



## Supporting Information

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Oral Fungal Alterations in Patients with COVID-19 and Recovered Patients

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## **Supplementary Method**

### **Enrollment process**

The isolation ward is divided into two areas in hospital, one for suspected cases ward and the other for confirmed cases ward. Patients with fever, cough, or other related symptoms, or clinical confirmed COVID-19 were admitted to suspected cases ward. After hospitalization, the throat swab specimens were collected for nucleic acid test by PT-PCR the next day. Patients were transferred to confirmed cases ward if the nucleic acid test was positive. Then our researcher evaluated the patient whether meeting our criteria and enrolled eligible patients after signing written informed consent. Patients with exposure to confirmed cases or Wuhan, but without symptoms, were isolated outside the hospital and collected throat swab specimens. Patients were admitted to hospital and transferred to confirmed cases ward if the result of nucleic acid test was positive. Then researchers screened and enrolled eligible patients.

Convalescent patients were transferred to another independent isolated region under observation for 15 days. If the nucleic acid test was still negative during this period, convalescent patients could departure from the independent isolated region. Samples from recovery patients were collected two days before discharge. The samples collection methods were consistent with our previous description.

### **Diagnostic, inclusion, and exclusion criteria**

Diagnostic criteria are based on the “Diagnosis and treatment program trial version 5 guidelines” issued by the National Health Commission of the People’s Republic of China.

#### **1. Suspected cases.**

Combined with the following comprehensive analysis of epidemiological history and clinical manifestations: any one of the epidemiological history and any two of the clinical manifestations, or no clear epidemiological history and three of the clinical manifestations can be diagnosed as a suspected case.

#### **(1) History of Epidemiology**

- 1) Travel history or residence history of Wuhan city and surrounding areas, or other communities with case reports within 14 days before onset.
- 2) A history of contact with a infected person (positive nucleic acid test) within 14 days before onset.
- 3) Have contacted patients with fever or respiratory symptoms from Wuhan city and surrounding areas, or from communities with case reports within 14 days before onset.
- 4) Aggregated onset (2 or more cases of fever and / or respiratory symptoms occurred within 2 weeks in a small area such as home, office, school class, etc.,).

(2) Clinical manifestations

- 1) Fever and / or respiratory symptoms.
- 2) With the characteristic image of COVID-19.
- 3) The total number of white blood cells in the early stage of the disease is normal or decreased, and the lymphocyte count is normal or decreased.

2. Confirmed cases (COVID-19 patients).

Suspected cases with one of the following etiological or serological evidence:

- (1) Fluorescence RT-PCR detects the positive of the COVID-19 virus nucleic acid.
- (2) Viral gene sequencing finds highly homologous to COVID-19 virus.

3. Cured patients (Convalescent patients).

Need to meet the following conditions at the same time:

- (1) Body temperature returned to normal for more than 3 days.
- (2) Respiratory symptoms improved significantly.
- (3) Pulmonary imaging showed a significant improvement in acute exudative lesions.
- (4) Two consecutive sputum, nasopharyngeal swabs and other respiratory tract specimens with negative nucleic acid test (sampling time needs to be at least 24 hours apart).

4. Healthy volunteers

- 1) Inclusion criteria.

- (1) Aged  $\geq 18$  years old.
- (2) Competent to provide informed consent (no mental illness or dementia).
- (3) Have lived in the same geographic area for the preceding 6 months.
- (4) All enrolled individuals had healthy oral tissues and gingiva (determined by a professional dentist).

## 2) exclusion criteria

- (1) Individuals who received antibiotics and/or probiotics within 8 weeks before enrolment were also excluded.
- (2) Current pregnancy.
- (3) The use of laxatives or anti-diarrheal drugs in the last 3 months.
- (4) Have no underlying infectious, acute disease, or severe organ failure.

The inclusion criteria for healthy volunteers referred to our previous study. In all healthy controls, exclusion criteria included hypertension, diabetes, obesity, metabolic syndrome, irritable bowel syndrome (IBD), nonalcoholic fatty liver disease, coeliac disease and liver cirrhosis.

All enrolled individuals had healthy oral tissues and gingiva (determined by a professional dentist). Individuals who received antibiotics and/or probiotics within 8 weeks before enrolment were also excluded.

## **DNA extraction**

Centrifuge at 14,000 rpm for 5 min, take the supernatant and place it in a new 2 mL centrifuge tube, add 250  $\mu$ L SP2 Buffer, and vortex for 5 min in ice bath; 200  $\mu$ L of cHTR Reagent, mixed and placed at room temperature for 2 min; 14,000 rpm, 2 min, take 500  $\mu$ L of supernatant and put it in a new 2 ml centrifuge tube, add 20  $\mu$ L proteinase K (20 mg/ml), 500  $\mu$ L BL buffer, vortex and mix, Incubate at 70°C for 10 min; after incubation, add 500  $\mu$ L of absolute ethanol, insert the HiBind® DNA spin column into a 2 mL collection tube, centrifuge (12,000 rpm, 1 min), and discard the waste solution; 500ul HB Buffer once, 750ul Wash Buffer twice time, discard the waste solution; vacate



the collection tube and spin column for 1 min and leave at room temperature for 2 min; transfer the spin column to a new 1.5 ml collection tube and elute with 100  $\mu$ L of Elution Buffer.

### **Construction of POD**

We used the abundance profile of the optimal OTUs markers in the discovery set to perform fivefold cross-validation on a random forest model (R 3.4.1, randomForest 4.6-12 package). Then we acquired the cross-validation error curve through five trials of the fivefold cross-validation. We defined the point with the minimum cross-validation error as the cut-off point through the minimum error plus the standard deviation (SD). The sets of OTU markers with the error less than the cut-off value were listed and the set with the smallest number of OTUs were defined as the optimal set. Then we used the optimal set of OTUs to calculate the probability of disease (POD) index in discovery cohort and validation cohort. The constructed models was evaluated using the receiver operating characteristic (ROC) curve (R 3.3.0, pROC package), and the ROC effect was showed using AUC.

## Supplementary Figures Legend

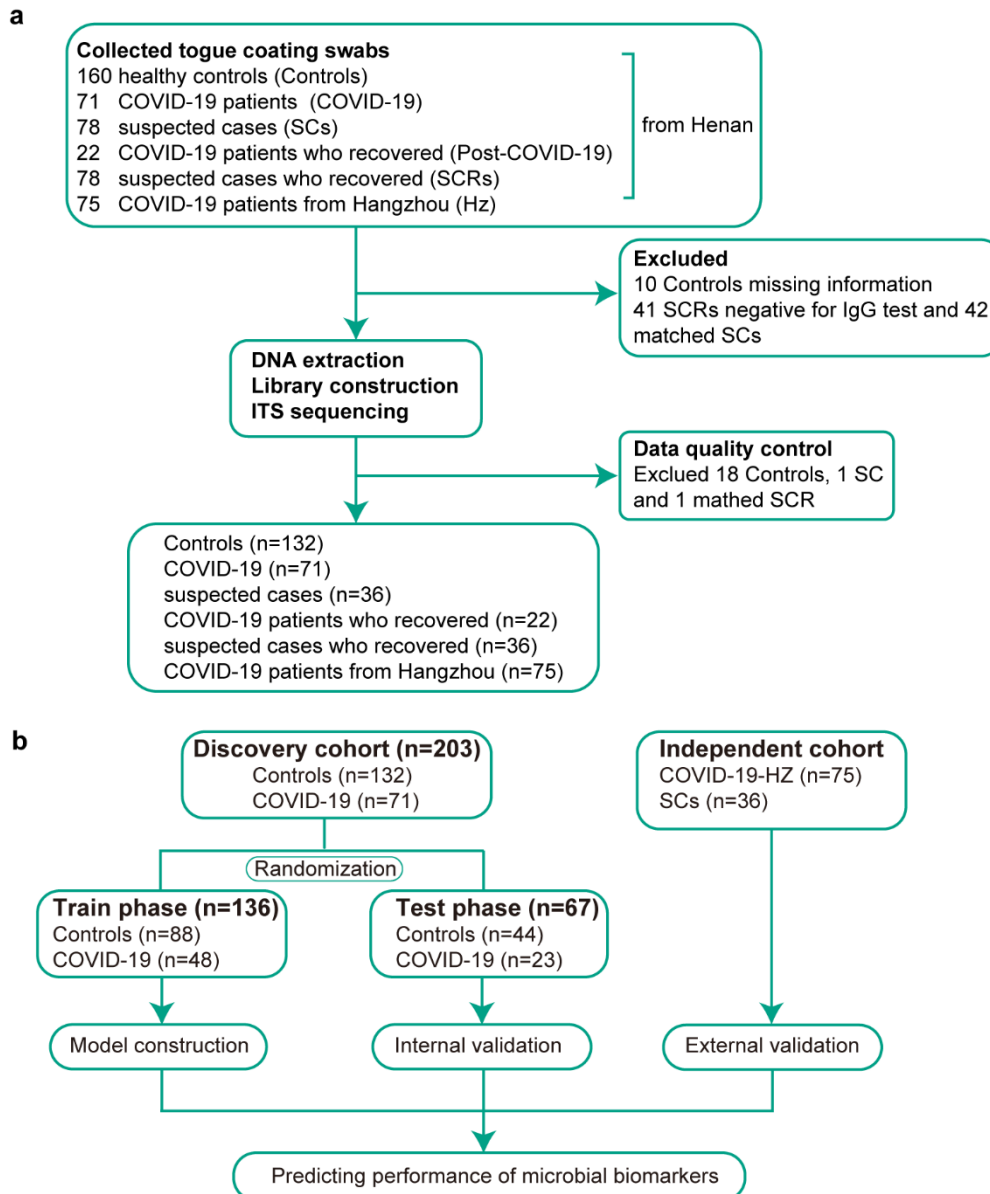


**Fig.S1 Study design and flow diagram.**

(a) A total of 484 tongue coating specimens from Central China and East China were collected. After screening, 372 samples were used for further sequencing using ITS sequencing, including 71 COVID-19 patients from Henan, 36 SCs from Henan, 20 matched Post-COVID-19, 36 matched SCRs, 132 controls from Henan, and 75 COVID-19 patients from Hangzhou. (b) To investigate the potential of oral fungi for diagnostic markers, random-forest classifiers were built to discriminate 71 COVID-19 from 132 controls in the discovery cohort. Five-fold cross-validated random-forest model in the training phase (two thirds of the samples in each group randomly selected

from the discovery cohort) was performed to select key discriminatory oral fungal markers. The remaining 30% samples from the discovery cohort were used to validate the diagnosis efficacy of classifiers. Moreover, 75 COVID-19 from Hangzhou, and 36 SCs served as an independent external validation phase to verify the potential of the classifiers. ITS, internal transcribed spacer; SCs, suspected cases; Post-COVID-19, recovered COVID-19 patients; SCRs, suspected cases who recovered; RFC, random forest classifier.

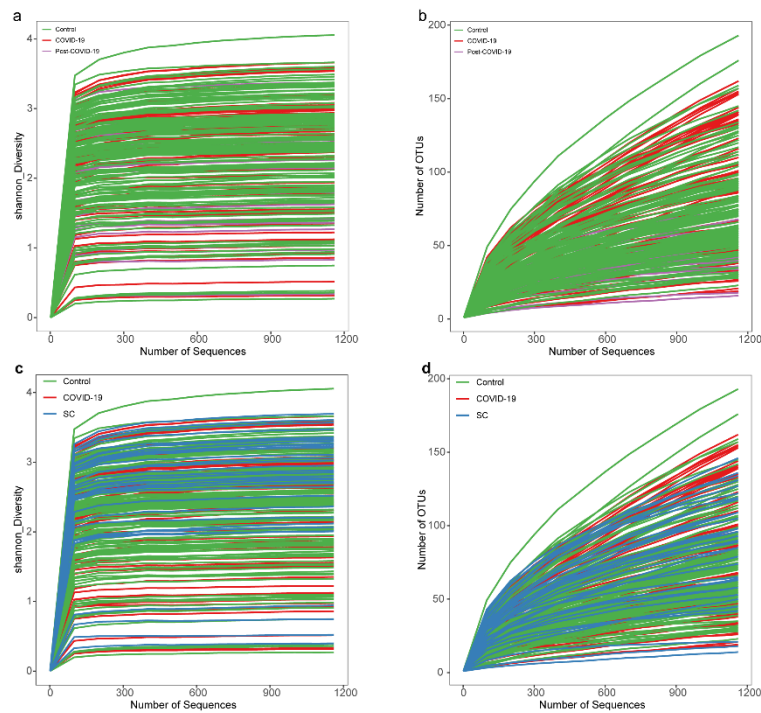


**Fig.S2 The rarefaction analysis of oral fungi.** Rarefaction analysis showed as the number of sequences raised, (a) shannon diversity and (b) the number of OTUs approached saturation in COVID-19 (n=71), Post-COVID-19 (n=22), and controls (n=132). As the number of sequences raised, (c) shannon diversity and (d) the number of OTUs approached saturation in COVID-19 (n=71), SCs (n=22), and controls (n=132). SCs, suspected cases; Post-COVID-19, recovered COVID-19 patients.

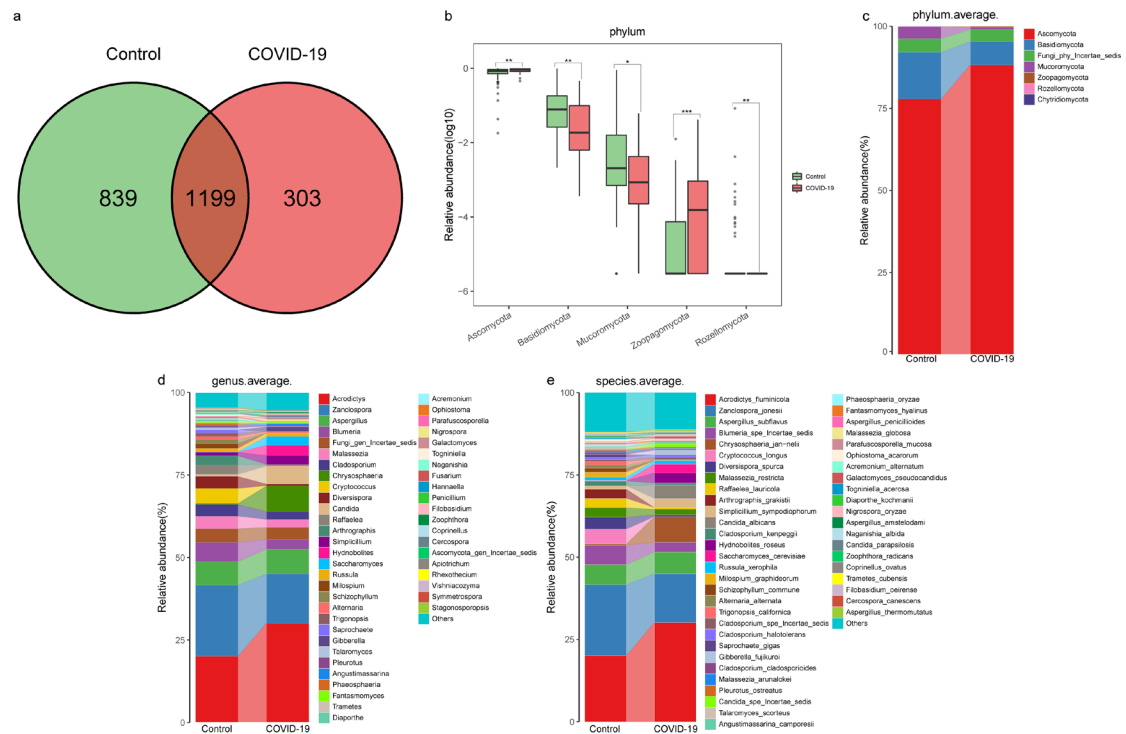


**Fig.S3 The oral fungal alterations between COVID-19 patients and controls. (a)** A Venn diagram revealed that 1199 of 2341 OTUs were shared in the COVID-19 and controls, while 303 OTUs were unique to COVID-19. **(b)** Two phyla were remarkably increased, while 3 phyla were remarkably reduced in COVID-19 versus controls. Average compositions and relative abundance of the fungal community in both groups at the **(c)** phylum, **(d)** genus, **(e)** species levels. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

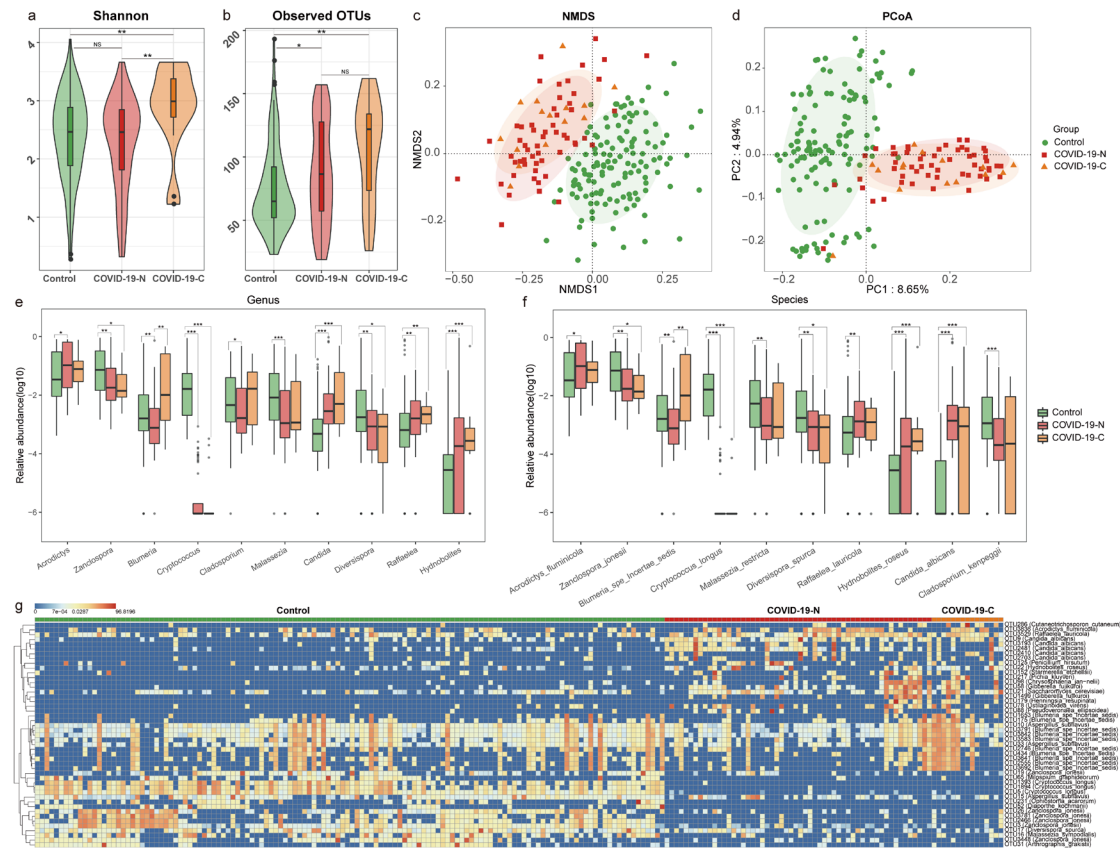


**Fig.S4 The characterization of oral fungi among COVID-19-N, COVID-19-C, and control groups.** (a) Shannon index and (b) Observed OTUs diversity indices among COVID-19-N (n=56), COVID-19-C (n=15), and control (n=132) groups. The NMDS (c) and PCoA (d) analysis showed the oral fungal taxonomic composition among three groups. The 10 most abundant fungi among the differential fungi among three groups at the (e) genus and (f) species levels. (g) Heatmap showed the relative abundances of differential OTUs for each sample in both groups. COVID-19-N, COVID-19 patients without comorbidities; COVID-19-C, COVID-19 patients with comorbidities; OTUs, operational taxonomy units; PCoA, principal coordinate analysis; NMDS, nonmetric multidimensional scaling. NS, no significance, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

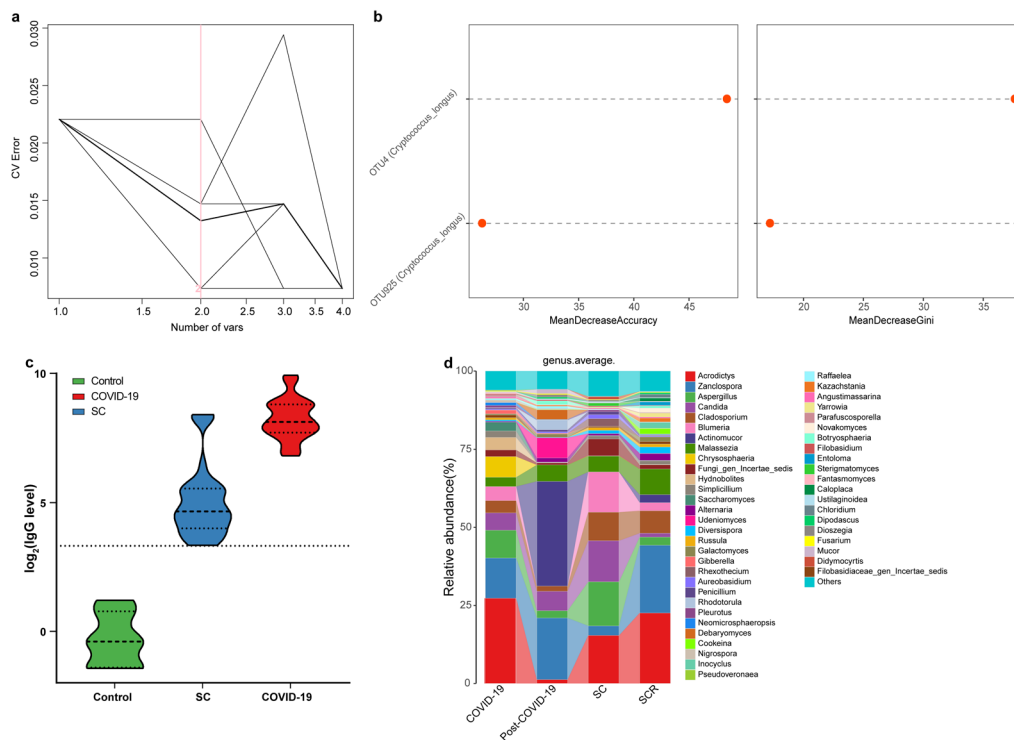


**Fig.S5. The COVID-19 diagnostic model and the characterization of oral fungi among COVID-19, Post-COVID-19, SCs, and SCRs.** (a) Importance distribution map of the selected microbial markers in the model. (b) Two fungal markers were selected as the best markers set by random forest model. (c) Levels of antibodies against SARS-CoV-2 in COVID-19 (n=22), SCs (n=36), and controls (n=6) after recovery. The positive judgment value was 10 U/ml in the kit (> 10 U/ml was positive, and < 10 U/ml was negative). The antibody levels in the figure were computed as log<sub>2</sub>(value). (d) Average compositions and relative abundance of the fungal community in COVID-19, Post-COVID-19, SCs, and SCRs at the genus level. SCs, suspected cases; Post-COVID-19, recovered COVID-19 patients; SCRs, suspected cases who recovered.

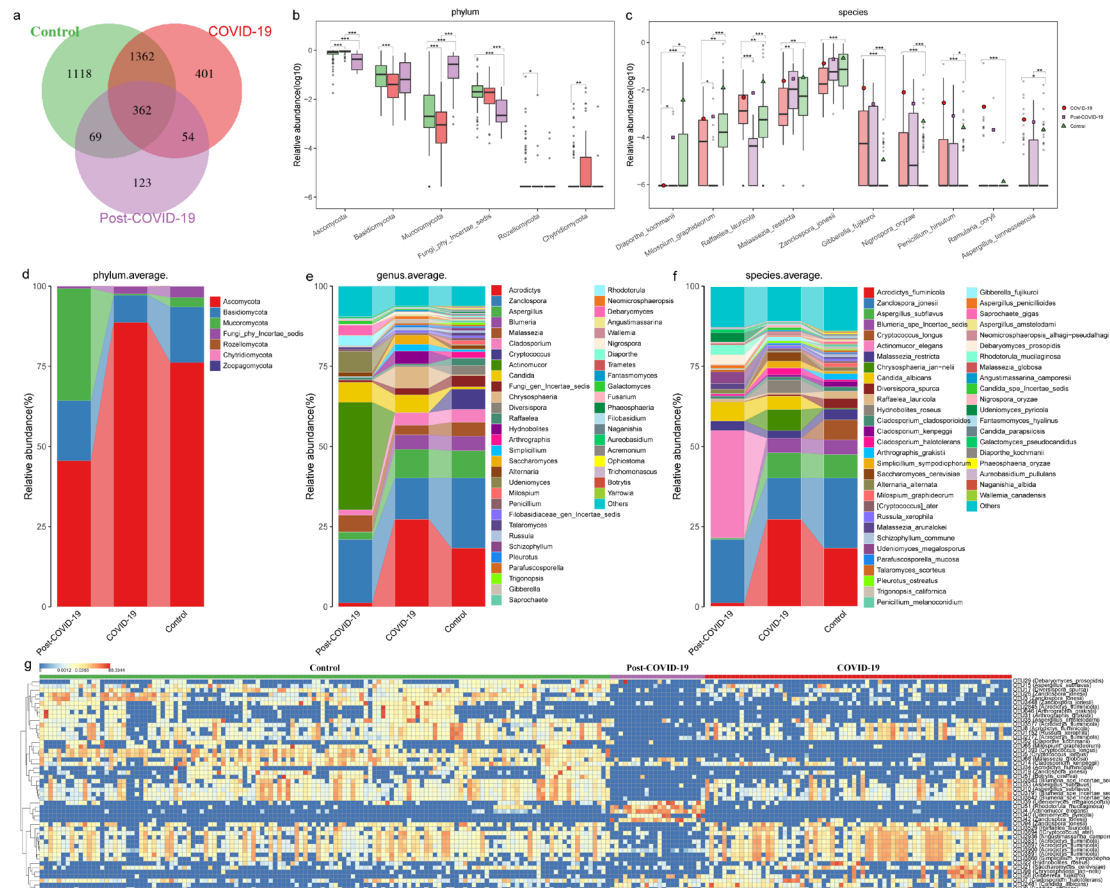


**Fig.S6 The characterization of oral mycobiome in COVID-19, Post-COVID-19, and control groups.** (a) A Venn diagram revealed that 362 of 3489 OTUs were shared in three groups, while 123 OTUs were unique to Post-COVID-19. The differential fungi among three groups at the (b) phyla and (c) species levels. Average compositions and relative abundance of the fungal community in three groups at the (d) phylum, (e) genus, (f) species levels. (g) Heatmap of the relative abundances of differential OTUs for each sample in the three groups. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . COVID-19, COVID-19 patients; Post-COVID-19, recovered COVID-19 patients.





**Fig.S7 Linear discriminant analysis (LDA) among COVID-19, COVID-19-C, and control groups.** (a) Based on the LDA selection, 24 gene functions were remarkedly raised in Post-COVID-19, 24 gene functions were significantly increased in COVID-19, while 20 gene functions were notably increased in controls. ( $p<0.05$ ,  $LDA>3.0$ ).

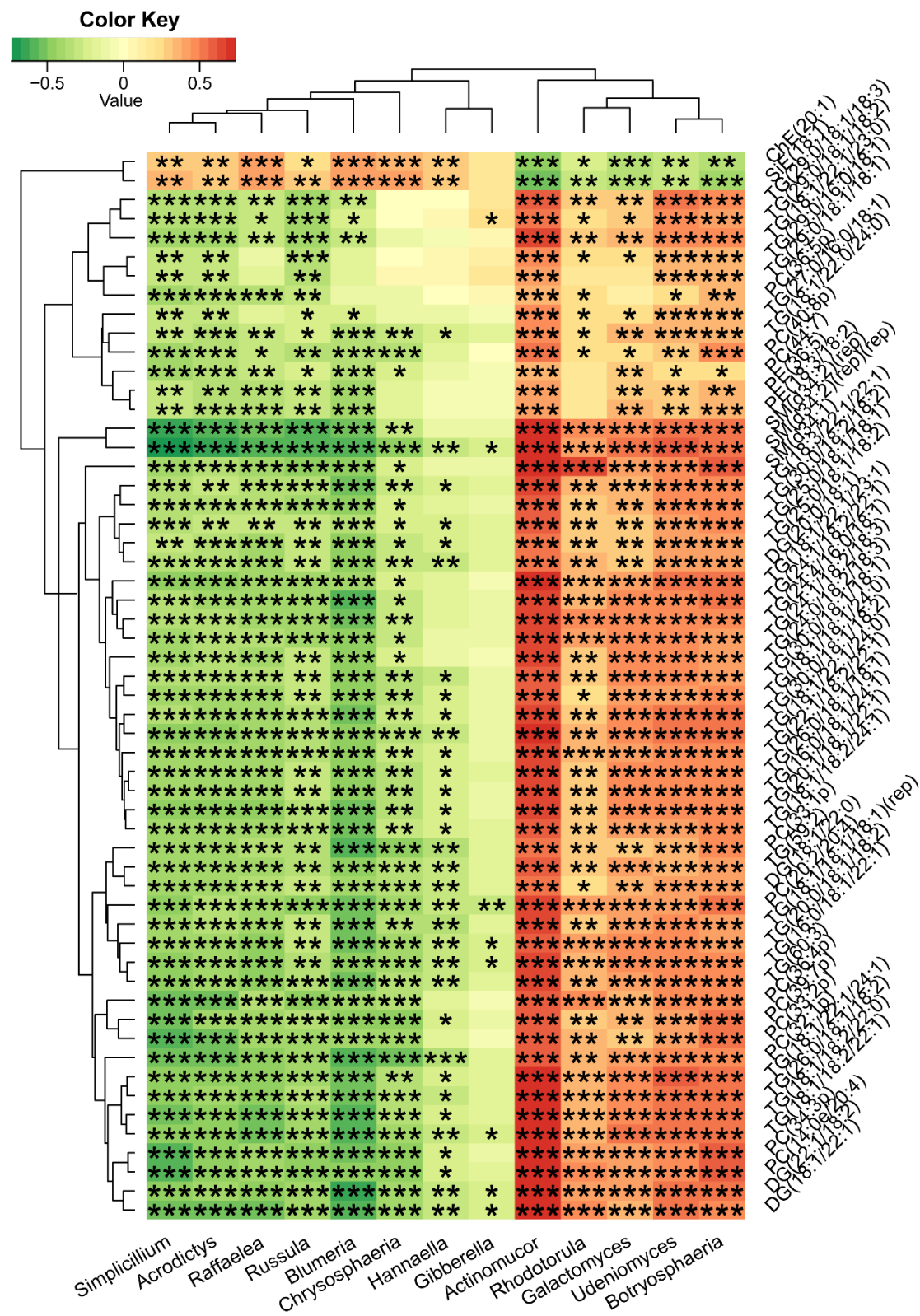


**Fig.S8 Association between oral mycobiome and serum lipidomics in COVID-19 and Post-COVID-19.** Spearman correlations of significantly altered oral mycobiome with significantly altered serum lipid in COVID-19 (n=71) and Post-COVID-19 (n=22). Red color represents the positive correlation, and blue color represents the negative correlation. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

## **Supplementary table legends**

**Supplementary table S1.** Clinical data of COVID-19 patients (n=71) and controls (n=132).

**Supplementary table S2.** The detailed values of oral fungal  $\alpha$ -diversity index in the control (n=132) and COVID-19 (n=71).

**Supplementary table S3.** The abundance and composition of mycobiome at the phylum, genus, and species levels of each sample in the control (n=132) and COVID-19 (n=71) groups.

**Supplementary table S4.** The different degree of mycobiome at the phylum, genus, and species levels (p value) in the control (n=132) and COVID-19 (n=71) groups.

**Supplementary table S5.** The relative abundance and distribution of the key 43 OTUs in the control (n=132) and COVID-19 (n=71) groups.

**Supplementary table S6.** The detailed values of oral fungal  $\alpha$ -diversity index in the control (n=132), COVID-19-N (n=56), and COVID-19-C (n=15) groups.

**Supplementary table S7.** The different degree of mycobiome at the phylum, genus, and species levels (p value) in the control (n=132), COVID-19-N (n=56), and COVID-19-C (n=15) groups.

**Supplementary table S8.** The relative abundance and distribution of the key 47 OTUs in the control (n=132), COVID-19-N (n=56), and COVID-19-C (n=15) groups.

**Supplementary table S9.** By random forest classifier model, the corresponding abundance of each optimal fungal marker and POD value in each sample in the train phase (88 controls and 48 COVID-19).

**Supplementary table S10.** By random forest classifier model, the corresponding abundance of each optimal fungal marker and POD value in each sample in the test phase (44 controls and 23 COVID-19).

**Supplementary table S11.** By random forest classifier model, the corresponding abundance of each optimal fungal marker and POD value in each sample in the Hangzhou independent cohort (44 controls and 75 COVID-19 from Hangzhou).

**Supplementary table S12.** The levels of Ig-G antibody in COVID-19 (n=20), SC (n=36), and controls (n=6).

**Supplementary table S13.** By random forest classifier model, the corresponding abundance of each optimal fungal marker and POD value in each sample in the SC (n=36) and control (n=44) groups.

**Supplementary table S14.** The detailed values of oral fungal diversity index and observed OTUs among COVID-19 (n=71), SC (n=36), and control (n=132) groups.

**Supplementary table S15.** The relative abundance and distribution of the key 47 OTUs among COVID-19 (n=71), SC (n=36), and control (n=132) groups.

**Supplementary table S16.** The average abundance and composition at the genus level among COVID-19 (n=71), SC (n=36), Post-COVID-19 (n=22), and SCR (n=36) groups.

**Supplementary table S17.** The detailed values of oral fungal diversity index and observed OTUs among COVID-19 (n=71), Post-COVID-19 (n=22), and controls (n=132) groups.

**Supplementary table S18.** The abundance and composition at the phylum, genus, and species levels of each sample among COVID-19 (n=71), Post-COVID-19 (n=22), and controls (n=132) groups.

**Supplementary table S19.** The relative abundance and distribution of the key 49 OTUs among the COVID-19 (n=71), Post-COVID-19 (n=22), and controls (n=132) groups.

**Supplementary table S20.** The different degree of mycobiome at the phylum, genus, and species levels (p value) among the COVID-19 (n=71), Post-COVID-19 (n=22), and controls (n=132) groups.

**Supplementary table S21.** The cladogram of oral fungal structure and their predominant fungal in the COVID-19 (n=71), Post-COVID-19 (n=22), and controls (n=132) groups.

**Supplementary table S22.** The corresponding LDA value and p value of fungal community gene function for samples in the COVID-19 (n=71), Post-COVID-19 (n=22), and controls (n=132) groups.

**Supplementary table S23.** The p value and correlation coefficient between 20 oral fungal OTUs and 11 clinical indicators of COVID-19 (n=71) and controls (n=132) obtained by spearman correlation analysis.

**Supplementary table S24.** The different bacteria of genus level (p value) between the control (n=79) and COVID-19 (n=71) groups.

**Supplementary table S25.** The p value and correlation coefficients between fungi and bacteria in control (n=79) and COVID-19 (n=71) groups.

**Supplementary table S26.** The p value and correlation coefficients between fungi and bacteria in COVID-19 patients (n=71) and Post-COVID-19 (n=21).

**Supplementary table S27.** The p value and correlation coefficients between fungi and lipid in COVID-19 patients (n=71) and Post-COVID-19 (n=22).

**Supplementary Table S1. Clinical data of all enrolled subjects**

| Number | Group    | Age | Sex | ALT | AST | TBIL | ALB  | CREA  | WBC   | RBC  | Hb  | PLT    | Neut#  | Lymph # | Neut#/Lymph # |
|--------|----------|-----|-----|-----|-----|------|------|-------|-------|------|-----|--------|--------|---------|---------------|
| 3      | controls | 52  | 1   | 10  | 14  | 9.8  | 38.7 | 86.8  | 6.44  | 5.02 | 164 | 302.00 | 4.190  | 1.76    | 2.3807        |
| 17     | controls | 38  | 1   | 26  | 25  | 4.4  | 45.1 | 79.6  | 6.16  | 4.66 | 145 | 202.00 | 4.270  | 1.52    | 2.8092        |
| 18     | controls | 46  | 1   | 54  | 33  | 6    | 45.1 | 78.7  | 6.39  | 5.42 | 163 | 222.00 | 3.410  | 2.55    | 1.3373        |
| 23     | controls | 58  | 2   | 11  | 19  | 5.5  | 44.5 | 71.8  | 6.25  | 4.06 | 130 | 212.00 | 3.410  | 2.38    | 1.4328        |
| 24     | controls | 46  | 2   | 13  | 21  | 6.3  | 41.4 | 64.4  | 4.18  | 4.64 | 145 | 154.00 | 2.320  | 1.59    | 1.4591        |
| 91     | controls | 36  | 1   | 37  | 30  | 3.6  | 50.1 | 98.9  | 5.87  | 5.30 | 162 | 213.00 | 3.200  | 2.28    | 1.4035        |
| 93     | controls | 52  | 1   | 16  | 16  | 4.9  | 47.4 | 72    | 12.35 | 4.97 | 158 | 374.00 | 7.140  | 3.70    | 1.9297        |
| 94     | controls | 56  | 1   | 18  | 23  | 4.8  | 40.3 | 82.5  | 5.98  | 4.37 | 142 | 198.00 | 3.550  | 1.95    | 1.8205        |
| 96     | controls | 43  | 1   | 52  | 30  | 5.6  | 55.2 | 80.4  | 8.07  | 5.17 | 152 | 204.00 | 4.850  | 2.74    | 1.7701        |
| 105    | controls | 47  | 2   | 14  | 15  | 5.9  | 36.8 | 67.3  | 7.24  | 4.51 | 133 | 129.00 | 4.170  | 2.56    | 1.6289        |
| 109    | controls | 51  | 2   | 12  | 19  | 3.5  | 35.9 | 59.1  | 3.22  | 3.81 | 123 | 222.00 | 1.710  | 1.30    | 1.3154        |
| 113    | controls | 46  | 2   | 10  | 13  | 2.1  | 36.3 | 61.8  | 6.68  | 4.33 | 134 | 273.00 | 3.830  | 2.39    | 1.6025        |
| 118    | controls | 58  | 2   | 14  | 18  | 13.9 | 47.3 | 70.8  | 5.94  | 4.35 | 126 | 259.00 | 3.680  | 1.90    | 1.9368        |
| 119    | controls | 54  | 1   | 17  | 19  | 3.4  | 38.8 | 81.5  | 8.16  | 4.92 | 143 | 205.00 | 5.650  | 2.06    | 2.7427        |
| 120    | controls | 42  | 2   | 28  | 21  | 6.1  | 44.2 | 68.6  | 8.37  | 5.39 | 96  | 287.00 | 5.200  | 2.66    | 1.9549        |
| 121    | controls | 56  | 2   | 11  | 12  | 7.7  | 41.1 | 64.9  | 5.45  | 4.35 | 130 | 150.00 | 3.040  | 2.06    | 1.4757        |
| 123    | controls | 55  | 1   | 46  | 29  | 3.5  | 41.6 | 78.7  | 6.60  | 5.00 | 164 | 151.00 | 4.340  | 1.86    | 2.3333        |
| 151    | controls | 39  | 1   | 30  | 28  | 8.5  | 43.8 | 93    | 6.48  | 4.84 | 155 | 217.00 | 4.300  | 1.69    | 2.5444        |
| 152    | controls | 43  | 1   | 25  | 23  | 2.9  | 40.3 | 92    | 5.19  | 4.33 | 147 | 180.00 | 3.640  | 1.11    | 3.2793        |
| 162    | controls | 38  | 1   | 18  | 19  | 4.7  | 44.5 | 76.2  | 5.80  | 5.24 | 145 | 317.00 | 3.710  | 1.73    | 2.1445        |
| 163    | controls | 38  | 1   | 25  | 19  | 7.1  | 43.6 | 81    | 6.48  | 5.12 | 159 | 262.00 | 3.890  | 2.13    | 1.8263        |
| 164    | controls | 58  | 1   | 15  | 19  | 4.7  | 41.4 | 77.2  | 4.35  | 4.33 | 143 | 202.00 | 2.130  | 1.87    | 1.139         |
| 170    | controls | 48  | 1   | 15  | 13  | 8    | 42   | 85.9  | 5.89  | 4.22 | 137 | 216.00 | 4.330  | 1.07    | 4.0467        |
| 173    | controls | 43  | 1   | 14  | 20  | 5.9  | 45.8 | 68.3  | 5.47  | 4.37 | 112 | 77.00  | 3.330  | 1.83    | 1.8197        |
| 174    | controls | 40  | 1   | 13  | 18  | 10.3 | 47.3 | 70.6  | 5.36  | 4.83 | 152 | 105.00 | 3.760  | 1.32    | 2.8485        |
| 175    | controls | 43  | 2   | 11  | 15  | 4.5  | 40.1 | 60.3  | 6.18  | 3.97 | 124 | 129.00 | 4.310  | 1.57    | 2.7452        |
| 179    | controls | 47  | 1   | 22  | 15  | 4.4  | 40.7 | 100.6 | 8.00  | 4.94 | 156 | 118.00 | 4.530  | 2.73    | 1.6593        |
| 186    | controls | 44  | 2   | 9   | 12  | 8.9  | 43.2 | 59.5  | 9.37  | 3.99 | 120 | 287.00 | 6.620  | 2.31    | 2.8658        |
| 187    | controls | 58  | 2   | 24  | 28  | 5.3  | 36.5 | 60.8  | 6.38  | 4.10 | 127 | 237.00 | 4.190  | 1.86    | 2.2527        |
| 188    | controls | 50  | 1   | 19  | 27  | 5.7  | 43.5 | 71    | 7.39  | 5.80 | 179 | 245.00 | 4.080  | 2.88    | 1.4167        |
| 189    | controls | 43  | 1   | 28  | 24  | 6.5  | 45.5 | 71.8  | 5.24  | 4.87 | 162 | 207.00 | 3.220  | 1.61    | 2             |
| 195    | controls | 51  | 2   | 10  | 18  | 3.3  | 38.5 | 70.7  | 7.93  | 5.01 | 125 | 248.00 | 4.090  | 3.46    | 1.1821        |
| 197    | controls | 43  | 1   | 19  | 20  | 3.4  | 41.9 | 73.4  | 6.57  | 4.63 | 143 | 206.00 | 3.260  | 2.61    | 1.249         |
| 198    | controls | 51  | 2   | 17  | 17  | 3.9  | 42.5 | 54.9  | 8.84  | 5.02 | 153 | 226.00 | 6.160  | 1.98    | 3.1111        |
| 199    | controls | 58  | 2   | 10  | 19  | 5.3  | 41.4 | 62.8  | 7.03  | 3.52 | 107 | 263.00 | 4.000  | 2.58    | 1.5504        |
| 201    | controls | 54  | 2   | 12  | 19  | 5    | 45.7 | 72.4  | 5.94  | 3.65 | 116 | 189.00 | 3.590  | 2.11    | 1.7014        |
| 202    | controls | 55  | 2   | 2   | 19  | 1.5  | 40   | 68.1  | 9.56  | 4.78 | 142 | 238.00 | 6.100  | 2.89    | 2.1107        |
| 204    | controls | 40  | 1   | 11  | 14  | 5.8  | 38.1 | 73.1  | 5.46  | 4.84 | 141 | 158.00 | 3.670  | 1.52    | 2.4145        |
| 205    | controls | 59  | 1   | 17  | 17  | 4.5  | 41.6 | 65.7  | 5.37  | 3.86 | 155 | 231.00 | 4.18   | 1.76    | 2.375         |
| 206    | controls | 53  | 1   | 12  | 19  | 5.3  | 33.8 | 81.2  | 4.87  | 4.64 | 134 | 216.00 | 2.920  | 1.61    | 1.8137        |
| 207    | controls | 53  | 1   | 33  | 25  | 4.4  | 39.3 | 86.8  | 8.57  | 4.79 | 146 | 278.00 | 5.410  | 2.22    | 2.4369        |
| 209    | controls | 47  | 2   | 14  | 17  | 3.8  | 41.9 | 56.9  | 4.49  | 4.50 | 137 | 294.00 | 2.570  | 1.67    | 1.5389        |
| 212    | controls | 38  | 1   | 24  | 17  | 2.5  | 41.5 | 73.9  | 14.69 | 5.21 | 158 | 144.00 | 10.830 | 3.23    | 3.3529        |
| 215    | controls | 54  | 2   | 9   | 16  | 0.5  | 35.8 | 80.4  | 5.67  | 4.03 | 123 | 153.00 | 2.870  | 2.48    | 1.1573        |
| 216    | controls | 50  | 2   | 6   | 10  | 6.4  | 33.9 | 62.7  | 4.17  | 3.21 | 71  | 228.00 | 2.850  | 1.18    | 2.4153        |
| 220    | controls | 53  | 1   | 29  | 25  | 10.1 | 41.3 | 85.4  | 5.12  | 5.44 | 162 | 210.00 | 2.880  | 1.72    | 1.6744        |
| 225    | controls | 39  | 1   | 17  | 14  | 15   | 42.1 | 84.5  | 6.77  | 4.90 | 152 | 335.00 | 4.900  | 1.39    | 3.5252        |
| 226    | controls | 41  | 1   | 15  | 19  | 12   | 36.4 | 76.1  | 3.36  | 4.86 | 144 | 118.00 | 1.950  | 1.08    | 1.8056        |
| 230    | controls | 40  | 1   | 28  | 20  | 5.3  | 41.1 | 82.4  | 7.26  | 4.86 | 147 | 51.00  | 3.480  | 3.29    | 1.0578        |
| 231    | controls | 53  | 1   | 10  | 17  | 14.6 | 43   | 90.4  | 5.64  | 5.11 | 149 | 44.00  | 3.830  | 1.34    | 2.8582        |
| 233    | controls | 54  | 1   | 17  | 15  | 8.1  | 41.4 | 75.3  | 6.54  | 5.20 | 160 | 285.00 | 4.430  | 1.64    | 2.7012        |
| 238    | controls | 58  | 1   | 17  | 19  | 7.5  | 39.1 | 76.3  | 5.78  | 4.57 | 153 | 202.00 | 3.300  | 2.09    | 1.5789        |
| 245    | controls | 57  | 1   | 38  | 29  | 22   | 43.8 | 98.5  | 6.50  | 4.90 | 169 | 169.00 | 3.810  | 2.17    | 1.7558        |
| 246    | controls | 50  | 2   | 22  | 21  | 5.5  | 37.9 | 51.2  | 8.70  | 4.63 | 139 | 282.00 | 6.170  | 1.94    | 3.1804        |
| 253    | controls | 45  | 2   | 11  | 17  | 6.3  | 37.7 | 56.6  | 6.37  | 4.02 | 126 | 119.00 | 4.500  | 1.46    | 3.0822        |

|     |          |    |   |    |    |       |      |      |       |      |     |        |       |      |        |
|-----|----------|----|---|----|----|-------|------|------|-------|------|-----|--------|-------|------|--------|
| 258 | controls | 54 | 2 | 15 | 22 | 1.7   | 40.5 | 70.6 | 4.28  | 3.50 | 93  | 125.00 | 3.250 | 0.91 | 3.5714 |
| 264 | controls | 50 | 1 | 16 | 12 | 6.8   | 39.8 | 66   | 7.91  | 4.76 | 140 | 132.00 | 5.650 | 1.89 | 2.9894 |
| 270 | controls | 35 | 1 | 9  | 12 | 7.1   | 45.9 | 82.8 | 4.77  | 4.76 | 142 | 220.00 | 2.890 | 1.43 | 2.021  |
| 271 | controls | 38 | 1 | 36 | 25 | -12.7 | 57.2 | 88.8 | 11.16 | 5.06 | 177 | 363.00 | 8.360 | 2.25 | 3.7156 |
| 276 | controls | 36 | 1 | 33 | 21 | 3.7   | 41.3 | 74.3 | 7.15  | 5.47 | 153 | 211.00 | 4.860 | 1.75 | 2.7771 |
| 278 | controls | 54 | 1 | 27 | 27 | 8.2   | 41.3 | 76.2 | 7.50  | 4.34 | 135 | 199.00 | 4.660 | 2.24 | 2.0804 |
| 279 | controls | 54 | 1 | 11 | 15 | 7.4   | 42.9 | 65.8 | 4.09  | 4.96 | 140 | 200.00 | 2.310 | 1.44 | 1.6042 |
| 280 | controls | 50 | 1 | 13 | 19 | 6.1   | 36.2 | 80.4 | 6.51  | 5.18 | 150 | 176.00 | 4.210 | 2.09 | 2.0144 |
| 281 | controls | 49 | 1 | 15 | 12 | 5.9   | 40.5 | 80.2 | 10.32 | 4.64 | 150 | 256.00 | 7.670 | 2.03 | 3.7783 |
| 291 | controls | 36 | 1 | 34 | 21 | 6.4   | 47.8 | 99.3 | 10.42 | 5.53 | 171 | 257.00 | 7.680 | 2.20 | 3.4909 |
| 292 | controls | 45 | 1 | 27 | 15 | 5.3   | 38.5 | 95.7 | 4.67  | 4.77 | 140 | 136.00 | 3.270 | 1.11 | 2.9459 |
| 293 | controls | 44 | 2 | 12 | 14 | 4.3   | 42.5 | 52.3 | 10.13 | 4.45 | 135 | 533.00 | 7.320 | 2.10 | 3.4857 |
| 294 | controls | 40 | 1 | 9  | 17 | 3.5   | 49   | 76.7 | 9.70  | 5.58 | 165 | 312.00 | 5.440 | 3.83 | 1.4204 |
| 298 | controls | 35 | 1 | 8  | 14 | 7.3   | 41.3 | 72.4 | 8.05  | 5.26 | 164 | 252.00 | 5.630 | 1.70 | 3.3118 |
| 300 | controls | 58 | 1 | 21 | 17 | 10.3  | 42   | 65.8 | 3.99  | 4.87 | 150 | 199.00 | 2.570 | 1.13 | 2.2743 |
| 305 | controls | 48 | 1 | 21 | 18 | 3.9   | 41.7 | 84.7 | 5.93  | 5.36 | 165 | 114.00 | 3.930 | 1.59 | 2.4717 |
| 317 | controls | 46 | 2 | 11 | 14 | 4.2   | 44.9 | 56.9 | 6.50  | 3.97 | 125 | 135.00 | 3.860 | 2.29 | 1.6856 |
| 319 | controls | 47 | 1 | 11 | 14 | 3.2   | 39.7 | 88.9 | 5.90  | 5.19 | 146 | 224.00 | 3.240 | 2.17 | 1.4931 |
| 324 | controls | 43 | 2 | 15 | 16 | 8.9   | 41.6 | 53.2 | 5.90  | 4.19 | 127 | 291.00 | 3.700 | 1.82 | 2.033  |
| 326 | controls | 55 | 1 | 19 | 22 | 4.4   | 47   | 60.8 | 6.68  | 4.86 | 143 | 285.00 | 4.420 | 1.66 | 2.6627 |
| 327 | controls | 53 | 1 | 29 | 31 | 17.6  | 44   | 76.7 | 7.29  | 5.08 | 159 | 177.00 | 4.550 | 2.09 | 2.177  |
| 328 | controls | 50 | 1 | 24 | 19 | 7.8   | 44.5 | 61.2 | 5.18  | 5.35 | 158 | 231.00 | 3.370 | 1.39 | 2.4245 |
| 329 | controls | 47 | 1 | 10 | 15 | 6.2   | 40.7 | 76.3 | 5.00  | 4.83 | 145 | 147.00 | 2.690 | 1.79 | 1.5028 |
| 331 | controls | 46 | 1 | 12 | 18 | 9.2   | 43.7 | 72.9 | 4.99  | 4.64 | 141 | 212.00 | 3.220 | 1.11 | 2.9009 |
| 343 | controls | 52 | 1 | 31 | 21 | 6.6   | 43.3 | 72.2 | 7.71  | 5.03 | 156 | 252.00 | 5.280 | 1.74 | 3.0345 |
| 344 | controls | 50 | 2 | 12 | 13 | 7.4   | 42.3 | 61.4 | 7.75  | 4.55 | 142 | 293.00 | 5.680 | 1.41 | 4.0284 |
| 345 | controls | 53 | 1 | 35 | 35 | 7.6   | 44.6 | 76.6 | 6.86  | 4.64 | 135 | 188.00 | 4.57  | 1.59 | 2.8742 |
| 356 | controls | 41 | 1 | 15 | 17 | 7.9   | 42.3 | 89.9 | 6.77  | 4.89 | 162 | 205.00 | 3.900 | 2.21 | 1.7647 |
| 361 | controls | 58 | 1 | 18 | 16 | 1.9   | 44.8 | 94.7 | 6.60  | 4.54 | 149 | 191.00 | 3.53  | 1.11 | 3.1802 |
| 367 | controls | 55 | 2 | 10 | 22 | 6.1   | 41.7 | 52.7 | 4.78  | 4.27 | 129 | 267.00 | 2.610 | 1.67 | 1.5629 |
| 368 | controls | 56 | 2 | 16 | 17 | 7.1   | 46.1 | 58.3 | 4.18  | 4.76 | 147 | 251.00 | 2.440 | 1.36 | 1.7941 |
| 372 | controls | 49 | 1 | 44 | 32 | 4.9   | 43.8 | 92.9 | 8.05  | 4.90 | 158 | 249.00 | 4.470 | 2.78 | 1.6079 |
| 655 | controls | 39 | 1 | 9  | 21 | 13.2  | 48.8 | 66.9 | 5.36  | 5.02 | 152 | 126    | 3.2   | 1.67 | 1.9162 |
| 733 | controls | 39 | 1 | 13 | 6  | 5     | 47.3 | 82.9 | 7.44  | 4.51 | 142 | 384    | 4.7   | 2.07 | 2.2705 |
| 755 | controls | 35 | 1 | 13 | 21 | 28.4  | 50.9 | 91.7 | 7     | 4.68 | 152 | 210    | 4.4   | 1.92 | 2.2917 |
| 801 | controls | 55 | 2 | 15 | 20 | 4.1   | 47.7 | 66.4 | 2.21  | 3.44 | 91  | 221    | 0.73  | 0.97 | 0.7526 |
| 802 | controls | 46 | 2 | 22 | 21 | 13.9  | 44.6 | 60.7 | 5.73  | 4.05 | 120 | 205    | 3.15  | 2.07 | 1.5217 |
| 805 | controls | 42 | 2 | 11 | 11 | 7.7   | 45.1 | 63.8 | 8.70  | 4.75 | 147 | 246    | 6.19  | 1.92 | 3.224  |
| 806 | controls | 46 | 2 | 11 | 19 | 4.4   | 45.9 | 66.4 | 5.09  | 4.48 | 119 | 363    | 2.62  | 1.90 | 1.3789 |
| 807 | controls | 41 | 2 | 34 | 23 | 10.0  | 47.8 | 72.0 | 7.86  | 4.73 | 138 | 313    | 5.40  | 1.86 | 2.9032 |
| 809 | controls | 52 | 2 | 13 | 20 | 4.7   | 47.9 | 73.7 | 7.15  | 4.14 | 98  | 378    | 4.27  | 2.16 | 1.9769 |
| 810 | controls | 58 | 2 | 17 | 22 | 6.5   | 46.1 | 75.5 | 3.96  | 4.30 | 128 | 202    | 1.68  | 1.67 | 1.006  |
| 811 | controls | 46 | 1 | 24 | 25 | 6     | 46.8 | 92.3 | 6.35  | 5.16 | 162 | 210    | 3.76  | 1.97 | 1.9086 |
| 812 | controls | 42 | 2 | 12 | 19 | 7.7   | 46.1 | 54.2 | 7.34  | 4.66 | 134 | 247    | 4.67  | 1.91 | 2.445  |
| 813 | controls | 57 | 2 | 27 | 34 | 7.7   | 47.7 | 65.5 | 5.54  | 4.50 | 138 | 281    | 2.58  | 2.31 | 1.1169 |
| 814 | controls | 39 | 1 | 11 | 15 | 6.7   | 45.1 | 98.9 | 6.33  | 5.22 | 151 | 154    | 3.09  | 2.39 | 1.2929 |
| 819 | controls | 52 | 2 | 25 | 24 | 7.2   | 46.4 | 64.6 | 3.76  | 4.90 | 140 | 136    | 1.89  | 1.23 | 1.5366 |
| 820 | controls | 35 | 1 | 9  | 14 | 13.4  | 47.5 | 98.1 | 6.30  | 5.67 | 161 | 210    | 2.98  | 2.62 | 1.1374 |
| 823 | controls | 49 | 2 | 16 | 20 | 5.1   | 44.9 | 71.9 | 7.40  | 4.52 | 137 | 300    | 3.59  | 3.07 | 1.1694 |
| 825 | controls | 41 | 2 | 12 | 21 | 7.1   | 48.0 | 52.3 | 4.26  | 4.17 | 124 | 188    | 1.89  | 1.78 | 1.0618 |
| 827 | controls | 52 | 2 | 19 | 24 | 8.0   | 45.3 | 70.2 | 3.97  | 4.41 | 112 | 202    | 2.34  | 1.01 | 2.3168 |
| 832 | controls | 46 | 2 | 28 | 16 | 5.1   | 48.8 | 86.7 | 14.86 | 4.58 | 132 | 367    | 12.94 | 1.17 | 11.06  |
| 833 | controls | 48 | 2 | 18 | 18 | 4.5   | 45   | 83.3 | 6.44  | 4.44 | 133 | 225    | 3.92  | 1.87 | 2.0963 |
| 838 | controls | 51 | 2 | 11 | 18 | 9.2   | 45.0 | 73.5 | 5.03  | 3.82 | 131 | 326    | 2.57  | 1.84 | 1.3967 |
| 843 | controls | 45 | 2 | 11 | 11 | 19.0  | 50.9 | 62.5 | 6.27  | 4.53 | 140 | 222    | 3.84  | 1.69 | 2.2722 |
| 847 | controls | 41 | 2 | 18 | 23 | 9.1   | 43.1 | 58   | 5.55  | 3.54 | 122 | 156    | 3.30  | 1.65 | 2      |
| 851 | controls | 53 | 1 | 27 | 28 | 9.5   | 47.0 | 76.1 | 4.77  | 4.95 | 148 | 181    | 2.53  | 1.54 | 1.6429 |
| 854 | controls | 47 | 2 | 12 | 13 | 7.8   | 48.3 | 66.7 | 5.62  | 4.30 | 129 | 227    | 3.58  | 1.57 | 2.2803 |



|      |          |    |   |    |    |      |      |      |      |      |     |     |      |      |        |
|------|----------|----|---|----|----|------|------|------|------|------|-----|-----|------|------|--------|
| 855  | controls | 45 | 2 | 10 | 17 | 5.7  | 44.7 | 72.3 | 6.52 | 4.00 | 127 | 176 | 3.81 | 1.91 | 1.9948 |
| 859  | controls | 41 | 2 | 8  | 12 | 5.5  | 44.1 | 65.5 | 5.45 | 4.40 | 137 | 246 | 2.84 | 1.98 | 1.4343 |
| 862  | controls | 41 | 2 | 19 | 18 | 4.2  | 44.2 | 56.1 | 6.15 | 3.95 | 122 | 200 | 3.45 | 2.16 | 1.5972 |
| 867  | controls | 43 | 2 | 17 | 17 | 19.2 | 47.2 | 66.2 | 6.24 | 4.19 | 136 | 230 | 3.82 | 1.92 | 1.9896 |
| 868  | controls | 52 | 2 | 16 | 21 | 5.9  | 45.9 | 55.1 | 7.55 | 4.61 | 138 | 266 | 3.91 | 2.64 | 1.4811 |
| 872  | controls | 50 | 1 | 21 | 22 | 11.7 | 43.1 | 82.2 | 5.40 | 5.12 | 158 | 210 | 2.30 | 2.05 | 1.122  |
| 878  | controls | 42 | 2 | 13 | 14 | 5.5  | 44.0 | 59.2 | 6.36 | 3.86 | 112 | 254 | 3.15 | 2.50 | 1.26   |
| 880  | controls | 42 | 2 | 16 | 23 | 5.7  | 45.2 | 61.1 | 7.43 | 4.18 | 134 | 209 | 4.28 | 2.11 | 2.0284 |
| 886  | controls | 43 | 1 | 37 | 28 | 6.5  | 45.1 | 80.7 | 7.00 | 4.98 | 149 | 238 | 3.50 | 2.67 | 1.3109 |
| 887  | controls | 43 | 2 | 21 | 18 | 7.7  | 46.5 | 79.0 | 7.92 | 4.56 | 131 | 324 | 3.92 | 3.37 | 1.1632 |
| 893  | controls | 40 | 1 | 15 | 12 | 7.5  | 46.0 | 85.9 | 6.64 | 5.20 | 153 | 301 | 3.07 | 2.67 | 1.1498 |
| 895  | controls | 36 | 1 | 21 | 19 | 19.4 | 48.1 | 67.5 | 3.69 | 4.79 | 151 | 178 | 1.27 | 1.52 | 0.8355 |
| 899  | controls | 36 | 1 | 18 | 29 | 8    | 47.9 | 72.5 | 5.44 | 4.59 | 143 | 184 | 2.35 | 2.41 | 0.9751 |
| 900  | controls | 48 | 2 | 11 | 12 | 5.1  | 46.4 | 83.4 | 6.24 | 4.51 | 140 | 255 | 3.86 | 1.68 | 2.2976 |
| 901  | controls | 43 | 2 | 19 | 21 | 7.3  | 45.2 | 1.5  | 5.77 | 4.55 | 130 | 230 | 2.77 | 1.96 | 1.4133 |
| 902  | controls | 35 | 1 | 18 | 20 | 10.2 | 49.8 | 79.7 | 6.95 | 5.65 | 168 | 225 | 2.95 | 3.22 | 0.9161 |
| 6001 | controls | 36 | 1 | 23 | 17 | 12.3 | 44.3 | 83.9 | 5.36 | 4.43 | 134 | 252 | 3.03 | 1.83 | 1.6557 |
| 6007 | controls | 43 | 1 | 14 | 20 | 5.9  | 45.8 | 68.3 | 7.99 | 5.33 | 160 | 250 | 4.71 | 2.32 | 2.0302 |
| 6008 | controls | 36 | 1 | 58 | 33 | 10.8 | 44.6 | 72.2 | 4.54 | 4.57 | 133 | 225 | 2.62 | 1.53 | 1.7124 |

| number   | Group    | Subgroup   | nucleic tesing | ICU or not | age (year) | sex(1,1; 2,2) | nationality | height(cm) | weight (kg) | BMI (kg/m2) | Confirmed patient or Wuhan exposure | Smoking or not | comorbidities | diabetes | high blood pressure |
|----------|----------|------------|----------------|------------|------------|---------------|-------------|------------|-------------|-------------|-------------------------------------|----------------|---------------|----------|---------------------|
| GY-301   | COVID-19 | COVID-19-N | positive       | n          | 50         | 2             | Han         | 168        | 64          | 22.676      | y                                   | n              | n             | n        | n                   |
| GY-302   | COVID-19 | COVID-19-N | positive       | n          | 45         | 2             | Han         | 160        | 73          | 28.516      | y                                   | n              | n             | n        | n                   |
| GY-303   | COVID-19 | COVID-19-N | positive       | n          | 56         | 2             | Han         | 156        | 62          | 25.48       | y                                   | n              | n             | n        | n                   |
| GY-304   | COVID-19 | COVID-19-N | positive       | n          | 40         | 1             | Han         | 168        | 89          | 26.48       | n                                   | n              | n             | n        | n                   |
| GY-305   | COVID-19 | COVID-19-N | positive       | n          | 39         | 1             | Han         | 165        | 75          | 27.548      | y                                   | y              | n             | n        | n                   |
| GY-308   | COVID-19 | COVID-19-N | positive       | n          | 47         | 1             | Han         | 176        | 72          | 23.244      | y                                   | n              | n             | n        | n                   |
| GY-309   | COVID-19 | COVID-19-N | positive       | n          | 39         | 1             | Han         | 179        | 80          | 24.968      | y                                   | y              | n             | n        | n                   |
| GY-310   | COVID-19 | COVID-19-N | positive       | n          | 50         | 1             | Han         | 173        | 80          | 26.73       | y                                   | n              | n             | n        | n                   |
| GY-311   | COVID-19 | COVID-19-N | positive       | n          | 51         | 2             | Han         | 160        | 60          | 23.438      | y                                   | n              | n             | n        | n                   |
| GY-313   | COVID-19 | COVID-19-N | positive       | n          | 40         | 1             | Han         | 170        | 61          | 21.107      | y                                   | n              | n             | n        | n                   |
| GY-314   | COVID-19 | COVID-19-N | positive       | n          | 41         | 2             | Han         | 158        | 58          | 23.233      | y                                   | n              | n             | n        | n                   |
| GY-315   | COVID-19 | COVID-19-N | positive       | n          | 44         | 2             | Han         | 162        | 62          | 23.624      | y                                   | n              | n             | n        | n                   |
| GY-316   | COVID-19 | COVID-19-N | positive       | n          | 49         | 2             | Han         | 159        | 56          | 22.151      | y                                   | n              | n             | n        | n                   |
| GY-317   | COVID-19 | COVID-19-N | positive       | n          | 51         | 1             | Han         | 172        | 85          | 28.732      | y                                   | n              | n             | n        | n                   |
| GY-323   | COVID-19 | COVID-19-N | positive       | n          | 38         | 1             | Han         | 155        | 50          | 20.812      | y                                   | n              | n             | n        | n                   |
| GY-326   | COVID-19 | COVID-19-N | positive       | n          | 56         | 1             | Han         | 170        | 60          | 20.761      | y                                   | n              | n             | n        | n                   |
| GY-327   | COVID-19 | COVID-19-N | positive       | n          | 62         | 1             | Han         | 175        | 60          | 19.592      | y                                   | n              | n             | n        | n                   |
| GY-330   | COVID-19 | COVID-19-N | positive       | n          | 46         | 2             | Han         | 162        | 56          | 21.338      | y                                   | n              | n             | n        | n                   |
| GY-331   | COVID-19 | COVID-19-N | positive       | n          | 55         | 2             | Han         | 157        | 60          | 24.342      | y                                   | n              | n             | n        | n                   |
| GY-332   | COVID-19 | COVID-19-N | positive       | n          | 46         | 2             | Han         | 155        | 60          | 24.974      | y                                   | n              | n             | n        | n                   |
| GY-333   | COVID-19 | COVID-19-N | positive       | n          | 53         | 1             | Han         | 170        | 60          | 20.761      | y                                   | n              | n             | n        | n                   |
| GY-335   | COVID-19 | COVID-19-N | positive       | n          | 35         | 1             | Han         | 170        | 74          | 25.606      | y                                   | y              | n             | n        | n                   |
| GY-337   | COVID-19 | COVID-19-N | positive       | n          | 48         | 2             | Han         | 175        | 68          | 22.204      | y                                   | n              | n             | n        | n                   |
| GY-339   | COVID-19 | COVID-19-N | positive       | n          | 56         | 1             | Han         | 170        | 85          | 29.412      | y                                   | y              | n             | n        | n                   |
| GY-343   | COVID-19 | COVID-19-N | positive       | n          | 25         | 1             | Han         | 176        | 68          | 21.952      | y                                   | n              | n             | n        | n                   |
| GY-344   | COVID-19 | COVID-19-N | positive       | n          | 36         | 2             | Han         | 160        | 53          | 20.703      | n                                   | n              | n             | n        | n                   |
| GY-345   | COVID-19 | COVID-19-N | positive       | n          | 71         | 1             | Han         | 168        | 69          | 24.447      | y                                   | n              | n             | n        | n                   |
| GY-346   | COVID-19 | COVID-19-N | positive       | n          | 68         | 2             | Han         | 155        | 56          | 23.309      | n                                   | n              | n             | n        | n                   |
| GY-347   | COVID-19 | COVID-19-N | positive       | n          | 48         | 1             | Han         | 173        | 90          | 30.071      | y                                   | n              | n             | n        | n                   |
| GY-348   | COVID-19 | COVID-19-N | positive       | n          | 12         | 1             | Han         | 165        | 52          | 19.1        | n                                   | n              | n             | n        | n                   |
| GY-349   | COVID-19 | COVID-19-N | positive       | n          | 30         | 1             | Han         | 178        | 75          | 23.671      | y                                   | n              | n             | n        | n                   |
| GY-350   | COVID-19 | COVID-19-N | positive       | n          | 46         | 2             | Han         | 161        | 54          | 20.833      | y                                   | n              | n             | n        | n                   |
| GY-351   | COVID-19 | COVID-19-N | positive       | n          | 58         | 2             | Han         | 153        | 55          | 23.495      | y                                   | n              | n             | n        | n                   |
| GY-352   | COVID-19 | COVID-19-N | positive       | n          | 25         | 1             | Han         | 170        | 65          | 22.491      | n                                   | n              | n             | n        | n                   |
| GY-353   | COVID-19 | COVID-19-N | positive       | n          | 46         | 1             | Han         | 175        | 80          | 26.122      | y                                   | n              | n             | n        | n                   |
| GY-354   | COVID-19 | COVID-19-N | positive       | n          | 79         | 2             | Han         | 150        | 65          | 28.889      | n                                   | n              | n             | n        | n                   |
| GY-355   | COVID-19 | COVID-19-N | positive       | n          | 22         | 1             | Han         | 180        | 100         | 30.864      | y                                   | n              | n             | n        | n                   |
| GY-357   | COVID-19 | COVID-19-N | positive       | n          | 49         | 2             | Han         | 165        | 50          | 18.365      | y                                   | n              | n             | n        | n                   |
| GY-358   | COVID-19 | COVID-19-N | positive       | n          | 56         | 2             | Han         | 157        | 60          | 24.342      | y                                   | n              | n             | n        | n                   |
| GY-359   | COVID-19 | COVID-19-N | positive       | n          | 35         | 1             | Han         | 176        | 74          | 23.889      | y                                   | n              | n             | n        | n                   |
| GY-359-2 | COVID-19 | COVID-19-N | positive       | n          | 55         | 1             | Han         | 172        | 70          | 23.661      | y                                   | n              | n             | n        | n                   |
| GY-360   | COVID-19 | COVID-19-N | positive       | n          | 30         | 1             | Han         | 172        | 85          | 28.732      | y                                   | n              | n             | n        | n                   |
| GY-361   | COVID-19 | COVID-19-N | positive       | n          | 57         | 1             | Han         | 175        | 72          | 23.51       | y                                   | n              | n             | n        | n                   |
| GY-362   | COVID-19 | COVID-19-N | positive       | n          | 65         | 1             | Han         | 170        | 68          | 23.529      | n                                   | n              | n             | n        | n                   |
| GY-364   | COVID-19 | COVID-19-N | positive       | n          | 53         | 2             | Han         | 158        | 60          | 24.035      | y                                   | n              | n             | n        | n                   |
| GY-365   | COVID-19 | COVID-19-N | positive       | n          | 48         | 1             | Han         | 168        | 67          | 23.739      | y                                   | y              | n             | n        | n                   |
| GY-366   | COVID-19 | COVID-19-N | positive       | n          | 17         | 1             | Han         | 165        | 70          | 25.712      | y                                   | y              | n             | n        | n                   |
| GY-367   | COVID-19 | COVID-19-N | positive       | n          | 76         | 2             | Han         | 154        | 60          | 25.299      | y                                   | n              | n             | n        | n                   |
| GY-368   | COVID-19 | COVID-19-N | positive       | n          | 75         | 1             | Han         | 165        | 65          | 23.875      | y                                   | n              | n             | n        | n                   |
| GY-369   | COVID-19 | COVID-19-N | positive       | n          | 43         | 2             | Han         | 153        | 54          | 23.068      | n                                   | n              | n             | n        | n                   |
| GY-370   | COVID-19 | COVID-19-N | positive       | n          | 24         | 2             | Han         | 154        | 50          | 21.083      | y                                   | n              | n             | n        | n                   |
| GY-371   | COVID-19 | COVID-19-N | positive       | n          | 57         | 1             | Han         | 172        | 80          | 27.04       | y                                   | n              | n             | n        | n                   |
| GY-372   | COVID-19 | COVID-19-N | positive       | n          | 68         | 1             | Han         | 175        | 69          | 28.04       | y                                   | n              | n             | n        | n                   |
| GY-373   | COVID-19 | COVID-19-N | positive       | n          | 29         | 1             | Han         | 178        | 75          | 29.04       | y                                   | y              | n             | n        | n                   |

|        |          |            |          |   |    |   |     |     |    |        |   |   |   |   |   |
|--------|----------|------------|----------|---|----|---|-----|-----|----|--------|---|---|---|---|---|
| GY-374 | COVID-19 | COVID-19-N | positive | n | 14 | 1 | Han | 163 | 52 | 30.04  | n | n | n | n | n |
| GY-375 | COVID-19 | COVID-19-N | positive | n | 39 | 1 | Han | 160 | 80 | 31.04  | y | n | n | n | n |
| GY-306 | COVID-19 | COVID-19-C | positive | n | 46 | 1 | Han | 176 | 70 | 22.598 | y | n | y | n | n |
| GY-307 | COVID-19 | COVID-19-C | positive | n | 56 | 2 | Han | 160 | 60 | 23.438 | y | n | y | y | n |
| GY-312 | COVID-19 | COVID-19-C | positive | n | 55 | 2 | Han | 169 | 65 | 22.758 | y | n | y | y | n |
| GY-320 | COVID-19 | COVID-19-C | positive | n | 65 | 2 | Han | 155 | 68 | 28.304 | N | n | y | n | y |
| GY-322 | COVID-19 | COVID-19-C | positive | n | 47 | 1 | Han | 175 | 72 | 23.51  | y | n | y | n | y |
| GY-324 | COVID-19 | COVID-19-C | positive | n | 50 | 2 | Han | 159 | 59 | 23.338 | n | n | y | y | n |
| GY-328 | COVID-19 | COVID-19-C | positive | n | 61 | 1 | Han | 175 | 60 | 19.592 | y | n | y | n | y |
| GY-329 | COVID-19 | COVID-19-C | positive | n | 64 | 2 | Han | 155 | 70 | 29.136 | y | n | y | n | n |
| GY-334 | COVID-19 | COVID-19-C | positive | n | 62 | 1 | Han | 170 | 82 | 28.374 | y | n | y | n | y |
| GY-336 | COVID-19 | COVID-19-C | positive | n | 54 | 2 | Han | 148 | 44 | 20.088 | y | n | y | n | y |
| GY-338 | COVID-19 | COVID-19-C | positive | n | 54 | 1 | Han | 175 | 62 | 20.245 | y | n | y | y | n |
| GY-340 | COVID-19 | COVID-19-C | positive | n | 58 | 2 | Han | 165 | 55 | 20.202 | y | n | y | n | n |
| GY-356 | COVID-19 | COVID-19-C | positive | n | 46 | 1 | Han | 168 | 76 | 26.927 | y | y | y | n | y |
| GY-363 | COVID-19 | COVID-19-C | positive | n | 61 | 1 | Han | 164 | 57 | 21.193 | n | y | y | y | n |
| GY-376 | COVID-19 | COVID-19-C | positive | n | 40 | 1 | Han | 178 | 78 | 32.04  | y | y | y | n | n |

| cardiovascular diseases | COPD | malignant tumor | chronic liver diseases | signs and symptoms | The highest temperature (°) | cough | muscle pain | fatigue | cough phlegm | headache | diarrhea | dyspnea | Time from illness to dyspnea (day) | time from illness to admission (day) | Total hospital stay (day) | systolic pressure (mmHg) | diastolic pressure (mmHg) | heart rate(Times/min) |
|-------------------------|------|-----------------|------------------------|--------------------|-----------------------------|-------|-------------|---------|--------------|----------|----------|---------|------------------------------------|--------------------------------------|---------------------------|--------------------------|---------------------------|-----------------------|
| n                       | n    | n               | n                      |                    | 37.5                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 7                                    | 16                        | 130                      | 84                        | 94                    |
| n                       | n    | n               | n                      |                    | 38.2                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 9                                    | 17                        | 120                      | 86                        | 81                    |
| n                       | n    | n               | n                      |                    | 36.8                        | y     | y           | y       | n            | y        | n        | n       | n                                  | 7                                    | 25                        | 124                      | 74                        | 82                    |
| n                       | n    | n               | n                      |                    | 39.2                        | y     | n           | y       | y            | n        | n        | y       | 15                                 | 14                                   | 30                        | 120                      | 87                        | 93                    |
| n                       | n    | n               | n                      |                    | 38.8                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 5                                    | 17                        | 125                      | 78                        | 86                    |
| n                       | n    | n               | n                      |                    | 37.9                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 5                                    | 18                        | 109                      | 76                        | 78                    |
| n                       | n    | n               | n                      |                    | 36.8                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 6                                    | 14                        | 106                      | 86                        | 74                    |
| n                       | n    | n               | n                      |                    | 37.7                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 7                                    | 21                        | 109                      | 87                        | 79                    |
| n                       | n    | n               | n                      |                    | 38.1                        | y     | n           | y       | n            | y        | n        | n       | n                                  | 4                                    | 24                        | 124                      | 82                        | 100                   |
| n                       | n    | n               | n                      |                    | 38.8                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 15                                   | 21                        | 98                       | 65                        | 69                    |
| n                       | n    | n               | n                      |                    | 37.5                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 4                                    | 17                        | 97                       | 69                        | 77                    |
| n                       | n    | n               | n                      |                    | 37.6                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 15                                   | 27                        | 100                      | 78                        | 75                    |
| n                       | n    | n               | n                      |                    | 38.1                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 9                                    | 15                        | 98                       | 67                        | 78                    |
| n                       | n    | n               | n                      |                    | 38.5                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 4                                    | 19                        | 119                      | 78                        | 96                    |
| n                       | n    | n               | n                      |                    | 38.7                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 8                                    | 14                        | 118                      | 89                        | 87                    |
| n                       | n    | n               | n                      |                    | 38.5                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 11                                   | 16                        | 161                      | 102                       | 90                    |
| n                       | n    | n               | n                      |                    | 38                          | n     | n           | n       | n            | y        | n        | n       | n                                  | 3                                    | 13                        | 129                      | 80                        | 80                    |
| n                       | n    | n               | n                      |                    | 37.2                        | y     | n           | n       | n            | n        | n        | n       | n                                  | 3                                    | 27                        | 150                      | 89                        | 90                    |
| n                       | n    | n               | n                      |                    | 37                          | y     | n           | n       | n            | n        | n        | n       | n                                  | 20                                   | 15                        | 107                      | 70                        | 80                    |
| n                       | n    | n               | n                      |                    | 36.5                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 1                                    | 16                        | 118                      | 65                        | 80                    |
| n                       | n    | n               | n                      |                    | 38                          | y     | n           | n       | n            | n        | n        | n       | n                                  | 1                                    | 22                        | 148                      | 95                        | 90                    |
| n                       | n    | n               | n                      |                    | 37                          | y     | n           | n       | n            | n        | n        | n       | n                                  | 1                                    | 11                        | 120                      | 80                        | 84                    |
| n                       | n    | n               | n                      |                    | 37.2                        | y     | n           | n       | n            | y        | n        | n       | n                                  | 1                                    | 11                        | 119                      | 87                        | 80                    |
| n                       | n    | n               | n                      |                    | 38.3                        | n     | n           | y       | n            | n        | n        | y       | 15                                 | 13                                   | 22                        | 142                      | 91                        | 113                   |
| n                       | n    | n               | n                      |                    | 38.0                        | y     | n           | n       | n            | n        | n        | n       | n                                  | 3                                    | 14                        | 105                      | 62                        | 102                   |
| n                       | n    | n               | n                      |                    | 37.2                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 3                                    | 16                        | 110                      | 68                        | 79                    |
| n                       | n    | n               | n                      |                    | 38.2                        | y     | n           | n       | y            | n        | n        | n       | n                                  | 5                                    | 18                        | 133                      | 77                        | 95                    |
| n                       | n    | n               | n                      |                    | 39.2                        | y     | n           | n       | y            | n        | n        | n       | n                                  | 4                                    | 18                        | 147                      | 70                        | 88                    |
| n                       | n    | n               | n                      |                    | 38.0                        | y     | n           | n       | y            | n        | n        | n       | n                                  | 5                                    | 16                        | 113                      | 70                        | 84                    |
| n                       | n    | n               | n                      |                    | 37.2                        | y     | n           | n       | n            | n        | n        | n       | n                                  | 2                                    | 14                        | 100                      | 60                        | 88                    |
| n                       | n    | n               | n                      |                    | 38.0                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 3                                    | 12                        | 121                      | 84                        | 95                    |
| n                       | n    | n               | n                      |                    | 37.4                        | y     | n           | n       | n            | n        | n        | n       | n                                  | 2                                    | 11                        | 110                      | 70                        | 76                    |
| n                       | n    | n               | n                      |                    | 38.6                        | y     | n           | n       | n            | n        | n        | n       | n                                  | 4                                    | 12                        | 130                      | 90                        | 80                    |
| n                       | n    | n               | n                      |                    | 38.0                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 3                                    | 12                        | 120                      | 80                        | 80                    |
| n                       | n    | n               | n                      |                    | 38.5                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 4                                    | 16                        | 147                      | 86                        | 95                    |
| n                       | n    | n               | n                      |                    | 36.9                        | n     | n           | y       | n            | n        | n        | n       | n                                  | 10                                   | 10                        | 143                      | 79                        | 83                    |
| n                       | n    | n               | n                      |                    | 37.7                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 4                                    | 14                        | 108                      | 78                        | 80                    |
| n                       | n    | n               | n                      |                    | 38.2                        | y     | n           | n       | n            | n        | n        | n       | n                                  | 10                                   | 13                        | 125                      | 90                        | 99                    |
| n                       | n    | n               | n                      |                    | 37.5                        | y     | n           | n       | n            | n        | n        | n       | n                                  | 10                                   | 17                        | 122                      | 76                        | 79                    |
| n                       | n    | n               | n                      |                    | 39                          | y     | y           | y       | n            | n        | n        | n       | n                                  | 4                                    | 23                        | 125                      | 82                        | 76                    |
| n                       | n    | n               | n                      |                    | 38                          | y     | n           | y       | n            | n        | n        | n       | n                                  | 15                                   | 20                        | 130                      | 70                        | 69                    |
| n                       | n    | n               | n                      |                    | 38.2                        | y     | n           | y       | n            | n        | n        | n       | n                                  | 1                                    | 12                        | 135                      | 89                        | 80                    |
| n                       | n    | n               | n                      |                    | 38.5                        | n     | n           | y       | n            | y        | n        | n       | n                                  | 14                                   | 15                        | 114                      | 76                        | 80                    |
| n                       | n    | n               | n                      |                    | 38.2                        | y     | n           | n       | y            | n        | n        | n       | n                                  | 7                                    | 21                        | 136                      | 92                        | 76                    |
| n                       | n    | n               | n                      |                    | 38                          | y     | n           | n       | n            | n        | n        | n       | n                                  | 4                                    | 29                        | 126                      | 82                        | 72                    |
| n                       | n    | n               | n                      |                    | 37.4                        | n     | n           | y       | n            | n        | n        | n       | n                                  | 1                                    | 6                         | 123                      | 91                        | 102                   |
| n                       | n    | n               | n                      |                    | 36.5                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 1                                    | 9                         | 125                      | 75                        | 68                    |
| n                       | n    | n               | n                      |                    | 36.6                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 1                                    | 12                        | 126                      | 68                        | 71                    |
| n                       | n    | n               | n                      |                    | 36.8                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 2                                    | 7                         | 126                      | 69                        | 69                    |
| n                       | n    | n               | n                      |                    | 37.6                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 3                                    | 13                        | 100                      | 64                        | 98                    |
| n                       | n    | n               | n                      |                    | 36.2                        | n     | n           | n       | n            | n        | n        | n       | n                                  | 1                                    | 7                         | 144                      | 88                        | 83                    |
| n                       | n    | n               | n                      |                    | 36.5                        | n     | n           | n       | y            | n        | n        | n       | n                                  | 1                                    | 6                         | 136                      | 76                        | 76                    |
| n                       | n    | n               | n                      |                    | 38.5                        | y     | n           | n       | n            | n        | n        | n       | n                                  | 2                                    | 15                        | 128                      | 80                        | 90                    |
| n                       | n    | n               | n                      |                    | 38.1                        | y     | n           | n       | y            | n        | n        | n       | n                                  | 7                                    | 7                         | 116                      | 69                        | 79                    |

|   |   |   |   |  |      |   |   |   |   |   |   |   |   |    |    |     |     |     |
|---|---|---|---|--|------|---|---|---|---|---|---|---|---|----|----|-----|-----|-----|
| n | n | n | n |  | 37.2 | n | n | n | n | n | y | n | n | 2  | 8  | 110 | 70  | 76  |
| n | n | n | n |  | 37.4 | y | n | n | n | n | n | n | n | 8  | 15 | 130 | 80  | 78  |
| n | n | n | y |  | 39.3 | n | n | n | n | n | n | n | n | 2  | 20 | 109 | 86  | 76  |
| n | n | n | n |  | 38.1 | n | n | n | n | n | n | n | n | 4  | 18 | 128 | 87  | 75  |
| n | n | n | n |  | 39.5 | n | n | n | n | n | n | n | n | 10 | 25 | 109 | 87  | 75  |
| n | n | n | n |  | 38.1 | n | n | n | y | n | n | n | n | 2  | 17 | 161 | 92  | 98  |
| n | n | n | n |  | 37.3 | y | n | y | n | n | n | n | n | 13 | 12 | 160 | 110 | 120 |
| n | n | n | n |  | 38.2 | n | n | n | n | n | n | n | n | 5  | 14 | 129 | 99  | 90  |
| n | n | n | n |  | 37.1 | y | n | n | n | n | n | n | n | 3  | 17 | 145 | 108 | 80  |
| y | y | n | n |  | 37.4 | y | n | n | n | n | n | y | 1 | 1  | 18 | 130 | 80  | 80  |
| y | n | n | n |  | 39.3 | n | n | n | n | n | n | n | n | 3  | 21 | 153 | 87  | 90  |
| n | n | n | n |  | 37.2 | y | n | n | n | y | n | n | n | 1  | 12 | 163 | 94  | 110 |
| y | n | n | n |  | 37   | y | n | n | n | n | n | n | n | 7  | 11 | 142 | 104 | 80  |
| y | n | n | n |  | 36.8 | n | n | n | n | n | n | n | n | 14 | 7  | 120 | 96  | 100 |
| n | n | n | n |  | 36.6 | y | n | n | n | n | n | n | n | 6  | 19 | 162 | 90  | 79  |
| n | n | n | n |  | 39   | n | y | y | n | n | n | n | n | 5  | 11 | 135 | 85  | 86  |
| n | n | n | y |  | 38.9 | n | n | n | n | n | n | n | n | 6  | 13 | 128 | 86  | 90  |

| respiratory rate<br>(Times/min) | laboratory testing results | ALT<br>(U/L) | AST<br>(U/L) | Total bilirubin<br>(mmol/L) | Albumin<br>(g/L) | Creatinine (μmol/L) | White blood cell<br>(10^9/L) | Red blood cell<br>(10^9/L) | Hemoglobin(g/L) | Platelet<br>(10^9/L) | Neutrophil<br>(10^9/L) | Lymphocyte<br>(10^9/L) | Neutrophil/Lymphocyte | Prothrombin time (s) | Activated partial thromboplastin time (s) | D-dimer<br>(mg/L) | Potassium ion,(mmol/L) | Sodium<br>(mmol/L) |
|---------------------------------|----------------------------|--------------|--------------|-----------------------------|------------------|---------------------|------------------------------|----------------------------|-----------------|----------------------|------------------------|------------------------|-----------------------|----------------------|-------------------------------------------|-------------------|------------------------|--------------------|
| 24                              |                            | 12.5         | 21.8         | 6.6                         | 37.6             | 46.7                | 3.21                         | 4.51                       | 129             | 128                  | 1.51                   | 1.42                   | 1.0634                | 10.8                 | 25.2                                      | 0.11              | 4                      | 144.3              |
| 21                              |                            | 43.9         | 34.2         | 12.6                        | 43.5             | 67.4                | 4.51                         | 5                          | 150             | 124                  | 2.25                   | 1.9                    | 1.1842                | 10.6                 | 23.8                                      | 0.15              | 3.46                   | 139.6              |
| 20                              |                            | 22.6         | 0.89         | 9.4                         | 44.1             | 53.6                | 3.5                          | 4.21                       | 137             | 183                  | 1.49                   | 1.73                   | 0.8613                | 9.8                  | 24.9                                      | 0.26              | 4.82                   | 142.2              |
| 24                              |                            | 28.2         | 23.5         | 9.1                         | 42.5             | 68.3                | 8.13                         | 4.87                       | 146             | 213                  | 6.24                   | 1.35                   | 4.6222                | 363                  | 21.5                                      | 0.31              | 5.75                   | 146.2              |
| 18                              |                            | 9.2          | 15.3         | 14.5                        | 43.5             | 57                  | 3.06                         | 4.75                       | 139             | 291                  | 1.48                   | 1.48                   | 1                     | 14.3                 | 25.2                                      | 0.03              | 3.97                   | 109.5              |
| 15                              |                            | 44.6         | 27.5         | 18.4                        | 42.2             | 63.3                | 3.13                         | 4.56                       | 137             | 118                  | 2.08                   | 0.91                   | 2.2857                | 14.2                 | 31.4                                      | 0.30              | 3.88                   | 140.8              |
| 17                              |                            | 30.2         | 21.5         | 34.2                        | 46.3             | 135.2               | 3.53                         | 5.32                       | 153             | 136                  | 2.53                   | 0.95                   | 2.6632                | 13.5                 | 21.5                                      | 0.07              | 3.51                   | 146.2              |
| 19                              |                            | 74.4         | 35           | 11.2                        | 45.8             | 128.8               | 6.43                         | 6.46                       | 184             | 147                  | 3.6                    | 2.35                   | 1.5319                | 21.6                 | 28.2                                      | 0.07              | 5.25                   | 140.7              |
| 20                              |                            | 11           | 10.3         | 14.5                        | 40.3             | 60.5                | 2.94                         | 3.93                       | 116             | 122                  | 1.73                   | 0.93                   | 1.8602                | 11.3                 | 28.6                                      | 0.16              | 4.02                   | 141.5              |
| 16                              |                            | 20.5         | 35.3         | 11.4                        | 35.3             | 74.2                | 3.82                         | 5.32                       | 159             | 209                  | 2.98                   | 0.72                   | 4.1389                | 13.5                 | 27.5                                      | 0.15              | 4.25                   | 135.3              |
| 18                              |                            | 21.8         | 25.7         | 6.5                         | 41.9             | 54.3                | 4.83                         | 3.88                       | 118             | 165                  | 2.21                   | 2.27                   | 0.9736                | 10.2                 | 24.7                                      | 0.07              | 3.78                   | 143.1              |
| 17                              |                            | 20.2         | 25.3         | 9.45                        | 44.2             | 56                  | 2.42                         | 3.13                       | 120             | 89                   | 1.78                   | 0.56                   | 3.1786                | 9.2                  | 21                                        | 0.04              | 4.01                   | 139.2              |
| 14                              |                            | 19.6         | 16.1         | 9.24                        | 39.5             | 47.9                | 10.82                        | 4.47                       | 136             | 319                  | 8.92                   | 1.51                   | 5.9073                | 9.2                  | 23.2                                      | 0.27              | 5.56                   | 140.8              |
| 19                              |                            | 41.2         | 24.3         | 19.34                       | 47.2             | 67.5                | 6.07                         | 5.59                       | 172             | 150                  | 4.42                   | 1.27                   | 3.4803                | 12.6                 | 21.5                                      | 0.39              | 4.01                   | 139.0              |
| 15                              |                            | 17.7         | 22.8         | 8.5                         | 46.5             | 43                  | 5.39                         | 4.54                       | 126             | 211                  | 3.30                   | 1.78                   | 1.8539                | 9.25                 | 28.8                                      | 0.45              | 4.49                   | 138.3              |
| 20                              |                            | 34           | 18           | 26.3                        | 38.1             | 65.3                | 11.8                         | 4.94                       | 144             | 374                  | 10.25                  | 1.06                   | 9.6698                | 9.2                  | 21.2                                      | 2.6               | 3.33                   | 142.2              |
| 20                              |                            | 14           | 10           | 46.3                        | 62.8             | 86.6                | 12.3                         | 4.21                       | 124             | 240                  | 10.95                  | 1.03                   | 10.631                | 11                   | 23.2                                      | 0.4               | 3.99                   | 139.8              |
| 20                              |                            | 39           | 29           | 20.0                        | 41.0             | 52.8                | 4.3                          | 4.14                       | 91              | 230                  | 3.00                   | 0.96                   | 3.125                 | 10                   | 29.4                                      | 0.06              | 3.20                   | 139.0              |
| 20                              |                            | 12           | 15           | 13.1                        | 41.9             | 57.8                | 7.1                          | 4.22                       | 125             | 287                  | 4.51                   | 2.06                   | 2.1893                | n                    | n                                         | 0.6               | 3.56                   | 139.7              |
| 20                              |                            | 38           | 31           | 19.8                        | 38.4             | 49.7                | 5.7                          | 3.80                       | 114             | 210                  | 3.53                   | 1.75                   | 2.0171                | 11                   | 23.4                                      | 0.2               | 3.77                   | 138.9              |
| 20                              |                            | 18           | 24           | 28.1                        | 39.8             | 79.5                | 4.9                          | 5.22                       | 150             | 179                  | 3.17                   | 1.23                   | 2.5772                | 12.3                 | 24.1                                      | 0.1               | 3.16                   | 138.0              |
| 20                              |                            | 15           | 11           | 22.0                        | 40.5             | 72.1                | 8.1                          | 5.11                       | 150             | 330                  | 4.54                   | 2.79                   | 1.6272                | 11.6                 | 23.1                                      | 0.1               | 3.64                   | 141.8              |
| 20                              |                            | 8            | 16           | 37.2                        | 46.3             | 68.0                | 5.3                          | 4.26                       | 113             | 269                  | 3.54                   | 1.44                   | 2.4583                | 18.2                 | 25.2                                      | 0.4               | 2.97                   | 141.2              |
| 21                              |                            | 50           | 20           | 10.2                        | 32.8             | 67.6                | 7                            | 3.88                       | 117             | 267                  | 4.92                   | 1.51                   | 3.2583                | 11.2                 | 25.1                                      | 0.4               | 2.9                    | 135                |
| 18                              |                            | 23           | 23           | 7.7                         | 39.2             | 103.2               | 8.59                         | 4.25                       | 161             | 319                  | 3.18                   | 1.21                   | 2.6281                | 14.9                 | 27.6                                      | 0.32              | 3.84                   | 138.1              |
| 20                              |                            | 7            | 14           | 6                           | 45.4             | 53.7                | 2.64                         | 4.23                       | 108             | 128                  | 4.08                   | 1.49                   | 2.7383                | 14.4                 | 37.2                                      | 0.27              | 3.67                   | 141.6              |
| 20                              |                            | 18           | 42           | 18.3                        | 40               | 94.2                | 6.45                         | 5.15                       | 126             | 93                   | 6.77                   | 0.69                   | 9.8116                | 132                  | 27.3                                      | 0.26              | 3.52                   | 146.1              |
| 22                              |                            | 21           | 37           | 5.7                         | 41.1             | 59.9                | 4.98                         | 4                          | 126             | 170                  | 7.54                   | 2.18                   | 3.4587                | 14.5                 | 29.8                                      | 0.29              | 3.64                   | 139.2              |
| 20                              |                            | 40           | 26           | 8.4                         | 46.9             | 202.2               | 5.22                         | 3.57                       | 156             | 196                  | 8.21                   | 0.75                   | 10.947                | 14.9                 | 33                                        | 0.3               | 3.51                   | 138                |
| 16                              |                            | 8            | 20           | 2.8                         | 52.6             | 52.2                | 4.75                         | 5.21                       | 137             | 177                  | 5.62                   | 2.28                   | 2.4649                | 14                   | 38.3                                      | 0.31              | 3.55                   | 142.8              |
| 20                              |                            | 8            | 23           | 8.1                         | 42.6             | 76.9                | 3.1                          | 5.23                       | 144             | 114                  | 6.38                   | 1.65                   | 3.8667                | 15.8                 | 35.1                                      | 0.27              | 3.8                    | 138.9              |
| 19                              |                            | 23           | 48           | 11.6                        | 39               | 88.5                | 3.73                         | 4.75                       | 102             | 132                  | 5.37                   | 1.28                   | 4.1953                | 16.9                 | 38.7                                      | 0.36              | 3.98                   | 140.9              |
| 20                              |                            | 12           | 27           | 2.8                         | 40.2             | 71.1                | 4.6                          | 4.21                       | 105             | 140                  | 8.52                   | 1.09                   | 7.8165                | 15.5                 | 45.8                                      | 0.29              | 3.08                   | 141.2              |
| 19                              |                            | 18           | 27           | 34.3                        | 48.5             | 92.7                | 6                            | 5.21                       | 152             | 199                  | 4.09                   | 1.74                   | 2.3506                | 15                   | 34                                        | 0.29              | 3.73                   | 140.1              |
| 21                              |                            | 25           | 25           | 7.7                         | 42               | 78.2                | 7.79                         | 5.25                       | 160             | 294                  | 5.87                   | 1.32                   | 4.447                 | 13.2                 | 28.6                                      | 0.33              | 4.03                   | 137.1              |
| 22                              |                            | 21           | 37           | 5.7                         | 14.1             | 59.9                | 4.98                         | 4                          | 126             | 170                  | 5.73                   | 2.03                   | 2.8227                | 14.5                 | 29.8                                      | 0.29              |                        |                    |
| 18                              |                            | 74.4         | 79.3         | 8.6                         | 41.6             | 94.5                | 4.57                         | 5.11                       | 153             | 259                  | 2.72                   | 1.42                   | 1.9155                | 9.7                  | 25.8                                      | 1.37              | 5.77                   | 142.4              |
| 20                              |                            | 20           | 24           | 4.8                         | 40.4             | 57                  | 2.36                         | 5.02                       | 151             | 113                  | 1.36                   | 0.83                   | 1.6386                | 12.7                 | 33.9                                      | 0.35              | 3.6                    | 139.4              |
| 20                              |                            | 12           | 23           | 5.8                         | 34.7             | 55                  | 7.23                         | 4.98                       | 129             | 325                  | 5.72                   | 1.09                   | 5.2477                | 12.1                 | 25.4                                      | 0.49              | 3.8                    | 140.1              |
| 22                              |                            | 47           | 45           | 8.8                         | 39.5             | 57                  | 4.55                         | 4.23                       | 138             | 163                  | 2.87                   | 1.15                   | 2.4957                | 11                   | 25.6                                      | 0.38              | 3.2                    | 138.9              |
| 18                              |                            | 30           | 31           | 7.2                         | 39.9             | 83                  | 5.34                         | 3.56                       | 139             | 173                  | 3.78                   | 1.08                   | 3.5                   | 12.5                 | 23.6                                      | 0.28              | 3.4                    | 139                |
| 19                              |                            | 35           | 28           | 6.5                         | 45.6             | 77                  | 4.15                         | 4.23                       | 164             | 176                  | 3.13                   | 0.71                   | 4.4085                | 13                   | 27.9                                      | 0.32              | 4.2                    | 142.2              |
| 19                              |                            | 33           | 35           | 5.9                         | 35.3             | 71                  | 3.61                         | 4.63                       | 137             | 285                  | 2.44                   | 0.91                   | 2.6813                | 12.5                 | 31                                        | 0.24              | 3.7                    | 138.5              |
| 19                              |                            | 34           | 23           | 5.2                         | 40.2             | 69                  | 4.2                          | 5.23                       | 128             | 164                  | 5.1                    | 2.25                   | 2.2667                | n                    | n                                         | 0.21              | 3.8                    | 139.2              |
| 18                              |                            | 21           | 25.2         | 8.2                         | 39.2             | 46                  | 3.61                         | 5.23                       | 132             | 193                  | 4.16                   | 6                      | 0.6933                | 13.2                 | 22.5                                      | 0.25              | 6.2                    | 139.2              |
| 24                              |                            | 44.3         | 29.2         | 14.07                       | 42.4             | 93                  | 4.78                         | 4.43                       | 141             | 133                  | 4.23                   | 1.81                   | 2.337                 | 13.5                 | 27.4                                      | 0.2               | 3.9                    | 138                |
| 18                              |                            | 15           | 16           | 10.9                        | 50               | 74.9                | 4.31                         | 5.24                       | 155             | 209                  | 2.14                   | 1.72                   | 1.2442                | 14.6                 | 31.1                                      | 0.27              | 4.35                   | 139.9              |
| 21                              |                            | 30           | 40           | 6.4                         | 43.2             | 46.8                | 5.37                         | 4.25                       | 115             | 210                  | 3.28                   | 1.65                   | 1.9879                | 12.7                 | 23.4                                      | 0.75              | 4.25                   | 142.9              |
| 21                              |                            | 33           | 26           | 8.4                         | 49               | 62.5                | 3.84                         | 5.21                       | 165             | 187                  | 6.19                   | 1.69                   | 3.6627                | 13.8                 | 26.5                                      | 0.31              | 4.32                   | 140.9              |
| 16                              |                            | 15           | 17           | 7.7                         | 45.8             | 47.3                | 5.18                         | 4.13                       | 138             | 219                  | 3.37                   | 1.87                   | 1.8021                | 14.6                 | 30.1                                      | 0.39              | 4.41                   | 138.5              |
| 20                              |                            | 13           | 18           | 19.6                        | 48.3             | 42.1                | 5.98                         | 4.37                       | 135             | 162                  | 2.79                   | 2.83                   | 0.9859                | 14.6                 | 33.3                                      | 0.26              | 3.58                   | 137                |
| 22                              |                            | 38           | 27           | 8.5                         | 43.1             | 79.4                | 5.54                         | 4.8                        | 342             | 159                  | 3.69                   | 1.5                    | 2.46                  | 12.8                 | 27.3                                      | 0.03              | 4.31                   | 136.4              |
| 23                              |                            | 15           | 45           | 18.1                        | 42               | 94.8                | 6.04                         | 4.9                        | 120             | 94                   | 8.43                   | 15                     | 0.562                 | 15.2                 | 26.7                                      | 0.21              | 5.02                   | 140.6              |
| 19                              |                            | 18           | 17           | 14                          | 47.5             | 64.2                | 7.53                         | 5.12                       | 145             | 227                  | 4.84                   | 2.06                   | 2.3495                | 14.2                 | 35.2                                      | 0.27              | 4.27                   | 140.3              |

|    |  |       |      |       |      |       |      |      |     |     |      |      |        |       |      |      |      |       |
|----|--|-------|------|-------|------|-------|------|------|-----|-----|------|------|--------|-------|------|------|------|-------|
| 20 |  | 17    | 26   | 6.4   | 46   | 48.4  | 3.1  | 5.23 | 125 | 98  | 5.74 | 0.93 | 6.172  | 13.2  | 33.6 | 0.36 | 4.45 | 138.1 |
| 20 |  | 40    | 27   | 9.4   | 43.8 | 78    | 7.19 | 4.32 | 135 | 61  | 3.84 | 2.65 | 1.4491 | 13.6  | 28.4 | 0.28 | 4.38 | 140.1 |
| 21 |  | 31.5  | 36.3 | 17.4  | 37.4 | 85.3  | 5.13 | 4.56 | 138 | 241 | 3.5  | 1.35 | 2.5926 | 17.3  | 31.3 | 0.22 | 4.75 | 136.3 |
| 19 |  | 27.4  | 21.5 | 7.4   | 41.3 | 67.3  | 3.53 | 4.21 | 136 | 146 | 3.09 | 0.45 | 6.8667 | 17.5  | 30.2 | 0.51 | 5.32 | 135.3 |
| 15 |  | 18.2  | 20.3 | 7.8   | 38.3 | 70.2  | 3.87 | 4.16 | 132 | 142 | 2.37 | 0.99 | 2.3939 | 10.5  | 29.3 | 0.45 | 5.23 | 139.4 |
| 17 |  | 20.3  | 30   | 15.2  | 41.3 | 48.5  | 5.13 | 4.42 | 135 | 287 | 4.13 | 1.09 | 3.789  | 10.56 | 18.2 | 0.71 | 4.2  | 145.2 |
| 24 |  | 111.9 | 33.2 | 12.8  | 42.3 | 54.9  | 8.18 | 4.89 | 142 | 410 | 6.08 | 1.71 | 3.5556 | 9.6   | 27.8 | 0.16 | 4.12 | 140.6 |
| 18 |  | 28.2  | 29.2 | 7.2   | 40.1 | 60.2  | 3.09 | 3.58 | 123 | 180 | 1.98 | 1.04 | 1.9038 | 11.3  | 25.2 | 0.72 | 4.3  | 140.2 |
| 20 |  | 10    | 20   | 53.8  | 41.4 | 77.3  | 8.3  | 5.08 | 160 | 138 | 5.79 | 1.94 | 2.9845 | 11.5  | 24.2 | 0.1  | 3.66 | 140.4 |
| 20 |  | 16    | 25   | 41.5  | 41.6 | 84.2  | 5.6  | 3.33 | 117 | 150 | 3.70 | 1.53 | 2.4183 | 13.2  | 25.2 | 2.1  | 3.69 | 140.7 |
| 20 |  | 56    | 71   | 12.0  | 38.7 | 76.7  | 6.9  | 5.11 | 150 | 116 | 6.03 | 0.71 | 8.493  | 11.9  | 25.3 | 0.6  | 3.87 | 138.5 |
| 20 |  | 10    | 15   | 5.0   | 36.1 | 118.7 | 6.2  | 3.65 | 106 | 308 | 5.12 | 0.63 | 8.127  | n     | n    | 1.9  | 6.14 | 131.4 |
| 20 |  | 13    | 9    | 20.2  | 42.2 | 57.0  | 6.9  | 5.10 | 154 | 210 | 4.48 | 1.76 | 2.5455 | n     | n    | 0.1  | 3.61 | 140.3 |
| 20 |  | 36.8  | 36.6 | 7.6   | 40.5 | 46.4  | 4.9  | 4.16 | 123 | 247 | 2.49 | 2.13 | 1.169  | 17.8  | 28.9 | 0.52 | 3.1  | 139   |
| 21 |  | 29    | 15   | 10.3  | 49   | 56.2  | 4.98 | 4.23 | 139 | 223 | 4.23 | 0.73 | 5.7945 | 13.5  | 36.2 | 0.35 | 3.73 | 142.3 |
| 18 |  | 20.6  | 23.7 | 18.13 | 33.8 | 60.5  | 4.79 | 4.79 | 141 | 119 | 3.38 | 0.89 | 3.7978 | 12.5  | 25.4 | 0.15 | 4.28 | 139.7 |
| 21 |  | 23    | 26   | 8.5   | 46   | 80.3  | 6.23 | 5.04 | 160 | 205 | 5.39 | 1.52 | 3.5461 | 13.2  | 28.6 | 0.33 | 4.03 | 137.1 |

| Creatin<br>e kinase<br>(U/L) | Lactic<br>dehydro<br>genase<br>(U/L) | hs-<br>cTnI,<br>pg/mL3 | PCT<br>(ng/mL) | CRP(ng<br>/mL) | HS-<br>CRP(ng<br>/mL) | ESR(m<br>m/h) |
|------------------------------|--------------------------------------|------------------------|----------------|----------------|-----------------------|---------------|
| 33.2                         | 179.8                                | 0.53                   | 0.14           | 13.4           | 》10                   | 44            |
| 104.4                        | 266.9                                | 0.52                   | 0.2            | ≤10            | 《0.499                | 64            |
| 76.2                         | 183.6                                | 0.38                   | 0.21           | <10            | 0.91                  | 20            |
| 46.1                         | 275.4                                | 0.26                   | 0.14           | 15             | >10                   | 81            |
| 101.3                        | 153.6                                | 0.53                   | 《0.1           | 《10            | 2.05                  | 26            |
| 65.9                         | 303.9                                | 0.60                   | 《0.1           | 22             | 》10                   | 14            |
| 85.3                         | 204.2                                | 0.4                    | 0.14           | 35.2           | 》10                   | 10            |
| 163.5                        | 249.4                                | 1.26                   | 0.19           | 10.3           | 》10                   | 34            |
| 36.2                         | 180.8                                | 0.72                   | <0.1           | >10            | 13.5                  | 60            |
| 180.3                        | 370.4                                | 0.01                   | 0.13           | 17.5           | 》10                   | 7             |
| 46.5                         | 178.2                                | 0.51                   | 《0.1           | 《10            | 《0.499                | 44            |
| 102.4                        | 198.2                                | 0.02                   | 0.13           | 53.4           | 》10                   | 99            |
| 32                           | 221.2                                | 0.01                   | 0.13           | 10.1           | 》10                   | 5             |
| 28.5                         | 180.1                                | 0.01                   | 0.19           | 《10            | 6.43                  | 47            |
| 51.8                         | 234.8                                | 0.68                   | 0.11           | 《10            | 2.06                  | 12            |
| 148                          | 343                                  | 0.02                   | 0.13           | 61.4           | 》10                   | 118           |
| 23                           | 112                                  | 0.2                    | 0.2            | 22.3           | 》10                   | 40            |
| 25                           | 129                                  | 0.06                   | 0.02           | 18.01          | 》10                   | 73            |
| 32                           | 163                                  | 0.01                   | 0.19           | 5.3            |                       | 115           |
| 37                           | 182                                  | 0.67                   | 0.16           | 6.8            |                       | 34            |
| 7                            | 225                                  | 0.68                   | 0.29           | 24.5           | 》10                   | 50            |
| 25                           | 133                                  | 0.57                   | 0.34           | 0.3            |                       | 15            |
| 44                           | 191                                  | 0.47                   | 0.19           | 4.90           |                       | 110           |
| 5                            | 304                                  | 0.05                   | 0.17           | <10            | 2.57                  | 130           |
| 101                          | 196                                  | 0.31                   | 0.07           | 35.3           | 》10                   | 46            |
| 46                           | 123                                  | 0.42                   | 0.04           | 26.3           | 》10                   | 45            |
| 125                          | 363                                  | 0.67                   | 0.05           | 28.1           | >3                    | 37            |
| 61                           | 249                                  | 0.45                   | 0.051          | 20.67          | >3                    | 39            |
| 45                           | 215                                  | 0.64                   | 0.34           | 16.65          | >3                    | 67            |
| 66                           | 186                                  | 0.34                   | 0.04           | <3             | 2.27                  | 23            |
| 43                           | 215                                  | n                      | 0.04           | <3             | 0.63                  | 8             |
| 50                           | 219                                  | 0.02                   | 0.04           | <3             | <0.5                  | 14            |
| 158                          | 296                                  | 0.05                   | 0.132          | 117.77         | >3                    | 32            |
| 61                           | 172                                  | 0.13                   | 0.04           | <3             | 1.14                  | 10            |
| 68                           | 165                                  | 0.05                   | 0.04           | 8.8            | >3                    | 11            |
| 61                           | 249                                  |                        | 0.051          | 20.67          | >3                    |               |
| 539.6                        | 561.6                                | 0.80                   | 0.11           | 136.3          | 》10                   | 87            |
| 42                           | 179                                  | 0.01                   | 0.13           | <10            | <0.499                | 13            |
| 25                           | 236                                  | 0.02                   | 0              | 38.08          | >10                   | 127           |
| 56                           | 212                                  | 0.34                   | 0              | 10.63          | >10                   | 2             |
| 388                          | 215                                  | 0.25                   | 0.09           | <10            | <0.5                  | 6             |
| 83                           | 204                                  | 0.27                   | 0              | <10            | <0.499                | 16            |
| 38                           | 205                                  | 0.31                   | 0              | 15.4           | >10                   | 43            |
| 42                           | 198                                  | 0.07                   | 0.14           | 1.3            | 1.3                   | 19            |
| 45                           | 153                                  | 0.23                   | 0.21           | 20.4           | 20.4                  | 29            |
| 135.9                        | 164.8                                | 0.028                  | 0.05           | 10.31          | >10                   | 8             |
| 98                           | 140                                  | 0.25                   | 0.04           | <3             | <0.5                  | 7             |
| 86                           | 192                                  | 0.025                  | 0.04           | <3             | <0.5                  | 20            |
| 59                           | 151                                  | 0.03                   | 0.06           | <3             | <0.5                  | 4             |
| 72                           | 141                                  | 0.036                  | 0.04           | <3             | <0.5                  | 2             |
| 59                           | 110                                  | 0.043                  | 0.04           | <3             | <0.5                  | 9             |
| 56                           | 127                                  | 0.06                   | 0.12           | <3             | <0.5                  | 6             |
| 124                          | 408                                  | 0.36                   | 0.05           | 27.8           | >3                    | 14            |
| 74                           | 137                                  | 0.025                  | 0.18           | <3             | <0.5                  | 4             |



|       |       |       |      |       |        |     |
|-------|-------|-------|------|-------|--------|-----|
| 129   | 156   | 0.64  | 0.20 | 3.54  | > 3    | 12  |
| 101   | 152   | 0.025 | 0.03 | <3    | <0.5   | 5   |
| 41    | 245.2 | 0.41  | 0.24 | 23.5  | 》 10   | 21  |
| 63    | 274.3 | 0.53  | 0.21 | 53.2  | 》 10   | 87  |
| 103   | 180.3 | 0.45  | 0.14 | 26.8  | 》 10   | 46  |
| 30.1  | 213   | 0.67  | 《0.1 | 《10   | 《0.499 | 53  |
| 138.7 | 240.9 | 0.64  | <0.1 | 《10   | 《0.499 | 30  |
| 58.3  | 210.3 | 0.56  | 0.2  | 《10   | 3.45   | 60  |
| 23    | 148   | 0.23  | 0.14 | 37.3  | 》 10   | 52  |
| 58    | 190   | 0.04  | 0.19 | 55.5  | 》 10   | 135 |
| 436   | 402   | 0.52  | 0.29 | 67.2  | 》 10   | 48  |
| 22    | 196   | 0.43  | 6.85 | 110.6 | 》 10   | 128 |
| 65    | 141   | 0.48  | 0.16 | 10.6  | 》 10   | 25  |
| 55.4  | 249.1 | 0.38  | N    | <10   | 1.31   | 44  |
| 46    | 159.3 | 0.53  | 0.12 | <10   | <0.499 | 13  |
| 204   | 210.9 | 0.31  | 0.05 | 57.06 | >10    | 11  |
| 68    | 165   | 0.05  | 0.04 | 8.8   | >3     | 11  |

| Table S2. The detailed values of oral fungal diversity index and observed OTUs |       |       |            |            |          |          |          |               |
|--------------------------------------------------------------------------------|-------|-------|------------|------------|----------|----------|----------|---------------|
| sample                                                                         | reads | label | ace        | chao       | shannon  | simpson  | coverage | observed_otus |
| Control001                                                                     | 1153  | 0.97  | 131.010013 | 79.5       | 1.735031 | 0.277142 | 0.980919 | 41            |
| Control003                                                                     | 1153  | 0.97  | 184.753702 | 161        | 2.2165   | 0.243723 | 0.965308 | 83            |
| Control004                                                                     | 1153  | 0.97  | 112.75471  | 75.111111  | 0.92401  | 0.712194 | 0.980052 | 47            |
| Control005                                                                     | 1153  | 0.97  | 172.752368 | 104.833333 | 2.763361 | 0.122912 | 0.974848 | 71            |
| Control006                                                                     | 1153  | 0.97  | 207.482764 | 125.176471 | 2.837108 | 0.1431   | 0.96791  | 86            |
| Control007                                                                     | 1153  | 0.97  | 159.998583 | 170.5625   | 2.488082 | 0.194923 | 0.959237 | 103           |
| Control008                                                                     | 1153  | 0.97  | 50.154614  | 47         | 1.044832 | 0.432513 | 0.98699  | 26            |
| Control009                                                                     | 1153  | 0.97  | 190.564008 | 155.3      | 1.669714 | 0.362974 | 0.962706 | 65            |
| Control010                                                                     | 1153  | 0.97  | 149.833028 | 107.076923 | 3.419509 | 0.044583 | 0.975716 | 78            |
| Control012                                                                     | 1153  | 0.97  | 221.587321 | 182        | 2.221924 | 0.25628  | 0.9549   | 104           |
| Control013                                                                     | 1153  | 0.97  | 204.885863 | 204        | 3.471806 | 0.070866 | 0.950564 | 128           |
| Control017                                                                     | 1153  | 0.97  | 184.421482 | 124.2      | 1.263353 | 0.423861 | 0.974848 | 43            |
| Control020                                                                     | 1153  | 0.97  | 103.633969 | 61.75      | 0.686175 | 0.779814 | 0.982654 | 38            |
| Control026                                                                     | 1153  | 0.97  | 70.445191  | 65         | 2.860279 | 0.093336 | 0.986123 | 55            |
| Control027                                                                     | 1153  | 0.97  | 321.17037  | 263.285714 | 4.043447 | 0.046669 | 0.937554 | 172           |
| Control028                                                                     | 1153  | 0.97  | 217.786981 | 181.8      | 3.560369 | 0.057248 | 0.957502 | 123           |
| Control030                                                                     | 1153  | 0.97  | 157.936039 | 107.333333 | 2.439059 | 0.139005 | 0.972246 | 66            |
| Control031                                                                     | 1153  | 0.97  | 178.321311 | 140.588235 | 3.195949 | 0.080477 | 0.966175 | 97            |
| Control033                                                                     | 1153  | 0.97  | 167.608199 | 141.4      | 3.2994   | 0.078134 | 0.96791  | 97            |
| Control034                                                                     | 1153  | 0.97  | 163.207027 | 126        | 2.363147 | 0.160919 | 0.978317 | 51            |
| Control035                                                                     | 1153  | 0.97  | 238.270353 | 228.235294 | 2.940839 | 0.168055 | 0.949696 | 131           |
| Control036                                                                     | 1153  | 0.97  | 93.063696  | 129        | 2.563596 | 0.114723 | 0.978317 | 54            |
| Control037                                                                     | 1153  | 0.97  | 64.400756  | 48.5       | 0.924028 | 0.666393 | 0.988725 | 29            |
| Control038                                                                     | 1153  | 0.97  | 148.203307 | 107.857143 | 2.908114 | 0.109127 | 0.978317 | 65            |
| Control039                                                                     | 1153  | 0.97  | 143.305377 | 134.6      | 2.523956 | 0.227821 | 0.972246 | 85            |
| Control040                                                                     | 1153  | 0.97  | 99.85328   | 97.5       | 1.830397 | 0.365731 | 0.975716 | 66            |
| Control041                                                                     | 1153  | 0.97  | 153.325241 | 111.25     | 2.792065 | 0.1277   | 0.973981 | 75            |
| Control042                                                                     | 1153  | 0.97  | 202.85314  | 145.533333 | 3.106704 | 0.103826 | 0.961839 | 114           |
| Control043                                                                     | 1153  | 0.97  | 86.57942   | 70.055556  | 0.831446 | 0.743411 | 0.97745  | 52            |
| Control044                                                                     | 1153  | 0.97  | 220.910695 | 211.1      | 3.189662 | 0.075144 | 0.959237 | 103           |
| Control045                                                                     | 1153  | 0.97  | 281.202331 | 206.125    | 3.624345 | 0.050797 | 0.954033 | 120           |
| Control046                                                                     | 1153  | 0.97  | 113.555998 | 83.333333  | 2.951689 | 0.081922 | 0.981787 | 60            |
| Control047                                                                     | 1153  | 0.97  | 127.744742 | 101.5      | 2.592855 | 0.155074 | 0.97745  | 69            |
| Control048                                                                     | 1153  | 0.97  | 199.163627 | 147        | 2.160326 | 0.287988 | 0.96791  | 73            |
| Control049                                                                     | 1153  | 0.97  | 121.37047  | 117.588235 | 2.973174 | 0.125778 | 0.973981 | 92            |
| Control050                                                                     | 1153  | 0.97  | 325.187044 | 204.55     | 2.151399 | 0.282268 | 0.946227 | 110           |
| Control051                                                                     | 1153  | 0.97  | 105.870903 | 85.3       | 2.060045 | 0.305619 | 0.980052 | 60            |
| Control052                                                                     | 1153  | 0.97  | 160.63847  | 98.75      | 2.170208 | 0.189695 | 0.973114 | 60            |
| Control053                                                                     | 1153  | 0.97  | 92.741955  | 91         | 1.768397 | 0.469646 | 0.979185 | 68            |
| Control054                                                                     | 1153  | 0.97  | 85.866259  | 88.25      | 2.278507 | 0.198219 | 0.984389 | 50            |
| Control056                                                                     | 1153  | 0.97  | 147.43011  | 139        | 3.527746 | 0.038479 | 0.97745  | 74            |
| Control058                                                                     | 1153  | 0.97  | 85.343391  | 75.2       | 1.939597 | 0.314037 | 0.985256 | 48            |
| Control059                                                                     | 1153  | 0.97  | 137.93894  | 119        | 3.213933 | 0.08486  | 0.976583 | 80            |
| Control060                                                                     | 1153  | 0.97  | 221.04182  | 123        | 2.419348 | 0.153488 | 0.972246 | 61            |
| Control061                                                                     | 1153  | 0.97  | 130.092006 | 130.1875   | 2.88899  | 0.11213  | 0.969644 | 93            |
| Control062                                                                     | 1153  | 0.97  | 175.155162 | 145.75     | 2.980989 | 0.119673 | 0.965308 | 97            |
| Control064                                                                     | 1153  | 0.97  | 123.911427 | 84         | 2.136697 | 0.258971 | 0.981787 | 49            |
| Control065                                                                     | 1153  | 0.97  | 190.931218 | 133.333333 | 2.581803 | 0.142789 | 0.970512 | 71            |
| Control067                                                                     | 1153  | 0.97  | 105.361012 | 74.142857  | 1.761948 | 0.376695 | 0.982654 | 47            |
| Control068                                                                     | 1153  | 0.97  | 110.034808 | 64.666667  | 1.688407 | 0.420914 | 0.985256 | 42            |
| Control069                                                                     | 1153  | 0.97  | 269.619815 | 140.230769 | 2.762817 | 0.092304 | 0.963573 | 74            |
| Control071                                                                     | 1153  | 0.97  | 151.536073 | 124.6      | 2.664242 | 0.145826 | 0.972246 | 75            |
| Control074                                                                     | 1153  | 0.97  | 39.78205   | 33.5       | 1.957661 | 0.282042 | 0.994796 | 31            |
| Control076                                                                     | 1153  | 0.97  | 38.119141  | 27.25      | 1.318114 | 0.460371 | 0.993929 | 22            |
| Control077                                                                     | 1153  | 0.97  | 119.524048 | 113.647059 | 3.274678 | 0.088621 | 0.976583 | 93            |
| Control079                                                                     | 1153  | 0.97  | 128.302613 | 104        | 2.398865 | 0.2107   | 0.976583 | 65            |

|              |      |      |            |            |          |          |          |     |
|--------------|------|------|------------|------------|----------|----------|----------|-----|
| Control081   | 1153 | 0.97 | 102.914348 | 72.428571  | 2.002879 | 0.296512 | 0.983521 | 48  |
| Control082   | 1153 | 0.97 | 182.964949 | 178.954545 | 3.173852 | 0.113916 | 0.955768 | 121 |
| Control084   | 1153 | 0.97 | 102.864198 | 67.5       | 0.956117 | 0.518287 | 0.987858 | 22  |
| Control085   | 1153 | 0.97 | 176.386576 | 193.333333 | 3.470649 | 0.065414 | 0.957502 | 128 |
| Control086   | 1153 | 0.97 | 77.816096  | 52         | 1.901969 | 0.231501 | 0.98699  | 37  |
| Control087   | 1153 | 0.97 | 117.526794 | 74.375     | 2.561017 | 0.162848 | 0.983521 | 53  |
| Control088   | 1153 | 0.97 | 60.279176  | 90         | 1.204584 | 0.524132 | 0.986123 | 30  |
| Control090   | 1153 | 0.97 | 237.966344 | 173.954545 | 3.367588 | 0.063164 | 0.955768 | 116 |
| Control091   | 1153 | 0.97 | 123.231053 | 93.545455  | 2.76814  | 0.102536 | 0.97745  | 64  |
| Control092   | 1153 | 0.97 | 94.5197    | 77         | 2.371521 | 0.132196 | 0.985256 | 43  |
| Control093   | 1153 | 0.97 | 46.56      | 39.5       | 0.4091   | 0.836605 | 0.988725 | 20  |
| Control095   | 1153 | 0.97 | 103.504932 | 75.153846  | 2.959546 | 0.09384  | 0.983521 | 62  |
| Control096   | 1153 | 0.97 | 176.263358 | 167.3      | 3.366473 | 0.060231 | 0.967042 | 97  |
| Control097   | 1153 | 0.97 | 366.915363 | 273.5      | 2.619882 | 0.14362  | 0.973981 | 56  |
| Control098   | 1153 | 0.97 | 134.517991 | 125.3      | 2.391263 | 0.194082 | 0.96791  | 92  |
| Control101   | 1153 | 0.97 | 158.373511 | 109.2      | 2.690435 | 0.107923 | 0.979185 | 54  |
| Control103   | 1153 | 0.97 | 106.377712 | 95.166667  | 1.818235 | 0.305778 | 0.980052 | 53  |
| Control104   | 1153 | 0.97 | 684.727835 | 402.44     | 2.970242 | 0.142436 | 0.905464 | 167 |
| Control106   | 1153 | 0.97 | 90.405266  | 86.769231  | 2.602314 | 0.133294 | 0.980919 | 69  |
| Control108   | 1153 | 0.97 | 247.956677 | 278        | 3.238722 | 0.079554 | 0.937554 | 136 |
| Control110   | 1153 | 0.97 | 158.699696 | 117.714286 | 2.987141 | 0.087536 | 0.971379 | 80  |
| Control111   | 1153 | 0.97 | 101.923117 | 63.1       | 2.381641 | 0.134453 | 0.983521 | 46  |
| Control112   | 1153 | 0.97 | 86.648673  | 92.5       | 2.810307 | 0.083404 | 0.980919 | 54  |
| Control115   | 1153 | 0.97 | 41.799974  | 38.5       | 1.396628 | 0.484477 | 0.991327 | 31  |
| Control118   | 1153 | 0.97 | 171.253141 | 118.125    | 2.179337 | 0.215017 | 0.973114 | 60  |
| Control119   | 1153 | 0.97 | 117.071945 | 87.5       | 1.61884  | 0.428962 | 0.979185 | 53  |
| Control121   | 1153 | 0.97 | 146.751953 | 75.5       | 0.420232 | 0.863544 | 0.98699  | 23  |
| Control123   | 1153 | 0.97 | 121.690304 | 93.428571  | 1.025085 | 0.62948  | 0.97745  | 47  |
| Control124   | 1153 | 0.97 | 172.78161  | 112.142857 | 2.509085 | 0.172646 | 0.976583 | 62  |
| Control126   | 1153 | 0.97 | 123.5717   | 117.176471 | 2.688722 | 0.148913 | 0.972246 | 88  |
| Control130   | 1153 | 0.97 | 167.975931 | 89.5       | 2.275881 | 0.214051 | 0.97745  | 57  |
| Control131   | 1153 | 0.97 | 115.376255 | 79         | 2.426952 | 0.142733 | 0.986123 | 39  |
| COVID-19-002 | 1153 | 0.97 | 210.579785 | 100.25     | 1.174602 | 0.509464 | 0.980052 | 37  |
| COVID-19-003 | 1153 | 0.97 | 406.024229 | 267.956522 | 2.920419 | 0.144388 | 0.931483 | 134 |
| COVID-19-005 | 1153 | 0.97 | 427.722493 | 286.588235 | 3.142647 | 0.109417 | 0.936687 | 132 |
| COVID-19-006 | 1153 | 0.97 | 363.430139 | 198.157895 | 2.366962 | 0.242983 | 0.947962 | 105 |
| COVID-19-008 | 1153 | 0.97 | 309.861821 | 199.588235 | 3.119197 | 0.088067 | 0.951431 | 109 |
| COVID-19-010 | 1153 | 0.97 | 282.604799 | 221.526316 | 2.681193 | 0.191136 | 0.946227 | 122 |
| COVID-19-011 | 1153 | 0.97 | 272.530146 | 207.391304 | 3.221056 | 0.121585 | 0.948829 | 133 |
| COVID-19-013 | 1153 | 0.97 | 392.709318 | 263        | 2.793213 | 0.172491 | 0.940156 | 125 |
| COVID-19-014 | 1153 | 0.97 | 268.988431 | 287.3      | 2.972398 | 0.146601 | 0.933218 | 141 |
| COVID-19-015 | 1153 | 0.97 | 135.991504 | 135.214286 | 2.849925 | 0.096355 | 0.967042 | 85  |
| COVID-19-016 | 1153 | 0.97 | 322.080399 | 243.24     | 2.877085 | 0.177159 | 0.937554 | 141 |
| COVID-19-017 | 1153 | 0.97 | 217.932528 | 129.052632 | 2.866067 | 0.11359  | 0.965308 | 88  |
| COVID-19-018 | 1153 | 0.97 | 337.730045 | 214.8      | 2.697125 | 0.194517 | 0.942758 | 129 |
| COVID-19-019 | 1153 | 0.97 | 216.809895 | 168.176471 | 2.703743 | 0.145943 | 0.957502 | 99  |
| COVID-19-023 | 1153 | 0.97 | 248.906575 | 181        | 2.598357 | 0.216082 | 0.955768 | 106 |
| COVID-19-024 | 1153 | 0.97 | 120.844798 | 122.153846 | 2.901635 | 0.119715 | 0.972246 | 84  |
| COVID-19-025 | 1153 | 0.97 | 267.659365 | 176.913043 | 3.112135 | 0.10744  | 0.954033 | 117 |
| COVID-19-026 | 1153 | 0.97 | 84.813265  | 85.6       | 1.418813 | 0.497418 | 0.979185 | 58  |
| COVID-19-027 | 1153 | 0.97 | 218.79619  | 198.5625   | 3.396765 | 0.07823  | 0.956635 | 122 |
| COVID-19-028 | 1153 | 0.97 | 76.489899  | 71.25      | 1.798035 | 0.352812 | 0.983521 | 57  |
| COVID-19-029 | 1153 | 0.97 | 120.640759 | 111.875    | 2.290937 | 0.251667 | 0.976583 | 68  |
| COVID-19-030 | 1153 | 0.97 | 173.478573 | 176.6      | 2.443056 | 0.231939 | 0.971379 | 71  |
| COVID-19-031 | 1153 | 0.97 | 204.595751 | 152.416667 | 3.539952 | 0.054337 | 0.961839 | 113 |
| COVID-19-032 | 1153 | 0.97 | 106.138122 | 124.428571 | 3.028249 | 0.098975 | 0.97745  | 78  |
| COVID-19-035 | 1153 | 0.97 | 188.939955 | 142.05     | 3.076585 | 0.091707 | 0.963573 | 99  |
| COVID-19-037 | 1153 | 0.97 | 150.965067 | 151.05     | 3.412512 | 0.071971 | 0.966175 | 114 |

|              |      |      |            |            |          |          |          |     |
|--------------|------|------|------------|------------|----------|----------|----------|-----|
| COVID-19-038 | 1153 | 0.97 | 381.201514 | 259.05     | 2.509661 | 0.209565 | 0.93582  | 124 |
| COVID-19-040 | 1153 | 0.97 | 341.659637 | 146.333333 | 1.452952 | 0.381972 | 0.97745  | 38  |
| COVID-19-041 | 1153 | 0.97 | 129.429249 | 126        | 2.757546 | 0.095061 | 0.979185 | 57  |
| COVID-19-043 | 1153 | 0.97 | 190.894725 | 195.714286 | 3.745357 | 0.045423 | 0.955768 | 135 |
| COVID-19-045 | 1153 | 0.97 | 131.849662 | 144        | 2.13436  | 0.192037 | 0.969644 | 59  |
| COVID-19-046 | 1153 | 0.97 | 338.245526 | 156.25     | 1.350061 | 0.511776 | 0.960104 | 70  |
| COVID-19-047 | 1153 | 0.97 | 59.317063  | 53.666667  | 1.482381 | 0.442123 | 0.98699  | 42  |
| COVID-19-048 | 1153 | 0.97 | 398.760582 | 275.375    | 2.687132 | 0.174462 | 0.928881 | 137 |
| COVID-19-049 | 1153 | 0.97 | 27.375     | 20         | 0.312119 | 0.886642 | 0.993929 | 13  |
| COVID-19-050 | 1153 | 0.97 | 224.265405 | 163.625    | 2.512878 | 0.136936 | 0.966175 | 71  |
| COVID-19-051 | 1153 | 0.97 | 111.698199 | 111.230769 | 3.39937  | 0.068368 | 0.979185 | 90  |
| COVID-19-052 | 1153 | 0.97 | 137.237802 | 112.5      | 1.53627  | 0.477149 | 0.976583 | 54  |
| COVID-19-054 | 1153 | 0.97 | 30.576505  | 18         | 0.279089 | 0.902736 | 0.994796 | 13  |
| COVID-19-055 | 1153 | 0.97 | 43.934165  | 41         | 1.068172 | 0.623208 | 0.99046  | 30  |
| COVID-19-057 | 1153 | 0.97 | 69.477419  | 58.75      | 0.771909 | 0.717563 | 0.982654 | 35  |
| COVID-19-058 | 1153 | 0.97 | 109.997138 | 52         | 0.96995  | 0.448843 | 0.989592 | 19  |
| COVID-19-061 | 1153 | 0.97 | 218.392762 | 214.6      | 2.930035 | 0.0901   | 0.967042 | 74  |
| COVID-19-062 | 1153 | 0.97 | 105.568864 | 106.6      | 3.318555 | 0.062498 | 0.979185 | 79  |
| COVID-19-063 | 1153 | 0.97 | 93.6305    | 80.428571  | 2.45701  | 0.183663 | 0.983521 | 56  |
| COVID-19-064 | 1153 | 0.97 | 153.986734 | 143.434783 | 2.683671 | 0.179264 | 0.963573 | 106 |
| COVID-19-065 | 1153 | 0.97 | 65.086056  | 40         | 1.570759 | 0.351271 | 0.991327 | 25  |
| COVID-19-069 | 1153 | 0.97 | 87.37111   | 75.666667  | 2.650988 | 0.146252 | 0.985256 | 53  |

**Table S3. The abundance and composition at the phylum level of each sample**

| phylum                   | Control001 | Control003 | Control004 | Control005 | Control006 | Control007 | Control008 | Control009 | Control010 | Control012 | Control013 | Control017 |
|--------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ascomycota               | 774573     | 929480     | 42829      | 709862     | 863089     | 898554     | 531943     | 984265     | 734248     | 924193     | 813393     | 984473     |
| Basidiomycota            | 173163     | 38765      | 5085       | 218481     | 116921     | 34157      | 5508       | 9940       | 233452     | 29195      | 151193     | 12588      |
| Chytridiomycota          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Fungi_phy_Incertae_sedis | 11596      | 30935      | 47086      | 33272      | 16099      | 50209      | 461225     | 4525       | 30663      | 35241      | 31844      | 2572       |
| Mucoromycota             | 40067      | 820        | 905000     | 38344      | 3813       | 16178      | 1324       | 1270       | 1637       | 11034      | 214        | 336        |
| Rozellomycota            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 337        | 0          | 0          |
| Zoopagomycota            | 601        | 0          | 0          | 41         | 78         | 902        | 0          | 0          | 0          | 0          | 3356       | 31         |

**Table S3 .The abundance and composition at the genus level of each sample**

| genus                              | Control001 | Control003 | Control004 | Control005 | Control006 | Control007 | Control008 | Control009 | Control010 | Control012 | Control013 | Control017 |
|------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Acremonium                         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 80         | 0          | 0          | 0          | 0          |
| Acrocalymma                        | 0          | 46         | 0          | 0          | 0          | 43         | 49         | 0          | 54         | 0          | 65         | 0          |
| Acrodictys                         | 744214     | 812817     | 11466      | 559057     | 205691     | 480837     | 6191       | 275297     | 183709     | 533166     | 458328     | 205881     |
| Acrodontium                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Actinomucor                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Agaricales_gen_Incertae_sedis      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Agaricus                           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Ahmadea                            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 202        |
| Alloccryptovalsa                   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Alternaria                         | 205        | 6116       | 260        | 164        | 77         | 164        | 93         | 264        | 31354      | 1076       | 6280       | 671        |
| Amphobotrys                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 122        | 0          | 0          | 3346       | 0          |
| Amylostereum                       | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Anastomitrabeculia                 | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Angustimassarina                   | 621        | 3940       | 0          | 84         | 144        | 2877       | 0          | 634        | 848        | 10696      | 3441       | 36         |
| Anisomeridium                      | 0          | 43         | 0          | 0          | 70         | 167        | 0          | 76         | 0          | 0          | 125        | 0          |
| Antennariella                      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 13314      | 35         |
| Anthracina                         | 0          | 2359       | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Apiotrichum                        | 0          | 0          | 0          | 0          | 0          | 1355       | 0          | 80         | 77         | 0          | 72         | 144        |
| Aquapteridospora                   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Archaeorhizomyces                  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Arthrographis                      | 2138       | 1560       | 1863       | 13627      | 2563       | 3298       | 1103       | 672077     | 2421       | 9399       | 1064       | 747216     |
| Ascochyta                          | 0          | 0          | 54         | 0          | 0          | 0          | 2263       | 0          | 0          | 0          | 0          | 0          |
| Ascomycota_gen_Incertae_sedis      | 0          | 0          | 0          | 0          | 0          | 337        | 0          | 0          | 63         | 0          | 0          | 0          |
| Ascosphaera                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Ascotricha                         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 51         | 90         |
| Aspergillus                        | 2232       | 1063       | 1961       | 3826       | 12269      | 17817      | 1646       | 1369       | 122933     | 9440       | 5230       | 2254       |
| Atractiella                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Aureobasidium                      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 205        |
| Auricularia                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 64         | 0          | 0          | 179        | 185        |
| Austropleospora                    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Avachytrium                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Bandonia                           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Banksiophoma                       | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Basidiomycota_gen_Incertae_sedis   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Beauveria                          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 160        | 0          | 0          | 0          | 0          |
| Bergerella                         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 175        | 0          |
| Biatrisporaceae_gen_Incertae_sedis | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Bjerkandera                        | 151        | 0          | 290        | 256        | 322        | 1706       | 105        | 138        | 183        | 2124       | 0          | 37         |
| Blastobotrys                       | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Blumeria                           | 1609       | 501        | 1109       | 1622       | 1319       | 2447       | 873        | 1447       | 1855       | 6484       | 290        | 190        |
| Botryosphaeria                     | 0          | 0          | 0          | 48         | 0          | 78         | 100        | 86         | 143        | 0          | 0          | 0          |
| Botrytis                           | 0          | 34         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 69         | 0          |
| Bovista                            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Buckleyzyma                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Bulleromyces                       | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Byssoschlamys                      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| Calosphaeria                       | 0          | 424        | 38         | 0          | 0          | 1830       | 0          | 131        | 253        | 722        | 304        | 34         |

[illegible]

[illegible]

|                                       |      |      |      |       |       |      |      |      |        |      |       |      |
|---------------------------------------|------|------|------|-------|-------|------|------|------|--------|------|-------|------|
| Kazachstania                          | 131  | 155  | 91   | 88    | 154   | 129  | 182  | 362  | 57     | 1410 | 0     | 609  |
| Keissleriella                         | 74   | 47   | 93   | 85    | 80    | 41   | 43   | 214  | 63     | 364  | 0     | 0    |
| Keratinophyton                        | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Kneiffiella                           | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Knufia                                | 0    | 0    | 0    | 0     | 0     | 720  | 0    | 0    | 0      | 0    | 68    | 108  |
| Kodamaea                              | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Kurtzmaniella                         | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Laburnicola                           | 0    | 0    | 0    | 0     | 0     | 0    | 43   | 57   | 0      | 0    | 0     | 0    |
| Laetisaria                            | 0    | 0    | 0    | 0     | 0     | 28   | 0    | 0    | 0      | 0    | 0     | 0    |
| Lecanicillium                         | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Lentinula                             | 0    | 4764 | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 61    | 26   |
| Lentinus                              | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 73    | 123  |
| Lentithecium                          | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Leptospora                            | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Leucosporidium                        | 0    | 0    | 0    | 0     | 0     | 44   | 0    | 0    | 0      | 0    | 0     | 0    |
| Lipomyces                             | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Lithohypha                            | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Lophiostoma                           | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 64    | 0    |
| Lyomyces                              | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Macrohyporia                          | 0    | 36   | 50   | 49    | 73    | 0    | 0    | 0    | 146    | 341  | 0     | 0    |
| Malassezia                            | 1416 | 6963 | 1820 | 79025 | 80527 | 8521 | 1936 | 2808 | 123749 | 9919 | 63306 | 1812 |
| Marantokordyana                       | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Meira                                 | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Meyerozyma                            | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Microascus                            | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Milospium                             | 114  | 0    | 102  | 104   | 45889 | 175  | 49   | 75   | 39675  | 0    | 1809  | 2166 |
| Moesziomyces                          | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Moniliella                            | 0    | 0    | 43   | 0     | 81    | 44   | 0    | 0    | 70     | 318  | 0     | 0    |
| Mrakia                                | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Mucor                                 | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Mycoarthritis                         | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Mycosphaerellaceae_gen_Incertae_sedis | 0    | 0    | 0    | 0     | 0     | 40   | 43   | 0    | 0      | 0    | 54    | 34   |
| Naganishia                            | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 65   | 0      | 0    | 462   | 685  |
| Nakaseomyces                          | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Nannizziopsis                         | 0    | 0    | 0    | 51    | 0     | 0    | 0    | 127  | 0      | 0    | 0     | 0    |
| Nectriopsis                           | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Nemania                               | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Neoscochyta                           | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Neoconiothyrium                       | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Neocucurbitaria                       | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Neodevriesia                          | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Neodevriesiaceae_gen_Incertae_sedis   | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Neoreysiphe                           | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 42   |
| Neofusicoccum                         | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 69   |
| Neosetophoma                          | 0    | 0    | 0    | 0     | 0     | 0    | 903  | 0    | 0      | 0    | 64    | 0    |
| Nigrograna                            | 0    | 46   | 0    | 0     | 0     | 0    | 0    | 0    | 63     | 367  | 0     | 0    |
| Nigrospora                            | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Nothophoma                            | 0    | 0    | 0    | 0     | 66    | 3267 | 93   | 0    | 392    | 704  | 0     | 0    |
| Novakomyces                           | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Ochroconis                            | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Ogataea                               | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Oliveonia                             | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Ophiosphaerella                       | 0    | 0    | 0    | 0     | 0     | 68   | 0    | 0    | 0      | 0    | 0     | 0    |
| Ophiostoma                            | 71   | 86   | 96   | 0     | 2244  | 42   | 0    | 0    | 60     | 0    | 3228  | 104  |
| Papillotrema                          | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Paracremonium                         | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |
| Parafuscosporella                     | 72   | 7663 | 154  | 47    | 1076  | 5818 | 127  | 8440 | 1109   | 8914 | 6013  | 8947 |
| Paraleptosphaeria                     | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0      | 0    | 0     | 0    |



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|                                    |        |       |     |       |       |       |     |      |       |      |       |      |
|------------------------------------|--------|-------|-----|-------|-------|-------|-----|------|-------|------|-------|------|
| Robbaurera                         | 0      | 0     | 0   | 0     | 0     | 609   | 0   | 0    | 0     | 0    | 0     | 0    |
| Rousoella                          | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Rozellomycota_gen_Incertae_sedis   | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 337  | 0     | 0    |
| Ruhlandiella                       | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Russula                            | 169020 | 382   | 859 | 95282 | 613   | 915   | 423 | 644  | 431   | 3123 | 17339 | 192  |
| Russulales_gen_Incertae_sedis      | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Saccharomyces                      | 0      | 0     | 143 | 53    | 0     | 0     | 153 | 0    | 0     | 2079 | 0     | 43   |
| Saccharomycopsis                   | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Saprochaete                        | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sarocladium                        | 0      | 0     | 0   | 0     | 0     | 38    | 0   | 0    | 0     | 345  | 0     | 0    |
| Schizophyllum                      | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 1088  | 1584 |
| Scopulariopsis                     | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Scytinostroma                      | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Septoria                           | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Setophaeosphaeria                  | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sidera                             | 0      | 0     | 0   | 0     | 0     | 875   | 0   | 0    | 0     | 0    | 0     | 0    |
| Simplicillium                      | 2405   | 56016 | 912 | 1862  | 8464  | 20963 | 438 | 3198 | 39903 | 5940 | 13965 | 787  |
| Sistotrema                         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sistotremastrum                    | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Skeletocutis                       | 0      | 0     | 0   | 0     | 12541 | 0     | 50  | 0    | 0     | 0    | 0     | 0    |
| Sordaria                           | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Spiromastix                        | 0      | 0     | 238 | 150   | 0     | 186   | 43  | 0    | 129   | 0    | 0     | 0    |
| Sporobolomyces                     | 77     | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 7316  | 0    |
| Sporothrix                         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Stachybotrys                       | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Stagonosporopsis                   | 90     | 95    | 0   | 39112 | 154   | 87    | 0   | 195  | 133   | 367  | 0     | 0    |
| Starmerella                        | 69     | 41    | 0   | 0     | 0     | 38    | 45  | 0    | 0     | 0    | 0     | 0    |
| Steccherinum                       | 0      | 0     | 0   | 0     | 5878  | 0     | 0   | 0    | 63    | 0    | 0     | 0    |
| Stemphylium                        | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 132  | 0     | 0    | 13563 | 37   |
| Sterigmatomyces                    | 0      | 0     | 0   | 0     | 0     | 1435  | 0   | 0    | 0     | 0    | 0     | 0    |
| Strelitziana                       | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Strobilurus                        | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Subulicystidium                    | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Symmetrospora                      | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sympodiomyopsis                    | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Talaromyces                        | 441    | 84    | 267 | 328   | 331   | 293   | 128 | 407  | 47509 | 684  | 38749 | 599  |
| Tausonia                           | 0      | 0     | 0   | 49    | 0     | 2769  | 0   | 0    | 0     | 0    | 0     | 35   |
| Tetracladium                       | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Thanatephorus                      | 67     | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 3995  | 113  |
| Thecaphora                         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 20567 | 44   |
| Thelebolus                         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 180   | 190  |
| Thermomyces                        | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Thielaviopsis                      | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Tilletia                           | 66     | 0     | 0   | 40    | 6351  | 775   | 44  | 74   | 0     | 350  | 68    | 67   |
| Tilletiopsis                       | 0      | 0     | 0   | 0     | 0     | 46    | 0   | 0    | 0     | 0    | 67    | 114  |
| Togniniella                        | 0      | 0     | 0   | 0     | 0     | 0     | 37  | 0    | 0     | 0    | 0     | 0    |
| Toxicocladosporium                 | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Trametes                           | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 11104 | 615  |
| Trechispora                        | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Tremateia                          | 0      | 0     | 0   | 0     | 0     | 0     | 159 | 0    | 0     | 0    | 0     | 0    |
| Trichoderma                        | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Trichomeriaceae_gen_Incertae_sedis | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Trichomerium                       | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 5267  | 0    |
| Trichomonascus                     | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Trichophaea                        | 0      | 0     | 0   | 0     | 0     | 82    | 0   | 0    | 0     | 0    | 0     | 39   |
| Trichosporon                       | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Trigonopsis                        | 0      | 0     | 0   | 41    | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Tritirachium                       | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |



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|                                     |       |       |        |       |       |       |      |      |       |       |       |      |
|-------------------------------------|-------|-------|--------|-------|-------|-------|------|------|-------|-------|-------|------|
| Crustoderma_spe_Incertae_sedis      | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cryptococcus_longus                 | 1739  | 23993 | 1422   | 42617 | 1143  | 1569  | 971  | 1610 | 22608 | 7408  | 1781  | 3881 |
| Cryptococcus_neoformans             | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cryptococcus_uniguttulatus          | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cryptomarasmius_aucubae             | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Curvularia_solii                    | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cutaneotrichosporon_arboriforme     | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cutaneotrichosporon_cutaneum        | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 717   | 0     | 0    |
| Cutaneotrichosporon_jirovecii       | 141   | 37    | 141    | 96    | 0     | 47    | 0    | 0    | 32393 | 682   | 0     | 0    |
| Cyphellaceae_spe_Incertae_sedis     | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cyphellophora_olivacea              | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cyphellophora_sessilis              | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cystofilobasidium_capitatum         | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cystofilobasidium_infirminium       | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cystofilobasidium_macerans          | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 63    | 354   | 118   | 382  |
| Cytospora_myrtagena                 | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Cytospora_predappioensis            | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 11909 | 0    |
| Dactylella_spe_Incertae_sedis       | 0     | 0     | 0      | 48    | 8548  | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Dactylodendron_pinicola             | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Debaryomyces_prosopidis             | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 119   | 97   |
| Deconica_spe_Incertae_sedis         | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 67    | 35   |
| Delastria_faustiniana               | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Dendryphiella_paravinosa            | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Dermomyces_mrakii                   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Diaporthe_bohemiae                  | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Diaporthe_caulivora                 | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 63    | 204  |
| Diaporthe_celeris                   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Diaporthe_ganjae                    | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Diaporthe_kochmanii                 | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 55    | 265  |
| Diaporthe_passifloricola            | 0     | 0     | 0      | 0     | 0     | 260   | 0    | 0    | 0     | 0     | 0     | 0    |
| Diaporthe_pseudooculi               | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Diaporthe_searleii                  | 0     | 0     | 2356   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Didymella_dimorpha                  | 66    | 68    | 137    | 0     | 0     | 0     | 0    | 56   | 27160 | 711   | 0     | 0    |
| Didymella_spe_Incertae_sedis        | 0     | 0     | 93     | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 68    | 0    |
| Didymocyrtis_brachylaenae           | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Dimorphoma_saxea                    | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Dioszegia_catarinonii               | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Dioszegia_zsoltii_var._yunnanensis  | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 61    | 196  |
| Dipodascus_geotrichum               | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Diutina_catenulata                  | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Diutina_rugosa                      | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 979  | 0     | 0     | 0     | 0    |
| Diutina_sipiczki                    | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Diversispora_spurca                 | 40067 | 820   | 905000 | 38344 | 3813  | 16178 | 1324 | 1270 | 1637  | 11034 | 171   | 299  |
| Dothidea_eucalypti                  | 0     | 0     | 0      | 0     | 11718 | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Dothidea_sambuci                    | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Dothiora_spartii                    | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Echinoporia_hydnothpora             | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 135  | 0     | 0     | 0     | 0    |
| Edenia_gomezpompae                  | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Effuseotrichosporon_vanderwaltii    | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Elaphomyces_anthracinus             | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 2466  | 0    |
| Elsinoe_leucopogonis                | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Engyodontium_album                  | 0     | 42    | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 65   |
| Entoloma_graphitipes_f._cystidiatum | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Entorrhiza_citriformis              | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 147  | 0     | 0     | 50    | 0    |
| Entorrhiza_parvula                  | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Entyloma_calendulae                 | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Entyloma_cosmi                      | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |
| Entyloma_linariae                   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    |

|                                     |       |       |       |       |       |       |        |      |       |       |       |      |
|-------------------------------------|-------|-------|-------|-------|-------|-------|--------|------|-------|-------|-------|------|
| Epicoccum_dendrobii                 | 69    | 44    | 117   | 84    | 94    | 115   | 518    | 62   | 28339 | 692   | 0     | 0    |
| Eremothecium_ashbyi                 | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Erythrobasidium_hasegawianum        | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 53    | 47   |
| Eupeniidiella_venezuelensis         | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Eutypella_spe_Incertae_sedis        | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 68    | 37   |
| Extremus_spe_Incertae_sedis         | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Fantasmomyces_hyalinus              | 0     | 2433  | 43    | 37    | 159   | 2685  | 80     | 1275 | 830   | 727   | 753   | 310  |
| Filobasidium_oeirense               | 0     | 39    | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 124  |
| Filobasidium_wieringae              | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 119   | 219  |
| Flagelloscypha_spe_Incertae_sedis   | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Flammulina_filiformis               | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 68    | 95   |
| Flammulina_velutipes                | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Flavodon_spe_Incertae_sedis         | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Fomitopsis_eucalypticola            | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Fungi_spe_Incertae_sedis            | 11596 | 30935 | 47086 | 33272 | 16099 | 50209 | 461225 | 4378 | 30663 | 35241 | 31794 | 2572 |
| Fusarium_fujikuroi                  | 0     | 34    | 0     | 0     | 0     | 688   | 0      | 0    | 0     | 0     | 0     | 0    |
| Fusarium_lacertarum                 | 231   | 0     | 0     | 45    | 0     | 1938  | 243    | 127  | 0     | 362   | 0     | 33   |
| Fusarium_neocosmosporiellum         | 71    | 0     | 0     | 177   | 76    | 66    | 0      | 76   | 180   | 354   | 0     | 0    |
| Fusarium_oxysporum                  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Fusarium_poae                       | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 140  | 0     | 0     | 0     | 0    |
| Fusarium_ramigenum                  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Fuscosporella_aquatica              | 161   | 39    | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 119   | 0    |
| Fusicolla_acetilerea                | 0     | 0     | 0     | 0     | 0     | 79    | 0      | 0    | 0     | 0     | 0     | 0    |
| Galactomyces_pseudocandidus         | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Ganoderma_australe                  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Genea_brunneocarpa                  | 0     | 0     | 8482  | 0     | 0     | 125   | 0      | 0    | 72    | 0     | 0     | 0    |
| Gibberella_baccata                  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 59    | 0    |
| Gibberella_fujikuroi                | 0     | 0     | 46    | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 60    | 0    |
| Gibellula_shennongjiaensis          | 0     | 265   | 0     | 0     | 62    | 556   | 753    | 0    | 0     | 0     | 1785  | 0    |
| Gjaerumia_minor                     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Glomus_macrocarpum                  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 43    | 37   |
| Golovinomyces_latisporus            | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Golovinomyces_sonchicola            | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Golubevia_pallescens                | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Gonatophragmium_spe_Incertae_sedis  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Gymnopus_varicolor                  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Halosphaeriaceae_spe_Incertae_sedis | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hannaella_kunmingensis              | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hannaella_oryzae                    | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hannaella_pagnoccae                 | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hannaella_sinensis                  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 77   |
| Hannaella_surugaensis               | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hanseniaspora_nectarophila          | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hazslinszkyomyces_aloes             | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Heitmania_litseae                   | 0     | 249   | 0     | 0     | 694   | 2995  | 1692   | 2621 | 255   | 328   | 268   | 62   |
| Helicoma_brunneisporum              | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Heliocybe_villosa                   | 0     | 0     | 0     | 43    | 0     | 0     | 41     | 0    | 0     | 0     | 0     | 0    |
| Henningsia_resupinata               | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Heydenia_spe_Incertae_sedis         | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Holtermanniella_takashimae          | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hormodochis_melanochlora            | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hortaea_werneckii                   | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Houjia_yanglingensis                | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Huntiella_tyalla                    | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hydnobolites_roseus                 | 64    | 67    | 96    | 45    | 77    | 137   | 0      | 221  | 0     | 681   | 49    | 0    |
| Hyphopichia_burtonii                | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| Hypoxylon_perforatum                | 0     | 44    | 135   | 0     | 73    | 84    | 45     | 157  | 69    | 725   | 0     | 0    |
| Irpex_lacteus                       | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0     | 0     | 0     | 0    |

[illegible]



|                                     |     |      |     |     |      |      |     |      |      |      |      |      |
|-------------------------------------|-----|------|-----|-----|------|------|-----|------|------|------|------|------|
| Nemania_viridis                     | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Neosascochyta_paspali               | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Neoconiothyrium_viticola            | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Neocucurbitaria_irregularis         | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Neodevriesia_lagerstroemiae         | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Neodevriesia_sexualis               | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Neodevriesiaceae_spe_Incertae_sedis | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Neoerysiphe_galeopsidis             | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 42   |
| Neofusicoccum_buxi                  | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 69   |
| Neosetophoma_poaceicola             | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 64   | 0    |
| Neosetophoma_samararum              | 0   | 0    | 0   | 0   | 0    | 0    | 903 | 0    | 0    | 0    | 0    | 0    |
| Nigrograna_spe_Incertae_sedis       | 0   | 46   | 0   | 0   | 0    | 0    | 0   | 0    | 63   | 367  | 0    | 0    |
| Nigrospora_oryzae                   | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Nigrospora_spe_Incertae_sedis       | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Nothophoma_macrospora               | 0   | 0    | 0   | 0   | 66   | 3267 | 93  | 0    | 392  | 704  | 0    | 0    |
| Novakomyces_olei                    | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Ochroconis_mirabilis                | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Oliveonia_spe_Incertae_sedis        | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Ophiosphaerella_agrostidis          | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Ophiosphaerella_aquatica            | 0   | 0    | 0   | 0   | 0    | 68   | 0   | 0    | 0    | 0    | 0    | 0    |
| Ophiostoma_acarorum                 | 71  | 86   | 96  | 0   | 2244 | 0    | 0   | 0    | 60   | 0    | 3228 | 104  |
| Ophiostoma_pusillum                 | 0   | 0    | 0   | 0   | 0    | 42   | 0   | 0    | 0    | 0    | 0    | 0    |
| Papillotrema_aurea                  | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Papillotrema_flavescens             | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Papillotrema_terrestris             | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Paracremonium_binnewijzendii        | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Parafuscosporella_mucosa            | 72  | 7663 | 154 | 47  | 1076 | 5818 | 127 | 8440 | 1109 | 8914 | 6013 | 8947 |
| Paraleptosphaeria_rumicis           | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Pararamichloridium_caricicola       | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Parasarocladium_aestuarinum         | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Parastagonosporella_falloppiae      | 125 | 74   | 0   | 0   | 85   | 87   | 0   | 79   | 76   | 726  | 0    | 0    |
| Parasympodiella_longispora          | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Parathyridaria_rosae                | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Paratritirachium_cylindroconium     | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillifer_martinii               | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_adametzoides            | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_aurantiogriseum         | 0   | 0    | 0   | 0   | 0    | 43   | 52  | 0    | 126  | 0    | 0    | 0    |
| Penicillium_bialowiezense           | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_brevicompactum          | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_cinnamopurpureum        | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_citrinum                | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_fructuariae-cellae      | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_hirsutum                | 0   | 0    | 0   | 0   | 0    | 535  | 39  | 0    | 0    | 370  | 56   | 0    |
| Penicillium_jiangxiense             | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_lanosocoeruleum         | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_ludwigii                | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_melanoconidium          | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_multicolor              | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_oxalicum                | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_pancosmium              | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_pimiteouiense           | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Penicillium_steckii                 | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Peniophora_cinerea                  | 0   | 42   | 0   | 0   | 72   | 78   | 0   | 120  | 0    | 372  | 0    | 0    |
| Peniophora_crassitunicata           | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Peniophora_pseudoversicolor         | 0   | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Peniophorella_spe_Incertae_sedis    | 200 | 0    | 0   | 127 | 82   | 159  | 71  | 232  | 76   | 350  | 0    | 0    |
| Periconia_byssoides                 | 591 | 0    | 0   | 0   | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    |
| Periconia_cortaderiae               | 0   | 2328 | 108 | 47  | 643  | 755  | 0   | 70   | 111  | 1086 | 1797 | 0    |

|                                      |      |      |     |     |       |      |        |     |     |      |       |     |
|--------------------------------------|------|------|-----|-----|-------|------|--------|-----|-----|------|-------|-----|
| Periconia_epilithographicola         | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Periconia_homothallica               | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Periconia_macrospinosa               | 0    | 686  | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pestalotiopsis_dracontomelon         | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pestalotiopsis_vismiae               | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Peyronellaea_spe_Incertae_sedis      | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Peziza_fruticosa                     | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phacidium_lacerum                    | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phaeoacremonium_griseo-olivaceum     | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phaeophleospora_hymenocallidicola    | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phaeosphaeria_acaciae                | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phaeosphaeria_fuckelii               | 93   | 34   | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phaeosphaeria_oryzae                 | 748  | 0    | 287 | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phialocephala_trigonospora           | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phialosimplex_salinarum              | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phlebiopsis_flavidoalba              | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phlebiopsis_spe_Incertae_sedis       | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Phyllachora_cynodonticola            | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 133 | 60  | 0    | 0     | 42  |
| Phyllosticta_capitalensis            | 59   | 0    | 0   | 0   | 13024 | 48   | 0      | 0   | 0   | 341  | 0     | 0   |
| Physisporinus_tibeticus              | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pichia_cactophila                    | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pichia_fermentans                    | 0    | 0    | 238 | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pichia_kluyveri                      | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 381  | 0     | 0   |
| Pichia_mandshurica                   | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 100 |
| Plectosphaerella_cucumerina          | 0    | 0    | 356 | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Plectosphaerella_niemeijerorum       | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Plenodomus_enteroleucus              | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pleurotus_eryngii                    | 0    | 0    | 0   | 39  | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pleurotus_ostreatus                  | 67   | 0    | 103 | 176 | 150   | 94   | 0      | 337 | 136 | 358  | 17249 | 26  |
| Podosphaera_aphanis                  | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Podosphaera_cunningtonii             | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Powellomyces_spe_Incertae_sedis      | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Preussia_procaviae                   | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Protomyces_inouyei                   | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Psathyrella_candolleana              | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pseudocercospora_snelliana           | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 45  |
| Pseudogymnoascus_spe_Incertae_sedis  | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pseudomicrostroma_phylloplanum       | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pseudopithomyces_karoo               | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pseudoramichloridium_henryi          | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 68    | 0   |
| Pseudorobillarda_sojae               | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pseudoveronea_ellipsoidea            | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 70  | 0    | 0     | 0   |
| Puccinia_striiformis                 | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Punctularia_atropurpurascens         | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Purpureocillium_lilacinum            | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 36  |
| Pyrenochaeta_spe_Incertae_sedis      | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pyrenochaetopsis_leptospora          | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Pyrenochaetopsis_microspora          | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 34  |
| Pyricularia_oryzae                   | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Rachicladosporium_spe_Incertae_sedis | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Radulomyces_paumanokensis            | 0    | 0    | 0   | 46  | 0     | 0    | 0      | 76  | 68  | 0    | 0     | 0   |
| Raffaelea_albimanens                 | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Raffaelea_lauricola                  | 1240 | 1239 | 572 | 923 | 939   | 3271 | 506805 | 822 | 749 | 4654 | 1810  | 647 |
| Ramophialophora_spe_Incertae_sedis   | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |
| Ramularia_coryli                     | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 62  | 0    | 0     | 0   |
| Recurvomyces_spe_Incertae_sedis      | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 62    | 0   |
| Rhexothecium_globosum                | 242  | 0    | 0   | 0   | 60    | 0    | 0      | 0   | 0   | 0    | 478   | 0   |
| Rhizopogon_laricinus                 | 0    | 0    | 0   | 0   | 0     | 0    | 0      | 0   | 0   | 0    | 0     | 0   |

|                                     |        |       |     |       |       |       |     |      |       |      |       |      |
|-------------------------------------|--------|-------|-----|-------|-------|-------|-----|------|-------|------|-------|------|
| Rhizopus_arrhizus                   | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Rhodosporidiobolus_colostri         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Rhodotorula_diobovata               | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 2165  | 0    |
| Rhodotorula_glutinis                | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Rhodotorula_ingeniosa               | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Rhodotorula_mucilaginoso            | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Rhopalophora_clavispora             | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Robbauera_albescens                 | 0      | 0     | 0   | 0     | 0     | 609   | 0   | 0    | 0     | 0    | 0     | 0    |
| Rousoella_neopustulans              | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Rousoella_solani                    | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Rozellomycota_spe_Incertae_sedis    | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 337  | 0     | 0    |
| Ruhlandiella_patagonica             | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Russula_xerophila                   | 169020 | 382   | 859 | 95282 | 613   | 915   | 423 | 644  | 431   | 3123 | 17339 | 192  |
| Russulales_spe_Incertae_sedis       | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Saccharomyces_cerevisiae            | 0      | 0     | 143 | 53    | 0     | 0     | 153 | 0    | 0     | 2079 | 0     | 43   |
| Saccharomycopsis_fibuligera         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Saprochaete_gigas                   | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sarocladium_kiliense                | 0      | 0     | 0   | 0     | 0     | 38    | 0   | 0    | 0     | 345  | 0     | 0    |
| Sarocladium_oryzae                  | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sarocladium_strictum                | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sarocladium_zeae                    | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Schizophyllum_commuue               | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 1088  | 1584 |
| Scopulariopsis_cordiae              | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Scytinostroma_caudisporum           | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Septoria_spe_Incertae_sedis         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Setophaeosphaeria_badalingensis     | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sidera_vesiculosa                   | 0      | 0     | 0   | 0     | 0     | 875   | 0   | 0    | 0     | 0    | 0     | 0    |
| Simplicillium_aogashimaense         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Simplicillium_lanosoniveum          | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Simplicillium_sympodiophorum        | 2405   | 56016 | 912 | 1862  | 8464  | 20963 | 438 | 3198 | 39903 | 5940 | 13965 | 787  |
| Sistotrema_brinkmannii              | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sistotremastrum_guttuliferum        | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Skeletocutis_nivea                  | 0      | 0     | 0   | 0     | 12541 | 0     | 50  | 0    | 0     | 0    | 0     | 0    |
| Sordaria_equicola                   | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sordaria_spe_Incertae_sedis         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Spiromastix_princeps                | 0      | 0     | 238 | 150   | 0     | 186   | 43  | 0    | 129   | 0    | 0     | 0    |
| Sporobolomyces_beijingensis         | 77     | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 7134  | 0    |
| Sporobolomyces_koalae               | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 60    | 0    |
| Sporobolomyces_patagonicus          | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 122   | 0    |
| Sporobolomyces_phaffii              | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sporobolomyces_roseus               | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sporothrix_nigrograna               | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Stachybotrys_aloeticola             | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Stagonosporopsis_citrulli           | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Stagonosporopsis_lupini             | 90     | 95    | 0   | 39112 | 154   | 87    | 0   | 195  | 133   | 367  | 0     | 0    |
| Stagonosporopsis_nemophilae         | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Starmerella_etchellsii              | 69     | 41    | 0   | 0     | 0     | 38    | 45  | 0    | 0     | 0    | 0     | 0    |
| Steccherinum_ochraceum              | 0      | 0     | 0   | 0     | 5878  | 0     | 0   | 0    | 63    | 0    | 0     | 0    |
| Stemphylium_lycopersici             | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 132  | 0     | 0    | 13563 | 37   |
| Stemphylium_spe_Incertae_sedis      | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sterigmatomyces_halophilus          | 0      | 0     | 0   | 0     | 0     | 1435  | 0   | 0    | 0     | 0    | 0     | 0    |
| Strelitziana_eucalypti              | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Strobilurus_spe_Incertae_sedis      | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Subulicystidium_brachysporum        | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Symmetrospora_oryzicola             | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Symmetrospora_spe_Incertae_sedis    | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Sympodiomycopsis_spe_Incertae_sedis | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |
| Talaromyces_calidicanius            | 0      | 0     | 0   | 0     | 0     | 0     | 0   | 0    | 0     | 0    | 0     | 0    |

|                                       |     |    |     |     |      |      |     |     |       |     |       |     |
|---------------------------------------|-----|----|-----|-----|------|------|-----|-----|-------|-----|-------|-----|
| Talaromyces_funiculosus               | 84  | 0  | 49  | 0   | 0    | 0    | 88  | 144 | 0     | 360 | 132   | 86  |
| Talaromyces_islandicus                | 0   | 37 | 0   | 161 | 80   | 42   | 40  | 0   | 30940 | 0   | 0     | 0   |
| Talaromyces_rogersiae                 | 140 | 0  | 0   | 80  | 0    | 46   | 0   | 66  | 135   | 324 | 0     | 0   |
| Talaromyces_scorteus                  | 217 | 47 | 218 | 87  | 251  | 205  | 0   | 197 | 16434 | 0   | 38560 | 513 |
| Talaromyces_stollii                   | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Talaromyces_wortmannii                | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 57    | 0   |
| Tausonia_pullulans                    | 0   | 0  | 0   | 49  | 0    | 2769 | 0   | 0   | 0     | 0   | 0     | 35  |
| Tetracladium_spe_Incertae_sedis       | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Thanatephorus_cucumeris               | 67  | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 3995  | 113 |
| Thecaphora_australiensis              | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 20567 | 44  |
| Thelebolus_balaustiformis             | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 180   | 190 |
| Thermomyces_lanuginosus               | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Thielaviopsis_euricoi                 | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Tilletia_barclayana                   | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Tilletia_geeringii                    | 66  | 0  | 0   | 40  | 6351 | 775  | 44  | 74  | 0     | 350 | 68    | 32  |
| Tilletia_maclaganii                   | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 35  |
| Tilletiopsis_washingtonensis          | 0   | 0  | 0   | 0   | 0    | 46   | 0   | 0   | 0     | 0   | 67    | 114 |
| Togniniella_acerosa                   | 0   | 0  | 0   | 0   | 0    | 0    | 37  | 0   | 0     | 0   | 0     | 0   |
| Toxicocladosporium_spe_Incertae_sedis | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Toxicocladosporium_strelitziae        | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trametes_cubensis                     | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trametes_trogii                       | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 390 |
| Trametes_versicolor                   | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 11104 | 225 |
| Trechispora_spe_Incertae_sedis        | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Tremateia_chromolaenae                | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Tremateia_murispora                   | 0   | 0  | 0   | 0   | 0    | 0    | 159 | 0   | 0     | 0   | 0     | 0   |
| Trichoderma_asperellum                | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichoderma_deliquescens              | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichoderma_effusum                   | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichoderma_harzianum                 | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichoderma_longibrachiatum           | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichoderma_pleuroticola              | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichomeriaceae_spe_Incertae_sedis    | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichomerium_dioscoreae               | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichomerium_flexuosum                | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 5267  | 0   |
| Trichomonascus_ciferrii               | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trichophaea_saccata                   | 0   | 0  | 0   | 0   | 0    | 82   | 0   | 0   | 0     | 0   | 0     | 39  |
| Trichosporon_asahii                   | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trigonopsis_californica               | 0   | 0  | 0   | 41  | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Trigonopsis_vinaria                   | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Tritirachium_cinnamomeum              | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Tritirachium_oryzae                   | 0   | 0  | 0   | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Tuber_alcaracense                     | 0   | 0  | 202 | 0   | 0    | 0    | 0   | 0   | 0     | 0   | 0     | 0   |
| Tubeufia_tratensis                    | 126 | 0  | 0   | 0   | 0    | 76   | 39  | 0   | 133   | 0   | 0     | 0   |
| Tulostoma_calcareum                   | 0   | 0  | 86  | 125 | 0    | 0    | 40  | 67  | 0     | 0   | 0     | 0   |

|                                 |       |       |      |       |        |        |      |       |        |        |        |      |
|---------------------------------|-------|-------|------|-------|--------|--------|------|-------|--------|--------|--------|------|
| Vishniacozyma_heimaeyensis      | 0     | 0     | 0    | 44    | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Vishniacozyma_taibaiensis       | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Vishniacozyma_tephrensensis     | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Vishniacozyma_victoriae         | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Wallemia_canadensis             | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 133   | 0      | 0      | 0      | 0    |
| Wallemia_mellicola              | 0     | 0     | 0    | 0     | 7608   | 44     | 0    | 198   | 0      | 0      | 1853   | 0    |
| Wallemia_muriae                 | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Wallemia_sebi                   | 0     | 0     | 48   | 126   | 0      | 8824   | 0    | 69    | 0      | 0      | 0      | 0    |
| Wickerhamiella_versatilis       | 0     | 0     | 0    | 0     | 0      | 2649   | 0    | 0     | 0      | 0      | 0      | 0    |
| Wickerhamomyces_onychis         | 0     | 0     | 0    | 0     | 0      | 188    | 0    | 0     | 0      | 0      | 0      | 0    |
| Xenodevriesia_strelitzicola     | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Xeromyces_bisporus              | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Xylocoremium_spe_Incertae_sedis | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Xylodon_filicinus               | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Yamadazyma_terventina           | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Yamadazyma_triangularis         | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Yarrowia_alimentaria            | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Yarrowia_bubula                 | 85    | 84    | 63   | 77    | 72     | 79     | 0    | 128   | 128    | 0      | 0      | 0    |
| Yarrowia_lipolytica             | 73    | 0     | 0    | 71    | 18808  | 2288   | 0    | 0     | 0      | 0      | 0      | 0    |
| Zanclospora_aurea               | 75    | 37    | 46   | 0     | 0      | 175    | 0    | 0     | 65     | 0      | 56     | 0    |
| Zanclospora_jonesii             | 10464 | 28253 | 9308 | 41137 | 478715 | 318197 | 5202 | 12488 | 199363 | 314886 | 178990 | 7736 |
| Zasmidium_spe_Incertae_sedis    | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Zeloasperisporium_eucalyptorum  | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Zoophthora_radicans             | 601   | 0     | 0    | 41    | 78     | 902    | 0    | 0     | 0      | 0      | 3356   | 31   |
| Zygosaccharomyces_rouxii        | 0     | 0     | 0    | 0     | 0      | 142    | 0    | 0     | 0      | 0      | 0      | 0    |
| Zygosporium_pseudogibbum        | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| Zygotrulaspora_danielsina       | 2861  | 0     | 50   | 1564  | 0      | 0      | 39   | 0     | 0      | 0      | 0      | 41   |
| Zymoseptoria_spe_Incertae_sedis | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| [Candida]_aaseri                | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| [Candida]_boidinii              | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| [Candida]_glabrata              | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| [Candida]_incommunis            | 0     | 0     | 0    | 0     | 0      | 0      | 0    | 0     | 0      | 0      | 0      | 0    |
| [Candida]_pseudolambica         | 0     | 0     | 0    | 0     | 0      | 0      | 46   | 0     | 0      | 0      | 0      | 0    |
| [Cryptococcus]_ater             | 0     | 2144  | 0    | 0     | 474    | 1002   | 0    | 0     | 450    | 0      | 846    | 0    |

| Control0<br>20 | Control0<br>26 | Control0<br>27 | Control0<br>28 | Control0<br>30 | Control0<br>31 | Control0<br>33 | Control0<br>34 | Control0<br>35 | Control0<br>36 | Control0<br>37 | Control0<br>38 | Control0<br>39 | Control0<br>40 | Control0<br>41 | Control0<br>42 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 932004         | 424256         | 679023         | 968561         | 802055         | 666714         | 975672         | 813445         | 898341         | 858595         | 970017         | 751249         | 872681         | 305170         | 922863         | 929052         |
| 20581          | 482767         | 272341         | 12017          | 176815         | 282157         | 3299           | 110092         | 57343          | 126667         | 25943          | 167261         | 72020          | 26024          | 69914          | 61823          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 47102          | 19197          | 13912          | 16682          | 3625           | 15419          | 19942          | 28225          | 35593          | 13614          | 3268           | 18337          | 35413          | 32432          | 7057           | 7120           |
| 313            | 73780          | 34724          | 2685           | 17505          | 35542          | 1087           | 48158          | 8723           | 1124           | 772            | 62708          | 19886          | 636374         | 166            | 2005           |
| 0              | 0              | 0              | 55             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 168            | 0              | 80             | 0              | 0              | 0              | 445            | 0              | 0              | 0              | 0              |

| Control0<br>20 | Control0<br>26 | Control0<br>27 | Control0<br>28 | Control0<br>30 | Control0<br>31 | Control0<br>33 | Control0<br>34 | Control0<br>35 | Control0<br>36 | Control0<br>37 | Control0<br>38 | Control0<br>39 | Control0<br>40 | Control0<br>41 | Control0<br>42 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 221            | 231            | 119            | 7167           | 245            | 106            | 148            | 169            | 107            | 0              | 584            |
| 82             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 7535           | 1281           | 87407          | 157461         | 236828         | 425571         | 13646          | 196494         | 678338         | 67504          | 59169          | 457539         | 732134         | 232080         | 159746         | 10828          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 144            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 3755           | 97             | 5203           | 357            | 635            | 799            | 6221           | 286859         | 775            | 1295           | 20930          | 14460          | 7324           | 1210           | 774            | 9305           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 15             | 3486           | 1026           | 287            | 316            | 47             | 0              | 5633           | 196            | 0              | 0              | 124            | 130            | 0              | 91             |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 872            | 0              | 0              | 0              | 72             | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 90             | 14             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 180            |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 28             | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 708            | 0              | 3467           | 0              | 275            | 0              | 0              | 0              | 0              | 116            | 35             | 31             | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 44             | 30             | 2606           | 6695           | 168            | 2370           | 10495          | 30             | 0              | 0              | 0              | 0              | 51             | 247            | 114            | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 19             | 2599           | 0              | 0              | 3987           | 0              | 13             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 2894           | 46272          | 112685         | 178989         | 261454         | 53574          | 316316         | 307547         | 16301          | 108474         | 1335           | 67619          | 1090           | 6391           | 120155         | 19006          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 42             | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 94             | 0              | 0              | 0              | 0              | 36             | 0              | 39             | 0              | 0              | 44             | 100            |
| 252            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 65             | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 581            |
| 0              | 0              | 0              | 0              | 0              | 53             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 332            | 119            | 977            | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 53             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 6501           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 2091           | 0              | 0              | 39             | 33             | 71             | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 803            | 1160           | 91968          | 514611         | 9947           | 29886          | 562475         | 794            | 10974          | 888            | 890            | 4882           | 498            | 5278           | 161764         | 4906           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 59             | 88             |
| 0              | 225            | 11363          | 400            | 669            | 120            | 139            | 31             | 96             | 131            | 1854           | 17515          | 25             | 69             | 114            | 88             |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 59             | 28             | 1770           | 281            | 0              | 64             | 0              | 0              | 347            | 0              | 0              | 40             | 299            | 0              | 0              | 0              |

|      |        |        |      |       |       |      |       |       |        |       |        |       |        |        |       |
|------|--------|--------|------|-------|-------|------|-------|-------|--------|-------|--------|-------|--------|--------|-------|
| 0    | 0      | 0      | 0    | 0     | 111   | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 62   | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 427  | 17     | 1728   | 2528 | 83    | 6133  | 574  | 461   | 446   | 167091 | 248   | 512    | 182   | 523    | 4247   | 7890  |
| 0    | 0      | 0      | 0    | 0     | 163   | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 70     | 9543   | 118  | 462   | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 4899  |
| 0    | 54     | 1743   | 65   | 87    | 0     | 0    | 33    | 0     | 0      | 0     | 0      | 8209  | 55     | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 8093  |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 633   | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 67     | 0     |
| 0    | 0      | 0      | 0    | 0     | 45    | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 360    | 0      | 0     |
| 48   | 66     | 877    | 393  | 0     | 279   | 97   | 139   | 224   | 131975 | 125   | 1900   | 99    | 346    | 1080   | 9544  |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 212   | 0      | 0     | 489    | 55     | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 199   |
| 6157 | 122214 | 58827  | 3190 | 2543  | 19982 | 1148 | 563   | 12459 | 1023   | 4604  | 108339 | 295   | 5526   | 13882  | 57638 |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 168    | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 477   | 0      | 0     | 0      | 0      | 0     |
| 684  | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 1443  | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 40   | 130   | 0     | 30     | 0     | 75     | 0     | 63     | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 48     | 0     |
| 0    | 0      | 868    | 56   | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 886    | 114  | 74    | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 4819  | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 2047 | 245466 | 187400 | 5833 | 8219  | 9757  | 490  | 17443 | 9060  | 1282   | 6439  | 28286  | 17297 | 1669   | 23168  | 3048  |
| 0    | 34     | 0      | 121  | 0     | 0     | 0    | 0     | 3528  | 0      | 0     | 0      | 0     | 55     | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 63   | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 252    | 0      | 5428  |
| 0    | 0      | 0      | 0    | 0     | 0     | 39   | 31    | 0     | 22     | 0     | 0      | 5088  | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 56    | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 1234 | 0      | 0      | 132  | 0     | 46    | 0    | 30    | 0     | 0      | 1091  | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 53   | 0     | 2010  | 0      | 0     | 0      | 0     | 56     | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 112   | 135  | 83    | 98    | 37     | 29534 | 0      | 24    | 259    | 0      | 0     |
| 102  | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 71   | 0     | 0     | 43   | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 125   | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 1316 | 0      | 0      | 0    | 0     | 10240 | 193  | 126   | 276   | 250    | 0     | 39     | 46    | 59     | 299610 | 325   |
| 4961 | 40     | 881    | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 46    | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 1121   | 0      | 0     |
| 100  | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 101   |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0     |
| 206  | 73780  | 34724  | 2685 | 17505 | 35542 | 1041 | 48115 | 8723  | 1124   | 772   | 62666  | 19849 | 635940 | 166    | 2005  |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 100   |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 717   |

|       |       |       |       |      |       |       |       |       |       |      |       |       |       |       |      |
|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 668  |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 872   | 0    | 0     | 1549  | 56    | 2014  | 0     | 0    | 0     | 6228  | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 143   | 0    | 0     | 332   | 0     | 0     | 0     | 854  | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 12    | 1715  | 134   | 98   | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 20    | 0     | 1900  | 89   | 87    | 1050  | 0     | 5316  | 33    | 45   | 0     | 77    | 60    | 60    | 90   |
| 0     | 0     | 0     | 173   | 0    | 0     | 49    | 0     | 2072  | 0     | 0    | 0     | 1834  | 0     | 0     | 92   |
| 150   | 0     | 863   | 0     | 0    | 56    | 0     | 35    | 1250  | 0     | 0    | 0     | 0     | 53    | 50    | 2986 |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 1237 |
| 58    | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 39    | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 307  | 0     | 0     | 0     | 0     | 2409 |
| 0     | 0     | 0     | 0     | 0    | 5298  | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 57    | 0     | 0    |
| 47102 | 19197 | 13912 | 15810 | 3625 | 15419 | 18393 | 28169 | 33579 | 13614 | 3268 | 18337 | 29185 | 32432 | 7057  | 7120 |
| 0     | 177   | 7749  | 123   | 355  | 51    | 33    | 0     | 2828  | 52    | 0    | 0     | 0     | 4819  | 23381 | 71   |
| 0     | 19    | 0     | 15750 | 180  | 614   | 24938 | 0     | 35    | 0     | 46   | 38    | 49    | 59    | 12326 | 1161 |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 107   | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 812   | 0     | 51    | 0    | 56    | 0     | 215   | 231   | 0     | 0    | 0     | 162   | 7896  | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 54    | 586   | 0     | 0     | 0     | 0    | 0     | 35    | 0     | 59    | 0    |
| 0     | 22    | 860   | 223   | 0    | 0     | 0     | 0     | 394   | 0     | 0    | 0     | 529   | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 107   | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 64    | 6028 |
| 0     | 0     | 0     | 0     | 0    | 0     | 43    | 0     | 53    | 60    | 0    | 7916  | 0     | 74    | 94    | 0    |
| 0     | 0     | 873   | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 877   | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 44    | 31    | 0    | 33    | 0     | 143   | 9209  | 0    |
| 0     | 0     | 0     | 0     | 0    | 854   | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 16    | 0     | 56    | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 1141  | 0     | 0    |
| 0     | 0     | 873   | 116   | 165  | 48    | 0     | 0     | 256   | 0     | 0    | 0     | 228   | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 301   | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     |       |      |       |       |       |       |       |      |       |       |       |       |      |



|        |        |       |      |      |        |      |      |       |       |     |       |      |      |       |        |
|--------|--------|-------|------|------|--------|------|------|-------|-------|-----|-------|------|------|-------|--------|
|        | 0      | 0     | 252  | 0    | 0      | 0    | 0    | 44    | 0     | 0   | 0     | 0    | 66   | 0     | 2855   |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 110    | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 4219   |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 45    | 0      |
| 54     | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 39     | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 64     | 8704  | 378  | 571  | 0      | 52   | 0    | 3601  | 0     | 0   | 0     | 0    | 0    | 106   | 0      |
| 0      | 36     | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 862   | 57   | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 6753  | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 12707  | 135383 | 38999 | 971  | 2279 | 152404 | 1535 | 1642 | 8714  | 54013 | 507 | 16488 | 7577 | 4760 | 17475 | 18875  |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 864764 | 59     | 3473  | 480  | 807  | 0      | 48   | 0    | 216   | 30    | 0   | 0     | 25   | 0    | 467   | 197    |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 58   | 0    | 0      | 0    | 0    | 140   | 0     | 0   | 0     | 29   | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 34     | 0      | 0     | 0    | 0    | 2789   | 0    | 28   | 0     | 0     | 0   | 0     | 27   | 0    | 0     | 0      |
| 503    | 0      | 0     | 68   | 0    | 0      | 0    | 65   | 0     | 60    | 0   | 0     | 9054 | 112  | 48    | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 20     | 0     | 7633 | 92   | 60     | 9622 | 28   | 0     | 0     | 0   | 0     | 0    | 0    | 712   | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 7179 | 48    | 34    | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 53    | 12233  |
| 0      | 21     | 0     | 141  | 85   | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 191    | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 46     | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 57     | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 12183  |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 42481  | 4314  | 241  | 92   | 123    | 0    | 0    | 0     | 0     | 0   | 0     | 44   | 66   | 0     | 98     |
| 0      | 36     | 2591  | 114  | 181  | 0      | 0    | 0    | 0     | 0     | 453 | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 275    |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 1155   | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 97     | 0      | 0     | 60   | 0    | 58     | 0    | 0    | 45    | 0     | 0   | 0     | 209  | 0    | 262   | 291398 |
| 0      | 0      | 0     | 0    | 0    | 0      | 143  | 35   | 19638 | 67    | 0   | 0     | 0    | 63   | 0     | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |
| 104    | 167    | 861   | 2434 | 177  | 110    | 190  | 64   | 7317  | 2190  | 37  | 126   | 4879 | 142  | 58    | 0      |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0   | 0     | 0    | 0    | 0     | 0      |

|     |        |       |       |      |       |      |     |       |        |     |       |       |      |       |      |
|-----|--------|-------|-------|------|-------|------|-----|-------|--------|-----|-------|-------|------|-------|------|
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 659   | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 121   | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 885   | 4846  | 81   | 157   | 6040 | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 663   | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 90  | 0      | 0     | 0     | 0    | 117   | 96   | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 359   | 880  |
| 0   | 53     | 6903  | 53    | 116  | 16251 | 36   | 33  | 57    | 27     | 0   | 37    | 6429  | 145  | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 47  | 15     | 0     | 1138  | 90   | 0     | 187  | 0   | 5840  | 65     | 82  | 22199 | 916   | 263  | 0     | 106  |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 72  | 0     | 70     | 42  | 45    | 0     | 76   | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 179  |
| 0   | 157580 | 19050 | 918   | 1312 | 442   | 530  | 574 | 371   | 253429 | 289 | 342   | 310   | 1290 | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 411   | 0      | 0   | 0     | 0     | 0    | 0     | 465  |
| 0   | 0      | 0     | 0     | 0    | 8692  | 50   | 38  | 0     | 37     | 38  | 74    | 10131 | 0    | 0     | 0    |
| 0   | 0      | 0     | 673   | 0    | 44    | 0    | 0   | 59    | 87     | 174 | 0     | 11718 | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 3139 | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 107   | 130  | 74  | 40    | 59727  | 23  | 110   | 0     | 70   | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 66    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 68    | 6104 |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 9624  | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 56    | 88   | 0   | 54    | 0      | 47  | 14514 | 30    | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 5021  | 0      | 0   | 47    | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 52    | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 25  | 0     | 0      | 0   | 0     | 0     | 127  | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 51    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 302   | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 457 | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 151   | 97   | 53  | 129   | 84     | 98  | 259   | 46    | 75   | 59    | 102  |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 105   | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 54    | 188  |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 110 | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 189 | 62     | 6940  | 39528 | 0    | 129   | 2424 | 35  | 12637 | 70     | 0   | 115   | 3394  | 69   | 107   | 2706 |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 757  |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 887   | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 3913  | 296  | 1896  | 2157 | 0   | 187   | 21     | 0   | 33    | 0     | 0    | 37566 | 6746 |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 579  |
| 0   | 0      | 0     | 0     | 0    | 0     | 46   | 43  | 0     | 0      | 0   | 42    | 37    | 74   | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 68    | 0    | 0     | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 12707 | 0    |
| 0   | 0      | 0     | 0     | 0    | 0     | 0    | 42  | 43    | 0      | 44  | 43    | 0     | 0    | 0     | 0    |

[illegible]



|     |       |       |        |        |       |        |        |       |        |      |       |      |      |        |      |
|-----|-------|-------|--------|--------|-------|--------|--------|-------|--------|------|-------|------|------|--------|------|
| 90  | 14    | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 180  |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 28   | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 708 | 0     | 3467  | 0      | 275    | 0     | 0      | 0      | 0     | 116    | 35   | 31    | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 44  | 30    | 2606  | 6695   | 168    | 2370  | 10495  | 30     | 0     | 0      | 0    | 0     | 51   | 247  | 114    | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 19    | 2599  | 0      | 0      | 3987  | 0      | 13     | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 165 | 62    | 4347  | 119    | 256    | 0     | 1027   | 0      | 0     | 0      | 0    | 0     | 0    | 332  | 373    | 4530 |
| 156 | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 5363   | 120  |
| 0   | 0     | 0     | 0      | 0      | 0     | 663    | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 2072 |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 1728  | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 802 | 33881 | 5193  | 162    | 489    | 3209  | 179    | 533    | 1103  | 107353 | 297  | 163   | 46   | 477  | 101    | 6997 |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 495   | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 814 | 11023 | 855   | 0      | 90     | 819   | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 1726 |
| 957 | 1266  | 99691 | 178708 | 260619 | 49410 | 314447 | 307014 | 13549 | 1121   | 919  | 67456 | 1044 | 5524 | 114259 | 3356 |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 205  |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 12    | 0     | 0      | 0      | 136   | 0      | 0      | 0     | 0      | 119  | 0     | 0    | 0    | 0      | 0    |
| 0   | 28    | 871   | 0      | 0      | 0     | 0      | 0      | 1154  | 0      | 0    | 0     | 0    | 0    | 59     | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 58   | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 42   | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 94     | 0     | 0      | 0      | 0     | 36     | 0    | 39    | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 44     | 100  |
| 252 | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 65     | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 581  |
| 0   | 0     | 0     | 0      | 0      | 53    | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 332   | 119  | 977  | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 53  | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 6501 |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 2091  | 0      | 0    | 39    | 33   | 71   | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 42     | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 803 | 1160  | 91968 | 514611 | 9947   | 29886 | 562433 | 794    | 10974 | 888    | 890  | 4882  | 498  | 5278 | 161764 | 4906 |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 59     | 88   |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 225   | 11363 | 400    | 669    | 120   | 139    | 31     | 96    | 131    | 1854 | 17515 | 25   | 69   | 114    | 88   |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |
| 0   | 0     | 0     | 0      | 0      | 0     | 0      | 0      | 0     | 0      | 0    | 0     | 0    | 0    | 0      | 0    |

|      |        |       |      |      |       |     |     |      |        |      |       |      |      |       |       |
|------|--------|-------|------|------|-------|-----|-----|------|--------|------|-------|------|------|-------|-------|
| 59   | 28     | 1770  | 281  | 0    | 64    | 0   | 0   | 347  | 0      | 0    | 40    | 299  | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 111   | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 62   | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 49   | 0      | 864   | 2528 | 0    | 0     | 0   | 36  | 0    | 0      | 0    | 280   | 0    | 0    | 173   | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 87   | 0      | 0     | 0    | 0    | 299   | 40  | 123 | 0    | 90     | 86   | 39    | 0    | 137  | 118   | 321   |
| 0    | 0      | 0     | 0    | 0    | 503   | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 291  | 17     | 864   | 0    | 0    | 4749  | 0   | 38  | 0    | 0      | 0    | 0     | 0    | 70   | 0     | 7093  |
| 0    | 0      | 0     | 0    | 0    | 224   | 534 | 264 | 446  | 166974 | 162  | 193   | 182  | 316  | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 263   | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 389   |
| 0    | 0      | 0     | 0    | 83   | 95    | 0   | 0   | 0    | 27     | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 163   | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 70     | 9543  | 118  | 462  | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 4899  |
| 0    | 54     | 1743  | 65   | 87   | 0     | 0   | 33  | 0    | 0      | 0    | 0     | 8209 | 55   | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 8093  |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 633  | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 67    | 0     |
| 0    | 0      | 0     | 0    | 0    | 45    | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 360  | 0     | 0     |
| 48   | 66     | 877   | 393  | 0    | 279   | 97  | 139 | 224  | 131975 | 125  | 1900  | 99   | 346  | 1080  | 9544  |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 212  | 0     | 0    | 489  | 55    | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 199   |
| 849  | 9157   | 9530  | 662  | 453  | 12711 | 474 | 203 | 1503 | 450    | 319  | 44768 | 87   | 802  | 57    | 5495  |
| 0    | 36     | 3493  | 65   | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 200   | 0    | 0    | 0     | 0     |
| 2392 | 0      | 0     | 0    | 0    | 64    | 153 | 85  | 5217 | 205    | 1577 | 19805 | 103  | 61   | 0     | 12331 |
| 459  | 111817 | 28460 | 1029 | 1309 | 5909  | 85  | 59  | 303  | 193    | 2635 | 8122  | 53   | 3152 | 219   | 36184 |
| 2457 | 1204   | 17344 | 1434 | 781  | 275   | 400 | 70  | 5436 | 35     | 34   | 1164  | 25   | 1511 | 50    | 3538  |
| 0    | 0      | 0     | 0    | 0    | 1023  | 36  | 146 | 0    | 140    | 39   | 34280 | 27   | 0    | 13556 | 90    |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 168   | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 477  | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 684  | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 1443 | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 40  | 130 | 0    | 30     | 0    | 75    | 0    | 63   | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 48    | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 868   | 56   | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 886   | 114  | 74   | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |
| 0    | 0      | 0     | 0    | 0    | 0     | 0   | 0   | 0    | 0      | 0    | 0     | 0    | 0    | 0     | 0     |

|      |        |        |      |       |       |      |       |      |      |       |       |       |        |        |      |
|------|--------|--------|------|-------|-------|------|-------|------|------|-------|-------|-------|--------|--------|------|
|      | 0      | 0      | 0    | 0     | 0     | 0    | 4819  | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 2047 | 245466 | 187400 | 5833 | 8219  | 9757  | 490  | 17443 | 9060 | 1282 | 6439  | 28286 | 17297 | 1669   | 23168  | 3048 |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 34     | 0      | 121  | 0     | 0     | 0    | 0     | 3528 | 0    | 0     | 0     | 0     | 55     | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 63     | 0      | 0    |
| 0    | 0      | 0      | 63   | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 189    | 0      | 5428 |
| 0    | 0      | 0      | 0    | 0     | 0     | 39   | 31    | 0    | 22   | 0     | 0     | 5088  | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 56    | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 1041 | 0      | 0      | 0    | 0     | 46    | 0    | 30    | 0    | 0    | 1091  | 0     | 0     | 0      | 0      | 0    |
| 193  | 0      | 0      | 132  | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 53   | 0     | 2010 | 0    | 0     | 0     | 0     | 56     | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 112   | 135  | 83    | 98   | 37   | 29534 | 0     | 24    | 259    | 0      | 0    |
| 102  | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 71   | 0     | 0     | 43   | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 125   | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 10240 | 193  | 126   | 276  | 250  | 0     | 39    | 46    | 59     | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 1124 | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 20402  | 0    |
| 192  | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 279208 | 325  |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 42   | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 46    | 0     | 0     | 0      | 0      | 0    |
| 4919 | 40     | 881    | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 1121   | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 100  | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 101  |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 206  | 73780  | 34724  | 2685 | 17505 | 35542 | 1041 | 48115 | 8723 | 1124 | 772   | 62666 | 19849 | 635940 | 166    | 2005 |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 100  |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 717  |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 668  |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 812  | 0     | 0     | 1549 | 0     | 0    | 0    | 0     | 0     | 65    | 0      | 0      | 0    |
| 0    | 0      | 0      | 60   | 0     | 0     | 0    | 56    | 2014 | 0    | 0     | 0     | 6163  | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0      | 0    | 0     | 0     | 0    | 0     | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |

[illegible]



|        |        |       |      |      |        |      |      |      |       |     |       |      |      |       |       |
|--------|--------|-------|------|------|--------|------|------|------|-------|-----|-------|------|------|-------|-------|
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 43   | 0     | 0   | 0     | 0    | 134  | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 252  | 0    | 0      | 0    | 0    | 44   | 0     | 0   | 0     | 0    | 66   | 0     | 2855  |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 860   |
| 110    | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 1702  |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 1657  |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 45    |
| 54     | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 39     | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 47     | 6957  | 268  | 571  | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 106   | 0     |
| 0      | 17     | 1747  | 110  | 0    | 0      | 52   | 0    | 3601 | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 36     | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 862   | 57   | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 6753  | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 7606   | 10976  | 2602  | 58   | 109  | 23651  | 373  | 99   | 148  | 280   | 167 | 173   | 28   | 586  | 0     | 641   |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 48     | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 545   |
| 196    | 6616   | 7781  | 167  | 110  | 4302   | 39   | 987  | 573  | 3960  | 39  | 79    | 337  | 116  | 2555  | 195   |
| 0      | 9      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 1694   | 117683 | 27758 | 688  | 1582 | 124451 | 1029 | 556  | 4123 | 49743 | 301 | 10577 | 7212 | 3884 | 14920 | 17293 |
| 3163   | 99     | 858   | 58   | 478  | 0      | 94   | 0    | 3870 | 30    | 0   | 5659  | 0    | 174  | 0     | 201   |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 864764 | 59     | 3473  | 480  | 807  | 0      | 48   | 0    | 216  | 30    | 0   | 0     | 25   | 0    | 467   | 197   |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 58   | 0    | 0      | 0    | 0    | 140  | 0     | 0   | 0     | 29   | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 34     | 0      | 0     | 0    | 0    | 2789   | 0    | 28   | 0    | 0     | 0   | 0     | 27   | 0    | 0     | 0     |
| 503    | 0      | 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 112  | 48    | 0     |
| 0      | 0      | 0     | 68   | 0    | 0      | 0    | 0    | 0    | 0     | 0   | 0     | 0    | 0    | 0     | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 65   | 0    | 60    | 0   | 0     | 9054 | 0    | 0     | 0     |
| 0      | 20     | 0     | 7633 | 92   | 60     | 9622 | 28   | 0    | 0     | 0   | 0     | 0    | 0    | 712   | 0     |
| 0      | 0      | 0     | 0    | 0    | 0      | 0    | 7179 | 48   | 34    | 0   | 0     | 0    | 0    | 0     | 0     |

|     |       |      |      |     |       |      |    |       |      |     |       |      |     |     |        |
|-----|-------|------|------|-----|-------|------|----|-------|------|-----|-------|------|-----|-----|--------|
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 53  | 12233  |
| 0   | 21    | 0    | 141  | 85  | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 191   | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 46  | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 57  | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 12183  |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 42481 | 4314 | 241  | 92  | 123   | 0    | 0  | 0     | 0    | 0   | 0     | 44   | 66  | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 98     |
| 0   | 36    | 2591 | 114  | 181 | 0     | 0    | 0  | 0     | 0    | 453 | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 275    |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 1155  | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 97  | 0     | 0    | 60   | 0   | 58    | 0    | 0  | 0     | 0    | 0   | 0     | 177  | 0   | 262 | 291398 |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 45    | 0    | 0   | 0     | 32   | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 3806  | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 143  | 35 | 15832 | 67   | 0   | 0     | 0    | 63  | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 104 | 167   | 861  | 2434 | 177 | 110   | 190  | 64 | 7317  | 2190 | 37  | 126   | 4879 | 142 | 58  | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 659   | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 121   | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 885  | 4846 | 81  | 157   | 6040 | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 663 | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 96   | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 117   | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 90  | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 359 | 880    |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 53    | 6903 | 53   | 116 | 0     | 36   | 33 | 57    | 27   | 0   | 0     | 6404 | 145 | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 16251 | 0    | 0  | 0     | 0    | 0   | 37    | 25   | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0      |
| 0   | 0     | 0    | 0    | 0   | 0     | 0    | 0  | 0     | 38   | 82  | 22157 | 0    | 0   | 0   | 0      |
| 47  | 15    | 0    | 1138 | 90  | 0     | 187  | 0  | 5840  | 27   | 0   | 42    | 916  | 263 | 0   | 0      |

|     |        |       |       |      |      |      |     |       |        |     |       |       |      |       |      |
|-----|--------|-------|-------|------|------|------|-----|-------|--------|-----|-------|-------|------|-------|------|
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 106  |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 72  | 0     | 70     | 0   | 45    | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 42  | 0     | 0     | 76   | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 179  |
| 0   | 0      | 0     | 0     | 0    | 223  | 0    | 0   | 0     | 0      | 0   | 22    | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 157580 | 19050 | 918   | 1312 | 219  | 530  | 574 | 371   | 253429 | 289 | 320   | 310   | 1290 | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 411   | 0      | 0   | 0     | 0     | 0    | 0     | 465  |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 38  | 0     | 37     | 38  | 74    | 10101 | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 8692 | 50   | 0   | 0     | 0      | 0   | 0     | 30    | 0    | 0     | 0    |
| 0   | 0      | 0     | 673   | 0    | 44   | 0    | 0   | 59    | 87     | 174 | 0     | 11718 | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 3139 | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 107  | 130  | 74  | 40    | 59727  | 23  | 110   | 0     | 70   | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 66   | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 68    | 6104 |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 9624  | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 56   | 88   | 0   | 54    | 0      | 47  | 14514 | 30    | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 5021  | 0      | 0   | 47    | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 52    | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 25  | 0     | 0      | 0   | 0     | 0     | 127  | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 51   | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 302  | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 457 | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 151  | 97   | 53  | 129   | 84     | 98  | 259   | 46    | 75   | 59    | 102  |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 105  | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 54    | 188  |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 110 | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 187   | 0    | 0    | 204  | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 189 | 62     | 6940  | 39341 | 0    | 129  | 2220 | 35  | 12637 | 70     | 0   | 115   | 3394  | 69   | 107   | 2706 |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 757  |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 0     | 0    | 887  | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 0    |
| 0   | 0      | 0     | 3913  | 296  | 1896 | 2157 | 0   | 187   | 21     | 0   | 33    | 0     | 0    | 37566 | 6746 |
| 0   | 0      | 0     | 0     | 0    | 0    | 0    | 0   | 0     | 0      | 0   | 0     | 0     | 0    | 0     | 579  |

|      |       |       |      |        |       |      |       |       |       |     |       |       |      |       |      |
|------|-------|-------|------|--------|-------|------|-------|-------|-------|-----|-------|-------|------|-------|------|
| 0    | 0     | 0     | 0    | 0      | 0     | 46   | 43    | 0     | 0     | 0   | 42    | 37    | 74   | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 12707 | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 68   | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 42    | 43    | 0     | 44  | 43    | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 868   | 113  | 104    | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 2814 |
| 0    | 0     | 0     | 55   | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 5067 |
| 0    | 66    | 4366  | 240  | 164740 | 78416 | 401  | 50056 | 302   | 438   | 312 | 88031 | 90    | 2665 | 210   | 1112 |
| 0    | 18    | 850   | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 883   | 132  | 519    | 336   | 0    | 70    | 0     | 22    | 75  | 0     | 2127  | 3676 | 56    | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 420  | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 161  | 0     | 0     | 137  | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 870  | 0     | 878   | 0    | 114    | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 61    | 3464  | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 49    | 5223  | 376  | 484    | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 87   | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 599  | 132   | 5228  | 9554 | 748    | 1574  | 1648 | 675   | 61404 | 349   | 84  | 1946  | 74764 | 341  | 538   | 872  |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 261  | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 1127 | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 8754 | 0     | 35    | 0     | 0   | 44    | 0     | 0    | 69    | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 48200 | 10440 | 289  | 176    | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 39    | 0    | 0     | 0     | 0     | 906 | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 56    | 5205  | 49   | 179    | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 54   | 0     | 3681  | 0     | 42  | 0     | 0     | 51   | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 34    | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 52   | 0     | 0     | 0    | 0      | 5580  | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 96   | 112   | 0     | 90    | 0   | 25660 | 0     | 63   | 0     | 93   |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 1319 |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 52    | 50   | 34    | 0     | 70277 | 121 | 73    | 56    | 187  | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0    |
| 0    | 0     | 0     | 0    | 0      | 0     | 0    | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 46    | 0    |

[illegible]

[illegible]

| Control0<br>43 | Control0<br>44 | Control0<br>45 | Control0<br>46 | Control0<br>47 | Control0<br>48 | Control0<br>49 | Control0<br>50 | Control0<br>51 | Control0<br>52 | Control0<br>53 | Control0<br>54 | Control0<br>56 | Control0<br>58 | Control0<br>59 | Control0<br>60 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 952283         | 938843         | 882089         | 718844         | 864862         | 882507         | 974198         | 954868         | 945107         | 712039         | 208579         | 932798         | 618513         | 908836         | 847445         | 973163         |
| 41904          | 53198          | 86478          | 263255         | 84401          | 7863           | 3748           | 6667           | 6258           | 8570           | 84465          | 28391          | 237114         | 37311          | 139317         | 3570           |
| 0              | 0              | 0              | 0              | 684            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 808            | 7785           | 22013          | 17901          | 43877          | 31393          | 19737          | 36961          | 44166          | 273620         | 19951          | 27499          | 11276          | 52168          | 11950          | 15632          |
| 5005           | 174            | 6332           | 0              | 6176           | 75286          | 2246           | 1283           | 4439           | 5288           | 686744         | 11246          | 50015          | 1587           | 1288           | 7546           |
| 0              | 0              | 0              | 0              | 0              | 90             | 71             | 221            | 30             | 483            | 261            | 66             | 83082          | 98             | 0              | 0              |
| 0              | 0              | 3088           | 0              | 0              | 2861           | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 89             |

| Control0<br>43 | Control0<br>44 | Control0<br>45 | Control0<br>46 | Control0<br>47 | Control0<br>48 | Control0<br>49 | Control0<br>50 | Control0<br>51 | Control0<br>52 | Control0<br>53 | Control0<br>54 | Control0<br>56 | Control0<br>58 | Control0<br>59 | Control0<br>60 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 165            | 80             | 258            | 37             | 0              | 36             | 77             | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 30724          | 9944           | 393220         | 4373           | 4555           | 15373          | 10189          | 856360         | 680712         | 37482          | 20683          | 9137           | 9468           | 25255          | 8329           | 15967          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 76             | 62             | 0              | 24             | 120            | 35             | 38             | 33             | 35             | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 1051           | 15200          | 820            | 185710         | 577            | 85             | 2224           | 764            | 220            | 133            | 9041           | 49             | 130            | 37             | 503            | 1277           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 22             | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 43             | 0              | 325            | 0              | 0              | 103229         | 144            | 5116           | 191            | 514            | 142            | 32             | 36             | 875            | 203            | 0              |
| 0              | 65             | 119            | 0              | 0              | 0              | 0              | 518            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 46             | 120            | 68             | 286            | 0              | 271            | 145            | 473            | 149            | 0              | 129            | 69             | 41744          | 140            | 412            | 157            |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 77             | 55             | 60             | 0              | 0              | 0              | 0              | 0              | 180            | 55             | 0              | 35             | 280            | 281            |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 27             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 58             | 10376          | 25             | 63             | 0              | 1434           | 17715          | 32             | 0              | 237            | 1376           | 180            | 0              | 25             | 97             | 86             |
| 0              | 1676           | 41             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 4385           | 209428         | 50993          | 47920          | 69453          | 17552          | 385408         | 9710           | 3180           | 618893         | 35177          | 10407          | 68758          | 17773          | 15593          | 4842           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 38             | 0              | 0              | 0              | 0              | 0              |
| 897            | 0              | 109            | 64             | 0              | 0              | 82             | 71             | 86             | 0              | 43             | 35             | 0              | 0              | 0              | 0              |
| 0              | 59             | 112            | 0              | 20661          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 167            | 143            | 135            | 278            | 643            | 345            | 25             | 61242          | 121            | 0              | 0              |
| 0              | 0              | 0              | 0              | 684            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 81             | 0              | 1744           | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 9329           | 0              |
| 0              | 0              | 0              | 0              | 0              | 1803           | 0              | 0              | 0              | 0              | 13520          | 146            | 39             | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 49             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 85             |
| 5407           | 334876         | 149006         | 1964           | 581844         | 7540           | 495960         | 774            | 843            | 2145           | 26093          | 11253          | 55679          | 1473           | 1519           | 4971           |
| 93             | 0              | 31             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 35             | 0              | 0              |
| 93             | 62482          | 136            | 50             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 84             | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 41             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 33             | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 121            | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 1159           | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |

|       |        |       |        |       |       |      |      |      |      |        |       |        |        |        |      |
|-------|--------|-------|--------|-------|-------|------|------|------|------|--------|-------|--------|--------|--------|------|
|       | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 14312  | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 933   | 101    | 169   | 90601  | 1525  | 55075 | 2963 | 1332 | 1764 | 4670 | 2732   | 35349 | 1256   | 1009   | 61265  | 1394 |
| 851   | 0      | 0     | 71     | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 21322  | 85   |
| 0     | 0      | 0     | 0      | 0     | 75    | 65   | 99   | 34   | 0    | 131    | 80    | 27317  | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 4310  | 0    | 0    | 30   | 0    | 44     | 0     | 0      | 36     | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 36    | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 55     | 40    | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 41    | 0      | 95    | 0      | 23121 | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 13006  | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 209   | 115033 | 182   | 232    | 484   | 355   | 587  | 0    | 92   | 1374 | 140    | 7265  | 718    | 76     | 93     | 9271 |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 59     | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 40    | 0      | 0     | 12101  | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 7871  | 12673  | 29616 | 103794 | 731   | 2065  | 1009 | 1006 | 4375 | 4677 | 31671  | 16998 | 159376 | 256454 | 310908 | 2855 |
| 0     | 0      | 40    | 63675  | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 701   | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 54    | 0      | 0     | 115    | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 90   |
| 0     | 0      | 0     | 0      | 0     | 98    | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 5194   | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 3851  | 23607  | 51681 | 110868 | 44498 | 557   | 532  | 885  | 1655 | 833  | 23873  | 26697 | 59680  | 30915  | 11215  | 1282 |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 63    | 0      | 64    | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 326   | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 1699   | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 85    | 431  | 210  | 375  | 876  | 457    | 121   | 101    | 95     | 108    | 164  |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 213  | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 14036  | 93   |
| 748   | 607    | 439   | 103    | 11193 | 0     | 145  | 126  | 38   | 0    | 176    | 0     | 35     | 31     | 0      | 90   |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 30     | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 88     | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 7725   | 0    |
| 58    | 0      | 38    | 0      | 0     | 0     | 70   | 113  | 124  | 514  | 196    | 85    | 28     | 0      | 582    | 839  |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 106  | 0    | 125  | 0      | 30    | 0      | 0      | 0      | 0    |
| 5005  | 174    | 6299  | 0      | 186   | 74617 | 1421 | 1151 | 4135 | 3980 | 685983 | 10836 | 49772  | 1255   | 917    | 7461 |
| 35409 | 51     | 72    | 60     | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |
| 0     | 0      | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0      | 0      | 0      | 0    |



|       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 58    | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 9427  | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 75    | 0     | 50    | 103   | 747   | 712   | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 272   | 136   | 244   | 67    | 287    | 277   | 71    | 69    | 126   | 0     | 0     |
| 0     | 5554  | 38    | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 356   | 377   | 21143 | 70    | 112   | 94    | 146   | 3633  | 31    | 0      | 193   | 26    | 0     | 0     | 107   | 0     |
| 0     | 0     | 526   | 0     | 0     | 0     | 0     | 2145  | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 81    |
| 26612 | 8266  | 39    | 120   | 56    | 0     | 0     | 0     | 40    | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 60    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 113   | 165   |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 808   | 7785  | 21938 | 17901 | 43827 | 31290 | 18990 | 36249 | 44166 | 273620 | 19951 | 27499 | 11276 | 52168 | 11950 | 15632 |
| 0     | 3767  | 0     | 0     | 95    | 21517 | 835   | 205   | 24    | 232    | 0     | 0     | 80    | 0     | 0     | 0     |
| 0     | 17882 | 307   | 115   | 1313  | 338   | 16265 | 0     | 34    | 0      | 329   | 0     | 164   | 0     | 86    | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 28    | 0     | 0     | 548   | 473   | 249   | 168   | 1156   | 388   | 308   | 170   | 243   | 14531 | 899   |
| 0     | 4865  | 38    | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 56    | 0     | 0     | 0     | 57    | 0     | 0     | 0     | 33    | 0      | 0     | 0     | 498   | 39    | 0     | 88    |
| 0     | 0     | 0     | 0     | 0     | 0     | 143   | 0     | 0     | 0      | 40    | 0     | 0     | 0     | 0     | 104   |
| 0     | 0     | 105   | 0     | 0     | 0     | 0     | 578   | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 274   | 247   | 105   | 214   | 218   | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 3765  | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 60    | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 349   | 0      | 0     | 0     | 0     | 0     | 85810 | 160   |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 256   | 831   | 264   | 0     | 0     | 444   | 0     | 1057  | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 25208 | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 32    | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 37    | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 10502 | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 5724  | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 128   | 0     | 0     | 84    | 71    | 0     | 269   | 0      | 70    | 0     | 4527  | 33    | 101   | 84    |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 1335  | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 35    | 0     | 0      | 69    | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 58    | 0      | 0     | 0     | 0     | 0     | 0     | 0     |
| 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 11111 | 0     | 0     | 28    | 0     | 0     |

|      |       |       |        |       |     |      |      |      |      |       |      |       |     |       |      |
|------|-------|-------|--------|-------|-----|------|------|------|------|-------|------|-------|-----|-------|------|
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 434  | 0    | 0    | 0     | 33   | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 5180  | 0    | 43    | 0   | 0     | 0    |
| 333  | 59    | 26    | 60     | 159   | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 208   | 426  |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 72    | 20419 | 63     | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 32    | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 29    | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 49   | 62    | 33538 | 0      | 183   | 288 | 79   | 233  | 34   | 391  | 33    | 145  | 47908 | 221 | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 338  | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 25   | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 2923  | 0    |
| 0    | 0     | 65    | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 9296 | 12787 | 2926  | 132342 | 17377 | 928 | 306  | 204  | 162  | 526  | 13766 | 127  | 46465 | 90  | 7175  | 360  |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 301   | 0    |
| 729  | 452   | 797   | 500    | 78744 | 0   | 0    | 0    | 38   | 0    | 0     | 0    | 121   | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 839   | 0      | 0     | 0   | 0    | 34   | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 593 | 763  | 132  | 280  | 1188 | 726   | 372  | 210   | 297 | 371   | 85   |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 60   | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 88   | 2804  | 456   | 0      | 2707  | 106 | 5786 | 0    | 0    | 0    | 0     | 31   | 45    | 0   | 0     | 90   |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 22   | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 19727 | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 100    | 55    | 0   | 0    | 0    | 0    | 0    | 35    | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 134   | 75    | 107    | 124   | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 95    | 0    |
| 60   | 2741  | 0     | 0      | 0     | 85  | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 13385  | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 167  | 4768  | 412   | 121    | 346   | 73  | 199  | 62   | 0    | 0    | 0     | 250  | 0     | 0   | 0     | 0    |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 40   | 0    | 150  | 0     | 0    | 0     | 0   | 0     | 0    |
| 262  | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |
| 61   | 109   | 2287  | 60     | 0     | 253 | 228  | 9425 | 6296 | 257  | 112   | 2946 | 43    | 76  | 276   | 2837 |
| 0    | 0     | 0     | 0      | 0     | 0   | 0    | 0    | 0    | 0    | 0     | 0    | 0     | 0   | 0     | 0    |

[illegible]

[illegible]



|      |        |        |       |        |       |        |      |      |        |       |       |       |       |      |      |
|------|--------|--------|-------|--------|-------|--------|------|------|--------|-------|-------|-------|-------|------|------|
| 46   | 120    | 68     | 286   | 0      | 271   | 145    | 473  | 149  | 0      | 129   | 69    | 41744 | 140   | 412  | 157  |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 77     | 55    | 60     | 0     | 0      | 0    | 0    | 0      | 180   | 55    | 0     | 35    | 280  | 281  |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 27   | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 58   | 10376  | 25     | 63    | 0      | 1434  | 17715  | 32   | 0    | 237    | 1376  | 180   | 0     | 25    | 97   | 86   |
| 0    | 1676   | 41     | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 652  | 126    | 423    | 527   | 329    | 6578  | 77     | 212  | 29   | 245    | 117   | 88    | 43808 | 33    | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 49   | 67     | 36     | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 98   |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 241  | 1152   | 6184   | 233   | 58     | 0     | 0      | 0    | 68   | 0      | 2451  | 0     | 0     | 0     | 5071 | 0    |
| 0    | 1734   | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 85   | 0    |
| 43   | 0      | 38     | 14494 | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 3400 | 205529 | 38496  | 1570  | 69009  | 10974 | 385331 | 9498 | 3019 | 618532 | 32483 | 10319 | 24915 | 17740 | 8222 | 4477 |
| 0    | 0      | 0      | 16076 | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 5816   | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 169  |
| 0    | 0      | 0      | 2582  | 0      | 0     | 0      | 0    | 64   | 116    | 86    | 0     | 35    | 0     | 2132 | 98   |
| 0    | 820    | 0      | 12438 | 57     | 0     | 0      | 0    | 0    | 0      | 40    | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 83   | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 38    | 0     | 0     | 0     | 0    | 0    |
| 849  | 0      | 0      | 0     | 0      | 0     | 82     | 71   | 86   | 0      | 43    | 35    | 0     | 0     | 0    | 0    |
| 48   | 0      | 109    | 64    | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 59     | 112    | 0     | 20661  | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 167   | 143    | 135  | 278  | 643    | 345   | 25    | 61242 | 121   | 0    | 0    |
| 0    | 0      | 0      | 0     | 684    | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 81     | 0    | 1744 | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 9329 | 0    |
| 0    | 0      | 0      | 0     | 0      | 1803  | 0      | 0    | 0    | 0      | 13520 | 146   | 39    | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 49     | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 85   |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 35    | 0     | 11523 | 0     | 0    | 0    |
| 5407 | 334876 | 149006 | 1964  | 581844 | 7540  | 495960 | 774  | 843  | 2145   | 26058 | 11253 | 44156 | 1473  | 1519 | 4971 |
| 93   | 0      | 31     | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 35    | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 93   | 62482  | 136    | 50    | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 84   | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    |
| 0    | 0      | 41     | 0     | 0      | 0     | 0      | 0    | 0    | 0      | 0     | 33    | 0     | 0     | 0    | 0    |
| 0    | 0      | 0      | 0     | 0      | 0     | 0      | 0    | 121  | 0      | 0     | 0     | 0     | 0     | 0    | 0    |

|      |        |       |       |       |       |      |      |      |      |       |       |       |        |        |      |
|------|--------|-------|-------|-------|-------|------|------|------|------|-------|-------|-------|--------|--------|------|
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 1159 | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 14312  | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 34    | 55    | 0     | 0     | 550  | 139  | 349  | 0    | 188   | 34    | 39    | 37     | 0      | 263  |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 184   | 504  | 129  | 164  | 598  | 364   | 0     | 107   | 165    | 103    | 249  |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 145  | 48     | 135   | 90546 | 1525  | 53077 | 75   | 67   | 189  | 405  | 304   | 34561 | 29    | 36     | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 41729  | 152  |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 1543  | 1072 | 708  | 800  | 2531 | 1500  | 604   | 715   | 654    | 309    | 457  |
| 735  | 53     | 0     | 0     | 0     | 0     | 426  | 180  | 98   | 612  | 65    | 49    | 221   | 78     | 192    | 179  |
| 0    | 0      | 0     | 0     | 0     | 0     | 145  | 0    | 44   | 0    | 36    | 0     | 0     | 0      | 0      | 94   |
| 53   | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 44    | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 271   | 191  | 109  | 120  | 524  | 231   | 101   | 145   | 39     | 18932  | 0    |
| 851  | 0      | 0     | 71    | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 21322  | 85   |
| 0    | 0      | 0     | 0     | 0     | 75    | 65   | 99   | 34   | 0    | 131   | 80    | 27317 | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 4310  | 0    | 0    | 30   | 0    | 44    | 0     | 0     | 36     | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 36    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 55     | 40    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 41   | 0      | 95    | 0     | 23121 | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 13006  | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 209  | 115033 | 182   | 232   | 484   | 355   | 587  | 0    | 92   | 1374 | 140   | 7265  | 718   | 76     | 93     | 9271 |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 59    | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 40   | 0      | 0     | 12101 | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 1283 | 2502   | 3058  | 3517  | 225   | 208   | 84   | 101  | 2357 | 775  | 4630  | 131   | 3029  | 48029  | 46026  | 366  |
| 0    | 0      | 0     | 0     | 0     | 98    | 214  | 34   | 196  | 764  | 265   | 50    | 69542 | 84     | 0      | 0    |
| 112  | 8147   | 71    | 55610 | 117   | 107   | 152  | 24   | 82   | 485  | 126   | 27    | 39688 | 111    | 81     | 0    |
| 3592 | 585    | 452   | 44115 | 325   | 458   | 57   | 353  | 1066 | 906  | 12338 | 30    | 45740 | 21142  | 241518 | 2489 |
| 2884 | 1439   | 26035 | 552   | 64    | 1036  | 423  | 397  | 640  | 1630 | 14174 | 20    | 551   | 186980 | 6480   | 0    |
| 0    | 0      | 0     | 0     | 0     | 158   | 79   | 97   | 34   | 117  | 138   | 16740 | 826   | 108    | 16803  | 0    |
| 0    | 0      | 40    | 63675 | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 701  | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 54   | 0      | 0     | 115   | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 90   |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 98    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 5194   | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |
| 0    | 0      | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0      | 0      | 0    |

|       |       |       |        |       |       |      |      |      |      |        |       |       |       |       |      |
|-------|-------|-------|--------|-------|-------|------|------|------|------|--------|-------|-------|-------|-------|------|
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 3851  | 23607 | 51681 | 110868 | 44498 | 557   | 532  | 885  | 1655 | 833  | 23873  | 26697 | 59680 | 30915 | 11215 | 1282 |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 64    | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 63    | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 326   | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 1699  | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 85    | 431  | 210  | 375  | 876  | 457    | 121   | 101   | 95    | 108   | 164  |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 213  | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 14036 | 93   |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 10882 | 0     | 0    | 126  | 38   | 0    | 176    | 0     | 35    | 31    | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 748   | 607   | 439   | 103    | 311   | 0     | 145  | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 90   |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 30    | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 88    | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 7725  | 0    |
| 58    | 0     | 38    | 0      | 0     | 0     | 70   | 113  | 124  | 514  | 196    | 85    | 28    | 0     | 582   | 839  |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 43   | 0    | 125  | 0      | 30    | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 63   | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 5005  | 174   | 6299  | 0      | 186   | 74617 | 1421 | 1151 | 4135 | 3980 | 685983 | 10836 | 49772 | 1255  | 917   | 7461 |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 35409 | 51    | 72    | 60     | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 58   | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 9427  | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 75    | 0      | 50    | 103   | 747  | 712  | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 272   | 136  | 217  | 67   | 287  | 248    | 71    | 69    | 126   | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 0    | 0    | 0    | 0      | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0     | 0      | 0     | 0     | 0    | 27   | 0    | 0    | 29     | 0     | 0     | 0     | 0     | 0    |



[illegible]

|      |      |       |        |       |     |     |     |     |     |       |     |       |     |      |     |
|------|------|-------|--------|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|------|-----|
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 35  | 0   | 0   | 69    | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 58  | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 11111 | 0   | 0     | 28  | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 434 | 0   | 0   | 0     | 33  | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 5180  | 0   | 43    | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 333  | 59   | 0     | 0      | 56    | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 26    | 60     | 50    | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 111  | 182 |
| 0    | 0    | 0     | 0      | 53    | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 97   | 244 |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 72   | 20419 | 63     | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 32    | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 29    | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 49   | 62   | 33538 | 0      | 183   | 288 | 79  | 233 | 34  | 391 | 33    | 110 | 47908 | 221 | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 35  | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 338  | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 25  | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 2923 | 0   |
| 0    | 0    | 65    | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 2433 | 34    | 55     | 0     | 0   | 154 | 0   | 0   | 0   | 0     | 34  | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 151  | 57   | 927   | 11539  | 2476  | 838 | 0   | 37  | 22  | 255 | 1768  | 29  | 14511 | 0   | 1528 | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 8953 | 9592 | 1900  | 107695 | 14901 | 0   | 77  | 132 | 140 | 128 | 11998 | 32  | 26005 | 90  | 5647 | 360 |
| 192  | 705  | 65    | 13053  | 0     | 90  | 75  | 35  | 0   | 143 | 0     | 32  | 5949  | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    | 0   |
| 0    | 0    | 0     | 0      | 0     | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0     | 0   | 0    |     |

|     |      |      |       |     |     |      |      |      |     |     |      |       |    |       |       |
|-----|------|------|-------|-----|-----|------|------|------|-----|-----|------|-------|----|-------|-------|
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 22   | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 19727 | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 35  | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 100   | 55  | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 95    | 0     |
| 0   | 134  | 75   | 107   | 124 | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 60  | 2741 | 0    | 0     | 0   | 85  | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 13385 | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 167 | 4768 | 369  | 121   | 346 | 73  | 199  | 0    | 0    | 0   | 0   | 250  | 0     | 0  | 0     | 0     |
| 0   | 0    | 43   | 0     | 0   | 0   | 0    | 62   | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 150 | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 40   | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 262 | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 61  | 109  | 2287 | 60    | 0   | 253 | 228  | 9425 | 6296 | 257 | 112 | 2946 | 43    | 76 | 276   | 2837  |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 9075  | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 2428 | 123  | 0     | 152 | 82  | 4563 | 32   | 488  | 0   | 67  | 31   | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 39    | 14642 |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 2276  | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 72   | 0    | 33   | 0   | 0   | 27   | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 85    |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 111  | 0    | 1802  | 0   | 0   | 0    | 0    | 0    | 135 | 0   | 0    | 3581  | 0  | 109   | 0     |
| 549 | 575  | 561  | 668   | 586 | 0   | 0    | 0    | 96   | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 1635  | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 78   | 63   | 110  | 115 | 77  | 0    | 32038 | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 141 | 0   | 0    | 7634  | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 39   | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 0    | 0     | 0   | 0   | 0    | 0    | 0    | 0   | 0   | 0    | 0     | 0  | 0     | 0     |
| 0   | 0    | 382  | 58    | 0   | 87  | 68   | 5878 | 0    | 0   | 0   | 25   | 0     | 0  | 0     | 0     |

[illegible]

[illegible]

|     |      |     |     |       |     |      |     |       |     |       |       |       |       |      |        |
|-----|------|-----|-----|-------|-----|------|-----|-------|-----|-------|-------|-------|-------|------|--------|
| 0   | 0    | 34  | 0   | 18107 | 0   | 0    | 0   | 32    | 257 | 6645  | 0     | 79    | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 40    | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 57  | 53   | 244 | 0   | 102   | 79  | 79   | 101 | 24132 | 98  | 227   | 15    | 87    | 108   | 3234 | 249    |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 2095  | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 35    | 38    | 43    | 0     | 0    | 0      |
| 781 | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 27  | 0   | 0     | 371 | 0    | 32  | 34    | 0   | 1322  | 26    | 26467 | 17039 | 180  | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 44    | 0     | 43    | 0     | 0    | 0      |
| 0   | 1357 | 31  | 0   | 115   | 98  | 5664 | 38  | 232   | 252 | 362   | 99902 | 117   | 72    | 108  | 115372 |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 91  | 58   | 56  | 21    | 0   | 24436 | 38    | 92    | 31    | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 139  | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 644 | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 100 | 0    | 0   | 58    | 119 | 100   | 23    | 22036 | 32    | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 53   | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 73   | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 211 | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 159 | 462  | 218 | 258 | 210   | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 906  | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 79   | 0   | 0     | 147 | 29    | 33    | 0     | 34    | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 1076  | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 55   | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 47  | 1507 | 0   | 0   | 0     | 103 | 0    | 0   | 0     | 125 | 10540 | 41    | 41    | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 287   | 0   | 0     | 0     | 0     | 0     | 105  | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 86   | 0      |
| 221 | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |
| 0   | 0    | 0   | 0   | 0     | 0   | 0    | 0   | 0     | 0   | 0     | 0     | 0     | 0     | 0    | 0      |

|        |       |       |       |       |        |       |       |        |       |      |       |       |        |        |       |
|--------|-------|-------|-------|-------|--------|-------|-------|--------|-------|------|-------|-------|--------|--------|-------|
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 27     | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 98     | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 676    | 458   | 233   | 249   | 232   | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 77     | 0     | 31    | 30     | 381   | 77   | 65    | 51    | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 452    | 476   | 122   | 193    | 1015  | 591  | 210   | 16161 | 75     | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 68    | 67    | 31     | 0     | 0    | 71    | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 1021   | 71    | 0     | 0      | 0     | 78   | 23    | 26260 | 59     | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 816    | 0     | 33    | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 939   | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 63    | 35    | 35     | 106   | 66   | 33    | 17602 | 41     | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 34     | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 2365  | 0     | 0     | 78     | 0     | 37    | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 852984 | 13970 | 95731 | 56376 | 66073 | 647269 | 15751 | 10198 | 217980 | 14858 | 8887 | 28577 | 41583 | 568543 | 129376 | 23662 |
| 0      | 40    | 31    | 12885 | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 3088  | 0     | 0     | 2861   | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 89    |
| 0      | 0     | 0     | 0     | 0     | 0      | 63    | 0     | 61     | 0     | 112  | 0     | 14929 | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 86    | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 198   | 0     | 0     | 93     | 0     | 141   | 33     | 17050 | 198  | 0     | 73    | 112    | 0      | 0     |
| 358    | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 60     | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 0     |
| 0      | 0     | 526   | 0     | 0     | 0      | 0     | 2145  | 0      | 0     | 0    | 0     | 0     | 0      | 0      | 81    |

| Control0<br>61 | Control0<br>62 | Control0<br>64 | Control0<br>65 | Control0<br>67 | Control0<br>68 | Control0<br>69 | Control0<br>71 | Control0<br>74 | Control0<br>76 | Control0<br>77 | Control0<br>79 | Control0<br>81 | Control0<br>82 | Control0<br>84 | Control0<br>85 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 843348         | 921593         | 729007         | 853189         | 822083         | 917230         | 649580         | 854474         | 796699         | 798800         | 727860         | 782462         | 752805         | 924585         | 994748         | 924941         |
| 94323          | 36213          | 238576         | 100705         | 147581         | 71215          | 238791         | 69837          | 100150         | 136468         | 195153         | 139555         | 147683         | 30469          | 2890           | 40498          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 338            | 0              | 0              | 0              | 0              |
| 56817          | 25465          | 32329          | 34991          | 28862          | 11283          | 107129         | 67850          | 103098         | 64670          | 53921          | 75644          | 98682          | 42972          | 1577           | 21647          |
| 396            | 15889          | 88             | 10732          | 1422           | 235            | 4221           | 7839           | 53             | 62             | 23010          | 2001           | 830            | 1974           | 785            | 10138          |
| 4210           | 0              | 0              | 0              | 0              | 37             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 906            | 840            | 0              | 383            | 52             | 0              | 279            | 0              | 0              | 0              | 56             | 0              | 0              | 0              | 0              | 2776           |

| Control0<br>61 | Control0<br>62 | Control0<br>64 | Control0<br>65 | Control0<br>67 | Control0<br>68 | Control0<br>69 | Control0<br>71 | Control0<br>74 | Control0<br>76 | Control0<br>77 | Control0<br>79 | Control0<br>81 | Control0<br>82 | Control0<br>84 | Control0<br>85 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 44             | 0              | 0              | 0              | 8427           | 0              | 0              | 161            | 0              | 42             | 0              | 0              | 0              | 0              | 0              | 56             |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 17644          | 0              | 0              | 0              | 0              | 0              |
| 403938         | 142656         | 77624          | 144290         | 12335          | 14716          | 111998         | 312430         | 16521          | 571            | 98034          | 494243         | 11210          | 536011         | 7760           | 303926         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 207            | 231            | 88             | 262            | 123            | 43             | 0              | 0              | 0              | 0              | 0              | 0              | 199            | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 82212          | 5238           | 358            | 14070          | 287            | 89             | 371            | 0              | 0              | 0              | 0              | 46             | 109            | 0              | 46             | 2089           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 2446           | 303            | 21260          | 977            | 76             | 47             | 0              | 1367           | 4030           | 0              | 7293           | 107            | 0              | 8643           | 0              | 837            |
| 257            | 0              | 48             | 0              | 0              | 0              | 86             | 0              | 0              | 0              | 0              | 0              | 0              | 79             | 0              | 37             |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 204            | 27769          | 2871           | 131            | 11591          | 94             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 2951           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 83             | 206            | 141            | 268            | 269            | 45             | 741            | 424            | 259            | 96             | 1609           | 602            | 674            | 1091           | 974627         | 1340           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 94             | 0              | 0              | 0              |
| 38             | 3072           | 41             | 0              | 76             | 0              | 0              | 3781           | 0              | 0              | 0              | 0              | 96             | 0              | 156            | 6779           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 7884           | 43132          | 1393           | 238044         | 9667           | 4114           | 59542          | 35642          | 12254          | 89             | 288201         | 8935           | 599            | 7012           | 2239           | 181864         |
| 0              | 0              | 0              | 6954           | 0              | 0              | 81             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 326            | 0              | 1964           | 0              | 0              |
| 0              | 0              | 0              | 46             | 36             | 0              | 84             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 163            |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 49             | 43             | 152            | 57             | 42             | 118            |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 282            | 40073          | 671            | 536            | 826            | 1513           | 881            | 10471          | 1618           | 0              | 51213          | 426            | 394            | 564            | 615            | 277103         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 63             | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 1682           |
| 50             | 0              | 0              | 69             | 78             | 51             | 75             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 168            | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 179            | 0              | 44             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 227            | 0              | 0              | 0              | 0              | 0              | 76             | 307            | 0              | 0              | 0              | 0              | 0              | 3151           | 0              | 2998           |



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|-------|------|-------|------|-------|-------|------|-------|-------|-----|-------|-------|-------|-------|-----|------|
| 227   | 0    | 0     | 0    | 0     | 0     | 76   | 307   | 0     | 0   | 0     | 0     | 0     | 3151  | 0   | 2998 |
| 44    | 71   | 51    | 49   | 0     | 47    | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 121  | 263   | 0     | 1031 | 0     | 48    | 41  | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 222   | 263  | 171   | 519  | 203   | 78    | 450  | 0     | 0     | 0   | 0     | 109   | 0     | 0     | 0   | 47   |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 111  | 165   | 171   | 141 | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 138  | 41    | 102  | 0     | 36    | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 231   | 284  | 260   | 692  | 80    | 112   | 248  | 0     | 0     | 0   | 0     | 0     | 153   | 318   | 0   | 68   |
| 82    | 68   | 0     | 78   | 40    | 0     | 170  | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 39    | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 42    | 148  | 34    | 32   | 0     | 48    | 105  | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 153  | 0     | 0    | 6784  | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 6293  | 0    | 0     | 129  | 0     | 0     | 0    | 0     | 0     | 0   | 114   | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 58    | 26385 | 0     | 57    | 61  | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 36    | 0    | 46    | 0    | 0     | 0     | 79   | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 33    | 0     | 86   | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 317   | 2476 | 710   | 170  | 131   | 1108  | 0    | 639   | 272   | 362 | 4258  | 0     | 0     | 228   | 50  | 583  |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 338   | 0     | 0     | 0   | 0    |
| 483   | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 101   | 0     | 2383  | 0   | 32   |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 880   | 3248 | 2361  | 253  | 5284  | 0     | 0    | 2795  | 0     | 0   | 14229 | 2765  | 48    | 573   | 48  | 122  |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 150   | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 88    | 2968 | 37    | 48   | 1168  | 19375 | 285  | 0     | 0     | 0   | 8422  | 105   | 36508 | 7892  | 162 | 1023 |
| 13760 | 8996 | 28673 | 1128 | 93134 | 298   | 523  | 33035 | 50    | 0   | 2056  | 93    | 47    | 13162 | 52  | 86   |
| 1736  | 381  | 228   | 38   | 987   | 45    | 171  | 302   | 0     | 0   | 612   | 10176 | 47    | 119   | 523 | 102  |
| 78    | 0    | 0     | 38   | 43    | 0     | 0    | 35707 | 0     | 40  | 52    | 0     | 48    | 0     | 160 | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 68   | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 104  | 0     | 0     | 0    | 0     | 59764 | 161 | 62    | 110   | 72    | 62    | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 54    | 0     | 33914 | 0     | 0   | 29   |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |
| 0     | 0    | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0   | 0    |



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|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|------|-------|
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 6362   | 0      | 0      | 0      | 38     | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 44     | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 91     | 0     | 0      | 0      | 0      | 0      | 6014   | 0      | 3327   | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 83     | 38     | 0      | 45     | 0     | 0      | 0      | 0      | 0      | 64     | 0      | 0      | 1624   | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 23183  | 0      | 104    | 61     | 103  | 81    |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 41     | 0      | 0    | 0     |
| 0      | 71     | 0      | 371    | 35     | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 120    | 0    | 0     |
| 252705 | 343578 | 522001 | 340471 | 650355 | 94933 | 386190 | 396709 | 660112 | 793863 | 179001 | 212486 | 694176 | 157965 | 5522 | 62767 |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 906    | 840    | 0      | 383    | 52     | 0     | 279    | 0      | 0      | 0      | 56     | 0      | 0      | 0      | 0    | 2776  |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 88     | 514    | 0      | 3259   | 0      | 177   | 0      | 0      | 53     | 0      | 3581   | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0    | 0     |
| 972    | 0      | 183    | 125    | 0      | 39    | 178    | 449    | 0      | 0      | 58     | 95     | 52     | 1380   | 0    | 681   |



| Control0<br>86 | Control0<br>87 | Control0<br>88 | Control0<br>90 | Control0<br>91 | Control0<br>92 | Control0<br>93 | Control0<br>95 | Control0<br>96 | Control0<br>97 | Control0<br>98 | Control1<br>01 | Control1<br>03 | Control1<br>04 | Control1<br>06 | Control1<br>08 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 573324         | 620376         | 867677         | 833963         | 686271         | 430852         | 18041          | 422314         | 686933         | 985421         | 924004         | 372969         | 912332         | 953037         | 941558         | 823474         |
| 355983         | 341164         | 2205           | 68770          | 212187         | 550654         | 981100         | 548121         | 290551         | 8742           | 48714          | 591853         | 58722          | 14899          | 51487          | 12356          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 69693          | 37317          | 129605         | 47919          | 90666          | 18206          | 546            | 19027          | 15278          | 5514           | 24472          | 27586          | 12651          | 30658          | 6752           | 22680          |
| 961            | 1089           | 513            | 36752          | 10876          | 288            | 313            | 10448          | 7196           | 250            | 2084           | 6823           | 16295          | 529            | 203            | 141271         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 769            | 0              | 0              | 0              | 0              |
| 39             | 54             | 0              | 12596          | 0              | 0              | 0              | 90             | 42             | 73             | 726            | 0              | 0              | 877            | 0              | 219            |

| Control0<br>86 | Control0<br>87 | Control0<br>88 | Control0<br>90 | Control0<br>91 | Control0<br>92 | Control0<br>93 | Control0<br>95 | Control0<br>96 | Control0<br>97 | Control0<br>98 | Control1<br>01 | Control1<br>03 | Control1<br>04 | Control1<br>06 | Control1<br>08 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 257            | 0              | 0              |
| 0              | 0              | 51             | 0              | 0              | 0              | 0              | 0              | 0              | 260            | 0              | 0              | 0              | 0              | 0              | 0              |
| 19769          | 20586          | 4554           | 431413         | 495507         | 161403         | 5600           | 78789          | 37938          | 14269          | 625674         | 3280           | 14857          | 696413         | 1352           | 241482         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 39             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 62708          | 0              | 0              | 42             | 192            | 202            | 114            | 0              | 0              | 401            | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 154            | 0              | 53             | 185            | 271            | 459            | 514            | 253            | 292            | 434            | 12718          | 330            | 57             | 260            | 53             | 1786           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 57             | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 383            | 37             | 39             | 3458           | 836            | 64             | 0              | 292            | 534            | 0              | 6343           | 0              | 0              | 6227           | 0              | 2037           |
| 0              | 29             | 0              | 0              | 121            | 0              | 0              | 40             | 55             | 0              | 472            | 0              | 0              | 176            | 0              | 123            |
| 0              | 0              | 0              | 0              | 67             | 0              | 0              | 33             | 0              | 71             | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 287            | 232            | 0              | 42360          | 0              | 243            | 34             | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 994            | 552            | 1139           | 242            | 363            | 875            | 861            | 423            | 935            | 992            | 715            | 0              | 0              | 0              | 0              | 263            |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 51             | 0              | 0              | 0              | 0              | 0              | 125            | 0              | 13872          | 63             | 0              | 140            | 200            | 0              | 9754           | 9293           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 48             | 0              | 0              | 42             | 81             | 58             | 5174           | 100            | 0              | 70             |
| 727            | 10453          | 63667          | 292625         | 14132          | 1636           | 1324           | 1193           | 134846         | 1598           | 1402           | 3816           | 24764          | 4473           | 302387         | 214459         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 11640          | 0              | 0              | 69             |
| 0              | 0              | 0              | 180            | 65             | 0              | 67             | 40             | 0              | 137            | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 335            | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 358            | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 76             | 0              | 35             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 110            | 64             | 40             | 0              | 0              | 0              | 0              | 0              | 10177          | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 606            | 470            | 562            | 314            | 141            | 541            | 282            | 254            | 263465         | 786            | 296            | 6501           | 1557           | 2006           | 595196         | 266694         |
| 42             | 37             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 76             | 0              | 0              | 34             | 0              | 48             | 48             | 166            | 151            | 406            | 157            | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 4575           | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 97             | 0              | 0              | 337            | 62             | 0              | 0              | 0              | 0              | 0              | 2326           | 78             | 0              | 1383           | 35             | 122            |

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|       |       |        |       |       |       |     |       |       |      |       |       |       |       |      |       |
|-------|-------|--------|-------|-------|-------|-----|-------|-------|------|-------|-------|-------|-------|------|-------|
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 139   | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 247   | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 90    | 56    | 0     | 0   | 31865 | 117   | 182  | 41    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 165   | 0     | 0     | 0   | 0     | 63    | 0    | 0     | 0     | 0     | 1102  | 272  | 116   |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 889   |
| 47    | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 182   |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 44    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 40     | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 75    | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 79    | 27    | 69     | 620   | 54073 | 284   | 0   | 4992  | 124   | 0    | 4496  | 83    | 57    | 27963 | 212  | 2943  |
| 43    | 68    | 0      | 61    | 1179  | 0     | 62  | 0     | 56    | 0    | 4379  | 0     | 0     | 1507  | 0    | 488   |
| 0     | 0     | 0      | 166   | 62    | 161   | 137 | 105   | 0     | 287  | 95    | 0     | 0     | 46    | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 201 | 42    | 58    | 58   | 44    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 69693 | 37317 | 129605 | 47754 | 90666 | 18206 | 546 | 19027 | 15215 | 5514 | 24472 | 27586 | 12651 | 29556 | 6480 | 22564 |
| 0     | 26    | 0      | 1226  | 0     | 81    | 0   | 0     | 0     | 0    | 4485  | 575   | 63    | 123   | 171  | 1212  |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 1523  | 0    | 0     | 87    | 0     | 0     | 5432 | 4886  |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 87    | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 55    | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 28    | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 225   | 0     | 0    | 2109  |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 36    | 0      | 0     | 234   | 0     | 0   | 0     | 0     | 0    | 2266  | 0     | 0     | 129   | 0    | 65    |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 58    | 124  | 97    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 13947 | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 120 | 0     | 64    | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 71    | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 33    | 31    | 0      | 330   | 0     | 0     | 49  | 0     | 0     | 60   | 458   | 0     | 91    | 5259  | 0    | 181   |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 251   | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 51792 | 535   | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 56   | 38    | 155   | 0     | 131   | 0    | 124   |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 22572 | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 57  | 0     | 0     | 0    | 0     | 76    | 43    | 72    | 0    | 65    |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |

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|     |       |     |       |       |        |        |       |      |       |       |       |      |       |      |       |
|-----|-------|-----|-------|-------|--------|--------|-------|------|-------|-------|-------|------|-------|------|-------|
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 76    | 0     | 82    | 52   | 99    | 0    | 67    |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 769   | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 324 | 126   | 272 | 44026 | 73    | 89     | 171    | 1508  | 290  | 0     | 39    | 323   | 0    | 116   | 0    | 334   |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 64415 | 0    | 0     | 0    | 0     |
| 403 | 0     | 50  | 0     | 0     | 0      | 0      | 11053 | 0    | 69    | 95    | 0     | 0    | 0     | 1440 | 604   |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 258   |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 1039  | 438   | 793    | 970895 | 20672 | 421  | 1154  | 861   | 82197 | 0    | 62    | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 240   | 95   | 122   | 97   | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 535 | 358   | 95  | 13700 | 33460 | 667    | 1104   | 441   | 2378 | 612   | 27206 | 254   | 1158 | 55459 | 150  | 30980 |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 66    | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 27    | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 57     | 0     | 0    | 123   | 0     | 312   | 174  | 57    | 34   | 135   |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 38  | 0     | 82  | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 237   | 65   | 163   | 0    | 50    |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 36  | 0     | 0   | 0     | 0     | 0      | 49     | 35    | 0    | 0     | 2163  | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 817   | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 83  | 39    | 188 | 314   | 270   | 303    | 326    | 16435 | 4461 | 96658 | 0     | 18666 | 0    | 1035  | 0    | 122   |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 69    | 0    | 0     | 0     | 0     | 0    | 1311  | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 255    | 49    | 238  | 107   | 113   | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 12111 | 0   | 179   | 0     | 155    | 0      | 32    | 48   | 79    | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 81    | 0     | 0      | 0      | 23515 | 112  | 52    | 0     | 0     | 0    | 0     | 0    | 306   |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 510  | 0     | 0     | 0     | 0    | 0     | 1949 | 2152  |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 378   |
| 0   | 25    | 0   | 72    | 61    | 154571 | 235    | 178   | 123  | 611   | 149   | 394   | 122  | 112   | 57   | 268   |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 40    | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 235 | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 0    | 0     | 0    | 0     |
| 0   | 0     | 0   | 0     | 0     | 0      | 0      | 0     | 0    | 0     | 0     | 0     | 160  | 0     | 0    | 0     |



|     |       |       |        |       |      |      |       |        |      |      |      |       |       |               |
|-----|-------|-------|--------|-------|------|------|-------|--------|------|------|------|-------|-------|---------------|
|     | 0     | 0     | 0      | 287   | 232  | 0    | 42360 | 0      | 243  | 34   | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 994 | 552   | 1139  | 242    | 363   | 875  | 861  | 423   | 935    | 992  | 715  | 0    | 0     | 0     | 263           |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 51  | 0     | 0     | 0      | 0     | 0    | 125  | 0     | 13872  | 63   | 0    | 140  | 200   | 0     | 9754 9293     |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 48   | 0     | 0      | 42   | 81   | 58   | 5174  | 100   | 0 70          |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 37  | 73    | 59    | 163    | 55    | 0    | 74   | 68    | 0      | 185  | 0    | 91   | 62    | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 39  | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 30  | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 2442  | 0     | 0             |
| 0   | 10146 | 0     | 1729   | 12569 | 0    | 0    | 0     | 1821   | 0    | 0    | 72   | 2011  | 127   | 52 121        |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 46 56 | 40            |
| 533 | 149   | 63553 | 290733 | 1508  | 1488 | 1144 | 1091  | 129945 | 1275 | 1402 | 3653 | 20249 | 4300  | 302279 214002 |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 52     | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 76   | 0    | 0     | 0      | 138  | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 55    | 0      | 0     | 0    | 52   | 34    | 2977   | 0    | 0    | 0    | 0     | 0     | 112           |
| 88  | 85    | 0     | 0      | 0     | 72   | 54   | 0     | 51     | 0    | 0    | 0    | 0     | 0     | 184           |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 11640 | 0     | 69            |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 180    | 65    | 0    | 67   | 40    | 0      | 137  | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 335  | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 358   | 0             |
| 0   | 0     | 0     | 0      | 0     | 76   | 0    | 35    | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 10177  | 0    | 0    | 0    | 0     | 0     | 0             |
| 110 | 64    | 40    | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 606 | 470   | 562   | 314    | 141   | 541  | 282  | 254   | 263465 | 786  | 296  | 6501 | 1557  | 2006  | 595196 266694 |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 42  | 37    | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 76    | 0    | 0    | 34    | 0      | 48   | 48   | 166  | 151   | 406   | 157 0         |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 4575  | 0     | 0             |
| 0   | 0     | 0     | 0      | 0     | 0    | 0    | 0     | 0      | 0    | 0    | 0    | 0     | 0     | 0             |



|     |       |     |      |     |        |     |       |       |      |        |        |       |      |      |     |
|-----|-------|-----|------|-----|--------|-----|-------|-------|------|--------|--------|-------|------|------|-----|
| 97  | 0     | 0   | 337  | 62  | 0      | 0   | 0     | 0     | 0    | 2326   | 78     | 0     | 1383 | 35   | 122 |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 70  | 0     | 0     | 68   | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 64  | 0     | 0     | 0    | 0      | 82     | 0     | 63   | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 57  | 0    | 0   | 0      | 0   | 0     | 0     | 59   | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 1622 | 0   |
| 0   | 0     | 0   | 235  | 73  | 160    | 117 | 184   | 0     | 65   | 114    | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 55  | 0    | 0   | 0      | 105 | 0     | 0     | 255  | 0      | 0      | 57    | 0    | 257  | 0   |
| 0   | 0     | 0   | 893  | 189 | 380    | 172 | 35444 | 237   | 216  | 169    | 0      | 4050  | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 69   | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 84   | 0   | 0      | 0   | 42    | 0     | 0    | 37     | 0      | 4866  | 52   | 0    | 262 |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 3188  | 49   | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 72  | 32    | 42  | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 433    | 308    | 56    | 191  | 34   | 255 |
| 0   | 0     | 0   | 0    | 66  | 0      | 0   | 0     | 0     | 0    | 0      | 157    | 0     | 61   | 0    | 113 |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 176    | 0   | 0     | 28685 | 79   | 0      | 78     | 0     | 0    | 515  | 51  |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 91  | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 780    | 0      | 0     | 0    | 157  | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 65  | 6720  | 87  | 841  | 150 | 146195 | 119 | 34697 | 5544  | 329  | 258    | 15810  | 7710  | 137  | 46   | 124 |
| 0   | 32    | 0   | 0    | 0   | 61     | 0   | 0     | 0     | 0    | 0      | 78     | 12357 | 58   | 47   | 59  |
| 282 | 43702 | 211 | 1000 | 484 | 1330   | 648 | 32343 | 580   | 963  | 196136 | 0      | 0     | 0    | 0    | 0   |
| 82  | 669   | 148 | 571  | 538 | 27402  | 684 | 44663 | 1227  | 1118 | 841    | 125530 | 2518  | 877  | 255  | 824 |
| 80  | 59859 | 47  | 2410 | 210 | 6139   | 124 | 73325 | 26587 | 684  | 191    | 72871  | 14792 | 306  | 236  | 424 |
| 45  | 0     | 37  | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 101   | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 241 |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 2292 | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 38  | 27    | 45  | 155  | 186 | 146    | 0   | 29    | 67    | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 63  | 0     | 0     | 0    | 75     | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 30    | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 114  | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |
| 0   | 0     | 0   | 0    | 0   | 0      | 0   | 0     | 0     | 0    | 0      | 0      | 0     | 49   | 0    | 0   |
| 0   | 0     | 0   | 1304 | 0   | 0      | 56  | 0     | 0     | 0    | 0      | 0      | 0     | 0    | 0    | 0   |

[illegible]

|       |       |        |       |       |       |     |       |       |      |       |       |       |       |      |       |
|-------|-------|--------|-------|-------|-------|-----|-------|-------|------|-------|-------|-------|-------|------|-------|
| 47    | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 182   |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 44    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 40     | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 75    | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 79    | 27    | 69     | 620   | 54073 | 284   | 0   | 4992  | 124   | 0    | 4496  | 83    | 57    | 27963 | 212  | 2943  |
| 0     | 0     | 0      | 82    | 0     | 0     | 95  | 43    | 0     | 133  | 0     | 0     | 0     | 46    | 0    | 0     |
| 0     | 0     | 0      | 84    | 62    | 161   | 42  | 62    | 0     | 154  | 95    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 201 | 42    | 58    | 58   | 44    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 69693 | 37317 | 129605 | 47754 | 90666 | 18206 | 546 | 19027 | 15215 | 5514 | 24472 | 27586 | 12651 | 29556 | 6480 | 22564 |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 49    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 1226  | 0     | 81    | 0   | 0     | 0     | 0    | 4436  | 0     | 0     | 0     | 0    | 810   |
| 0     | 26    | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 575   | 63    | 123   | 171  | 402   |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 1523  | 0    | 0     | 87    | 0     | 0     | 5432 | 4886  |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 87    | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 55    | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 28    | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 225   | 0     | 0    | 2109  |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 36    | 0      | 0     | 234   | 0     | 0   | 0     | 0     | 0    | 2266  | 0     | 0     | 129   | 0    | 65    |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 58    | 124  | 97    | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 13947 | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 120 | 0     | 64    | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 71    | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 33    | 31    | 0      | 330   | 0     | 0     | 49  | 0     | 0     | 60   | 458   | 0     | 91    | 5259  | 0    | 181   |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 251   | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 51792 | 535   | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 56   | 38    | 155   | 0     | 131   | 0    | 124   |
| 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 22572 | 0      | 0     | 0     | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0     |
| 0     | 0     | 0      | 0     | 0     | 0     | 57  | 0     | 0     | 0    | 0     | 76    | 43    | 72    | 0    | 65    |

|        |       |     |      |       |       |      |        |        |      |      |        |      |     |      |      |
|--------|-------|-----|------|-------|-------|------|--------|--------|------|------|--------|------|-----|------|------|
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 329  | 58    | 0     | 0    | 0      | 6778   | 65   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 4740  | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 997  | 0      | 0    | 564 | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 86   | 0     | 0     | 63   | 26     | 0      | 0    | 75   | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 67   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 229   | 165  | 0      | 50     | 0    | 84   | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 74    | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 53083 | 75    | 243  | 68     | 100    | 0    | 73   | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 239    | 0    | 56  | 122  | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 46   | 0   | 0    | 269  |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 4817 | 0   | 0    | 72   |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 38     | 0     | 46  | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 316377 | 35096 | 159 | 73   | 68    | 84    | 0    | 29     | 5811   | 141  | 0    | 21603  | 0    | 66  | 1399 | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 98     | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 6205  | 0   | 1981 | 0     | 81    | 72   | 16358  | 179    | 0    | 601  | 4768   | 3345 | 117 | 314  | 173  |
| 41     | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 37269  | 62597 | 560 | 1417 | 609   | 50990 | 246  | 121530 | 137504 | 1167 | 2618 | 334389 | 7119 | 878 | 2883 | 603  |
| 0      | 28    | 95  | 669  | 0     | 73    | 123  | 79     | 3594   | 130  | 78   | 18197  | 4445 | 0   | 0    | 70   |
| 0      | 0     | 0   | 1221 | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 952  | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 613  | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 1451   | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 52     | 60    | 0   | 1172 | 1067  | 1931  | 1189 | 748    | 5004   | 1221 | 1035 | 593    | 103  | 67  | 113  | 321  |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 913   | 73    | 0    | 0      | 0      | 0    | 43   | 0      | 0    | 671 | 0    | 60   |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 68  | 0    | 0    |
| 0      | 0     | 0   | 0    | 148   | 0     | 53   | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 1504 | 0   | 0    | 0    |
| 0      | 0     | 45  | 446  | 509   | 587   | 640  | 245876 | 404    | 948  | 487  | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 946  | 0     | 0     | 0    | 106    | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 148   | 57   | 0      | 54     | 123  | 28   | 0      | 0    | 0   | 0    | 0    |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 3035   | 0    | 0    | 0      | 0    | 0   | 7565 | 1326 |
| 0      | 0     | 0   | 0    | 0     | 0     | 0    | 0      | 0      | 0    | 0    | 0      | 0    | 0   | 0    | 0    |

[illegible]

[illegible]

[illegible]

[illegible]



|        |        |        |       |       |      |      |       |        |        |       |        |        |        |      |      |
|--------|--------|--------|-------|-------|------|------|-------|--------|--------|-------|--------|--------|--------|------|------|
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 22     | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 287    | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 40     | 33     | 0      | 0     | 0     | 0    | 0    | 47    | 0      | 0      | 0     | 166    | 157    | 195    | 113  | 200  |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 388   | 0     | 0    | 0    | 0     | 0      | 0      | 344   | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 168    | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 1833 |
| 0      | 32     | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 42     | 0      | 57     | 1864  | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 2357  | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 125    | 0    | 0    |
| 494137 | 411116 | 791820 | 67257 | 15520 | 8247 | 3492 | 40127 | 120717 | 862299 | 17464 | 121091 | 769544 | 126458 | 7367 | 8216 |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 39     | 54     | 0      | 12596 | 0     | 0    | 0    | 90    | 42     | 73     | 726   | 0      | 0      | 877    | 0    | 219  |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 4541  | 0     | 0    | 0    | 82    | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 84     | 6815   | 0      | 0    | 65   |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 0      | 0      | 0      | 0     | 0     | 0    | 0    | 0     | 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0    |
| 43     | 68     | 0      | 61    | 1179  | 0    | 62   | 0     | 56     | 0      | 4379  | 0      | 0      | 1507   | 0    | 488  |

| Control1<br>10 | Control1<br>11 | Control1<br>12 | Control1<br>15 | Control1<br>18 | Control1<br>19 | Control1<br>21 | Control1<br>23 | Control1<br>24 | Control1<br>26 | Control1<br>30 | Control1<br>31 | COVID-<br>19-002 | COVID-<br>19-003 | COVID-<br>19-005 | COVID-<br>19-006 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|
| 952387         | 694279         | 820118         | 776432         | 408545         | 954791         | 975429         | 975821         | 482484         | 875624         | 816878         | 135312         | 941809           | 966333           | 893188           | 961992           |
| 32661          | 282630         | 177047         | 100858         | 365775         | 16414          | 2129           | 13670          | 474486         | 85474          | 104625         | 821122         | 24824            | 6045             | 16914            | 5702             |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                |
| 14553          | 7085           | 2117           | 122060         | 224111         | 26687          | 21471          | 10509          | 21053          | 38595          | 44716          | 43566          | 32785            | 27304            | 42859            | 30462            |
| 399            | 16006          | 718            | 650            | 1569           | 1909           | 971            | 0              | 21364          | 307            | 33781          | 0              | 516              | 163              | 5148             | 1746             |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0              | 199            | 0              | 0              | 613            | 0              | 0              | 0              | 66               | 155              | 41891            | 98               |

| Control1<br>10 | Control1<br>11 | Control1<br>12 | Control1<br>15 | Control1<br>18 | Control1<br>19 | Control1<br>21 | Control1<br>23 | Control1<br>24 | Control1<br>26 | Control1<br>30 | Control1<br>31 | CC002  | CC003  | CC005  | CC006  |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|--------|--------|--------|
| 0              | 0              | 0              | 0              | 310387         | 125            | 35             | 0              | 0              | 0              | 0              | 0              | 0      | 140    | 173    | 283    |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 304099         | 2255           | 1725           | 39664          | 14950          | 5355           | 11787          | 17105          | 348840         | 508599         | 754477         | 2018           | 58294  | 650010 | 740693 | 782560 |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 45             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 134    | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 138            | 262            | 145            | 383            | 1305           | 433            | 520            | 1335           | 409            | 11274          | 218            | 42689          | 423    | 151    | 0      | 260    |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 1121           | 59             | 51             | 0              | 122            | 33142          | 25             | 0              | 200            | 4239           | 708            | 0              | 0      | 11670  | 3275   | 1625   |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 123            | 98             | 0              | 64     | 793    | 84     | 302    |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 5904           | 0              | 0              | 0              | 38             | 93             | 35390          | 132    | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 1375           | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 1174           | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 27             | 0              | 0              | 0              | 0              | 116            | 0              | 0              | 0              | 0              | 0              | 0              | 130    | 0      | 92     | 110    |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 13456          | 66             | 13570          | 0              | 0              | 3569           | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 95     | 53     |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 232784         | 81577          | 239632         | 650            | 7471           | 13121          | 869            | 149902         | 18343          | 6821           | 39443          | 61789          | 171204 | 4422   | 17529  | 1559   |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 35             | 425            | 0              | 0              | 0              | 63             | 0      | 748    | 0      | 446    |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 435            | 46             | 0              | 0              | 59             | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 186            | 0              | 0      | 0      | 0      | 153    |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 394            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 331            | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 632    | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 43             | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 183825         | 75475          | 220937         | 618            | 57065          | 14281          | 634            | 6359           | 375            | 1051           | 1219           | 1097           | 805    | 929    | 1876   | 932    |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 8440           | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 164            | 418            | 195            | 0              | 112            | 0              | 529            | 0              | 0              | 127            | 36             | 58             | 0      | 0      | 0      | 52     |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 59     | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0      | 0      | 0      | 0      |
| 174            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 479            | 88             | 0              | 0      | 499    | 742    | 861    |

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|      |      |       |       |      |      |       |      |       |        |        |        |       |      |      |      |
|------|------|-------|-------|------|------|-------|------|-------|--------|--------|--------|-------|------|------|------|
|      | 0    | 0     | 0     | 0    | 0    | 852   | 0    | 0     | 0      | 0      | 0      | 480   | 570  | 376  |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 35    | 0    | 3669  | 87     | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 10115  | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 142  | 170  | 162   | 0     | 93   | 0    | 0     | 0    | 0     | 0      | 0      | 99     | 0     | 0    | 0    |      |
| 4532 | 82   | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 440  | 35    | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 5566 | 1058 | 58083 | 92983 | 5861 | 1236 | 803   | 3183 | 4254  | 16206  | 101319 | 224303 | 14487 | 329  | 332  | 465  |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 66   | 339  | 0     | 0     | 119  | 0    | 10558 | 464  | 78    | 221020 | 233    | 46     | 0     | 0    | 0    | 54   |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    |      |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 809  | 0    | 238  |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 78    | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 44     | 0      | 0      | 258   | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 109  | 41   | 45    | 0    | 0     | 0      | 41     | 0      | 0     | 0    | 0    | 45   |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 250  | 0    | 149   | 0     | 0    | 35   | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 162  | 0    | 0    |
| 0    | 0    | 0     | 0     | 94   | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 63    | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 8232   | 27     | 0      | 0     | 148  | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 99   | 341  | 115   | 0     | 0    | 0    | 0     | 0    | 32543 | 0      | 116    | 57     | 0     | 323  | 74   | 0    |
| 28   | 127  | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 59     | 0     | 1207 | 514  | 550  |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 0    | 0    | 0     | 4566  | 0    | 2789 | 0     | 0    | 236   | 67     | 157    | 1136   | 60    | 481  | 552  | 40   |
| 0    | 0    | 0     | 0     | 109  | 40   | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 337  | 163  | 198  |
| 0    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |
| 2518 | 0    | 0     | 3512  | 212  | 0    | 34    | 0    | 326   | 6660   | 2351   | 0      | 558   | 4641 | 7323 | 3657 |
| 0    | 0    | 0     | 0     | 0    | 0    | 234   | 0    | 0     | 0      | 0      | 0      | 0     | 0    | 0    | 0    |

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|     |        |       |     |     |       |      |     |       |      |     |     |     |       |      |      |
|-----|--------|-------|-----|-----|-------|------|-----|-------|------|-----|-----|-----|-------|------|------|
| 174 | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 479  | 88  | 0   | 0   | 499   | 742  | 861  |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 79     | 0     | 0   | 0   | 39    | 0    | 0   | 0     | 0    | 41  | 0   | 0   | 24821 | 2016 | 2097 |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 156   | 83   | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 135 | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 412 | 0     | 0    | 472 | 39    | 42   | 33  | 63  | 0   | 453   | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 56    | 59  | 199 | 0     | 0    | 0   | 0     | 51   | 0   | 0   | 303 | 0     | 0    | 0    |
| 0   | 0      | 48    | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 756   | 165  | 601  |
| 0   | 0      | 0     | 54  | 536 | 61    | 101  | 0   | 0     | 0    | 0   | 0   | 73  | 0     | 82   | 210  |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 149   | 0    | 50   |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 119 | 319   | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 61  | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 53   |
| 128 | 183478 | 278   | 71  | 0   | 0     | 290  | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 103 | 191    | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 122  | 40  | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 19601 | 0   | 428 | 73    | 0    | 473 | 102   | 1386 | 0   | 458 | 0   | 323   | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 10592 | 0    | 0   | 60  | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 38  | 0   | 0   | 0     | 0    | 0    |
| 139 | 13820  | 193   | 0   | 214 | 7553  | 185  | 947 | 862   | 68   | 94  | 64  | 71  | 952   | 87   | 33   |
| 38  | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 33  | 0      | 0     | 118 | 0   | 35    | 120  | 0   | 61    | 46   | 259 | 173 | 0   | 838   | 222  | 500  |
| 537 | 197755 | 1049  | 67  | 300 | 27234 | 1170 | 913 | 12270 | 125  | 256 | 243 | 311 | 163   | 0    | 56   |
| 380 | 2652   | 229   | 0   | 216 | 282   | 178  | 0   | 0     | 0    | 72  | 98  | 0   | 0     | 0    | 101  |
| 0   | 0      | 0     | 155 | 236 | 27    | 30   | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 42  | 54  | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 109 | 37    | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 19151 | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 77  | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 31  | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |
| 0   | 0      | 0     | 0   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0   | 0   | 0     | 0    | 0    |

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|       |        |     |      |      |      |     |      |       |       |      |     |      |       |       |        |
|-------|--------|-----|------|------|------|-----|------|-------|-------|------|-----|------|-------|-------|--------|
| 0     | 0      | 0   | 0    | 0    | 33   | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 163   | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 146   | 0     | 198    |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 168   | 113    |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 137   | 0     | 186    |
| 0     | 0      | 0   | 0    | 0    | 9227 | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 153   | 252    | 61  | 7081 | 304  | 169  | 165 | 463  | 52408 | 0     | 34   | 177 | 58   | 0     | 12337 | 61     |
| 31    | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 64    | 0      | 0   | 0    | 0    | 6993 | 39  | 0    | 0     | 0     | 84   | 66  | 539  | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 1329 | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 28    | 71     | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 47    | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 52    | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 181   | 153    | 222 | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 24011 | 409    | 50  | 121  | 1178 | 389  | 152 | 1359 | 10155 | 81368 | 3115 | 184 | 756  | 96000 | 93533 | 131920 |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 126   | 183    | 40  | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 78    | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 306   | 101   | 55     |
| 61    | 109536 | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 58   | 0    | 78   | 46  | 0    | 0     | 0     | 35   | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 337 | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 7943 | 0     | 0     | 0      |
| 0     | 0      | 0   | 116  | 565  | 201  | 22  | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 0    | 0     | 0     | 0    | 0   | 0    | 0     | 0     | 0      |
| 0     | 0      | 0   | 0    | 0    | 0    | 0   | 444  | 0     | 0     | 42   | 110 | 0    | 0     | 0     | 0      |



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|        |       |        |        |      |        |      |        |      |      |       |        |        |       |       |       |
|--------|-------|--------|--------|------|--------|------|--------|------|------|-------|--------|--------|-------|-------|-------|
| 0      | 0     | 0      | 55     | 183  | 33     | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 1378   | 90   | 255  | 81    | 129185 | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 58     | 137   | 44     | 0      | 0    | 0      | 0    | 0      | 0    | 3407 | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 58     | 442   | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 219  | 0    | 0     | 0      | 0      | 0     | 10672 | 100   |
| 174133 | 24092 | 313160 | 724860 | 7699 | 814084 | 2622 | 782372 | 7928 | 5840 | 10268 | 5811   | 701547 | 72715 | 5576  | 12464 |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 92   | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 149   | 0     | 61    |
| 0      | 0     | 0      | 0      | 0    | 199    | 0    | 0      | 613  | 0    | 0     | 0      | 66     | 155   | 41891 | 98    |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 109    | 0    | 0      | 0    | 952    | 822  | 0    | 33    | 0      | 2520   | 0     | 229   | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 58    | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 0      | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 0    | 0     | 0      | 0      | 0     | 0     | 0     |
| 684    | 0     | 0      | 0      | 0    | 0      | 0    | 0      | 0    | 161  | 1914  | 486    | 0      | 66    | 1361  | 1800  |

| COVID-19-008 | COVID-19-010 | COVID-19-011 | COVID-19-013 | COVID-19-014 | COVID-19-015 | COVID-19-016 | COVID-19-017 | COVID-19-018 | COVID-19-019 | COVID-19-023 | COVID-19-024 | COVID-19-025 | COVID-19-026 | COVID-19-027 | COVID-19-028 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 940799       | 933906       | 937607       | 917513       | 916893       | 822817       | 913432       | 794731       | 929186       | 914919       | 980079       | 792391       | 898988       | 986222       | 949154       | 990722       |
| 17993        | 10972        | 21568        | 19039        | 11480        | 132100       | 10359        | 91365        | 9117         | 27210        | 9265         | 201949       | 94909        | 4227         | 28206        | 7879         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 215          | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 39265        | 37888        | 32195        | 39425        | 43337        | 19273        | 35003        | 30383        | 42908        | 32770        | 9843         | 5274         | 5509         | 9437         | 20224        | 1016         |
| 663          | 610          | 5146         | 3885         | 618          | 12351        | 40466        | 47321        | 1563         | 3845         | 605          | 280          | 379          | 114          | 1168         | 299          |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 1280         | 16624        | 3484         | 20138        | 27672        | 13459        | 740          | 36200        | 17011        | 21256        | 208          | 106          | 215          | 0            | 1248         | 84           |

| CC008  | CC010  | CC011  | CC013  | CC014  | CC015  | CC016  | CC017  | CC018  | CC019  | CC023 | CC024 | CC025  | CC026 | CC027  | CC028 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|--------|-------|
| 100    | 118    | 0      | 646    | 0      | 185    | 278    | 104    | 199    | 615    | 0     | 52    | 0      | 148   | 0      | 87    |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 592263 | 796690 | 678440 | 773001 | 764351 | 559416 | 726586 | 708194 | 790645 | 633865 | 76569 | 43682 | 156764 | 37076 | 368136 | 11149 |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 46     | 58     | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 92     | 0      | 12232  | 75     | 0      | 103    | 88     | 349    | 0      | 230    | 3228  | 2345  | 8381   | 116   | 0      | 3420  |
| 195    | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 4205   | 0     | 0      | 0     |
| 1230   | 2447   | 2775   | 3336   | 2335   | 2672   | 2612   | 2753   | 3359   | 2794   | 0     | 179   | 1176   | 384   | 1622   | 206   |
| 464    | 357    | 305    | 298    | 590    | 0      | 193    | 46     | 185    | 584    | 206   | 0     | 203    | 0     | 414    | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 3499   | 346   | 1550   | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 3609   | 163    | 94     | 286    | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 118    | 536    | 0      | 0      | 0      | 0      | 0      | 0      | 70     | 2894  | 107   | 0      | 989   | 1720   | 983   |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 2535   | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 7436   | 9514   | 11133  | 8105   | 18091  | 119367 | 3145   | 23728  | 12479  | 8038   | 64585 | 21561 | 8309   | 5562  | 34141  | 20853 |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 60     | 6538   | 33     | 139    | 0      | 0     | 46    | 0      | 1817  | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 2491   | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 65     | 3683  | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 625    | 0      | 212    | 139    | 0      | 51     | 2317   | 0      | 130    | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 200    | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 237    | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 1860  | 0      | 0     | 0      | 941   |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 937    | 573    | 4244   | 520    | 2893   | 0      | 95     | 587    | 407    | 934    | 91186 | 996   | 2057   | 2955  | 22976  | 19151 |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 610   | 0     | 210    | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 54     | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 53     | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0     | 0      | 0     |
| 451    | 877    | 118    | 1083   | 807    | 3058   | 2837   | 356    | 1456   | 680    | 0     | 0     | 0      | 0     | 320    | 0     |

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|        |       |       |       |       |       |       |       |       |        |       |      |        |      |       |      |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|------|--------|------|-------|------|
| 0      | 0     | 0     | 0     | 0     | 0     | 137   | 53    | 0     | 64     | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 219   | 217   | 0     | 0     | 0     | 0     | 0     | 0     | 364    | 423   | 1404 | 208    | 0    | 87    | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 2175  | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 2219   | 0    | 0     | 0    |
| 91     | 0     | 0     | 0     | 298   | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 1548  | 0     | 0     | 0     | 0     | 190   | 0     | 0      | 0     | 0    | 11567  | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 27    | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 558   | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 7533  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 5871   | 0    | 0     | 0    |
| 284217 | 14870 | 84545 | 28151 | 15388 | 84518 | 11428 | 24345 | 11263 | 194964 | 15415 | 4534 | 241979 | 3432 | 62685 | 6747 |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 72    | 596   | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 225    | 0    | 0     | 0    |
| 1280   | 16624 | 3484  | 20138 | 27672 | 13459 | 740   | 36200 | 17011 | 21256  | 208   | 106  | 215    | 0    | 1248  | 84   |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 116   | 73    | 0     | 1950  | 42    | 1453  | 114   | 115    | 0     | 0    | 439    | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |

| COVID-19-008 | COVID-19-010 | COVID-19-011 | COVID-19-013 | COVID-19-014 | COVID-19-015 | COVID-19-016 | COVID-19-017 | COVID-19-018 | COVID-19-019 | COVID-19-023 | COVID-19-024 | COVID-19-025 | COVID-19-026 | COVID-19-027 | COVID-19-028 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 52           | 0            | 148          | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 49           | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 100          | 118          | 0            | 646          | 0            | 185          | 278          | 55           | 199          | 615          | 0            | 0            | 0            | 0            | 0            | 87           |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 592263       | 796690       | 678440       | 773001       | 764351       | 559416       | 726586       | 708194       | 790645       | 633865       | 76569        | 43682        | 156764       | 37076        | 368136       | 11149        |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 46           | 58           | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 92           | 0            | 12232        | 75           | 0            | 103          | 88           | 349          | 0            | 230          | 3228         | 2345         | 8381         | 116          | 0            | 3420         |
| 195          | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 4205         | 0            | 0            | 0            |
| 1230         | 2447         | 2775         | 3336         | 2335         | 2672         | 2612         | 2753         | 3359         | 2794         | 0            | 179          | 1176         | 384          | 1622         | 206          |
| 464          | 357          | 305          | 298          | 590          | 0            | 193          | 46           | 185          | 584          | 206          | 0            | 203          | 0            | 414          | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 406          | 0            | 1550         | 0            |

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|      |      |      |      |      |      |      |     |      |      |        |        |        |        |        |       |
|------|------|------|------|------|------|------|-----|------|------|--------|--------|--------|--------|--------|-------|
| 451  | 877  | 118  | 1083 | 807  | 3058 | 2837 | 356 | 1456 | 680  | 0      | 0      | 0      | 0      | 320    | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 1480 | 568  | 0    | 843  | 4728 | 1754 | 66   | 0   | 0    | 0    | 394    | 0      | 3902   | 119    | 1787   | 164   |
| 91   | 0    | 0    | 71   | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 65     | 35369  | 3015   | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 78   | 0    | 0    | 69   | 0   | 79   | 0    | 0      | 0      | 8504   | 0      | 14524  | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 207    | 0      | 0      | 0      | 0      | 0     |
| 181  | 2369 | 5653 | 537  | 861  | 54   | 0    | 139 | 0    | 2213 | 648    | 26339  | 200485 | 116    | 0      | 251   |
| 0    | 0    | 0    | 0    | 598  | 0    | 0    | 0   | 0    | 0    | 198    | 0      | 380    | 2389   | 154    | 0     |
| 0    | 105  | 842  | 0    | 0    | 0    | 0    | 0   | 0    | 340  | 0      | 1524   | 7749   | 134    | 0      | 0     |
| 0    | 0    | 875  | 69   | 293  | 0    | 0    | 0   | 0    | 0    | 0      | 2133   | 2025   | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 596    | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 2209   | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 1329 | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 592    | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 94   | 0    | 207  | 67   | 0    | 0    | 0    | 0   | 0    | 0    | 521801 | 320690 | 13269  | 859830 | 223585 | 44494 |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 1940 | 338  | 0    | 3328 | 38   | 51  | 0    | 0    | 1252   | 1331   | 19486  | 121    | 5920   | 377   |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 619  | 130  | 0    | 820  | 898  | 6670 | 0    | 0   | 0    | 297  | 1588   | 6726   | 4099   | 124    | 6502   | 2675  |
| 0    | 0    | 210  | 297  | 274  | 389  | 0    | 156 | 129  | 0    | 1395   | 19152  | 40319  | 0      | 2905   | 3535  |
| 94   | 0    | 917  | 67   | 0    | 182  | 111  | 32  | 216  | 0    | 1026   | 346    | 15689  | 1366   | 316    | 0     |
| 84   | 0    | 736  | 0    | 0    | 63   | 0    | 0   | 0    | 0    | 217    | 0      | 2222   | 0      | 0      | 896   |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 1136   | 0      | 0      | 0      | 90    |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 359   |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 1602 | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 69   | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 182  | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 88     | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |
| 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0      | 0      | 0      | 0      | 0      | 0     |

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|     |     |      |     |     |     |     |      |     |     |      |        |      |     |      |      |
|-----|-----|------|-----|-----|-----|-----|------|-----|-----|------|--------|------|-----|------|------|
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 216  | 12384  | 0    | 123 | 0    | 79   |
| 87  | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 480 | 364 | 0    | 557 | 582 | 0   | 95  | 234  | 336 | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 71  | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 1357 | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 45  | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 4255   | 2058 | 127 | 69   | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 3410 |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 221  | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 78  | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 90  | 0   | 0    | 0   | 0   | 53  | 547 | 0    | 209 | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 107  | 0   | 0   | 74  | 0   | 0    | 0   | 0   | 210  | 1007   | 0    | 131 | 0    | 86   |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 538 | 0   | 5591 | 74  | 906 | 126 | 425 | 1940 | 420 | 104 | 2910 | 146743 | 183  | 749 | 4517 | 448  |
| 0   | 0   | 0    | 0   | 0   | 120 | 0   | 0    | 0   | 0   | 0    | 4109   | 0    | 259 | 404  | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 96  | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 428  | 364 | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 116  | 0   | 0   | 0   | 0   | 0    | 0   | 64  | 0    | 64     | 7317 | 718 | 0    | 99   |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 187 | 378 | 110  | 143 | 0   | 0   | 808 | 0    | 132 | 208 | 0    | 182    | 0    | 128 | 73   | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 1047 | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 389  | 0      | 618  | 575 | 4002 | 3364 |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 2031 | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 663  | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 594  | 0      | 220  | 0   | 81   | 529  |
| 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0      | 0    | 0   | 0    | 0    |

[illegible]

|     |   |     |     |     |   |      |    |     |     |      |      |       |     |      |      |
|-----|---|-----|-----|-----|---|------|----|-----|-----|------|------|-------|-----|------|------|
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 320 | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 401   | 0   | 0    | 1702 |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 72   | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 27   | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 62  | 259 | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 90  | 0 | 0   | 639 | 0   | 0 | 0    | 0  | 132 | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 117 | 0 | 285 | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 4917 | 118  | 23248 | 223 | 6268 | 86   |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 806  | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 2590 | 48 | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 637 | 0 | 0   | 219 | 890 | 0 | 0    | 0  | 0   | 0   | 3085 | 2049 | 1892  | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 79   | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 215 | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 2282 | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 213  | 56   | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 | 0    | 0  | 0   | 0   | 0    | 0    | 0     | 0   | 0    | 0    |
| 0   | 0 | 0   | 0   | 0   | 0 |      |    |     |     |      |      |       |     |      |      |



[illegible]

|     |     |     |     |   |      |      |     |     |      |      |      |      |      |      |      |
|-----|-----|-----|-----|---|------|------|-----|-----|------|------|------|------|------|------|------|
|     | 0   | 0   | 0   | 0 | 0    | 0    | 30  | 0   | 0    | 1410 | 0    | 0    | 1037 | 77   | 3498 |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 209 | 263 | 0   | 298 | 0 | 1115 | 1225 | 0   | 399 | 257  | 0    | 245  | 383  | 0    | 2375 | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 1089 | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 402  | 2281 | 0    | 120  | 0    | 231  |
| 80  | 384 | 830 | 68  | 0 | 0    | 0    | 0   | 0   | 1125 | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 2486 | 0    | 2448 | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 136  | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 397  | 0    | 0    | 0    | 382  | 340  |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 23   | 46  | 0   | 0    | 0    | 4184 | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 451  |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 241 | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 2333 | 1101 | 0    | 619  | 0    | 4382 |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 51  | 79  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 230  | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 166  | 121 | 72  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 0   | 0   | 0   | 0   | 0 | 0    | 0    | 0   | 0   | 0    | 198  | 0    | 0    | 0    | 0    | 0</  |

|        |       |       |       |       |       |       |       |       |        |       |      |        |      |       |      |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|------|--------|------|-------|------|
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 2031   | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 188    | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 91     | 0     | 0     | 0     | 298   | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 1548  | 0     | 0     | 0     | 0     | 190   | 0     | 0      | 0     | 0    | 11567  | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 27    | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 558   | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 7533  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 5871   | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 322    | 3232  | 334   | 4021  | 5576  | 1604  | 341   | 7278  | 2659  | 3308   | 0     | 114  | 0      | 0    | 143   | 0    |
| 283895 | 11638 | 84211 | 24130 | 9812  | 82914 | 11087 | 17067 | 8604  | 191656 | 15415 | 4420 | 241979 | 3432 | 62542 | 6747 |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 72    | 596   | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 225    | 0    | 0     | 0    |
| 1280   | 16624 | 3484  | 20138 | 27672 | 13459 | 740   | 36200 | 17011 | 21256  | 208   | 106  | 215    | 0    | 1248  | 84   |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 116   | 73    | 0     | 1950  | 42    | 1453  | 114   | 115    | 0     | 0    | 439    | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 2075  | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 68    | 91    | 133   | 0      | 0     | 0    | 0      | 0    | 0     | 270  |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0    |
| 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0      | 215   | 2834 | 0      | 0    | 3716  | 276  |
| 1347   | 2623  | 1543  | 1817  | 882   | 354   | 2287  | 485   | 1783  | 862    | 0     | 69   | 206    | 0    | 839   | 0    |

| COVID-19-029 | COVID-19-030 | COVID-19-031 | COVID-19-032 | COVID-19-035 | COVID-19-037 | COVID-19-038 | COVID-19-040 | COVID-19-041 | COVID-19-043 | COVID-19-045 | COVID-19-046 | COVID-19-047 | COVID-19-048 | COVID-19-049 | COVID-19-050 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 856377       | 822704       | 737663       | 744726       | 967355       | 870219       | 962609       | 995318       | 537718       | 668958       | 729910       | 988393       | 978166       | 956638       | 966850       | 771396       |
| 133817       | 155166       | 256095       | 178412       | 24281        | 103471       | 5745         | 2626         | 455535       | 291429       | 4477         | 2406         | 6385         | 9447         | 1685         | 158978       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 9641         | 21944        | 5116         | 42999        | 8290         | 5948         | 30904        | 1684         | 6747         | 28917        | 263037       | 8911         | 13925        | 31471        | 31254        | 7398         |
| 165          | 186          | 1030         | 33863        | 74           | 20222        | 742          | 0            | 0            | 9853         | 2576         | 226          | 815          | 2267         | 211          | 61029        |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 96           | 0            | 0            | 140          | 0            | 372          | 0            | 843          | 0            | 64           | 709          | 177          | 0            | 1199         |

| CC029 | CC030 | CC031  | CC032  | CC035  | CC037  | CC038  | CC040 | CC041 | CC043  | CC045  | CC046  | CC047  | CC048  | CC049 | CC050  |
|-------|-------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|--------|--------|-------|--------|
| 0     | 17751 | 0      | 0      | 0      | 0      | 362    | 0     | 0     | 0      | 0      | 58     | 0      | 169    | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 14778 | 29022 | 46321  | 182507 | 118347 | 129740 | 799978 | 18582 | 49187 | 149881 | 33058  | 247821 | 2448   | 750002 | 4204  | 539138 |
| 0     | 0     | 0      | 0      | 3952   | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 83     | 8483   | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 48     | 0     | 0     | 0      | 0      | 1371   | 914    | 165    | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 2716   | 0      | 0      | 0      | 0      | 0     | 0      |
| 76    | 96    | 17505  | 13231  | 93     | 3512   | 1399   | 256   | 0     | 22549  | 313    | 222    | 0      | 542    | 0     | 5093   |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 247    | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 178   | 48    | 88     | 266    | 174    | 795    | 1986   | 41470 | 441   | 3919   | 1305   | 1158   | 130346 | 4703   | 466   | 810    |
| 0     | 87    | 0      | 80     | 0      | 0      | 580    | 0     | 0     | 276    | 303    | 287    | 0      | 973    | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 319   | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 150    | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 321    | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 219   | 96     | 0      | 0      | 0      | 65     | 0     | 0     | 283    | 0      | 0      | 63     | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 101    | 0     | 0      |
| 3759  | 575   | 1245   | 260    | 2104   | 3019   | 54     | 0     | 0     | 0      | 0      | 0      | 0      | 92     | 113   | 202    |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 33322 | 0      | 331    | 0      | 0      | 0      | 0     | 0      |
| 57722 | 73729 | 59865  | 26568  | 62698  | 102146 | 2781   | 1812  | 22770 | 10004  | 631298 | 1509   | 93045  | 3367   | 592   | 55083  |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 66    | 0     | 4847   | 0      | 0      | 0      | 0      | 0     | 90870 | 0      | 0      | 55     | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 63     | 0     | 0     | 0      | 0      | 0      | 0      | 91     | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 122    | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 273    | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 9498  | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 120   | 282    |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 74     |
| 57085 | 1879  | 259705 | 3149   | 55740  | 251794 | 436    | 135   | 457   | 209    | 3257   | 105    | 120    | 361    | 344   | 41784  |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 5200   | 0      | 0      | 0      | 85     | 0     | 0      |
| 78    | 0     | 1700   | 0      | 101    | 15994  | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 470   | 19851  | 0      | 0      | 0      | 80     | 0     | 0      |
| 0     | 0     | 621    | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      | 0     | 0      |
| 0     | 0     | 0      | 0      | 657    | 0      | 1234   | 0     | 0     | 0      | 0      | 704    | 0      | 1121   | 0     | 0      |

|        |        |       |        |        |        |      |        |        |        |       |        |       |      |       |       |
|--------|--------|-------|--------|--------|--------|------|--------|--------|--------|-------|--------|-------|------|-------|-------|
|        | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 31084  | 615    | 30103 | 14536  | 363    | 210359 | 2142 | 642743 | 6336   | 6958   | 10978 | 695646 | 1698  | 1953 | 11841 | 37195 |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 1436   | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 53   | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 210  | 0      | 0      | 0      | 0     | 55     | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 578689 | 560712 | 49121 | 306221 | 241711 | 7491   | 439  | 1058   | 2896   | 567    | 2163  | 320    | 0     | 465  | 0     | 280   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 3866   | 321    | 56772 | 16796  | 45896  | 67110  | 1115 | 1105   | 306807 | 143370 | 2859  | 418    | 24134 | 1173 | 583   | 1711  |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 116   | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 133   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 678   | 0    | 0     | 0     |
| 0      | 0      | 6464  | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 80   | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 50   | 121    | 85658  | 0      | 0     | 65     | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 73     | 0     | 0      | 87     | 0      | 161  | 139    | 0      | 0      | 0     | 0      | 0     | 258  | 0     | 57    |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 284   |
| 0      | 0      | 0     | 69     | 4960   | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 91    | 0      | 0      | 0      | 0    | 0      | 0      | 3967   | 0     | 64     | 0     | 0    | 0     | 69    |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 280    | 0      | 650    | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 136   |
| 0      | 0      | 0     | 79     | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 305    | 0     | 72     | 38184  | 118    | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 554   | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 49     | 120   | 61     | 14722  | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 224    | 5873   | 611   | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 84     | 19737  | 103   | 61     | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 82     | 143    | 914   | 0      | 0      | 19827  | 742  | 0      | 0      | 9853   | 2576  | 226    | 815   | 2267 | 211   | 60891 |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |
| 0      | 0      | 0     | 0      | 0      | 0      | 0    | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0     |

|        |       |       |        |        |       |       |      |        |       |        |      |       |       |       |      |
|--------|-------|-------|--------|--------|-------|-------|------|--------|-------|--------|------|-------|-------|-------|------|
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 222   | 0    | 0      | 0     | 0      | 0    | 0     | 78    | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 643   | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 153   | 0    | 0      | 0     | 0      | 175  | 0     | 397   | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 45    | 15003 | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 61   |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 144    | 0     | 400   | 6100   | 9925   | 122   | 17961 | 788  | 0      | 9709  | 965    | 4442 | 0     | 24124 | 0     | 261  |
| 0      | 41    | 0     | 580    | 223    | 0     | 1601  | 0    | 224    | 102   | 0      | 442  | 0     | 2481  | 0     | 0    |
| 102448 | 126   | 1031  | 11636  | 145    | 23923 | 55    | 135  | 0      | 13466 | 310    | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 55   | 65    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 9641   | 21944 | 5116  | 42999  | 8290   | 5948  | 30751 | 1684 | 6747   | 28917 | 263037 | 8736 | 13925 | 31074 | 31254 | 7398 |
| 161    | 310   | 11005 | 8125   | 2827   | 397   | 0     | 0    | 0      | 47    | 0      | 223  | 0     | 90    | 0     | 2092 |
| 489    | 0     | 1252  | 0      | 675    | 2666  | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 129   | 551  |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 1856  | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 477   | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 263   | 0      | 0    | 0     | 0     | 0     | 0    |
| 15409  | 53659 | 4169  | 488    | 132916 | 12248 | 99    | 110  | 213    | 2576  | 1302   | 149  | 1282  | 257   | 0     | 0    |
| 0      | 0     | 206   | 142    | 227    | 0     | 341   | 0    | 0      | 1376  | 0      | 52   | 0     | 653   | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 83     | 43    | 116   | 33863  | 74     | 395   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 138  |
| 85     | 47    | 0     | 17870  | 0      | 127   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 241   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 315    | 384   | 372   | 128784 | 249    | 4774  | 55    | 131  | 223    | 7093  | 0      | 0    | 0     | 99    | 0     | 0    |
| 0      | 2739  | 505   | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 256  |
| 0      | 0     | 117   | 0      | 0      | 0     | 1626  | 525  | 209    | 1376  | 0      | 624  | 2297  | 1897  | 114   | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 171    | 76093 | 201   | 130    | 218    | 129   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 130  | 199    | 7847  | 0      | 57   | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 67     | 180   | 226   | 0      | 142    | 250   | 517   | 649  | 0      | 1147  | 0      | 0    | 3087  | 262   | 0     | 84   |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 107   | 0    | 117809 | 163   | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 47    | 0     | 71     | 0      | 137   | 0     | 0    | 0      | 642   | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 58    | 0     | 0     | 0    |

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|      |      |      |       |       |       |       |        |       |        |       |      |        |       |        |       |
|------|------|------|-------|-------|-------|-------|--------|-------|--------|-------|------|--------|-------|--------|-------|
| 0    | 0    | 0    | 0     | 0     | 0     | 133   | 0      | 0     | 0      | 0     | 42   | 0      | 245   | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 414  | 0     | 0     | 0     | 0     | 0      | 218   | 0      | 0     | 0    | 0      | 0     | 0      | 445   |
| 1911 | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 78   | 47   | 0    | 5351  | 12562 | 1053  | 0     | 0      | 237   | 1747   | 0     | 57   | 0      | 79    | 110    | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 10888 | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 318   | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 45    | 0      | 225   | 10499  | 0     | 59   | 0      | 363   | 0      | 0     |
| 84   | 0    | 0    | 144   | 6544  | 0     | 156   | 0      | 0     | 1101   | 0     | 0    | 222    | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 3024   | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 5881   | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 97    | 0      | 0     | 43     | 0     | 118  | 0      | 241   | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 7192 | 5821 | 8625 | 17992 | 14626 | 13164 | 17643 | 282540 | 7617  | 204086 | 10590 | 5768 | 716231 | 25536 | 947205 | 76301 |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 255   | 2580   | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 96   | 0     | 0     | 140   | 0     | 372    | 0     | 843    | 0     | 64   | 709    | 177   | 0      | 1199  |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0    | 0     | 0     | 495   | 0     | 0      | 0     | 145    | 22752 | 0    | 1070   | 0     | 0      | 2167  |
| 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0      | 0     | 0      | 0     | 0    | 0      | 0     | 0      | 0     |

| COVID-19-029 | COVID-19-030 | COVID-19-031 | COVID-19-032 | COVID-19-035 | COVID-19-037 | COVID-19-038 | COVID-19-040 | COVID-19-041 | COVID-19-043 | COVID-19-045 | COVID-19-046 | COVID-19-047 | COVID-19-048 | COVID-19-049 | COVID-19-050 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0            | 17751        | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 362          | 0            | 0            | 0            | 0            | 58           | 0            | 169          | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 14778        | 29022        | 46321        | 182507       | 118347       | 129740       | 799978       | 18582        | 49187        | 149881       | 33058        | 247821       | 2448         | 750002       | 4204         | 539138       |
| 0            | 0            | 0            | 0            | 3952         | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 83           | 8483         | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 48           | 0            | 0            | 0            | 0            | 1371         | 914          | 165          | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 2716         | 0            | 0            | 0            | 0            | 0            | 0            |
| 76           | 96           | 17505        | 13231        | 93           | 3512         | 1399         | 256          | 0            | 22549        | 313          | 222          | 0            | 542          | 0            | 5093         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 247          | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 178          | 48           | 88           | 266          | 174          | 795          | 1986         | 41470        | 441          | 3919         | 1305         | 1158         | 130346       | 4703         | 466          | 810          |
| 0            | 87           | 0            | 80           | 0            | 0            | 580          | 0            | 0            | 276          | 303          | 287          | 0            | 973          | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 58           | 0            | 0            | 0            | 0            | 0            | 0            |

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|--------|-------|-------|--------|--------|-------|-------|------|--------|-------|--------|------|-------|-------|-------|------|
| 0      | 45    | 15003 | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 61   |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 144    | 0     | 400   | 6100   | 9925   | 122   | 17961 | 788  | 0      | 9709  | 965    | 4442 | 0     | 24124 | 0     | 261  |
| 102448 | 126   | 1031  | 11636  | 145    | 23923 | 0     | 0    | 0      | 13466 | 310    | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 55    | 135  | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 55   | 65    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 9641   | 21944 | 5116  | 42999  | 8290   | 5948  | 30751 | 1684 | 6747   | 28917 | 263037 | 8736 | 13925 | 31074 | 31254 | 7398 |
| 0      | 45    | 0     | 7988   | 2435   | 121   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 80     | 98    | 3566  | 63     | 172    | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 1603 |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 81     | 110   | 7439  | 74     | 0      | 276   | 0     | 0    | 0      | 47    | 0      | 223  | 0     | 90    | 0     | 489  |
| 0      | 57    | 0     | 0      | 220    | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 489    | 0     | 1252  | 0      | 675    | 2666  | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 129   | 551  |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 1856  | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 477   | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 263   | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 101   | 0      | 0      | 11562 | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 15409  | 53659 | 4068  | 488    | 132916 | 686   | 99    | 110  | 213    | 2576  | 1302   | 149  | 1282  | 257   | 0     | 0    |
| 0      | 0     | 206   | 142    | 227    | 0     | 341   | 0    | 0      | 1376  | 0      | 52   | 0     | 653   | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 83     | 43    | 116   | 33863  | 74     | 395   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 138  |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 85     | 47    | 0     | 17870  | 0      | 127   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 241   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 4642  | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 7093  | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 315    | 384   | 372   | 128784 | 249    | 132   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 55    | 131  | 223    | 0     | 0      | 0    | 0     | 99    | 0     | 0    |
| 0      | 2739  | 505   | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 256  |
| 0      | 0     | 117   | 0      | 0      | 0     | 1626  | 525  | 209    | 1376  | 0      | 624  | 2297  | 1897  | 114   | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 171    | 76093 | 201   | 130    | 218    | 129   | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 130  | 199    | 7847  | 0      | 57   | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 67     | 180   | 226   | 0      | 142    | 250   | 517   | 649  | 0      | 1147  | 0      | 0    | 3087  | 262   | 0     | 84   |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 0     | 0    | 0      | 0     | 0      | 0    | 0     | 0     | 0     | 0    |
| 0      | 0     | 0     | 0      | 0      | 0     | 107   | 0    | 117809 | 163   | 0      | 0    | 0     | 0     | 0     | 0    |

|       |       |        |       |      |       |     |     |       |        |     |     |      |     |     |      |
|-------|-------|--------|-------|------|-------|-----|-----|-------|--------|-----|-----|------|-----|-----|------|
|       | 47    | 0      | 71    | 0    | 137   | 0   | 0   | 0     | 642    | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 58   | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 263 | 0   | 0     | 0      | 0   | 59  | 0    | 199 | 0   | 60   |
| 78    | 0     | 14284  | 0     | 79   | 141   | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 368    | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 1997  | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 3089  | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 122 | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 1775   | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 37    | 0      | 0     | 0    | 0     | 0   | 249 | 0     | 93     | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 59    | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 614 | 651 | 646   | 111405 | 973 | 240 | 0    | 363 | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 147   | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 69    | 0     | 25860  | 0     | 81   | 0     | 0   | 0   | 23247 | 0      | 0   | 0   | 0    | 84  | 211 | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 136  | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 103    | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 239   | 886   | 164974 | 2216  | 401  | 103   | 0   | 0   | 0     | 332    | 0   | 0   | 0    | 80  | 102 | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 10152 | 43266 | 59089  | 15464 | 206  | 42899 | 46  | 0   | 49151 | 1874   | 326 | 52  | 1899 | 76  | 780 | 1244 |
| 0     | 0     | 0      | 0     | 0    | 133   | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 75    | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 49    | 0      | 0     | 1239 | 388   | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 84  | 0   | 0    |
| 0     | 2098  | 0      | 0     | 0    | 0     | 0   | 119 | 0     | 395    | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 462 | 0   | 0     | 91     | 0   | 283 | 0    | 843 | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 604    | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 522    | 0     | 0    | 0     | 0   | 0   | 229   | 1278   | 0   | 0   | 371  | 0   | 0   | 375  |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |
| 169   | 53    | 5386   | 0     | 0    | 2618  | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 769  |
| 0     | 0     | 0      | 0     | 0    | 0     | 0   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0    |

|      |     |      |       |     |       |      |     |       |      |     |      |    |      |   |     |
|------|-----|------|-------|-----|-------|------|-----|-------|------|-----|------|----|------|---|-----|
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 65   | 0  | 0    | 0 | 0   |
| 9630 | 0   | 0    | 0     | 0   | 113   | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 54   | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 113 |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 77  | 25467 | 57   | 0   | 0     | 2530 | 0   | 0    | 0  | 0    | 0 | 198 |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 6645 | 0     | 0   | 138   | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 79  |
| 0    | 0   | 0    | 0     | 0   | 0     | 61   | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 73   | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 786 |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 164 |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 81  | 0     | 557  | 0   | 0     | 0    | 0   | 205  | 0  | 270  | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 152 |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 158  | 192 | 0    | 1619  | 888 | 121   | 5413 | 253 | 437   | 920  | 0   | 2149 | 0  | 5263 | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 594  | 0     | 0   | 786   | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 112 |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 43   | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 7847  | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 133   | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 48  | 0    | 27742 | 75  | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 1583 | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 141   | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 86   | 98  | 0    | 11355 | 0   | 138   | 0    | 0   | 0     | 394  | 0   | 0    | 64 | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 62  | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 70  |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 54   | 0   | 87876 | 74   | 320 | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 0     | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0    | 0  | 0    | 0 | 0   |
| 0    | 0   | 0    | 71    | 304 | 0     | 3991 | 241 | 241   | 589  | 324 | 1904 | 0  | 4175 | 0 | 0   |



[illegible]

[illegible]

[illegible]

|      |      |       |       |       |       |       |        |      |        |       |      |        |       |        |       |
|------|------|-------|-------|-------|-------|-------|--------|------|--------|-------|------|--------|-------|--------|-------|
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 45    | 0      | 0    | 6650   | 0     | 0    | 0      | 191   | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 225  | 3849   | 0     | 59   | 0      | 172   | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 100   | 0      | 0    | 0      | 0     | 0    | 222    | 0     | 0      | 0     |
| 84   | 0    | 0     | 144   | 6544  | 0     | 56    | 0      | 0    | 1101   | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 3024   | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 5881   | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 97    | 0      | 0    | 43     | 0     | 118  | 0      | 241   | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 379   | 49    | 0      | 0    | 53     | 0     | 132  | 0      | 190   | 0      | 69    |
| 7192 | 5821 | 8625  | 17992 | 14626 | 12785 | 17594 | 282540 | 7617 | 204033 | 10590 | 5636 | 716231 | 25346 | 947205 | 76232 |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 255  | 2580   | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 96    | 0     | 0     | 140   | 0     | 372    | 0    | 843    | 0     | 64   | 709    | 177   | 0      | 1199  |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 495   | 0     | 0      | 0    | 145    | 22752 | 0    | 1070   | 0     | 0      | 2167  |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0      | 0    | 0      | 0     | 0    | 0      | 0     | 0      | 0     |
| 151  | 54   | 67258 | 77    | 0     | 134   | 0     | 0      | 0    | 35     | 0     | 0    | 0      | 0     | 0      | 0     |
| 0    | 41   | 0     | 580   | 223   | 0     | 1601  | 0      | 224  | 102    | 0     | 442  | 0      | 2481  | 0      | 0     |

| COVID-19-051 | COVID-19-052 | COVID-19-054 | COVID-19-055 | COVID-19-057 | COVID-19-058 | COVID-19-061 | COVID-19-062 | COVID-19-063 | COVID-19-064 | COVID-19-065 | COVID-19-069 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 934704       | 960184       | 970139       | 869940       | 979692       | 998468       | 453830       | 745701       | 911400       | 935911       | 776780       | 879050       |
| 40789        | 6847         | 1454         | 97717        | 1285         | 365          | 329146       | 227611       | 39185        | 18176        | 1597         | 97034        |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 15422        | 27746        | 27215        | 28358        | 4469         | 88           | 214329       | 26055        | 49248        | 44809        | 221367       | 23916        |
| 9026         | 5223         | 1192         | 3985         | 14419        | 895          | 2544         | 222          | 100          | 300          | 82           | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 59           | 0            | 0            | 0            | 135          | 184          | 151          | 411          | 67           | 804          | 174          | 0            |

| CC051  | CC052 | CC054 | CC055 | CC057  | CC058 | CC061 | CC062  | CC063  | CC064  | CC065  | CC069  |
|--------|-------|-------|-------|--------|-------|-------|--------|--------|--------|--------|--------|
| 0      | 0     | 48    | 0     | 63     | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 58     | 0      | 0      | 0      |
| 79043  | 48810 | 4541  | 1729  | 126211 | 4432  | 27167 | 34594  | 48548  | 696071 | 14612  | 320347 |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 71     | 0     | 0     | 35118  | 0      | 38     | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 388    | 13822 | 104   | 126   | 131    | 157   | 36339 | 24261  | 862    | 31     | 100    | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 57     | 0     | 743   | 46    | 639    | 0     | 0     | 5306   | 350    | 3150   | 181    | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 250    | 0      | 59     |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 2562   | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 167   | 0     | 0      | 0     | 631   | 70     | 118    | 0      | 158    | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 21306  | 1625  | 53    | 0     | 0      | 0     | 0     | 7113   | 0      | 254    | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 283769 | 11090 | 615   | 711   | 290    | 345   | 29357 | 255270 | 420574 | 20696  | 736724 | 25159  |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 50    | 0     | 0      | 84    | 0     | 0      | 15442  | 0      | 95     | 67     |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 59     |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 61     | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 131    | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 53    | 23709 | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 118    | 310   | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 483477 | 13206 | 744   | 1959  | 134    | 176   | 366   | 76121  | 150    | 26279  | 86     | 6548   |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 41     | 1576   | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 5827   | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| 0      | 0     | 0     | 0     | 0      | 0     | 74    | 0      | 0      | 1664   | 99     | 0      |

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|      |      |    |       |      |     |        |      |      |      |     |       |
|------|------|----|-------|------|-----|--------|------|------|------|-----|-------|
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 4171 | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 83   | 0  | 14388 | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 4325 | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 322  | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 110  | 42 | 0     | 0    | 0   | 179142 | 28   | 59   | 0    | 175 | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 65   | 0   | 0      | 0    | 0    | 42   | 0   | 30863 |
| 0    | 0    | 0  | 0     | 543  | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 688  | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 59   | 0   | 0      | 0    | 62   | 38   | 83  | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 54   | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 67   | 187  | 0  | 49    | 1849 | 0   | 75     | 475  | 503  | 6919 | 170 | 162   |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 4144 | 0    | 0  | 0     | 0    | 0   | 0      | 209  | 0    | 119  | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 2900 | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 151    | 0    | 228  | 0    | 0   | 117   |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 85   | 177 | 4654   | 0    | 5879 | 76   | 0   | 31763 |
| 61   | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 76     | 0    | 67   | 0    | 0   | 563   |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 56   | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 2085  | 0    | 95  | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 0    | 0   | 0      | 0    | 0    | 0    | 0   | 0     |
| 0    | 0    | 0  | 0     | 422  | 0   | 162    | 62   | 107  | 2166 | 0   | 0     |

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|       |        |        |        |      |       |       |       |        |       |       |       |
|-------|--------|--------|--------|------|-------|-------|-------|--------|-------|-------|-------|
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 94    | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 84    | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 61    |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 27741 |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 369   |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 146   | 0     | 114    | 0     | 0     | 0     |
| 26126 | 788571 | 953671 | 806542 | 5611 | 22082 | 81318 | 19458 | 105657 | 18124 | 758   | 83662 |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 59    | 0      | 0      | 0      | 135  | 184   | 151   | 411   | 67     | 804   | 174   | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 413   | 0      | 52     | 20823  | 0    | 0     | 64    | 2646  | 5660   | 0     | 18656 | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 61   | 0     | 43739 | 0     | 0      | 90    | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 0      | 0      | 0      | 0    | 0     | 0     | 0     | 0      | 0     | 0     | 0     |
| 0     | 106    | 67     | 0      | 275  | 0     | 0     | 53    | 53     | 911   | 0     | 0     |

| Table S4. The different degree of phylum level (p value) between the controls (n=88) and COVID-19 patients (n=48) |                          |                  |            |                          |                   |                 |           |         |              |          |         |            |
|-------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|------------|--------------------------|-------------------|-----------------|-----------|---------|--------------|----------|---------|------------|
| ID                                                                                                                | Control.median           | Control.m<br>ean | Control.se | COVID-19.median          | COVID-<br>19.mean | COVID-<br>19.se | p-value   | z-score | Sig_<br>mark | q-value  | fixp    | fixps      |
| Ascomycota                                                                                                        | 0.8503(0.7115,0.9292)    | 0.778291         | 0.023311   | 0.9233(0.8228,0.9635)    | 0.88236417        | 0.016966        | 0.0013474 | -3.2057 | **           | 0.003144 | 0.0013  | ** 0.0013  |
| Basidiomycota                                                                                                     | 0.0782(0.026,0.1816)     | 0.141961         | 0.019192   | 0.0186(0.0063,0.0992)    | 0.07088092        | 0.014738        | 0.0010333 | -3.2813 | **           | 0.003144 | 0.001   | ** 0.001   |
| Mucoromycota                                                                                                      | 0.002(0.0007,0.0159)     | 0.036631         | 0.014588   | 0.0009(0.0002,0.0043)    | 0.0062111         | 0.001883        | 0.0102163 | -2.5684 | *            | 0.014303 | 0.0102  | * 0.0102   |
| Zoopagomycota                                                                                                     | <0.0001(<0.0001,<0.0001) | 3.70E-04         | 1.57E-04   | 0.0002(<0.0001,0.0009)   | 0.00432333        | 0.001421        | 3.42E-06  | -4.644  | ***          | 2.39E-05 | <0.0001 | ***<0.0001 |
| Rozellomycota                                                                                                     | <0.0001(<0.0001,<0.0001) | 0.001021         | 9.45E-04   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 0.0037686 | -2.8969 | **           | 0.006595 | 0.0038  | ** 0.0038  |
| Table S4. The different degree of genus level (p value) between the controls (n=88) and COVID-19 patients (n=48)  |                          |                  |            |                          |                   |                 |           |         |              |          |         |            |
| ID                                                                                                                | Control.median           | Control.m<br>ean | Control.se | COVID-19.median          | COVID-<br>19.mean | COVID-<br>19.se | p-value   | z-score | Sig_<br>mark | q-value  | fixp    | fixps      |
| Cryptococcus                                                                                                      | 0.0105(0.0017,0.044)     | 0.045024         | 0.008483   | <0.0001(<0.0001,<0.0001) | 4.10E-05          | 1.91E-05        | 3.65E-22  | -9.6804 | ***          | 1.35E-19 | <0.0001 | ***<0.0001 |
| Diversispora                                                                                                      | 0.002(0.0006,0.0156)     | 0.036457         | 0.014585   | 0.0008(0.0002,0.0039)    | 0.005474          | 0.001791        | 0.0086361 | -2.6261 | **           | 0.04699  | 0.0086  | ** 0.0086  |
| Arthrographis                                                                                                     | 0.0001(<0.0001,0.0009)   | 0.027897         | 0.015719   | <0.0001(<0.0001,<0.0001) | 1.32E-04          | 7.58E-05        | 1.39E-04  | -3.81   | ***          | 0.003234 | 0.0001  | ***0.0001  |
| Raffaelea                                                                                                         | 0.0007(0.0001,0.0025)    | 0.0284           | 0.013353   | 0.0016(0.0006,0.0054)    | 0.00478331        | 0.001399        | 0.0476792 | -1.9802 | *            | 0.143425 | 0.0477  | * 0.0477   |
| Milospium                                                                                                         | <0.0001(<0.0001,<0.0005) | 0.014769         | 0.010143   | <0.0001(<0.0001,<0.0001) | 2.14E-04          | 1.54E-04        | 2.66E-06  | -4.6952 | ***          | 1.23E-04 | <0.0001 | ***<0.0001 |
| Malassezia                                                                                                        | 0.0072(0.0014,0.0477)    | 0.037437         | 0.007326   | 0.0011(0.0003,0.0148)    | 0.02419129        | 0.008168        | 0.001973  | -3.0943 | **           | 0.015532 | 0.002   | ** 0.002   |
| Cladosporium                                                                                                      | 0.0047(0.0011,0.0341)    | 0.035333         | 0.0069     | 0.0016(0.0005,0.0184)    | 0.02383048        | 0.007903        | 0.0372201 | -2.0833 | *            | 0.125426 | 0.0372  | * 0.0372   |
| Trigonopsis                                                                                                       | <0.0001(<0.0001,<0.0001) | 0.010833         | 0.010658   | <0.0001(<0.0001,<0.0001) | 4.64E-05          | 4.24E-05        | 0.0227775 | -2.2771 | *            | 0.089656 | 0.0228  | * 0.0228   |
| Phaeosphaeria                                                                                                     | <0.0001(<0.0001,<0.0003) | 0.005452         | 0.003386   | <0.0001(<0.0001,<0.0001) | 2.37E-04          | 1.40E-04        | 0.0038712 | -2.8885 | **           | 0.025578 | 0.0039  | ** 0.0039  |
| Diaporthe                                                                                                         | <0.0001(<0.0001,<0.0003) | 0.004012         | 0.003406   | <0.0001(<0.0001,<0.0001) | 9.56E-06          | 9.56E-06        | 1.08E-08  | -5.717  | ***          | 1.34E-06 | <0.0001 | ***<0.0001 |
| Naganishia                                                                                                        | <0.0001(<0.0001,<0.0001) | 0.003045         | 0.002795   | <0.0001(<0.0001,<0.0001) | 5.71E-05          | 4.42E-05        | 0.0040622 | -2.8733 | **           | 0.026369 | 0.0041  | ** 0.0041  |
| Cercospora                                                                                                        | <0.0001(<0.0001,<0.0001) | 0.002359         | 0.002086   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 2.31E-05  | -4.2331 | ***          | 7.75E-04 | <0.0001 | ***<0.0001 |
| Apiotrichum                                                                                                       | <0.0001(<0.0001,<0.0001) | 0.002005         | 8.40E-04   | <0.0001(<0.0001,<0.0001) | 1.25E-04          | 7.92E-05        | 8.05E-04  | -3.3512 | ***          | 0.008757 | 0.0008  | ***0.0008  |
| Stagonosporopsis                                                                                                  | <0.0001(<0.0001,<0.0001) | 0.001819         | 0.001317   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 1.51E-05  | -4.3278 | ***          | 5.57E-04 | <0.0001 | ***<0.0001 |
| Vishniacozyma                                                                                                     | <0.0001(<0.0001,<0.0001) | 0.001872         | 0.00149    | <0.0001(<0.0001,<0.0001) | 2.79E-04          | 2.22E-04        | 0.0152317 | -2.4268 | *            | 0.071338 | 0.0152  | * 0.0152   |
| Wallemia                                                                                                          | <0.0001(<0.0001,<0.0003) | 0.001696         | 7.80E-04   | <0.0001(<0.0001,<0.0001) | 1.92E-04          | 1.38E-04        | 0.0013901 | -3.1967 | **           | 0.012858 | 0.0014  | ** 0.0014  |
| Pyrenochaetopsis                                                                                                  | <0.0001(<0.0001,<0.0001) | 0.001269         | 0.001048   | <0.0001(<0.0001,<0.0001) | 1.85E-06          | 1.85E-06        | 0.0023226 | -3.0455 | **           | 0.017538 | 0.0023  | ** 0.0023  |
| Rozellomycota_gen_Incertae_sedis                                                                                  | <0.0001(<0.0001,<0.0001) | 0.001021         | 9.45E-04   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 0.0037686 | -2.8969 | **           | 0.025353 | 0.0038  | ** 0.0038  |
| Botrytis                                                                                                          | <0.0001(<0.0001,<0.0001) | 0.001138         | 7.44E-04   | <0.0001(<0.0001,<0.0001) | 3.91E-04          | 3.34E-04        | 0.0018394 | -3.115  | **           | 0.015532 | 0.0018  | ** 0.0018  |
| Recurvomyces                                                                                                      | <0.0001(<0.0001,<0.0001) | 6.90E-04         | 6.74E-04   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 0.0324831 | -2.1384 | *            | 0.113384 | 0.0325  | * 0.0325   |
| Lentinus                                                                                                          | <0.0001(<0.0001,<0.0001) | 6.59E-04         | 6.04E-04   | <0.0001(<0.0001,<0.0001) | 1.08E-06          | 1.08E-06        | 0.0390097 | -2.0641 | *            | 0.130032 | 0.039   | * 0.039    |
| Knufia                                                                                                            | <0.0001(<0.0001,<0.0001) | 6.80E-04         | 4.19E-04   | <0.0001(<0.0001,<0.0001) | 4.31E-05          | 4.16E-05        | 6.14E-04  | -3.4255 | ***          | 0.008109 | 0.0006  | ***0.0006  |
| Flavodon                                                                                                          | <0.0001(<0.0001,<0.0001) | 5.97E-04         | 5.55E-04   | <0.0001(<0.0001,<0.0001) | 4.96E-06          | 4.96E-06        | 0.044586  | -2.0085 | *            | 0.140605 | 0.0446  | * 0.0446   |
| Thielaviopsis                                                                                                     | <0.0001(<0.0001,<0.0001) | 5.74E-04         | 3.57E-04   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 0.0026097 | -3.0103 | **           | 0.018933 | 0.0026  | ** 0.0026  |
| Udeniomyces                                                                                                       | <0.0001(<0.0001,<0.0001) | 5.93E-04         | 2.33E-04   | <0.0001(<0.0001,<0.0001) | 2.40E-05          | 1.32E-05        | 0.001895  | -3.1062 | **           | 0.015532 | 0.0019  | ** 0.0019  |
| Sporobolomyces                                                                                                    | <0.0001(<0.0001,<0.0001) | 8.74E-04         | 5.71E-04   | <0.0001(<0.0001,<0.0001) | 3.21E-04          | 2.83E-04        | 0.0190929 | -2.3437 | *            | 0.0812   | 0.0191  | * 0.0191   |
| Dothidea                                                                                                          | <0.0001(<0.0001,<0.0001) | 5.41E-04         | 4.22E-04   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 0.0159476 | -2.4101 | *            | 0.072691 | 0.0159  | * 0.0159   |
| Yarrowia                                                                                                          | <0.0001(<0.0001,<0.0001) | 7.83E-04         | 3.98E-04   | <0.0001(<0.0001,<0.0001) | 2.79E-04          | 1.97E-04        | 0.003703  | -2.9024 | **           | 0.025353 | 0.0037  | ** 0.0037  |
| Didymella                                                                                                         | <0.0001(<0.0001,<0.0001) | 5.32E-04         | 3.39E-04   | <0.0001(<0.0001,<0.0001) | 2.83E-05          | 1.78E-05        | 0.0266866 | -2.2161 | *            | 0.100756 | 0.0267  | * 0.0267   |
| Pseudoramichloridium                                                                                              | <0.0001(<0.0001,<0.0001) | 4.80E-04         | 4.72E-04   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 0.0463617 | -1.9921 | *            | 0.140605 | 0.0464  | * 0.0464   |
| Coprinopsis                                                                                                       | <0.0001(<0.0001,<0.0001) | 4.70E-04         | 3.89E-04   | <0.0001(<0.0001,<0.0001) | 1.60E-06          | 1.60E-06        | 0.0047112 | -2.8261 | **           | 0.030054 | 0.0047  | ** 0.0047  |
| Golubevia                                                                                                         | <0.0001(<0.0001,<0.0001) | 4.16E-04         | 2.65E-04   | <0.0001(<0.0001,<0.0001) | 5.02E-06          | 5.02E-06        | 2.56E-04  | -3.6565 | ***          | 0.004731 | 0.0003  | ***0.0003  |
| Ceriporia                                                                                                         | <0.0001(<0.0001,<0.0001) | 4.30E-04         | 3.13E-04   | <0.0001(<0.0001,<0.0001) | 4.71E-05          | 4.60E-05        | 0.0019512 | -3.0976 | **           | 0.015532 | 0.002   | ** 0.002   |
| Peniophorella                                                                                                     | <0.0001(<0.0001,<0.0001) | 3.80E-04         | 3.62E-04   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 0.0037685 | -2.8969 | **           | 0.025353 | 0.0038  | ** 0.0038  |
| Toxicocladosporium                                                                                                | <0.0001(<0.0001,<0.0001) | 3.48E-04         | 2.84E-04   | <0.0001(<0.0001,<0.0001) | 0                 | 0               | 0.0159476 | -2.4101 | *            | 0.072691 | 0.0159  | * 0.0159   |

|                                 |                          |          |          |                          |            |          |           |         |     |          |         |            |
|---------------------------------|--------------------------|----------|----------|--------------------------|------------|----------|-----------|---------|-----|----------|---------|------------|
| Typhula                         | <0.0001(<0.0001,<0.0001) | 3.30E-04 | 2.51E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 5.79E-04  | -3.4413 | *** | 0.007934 | 0.0006  | ***0.0006  |
| Carlososaea                     | <0.0001(<0.0001,<0.0001) | 3.16E-04 | 3.10E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0463617 | -1.9921 | *   | 0.140605 | 0.0464  | * 0.0464   |
| Ciliophora                      | <0.0001(<0.0001,<0.0001) | 2.97E-04 | 1.70E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0012386 | -3.2298 | **  | 0.012386 | 0.0012  | ** 0.0012  |
| Parastagonosporella             | <0.0001(<0.0001,<0.0001) | 2.92E-04 | 2.76E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0111558 | -2.5378 | *   | 0.055779 | 0.0112  | * 0.0112   |
| Stemphylium                     | <0.0001(<0.0001,<0.0001) | 2.91E-04 | 1.72E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0077887 | -2.6611 | **  | 0.043014 | 0.0078  | ** 0.0078  |
| Hypoxylon                       | <0.0001(<0.0001,<0.0001) | 2.73E-04 | 2.56E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0111558 | -2.5378 | *   | 0.055779 | 0.0112  | * 0.0112   |
| Tilletia                        | <0.0001(<0.0001,<0.0001) | 2.71E-04 | 1.58E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 3.93E-04  | -3.5445 | *** | 0.005821 | 0.0004  | ***0.0004  |
| Tulostoma                       | <0.0001(<0.0001,<0.0001) | 2.34E-04 | 2.28E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0324831 | -2.1384 | *   | 0.113384 | 0.0325  | * 0.0325   |
| Phlebiopsis                     | <0.0001(<0.0001,<0.0001) | 2.20E-04 | 1.51E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0111554 | -2.5378 | *   | 0.055779 | 0.0112  | * 0.0112   |
| Nigrograna                      | <0.0001(<0.0001,<0.0001) | 2.17E-04 | 1.66E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0324831 | -2.1384 | *   | 0.113384 | 0.0325  | * 0.0325   |
| Xylocoremium                    | <0.0001(<0.0001,<0.0001) | 2.04E-04 | 2.00E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0324819 | -2.1384 | *   | 0.113384 | 0.0325  | * 0.0325   |
| Auricularia                     | <0.0001(<0.0001,<0.0001) | 2.57E-04 | 2.35E-04 | <0.0001(<0.0001,<0.0001) | 5.31E-05   | 5.19E-05 | 0.0232408 | -2.2695 | *   | 0.090517 | 0.0232  | * 0.0232   |
| Verrucaria                      | <0.0001(<0.0001,<0.0001) | 2.06E-04 | 1.49E-04 | <0.0001(<0.0001,<0.0001) | 6.63E-06   | 6.63E-06 | 0.0106017 | -2.5556 | *   | 0.055779 | 0.0106  | * 0.0106   |
| Preussia                        | <0.0001(<0.0001,<0.0001) | 1.69E-04 | 1.65E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0324831 | -2.1384 | *   | 0.113384 | 0.0325  | * 0.0325   |
| Calycina                        | <0.0001(<0.0001,<0.0001) | 1.67E-04 | 1.63E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0463617 | -1.9921 | *   | 0.140605 | 0.0464  | * 0.0464   |
| Dexomyces                       | <0.0001(<0.0001,<0.0001) | 1.65E-04 | 1.59E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0324831 | -2.1384 | *   | 0.113384 | 0.0325  | * 0.0325   |
| Lecanicillium                   | <0.0001(<0.0001,<0.0001) | 1.22E-04 | 1.15E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0463617 | -1.9921 | *   | 0.140605 | 0.0464  | * 0.0464   |
| Debaryomyces                    | <0.0001(<0.0001,<0.0001) | 4.00E-04 | 3.35E-04 | <0.0001(<0.0001,<0.0001) | 4.78E-04   | 3.94E-04 | 3.50E-04  | -3.575  | *** | 0.005453 | 0.0004  | ***0.0004  |
| Coprinellus                     | <0.0001(<0.0001,<0.0001) | 0.001536 | 9.20E-04 | <0.0001(<0.0001,<0.0001) | 0.00179129 | 0.001784 | 0.0014972 | -3.1752 | **  | 0.013189 | 0.0015  | ** 0.0015  |
| Issatchenkia                    | <0.0001(<0.0001,<0.0001) | 1.86E-06 | 1.10E-06 | <0.0001(<0.0001,<0.0001) | 2.87E-04   | 2.58E-04 | 0.0019304 | -3.1007 | **  | 0.015532 | 0.0019  | ** 0.0019  |
| Wickerhamiella                  | <0.0001(<0.0001,<0.0001) | 3.58E-05 | 3.06E-05 | <0.0001(<0.0001,<0.0001) | 3.42E-04   | 2.49E-04 | 0.0413845 | -2.0397 | *   | 0.134318 | 0.0414  | * 0.0414   |
| Golovinomyces                   | <0.0001(<0.0001,<0.0001) | 6.92E-05 | 6.85E-05 | <0.0001(<0.0001,<0.0001) | 3.80E-04   | 3.72E-04 | 0.0413845 | -2.0397 | *   | 0.134318 | 0.0414  | * 0.0414   |
| Didymocyrtis                    | <0.0001(<0.0001,<0.0001) | 1.15E-06 | 1.15E-06 | <0.0001(<0.0001,<0.0001) | 3.14E-04   | 3.07E-04 | 0.0125736 | -2.4956 | *   | 0.06083  | 0.0126  | * 0.0126   |
| Venturiaceae_gen_Incertae_sedis | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 3.35E-04   | 3.31E-04 | 0.006324  | -2.7305 | **  | 0.036002 | 0.0063  | ** 0.0063  |
| Periconia                       | <0.0001(<0.0001,<0.0001) | 8.14E-04 | 2.84E-04 | 0.0002(<0.0001,0.0022)   | 0.00116115 | 2.40E-04 | 0.0404357 | -2.0493 | *   | 0.133582 | 0.0404  | * 0.0404   |
| Neodevriesia                    | <0.0001(<0.0001,<0.0001) | 2.50E-07 | 2.50E-07 | <0.0001(<0.0001,<0.0001) | 5.04E-04   | 3.57E-04 | 0.0320327 | -2.144  | *   | 0.113384 | 0.032   | * 0.032    |
| Pseudoveronaea                  | <0.0001(<0.0001,<0.0001) | 5.99E-06 | 5.24E-06 | <0.0001(<0.0001,<0.0001) | 6.14E-04   | 3.93E-04 | 3.12E-04  | -3.6052 | *** | 0.005435 | 0.0003  | ***0.0003  |
| Agaricus                        | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 7.36E-04   | 7.32E-04 | 0.0021705 | -3.0659 | **  | 0.016731 | 0.0022  | ** 0.0022  |
| Dendryphiella                   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 8.12E-04   | 7.95E-04 | 7.45E-04  | -3.3723 | *** | 0.008358 | 0.0007  | ***0.0007  |
| Hortaea                         | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 8.41E-04   | 7.89E-04 | 7.45E-04  | -3.3723 | *** | 0.008358 | 0.0007  | ***0.0007  |
| Heitmania                       | <0.0001(<0.0001,<0.0001) | 3.85E-04 | 9.57E-05 | 0.0003(<0.0001,0.0014)   | 0.00123465 | 3.77E-04 | 6.64E-04  | -3.4041 | *** | 0.008358 | 0.0007  | ***0.0007  |
| Nakaseomyces                    | <0.0001(<0.0001,<0.0001) | 6.82E-07 | 6.82E-07 | <0.0001(<0.0001,<0.0001) | 9.26E-04   | 9.11E-04 | 0.0013514 | -3.2048 | **  | 0.012821 | 0.0014  | ** 0.0014  |
| Diutina                         | <0.0001(<0.0001,<0.0001) | 1.41E-05 | 1.12E-05 | <0.0001(<0.0001,<0.0001) | 9.82E-04   | 6.05E-04 | 1.40E-04  | -3.8084 | *** | 0.003234 | 0.0001  | ***0.0001  |
| Dipodascus                      | <0.0001(<0.0001,<0.0001) | 7.38E-05 | 1.90E-05 | <0.0001(<0.0001,<0.0001) | 0.00106213 | 0.001054 | 0.0024996 | -3.0234 | **  | 0.018497 | 0.0025  | ** 0.0025  |
| Ustilaginoidea                  | <0.0001(<0.0001,<0.0001) | 1.03E-05 | 4.29E-06 | <0.0001(<0.0001,0.0002)  | 0.00105854 | 5.32E-04 | 2.07E-06  | -4.7467 | *** | 1.09E-04 | <0.0001 | ***<0.0001 |
| Fantasmomyces                   | <0.0001(<0.0001,<0.0001) | 0.002768 | 0.00109  | 0.0008(0.0001,0.0047)    | 0.00391148 | 9.31E-04 | 2.11E-04  | -3.7053 | *** | 0.004339 | 0.0002  | ***0.0002  |
| Sporothrix                      | <0.0001(<0.0001,<0.0001) | 1.07E-05 | 1.03E-05 | <0.0001(<0.0001,<0.0001) | 0.00125642 | 3.94E-04 | 8.39E-07  | -4.926  | *** | 6.21E-05 | <0.0001 | ***<0.0001 |
| Peniophora                      | <0.0001(<0.0001,<0.0001) | 5.25E-04 | 2.49E-04 | <0.0001(<0.0001,<0.0001) | 0.00199715 | 0.001831 | 0.0207069 | -2.3133 | *   | 0.086085 | 0.0207  | * 0.0207   |
| Starmerella                     | <0.0001(<0.0001,<0.0001) | 3.64E-06 | 1.37E-06 | <0.0001(<0.0001,0.0001)  | 0.00148767 | 0.001008 | 1.43E-06  | -4.8211 | *** | 8.80E-05 | <0.0001 | ***<0.0001 |
| Henningisia                     | <0.0001(<0.0001,<0.0001) | 3.64E-07 | 3.64E-07 | <0.0001(<0.0001,<0.0001) | 0.00162858 | 0.001584 | 5.12E-05  | -4.0499 | *** | 0.001459 | <0.0001 | ***<0.0001 |
| Hannaella                       | <0.0001(<0.0001,<0.0001) | 0.001014 | 9.75E-04 | <0.0001(<0.0001,0.0002)  | 0.00324302 | 0.002681 | 3.54E-04  | -3.5724 | *** | 0.005453 | 0.0004  | ***0.0004  |
| Angustimassarina                | 0.0001(<0.0001,0.001)    | 0.002873 | 0.001251 | 0.001(0.0002,0.0028)     | 0.00510573 | 0.002807 | 0.0062543 | -2.7341 | **  | 0.036002 | 0.0063  | ** 0.0063  |
| Leucosporidium                  | <0.0001(<0.0001,<0.0001) | 5.74E-05 | 5.15E-05 | <0.0001(<0.0001,<0.0001) | 0.00239935 | 0.002319 | 0.0444032 | -2.0103 | *   | 0.140605 | 0.0444  | * 0.0444   |

|                                                                                                                           |                           |              |            |                           |               |             |           |         |           |          |         |            |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------|------------|---------------------------|---------------|-------------|-----------|---------|-----------|----------|---------|------------|
| Aureobasidium                                                                                                             | <0.0001(<0.0001, <0.0001) | 1.61E-04     | 1.32E-04   | <0.0001(<0.0001, <0.0001) | 0.00252923    | 0.001913    | 0.0493715 | -1.9654 | *         | 0.147318 | 0.0494  | * 0.0494   |
| Ramularia                                                                                                                 | <0.0001(<0.0001, <0.0001) | 7.05E-07     | 7.05E-07   | <0.0001(<0.0001, <0.0001) | 0.00285081    | 0.002808    | 0.0013514 | -3.2048 | **        | 0.012821 | 0.0014  | ** 0.0014  |
| Pichia                                                                                                                    | <0.0001(<0.0001, <0.0001) | 5.47E-05     | 3.59E-05   | <0.0001(<0.0001, 0.0002)  | 0.00318777    | 0.001725    | 1.59E-04  | -3.7765 | ***       | 0.003461 | 0.0002  | ***0.0002  |
| Nigrospora                                                                                                                | <0.0001(<0.0001, <0.0001) | 9.60E-04     | 6.06E-04   | <0.0001(<0.0001, 0.0001)  | 0.00466638    | 0.003759    | 0.0134453 | -2.4718 | *         | 0.063779 | 0.0134  | * 0.0134   |
| Zoophthora                                                                                                                | <0.0001(<0.0001, <0.0001) | 3.70E-04     | 1.57E-04   | 0.0002(<0.0001, 0.0009)   | 0.00432333    | 0.001421    | 3.42E-06  | -4.644  | ***       | 1.40E-04 | <0.0001 | ***<0.0001 |
| Gibberella                                                                                                                | <0.0001(<0.0001, <0.0001) | 1.52E-05     | 7.26E-06   | <0.0001(<0.0001, 0.0016)  | 0.01443771    | 0.006146    | 4.19E-11  | -6.5973 | ***       | 7.75E-09 | <0.0001 | ***<0.0001 |
| Simplicillium                                                                                                             | 0.0007(0.0003, 0.0084)    | 0.01024      | 0.002164   | 0.004(0.0009, 0.04)       | 0.0275095     | 0.005561    | 0.0014572 | -3.1831 | **        | 0.01315  | 0.0015  | ** 0.0015  |
| Saccharomyces                                                                                                             | <0.0001(<0.0001, 0.0004)  | 0.001739     | 6.34E-04   | 0.0005(<0.0001, 0.0084)   | 0.02640275    | 0.013063    | 4.89E-04  | -3.4868 | ***       | 0.006956 | 0.0005  | ***0.0005  |
| Hydnobolites                                                                                                              | <0.0001(<0.0001, 0.0001)  | 8.14E-04     | 5.91E-04   | 0.0002(<0.0001, 0.0008)   | 0.03087802    | 0.019833    | 5.04E-05  | -4.0539 | ***       | 0.001459 | <0.0001 | ***<0.0001 |
| Candida                                                                                                                   | 0.0005(0.0001, 0.0013)    | 0.005989     | 0.002359   | 0.004(0.0013, 0.015)      | 0.05441221    | 0.022181    | 1.93E-07  | -5.206  | ***       | 1.78E-05 | <0.0001 | ***<0.0001 |
| Acrodictys                                                                                                                | 0.0726(0.0114, 0.3599)    | 0.200955     | 0.02619    | 0.128(0.0342, 0.6571)     | 0.30144798    | 0.045429    | 0.0318034 | -2.1469 | *         | 0.113384 | 0.0318  | * 0.0318   |
| <b>Table S4. The different degree of species level (p value) between the controls (n=88) and COVID-19 patients (n=48)</b> |                           |              |            |                           |               |             |           |         |           |          |         |            |
| ID                                                                                                                        | Control.median            | Control.mean | Control.se | COVID-19.median           | COVID-19.mean | COVID-19.se | p-value   | z-score | Sig. mark | q-value  | fixp    | fixps      |
| Acrodictys_fluminicola                                                                                                    | 0.0726(0.0114, 0.3599)    | 0.200955     | 0.02619    | 0.128(0.0342, 0.6571)     | 0.30144798    | 0.045429    | 0.0318034 | -2.1469 | *         | 0.113104 | 0.0318  | * 0.0318   |
| Zanclospora_jonesii                                                                                                       | 0.0667(0.0146, 0.3238)    | 0.215283     | 0.028571   | 0.0188(0.0095, 0.0896)    | 0.14840617    | 0.038729    | 0.034467  | -2.1146 | *         | 0.117881 | 0.0345  | * 0.0345   |
| Cryptococcus_longus                                                                                                       | 0.0105(0.0017, 0.044)     | 0.045024     | 0.008483   | <0.0001(<0.0001, <0.0001) | 2.62E-05      | 1.80E-05    | 2.52E-22  | -9.7184 | ***       | 1.46E-19 | <0.0001 | ***<0.0001 |
| Diversispora_spurca                                                                                                       | 0.002(0.0006, 0.0156)     | 0.036457     | 0.014585   | 0.0008(0.0002, 0.0039)    | 0.005474      | 0.001791    | 0.0086361 | -2.6261 | **        | 0.049917 | 0.0086  | ** 0.0086  |
| Malassezia_restricta                                                                                                      | 0.0048(0.0007, 0.0342)    | 0.028644     | 0.005607   | 0.0008(0.0003, 0.0086)    | 0.01744896    | 0.005978    | 0.0104907 | -2.5592 | *         | 0.058619 | 0.0105  | * 0.0105   |
| Raffaelea_lauricola                                                                                                       | 0.0007(0.0001, 0.0024)    | 0.028395     | 0.013353   | 0.0016(0.0006, 0.0054)    | 0.00478331    | 0.001399    | 0.0466646 | -1.9893 | *         | 0.143469 | 0.0467  | * 0.0467   |
| Arthrographis_grakistii                                                                                                   | 0.0001(<0.0001, 0.0009)   | 0.027897     | 0.015719   | <0.0001(<0.0001, <0.0001) | 1.32E-04      | 7.58E-05    | 1.39E-04  | -3.81   | ***       | 0.004017 | 0.0001  | ***0.0001  |
| Simplicillium_sympodiophorum                                                                                              | 0.0007(0.0003, 0.0084)    | 0.010222     | 0.002164   | 0.004(0.0009, 0.04)       | 0.0275095     | 0.005561    | 0.0014572 | -3.1831 | **        | 0.015892 | 0.0015  | ** 0.0015  |
| Candida_albicans                                                                                                          | <0.0001(<0.0001, <0.0001) | 1.05E-04     | 3.37E-05   | 0.0012(0.0001, 0.0048)    | 0.04067365    | 0.021616    | 1.46E-10  | -6.4096 | ***       | 2.81E-08 | <0.0001 | ***<0.0001 |
| Cladosporium_kenpeggii                                                                                                    | 0.0008(0.0002, 0.0065)    | 0.014341     | 0.004126   | 0.0002(<0.0001, 0.0016)   | 0.00614894    | 0.002416    | 0.005339  | -2.7858 | **        | 0.037634 | 0.0053  | ** 0.0053  |
| Hydnobolites_roseus                                                                                                       | <0.0001(<0.0001, 0.0001)  | 8.14E-04     | 5.91E-04   | 0.0002(<0.0001, 0.0008)   | 0.03087802    | 0.019833    | 5.04E-05  | -4.0539 | ***       | 0.001816 | <0.0001 | ***<0.0001 |
| Saccharomyces_cerevisiae                                                                                                  | <0.0001(<0.0001, 0.0004)  | 0.001739     | 6.34E-04   | 0.0005(<0.0001, 0.0084)   | 0.02640275    | 0.013063    | 4.89E-04  | -3.4868 | ***       | 0.008562 | 0.0005  | ***0.0005  |
| Milospium_graphideorum                                                                                                    | <0.0001(<0.0001, 0.0005)  | 0.014769     | 0.010143   | <0.0001(<0.0001, <0.0001) | 2.14E-04      | 1.54E-04    | 2.66E-06  | -4.6952 | ***       | 1.71E-04 | <0.0001 | ***<0.0001 |
| Trigonopsis_californica                                                                                                   | <0.0001(<0.0001, <0.0001) | 0.010833     | 0.010658   | <0.0001(<0.0001, <0.0001) | 0             | 0           | 0.0018012 | -3.1212 | **        | 0.01833  | 0.0018  | ** 0.0018  |
| Cladosporium_specteratae_sedis                                                                                            | 0.0004(0.0001, 0.0015)    | 0.006696     | 0.002514   | 0.0001(<0.0001, 0.0005)   | 0.00701969    | 0.004617    | 0.0049147 | -2.8126 | **        | 0.03507  | 0.0049  | ** 0.0049  |
| Gibberella_fujikuroi                                                                                                      | <0.0001(<0.0001, <0.0001) | 1.46E-05     | 7.18E-06   | <0.0001(<0.0001, 0.0013)  | 0.01419179    | 0.006151    | 3.14E-11  | -6.6397 | ***       | 9.08E-09 | <0.0001 | ***<0.0001 |
| Cladosporium_cladosporioides                                                                                              | 0.0005(0.0001, 0.0031)    | 0.005654     | 0.001899   | 0.0002(<0.0001, 0.0014)   | 0.00345388    | 0.001263    | 0.0305779 | -2.1625 | *         | 0.113104 | 0.0306  | * 0.0306   |
| Malassezia_arunalokei                                                                                                     | <0.0001(<0.0001, 0.0005)  | 0.005199     | 0.003619   | <0.0001(<0.0001, 0.0001)  | 0.00249294    | 0.001182    | 0.0149439 | -2.4337 | *         | 0.073826 | 0.0149  | * 0.0149   |
| Candida_specteratae_sedis                                                                                                 | <0.0001(<0.0001, 0.0002)  | 7.36E-04     | 4.15E-04   | 0.0001(<0.0001, 0.0007)   | 0.00944452    | 0.005809    | 0.010687  | -2.5528 | *         | 0.058619 | 0.0107  | * 0.0107   |
| Angustimassarina_camposii                                                                                                 | 0.0001(<0.0001, 0.001)    | 0.002873     | 0.001251   | 0.001(0.0002, 0.0028)     | 0.00510573    | 0.002807    | 0.0062543 | -2.7341 | **        | 0.039736 | 0.0063  | ** 0.0063  |
| Phaeosphaeria_oryzae                                                                                                      | <0.0001(<0.0001, 0.0003)  | 0.005041     | 0.003375   | <0.0001(<0.0001, <0.0001) | 1.39E-04      | 1.06E-04    | 0.0024174 | -3.0335 | **        | 0.021171 | 0.0024  | ** 0.0024  |
| Fantasmomyces_hyalinus                                                                                                    | <0.0001(<0.0001, 0.0005)  | 0.002768     | 0.00109    | 0.0008(0.0001, 0.0047)    | 0.00391148    | 9.31E-04    | 2.11E-04  | -3.7053 | ***       | 0.005305 | 0.0002  | ***0.0002  |
| Malassezia_globosa                                                                                                        | 0.0002(<0.0001, 0.0016)   | 0.001823     | 3.85E-04   | <0.0001(<0.0001, 0.0001)  | 0.00383756    | 0.003433    | 4.35E-05  | -4.0881 | ***       | 0.001796 | <0.0001 | ***<0.0001 |
| Ophiostoma_acarorum                                                                                                       | <0.0001(<0.0001, <0.0001) | 0.003579     | 0.00331    | <0.0001(<0.0001, <0.0001) | 2.00E-06      | 2.00E-06    | 2.65E-06  | -4.6964 | ***       | 1.71E-04 | <0.0001 | ***<0.0001 |
| Acremonium_alternatum                                                                                                     | <0.0001(<0.0001, <0.0001) | 0.003542     | 0.003526   | <0.0001(<0.0001, <0.0001) | 1.00E-06      | 1.00E-06    | 0.0184111 | -2.3572 | *         | 0.078431 | 0.0184  | * 0.0184   |
| Diaporthe_kochmanii                                                                                                       | <0.0001(<0.0001, 0.0001)  | 0.003277     | 0.003172   | <0.0001(<0.0001, <0.0001) | 0             | 0           | 9.79E-06  | -4.4218 | ***       | 5.14E-04 | <0.0001 | ***<0.0001 |
| Nigrospora_oryzae                                                                                                         | <0.0001(<0.0001, <0.0001) | 5.82E-04     | 4.85E-04   | <0.0001(<0.0001, 0.0001)  | 0.00466638    | 0.003759    | 2.39E-04  | -3.6738 | ***       | 0.005474 | 0.0002  | ***0.0002  |
| Aspergillus_amstelodami                                                                                                   | <0.0001(<0.0001, 0.0003)  | 0.002515     | 0.001147   | <0.0001(<0.0001, <0.0001) | 8.07E-04      | 4.16E-04    | 0.0073878 | -2.6788 | **        | 0.045915 | 0.0074  | ** 0.0074  |
| Naganishia_albida                                                                                                         | <0.0001(<0.0001, <0.0001) | 0.002861     | 0.002793   | <0.0001(<0.0001, <0.0001) | 4.33E-05      | 4.23E-05    | 0.0225472 | -2.281  | *         | 0.08952  | 0.0225  | * 0.0225   |
| Candida_parapsilosis                                                                                                      | <0.0001(<0.0001, 0.0001)  | 0.002108     | 0.001243   | <0.0001(<0.0001, <0.0001) | 0.00139577    | 7.08E-04    | 0.0096825 | -2.587  | **        | 0.05541  | 0.0097  | ** 0.0097  |



|                                  |                          |          |          |                          |            |          |           |         |     |          |         |            |
|----------------------------------|--------------------------|----------|----------|--------------------------|------------|----------|-----------|---------|-----|----------|---------|------------|
| Zoophthora_radicans              | <0.0001(<0.0001,<0.0001) | 3.70E-04 | 1.57E-04 | 0.0002(<0.0001,0.0009)   | 0.00432333 | 0.001421 | 3.42E-06  | -4.644  | *** | 1.98E-04 | <0.0001 | ***<0.0001 |
| Coprinellus_ovatus               | <0.0001(<0.0001,<0.0001) | 0.001533 | 9.20E-04 | <0.0001(<0.0001,<0.0001) | 0.00179129 | 0.001784 | 0.0030157 | -2.9661 | **  | 0.024551 | 0.003   | ** 0.003   |
| Trametes_cubensis                | <0.0001(<0.0001,<0.0001) | 0.002466 | 0.002341 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0054254 | -2.7806 | **  | 0.037782 | 0.0054  | ** 0.0054  |
| Filobasidium_oeirens             | <0.0001(<0.0001,<0.0001) | 1.76E-04 | 1.00E-04 | <0.0001(<0.0001,0.0002)  | 0.00411021 | 0.002242 | 0.0147796 | -2.4377 | *   | 0.073643 | 0.0148  | * 0.0148   |
| Cercospora_canescens             | <0.0001(<0.0001,<0.0001) | 0.002359 | 0.002086 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 2.31E-05  | -4.2331 | *** | 0.00111  | <0.0001 | ***<0.0001 |
| Apiotrichum_domesticum           | <0.0001(<0.0001,<0.0001) | 0.002005 | 8.40E-04 | <0.0001(<0.0001,<0.0001) | 8.30E-05   | 6.48E-05 | 1.92E-04  | -3.7296 | *** | 0.005039 | 0.0002  | ***0.0002  |
| Malassezia_symptodialis          | <0.0001(<0.0001,<0.0001) | 0.001685 | 5.30E-04 | <0.0001(<0.0001,<0.0001) | 2.49E-04   | 1.54E-04 | 2.77E-05  | -4.192  | *** | 0.00123  | <0.0001 | ***<0.0001 |
| Trametes_trogii                  | <0.0001(<0.0001,<0.0001) | 0.001773 | 0.001756 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0159476 | -2.4101 | *   | 0.074941 | 0.0159  | * 0.0159   |
| Ramularia_coryli                 | <0.0001(<0.0001,<0.0001) | 7.05E-07 | 7.05E-07 | <0.0001(<0.0001,<0.0001) | 0.00285081 | 0.002808 | 0.0013514 | -3.2048 | **  | 0.015022 | 0.0014  | ** 0.0014  |
| Aureobasidium_pullulans          | <0.0001(<0.0001,<0.0001) | 1.51E-04 | 1.32E-04 | <0.0001(<0.0001,<0.0001) | 0.00252923 | 0.001913 | 0.003382  | -2.9307 | **  | 0.02715  | 0.0034  | ** 0.0034  |
| Hannaella_sinensis               | <0.0001(<0.0001,<0.0001) | 6.93E-06 | 4.31E-06 | <0.0001(<0.0001,<0.0001) | 0.00274702 | 0.002682 | 0.0019648 | -3.0955 | **  | 0.018617 | 0.002   | ** 0.002   |
| Leucosporidium_golubevii         | <0.0001(<0.0001,<0.0001) | 5.74E-05 | 5.15E-05 | <0.0001(<0.0001,<0.0001) | 0.00239935 | 0.002319 | 0.0444032 | -2.0103 | *   | 0.1433   | 0.0444  | * 0.0444   |
| Botrytis_cinerea                 | <0.0001(<0.0001,<0.0001) | 0.001138 | 7.44E-04 | <0.0001(<0.0001,<0.0001) | 3.91E-04   | 3.34E-04 | 0.0018394 | -3.115  | **  | 0.01833  | 0.0018  | ** 0.0018  |
| Stagonosporopsis_citricolli      | <0.0001(<0.0001,<0.0001) | 0.001314 | 0.001245 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0159476 | -2.4101 | *   | 0.074941 | 0.0159  | * 0.0159   |
| Wallemia_meliccola               | <0.0001(<0.0001,<0.0001) | 0.001176 | 6.40E-04 | <0.0001(<0.0001,<0.0001) | 1.65E-04   | 1.38E-04 | 4.44E-04  | -3.5121 | *** | 0.008029 | 0.0004  | ***0.0004  |
| Pyrenochaetopsis_microspora      | <0.0001(<0.0001,<0.0001) | 0.001058 | 0.00103  | <0.0001(<0.0001,<0.0001) | 1.85E-06   | 1.85E-06 | 0.0146502 | -2.4409 | *   | 0.073633 | 0.0147  | * 0.0147   |
| Heitmania_litsea                 | <0.0001(<0.0001,<0.0001) | 3.85E-04 | 9.57E-05 | 0.0003(<0.0001,0.0014)   | 0.00123465 | 3.77E-04 | 6.64E-04  | -3.4041 | *** | 0.010259 | 0.0007  | ***0.0007  |
| Rozellomyces_sp._Incertae_sedis  | <0.0001(<0.0001,<0.0001) | 0.001021 | 9.45E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0037686 | -2.8969 | **  | 0.028289 | 0.0038  | ** 0.0038  |
| Cladosporium_coloradense         | <0.0001(<0.0001,<0.0001) | 1.00E-03 | 8.01E-04 | <0.0001(<0.0001,<0.0001) | 1.73E-06   | 1.73E-06 | 5.11E-04  | -3.4747 | *** | 0.008695 | 0.0005  | ***0.0005  |
| Cutaneotrichosporon_cutaneum     | <0.0001(<0.0001,<0.0001) | 9.59E-06 | 8.19E-06 | <0.0001(<0.0001,<0.0001) | 0.00174694 | 0.001588 | 8.56E-04  | -3.3341 | *** | 0.011492 | 0.0009  | ***0.0009  |
| Penicillium_hirsutum             | <0.0001(<0.0001,<0.0001) | 2.71E-04 | 2.39E-04 | <0.0001(<0.0001,<0.0001) | 0.00117021 | 7.08E-04 | 0.0018189 | -3.1183 | **  | 0.01833  | 0.0018  | ** 0.0018  |
| Pichia_kluyveri                  | <0.0001(<0.0001,<0.0001) | 4.33E-06 | 4.33E-06 | <0.0001(<0.0001,0.0001)  | 0.00162748 | 7.33E-04 | 2.48E-08  | -5.5749 | *** | 3.58E-06 | <0.0001 | ***<0.0001 |
| Henningsia_resupinata            | <0.0001(<0.0001,<0.0001) | 3.64E-07 | 3.64E-07 | <0.0001(<0.0001,<0.0001) | 0.00162858 | 0.001584 | 5.12E-05  | -4.0499 | *** | 0.001816 | <0.0001 | ***<0.0001 |
| [Candida]_pseudolambica          | <0.0001(<0.0001,<0.0001) | 5.23E-07 | 5.23E-07 | <0.0001(<0.0001,<0.0001) | 0.00155729 | 0.001401 | 5.34E-05  | -4.0402 | *** | 0.001816 | <0.0001 | ***<0.0001 |
| Starmerella_etchellsii           | <0.0001(<0.0001,<0.0001) | 3.64E-06 | 1.37E-06 | <0.0001(<0.0001,0.0001)  | 0.00148767 | 0.001008 | 1.43E-06  | -4.8211 | *** | 1.38E-04 | <0.0001 | ***<0.0001 |
| Symmetrospora_sp._Incertae_sedis | <0.0001(<0.0001,<0.0001) | 9.28E-06 | 9.28E-06 | <0.0001(<0.0001,<0.0001) | 0.00136994 | 0.001367 | 0.0355446 | -2.1021 | *   | 0.120145 | 0.0355  | * 0.0355   |
| Sporothrix_nigrograna            | <0.0001(<0.0001,<0.0001) | 1.07E-05 | 1.03E-05 | <0.0001(<0.0001,<0.0001) | 0.00125642 | 3.94E-04 | 8.39E-07  | -4.926  | *** | 9.70E-05 | <0.0001 | ***<0.0001 |
| Recurvomyces_sp._Incertae_sedis  | <0.0001(<0.0001,<0.0001) | 6.90E-04 | 6.74E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0324831 | -2.1384 | *   | 0.113104 | 0.0325  | * 0.0325   |
| Sporobolomyces_roseus            | <0.0001(<0.0001,<0.0001) | 6.84E-04 | 5.59E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.007789  | -2.6611 | **  | 0.045939 | 0.0078  | ** 0.0078  |
| Fusarium_poeae                   | <0.0001(<0.0001,<0.0001) | 2.07E-04 | 1.04E-04 | <0.0001(<0.0001,0.0001)  | 8.68E-04   | 4.46E-04 | 0.0320289 | -2.144  | *   | 0.113104 | 0.032   | * 0.032    |
| Aspergillus_tennesseensis        | <0.0001(<0.0001,<0.0001) | 3.01E-04 | 2.01E-04 | <0.0001(<0.0001,<0.0001) | 6.74E-04   | 4.95E-04 | 0.030075  | -2.1691 | *   | 0.113104 | 0.0301  | * 0.0301   |
| Debaryomyces_prosopidis          | <0.0001(<0.0001,<0.0001) | 4.00E-04 | 3.35E-04 | <0.0001(<0.0001,<0.0001) | 4.78E-04   | 3.94E-04 | 3.50E-04  | -3.575  | *** | 0.00653  | 0.0004  | ***0.0004  |
| Dipodascus_geotrichum            | <0.0001(<0.0001,<0.0001) | 7.38E-05 | 1.90E-05 | <0.0001(<0.0001,<0.0001) | 0.00106213 | 0.001054 | 0.0024996 | -3.0234 | **  | 0.021524 | 0.0025  | ** 0.0025  |
| Udeniomyces_megalosporus         | <0.0001(<0.0001,<0.0001) | 5.93E-04 | 2.33E-04 | <0.0001(<0.0001,<0.0001) | 2.40E-05   | 1.32E-05 | 0.001895  | -3.1062 | **  | 0.018564 | 0.0019  | ** 0.0019  |
| Flavodon_sp._Incertae_sedis      | <0.0001(<0.0001,<0.0001) | 5.97E-04 | 5.55E-04 | <0.0001(<0.0001,<0.0001) | 4.96E-06   | 4.96E-06 | 0.044586  | -2.0085 | *   | 0.1433   | 0.0446  | * 0.0446   |
| Ustilaginoidea_virens            | <0.0001(<0.0001,<0.0001) | 1.03E-05 | 4.29E-06 | <0.0001(<0.0001,0.0002)  | 0.00105854 | 5.32E-04 | 2.07E-06  | -4.7467 | *** | 1.71E-04 | <0.0001 | ***<0.0001 |
| Thielaviopsis_euricoi            | <0.0001(<0.0001,<0.0001) | 5.74E-04 | 3.57E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0026097 | -3.0103 | **  | 0.021549 | 0.0026  | ** 0.0026  |
| Zanclospora_aurea                | <0.0001(<0.0001,<0.0001) | 7.21E-05 | 3.79E-05 | <0.0001(<0.0001,0.0002)  | 8.51E-04   | 3.06E-04 | 1.84E-04  | -3.7394 | *** | 0.005039 | 0.0002  | ***0.0002  |
| Pleurotus_eryngii                | <0.0001(<0.0001,<0.0001) | 5.15E-04 | 4.83E-04 | <0.0001(<0.0001,<0.0001) | 1.33E-06   | 1.33E-06 | 0.0045435 | -2.8377 | **  | 0.032827 | 0.0045  | ** 0.0045  |
| [Candida]_glabrata               | <0.0001(<0.0001,<0.0001) | 6.82E-07 | 6.82E-07 | <0.0001(<0.0001,<0.0001) | 9.26E-04   | 9.11E-04 | 0.0013514 | -3.2048 | **  | 0.015022 | 0.0014  | ** 0.0014  |
| Yarrowia_lipolytica              | <0.0001(<0.0001,<0.0001) | 4.80E-04 | 3.03E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0111554 | -2.5378 | *   | 0.058619 | 0.0112  | * 0.0112   |
| Pseudoramichloridium_henrii      | <0.0001(<0.0001,<0.0001) | 4.80E-04 | 4.72E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0463617 | -1.9921 | *   | 0.1433   | 0.0464  | * 0.0464   |
| Stagonosporopsis_lupini          | <0.0001(<0.0001,<0.0001) | 4.61E-04 | 4.44E-04 | <0.0001(<0.0001,<0.0001) | 0          | 0        | 0.0037686 | -2.8969 | **  | 0.028289 | 0.0038  | ** 0.0038  |

|                                         |                           |          |          |                           |          |          |           |         |     |          |        |           |
|-----------------------------------------|---------------------------|----------|----------|---------------------------|----------|----------|-----------|---------|-----|----------|--------|-----------|
| Knufia_epidermidis                      | <0.0001(<0.0001, <0.0001) | 4.61E-04 | 4.05E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0463617 | -1.9921 | *   | 0.1433   | 0.0464 | * 0.0464  |
| Hortaea_werneckii                       | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 8.41E-04 | 7.89E-04 | 7.45E-04  | -3.3723 | *** | 0.010259 | 0.0007 | ***0.0007 |
| Cutaneotrichosporon_jirovecii           | <0.0001(<0.0001, <0.0001) | 4.53E-04 | 3.72E-04 | <0.0001(<0.0001, <0.0001) | 8.69E-06 | 8.69E-06 | 0.0080193 | -2.6513 | **  | 0.04682  | 0.008  | ** 0.008  |
| Dendryphiella_paravinososa              | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 8.12E-04 | 7.95E-04 | 7.45E-04  | -3.3723 | *** | 0.010259 | 0.0007 | ***0.0007 |
| Candida_apicola                         | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 8.09E-04 | 7.38E-04 | 2.55E-04  | -3.6571 | *** | 0.005474 | 0.0003 | ***0.0003 |
| Ceriporia_lacerata                      | <0.0001(<0.0001, <0.0001) | 4.30E-04 | 3.13E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 1.20E-04  | -3.846  | *** | 0.003653 | 0.0001 | ***0.0001 |
| Golubevia_pallescens                    | <0.0001(<0.0001, <0.0001) | 4.16E-04 | 2.65E-04 | <0.0001(<0.0001, <0.0001) | 5.02E-06 | 5.02E-06 | 2.56E-04  | -3.6565 | *** | 0.005474 | 0.0003 | ***0.0003 |
| Coprinopsis_urticicola                  | <0.0001(<0.0001, <0.0001) | 4.10E-04 | 3.85E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0026097 | -3.0103 | **  | 0.021549 | 0.0026 | ** 0.0026 |
| Dothidea_sambuci                        | <0.0001(<0.0001, <0.0001) | 4.08E-04 | 4.02E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0324831 | -2.1384 | *   | 0.113104 | 0.0325 | * 0.0325  |
| Agaricus_subfloccosus                   | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 7.36E-04 | 7.32E-04 | 0.0021705 | -3.0659 | **  | 0.019301 | 0.0022 | ** 0.0022 |
| Candida_solani                          | <0.0001(<0.0001, <0.0001) | 1.64E-04 | 4.22E-05 | <0.0001(<0.0001, <0.0001) | 4.18E-04 | 4.06E-04 | 0.0012334 | -3.231  | **  | 0.014611 | 0.0012 | ** 0.0012 |
| Peniophorella_spectabilis_sedis         | <0.0001(<0.0001, <0.0001) | 3.80E-04 | 3.62E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0037685 | -2.8969 | **  | 0.028289 | 0.0038 | ** 0.0038 |
| Nigrospora_spectabilis_Incertae_sedis   | <0.0001(<0.0001, <0.0001) | 3.78E-04 | 3.70E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0324831 | -2.1384 | *   | 0.113104 | 0.0325 | * 0.0325  |
| Diutina_catenulata                      | <0.0001(<0.0001, <0.0001) | 2.25E-06 | 1.53E-06 | <0.0001(<0.0001, <0.0001) | 6.83E-04 | 4.83E-04 | 0.0152996 | -2.4252 | *   | 0.074941 | 0.0153 | * 0.0153  |
| Talaromyces_islandicus                  | <0.0001(<0.0001, <0.0001) | 3.58E-04 | 3.52E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0159445 | -2.4102 | *   | 0.074941 | 0.0159 | * 0.0159  |
| Candida_ethanolica                      | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 6.26E-04 | 6.21E-04 | 0.01859   | -2.3537 | *   | 0.078431 | 0.0186 | * 0.0186  |
| Pseudoveronaea_ellipsoidea              | <0.0001(<0.0001, <0.0001) | 5.99E-06 | 5.24E-06 | <0.0001(<0.0001, <0.0001) | 6.14E-04 | 3.93E-04 | 3.12E-04  | -3.6052 | *** | 0.006217 | 0.0003 | ***0.0003 |
| Typhula_micans                          | <0.0001(<0.0001, <0.0001) | 3.30E-04 | 2.51E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 5.79E-04  | -3.4413 | *** | 0.009561 | 0.0006 | ***0.0006 |
| Filobasidium_wieringiae                 | <0.0001(<0.0001, <0.0001) | 3.21E-04 | 3.02E-04 | <0.0001(<0.0001, <0.0001) | 5.67E-06 | 3.42E-06 | 0.0217789 | -2.2942 | *   | 0.08952  | 0.0218 | * 0.0218  |
| Penicillium_bialowiezense               | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 5.86E-04 | 5.78E-04 | 0.0021705 | -3.0659 | **  | 0.019301 | 0.0022 | ** 0.0022 |
| Carlossosaea_hohenbergiae               | <0.0001(<0.0001, <0.0001) | 3.16E-04 | 3.10E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0463617 | -1.9921 | *   | 0.1433   | 0.0464 | * 0.0464  |
| Diaporthe_caulivora                     | <0.0001(<0.0001, <0.0001) | 3.06E-04 | 2.09E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0018011 | -3.1212 | **  | 0.01833  | 0.0018 | ** 0.0018 |
| Ciliophora_spectabilis_Incertae_sedis   | <0.0001(<0.0001, <0.0001) | 2.97E-04 | 1.70E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0012386 | -3.2298 | **  | 0.014611 | 0.0012 | ** 0.0012 |
| Parastagonospora_falloppiae             | <0.0001(<0.0001, <0.0001) | 2.92E-04 | 2.76E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0111558 | -2.5378 | *   | 0.058619 | 0.0112 | * 0.0112  |
| Toxicocladosporium_streptitiae          | <0.0001(<0.0001, <0.0001) | 2.82E-04 | 2.78E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0324831 | -2.1384 | *   | 0.113104 | 0.0325 | * 0.0325  |
| Vishniacozyma_heimavensis               | <0.0001(<0.0001, <0.0001) | 2.78E-04 | 2.69E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.007789  | -2.6611 | **  | 0.045939 | 0.0078 | ** 0.0078 |
| Yarrowia_bubula                         | <0.0001(<0.0001, <0.0001) | 2.76E-04 | 2.63E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0037685 | -2.8969 | **  | 0.028289 | 0.0038 | ** 0.0038 |
| Hypoxylon_perforatum                    | <0.0001(<0.0001, <0.0001) | 2.73E-04 | 2.56E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0111558 | -2.5378 | *   | 0.058619 | 0.0112 | * 0.0112  |
| Candida_vespimorsum                     | <0.0001(<0.0001, <0.0001) | 1.20E-05 | 5.98E-06 | <0.0001(<0.0001, <0.0001) | 4.47E-04 | 2.61E-04 | 8.75E-04  | -3.328  | *** | 0.011492 | 0.0009 | ***0.0009 |
| Trichoderma_deliquescentens             | <0.0001(<0.0001, <0.0001) | 2.55E-04 | 2.50E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0463599 | -1.9921 | *   | 0.1433   | 0.0464 | * 0.0464  |
| Stemphylium_lycopersici                 | <0.0001(<0.0001, <0.0001) | 2.46E-04 | 1.67E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0227671 | -2.2773 | *   | 0.08952  | 0.0228 | * 0.0228  |
| Auricularia_delicata                    | <0.0001(<0.0001, <0.0001) | 2.44E-04 | 2.35E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0463599 | -1.9921 | *   | 0.1433   | 0.0464 | * 0.0464  |
| Tulostoma_calcareum                     | <0.0001(<0.0001, <0.0001) | 2.34E-04 | 2.28E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0324831 | -2.1384 | *   | 0.113104 | 0.0325 | * 0.0325  |
| Tilletia_geeringii                      | <0.0001(<0.0001, <0.0001) | 2.33E-04 | 1.55E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0012386 | -3.2298 | **  | 0.014611 | 0.0012 | ** 0.0012 |
| Wickerhamiella_versatilis               | <0.0001(<0.0001, <0.0001) | 3.58E-05 | 3.06E-05 | <0.0001(<0.0001, <0.0001) | 3.42E-04 | 2.49E-04 | 0.0413845 | -2.0397 | *   | 0.138267 | 0.0414 | * 0.0414  |
| Nigrograna_spectabilis_Incertae_sedis   | <0.0001(<0.0001, <0.0001) | 2.17E-04 | 1.66E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0324831 | -2.1384 | *   | 0.113104 | 0.0325 | * 0.0325  |
| Golovinomyces_sonchicola                | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 3.80E-04 | 3.72E-04 | 0.0021705 | -3.0659 | **  | 0.019301 | 0.0022 | ** 0.0022 |
| Xylocoremium_spectabilis_Incertae_sedis | <0.0001(<0.0001, <0.0001) | 2.04E-04 | 2.00E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0324819 | -2.1384 | *   | 0.113104 | 0.0325 | * 0.0325  |
| Didymella_spectabilis_Incertae_sedis    | <0.0001(<0.0001, <0.0001) | 2.04E-04 | 1.46E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0463617 | -1.9921 | *   | 0.1433   | 0.0464 | * 0.0464  |
| Venturiaceae_spectabilis_Incertae_sedis | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 3.35E-04 | 3.31E-04 | 0.006324  | -2.7305 | **  | 0.039736 | 0.0063 | ** 0.0063 |
| Didymocyrtis_brachylenae                | <0.0001(<0.0001, <0.0001) | 1.15E-06 | 1.15E-06 | <0.0001(<0.0001, <0.0001) | 3.14E-04 | 3.07E-04 | 0.0125736 | -2.4956 | *   | 0.064184 | 0.0126 | * 0.0126  |
| Preussia_procvaviae                     | <0.0001(<0.0001, <0.0001) | 1.69E-04 | 1.65E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0324831 | -2.1384 | *   | 0.113104 | 0.0325 | * 0.0325  |
| Calycina_spectabilis_Incertae_sedis     | <0.0001(<0.0001, <0.0001) | 1.67E-04 | 1.63E-04 | <0.0001(<0.0001, <0.0001) | 0        | 0        | 0.0463617 | -1.9921 | *   | 0.1433   | 0.0464 | * 0.0464  |

|                           |                                |          |          |                              |          |          |           |         |    |          |        |           |
|---------------------------|--------------------------------|----------|----------|------------------------------|----------|----------|-----------|---------|----|----------|--------|-----------|
| Kazachstania_humilis      | <0.0001(<0.0001,<br>1,<0.0001) | 0        | 0        | <0.0001(<0.0001,<<br>0.0001) | 3.04E-04 | 2.97E-04 | 0.0063247 | -2.7305 | ** | 0.039736 | 0.0063 | ** 0.0063 |
| Derxomyces_mrakii         | <0.0001(<0.0001,<br>1,<0.0001) | 1.65E-04 | 1.59E-04 | <0.0001(<0.0001,<<br>0.0001) | 0        | 0        | 0.0324831 | -2.1384 | *  | 0.113104 | 0.0325 | * 0.0325  |
| Issatchenkia_orientalis   | <0.0001(<0.0001,<br>1,<0.0001) | 1.86E-06 | 1.10E-06 | <0.0001(<0.0001,<<br>0.0001) | 2.87E-04 | 2.58E-04 | 0.0019304 | -3.1007 | ** | 0.018596 | 0.0019 | ** 0.0019 |
| Gibberella_baccata        | <0.0001(<0.0001,<br>1,<0.0001) | 6.70E-07 | 6.70E-07 | <0.0001(<0.0001,<<br>0.0001) | 2.46E-04 | 2.41E-04 | 0.0331688 | -2.13   | *  | 0.114414 | 0.0332 | * 0.0332  |
| Diaporthe_bohemiae        | <0.0001(<0.0001,<br>1,<0.0001) | 1.34E-04 | 1.16E-04 | <0.0001(<0.0001,<<br>0.0001) | 0        | 0        | 0.0111558 | -2.5378 | *  | 0.058619 | 0.0112 | * 0.0112  |
| Lecanicillium_coprophilum | <0.0001(<0.0001,<br>1,<0.0001) | 1.22E-04 | 1.15E-04 | <0.0001(<0.0001,<<br>0.0001) | 0        | 0        | 0.0463617 | -1.9921 | *  | 0.1433   | 0.0464 | * 0.0464  |
| Phlebiopsis_flavidoalba   | <0.0001(<0.0001,<br>1,<0.0001) | 1.18E-04 | 1.15E-04 | <0.0001(<0.0001,<<br>0.0001) | 0        | 0        | 0.0463599 | -1.9921 | *  | 0.1433   | 0.0464 | * 0.0464  |

Table S5. The relative abundance and distribution of the key 43 OTUs

|                                                   | Control001 | Control003 | Control004 | Control005 | Control006 | Control007 | Control008 | Control009 | Control010 | Control012 | Control013 | Control017 | Control020 |
|---------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| OTU563 ( <i>Purpureocillium lilacinum</i> )       | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00955    | 0          |
| OTU1858 ( <i>Fuscospora aquatica</i> )            | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1210 ( <i>Ophiostoma pusillum</i> )            | 0          | 0          | 0          | 0          | 0          | 0.0069     | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1959 ( <i>Acrodictys fluminicola</i> )         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU2237 ( <i>Simplicillium sympodiophorum</i> )   | 0          | 0          | 0          | 0          | 0          | 0.00561    | 0.00738    | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU2338 ( <i>Acrodictys fluminicola</i> )         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU2141 ( <i>Acrodictys fluminicola</i> )         | 0.00692    | 0.0071     | 0.0041696  | 0          | 0          | 0.01437    | 0          | 0          | 0.0063     | 0          | 0          | 0          | 0.00373    |
| OTU2103 ( <i>Sporothrix nigrograna</i> )          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1114 ( <i>CryptocoCOVID-19-us longus</i> )     | 0.00445    | 0.02514    | 0.0028869  | 0.0255     | 0          | 0          | 0          | 0.00499    | 0.01089    | 0          | 0.00367    | 0.00451    | 0          |
| OTU2318 ( <i>Talaromyces scorteus</i> )           | 0          | 0          | 0.002551   | 0          | 0          | 0.00194    | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1844 ( <i>Parafuscospora mucosa</i> )          | 0.00257    | 0.003      | 0.0034943  | 0.00168    | 0.00296    | 0          | 0.00146    | 0.00221    | 0          | 0          | 0          | 0          | 0          |
| OTU1218 ( <i>Acrodictys fluminicola</i> )         | 0          | 0.00118    | 0          | 0.00238    | 0.00222    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1602 ( <i>SaCOVID-19-haromyces cerevisia</i> ) | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1436 ( <i>Sporothrix nigrograna</i> )          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU142 ( <i>Ustilaginoidea virens</i> )           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00155    | 0          | 0          | 0          | 0          | 0          |
| OTU1542 ( <i>Candida albicans</i> )               | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00116    | 0          | 0          | 0          | 0          | 0          |
| OTU111 ( <i>Starmerella etchellsii</i> )          | 0.001      | 0.00059    | 0          | 0          | 0          | 0.00055    | 0.00065    | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU133 ( <i>Pichia kluyveri</i> )                 | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00489    | 0          | 0          | 0          |
| OTU94 ( <i>Heningsia resupinata</i> )             | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU102 ( <i>Milospium graphideorum</i> )          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00157    | 0.00171    | 0          |
| OTU1333 ( <i>CryptocoCOVID-19-us longus</i> )     | 0.00071    | 0.00567    | 4.86E-04   | 0.0114     | 0          | 0          | 0          | 0.00147    | 0.00701    | 0          | 0          | 0.00068    | 0.0005     |
| OTU2121 ( <i>Zanclospora jonesii</i> )            | 0          | 0          | 0.0016101  | 0          | 0          | 0          | 0          | 0          | 0.12373    | 0.00323    | 0.0895     | 0.00163    | 0.00137    |
| OTU2016 ( <i>Simplicillium sympodiophorum</i> )   | 0          | 0          | 0          | 0          | 0          | 0.00215    | 0.00026    | 0          | 0          | 0          | 0.00426    | 0          | 0          |
| OTU925 ( <i>CryptocoCOVID-19-us longus</i> )      | 0          | 0.00707    | 0          | 0.01143    | 0          | 0.00029    | 0.0003     | 0          | 0.00547    | 0.00211    | 0          | 0.00064    | 0          |
| OTU72 ( <i>Malassezia globosa</i> )               | 0.00029    | 0.00397    | 0          | 0.00214    | 0.03551    | 0          | 0.00024    | 0          | 0          | 0.00198    | 0.00963    | 0.00042    | 0.00085    |
| OTU2166 ( <i>Zoophthora radicans</i> )            | 0.0026     | 0          | 0          | 0.00018    | 0.00034    | 0.0039     | 0          | 0          | 0          | 0          | 0.01451    | 0.00013    | 0          |
| OTU40 ( <i>Diaporthe kochmanii</i> )              | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00019    | 0.00092    | 0.00067    |
| OTU1820 ( <i>Raffaelea lauricola</i> )            | 0.00043    | 0.0023     | 0          | 9.6E-05    | 0.00049    | 0.00707    | 0          | 0          | 0.00037    | 0.00209    | 0.00464    | 0          | 0          |
| OTU50 ( <i>Zanclospora jonesii</i> )              | 0          | 8.3E-05    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00011    | 0          |
| OTU1794 ( <i>Acrodictys fluminicola</i> )         | 0.00116    | 0.00033    | 0.0001647  | 0.00044    | 0.00086    | 0.00097    | 0.00027    | 0.46559    | 0.00086    | 0.00574    | 0.00088    | 0.51238    | 0.00065    |
| OTU2353 ( <i>Acrodictys fluminicola</i> )         | 0.00069    | 0.00819    | 0.0004002  | 0.00025    | 0.00156    | 0.00769    | 0          | 0.00155    | 0.00064    | 0.00267    | 0.00971    | 0.0001     | 0          |
| OTU57 ( <i>Chrysosphaeria jan-nelii</i> )         | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0.00012    | 0          | 0          | 0          | 0          |
| OTU35 ( <i>Gibberella fujikuroi</i> )             | 0          | 0          | 6.80E-05   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 8.9E-05    | 0          | 0          |
| OTU27 ( <i>Zanclospora jonesii</i> )              | 0.00046    | 0.00039    | 0.0001603  | 0.00043    | 0.02468    | 0.31213    | 0.00031    | 0.00088    | 0.07888    | 0.0041     | 0.00101    | 0.00183    | 0.00123    |
| OTU22 ( <i>Zanclospora jonesii</i> )              | 0.00058    | 0.00838    | 0.0006859  | 0.01771    | 0.00074    | 0.00098    | 0.00031    | 0.00065    | 0.00028    | 0.00303    | 0.00011    | 3.1E-05    | 0.00346    |
| OTU21 ( <i>Hydnobolites roseus</i> )              | 0          | 2E-05      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 3.3E-05    | 0          | 0          |
| OTU24 ( <i>Candida albicans</i> )                 | 3.2E-05    | 0          | 0.000292   | 8.4E-05    | 0          | 0.00011    | 0          | 0.00025    | 0          | 0          | 7.2E-05    | 6.1E-05    | 2.6E-05    |
| OTU16 ( <i>Zanclospora jonesii</i> )              | 0          | 4.1E-05    | 0.0000607  | 0.00017    | 0.0306     | 0          | 1.7E-05    | 0          | 0.00059    | 0          | 0          | 0          | 0          |
| OTU13 ( <i>Diversispora spurca</i> )              | 0.00053    | 0.00032    | 0.4424098  | 0.00093    | 0.00174    | 0.00672    | 0.00035    | 0.00053    | 0.0007     | 0.00464    | 0          | 7.4E-05    | 2.3E-05    |
| OTU10 ( <i>Aspergillus subflavus</i> )            | 0.00017    | 4.4E-05    | 1.28E-04   | 0.00013    | 0.00019    | 0.00013    | 0.0001     | 7.3E-05    | 8.8E-05    | 0.0006     | 0.00046    | 0.00034    | 0.00015    |
| OTU11 ( <i>Chrysosphaeria jan-nelii</i> )         | 1.9E-05    | 1.5E-05    | 0          | 0          | 5.2E-05    | 2.2E-05    | 0          | 0          | 2.3E-05    | 0.00012    | 0          | 1.8E-05    | 0          |
| OTU4 ( <i>CryptocoCOVID-19-us longus</i> )        | 0.00043    | 0.00593    | 0.0003604  | 0.01064    | 0.00031    | 0.00041    | 0.00025    | 0.00038    | 0.00566    | 0.00192    | 0.00047    | 0.00099    | 0.00054    |
| OTU3 ( <i>Zanclospora jonesii</i> )               | 0.00088    | 0.00154    | 0.0009024  | 0.00101    | 0.00137    | 0.00123    | 0.00045    | 0.00124    | 0.00081    | 0.0477     | 0.00027    | 0.00045    | 0.00085    |

| Control026 | Control027 | Control028 | Control030 | Control031 | Control033 | Control034 | Control035 | Control036 | Control037 | Control038 | Control039 | Control040 | Control041 | Control042 | Control043 | Control044 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0          | 0          | 0          | 0          | 0.04006    | 0.02574    | 0.01406    | 0.03423    | 0.02229    | 0.026      | 0.06872    | 0.0122     | 0.0198992  | 0.01565    | 0.02706    | 0.0106129  | 0.01406    |
| 0          | 0          | 0          | 0          | 0.02375    | 0          | 0          | 0          | 0          | 0          | 0          | 0.00954    | 0          | 0.01343    | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0074     | 0          | 0          | 0          | 0.00526    | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.01723    | 0          | 0          | 0.00533    | 0.04266    | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00596    | 0          | 0          | 0          | 0          | 0.00596    |
| 0          | 0          | 0.00994    | 0          | 0          | 0          | 0          | 0.0039     | 0          | 0          | 0          | 0.00736    | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0.00284    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.097071   | 0          | 0          | 0          | 0.01077    | 0          | 0.01305    | 0.01137    | 0.0012     | 0.01221    | 0.02045    | 0.00902    | 0.0036086  | 0.00698    | 0          | 0.0031274  | 0.02171    |
| 0          | 0.04143    | 0          | 0.00387    | 0          | 0          | 0          | 0.00175    | 0          | 0          | 0.00198    | 0.00383    | 0.00E+00   | 0          | 0          | 0          | 0          |
| 0.0054553  | 0          | 0          | 0.00332    | 0          | 0          | 0.00082    | 0          | 0.00777    | 0          | 0.00175    | 0.00389    | 0.0023533  | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0036906  | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.01907    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00057    | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00049    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.000646   | 0.03802    | 0.0032     | 0.00776    | 0          | 0          | 0          | 0.00191    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0017846  | 0.00183    |
| 0.0561385  | 0.02719    | 0.00192    | 0.00097    | 0.00362    | 0          | 0.00621    | 0.00296    | 0.00032    | 0.00044    | 0.00488    | 0.00396    | 0.0006513  | 0.00516    | 0.00099    | 0          | 0.00345    |
| 0          | 0          | 0.00057    | 0          | 0.00063    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0.00039    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0005284  | 0          | 0          | 0          | 0          |
| 0.0639949  | 0.01027    | 0.00073    | 0.00108    | 0.00241    | 0          | 0.0035     | 0.0014     | 0.00045    | 0.00295    | 0.00748    | 0.00447    | 0.0003515  | 0.00663    | 0.0011     | 0.0006434  | 0.00578    |
| 0.0330891  | 0.02435    | 0.00094    | 0.00062    | 0.0231     | 0.00022    | 0.00519    | 0.00265    | 0.02089    | 0          | 0.00044    | 0.00157    | 0.0006508  | 0.01343    | 0.00109    | 0.0008471  | 0.00032    |
| 0          | 0          | 0          | 0          | 0.00048    | 0          | 0.00035    | 0          | 0          | 0          | 0.00018    | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.96812    | 0.00113    | 0.0025936  | 0.0021     |
| 0.0001867  | 0.01822    | 0.10498    | 0          | 0.00039    | 0.00658    | 0.00011    | 0.03776    | 0.00021    | 0          | 0.00035    | 0.01022    | 0.0002078  | 0          | 0.00032    | 0          | 0.00159    |
| 0.0001623  | 0.01026    | 0.00033    | 0.00055    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00421    | 0.0002567  | 0.00075    |
| 0          | 0.00231    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          |
| 0          | 0.00449    | 0.00157    | 0          | 0.00047    | 0.00021    | 0.00019    | 0.01432    | 0          | 0          | 0          | 0.01776    | 0.0001411  | 0          | 0          | 0.0004797  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 8.2E-05    | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 8.9E-05    |
| 0          | 0          | 0          | 0          | 8E-05      | 0.00087    | 0          | 0          | 0          | 0          | 0          | 5.2E-05    | 0          | 8.7E-05    | 0          | 0          | 0          |
| 0.0003058  | 0.02478    | 0.00046    | 0.00134    | 0.02331    | 0.00015    | 0          | 5.1E-05    | 5.4E-05    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.000032   | 0.00295    | 8.9E-05    | 0.00058    | 0.00045    | 0          | 2.6E-05    | 3.8E-05    | 0          | 0.00366    | 0          | 0          | 0.0000935  | 0.00778    | 0          | 0          | 0          |
| 0.00E+00   | 0.00119    | 0          | 6.2E-05    | 7.7E-05    | 3E-05      | 6.9E-05    | 0          | 3.9E-05    | 0          | 0          | 2E-05      | 0.0000475  | 0          | 0          | 0          | 0          |
| 0          | 0.00046    | 0.00134    | 0          | 0          | 0          | 1.9E-05    | 0          | 0          | 0          | 0.00013    | 0          | 0          | 9.2E-05    | 0          | 0          | 0          |
| 2.21E-04   | 0.01284    | 0.00032    | 0.00072    | 0.00047    | 0.00028    | 0.00012    | 0.00036    | 0.00023    | 8.5E-05    | 0.00036    | 8.2E-05    | 0.0002715  | 0.0006     | 0.00076    | 0.4487596  | 0.00054    |
| 0.021783   | 0.01087    | 0.00039    | 0.00079    | 0.00055    | 0.0004     | 0.01297    | 0.00375    | 0.00037    | 0.00024    | 0.00039    | 0.00938    | 0.2970153  | 2.9E-05    | 0.0004     | 0.0015467  | 3.6E-05    |
| 6.19E-06   | 0.0006     | 0          | 0          | 0.00018    | 0.00017    | 0.08436    | 0.00023    | 0.00011    | 0.0002     | 0.02146    | 7.8E-05    | 0.0001348  | 9.3E-05    | 0.00025    | 0.0003192  | 0.00017    |
| 0.000006   | 0.00028    | 2E-05      | 0          | 8.8E-05    | 3.1E-05    | 4.4E-05    | 4.3E-05    | 0.04163    | 3.9E-05    | 7.4E-05    | 3.1E-05    | 0.0001092  | 0          | 6.5E-05    | 0          | 0          |
| 0.0618337  | 0.04971    | 0.0015     | 0.00216    | 0.0024     | 0.00013    | #####      | 0.00227    | 0.00031    | 0.00155    | 0.00712    | 0.00435    | 0.0004038  | 0.00582    | 0.00075    | 0.0010024  | 0.00596    |
| 0.0062781  | 0.00448    | 0.00014    | 0.00026    | 0.00137    | 0.00016    | 0.00015    | 0.00015    | 0.00531    | 0.00021    | 0.00238    | 0.00241    | 0.0002849  | 1.1E-05    | 0.00126    | 0.0000843  | 0.00056    |

| Control045 | Control046 | Control047 | Control048 | Control049 | Control050 | Control051 | Control052 | Control053 | Control054 | Control056 | Control058 | Control059 | Control060 | Control061 | Control062 | Control064 | Control065 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0.0459     | 0.0467     | 0.02786    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00707    | 0          | 0          | 0          | 0          | 0.01019    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00602    | 0          | 0          | 0          | 0          | 0.00451    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00923    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0.04409    | 0          | 0          | 0          | 0.002      | 0          | 0          | 0          | 0          | 0          | 0          | 0.0074     | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.02881    | 0.04433    | 0.00361    | 0          | 0          | 0.00174    | 0.0092     | 0.0091     | 0.0191     | 0.011      | 0.021      | 0.0114     | 0          | 0          | 0.0084     | 0          | 0.0408     | 0.0605     |
| 0.00283    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0021     | 0          | 0          | 0          |
| 0.00221    | 0          | 0          | 0.00631    | 0          | 0          | 0          | 0          | 0          | 0.0055     | 0          | 0.0015     | 0.0066     | 0          | 0.0029     | 0.0057     | 0.092      | 0.0455     |
| 0          | 0          | 0          | 0          | 0          | 0.00104    | 0.0014     | 0          | 0          | 0.0008     | 0          | 0          | 0.0028     | 0          | 0.0021     | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0.00155    | 0          | 0          | 0          | 0.0063     | 0          | 0.0365     | 0.0064     | 0          | 0          | 0          | 0.0076     | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.0055     | 0          | 0          | 0          | 0          | 0          | 0.002      | 0          | 0.0009     | 0.0012     | 0.0036     | 0.0015     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.0006     | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0008     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0004     | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00193    | 0.00174    | 0.85912    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.01346    | 0.01715    | 0.01477    | 0          | 0          | 0.00031    | 0          | 0          | 0.0063     | 0.0094     | 0.0133     | 0.0069     | 0.002      | 0          | 0.0018     | 0.0021     | 0.0402     | 0.0125     |
| 0          | 0          | 0          | 0.0025     | 0.00123    | 0.00025    | 0.1552     | 0.0027     | 0.0009     | 0.0007     | 0.0004     | 0.0012     | 0          | 0          | 0          | 0.0014     | 0          | 0          |
| 0.01929    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0037     | 0.0005     | 0 #####    |
| 0.01336    | 0.0216     | 0.01076    | 0          | 0          | 0          | 0.0002     | 0          | 0.0057     | 0.0042     | 0.0153     | 0.0085     | 0.0039     | 0.0005     | 0.0019     | 0.0008     | 0.0339     | 0.0195     |
| 0.00495    | 0.06039    | 0.01327    | 0.00408    | 0          | 0.00021    | 0          | 0.0008     | 0.0094     | 0          | 0.0768     | 0          | 0.0026     | 0          | 0          | 0.0032     | 0.0056     | 0.0049     |
| 0.01335    | 0          | 0          | 0.00038    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0004     | 0.0039     | 0.0036     | 0.0017     |
| 0.00152    | 0.00036    | 0.00108    | 0          | 0.0005     | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0003     | 0          | 0          | 0          |
| 0.00837    | 0          | 0          | 0          | 0.00021    | 0.0055     | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0004     | 0.0004     | 0          |
| 0.09097    | 0          | 0.00045    | 0.00026    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0006     | 0.0001     | 0          | 0          | 0          |
| 8.5E-05    | 0.00015    | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002     | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 1E-04      |
| 0.02267    | 0          | 0          | 0.00093    | 0          | 0.01407    | 7E-05      | 0          | 6E-05      | 8E-05      | 0          | 0          | 0.0003     | 0.0002     | 0.0056     | 0.0004     | 0.0003     | 0.0005     |
| 0          | 0          | 0          | 0.00015    | 0.00024    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002     | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0.00021    | 0          | 0          | 0          | 6E-05      | 0          | 0          | 0          | 0          | 0.0002     | 0          | 0.0002     | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0003     | 7E-05      | 0          | 0          | 0          | 0          | 9E-05      | 4E-05      | 0          | 9E-05      |
| 0          | 0          | 0          | 0.00065    | 0.00041    | 0.00053    | 0.0008     | 0.0016     | 0.0009     | 0.0008     | 0.0005     | 0.0375     | 0.0222     | 0.0029     | 0.0058     | 0.0215     | 0.0271     | 0.0239     |
| 0          | 0          | 0          | 0          | 4.8E-05    | 0          | 0.0002     | 0          | 2E-05      | 0          | 3E-05      | 2E-05      | 0          | 0          | 0          | 0          | 0          | 0          |
| 1.8E-05    | 2.9E-05    | 0          | 0          | 0.00029    | 7.4E-05    | 0.0002     | 0          | 1E-04      | 2E-05      | 2E-05      | 2E-05      | 0          | 0.0001     | 0          | 0          | 0          | 6E-05      |
| 0.00083    | 0.00066    | 0.00076    | 0          | 0          | 0          | 7E-05      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0 #####    | 0          |
| 5.6E-05    | 0          | 3.4E-05    | 4.3E-05    | 0.00012    | 0.00013    | 0.0017     | 0.0007     | 2E-05      | 0.0006     | 0.0247     | 1E-04      | 0.0004     | 0.0038     | 0          | 0.0003     | 0          | 0          |
| 0.00024    | 0.00014    | 0.00027    | 0.00025    | 0.00024    | 0.00249    | 0.0002     | 0.1178     | 0.0004     | 0.0007     | 0.0001     | 0.0002     | 0.0023     | 0.0004     | 0.0002     | 0.0005     | 0.0002     | 0.0793     |
| 1.1E-05    | 0          | 1.7E-05    | 8.5E-05    | 4.5E-05    | 0          | 2E-05      | 0.0002     | 2E-05      | 0          | 0.0002     | 2E-05      | 3E-05      | 7E-05      | 3E-05      | 0          | 3E-05      | 4E-05      |
| 0.01294    | 0.02847    | 0.01119    | 0.00015    | 0.00014    | 0.00022    | 0.0004     | 0.0002     | 0.006      | 0.0068     | 0.0151     | 0.0078     | 0.0028     | 0.0003     | 0.0013     | 0.0012     | 0.039      | 0.0172     |
| 0.00359    | 9.5E-06    | 0          | 0.00334    | 0.00046    | 0.00012    | 0.0002     | 0.0004     | 0.0003     | 0.0021     | 0.0037     | 0.002      | 0.0114     | 0.0007     | 0.0051     | 0.004      | 0.078      | 0.0442     |

| Control<br>067 | Control<br>068 | Control<br>069 | Control<br>071 | Control<br>074 | Control<br>076 | Control<br>077 | Control<br>079 | Control<br>081 | Control<br>082 | Control<br>084 | Control<br>085 | Control<br>086 | Control<br>087 | Control<br>088 | Control<br>090 | Control<br>091 | Control<br>092 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0226         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0117         | 0.0055         | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0263         | 0              | 0              | 0              | 0              | 0              | 0.009          | 0              | 0.0059         | 0.0067         | 0              | 0              | 0              | 0.0104         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0227         | 0              | 0.0611         | #####          | #####          | 0              | 0              | 0              | 0              |
| 0              | 0.0036         | 0              | 0              | 0              | 0              | 0              | 0.0201         | 0              | 0              | 0              | 0.003          | #####          | 0              | 0              | 0.0086         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0159         | 0              | 0.0067         | 0              | 0              | 0              | 0.0061         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0214         | 0              | 0              | 0.0093         | 0.0167         | 0.0398         | 0              | 0              | 0.0125         | 0.0047         | 0              | 0.0139         | 0              | #####          | #####          | 0              | 0.0172         | 0.0045         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.2412         | 0              | 0              | 0              | 0.0018         | 0              | 0              | 0.0068         | 0              |
| 0.0031         | 0.0077         | 0.0277         | 0.0372         | 0.0734         | 0.0997         | 0.0746         | 0.0161         | #####          | 0.0084         | 0.0018         | 0.0024         | 0.0553         | 0.0474         | 0.1229         | 0              | 0              | 0.0027         |
| 0              | 0              | 0              | 0              | #####          | #####          | 0              | 0.1014         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0056         | 0              | 0              | 0              | 0              | 0              | 0.0016         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.0013         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0006         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0015         | 0.0005         | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0008         | 0              |
| 0.0129         | 0.007          | 0              | 0.0109         | 0.0075         | 0.0364         | 0.0063         | 0.0007         | 0.0063         | 0.0006         | 0              | 0.004          | 0.0009         | 0.0485         | 0              | 0.0007         | 0.0398         | 0.0689         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0005         | 0.0005         | 0.0006         | 0.0004         | 0.001          | 0.0004         | 0              | 0              | 0.0006         | 0.0006         | 0.0013         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0009         | 0.0003         | 0              | 0.0005         | 0              | 0              | 0              | 0              | 0.0334         | 0              | 0              |
| 0.0145         | 0.0094         | 0              | 0.0134         | 0.0081         | 0.0336         | 0.008          | 0              | 0.0055         | 0.0007         | 0              | 0.0031         | 0.0005         | 0.0444         | 0              | 0.0013         | 0.0443         | 0.0551         |
| 0.045          | 0              | 0              | 0.017          | 0              | 0              | 0.0057         | 0.0103         | 0              | 0.003          | 0.0003         | 0.0007         | 0              | 0.0324         | 0              | 0.0097         | 0              | 0.0005         |
| 0.0002         | 0              | 0.0012         | 0              | 0              | 0              | 0.0002         | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0.0002         | 0              | 0.0544         | 0              | 0              |
| 0              | 0              | 0              | 0.0005         | 0.0004         | 0.0005         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0008         | 0.0005         | 0.0008         |
| 0              | 0.0001         | 0              | 0.0032         | #####          | #####          | 0.0004         | 0.0007         | 0              | 0.006          | 0.0004         | 0.0477         | 0.0002         | 0.0001         | 0.0001         | 0.0012         | 0.0012         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              |
| 0.0001         | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              | 0.0002         | 0.0012         | 0.0002         | 1E-04          | 0.0002         | 0.0005         | 0.0006         | 0.0002         | 0.0008         |
| 9E-05          | 0              | 0.0011         | 0.0032         | 0              | 0              | 0              | 0.0014         | 0              | 0.0238         | 0              | 0.0029         | 0              | 0.0003         | 0              | 0.0296         | 0.0023         | 0.0002         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 9E-05          | 0              | 0              | 0              | 0.0002         | 0.0005         | 0.0003         | 0.0013         | 0.0006         | 0.0003         | 0.0003         | 0.0226         | 0.0003         | 0.001          | 0.0006         | 0.0005         |
| 0.0071         | 0.0158         | 0.1522         | 0.0238         | 0.1225         | 0.0567         | 0.0253         | 0.0515         | 0.124          | 0.0134         | 0.0006         | 0.0077         | 0.0976         | 0.0155         | 0.0287         | 0              | 5E-05          | 0.0001         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 2E-05          | #####          | 0              | 0              | 0              |
| 0.0001         | 0              | 0.0005         | 0              | 3E-05          | #####          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 5E-05          | 0              | 0              | 0.0078         | 3E-05          | 0              | 2E-05          | 0              | 0              | 0              | 0              | 3E-05          | 3E-05          | 9E-05          | 0              | 0              |
| 0.0006         | 0              | 0.002          | 0.004          | 0              | 2E-05          | 0.0023         | 0.0009         | 0.0003         | 0.0003         | 0.0003         | 0.0003         | 0.0004         | 0.0005         | 0.0002         | 0.0041         | 0.0055         | 0.0001         |
| 0.0002         | 0.0001         | 0.0003         | 0              | 0.0006         | 0              | 0.0899         | 4E-05          | 4E-05          | 9E-05          | 4E-05          | 6E-05          | 4E-05          | 2E-05          | 3E-05          | 0.0485         | 0.0003         | 0.0003         |
| 3E-05          | 1E-05          | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0139         | 0.0061         | 0.0004         | 0.0141         | 0.0101         | 0.0342         | 0.0092         | 8E-05          | 0.0066         | 0.0012         | 0.0002         | 0.0038         | 0.0003         | 0.0433         | 0.0001         | 0.0013         | 0.0388         | 0.0579         |
| 0.0036         | 0.0106         | 0.0205         | 0.0507         | 0.0797         | 0.1058         | 0.0184         | 0.0205         | 0.0828         | 0.0089         | 0.0006         | 0.0046         | 0.0561         | 0.0556         | 0.1152         | 0.0007         | 0.0001         | 0.0002         |

| Control<br>093 | Control<br>095 | Control<br>096 | Control<br>097 | Control<br>098 | Control<br>101 | Control<br>103 | Control<br>104 | Control<br>106 | Control<br>108 | Control<br>110 | Control<br>111 | Control<br>112 | Control<br>115 | Control<br>118 | Control<br>119 | Control<br>121 | Control<br>123 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0146         | 0.0793         | 0.0326         | 0              | 0.3484         |
| 0              | 0              | 0.0093         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.0058         | 0.0131         | 0              | 0.1099         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0176         | 0.0037         | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0337         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.0309         | 0              | 0              | 0.0739         | 0              | 0.0139         | 0.0036         | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0077         | 0.0405         | 0              | 0.012          | 0.0103         | 0.0273         | 0              | 0.012          | 0              | 0.0016         | 0              | 0.0171         | 0              | 0              | 0              | 0.0046         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0489         | 0              | 0.0028         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.1252         | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0072         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0026         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0012         | 0.0023         | 0.0446         | 0.0016         | 0.0004         | 0.0065         | 0.0011         | 0.0007         | 0.0012         | 0.0035         | 0.0007         | 0.0037         | 0              | 0              | 0.0013         | 0              | 0              | 0              |
| 0.0007         | 0.0185         | 0.0324         | 0.0006         | 0.0027         | 0.0144         | 0.012          | 0              | 0.0109         | 0.0007         | 0.0028         | 0.0226         | 0.0317         | 0.0007         | 0.0951         | 0.0015         | 0              | 0              |
| 0              | 0              | 0.0006         | 0.6008         | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0003         | 0              | 0.001          | 0.0003         | 0              | 0              | 0.001          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0025         | 0.0174         | 0.0361         | 0              | 0.0049         | 0.0108         | 0.0099         | 0.0011         | 0.0134         | 0.0016         | 0.003          | 0.02           | 0.0327         | 0.0004         | 0.1229         | 0.0016         | 0.0002         | 0              |
| 0              | 0.0844         | 0.0007         | 0              | 0.0034         | 0.0249         | 0.0185         | 0.0007         | 0.0018         | 0.0004         | 0.0002         | 0              | 0              | 0.0004         | 0.0256         | 0.0046         | 0.0002         | 0              |
| 0              | 0.0004         | 0.0002         | 0.0003         | 0.0002         | 0              | 0              | 0.0033         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0006         | 0.0005         | 0.0006         | 0.0012         | 0.0004         | 0              | 0              | 0              | 0              | 0.0023         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.008          |
| 0              | 0              | 0.0055         | 0              | 0.0032         | 0              | 0              | 0.0349         | 0.0002         | 0.056          | 0.0151         | 0.0006         | 0              | 0              | 0              | 0.0002         | 0.0002         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.0003         | 0.0003         | 0.0002         | 0.0001         | 0.0004         | 0              | 0              | 0.259          | 0              | 0              | 0              | 0              | 0              |
| 0.0003         | 0.0003         | 0.0003         | 0.0005         | 0.0005         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              | 0              |
| 0.0003         | 0              | 0              | 0.0004         | 0.0054         | 0              | 0              | 0.0125         | 0              | 0.0054         | 0.0029         | 0.0002         | 0              | 0              | 0              | 0              | 7E-05          | 0.0011         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0008         | 0.0115         | 0.0007         | 0.0013         | 0.0006         | 0.0011         | 0.4734         | 0.0004         | 0.0003         | 0.0002         | 0.0004         | 0.0007         | 0.0002         | 0              | 0              | 0.0002         | 7E-05          | 0              |
| 0.0001         | 0              | 0.0067         | 0.0002         | 6E-05          | 0.0137         | 0              | 4E-05          | 4E-05          | 6E-05          | 0.0111         | 0              | 0              | 0              | 0              | 0              | 6E-05          | 0              |
| 0              | 0              | 0              | 4E-05          | 3E-05          | 4E-05          | 0              | 4E-05          | 0              | 8E-05          | 4E-05          | 4E-05          | 3E-05          | 0              | 7E-05          | 0              | 3E-05          | 0              |
| 3E-05          | 0              | 0              | 0              | 0              | 4E-05          | 0              | 3E-05          | 0              | 0              | 0              | 4E-05          | 0              | 0              | 0              | 2E-05          | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.0404         | 0.0001         | 0.0002         | 0.0003         | 0.0004         | 0.0001         | 0.0109         | 6E-05          | 0.0002         | 0.0006         | 0.0002         | 0.0001         | 0.4122         |
| 8E-05          | 0.0017         | 0.0009         | 3E-05          | 0.0009         | 0.0032         | 0.0044         | 0.0002         | 8E-05          | 0.0703         | 0.0001         | 0.0002         | 0.0002         | 0.0002         | 0.0007         | 0.0006         | 0.0001         | 0              |
| 0.0001         | 0.0002         | 0.0002         | 0.0002         | 0.0002         | 3E-05          | 0              | 4E-05          | 0              | 3E-05          | 0              | 0              | 0              | 6E-05          | 0.0004         | 8E-05          | 9E-05          | 0.0322         |
| 0              | 0              | 0              | 2E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001         | 2E-05          | 0              | 0              |
| 0.0019         | 0.0191         | 0.0328         | 0.0007         | 0.0038         | 0.0128         | 0.0095         | 0.0007         | 0.011          | 0.0021         | 0.0034         | 0.0186         | 0.0298         | 1E-04          | 0.0892         | 0.0019         | 0.0001         | 0.0019         |
| 0.0001         | 5E-05          | 0.0001         | 0.0002         | 0.0001         | 0.0002         | 5E-05          | 0.0001         | 0.0004         | 0.0001         | 8E-05          | 0.0001         | 9E-05          | 0.1079         | 0.0004         | 0.0001         | 8E-05          | 0              |



| Control<br>124 | Control<br>126 | Control<br>130 | Control<br>131 | COVID<br>-19-002 | COVID<br>-19-003 | COVID<br>-19-005 | COVID<br>-19-006 | COVID<br>-19-008 | COVID<br>-19-010 | COVID<br>-19-011 | COVID<br>-19-013 | COVID<br>-19-014 | COVID<br>-19-015 | COVID<br>-19-016 | COVID<br>-19-017 | COVID<br>-19-018 | COVID<br>-19-019 |
|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 0.026          | 0              | 0.0159         | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0.3902           | 0                | 0                | 0                | 0                | 0.1499           | 0.0115           | 0                | 0.0463           | 0                | 0.0082           | 0.0115           | 0.0105           |
| 0              | 0.0046         | 0.0074         | 0              | 0.0099           | 0.079            | 0.0907           | 0.0066           | 0.0131           | 0.0585           | 0                | 0.094            | 0.0473           | 0                | 0.0159           | 0.057            | 0.0595           | 0.0097           |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0.0699           | 0.0126           | 0.07             | 0.0111           | 0.0826           | 0.058            | 0.0498           | 0.0402           | 0.0246           | 0.0355           | 0.0074           | 0.0288           | 0.0185           |
| 0              | 0              | 0.0915         | 0              | 0                | 0                | 0.0989           | 0.0051           | 0.2438           | 0.057            | 0.0095           | 0.0072           | 0.0564           | 0.0151           | 0.045            | 0.069            | 0.0343           | 0.0197           |
| 0              | 0.0033         | 0              | 0              | 0                | 0.0687           | 0.0206           | 0.0822           | 0.0144           | 0.0835           | 0.0178           | 0.0458           | 0.0265           | 0.0046           | 0.0129           | 0.0078           | 0.0658           | 0.044            |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0.0624         | 0.0051         | 0              | 0.0251         | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0.0513           | 0.0082           | 0.0075           | 0.0099           | 0.0124           | 0                | 0.0141           | 0                | 0.05             | 0.0579           | 0                | 0.0163           | 0.0121           |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0.0014         | 0.0567         | 0              | 0                | 0                | 0                | 0.0014           | 0.6811           | 0.0067           | 0.0345           | 0.0037           | 0.0151           | 0.0156           | 0                | 0.0086           | 0                | 0.005            |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0.0009           | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0.0016           | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0.0042           | 0.0042           | 0                | 0                | 0                | 0                | 0                | 0.007            |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0.0015           | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0.0017           |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0.0012           | 0.0015           | 0                | 0.0037           | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0.0004         | 0.0009         | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0.0013           | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0.1005         | 0.0047         | 0.0004         | 0.1079         | 0.0007           | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0.0004         | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0.0024         | 0.0003         | 0              | 0              | 0.0009           | 0.0012           | 0.2282           | 0.0004           | 0.0061           | 0.1245           | 0.013            | 0.0682           | 0.1689           | 0.0291           | 0.0026           | 0.0913           | 0.092            | 0.0813           |
| 0.109          | 0.0042         | 0              | 0.0857         | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0.0054         | 0.071          | 0              | 0.0771         | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0.0004           | 0                | 0                | 0                | 0                |
| 0.0026         | 0              | 0              | 0              | 0.0003           | 0.0007           | 0.1811           | 0.0002           | 0.0055           | 0.0719           | 0.0151           | 0.087            | 0.1196           | 0.0582           | 0.0032           | 0.1565           | 0.0732           | 0.0919           |
| 0.0009         | 0.0009         | 0.0005         | 0.001          | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| #####          | 0.0003         | 0.0002         | 0              | 0                | 0.1813           | 0.0009           | 0.0115           | 0.0037           | 0.0052           | 0.063            | 0.0232           | 0.0053           | 0.0108           | 0.0011           | 0.0051           | 0.0065           | 0.0084           |
| 0.0001         | 0.0003         | 0              | 0              | 0                | 0.0009           | 0.001            | 0.0006           | 0.3033           | 0.0003           | 0.0614           | 0.0062           | 0.0025           | 0.0004           | 0.0001           | 0.0267           | 0.0007           | 0                |
| 0              | 0              | 0              | 0              | 0                | 0                | 0.0002           | 0.0003           | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0.0033         | 0.0059         | 0.0004         | 0              | 0.0004           | 0.0099           | 0.1338           | 0.0103           | 0.0239           | 0.0728           | 0.0215           | 0.0588           | 0.1259           | 0.0298           | 0.0143           | 0.0776           | 0.0683           | 0.0586           |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0.0002           | 0.0001           | 0                | 0                | 0                | 0.0005           | 0.0001           | 0                | 9E-05            | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0.0001           | 0                | 0                | 0.001            | 8E-05            | 0                | 0.0003           | 0                | 5E-05            | 7E-05            | 6E-05            |
| 0              | 0              | 0              | 0              | 0.0005           | 0                | 0                | 9E-05            | 0                | 0                | 0                | 6E-05            | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 0              | 0              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0              | 0              | 2E-05          | 0              | 0                | 0.0131           | 0.0011           | 0.0011           | 0.0007           | 0.0003           | 0                | 0.0004           | 0.0025           | 0.0009           | 3E-05            | 0                | 0                | 0                |
| 0.0003         | 0.0005         | 0.0002         | 0.0004         | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 2E-05            | 0                | 4E-05            | 0                |
| 0.0025         | 3E-05          | 0.0063         | 0              | 3E-05            | 0                | 0                | 0.0008           | 0                | 0                | 5E-05            | 4E-05            | 0                | 0                | 0.0177           | 0.0002           | 3E-05            | 0                |
| 8E-05          | 5E-05          | 6E-05          | 0.0001         | 0.0001           | 0                | 6E-05            | 2E-05            | 0                | 4E-05            | 7E-05            | 0                | 0.0004           | 0                | 0.0002           | 0.0004           | 0.0007           | 0                |
| 0              | 1E-05          | 0              | 0              | 0                | 0.0001           | 0                | 0                | 3E-05            | 0                | 4E-05            | 2E-05            | 0                | 0                | 0                | 0                | 0                | 0                |
| 0.0999         | 0.0056         | 0.0004         | 0.0817         | 0.0002           | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 1E-05            |
| 8E-06          | 0              | 2E-05          | 2E-05          | 0.0003           | 0                | 0                | 1E-05            | 0                | 4E-05            | 5E-05            | 1E-05            | 0                | 0                | 0                | 0                | 0                | 8E-06            |

| COVID-19-023 | COVID-19-024 | COVID-19-025 | COVID-19-026 | COVID-19-027 | COVID-19-028 | COVID-19-029 | COVID-19-030 | COVID-19-031 | COVID-19-032 | COVID-19-035 | COVID-19-037 | COVID-19-038 | COVID-19-040 | COVID-19-041 | COVID-19-043 | COVID-19-045 | COVID-19-046 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.0389       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0133       | 0            | 0.0915       | 0            | 0            | 0            | 0            | 0.0337       |
| 0.1758       | 0.0963       | 0.0303       | 0.087        | 0.2444       | 0.0392       | 0            | 0.0318       | 0.0277       | 0.1506       | 0.0783       | 0.0199       | 0            | 0.0187       | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0.0127       | 0            | 0            | 0            | 0            | 0.0096       | 0.0103       | 0            | 0.0751       | 0            | 0            | 0.0068       | 0            | #####        |
| 0            | 0            | 0.0202       | 0.0123       | 0.0087       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.03         | 0.0132       | 0            | 0.0283       | 0            | 0.0119       |
| 0            | 0.0043       | 0.0537       | 0.0133       | 0.0075       | 0            | 0            | 0            | 0.0089       | 0            | 0.0081       | 0            | 0.0741       | 0            | 0            | 0            | 0            | 0.0124       |
| 0.2239       | #####        | 0.0909       | 0.0522       | 0.1365       | 0.0204       | 0.0175       | 0.2065       | 0.0171       | 0.0356       | 0.1438       | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.0181       | 0            | 0.1122       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.051        | 0.0067       | 0.0314       | 0.0783       | 0.0156       | 0.0212       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0053       | 0.0073       | 0.0052       | 0            | 0            | 0            | 0            | 0            | 0            | 0.0019       | 0            | 0            | 0            | 0            | 0            | 0.0227       | 0            | 0.0015       |
| 0.0722       | 0            | 0.0362       | 0.0064       | 0.0283       | 0.4497       | 0.0262       | 0.0181       | 0.0485       | 0.0019       | 0.1217       | 0            | 0            | 0            | 0            | 0.0033       | 0.0082       | 0            |
| 0.1619       | 0.1307       | 0.0213       | 0.1342       | 0.1068       | 0.0461       | 0.0602       | 0.1452       | 0.0138       | 0.0908       | 0.0626       | 0.0028       | 0            | 0            | 0            | 0.001        | 0            | 0            |
| 0.0082       | 0.0271       | 0.004        | 0            | 0.0017       | 0            | 0.0015       | 0.0009       | 0            | 0.1035       | 0.2429       | 0.0204       | 0            | 0            | 0.0046       | 0.0338       | 0            | 0.0011       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0015       | 0.6734       | 0            | 0            | 0            | 0.0219       |
| 0.0025       | #####        | 0            | 0.0017       | 0.0011       | 0            | 0.0021       | 0.0008       | 0.0029       | 0.439        | 0            | 0            | 0.0006       | 0.0019       | 0.0035       | 0.5234       | 0.0049       | 0.0025       |
| 0.0631       | 0.0015       | 0.2985       | 0.0029       | 0.0805       | 0.0011       | 0            | 0            | 0.1142       | 0            | 0            | 0            | 0.002        | 0.0033       | 0.003        | 0.1103       | 0            | 0            |
| 0.0105       | 0.0006       | 0            | 0.0014       | 0            | 0.0033       | 0.0022       | 0.973        | 0.0026       | 0.0017       | 0.0028       | 0.0016       | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0042       | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.003        | 0            |
| 0            | #####        | 0            | 0.001        | 0.0075       | 0            | 0            | #####        | 0            | 0            | 0            | 0.001        | 0            | 0            | 0            | 0.0022       | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0041       | 0            | 0            | 0            | 0.0005       | 0            | #####        | 0.0896       | 0.0117       | 0.0022       | 0            | 0            | 0            | 0            | 0.0019       | 0            | #####        |
| 0.0009       | 0.0005       | 0.0009       | 0            | 0.004        | 0.0004       | 0            | 0            | 0.0004       | 0            | 0            | 0.0006       | 0            | 0            | 0            | 0.0036       | 0            | #####        |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0243       | 0.0049       | 0.0036       | 0.0094       | 0.0532       | 0.0032       | 0.0019       | 0.0067       | 0.0154       | 0.0114       | 0.0191       | 0.0009       | 0.0162       | 0            | 0            | 0.0001       | 0.001        | 0.003        |
| 0            | 0            | 0.0019       | 0            | 0.0004       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0065       | 0.0008       | 0            | 0.2054       | 0.001        | #####        |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0001       | 0            | 0            | 0            | 0            | 0            |
| 0.0019       | 0.0003       | 0.0016       | 0.0009       | 0.0065       | 0.0005       | 0            | 0.0003       | 0.0005       | 0.0021       | 0.0004       | 0.0009       | 0.0135       | 0.0003       | 0.0011       | 0.0021       | 0.0009       | 0.0042       |
| 0.1481       | 0.0773       | 0.0042       | 0.2368       | 0.0803       | 0.012        | 0.1183       | 0.1238       | 0.0169       | 0.1097       | 0.0687       | 0.0014       | 8E-05        | 0.0004       | 0.0004       | 0.0003       | 0            | 0.0002       |
| 0.0284       | 0.2567       | 0.0087       | 0.0485       | 0.0447       | 0.2996       | 0.0224       | 0.0766       | 0.006        | 0.0007       | 0.1945       | 0.001        | 0.0001       | 0.0002       | 0.0003       | 0.0038       | 0.0019       | 0.0002       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 5E-05        | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 6E-05        | 0            | 6E-05        |
| 0            | 0            | 0.0002       | 0            | 0            | 6E-05        | 0            | 0            | 0            | 0            | 0            | 0.0001       | 0.0001       | 0.0001       | 0            | 0.0236       | 0            | 6E-05        |
| 0.0004       | 0.043        | 0.0003       | 0.0009       | 0.0148       | 0.0028       | 5E-05        | 0.0001       | 0.0002       | 0            | 1E-04        | 0.0002       | 0            | 0            | 0            | 0.0007       | 0            | 0            |
| 0.0002       | 0            | 0.0021       | 6E-05        | 0.0009       | 9E-05        | 0.0059       | 0.0001       | 0            | 0.0002       | 0            | 0            | 0.0011       | 0.3153       | 0.0034       | 0.0014       | 0.0058       | 0.3665       |
| 0            | 0.0001       | 0.0004       | 0            | 0            | 0            | 0.0002       | 0            | 0            | 0            | 0            | 0            | 0            | 0.0005       | 0            | 0            | 0            | #####        |
| 0.0002       | 0            | 0.0001       | 0            | 5E-05        | 0.0001       | 0            | 0            | 0.0002       | 0            | 0            | 0            | 0.0002       | 0            | 0            | 0.004        | 0.001        | #####        |
| 0            | 0            | 0            | 8E-05        | 0.0001       | 0.0002       | 0            | 0            | 0.0001       | 0            | 0            | 5E-05        | 9E-05        | 0.0001       | 0.0005       | 4E-05        | 0.1232       | 0.0001       |
| 0.133        | 0.0852       | 0.0034       | 0.2197       | 0.0537       | 0.0116       | 0.1538       | 0.1465       | 0.0121       | 0.0733       | 0.0599       | 0.0016       | 0.0001       | 0.0003       | 0.0008       | 0.0001       | 0.0007       | 7E-05        |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 2E-05        | 0            | 0            | 2E-05        | 0            | 0            | 4E-05        | 0            | 0            | 0            | 0            |
| 0            | 9E-06        | 0            | 0            | 0            | 3E-05        | 1E-05        | 0            | 0            | 0            | 0            | 9E-05        | 0            | 2E-05        | 3E-05        | 7E-06        | 0            | 0            |

| COVID-19-047 | COVID-19-048 | COVID-19-049 | COVID-19-050 | COVID-19-051 | COVID-19-052 | COVID-19-054 | COVID-19-055 | COVID-19-057 | COVID-19-058 | COVID-19-061 | COVID-19-062 | COVID-19-063 | COVID-19-064 | COVID-19-065 | COVID-19-069 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.0251       | 0.0423       | 0            | 0.14         | 0            | 0.0189       | 0            | 0            | 0.0335       | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0444       | 0            | 0            | 0            | 0            | 0            | 0            | 0.0097       | 0            | 0            | 0            | 0.0102       | 0.0062       | 0.0136       | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | #####        | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.1187       | 0            | 0            | 0            | 0            | 0            | 0            | 0.0093       | 0            | 0            | 0            | 0            | 0.0149       | 0            | 0            |
| 0            | 0.0231       | 0            | 0            | 0            | 0            | 0            | 0            | #####        | 0            | 0            | 0            | 0            | 0            | 0.0099       | 0            |
| 0            | 0.0353       | 0            | 0.0059       | 0            | 0            | 0            | 0            | #####        | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.062        | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0037       |
| 0            | 0.0044       | 0            | 0            | 0            | 0.003        | 0            | 0            | 0            | 0.0038       | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0046       | 0            | 0            | 0            | 0            | 0            | 0.0013       | 0            | 0            | 0.0017       | 0.0279       | 0            | 0.0353       | 0            | 0.0287       |
| 0            | 0.0017       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0015       | 0.0021       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0667       | 0.0207       | 0            | 0.4264       |
| 0            | 0            | 0.0017       | 0.0033       | 0.0028       | 0.0018       | 0.0031       | 0.0016       | 0            | 0.2851       | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0013       | 0            | 0            | 0.0033       | 0.0015       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0013       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.3071       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0.0014       | 0            | 0            | 0            | 0            | 0.0005       | 0            | 0.0006       | 0.0006       | 0.0004       | 0.0021       | 0            | 0.0008       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0004       | 0.0006       | 0            | 0            | 0            | 0            | 0.0255       | 0            | 0            | 0.0126       | 0            | 0            | 0            | 0            | 0.0326       |
| 0.0009       | 0            | 0            | 0.0052       | 0.0003       | 0            | 0            | 0            | 0.0006       | 0.0008       | 0.0007       | 0.0018       | 0.0003       | 0.0035       | 0.0008       | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0002       | 0.0626       | 0            | 0.0001       | 0            | 0.0192       | 0            | 0            | 0.0008       | 0            | 0.0023       | 0.001        | 0.0002       | 0.0218       | 0.0003       | 0.0002       |
| 0.0004       | 0.003        | 0            | 0.0002       | 0            | 0            | 0.0001       | 0            | 0.0039       | 0.0007       | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0006       | 0.0119       | 0            | 0.0011       | 0.0002       | 0.001        | 0.0001       | 0            | 0.002        | 0.0005       | 0.0009       | 0.0007       | 0.0002       | 0.0148       | 0.0004       | 0.0003       |
| 0            | 0.0002       | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0018       | 0.0004       | 0            | 0            | 0.0001       | 0            | 0            | 8E-05        | 0            | 0            | 0            | 5E-05        | 0            | 0            | 0.0001       | 9E-05        |
| 0            | 0            | 0            | 0            | 0            | 0            | 6E-05        | 0            | 7E-05        | 9E-05        | 0            | 0            | 0            | 0            | 0            | 6E-05        |
| 0            | 0.0001       | 0            | 5E-05        | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0004       | 0            | 0            | 0            |
| 0            | 0            | 0            | 6E-05        | 0.0001       | 0.0311       | 0.0002       | 0.0111       | 0.5649       | 0.3262       | 0            | 0            | 0            | 2E-05        | 0            | 0.0003       |
| 0.0009       | 0.001        | 0.0061       | 0.0038       | 0.0026       | 0.0037       | 0.0041       | 0.0022       | 0.0004       | 0.2459       | 0.0004       | 0            | 9E-05        | 0.0004       | 0            | 0.0004       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 8E-05        | 0.0036       | 0.0189       | 6E-05        | 0            | 0            |
| 4E-05        | 0.001        | 6E-05        | 0            | 6E-05        | 0.0018       | 0.0005       | 0.0021       | 0.001        | 0.0003       | 0.0012       | 3E-05        | 3E-05        | 2E-05        | 4E-05        | 0            |
| 0.0234       | 3E-05        | 0            | 0            | 2E-05        | 0            | 0            | 2E-05        | 0            | 0            | 0.0008       | 0.0421       | 0.1258       | 0            | 0.1898       | 0            |
| 0            | 0.0001       | 0            | 4E-05        | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 2E-05        | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 6E-05        | 3E-05        | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 8E-06        | 0            | 0.0015       | 0            | 0.0092       |

**Supplementary Table S6. The detailed values of oral fungal  $\alpha$ -diversity index**

| sample     | reads | label | ace        | chao       | shannon  | simpson  | coverage | observed_otus | Subgroup |
|------------|-------|-------|------------|------------|----------|----------|----------|---------------|----------|
| Control001 | 1161  | 0.97  | 177.997272 | 94.428571  | 1.767396 | 0.30397  | 0.972438 | 59            | Control  |
| Control097 | 1161  | 0.97  | 137.666851 | 96.2       | 2.580427 | 0.133773 | 0.981051 | 50            | Control  |
| Control096 | 1161  | 0.97  | 178.409985 | 162.12     | 3.374096 | 0.06289  | 0.958656 | 117           | Control  |
| Control095 | 1161  | 0.97  | 206.637282 | 147.375    | 2.928213 | 0.0952   | 0.969854 | 73            | Control  |
| Control094 | 1161  | 0.97  | 77.946138  | 72.909091  | 2.772583 | 0.115293 | 0.984496 | 59            | Control  |
| Control093 | 1161  | 0.97  | 137.847812 | 83         | 0.271306 | 0.922439 | 0.986219 | 23            | Control  |
| Control092 | 1161  | 0.97  | 139.985502 | 98         | 2.471787 | 0.123441 | 0.979328 | 52            | Control  |
| Control091 | 1161  | 0.97  | 152.307424 | 101.071429 | 2.443229 | 0.188255 | 0.97416  | 70            | Control  |
| Control090 | 1161  | 0.97  | 257.490748 | 177.045455 | 3.162196 | 0.079683 | 0.953488 | 112           | Control  |
| Control089 | 1161  | 0.97  | 73.537462  | 79.666667  | 1.687042 | 0.404479 | 0.982773 | 48            | Control  |
| Control088 | 1161  | 0.97  | 120.286762 | 67.5       | 1.389625 | 0.488166 | 0.983635 | 39            | Control  |
| Control087 | 1161  | 0.97  | 126.962117 | 84.1       | 2.696581 | 0.145929 | 0.981051 | 61            | Control  |
| Control086 | 1161  | 0.97  | 103.938776 | 95         | 2.012645 | 0.213327 | 0.978467 | 45            | Control  |
| Control085 | 1161  | 0.97  | 292.997627 | 237.896552 | 3.458815 | 0.087888 | 0.940568 | 157           | Control  |
| Control084 | 1161  | 0.97  | 256.064431 | 92.333333  | 1.034312 | 0.497006 | 0.982773 | 29            | Control  |
| Control083 | 1161  | 0.97  | 250.497894 | 227.25     | 3.419134 | 0.098505 | 0.951766 | 131           | Control  |
| Control082 | 1161  | 0.97  | 178.079118 | 167.935484 | 2.922534 | 0.19167  | 0.957795 | 130           | Control  |
| Control081 | 1161  | 0.97  | 97.82309   | 86         | 2.205264 | 0.261154 | 0.981912 | 56            | Control  |
| Control080 | 1161  | 0.97  | 89.510452  | 92.25      | 3.022942 | 0.078344 | 0.981912 | 66            | Control  |
| Control079 | 1161  | 0.97  | 226.686252 | 168.666667 | 2.591343 | 0.189894 | 0.965547 | 82            | Control  |
| Control078 | 1161  | 0.97  | 147.722023 | 96.625     | 1.951543 | 0.349036 | 0.977606 | 56            | Control  |
| Control077 | 1161  | 0.97  | 141.235226 | 135.058824 | 3.158188 | 0.100824 | 0.968992 | 98            | Control  |
| Control076 | 1161  | 0.97  | 36.774656  | 35         | 1.751404 | 0.322276 | 0.993109 | 28            | Control  |
| Control075 | 1161  | 0.97  | 71.701698  | 56.6       | 2.510962 | 0.142266 | 0.988803 | 41            | Control  |
| Control074 | 1161  | 0.97  | 41.042707  | 38         | 2.182768 | 0.219415 | 0.993971 | 35            | Control  |
| Control073 | 1161  | 0.97  | 55.89319   | 54         | 1.683156 | 0.311148 | 0.989664 | 32            | Control  |
| Control072 | 1161  | 0.97  | 63.251698  | 71.25      | 2.427898 | 0.147477 | 0.98708  | 45            | Control  |
| Control071 | 1161  | 0.97  | 182.490922 | 149.375    | 2.552403 | 0.169763 | 0.969854 | 75            | Control  |
| Control070 | 1161  | 0.97  | 107.671029 | 79.666667  | 2.272615 | 0.191708 | 0.981051 | 54            | Control  |
| Control069 | 1161  | 0.97  | 157.723771 | 152.272727 | 2.690339 | 0.103313 | 0.963824 | 74            | Control  |
| Control098 | 1161  | 0.97  | 211.253769 | 154.875    | 2.178837 | 0.292463 | 0.96124  | 93            | Control  |
| Control099 | 1161  | 0.97  | 154.673251 | 140.12     | 3.219959 | 0.112961 | 0.96727  | 112           | Control  |
| Control100 | 1161  | 0.97  | 113.667758 | 95.083333  | 3.16343  | 0.074337 | 0.980189 | 74            | Control  |
| Control101 | 1161  | 0.97  | 102.438804 | 76         | 2.797279 | 0.103325 | 0.983635 | 57            | Control  |
| Control132 | 1161  | 0.97  | 176.845816 | 137        | 1.084853 | 0.664035 | 0.968131 | 63            | Control  |
| Control131 | 1161  | 0.97  | 72.521783  | 71.5       | 2.394603 | 0.156644 | 0.984496 | 46            | Control  |
| Control130 | 1161  | 0.97  | 199.474053 | 165.75     | 2.285088 | 0.207982 | 0.97416  | 57            | Control  |
| Control129 | 1161  | 0.97  | 97.55556   | 72.090909  | 2.180812 | 0.198816 | 0.981912 | 53            | Control  |
| Control128 | 1161  | 0.97  | 114.951615 | 69.1       | 1.902713 | 0.231159 | 0.981051 | 46            | Control  |
| Control127 | 1161  | 0.97  | 67.283243  | 65         | 0.385624 | 0.896084 | 0.981912 | 35            | Control  |
| Control126 | 1161  | 0.97  | 165.315906 | 138.866667 | 2.48526  | 0.220617 | 0.96727  | 92            | Control  |
| Control125 | 1161  | 0.97  | 80.126864  | 79.6       | 1.489677 | 0.480916 | 0.979328 | 52            | Control  |
| Control124 | 1161  | 0.97  | 206.159832 | 140.6      | 2.435497 | 0.189716 | 0.968131 | 74            | Control  |
| Control123 | 1161  | 0.97  | 87.682168  | 115.2      | 0.984722 | 0.626667 | 0.976744 | 45            | Control  |
| Control122 | 1161  | 0.97  | 97.616243  | 72         | 2.562433 | 0.111701 | 0.982773 | 53            | Control  |
| Control121 | 1161  | 0.97  | 67.387778  | 72.75      | 0.359458 | 0.899413 | 0.983635 | 30            | Control  |
| Control120 | 1161  | 0.97  | 182.419281 | 113.75     | 2.586502 | 0.14757  | 0.975022 | 63            | Control  |
| Control119 | 1161  | 0.97  | 138.559826 | 98         | 1.665967 | 0.427619 | 0.976744 | 59            | Control  |
| Control068 | 1161  | 0.97  | 96.087629  | 88.333333  | 1.758392 | 0.391339 | 0.985357 | 43            | Control  |
| Control118 | 1161  | 0.97  | 90.577774  | 87.428571  | 2.219891 | 0.220958 | 0.978467 | 66            | Control  |
| Control116 | 1161  | 0.97  | 75.814498  | 77.5       | 2.318262 | 0.240947 | 0.984496 | 52            | Control  |
| Control115 | 1161  | 0.97  | 60.032739  | 54         | 1.583295 | 0.42197  | 0.98708  | 39            | Control  |
| Control114 | 1161  | 0.97  | 610.137824 | 310.473684 | 2.025692 | 0.42142  | 0.927649 | 127           | Control  |
| Control113 | 1161  | 0.97  | 156.795172 | 122.142857 | 1.88887  | 0.329628 | 0.97416  | 60            | Control  |
| Control112 | 1161  | 0.97  | 89.015108  | 84         | 2.830503 | 0.086192 | 0.980189 | 61            | Control  |
| Control111 | 1161  | 0.97  | 123.767447 | 94.2       | 2.387957 | 0.136805 | 0.981051 | 48            | Control  |

|            |      |      |            |            |          |          |          |     |         |
|------------|------|------|------------|------------|----------|----------|----------|-----|---------|
| Control110 | 1161 | 0.97 | 196.456922 | 139.235294 | 2.881161 | 0.114993 | 0.964686 | 91  | Control |
| Control109 | 1161 | 0.97 | 332.296971 | 116.5      | 1.401353 | 0.468256 | 0.983635 | 31  | Control |
| Control108 | 1161 | 0.97 | 373.92205  | 272.433333 | 3.273436 | 0.091161 | 0.92851  | 159 | Control |
| Control107 | 1161 | 0.97 | 106.20442  | 97.5       | 2.49073  | 0.138103 | 0.982773 | 50  | Control |
| Control106 | 1161 | 0.97 | 152.323888 | 182        | 2.749048 | 0.129735 | 0.962102 | 96  | Control |
| Control105 | 1161 | 0.97 | 111.040825 | 86.25      | 3.036538 | 0.073136 | 0.981912 | 60  | Control |
| Control104 | 1161 | 0.97 | 682.365975 | 398.037037 | 2.834972 | 0.234671 | 0.905254 | 176 | Control |
| Control103 | 1161 | 0.97 | 103.127162 | 102.6      | 1.951251 | 0.26949  | 0.980189 | 52  | Control |
| Control117 | 1161 | 0.97 | 70.174464  | 62.363636  | 2.165975 | 0.238344 | 0.985357 | 50  | Control |
| Control067 | 1161 | 0.97 | 147.801943 | 140.2      | 1.813566 | 0.381645 | 0.975022 | 59  | Control |
| Control102 | 1161 | 0.97 | 226.802311 | 132        | 1.431463 | 0.46194  | 0.96124  | 77  | Control |
| Control065 | 1161 | 0.97 | 241.825829 | 167.625    | 2.551312 | 0.145116 | 0.966408 | 75  | Control |
| Control030 | 1161 | 0.97 | 156.4265   | 221.5      | 2.599654 | 0.128893 | 0.963824 | 78  | Control |
| Control029 | 1161 | 0.97 | 106.184557 | 88         | 2.890661 | 0.076768 | 0.981912 | 53  | Control |
| Control028 | 1161 | 0.97 | 250.715284 | 204.035714 | 3.603339 | 0.063906 | 0.950043 | 145 | Control |
| Control027 | 1161 | 0.97 | 461.362636 | 379.24     | 4.056134 | 0.047697 | 0.916451 | 193 | Control |
| Control026 | 1161 | 0.97 | 132.573564 | 89.666667  | 2.88151  | 0.089767 | 0.979328 | 59  | Control |
| Control025 | 1161 | 0.97 | 133.132313 | 62.2       | 1.842743 | 0.2628   | 0.985357 | 35  | Control |
| Control024 | 1161 | 0.97 | 346.557825 | 136.8125   | 2.885238 | 0.123646 | 0.963824 | 83  | Control |
| Control023 | 1161 | 0.97 | 199.826896 | 119        | 1.541679 | 0.458064 | 0.972438 | 57  | Control |
| Control022 | 1161 | 0.97 | 171.700977 | 98         | 1.651188 | 0.419121 | 0.975883 | 56  | Control |
| Control021 | 1161 | 0.97 | 63.543488  | 62.142857  | 2.592412 | 0.154108 | 0.988803 | 51  | Control |
| Control019 | 1161 | 0.97 | 114.043134 | 119        | 3.158632 | 0.075746 | 0.979328 | 73  | Control |
| Control018 | 1161 | 0.97 | 129.086128 | 122        | 2.870741 | 0.151686 | 0.971576 | 89  | Control |
| Control017 | 1161 | 0.97 | 229.172201 | 98         | 1.326716 | 0.397766 | 0.975883 | 44  | Control |
| Control016 | 1161 | 0.97 | 185.644686 | 223.333333 | 2.447286 | 0.131725 | 0.972438 | 58  | Control |
| Control015 | 1161 | 0.97 | 278.873177 | 228.666667 | 3.134304 | 0.147931 | 0.944014 | 142 | Control |
| Control014 | 1161 | 0.97 | 189.114359 | 144.2      | 2.815957 | 0.10165  | 0.975022 | 63  | Control |
| Control013 | 1161 | 0.97 | 268.306557 | 228.3125   | 3.314455 | 0.106653 | 0.950043 | 125 | Control |
| Control012 | 1161 | 0.97 | 302.056335 | 222.071429 | 2.179614 | 0.260891 | 0.950043 | 104 | Control |
| Control011 | 1161 | 0.97 | 196.243984 | 122.8      | 2.698382 | 0.11555  | 0.971576 | 70  | Control |
| Control010 | 1161 | 0.97 | 307.407096 | 183        | 3.35518  | 0.059498 | 0.96124  | 93  | Control |
| Control009 | 1161 | 0.97 | 200.045282 | 99.75      | 1.526234 | 0.376948 | 0.975022 | 49  | Control |
| Control008 | 1161 | 0.97 | 92.614325  | 67.25      | 1.099694 | 0.420936 | 0.984496 | 29  | Control |
| Control007 | 1161 | 0.97 | 204.293264 | 154        | 2.429498 | 0.233694 | 0.959518 | 107 | Control |
| Control006 | 1161 | 0.97 | 183.199277 | 132.461538 | 2.823661 | 0.139974 | 0.968992 | 84  | Control |
| Control005 | 1161 | 0.97 | 154.664984 | 133.111111 | 2.727948 | 0.138568 | 0.972438 | 78  | Control |
| Control004 | 1161 | 0.97 | 245.659438 | 167.2      | 0.911305 | 0.729502 | 0.970715 | 55  | Control |
| Control003 | 1161 | 0.97 | 200.515224 | 164.666667 | 1.836512 | 0.428431 | 0.965547 | 78  | Control |
| Control002 | 1161 | 0.97 | 378.782573 | 227        | 2.191876 | 0.353077 | 0.939707 | 122 | Control |
| Control066 | 1161 | 0.97 | 198.236722 | 180        | 3.079379 | 0.126982 | 0.953488 | 127 | Control |
| Control031 | 1161 | 0.97 | 153.015447 | 149.333333 | 3.335041 | 0.076395 | 0.965547 | 106 | Control |
| Control032 | 1161 | 0.97 | 141.290336 | 118.909091 | 3.311081 | 0.058579 | 0.975022 | 82  | Control |
| Control020 | 1161 | 0.97 | 138.905418 | 91.428571  | 0.747475 | 0.7634   | 0.977606 | 45  | Control |
| Control034 | 1161 | 0.97 | 109.55903  | 97.166667  | 2.380188 | 0.160608 | 0.980189 | 55  | Control |
| Control051 | 1161 | 0.97 | 177.038291 | 113.5      | 1.80514  | 0.420458 | 0.969854 | 71  | Control |
| Control052 | 1161 | 0.97 | 168.87007  | 102.333333 | 2.074063 | 0.223672 | 0.972438 | 61  | Control |
| Control053 | 1161 | 0.97 | 195.346513 | 159        | 1.86382  | 0.447339 | 0.965547 | 81  | Control |
| Control054 | 1161 | 0.97 | 130.592023 | 101.857143 | 2.322021 | 0.196342 | 0.978467 | 59  | Control |
| Control055 | 1161 | 0.97 | 149.302086 | 151.4      | 2.902043 | 0.108971 | 0.963824 | 94  | Control |
| Control056 | 1161 | 0.97 | 285.706879 | 195.333333 | 3.662793 | 0.03446  | 0.962963 | 95  | Control |
| Control050 | 1161 | 0.97 | 200.368186 | 199.055556 | 1.723382 | 0.49828  | 0.949182 | 104 | Control |
| Control057 | 1161 | 0.97 | 175.470426 | 98.625     | 2.640645 | 0.133016 | 0.977606 | 58  | Control |
| Control059 | 1161 | 0.97 | 165.531759 | 136        | 3.267342 | 0.081162 | 0.971576 | 88  | Control |
| Control060 | 1161 | 0.97 | 165.55496  | 139.428571 | 2.411592 | 0.149719 | 0.971576 | 64  | Control |
| Control033 | 1161 | 0.97 | 236.142838 | 209.315789 | 3.567941 | 0.069534 | 0.953488 | 134 | Control |
| Control062 | 1161 | 0.97 | 195.748629 | 151.117647 | 3.027117 | 0.107805 | 0.962963 | 98  | Control |
| Control063 | 1161 | 0.97 | 174.171798 | 148.583333 | 3.164894 | 0.073661 | 0.96727  | 90  | Control |

|            |      |      |            |            |          |          |          |     |            |
|------------|------|------|------------|------------|----------|----------|----------|-----|------------|
| Control064 | 1161 | 0.97 | 231.205168 | 114.8      | 2.178124 | 0.247257 | 0.971576 | 62  | Control    |
| Control058 | 1161 | 0.97 | 82.868001  | 72.857143  | 2.11927  | 0.252051 | 0.984496 | 51  | Control    |
| Control049 | 1161 | 0.97 | 272.137619 | 219.142857 | 3.212013 | 0.108676 | 0.947459 | 132 | Control    |
| Control061 | 1161 | 0.97 | 225.268676 | 234.125    | 2.829556 | 0.137077 | 0.959518 | 99  | Control    |
| Control047 | 1161 | 0.97 | 210.930062 | 141.75     | 2.774164 | 0.131168 | 0.966408 | 80  | Control    |
| Control048 | 1161 | 0.97 | 129.307083 | 93         | 2.184379 | 0.27445  | 0.976744 | 66  | Control    |
| Control036 | 1161 | 0.97 | 99.407298  | 69.111111  | 2.458787 | 0.121642 | 0.982773 | 48  | Control    |
| Control037 | 1161 | 0.97 | 91.568196  | 54.3       | 1.064402 | 0.619386 | 0.984496 | 39  | Control    |
| Control038 | 1161 | 0.97 | 142.686778 | 105.1      | 2.829536 | 0.124422 | 0.976744 | 70  | Control    |
| Control039 | 1161 | 0.97 | 205.686318 | 153        | 2.045832 | 0.41296  | 0.965547 | 88  | Control    |
| Control040 | 1161 | 0.97 | 117.461298 | 112.615385 | 1.851581 | 0.369993 | 0.971576 | 72  | Control    |
| Control035 | 1161 | 0.97 | 291.621806 | 222        | 2.609647 | 0.310248 | 0.944014 | 142 | Control    |
| Control042 | 1161 | 0.97 | 225.877276 | 183.142857 | 3.184155 | 0.093588 | 0.955211 | 120 | Control    |
| Control043 | 1161 | 0.97 | 170.892434 | 89.909091  | 0.94206  | 0.704604 | 0.975022 | 53  | Control    |
| Control044 | 1161 | 0.97 | 168.277257 | 168.473684 | 3.268661 | 0.075702 | 0.960379 | 114 | Control    |
| Control045 | 1161 | 0.97 | 351.799689 | 254.066667 | 3.489481 | 0.075347 | 0.946598 | 128 | Control    |
| Control046 | 1161 | 0.97 | 115.734121 | 109.25     | 3.014629 | 0.078958 | 0.97416  | 73  | Control    |
| Control041 | 1161 | 0.97 | 204.134584 | 137.333333 | 2.846813 | 0.114629 | 0.970715 | 75  | Control    |
| CC054      | 1161 | 0.97 | 33.936017  | 30.25      | 0.31763  | 0.896694 | 0.991387 | 19  | COVID-19-N |
| CC053      | 1161 | 0.97 | 206.513438 | 174.875    | 3.017554 | 0.115036 | 0.96727  | 87  | COVID-19-N |
| CC052      | 1161 | 0.97 | 128.50878  | 99         | 1.650383 | 0.469497 | 0.976744 | 60  | COVID-19-N |
| CC050      | 1161 | 0.97 | 316.391581 | 212.545455 | 2.770248 | 0.123633 | 0.955211 | 92  | COVID-19-N |
| CC049      | 1161 | 0.97 | 848.249242 | 157        | 0.331303 | 0.885793 | 0.985357 | 21  | COVID-19-N |
| CC047      | 1161 | 0.97 | 101.777416 | 85.5       | 1.508825 | 0.448113 | 0.981051 | 47  | COVID-19-N |
| CC046      | 1161 | 0.97 | 139.489599 | 118.214286 | 1.779718 | 0.335989 | 0.96727  | 68  | COVID-19-N |
| CC045      | 1161 | 0.97 | 184.473842 | 124.333333 | 2.1401   | 0.206212 | 0.970715 | 62  | COVID-19-N |
| CC044      | 1161 | 0.97 | 613.555391 | 374.588235 | 2.374443 | 0.333259 | 0.922481 | 139 | COVID-19-N |
| CC055      | 1161 | 0.97 | 89.077493  | 59.857143  | 1.117057 | 0.614781 | 0.984496 | 38  | COVID-19-N |
| CC043      | 1161 | 0.97 | 268.371365 | 234.55     | 3.66058  | 0.050965 | 0.946598 | 140 | COVID-19-N |
| CC048      | 1161 | 0.97 | 531.467374 | 339.125    | 2.70861  | 0.264882 | 0.919035 | 157 | COVID-19-N |
| CC056      | 1161 | 0.97 | 195.426883 | 147.571429 | 2.466214 | 0.205444 | 0.964686 | 89  | COVID-19-N |
| CC064      | 1161 | 0.97 | 277.61828  | 196.65     | 2.386726 | 0.310738 | 0.950043 | 114 | COVID-19-N |
| CC059      | 1161 | 0.97 | 333.901698 | 100        | 0.516028 | 0.824471 | 0.981912 | 30  | COVID-19-N |
| CC060      | 1161 | 0.97 | 462.156197 | 266        | 1.823761 | 0.319221 | 0.94832  | 89  | COVID-19-N |
| CC061      | 1161 | 0.97 | 94.610612  | 90.714286  | 2.937261 | 0.09463  | 0.979328 | 71  | COVID-19-N |
| CC062      | 1161 | 0.97 | 106.576254 | 104.4      | 3.32563  | 0.061818 | 0.979328 | 86  | COVID-19-N |
| CC063      | 1161 | 0.97 | 151.625555 | 147.428571 | 2.394678 | 0.197268 | 0.971576 | 72  | COVID-19-N |
| CC065      | 1161 | 0.97 | 372.916051 | 104        | 1.632065 | 0.333212 | 0.981912 | 34  | COVID-19-N |
| CC066      | 1161 | 0.97 | 164.047733 | 124.75     | 2.987428 | 0.127041 | 0.969854 | 95  | COVID-19-N |
| CC067      | 1161 | 0.97 | 51.730104  | 51         | 0.975967 | 0.565194 | 0.986219 | 27  | COVID-19-N |
| CC070      | 1161 | 0.97 | 43.715735  | 42.166667  | 2.042991 | 0.202291 | 0.990525 | 33  | COVID-19-N |
| CC068      | 1161 | 0.97 | 84.514889  | 71.666667  | 2.630853 | 0.119444 | 0.985357 | 49  | COVID-19-N |
| CC069      | 1161 | 0.97 | 102.670873 | 86.75      | 2.833069 | 0.129892 | 0.982773 | 63  | COVID-19-N |
| CC042      | 1161 | 0.97 | 86.238635  | 77         | 1.031194 | 0.592878 | 0.982773 | 39  | COVID-19-N |
| CC057      | 1161 | 0.97 | 301.417131 | 119.857143 | 0.928618 | 0.663082 | 0.972438 | 49  | COVID-19-N |
| CC041      | 1161 | 0.97 | 220.26437  | 114.666667 | 2.846907 | 0.08374  | 0.973299 | 63  | COVID-19-N |
| CC004      | 1161 | 0.97 | 53.104915  | 51.5       | 0.859756 | 0.706987 | 0.98708  | 34  | COVID-19-N |
| CC039      | 1161 | 0.97 | 718.616042 | 403.157895 | 2.685407 | 0.258907 | 0.91559  | 153 | COVID-19-N |
| CC002      | 1161 | 0.97 | 217.174298 | 128.75     | 1.124585 | 0.54092  | 0.976744 | 41  | COVID-19-N |
| CC003      | 1161 | 0.97 | 376.928122 | 254.111111 | 2.5696   | 0.279783 | 0.931955 | 140 | COVID-19-N |
| CC005      | 1161 | 0.97 | 416.045656 | 264.142857 | 2.974694 | 0.193126 | 0.937123 | 139 | COVID-19-N |
| CC006      | 1161 | 0.97 | 487.081935 | 306.105263 | 1.891302 | 0.465179 | 0.92851  | 127 | COVID-19-N |
| CC007      | 1161 | 0.97 | 451.622772 | 288.956522 | 2.312381 | 0.366585 | 0.92851  | 141 | COVID-19-N |
| CC040      | 1161 | 0.97 | 235.77996  | 103.25     | 1.556162 | 0.37698  | 0.980189 | 40  | COVID-19-N |
| CC011      | 1161 | 0.97 | 224.422011 | 216.115385 | 3.031965 | 0.197648 | 0.945736 | 141 | COVID-19-N |
| CC012      | 1161 | 0.97 | 152.157191 | 100        | 1.938388 | 0.384781 | 0.976744 | 61  | COVID-19-N |
| CC013      | 1161 | 0.97 | 419.519902 | 236.387097 | 2.602492 | 0.289792 | 0.933678 | 142 | COVID-19-N |
| CC015      | 1161 | 0.97 | 121.960285 | 124.0625   | 2.848519 | 0.103129 | 0.970715 | 89  | COVID-19-N |

|       |      |      |            |            |          |          |          |     |            |
|-------|------|------|------------|------------|----------|----------|----------|-----|------------|
| CC016 | 1161 | 0.97 | 270.579709 | 199.103448 | 2.594603 | 0.299152 | 0.947459 | 136 | COVID-19-N |
| CC017 | 1161 | 0.97 | 218.41396  | 150.5      | 2.890446 | 0.123193 | 0.96124  | 101 | COVID-19-N |
| CC010 | 1161 | 0.97 | 427.255455 | 318.789474 | 2.524395 | 0.316374 | 0.929371 | 144 | COVID-19-N |
| CC019 | 1161 | 0.97 | 466.168334 | 235.894737 | 2.568414 | 0.221655 | 0.94143  | 116 | COVID-19-N |
| CC018 | 1161 | 0.97 | 500.968322 | 283        | 2.710498 | 0.273871 | 0.925065 | 154 | COVID-19-N |
| CC038 | 1161 | 0.97 | 387.82118  | 269        | 2.398014 | 0.332885 | 0.933678 | 136 | COVID-19-N |
| CC036 | 1161 | 0.97 | 219.751529 | 153.8125   | 3.357808 | 0.065045 | 0.963824 | 100 | COVID-19-N |
| CC032 | 1161 | 0.97 | 162.833334 | 128.090909 | 3.05133  | 0.100125 | 0.972438 | 83  | COVID-19-N |
| CC030 | 1161 | 0.97 | 176.953146 | 144.111111 | 2.456564 | 0.235057 | 0.969854 | 78  | COVID-19-N |
| CC034 | 1161 | 0.97 | 107.938782 | 134        | 1.852562 | 0.378338 | 0.971576 | 68  | COVID-19-N |
| CC028 | 1161 | 0.97 | 235.052693 | 176.5      | 1.834912 | 0.36759  | 0.964686 | 74  | COVID-19-N |
| CC027 | 1161 | 0.97 | 191.150007 | 177.357143 | 3.0825   | 0.138241 | 0.955211 | 130 | COVID-19-N |
| CC024 | 1161 | 0.97 | 130.767842 | 145.583333 | 3.022738 | 0.116359 | 0.969854 | 96  | COVID-19-N |
| CC023 | 1161 | 0.97 | 324.443953 | 214.12     | 2.604299 | 0.210568 | 0.94143  | 123 | COVID-19-N |
| CC021 | 1161 | 0.97 | 172.474607 | 154.4      | 3.199116 | 0.09717  | 0.966408 | 105 | COVID-19-N |
| CC029 | 1161 | 0.97 | 103.245946 | 102.25     | 2.419849 | 0.236817 | 0.976744 | 73  | COVID-19-N |
| CC001 | 1161 | 0.97 | 203.569711 | 162.105263 | 3.217839 | 0.091982 | 0.96124  | 110 | COVID-19-C |
| CC051 | 1161 | 0.97 | 187.602734 | 209.5625   | 3.660507 | 0.062593 | 0.956934 | 133 | COVID-19-C |
| CC037 | 1161 | 0.97 | 272.802393 | 205.8      | 3.553794 | 0.063068 | 0.94832  | 135 | COVID-19-C |
| CC035 | 1161 | 0.97 | 241.82044  | 162        | 3.080292 | 0.092937 | 0.957795 | 106 | COVID-19-C |
| CC033 | 1161 | 0.97 | 200.048146 | 222.352941 | 3.538085 | 0.068903 | 0.952627 | 135 | COVID-19-C |
| CC031 | 1161 | 0.97 | 209.395477 | 202.545455 | 3.587085 | 0.055074 | 0.950904 | 130 | COVID-19-C |
| CC008 | 1161 | 0.97 | 386.676842 | 278.4      | 2.930965 | 0.138677 | 0.940568 | 122 | COVID-19-C |
| CC025 | 1161 | 0.97 | 210.754853 | 220.333333 | 3.04407  | 0.111144 | 0.94832  | 122 | COVID-19-C |
| CC022 | 1161 | 0.97 | 166.126034 | 168        | 2.991241 | 0.111667 | 0.971576 | 80  | COVID-19-C |
| CC020 | 1161 | 0.97 | 96.967943  | 70.666667  | 2.671143 | 0.122271 | 0.985357 | 48  | COVID-19-C |
| CC014 | 1161 | 0.97 | 451.441662 | 337.75     | 2.865736 | 0.240612 | 0.925926 | 155 | COVID-19-C |
| CC009 | 1161 | 0.97 | 494.725222 | 319.5      | 2.761421 | 0.276614 | 0.921619 | 162 | COVID-19-C |
| CC058 | 1161 | 0.97 | 33.207015  | 32         | 1.222445 | 0.401215 | 0.992248 | 26  | COVID-19-C |
| CC026 | 1161 | 0.97 | 163.484216 | 118.230769 | 1.353496 | 0.520929 | 0.968131 | 67  | COVID-19-C |
| CC071 | 1161 | 0.97 | 94.584173  | 82.5       | 2.404128 | 0.179839 | 0.983635 | 54  | COVID-19-C |

| Supplementary Table S7. The different degree of phylum level (p value) among control (n=132), COVID-19-N (n=56), and COVID-19-C (n=15) groups |                             |                  |                |                             |                   |                 |                             |                         |                   |          |             |                  |         |         |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------|----------------|-----------------------------|-------------------|-----------------|-----------------------------|-------------------------|-------------------|----------|-------------|------------------|---------|---------|------------|
| ID                                                                                                                                            | Control.med<br>an           | Control.m<br>ean | Control.s<br>e | COVID-<br>19.median         | COVID-<br>19.mean | COVID-<br>19.se | COVID-19-<br>C.median       | COVID-<br>19-<br>C.mean | COVID-<br>19-C.se | p-value  | z-<br>score | Sig<br>_ma<br>rk | q-value | fixp    | fixps      |
| Ascomycota                                                                                                                                    | 0.8321(0.687<br>8,0.9221)   | 0.761667         | 0.01934        | 0.9334(0.8501,<br>0.9633)   | 0.890036          | 0.015805        | 0.9283(0.888<br>7,0.9553)   | 0.87461                 | 0.04144           | 6.6E-06  | -4.51       | ***              | 4E-05   | <0.0001 | ***<0.0001 |
| Basidiomycota                                                                                                                                 | 0.1025(0.032<br>5,0.2375)   | 0.173363         | 0.01723        | 0.0388(0.0103,<br>0.1147)   | 0.078534          | 0.014131        | 0.0422(0.024<br>7,0.0932)   | 0.10749                 | 0.04068           | 0.00019  | -3.73       | ***              | 0.0006  | 0.0002  | ***0.0002  |
| Mucoromycota                                                                                                                                  | 0.002(0.0007<br>0.0146)     | 0.029713         | 0.00983        | 0.0009(0.0002,<br>0.0032)   | 0.005506          | 0.001596        | 0.0008(0.0001,<br>0.0023)   | 0.00294                 | 0.00128           | 0.00366  | -2.91       | **               | 0.0073  | 0.0037  | ** 0.0037  |
| Rozellomycota                                                                                                                                 | <0.0001(<0.0001,<br>0.0001) | 7.11E-04         | 6.33E-04       | <0.0001(<0.0001,<br>0.0001) | 0.000267          | 0.000264        | <0.0001(<0.0001,<br>0.0001) | 0                       | 0                 | 9.47E-02 | -1.67       |                  | 0.1136  | 0.0947  | 0.0947     |
| Chytridiomycota                                                                                                                               | <0.0001(<0.0001,<br>0.0001) | 0.000122         | 6.09E-05       | <0.0001(<0.0001,<br>0.0001) | 0.001203          | 0.000629        | <0.0001(<0.0001,<br>0.0001) | 0.00023                 | 0.00022           | 0.00843  | -2.63       | **               | 0.0126  | 0.0084  | ** 0.0084  |
| Zoopagomycota                                                                                                                                 | <0.0001(<0.0001,<br>0.0001) | 3.25E-05         | 2.13E-05       | <0.0001(<0.0001,<br>0.0001) | 1.18E-05          | 6.52E-06        | <0.0001(<0.0001,<br>0.0001) | 0                       | 0                 | 0.32876  | -0.98       |                  | 0.3288  | 0.3288  | 0.3288     |
| Supplementary Table S7. The different degree of genus level (p value) among control (n=132), COVID-19-N (n=56), and COVID-19-C (n=15) groups  |                             |                  |                |                             |                   |                 |                             |                         |                   |          |             |                  |         |         |            |
| ID                                                                                                                                            | Control.med<br>an           | Control.m<br>ean | Control.s<br>e | COVID-<br>19.median         | COVID-<br>19.mean | COVID-<br>19.se | COVID-19-<br>C.median       | COVID-<br>19-<br>C.mean | COVID-<br>19-C.se | p-value  | z-<br>score | Sig<br>_ma<br>rk | q-value | fixp    | fixps      |
| Acrodictys                                                                                                                                    | 0.0341(0.0091,<br>0.3007)   | 0.182386         | 0.02101        | 0.1043(0.0181,<br>0.6448)   | 2.95E-01          | 4.25E-02        | 0.0775(0.0294,<br>0.1452)   | 0.19051                 | 0.07115           | 6.03E-02 | -1.88       |                  | 0.1649  | 0.0603  | 0.0603     |
| Zanclospora                                                                                                                                   | 0.0732(0.0146,<br>0.3212)   | 0.219291         | 0.02397        | 0.0179(0.0067,<br>0.0827)   | 0.147946          | 0.037686        | 0.014(0.0087,<br>0.0561)    | 0.0578                  | 0.02297           | 0.00121  | -3.24       | **               | 0.0098  | 0.0012  | ** 0.0012  |
| Aspergillus                                                                                                                                   | 0.0177(0.0048,<br>0.089)    | 0.084935         | 0.01325        | 0.0207(0.0062,<br>0.0629)   | 8.51E-02          | 2.52E-02        | 0.0652(0.018,<br>0.1176)    | 0.10379                 | 0.03261           | 0.30746  | -1.02       |                  | 0.4634  | 0.3075  | 0.3075     |
| Blumeria                                                                                                                                      | 0.0016(0.0006,<br>0.0102)   | 0.045477         | 0.0103         | 0.0008(0.0002,<br>0.0035)   | 0.022175          | 0.013184        | 0.0102(0.0016,<br>0.02573)  | 0.12993                 | 0.04323           | 0.00151  | -3.17       | **               | 0.0108  | 0.0015  | ** 0.0015  |
| Cryptococcus                                                                                                                                  | 0.0163(0.0020,<br>0.0547)   | 0.062697         | 0.01085        | <0.0001(<0.0001,<br>0.0001) | 3.84E-05          | 1.63E-05        | <0.0001(<0.0001,<br>0.0001) | 4E-05                   | 2.5E-05           | 4.92E-31 | -11.6       | ***              | 2E-28   | <0.0001 | ***<0.0001 |
| Cladosporium                                                                                                                                  | 0.0046(0.0012,<br>0.0396)   | 0.040226         | 0.00606        | 0.0017(0.0005,<br>0.0172)   | 0.036696          | 0.012744        | 0.0166(0.001,<br>0.0618)    | 0.05078                 | 0.01927           | 0.03687  | -2.09       | *                | 0.1212  | 0.0369  | * 0.0369   |
| Malassezia                                                                                                                                    | 0.0083(0.0014,<br>0.0549)   | 0.043633         | 0.00702        | 0.0011(0.0003,<br>0.0142)   | 0.027039          | 0.009708        | 0.0012(0.0007,<br>0.0312)   | 0.03976                 | 0.01913           | 0.0005   | -3.48       | ***              | 0.0051  | 0.0005  | ***0.0005  |
| Chrysosphaeria                                                                                                                                | 0.0001(<0.0001,<br>0.0004)  | 0.003136         | 0.00136        | <0.0001(<0.0001,<br>0.0005) | 6.29E-02          | 2.23E-02        | <0.0001(<0.0001,<br>0.0107) | 0.07847                 | 0.0582            | 0.60559  | -0.52       |                  | 0.7291  | 0.6056  | 0.6056     |
| Candida                                                                                                                                       | 0.0005(0.0001,<br>0.0015)   | 0.007518         | 0.00199        | 0.0028(0.0011,<br>0.0111)   | 5.00E-02          | 2.33E-02        | 0.005(0.0011,<br>0.0734)    | 0.07523                 | 0.03645           | 1.1E-08  | -5.72       | ***              | 9E-07   | <0.0001 | ***<0.0001 |
| Diversispora                                                                                                                                  | 0.0017(0.0006,<br>0.0146)   | 0.029246         | 0.00983        | 0.0009(0.0001,<br>0.003)    | 4.88E-03          | 1.51E-03        | 0.0008(<0.0001,<br>0.0022)  | 0.00288                 | 0.00127           | 5.04E-03 | -2.8        | **               | 0.0259  | 0.005   | ** 0.005   |
| Raffaelea                                                                                                                                     | 0.0006(0.0002,<br>0.0024)   | 0.022379         | 0.0093         | 0.0016(0.0005,<br>0.0064)   | 5.41E-03          | 1.44E-03        | 0.0022(0.001,<br>0.004)     | 0.00348                 | 0.00093           | 0.0013   | -3.22       | **               | 0.0098  | 0.0013  | ** 0.0013  |
| Hydnobolites                                                                                                                                  | <0.0001(<0.0001,<br>0.0001) | 0.001496         | 0.00072        | 0.0002(<0.0001,<br>0.0018)  | 0.042453          | 0.022936        | 0.0003(0.0001,<br>0.0009)   | 0.03189                 | 0.03139           | 1.33E-05 | -4.35       | ***              | 0.0003  | <0.0001 | ***<0.0001 |
| Arthrographis                                                                                                                                 | 0.0001(<0.0001,<br>0.0008)  | 0.018769         | 1.05E-02       | <0.0001(<0.0001,<br>0.0001) | 1.50E-04          | 6.68E-05        | <0.0001(<0.0001,<br>0.0001) | 8.7E-05                 | 4.1E-05           | 0.00014  | -3.81       | ***              | 0.0021  | 0.0001  | ***0.0001  |
| Simplicillium                                                                                                                                 | 0.0004(0.0002,<br>0.0045)   | 0.007369         | 0.00124        | 0.0026(0.0006,<br>0.0417)   | 0.022506          | 0.004189        | 0.0016(0.0003,<br>0.0083)   | 0.01324                 | 0.00644           | 2.15E-04 | -3.7        | ***              | 0.0028  | 0.0002  | ***0.0002  |
| Saccharomyces                                                                                                                                 | <0.0001(<0.0001,<br>0.0003) | 0.001336         | 0.00044        | 0.0005(<0.0001,<br>0.0026)  | 2.26E-02          | 1.12E-02        | 0.0007(0.0001,<br>0.00216)  | 0.04922                 | 0.02599           | 1.4E-06  | -4.83       | ***              | 5E-05   | <0.0001 | ***<0.0001 |
| Alternaria                                                                                                                                    | 0.0005(0.0002,<br>0.0042)   | 0.011654         | 3.17E-03       | 0.0001(<0.0001,<br>0.0007)  | 2.75E-03          | 9.26E-04        | 0.0001(<0.0001,<br>0.0021)  | 0.00275                 | 0.00134           | 0.00083  | -3.34       | ***              | 0.0075  | 0.0008  | ***0.0008  |
| Milospium                                                                                                                                     | 0.0002(<0.0001,<br>0.0001)  | 0.012121         | 0.00686        | <0.0001(<0.0001,<br>0.0003) | 5.19E-04          | 2.50E-04        | <0.0001(<0.0001,<br>0.0001) | 0.00087                 | 0.00049           | 0.01694  | -2.39       | *                | 0.0671  | 0.0169  | * 0.0169   |
| Filobasidiaceae_gen_Incertae_sedis                                                                                                            | 0.0004(0.0001,<br>0.0017)   | 0.006671         | 1.37E-03       | 0.0014(0.0003,<br>0.0161)   | 0.009638          | 0.001953        | 0.0002(0.0001,<br>0.0016)   | 0.00592                 | 0.003             | 0.00635  | -2.73       | **               | 0.0311  | 0.0063  | ** 0.0063  |
| Russula                                                                                                                                       | 0.0003(<0.0001,<br>0.0023)  | 0.007204         | 1.97E-03       | 0.0004(0.0002,<br>0.0031)   | 7.62E-03          | 3.11E-03        | 0.0014(0.0001,<br>0.0076)   | 0.00439                 | 0.00148           | 0.41328  | -0.82       |                  | 0.575   | 0.4133  | 0.4133     |
| Penicillium                                                                                                                                   | <0.0001(<0.0001,<br>0.0003) | 8.67E-03         | 7.28E-03       | <0.0001(<0.0001,<br>0.0002) | 0.004359          | 0.002444        | 0.0001(<0.0001,<br>0.0003)  | 0.00038                 | 0.0002            | 0.61901  | -0.5        |                  | 0.7421  | 0.619   | 0.619      |
| Talaromyces                                                                                                                                   | 0.0002(<0.0001,<br>0.0007)  | 9.27E-03         | 2.50E-03       | <0.0001(<0.0001,<br>0.0002) | 1.09E-03          | 4.66E-04        | <0.0001(<0.0001,<br>0.0006) | 0.00063                 | 0.00034           | 0.00012  | -3.85       | ***              | 0.0018  | 0.0001  | ***0.0001  |
| Schizophyllum                                                                                                                                 | <0.0001(<0.0001,<br>0.0001) | 8.26E-03         | 7.37E-03       | <0.0001(<0.0001,<br>0.0001) | 7.00E-04          | 4.59E-04        | <0.0001(<0.0001,<br>0.0001) | 0.00034                 | 0.00032           | 0.40008  | -0.84       |                  | 0.5642  | 0.4001  | 0.4001     |
| Pleurotus                                                                                                                                     | <0.0001(<0.0001,<br>0.0002) | 4.67E-03         | 1.92E-03       | <0.0001(<0.0001,<br>0.0002) | 3.52E-03          | 1.77E-03        | 0.0006(<0.0001,<br>0.0016)  | 0.02024                 | 0.01889           | 0.01569  | -2.42       | *                | 0.0631  | 0.0157  | * 0.0157   |
| Parafuscospora                                                                                                                                | 0.0008(0.0001,<br>0.0053)   | 4.61E-03         | 1.02E-03       | 0.0024(0.0004,<br>0.0092)   | 0.006971          | 0.002106        | 0.0003(0.0002,<br>0.0014)   | 0.00235                 | 0.00104           | 0.03554  | -2.1        | *                | 0.1183  | 0.0355  | * 0.0355   |
| Trigonopsis                                                                                                                                   | <0.0001(<0.0001,<br>0.0001) | 7.45E-03         | 7.26E-03       | <0.0001(<0.0001,<br>0.0001) | 4.15E-05          | 3.77E-05        | <0.0001(<0.0001,<br>0.0001) | 0                       | 0                 | 0.00114  | -3.25       | **               | 0.0098  | 0.0011  | ** 0.0011  |
| Gibberella                                                                                                                                    | <0.0001(<0.0001,<br>0.0001) | 1.08E-05         | 4.77E-06       | <0.0001(<0.0001,<br>0.0007) | 1.17E-02          | 4.98E-03        | <0.0001(<0.0001,<br>0.0051) | 0.01269                 | 0.00885           | 2.3E-14  | -7.63       | ***              | 5E-12   | <0.0001 | ***<0.0001 |
| Saprochaete                                                                                                                                   | <0.0001(<0.0001,<br>0.0001) | 6.06E-03         | 5.89E-03       | <0.0001(<0.0001,<br>0.0001) | 2.49E-05          | 2.49E-05        | <0.0001(<0.0001,<br>0.0001) | 7.1E-05                 | 6.5E-05           | 0.07381  | -1.79       |                  | 0.1828  | 0.0738  | 0.0738     |



|                         |                          |          |          |                          |          |          |                          |         |         |         |       |     |       |         |         |            |
|-------------------------|--------------------------|----------|----------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|-----|-------|---------|---------|------------|
| Neomicrosp<br>haeropsis | <0.0001(<0.0001,<0.0001) | 5.38E-04 | 2.39E-04 | <0.0001(<0.0001,<0.0001) | 1.12E-02 | 1.09E-02 | 0.0001(<0.0001,0.0018)   | 0.00222 | 0.00145 | 0.03013 | -2.17 | *   |       | 0.1036  | 0.0301  | * 0.0301   |
| Angustimass<br>arina    | 0.0002(<0.0001,0.0026)   | 2.79E-03 | 4.37E-04 | 0.0011(0.0002,0.0105)    | 5.31E-03 | 8.76E-04 | 0.0007(0.0001,0.0022)    | 0.00293 | 0.00131 | 0.00303 | -2.96 | **  |       | 0.0173  | 0.003   | ** 0.003   |
| Wallemia                | <0.0001(<0.0001,0.0002)  | 5.04E-03 | 3.88E-03 | <0.0001(<0.0001,<0.0001) | 0.000112 | 5.37E-05 | <0.0001(<0.0001,<0.0001) | 0.00222 | 0.00177 | 0.00526 | -2.79 | **  |       | 0.026   | 0.0053  | ** 0.0053  |
| Diaporthe               | <0.0001(<0.0001,0.0002)  | 4.99E-03 | 2.62E-03 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 3.3E-05 | 3.3E-05 | 2E-11   | -6.7  | *** | 3E-09 | <0.0001 |         | ***<0.0001 |
| Nigrospora              | <0.0001(<0.0001,<0.0001) | 7.29E-04 | 4.13E-04 | <0.0001(<0.0001,<0.0001) | 4.08E-03 | 3.23E-03 | <0.0001(<0.0001,0.0004)  | 0.02106 | 0.01921 | 0.02006 | -2.33 | *   |       | 0.0745  | 0.0201  | * 0.0201   |
| Trametes                | <0.0001(<0.0001,0.0001)  | 3.46E-03 | 1.96E-03 | <0.0001(<0.0001,<0.0001) | 2.18E-03 | 1.39E-03 | <0.0001(<0.0001,<0.0001) | 4.1E-06 | 4.1E-06 | 0.02661 | -2.22 | *   |       | 0.0922  | 0.0266  | * 0.0266   |
| Fantasmomy<br>ces       | <0.0001(<0.0001,0.0013)  | 2.10E-03 | 5.46E-04 | 0.0008(0.0001,0.0079)    | 0.004554 | 0.0009   | 0.0003(<0.0001,0.0036)   | 0.00222 | 0.0009  | 0.00126 | -3.23 | **  |       | 0.0098  | 0.0013  | ** 0.0013  |
| Phaeosphaer<br>ia       | <0.0001(<0.0001,0.0003)  | 3.69E-03 | 2.26E-03 | <0.0001(<0.0001,<0.0001) | 0.000208 | 0.00012  | <0.0001(<0.0001,<0.0001) | 8.2E-06 | 8.2E-06 | 0.00031 | -3.6  | *** |       | 0.0036  | 0.0003  | ***0.0003  |
| Fusarium                | <0.0001(<0.0001,0.0002)  | 2.39E-03 | 8.42E-04 | <0.0001(<0.0001,<0.0002) | 0.002021 | 0.001057 | <0.0001(<0.0001,0.0009)  | 0.00177 | 0.00096 | 0.29671 | -1.04 |     |       | 0.454   | 0.2967  | 0.2967     |
| Naganishia              | <0.0001(<0.0001,<0.0001) | 3.23E-03 | 1.99E-03 | <0.0001(<0.0001,<0.0001) | 1.26E-05 | 1.16E-05 | <0.0001(<0.0001,<0.0001) | 0.00013 | 0.00013 | 0.00011 | -3.87 | *** |       | 0.0018  | 0.0001  | ***0.0001  |
| Filobasidium            | <0.0001(<0.0001,<0.0001) | 1.43E-03 | 8.62E-04 | <0.0001(<0.0001,<0.0001) | 0.003527 | 0.00193  | <0.0001(<0.0001,0.0002)  | 0.00169 | 0.00154 | 0.0918  | -1.69 |     |       | 0.217   | 0.0918  | 0.0918     |
| Acremonium              | <0.0001(<0.0001,<0.0001) | 2.85E-03 | 2.40E-03 | <0.0001(<0.0001,<0.0001) | 0.000374 | 0.000318 | <0.0001(<0.0001,<0.0001) | 2.6E-05 | 1.4E-05 | 0.47703 | -0.71 |     |       | 0.624   | 0.477   | 0.477      |
| Ophiostoma              | <0.0001(<0.0001,0.0001)  | 2.66E-03 | 2.20E-03 | <0.0001(<0.0001,<0.0001) | 0.000104 | 2.39E-05 | <0.0001(<0.0001,<0.0001) | 7.9E-05 | 4.9E-05 | 0.14669 | -1.45 |     |       | 0.2906  | 0.1467  | 0.1467     |
| Trichomonas<br>cus      | <0.0001(<0.0001,<0.0001) | 2.69E-03 | 2.64E-03 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 1.5E-05 | 1.5E-05 | 0.01719 | -2.38 | *   |       | 0.0675  | 0.0172  | * 0.0172   |
| Botrytis                | <0.0001(<0.0001,0.0001)  | 2.25E-03 | 1.50E-03 | <0.0001(<0.0001,<0.0001) | 8.54E-05 | 7.1E-05  | <0.0001(<0.0001,0.0002)  | 0.00177 | 0.00116 | 5.2E-05 | -4.05 | *** |       | 0.001   | <0.0001 | ***<0.0001 |
| Galactomyc<br>es        | <0.0001(<0.0001,0.0001)  | 4.50E-04 | 1.41E-04 | <0.0001(<0.0001,<0.0001) | 0.004727 | 0.004644 | <0.0001(<0.0001,<0.0001) | 0.0001  | 7E-05   | 0.21987 | -1.23 |     |       | 0.4131  | 0.2199  | 0.2199     |
| Aureobasidi<br>um       | <0.0001(<0.0001,<0.0001) | 8.12E-04 | 4.07E-04 | <0.0001(<0.0001,<0.0001) | 0.003606 | 0.002233 | <0.0001(<0.0001,<0.0001) | 0.00051 | 0.00038 | 0.33637 | -0.96 |     |       | 0.4859  | 0.3364  | 0.3364     |
| Yarrowia                | <0.0001(<0.0001,<0.0001) | 2.30E-03 | 1.10E-03 | <0.0001(<0.0001,<0.0001) | 0.00015  | 0.000149 | <0.0001(<0.0001,<0.0001) | 0.00026 | 0.00026 | 4.5E-06 | -4.59 | *** |       | 0.0001  | <0.0001 | ***<0.0001 |
| Udeniomyce<br>s         | <0.0001(<0.0001,<0.0001) | 2.26E-03 | 1.84E-03 | <0.0001(<0.0001,<0.0001) | 1.53E-05 | 8.35E-06 | <0.0001(<0.0001,<0.0001) | 3.1E-05 | 2.7E-05 | 0.00186 | -3.11 | **  |       | 0.012   | 0.0019  | ** 0.0019  |
| Coprinellus             | <0.0001(<0.0001,<0.0001) | 1.56E-03 | 7.24E-04 | <0.0001(<0.0001,<0.0001) | 1.54E-03 | 1.53E-03 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00018 | -3.75 | *** |       | 0.0024  | 0.0002  | ***0.0002  |
| Zygotrulas<br>pora      | <0.0001(<0.0001,<0.0001) | 8.48E-04 | 6.13E-04 | <0.0001(<0.0001,<0.0001) | 3.10E-03 | 1.85E-03 | <0.0001(<0.0001,<0.0001) | 4.3E-05 | 2.8E-05 | 0.14201 | -1.47 |     |       | 0.2885  | 0.142   | 0.142      |
| Verrucaria              | <0.0001(<0.0001,<0.0001) | 2.13E-03 | 1.40E-03 | <0.0001(<0.0001,<0.0001) | 5.8E-06  | 5.8E-06  | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0026  | -3.01 | **  |       | 0.0155  | 0.0026  | ** 0.0026  |
| Golubevia               | <0.0001(<0.0001,<0.0001) | 2.12E-03 | 1.76E-03 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 1.8E-05 | 1.8E-05 | 0.0001  | -3.88 | *** |       | 0.0018  | 0.0001  | ***0.0001  |
| Togniniella             | <0.0001(<0.0001,<0.0001) | 2.03E-03 | 1.17E-03 | <0.0001(<0.0001,<0.0001) | 4.96E-05 | 2.05E-05 | <0.0001(<0.0001,0.0001)  | 0.0002  | 0.00011 | 0.05452 | -1.92 |     |       | 0.1564  | 0.0545  | 0.0545     |
| Hannaella               | <0.0001(<0.0001,<0.0001) | 7.11E-04 | 6.51E-04 | <0.0001(<0.0001,<0.0001) | 0.00266  | 0.002306 | <0.0001(<0.0001,0.0003)  | 0.00053 | 0.00032 | 0.00498 | -2.81 | **  |       | 0.0259  | 0.005   | ** 0.005   |
| Bjerkandera             | <0.0001(<0.0001,<0.0001) | 1.37E-03 | 1.23E-03 | <0.0001(<0.0001,<0.0001) | 6.69E-04 | 4.55E-04 | <0.0001(<0.0001,<0.0001) | 0.00107 | 0.00107 | 0.22043 | -1.23 |     |       | 0.4131  | 0.2204  | 0.2204     |
| Leptospora              | <0.0001(<0.0001,<0.0001) | 0.001544 | 9.01E-04 | <0.0001(<0.0001,<0.0001) | 0.000456 | 0.000322 | <0.0001(<0.0001,<0.0001) | 0.00015 | 0.00014 | 0.04394 | -2.01 | *   |       | 0.1306  | 0.0439  | * 0.0439   |
| Cercospora              | <0.0001(<0.0001,<0.0001) | 1.68E-03 | 1.40E-03 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 9E-07   | -4.91 | *** |       | 4E-05   | <0.0001 | ***<0.0001 |
| Irpex                   | <0.0001(<0.0001,<0.0001) | 6.70E-04 | 6.10E-04 | <0.0001(<0.0001,<0.0001) | 2.11E-03 | 2.08E-03 | <0.0001(<0.0001,<0.0001) | 0.00087 | 0.00085 | 0.76179 | -0.3  |     |       | 0.7869  | 0.7618  | 0.7618     |
| Peniophora              | <0.0001(<0.0001,<0.0001) | 8.83E-04 | 5.51E-04 | <0.0001(<0.0001,<0.0001) | 1.72E-03 | 1.57E-03 | <0.0001(<0.0001,<0.0001) | 5.6E-06 | 5.6E-06 | 0.01902 | -2.35 | *   |       | 0.0719  | 0.019   | * 0.019    |
| Pseudoveron<br>aea      | <0.0001(<0.0001,<0.0001) | 3.60E-06 | 3.23E-06 | <0.0001(<0.0001,<0.0001) | 3.47E-03 | 2.98E-03 | <0.0001(<0.0001,<0.0001) | 0.00104 | 0.00101 | 9.8E-07 | -4.9  | *** |       | 4E-05   | <0.0001 | ***<0.0001 |
| Purpureocilli<br>um     | <0.0001(<0.0001,<0.0001) | 0.001541 | 0.001    | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 4.4E-06 | 4.4E-06 | 4.3E-05 | -4.09 | *** |       | 0.0008  | <0.0001 | ***<0.0001 |

|                          |                          |          |          |                          |          |          |                          |         |         |          |       |     |        |         |            |
|--------------------------|--------------------------|----------|----------|--------------------------|----------|----------|--------------------------|---------|---------|----------|-------|-----|--------|---------|------------|
| Apiotrichum              | <0.0001(<0.0001,0.0001)  | 1.40E-03 | 5.66E-04 | <0.0001(<0.0001,<0.0001) | 0.000142 | 1.03E-04 | <0.0001(<0.0001,<0.0001) | 0.00027 | 0.00023 | 0.00047  | -3.5  | *** | 0.005  | 0.0005  | ***0.0005  |
| Rhoxothecium             | <0.0001(<0.0001,0.0001)  | 1.28E-03 | 7.55E-04 | <0.0001(<0.0001,<0.0001) | 1.24E-04 | 6.57E-05 | <0.0001(<0.0001,0.0005)  | 0.00071 | 0.00035 | 0.06611  | -1.84 |     | 0.1752 | 0.0661  | 0.0661     |
| Vishniacozyma            | <0.0001(<0.0001,<0.0001) | 1.29E-03 | 1.01E-03 | <0.0001(<0.0001,<0.0001) | 2.06E-04 | 1.92E-04 | <0.0001(<0.0001,<0.0001) | 0.00015 | 0.00015 | 0.01177  | -2.52 | *   | 0.0505 | 0.0118  | * 0.0118   |
| Pichia                   | <0.0001(<0.0001,<0.0001) | 4.25E-05 | 2.5E-05  | <0.0001(<0.0001,0.0001)  | 1.35E-03 | 6.23E-04 | <0.0001(<0.0001,0.0002)  | 0.00664 | 0.00515 | 0.00082  | -3.34 | *** | 0.0075 | 0.0008  | ***0.0008  |
| Symmetrorpora            | <0.0001(<0.0001,<0.0001) | 0.000577 | 0.00053  | <0.0001(<0.0001,<0.0001) | 1.81E-03 | 1.24E-03 | <0.0001(<0.0001,<0.0001) | 2.6E-05 | 1.4E-05 | 0.62408  | -0.49 |     | 0.746  | 0.6241  | 0.6241     |
| Stagonosporopsis         | <0.0001(<0.0001,<0.0001) | 0.001225 | 0.00088  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 3E-06    | -4.67 | *** | 9E-05  | <0.0001 | ***<0.0001 |
| Cystofilobasidium        | <0.0001(<0.0001,<0.0001) | 1.07E-03 | 7.57E-04 | <0.0001(<0.0001,<0.0001) | 0.000153 | 8.97E-05 | <0.0001(<0.0001,<0.0001) | 7E-06   | 7E-06   | 0.06907  | -1.82 |     | 0.1781 | 0.0691  | 0.0691     |
| Neosetophoma             | <0.0001(<0.0001,<0.0001) | 6.05E-04 | 4.10E-04 | <0.0001(<0.0001,<0.0001) | 9.22E-05 | 8.23E-05 | <0.0001(<0.0001,<0.0001) | 0.00395 | 0.00386 | 0.38772  | -0.86 |     | 0.5527 | 0.3877  | 0.3877     |
| Ramularia                | <0.0001(<0.0001,<0.0001) | 4.47E-07 | 4.47E-07 | <0.0001(<0.0001,<0.0001) | 2.41E-03 | 2.37E-03 | <0.0001(<0.0001,<0.0001) | 4.7E-05 | 4.7E-05 | 0.00012  | -3.85 | *** | 0.0018 | 0.0001  | ***0.0001  |
| Kazachstaniana           | <0.0001(<0.0001,<0.0001) | 5.55E-04 | 3.55E-04 | <0.0001(<0.0001,0.0002)  | 0.000772 | 0.000629 | <0.0001(<0.0001,0.0003)  | 0.00108 | 0.00093 | 0.02102  | -2.31 | *   | 0.0774 | 0.021   | * 0.021    |
| Dioszegia                | <0.0001(<0.0001,<0.0001) | 9.34E-04 | 8.58E-04 | <0.0001(<0.0001,<0.0001) | 0.000123 | 1.05E-04 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 1.23E-01 | -1.54 |     | 0.2644 | 0.1227  | 0.1227     |
| Cutaneotrichosporon      | <0.0001(<0.0001,<0.0001) | 0.000317 | 0.00025  | <0.0001(<0.0001,<0.0001) | 2.97E-05 | 1.18E-05 | <0.0001(<0.0001,0.0002)  | 0.00561 | 0.00512 | 0.03747  | -2.08 | *   | 0.1212 | 0.0375  | * 0.0375   |
| Setophaeosphaeria        | <0.0001(<0.0001,<0.0001) | 9.64E-04 | 8.91E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 2.70E-03 | -3    | **  | 0.0158 | 0.0027  | ** 0.0027  |
| Tilletiopsis             | <0.0001(<0.0001,<0.0001) | 2.34E-04 | 1.82E-04 | <0.0001(<0.0001,<0.0001) | 0.001632 | 0.001545 | <0.0001(<0.0001,<0.0001) | 0.00011 | 0.00011 | 0.40298  | -0.84 |     | 0.5663 | 0.403   | 0.403      |
| Leucosporidium           | <0.0001(<0.0001,<0.0001) | 3.69E-05 | 3.28E-05 | <0.0001(<0.0001,<0.0001) | 0.002109 | 0.002014 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 2.36E-03 | -3.04 | **  | 0.0145 | 0.0024  | ** 0.0024  |
| Sporobolomyces           | <0.0001(<0.0001,<0.0001) | 7.86E-04 | 4.00E-04 | <0.0001(<0.0001,<0.0001) | 0.00027  | 0.000239 | <0.0001(<0.0001,<0.0001) | 7.3E-06 | 7.3E-06 | 0.00059  | -3.44 | *** | 0.0059 | 0.0006  | ***0.0006  |
| Entorrhiza               | <0.0001(<0.0001,<0.0001) | 0.000258 | 8.14E-05 | <0.0001(<0.0001,0.0005)  | 0.001154 | 0.000361 | 0.0001(<0.0001,0.0006)   | 0.00122 | 0.00069 | 0.00017  | -3.76 | *** | 0.0024 | 0.0002  | ***0.0002  |
| Pyrenochaetopsis         | <0.0001(<0.0001,<0.0001) | 0.000855 | 0.0007   | <0.0001(<0.0001,<0.0001) | 5.44E-05 | 5.2E-05  | <0.0001(<0.0001,<0.0001) | 1.4E-05 | 1.4E-05 | 0.04065  | -2.05 | *   | 0.1243 | 0.0406  | * 0.0406   |
| Didymella                | <0.0001(<0.0001,<0.0001) | 6.73E-04 | 3.37E-04 | <0.0001(<0.0001,<0.0001) | 0.000432 | 0.000425 | <0.0001(<0.0001,<0.0001) | 4.1E-05 | 4.1E-05 | 0.00309  | -2.96 | **  | 0.0173 | 0.0031  | ** 0.0031  |
| Ceriporia                | <0.0001(<0.0001,<0.0001) | 7.54E-04 | 5.06E-04 | <0.0001(<0.0001,<0.0001) | 0.00017  | 0.000104 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00769  | -2.67 | **  | 0.0356 | 0.0077  | ** 0.0077  |
| Rhodotorula              | <0.0001(<0.0001,<0.0001) | 2.59E-04 | 1.07E-04 | <0.0001(<0.0001,<0.0001) | 7.32E-05 | 2.42E-05 | <0.0001(<0.0001,<0.0001) | 0.00446 | 0.00437 | 0.25456  | -1.14 |     | 0.4209 | 0.2546  | 0.2546     |
| Ustilaginoides           | <0.0001(<0.0001,<0.0001) | 1.08E-05 | 3.68E-06 | <0.0001(<0.0001,0.0001)  | 0.001427 | 0.000609 | <0.0001(<0.0001,0.0002)  | 0.00145 | 0.00095 | 2.9E-07  | -5.13 | *** | 2E-05  | <0.0001 | ***<0.0001 |
| Tausonia                 | <0.0001(<0.0001,<0.0001) | 6.30E-04 | 3.69E-04 | <0.0001(<0.0001,<0.0001) | 0.000267 | 0.000186 | <0.0001(<0.0001,<0.0001) | 0.00018 | 0.00016 | 0.99763  | -0    |     | 0.9976 | 0.9976  | 0.9976     |
| Trichophaea              | <0.0001(<0.0001,<0.0001) | 8.84E-06 | 7.03E-06 | <0.0001(<0.0001,<0.0001) | 0.001756 | 0.001735 | <0.0001(<0.0001,<0.0001) | 2.6E-05 | 2.6E-05 | 4.11E-03 | -2.87 | **  | 0.0222 | 0.0041  | ** 0.0041  |
| Parasymptotella          | <0.0001(<0.0001,0.0001)  | 3.93E-04 | 1.17E-04 | <0.0001(<0.0001,0.0003)  | 0.000382 | 0.000149 | 0.0008(<0.0001,0.0017)   | 0.00177 | 0.00068 | 6.33E-04 | -3.42 | *** | 0.0061 | 0.0006  | ***0.0006  |
| Tilletia                 | <0.0001(<0.0001,<0.0001) | 0.000745 | 0.00057  | <0.0001(<0.0001,<0.0001) | 2.62E-05 | 2.56E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00051  | -3.48 | *** | 0.0051 | 0.0005  | ***0.0005  |
| Dipodascus               | <0.0001(<0.0001,<0.0001) | 0.000339 | 1.78E-04 | <0.0001(<0.0001,<0.0001) | 0.000927 | 0.000903 | <0.0001(<0.0001,<0.0001) | 9.4E-05 | 6.8E-05 | 0.01579  | -2.41 | *   | 0.0631 | 0.0158  | * 0.0158   |
| Starmarella              | <0.0001(<0.0001,<0.0001) | 7.76E-05 | 7.52E-05 | <0.0001(<0.0001,<0.0001) | 0.0015   | 0.000895 | <0.0001(<0.0001,<0.0001) | 5.7E-05 | 2.7E-05 | 1.3E-06  | -4.85 | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Rozellomyces_gerae_sedis | <0.0001(<0.0001,<0.0001) | 0.000711 | 0.00063  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 5.14E-03 | -2.8  | **  | 0.0259 | 0.0051  | ** 0.0051  |
| Auricularia              | <0.0001(<0.0001,<0.0001) | 0.000485 | 0.00029  | <0.0001(<0.0001,<0.0001) | 0.000493 | 0.000432 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.06191  | -1.87 |     | 0.1673 | 0.0619  | 0.0619     |

|                                       |                          |          |          |                          |          |          |                          |         |         |          |       |     |        |         |            |
|---------------------------------------|--------------------------|----------|----------|--------------------------|----------|----------|--------------------------|---------|---------|----------|-------|-----|--------|---------|------------|
| Sterigmatomycetes                     | <0.0001(<0.0001,<0.0001) | 0.000361 | 0.00024  | <0.0001(<0.0001,<0.0001) | 0.000133 | 0.000122 | <0.0001(<0.0001,<0.0001) | 0.00227 | 0.0015  | 0.07625  | -1.77 |     | 0.1877 | 0.0763  | 0.0763     |
| Tuber                                 | <0.0001(<0.0001,0.0002)  | 0.000264 | 5.5E-05  | 0.0002(<0.0001,0.0001)   | 0.000768 | 0.000155 | 0.0001(<0.0001,0.0004)   | 0.00074 | 0.00041 | 1.3E-05  | -4.36 | *** | 0.0003 | <0.0001 | ***<0.0001 |
| Blastobotrys                          | <0.0001(<0.0001,<0.0001) | 6.44E-07 | 6.4E-07  | <0.0001(<0.0001,<0.0001) | 0.001552 | 0.001545 | <0.0001(<0.0001,<0.0001) | 6.7E-06 | 6.7E-06 | 0.09692  | -1.66 |     | 0.2265 | 0.0969  | 0.0969     |
| Papiliotrema                          | <0.0001(<0.0001,<0.0001) | 0.000151 | 0.00015  | <0.0001(<0.0001,<0.0001) | 2.77E-05 | 1.26E-05 | <0.0001(<0.0001,0.0001)  | 0.00436 | 0.0043  | 0.00769  | -2.67 | **  | 0.0356 | 0.0077  | ** 0.0077  |
| Phlebia                               | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 1.52E-03 | 1.52E-03 | <0.0001(<0.0001,<0.0001) | 5.7E-06 | 5.7E-06 | 4.15E-02 | -2.04 | *   | 0.125  | 0.0415  | * 0.0415   |
| Debaryomyces                          | <0.0001(<0.0001,<0.0001) | 0.000452 | 0.00026  | <0.0001(<0.0001,<0.0001) | 0.000336 | 0.000332 | <0.0001(<0.0001,<0.0001) | 0.00022 | 0.00019 | 1.1E-05  | -4.4  | *** | 0.0002 | <0.0001 | ***<0.0001 |
| Ascomycota_gen_Incertae sedis         | <0.0001(<0.0001,<0.0001) | 0.000123 | 3.2E-05  | <0.0001(<0.0001,<0.0001) | 0.000785 | 0.000283 | 0.0002(<0.0001,0.0016)   | 0.00132 | 0.00069 | 0.00361  | -2.91 | **  | 0.0197 | 0.0036  | ** 0.0036  |
| Henningisia                           | <0.0001(<0.0001,<0.0001) | 2.05E-07 | 2E-07    | <0.0001(<0.0001,<0.0001) | 0.001399 | 0.001369 | <0.0001(<0.0001,0.0001)  | 5.9E-05 | 2.3E-05 | 6.5E-07  | -4.98 | *** | 4E-05  | <0.0001 | ***<0.0001 |
| Knufia                                | <0.0001(<0.0001,<0.0001) | 0.000583 | 0.00032  | <0.0001(<0.0001,<0.0001) | 8.57E-07 | 8.57E-07 | <0.0001(<0.0001,<0.0001) | 0.00013 | 0.00013 | 0.0007   | -3.39 | *** | 0.0066 | 0.0007  | ***0.0007  |
| Mycosphaerellaceae_gen_Incertae sedis | <0.0001(<0.0001,<0.0001) | 0.000285 | 0.00015  | <0.0001(<0.0001,<0.0001) | 0.000529 | 0.000232 | <0.0001(<0.0001,0.0003)  | 0.00073 | 0.0006  | 0.14424  | -1.46 |     | 0.2885 | 0.1442  | 0.1442     |
| Flammulina                            | <0.0001(<0.0001,<0.0001) | 5.76E-04 | 5.26E-04 | <0.0001(<0.0001,<0.0001) | 1.05E-05 | 8.62E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 9.47E-02 | -1.67 |     | 0.2225 | 0.0947  | 0.0947     |
| Typhula                               | <0.0001(<0.0001,<0.0001) | 0.00057  | 0.00038  | <0.0001(<0.0001,<0.0001) | 2.7E-06  | 1.89E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00131  | -3.21 | **  | 0.0098 | 0.0013  | ** 0.0013  |
| Coprinopsis                           | <0.0001(<0.0001,<0.0001) | 4.88E-04 | 3.10E-04 | <0.0001(<0.0001,<0.0001) | 3.27E-06 | 1.86E-06 | <0.0001(<0.0001,<0.0001) | 0.00068 | 0.00068 | 0.04488  | -2.01 | *   | 0.1306 | 0.0449  | * 0.0449   |
| Glomus                                | <0.0001(<0.0001,<0.0001) | 0.000278 | 2.73E-04 | <0.0001(<0.0001,<0.0001) | 0.000612 | 0.000608 | <0.0001(<0.0001,<0.0001) | 4.6E-05 | 2.6E-05 | 0.03374  | -2.12 | *   | 0.1141 | 0.0337  | * 0.0337   |
| Clavispora                            | <0.0001(<0.0001,<0.0001) | 0.000522 | 0.00048  | <0.0001(<0.0001,<0.0001) | 7.38E-06 | 4.91E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 4.26E-01 | -0.8  |     | 0.581  | 0.4257  | 0.4257     |
| Austropleospora                       | <0.0001(<0.0001,<0.0001) | 0.000481 | 0.00046  | <0.0001(<0.0001,<0.0001) | 6.65E-05 | 6.54E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.27538  | -1.09 |     | 0.4275 | 0.2754  | 0.2754     |
| Russulales_gen_Incertae sedis         | <0.0001(<0.0001,<0.0001) | 0.000501 | 0.00049  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.04464  | -2.01 | *   | 0.1306 | 0.0446  | * 0.0446   |
| Chytridium                            | <0.0001(<0.0001,<0.0001) | 1.14E-04 | 6.08E-05 | <0.0001(<0.0001,<0.0001) | 0.000847 | 0.000536 | <0.0001(<0.0001,<0.0001) | 0.00022 | 0.00022 | 1.56E-01 | -1.42 |     | 0.3085 | 0.1565  | 0.1565     |
| Ahmadea                               | <0.0001(<0.0001,<0.0001) | 0.00049  | 0.00048  | <0.0001(<0.0001,<0.0001) | 1.18E-05 | 5.17E-06 | <0.0001(<0.0001,<0.0001) | 6.1E-06 | 6.1E-06 | 0.88569  | -0.14 |     | 0.89   | 0.8857  | 0.8857     |
| Eupeniidiella                         | <0.0001(<0.0001,<0.0001) | 0.000496 | 0.00047  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.018    | -2.37 | *   | 0.0693 | 0.018   | * 0.018    |
| Plectosphaerella                      | <0.0001(<0.0001,<0.0001) | 4.68E-04 | 4.52E-04 | <0.0001(<0.0001,<0.0001) | 1.61E-05 | 1.48E-05 | <0.0001(<0.0001,<0.0001) | 0.00015 | 0.00014 | 0.1329   | -1.5  |     | 0.2809 | 0.1329  | 0.1329     |
| Ascotricha                            | <0.0001(<0.0001,<0.0001) | 0.000212 | 0.00013  | <0.0001(<0.0001,<0.0001) | 0.000644 | 0.000593 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.12173  | -1.55 |     | 0.2637 | 0.1217  | 0.1217     |
| Recurvomyces                          | <0.0001(<0.0001,<0.0001) | 0.000458 | 0.00045  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 7.6E-06 | 7.6E-06 | 0.10973  | -1.6  |     | 0.239  | 0.1097  | 0.1097     |
| Thielaviopsis                         | <0.0001(<0.0001,<0.0001) | 0.000453 | 0.00024  | <0.0001(<0.0001,<0.0001) | 1.46E-06 | 1.46E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01226  | -2.5  | *   | 0.0515 | 0.0123  | * 0.0123   |
| Spiromastix                           | <0.0001(<0.0001,<0.0001) | 0.00045  | 4.40E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.02444  | -2.25 | *   | 0.0854 | 0.0244  | * 0.0244   |
| Lentinus                              | <0.0001(<0.0001,<0.0001) | 0.000443 | 0.0004   | <0.0001(<0.0001,<0.0001) | 1.11E-06 | 1.11E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 2.22E-02 | -2.29 | *   | 0.0804 | 0.0222  | * 0.0222   |
| Thecaphora                            | <0.0001(<0.0001,<0.0001) | 0.000425 | 0.00029  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 8.7E-06 | 8.7E-06 | 0.05292  | -1.94 |     | 0.1529 | 0.0529  | 0.0529     |
| Heitmania                             | <0.0001(<0.0001,0.0002)  | 0.000233 | 5.7E-05  | <0.0001(<0.0001,0.0004)  | 0.000428 | 0.000222 | <0.0001(<0.0001,<0.0001) | 6.9E-05 | 4.9E-05 | 8.56E-02 | -1.72 |     | 0.2036 | 0.0856  | 0.0856     |
| Engyodontium                          | <0.0001(<0.0001,<0.0001) | 2.90E-04 | 2.45E-04 | <0.0001(<0.0001,<0.0001) | 0.000291 | 0.000152 | <0.0001(<0.0001,<0.0001) | 3E-05   | 1.8E-05 | 0.48241  | -0.7  |     | 0.6291 | 0.4824  | 0.4824     |

|                                |                          |          |          |                          |          |          |                          |         |         |          |       |     |        |         |            |
|--------------------------------|--------------------------|----------|----------|--------------------------|----------|----------|--------------------------|---------|---------|----------|-------|-----|--------|---------|------------|
| Calosphaeria                   | <0.0001(<0.0001,<0.0001) | 0.000236 | 8.7E-05  | <0.0001(<0.0001,0.0005)  | 3.58E-04 | 8.90E-05 | <0.0001(<0.0001,<0.0001) | 0.0002  | 0.00011 | 0.06771  | -1.83 |     | 0.1771 | 0.0677  | 0.0677     |
| Flavodon                       | <0.0001(<0.0001,<0.0001) | 0.000396 | 0.00037  | <0.0001(<0.0001,<0.0001) | 4.91E-06 | 4.91E-06 | <0.0001(<0.0001,<0.0001) | 4.3E-06 | 4.3E-06 | 0.125    | -1.53 |     | 0.2681 | 0.125   | 0.125      |
| Psathyrella                    | <0.0001(<0.0001,<0.0001) | 0.000155 | 9.7E-05  | <0.0001(<0.0001,<0.0001) | 1.23E-06 | 1.23E-06 | <0.0001(<0.0001,<0.0001) | 0.00204 | 0.00204 | 0.2453   | -1.16 |     | 0.4209 | 0.2453  | 0.2453     |
| Ophiosphaerella                | <0.0001(<0.0001,<0.0001) | 3.30E-04 | 3.28E-04 | <0.0001(<0.0001,<0.0001) | 0.000128 | 8.43E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 2.04E-01 | -1.27 |     | 0.3869 | 0.2037  | 0.2037     |
| Nakaseomyces                   | <0.0001(<0.0001,<0.0001) | 3.94E-07 | 3.94E-07 | <0.0001(<0.0001,<0.0001) | 0.000883 | 0.000785 | <0.0001(<0.0001,<0.0001) | 1.9E-06 | 1.9E-06 | 1.7E-06  | -4.79 | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Dothidea                       | <0.0001(<0.0001,<0.0001) | 0.000371 | 0.00028  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01322  | -2.48 | *   | 0.0539 | 0.0132  | * 0.0132   |
| Periconia                      | <0.0001(<0.0001,<0.0001) | 3.03E-04 | 1.76E-04 | <0.0001(<0.0001,<0.0001) | 9.74E-05 | 2.63E-05 | <0.0001(<0.0001,<0.0001) | 0.00023 | 0.00021 | 0.2536   | -1.14 |     | 0.4209 | 0.2536  | 0.2536     |
| Roussoella                     | <0.0001(<0.0001,<0.0001) | 0.000369 | 0.00033  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00514  | -2.8  | **  | 0.0259 | 0.0051  | ** 0.0051  |
| Thelebolus                     | <0.0001(<0.0001,<0.0001) | 0.000362 | 3.46E-04 | <0.0001(<0.0001,<0.0001) | 1.53E-05 | 1.53E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.03474  | -2.11 | *   | 0.1166 | 0.0347  | * 0.0347   |
| Acrocalymma                    | <0.0001(<0.0001,<0.0001) | 0.00036  | 2.51E-04 | <0.0001(<0.0001,<0.0001) | 1.02E-06 | 1.02E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01209  | -2.51 | *   | 0.0513 | 0.0121  | * 0.0121   |
| Diutina                        | <0.0001(<0.0001,<0.0001) | 1.05E-05 | 7.9E-06  | <0.0001(<0.0001,<0.0001) | 0.000431 | 0.000362 | <0.0001(<0.0001,<0.0001) | 0.00143 | 0.00141 | 0.00516  | -2.8  | **  | 0.0259 | 0.0052  | ** 0.0052  |
| Vanrija                        | <0.0001(<0.0001,<0.0001) | 1.74E-06 | 9.15E-07 | <0.0001(<0.0001,<0.0001) | 3.46E-06 | 2.03E-06 | <0.0001(<0.0001,<0.0001) | 0.00305 | 0.0021  | 0.1465   | -1.45 |     | 0.2906 | 0.1465  | 0.1465     |
| Coniochaeta                    | <0.0001(<0.0001,<0.0001) | 3.38E-04 | 3.27E-04 | <0.0001(<0.0001,<0.0001) | 2.48E-05 | 2.48E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14082  | -1.47 |     | 0.2885 | 0.1408  | 0.1408     |
| Yamadazyma                     | <0.0001(<0.0001,<0.0001) | 5.54E-05 | 5.30E-05 | <0.0001(<0.0001,<0.0001) | 0.000511 | 0.000502 | <0.0001(<0.0001,<0.0001) | 0.00065 | 0.00065 | 0.8661   | -0.17 |     | 0.8809 | 0.8661  | 0.8661     |
| Pseudocercospora               | <0.0001(<0.0001,<0.0001) | 3.46E-04 | 2.69E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00706  | -2.69 | **  | 0.0336 | 0.0071  | ** 0.0071  |
| Lecanicillium                  | <0.0001(<0.0001,<0.0001) | 0.000341 | 2.63E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00968  | -2.59 | **  | 0.0424 | 0.0097  | ** 0.0097  |
| Bovista                        | <0.0001(<0.0001,<0.0001) | 5.95E-06 | 2.4E-06  | <0.0001(<0.0001,<0.0001) | 0.000004 | 2.34E-06 | <0.0001(<0.0001,<0.0001) | 0.0029  | 0.0029  | 0.93345  | -0.08 |     | 0.9357 | 0.9334  | 0.9334     |
| Botryosphaeria                 | <0.0001(<0.0001,<0.0001) | 0.000294 | 2.13E-04 | <0.0001(<0.0001,<0.0001) | 8.81E-05 | 8.55E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.07677  | -1.77 |     | 0.1879 | 0.0768  | 0.0768     |
| Lentinula                      | <0.0001(<0.0001,<0.0001) | 0.000128 | 9.6E-05  | <0.0001(<0.0001,<0.0001) | 4.63E-04 | 4.57E-04 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.42849  | -0.79 |     | 0.581  | 0.4285  | 0.4285     |
| Trichoderma                    | <0.0001(<0.0001,<0.0001) | 2.51E-04 | 1.73E-04 | <0.0001(<0.0001,<0.0001) | 0.000162 | 9.67E-05 | <0.0001(<0.0001,<0.0001) | 3.9E-05 | 3.9E-05 | 0.87793  | -0.15 |     | 0.8843 | 0.8779  | 0.8779     |
| Pseudoramichloridium           | <0.0001(<0.0001,<0.0001) | 0.000318 | 3.13E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 1E-05   | 7.1E-06 | 0.06193  | -1.87 |     | 0.1673 | 0.0619  | 0.0619     |
| Zeloasperisporium              | <0.0001(<0.0001,<0.0001) | 3.08E-06 | 3.08E-06 | <0.0001(<0.0001,<0.0001) | 6.00E-05 | 4.87E-05 | <0.0001(<0.0001,<0.0001) | 0.0025  | 0.00244 | 0.00017  | -3.76 | *** | 0.0024 | 0.0002  | ***0.0002  |
| Keissleriella                  | <0.0001(<0.0001,<0.0001) | 3.08E-04 | 2.98E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01322  | -2.48 | *   | 0.0539 | 0.0132  | * 0.0132   |
| Hortaea                        | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 0.000683 | 6.72E-04 | <0.0001(<0.0001,<0.0001) | 0.00013 | 0.00013 | 0.00028  | -3.64 | *** | 0.0033 | 0.0003  | ***0.0003  |
| Cordyceps                      | <0.0001(<0.0001,<0.0001) | 2.78E-04 | 2.55E-04 | <0.0001(<0.0001,<0.0001) | 4.11E-05 | 1.11E-05 | <0.0001(<0.0001,<0.0001) | 2.9E-05 | 1.6E-05 | 3.94E-01 | -0.85 |     | 0.5577 | 0.3942  | 0.3942     |
| Capnodiales_gen_Incertae_sedis | <0.0001(<0.0001,<0.0001) | 2.72E-04 | 1.72E-04 | <0.0001(<0.0001,<0.0001) | 6.03E-05 | 5.82E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.28163  | -1.08 |     | 0.4355 | 0.2816  | 0.2816     |
| Dendryphiella                  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 1.1E-05  | 6.01E-06 | <0.0001(<0.0001,<0.0001) | 0.00255 | 0.00255 | 0.00144  | -3.19 | **  | 0.0105 | 0.0014  | ** 0.0014  |
| Bradymyces                     | <0.0001(<0.0001,<0.0001) | 2.92E-04 | 2.46E-04 | <0.0001(<0.0001,<0.0001) | 9.46E-07 | 9.46E-07 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 1.28E-01 | -1.52 |     | 0.274  | 0.1284  | 0.1284     |
| Pseudomicrostroma              | <0.0001(<0.0001,<0.0001) | 1.74E-05 | 1.60E-05 | <0.0001(<0.0001,<0.0001) | 0.000627 | 0.000453 | <0.0001(<0.0001,<0.0001) | 5.1E-06 | 5.1E-06 | 0.55836  | -0.59 |     | 0.7105 | 0.5584  | 0.5584     |

|                                     |                          |          |          |                          |          |          |                          |         |         |          |       |     |        |         |            |
|-------------------------------------|--------------------------|----------|----------|--------------------------|----------|----------|--------------------------|---------|---------|----------|-------|-----|--------|---------|------------|
| Rhodosporidiobolus                  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 1.08E-05 | 5.37E-06 | <0.0001(<0.0001,<0.0001) | 0.00243 | 0.0024  | 5.57E-05 | -4.03 | *** | 0.001  | <0.0001 | ***<0.0001 |
| Agaricus                            | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 0.000638 | 0.000627 | <0.0001(<0.0001,<0.0001) | 1.3E-05 | 1.3E-05 | 5.6E-06  | -4.54 | *** | 0.0001 | <0.0001 | ***<0.0001 |
| Trichomerium                        | <0.0001(<0.0001,<0.0001) | 1.66E-04 | 1.09E-04 | <0.0001(<0.0001,<0.0001) | 0.00024  | 0.000179 | <0.0001(<0.0001,<0.0001) | 1.3E-05 | 8.9E-06 | 0.73963  | -0.33 |     | 0.7869 | 0.7396  | 0.7396     |
| Ciliophora                          | <0.0001(<0.0001,<0.0001) | 2.52E-04 | 1.24E-04 | <0.0001(<0.0001,<0.0001) | 3.61E-06 | 2.21E-06 | <0.0001(<0.0001,<0.0001) | 0.00011 | 0.0001  | 0.06666  | -1.83 |     | 0.1755 | 0.0667  | 0.0667     |
| Peniophorella                       | <0.0001(<0.0001,<0.0001) | 2.57E-04 | 2.43E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00514  | -2.8  | **  | 0.0259 | 0.0051  | ** 0.0051  |
| Epicoccum                           | <0.0001(<0.0001,<0.0001) | 3.62E-05 | 2.35E-05 | <0.0001(<0.0001,<0.0001) | 4.74E-04 | 4.01E-04 | <0.0001(<0.0001,<0.0001) | 0.00011 | 6.1E-05 | 0.01925  | -2.34 | *   | 0.0721 | 0.0192  | * 0.0192   |
| Pestalotiopsis                      | <0.0001(<0.0001,<0.0001) | 2.48E-04 | 2.06E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379  | -1.46 |     | 0.2885 | 0.1438  | 0.1438     |
| Ramophialophora                     | <0.0001(<0.0001,<0.0001) | 2.45E-04 | 2.31E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.06006  | -1.88 |     | 0.1649 | 0.0601  | 0.0601     |
| Phyllachora                         | <0.0001(<0.0001,<0.0001) | 1.99E-04 | 1.15E-04 | <0.0001(<0.0001,<0.0001) | 9.28E-05 | 3.04E-05 | <0.0001(<0.0001,<0.0001) | 1.9E-05 | 1E-05   | 0.38992  | -0.86 |     | 0.5536 | 0.3899  | 0.3899     |
| Genea                               | <0.0001(<0.0001,<0.0001) | 2.28E-04 | 9.22E-05 | <0.0001(<0.0001,<0.0001) | 2.39E-05 | 1.16E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 1.29E-03 | -3.22 | **  | 0.0098 | 0.0013  | ** 0.0013  |
| Septoria                            | <0.0001(<0.0001,<0.0001) | 2.27E-04 | 2.01E-04 | <0.0001(<0.0001,<0.0001) | 2.03E-05 | 1.71E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.60641  | -0.52 |     | 0.7291 | 0.6064  | 0.6064     |
| Bulleromyces                        | <0.0001(<0.0001,<0.0001) | 3.70E-05 | 3.47E-05 | <0.0001(<0.0001,<0.0001) | 4.62E-04 | 3.55E-04 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.06341  | -1.86 |     | 0.1701 | 0.0634  | 0.0634     |
| Toxicocladosporium                  | <0.0001(<0.0001,<0.0001) | 2.32E-04 | 1.89E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.04464  | -2.01 | *   | 0.1306 | 0.0446  | * 0.0446   |
| Stachybotrys                        | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 8.32E-06 | 5.13E-06 | <0.0001(<0.0001,<0.0001) | 0.00194 | 0.00187 | 8.9E-07  | -4.91 | *** | 4E-05  | <0.0001 | ***<0.0001 |
| Macrohyporia                        | <0.0001(<0.0001,<0.0001) | 2.17E-04 | 2.10E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.02444  | -2.25 | *   | 0.0854 | 0.0244  | * 0.0244   |
| Carlososaea                         | <0.0001(<0.0001,<0.0001) | 2.14E-04 | 2.10E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.10779  | -1.61 |     | 0.236  | 0.1078  | 0.1078     |
| Neoconiothyrium                     | <0.0001(<0.0001,<0.0001) | 2.08E-04 | 2.04E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.06006  | -1.88 |     | 0.1649 | 0.0601  | 0.0601     |
| Sistotrema                          | <0.0001(<0.0001,<0.0001) | 1.93E-06 | 1.93E-06 | <0.0001(<0.0001,<0.0001) | 0.000481 | 0.000455 | <0.0001(<0.0001,<0.0001) | 1.2E-05 | 1.2E-05 | 0.00168  | -3.14 | **  | 0.0118 | 0.0017  | ** 0.0017  |
| Stemphylium                         | <0.0001(<0.0001,<0.0001) | 0.000197 | 0.00012  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00706  | -2.69 | **  | 0.0336 | 0.0071  | ** 0.0071  |
| Peroneutypa                         | <0.0001(<0.0001,<0.0001) | 2.50E-07 | 2.50E-07 | <0.0001(<0.0001,<0.0001) | 4.59E-04 | 4.58E-04 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.30009  | -1.04 |     | 0.454  | 0.3001  | 0.3001     |
| Parastagonospora                    | <0.0001(<0.0001,<0.0001) | 0.000194 | 0.00018  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.018    | -2.37 | *   | 0.0693 | 0.018   | * 0.018    |
| Helicoma                            | <0.0001(<0.0001,<0.0001) | 0.000193 | 0.00019  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379  | -1.46 |     | 0.2885 | 0.1438  | 0.1438     |
| Golovinomyces                       | <0.0001(<0.0001,<0.0001) | 4.57E-05 | 4.52E-05 | <0.0001(<0.0001,<0.0001) | 0.000323 | 0.000321 | <0.0001(<0.0001,<0.0001) | 2.6E-05 | 1.4E-05 | 0.00182  | -3.12 | **  | 0.012  | 0.0018  | ** 0.0018  |
| Hypoxylon                           | <0.0001(<0.0001,<0.0001) | 1.85E-04 | 1.73E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01322  | -2.48 | *   | 0.0539 | 0.0132  | * 0.0132   |
| Chaetomium                          | <0.0001(<0.0001,<0.0001) | 1.80E-04 | 1.77E-04 | <0.0001(<0.0001,<0.0001) | 1.04E-05 | 1.04E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.38796  | -0.86 |     | 0.5527 | 0.388   | 0.388      |
| Neodevriesia                        | <0.0001(<0.0001,<0.0001) | 7.80E-07 | 4.54E-07 | <0.0001(<0.0001,<0.0001) | 0.00043  | 0.000305 | <0.0001(<0.0001,<0.0001) | 8.3E-06 | 8.3E-06 | 0.10343  | -1.63 |     | 0.2351 | 0.1034  | 0.1034     |
| Halosphaeriaceae_gen_Incertae_sedis | <0.0001(<0.0001,<0.0001) | 0.000181 | 0.00011  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00968  | -2.59 | **  | 0.0424 | 0.0097  | ** 0.0097  |
| Valsaria                            | <0.0001(<0.0001,<0.0001) | 2.66E-05 | 2.54E-05 | <0.0001(<0.0001,<0.0001) | 3.58E-04 | 2.51E-04 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.52684  | -0.63 |     | 0.6828 | 0.5268  | 0.5268     |

|                                      |                          |          |          |                          |          |          |                          |         |         |         |           |  |        |         |            |
|--------------------------------------|--------------------------|----------|----------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-----------|--|--------|---------|------------|
| Erythrobasidium                      | <0.0001(<0.0001,<0.0001) | 4.09E-05 | 3.88E-05 | <0.0001(<0.0001,<0.0001) | 0.000317 | 0.000188 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.27315 | -1.1      |  | 0.4256 | 0.2731  | 0.2731     |
| Rachicladopodium                     | <0.0001(<0.0001,<0.0001) | 1.60E-04 | 1.56E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.10779 | -1.61     |  | 0.236  | 0.1078  | 0.1078     |
| Basidiomyco<br>ta_gen_Incertae_sedis | <0.0001(<0.0001,<0.0001) | 1.57E-04 | 1.03E-04 | <0.0001(<0.0001,<0.0001) | 2.75E-06 | 2.75E-06 | <0.0001(<0.0001,<0.0001) | 8.9E-06 | 8.9E-06 | 0.03826 | -2.07 *   |  | 0.1224 | 0.0383  | * 0.0383   |
| Laetisaria                           | <0.0001(<0.0001,<0.0001) | 1.57E-04 | 1.55E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14     |  | 0.4209 | 0.2537  | 0.2537     |
| Tulostoma                            | <0.0001(<0.0001,<0.0001) | 0.000157 | 0.00015  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.08057 | -1.75     |  | 0.1938 | 0.0806  | 0.0806     |
| Thermomyces                          | <0.0001(<0.0001,<0.0001) | 1.18E-04 | 1.16E-04 | <0.0001(<0.0001,<0.0001) | 4.41E-05 | 4.41E-05 | <0.0001(<0.0001,<0.0001) | 0.00016 | 0.00016 | 0.52297 | -0.64     |  | 0.6799 | 0.523   | 0.523      |
| Monoblepharis                        | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 0.000351 | 0.000345 | <0.0001(<0.0001,<0.0001) | 8.9E-06 | 8.9E-06 | 0.00297 | -2.97 **  |  | 0.0172 | 0.003   | ** 0.003   |
| Wickerhamiella                       | <0.0001(<0.0001,<0.0001) | 2.32E-05 | 2.00E-05 | <0.0001(<0.0001,<0.0001) | 8.56E-05 | 6.08E-05 | <0.0001(<0.0001,<0.0001) | 0.00079 | 0.00078 | 0.03951 | -2.06 *   |  | 0.1243 | 0.0395  | * 0.0395   |
| Phlebiopsis                          | <0.0001(<0.0001,<0.0001) | 0.000149 | 0.0001   | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.02444 | -2.25 *   |  | 0.0854 | 0.0244  | * 0.0244   |
| Neodevriesiaceae_gen_Incertae_sedis  | <0.0001(<0.0001,<0.0001) | 1.48E-04 | 1.46E-04 | <0.0001(<0.0001,<0.0001) | 2.39E-06 | 1.72E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.71681 | -0.36     |  | 0.7869 | 0.7168  | 0.7168     |
| Nigrograna                           | <0.0001(<0.0001,<0.0001) | 1.45E-04 | 1.11E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.04464 | -2.01 *   |  | 0.1306 | 0.0446  | * 0.0446   |
| Coniosporium                         | <0.0001(<0.0001,<0.0001) | 1.79E-05 | 1.72E-05 | <0.0001(<0.0001,<0.0001) | 1.49E-05 | 1.26E-05 | <0.0001(<0.0001,<0.0001) | 0.00105 | 0.00105 | 0.43169 | -0.79     |  | 0.581  | 0.4317  | 0.4317     |
| Ceriporiopsis                        | <0.0001(<0.0001,<0.0001) | 1.38E-04 | 9.57E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.10779 | -1.61     |  | 0.236  | 0.1078  | 0.1078     |
| Cytospora                            | <0.0001(<0.0001,<0.0001) | 1.37E-04 | 9.50E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.06006 | -1.88     |  | 0.1649 | 0.0601  | 0.0601     |
| Xylocoremium                         | <0.0001(<0.0001,<0.0001) | 1.34E-04 | 1.31E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.08058 | -1.75     |  | 0.1938 | 0.0806  | 0.0806     |
| Novakomyces                          | <0.0001(<0.0001,<0.0001) | 1.26E-04 | 1.02E-04 | <0.0001(<0.0001,<0.0001) | 1.48E-05 | 1.06E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.64159 | -0.47     |  | 0.7648 | 0.6416  | 0.6416     |
| Torula                               | <0.0001(<0.0001,<0.0001) | 3.79E-07 | 3.79E-07 | <0.0001(<0.0001,<0.0001) | 0.000308 | 0.000306 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.30009 | -1.04     |  | 0.454  | 0.3001  | 0.3001     |
| Symptodiomyces                       | <0.0001(<0.0001,<0.0001) | 1.30E-04 | 1.26E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.19126 | -1.31     |  | 0.365  | 0.1913  | 0.1913     |
| Deconica                             | <0.0001(<0.0001,<0.0001) | 1.25E-04 | 1.22E-04 | <0.0001(<0.0001,<0.0001) | 1.23E-06 | 1.23E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.29911 | -1.04     |  | 0.454  | 0.2991  | 0.2991     |
| Exobasidium                          | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 0.000147 | 0.000145 | <0.0001(<0.0001,<0.0001) | 0.00054 | 0.00054 | 0.02157 | -2.3 *    |  | 0.0787 | 0.0216  | * 0.0216   |
| Beauveria                            | <0.0001(<0.0001,<0.0001) | 7.38E-05 | 2.02E-05 | <0.0001(<0.0001,<0.0001) | 7.23E-05 | 2.26E-05 | <0.0001(<0.0001,<0.0001) | 0.00016 | 0.00013 | 0.81393 | -0.24     |  | 0.834  | 0.8139  | 0.8139     |
| Venturiaceae_gen_Incertae_sedis      | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 0.000286 | 0.000281 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00124 | -3.23 **  |  | 0.0098 | 0.0012  | ** 0.0012  |
| Phaeophleospora                      | <0.0001(<0.0001,<0.0001) | 1.21E-04 | 1.08E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.10779 | -1.61     |  | 0.236  | 0.1078  | 0.1078     |
| Bergerella                           | <0.0001(<0.0001,<0.0001) | 1.20E-04 | 1.16E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.06006 | -1.88     |  | 0.1649 | 0.0601  | 0.0601     |
| Tubeufia                             | <0.0001(<0.0001,<0.0001) | 1.18E-04 | 1.15E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379 | -1.46     |  | 0.2885 | 0.1438  | 0.1438     |
| Didymocyrtis                         | <0.0001(<0.0001,<0.0001) | 6.67E-07 | 6.7E-07  | <0.0001(<0.0001,<0.0001) | 8.80E-06 | 3.71E-06 | <0.0001(<0.0001,<0.0001) | 0.00098 | 0.00096 | 0.00027 | -3.64 *** |  | 0.0033 | 0.0003  | ***0.0003  |
| Zygosaccharomyces                    | <0.0001(<0.0001,<0.0001) | 1.16E-04 | 1.13E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14     |  | 0.4209 | 0.2537  | 0.2537     |
| Sporothrix                           | <0.0001(<0.0001,<0.0001) | 2.80E-07 | 2.80E-07 | <0.0001(<0.0001,<0.0001) | 0.000196 | 8.24E-05 | <0.0001(<0.0001,<0.0001) | 0.00027 | 0.00015 | 5E-06   | -4.56 *** |  | 0.0001 | <0.0001 | ***<0.0001 |

|                         |                          |          |          |                          |          |          |                          |         |         |         |       |     |        |        |           |
|-------------------------|--------------------------|----------|----------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|-----|--------|--------|-----------|
| Preussia                | <0.0001(<0.0001,<0.0001) | 0.000114 | 0.00011  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.02444 | -2.25 | *   | 0.0854 | 0.0244 | * 0.0244  |
| GS08_gen_1ncertae_sedis | <0.0001(<0.0001,<0.0001) | 0.00E+00 | #####    | <0.0001(<0.0001,<0.0001) | 2.67E-04 | 2.64E-04 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01875 | -2.35 | *   | 0.0716 | 0.0187 | * 0.0187  |
| Gymnopus                | <0.0001(<0.0001,<0.0001) | 1.12E-04 | 1.05E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7105 | 0.5824 | 0.5824    |
| Sordaria                | <0.0001(<0.0001,<0.0001) | 1.11E-04 | 9.85E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.2885 | 0.1438 | 0.1438    |
| Calycina                | <0.0001(<0.0001,<0.0001) | 0.000111 | 0.00011  | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.236  | 0.1078 | 0.1078    |
| Cryptomarasmius         | <0.0001(<0.0001,<0.0001) | 1.11E-04 | 7.42E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.03308 | -2.13 | *   | 0.1128 | 0.0331 | * 0.0331  |
| Dexomyces               | <0.0001(<0.0001,<0.0001) | 1.10E-04 | 1.07E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.236  | 0.1078 | 0.1078    |
| Radulomyces             | <0.0001(<0.0001,<0.0001) | 1.08E-04 | 1.05E-04 | <0.0001(<0.0001,<0.0001) | 0.00E+00 | 0.00E+00 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14378 | -1.46 |     | 0.2885 | 0.1438 | 0.1438    |
| Pyrenochaeta            | <0.0001(<0.0001,<0.0001) | 1.07E-04 | 1.06E-04 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4859 | 0.3356 | 0.3356    |
| Dactylodendron          | <0.0001(<0.0001,<0.0001) | 4.83E-05 | 4.53E-05 | <0.0001(<0.0001,<0.0001) | 0.000126 | 0.00012  | <0.0001(<0.0001,<0.0001) | 4.5E-05 | 4.5E-05 | 0.43936 | -0.77 |     | 0.581  | 0.4394 | 0.4394    |
| Issatchenkia            | <0.0001(<0.0001,<0.0001) | 1.08E-06 | 6.57E-07 | <0.0001(<0.0001,<0.0001) | 0.000244 | 0.000222 | <0.0001(<0.0001,<0.0001) | 1.6E-05 | 1.1E-05 | 0.00905 | -2.61 | **  | 0.0405 | 0.0091 | ** 0.0091 |
| Podosphaera             | <0.0001(<0.0001,<0.0001) | 7.51E-05 | 7.4E-05  | <0.0001(<0.0001,<0.0001) | 6.97E-05 | 6.69E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.41116 | -0.82 |     | 0.574  | 0.4112 | 0.4112    |
| Phyllosticta            | <0.0001(<0.0001,<0.0001) | 0.000104 | 9.9E-05  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.2885 | 0.1438 | 0.1438    |
| Sarocladium             | <0.0001(<0.0001,<0.0001) | 3.45E-05 | 2.2E-05  | <0.0001(<0.0001,<0.0001) | 0.000146 | 4.72E-05 | <0.0001(<0.0001,<0.0001) | 5.8E-05 | 3.2E-05 | 0.00034 | -3.59 | *** | 0.0038 | 0.0003 | ***0.0003 |
| Gonatophragmium         | <0.0001(<0.0001,<0.0001) | 0.000103 | 9.5E-05  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.4209 | 0.2537 | 0.2537    |
| Zasmidium               | <0.0001(<0.0001,<0.0001) | 0.000103 | 9.7E-05  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.19126 | -1.31 |     | 0.365  | 0.1913 | 0.1913    |
| Antennariella           | <0.0001(<0.0001,<0.0001) | 0.000103 | 0.0001   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.2885 | 0.1438 | 0.1438    |
| Phanerochaete           | <0.0001(<0.0001,<0.0001) | 4.47E-07 | 4.5E-07  | <0.0001(<0.0001,<0.0001) | 0.000241 | 0.000235 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00791 | -2.66 | **  | 0.0362 | 0.0079 | ** 0.0079 |
| Meira                   | <0.0001(<0.0001,<0.0001) | 1.12E-05 | 8.2E-06  | <0.0001(<0.0001,<0.0001) | 2.18E-06 | 2.18E-06 | <0.0001(<0.0001,<0.0001) | 0.0008  | 0.0008  | 0.38098 | -0.88 |     | 0.5465 | 0.381  | 0.381     |
| Ochrocladosporium       | <0.0001(<0.0001,<0.0001) | 1.74E-06 | 9.1E-07  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0.00088 | 0.00088 | 0.25398 | -1.14 |     | 0.4209 | 0.254  | 0.254     |
| Rhizopus                | <0.0001(<0.0001,<0.0001) | 9.98E-05 | 6.7E-05  | <0.0001(<0.0001,<0.0001) | 2.93E-06 | 2.93E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.17951 | -1.34 |     | 0.349  | 0.1795 | 0.1795    |
| Pseudogymnascus         | <0.0001(<0.0001,<0.0001) | 0.0001   | 7.2E-05  | <0.0001(<0.0001,<0.0001) | 1.13E-06 | 1.13E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.37758 | -0.88 |     | 0.5435 | 0.3776 | 0.3776    |
| Neosascochyta           | <0.0001(<0.0001,<0.0001) | 9.87E-05 | 9.5E-05  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.581  | 0.4427 | 0.4427    |
| Chalara                 | <0.0001(<0.0001,<0.0001) | 9.81E-05 | 9.7E-05  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4859 | 0.3356 | 0.3356    |
| Skeletocutis            | <0.0001(<0.0001,<0.0001) | 9.69E-05 | 9.6E-05  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4859 | 0.3356 | 0.3356    |
| Cladophialophora        | <0.0001(<0.0001,<0.0001) | 9.29E-05 | 9E-05    | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.4209 | 0.2537 | 0.2537    |
| Anisomeridium           | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0.000205 | 0.000204 | <0.0001(<0.0001,<0.0001) | 3.6E-05 | 3.6E-05 | 0.04061 | -2.05 | *   | 0.1243 | 0.0406 | * 0.0406  |
| Calyptrella             | <0.0001(<0.0001,<0.0001) | 0.000089 | 8.5E-05  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.08058 | -1.75 |     | 0.1938 | 0.0806 | 0.0806    |

|                                            |                  |          |         |                          |          |          |                          |         |         |         |          |        |        |           |
|--------------------------------------------|------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|----------|--------|--------|-----------|
| Atractiella                                | <0.0001(<0.0001) | 8.75E-05 | 6.2E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379 | -1.46    | 0.2885 | 0.1438 | 0.1438    |
| Jaminaea                                   | <0.0001(<0.0001) | 8.52E-05 | 8.5E-05 | <0.0001(<0.0001,<0.0001) | 1.02E-06 | 1.02E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.87748 | -0.15    | 0.8843 | 0.8775 | 0.8775    |
| Phacidium                                  | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.0002   | 0.000198 | <0.0001(<0.0001,<0.0001) | 5.1E-06 | 5.1E-06 | 0.04145 | -2.04 *  | 0.125  | 0.0415 | * 0.0415  |
| Hormodochis                                | <0.0001(<0.0001) | 8.36E-05 | 8E-05   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77    | 0.581  | 0.4427 | 0.4427    |
| Physisporinus                              | <0.0001(<0.0001) | 8.25E-05 | 8.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77    | 0.581  | 0.4427 | 0.4427    |
| Fuscosporella                              | <0.0001(<0.0001) | 5.33E-05 | 1.3E-05 | <0.0001(<0.0001,<0.0001) | 2.18E-05 | 1.01E-05 | <0.0001(<0.0001,<0.0001) | 0.00017 | 9.5E-05 | 0.08505 | -1.72    | 0.2033 | 0.0851 | 0.0851    |
| Holtermanniella                            | <0.0001(<0.0001) | 1.41E-05 | 8E-06   | <0.0001(<0.0001,<0.0001) | 0.000152 | 0.000142 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.16188 | -1.4     | 0.3177 | 0.1619 | 0.1619    |
| Itersonilia                                | <0.0001(<0.0001) | 2.15E-06 | 1.2E-06 | <0.0001(<0.0001,<0.0001) | 0.000169 | 0.000165 | <0.0001(<0.0001,<0.0001) | 1.7E-05 | 1.2E-05 | 0.13303 | -1.5     | 0.2809 | 0.133  | 0.133     |
| Neofusicoccum                              | <0.0001(<0.0001) | 7.53E-05 | 7.2E-05 | <0.0001(<0.0001,<0.0001) | 9.29E-07 | 9.29E-07 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.29618 | -1.04    | 0.454  | 0.2962 | 0.2962    |
| Banksiophoma                               | <0.0001(<0.0001) | 7.47E-05 | 7.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 4.4E-06 | 4.4E-06 | 0.2541  | -1.14    | 0.4209 | 0.2541 | 0.2541    |
| Rhopalophora                               | <0.0001(<0.0001) | 7.29E-05 | 7.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.19126 | -1.31    | 0.365  | 0.1913 | 0.1913    |
| Trechispora                                | <0.0001(<0.0001) | 7.21E-05 | 6.7E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96    | 0.4859 | 0.3356 | 0.3356    |
| Elsinoe                                    | <0.0001(<0.0001) | 7.19E-05 | 7.2E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7869 | 0.7642 | 0.7642    |
| Parasarocladium                            | <0.0001(<0.0001) | 6.95E-05 | 6.9E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7105 | 0.5824 | 0.5824    |
| Mucor                                      | <0.0001(<0.0001) | 6.52E-05 | 1.5E-05 | <0.0001(<0.0001,<0.0001) | 6.46E-06 | 5.6E-06  | <0.0001(<0.0001,<0.0001) | 8.3E-06 | 8.3E-06 | 0.00262 | -3.01 ** | 0.0155 | 0.0026 | ** 0.0026 |
| Trichomeria<br>ceae_gen_In<br>certae_sedis | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000161 | 0.000158 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00124 | -3.23 ** | 0.0098 | 0.0012 | ** 0.0012 |
| Fusicolla                                  | <0.0001(<0.0001) | 6.81E-05 | 6.8E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7105 | 0.5824 | 0.5824    |
| Subulicystidium                            | <0.0001(<0.0001) | 7.37E-06 | 6.1E-06 | <0.0001(<0.0001,<0.0001) | 0.000139 | 0.000139 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.83326 | -0.21    | 0.8496 | 0.8333 | 0.8333    |
| Bandonia                                   | <0.0001(<0.0001) | 3.84E-05 | 2E-05   | <0.0001(<0.0001,<0.0001) | 5.01E-05 | 3.65E-05 | <0.0001(<0.0001,<0.0001) | 4.4E-05 | 4.1E-05 | 0.18498 | -1.33    | 0.3579 | 0.185  | 0.185     |
| Dimorphom<br>a                             | <0.0001(<0.0001) | 4.93E-05 | 4E-05   | <0.0001(<0.0001,<0.0001) | 3.53E-05 | 3.53E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.72286 | -0.35    | 0.7869 | 0.7229 | 0.7229    |
| Dactylella                                 | <0.0001(<0.0001) | 6.37E-05 | 6.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7105 | 0.5824 | 0.5824    |
| Agaricales_<br>gen_Incertae<br>_sedis      | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000148 | 0.000148 | <0.0001(<0.0001,<0.0001) | 6.7E-06 | 6.7E-06 | 0.03757 | -2.08 *  | 0.1212 | 0.0376 | * 0.0376  |
| Gibellula                                  | <0.0001(<0.0001) | 5.08E-05 | 2.1E-05 | <0.0001(<0.0001,<0.0001) | 2.44E-05 | 1.01E-05 | <0.0001(<0.0001,<0.0001) | 7.1E-06 | 7.1E-06 | 0.59625 | -0.53    | 0.7253 | 0.5962 | 0.5962    |
| Eutypella                                  | <0.0001(<0.0001) | 6.06E-05 | 6E-05   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77    | 0.581  | 0.4427 | 0.4427    |
| Lophiostoma                                | <0.0001(<0.0001) | 5.89E-05 | 4.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 7.1E-06 | 7.1E-06 | 0.23128 | -1.2     | 0.4209 | 0.2313 | 0.2313    |
| Paratrithirachium                          | <0.0001(<0.0001) | 4.17E-07 | 4.2E-07 | <0.0001(<0.0001,<0.0001) | 0.000137 | 9.97E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.30009 | -1.04    | 0.454  | 0.3001 | 0.3001    |
| Umthunziomyces                             | <0.0001(<0.0001) | 3.22E-05 | 3.1E-05 | <0.0001(<0.0001,<0.0001) | 5.51E-05 | 5.42E-05 | <0.0001(<0.0001,<0.0001) | 8.1E-06 | 8.1E-06 | 0.60355 | -0.52    | 0.7291 | 0.6035 | 0.6035    |



|                                    |                           |          |         |                           |          |          |                           |         |         |         |       |     |        |        |           |
|------------------------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|-----|--------|--------|-----------|
| Nectriopsis                        | <0.0001(<0.0001, <0.0001) | 5.56E-05 | 5.3E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.4209 | 0.2537 | 0.2537    |
| Lyomyces                           | <0.0001(<0.0001, <0.0001) | 5.55E-05 | 5.1E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4859 | 0.3356 | 0.3356    |
| Hanseniaspora                      | <0.0001(<0.0001, <0.0001) | 3.02E-05 | 2.7E-05 | <0.0001(<0.0001, <0.0001) | 4.78E-05 | 4.78E-05 | <0.0001(<0.0001, <0.0001) | 4.4E-05 | 3.1E-05 | 0.17926 | -1.34 |     | 0.349  | 0.1793 | 0.1793    |
| Ciboria                            | <0.0001(<0.0001, <0.0001) | 5.3E-05  | 5.3E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.581  | 0.4427 | 0.4427    |
| Xeromyces                          | <0.0001(<0.0001, <0.0001) | 6.99E-06 | 7E-06   | <0.0001(<0.0001, <0.0001) | 0.000108 | 0.000104 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.101   | -1.64 |     | 0.2309 | 0.101  | 0.101     |
| Coniothyrium                       | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 1.34E-06 | 1.34E-06 | <0.0001(<0.0001, <0.0001) | 0.00043 | 0.00043 | 0.00025 | -3.66 | *** | 0.0032 | 0.0003 | ***0.0003 |
| Biatrisporaceae_gen_Incertae_sedis | <0.0001(<0.0001, <0.0001) | 4.95E-05 | 4.9E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.581  | 0.4427 | 0.4427    |
| Vacuiphoma                         | <0.0001(<0.0001, <0.0001) | 2.21E-05 | 1.6E-05 | <0.0001(<0.0001, <0.0001) | 3.37E-05 | 2.55E-05 | <0.0001(<0.0001, <0.0001) | 8.8E-05 | 7E-05   | 0.0975  | -1.66 |     | 0.2266 | 0.0975 | 0.0975    |
| Laburnicola                        | <0.0001(<0.0001, <0.0001) | 4.59E-05 | 4.4E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.4209 | 0.2537 | 0.2537    |
| Heliocybe                          | <0.0001(<0.0001, <0.0001) | 4.57E-05 | 4.5E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.4209 | 0.2537 | 0.2537    |
| Lipomyces                          | <0.0001(<0.0001, <0.0001) | 4.55E-05 | 3.8E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.4209 | 0.2537 | 0.2537    |
| Steccherinum                       | <0.0001(<0.0001, <0.0001) | 4.41E-05 | 4.4E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7105 | 0.5824 | 0.5824    |
| Colletotrichum                     | <0.0001(<0.0001, <0.0001) | 4.37E-05 | 3.1E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4859 | 0.3356 | 0.3356    |
| Striatibotrys                      | <0.0001(<0.0001, <0.0001) | 3.1E-05  | 1.5E-05 | <0.0001(<0.0001, <0.0001) | 2.25E-05 | 6.68E-06 | <0.0001(<0.0001, <0.0001) | 2.4E-05 | 1.9E-05 | 0.33055 | -0.97 |     | 0.4859 | 0.3305 | 0.3305    |
| Huntiaella                         | <0.0001(<0.0001, <0.0001) | 4.3E-05  | 4.3E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7869 | 0.7642 | 0.7642    |
| Fomitopsis                         | <0.0001(<0.0001, <0.0001) | 4.18E-05 | 4.1E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.581  | 0.4427 | 0.4427    |
| Vandijckella                       | <0.0001(<0.0001, <0.0001) | 5.38E-07 | 5.4E-07 | <0.0001(<0.0001, <0.0001) | 9.42E-05 | 9.42E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.74278 | -0.33 |     | 0.7869 | 0.7428 | 0.7428    |
| Kneiffiella                        | <0.0001(<0.0001, <0.0001) | 3.97E-05 | 3.9E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7105 | 0.5824 | 0.5824    |
| Ceratocystis                       | <0.0001(<0.0001, <0.0001) | 3.45E-05 | 3.4E-05 | <0.0001(<0.0001, <0.0001) | 1.05E-06 | 1.05E-06 | <0.0001(<0.0001, <0.0001) | 3.9E-05 | 3.9E-05 | 0.60095 | -0.52 |     | 0.7289 | 0.601  | 0.601     |
| Cyphellaceae_gen_Incertae_sedis    | <0.0001(<0.0001, <0.0001) | 3.92E-05 | 3.8E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4859 | 0.3356 | 0.3356    |
| Ruhlandiella                       | <0.0001(<0.0001, <0.0001) | 3.92E-05 | 3.8E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7105 | 0.5824 | 0.5824    |
| Moesziomyces                       | <0.0001(<0.0001, <0.0001) | 1.73E-06 | 1.7E-06 | <0.0001(<0.0001, <0.0001) | 8.79E-05 | 5.45E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00813 | -2.65 | **  | 0.0368 | 0.0081 | ** 0.0081 |
| Peyronellaea                       | <0.0001(<0.0001, <0.0001) | 9.7E-07  | 9.7E-07 | <0.0001(<0.0001, <0.0001) | 5.46E-05 | 3.4E-05  | <0.0001(<0.0001, <0.0001) | 0.00013 | 8.8E-05 | 0.00047 | -3.5  | *** | 0.005  | 0.0005 | ***0.0005 |
| Anthracina                         | <0.0001(<0.0001, <0.0001) | 1.77E-05 | 1.7E-05 | <0.0001(<0.0001, <0.0001) | 4.68E-05 | 4.57E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.55425 | -0.59 |     | 0.7105 | 0.5543 | 0.5543    |
| Zoophthora                         | <0.0001(<0.0001, <0.0001) | 3.25E-05 | 2.1E-05 | <0.0001(<0.0001, <0.0001) | 1.18E-05 | 6.52E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.32876 | -0.98 |     | 0.4859 | 0.3288 | 0.3288    |
| Ganoderma                          | <0.0001(<0.0001, <0.0001) | 3.69E-05 | 3.5E-05 | <0.0001(<0.0001, <0.0001) | 9.46E-07 | 9.46E-07 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.82925 | -0.22 |     | 0.8476 | 0.8293 | 0.8293    |
| Amphobotrys                        | <0.0001(<0.0001, <0.0001) | 3.5E-05  | 2.6E-05 | <0.0001(<0.0001, <0.0001) | 1.52E-06 | 1.08E-06 | <0.0001(<0.0001, <0.0001) | 1.3E-05 | 1.3E-05 | 0.8128  | -0.24 |     | 0.834  | 0.8128 | 0.8128    |

|                    |                           |          |         |                           |          |          |                           |         |         |         |       |     |        |         |            |
|--------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Crustoderma        | <0.0001(<0.0001, <0.0001) | 3.58E-05 | 3.6E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7869 | 0.7642  | 0.7642     |
| Penicillifer       | <0.0001(<0.0001, <0.0001) | 1.72E-05 | 1.3E-05 | <0.0001(<0.0001, <0.0001) | 3.84E-05 | 1.19E-05 | <0.0001(<0.0001, <0.0001) | 2.1E-05 | 1.5E-05 | 0.00311 | -2.96 | **  | 0.0173 | 0.0031  | ** 0.0031  |
| Pseudophthomyces   | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 8.39E-07 | 8.39E-07 | <0.0001(<0.0001, <0.0001) | 0.0003  | 0.00028 | 2E-09   | -5.99 | *** | 2E-07  | <0.0001 | ***<0.0001 |
| Akanthomyces       | <0.0001(<0.0001, <0.0001) | 3.29E-05 | 2E-05   | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.06006 | -1.88 |     | 0.1649 | 0.0601  | 0.0601     |
| Anastomitrabeculia | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0.00029 | 0.00029 | 0.0019  | -3.11 | **  | 0.012  | 0.0019  | ** 0.0019  |
| Eremothecium       | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 7.72E-05 | 7.61E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.0715  | -1.8  |     | 0.1781 | 0.0715  | 0.0715     |
| Thanatephorus      | <0.0001(<0.0001, <0.0001) | 3.25E-05 | 3.1E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.581  | 0.4427  | 0.4427     |
| Paecilomyces       | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 7.58E-05 | 7.58E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.4209 | 0.2691  | 0.2691     |
| Quambalaria        | <0.0001(<0.0001, <0.0001) | 3.19E-05 | 3.2E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7869 | 0.7642  | 0.7642     |
| Meyerozyma         | <0.0001(<0.0001, <0.0001) | 2.51E-05 | 2.4E-05 | <0.0001(<0.0001, <0.0001) | 1.39E-06 | 1.39E-06 | <0.0001(<0.0001, <0.0001) | 5.4E-05 | 3.3E-05 | 0.00111 | -3.26 | **  | 0.0098 | 0.0011  | ** 0.0011  |
| Nemania            | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 7.46E-05 | 7.46E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.4209 | 0.2691  | 0.2691     |
| Aquapteridospora   | <0.0001(<0.0001, <0.0001) | 1.63E-05 | 1.2E-05 | <0.0001(<0.0001, <0.0001) | 3.32E-05 | 2.56E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.41116 | -0.82 |     | 0.574  | 0.4112  | 0.4112     |
| Acrodontium        | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0.00026 | 0.00026 | 0.0019  | -3.11 | **  | 0.012  | 0.0019  | ** 0.0019  |
| Lembosiniella      | <0.0001(<0.0001, <0.0001) | 6.21E-07 | 6.2E-07 | <0.0001(<0.0001, <0.0001) | 6.33E-05 | 6.33E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.74278 | -0.33 |     | 0.7869 | 0.7428  | 0.7428     |
| Kodamaea           | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 5.64E-06 | 4.13E-06 | <0.0001(<0.0001, <0.0001) | 0.00022 | 0.00022 | 0.03976 | -2.06 | *   | 0.1243 | 0.0398  | * 0.0398   |
| Trichosporon       | <0.0001(<0.0001, <0.0001) | 2.67E-05 | 2.2E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.236  | 0.1078  | 0.1078     |
| Neocucurbitaria    | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 6.07E-05 | 5.99E-05 | <0.0001(<0.0001, <0.0001) | 7.4E-06 | 7.4E-06 | 0.04061 | -2.05 | *   | 0.1243 | 0.0406  | * 0.0406   |
| Elaphomyces        | <0.0001(<0.0001, <0.0001) | 2.01E-05 | 1.8E-05 | <0.0001(<0.0001, <0.0001) | 1.4E-05  | 7.97E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.20483 | -1.27 |     | 0.3873 | 0.2048  | 0.2048     |
| Entyloma           | <0.0001(<0.0001, <0.0001) | 2.44E-05 | 9.4E-06 | <0.0001(<0.0001, <0.0001) | 8.75E-07 | 8.75E-07 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.07038 | -1.81 |     | 0.1781 | 0.0704  | 0.0704     |
| Penidiella         | <0.0001(<0.0001, <0.0001) | 2.4E-05  | 2.4E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7869 | 0.7642  | 0.7642     |
| Homortomyces       | <0.0001(<0.0001, <0.0001) | 2.2E-05  | 2.2E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7869 | 0.7642  | 0.7642     |
| Actinomucor        | <0.0001(<0.0001, <0.0001) | 2.04E-05 | 4.7E-06 | <0.0001(<0.0001, <0.0001) | 2.21E-06 | 2.21E-06 | <0.0001(<0.0001, <0.0001) | 3.9E-06 | 3.9E-06 | 0.00711 | -2.69 | **  | 0.0336 | 0.0071  | ** 0.0071  |
| Plenodomus         | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 5.11E-05 | 4.79E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00124 | -3.23 | **  | 0.0098 | 0.0012  | ** 0.0012  |
| Alloccryptovalsa   | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 4.84E-05 | 4.84E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.4209 | 0.2691  | 0.2691     |
| Kluyveromyces      | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 4.66E-05 | 4.54E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.0715  | -1.8  |     | 0.1781 | 0.0715  | 0.0715     |
| Heydenia           | <0.0001(<0.0001, <0.0001) | 1.97E-05 | 2E-05   | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7869 | 0.7642  | 0.7642     |
| Lithohypha         | <0.0001(<0.0001, <0.0001) | 1.82E-05 | 1.5E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4859 | 0.3356  | 0.3356     |
| Komagataella       | <0.0001(<0.0001, <0.0001) | 1.78E-05 | 1.4E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7105 | 0.5824  | 0.5824     |

|                        |                  |          |         |                          |          |          |                          |         |         |         |       |    |        |        |           |
|------------------------|------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|----|--------|--------|-----------|
| Protomyces             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 4.07E-05 | 4.07E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Clonostachys           | <0.0001(<0.0001) | 3.83E-06 | 3.8E-06 | <0.0001(<0.0001,<0.0001) | 3.1E-05  | 2.22E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.101   | -1.64 |    | 0.2309 | 0.101  | 0.101     |
| Microascus             | <0.0001(<0.0001) | 1.68E-05 | 1.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 |    | 0.581  | 0.4427 | 0.4427    |
| Pseudohelminthosporium | <0.0001(<0.0001) | 1.62E-05 | 1.6E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Ogataea                | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 3.68E-05 | 3.53E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0715  | -1.8  |    | 0.1781 | 0.0715 | 0.0715    |
| Cyphellophora          | <0.0001(<0.0001) | 1.54E-05 | 1.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 |    | 0.581  | 0.4427 | 0.4427    |
| Puccinia               | <0.0001(<0.0001) | 1.16E-05 | 1.1E-05 | <0.0001(<0.0001,<0.0001) | 8.07E-06 | 8.07E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.87748 | -0.15 |    | 0.8843 | 0.8775 | 0.8775    |
| Umbilicaria            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 3.43E-05 | 3.43E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Buckleyzyma            | <0.0001(<0.0001) | 1.1E-06  | 1.1E-06 | <0.0001(<0.0001,<0.0001) | 3.17E-05 | 2.99E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.101   | -1.64 |    | 0.2309 | 0.101  | 0.101     |
| Lentithecium           | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0.00012 | 0.00012 | 0.0019  | -3.11 | ** | 0.012  | 0.0019 | ** 0.0019 |
| Ascosphaera            | <0.0001(<0.0001) | 1.32E-05 | 1.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |    | 0.7105 | 0.5824 | 0.5824    |
| Tetrapispora           | <0.0001(<0.0001) | 3.59E-06 | 2.4E-06 | <0.0001(<0.0001,<0.0001) | 1.73E-05 | 6.1E-06  | <0.0001(<0.0001,<0.0001) | 2E-05   | 1.4E-05 | 0.01144 | -2.53 | *  | 0.0496 | 0.0114 | * 0.0114  |
| Hyphopichia            | <0.0001(<0.0001) | 1.04E-05 | 1E-05   | <0.0001(<0.0001,<0.0001) | 5.66E-06 | 5.66E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 |    | 0.7869 | 0.7505 | 0.7505    |
| Arthrimum              | <0.0001(<0.0001) | 9.71E-06 | 9.2E-06 | <0.0001(<0.0001,<0.0001) | 5.39E-06 | 5.39E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.87748 | -0.15 |    | 0.8843 | 0.8775 | 0.8775    |
| Kurtzmaniella          | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.56E-05 | 2.56E-05 | <0.0001(<0.0001,<0.0001) | 9.3E-06 | 9.3E-06 | 0.03757 | -2.08 | *  | 0.1212 | 0.0376 | * 0.0376  |
| Uwebraunia             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.64E-05 | 2.64E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Curvularia             | <0.0001(<0.0001) | 9.06E-06 | 9.1E-06 | <0.0001(<0.0001,<0.0001) | 4.66E-06 | 4.66E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 |    | 0.7869 | 0.7505 | 0.7505    |
| Collybiopsis           | <0.0001(<0.0001) | 1.1E-05  | 1.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Coronicium             | <0.0001(<0.0001) | 1.1E-05  | 1E-05   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |    | 0.7105 | 0.5824 | 0.5824    |
| Strobilurus            | <0.0001(<0.0001) | 9.8E-06  | 9.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 9.1E-06 | 9.1E-06 | 0.06381 | -1.85 |    | 0.1701 | 0.0638 | 0.0638    |
| Ceraceosorus           | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.5E-05  | 2.5E-05  | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Hazslinszkyomyces      | <0.0001(<0.0001) | 8.36E-06 | 8.4E-06 | <0.0001(<0.0001,<0.0001) | 4.73E-06 | 4.73E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 |    | 0.7869 | 0.7505 | 0.7505    |
| Flagelloscypba         | <0.0001(<0.0001) | 9.7E-06  | 9.7E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Tritirachium           | <0.0001(<0.0001) | 9.51E-06 | 8E-06   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 |    | 0.581  | 0.4427 | 0.4427    |
| Marantokorodyana       | <0.0001(<0.0001) | 9.45E-06 | 9.4E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Archaeorhizomyces      | <0.0001(<0.0001) | 9.35E-06 | 9.3E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Berkeleyomyces         | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.18E-05 | 1.71E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0715  | -1.8  |    | 0.1781 | 0.0715 | 0.0715    |
| Extremus               | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.03E-05 | 2.03E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |

|                                      |                           |          |         |                           |          |          |                           |         |         |         |       |        |        |        |
|--------------------------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|--------|--------|--------|
| Oliveonia                            | <0.0001(<0.0001, <0.0001) | 8.56E-06 | 8.6E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Saccharomyces                        | <0.0001(<0.0001, <0.0001) | 8.09E-06 | 5.9E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7105 | 0.5824 | 0.5824 |
| Neovarysphaeria                      | <0.0001(<0.0001, <0.0001) | 7.86E-06 | 7.5E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7105 | 0.5824 | 0.5824 |
| Pyricularia                          | <0.0001(<0.0001, <0.0001) | 7.75E-06 | 7.5E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7105 | 0.5824 | 0.5824 |
| Mycoarthritis                        | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 1.78E-05 | 1.78E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.4209 | 0.2691 | 0.2691 |
| Byssoschlamys                        | <0.0001(<0.0001, <0.0001) | 3.05E-06 | 2E-06   | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 3.8E-05 | 3.8E-05 | 0.22834 | -1.2  | 0.4209 | 0.2283 | 0.2283 |
| Ascochyta                            | <0.0001(<0.0001, <0.0001) | 4.86E-06 | 3.6E-06 | <0.0001(<0.0001, <0.0001) | 5.39E-06 | 4.11E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76399 | -0.3  | 0.7869 | 0.764  | 0.764  |
| Mrakia                               | <0.0001(<0.0001, <0.0001) | 1.81E-06 | 1.2E-06 | <0.0001(<0.0001, <0.0001) | 1.25E-05 | 1.14E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.70358 | -0.38 | 0.7869 | 0.7036 | 0.7036 |
| Parathyridaria                       | <0.0001(<0.0001, <0.0001) | 0.000007 | 6.2E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.44271 | -0.77 | 0.581  | 0.4427 | 0.4427 |
| Xenodermatobia                       | <0.0001(<0.0001, <0.0001) | 6.77E-06 | 6.4E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7105 | 0.5824 | 0.5824 |
| Effuseotrichosporon                  | <0.0001(<0.0001, <0.0001) | 6.29E-07 | 6.3E-07 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 5.3E-05 | 5.3E-05 | 0.06013 | -1.88 | 0.1649 | 0.0601 | 0.0601 |
| Dothiora                             | <0.0001(<0.0001, <0.0001) | 5.14E-06 | 4.9E-06 | <0.0001(<0.0001, <0.0001) | 3.54E-06 | 2.67E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.55425 | -0.59 | 0.7105 | 0.5543 | 0.5543 |
| Gjaerumia                            | <0.0001(<0.0001, <0.0001) | 6.62E-06 | 6.6E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Sidera                               | <0.0001(<0.0001, <0.0001) | 6.61E-06 | 6.6E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Neoaccladium                         | <0.0001(<0.0001, <0.0001) | 6.43E-06 | 6.4E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Strelitziana                         | <0.0001(<0.0001, <0.0001) | 6.14E-06 | 3.7E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.44271 | -0.77 | 0.581  | 0.4427 | 0.4427 |
| Cerrena                              | <0.0001(<0.0001, <0.0001) | 5.87E-06 | 4.8E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.44271 | -0.77 | 0.581  | 0.4427 | 0.4427 |
| Phaeoacremonium                      | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 1.37E-05 | 1.37E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.4209 | 0.2691 | 0.2691 |
| Tremateia                            | <0.0001(<0.0001, <0.0001) | 5.75E-06 | 4.8E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7105 | 0.5824 | 0.5824 |
| Tetracladium                         | <0.0001(<0.0001, <0.0001) | 5.7E-06  | 5.7E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Stephanosporaceae_gen_Incertae_sedis | <0.0001(<0.0001, <0.0001) | 5.68E-06 | 5.7E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Avachytrium                          | <0.0001(<0.0001, <0.0001) | 5.52E-06 | 5.5E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Iodophanus                           | <0.0001(<0.0001, <0.0001) | 5.35E-06 | 4.3E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7105 | 0.5824 | 0.5824 |
| Ochroconis                           | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 1.25E-05 | 1.25E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.4209 | 0.2691 | 0.2691 |
| Pararamichloridium                   | <0.0001(<0.0001, <0.0001) | 5.11E-06 | 5.1E-06 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Basidiodendron                       | <0.0001(<0.0001, <0.0001) | 5.02E-06 | 5E-06   | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |
| Coniella                             | <0.0001(<0.0001, <0.0001) | 4.96E-06 | 5E-06   | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7869 | 0.7642 | 0.7642 |

|                                    |                  |          |         |                          |          |          |                          |         |         |         |       |    |        |        |           |
|------------------------------------|------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|----|--------|--------|-----------|
| Xylodon                            | <0.0001(<0.0001) | 6.29E-07 | 4.5E-07 | <0.0001(<0.0001,<0.0001) | 9.52E-06 | 3.94E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00237 | -3.04 | ** | 0.0145 | 0.0024 | ** 0.0024 |
| Iodosphaeria                       | <0.0001(<0.0001) | 4.58E-06 | 4.6E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Rhizopogon                         | <0.0001(<0.0001) | 4.55E-06 | 4.5E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Robbauera                          | <0.0001(<0.0001) | 4.53E-06 | 4.5E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Adiscisco                          | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 1.05E-05 | 1.05E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Peziza                             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 1.05E-05 | 1.05E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Phialocephala                      | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 4.7E-06  | 3.55E-06 | <0.0001(<0.0001,<0.0001) | 2E-05   | 2E-05   | 0.03976 | -2.06 | *  | 0.1243 | 0.0398 | * 0.0398  |
| Wickerhamomyces                    | <0.0001(<0.0001) | 1.71E-06 | 1.7E-06 | <0.0001(<0.0001,<0.0001) | 3.55E-06 | 3.55E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 |    | 0.7869 | 0.7505 | 0.7505    |
| Keratinophyton                     | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 6.82E-06 | 6.82E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Graphium                           | <0.0001(<0.0001) | 2.86E-06 | 2.9E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Groenewaldozyma                    | <0.0001(<0.0001) | 2.84E-06 | 2.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Choanephora                        | <0.0001(<0.0001) | 2.83E-06 | 2.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Zymoseptoria                       | <0.0001(<0.0001) | 2.76E-06 | 2.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Delastria                          | <0.0001(<0.0001) | 2.74E-06 | 1.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96 |    | 0.4859 | 0.3356 | 0.3356    |
| Punctularia                        | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 2.4E-05 | 2.4E-05 | 0.0019  | -3.11 | ** | 0.012  | 0.0019 | ** 0.0019 |
| Houjia                             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 2.4E-05 | 2.4E-05 | 0.0019  | -3.11 | ** | 0.012  | 0.0019 | ** 0.0019 |
| Hydropisphaera                     | <0.0001(<0.0001) | 2.61E-06 | 2.6E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Jattaia                            | <0.0001(<0.0001) | 2.61E-06 | 2.6E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Fracchiaria                        | <0.0001(<0.0001) | 1.26E-06 | 1.3E-06 | <0.0001(<0.0001,<0.0001) | 3.02E-06 | 3.02E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.74278 | -0.33 |    | 0.7869 | 0.7428 | 0.7428    |
| Gibellulopsis                      | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 5.91E-06 | 5.91E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Sistotremastrum                    | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 5.91E-06 | 4.73E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0715  | -1.8  |    | 0.1781 | 0.0715 | 0.0715    |
| Paracremonium                      | <0.0001(<0.0001) | 2.45E-06 | 2E-06   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |    | 0.7105 | 0.5824 | 0.5824    |
| Leptosporella                      | <0.0001(<0.0001) | 2.43E-06 | 2.4E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Chytridiomycota_gen_Incertae_sedis | <0.0001(<0.0001) | 2.42E-06 | 2.4E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Pseudorobillarda                   | <0.0001(<0.0001) | 2.36E-06 | 2.4E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7869 | 0.7642 | 0.7642    |
| Cookeina                           | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 4.91E-06 | 3.85E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0715  | -1.8  |    | 0.1781 | 0.0715 | 0.0715    |
| Entoloma                           | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 4.64E-06 | 4.64E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |
| Amylostereum                       | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 4.27E-06 | 4.27E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.4209 | 0.2691 | 0.2691    |

|                                                                                                                                                |                        |              |            |                          |               |             |                          |                 |               |         |         |           |         |         |            |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------|------------|--------------------------|---------------|-------------|--------------------------|-----------------|---------------|---------|---------|-----------|---------|---------|------------|
| Paraleptosphaeria                                                                                                                              | <0.0001(<0.0001)       | 1.56E-06     | 1.6E-06    | <0.0001(<0.0001,<0.0001) | 0             | 0           | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.76419 | -0.3    |           | 0.7869  | 0.7642  | 0.7642     |
| Powellomyces                                                                                                                                   | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 3.68E-06      | 3.68E-06    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Vararia                                                                                                                                        | <0.0001(<0.0001)       | 1.48E-06     | 1.5E-06    | <0.0001(<0.0001,<0.0001) | 0             | 0           | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.76419 | -0.3    |           | 0.7869  | 0.7642  | 0.7642     |
| Scopulariopsis                                                                                                                                 | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 3.43E-06      | 3.43E-06    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Gregarithecium                                                                                                                                 | <0.0001(<0.0001)       | 1.3E-06      | 1.3E-06    | <0.0001(<0.0001,<0.0001) | 0             | 0           | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.76419 | -0.3    |           | 0.7869  | 0.7642  | 0.7642     |
| Scopuloides                                                                                                                                    | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 2.7E-06       | 2.7E-06     | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Chaetosphaeria                                                                                                                                 | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 2.57E-06      | 2.57E-06    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Echinoporia                                                                                                                                    | <0.0001(<0.0001)       | 9.02E-07     | 9E-07      | <0.0001(<0.0001,<0.0001) | 0             | 0           | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.76419 | -0.3    |           | 0.7869  | 0.7642  | 0.7642     |
| Septobasidium                                                                                                                                  | <0.0001(<0.0001)       | 7.27E-07     | 7.3E-07    | <0.0001(<0.0001,<0.0001) | 0             | 0           | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.76419 | -0.3    |           | 0.7869  | 0.7642  | 0.7642     |
| Cystobasidium                                                                                                                                  | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 1.7E-06       | 1.7E-06     | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Emericellopsis                                                                                                                                 | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 1.45E-06      | 1.45E-06    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Chaenothecopsis                                                                                                                                | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 1.38E-06      | 1.38E-06    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Zygosporium                                                                                                                                    | <0.0001(<0.0001)       | 5.83E-07     | 5.8E-07    | <0.0001(<0.0001,<0.0001) | 0             | 0           | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.76419 | -0.3    |           | 0.7869  | 0.7642  | 0.7642     |
| Sphaerulina                                                                                                                                    | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 1.34E-06      | 1.34E-06    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Edenia                                                                                                                                         | <0.0001(<0.0001)       | 5.15E-07     | 5.2E-07    | <0.0001(<0.0001,<0.0001) | 0             | 0           | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.76419 | -0.3    |           | 0.7869  | 0.7642  | 0.7642     |
| Paludomyces                                                                                                                                    | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 1.13E-06      | 1.13E-06    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Chloridium                                                                                                                                     | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 1.09E-06      | 1.09E-06    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Emergomycetes                                                                                                                                  | <0.0001(<0.0001)       | 4.32E-07     | 4.3E-07    | <0.0001(<0.0001,<0.0001) | 0             | 0           | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.76419 | -0.3    |           | 0.7869  | 0.7642  | 0.7642     |
| Geotrichum                                                                                                                                     | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 9.11E-07      | 9.11E-07    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Inocyclus                                                                                                                                      | <0.0001(<0.0001)       | 0            | 0          | <0.0001(<0.0001,<0.0001) | 8.75E-07      | 8.75E-07    | <0.0001(<0.0001,<0.0001) | 0               | 0             | 0.26915 | -1.11   |           | 0.4209  | 0.2691  | 0.2691     |
| Supplementary Table S7. The different degree of species level (p value) among control (n=132), COVID-19-N (n=56), and COVID-19-C (n=15) groups |                        |              |            |                          |               |             |                          |                 |               |         |         |           |         |         |            |
| ID                                                                                                                                             | Control.median         | Control.mean | Control.se | COVID-19.median          | COVID-19.mean | COVID-19.se | COVID-19-C.median        | COVID-19-C.mean | COVID-19-C.se | p-value | z-score | Sig._mark | q-value | fixp    | fixps      |
| Acrodictys_luminicola                                                                                                                          | 0.0341(0.0091,0.3007)  | 0.182386     | 0.02101    | 0.1043(0.0181,0.6448)    | 0.295128      | 0.042549    | 0.0775(0.0294,0.1452)    | 0.19051         | 0.07115       | 0.06026 | -1.88   |           | 0.1658  | 0.0603  | 0.0603     |
| Zanclospora_jonesii                                                                                                                            | 0.0732(0.0146,0.3211)  | 0.219276     | 0.02397    | 0.0175(0.0067,0.0825)    | 0.147875      | 0.03769     | 0.014(0.0082,0.0561)     | 0.05769         | 0.02298       | 0.00111 | -3.26   | **        | 0.0103  | 0.0011  | ** 0.0011  |
| Aspergillus_subflavus                                                                                                                          | 0.007(0.0018,0.0609)   | 0.073277     | 0.01328    | 0.0104(0.0028,0.0266)    | 0.074688      | 0.025349    | 0.0225(0.0081,0.1115)    | 0.09332         | 0.03237       | 0.17398 | -1.36   |           | 0.3576  | 0.174   | 0.174      |
| Blumeria_spe_Incertae_sedis                                                                                                                    | 0.0016(0.0006,0.0102)  | 0.04539      | 0.0103     | 0.0008(0.0002,0.0035)    | 0.022175      | 0.013184    | 0.0102(0.0016,0.2573)    | 0.12993         | 0.04323       | 0.00151 | -3.17   | **        | 0.0125  | 0.0015  | ** 0.0015  |
| Cryptococcus_longus                                                                                                                            | 0.0163(0.002,0.0547)   | 0.062697     | 0.01085    | <0.0001(<0.0001,<0.0001) | 2.57E-05      | 1.56E-05    | <0.0001(<0.0001,<0.0001) | 2.7E-05         | 2.2E-05       | 2.7E-31 | -11.6   | ***       | 2E-28   | <0.0001 | ***<0.0001 |
| Malassezia_restricta                                                                                                                           | 0.0054(0.0008,0.0336)  | 0.033444     | 0.00611    | 0.0009(0.0003,0.0087)    | 0.022914      | 0.008543    | 0.0009(0.0004,0.0303)    | 0.02628         | 0.01173       | 0.0098  | -2.58   | **        | 0.0441  | 0.0098  | ** 0.0098  |
| Chrysosphaeria_jan-nelii                                                                                                                       | 0.0001(<0.0001,0.0004) | 0.003136     | 0.00136    | <0.0001(<0.0001,0.0005)  | 0.062906      | 0.022261    | <0.0001(<0.0001,0.0107)  | 0.07847         | 0.0582        | 0.60559 | -0.52   |           | 0.729   | 0.6056  | 0.6056     |
| Diversisporaspurca                                                                                                                             | 0.0017(0.0008,0.0146)  | 0.029246     | 0.00983    | 0.0009(0.0001,0.003)     | 0.004882      | 0.001511    | 0.0008(<0.0001,0.0022)   | 0.00288         | 0.00127       | 0.00504 | -2.8    | **        | 0.0281  | 0.005   | ** 0.005   |
| Raffaella_auricola                                                                                                                             | 0.0005(<0.0001,0.002)  | 0.022161     | 0.0093     | 0.0013(0.0004,0.0064)    | 0.0053        | 0.001446    | 0.0012(0.0004,0.0038)    | 0.00254         | 0.00077       | 0.00523 | -2.79   | **        | 0.0283  | 0.0052  | ** 0.0052  |

|                                            |                           |          |         |                           |          |          |                           |         |         |         |       |     |        |         |            |
|--------------------------------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Hydnobolite<br>s_roseus                    | <0.0001(<0.0001, <0.0001) | 0.001496 | 0.00072 | 0.0002(<0.0001, 0.0018)   | 0.042453 | 0.022936 | 0.0003(0.0001, 0.0009)    | 0.03189 | 0.03139 | 1.3E-05 | -4.35 | *** | 0.0003 | <0.0001 | ***<0.0001 |
| Candida_albicans                           | <0.0001(<0.0001, <0.0001) | 0.000103 | 2.5E-05 | 0.0014(0.0003, 0.0048)    | 0.04441  | 0.022852 | 0.0009(<0.0001, 0.0041)   | 0.03379 | 0.03223 | 5.7E-17 | -8.37 | *** | 2E-14  | <0.0001 | ***<0.0001 |
| Cladosporium_kenpeggii                     | 0.0011(0.0003, 0.0089)    | 0.016085 | 0.00343 | 0.0002(<0.0001, 0.0017)   | 0.00606  | 0.002458 | 0.0002(<0.0001, 0.0105)   | 0.00766 | 0.00344 | 0.00032 | -3.6  | *** | 0.0039 | 0.0003  | ***0.0003  |
| Cladosporium_cladosporioides               | 0.0009(0.0003, 0.0069)    | 0.013677 | 0.00294 | 0.0002(0.0001, 0.0013)    | 0.010854 | 0.004854 | 0.0003(0.0001, 0.0066)    | 0.00724 | 0.00335 | 0.00677 | -2.71 | **  | 0.035  | 0.0068  | ** 0.0068  |
| Arthrographis_grakistii                    | 0.0001(<0.0001, 0.0008)   | 0.018769 | 0.01051 | <0.0001(<0.0001, 0.0001)  | 0.00015  | 6.68E-05 | <0.0001(<0.0001, <0.0001) | 8.7E-05 | 4.1E-05 | 0.00014 | -3.81 | *** | 0.0021 | 0.0001  | ***0.0001  |
| Simplicium_symphodiorum                    | 0.0004(0.0002, 0.0043)    | 0.007264 | 0.00124 | 0.0026(0.0006, 0.0417)    | 0.022493 | 0.00419  | 0.0016(0.0003, 0.0083)    | 0.01324 | 0.00644 | 0.00016 | -3.77 | *** | 0.0023 | 0.0002  | ***0.0002  |
| Cladosporium_halotolerans                  | 0.0001(<0.0001, 0.0009)   | 0.006278 | 0.00191 | 0.0003(<0.0001, 0.0034)   | 0.018252 | 0.009082 | 0.001(0.0005, 0.0214)     | 0.0345  | 0.01964 | 0.0016  | -3.16 | **  | 0.013  | 0.0016  | ** 0.0016  |
| Saccharomyces_cerevisiae                   | <0.0001(<0.0001, 0.0003)  | 0.001336 | 0.00044 | 0.0005(<0.0001, 0.0026)   | 0.022645 | 0.011213 | 0.0007(0.0001, 0.0216)    | 0.04922 | 0.02599 | 1.4E-06 | -4.83 | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Alternaria_ternata                         | 0.0005(0.0002, 0.0036)    | 0.011542 | 0.00315 | 0.0001(<0.0001, 0.0006)   | 0.002666 | 0.000902 | 0.0001(<0.0001, 0.0002)   | 0.00269 | 0.00131 | 0.0005  | -3.48 | *** | 0.0058 | 0.0005  | ***0.0005  |
| Mutinus_graphideorum                       | 0.0002(<0.0001, 0.0001)   | 0.012121 | 0.00686 | <0.0001(<0.0001, 0.0003)  | 0.000519 | 0.00025  | <0.0001(<0.0001, 0.0001)  | 0.00087 | 0.00049 | 0.01694 | -2.39 | *   | 0.0684 | 0.0169  | * 0.0169   |
| [Cryptococcus]_ater                        | 0.0004(0.0001, 0.0017)    | 0.006671 | 0.00137 | 0.0014(0.0003, 0.0161)    | 0.009638 | 0.001953 | 0.0002(0.0001, 0.0016)    | 0.00592 | 0.003   | 0.00635 | -2.73 | **  | 0.0333 | 0.0063  | ** 0.0063  |
| Russula_xerophilus                         | 0.0003(<0.0001, 0.0023)   | 0.007204 | 0.00197 | 0.0004(0.0002, 0.0031)    | 0.007618 | 0.003107 | 0.0014(0.0001, 0.0076)    | 0.00439 | 0.00148 | 0.41328 | -0.82 |     | 0.5856 | 0.4133  | 0.4133     |
| Schizophyllum_communis                     | 0.0001(<0.0001, <0.0001)  | 0.008264 | 0.00737 | <0.0001(<0.0001, <0.0001) | 0.0007   | 0.000459 | <0.0001(<0.0001, <0.0001) | 0.00034 | 0.00032 | 0.40008 | -0.84 |     | 0.5706 | 0.4001  | 0.4001     |
| Paratubercospora_mucoosa                   | 0.0008(0.0001, 0.0053)    | 0.004611 | 0.00102 | 0.0024(0.0004, 0.0092)    | 0.006971 | 0.002106 | 0.0003(0.0002, 0.0014)    | 0.00235 | 0.00104 | 0.03554 | -2.1  | *   | 0.1168 | 0.0355  | * 0.0355   |
| Trigonopsis_californica                    | <0.0001(<0.0001, <0.0001) | 0.007453 | 0.00726 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00013 | -3.84 | *** | 0.002  | 0.0001  | ***0.0001  |
| Penicillium_melanoconidium                 | <0.0001(<0.0001, <0.0001) | 0.007388 | 0.00727 | <0.0001(<0.0001, <0.0001) | 5.66E-06 | 5.66E-06 | <0.0001(<0.0001, <0.0001) | 7.3E-06 | 5E-06   | 0.01648 | -2.4  | *   | 0.0673 | 0.0165  | * 0.0165   |
| Pleurotus_ostreatus                        | <0.0001(<0.0001, 0.0002)  | 0.003574 | 0.00153 | <0.0001(<0.0001, 0.0002)  | 0.00352  | 0.001771 | 0.0006(<0.0001, 0.0016)   | 0.02024 | 0.01889 | 0.00959 | -2.59 | **  | 0.0439 | 0.0096  | ** 0.0096  |
| Malassezia_arunalokei                      | <0.0001(<0.0001, 0.0005)  | 0.004934 | 0.00246 | <0.0001(<0.0001, 0.0002)  | 0.002878 | 0.001322 | <0.0001(<0.0001, 0.0002)  | 0.00226 | 0.00171 | 0.01019 | -2.57 | *   | 0.0449 | 0.0102  | * 0.0102   |
| Talaromyces_scorteus                       | <0.0001(<0.0001, 0.0002)  | 0.006259 | 0.00211 | <0.0001(<0.0001, <0.0001) | 0.000232 | 0.000157 | <0.0001(<0.0001, <0.0001) | 9E-05   | 5.6E-05 | 0.00026 | -3.66 | *** | 0.0033 | 0.0003  | ***0.0003  |
| Gibberella_fujikuroi                       | 0.0001(<0.0001, <0.0001)  | 1.04E-05 | 4.7E-06 | <0.0001(<0.0001, 0.0007)  | 0.011717 | 0.004983 | <0.0001(<0.0001, 0.0031)  | 0.01193 | 0.00889 | 1.9E-14 | -7.66 | *** | 4E-12  | <0.0001 | ***<0.0001 |
| Saprochaete_gigas                          | 0.0001(<0.0001, <0.0001)  | 0.00606  | 0.00589 | <0.0001(<0.0001, <0.0001) | 2.49E-05 | 2.49E-05 | <0.0001(<0.0001, <0.0001) | 7.1E-05 | 6.5E-05 | 0.07381 | -1.79 |     | 0.1898 | 0.0738  | 0.0738     |
| Aspergillus_amstelodami                    | <0.0001(<0.0001, 0.0003)  | 0.004919 | 0.00187 | <0.0001(<0.0001, <0.0001) | 0.001865 | 0.00108  | <0.0001(<0.0001, 0.0001)  | 0.00124 | 0.00086 | 0.00102 | -3.29 | **  | 0.0098 | 0.001   | ** 0.001   |
| Neomicrospora_haeropsis_alhagi-pseudalhagi | <0.0001(<0.0001, <0.0001) | 0.000538 | 0.00024 | <0.0001(<0.0001, <0.0001) | 0.011165 | 0.010884 | 0.0001(<0.0001, 0.0018)   | 0.00222 | 0.00145 | 0.03013 | -2.17 | *   | 0.1056 | 0.0301  | * 0.0301   |
| Angustimassarina_camporesii                | 0.0002(<0.0001, 0.0026)   | 0.002793 | 0.00044 | 0.0011(0.0002, 0.0105)    | 0.005309 | 0.000876 | 0.0007(0.0001, 0.0022)    | 0.00293 | 0.00131 | 0.00303 | -2.96 | **  | 0.0189 | 0.003   | ** 0.003   |
| Candida_spe_Incertae_sedis                 | <0.0001(<0.0001, 0.0002)  | 0.001231 | 0.00054 | <0.0001(<0.0001, 0.0003)  | 0.001394 | 0.000626 | 0.0003(0.0001, 0.0009)    | 0.02976 | 0.01703 | 0.00053 | -3.46 | *** | 0.0059 | 0.0005  | ***0.0005  |
| Malassezia_globosa                         | 0.0002(<0.0001, 0.0019)   | 0.003037 | 0.00062 | <0.0001(<0.0001, 0.0001)  | 0.000902 | 0.000524 | <0.0001(<0.0001, 0.0002)  | 0.01101 | 0.01092 | 1.6E-05 | -4.31 | *** | 0.0004 | <0.0001 | ***<0.0001 |
| Nigrospora_oryzae                          | <0.0001(<0.0001, <0.0001) | 0.00047  | 0.00033 | <0.0001(<0.0001, 0.0001)  | 0.004079 | 0.003234 | <0.0001(<0.0001, 0.0004)  | 0.02106 | 0.01921 | 0.00014 | -3.81 | *** | 0.0021 | 0.0001  | ***0.0001  |
| Aspergillus_penicillioideus                | <0.0001(<0.0001, 0.0007)  | 0.003246 | 0.00101 | <0.0001(<0.0001, 0.0009)  | 0.001848 | 0.000574 | 0.0001(<0.0001, 0.0016)   | 0.00374 | 0.00255 | 0.87884 | -0.15 |     | 0.8843 | 0.8788  | 0.8788     |
| Fantasmomyces_hyalinus                     | <0.0001(<0.0001, 0.0013)  | 0.002101 | 0.00055 | 0.0008(0.0001, 0.0079)    | 0.004554 | 0.0009   | 0.0003(<0.0001, 0.0036)   | 0.00222 | 0.0009  | 0.00126 | -3.23 | **  | 0.011  | 0.0013  | ** 0.0013  |
| Candida_papillulosa                        | <0.0001(<0.0001, 0.0001)  | 0.003702 | 0.0014  | <0.0001(<0.0001, <0.0001) | 0.001204 | 0.000608 | <0.0001(<0.0001, <0.0001) | 0.00057 | 0.00057 | 0.00062 | -3.42 | *** | 0.0067 | 0.0006  | ***0.0006  |
| Diaporthe_kochmanii                        | <0.0001(<0.0001, 0.0001)  | 0.003735 | 0.0024  | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 2.6E-07 | -5.15 | *** | 2E-05  | <0.0001 | ***<0.0001 |

|                                 |                          |          |         |                         |          |          |                         |         |         |         |       |     |        |         |            |
|---------------------------------|--------------------------|----------|---------|-------------------------|----------|----------|-------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Phaeosphaeria_oryzae            | <0.0001(<0.0001,0.0003)  | 0.003419 | 0.00225 | <0.0001(<0.001,<0.0001) | 0.00012  | 8.91E-05 | <0.0001(<0.001,<0.0001) | 0       | 0       | 0.00012 | -3.84 | *** | 0.002  | 0.0001  | ***0.0001  |
| Wallemia_c/anadensis            | <0.0001(<0.0001,<0.0001) | 0.002712 | 0.00258 | <0.0001(<0.001,<0.0001) | 6.1E-05  | 4.7E-05  | <0.0001(<0.001,<0.0001) | 0       | 0       | 0.08981 | -1.7  |     | 0.2191 | 0.0898  | 0.0898     |
| Trichomonascus_ciferrii         | <0.0001(<0.0001,<0.0001) | 0.002686 | 0.00264 | <0.0001(<0.001,<0.0001) | 0        | 0        | <0.0001(<0.001,<0.0001) | 1.5E-05 | 1.5E-05 | 0.01719 | -2.38 | *   | 0.069  | 0.0172  | * 0.0172   |
| Naganishia_albida               | <0.0001(<0.0001,<0.0001) | 0.002664 | 0.00194 | <0.0001(<0.001,<0.0001) | 9.29E-07 | 9.29E-07 | <0.0001(<0.001,<0.0001) | 0.00013 | 0.00013 | 0.00095 | -3.31 | *** | 0.0094 | 0.0009  | ***0.0009  |
| Ophiostoma_acarorum             | <0.0001(<0.0001,0.0001)  | 0.002643 | 0.0022  | <0.0001(<0.001,<0.0001) | 1.79E-06 | 1.79E-06 | <0.0001(<0.001,<0.0001) | 0       | 0       | 2.2E-09 | -5.98 | *** | 4E-07  | <0.0001 | ***<0.0001 |
| Botrytis_cinerea                | <0.0001(<0.0001,0.0001)  | 0.002254 | 0.0015  | <0.0001(<0.001,<0.0001) | 8.54E-05 | 7.1E-05  | <0.0001(<0.001,0.0002)  | 0.00177 | 0.00116 | 5.2E-05 | -4.05 | *** | 0.001  | <0.0001 | ***<0.0001 |
| Galactomyces_pseudocandidus     | <0.0001(<0.0001,0.0001)  | 0.00045  | 0.00014 | <0.0001(<0.001,<0.0001) | 0.004727 | 0.004644 | <0.0001(<0.001,<0.0001) | 0.0001  | 7E-05   | 0.21987 | -1.23 |     | 0.4269 | 0.2199  | 0.2199     |
| Acremonium_alternatum           | <0.0001(<0.0001,<0.0001) | 0.002392 | 0.00238 | <0.0001(<0.001,<0.0001) | 9.11E-07 | 9.11E-07 | <0.0001(<0.001,<0.0001) | 0       | 0       | 0.0157  | -2.42 | *   | 0.0653 | 0.0157  | * 0.0157   |
| Oudemomyces_megalosporus        | <0.0001(<0.0001,<0.0001) | 0.002256 | 0.00184 | <0.0001(<0.001,<0.0001) | 1.53E-05 | 8.35E-06 | <0.0001(<0.001,<0.0001) | 3.1E-05 | 2.7E-05 | 0.00186 | -3.11 | **  | 0.0136 | 0.0019  | ** 0.0019  |
| Zygorhiza_danielis              | <0.0001(<0.0001,<0.0001) | 0.000848 | 0.00061 | <0.0001(<0.001,0.0001)  | 0.003098 | 0.001848 | <0.0001(<0.001,<0.0001) | 4.3E-05 | 2.8E-05 | 0.14201 | -1.47 |     | 0.3059 | 0.142   | 0.142      |
| Aureobasidium_pullulanis        | <0.0001(<0.0001,<0.0001) | 0.000565 | 0.00033 | <0.0001(<0.001,<0.0001) | 0.003606 | 0.002233 | <0.0001(<0.001,<0.0001) | 0.00051 | 0.00038 | 0.04209 | -2.03 | *   | 0.1263 | 0.0421  | * 0.0421   |
| Malassezia_symphodialis         | <0.0001(<0.0001,0.0002)  | 0.002014 | 0.00051 | <0.0001(<0.001,<0.0001) | 0.000207 | 0.000132 | <0.0001(<0.001,0.0001)  | 0.00021 | 0.00016 | 8.4E-07 | -4.93 | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Golubevia_pallescens            | <0.0001(<0.0001,<0.0001) | 0.002124 | 0.00176 | <0.0001(<0.001,<0.0001) | 0        | 0        | <0.0001(<0.001,<0.0001) | 1.8E-05 | 1.8E-05 | 0.0001  | -3.88 | *** | 0.0019 | 0.0001  | ***0.0001  |
| Cladosporium_sphaeropermium     | <0.0001(<0.0001,<0.0001) | 0.001835 | 0.00068 | <0.0001(<0.001,<0.0001) | 0.000537 | 0.000347 | <0.0001(<0.001,<0.0001) | 0.00033 | 0.0002  | 0.28972 | -1.06 |     | 0.4594 | 0.2897  | 0.2897     |
| Filobasidium_oeirense           | <0.0001(<0.0001,<0.0001) | 0.000411 | 0.00029 | <0.0001(<0.001,0.0001)  | 0.003523 | 0.00193  | <0.0001(<0.001,0.0002)  | 0.00169 | 0.00154 | 0.00364 | -2.91 | **  | 0.0216 | 0.0036  | ** 0.0036  |
| Coprinellus_ovatus              | <0.0001(<0.0001,<0.0001) | 0.001423 | 0.00071 | <0.0001(<0.001,<0.0001) | 0.001543 | 0.001532 | <0.0001(<0.001,<0.0001) | 0       | 0       | 0.00068 | -3.4  | *** | 0.0071 | 0.0007  | ***0.0007  |
| Togniniella_acerosa             | <0.0001(<0.0001,<0.0001) | 0.002027 | 0.00117 | <0.0001(<0.001,<0.0001) | 4.96E-05 | 2.05E-05 | <0.0001(<0.001,0.0001)  | 0.0002  | 0.00011 | 0.05452 | -1.92 |     | 0.1585 | 0.0545  | 0.0545     |
| Talaromyces_funiculosus         | <0.0001(<0.0001,<0.0001) | 0.001596 | 0.00111 | <0.0001(<0.001,<0.0001) | 0.000787 | 0.000445 | <0.0001(<0.001,<0.0001) | 0.00021 | 0.00014 | 0.1279  | -1.52 |     | 0.2861 | 0.1279  | 0.1279     |
| Cladosporium_spe_Incertae_sedis | <0.0001(<0.0001,0.0005)  | 0.001298 | 0.00034 | <0.0001(<0.001,0.0002)  | 0.000898 | 0.000495 | <0.0001(<0.001,0.001)   | 0.00087 | 0.00041 | 0.01607 | -2.41 | *   | 0.066  | 0.0161  | * 0.0161   |
| Aspergillus_versicolor          | <0.0001(<0.0001,<0.0001) | 0.000905 | 0.00028 | <0.0001(<0.001,0.0001)  | 0.001209 | 0.000572 | <0.0001(<0.001,0.0003)  | 0.00299 | 0.00212 | 0.18787 | -1.32 |     | 0.3758 | 0.1879  | 0.1879     |
| Penicillium_hirsutum            | <0.0001(<0.0001,<0.0001) | 0.000257 | 0.00017 | <0.0001(<0.001,<0.0001) | 0.003471 | 0.002278 | <0.0001(<0.001,<0.0001) | 0.00021 | 0.00018 | 0.0022  | -3.06 | **  | 0.0153 | 0.0022  | ** 0.0022  |
| Candida_tropicalis              | <0.0001(<0.0001,<0.0001) | 0.001311 | 0.00127 | <0.0001(<0.001,<0.0001) | 0.000785 | 0.000763 | <0.0001(<0.001,0.0003)  | 0.00034 | 0.00019 | 0.32895 | -0.98 |     | 0.4934 | 0.329   | 0.329      |
| Cercospora_canescens            | <0.0001(<0.0001,<0.0001) | 0.001679 | 0.0014  | <0.0001(<0.001,<0.0001) | 0        | 0        | <0.0001(<0.001,<0.0001) | 0       | 0       | 9E-07   | -4.91 | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Irpex_lacteus                   | <0.0001(<0.0001,<0.0001) | 0.00067  | 0.00061 | <0.0001(<0.001,<0.0001) | 0.002105 | 0.002083 | <0.0001(<0.001,<0.0001) | 0.00087 | 0.00085 | 0.76179 | -0.3  |     | 0.7866 | 0.7618  | 0.7618     |
| Trametes_cubensis               | <0.0001(<0.0001,<0.0001) | 0.001646 | 0.00155 | <0.0001(<0.001,<0.0001) | 0        | 0        | <0.0001(<0.001,<0.0001) | 0       | 0       | 0.00194 | -3.1  | **  | 0.0136 | 0.0019  | ** 0.0019  |
| Wallemia_mellicola              | <0.0001(<0.0001,<0.0001) | 0.001572 | 0.0009  | <0.0001(<0.001,<0.0001) | 4.11E-05 | 2.61E-05 | <0.0001(<0.001,<0.0001) | 0.00046 | 0.00046 | 0.00015 | -3.8  | *** | 0.0021 | 0.0001  | ***0.0001  |
| Pseudoveronaea_ellipsoidea      | <0.0001(<0.0001,<0.0001) | 3.6E-06  | 3.2E-06 | <0.0001(<0.001,<0.0001) | 0.003471 | 0.002984 | <0.0001(<0.001,<0.0001) | 0.00104 | 0.00101 | 9.8E-07 | -4.9  | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Trametes_versicolor             | <0.0001(<0.0001,<0.0001) | 0.000627 | 0.00035 | <0.0001(<0.001,<0.0001) | 0.00218  | 0.00139  | <0.0001(<0.001,<0.0001) | 4.1E-06 | 4.1E-06 | 0.13077 | -1.51 |     | 0.2903 | 0.1308  | 0.1308     |
| Purpureocillium_lilacinum       | <0.0001(<0.0001,<0.0001) | 0.001541 | 0.001   | <0.0001(<0.001,<0.0001) | 0        | 0        | <0.0001(<0.001,<0.0001) | 4.4E-06 | 4.4E-06 | 4.3E-05 | -4.09 | *** | 0.0008 | <0.0001 | ***<0.0001 |



|                                  |                           |          |         |                           |          |          |                           |         |         |         |       |     |        |        |           |
|----------------------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|-----|--------|--------|-----------|
| Fusarium_poae                    | <0.0001(<0.0001, <0.0001) | 0.00117  | 0.00074 | <0.0001(<0.0001, <0.0001) | 0.00067  | 0.000376 | <0.0001(<0.0001, 0.0001)  | 0.00075 | 0.00052 | 0.23802 | -1.18 |     | 0.433  | 0.238  | 0.238     |
| Leptospora_rubella               | <0.0001(<0.0001, <0.0001) | 0.001338 | 0.00077 | <0.0001(<0.0001, <0.0001) | 0.000396 | 0.000318 | <0.0001(<0.0001, <0.0001) | 0.00015 | 0.00014 | 0.04141 | -2.04 | *   | 0.1249 | 0.0414 | * 0.0414  |
| Aspergillus_thermophilus         | <0.0001(<0.0001, <0.0001) | 0.000145 | 8.3E-05 | <0.0001(<0.0001, <0.0001) | 0.003149 | 0.002997 | <0.0001(<0.0001, <0.0001) | 1.4E-05 | 9.9E-06 | 0.6128  | -0.51 |     | 0.7354 | 0.6128 | 0.6128    |
| Apiotrichum_domesticum           | <0.0001(<0.0001, 0.0001)  | 0.001397 | 0.00057 | <0.0001(<0.0001, <0.0001) | 0.000113 | 1E-04    | <0.0001(<0.0001, <0.0001) | 0.00025 | 0.0002  | 0.00011 | -3.86 | *** | 0.002  | 0.0001 | ***0.0001 |
| Rhexothecium_globosum            | <0.0001(<0.0001, 0.0001)  | 0.001278 | 0.00076 | <0.0001(<0.0001, <0.0001) | 0.000124 | 6.57E-05 | <0.0001(<0.0001, 0.0001)  | 0.00071 | 0.00035 | 0.06611 | -1.84 |     | 0.1783 | 0.0661 | 0.0661    |
| Peniophora_crassitunicata        | <0.0001(<0.0001, <0.0001) | 0.000662 | 0.00053 | <0.0001(<0.0001, <0.0001) | 0.001585 | 0.001573 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.08537 | -1.72 |     | 0.2097 | 0.0854 | 0.0854    |
| Yarrowia_ubiula                  | <0.0001(<0.0001, <0.0001) | 0.001272 | 0.00075 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00051 | -3.48 | *** | 0.0058 | 0.0005 | ***0.0005 |
| Bjerkandera_mikrofumosa          | <0.0001(<0.0001, <0.0001) | 0.001261 | 0.00122 | <0.0001(<0.0001, <0.0001) | 3.79E-06 | 3.79E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.0028  | -2.99 | **  | 0.0183 | 0.0028 | ** 0.0028 |
| Trametes_trogii                  | <0.0001(<0.0001, <0.0001) | 0.001189 | 0.00117 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00373 | -2.9  | **  | 0.022  | 0.0037 | ** 0.0037 |
| Verrucaria_coulankaensis         | <0.0001(<0.0001, <0.0001) | 0.001182 | 0.00109 | <0.0001(<0.0001, <0.0001) | 5.8E-06  | 5.8E-06  | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.0028  | -2.99 | **  | 0.0183 | 0.0028 | ** 0.0028 |
| Cladosporium_coloradense         | <0.0001(<0.0001, <0.0001) | 0.001055 | 0.00061 | <0.0001(<0.0001, <0.0001) | 9.53E-05 | 5.35E-05 | <0.0001(<0.0001, 0.0001)  | 0.00018 | 9.9E-05 | 0.01893 | -2.35 | *   | 0.0708 | 0.0189 | * 0.0189  |
| Pleurotus_eryngii                | <0.0001(<0.0001, <0.0001) | 0.001098 | 0.00065 | <0.0001(<0.0001, <0.0001) | 1.13E-06 | 1.13E-06 | <0.0001(<0.0001, <0.0001) | 4.1E-06 | 4.1E-06 | 0.00612 | -2.74 | **  | 0.0326 | 0.0061 | ** 0.0061 |
| Vishniacozyma_victoriae          | <0.0001(<0.0001, <0.0001) | 0.001049 | 0.001   | <0.0001(<0.0001, <0.0001) | 7.82E-05 | 6.92E-05 | <0.0001(<0.0001, <0.0001) | 1.5E-05 | 1.5E-05 | 0.36199 | -0.91 |     | 0.5287 | 0.362  | 0.362     |
| Cystophobasidium_macerans        | <0.0001(<0.0001, <0.0001) | 0.001044 | 0.00076 | <0.0001(<0.0001, <0.0001) | 7.01E-05 | 6.77E-05 | <0.0001(<0.0001, <0.0001) | 7E-06   | 7E-06   | 0.00801 | -2.65 | **  | 0.0395 | 0.008  | ** 0.008  |
| Yarrowia_lipolytica              | <0.0001(<0.0001, <0.0001) | 0.001013 | 0.00045 | <0.0001(<0.0001, <0.0001) | 7.68E-05 | 7.68E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00014 | -3.81 | *** | 0.0021 | 0.0001 | ***0.0001 |
| Hannaella_sinnensis              | <0.0001(<0.0001, <0.0001) | 3.72E-05 | 3.1E-05 | <0.0001(<0.0001, <0.0001) | 0.002347 | 0.002304 | <0.0001(<0.0001, 0.0001)  | 9.2E-05 | 3.8E-05 | 0.00362 | -2.91 | **  | 0.0216 | 0.0036 | ** 0.0036 |
| Ramularia_coryli                 | <0.0001(<0.0001, <0.0001) | 4.47E-07 | 4.5E-07 | <0.0001(<0.0001, <0.0001) | 0.002412 | 0.002369 | <0.0001(<0.0001, <0.0001) | 4.7E-05 | 4.7E-05 | 0.00012 | -3.85 | *** | 0.002  | 0.0001 | ***0.0001 |
| Filobasidium_wieringae           | <0.0001(<0.0001, <0.0001) | 0.001015 | 0.00081 | <0.0001(<0.0001, <0.0001) | 4.59E-06 | 2.84E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00192 | -3.1  | **  | 0.0136 | 0.0019 | ** 0.0019 |
| Fusarium_lacertarum              | <0.0001(<0.0001, <0.0001) | 0.00059  | 0.00024 | <0.0001(<0.0001, <0.0001) | 0.000816 | 0.000531 | <0.0001(<0.0001, 0.0001)  | 0.00068 | 0.00044 | 0.3878  | -0.86 |     | 0.5577 | 0.3878 | 0.3878    |
| Setophaeosphaeria_badalingensis  | <0.0001(<0.0001, <0.0001) | 0.000964 | 0.00089 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.0027  | -3    | **  | 0.018  | 0.0027 | ** 0.0027 |
| Verrucaria_vitikainenii          | <0.0001(<0.0001, <0.0001) | 0.000952 | 0.0009  | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.0027  | -3    | **  | 0.018  | 0.0027 | ** 0.0027 |
| Trietopis_washingtonensis        | <0.0001(<0.0001, <0.0001) | 0.000234 | 0.00018 | <0.0001(<0.0001, <0.0001) | 0.001632 | 0.001545 | <0.0001(<0.0001, <0.0001) | 0.00011 | 0.00011 | 0.40298 | -0.84 |     | 0.5735 | 0.403  | 0.403     |
| Dioszegia_zoltii_var._yunanensis | <0.0001(<0.0001, <0.0001) | 0.000934 | 0.00086 | <0.0001(<0.0001, <0.0001) | 3.5E-06  | 2.55E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.01356 | -2.47 | *   | 0.0568 | 0.0136 | * 0.0136  |
| Leucosporidium_golubevii         | <0.0001(<0.0001, <0.0001) | 3.69E-05 | 3.3E-05 | <0.0001(<0.0001, <0.0001) | 0.002109 | 0.002014 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00236 | -3.04 | **  | 0.0161 | 0.0024 | ** 0.0024 |
| Neosetophoma_poaceicola          | <0.0001(<0.0001, <0.0001) | 0.000412 | 0.0004  | <0.0001(<0.0001, <0.0001) | 8.54E-05 | 8.23E-05 | <0.0001(<0.0001, <0.0001) | 0.00383 | 0.00382 | 0.31841 | -1    |     | 0.4909 | 0.3184 | 0.3184    |
| Stagonosporopsis_citrullina      | <0.0001(<0.0001, <0.0001) | 0.000882 | 0.00083 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00514 | -2.8  | **  | 0.0281 | 0.0051 | ** 0.0051 |
| Kazachstanella_heterogenica      | <0.0001(<0.0001, <0.0001) | 0.000502 | 0.00035 | <0.0001(<0.0001, 0.0001)  | 0.000762 | 0.000629 | <0.0001(<0.0001, <0.0001) | 0.00012 | 6E-05   | 0.06001 | -1.88 |     | 0.1658 | 0.06   | 0.06      |
| Aspergillus_vitricola            | <0.0001(<0.0001, <0.0001) | 0.000603 | 0.00026 | <0.0001(<0.0001, <0.0001) | 0.000514 | 0.000229 | <0.0001(<0.0001, <0.0001) | 5.9E-05 | 5.3E-05 | 0.55947 | -0.58 |     | 0.7066 | 0.5595 | 0.5595    |

|                                       |                           |          |         |                           |          |          |                           |         |         |         |       |     |        |         |            |
|---------------------------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Symmetropa_oryzicola                  | <0.0001(<0.0001, <0.0001) | 0.000547 | 0.00053 | <0.0001(<0.0001, <0.0001) | 0.000631 | 0.00044  | <0.0001(<0.0001, <0.0001) | 2.6E-05 | 1.4E-05 | 0.34083 | -0.95 |     | 0.5    | 0.3408  | 0.3408     |
| Ceriporia_lacerata                    | <0.0001(<0.0001, <0.0001) | 0.000754 | 0.00051 | <0.0001(<0.0001, <0.0001) | 0.000129 | 9.72E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00107 | -3.27 | **  | 0.0102 | 0.0011  | ** 0.0011  |
| Entorrhiza_citriformis                | <0.0001(<0.0001, <0.0001) | 0.000185 | 6.5E-05 | <0.0001(<0.0001, 0.0004)  | 0.001109 | 0.000352 | 0.0001(<0.0001, 0.0005)   | 0.00119 | 0.00069 | 3.2E-05 | -4.16 | *** | 0.0007 | <0.0001 | ***<0.0001 |
| Ustilaginoides_virens                 | <0.0001(<0.0001, <0.0001) | 1.08E-05 | 3.7E-06 | <0.0001(<0.0001, 0.0001)  | 0.001427 | 0.000609 | <0.0001(<0.0001, 0.0002)  | 0.00145 | 0.00095 | 2.9E-07 | -5.13 | *** | 2E-05  | <0.0001 | ***<0.0001 |
| Pichia_kluyveri                       | <0.0001(<0.0001, <0.0001) | 2.64E-06 | 2.6E-06 | <0.0001(<0.0001, 0.0001)  | 0.001215 | 0.000609 | <0.0001(<0.0001, 0.0001)  | 0.0022  | 0.00162 | 2.7E-09 | -5.95 | *** | 4E-07  | <0.0001 | ***<0.0001 |
| Candida_zealandoides                  | <0.0001(<0.0001, <0.0001) | 0.000383 | 0.00022 | <0.0001(<0.0001, 0.0001)  | 0.000313 | 0.000253 | <0.0001(<0.0001, 0.0002)  | 0.0022  | 0.00201 | 0.00846 | -2.63 | **  | 0.041  | 0.0085  | ** 0.0085  |
| Tausonia_pulchra                      | <0.0001(<0.0001, <0.0001) | 0.00063  | 0.00037 | <0.0001(<0.0001, 0.0001)  | 0.000267 | 0.000186 | <0.0001(<0.0001, 0.0001)  | 0.00018 | 0.00016 | 0.99763 | -0    |     | 0.9976 | 0.9976  | 0.9976     |
| Diaporthe_bombacinae                  | <0.0001(<0.0001, <0.0001) | 0.000762 | 0.00067 | <0.0001(<0.0001, 0.0001)  | 0        | 0        | <0.0001(<0.0001, 0.0001)  | 0       | 0       | 0.00968 | -2.59 | **  | 0.0439 | 0.0097  | ** 0.0097  |
| Trichophaea_saccata                   | <0.0001(<0.0001, <0.0001) | 8.84E-06 | 7E-06   | <0.0001(<0.0001, 0.0001)  | 0.001756 | 0.001735 | <0.0001(<0.0001, 0.0001)  | 2.6E-05 | 2.6E-05 | 0.00411 | -2.87 | **  | 0.0238 | 0.0041  | ** 0.0041  |
| Parasymptoma_longispora               | <0.0001(<0.0001, 0.0001)  | 0.000393 | 0.00012 | <0.0001(<0.0001, 0.0003)  | 0.000382 | 0.000149 | 0.0008(<0.0001, 0.0017)   | 0.00177 | 0.00068 | 0.00063 | -3.42 | *** | 0.0067 | 0.0006  | ***0.0006  |
| Dipodascus_geotrichum                 | <0.0001(<0.0001, <0.0001) | 0.000339 | 0.00018 | <0.0001(<0.0001, 0.0001)  | 0.000927 | 0.000903 | <0.0001(<0.0001, 0.0001)  | 9.4E-05 | 6.8E-05 | 0.01579 | -2.41 | *   | 0.0653 | 0.0158  | * 0.0158   |
| Starmerella_etchellsii                | <0.0001(<0.0001, <0.0001) | 7.76E-05 | 7.5E-05 | <0.0001(<0.0001, 0.0001)  | 0.0015   | 0.000895 | <0.0001(<0.0001, 0.0001)  | 5.7E-05 | 2.7E-05 | 1.3E-06 | -4.85 | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Pyrenochaeta_microspora               | <0.0001(<0.0001, <0.0001) | 0.000716 | 0.00068 | <0.0001(<0.0001, 0.0001)  | 1.46E-06 | 1.46E-06 | <0.0001(<0.0001, 0.0001)  | 0       | 0       | 0.01278 | -2.49 | *   | 0.0549 | 0.0128  | * 0.0128   |
| Rozellomyces_sp._Incerta_sedis        | <0.0001(<0.0001, <0.0001) | 0.000711 | 0.00063 | <0.0001(<0.0001, 0.0001)  | 0        | 0        | <0.0001(<0.0001, 0.0001)  | 0       | 0       | 0.00514 | -2.8  | **  | 0.0281 | 0.0051  | ** 0.0051  |
| Didymella_keratinophila               | <0.0001(<0.0001, <0.0001) | 0.0005   | 0.0003  | <0.0001(<0.0001, 0.0001)  | 0.000419 | 0.000412 | <0.0001(<0.0001, 0.0001)  | 4.1E-05 | 4.1E-05 | 0.01881 | -2.35 | *   | 0.0708 | 0.0188  | * 0.0188   |
| Sterigmatomyces_halophilus            | <0.0001(<0.0001, <0.0001) | 0.000361 | 0.00024 | <0.0001(<0.0001, 0.0001)  | 0.000133 | 0.000122 | <0.0001(<0.0001, 0.0001)  | 0.00227 | 0.0015  | 0.07625 | -1.77 |     | 0.1953 | 0.0763  | 0.0763     |
| Tuber_alcaracense                     | <0.0001(<0.0001, 0.0002)  | 0.000264 | 5.5E-05 | 0.0002(<0.0001, 0.001)    | 0.000768 | 0.000155 | 0.0001(<0.0001, 0.0004)   | 0.00074 | 0.00041 | 1.3E-05 | -4.36 | *** | 0.0003 | <0.0001 | ***<0.0001 |
| Hannaella_pagnoccae                   | <0.0001(<0.0001, <0.0001) | 0.000664 | 0.00065 | <0.0001(<0.0001, 0.0001)  | 2.57E-06 | 1.83E-06 | <0.0001(<0.0001, 0.0001)  | 0       | 0       | 0.20728 | -1.26 |     | 0.4037 | 0.2073  | 0.2073     |
| Blastobotrys_proliferans              | <0.0001(<0.0001, <0.0001) | 6.44E-07 | 6.4E-07 | <0.0001(<0.0001, 0.0001)  | 0.001552 | 0.001545 | <0.0001(<0.0001, 0.0001)  | 6.7E-06 | 6.7E-06 | 0.09692 | -1.66 |     | 0.233  | 0.0969  | 0.0969     |
| Phlebia_tuberculata                   | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, 0.0001)  | 0.001524 | 0.001522 | <0.0001(<0.0001, 0.0001)  | 5.7E-06 | 5.7E-06 | 0.04145 | -2.04 | *   | 0.1249 | 0.0415  | * 0.0415   |
| Cutaneotrichosporon_cutaneum          | <0.0001(<0.0001, <0.0001) | 8.05E-06 | 5.7E-06 | <0.0001(<0.0001, 0.0001)  | 2.2E-05  | 9.33E-06 | <0.0001(<0.0001, 0.0002)  | 0.00554 | 0.00505 | 1.2E-06 | -4.86 | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Aspergillus_restrictus                | <0.0001(<0.0001, <0.0001) | 0.000262 | 0.00014 | <0.0001(<0.0001, 0.0001)  | 0.000603 | 0.000351 | <0.0001(<0.0001, 0.0001)  | 0.00097 | 0.00079 | 0.105   | -1.62 |     | 0.245  | 0.105   | 0.105      |
| Debaryomyces_prosopidis               | <0.0001(<0.0001, <0.0001) | 0.000452 | 0.00026 | <0.0001(<0.0001, 0.0001)  | 0.000336 | 0.000332 | <0.0001(<0.0001, 0.0001)  | 0.00022 | 0.00019 | 1.1E-05 | -4.4  | *** | 0.0003 | <0.0001 | ***<0.0001 |
| Ascomycota_sp._Incerta_sedis          | <0.0001(<0.0001, <0.0001) | 0.000123 | 3.2E-05 | <0.0001(<0.0001, 0.0001)  | 0.000785 | 0.000283 | 0.0002(<0.0001, 0.0016)   | 0.00132 | 0.00069 | 0.00361 | -2.91 | **  | 0.0216 | 0.0036  | ** 0.0036  |
| Candida_vesimorsum                    | <0.0001(<0.0001, <0.0001) | 9.24E-05 | 5.3E-05 | <0.0001(<0.0001, 0.0001)  | 0.000162 | 7.73E-05 | <0.0001(<0.0001, 0.0001)  | 0.00388 | 0.00216 | 0.01691 | -2.39 | *   | 0.0684 | 0.0169  | * 0.0169   |
| Henningisia_resupinata                | <0.0001(<0.0001, <0.0001) | 2.05E-07 | 2E-07   | <0.0001(<0.0001, 0.0001)  | 0.001399 | 0.001369 | <0.0001(<0.0001, 0.0001)  | 5.9E-05 | 2.3E-05 | 6.5E-07 | -4.98 | *** | 4E-05  | <0.0001 | ***<0.0001 |
| Mycoasphaerellaceae_sp._Incerta_sedis | <0.0001(<0.0001, <0.0001) | 0.000285 | 0.00015 | <0.0001(<0.0001, 0.0001)  | 0.000529 | 0.000232 | <0.0001(<0.0001, 0.0003)  | 0.00073 | 0.0006  | 0.14424 | -1.46 |     | 0.3059 | 0.1442  | 0.1442     |
| Typhula_micans                        | <0.0001(<0.0001, <0.0001) | 0.00057  | 0.00038 | <0.0001(<0.0001, 0.0001)  | 0        | 0        | <0.0001(<0.0001, 0.0001)  | 0       | 0       | 0.00013 | -3.84 | *** | 0.002  | 0.0001  | ***0.0001  |

|                               |                           |          |         |                           |          |          |                           |         |         |         |       |     |        |         |            |
|-------------------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Candida_pseudolambica         | <0.0001(<0.0001, <0.0001) | 3.41E-07 | 3.4E-07 | <0.0001(<0.0001, <0.0001) | 0.000132 | 8.22E-05 | <0.0001(<0.0001, <0.0001) | 0.00444 | 0.00442 | 3.3E-05 | -4.15 | *** | 0.0007 | <0.0001 | ***<0.0001 |
| Flammulina filiformis         | <0.0001(<0.0001, <0.0001) | 0.000555 | 0.00053 | <0.0001(<0.0001, <0.0001) | 1.05E-05 | 8.62E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.12262 | -1.54 |     | 0.2768 | 0.1226  | 0.1226     |
| Fusarium_fujikuroi            | <0.0001(<0.0001, <0.0001) | 0.000402 | 0.00027 | <0.0001(<0.0001, <0.0001) | 0.000297 | 0.000174 | <0.0001(<0.0001, <0.0001) | 0.00019 | 0.00016 | 0.48206 | -0.7  |     | 0.6362 | 0.4821  | 0.4821     |
| Candida_intermedia            | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 0.00128  | 0.001272 | <0.0001(<0.0001, <0.0001) | 1.3E-05 | 1.3E-05 | 0.00028 | -3.64 | *** | 0.0034 | 0.0003  | ***0.0003  |
| Glomus_macrocarpum            | <0.0001(<0.0001, <0.0001) | 0.000278 | 0.00027 | <0.0001(<0.0001, <0.0001) | 0.000612 | 0.000608 | <0.0001(<0.0001, <0.0001) | 4.6E-05 | 2.6E-05 | 0.03374 | -2.12 | *   | 0.1129 | 0.0337  | * 0.0337   |
| Auricularia_auriculajudae     | <0.0001(<0.0001, <0.0001) | 0.000322 | 0.00025 | <0.0001(<0.0001, <0.0001) | 0.000493 | 0.000432 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.28885 | -1.06 |     | 0.4591 | 0.2889  | 0.2889     |
| Talaromyces_calidicanus       | <0.0001(<0.0001, <0.0001) | 0.000526 | 0.0005  | <0.0001(<0.0001, <0.0001) | 1.29E-06 | 1.29E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.12843 | -1.52 |     | 0.2861 | 0.1284  | 0.1284     |
| Clavispora_lusitanae          | <0.0001(<0.0001, <0.0001) | 0.000522 | 0.00048 | <0.0001(<0.0001, <0.0001) | 2.88E-06 | 2.08E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.27538 | -1.09 |     | 0.4398 | 0.2754  | 0.2754     |
| Naganishia_globosa            | <0.0001(<0.0001, <0.0001) | 0.000514 | 0.00043 | <0.0001(<0.0001, <0.0001) | 1.16E-05 | 1.16E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00297 | -2.97 | **  | 0.0187 | 0.003   | ** 0.003   |
| Bjerkandera_adusta            | <0.0001(<0.0001, <0.0001) | 0.000111 | 7.9E-05 | <0.0001(<0.0001, <0.0001) | 0.000666 | 0.000455 | <0.0001(<0.0001, <0.0001) | 0.00107 | 0.00107 | 0.52948 | -0.63 |     | 0.6901 | 0.5295  | 0.5295     |
| Wallemia_sebi                 | <0.0001(<0.0001, <0.0001) | 0.000306 | 0.00021 | <0.0001(<0.0001, <0.0001) | 9.05E-06 | 8.13E-06 | <0.0001(<0.0001, <0.0001) | 0.00177 | 0.00174 | 0.03784 | -2.08 | *   | 0.1206 | 0.0378  | * 0.0378   |
| Austropleospora_keteleeriae   | <0.0001(<0.0001, <0.0001) | 0.000481 | 0.00046 | <0.0001(<0.0001, <0.0001) | 6.65E-05 | 6.54E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.27538 | -1.09 |     | 0.4398 | 0.2754  | 0.2754     |
| Symmetropa_spectabilis        | <0.0001(<0.0001, <0.0001) | 6.82E-06 | 6.3E-06 | <0.0001(<0.0001, <0.0001) | 0.00118  | 0.001174 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00953 | -2.59 | **  | 0.0439 | 0.0095  | ** 0.0095  |
| Aspergillus_tennesseensis     | <0.0001(<0.0001, <0.0001) | 0.000206 | 0.00014 | <0.0001(<0.0001, <0.0001) | 0.000668 | 0.000429 | <0.0001(<0.0001, <0.0001) | 0.00011 | 6.5E-05 | 0.00849 | -2.63 | **  | 0.041  | 0.0085  | ** 0.0085  |
| Papiliotrema_terrestris       | <0.0001(<0.0001, <0.0001) | 2.35E-07 | 2.3E-07 | <0.0001(<0.0001, <0.0001) | 1.46E-05 | 7.19E-06 | <0.0001(<0.0001, <0.0001) | 0.00436 | 0.0043  | 2.6E-07 | -5.15 | *** | 2E-05  | <0.0001 | ***<0.0001 |
| Russulales_spe_Incertae_sedis | <0.0001(<0.0001, <0.0001) | 0.000501 | 0.00049 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.04464 | -2.01 | *   | 0.131  | 0.0446  | * 0.0446   |
| Chytridium_olla               | <0.0001(<0.0001, <0.0001) | 0.000114 | 6.1E-05 | <0.0001(<0.0001, <0.0001) | 0.000847 | 0.000536 | <0.0001(<0.0001, <0.0001) | 0.00022 | 0.00022 | 0.15645 | -1.42 |     | 0.3287 | 0.1565  | 0.1565     |
| Ahmadea_dalensis              | <0.0001(<0.0001, <0.0001) | 0.00049  | 0.00048 | <0.0001(<0.0001, <0.0001) | 1.18E-05 | 5.17E-06 | <0.0001(<0.0001, <0.0001) | 6.1E-06 | 6.1E-06 | 0.88569 | -0.14 |     | 0.8897 | 0.8857  | 0.8857     |
| Eupentidella_venezuelensis    | <0.0001(<0.0001, <0.0001) | 0.000496 | 0.00047 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.018   | -2.37 | *   | 0.0708 | 0.018   | * 0.018    |
| Plectosphaerella_cucumerina   | <0.0001(<0.0001, <0.0001) | 0.000467 | 0.00045 | <0.0001(<0.0001, <0.0001) | 1.61E-05 | 1.48E-05 | <0.0001(<0.0001, <0.0001) | 0.00015 | 0.00014 | 0.13309 | -1.5  |     | 0.2935 | 0.1331  | 0.1331     |
| Sporobolomyces_roseus         | <0.0001(<0.0001, <0.0001) | 0.000464 | 0.00037 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00194 | -3.1  | **  | 0.0136 | 0.0019  | ** 0.0019  |
| Recurvomyces_spectabilis      | <0.0001(<0.0001, <0.0001) | 0.000458 | 0.00045 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 7.6E-06 | 7.6E-06 | 0.10973 | -1.6  |     | 0.2486 | 0.1097  | 0.1097     |
| Thielaviopsis_euricoi         | <0.0001(<0.0001, <0.0001) | 0.000453 | 0.00024 | <0.0001(<0.0001, <0.0001) | 1.46E-06 | 1.46E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.01226 | -2.5  | *   | 0.053  | 0.0123  | * 0.0123   |
| Wallemia_muriae               | <0.0001(<0.0001, <0.0001) | 0.000451 | 0.00045 | <0.0001(<0.0001, <0.0001) | 1.21E-06 | 1.21E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.4795  | -0.71 |     | 0.6349 | 0.4795  | 0.4795     |
| Spiromastix_princeps          | <0.0001(<0.0001, <0.0001) | 0.00045  | 0.00044 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.02444 | -2.25 | *   | 0.0861 | 0.0244  | * 0.0244   |
| Coprinopsis_urticicola        | <0.0001(<0.0001, <0.0001) | 0.000449 | 0.00031 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.0014  | -3.2  | **  | 0.0119 | 0.0014  | ** 0.0014  |
| Aspergillus_whitfieldii       | <0.0001(<0.0001, <0.0001) | 0.000435 | 0.00043 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 4.2E-06 | 4.2E-06 | 0.13622 | -1.49 |     | 0.2994 | 0.1362  | 0.1362     |

|                                     |                          |          |         |                          |          |          |                          |         |         |         |       |     |        |         |            |
|-------------------------------------|--------------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Talaromyces_wortmannii              | <0.0001(<0.0001,<0.0001) | 0.000411 | 0.00019 | <0.0001(<0.0001,<0.0001) | 5.21E-05 | 4.08E-05 | <0.0001(<0.0001,<0.0001) | 7.3E-06 | 7.3E-06 | 0.0599  | -1.88 |     | 0.1658 | 0.0599  | 0.0599     |
| Tilletia_geeringii                  | <0.0001(<0.0001,<0.0001) | 0.000427 | 0.00029 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00025 | -3.66 | *** | 0.0033 | 0.0003  | ***0.0003  |
| Thecaphora_australiensis            | <0.0001(<0.0001,<0.0001) | 0.000425 | 0.00029 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 8.7E-06 | 8.7E-06 | 0.05292 | -1.94 |     | 0.1546 | 0.0529  | 0.0529     |
| Heitmania_litsea                    | <0.0001(<0.0001,0.0002)  | 0.000233 | 5.7E-05 | <0.0001(<0.0001,0.0004)  | 0.000428 | 0.000222 | <0.0001(<0.0001,<0.0001) | 6.9E-05 | 4.9E-05 | 0.08565 | -1.72 |     | 0.2097 | 0.0856  | 0.0856     |
| Engyodontium_album                  | <0.0001(<0.0001,<0.0001) | 0.00029  | 0.00024 | <0.0001(<0.0001,<0.0001) | 0.000291 | 0.000152 | <0.0001(<0.0001,<0.0001) | 3E-05   | 1.8E-05 | 0.48241 | -0.7  |     | 0.6362 | 0.4824  | 0.4824     |
| Lentinus_angularis                  | <0.0001(<0.0001,<0.0001) | 0.000412 | 0.0004  | <0.0001(<0.0001,<0.0001) | 1.11E-06 | 1.11E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.03027 | -2.17 | *   | 0.1056 | 0.0303  | * 0.0303   |
| Rhodotorula_mucilaginosa            | <0.0001(<0.0001,<0.0001) | 0.000145 | 4.9E-05 | <0.0001(<0.0001,<0.0001) | 6.14E-05 | 2.23E-05 | <0.0001(<0.0001,<0.0001) | 0.00211 | 0.00206 | 0.14744 | -1.45 |     | 0.3107 | 0.1474  | 0.1474     |
| Calosphaeria_pulchella              | <0.0001(<0.0001,<0.0001) | 0.000236 | 8.7E-05 | <0.0001(<0.0001,0.0005)  | 0.000358 | 8.9E-05  | <0.0001(<0.0001,<0.0001) | 0.0002  | 0.00011 | 0.06771 | -1.83 |     | 0.1804 | 0.0677  | 0.0677     |
| Flavodon_sp._Incertae_sedis         | <0.0001(<0.0001,<0.0001) | 0.000396 | 0.00037 | <0.0001(<0.0001,<0.0001) | 4.91E-06 | 4.91E-06 | <0.0001(<0.0001,<0.0001) | 4.3E-06 | 4.3E-06 | 0.125   | -1.53 |     | 0.2813 | 0.125   | 0.125      |
| Aspergillus_foetidus                | <0.0001(<0.0001,<0.0001) | 0.000362 | 0.00027 | <0.0001(<0.0001,<0.0001) | 8.07E-05 | 6.38E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.49469 | -0.68 |     | 0.6511 | 0.4947  | 0.4947     |
| Psathyrella_candolleana             | <0.0001(<0.0001,<0.0001) | 0.000155 | 9.7E-05 | <0.0001(<0.0001,<0.0001) | 1.23E-06 | 1.23E-06 | <0.0001(<0.0001,<0.0001) | 0.00204 | 0.00204 | 0.2453  | -1.16 |     | 0.433  | 0.2453  | 0.2453     |
| [Candida]_glabrata                  | <0.0001(<0.0001,<0.0001) | 3.94E-07 | 3.9E-07 | <0.0001(<0.0001,<0.0001) | 0.000883 | 0.000785 | <0.0001(<0.0001,<0.0001) | 1.9E-06 | 1.9E-06 | 1.7E-06 | -4.79 | *** | 6E-05  | <0.0001 | ***<0.0001 |
| Raffaelea_albimanens                | <0.0001(<0.0001,<0.0001) | 0.000218 | 5.4E-05 | <0.0001(<0.0001,<0.0001) | 0.000107 | 6.14E-05 | 0.0004(<0.0001,0.0014)   | 0.00094 | 0.00035 | 0.00323 | -2.95 | **  | 0.0197 | 0.0032  | ** 0.0032  |
| Thielavia_balaustiformis            | <0.0001(<0.0001,<0.0001) | 0.000362 | 0.00035 | <0.0001(<0.0001,<0.0001) | 1.53E-05 | 1.53E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.03474 | -2.11 | *   | 0.1157 | 0.0347  | * 0.0347   |
| Rhodotorula_glutinis                | <0.0001(<0.0001,<0.0001) | 9.67E-05 | 9.6E-05 | <0.0001(<0.0001,<0.0001) | 8.25E-06 | 4.83E-06 | <0.0001(<0.0001,<0.0001) | 0.00236 | 0.00232 | 0.0051  | -2.8  | **  | 0.0281 | 0.0051  | ** 0.0051  |
| Ophiostoma_aquaticum                | <0.0001(<0.0001,<0.0001) | 0.00033  | 0.00033 | <0.0001(<0.0001,<0.0001) | 8.34E-05 | 7.82E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.53442 | -0.62 |     | 0.6952 | 0.5344  | 0.5344     |
| Acrocalymma_fici                    | <0.0001(<0.0001,<0.0001) | 0.00036  | 0.00025 | <0.0001(<0.0001,<0.0001) | 1.02E-06 | 1.02E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01209 | -2.51 | *   | 0.0526 | 0.0121  | * 0.0121   |
| Vanrija_musci                       | <0.0001(<0.0001,<0.0001) | 1.74E-06 | 9.2E-07 | <0.0001(<0.0001,<0.0001) | 3.46E-06 | 2.03E-06 | <0.0001(<0.0001,<0.0001) | 0.00305 | 0.0021  | 0.1465  | -1.45 |     | 0.3097 | 0.1465  | 0.1465     |
| Coniochaeta_mutabilis               | <0.0001(<0.0001,<0.0001) | 0.000338 | 0.00033 | <0.0001(<0.0001,<0.0001) | 2.48E-05 | 2.48E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14082 | -1.47 |     | 0.3059 | 0.1408  | 0.1408     |
| Roussoella_neopustulans             | <0.0001(<0.0001,<0.0001) | 0.000347 | 0.00033 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01322 | -2.48 | *   | 0.0557 | 0.0132  | * 0.0132   |
| Pseudocercospora_sp._Incertae_sedis | <0.0001(<0.0001,<0.0001) | 0.000346 | 0.00027 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00706 | -2.69 | **  | 0.0356 | 0.0071  | ** 0.0071  |
| Lecanicium_coprophilum              | <0.0001(<0.0001,<0.0001) | 0.000341 | 0.00026 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00968 | -2.59 | **  | 0.0439 | 0.0097  | ** 0.0097  |
| Bovista_aestivalis                  | <0.0001(<0.0001,<0.0001) | 5.5E-06  | 2.4E-06 | <0.0001(<0.0001,<0.0001) | 1.09E-06 | 1.09E-06 | <0.0001(<0.0001,<0.0001) | 0.0029  | 0.0029  | 0.4337  | -0.78 |     | 0.5909 | 0.4337  | 0.4337     |
| Candida_saitoana                    | <0.0001(<0.0001,<0.0001) | 0.000327 | 0.00032 | <0.0001(<0.0001,<0.0001) | 2.16E-06 | 2.16E-06 | <0.0001(<0.0001,<0.0001) | 3.7E-06 | 3.7E-06 | 0.43797 | -0.78 |     | 0.5909 | 0.438   | 0.438      |
| Lentinula_edomodes                  | <0.0001(<0.0001,<0.0001) | 0.000128 | 9.6E-05 | <0.0001(<0.0001,<0.0001) | 0.000463 | 0.000457 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.42849 | -0.79 |     | 0.5909 | 0.4285  | 0.4285     |
| Candida_solani                      | <0.0001(<0.0001,<0.0001) | 0.000169 | 4.1E-05 | <0.0001(<0.0001,<0.0001) | 0.000359 | 0.000346 | <0.0001(<0.0001,<0.0001) | 1.3E-05 | 9.3E-06 | 0.00156 | -3.16 | **  | 0.0128 | 0.0016  | ** 0.0016  |
| Acremonium_charticola               | <0.0001(<0.0001,<0.0001) | 0.000322 | 0.00032 | <0.0001(<0.0001,<0.0001) | 7.86E-07 | 7.86E-07 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.82925 | -0.22 |     | 0.8471 | 0.8293  | 0.8293     |
| Pseudoramichloridium_henryi         | <0.0001(<0.0001,<0.0001) | 0.000318 | 0.00031 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 1E-05   | 7.1E-06 | 0.06193 | -1.87 |     | 0.1697 | 0.0619  | 0.0619     |

|                                |                           |          |         |                           |          |          |                           |         |         |         |       |     |        |         |            |
|--------------------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Diaporthe_caulivora            | <0.0001(<0.0001, <0.0001) | 0.000317 | 0.00017 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00071 | -3.38 | *** | 0.0073 | 0.0007  | ***0.0007  |
| Knufia_epidemicus              | <0.0001(<0.0001, <0.0001) | 0.000312 | 0.00027 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.08058 | -1.75 |     | 0.1995 | 0.0806  | 0.0806     |
| Cutaneotrichosporon_jirovecii  | <0.0001(<0.0001, <0.0001) | 0.000308 | 0.00025 | <0.0001(<0.0001, <0.0001) | 7.71E-06 | 7.71E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00551 | -2.78 | **  | 0.0296 | 0.0055  | ** 0.0055  |
| Stagonosporopsis_lupini        | <0.0001(<0.0001, <0.0001) | 0.000312 | 0.0003  | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00706 | -2.69 | **  | 0.0356 | 0.0071  | ** 0.0071  |
| Zerodasporium_eucalyptorum     | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 6E-05    | 4.87E-05 | <0.0001(<0.0001, <0.0001) | 0.0025  | 0.00244 | 2.6E-05 | -4.2  | *** | 0.0006 | <0.0001 | ***<0.0001 |
| Keissleriella_quadrisepata     | <0.0001(<0.0001, <0.0001) | 0.000308 | 0.0003  | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.01322 | -2.48 | *   | 0.0557 | 0.0132  | * 0.0132   |
| Hortaea_werneckii              | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 0.000683 | 0.000672 | <0.0001(<0.0001, <0.0001) | 0.00013 | 0.00013 | 0.00028 | -3.64 | *** | 0.0034 | 0.0003  | ***0.0003  |
| Candida_apicola                | <0.0001(<0.0001, <0.0001) | 5.15E-07 | 5.2E-07 | <0.0001(<0.0001, <0.0001) | 1.41E-05 | 5.1E-06  | <0.0001(<0.0001, <0.0001) | 0.0026  | 0.00238 | 8.4E-06 | -4.45 | *** | 0.0002 | <0.0001 | ***<0.0001 |
| Capnodiates_sp._Incerta_sedis  | <0.0001(<0.0001, <0.0001) | 0.000272 | 0.00017 | <0.0001(<0.0001, <0.0001) | 6.03E-05 | 5.82E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.28163 | -1.08 |     | 0.4487 | 0.2816  | 0.2816     |
| Dendryphiella_parvinoxantha    | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 1.1E-05  | 6.01E-06 | <0.0001(<0.0001, <0.0001) | 0.00255 | 0.00255 | 0.00144 | -3.19 | **  | 0.0121 | 0.0014  | ** 0.0014  |
| Bradymyces_alpinus             | <0.0001(<0.0001, <0.0001) | 0.000292 | 0.00025 | <0.0001(<0.0001, <0.0001) | 9.46E-07 | 9.46E-07 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.12843 | -1.52 |     | 0.2861 | 0.1284  | 0.1284     |
| Pseudomicrostroma_phylloplanum | <0.0001(<0.0001, <0.0001) | 1.74E-05 | 1.6E-05 | <0.0001(<0.0001, <0.0001) | 0.000627 | 0.000453 | <0.0001(<0.0001, <0.0001) | 5.1E-06 | 5.1E-06 | 0.55836 | -0.59 |     | 0.7066 | 0.5584  | 0.5584     |
| Penicillium_pimiteouiense      | <0.0001(<0.0001, <0.0001) | 0.000283 | 0.00024 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 5.1E-06 | 5.1E-06 | 0.06772 | -1.83 |     | 0.1804 | 0.0677  | 0.0677     |
| Dothidea_sambuci               | <0.0001(<0.0001, <0.0001) | 0.000281 | 0.00027 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.03308 | -2.13 | *   | 0.1113 | 0.0331  | * 0.0331   |
| Rhodospiridiobolus_colostri    | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 1.08E-05 | 5.37E-06 | <0.0001(<0.0001, <0.0001) | 0.00243 | 0.0024  | 5.6E-05 | -4.03 | *** | 0.001  | <0.0001 | ***<0.0001 |
| Phaeosphaeria_acaciae          | <0.0001(<0.0001, <0.0001) | 0.000238 | 0.00023 | <0.0001(<0.0001, <0.0001) | 8.74E-05 | 8.28E-05 | <0.0001(<0.0001, <0.0001) | 8.2E-06 | 8.2E-06 | 0.93826 | -0.08 |     | 0.9397 | 0.9383  | 0.9383     |
| Agaricus_sulfococcus           | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 0.000638 | 0.000627 | <0.0001(<0.0001, <0.0001) | 1.3E-05 | 1.3E-05 | 5.6E-06 | -4.54 | *** | 0.0002 | <0.0001 | ***<0.0001 |
| Cordyceps_succavus             | <0.0001(<0.0001, <0.0001) | 0.000265 | 0.00025 | <0.0001(<0.0001, <0.0001) | 5.54E-06 | 4.68E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.34579 | -0.94 |     | 0.5061 | 0.3458  | 0.3458     |
| Ciliophora_spe._Incerta_sedis  | <0.0001(<0.0001, <0.0001) | 0.000252 | 0.00012 | <0.0001(<0.0001, <0.0001) | 3.61E-06 | 2.21E-06 | <0.0001(<0.0001, <0.0001) | 0.00011 | 0.0001  | 0.06666 | -1.83 |     | 0.179  | 0.0667  | 0.0667     |
| Nigrospora_spe._Incerta_sedis  | <0.0001(<0.0001, <0.0001) | 0.000259 | 0.00025 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.02444 | -2.25 | *   | 0.0861 | 0.0244  | * 0.0244   |
| Peniophora_spe._Incerta_sedis  | <0.0001(<0.0001, <0.0001) | 0.000257 | 0.00024 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00514 | -2.8  | **  | 0.0281 | 0.0051  | ** 0.0051  |
| Ascotricha_guamensis           | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 0.0006   | 0.000592 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.01875 | -2.35 | *   | 0.0708 | 0.0187  | * 0.0187   |
| Diutina_catenulata             | <0.0001(<0.0001, <0.0001) | 2.68E-06 | 1.3E-06 | <0.0001(<0.0001, <0.0001) | 0.000363 | 0.000358 | <0.0001(<0.0001, <0.0001) | 0.00084 | 0.00083 | 0.03266 | -2.14 | *   | 0.1113 | 0.0327  | * 0.0327   |
| Tilletia_maculagani            | <0.0001(<0.0001, <0.0001) | 0.00025  | 0.00025 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.06006 | -1.88 |     | 0.1658 | 0.0601  | 0.0601     |
| Aureobasidium_thailandense     | <0.0001(<0.0001, <0.0001) | 0.000247 | 0.00024 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.08058 | -1.75 |     | 0.1995 | 0.0806  | 0.0806     |
| Hamophria_spe._Incerta_sedis   | <0.0001(<0.0001, <0.0001) | 0.000245 | 0.00023 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.06006 | -1.88 |     | 0.1658 | 0.0601  | 0.0601     |
| Talaromyces_islandicus         | <0.0001(<0.0001, <0.0001) | 0.000241 | 0.00024 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.03308 | -2.13 | *   | 0.1113 | 0.0331  | * 0.0331   |

|                                       |                  |          |         |                          |          |          |                          |         |         |         |       |     |        |         |            |
|---------------------------------------|------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Phyllachora_cynodonticola             | <0.0001(<0.0001) | 0.000199 | 0.00012 | <0.0001(<0.0001,<0.0001) | 9.28E-05 | 3.04E-05 | <0.0001(<0.0001,<0.0001) | 1.9E-05 | 1E-05   | 0.38992 | -0.86 |     | 0.5585 | 0.3899  | 0.3899     |
| Genea_brunneocarpa                    | <0.0001(<0.0001) | 0.000228 | 9.2E-05 | <0.0001(<0.0001,<0.0001) | 2.39E-05 | 1.16E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00129 | -3.22 | **  | 0.0111 | 0.0013  | ** 0.0013  |
| Talaromyces_rogersiae                 | <0.0001(<0.0001) | 0.000237 | 0.00023 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.04464 | -2.01 | *   | 0.131  | 0.0446  | * 0.0446   |
| Septoria_spectabilis_Incertae_sedis   | <0.0001(<0.0001) | 0.000227 | 0.0002  | <0.0001(<0.0001,<0.0001) | 2.03E-05 | 1.71E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.60641 | -0.52 |     | 0.729  | 0.6064  | 0.6064     |
| Bulleromyces_albus                    | <0.0001(<0.0001) | 3.7E-05  | 3.5E-05 | <0.0001(<0.0001,<0.0001) | 0.000462 | 0.000355 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.06341 | -1.86 |     | 0.1727 | 0.0634  | 0.0634     |
| Leptospora_spectabilis_Incertae_sedis | <0.0001(<0.0001) | 0.000205 | 0.00016 | <0.0001(<0.0001,<0.0001) | 5.97E-05 | 5.87E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.17567 | -1.35 |     | 0.3591 | 0.1757  | 0.1757     |
| Aspergillus_coremiiformis             | <0.0001(<0.0001) | 0.000226 | 0.00015 | <0.0001(<0.0001,<0.0001) | 3.23E-06 | 2.32E-06 | <0.0001(<0.0001,<0.0001) | 2.7E-05 | 2.7E-05 | 0.27346 | -1.1  |     | 0.4389 | 0.2735  | 0.2735     |
| Ascotricha_erinacea                   | <0.0001(<0.0001) | 0.000212 | 0.00013 | <0.0001(<0.0001,<0.0001) | 0.000044 | 0.000044 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0101  | -2.57 | *   | 0.0448 | 0.0101  | * 0.0101   |
| Candida_ethanolica                    | <0.0001(<0.0001) | 2.8E-07  | 2.8E-07 | <0.0001(<0.0001,<0.0001) | 3.34E-06 | 2.34E-06 | <0.0001(<0.0001,<0.0001) | 0.00197 | 0.00196 | 0.00864 | -2.63 | **  | 0.0414 | 0.0086  | ** 0.0086  |
| Botryosphaeria_wangensis              | <0.0001(<0.0001) | 0.000225 | 0.0002  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.03308 | -2.13 | *   | 0.1113 | 0.0331  | * 0.0331   |
| Stachybotrys_aleutica                 | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 8.32E-06 | 5.13E-06 | <0.0001(<0.0001,<0.0001) | 0.00194 | 0.00187 | 8.9E-07 | -4.91 | *** | 5E-05  | <0.0001 | ***<0.0001 |
| Macrohypharia_dictyophora             | <0.0001(<0.0001) | 0.000217 | 0.00021 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.02444 | -2.25 | *   | 0.0861 | 0.0244  | * 0.0244   |
| Carrirososaea_hohenbergiae            | <0.0001(<0.0001) | 0.000214 | 0.00021 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.245  | 0.1078  | 0.1078     |
| Epicoccum_dendrobii                   | <0.0001(<0.0001) | 3.06E-05 | 2.3E-05 | <0.0001(<0.0001,<0.0001) | 0.000399 | 0.000395 | <0.0001(<0.0001,<0.0001) | 0.00011 | 6.1E-05 | 0.00655 | -2.72 | **  | 0.0341 | 0.0065  | ** 0.0065  |
| Penicillium_bialowiezense             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000498 | 0.000489 | <0.0001(<0.0001,<0.0001) | 5.3E-06 | 5.3E-06 | 0.00295 | -2.97 | **  | 0.0187 | 0.0029  | ** 0.0029  |
| Yamadazyma_terventina                 | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000496 | 0.000496 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Neosetophoma_samararum                | <0.0001(<0.0001) | 0.000193 | 0.00011 | <0.0001(<0.0001,<0.0001) | 6.75E-06 | 4.08E-06 | <0.0001(<0.0001,<0.0001) | 0.00013 | 9E-05   | 0.54243 | -0.61 |     | 0.7032 | 0.5424  | 0.5424     |
| Neocomomyrium_viticola                | <0.0001(<0.0001) | 0.000208 | 0.0002  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.06006 | -1.88 |     | 0.1658 | 0.0601  | 0.0601     |
| Sistotrema_brinkmannii                | <0.0001(<0.0001) | 1.93E-06 | 1.9E-06 | <0.0001(<0.0001,<0.0001) | 0.000481 | 0.000455 | <0.0001(<0.0001,<0.0001) | 1.2E-05 | 1.2E-05 | 0.00168 | -3.14 | **  | 0.0135 | 0.0017  | ** 0.0017  |
| Pestalotiopsis_dracontomelon          | <0.0001(<0.0001) | 0.000203 | 0.0002  | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356  | 0.3356     |
| Knufia_hypolithi                      | <0.0001(<0.0001) | 0.000187 | 0.00017 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0.00013 | 0.00013 | 0.03178 | -2.15 | *   | 0.1102 | 0.0318  | * 0.0318   |
| Acremonium_acutatum                   | <0.0001(<0.0001) | 6.35E-05 | 6.3E-05 | <0.0001(<0.0001,<0.0001) | 0.000319 | 0.000318 | <0.0001(<0.0001,<0.0001) | 7.2E-06 | 7.2E-06 | 0.38857 | -0.86 |     | 0.5577 | 0.3886  | 0.3886     |
| Peroneutypa_scoparia                  | <0.0001(<0.0001) | 2.5E-07  | 2.5E-07 | <0.0001(<0.0001,<0.0001) | 0.000459 | 0.000458 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.30009 | -1.04 |     | 0.467  | 0.3001  | 0.3001     |
| Parastagonospora_falloppiae           | <0.0001(<0.0001) | 0.000194 | 0.00018 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.018   | -2.37 | *   | 0.0708 | 0.018   | * 0.018    |
| Helicoma_brunneisporum                | <0.0001(<0.0001) | 0.000193 | 0.00019 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.3059 | 0.1438  | 0.1438     |
| Aspergillus_flavus                    | <0.0001(<0.0001) | 9.52E-05 | 7.4E-05 | <0.0001(<0.0001,<0.0001) | 0.000208 | 0.000108 | <0.0001(<0.0001,<0.0001) | 7.8E-05 | 5.5E-05 | 0.32933 | -0.98 |     | 0.4934 | 0.3293  | 0.3293     |
| Fusarium_neocosmosporiellum           | <0.0001(<0.0001) | 0.000189 | 0.00018 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00706 | -2.69 | **  | 0.0356 | 0.0071  | ** 0.0071  |
| Toxicoclado sporium_streptolizae      | <0.0001(<0.0001) | 0.000189 | 0.00019 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.08057 | -1.75 |     | 0.1995 | 0.0806  | 0.0806     |

|                  |                 |          |         |                  |          |          |                  |         |         |         |       |    |        |        |           |
|------------------|-----------------|----------|---------|------------------|----------|----------|------------------|---------|---------|---------|-------|----|--------|--------|-----------|
| Vismia           | 0.0001(<0.0001) | 0.000186 | 0.00018 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.02444 | -2.25 | *  | 0.0861 | 0.0244 | * 0.0244  |
| Sporobolomyces   | 0.0001(<0.0001) | 0.00017  | 0.00012 | <0.0001(<0.0001) | 3.74E-05 | 2.8E-05  | <0.0001(<0.0001) | 0       | 0       | 0.31611 | -1    |    | 0.4885 | 0.3161 | 0.3161    |
| Hypoxylon        | 0.0001(<0.0001) | 0.000185 | 0.00017 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.01322 | -2.48 | *  | 0.0557 | 0.0132 | * 0.0132  |
| Chaetomium       | 0.0001(<0.0001) | 0.00018  | 0.00018 | <0.0001(<0.0001) | 1.04E-05 | 1.04E-05 | <0.0001(<0.0001) | 0       | 0       | 0.38796 | -0.86 |    | 0.5577 | 0.388  | 0.388     |
| Aspergillus      | 0.0001(<0.0001) | 0.000101 | 7.7E-05 | <0.0001(<0.0001) | 1.54E-05 | 1.38E-05 | <0.0001(<0.0001) | 0.00067 | 0.00064 | 0.10026 | -1.64 |    | 0.2385 | 0.1003 | 0.1003    |
| Trichosphaeria   | 0.0001(<0.0001) | 0.000181 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.00968 | -2.59 | ** | 0.0439 | 0.0097 | ** 0.0097 |
| Valsaria         | 0.0001(<0.0001) | 2.66E-05 | 2.5E-05 | <0.0001(<0.0001) | 0.000358 | 0.000251 | <0.0001(<0.0001) | 0       | 0       | 0.52684 | -0.63 |    | 0.6893 | 0.5268 | 0.5268    |
| Periconia        | 0.0001(<0.0001) | 0.000173 | 0.00017 | <0.0001(<0.0001) | 1.46E-06 | 1.46E-06 | <0.0001(<0.0001) | 0       | 0       | 0.37758 | -0.88 |    | 0.5479 | 0.3776 | 0.3776    |
| Malassezia       | 0.0001(<0.0001) | 0.000173 | 0.00013 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.06006 | -1.88 |    | 0.1658 | 0.0601 | 0.0601    |
| Trichoderma      | 0.0001(<0.0001) | 0.000172 | 0.00017 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.08057 | -1.75 |    | 0.1995 | 0.0806 | 0.0806    |
| Stemphylium      | 0.0001(<0.0001) | 0.000167 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.02444 | -2.25 | *  | 0.0861 | 0.0244 | * 0.0244  |
| Diaporthe        | 0.0001(<0.0001) | 0.000164 | 0.00015 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96 |    | 0.4934 | 0.3356 | 0.3356    |
| Pyrenochaeta     | 0.0001(<0.0001) | 0.000139 | 0.00014 | <0.0001(<0.0001) | 5.3E-05  | 5.2E-05  | <0.0001(<0.0001) | 1.4E-05 | 1.4E-05 | 0.86371 | -0.17 |    | 0.8782 | 0.8637 | 0.8637    |
| Trichomerium     | 0.0001(<0.0001) | 0.000163 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.10779 | -1.61 |    | 0.245  | 0.1078 | 0.1078    |
| Auricularia      | 0.0001(<0.0001) | 0.000163 | 0.00016 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.10779 | -1.61 |    | 0.245  | 0.1078 | 0.1078    |
| Raciniatosporium | 0.0001(<0.0001) | 0.00016  | 0.00016 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.10779 | -1.61 |    | 0.245  | 0.1078 | 0.1078    |
| Basidiomyces     | 0.0001(<0.0001) | 0.000157 | 0.0001  | <0.0001(<0.0001) | 2.75E-06 | 2.75E-06 | <0.0001(<0.0001) | 8.9E-06 | 8.9E-06 | 0.03826 | -2.07 | *  | 0.1213 | 0.0383 | * 0.0383  |
| Laetisaria       | 0.0001(<0.0001) | 0.000157 | 0.00016 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.2537  | -1.14 |    | 0.433  | 0.2537 | 0.2537    |
| Tulostoma        | 0.0001(<0.0001) | 0.000157 | 0.00015 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.08057 | -1.75 |    | 0.1995 | 0.0806 | 0.0806    |
| Peniophora       | 0.0001(<0.0001) | 9.73E-05 | 8.8E-05 | <0.0001(<0.0001) | 0.000135 | 0.000103 | <0.0001(<0.0001) | 5.6E-06 | 5.6E-06 | 0.52818 | -0.63 |    | 0.6897 | 0.5282 | 0.5282    |
| Thermomyces      | 0.0001(<0.0001) | 0.000118 | 0.00012 | <0.0001(<0.0001) | 4.41E-05 | 4.41E-05 | <0.0001(<0.0001) | 0.00016 | 0.00016 | 0.52297 | -0.64 |    | 0.687  | 0.523  | 0.523     |
| Alternaria       | 0.0001(<0.0001) | 0.000108 | 2.6E-05 | <0.0001(<0.0001) | 8.4E-05  | 4.15E-05 | <0.0001(<0.0001) | 6.6E-05 | 3.4E-05 | 0.88734 | -0.14 |    | 0.89   | 0.8873 | 0.8873    |
| Penicillium      | 0.0001(<0.0001) | 0.00015  | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 2.7E-06 | 2.7E-06 | 0.16761 | -1.38 |    | 0.3477 | 0.1676 | 0.1676    |
| Monoblepna       | 0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000351 | 0.000345 | <0.0001(<0.0001) | 8.9E-06 | 8.9E-06 | 0.00297 | -2.97 | ** | 0.0187 | 0.003  | ** 0.003  |
| Wickhamella      | 0.0001(<0.0001) | 2.32E-05 | 2E-05   | <0.0001(<0.0001) | 8.56E-05 | 6.08E-05 | <0.0001(<0.0001) | 0.00079 | 0.00078 | 0.03951 | -2.06 | *  | 0.1237 | 0.0395 | * 0.0395  |
| Neodevriesia     | 0.0001(<0.0001) | 0.000148 | 0.00015 | <0.0001(<0.0001) | 2.39E-06 | 1.72E-06 | <0.0001(<0.0001) | 0       | 0       | 0.71681 | -0.36 |    | 0.7866 | 0.7168 | 0.7168    |
| Nigrograna       | 0.0001(<0.0001) | 0.000145 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.04464 | -2.01 | *  | 0.131  | 0.0446 | * 0.0446  |

|                                     |                  |          |         |                  |          |          |                  |         |         |         |       |     |        |         |            |
|-------------------------------------|------------------|----------|---------|------------------|----------|----------|------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Penicillium_lanosocoeruleum         | <0.0001(<0.0001) | 0.000121 | 0.00011 | <0.0001(<0.0001) | 4.83E-05 | 3.55E-05 | <0.0001(<0.0001) | 7.5E-06 | 7.5E-06 | 0.75185 | -0.32 |     | 0.7866 | 0.7519  | 0.7519     |
| Coprinelluspseudodissemminatus      | <0.0001(<0.0001) | 0.000141 | 0.00014 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.3059 | 0.1438  | 0.1438     |
| Gorovimomyces_sonchicola            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000323 | 0.000321 | <0.0001(<0.0001) | 2.6E-05 | 1.4E-05 | 3.7E-05 | -4.12 | *** | 0.0008 | <0.0001 | ***<0.0001 |
| Ceriporiopsis_fimbriata             | <0.0001(<0.0001) | 0.000138 | 9.6E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.245  | 0.1078  | 0.1078     |
| Didymella_spe_Incertae_sedis        | <0.0001(<0.0001) | 0.000135 | 9.7E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.245  | 0.1078  | 0.1078     |
| Xylocoremium_spe_Incertae_sedis     | <0.0001(<0.0001) | 0.000134 | 0.00013 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.08058 | -1.75 |     | 0.1995 | 0.0806  | 0.0806     |
| Novakomyces_olei                    | <0.0001(<0.0001) | 0.000126 | 0.0001  | <0.0001(<0.0001) | 1.48E-05 | 1.06E-05 | <0.0001(<0.0001) | 0       | 0       | 0.64159 | -0.47 |     | 0.7685 | 0.6416  | 0.6416     |
| Torula_fici                         | <0.0001(<0.0001) | 3.79E-07 | 3.8E-07 | <0.0001(<0.0001) | 0.000308 | 0.000306 | <0.0001(<0.0001) | 0       | 0       | 0.30009 | -1.04 |     | 0.467  | 0.3001  | 0.3001     |
| Penicillium_brevicompactum          | <0.0001(<0.0001) | 0.000114 | 0.00011 | <0.0001(<0.0001) | 2.91E-05 | 2.91E-05 | <0.0001(<0.0001) | 3.6E-05 | 2.9E-05 | 0.16954 | -1.37 |     | 0.3507 | 0.1695  | 0.1695     |
| Symptotomycopsis_spe_Incertae_sedis | <0.0001(<0.0001) | 0.00013  | 0.00013 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.19126 | -1.31 |     | 0.3758 | 0.1913  | 0.1913     |
| Coniosporium_spe_Incertae_sedis     | <0.0001(<0.0001) | 5.23E-07 | 5.2E-07 | <0.0001(<0.0001) | 1.49E-05 | 1.26E-05 | <0.0001(<0.0001) | 0.00105 | 0.00105 | 0.09584 | -1.67 |     | 0.2321 | 0.0958  | 0.0958     |
| Deconica_spe_Incertae_sedis         | <0.0001(<0.0001) | 0.000125 | 0.00012 | <0.0001(<0.0001) | 1.23E-06 | 1.23E-06 | <0.0001(<0.0001) | 0       | 0       | 0.29911 | -1.04 |     | 0.467  | 0.2991  | 0.2991     |
| Exobasidium_spe_Incertae_sedis      | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000147 | 0.000145 | <0.0001(<0.0001) | 0.00054 | 0.00054 | 0.02157 | -2.3  | *   | 0.0798 | 0.0216  | * 0.0216   |
| Erythrobasidium_hasegawianum        | <0.0001(<0.0001) | 4.09E-05 | 3.9E-05 | <0.0001(<0.0001) | 0.000196 | 0.000147 | <0.0001(<0.0001) | 0       | 0       | 0.47248 | -0.72 |     | 0.6281 | 0.4725  | 0.4725     |
| Papilliotrema_flavescens            | <0.0001(<0.0001) | 0.000123 | 0.00012 | <0.0001(<0.0001) | 1.48E-06 | 1.48E-06 | <0.0001(<0.0001) | 0       | 0       | 0.22777 | -1.21 |     | 0.433  | 0.2278  | 0.2278     |
| Peniophora_pseudoversicolor         | <0.0001(<0.0001) | 0.000124 | 0.00012 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.19126 | -1.31 |     | 0.3758 | 0.1913  | 0.1913     |
| Venturia_spe_Incertae_sedis         | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000286 | 0.000281 | <0.0001(<0.0001) | 0       | 0       | 0.00124 | -3.23 | **  | 0.011  | 0.0012  | ** 0.0012  |
| Phaeophloeospora_hymenocallidicola  | <0.0001(<0.0001) | 0.000121 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.245  | 0.1078  | 0.1078     |
| Bergerella_atrofusca                | <0.0001(<0.0001) | 0.00012  | 0.00012 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.06006 | -1.88 |     | 0.1658 | 0.0601  | 0.0601     |
| Tubeufia_trentensis                 | <0.0001(<0.0001) | 0.000118 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.3059 | 0.1438  | 0.1438     |
| Didymocyrtis_brachylaeae            | <0.0001(<0.0001) | 6.67E-07 | 6.7E-07 | <0.0001(<0.0001) | 8.8E-06  | 3.71E-06 | <0.0001(<0.0001) | 0.00098 | 0.00096 | 0.00027 | -3.64 | *** | 0.0034 | 0.0003  | ***0.0003  |
| Zygosaccharomyces_rouxii            | <0.0001(<0.0001) | 0.000116 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537  | 0.2537     |
| Sporothrix_nigrograna               | <0.0001(<0.0001) | 2.8E-07  | 2.8E-07 | <0.0001(<0.0001) | 0.000196 | 8.24E-05 | <0.0001(<0.0001) | 0.00027 | 0.00015 | 5E-06   | -4.56 | *** | 0.0002 | <0.0001 | ***<0.0001 |
| Periconia_cortaderiae               | <0.0001(<0.0001) | 4.84E-05 | 2.4E-05 | <0.0001(<0.0001) | 9.59E-05 | 2.6E-05  | <0.0001(<0.0001) | 0.00023 | 0.00021 | 0.02405 | -2.26 | *   | 0.0861 | 0.0241  | * 0.0241   |
| Preussia_provinciae                 | <0.0001(<0.0001) | 0.000114 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.02444 | -2.25 | *   | 0.0861 | 0.0244  | * 0.0244   |
| GS08_spe_Incertae_sedis             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000267 | 0.000264 | <0.0001(<0.0001) | 0       | 0       | 0.01875 | -2.35 | *   | 0.0708 | 0.0187  | * 0.0187   |
| Neodevriesia_sexualis               | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000263 | 0.000259 | <0.0001(<0.0001) | 0       | 0       | 0.01875 | -2.35 | *   | 0.0708 | 0.0187  | * 0.0187   |



|                                    |                  |          |         |                  |          |          |                  |         |         |         |       |     |        |         |            |
|------------------------------------|------------------|----------|---------|------------------|----------|----------|------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Gymnopus_varicolor                 | <0.0001(<0.0001) | 0.000112 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824  | 0.5824     |
| Calyculina_sp_Incertae_sedis       | <0.0001(<0.0001) | 0.000111 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.245  | 0.1078  | 0.1078     |
| Cryptomarasmius_aucubae            | <0.0001(<0.0001) | 0.000111 | 7.4E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.03308 | -2.13 | *   | 0.1113 | 0.0331  | * 0.0331   |
| Derxomyces_mrakii                  | <0.0001(<0.0001) | 0.00011  | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.10779 | -1.61 |     | 0.245  | 0.1078  | 0.1078     |
| Penicillium_ludwigii               | <0.0001(<0.0001) | 0.000109 | 4.4E-05 | <0.0001(<0.0001) | 2.5E-06  | 1.76E-06 | <0.0001(<0.0001) | 0       | 0       | 0.20018 | -1.28 |     | 0.3921 | 0.2002  | 0.2002     |
| Kazachstaniana_humilis             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 2.98E-06 | 2.11E-06 | <0.0001(<0.0001) | 0.00095 | 0.00094 | 1E-05   | -4.41 | *** | 0.0003 | <0.0001 | ***<0.0001 |
| Radulomyces_paumanokensis          | <0.0001(<0.0001) | 0.000108 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.14378 | -1.46 |     | 0.3059 | 0.1438  | 0.1438     |
| Pyrenochaeta_sp_Incertae_sedis     | <0.0001(<0.0001) | 0.000107 | 0.00011 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356  | 0.3356     |
| Dactyloendron_pinicola             | <0.0001(<0.0001) | 4.83E-05 | 4.5E-05 | <0.0001(<0.0001) | 0.000126 | 0.00012  | <0.0001(<0.0001) | 4.5E-05 | 4.5E-05 | 0.43936 | -0.77 |     | 0.5909 | 0.4394  | 0.4394     |
| Beauveria_majiangensis             | <0.0001(<0.0001) | 7.03E-05 | 2E-05   | <0.0001(<0.0001) | 4.73E-05 | 1.89E-05 | <0.0001(<0.0001) | 0.00014 | 0.00013 | 0.54272 | -0.61 |     | 0.7032 | 0.5427  | 0.5427     |
| Issatchenkia_orientalis            | <0.0001(<0.0001) | 1.08E-06 | 6.6E-07 | <0.0001(<0.0001) | 0.000244 | 0.000222 | <0.0001(<0.0001) | 1.6E-05 | 1.1E-05 | 0.00905 | -2.61 | **  | 0.0428 | 0.0091  | ** 0.0091  |
| Trichomerium_dioscoreae            | <0.0001(<0.0001) | 2.7E-06  | 2.4E-06 | <0.0001(<0.0001) | 0.00024  | 0.000179 | <0.0001(<0.0001) | 1.3E-05 | 8.9E-06 | 0.01757 | -2.37 | *   | 0.0701 | 0.0176  | * 0.0176   |
| Penicillium_aurantiogriseum        | <0.0001(<0.0001) | 9.55E-05 | 8.6E-05 | <0.0001(<0.0001) | 2.29E-05 | 1.27E-05 | <0.0001(<0.0001) | 0       | 0       | 0.47865 | -0.71 |     | 0.6349 | 0.4787  | 0.4787     |
| Phyllosticta_capitalensis          | <0.0001(<0.0001) | 0.000104 | 9.9E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.3059 | 0.1438  | 0.1438     |
| Gonatopragmium_sp_Incertae_sedis   | <0.0001(<0.0001) | 0.000103 | 9.5E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537  | 0.2537     |
| Zasmidium_sp_Incertae_sedis        | <0.0001(<0.0001) | 0.000103 | 9.7E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.19126 | -1.31 |     | 0.3758 | 0.1913  | 0.1913     |
| Diutina_rugosa                     | <0.0001(<0.0001) | 7.78E-06 | 7.8E-06 | <0.0001(<0.0001) | 6.73E-05 | 6.63E-05 | <0.0001(<0.0001) | 0.00059 | 0.00058 | 0.00959 | -2.59 | **  | 0.0439 | 0.0096  | ** 0.0096  |
| Antennariella_placitae             | <0.0001(<0.0001) | 0.000103 | 0.0001  | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.3059 | 0.1438  | 0.1438     |
| Phanerochaete_sp_Incertae_sedis    | <0.0001(<0.0001) | 4.47E-07 | 4.5E-07 | <0.0001(<0.0001) | 0.000241 | 0.000235 | <0.0001(<0.0001) | 0       | 0       | 0.00791 | -2.66 | **  | 0.0393 | 0.0079  | ** 0.0079  |
| Ochrocladopus_frigidarii           | <0.0001(<0.0001) | 1.74E-06 | 9.1E-07 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0.00088 | 0.00088 | 0.25398 | -1.14 |     | 0.433  | 0.254   | 0.254      |
| Sporobolomyces_phaffii             | <0.0001(<0.0001) | 1.61E-06 | 1.2E-06 | <0.0001(<0.0001) | 0.000233 | 0.000232 | <0.0001(<0.0001) | 7.3E-06 | 7.3E-06 | 0.39186 | -0.86 |     | 0.56   | 0.3919  | 0.3919     |
| Rhizopus_arhizus                   | <0.0001(<0.0001) | 9.98E-05 | 6.7E-05 | <0.0001(<0.0001) | 2.93E-06 | 2.93E-06 | <0.0001(<0.0001) | 0       | 0       | 0.17951 | -1.34 |     | 0.3634 | 0.1795  | 0.1795     |
| Pseudogymnoascus_sp_Incertae_sedis | <0.0001(<0.0001) | 0.0001   | 7.2E-05 | <0.0001(<0.0001) | 1.13E-06 | 1.13E-06 | <0.0001(<0.0001) | 0       | 0       | 0.37758 | -0.88 |     | 0.5479 | 0.3776  | 0.3776     |
| Sordaria_eq_uicola                 | <0.0001(<0.0001) | 9.94E-05 | 9.8E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356  | 0.3356     |
| Neosochytrium_paspali              | <0.0001(<0.0001) | 9.87E-05 | 9.5E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427  | 0.4427     |
| Chalara_hughesii                   | <0.0001(<0.0001) | 9.81E-05 | 9.7E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356  | 0.3356     |
| Candida_haemulonis                 | <0.0001(<0.0001) | 9.71E-05 | 9.6E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427  | 0.4427     |

|                                |                  |          |         |                  |          |          |                  |         |         |         |       |     |        |        |           |
|--------------------------------|------------------|----------|---------|------------------|----------|----------|------------------|---------|---------|---------|-------|-----|--------|--------|-----------|
| Skeletocutis_nivea             | <0.0001(<0.0001) | 9.69E-05 | 9.6E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356 | 0.3356    |
| Simplicium_aogashimense        | <0.0001(<0.0001) | 9.57E-05 | 9.4E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537 | 0.2537    |
| Sporobolomyces_koalae          | <0.0001(<0.0001) | 9.45E-05 | 8.9E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.08058 | -1.75 |     | 0.1995 | 0.0806 | 0.0806    |
| Entorrhiza_pavula              | <0.0001(<0.0001) | 7.25E-05 | 5E-05   | <0.0001(<0.0001) | 4.45E-05 | 1.83E-05 | <0.0001(<0.0001) | 2.5E-05 | 1.5E-05 | 0.04258 | -2.03 | *   | 0.1266 | 0.0426 | * 0.0426  |
| Fusarium_ramigenum             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000208 | 0.000146 | <0.0001(<0.0001) | 4.4E-05 | 3.5E-05 | 0.00086 | -3.33 | *** | 0.0087 | 0.0009 | ***0.0009 |
| Cladophiala_sp._lucertae_sedis | <0.0001(<0.0001) | 9.29E-05 | 9E-05   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537 | 0.2537    |
| Merula_sp._lucertae_sedis      | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 2.18E-06 | 2.18E-06 | <0.0001(<0.0001) | 0.0008  | 0.0008  | 0.03578 | -2.1  | *   | 0.1168 | 0.0358 | * 0.0358  |
| Cytospora_pseudopioensis       | <0.0001(<0.0001) | 9.12E-05 | 8.9E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356 | 0.3356    |
| Anisomeridium_guangdongensis   | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000205 | 0.000204 | <0.0001(<0.0001) | 3.6E-05 | 3.6E-05 | 0.04061 | -2.05 | *   | 0.1249 | 0.0406 | * 0.0406  |
| Dothidea_eucalypti             | <0.0001(<0.0001) | 0.00009  | 8.9E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Calyptrella_cavapula           | <0.0001(<0.0001) | 0.000089 | 8.5E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.08058 | -1.75 |     | 0.1995 | 0.0806 | 0.0806    |
| Gibberella_baccata             | <0.0001(<0.0001) | 4.39E-07 | 4.4E-07 | <0.0001(<0.0001) | 2.73E-06 | 1.97E-06 | <0.0001(<0.0001) | 0.00076 | 0.00075 | 0.00905 | -2.61 | **  | 0.0428 | 0.0091 | ** 0.0091 |
| Atractiella_rhizophila         | <0.0001(<0.0001) | 8.75E-05 | 6.2E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.3059 | 0.1438 | 0.1438    |
| Blumeria_graminis              | <0.0001(<0.0001) | 0.000087 | 8.6E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Hannaella_scurugaensis         | <0.0001(<0.0001) | 9.77E-06 | 9.8E-06 | <0.0001(<0.0001) | 0.00018  | 0.000143 | <0.0001(<0.0001) | 0       | 0       | 0.00061 | -3.43 | *** | 0.0066 | 0.0006 | ***0.0006 |
| Jaminala_angkorensis           | <0.0001(<0.0001) | 8.52E-05 | 8.5E-05 | <0.0001(<0.0001) | 1.02E-06 | 1.02E-06 | <0.0001(<0.0001) | 0       | 0       | 0.87748 | -0.15 |     | 0.8843 | 0.8775 | 0.8775    |
| Phacidium_laccerum             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.0002   | 0.000198 | <0.0001(<0.0001) | 5.1E-06 | 5.1E-06 | 0.04145 | -2.04 | *   | 0.1249 | 0.0415 | * 0.0415  |
| Acremonium_egyptiacum          | <0.0001(<0.0001) | 6.06E-05 | 5.4E-05 | <0.0001(<0.0001) | 5.33E-05 | 1.77E-05 | <0.0001(<0.0001) | 1.8E-05 | 1.3E-05 | 0.00629 | -2.73 | **  | 0.0333 | 0.0063 | ** 0.0063 |
| Hormodendrum_melanochlora      | <0.0001(<0.0001) | 8.36E-05 | 8E-05   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Physisporinus_tibeticus        | <0.0001(<0.0001) | 8.25E-05 | 8.1E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Fuscosporella_aquatica         | <0.0001(<0.0001) | 5.33E-05 | 1.3E-05 | <0.0001(<0.0001) | 2.18E-05 | 1.01E-05 | <0.0001(<0.0001) | 0.00017 | 9.5E-05 | 0.08505 | -1.72 |     | 0.2097 | 0.0851 | 0.0851    |
| Phlebiopsis_flavidoalba        | <0.0001(<0.0001) | 8.15E-05 | 7.8E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.08058 | -1.75 |     | 0.1995 | 0.0806 | 0.0806    |
| Yamatadomyces_triangularis     | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 1.53E-05 | 1.11E-05 | <0.0001(<0.0001) | 0.00065 | 0.00065 | 0.03976 | -2.06 | *   | 0.1237 | 0.0398 | * 0.0398  |
| Knufia_tsunedae                | <0.0001(<0.0001) | 7.87E-05 | 5.2E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.06006 | -1.88 |     | 0.1658 | 0.0601 | 0.0601    |
| Holtermannella_takashimae      | <0.0001(<0.0001) | 1.41E-05 | 8E-06   | <0.0001(<0.0001) | 0.000152 | 0.000142 | <0.0001(<0.0001) | 0       | 0       | 0.16188 | -1.4  |     | 0.338  | 0.1619 | 0.1619    |
| Coprinopsis_clastophylla       | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 1.05E-06 | 1.05E-06 | <0.0001(<0.0001) | 0.00068 | 0.00068 | 0.03578 | -2.1  | *   | 0.1168 | 0.0358 | * 0.0358  |
| Yarrowia_alkimenteria          | <0.0001(<0.0001) | 1.67E-05 | 1.5E-05 | <0.0001(<0.0001) | 7.34E-05 | 7.23E-05 | <0.0001(<0.0001) | 0.00026 | 0.00026 | 0.38365 | -0.87 |     | 0.5555 | 0.3837 | 0.3837    |

|                                      |                  |          |         |                          |          |          |                          |         |         |         |       |     |        |        |           |
|--------------------------------------|------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|-----|--------|--------|-----------|
| Itersonilia_perplexans               | <0.0001(<0.0001) | 2.15E-06 | 1.2E-06 | <0.0001(<0.0001,<0.0001) | 0.000169 | 0.000165 | <0.0001(<0.0001,<0.0001) | 1.7E-05 | 1.2E-05 | 0.13303 | -1.5  |     | 0.2935 | 0.133  | 0.133     |
| Neofusicoccum_buxi                   | <0.0001(<0.0001) | 7.53E-05 | 7.2E-05 | <0.0001(<0.0001,<0.0001) | 9.29E-07 | 9.29E-07 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.29618 | -1.04 |     | 0.467  | 0.2962 | 0.2962    |
| Bankstophoma_australiensis           | <0.0001(<0.0001) | 7.47E-05 | 7.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 4.4E-06 | 4.4E-06 | 0.2541  | -1.14 |     | 0.433  | 0.2541 | 0.2541    |
| Podosphaera_cunningtonii             | <0.0001(<0.0001) | 7.51E-05 | 7.4E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Aspergillus_insolitus                | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000172 | 0.000172 | <0.0001(<0.0001,<0.0001) | 7.8E-06 | 7.8E-06 | 0.03757 | -2.08 | *   | 0.1203 | 0.0376 | * 0.0376  |
| Rhopalophora_clavispora              | <0.0001(<0.0001) | 7.29E-05 | 7.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.19126 | -1.31 |     | 0.3758 | 0.1913 | 0.1913    |
| Trechispora_spe_Incertae_sedis       | <0.0001(<0.0001) | 7.21E-05 | 6.7E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356 | 0.3356    |
| Elsinoe_leucopogonis                 | <0.0001(<0.0001) | 7.19E-05 | 7.2E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642 | 0.7642    |
| Neodevriesia_lagerstroemiae          | <0.0001(<0.0001) | 2.05E-07 | 2E-07   | <0.0001(<0.0001,<0.0001) | 0.000166 | 0.000165 | <0.0001(<0.0001,<0.0001) | 8.3E-06 | 8.3E-06 | 0.17357 | -1.36 |     | 0.3576 | 0.1736 | 0.1736    |
| Hannaella_oryzae                     | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000131 | 0.000128 | <0.0001(<0.0001,<0.0001) | 0.00014 | 0.00014 | 0.02172 | -2.3  | *   | 0.0799 | 0.0217 | * 0.0217  |
| Vismiazyma_tephrensis                | <0.0001(<0.0001) | 6.36E-07 | 6.4E-07 | <0.0001(<0.0001,<0.0001) | 0.000128 | 0.000122 | <0.0001(<0.0001,<0.0001) | 0.00014 | 0.00014 | 0.04087 | -2.04 | *   | 0.1249 | 0.0409 | * 0.0409  |
| Parasarcocladium_aestuarium          | <0.0001(<0.0001) | 6.95E-05 | 6.9E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Botryosphaeria_corticis              | <0.0001(<0.0001) | 6.89E-05 | 6.4E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.14379 | -1.46 |     | 0.3059 | 0.1438 | 0.1438    |
| Ophiostoma_pusillum                  | <0.0001(<0.0001) | 1.6E-05  | 6E-06   | <0.0001(<0.0001,<0.0001) | 0.000102 | 2.4E-05  | <0.0001(<0.0001,<0.0001) | 7.9E-05 | 4.9E-05 | 0.00053 | -3.46 | *** | 0.0059 | 0.0005 | ***0.0005 |
| Trichomeria_aceae_spe_Incertae_sedis | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000161 | 0.000158 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00124 | -3.23 | **  | 0.011  | 0.0012 | ** 0.0012 |
| Fusicolla_acetilerea                 | <0.0001(<0.0001) | 6.81E-05 | 6.8E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Mucor_circinelloides                 | <0.0001(<0.0001) | 6.52E-05 | 1.5E-05 | <0.0001(<0.0001,<0.0001) | 4.48E-06 | 4.48E-06 | <0.0001(<0.0001,<0.0001) | 8.3E-06 | 8.3E-06 | 0.00098 | -3.3  | *** | 0.0096 | 0.001  | ***0.001  |
| Phaeobotryopsis_spe_Incertae_sedis   | <0.0001(<0.0001) | 6.77E-05 | 6.6E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537 | 0.2537    |
| Subunicystidium_brachysporum         | <0.0001(<0.0001) | 7.37E-06 | 6.1E-06 | <0.0001(<0.0001,<0.0001) | 0.000139 | 0.000139 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.83326 | -0.21 |     | 0.8485 | 0.8333 | 0.8333    |
| Trichoderma_harzianum                | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000145 | 8.99E-05 | <0.0001(<0.0001,<0.0001) | 3.9E-05 | 3.9E-05 | 0.00295 | -2.97 | **  | 0.0187 | 0.0029 | ** 0.0029 |
| Penicillium_mallochii                | <0.0001(<0.0001) | 6.48E-05 | 6.5E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 4E-06   | 4E-06   | 0.06381 | -1.85 |     | 0.1727 | 0.0638 | 0.0638    |
| Bandonia_marina                      | <0.0001(<0.0001) | 3.84E-05 | 2E-05   | <0.0001(<0.0001,<0.0001) | 5.01E-05 | 3.65E-05 | <0.0001(<0.0001,<0.0001) | 4.4E-05 | 4.1E-05 | 0.18498 | -1.33 |     | 0.3733 | 0.185  | 0.185     |
| Dimorphomorph_a_saxea                | <0.0001(<0.0001) | 4.93E-05 | 4E-05   | <0.0001(<0.0001,<0.0001) | 3.53E-05 | 3.53E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.72286 | -0.35 |     | 0.7866 | 0.7229 | 0.7229    |
| Dactyliaria_spe_Incertae_sedis       | <0.0001(<0.0001) | 6.37E-05 | 6.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Periconia_homothallica               | <0.0001(<0.0001) | 6.37E-05 | 5.7E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537 | 0.2537    |
| Agaricales_spe_Incertae_sedis        | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0.000148 | 0.000148 | <0.0001(<0.0001,<0.0001) | 6.7E-06 | 6.7E-06 | 0.03757 | -2.08 | *   | 0.1203 | 0.0376 | * 0.0376  |
| Gibberula_sennongjiaensis            | <0.0001(<0.0001) | 5.08E-05 | 2.1E-05 | <0.0001(<0.0001,<0.0001) | 2.44E-05 | 1.01E-05 | <0.0001(<0.0001,<0.0001) | 7.1E-06 | 7.1E-06 | 0.59625 | -0.53 |     | 0.722  | 0.5962 | 0.5962    |

|                                      |                  |          |         |                  |          |          |                  |         |         |         |           |        |         |            |
|--------------------------------------|------------------|----------|---------|------------------|----------|----------|------------------|---------|---------|---------|-----------|--------|---------|------------|
| Eutypena_spe_Incertae_sedis          | <0.0001(<0.0001) | 6.06E-05 | 6E-05   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77     | 0.5909 | 0.4427  | 0.4427     |
| Penicillium_adametzoides             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.00014  | 0.00014  | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11     | 0.433  | 0.2691  | 0.2691     |
| Paratrichium_cylindroconium          | <0.0001(<0.0001) | 4.17E-07 | 4.2E-07 | <0.0001(<0.0001) | 0.000137 | 9.97E-05 | <0.0001(<0.0001) | 0       | 0       | 0.30009 | -1.04     | 0.467  | 0.3001  | 0.3001     |
| Penicillium_steckii                  | <0.0001(<0.0001) | 5.69E-05 | 5.6E-05 | <0.0001(<0.0001) | 1.55E-06 | 1.55E-06 | <0.0001(<0.0001) | 0       | 0       | 0.879   | -0.15     | 0.8843 | 0.879   | 0.879      |
| Aspergillus_neoglaber                | <0.0001(<0.0001) | 5.74E-05 | 3.4E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.2537  | -1.14     | 0.433  | 0.2537  | 0.2537     |
| Zancluspora_aurea                    | <0.0001(<0.0001) | 1.52E-05 | 8.2E-06 | <0.0001(<0.0001) | 7.13E-05 | 2.86E-05 | <0.0001(<0.0001) | 0.00011 | 6.8E-05 | 0.01008 | -2.57 *   | 0.0448 | 0.0101  | * 0.0101   |
| Umbonium_hagahensis                  | <0.0001(<0.0001) | 3.22E-05 | 3.1E-05 | <0.0001(<0.0001) | 5.51E-05 | 5.42E-05 | <0.0001(<0.0001) | 8.1E-06 | 8.1E-06 | 0.60355 | -0.52     | 0.7282 | 0.6035  | 0.6035     |
| Sporobolium_hagahensis               | <0.0001(<0.0001) | 5.6E-05  | 5.5E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77     | 0.5909 | 0.4427  | 0.4427     |
| Fusarium_irregulare                  | <0.0001(<0.0001) | 3.95E-05 | 1.6E-05 | <0.0001(<0.0001) | 3.06E-05 | 2.5E-05  | <0.0001(<0.0001) | 3E-05   | 2E-05   | 0.52444 | -0.64     | 0.6876 | 0.5244  | 0.5244     |
| Sarocladium_strictum                 | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000119 | 4.57E-05 | <0.0001(<0.0001) | 4.5E-05 | 3.1E-05 | 5.9E-06 | -4.53 *** | 0.0002 | <0.0001 | ***<0.0001 |
| Nectriopsis_exigua                   | <0.0001(<0.0001) | 5.56E-05 | 5.3E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.2537  | -1.14     | 0.433  | 0.2537  | 0.2537     |
| Kazakhstania_exigua                  | <0.0001(<0.0001) | 5.26E-05 | 4.9E-05 | <0.0001(<0.0001) | 0.000007 | 0.000007 | <0.0001(<0.0001) | 0       | 0       | 0.60138 | -0.52     | 0.7269 | 0.6014  | 0.6014     |
| Lyomyces_spe_Incertae_sedis          | <0.0001(<0.0001) | 5.55E-05 | 5.1E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96     | 0.4934 | 0.3356  | 0.3356     |
| Hanseniaspora_nectarophila           | <0.0001(<0.0001) | 3.02E-05 | 2.7E-05 | <0.0001(<0.0001) | 4.78E-05 | 4.78E-05 | <0.0001(<0.0001) | 4.4E-05 | 3.1E-05 | 0.17926 | -1.34     | 0.3634 | 0.1793  | 0.1793     |
| [Candida]_asari                      | <0.0001(<0.0001) | 5.54E-05 | 5.3E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.19126 | -1.31     | 0.3758 | 0.1913  | 0.1913     |
| Vishniacozyma_taibaiensis            | <0.0001(<0.0001) | 5.49E-05 | 4.8E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.19126 | -1.31     | 0.3758 | 0.1913  | 0.1913     |
| Aspergillus_unguis                   | <0.0001(<0.0001) | 6.89E-07 | 5E-07   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0.00047 | 0.00047 | 0.15986 | -1.41     | 0.3348 | 0.1599  | 0.1599     |
| Ciboria_shiraiana                    | <0.0001(<0.0001) | 5.3E-05  | 5.3E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77     | 0.5909 | 0.4427  | 0.4427     |
| Xeromyces_bisporus                   | <0.0001(<0.0001) | 6.99E-06 | 7E-06   | <0.0001(<0.0001) | 0.000108 | 0.000104 | <0.0001(<0.0001) | 0       | 0       | 0.101   | -1.64     | 0.2385 | 0.101   | 0.101      |
| Aspergillus_pragensis                | <0.0001(<0.0001) | 1.71E-05 | 1.3E-05 | <0.0001(<0.0001) | 6.39E-05 | 6.15E-05 | <0.0001(<0.0001) | 7.5E-05 | 7.5E-05 | 0.44737 | -0.76     | 0.5959 | 0.4474  | 0.4474     |
| Erythrobolium_yunnanense             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.000121 | 0.000121 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11     | 0.433  | 0.2691  | 0.2691     |
| Aspergillus_conicus                  | <0.0001(<0.0001) | 5.08E-05 | 5.1E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.58243 | -0.55     | 0.7066 | 0.5824  | 0.5824     |
| Dioszegia_catarinonii                | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0.00012  | 0.000105 | <0.0001(<0.0001) | 0       | 0       | 0.01875 | -2.35 *   | 0.0708 | 0.0187  | * 0.0187   |
| Malassezia_dermatis                  | <0.0001(<0.0001) | 2.1E-06  | 1.8E-06 | <0.0001(<0.0001) | 0.000114 | 0.000112 | <0.0001(<0.0001) | 0       | 0       | 0.54847 | -0.6      | 0.7066 | 0.5485  | 0.5485     |
| Naganishia_albidosimilis             | <0.0001(<0.0001) | 5E-05    | 3.9E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.19126 | -1.31     | 0.3758 | 0.1913  | 0.1913     |
| Comotrypanum_spe_Incertae_sedis      | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 1.34E-06 | 1.34E-06 | <0.0001(<0.0001) | 0.00043 | 0.00043 | 0.00025 | -3.66 *** | 0.0033 | 0.0003  | ***0.0003  |
| Biatrispora_aceae_spe_Incertae_sedis | <0.0001(<0.0001) | 4.95E-05 | 4.9E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77     | 0.5909 | 0.4427  | 0.4427     |

|                                           |                  |          |         |                          |          |          |                          |         |         |         |       |     |        |        |           |
|-------------------------------------------|------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|-----|--------|--------|-----------|
| Candida_inc<br>onspicua                   | <0.0001(<0.0001) | 4.52E-05 | 9.6E-06 | <0.0001(<0.0001,<0.0001) | 2.07E-06 | 2.07E-06 | <0.0001(<0.0001,<0.0001) | 7E-06   | 7E-06   | 0.00171 | -3.14 | **  | 0.0136 | 0.0017 | ** 0.0017 |
| Tilletia_mac<br>taggartii                 | <0.0001(<0.0001) | 4.67E-05 | 4.5E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Vacuophoma<br>oculihominis                | <0.0001(<0.0001) | 2.21E-05 | 1.6E-05 | <0.0001(<0.0001,<0.0001) | 3.37E-05 | 2.55E-05 | <0.0001(<0.0001,<0.0001) | 8.8E-05 | 7E-05   | 0.0975  | -1.66 |     | 0.2336 | 0.0975 | 0.0975    |
| Laburnicola<br>_dactylidis                | <0.0001(<0.0001) | 4.59E-05 | 4.4E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537 | 0.2537    |
| Glovinomyces<br>_latisporus               | <0.0001(<0.0001) | 4.57E-05 | 4.5E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Heliocybe_v<br>illosa                     | <0.0001(<0.0001) | 4.57E-05 | 4.5E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537 | 0.2537    |
| Lipomyces_<br>doorenjongii                | <0.0001(<0.0001) | 4.55E-05 | 3.8E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537 | 0.2537    |
| Pestalotiopsis<br>_vismiae                | <0.0001(<0.0001) | 4.47E-05 | 4.4E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Steccherinum<br>_ochraceum                | <0.0001(<0.0001) | 4.41E-05 | 4.4E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Colletotrichum<br>_cliviae                | <0.0001(<0.0001) | 4.37E-05 | 3.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356 | 0.3356    |
| Didymella_d<br>_imorpha                   | <0.0001(<0.0001) | 3.8E-05  | 2.5E-05 | <0.0001(<0.0001,<0.0001) | 1.28E-05 | 1.28E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.38449 | -0.87 |     | 0.5555 | 0.3845 | 0.3845    |
| Striatibotrys<br>_yuccae                  | <0.0001(<0.0001) | 3.1E-05  | 1.5E-05 | <0.0001(<0.0001,<0.0001) | 2.25E-05 | 6.68E-06 | <0.0001(<0.0001,<0.0001) | 2.4E-05 | 1.9E-05 | 0.33055 | -0.97 |     | 0.4934 | 0.3305 | 0.3305    |
| Huntiaella_ty<br>_alla                    | <0.0001(<0.0001) | 4.3E-05  | 4.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642 | 0.7642    |
| Toxicocladosporium<br>_spe_Incertae_sedis | <0.0001(<0.0001) | 4.3E-05  | 4E-05   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Fomitopsis_<br>eucalypticola              | <0.0001(<0.0001) | 4.18E-05 | 4.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Trichoderma<br>_asperellum                | <0.0001(<0.0001) | 3.81E-05 | 3.8E-05 | <0.0001(<0.0001,<0.0001) | 7.55E-06 | 7.55E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 |     | 0.7866 | 0.7505 | 0.7505    |
| Vandijckella<br>_johannae                 | <0.0001(<0.0001) | 5.38E-07 | 5.4E-07 | <0.0001(<0.0001,<0.0001) | 9.42E-05 | 9.42E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.74278 | -0.33 |     | 0.7866 | 0.7428 | 0.7428    |
| Coprinopsis_<br>_strossmayeri             | <0.0001(<0.0001) | 3.93E-05 | 3.9E-05 | <0.0001(<0.0001,<0.0001) | 1.21E-06 | 1.21E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.879   | -0.15 |     | 0.8843 | 0.879  | 0.879     |
| Candida_sar<br>_aburiensis                | <0.0001(<0.0001) | 3.56E-07 | 3.6E-07 | <0.0001(<0.0001,<0.0001) | 7.17E-05 | 4.27E-05 | <0.0001(<0.0001,<0.0001) | 7.9E-05 | 7.9E-05 | 0.09511 | -1.67 |     | 0.2312 | 0.0951 | 0.0951    |
| Kneiffiella_e<br>_fibulata                | <0.0001(<0.0001) | 3.97E-05 | 3.9E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Cyphellaceae<br>_spe_Incertae_sedis       | <0.0001(<0.0001) | 3.92E-05 | 3.8E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356 | 0.3356    |
| Ruhlandiella<br>_patagonica               | <0.0001(<0.0001) | 3.92E-05 | 3.8E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Moesziomyces<br>_bullatus                 | <0.0001(<0.0001) | 1.73E-06 | 1.7E-06 | <0.0001(<0.0001,<0.0001) | 8.79E-05 | 5.45E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00813 | -2.65 | **  | 0.0398 | 0.0081 | ** 0.0081 |
| Peyronellaea<br>_spe_Incertae_sedis       | <0.0001(<0.0001) | 9.7E-07  | 9.7E-07 | <0.0001(<0.0001,<0.0001) | 5.46E-05 | 3.4E-05  | <0.0001(<0.0001,<0.0001) | 0.00013 | 8.8E-05 | 0.00047 | -3.5  | *** | 0.0056 | 0.0005 | ***0.0005 |
| Zoophthora_<br>_radicans                  | <0.0001(<0.0001) | 3.25E-05 | 2.1E-05 | <0.0001(<0.0001,<0.0001) | 1.18E-05 | 6.52E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.32876 | -0.98 |     | 0.4934 | 0.3288 | 0.3288    |
| Botryosphaeria<br>_spe_Incertae_sedis     | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 8.81E-05 | 8.55E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01875 | -2.35 | *   | 0.0708 | 0.0187 | * 0.0187  |
| Ganoderma_<br>_australe                   | <0.0001(<0.0001) | 3.69E-05 | 3.5E-05 | <0.0001(<0.0001,<0.0001) | 9.46E-07 | 9.46E-07 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.82925 | -0.22 |     | 0.8471 | 0.8293 | 0.8293    |

|                                 |                  |          |         |                  |          |          |                  |         |         |         |       |     |        |        |           |
|---------------------------------|------------------|----------|---------|------------------|----------|----------|------------------|---------|---------|---------|-------|-----|--------|--------|-----------|
| Amphobotrys_ricini              | <0.0001(<0.0001) | 3.5E-05  | 2.6E-05 | <0.0001(<0.0001) | 1.52E-06 | 1.08E-06 | <0.0001(<0.0001) | 1.3E-05 | 1.3E-05 | 0.8128  | -0.24 |     | 0.8354 | 0.8128 | 0.8128    |
| Anthracina_amosa                | <0.0001(<0.0001) | 1.77E-05 | 1.7E-05 | <0.0001(<0.0001) | 4.58E-05 | 4.58E-05 | <0.0001(<0.0001) | 0       | 0       | 0.87581 | -0.16 |     | 0.8843 | 0.8758 | 0.8758    |
| Phaeosphaeria_fuckelii          | <0.0001(<0.0001) | 3.71E-05 | 3.6E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96 |     | 0.4934 | 0.3356 | 0.3356    |
| Talaromyces_udagawae            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0.00033 | 0.00033 | 0.0019  | -3.11 | **  | 0.0136 | 0.0019 | ** 0.0019 |
| Crustoderma_spe_Incertae_sedis  | <0.0001(<0.0001) | 3.58E-05 | 3.6E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642 | 0.7642    |
| Penicillifer_martinii           | <0.0001(<0.0001) | 1.72E-05 | 1.3E-05 | <0.0001(<0.0001) | 3.84E-05 | 1.19E-05 | <0.0001(<0.0001) | 2.1E-05 | 1.5E-05 | 0.00311 | -2.96 | **  | 0.0192 | 0.0031 | ** 0.0031 |
| Lophostoma_spe_Incertae_sedis   | <0.0001(<0.0001) | 3.55E-05 | 3.4E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Ceratocystis_manginecans        | <0.0001(<0.0001) | 3.45E-05 | 3.4E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.33559 | -0.96 |     | 0.4934 | 0.3356 | 0.3356    |
| Hannaella_kunmingensis          | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0.0003  | 0.0003  | 0.0019  | -3.11 | **  | 0.0136 | 0.0019 | ** 0.0019 |
| Pseudopitomyces_karoon          | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 8.39E-07 | 8.39E-07 | <0.0001(<0.0001) | 0.00029 | 0.00028 | 0.00025 | -3.66 | *** | 0.0033 | 0.0003 | ***0.0003 |
| Cystomyces_capitatus            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 7.91E-05 | 6.06E-05 | <0.0001(<0.0001) | 0       | 0       | 0.00485 | -2.82 | **  | 0.0276 | 0.0049 | ** 0.0049 |
| Akanthomyces_thailandicus       | <0.0001(<0.0001) | 3.29E-05 | 2E-05   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.06006 | -1.88 |     | 0.1658 | 0.0601 | 0.0601    |
| Anastomitra_beculidimospora     | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0.00029 | 0.00029 | 0.0019  | -3.11 | **  | 0.0136 | 0.0019 | ** 0.0019 |
| Papiliotrema_aurea              | <0.0001(<0.0001) | 2.79E-05 | 2.8E-05 | <0.0001(<0.0001) | 1.16E-05 | 9.32E-06 | <0.0001(<0.0001) | 0       | 0       | 0.55425 | -0.59 |     | 0.7066 | 0.5543 | 0.5543    |
| Tilletia_barclayana             | <0.0001(<0.0001) | 2.17E-05 | 2.2E-05 | <0.0001(<0.0001) | 2.62E-05 | 2.56E-05 | <0.0001(<0.0001) | 0       | 0       | 0.31168 | -1.01 |     | 0.4827 | 0.3117 | 0.3117    |
| Eremothecium_ashbyi             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 7.72E-05 | 7.61E-05 | <0.0001(<0.0001) | 0       | 0       | 0.0715  | -1.8  |     | 0.1846 | 0.0715 | 0.0715    |
| Inanatephorus_cucumeris         | <0.0001(<0.0001) | 3.25E-05 | 3.1E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Paecilomyces_spe_Incertae_sedis | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 7.58E-05 | 7.58E-05 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691 | 0.2691    |
| Epicoccum_viticis               | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 7.56E-05 | 7.56E-05 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691 | 0.2691    |
| Quambalaria_cyanescens          | <0.0001(<0.0001) | 3.19E-05 | 3.2E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642 | 0.7642    |
| Meyerozyma_guilliermondii       | <0.0001(<0.0001) | 2.51E-05 | 2.4E-05 | <0.0001(<0.0001) | 1.39E-06 | 1.39E-06 | <0.0001(<0.0001) | 5.4E-05 | 3.3E-05 | 0.00111 | -3.26 | **  | 0.0103 | 0.0011 | ** 0.0011 |
| Nemania_viridis                 | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 7.46E-05 | 7.46E-05 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691 | 0.2691    |
| [Candida]_incommunis            | <0.0001(<0.0001) | 3.16E-05 | 3.1E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824 | 0.5824    |
| Cordyceps_epidopterorum         | <0.0001(<0.0001) | 1.28E-05 | 3.3E-06 | <0.0001(<0.0001) | 3.55E-05 | 9.74E-06 | <0.0001(<0.0001) | 2.9E-05 | 1.6E-05 | 0.05679 | -1.9  |     | 0.1644 | 0.0568 | 0.0568    |
| Stagonosporopsis_nemophilae     | <0.0001(<0.0001) | 3.1E-05  | 2.8E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.2537  | -1.14 |     | 0.433  | 0.2537 | 0.2537    |
| Lentinus_squarrosulus           | <0.0001(<0.0001) | 3.1E-05  | 3.1E-05 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642 | 0.7642    |
| Cytospora_brevispora            | <0.0001(<0.0001) | 3.05E-05 | 3E-05   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 |     | 0.5909 | 0.4427 | 0.4427    |
| Aquapteridosporea_fusiformis    | <0.0001(<0.0001) | 1.63E-05 | 1.2E-05 | <0.0001(<0.0001) | 3.32E-05 | 2.56E-05 | <0.0001(<0.0001) | 0       | 0       | 0.41116 | -0.82 |     | 0.5839 | 0.4112 | 0.4112    |

|                               |                           |          |         |                           |          |          |                           |         |         |         |       |    |        |        |           |
|-------------------------------|---------------------------|----------|---------|---------------------------|----------|----------|---------------------------|---------|---------|---------|-------|----|--------|--------|-----------|
| Acrodontium_crateriforme      | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0.00026 | 0.00026 | 0.0019  | -3.11 | ** | 0.0136 | 0.0019 | ** 0.0019 |
| Stemphylium_sp_Incertae_sedis | <0.0001(<0.0001, <0.0001) | 2.96E-05 | 2.9E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.3356  | -0.96 |    | 0.4934 | 0.3356 | 0.3356    |
| Podosphaera_aphanis           | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 6.97E-05 | 6.69E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.01875 | -2.35 | *  | 0.0708 | 0.0187 | * 0.0187  |
| Pichia_fermentans             | <0.0001(<0.0001, <0.0001) | 2.71E-05 | 2.5E-05 | <0.0001(<0.0001, <0.0001) | 2.21E-06 | 2.21E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.82925 | -0.22 |    | 0.8471 | 0.8293 | 0.8293    |
| Lembosium_eucalyptorum        | <0.0001(<0.0001, <0.0001) | 6.21E-07 | 6.2E-07 | <0.0001(<0.0001, <0.0001) | 6.33E-05 | 6.33E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.74278 | -0.33 |    | 0.7866 | 0.7428 | 0.7428    |
| Malassezia_furfur             | <0.0001(<0.0001, <0.0001) | 2.71E-05 | 2.2E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.2537  | -1.14 |    | 0.433  | 0.2537 | 0.2537    |
| Kodamaea_ohmeri               | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 5.64E-06 | 4.13E-06 | <0.0001(<0.0001, <0.0001) | 0.00022 | 0.00022 | 0.03976 | -2.06 | *  | 0.1237 | 0.0398 | * 0.0398  |
| Trichosporon_asahii           | <0.0001(<0.0001, <0.0001) | 2.67E-05 | 2.2E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.10779 | -1.61 |    | 0.245  | 0.1078 | 0.1078    |
| Neocucurbitaria_irregularis   | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 6.07E-05 | 5.99E-05 | <0.0001(<0.0001, <0.0001) | 7.4E-06 | 7.4E-06 | 0.04061 | -2.05 | *  | 0.1249 | 0.0406 | * 0.0406  |
| Elaphomyces_anthraxis         | <0.0001(<0.0001, <0.0001) | 2.01E-05 | 1.8E-05 | <0.0001(<0.0001, <0.0001) | 1.4E-05  | 7.97E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.20483 | -1.27 |    | 0.4001 | 0.2048 | 0.2048    |
| Lophiostoma_cynaroidis        | <0.0001(<0.0001, <0.0001) | 2.34E-05 | 2.3E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 7.1E-06 | 7.1E-06 | 0.23358 | -1.19 |    | 0.433  | 0.2336 | 0.2336    |
| Cystonobasidium_infirmominium | <0.0001(<0.0001, <0.0001) | 2.25E-05 | 1.2E-05 | <0.0001(<0.0001, <0.0001) | 3.71E-06 | 3.71E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.37758 | -0.88 |    | 0.5479 | 0.3776 | 0.3776    |
| Penidiella_sp_Incertae_sedis  | <0.0001(<0.0001, <0.0001) | 2.4E-05  | 2.4E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7866 | 0.7642 | 0.7642    |
| Symmetrorpora_marina          | <0.0001(<0.0001, <0.0001) | 2.39E-05 | 2.4E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7866 | 0.7642 | 0.7642    |
| Roussoella_solani             | <0.0001(<0.0001, <0.0001) | 2.2E-05  | 2.1E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.44271 | -0.77 |    | 0.5909 | 0.4427 | 0.4427    |
| Homotomycetes_tamaricis       | <0.0001(<0.0001, <0.0001) | 2.2E-05  | 2.2E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7866 | 0.7642 | 0.7642    |
| Actinomyces_elegans           | <0.0001(<0.0001, <0.0001) | 2.04E-05 | 4.7E-06 | <0.0001(<0.0001, <0.0001) | 2.21E-06 | 2.21E-06 | <0.0001(<0.0001, <0.0001) | 3.9E-06 | 3.9E-06 | 0.00711 | -2.69 | ** | 0.0356 | 0.0071 | ** 0.0071 |
| Phenodonus_enteroleucus       | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 5.11E-05 | 4.79E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.00124 | -3.23 | ** | 0.011  | 0.0012 | ** 0.0012 |
| Trichoderma_pleuroticola      | <0.0001(<0.0001, <0.0001) | 2.16E-05 | 2.1E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.58243 | -0.55 |    | 0.7066 | 0.5824 | 0.5824    |
| Penicillium_glabrum           | <0.0001(<0.0001, <0.0001) | 3.94E-07 | 3.9E-07 | <0.0001(<0.0001, <0.0001) | 2.98E-05 | 2.98E-05 | <0.0001(<0.0001, <0.0001) | 7.3E-05 | 5.7E-05 | 0.00408 | -2.87 | ** | 0.0238 | 0.0041 | ** 0.0041 |
| Allocreptovalsa_polyspora     | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 4.84E-05 | 4.84E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.26915 | -1.11 |    | 0.433  | 0.2691 | 0.2691    |
| Flammulina_velutipes          | <0.0001(<0.0001, <0.0001) | 2.04E-05 | 2E-05   | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7866 | 0.7642 | 0.7642    |
| Kluyveromyces_lactis          | <0.0001(<0.0001, <0.0001) | 0        | 0       | <0.0001(<0.0001, <0.0001) | 4.66E-05 | 4.54E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.0715  | -1.8  |    | 0.1846 | 0.0715 | 0.0715    |
| Ophiostoma_agrostidis         | <0.0001(<0.0001, <0.0001) | 7.27E-07 | 7.3E-07 | <0.0001(<0.0001, <0.0001) | 4.48E-05 | 3.18E-05 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.09867 | -1.65 |    | 0.2355 | 0.0987 | 0.0987    |
| Heydenia_sp_Incertae_sedis    | <0.0001(<0.0001, <0.0001) | 1.97E-05 | 2E-05   | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.76419 | -0.3  |    | 0.7866 | 0.7642 | 0.7642    |
| Penicillium_cinnamopurpureum  | <0.0001(<0.0001, <0.0001) | 0.000017 | 1.7E-05 | <0.0001(<0.0001, <0.0001) | 5.89E-06 | 4.81E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.31168 | -1.01 |    | 0.4827 | 0.3117 | 0.3117    |
| Trichoderma_longibrachiatum   | <0.0001(<0.0001, <0.0001) | 1.94E-05 | 1.7E-05 | <0.0001(<0.0001, <0.0001) | 0        | 0        | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.3356  | -0.96 |    | 0.4934 | 0.3356 | 0.3356    |
| Sarocladium_subulatum         | <0.0001(<0.0001, <0.0001) | 1.87E-05 | 1.8E-05 | <0.0001(<0.0001, <0.0001) | 1.77E-06 | 1.77E-06 | <0.0001(<0.0001, <0.0001) | 0       | 0       | 0.87748 | -0.15 |    | 0.8843 | 0.8775 | 0.8775    |

|                                   |                  |          |         |                          |          |          |                          |         |         |         |          |        |        |           |
|-----------------------------------|------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|----------|--------|--------|-----------|
| Penicillium_fructuariacellae      | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 4.34E-05 | 3.82E-05 | <0.0001(<0.0001,<0.0001) | 8.7E-06 | 8.7E-06 | 0.04145 | -2.04 *  | 0.1249 | 0.0415 | * 0.0415  |
| Lithohyphalaoicola                | <0.0001(<0.0001) | 1.82E-05 | 1.5E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.3356  | -0.96    | 0.4934 | 0.3356 | 0.3356    |
| Trigonopsis_vinaria               | <0.0001(<0.0001) | 3.71E-07 | 3.7E-07 | <0.0001(<0.0001,<0.0001) | 4.15E-05 | 3.77E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.30009 | -1.04    | 0.467  | 0.3001 | 0.3001    |
| Coniosporium_apollinis            | <0.0001(<0.0001) | 1.74E-05 | 1.7E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7066 | 0.5824 | 0.5824    |
| Aspergillus_ochraceus             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 3.38E-05 | 3.38E-05 | <0.0001(<0.0001,<0.0001) | 2.7E-05 | 2.7E-05 | 0.03757 | -2.08 *  | 0.1203 | 0.0376 | * 0.0376  |
| Protomyces_inouyei                | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 4.07E-05 | 4.07E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11    | 0.433  | 0.2691 | 0.2691    |
| Ceriporia_xylostromatoides        | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 4.06E-05 | 3.93E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0715  | -1.8     | 0.1846 | 0.0715 | 0.0715    |
| Rhodotorula_diobovata             | <0.0001(<0.0001) | 1.68E-05 | 1.7E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Entyloma_calandulae               | <0.0001(<0.0001) | 1.66E-05 | 6.2E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.03308 | -2.13 *  | 0.1113 | 0.0331 | * 0.0331  |
| Pseudohelminthosporium_clematidis | <0.0001(<0.0001) | 1.62E-05 | 1.6E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Penicillium_oxalicum              | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 3.73E-05 | 2.49E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.00485 | -2.82 ** | 0.0276 | 0.0049 | ** 0.0049 |
| Apiotrichum_brassicae             | <0.0001(<0.0001) | 4.55E-07 | 4.5E-07 | <0.0001(<0.0001,<0.0001) | 2.9E-05  | 2.82E-05 | <0.0001(<0.0001,<0.0001) | 2.7E-05 | 2.7E-05 | 0.17608 | -1.35    | 0.3591 | 0.1761 | 0.1761    |
| Diaporthe_celeris                 | <0.0001(<0.0001) | 1.19E-05 | 1.2E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 3.3E-05 | 3.3E-05 | 0.16555 | -1.39    | 0.3445 | 0.1655 | 0.1655    |
| [Candida]_boidinii                | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 3.68E-05 | 3.53E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0715  | -1.8     | 0.1846 | 0.0715 | 0.0715    |
| Cytospora_myrtagena               | <0.0001(<0.0001) | 1.55E-05 | 1.5E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77    | 0.5909 | 0.4427 | 0.4427    |
| Microascus_paisii                 | <0.0001(<0.0001) | 1.47E-05 | 1.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7066 | 0.5824 | 0.5824    |
| Beauveria_lii                     | <0.0001(<0.0001) | 2.58E-06 | 2.6E-06 | <0.0001(<0.0001,<0.0001) | 2.49E-05 | 1.4E-05  | <0.0001(<0.0001,<0.0001) | 1.2E-05 | 1.2E-05 | 0.04249 | -2.03 *  | 0.1266 | 0.0425 | * 0.0425  |
| Umblicaria_maculata               | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 3.43E-05 | 3.43E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11    | 0.433  | 0.2691 | 0.2691    |
| Clonostachys_eriocamporesii       | <0.0001(<0.0001) | 3.83E-06 | 3.8E-06 | <0.0001(<0.0001,<0.0001) | 2.47E-05 | 2.11E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.101   | -1.64    | 0.2385 | 0.101  | 0.101     |
| Buckleyzyma_aurantiaca            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 3.17E-05 | 2.99E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.01875 | -2.35 *  | 0.0708 | 0.0187 | * 0.0187  |
| Lentithecium_aquaticum            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0.00012 | 0.00012 | 0.0019  | -3.11 ** | 0.0136 | 0.0019 | ** 0.0019 |
| Komagataella_phaffii              | <0.0001(<0.0001) | 1.33E-05 | 1.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Ascosphaera_duoformis             | <0.0001(<0.0001) | 1.32E-05 | 1.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7066 | 0.5824 | 0.5824    |
| Candida_maltosa                   | <0.0001(<0.0001) | 1.32E-05 | 1.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7066 | 0.5824 | 0.5824    |
| Tetrapisporablatiae               | <0.0001(<0.0001) | 3.59E-06 | 2.4E-06 | <0.0001(<0.0001,<0.0001) | 1.73E-05 | 6.1E-06  | <0.0001(<0.0001,<0.0001) | 2E-05   | 1.4E-05 | 0.01144 | -2.53 *  | 0.0501 | 0.0114 | * 0.0114  |
| Hyphopichia_burtonii              | <0.0001(<0.0001) | 1.04E-05 | 1E-05   | <0.0001(<0.0001,<0.0001) | 5.66E-06 | 5.66E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32    | 0.7866 | 0.7505 | 0.7505    |
| Cyphellophora_sessilis            | <0.0001(<0.0001) | 1.27E-05 | 1.2E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7066 | 0.5824 | 0.5824    |



|                                   |                          |          |         |                          |          |          |                          |         |         |         |       |        |        |         |            |
|-----------------------------------|--------------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|--------|--------|---------|------------|
| Aspergillus_fumisinnyematus       | <0.0001(<0.0001,<0.0001) | 1.21E-05 | 1.2E-05 | <0.0001(<0.0001,<0.0001) | 1.07E-06 | 1.07E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 | 0.7866 | 0.7505 | 0.7505  |            |
| Penicillium_pancosmium            | <0.0001(<0.0001,<0.0001) | 1.25E-05 | 1.3E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642  |            |
| Sarocladium_oryzae                | <0.0001(<0.0001,<0.0001) | 9.6E-06  | 9.6E-06 | <0.0001(<0.0001,<0.0001) | 6.21E-06 | 6.21E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 | 0.7866 | 0.7505 | 0.7505  |            |
| Sordaria_spe_Incertae_sedis       | <0.0001(<0.0001,<0.0001) | 1.21E-05 | 9.2E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.2537  | -1.14 | 0.433  | 0.2537 | 0.2537  |            |
| Candida_nivariensis               | <0.0001(<0.0001,<0.0001) | 1.21E-05 | 1.2E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642  |            |
| Arthrinium_asiakravindrae         | <0.0001(<0.0001,<0.0001) | 9.71E-06 | 9.2E-06 | <0.0001(<0.0001,<0.0001) | 5.39E-06 | 5.39E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.87748 | -0.15 | 0.8843 | 0.8775 | 0.8775  |            |
| Pichia_cactophila                 | <0.0001(<0.0001,<0.0001) | 1.15E-05 | 2.9E-06 | <0.0001(<0.0001,<0.0001) | 1.09E-06 | 1.09E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.02208 | -2.29 | *      | 0.0808 | 0.0221  | * 0.0221   |
| Kurtzmanella_a-quercitrusa        | <0.0001(<0.0001,<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.56E-05 | 2.56E-05 | <0.0001(<0.0001,<0.0001) | 9.3E-06 | 9.3E-06 | 0.03757 | -2.08 | *      | 0.1203 | 0.0376  | * 0.0376   |
| Aspergillus_glabripes             | <0.0001(<0.0001,<0.0001) | 1.13E-05 | 7.7E-06 | <0.0001(<0.0001,<0.0001) | 6.79E-07 | 6.79E-07 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.8271  | -0.22 | 0.8471 | 0.8271 | 0.8271  |            |
| Uwebraunia_musae                  | <0.0001(<0.0001,<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.64E-05 | 2.64E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691  |            |
| Malassezia_cuniculi               | <0.0001(<0.0001,<0.0001) | 9.24E-07 | 9.2E-07 | <0.0001(<0.0001,<0.0001) | 2.41E-05 | 2.18E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.30009 | -1.04 | 0.467  | 0.3001 | 0.3001  |            |
| Puccinia_striiformis              | <0.0001(<0.0001,<0.0001) | 1.11E-05 | 1.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642  |            |
| Collybiopsis_filamentipes         | <0.0001(<0.0001,<0.0001) | 1.1E-05  | 1.1E-05 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642  |            |
| Coronicium_gemmiferum             | <0.0001(<0.0001,<0.0001) | 1.1E-05  | 1E-05   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824  |            |
| Strobilurus_spe_Incertae_sedis    | <0.0001(<0.0001,<0.0001) | 9.8E-06  | 9.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 9.1E-06 | 9.1E-06 | 0.06381 | -1.85 | 0.1727 | 0.0638 | 0.0638  |            |
| Ceraceosorus_guamensis            | <0.0001(<0.0001,<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.5E-05  | 2.5E-05  | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691  |            |
| Hazinszkyomyces_aloes             | <0.0001(<0.0001,<0.0001) | 8.36E-06 | 8.4E-06 | <0.0001(<0.0001,<0.0001) | 4.73E-06 | 4.73E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 | 0.7866 | 0.7505 | 0.7505  |            |
| Sarocladium_zeae                  | <0.0001(<0.0001,<0.0001) | 6.52E-07 | 6.5E-07 | <0.0001(<0.0001,<0.0001) | 1.93E-05 | 1.37E-05 | <0.0001(<0.0001,<0.0001) | 1.3E-05 | 1.3E-05 | 0.1763  | -1.35 | 0.3591 | 0.1763 | 0.1763  |            |
| Simplicillium_lanosonivum         | <0.0001(<0.0001,<0.0001) | 9.76E-06 | 9.3E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824  |            |
| Flagenoscyptha_spe_Incertae_sedis | <0.0001(<0.0001,<0.0001) | 9.7E-06  | 9.7E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642  |            |
| Marantokorydiana_obervinkleriana  | <0.0001(<0.0001,<0.0001) | 9.45E-06 | 9.4E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642  |            |
| Archaeormyces_borealalis          | <0.0001(<0.0001,<0.0001) | 9.35E-06 | 9.3E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642  |            |
| Berkeleyomyces_basicola           | <0.0001(<0.0001,<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.18E-05 | 1.71E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.0715  | -1.8  | 0.1846 | 0.0715 | 0.0715  |            |
| Extremus_spe_Incertae_sedis       | <0.0001(<0.0001,<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.03E-05 | 2.03E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691  |            |
| Penicillium_estinogenum           | <0.0001(<0.0001,<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 2.03E-05 | 2.03E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691  |            |
| Onveonia_spe_Incertae_sedis       | <0.0001(<0.0001,<0.0001) | 8.56E-06 | 8.6E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642  |            |
| Fusarium_oxysporum                | <0.0001(<0.0001,<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 7.4E-05 | 5.5E-05 | 5.7E-09 | -5.83 | ***    | 6E-07  | <0.0001 | ***<0.0001 |
| Cutaneotrichosporon_arboriforme   | <0.0001(<0.0001,<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 7.2E-05 | 6.8E-05 | 3.4E-06 | -4.65 | ***    | 0.0001 | <0.0001 | ***<0.0001 |

|                                      |                  |          |         |                          |          |          |                          |         |         |         |       |        |        |        |
|--------------------------------------|------------------|----------|---------|--------------------------|----------|----------|--------------------------|---------|---------|---------|-------|--------|--------|--------|
| Periconia_circinata                  | <0.0001(<0.0001) | 8.09E-06 | 7.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824 |
| Saccharomyces_copis_fibuligera       | <0.0001(<0.0001) | 8.09E-06 | 5.9E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824 |
| Talaromyces_stollii                  | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 1.88E-05 | 1.88E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Trichothium_cinnamomeum              | <0.0001(<0.0001) | 7.9E-06  | 7.9E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Neoerysiphe_galeopsidis              | <0.0001(<0.0001) | 7.86E-06 | 7.5E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824 |
| Pyrularia_oryzae                     | <0.0001(<0.0001) | 7.75E-06 | 7.5E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824 |
| Mycosphaerella_spe_Incertae_sedis    | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 1.78E-05 | 1.78E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Byssosphaeria_spectabilis            | <0.0001(<0.0001) | 3.05E-06 | 2E-06   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 3.8E-05 | 3.8E-05 | 0.22834 | -1.2  | 0.433  | 0.2283 | 0.2283 |
| Ascochyta_rabiei                     | <0.0001(<0.0001) | 4.86E-06 | 3.6E-06 | <0.0001(<0.0001,<0.0001) | 5.39E-06 | 4.11E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76399 | -0.3  | 0.7866 | 0.764  | 0.764  |
| Meira_argovae                        | <0.0001(<0.0001) | 7.1E-06  | 7.1E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Parathyridaria_rosae                 | <0.0001(<0.0001) | 0.000007 | 6.2E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 | 0.5909 | 0.4427 | 0.4427 |
| Entyloma_cosmi                       | <0.0001(<0.0001) | 6.52E-06 | 6.5E-06 | <0.0001(<0.0001,<0.0001) | 8.75E-07 | 8.75E-07 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 | 0.7866 | 0.7505 | 0.7505 |
| Xenodermatella_strelitzicola         | <0.0001(<0.0001) | 6.77E-06 | 6.4E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824 |
| Entusectocarpus_vanderwaltii         | <0.0001(<0.0001) | 6.29E-07 | 6.3E-07 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 5.3E-05 | 5.3E-05 | 0.06013 | -1.88 | 0.1658 | 0.0601 | 0.0601 |
| Dothiora_spartii                     | <0.0001(<0.0001) | 5.14E-06 | 4.9E-06 | <0.0001(<0.0001,<0.0001) | 3.54E-06 | 2.67E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.55425 | -0.59 | 0.7066 | 0.5543 | 0.5543 |
| Gjaerumia_minor                      | <0.0001(<0.0001) | 6.62E-06 | 6.6E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Sidera_vesiculosula                  | <0.0001(<0.0001) | 6.61E-06 | 6.6E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Neoacladia_indicum                   | <0.0001(<0.0001) | 6.43E-06 | 6.4E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Strelitziana_eucalypti               | <0.0001(<0.0001) | 6.14E-06 | 3.7E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 | 0.5909 | 0.4427 | 0.4427 |
| Curvularia_soli                      | <0.0001(<0.0001) | 3.98E-06 | 4E-06   | <0.0001(<0.0001,<0.0001) | 4.66E-06 | 4.66E-06 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.75049 | -0.32 | 0.7866 | 0.7505 | 0.7505 |
| Cerrena_aurantiopora                 | <0.0001(<0.0001) | 5.87E-06 | 4.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 | 0.5909 | 0.4427 | 0.4427 |
| Simplicium_spe_Incertae_sedis        | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 1.38E-05 | 1.38E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Phaeoacremonium_griseo-olivaceum     | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001,<0.0001) | 1.37E-05 | 1.37E-05 | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Retractadium_spe_Incertae_sedis      | <0.0001(<0.0001) | 5.7E-06  | 5.7E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Stephanosporaceae_spe_Incertae_sedis | <0.0001(<0.0001) | 5.68E-06 | 5.7E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Sarocladium_kiliense                 | <0.0001(<0.0001) | 5.61E-06 | 3.8E-06 | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.44271 | -0.77 | 0.5909 | 0.4427 | 0.4427 |
| Epicoccum_duchesneae                 | <0.0001(<0.0001) | 5.59E-06 | 5E-06   | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824 |

|                                       |                  |          |         |                  |          |          |                  |         |         |         |       |        |        |        |           |
|---------------------------------------|------------------|----------|---------|------------------|----------|----------|------------------|---------|---------|---------|-------|--------|--------|--------|-----------|
| Periconia_m<br>acrosiposina           | <0.0001(<0.0001) | 5.57E-06 | 5.6E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Avachytrium<br>platense               | <0.0001(<0.0001) | 5.52E-06 | 5.5E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Knufia_cryp<br>tophialidica           | <0.0001(<0.0001) | 5.48E-06 | 5.5E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Iodophanus_<br>testaceus              | <0.0001(<0.0001) | 5.35E-06 | 4.3E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824 |           |
| Ochroconis_<br>mirabilis              | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 1.25E-05 | 1.25E-05 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |           |
| Pararamicli<br>oridium_cari<br>cicola | <0.0001(<0.0001) | 5.11E-06 | 5.1E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Curvularia_c<br>honburiensis          | <0.0001(<0.0001) | 5.08E-06 | 5.1E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Basidiotend<br>ron_globisp<br>orum    | <0.0001(<0.0001) | 5.02E-06 | 5E-06   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Coniella_qu<br>ercicola               | <0.0001(<0.0001) | 4.96E-06 | 5E-06   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Ceratocystis_<br>pirilliformis        | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 1.05E-06 | 1.05E-06 | <0.0001(<0.0001) | 3.9E-05 | 3.9E-05 | 0.03578 | -2.1  | *      | 0.1168 | 0.0358 | * 0.0358  |
| Mrakia_aqu<br>atica                   | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 1.14E-05 | 1.14E-05 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |           |
| Tremateia_c<br>hromolaenae            | <0.0001(<0.0001) | 4.68E-06 | 4.7E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Xylodon_fili<br>cinus                 | <0.0001(<0.0001) | 6.29E-07 | 4.5E-07 | <0.0001(<0.0001) | 9.52E-06 | 3.94E-06 | <0.0001(<0.0001) | 0       | 0       | 0.00237 | -3.04 | **     | 0.0161 | 0.0024 | ** 0.0024 |
| Iodosphaeria_<br>phyllophila          | <0.0001(<0.0001) | 4.58E-06 | 4.6E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Rhizopogon_<br>laricinus              | <0.0001(<0.0001) | 4.55E-06 | 4.5E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Robbauera_<br>albescens               | <0.0001(<0.0001) | 4.53E-06 | 4.5E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Acremonium_<br>vitellinum             | <0.0001(<0.0001) | 4.48E-06 | 4.5E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Adisco_ya<br>kushimense               | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 1.05E-05 | 1.05E-05 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |           |
| Peziza_fruti<br>cosa                  | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 1.05E-05 | 1.05E-05 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |           |
| Komagataell<br>a_ulmi                 | <0.0001(<0.0001) | 4.42E-06 | 4.4E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Phialocephal<br>a_trigonospo<br>ra    | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 4.7E-06  | 3.55E-06 | <0.0001(<0.0001) | 2E-05   | 2E-05   | 0.03976 | -2.06 | *      | 0.1237 | 0.0398 | * 0.0398  |
| Alternaria_h<br>ungarica              | <0.0001(<0.0001) | 4.14E-06 | 3.3E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.44271 | -0.77 | 0.5909 | 0.4427 | 0.4427 |           |
| Meira_nashi<br>cola                   | <0.0001(<0.0001) | 4.14E-06 | 4.1E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |
| Cryptococcu<br>s_neoforman<br>s       | <0.0001(<0.0001) | 3.26E-07 | 3.3E-07 | <0.0001(<0.0001) | 8.91E-06 | 5.52E-06 | <0.0001(<0.0001) | 0       | 0       | 0.09638 | -1.66 | 0.2326 | 0.0964 | 0.0964 |           |
| Acremonium_<br>cavaraeanu<br>m        | <0.0001(<0.0001) | 4.08E-06 | 2.1E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.19126 | -1.31 | 0.3758 | 0.1913 | 0.1913 |           |
| Trichoderma_<br>effusum               | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 9.48E-06 | 9.48E-06 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |           |
| Puccinia_rec<br>ondita                | <0.0001(<0.0001) | 4.92E-07 | 4.9E-07 | <0.0001(<0.0001) | 8.07E-06 | 8.07E-06 | <0.0001(<0.0001) | 0       | 0       | 0.74278 | -0.33 | 0.7866 | 0.7428 | 0.7428 |           |
| Periconia_ep<br>ilithographic<br>ola  | <0.0001(<0.0001) | 3.6E-06  | 3.6E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |           |

|                                    |                  |          |         |                  |          |          |                  |         |         |         |          |        |        |           |
|------------------------------------|------------------|----------|---------|------------------|----------|----------|------------------|---------|---------|---------|----------|--------|--------|-----------|
| Penicillium_sumatraense            | <0.0001(<0.0001) | 1.63E-06 | 1.6E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 1.7E-05 | 1.7E-05 | 0.06013 | -1.88    | 0.1658 | 0.0601 | 0.0601    |
| Aspergillus_inflatus               | <0.0001(<0.0001) | 2.26E-06 | 2E-06   | <0.0001(<0.0001) | 2.68E-06 | 1.97E-06 | <0.0001(<0.0001) | 0       | 0       | 0.55425 | -0.59    | 0.7066 | 0.5543 | 0.5543    |
| Cryptococcus_uniguttulatus         | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 3.86E-06 | 2.24E-06 | <0.0001(<0.0001) | 1.3E-05 | 1.3E-05 | 0.02157 | -2.3 *   | 0.0798 | 0.0216 | * 0.0216  |
| Zetiaosporium_searsiae             | <0.0001(<0.0001) | 3.08E-06 | 3.1E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Keratinophyllum_linfenense         | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 6.82E-06 | 6.82E-06 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11    | 0.433  | 0.2691 | 0.2691    |
| Graphium_penicillioides            | <0.0001(<0.0001) | 2.86E-06 | 2.9E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Groenewaldomyces_tartarivorus      | <0.0001(<0.0001) | 2.84E-06 | 2.8E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Choanephora_cucurbitarum           | <0.0001(<0.0001) | 2.83E-06 | 2.8E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Zymoseptoria_spectabilis           | <0.0001(<0.0001) | 2.76E-06 | 2.8E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Delastria_fustiginiana             | <0.0001(<0.0001) | 2.74E-06 | 1.8E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.3356  | -0.96    | 0.4934 | 0.3356 | 0.3356    |
| Punctularia_atropurpurea           | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 2.4E-05 | 2.4E-05 | 0.0019  | -3.11 ** | 0.0136 | 0.0019 | ** 0.0019 |
| Cyphellophora_olivacea             | <0.0001(<0.0001) | 2.72E-06 | 2.7E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Houjia_yanglingensis               | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 2.4E-05 | 2.4E-05 | 0.0019  | -3.11 ** | 0.0136 | 0.0019 | ** 0.0019 |
| Clonostachys_rosea                 | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 6.23E-06 | 6.23E-06 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11    | 0.433  | 0.2691 | 0.2691    |
| Hydrophisphaera_spectabilis        | <0.0001(<0.0001) | 2.61E-06 | 2.6E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Jattaea_ribicola                   | <0.0001(<0.0001) | 2.61E-06 | 2.6E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Fracchiacea_myricoides             | <0.0001(<0.0001) | 1.26E-06 | 1.3E-06 | <0.0001(<0.0001) | 3.02E-06 | 3.02E-06 | <0.0001(<0.0001) | 0       | 0       | 0.74278 | -0.33    | 0.7866 | 0.7428 | 0.7428    |
| Gibellulopsis_serrae               | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 5.91E-06 | 5.91E-06 | <0.0001(<0.0001) | 0       | 0       | 0.26915 | -1.11    | 0.433  | 0.2691 | 0.2691    |
| Sistotrema_guttuliferum            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 5.91E-06 | 4.73E-06 | <0.0001(<0.0001) | 0       | 0       | 0.0715  | -1.8     | 0.1846 | 0.0715 | 0.0715    |
| Paracrematium_binnewijzendii       | <0.0001(<0.0001) | 2.45E-06 | 2E-06   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.58243 | -0.55    | 0.7066 | 0.5824 | 0.5824    |
| Leptosporella_bambusae             | <0.0001(<0.0001) | 2.43E-06 | 2.4E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Chytridiomyces_cota_Incertae_sedis | <0.0001(<0.0001) | 2.42E-06 | 2.4E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Pseudorobillarda_sojae             | <0.0001(<0.0001) | 2.36E-06 | 2.4E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Mrakia_frigida                     | <0.0001(<0.0001) | 1.81E-06 | 1.2E-06 | <0.0001(<0.0001) | 1.13E-06 | 1.13E-06 | <0.0001(<0.0001) | 0       | 0       | 0.83131 | -0.21    | 0.8479 | 0.8313 | 0.8313    |
| Penicillium_citrinum               | <0.0001(<0.0001) | 8.71E-07 | 5.5E-07 | <0.0001(<0.0001) | 3.27E-06 | 2.32E-06 | <0.0001(<0.0001) | 0       | 0       | 0.69968 | -0.39    | 0.7866 | 0.6997 | 0.6997    |
| Microascus_trigonosporus           | <0.0001(<0.0001) | 2.08E-06 | 2.1E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0       | 0       | 0.76419 | -0.3     | 0.7866 | 0.7642 | 0.7642    |
| Cookeina_korffii                   | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 4.91E-06 | 3.85E-06 | <0.0001(<0.0001) | 0       | 0       | 0.0715  | -1.8     | 0.1846 | 0.0715 | 0.0715    |
| Aspergillus_westerdijkiae          | <0.0001(<0.0001) | 4.77E-07 | 4.8E-07 | <0.0001(<0.0001) | 3.55E-06 | 3.55E-06 | <0.0001(<0.0001) | 0       | 0       | 0.74278 | -0.33    | 0.7866 | 0.7428 | 0.7428    |

|                                   |                  |          |         |                  |          |          |                  |   |   |         |       |        |        |        |
|-----------------------------------|------------------|----------|---------|------------------|----------|----------|------------------|---|---|---------|-------|--------|--------|--------|
| Diaporthe_miriciae                | <0.0001(<0.0001) | 1.97E-06 | 2E-06   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Entoloma_graphitipes_f._cystidium | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 4.64E-06 | 4.64E-06 | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Penicillium_multicolor            | <0.0001(<0.0001) | 1.93E-06 | 1.9E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| [Candida]_pseudointermédia        | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 4.5E-06  | 4.5E-06  | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Amylostereum_orientale            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 4.27E-06 | 4.27E-06 | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Wickhamomyces_onychis             | <0.0001(<0.0001) | 1.71E-06 | 1.7E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Bovista_psamphila                 | <0.0001(<0.0001) | 4.55E-07 | 4.5E-07 | <0.0001(<0.0001) | 2.91E-06 | 2.09E-06 | <0.0001(<0.0001) | 0 | 0 | 0.30009 | -1.04 | 0.467  | 0.3001 | 0.3001 |
| Tritirachium_oryzae               | <0.0001(<0.0001) | 1.61E-06 | 1.3E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.58243 | -0.55 | 0.7066 | 0.5824 | 0.5824 |
| Paraleptosphaira_rumicis          | <0.0001(<0.0001) | 1.56E-06 | 1.6E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Powellomyces_spectabilis          | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 3.68E-06 | 3.68E-06 | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Wickhamomyces_anomalous           | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 3.55E-06 | 3.55E-06 | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Rhodotorula_ingeniosa             | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 3.5E-06  | 3.5E-06  | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Vararia_gallica                   | <0.0001(<0.0001) | 1.48E-06 | 1.5E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Scopulariopsis_cordiae            | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 3.43E-06 | 3.43E-06 | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Diaporthe_pseudoculi              | <0.0001(<0.0001) | 1.3E-06  | 1.3E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Gregarithecium_curvisporum        | <0.0001(<0.0001) | 1.3E-06  | 1.3E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Entyloma_linariae                 | <0.0001(<0.0001) | 1.23E-06 | 7.3E-07 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.44271 | -0.77 | 0.5909 | 0.4427 | 0.4427 |
| Plectosphaerella_niemeijerorum    | <0.0001(<0.0001) | 1.21E-06 | 1.2E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Scopuloides_rimosa                | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 2.7E-06  | 2.7E-06  | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Typhula_setipes                   | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 2.7E-06  | 1.89E-06 | <0.0001(<0.0001) | 0 | 0 | 0.0715  | -1.8  | 0.1846 | 0.0715 | 0.0715 |
| Buckleyzyma_armeniaca             | <0.0001(<0.0001) | 1.1E-06  | 1.1E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Chaetosphaeria_guttulata          | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 2.57E-06 | 2.57E-06 | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Tremateia_murispora               | <0.0001(<0.0001) | 1.07E-06 | 1.1E-06 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Beauveria_bassiana                | <0.0001(<0.0001) | 1.01E-06 | 1E-06   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Alternaria_chlamydosporae         | <0.0001(<0.0001) | 0        | 0       | <0.0001(<0.0001) | 2.23E-06 | 2.23E-06 | <0.0001(<0.0001) | 0 | 0 | 0.26915 | -1.11 | 0.433  | 0.2691 | 0.2691 |
| Pichia_mandshurica                | <0.0001(<0.0001) | 9.32E-07 | 9.3E-07 | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |
| Echinmoporia_hydnochora           | <0.0001(<0.0001) | 9.02E-07 | 9E-07   | <0.0001(<0.0001) | 0        | 0        | <0.0001(<0.0001) | 0 | 0 | 0.76419 | -0.3  | 0.7866 | 0.7642 | 0.7642 |

|                                           |                             |          |         |                             |          |          |                             |         |         |         |       |     |        |         |            |
|-------------------------------------------|-----------------------------|----------|---------|-----------------------------|----------|----------|-----------------------------|---------|---------|---------|-------|-----|--------|---------|------------|
| Pseudophoma<br>myces_angol<br>ensis       | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 0        | 0        | <0.0001(<0.0001,<br>0.0001) | 7.9E-06 | 6.6E-06 | 3.4E-06 | -4.65 | *** | 0.0001 | <0.0001 | ***<0.0001 |
| Alternaria_n<br>epalensis                 | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.73E-06 | 1.73E-06 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Septobasidium<br>m_spe_Incert<br>ae_sedis | <0.0001(<0.0001,<br>0.0001) | 7.27E-07 | 7.3E-07 | <0.0001(<0.0001,<br>0.0001) | 0        | 0        | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642  | 0.7642     |
| Cystobasidium<br>m_slooffiae              | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.7E-06  | 1.7E-06  | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Emerickiella<br>is_robusta                | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.45E-06 | 1.45E-06 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Chaetotheca<br>psis_resinop<br>hila       | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.38E-06 | 1.38E-06 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Zygosporella<br>m_pseudogi<br>bbum        | <0.0001(<0.0001,<br>0.0001) | 5.83E-07 | 5.8E-07 | <0.0001(<0.0001,<br>0.0001) | 0        | 0        | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642  | 0.7642     |
| Neodevriesia<br>a_spe_Incert<br>ae_sedis  | <0.0001(<0.0001,<br>0.0001) | 5.76E-07 | 4.1E-07 | <0.0001(<0.0001,<br>0.0001) | 0        | 0        | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.58243 | -0.55 |     | 0.7066 | 0.5824  | 0.5824     |
| Sphaerulina<br>westendorpii               | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.34E-06 | 1.34E-06 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Edenia_gom<br>ezpompae                    | <0.0001(<0.0001,<br>0.0001) | 5.15E-07 | 5.2E-07 | <0.0001(<0.0001,<br>0.0001) | 0        | 0        | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642  | 0.7642     |
| Paludomyces<br>m_mangrovei                | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.13E-06 | 1.13E-06 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Chloridium<br>pini                        | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.09E-06 | 1.09E-06 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Mucor_race<br>mosus                       | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.05E-06 | 1.05E-06 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Anthraxia<br>saxicola                     | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 1.04E-06 | 1.04E-06 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Emergomyces<br>canadensis                 | <0.0001(<0.0001,<br>0.0001) | 4.32E-07 | 4.3E-07 | <0.0001(<0.0001,<br>0.0001) | 0        | 0        | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642  | 0.7642     |
| Yarrowia_p<br>orcina                      | <0.0001(<0.0001,<br>0.0001) | 4.32E-07 | 4.3E-07 | <0.0001(<0.0001,<br>0.0001) | 0        | 0        | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.76419 | -0.3  |     | 0.7866 | 0.7642  | 0.7642     |
| Coprinospora<br>atramentaria              | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 0.000001 | 0.000001 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Mucor_pseudos<br>dolusitanicus            | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 9.29E-07 | 9.29E-07 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Geotrichum<br>silvicola                   | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 9.11E-07 | 9.11E-07 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Inocyclus_a<br>ngularis                   | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 8.75E-07 | 8.75E-07 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |
| Knufia_karal<br>itana                     | <0.0001(<0.0001,<br>0.0001) | 0        | 0       | <0.0001(<0.0001,<br>0.0001) | 8.57E-07 | 8.57E-07 | <0.0001(<0.0001,<br>0.0001) | 0       | 0       | 0.26915 | -1.11 |     | 0.433  | 0.2691  | 0.2691     |

Supplementary Table S8. The relative abundance and distribution of the key 47 OTUs

|                                                | Control001 | Control097 | Control096 | Control095 | Control094 | Control093 | Control092 | Control091 | Control090 | Control089 | Control088 | Control087 | Control086 |
|------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| OTU1653 ( <i>Blumeria_spe_Incertae_sedis</i> ) | 0          | 0          | 0.017801   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1499 ( <i>Gibberella_fujikuroi</i> )        | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU2410 ( <i>Candida_albicans</i> )            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU3836 ( <i>Acrodictys_fluminicola</i> )      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0013     | 0.00857    | 0          | 0          | 0          | 0          |
| OTU2703 ( <i>Candida_albicans</i> )            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU434 ( <i>Blumeria_spe_Incertae_sedis</i> )  | 0          | 0          | 0.0341579  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00076    | 0          | 0          |
| OTU2555 ( <i>Blumeria_spe_Incertae_sedis</i> ) | 0          | 0          | 0.037552   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU3193 ( <i>Candida_albicans</i> )            | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU3692 ( <i>Blumeria_spe_Incertae_sedis</i> ) | 0          | 0          | 0.0307058  | 0          | 0          | 0          | 0          | 0          | 0.00117    | 0          | 0          | 0          | 0.00054    |
| OTU179 ( <i>Henningsia_resupinata</i> )        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU2746 ( <i>Blumeria_spe_Incertae_sedis</i> ) | 0          | 0          | 0.016025   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00059    | 0          | 0          |
| OTU286 ( <i>Cutaneotrichosporon_cutaneum</i> ) | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU152 ( <i>Starmerella_etchellsii</i> )       | 0.00081    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU217 ( <i>Pichia_kluyveri</i> )              | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU78 ( <i>Ustilaginoidea_virens</i> )         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU3641 ( <i>Blumeria_spe_Incertae_sedis</i> ) | 0.00064    | 0          | 0.0369084  | 0.00032    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU175 ( <i>Blumeria_spe_Incertae_sedis</i> )  | 0          | 0          | 0.0195723  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU88 ( <i>Pseudoveronaea_ellipsoidea</i> )    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1894 ( <i>Cryptococcus_longus</i> )         | 0.00027    | 0.00038    | 0.0144756  | 0.0085     | 0.01951    | 0.00031    | 0.03071    | 0.01871    | 0.00041    | 0.00404    | 0          | 0.0217     | 0.0004     |
| OTU125 ( <i>Penicillium_hirsutum</i> )         | 0          | 0          | 0          | 0          | 0          | 0          | 0.09368    | 0          | 0          | 0.00019    | 0          | 0.00013    | 0          |
| OTU3781 ( <i>Zanclospora_jonesii</i> )         | 0.00152    | 0          | 0.00E+00   | 0.00018    | 0          | 0.00023    | 0          | 0.00029    | 0          | 0.0325     | 0.05017    | 0.01878    | 0.0836     |
| OTU16 ( <i>Malassezia_symphodialis</i> )       | 0.00027    | 0.00053    | 0.0129334  | 0.00026    | 0          | 0.00041    | 0.00025    | 0          | 0.00242    | 0          | 0.00038    | 9.2E-05    | 0          |
| OTU231 ( <i>Ophiostoma_acarorum</i> )          | 0.00021    | 0          | 0.0001634  | 0          | 0.00019    | 0          | 0.0003     | 0.00021    | 0          | 0          | 0          | 0          | 0          |
| OTU2466 ( <i>Zanclospora_jonesii</i> )         | 0.00024    | 0.00023    | 0.0002121  | 0          | 0          | 0          | 0          | 0.00022    | 0.00028    | 0.06202    | 0.08166    | 0.03947    | 0.03696    |
| OTU65 ( <i>Milospium_graphideorum</i> )        | 0          | 0.00035    | 0.010866   | 0.00058    | 0.13065    | 0.00034    | 0          | 0.00013    | 0          | 0.03651    | 0          | 0          | 0          |
| OTU1393 ( <i>Cryptococcus_longus</i> )         | 0          | 0          | 0.016621   | 0.0075     | 0.01541    | 0.0011     | 0.02537    | 0.02013    | 0.00066    | 0.00504    | 0          | 0.0203     | 0.00021    |
| OTU3529 ( <i>Raffaelea_laureicola</i> )        | 0.00035    | 0          | 0.0036945  | 0          | 0          | 0          | 0          | 0.00121    | 0.0005     | 0.0001     | 0.0001     | 8.2E-05    | 0.0002     |
| OTU52 ( <i>Diaporthe_kochmanii</i> )           | 0          | 0.00064    | 0.0003407  | 0.00029    | 0.00028    | 0.00034    | 0.00046    | 0.00028    | 0.00047    | 0.00023    | 0          | 0          | 0          |
| OTU3583 ( <i>Blumeria_spe_Incertae_sedis</i> ) | 0.0001     | 0          | 0.0242382  | 0          | 9.6E-05    | 0.00011    | 0.00023    | 0          | 0.00013    | 0          | 0.00017    | 0          | 0.00012    |
| OTU98 ( <i>Chrysosphaeria_jan-nelii</i> )      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU58 ( <i>Gibberella_fujikuroi</i> )          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU33 ( <i>Aspergillus_subflavus</i> )         | 0.00014    | 5.8E-05    | 3.87E-02   | 0          | 0.0001     | 6.4E-05    | 0          | 0          | 0          | 0          | 5.1E-05    | 3.8E-05    | 7.5E-05    |
| OTU9 ( <i>Candida_albicans</i> )               | 6.4E-05    | 0          | 0.00E+00   | 0          | 0          | 5.7E-05    | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU3448 ( <i>Zanclospora_jonesii</i> )         | 0.00037    | 0.00102    | 0.0005365  | 0.00826    | 0.00039    | 0.00044    | 0.00043    | 0.00044    | 0.00075    | 0.00057    | 0.00018    | 0.0166     | 0.00023    |
| OTU26 ( <i>Zanclospora_jonesii</i> )           | 0.00048    | 0.00012    | 0.0048965  | 0          | 0          | 6.8E-05    | 8.9E-05    | 4.7E-05    | 0          | 0.05371    | 0.0211     | 0.01136    | 0.07173    |
| OTU2481 ( <i>Candida_albicans</i> )            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU31 ( <i>Arthrographis_grakistii</i> )       | 0.00071    | 0.00043    | 0.000355   | 0.00019    | 0.00017    | 0.00041    | 0.00039    | 0.00022    | 0.00014    | 0.00017    | 0.00047    | 0.00027    | 0.00039    |
| OTU21 ( <i>Saccharomyces_cerevisiae</i> )      | 0          | 4E-05      | 0          | 0.00502    | 0          | 0          | 0          | 0          | 0          | 0          | 2E-05      | 0          | 0.00021    |
| OTU17 ( <i>Diversispora_spurca</i> )           | 0.00041    | 2.4E-05    | 0.0006505  | 0.00132    | 0          | 7.5E-05    | 0.00011    | 0.00425    | 0.00318    | 4.5E-05    | 0.0002     | 0.00042    | 0.00027    |
| OTU3791 ( <i>Blumeria_spe_Incertae_sedis</i> ) | 0.00015    | 0.00022    | 3.96E-02   | 6.5E-05    | 1.6E-05    | 3.6E-05    | 0.00011    | 2.5E-05    | 0          | 0          | 5.1E-05    | 6.7E-05    | 6E-05      |
| OTU22 ( <i>Hydnobolites_roseus</i> )           | 0          | 2.3E-05    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 2.4E-05    | 0          | 1.1E-05    | 0          |
| OTU10 ( <i>Aspergillus_subflavus</i> )         | 0.00012    | 2.1E-05    | 0.0222557  | 1.2E-05    | 0.00019    | 2.4E-05    | 7.4E-05    | 4.6E-05    | 5.5E-05    | 2.5E-05    | 9.5E-05    | 1.3E-05    | 0.0001     |
| OTU3842 ( <i>Blumeria_spe_Incertae_sedis</i> ) | 0.00029    | 3.9E-05    | 0.0282471  | 1.1E-05    | 5.1E-05    | 3.4E-05    | 0          | 2.5E-05    | 2.8E-05    | 3.3E-05    | 6.3E-05    | 7.3E-05    | 0.0001     |
| OTU19 ( <i>Zanclospora_jonesii</i> )           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 5.4E-05    | 5.5E-05    | 1.1E-05    | 2.2E-05    | 0          |
| OTU15 ( <i>Aspergillus_subflavus</i> )         | 0.00011    | 0.00011    | 0.0001262  | 0.00012    | 0.02858    | 8.4E-05    | 0.0002     | 0.0002     | 0.03299    | 9.1E-05    | 2.5E-05    | 1.1E-05    | 2.7E-05    |
| OTU5 ( <i>Cryptococcus_longus</i> )            | 0.00022    | 0.00033    | 0.0157291  | 0.00911    | 0.01586    | 0.00091    | 0.02759    | 0.01861    | 0.00061    | 0.00465    | 7E-05      | 0.02089    | 0.00015    |
| OTU3 ( <i>Zanclospora_jonesii</i> )            | 0.00056    | 0.00015    | 7.857E-05  | 3.1E-05    | 6.4E-05    | 8.6E-05    | 0.0001     | 7.1E-05    | 0.00045    | 0.06846    | 0.07537    | 0.03652    | 0.03512    |

| Control085 | Control084 | Control083 | Control082 | Control081 | Control080 | Control079 | Control078 | Control077 | Control076 | Control075 | Control074 | Control073 | Control072 | Control071 | Control070 | Control069 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0.0277     | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0059088  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0034     | 0          | 0.00189    | 0.01461    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00135    |
| 0.0276     | 0          | 0          | 0.00096    | 0          | 0          | 0          | 0.00885    | 0.00126    | 0          | 0          | 0          | 0          | 0          | 0.00681    | 0          | 0          |
| 0.0389     | 0          | 0          | 0          | 0          | 0          | 0          | 0.01508    | 0.0008     | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00126    |
| 0.0257     | 0          | 0          | 0          | 0.00065    | 0          | 0          | 0.01142    | 0.00227    | 0          | 0          | 0          | 0.0008522  | 0          | 0.00194    | 0          | 0.00107    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          |
| 0.0583     | 0.00053    | 0          | 0          | 0          | 0          | 0          | 0.01857    | 0.0166     | 0          | 0          | 0          | 0.0009499  | 0          | 0.0056     | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0026835  | 0          |
| 0.0004     | 0          | 0.10535    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00086    |
| #####      | 0          | 0          | 0          | 0          | 0          | 0          | 0.01243    | 0.00648    | 0          | 0          | 0          | 0          | 0          | 0.00117    | 0.00079    | 0          |
| 0.0219     | 0          | 0          | 0          | 0          | 0          | 0          | 0.00251    | 0          | 0          | 0          | 0          | 0          | 0          | 0.0008     | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0021     | 0          | 0.00283    | 0.00029    | 0.00275    | 0.01356    | 0.00026    | 0.00417    | 0.00272    | 0.01717    | 0          | 0.00346    | 0.0072236  | 0.02258    | 0.00472    | 0.0015374  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0.03779    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0019     | 0          | 0.00306    | 0.00491    | 0.0293     | 0.00974    | 0.006548   | 0.18363    | 0.00412    | 0.0359     | 0.02472    | 0.15153    | 0.0141685  | 0.02128    | 0.01749    | 0.0325377  | 0.00799    |
| 0.0003     | 0.00019    | 0.00892    | 0          | 0.03313    | 0.06339    | 0.000203   | 0          | 0.00021    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.001      | 0          | 0.0065     | 0          | 0          | 0.00013    | 0          | 0.01888    | 0.00221    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0045     | 0          | 0.00514    | 0.00743    | 0.05663    | 0.01472    | 0.015056   | 0.06545    | 0.01042    | 0.07148    | 0.03527    | 0.0413     | 0.0230884  | 0.02615    | 0.04485    | 0.0070396  | 0.01579    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00011    | 0.16576    | 0.00012    | 0.0002051  | 0.00039    | 0.00047    | 0          | 0          |
| 0.0014     | 0          | 0.00327    | 0.00035    | 0.00251    | 0.01485    | 0          | 0.00395    | 0.00375    | 0.01469    | 0.00016    | 0.00364    | 0.0064693  | 0.02147    | 0.00592    | 0.0023869  | 0          |
| 0.0369     | 0.00025    | 0.00024    | 0.00476    | 0          | 9.6E-05    | 0.000498   | 0          | 0.00028    | 0          | 0          | 0          | 0          | 0.00089    | 0.0023     | 0.0001468  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00027    | 0.10939    | 0.00019    | 0          | 0          | 0.00028    | 0          | 0          |
| 0.0278     | 0          | 0          | 0          | 0          | 0          | 0          | 0.00892    | 0.00567    | 0          | 0          | 0          | 0.00024    | 0          | 0.00526    | 0.0001124  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 7.6E-05    | 0          | 0          | 0          | 0          |
| 0.0437     | 0.0002     | 4E-05      | 0          | 4.8E-05    | 4.8E-05    | 0          | 0.01677    | 0.00542    | 0          | 0          | 0          | 6.368E-05  | 0          | 0.00076    | 0.00E+00   | 0.00027    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 3.7E-05    | 0          | 5.1E-05    | 0          | 0          | 0          | 0          | 0.00061    |
| 0.0002     | 0.00052    | 0.00025    | 0.00092    | 0.00021    | 0.00022    | 0.000345   | 0.00022    | 0.00015    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 8.2E-05    |
| 0.0055     | 0.00041    | 0.01763    | 0.00982    | 0.09062    | 0.00011    | 0.037982   | 0.00018    | 0.01844    | 0.04138    | 0.04627    | 0.09009    | 4.132E-05  | 0.00835    | 0.01707    | 0.0194688  | 0.11176    |
| #####      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001     |
| 0.0005     | 0.35392    | 0.00032    | 0.0004     | 0.00028    | 0.00041    | 0.000233   | 0.00033    | 0.00049    | 1.7E-05    | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| #####      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00142    | 0.00011    | 7.8E-05    | 5.5E-05    | 0.0001271  | 0.00013    | 0.0012     | 0.0005473  | 0.00027    |
| 0.0003     | 0.00021    | 0.00014    | 0.00023    | 0.00023    | 0.03781    | 0.000731   | 0.00032    | 0.00176    | 1.7E-05    | 0          | 0          | 0          | 0          | 0.00313    | 5.766E-05  | 0.00149    |
| 0.0339     | 9.7E-05    | 2.3E-05    | 8.5E-05    | 5.2E-05    | 7.9E-05    | 8.17E-05   | 0.0131     | 0.00366    | 0          | 0          | 0          | 0.0002267  | 0          | 0.00085    | 0.0001208  | 0.00012    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0393     | 8.9E-05    | 4.5E-05    | 6.7E-05    | 7.2E-05    | 7.8E-05    | 1.73E-05   | 0.0075     | 0.0003     | 0          | 1.7E-05    | 0          | 0          | 0          | 0.00486    | 0.0001021  | 0.00027    |
| 0.0256     | 8E-05      | 5.4E-05    | 8.4E-05    | 5.1E-05    | 0.00121    | 4.79E-05   | 0.00487    | 0.00979    | 0          | 0          | 0          | 0          | 0          | 0.00034    | 0.0001803  | 0.00012    |
| 0          | 0          | 0.00041    | 0          | 1.3E-05    | 0          | 0          | 4.5E-05    | 2E-05      | 0.00481    | 0          | 0          | 0          | 0          | 0          | 0          | 2.5E-05    |
| 5E-05      | 2.5E-05    | 1.4E-05    | 5.6E-05    | 2.7E-05    | 0.00012    | 2.04E-05   | 9E-06      | 0.06054    | 0          | 0          | 0.0004     | 5.83E-05   | 0          | 0          | 0.0722004  | 0.00024    |
| 0.0018     | 0.0001     | 0.00256    | 0.00058    | 0.00316    | 0.01339    | 4.23E-05   | 0.00492    | 0.0044     | 0.01633    | 3.7E-05    | 0.00486    | 0.0077914  | 0.02098    | 0.00669    | 0.0017552  | 0.00018    |
| 0.0029     | 0.00045    | 0.00529    | 0.00564    | 0.0544     | 0.01791    | 0.013552   | 0.06072    | 0.01098    | 0.06313    | 0.03504    | 0.04911    | 0.0202882  | 0.03221    | 0.03538    | 0.008111   | 0.01337    |



| Control098 | Control099 | Control100 | Control101 | Control132 | Control131 | Control130 | Control129 | Control128 | Control127 | Control126 | Control125 | Control124 | Control123 | Control122 | Control121 | Control120 | Control119 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0012     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00676    | 0.00266    | 0          | 0.00143    | 0          | 0          | 0          | 0          | 0          | 0          | 0.0016     | 0          | 0.0006     | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0.00721    | 0          | 0          | 0.0025     | 0          | 0          | 0          | 0.0013     | 0          | 0          | 0          | 0          | 0          | 0.0013     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.0006     | 0.0023     | 0          | 0          | 0          | 0          | 0          | 0          | 0.0021     | 0          | 0          | 0.0016     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.00114    | 0          | 0          | 0          | 0.0019     | 0.0021     | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0012     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.0004     | 0.0018     | 0          | 0.0015     | 0.0006     | 0.0009     | 0          | 0          | 0          | 0          | 0          | 0.0072     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0007     | 0          | 0          | 0          |
| 0          | 0.00035    | 0          | 0          | 0.00401    | 0          | 0          | 0.0022     | 0          | 0          | 0          | 0.0014     | 0          | 0          | 0.0023     | 0          | 0          | 0.0007     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002     | 0.0007     | 0.0003     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00129    | 0.00278    | 0.00668    | 0.00646    | 0.1153     | 0.05103    | 0.0002     | 0.0524     | 0.0262     | 0.0006     | 0.0021     | 0.0007     | 0.0469     | 0          | 0.0065     | 0          | 0.0064     | 0.0006     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0052     | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.00037    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0014     | 0          | 0          | 0          | 0          | 0          | 0.0002     |
| 0.00035    | 0.02412    | 0.0393     | 0.06533    | 0          | 0.08997    | 0.0002     | 0.0013     | 0          | 0.0006     | 0          | 0          | 0.0003     | 0          | 0.0005     | 0          | 0          | 0          |
| 0          | 0.03671    | 0          | 0.00024    | 0.0017     | 0.00421    | 0.0003     | 0.0005     | 0.0005     | 0.001      | 0.0001     | 0.0006     | 0.0006     | 0          | 0.0003     | 0          | 0          | #####      |
| 0.00014    | 0.00014    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0026     | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00011    | 0.00028    | 0          | 0.00174    | 0          | 0          | 0          | 0.0004     | 0          | 0          | 0.0003     | 0.0002     | 0.0001     | 0          | 0.0004     | 0          | 0          | 0          |
| 0.00229    | 0.00289    | 0.00692    | 0.00494    | 0.12126    | 0.03919    | 0          | 0.051      | 0.0377     | 0.0007     | 0.0018     | 0          | 0.0497     | 0          | 0.0063     | 9E-05      | 0.0059     | 0.0007     |
| 0.00236    | 0.00116    | 0.00012    | 0.00019    | 0          | 0          | 8E-05      | 0          | 0          | 0          | 0.0003     | 0          | 0          | 0          | 0          | 0.0002     | 0          | 0.0002     |
| 0.00022    | 0.00028    | 0.29706    | 0          | 0.00358    | 0.00062    | 0.0003     | 0.0009     | 0.0006     | 0.0016     | 0.0005     | 0.0005     | 0.0004     | 0.0046     | 0.0013     | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.0004     | 0          | 7E-05      | 0.0001     | 0.0012     | 0          | 0          | 0.0001     | 0.0003     | 8E-05      | 0.0008     | 0.0005     | 0.0001     | 0.0015     | 0.0021     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.001      | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 4.8E-05    | 0          | 0.00014    | 0.00039    | 0          | 6.9E-05    | 0          | 0.0002     | 0.0001     | 0          | 0.0001     | 0          | 5E-05      | 0.0005     | 0.0001     | 7E-05      | 0.0004     | 0.0016     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00046    | 0.00059    | 0.0003     | 0.00084    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 6E-05      | 0          | 0.0001     |
| 4.7E-05    | 5.2E-05    | 2.6E-05    | 0.01005    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 4E-05      | 5E-05      | 0          | 0          |
| 0          | 0          | 0          | 3.5E-05    | 0          | 0          | 2E-05      | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 2E-05      |
| 0.00028    | 0.00011    | 0.00041    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 2E-05      |
| 4.4E-05    | 0          | 2.3E-05    | 0          | 0          | 2.9E-05    | 5E-05      | 0          | 0          | 0          | 0          | 0.0062     | 0          | 0          | 6E-05      | 2E-05      | #####      | 0.003      |
| 0.00068    | 0.01193    | 0.00628    | 0.00247    | 0.0002     | 0          | 0.0049     | 0          | 6E-05      | 0          | 2E-05      | 0          | 0.0019     | 0          | 0          | 0.0001     | 0.0006     | 0.0005     |
| 6.8E-05    | 0.00017    | 4.9E-05    | 0.0003     | 0.00108    | 0.00012    | 8E-05      | 0.0026     | 9E-05      | 0.0003     | 8E-05      | 0.0002     | 6E-05      | 0.0006     | 0.0012     | 4E-05      | 7E-05      | 0.0017     |
| 1.3E-05    | 0.00556    | 0          | 2.7E-05    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 4E-05      | 0          |
| 5.2E-05    | 0.00112    | 0.00688    | 0.00058    | 0.00075    | 3.7E-05    | 3E-05      | 0.0001     | 0.0001     | 5E-05      | 3E-05      | 0.0002     | 3E-05      | 0.0003     | 2E-05      | 0.0001     | 0.0008     | 0.0026     |
| 2E-05      | 1.6E-05    | 0.0044     | 0.00151    | 0.00116    | 0.00019    | 0.0002     | 0.0003     | 0.0005     | 0.0001     | 0.0002     | 0.0002     | 5E-05      | 0.0013     | 0.0003     | 7E-05      | 8E-05      | 0.0018     |
| 0          | 0          | 0          | 0.02453    | 0.00203    | 0.00022    | 0.0001     | 0.0003     | 0.0006     | 0.0002     | 0.0003     | 0.0005     | 0.0002     | 0.2502     | 0.0005     | 7E-05      | 0.0003     | 0.0001     |
| 0.00014    | 0.01208    | 0.00014    | 1.7E-05    | 0.00072    | 8.8E-05    | 5E-05      | 0.0001     | 0.0011     | 0.0008     | 4E-05      | 0.1589     | 6E-05      | 0.0219     | 0.0002     | 6E-05      | 0.0001     | 5E-05      |
| 0.00185    | 0.00323    | 0.00574    | 0.00615    | 0.10567    | 0.03944    | 0.0002     | 0.0445     | 0.032      | 0.0004     | 0.0026     | 0.0004     | 0.0478     | 0.0009     | 0.0061     | 6E-05      | 0.0062     | 0.0009     |
| 9E-05      | 8.3E-05    | 0.00011    | 0.00011    | 0.00021    | 1.2E-05    | 1E-05      | 0          | 2E-05      | 0.0002     | 0          | 0.0019     | 5E-06      | 0          | 6E-05      | 6E-05      | 8E-05      | 7E-05      |

| Control<br>068 | Control<br>118 | Control<br>116 | Control<br>115 | Control11<br>4 | Control11<br>3 | Control<br>112 | Control<br>111 | Control1<br>10 | Control<br>109 | Control<br>108 | Control<br>107 | Control1<br>06 | Control10<br>5 | Control10<br>4 | Control<br>103 | Control<br>117 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 0              | 0.0017         | 0              | 0.00378        | 0              | 0.0462         | 0              | 0.04989        | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.00E+00       | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.001          | 0.038223       | 0.000897       | 0              | 0              | 5.65E-04       | 0              | 0.007          | 0              | 0              | 0              | 0.026849       | 0              | 0.0007         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.00E+00       | 0.00E+00       | 0              | 0              | 0              |
| 0              | 0.0139         | 0.0103         | 0              | 0              | 0.004094       | 0.0247         | 0.0115         | 0.01419        | 0.0005         | 0.0246         | 0.0005         | 7.45E-02       | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.0169         | 0              | 0              | 0.00456        | 0.0267         | 0.0022         | 0.01835        | 0              | 0.0358         | 0.0008         | 0.1154         | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0011         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.0112         | 0              | 0              | 0.004866       | 0.0344         | 0.0055         | 0.02515        | 0              | 0.03           | 0              | 0.08874        | 7.42E-04       | 0.00E+00       | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0006         | 0              | 0.0129         | 0              | 0              | 0.012756       | 0.0143         | 0.0035         | 5.00E-02       | 0.0005         | 0.0659         | 0              | 0.00468        | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.00E+00       | 0.00E+00       | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.00E+00       | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0055         | 0.013          | 0              | 0              | 0.002523       | 0.035          | 0.007          | 0.0212         | 0              | 0.031          | 0              | 0.09907        | 0              | 0.000408       | 0              | 0              |
| 0.0002         | 0.0006         | 0.0011         | 0.0003         | 0              | 0.000348       | 0.0036         | 0              | 0.01992        | 0              | 0.0255         | 0.0002         | 0.07007        | 0.000185       | 0.000337       | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0033         | 0.0437         | 0.0041         | 0.0003         | 0.000203       | 0.001779       | 0.0145         | 0.0105         | 0.00126        | 0.0845         | 0.0003         | 0.0339         | 0.00492        | 0.009154       | 0              | 0.0057         | 0.015          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0011         | 0              | 0              | 0.000169       | 0              | 0.0064         | 0              |
| 0.0034         | 0.0005         | 0              | 0.0365         | 0.000185       | 0              | 0              | 0              | 0              | 9E-05          | 0              | 0              | 0.00018        | 0.000206       | 0              | 0              | 0.0005         |
| 0              | 0              | 0              | 0              | 0              | 0.01262        | 0.0002         | 0              | 0.01914        | 0.0001         | 0.0002         | 0.0001         | 0              | 0.018266       | 0              | 0.0167         | 0.0002         |
| 0              | 0              | 0              | 0.0158         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              | 0.007998       | 0              | 0              | 0              |
| 0.0065         | 0.0003         | 0              | 0.082          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.00032        | 0.000129       | 0              | 0.0001         | 0.003          |
| 0              | 0.0003         | 0              | 0              | 0.000118       | 0              | 0              | 0.0006         | 0.00017        | 0.0006         | 0.0006         | 9E-05          | 0.00032        | 0.416306       | 0.000157       | 0.0003         | 0              |
| 0.0047         | 0.0561         | 0.0045         | 0.0001         | 0.000133       | 0.002338       | 0.0151         | 0.0092         | 0.00141        | 0.0917         | 0.0006         | 0.0308         | 0.00604        | 0.009836       | 0.000555       | 0.0046         | 0.0147         |
| 0.0001         | 0              | 0              | 0              | 0.008448       | 0.000289       | 0              | 0.0004         | 0.01138        | 0.0001         | 0.0448         | 9E-05          | 9.6E-05        | 7.78E-05       | 0.028504       | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.00E+00       | 0.00E+00       | 0              | 0              | 0              | 0              | 0.0014         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0213         | 0.0167         | 0.0001         | 0              | 0.002762       | 0.0162         | 0.0122         | 1.27E-02       | 0              | 0.0293         | 0.0002         | 0.07104        | 6.88E-05       | 0.00E+00       | 0.0002         | 7E-05          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 4E-05          | 1E-04          | 0.0053         | 7E-05          | 4.48E-05       | 0.003086       | 0.0415         | 0.0173         | 0.02921        | 0.0002         | 0.0365         | 0.0005         | 0.10306        | 0.000109       | 0.000205       | 5E-05          | 0              |
| 0              | 0              | 0              | 0              | 5.72E-05       | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 4.4E-05        | 0              | 0.0001         | 0.0005         | 0.00028        | 0.0003         | 1E-04          | 0.0004         | 8.4E-05        | 0.000175       | 0.000263       | 0.3266         | 0              |
| 0.0114         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.00797        | 1E-05          | 4E-05          | 0.0001         | 2.7E-05        | 5.92E-05       | 3.52E-05       | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 3.24E-05       | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.00E+00       | 0              | 0              | 0              | 0              | 9E-05          | 0              | 0              | 0              | 0              | 0              | 2E-05          |
| 9E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 3.5E-05        | 0              | 0.0002         | 2E-05          | 0.00059        | 0              | 0              | 0              | 0              |
| 0              | 0.0005         | 0.001          | 0.0001         | 0.013547       | 0.039376       | 0.0001         | 0.0002         | 9.5E-05        | 0.0001         | 0.0538         | 0.0542         | 6.5E-05        | 0.000399       | 0.000123       | 0.0034         | 0.0057         |
| 9E-05          | 0.0003         | 0.0123         | 7E-05          | 2.96E-05       | 0.003434       | 0.0278         | 0.0035         | 0.02176        | 0.0001         | 0.0342         | 0.0003         | 0.08382        | 0.000171       | 0.000128       | 0.0001         | 7E-05          |
| 0              | 4E-05          | 4E-05          | 0              | 6.46E-05       | 0              | #####          | 2E-05          | 2.5E-05        | 0              | 4E-05          | 1E-05          | 0              | 0.012082       | 2.16E-05       | 0              | 3E-05          |
| 0.0009         | 0.0018         | 0.0184         | 6E-05          | 4.49E-05       | 0.005277       | 0.0514         | 0.0021         | 0.02325        | 0.0002         | 0.0505         | 0.0032         | 0.05309        | 0.000115       | 0.000255       | 0.0003         | 7E-05          |
| 0.0003         | 0              | 0.0097         | 4E-05          | 1.54E-05       | 0.004016       | 0.0341         | 0.0169         | 0.02664        | 0.0001         | 0.0224         | 0.001          | 0.05509        | 0.000182       | 0.000315       | 0.0002         | 6E-05          |
| 0              | 0.0003         | 9E-05          | 9E-05          | 7.54E-05       | 0.172531       | 3E-05          | 0.0065         | 5.9E-05        | 0.0057         | 0.0002         | 4E-05          | 0.00018        | 0.000127       | 0.000141       | 9E-05          | 0.0001         |
| 8E-05          | 0.0002         | 0.0051         | 6E-05          | 0.000108       | 8.12E-05       | 0              | 0              | 0              | 0              | 1E-05          | 0              | 0              | 2.71E-05       | 2.75E-05       | 0              | 6E-05          |
| 0.0029         | 0.043          | 0.0031         | 5E-05          | 0.000103       | 0.002434       | 0.0142         | 0.0089         | 0.00164        | 0.0861         | 0.001          | 0.0329         | 0.00515        | 0.009579       | 0.000358       | 0.0046         | 0.0134         |
| 0.007          | 0.0002         | 0.0002         | 0.0706         | 9.75E-05       | 8.48E-05       | 6E-05          | 8E-05          | 5E-05          | 4E-05          | 8E-05          | 2E-05          | 0.00028        | 5.18E-05       | 7.73E-05       | 3E-05          | 0.0064         |

| Control<br>067 | Control<br>102 | Control<br>065 | Control<br>030 | Control<br>029 | Control<br>028 | Control<br>027 | Control<br>026 | Control<br>025 | Control<br>024 | Control<br>023 | Control<br>022 | Control<br>021 | Control<br>019 | Control<br>018 | Control<br>017 | Control<br>016 | Control<br>015 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0.0033         | 0              | 0              | 0              | 0.0713         | 0              | 0              | 0              | 0.0022         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.0013         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0022         | 0.0009         | 0              | 0.0007         | 0.0135         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0006         | 0.0016         | 0              | 0              | 0.0051         |
| 0              | 0              | 0              | 0              | 0              | 0.0008         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0008         | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.0331         | 0              | 0.0002         | 0              | 0.0141         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.0008         | 0.0376         | 0              | 0.0002         | 0.0004         | 0.0208         | 0              | 0              | 0              | 0              | 0.0007         | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.0008         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0017         | 0              | 0              | 0              | 0.0368         | 0.0116         | 0.0002         | 0              | 0.0162         | 0.0013         | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0078         | 0              | 0.0071         | 0.0006         | 0.0947         | 0.0107         | 0              | 0              | 0.0059         | 0              | 0.0014         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.0008         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0007         | 0.0019         | 0              | 0.0008         | 0.0004         | 0.0431         | 0.0293         | 0.0002         | 0.0003         | 0.0128         | 0              | 0              | 0.0004         | 0              | 0.0003         | 0              | 0              | 0              |
| 0              | 0.0004         | 0              | 0.0009         | 0              | 0.079          | 0              | 0.0001         | 0.0003         | 0.0034         | 0.001          | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0059         | 0.0004         | 0.0058         | 0.0004         | 0.0006         | 0.0008         | 0.0123         | 0.0254         | 0.011          | 0.0415         | 0.0004         | 0              | 0.0003         | 0              | 0.0044         | 0.0003         | 0.0192         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              | 0              | 0.0002         | 0.0002         |
| 0.0007         | 0              | 0.0163         | 0.0003         | 0.0033         | 0              | 0              | 0.0021         | 0.0008         | 0.0001         | 0              | 0.0932         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0016         | 0.0664         | 0.0002         | 0              | 0.0003         | 1E-04          | 0.0005         | 0              | 0              | 0.0303         | 0.146          | 0.0003         | 0.0002         | 0.0006         | 0.0003         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001         | 0.0001         | 0              | 0              | 0.0001         | 0.0002         | 0              | 0.0004         | 0              | 0.0041         |
| 0.0033         | 0              | 0.03           | 0.0003         | 0.0054         | 0              | 0.0027         | 0.0045         | 0.0007         | 0              | 0.0003         | 0.0661         | 0              | 0.0003         | 0              | 0.0001         | 0              | 0              |
| 0              | 0.0018         | 0              | 0.0022         | 0.0005         | 0.0006         | 0.0097         | 0.0001         | 0.0004         | 0.0005         | 0.0016         | 0.0007         | 0.0003         | 0.0002         | 0.0002         | 0.0004         | 0              | 0.0002         |
| 0.0068         | 0.0004         | 0.0089         | 0.0005         | 0.0003         | 0.0003         | 0.0047         | 0.0295         | 0.0114         | 0.0355         | 0.0003         | 0              | 7E-05          | 0              | 0.0041         | 0.0003         | 0.0148         | 0.0003         |
| 0              | 0.0151         | 0              | 0              | 0.0001         | 0.0812         | 0.0134         | 0.0001         | 0.0002         | 0.0002         | 0.0002         | 0.0003         | 0              | 0.0006         | 0.0011         | 0              | 0.0001         | 0.0041         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0.0002         | 0.0005         | 0.0003         | 0.0004         |
| 0              | 0.001          | 0              | 0.0011         | 0.0003         | 0.0485         | 0.0072         | 0.0003         | 6E-05          | 0.0103         | 0.0006         | 0.0005         | 0              | 0              | 6E-05          | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 6E-05          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 7E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 4E-05          | 0.0015         | 4E-05          | 0.0013         | 0.0001         | 0.0229         | 0.0137         | 0.0002         | 0.0004         | 0.0243         | 0.0007         | 0.0004         | 2E-05          | 0.0001         | 0              | 3E-05          | 4E-05          | 5E-05          |
| 4E-05          | 0              | 0.0001         | 0              | 0.0001         | 0.0005         | 0.0008         | 0              | 0              | 0              | 9E-05          | 0              | 0.0001         | 0              | #####          | 9E-05          | 0              | 0              |
| 0              | 0.0002         | 8E-05          | 0.0008         | 0.0003         | 0.0004         | 0.0168         | 0.0002         | 0.0004         | 0.0002         | 0.0006         | 0.0004         | 0.2866         | 0.0004         | 0.0004         | 0.0014         | 0.0005         | 0.0006         |
| 0.0053         | 0              | 0.0173         | 0.0004         | 0              | 7E-05          | 0.0021         | 3E-05          | 5E-05          | 7E-05          | 0.0002         | 0.0805         | 3E-05          | 0.0001         | 5E-05          | 2E-05          | 6E-05          | 0.0002         |
| 0.0001         | 0              | 0              | 0              | 3E-05          | 0.0011         | 0              | 0              | 0              | 0              | 6E-05          | 0              | 0              | 0.0001         | 0              | 0              | 0              | 5E-05          |
| 0              | 0              | 0              | 6E-05          | 0              | 0              | 0.0014         | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0.0004         | 9E-05          | 0.3198         | 0.0002         | 0.0003         |
| 0.0093         | 0              | 0.0003         | 0.0002         | 2E-05          | 6E-05          | 0.0004         | 0              | 0              | 0              | 4E-05          | 3E-05          | 2E-05          | 0              | 0              | 1E-05          | 0              | 0              |
| 0.0005         | 0.0009         | 0              | 0.0006         | 0.0002         | 0.0003         | 0.0084         | 0.0167         | 0.0002         | 0.0001         | 0.0004         | 0.0002         | 0.0003         | 0.0043         | 3E-05          | 6E-05          | 0.0016         | 0.0001         |
| 0.0001         | 0.001          | 7E-05          | 0.0009         | 0.0002         | 0.0444         | 0.0091         | 0.0001         | 0.0003         | 0.0206         | 0.0004         | 0.0003         | 3E-05          | 0.0001         | 6E-05          | 2E-05          | 1E-05          | 0              |
| 0              | 0              | 0              | 3E-05          | 1E-05          | 0              | 0.0006         | 0              | 2E-05          | 0              | 3E-05          | 0              | 0              | 1E-05          | 0              | 0              | 3E-05          | 1E-05          |
| 0.0001         | 0.0012         | 0.0001         | 0.0011         | 0.0003         | 0.0325         | 0.0103         | 0.0001         | 0.0002         | 0.0162         | 0.0005         | 0.0002         | 5E-05          | 0.0001         | 0.0017         | 4E-05          | 4E-05          | 0              |
| 7E-05          | 0.0015         | 3E-05          | 0.0009         | 0.0003         | 0.0427         | 0.0116         | 0.0001         | 0.0003         | 0.0151         | 0.0005         | 0.0004         | 5E-05          | 4E-05          | 5E-05          | 0              | 6E-05          | 0              |
| 0              | 0.2055         | 0              | 0.0004         | 0.0002         | 0.0002         | 0.0077         | 0.0001         | 0.0002         | 0.0002         | 0.0003         | 0.0002         | 0              | 0              | 0              | 0              | 0              | 2E-05          |
| 0.0001         | 2E-05          | 0.0537         | 0              | 6E-05          | 0              | 0.0004         | 4E-06          | 2E-05          | 0              | 0              | 0              | 7E-05          | 0.0368         | 0.0001         | 0.0002         | 0.0001         | 0.0002         |
| 0.0067         | 0.0004         | 0.0083         | 0.001          | 0.0005         | 0.0007         | 0.0236         | 0.0299         | 0.0123         | 0.04           | 0.001          | 0.0006         | 1E-04          | 0.0002         | 0.0047         | 0.0005         | 0.018          | 0.0002         |
| 0.0024         | 8E-05          | 0.029          | 0.0002         | 0.0066         | 1E-04          | 0.0031         | 0.0041         | 0.0014         | 4E-05          | 0.0001         | 0.0716         | 9E-05          | 8E-05          | 8E-05          | 0.0003         | 0.0001         | 0.0002         |

| Control<br>014 | Control<br>013 | Control<br>012 | Control<br>011 | Control<br>010 | Control<br>009 | Control<br>008 | Control<br>007 | Control<br>006 | Control<br>005 | Control<br>004 | Control<br>003 | Control<br>002 | Control<br>066 | Control<br>031 | Control<br>032 | Control<br>020 | Control<br>034 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0.0059         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0014         | 0              | 0              | 0              | 0.0012         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0124         | 0              | 0              | 0              | 0              | 0              | 0.0006         | 0.0053         | 0              | 0.0009         | 0.0105         | 0.0185         | 0.0008         | 0.0009         | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0009         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0498         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.001          | 0.0015         | 0              | 0              |
| 0              | 0              | 0.0051         | 0.0296         | 0              | 0              | 0              | 0.0005         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0046         | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0011         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0009         | 0              | 0              | 0.026          | 0.0009         | 0              | 0.0006         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0023         | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0081         | 0              | 0              | 0              | 0.0015         | 0              | 0              | 0              | 0.0005         | 0              | 0.001          | 0.0117         | 0              | 0              | 0              |
| 0              | 0              | 0.0084         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0.0004         | 0.0005         | 0              | 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.0035         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.0006         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0224         | 0.0005         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0032         | 0              | 0.0005         | 0              |
| 0              | 0              | 0              | 0.004          | 0              | 0              | 0.0002         | 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0.0019         | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0005         | 0              | 0              | 0.0003         | 0.0032         | 0.0006         | 0              | 0              | 0              | 0.0053         | 0.0002         | 0.0026         | 0.0003         | 0              | 0.0016         | 0.0147         | 0.0002         | 0.0029         |
| 0              | 0.0003         | 0.0017         | 0.0004         | 0              | 0              | 0.0002         | 0.0024         | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0003         | 0.0102         | 0.0006         | 0.0002         | 0.0017         | 0.0007         | 0.0006         | 0.0009         | 0.0005         | 0.0002         | 0.0006         | 0.0005         | 0.0006         | 0              | 0.0016         | 0              | 0              |
| 0.0008         | 0.0002         | 0.0014         | 0.0003         | 0.0583         | 0              | 0.0004         | 0.0004         | 0.105          | 0.0007         | 0.0005         | 0.0003         | 0.0004         | 0              | 0              | 0.001          | 0.0114         | 0              |
| 0              | 0.0097         | 0              | 0.0117         | 0.0002         | 0              | 0              | 0              | 0.0078         | 0              | 0.0004         | 0.0003         | 0              | 0              | 0              | 0.0003         | 0.0003         | 0              |
| 0              | 0.0004         | 0.0156         | 0.0002         | 0.0006         | 0.0013         | 0.0003         | 0.0002         | 0.001          | 0              | 0.0001         | 0.0014         | 0.0009         | 0.0003         | 0.0003         | 0.0012         | 0.0005         | 0              |
| 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0002         | 0              | 0.001          | 0              | 0.0027         | 0              | 0.0001         | 0.0001         | 0              | 0.0052         | 0              | 0.0031         | 0              | 0              | 0.0011         | 0.0127         | 0              | 0.0017         |
| 0              | 0.0036         | 0.0016         | 0.0002         | 0.0004         | 0              | 0              | 0.0053         | 0.0004         | 8E-05          | 0              | 0.0015         | 0.0048         | 0.0006         | 0.0004         | 0.001          | 0              | 8E-05          |
| 0.0012         | #####          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0004         | 0              |
| 0.0001         | 0.0001         | 0              | 0.0244         | 0.0003         | 0.0002         | 0              | 0.0002         | 0.0001         | 6E-05          | 0.0001         | 0              | 0              | 8E-05          | 0.0034         | 0.0002         | 0.0001         | 0.0003         |
| 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              | 0              | 0              | 0              |
| 0              | 8E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 7E-05          | 0              | 0              | 0              | 6E-05          | 0              | 0              | 0              |
| 0              | 6E-05          | 0.001          | 0.026          | 0.0003         | 7E-05          | 0              | 0.0001         | 0.0003         | 0.0002         | 5E-05          | 0.0001         | 0.0004         | 0.0006         | 0.005          | 0              | 4E-05          | 7E-05          |
| 0              | 7E-05          | 0              | 0.0005         | 0              | 0              | 0              | 0.0001         | 0              | 0              | 0.0001         | 0              | 0.0004         | 0              | 0              | 0.0001         | 5E-05          | 0              |
| 0.001          | 0.0006         | 0.0031         | 0.0005         | 0.0541         | 0.0006         | 0.0002         | 0.2198         | 0.0171         | 0.0002         | 0.0001         | 0.0003         | 0.0004         | 0              | 0.0162         | 0              | 0.0009         | 0              |
| 0.0002         | 7E-05          | 0.0022         | 0.0005         | 0.0002         | 0.0005         | 0.0002         | 0.0007         | 0.0005         | 0.0129         | 0.0005         | 0.0061         | 0.001          | 0.0037         | 0.0003         | 0              | 0.0026         | 3E-05          |
| 0              | 4E-05          | 0              | 0.0002         | 0              | 0.0003         | 0              | 0              | 0              | 0.0001         | 0.0002         | 0              | 0              | 0              | 0              | 0              | 0              | 2E-05          |
| 0.001          | 0.0004         | 0.0032         | 0.0007         | 0.0008         | 0.3012         | 0.0004         | 0.0014         | 0.001          | 0.001          | 0.0008         | 0.0006         | 0.0014         | 0              | 0              | 0              | 0.0003         | 0              |
| 0.0001         | 0              | 0.0009         | 3E-05          | 0              | 0              | 4E-05          | 0              | 0              | 2E-05          | 8E-05          | 0              | 7E-05          | 0.0002         | 0.0002         | 8E-05          | 0              | 3E-05          |
| 0.0004         | 0              | 0.0036         | 0.0005         | 0.0005         | 0.0004         | 0.0003         | 0.0052         | 0.0014         | 0.0007         | 0.3432         | 0.0002         | 0.0241         | 0.0005         | 0.0004         | 0.0005         | 2E-05          | 0.0102         |
| 0.0002         | 7E-05          | 0.0003         | 0.0371         | 0.0002         | 0.0003         | 1E-04          | 0.0002         | 0.0002         | 0.0002         | 0.0001         | 0.0001         | 0.0001         | 0.0002         | 0.0042         | 7E-05          | 8E-05          | 9E-05          |
| 9E-05          | 2E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 1E-05          | 0              | 0              | 4E-05          | 0.0238         | 0              | 0              |
| 0.0001         | 8E-05          | 0.0009         | 0.0202         | 0.0002         | 0.0002         | 0.0001         | 0.0001         | 0.0001         | 0.0006         | 0.0001         | 5E-05          | 0.0001         | 0.001          | 0.0131         | 0.0002         | 7E-05          | 9E-05          |
| 0.0002         | 2E-05          | 0.0015         | 0.0731         | 0.0002         | 0.0002         | 0.0001         | 0.0004         | 0.0002         | 0.0002         | 0.0001         | 6E-05          | 0.0002         | 0.0004         | 0.0022         | 3E-05          | 0.0001         | 4E-05          |
| 0              | 0              | 0              | 7E-05          | 0.0004         | 0              | 1E-05          | 0              | 0.0186         | 9E-05          | 3E-05          | 3E-05          | 3E-05          | 0              | 0.0003         | 0.0018         | 0              | 9E-05          |
| 0.0005         | 0.0003         | 0.0004         | 7E-05          | 6E-05          | 5E-05          | 7E-05          | 8E-05          | 0.0001         | 8E-05          | 1E-04          | 4E-05          | 5E-05          | 9E-05          | 0.0001         | 9E-05          | 1E-04          | 0.0568         |
| 0.0004         | 0.0002         | 0.0009         | 0.0001         | 0.0028         | 0.0002         | 0.0001         | 0.0002         | 0.0002         | 0.0051         | 0.0002         | 0.0028         | 0.0003         | 5E-05          | 0.0012         | 0.0124         | 0.0003         | 0.0021         |
| 0.0002         | 0.0002         | 0.0313         | 0.0007         | 0.0006         | 0.0008         | 0.0003         | 0.0008         | 0.0009         | 0.0007         | 0.0006         | 0.001          | 0.0006         | 0.0005         | 0.0009         | 0.0023         | 0.0006         | 0.0001         |

| Control<br>051 | Control<br>052 | Control0<br>53 | Control<br>054 | Control<br>055 | Control<br>056 | Control<br>050 | Control<br>057 | Control<br>059 | Control<br>060 | Control<br>033 | Control<br>062 | Control<br>063 | Control<br>064 | Control<br>058 | Control<br>049 | Control<br>061 | Control<br>047 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0.0012         | 0              | 0.00112        | 0              | 0              | 0              | 0              | 0              | 0.004          | 0              | 0.1107         | 0              | 0              | 0              | 0              | 0.1261         | 0              | 0.0018         |
| 0              | 0              | 0.00112        | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0021         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0013         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0.0198         | 0.0009         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0024         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0.0006         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0007         | 0.0012         | 0              | 0              |
| 0              | 0              | 0.00334        | 0.001          | 0              | 0.0069         | 0              | 0              | 0              | 0              | 0.048          | 0.0012         | 0.0073         | 0.0008         | 0              | 0.0434         | 0              | 0.0541         |
| 0              | 0              | 0.00624        | 0.0004         | 0              | 0.0042         | 0              | 0.001          | 0              | 0              | 0.0481         | 0.0045         | 0.0087         | 0              | 0              | 0.0607         | 0              | 0.0434         |
| 0              | 0              | #####          | 0              | 0              | 0              | 0              | 0.0009         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.00164        | 0.0011         | 0              | 0.0069         | 0              | 0              | 0              | 0              | 0.0449         | 0.006          | 0.0039         | 0              | 0              | 0.041          | 0              | 0.05           |
| 0              | 0              | 0.00034        | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0008         | 0              | 0.00157        | 0.0043         | 0.0016         | 0.0021         | 0              | 0              | 0              | 0.0044         | 0.0153         | 0.0293         | 0.0246         | 0              | 0.0019         | 0.0103         | 0              | 0.079          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0006         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0027         | 0              | 0              | 0              | 0.0029         | 0              | 0              | 0              | 0.001          | 0              | 0              | 0.0008         | 0.0005         | 0.0019         | 0              | 0              | 0.0004         | 0              |
| 0              | 0              | 0.00426        | 0.0011         | 0.0006         | 0.0087         | 0              | 0              | 0              | 0              | 0.0428         | 0.0029         | 0.0058         | 0              | 0              | 0.0498         | 0              | 0.0589         |
| 0.0002         | 0              | 9.99E-04       | 0.0001         | 0.0004         | 0.0003         | 0              | 0.0003         | 0.0005         | 0.0004         | 0.11           | 0.0008         | 0.0017         | 0              | 0              | 0.0867         | 0              | 0.0258         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.00289        | 0.0043         | 0.0007         | 0.0058         | 0.0002         | 0              | 0.0009         | 0              | 0              | 0.0009         | 0.0046         | 0.0187         | 0.0031         | 0              | 0.0008         | 0.0066         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 9.5E-05        | 0.0008         | 0              | 0              | 0              | 0              | 0.0063         | 0              | 0              | 0.0006         | 0.0372         | 0.0265         | 0.0002         | 0.0002         | 0.0015         | 0              |
| 0              | 0.0005         | 0              | 9E-05          | 0.0003         | 0.0213         | 0.0001         | 0              | 0              | 0              | 0.0003         | 0.0045         | 0              | 0.0001         | 0              | 0.0002         | 0              | 0              |
| 0              | 0              | #####          | 0              | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0007         |
| 0              | 0              | 0              | 0.0013         | 0              | 0.0008         | 0              | 0.0003         | 0.0119         | 0              | 0.0003         | 0.0022         | 0.0068         | 0.0504         | 0.0009         | 0.0003         | 0.0047         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | #####          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.2066         |
| 6E-05          | 0              | 0.00265        | 0.0019         | 0.0002         | 0.0068         | 0              | 0              | 0.0018         | 0.0002         | 0              | 0.0004         | 0.0033         | 0.0157         | 0.0041         | 0              | 0.001          | 0.0048         |
| 0              | 0              | 0              | 0              | 0.0005         | 0              | 0.0044         | 0              | 0              | 0              | 0.0055         | 0.0003         | 0              | 0.0003         | 0              | 0.0002         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0.0007         |
| 0.0002         | 0.0004         | 0.002          | 0.0008         | 0.0007         | 0.0053         | 0.0003         | 9E-05          | 0.0002         | 0.0004         | 0.0421         | 0.004          | 0.0068         | 0              | 0.0002         | 0.0459         | 8E-05          | 0.056          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001         | 0.0007         | 8E-05          | 0              | 0              | 0              | 0.0002         | 0              | 0              |
| 0.0003         | 0.0001         | 0.00353        | 0.0026         | 0.0003         | 0.0019         | 0.0002         | 7E-05          | 0.0004         | 0.0005         | 0.0273         | 0.0034         | 0.012          | 5E-05          | 7E-05          | 0.0366         | 8E-05          | 0.0474         |
| 5E-05          | 0              | 0.00014        | 3E-05          | 0              | 0              | 6E-05          | 0.0004         | 0              | 0.0003         | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              |
| 0              | 0.0002         | 6.2E-05        | 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              | 3E-05          | 0              | 0.0066         | 0              | 0              | 0              | 3E-05          | 0              |
| 0.0006         | 0.0011         | 0.00066        | 0.0005         | 0.0018         | 0.0004         | 0.0004         | 0.0009         | 0.016          | 0.0021         | 0              | 0.0154         | 0.0225         | 0.0199         | 0.0273         | 0.0003         | 0.0041         | 0              |
| 0.0001         | 0              | 1.9E-05        | 0              | 0.0004         | 3E-05          | 2E-05          | 7E-05          | 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              | 3E-05          | 0              | 0              |
| 0              | 0              | 8.7E-05        | 0              | 9E-05          | 0              | 0              | 0              | 4E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 7E-05          | 0.0003         | 0.00582        | 0.0001         | 1E-04          | 0.0182         | 0.0001         | 0.0003         | 0.0002         | 0.0005         | 0              | 0.0137         | 0.0003         | 0.0001         | 0.0017         | 0.0014         | 0.0001         | 0              |
| 0.0014         | 0.0005         | 1.7E-05        | 0.0005         | 8E-05          | 0.0191         | 1E-04          | 8E-05          | 0.0003         | 0.003          | 0.0003         | 0.0002         | 5E-05          | 0              | 8E-05          | 8E-05          | 0              | 2E-05          |
| 7E-05          | 0.0002         | 0.00471        | 0.0009         | 0.0005         | 0.0048         | 8E-05          | 0.0001         | 3E-05          | 0.0006         | 0.0484         | 0.0044         | 0.0103         | 6E-05          | 0.0001         | 0.0534         | 4E-05          | 0.0451         |
| 8E-05          | 0              | 1.5E-05        | 0              | 2E-05          | 1E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 1E-05          | 2E-05          | 0              | 0              |
| 0.0002         | 0.0003         | 0.00841        | 0.0011         | 0.0004         | 0.007          | 0.0002         | 0.0002         | 3E-05          | 0.0005         | 0.0619         | 0.0101         | 0.0027         | 4E-05          | 0.0013         | 0.086          | 4E-05          | 0.0045         |
| 5E-05          | 0.0002         | 0.00182        | 0.0015         | 0.0003         | 0.0071         | 5E-05          | 0.0001         | 0.0002         | 0.0003         | 0.032          | 0.0037         | 0.0102         | 9E-05          | 6E-05          | 0.0317         | 4E-05          | 0.1053         |
| 4E-05          | 0              | 0              | 0              | 3E-05          | 0              | 0              | 2E-05          | 0              | 0              | 0.0002         | 0              | 0.0002         | 0              | 0              | 0              | 0              | 0.0005         |
| 0.0001         | 0.0814         | 0.00028        | 0.0005         | 0.0002         | 8E-05          | 0.0017         | 0.0001         | 0.0015         | 0.0003         | 0.0001         | 0.0004         | 0.0003         | 0.0001         | 0.0001         | 0.0002         | 0.0001         | 0.0002         |
| 0.0002         | 1E-04          | 0.00287        | 0.0032         | 0.0007         | 0.0073         | 1E-04          | 4E-05          | 0.0013         | 0.0002         | 6E-05          | 0.0006         | 0.0047         | 0.0187         | 0.0038         | 6E-05          | 0.0006         | 0.0053         |
| 0.0001         | 0.0002         | 0.00016        | 0.0014         | 0.0001         | 0.0007         | 7E-05          | 0.0003         | 0.0074         | 0.0004         | 0.0001         | 0.0026         | 0.0088         | 0.0515         | 0.0013         | 0.0003         | 0.0033         | 0              |

| Control<br>048 | Control<br>036 | Control<br>037 | Control<br>038 | Control<br>039 | Control<br>040 | Control<br>035 | Control<br>042 | Control<br>043 | Control04<br>4 | Control<br>045 | Control<br>046 | Control<br>041 | COVID<br>-19-N-<br>054 | COVID<br>-19-N-<br>053 | COVID<br>-19-N-<br>052 | COVID<br>-19-N-<br>050 | COVID<br>-19-N-<br>049 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.039155       | 0              | 0              | 0.0084         | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0.0042                 | 0                      | 0.0031                 | 0                      |
| 0              | 0.0005         | 0.0005         | 0              | 0.014          | 0              | 0.0235         | 0              | 0              | 0.00E+00       | 0.0018         | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| #####          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.001                  | 0.0017                 | 0                      | 0.001                  | 0.0016                 |
| 0.0013         | 0.0009         | 0              | 0              | 0              | 0              | 0.0007         | 0              | 0              | 4.17E-02       | 0.0113         | 0              | 0.0218         | 0                      | 0                      | 0.0032                 | 0.0053                 | 0                      |
| 0.0013         | 0              | 0              | 0              | 0              | 0.001          | 0.0007         | 0              | 0.0006         | 4.70E-02       | 0.0137         | 0              | 0.0159         | 0                      | 0                      | 0                      | 0.0042                 | 0                      |
| 0              | 0              | 0              | 0.0005         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.003                  | 0                      | 0.0014                 | 0.0027                 | 0.0019                 |
| 0.0024         | 0              | 0              | 0              | 0              | 0              | 0.0005         | 0              | 0.0012         | 0.030857       | 0.0051         | 0              | 0.0561         | 0                      | 0                      | 0                      | 0.0076                 | 0                      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0.0053         | 0              | 0              | 0.0011         | 0              | 0.0047         | 0.0036         | 0.0074         | 0.0048         | 0.035035       | 0.0126         | 0              | 0.0151         | 0                      | 0                      | 0.0036                 | 0.0089                 | 0                      |
| 0              | 0              | 0              | 0              | 0              | 0.0008         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0                      | 0.001                  | 0                      | 0                      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0.1757                 | 0                      | 0                      | 0.001                  |
| 0.0008         | 0              | 0.0003         | 0              | 0.0004         | 0.0004         | 0.0008         | 0              | 0.0009         | 0.033638       | 0.0059         | 0              | 0.0183         | 0.0005                 | 0                      | 0                      | 0.0042                 | 0                      |
| 0              | 0              | 0.0002         | 0              | 0              | 0.0005         | 0.0006         | 0              | 0.0003         | 0.035377       | 0.003          | 0              | 0.0128         | 0                      | 0                      | 0                      | 0.0038                 | 0                      |
| 0              | 0              | 0.002          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0              | 0.0002         | 0.0002         | 0.0021         | 0.0018         | 0.0003         | 0.0015         | 0.0004         | 0              | 0.001589       | 0.0062         | 0.0084         | 0.0023         | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0.0008         | 0.0015         | 0              | 0.0006         | 0.0009         | 0              | 0              | 0              | 0              | 0.000518       | 0.0014         | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0.0003         | 0.0001         | 0              | 0.0201         | 0              | 0.0007         | 0.014          | 0.0007         | 0.0007         | 0.002485       | 0.0003         | 0.0476         | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0.0003         | 0              | 0              | 0              | 0.0007         | 0              | 0              | 0.8401         | 0.0004         | 0.014103       | 0.0009         | 0.0002         | 0.0007         | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0.0023         | 0.0048         | 0.0004         | 0.0015         | 0.0019         | 0.0002         | 0.0001         | 0.0016         | 0.0001         | 0.000369       | 0.0018         | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| #####          | 0              | 0              | 0              | 0              | 0              | 0.0006         | 0              | 0.0004         | 0.000433       | 0.0005         | 0.0005         | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| #####          | 0.0002         | 0.0014         | 0.0033         | 0.0019         | 0.0002         | 0.0007         | 0.0006         | 0.0003         | 0.002621       | 0.006          | 0.0102         | 0.0028         | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0              | 0.0002         | 0              | 0.0003         | 0.0084         | 0.0003         | 0.0292         | 0.0002         | 0              | 0.000999       | 0.0086         | 0              | 0              | 0                      | 0.015                  | 0.0163                 | 0.0003                 | 0                      |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0006         | 0.0014         | 0.001101       | 0.001          | 0.0002         | 0.5639         | 0                      | 0                      | 0                      | 0                      | 0                      |
| #####          | 0.0001         | 8E-05          | 0.0001         | 8E-05          | 0.0008         | 0.0012         | 0.0003         | 0.0004         | 0.034805       | 0.012          | 0.0002         | 0.0182         | 0                      | 0                      | 0.0007                 | 0.0076                 | 0.0002                 |
| 0.0002         | 4E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 8.21E-05       | 0              | 0              | 0              | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0              | 0              | 0              | 0              | 3E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 7E-05          | 0                      | 0.0001                 | 0                      | 0                      | 0                      |
| 0.0007         | 9E-05          | 4E-05          | 0.0004         | 2E-05          | 7E-05          | 0.0035         | 0.0006         | 0.0005         | 0.032674       | 0.0104         | 0.0004         | 0.0194         | 0                      | 0.0001                 | 0.0038                 | 0.0037                 | 0.0002                 |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 4E-05          | 0              | 0.0001         | 0.0025                 | 0.0036                 | 0.0021                 | 0.0027                 | 0.0071                 |
| 0              | 5E-05          | 0              | 0              | 0              | 0              | 4E-05          | 0              | 0              | 0              | 0              | 0              | 3E-05          | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0.0004         | 0              | 0.0027         | 0              | 0              | 8E-05          | 3E-05          | 0              | 0              | 0              | 0              | 0              | 0.0057         | 0                      | 0                      | 0                      | 5E-05                  | 0                      |
| 0              | 0              | 0              | 0.0001         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 3E-05          | 0              | 0.0027                 | 0.0028                 | 0.0025                 | 0.0024                 | 0.0019                 |
| 0              | 6E-05          | 0              | 2E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 4E-05          | 3E-05          | 0              | 5E-05                  | 0                      | 0                      | 0                      | 0                      |
| #####          | 1E-05          | 4E-05          | 0              | 0.001          | 0.0017         | 0              | 0              | 0              | 0              | 0              | 0              | 3E-05          | 0                      | 0                      | 0                      | 0                      | 0                      |
| #####          | 0.0003         | 0.0002         | 0.0003         | 0.0072         | 0.23           | 0.0029         | 0.0003         | 0.0012         | 2.44E-05       | 5E-05          | 0              | 3E-05          | 0.0004                 | 0                      | 0.0013                 | 0                      | 5E-05                  |
| 0.0013         | 6E-05          | 0.0002         | 0.0003         | 4E-05          | 0.0004         | 0.0014         | 0.0005         | 0.0004         | 0.043533       | 0.0125         | 0.0002         | 0.0184         | 1E-04                  | 0.0002                 | 0.0011                 | 0.0032                 | 8E-05                  |
| 0              | 8E-06          | 0              | 0              | 5E-06          | 3E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001                 | 4E-05                  | 0.0154                 | 2E-05                  | 0                      |
| 0.0019         | 0.0001         | 4E-05          | 0.0003         | 0.0001         | 0.0009         | 0.002          | 0.0006         | 0.0006         | 0.047707       | 0.0042         | 0.0001         | 0.0291         | 0.0002                 | 0.0001                 | 0.002                  | 0.0019                 | 0                      |
| 0.0006         | 9E-05          | 5E-05          | 0.001          | 3E-05          | 0.0003         | 0.0011         | 0.0005         | 0.0005         | 0.032386       | 0.029          | 0.0003         | 0.0229         | 5E-05                  | 0.0001                 | 0.002                  | 0.0043                 | 0                      |
| 0              | 0.0001         | 6E-05          | 0.0002         | 5E-05          | 0.0002         | 0.0002         | 0.0005         | 0.2724         | 0.000333       | 0.0005         | 0.0004         | 0.0004         | 0                      | 0                      | 0                      | 0                      | 0                      |
| 0.0002         | 9E-05          | 0.0001         | 0.0144         | 4E-05          | 9E-05          | 0.0001         | 0.0002         | 0.0002         | 0.000106       | 0.0002         | 0.0001         | 7E-05          | 0                      | 2E-05                  | 0                      | 0                      | 0                      |
| 7E-05          | 0.0002         | 0.0007         | 0.0034         | 0.0021         | 0.0002         | 0.0011         | 0.0004         | 0.0005         | 0.002842       | 0.0062         | 0.0137         | 0.0027         | 0                      | 1E-05                  | 0                      | 8E-06                  | 0                      |
| 0.0022         | 0.0035         | 0.0002         | 0.0016         | 0.0016         | 0.0002         | 1E-04          | 0.0008         | 5E-05          | 0.000365       | 0.0024         | 7E-06          | 7E-06          | 0                      | 0                      | 0                      | 2E-05                  | 3E-05                  |

| COVID-19-N-047 | COVID-19-N-046 | COVID-19-N-045 | COVID-19-N-044 | COVID-19-N-055 | COVID-19-N-043 | COVID-19-N-048 | COVID-19-N-056 | COVID-19-N-064 | COVID-19-N-059 | COVID-19-N-060 | COVID-19-N-061 | COVID-19-N-062 | COVID-19-N-063 | COVID-19-N-065 | COVID-19-N-066 | COVID-19-N-067 | COVID-19-N-070 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0027         | 0              | 0              | 0              | 0.0012         | 0              | 0              | 0              | 0              | 0              |
| 0.0014         | 0              | 0              | 0              | 0              | 0.0028         | 0              | 0.013          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0245         | 0              | 0              |
| 0              | 0.2424         | 0.0068         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0029         | 0              |
| 0              | 0.0072         | 0              | 0.0421         | 0.001          | 0.0031         | 0.0528         | 0              | 0.0201         | 0              | 0.015          | 0              | 0              | 0              | 0              | 0.0027         | 0.001          | 0              |
| 0              | 0.3962         | 0              | 0              | 0              | 0.0007         | 0.0015         | 0.0011         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0212         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0022         | 0              | 0              | 0              | 0.0068         | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.0014         | 0              | 0              | 0              | 0.0022         | 0              | 0              | 0              | 0.0066         | 0              | 0              | 0              | 0              | 0              |
| 0.0008         | 0.3903         | 0.0043         | 0              | 0.0014         | 0.0014         | 0              | 0.001          | 0.0015         | 0.0125         | 0              | 0              | 0              | 0              | 0              | 0              | 0.036          | 0.0015         |
| 0              | 0              | 0              | 0              | 0.0013         | 0              | 0              | 0.002          | 0.0032         | 0              | 0              | 0              | 0.019          | 0              | 0              | 0.0003         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0005         | 0              | 0              | 0.0032         | 0.0007         | 0.0012         | 0.0008         | 0.0151         | 0              | 0              | 0              | 0.0118         | 0              | 0              | 0              | 0.001          | 0              |
| 0              | 0              | 0              | 0.0012         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.002          | 0.0037         | 0              | 0              | 0.3966         | 0.0009         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0018         | 0              | 0.0869         | 0.0008         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0006         | 0              | 0.001          | 0              | 0.0171         | 0.0007         | 0.0504         | 0.01           | 0              | 0              | 0              | 0              | 0.0338         | 0              | 0              | 0              | 0              |
| 0              | 0.0005         | 0              | 0              | 0              | 0              | 0              | 0.0005         | 0.0018         | 0              | 0              | 0              | 0.0033         | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0004         | 0.0005         | 0              | 0              | 0              | 0.0011         | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0003         | 0              | 0              | 0.0003         | 0.0003         | 0              | 0.0316         | 0.0002         | 0              | 0.0005         | 0              | 0              | 0.0116         | 0.0004         | 0              | 0              | 0.7939         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0003         | 0              | 0              | 0              | 0              | 0.002          | 0              | 0              | 0.0004         | 0.001          | 0.0024         | 0.02           | 0              | 0.0245         | 0              | 0              | 0.0004         | 0.5328         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0005         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0004         | 0              | 0.0226         | 0.0001         | 0.0014         | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0022         | 0.0014         | 0.0092         | 0              | 0.0003         | 0.0531         | 0.0006         | 0.0162         | 0              | 0.0192         | 0.0018         | 0.0007         | 0.0001         | 0.0002         | 0.0001         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 1E-04          | 0              | 0.0006         | 0              | 0.0004         | 0              | 0.0002         | 0.0004         | 0.0035         | 0              | 0.0002         | 0              | 0.0055         | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0002         | 0              | 0.0001         | 0              | 0.0003         | 0.0001         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0015         | 0.0002         | 0.0016         | 0.0005         | 6E-05          | 0.0031         | 0.0003         | 0.0099         | 0              | 0              | 0              | 0              | 5E-05          | 0              | 1E-04          | 0.0128         | 0              | 0              |
| 0              | 6E-05          | 0.0003         | 0              | 6E-05          | 4E-05          | 0.0002         | 0.0004         | 0.0014         | 0              | 0.0002         | 0              | 0.0032         | 0              | 0              | 0              | 0              | 0              |
| 0.0003         | 0.0957         | 0.0018         | 0.0002         | 0.0014         | 0.0002         | 0.0002         | 0.0014         | 0.0003         | 0.0001         | 0.0005         | 0              | 0              | 5E-05          | 0              | 0.0001         | 0.0022         | 0.0002         |
| 0              | 4E-05          | 0              | 0              | 0              | 4E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0009         | 0              | 0              |
| 0              | 3E-05          | 0              | 7E-05          | 0              | 0.0176         | 0.0001         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              |
| 0.0007         | 0.3088         | 0.0048         | 0.001          | 0.0015         | 0.0014         | 0.0009         | 0.0013         | 6E-05          | 0.0001         | 0.0002         | 0.0003         | 0              | 8E-05          | 0              | 0              | 0.0544         | 0.0001         |
| 0              | 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              | 0              | 0              | 0              | 4E-05          | 0              | 0              | 0              | 5E-05          | 0              | 0              |
| 8E-05          | 0.0002         | 0.0011         | 0.0003         | 0.0011         | 0.0002         | 0.0002         | 0.0003         | 0.0234         | 5E-05          | 0.0003         | 0.0155         | 0.0268         | 0.0002         | 0.0002         | 0.0013         | 7E-05          | 3E-05          |
| 2E-05          | 6E-05          | 0.0008         | 4E-05          | 0.0016         | 0.0031         | 0.0008         | 0.0006         | 2E-05          | 0.0155         | 4E-05          | 0.0009         | 3E-05          | 2E-05          | 4E-05          | 3E-05          | 0              | 0              |
| 0              | 0              | 0.0006         | 4E-05          | 0.0003         | 3E-05          | 3E-05          | 0.0002         | 0.0024         | 0              | 0              | 3E-05          | 0.0069         | 2E-05          | 3E-05          | 1E-05          | 2E-05          | 0              |
| 0              | 0              | 0              | 0              | 0.0055         | 0.0004         | 0              | 0.0017         | 8E-06          | 0.309          | 0.156          | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0.0001         |
| 0              | 6E-05          | 0.0008         | 6E-05          | 2E-05          | 2E-05          | 6E-05          | 0.0007         | 0.0054         | 0              | 0              | 9E-05          | 0.0087         | 3E-05          | 3E-05          | 3E-05          | 0              | 0              |
| 2E-05          | 0              | 0.0002         | 3E-05          | 5E-05          | 2E-05          | 5E-05          | 0.0002         | 0.0032         | 4E-05          | 0              | 7E-05          | 0.0128         | 3E-05          | 0              | 2E-05          | 3E-05          | 5E-05          |
| 0              | 2E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 3E-05          | 0              | 0.0001         | 5E-05          | 0.0022         | 0.0114         | 0              | 0.0006         | 2E-05          | 3E-05          |
| 0.0158         | 9E-05          | 0.0824         | 0.0001         | 1E-05          | 4E-05          | 2E-05          | 3E-05          | 0              | 0              | 0              | 0.0005         | 0.0281         | 0.0858         | 0.13           | 0.0003         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 3E-06          | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 5E-06          | 0              | 0              | 0.001          | 1E-05          | 1E-05          | 0              | 4E-06          | 0              | 0              | 0.0003         | 8E-06          | 0              |

| COVID-19-N-068 | COVID-19-N-069 | COVID-19-N-042 | COVID-19-N-057 | COVID-19-N-041 | COVID-19-N-004 | COVID-19-N-039 | COVID-19-N-002 | COVID-19-N-003 | COVID-19-N-005 | COVID-19-N-006 | COVID-19-N-007 | COVID-19-N-040 | COVID-19-N-011 | COVID-19-N-012 | COVID-19-N-013 | COVID-19-N-015 | COVID-19-N-016 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0028         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.1055         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0022         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.6222         | 0.0019         | 0              | 0.0135         | 0.0015         | 0              | 0              | 0.0221         | 0              | 0.0031         | 0              | 0              | 0              |
| 0              | 0              | 0              | 0.008          | 0              | 0              | 0.048          | 0.0009         | 0.0363         | 0.032          | 0.0303         | 0.0283         | 0.0022         | 0.0744         | 0              | 0.0253         | 0.0257         | 0.0281         |
| 0              | 0              | 0              | 0              | 0              | 0.257          | 0              | 0              | 0.0175         | 0              | 0.0007         | 0              | 0.1984         | 0              | 0.0034         | 0              | 0              | 0              |
| 0.0055         | 0              | 0              | 0              | 0.0037         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0021         | 0.0014         | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0032         | 0              | 0              | 0              | 0              |
| 0.0031         | 0              | 0              | 0.001          | 0.003          | 0.0008         | 0              | 0              | 0.0154         | 0              | 0              | 0              | 0.3104         | 0              | 0              | 0              | 0.0009         | 0              |
| 0.0006         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0013         | 0.0022         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0019         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0036         | 0.0007         | 0.0008         | 0              | 0              | 0              | 0.0007         | 0              | 0              | 0              |
| 0              | 0              | 0.0016         | 0              | 0.0022         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0.0014         | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.2378         | 0              | 0              | 0.0022         | 0              | 0              | 0              | 0              | 0              | 0.001          | 0              | 0.0024         | 0.0033         | 0.0007         | 0              | 0              | 0              |
| 0              | 0.2119         | 0              | 0              | 0.002          | 0              | 0.0007         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0021         | 0              | 0              | 0              | 0              |
| 0.0022         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0009         | 0.0008         | 0.0003         | 0              | 0              | 0.0006         | 0.0004         | 0              | 0              | 0              |
| 0              | 0.0002         | 0              | 0              | 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0577         | 0.137          | 0.0003         | 0.0003         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0009         | 0              | 0              | 0.0002         | 0              |
| 0              | 0.0032         | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              | 0.0004         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.003          | 0              | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              | 0.0002         | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0.0002         | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0001         | 0.0001         | 0.0004         | 0.0006         | 0.0005         | 0.0002         | 0.032          | 0.0001         | 0.1607         | 0.0007         | 0.011          | 0.0177         | 0.0005         | 0.0515         | 0.0022         | 0.0193         | 0.0098         | 0.0009         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0143         | 0.0006         | 0              | 0              | 0              | 0.0003         | 0.0001         | 9E-05          | 0              | 0.0001         | 0.0002         | 0              | 0              | 0              | 0.0006         | 0.0001         | 0              | 0              |
| 0              | 0              | 9E-05          | 0              | 0.0003         | 0              | 0.0001         | 0              | 0              | 0              | 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              |
| 0.0818         | 6E-05          | 0.0002         | 0              | 0.0003         | 0              | 0.0001         | 0              | 0.0002         | 0              | 0              | 4E-05          | 0.0002         | 0.0004         | 0              | 9E-05          | 7E-05          | 0              |
| 0.0003         | 6E-05          | 0              | 0              | 0              | 0.0001         | 0              | 0.0001         | 0.0005         | 0.0003         | 6E-05          | 0.0001         | 0              | 9E-05          | 6E-05          | 0.0003         | 0              | 0              |
| 0.0001         | 0.0005         | 0.0002         | 0.0004         | 0.0017         | 0.7832         | 9E-05          | 0              | 0.0051         | 0.0016         | 0.0019         | 0              | 0.0114         | 0              | 0.0016         | 0.0008         | 0.0009         | 0              |
| 8E-05          | 4E-05          | 0              | 5E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 9E-05          | 6E-05          | 0              | 0.0007         | 0              | 5E-05          | 0.0002         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 5E-05          | 0.0004         | 0              | 0              | 5E-05          | 0              | 8E-05          | 0              | 0              | 5E-05          | 0              | 0              |
| 3E-05          | 0.0001         | 0.001          | 0.0002         | 0.0026         | 0.001          | 0.0008         | 0              | 0.0091         | 5E-05          | 3E-05          | 0              | 0.3377         | 0              | 0.0001         | 0              | 0.0005         | 4E-05          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 5E-05          | 6E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0073         | 0.0157         | 3E-05          | 6E-05          | 0              | 3E-05          | 0.0002         | 0.0003         | 0              | 0              | 0              | 0.0002         | 0.0003         | 0              | 0              | 0              | 0.0001         | 0.0002         |
| 0              | 0              | 3E-05          | 0.0008         | 0              | 0.0029         | 9E-05          | 2E-05          | 0              | 0              | 0.0006         | 1E-05          | 0              | 4E-05          | 0              | 3E-05          | 0              | 0.014          |
| 0              | 0.0003         | 2E-05          | 0              | 7E-05          | 0.0001         | 8E-05          | 0.0002         | 0.0001         | 0.0002         | 6E-05          | 4E-05          | 0              | 0.0004         | 0.0002         | 5E-05          | 0              | 0              |
| 6E-05          | 0.0001         | 0              | 0.2742         | 0              | 0              | 3E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0016         | 2E-05          | 0              | 7E-05          | 7E-05          | 3E-05          | 9E-05          | 6E-05          | 6E-05          | 9E-05          | 0.0001         | 5E-05          | 0.0002         | 3E-05          | 2E-05          | 0              | 3E-05          |
| 3E-05          | 0.0015         | 0              | 3E-05          | 0              | 6E-05          | 5E-05          | 4E-05          | 0.0001         | 0.0002         | 6E-05          | 1E-05          | 0              | 0.0006         | 0.0002         | 7E-05          | 0              | 2E-05          |
| 3E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              | 1E-05          |
| 0              | 0              | 5E-05          | 0              | 0.0004         | 0              | 0.0002         | 9E-05          | 0              | 4E-05          | 1E-05          | 0.0002         | 9E-05          | 5E-05          | 0              | 0              | 0              | 0.0001         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              | 0              | 0              | 2E-05          | 0              | 0              | 0              | 0              | 0              |
| 0.0024         | 0.0062         | 0              | 0              | 3E-05          | 7E-06          | 0              | 0.0002         | 0              | 0              | 0              | 0              | 2E-05          | 4E-05          | 8E-06          | 9E-06          | 0              | 0              |



| COVID-19-N-017 | COVID-19-N-010 | COVID-19-N-019 | COVID-19-N-018 | COVID-19-N-038 | COVID-19-N-036 | COVID-19-N-032 | COVID-19-N-030 | COVID-19-N-034 | COVID-19-N-028 | COVID-19-N-027 | COVID-19-N-024 | COVID-19-N-023 | COVID-19-N-021 | COVID-19-N-029 | COVID-19-C-001 | COVID-19-C-051 | COVID-19-C-037 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0              | 0              | 0              | 0              | 0.0027         | 0              | 0.0022         | 0              | 0.0034         | 0              | 0              | 0              | 0.1509         | 0              | 0.0273         | 0.0933         | 0.0147         |
| 0              | 0              | 0              | 0              | 0              | 0.0728         | 0              | 0.0996         | 0.0135         | 0.1855         | 0.0487         | 0.1941         | 0.0245         | 0              | 0.0118         | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0015         | 0              | 0              | 0              | 0              | 0              | 0.0033         | 0              | 0.0009         | 0              |
| 0.0056         | 0.0288         | 0.0133         | 0.0426         | 0.0427         | 0              | 0.0024         | 0              | 0              | 0              | 0.0012         | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.001          | 0              | 0              | 0              | 0.0031         | 0              | 0              | 0              | 0              | 0              | 0.0014         | 0              | 0.0019         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.0027         | 0.0012         | 0              | 0.0045         | 0.003          | 0.0023         | 0              | 0.0163         | 0.0943         | 0.0049         | 0.0462         | 0.0481         | 0.0295         |
| 0              | 0              | 0              | 0              | 0              | 0.001          | 0              | 0.0007         | 0.0049         | 0.0012         | 0              | 0              | 0              | 0.0628         | 0.0027         | 0.0332         | 0.0532         | 0.0306         |
| 0              | 0.0016         | 0              | 0              | 0.0015         | 0              | 0.0009         | 0              | 0              | 0              | 0.0012         | 0              | 0              | 0              | 0.0087         | 0              | 0.0026         | 0              |
| 0              | 0              | 0              | 0              | 0              | 0.002          | 0              | 0              | 0.0138         | 0              | 0              | 0              | 0.0054         | 0.0813         | 0.01           | 0.0581         | 0.04           | 0.0229         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0.0017         | 0.9682         | 0.0027         | 0.0037         | 0              | 0.0006         | 0.0096         | 0              | 0.002          | 0              | 0              | 0.0016         |
| 0              | 0              | 0              | 0              | 0              | 0.0038         | 0.0008         | 0              | 0              | 0              | 0.0047         | 0              | 0              | 0.0058         | 0.0039         | 0.0156         | 0.0572         | 0.0531         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0.0007         | 0              | 0.001          | 0              | 0              | 0              | 0.0047         | 0.001          | 0              | 0              | 0              | 0              |
| 0              | 0              | 0.0015         | 0              | 0.0006         | 0.1321         | 0.333          | 0.0005         | 0              | 0              | 0.0009         | 0.0005         | 0.0021         | 0              | 0.0017         | 0              | 0.003          | 0              |
| 0              | 0              | 0              | 0              | 0.0014         | 0.2249         | 0              | 0              | 0              | 0.001          | 0.0613         | 0.0012         | 0.0476         | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0025         | 0.0033         | 0              | 0              | 0.1881         | 0.0527         | 0.0004         | 0.0009         | 0              | 0.0007         | 0.0141         | 0.0038         | 0              | 0.0007         | 0.078          | 0              | 0.0098         |
| 0              | 0              | 0.0005         | 0              | 0              | 0.0018         | 0.0005         | 0              | 0.0059         | 0.0007         | 0.0038         | 0              | 0.0036         | 0.0829         | 0.009          | 0.0508         | 0.0403         | 0.0213         |
| 0              | 0              | 0              | 0              | 0              | 0.0004         | 0              | 0              | 0.0032         | 0.0028         | 0.0008         | 0              | 0.0161         | 0.1604         | 0.0004         | 0.0191         | 0.0881         | 0.0251         |
| 0              | 0              | 0              | 0              | 0              | 0.0289         | 0              | 0.055          | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0.0499         | 0.0004         | 0              | 0              | 0              | 0.0044         | 0              | 0              | 0.0003         | 0.0119         | 0              | 0.0006         |
| 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0014         | 0.0149         | 0              | 0              | 0              | 0              | 0.0006         | 0.0005         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0004         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0011         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0048         | 0.005          | 0.0067         | 0.0046         | 0.0145         | 0.0056         | 0.01           | 0.006          | 0.0004         | 0.0029         | 0.0441         | 0.0049         | 0.0231         | 0              | 0.0018         | 0.0006         | 0              | 0.0003         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 6E-05          | 0              | 0              | 0              | 0              | 0.0029         | 0.0001         | 0.0003         | 0.0133         | 0.0028         | 0.0026         | 9E-05          | 0.0101         | 0.0907         | 0.0145         | 0.0411         | 0.0473         | 0.0303         |
| 0              | 0              | 0              | 0              | 7E-05          | 0.0704         | 0.0894         | 0.0964         | 0.1298         | 0.0096         | 0.0646         | 0.0609         | 0.1191         | 0              | 0.0969         | 0              | 0              | 0.0012         |
| 0              | 0              | 0              | 0              | 0.0001         | 0.0708         | 0.0006         | 0.0629         | 0.0047         | 0.2438         | 0.0367         | 0.2089         | 0.0229         | 0              | 0.0186         | 0              | 6E-05          | 0.0008         |
| 0              | 0.0001         | 0              | 0              | 5E-05          | 0.0046         | 0.0008         | 0.0002         | 0.0171         | 0.0033         | 0.0044         | 0.0002         | 0.0098         | 0.0415         | 0.0012         | 0.0426         | 0.0354         | 0.0394         |
| 0              | 0.0003         | 0              | 0              | 0.0003         | 0.0001         | 0              | 0.0002         | 0.0076         | 8E-05          | 0.0006         | 0              | 0.0002         | 0.0009         | 0.0017         | 0              | 0.0014         | 0              |
| 3E-05          | 0              | 5E-05          | 6E-05          | 0              | 0              | 0              | 3E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 9E-05          | 5E-05          | 0              | 0              | 0              | 6E-05          | 0              | 0              | 0              | 0              | 0              | 0.0001         | 0              | 8E-05          |
| 0              | 7E-05          | 0              | 0              | 0.0009         | 0.0006         | 8E-05          | 0              | 0              | 6E-05          | 0.0007         | 0              | 0.0001         | 0              | 0.0047         | 0              | 0.0019         | 0              |
| 0              | 0              | 0              | 0              | 3E-05          | 0              | 0              | 0.0001         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              |
| 0.0003         | 0              | 0              | 0.0002         | 1E-04          | 0.0714         | 0.0043         | 0.0093         | 0.0168         | 0.2738         | 0.0206         | 0.0005         | 0.0536         | 4E-05          | 0.0311         | 6E-05          | 0              | 0.0008         |
| 0.0001         | 0              | 0              | 3E-05          | 0.0001         | 0              | 0              | 0              | 0              | 7E-05          | 3E-05          | 0              | 0.0002         | 0              | 0              | 0              | 5E-05          | 0              |
| 6E-05          | 4E-05          | 0.0001         | 4E-05          | 8E-05          | 0.0022         | 0.0006         | 0.0001         | 0.01           | 0.0017         | 0.0021         | 0.0002         | 0.0084         | 0.0726         | 0.0076         | 0.0407         | 0.0469         | 0.0237         |
| 0              | 0              | 0              | 0              | 0              | 0.0029         | 0              | 6E-05          | 0              | 0.0013         | 0.0073         | 0.0215         | 0.0002         | 0              | 2E-05          | 0              | 6E-05          | 8E-05          |
| 5E-05          | 8E-05          | 8E-05          | 0              | 7E-05          | 0.0035         | 0.0004         | 0.0002         | 0.0197         | 0.0038         | 0.0044         | 9E-05          | 0.0138         | 0.021          | 0.0089         | 0.0786         | 0.057          | 0.0127         |
| 8E-05          | 3E-05          | 0.0001         | 6E-05          | 3E-05          | 0.0017         | 0.0003         | 0.0003         | 0.0125         | 0.0022         | 0.0036         | 1E-04          | 0.0111         | 0.0648         | 0.0051         | 0.0214         | 0.0325         | 0.0338         |
| 0              | 0              | 0              | 2E-05          | 0              | 0              | 0              | 0              | 0.0002         | 0              | 0              | 8E-05          | 0              | 0              | 1E-04          | 0              | 0              | 0              |
| 0.0003         | 3E-05          | 0              | 0.0004         | 8E-05          | 6E-05          | 0              | 0              | 2E-05          | 0.0001         | 8E-05          | 0              | 0              | 0              | 0              | 0.0001         | 1E-05          | 3E-05          |
| 0              | 0              | 7E-06          | 0              | 0              | 0              | 0              | 1E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 4E-05          | 0              | 0              |
| 0              | 1E-05          | 7E-06          | 0              | 0              | 3E-05          | 0              | 0              | 0              | 2E-05          | 0              | 7E-06          | 0              | 0              | 9E-06          | 0.0001         | 0              | 6E-05          |

| COVID-19-C-035 | COVID-19-C-033 | COVID-19-C-031 | COVID-19-C-008 | COVID-19-C-025 | COVID-19-C-022 | COVID-19-C-020 | COVID-19-C-014 | COVID-19-C-009 | COVID-19-C-058 | COVID-19-C-026 | COVID-19-C-071 |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0              | 0.1434         | 0.01           | 0              | 0              | 0.0114         | 0              | 0              | 0              | 0              | 0.0045         | 0              |
| 0.1666         | 0              | 0.003          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0274         | 0              |
| 0              | 0              | 0              | 0              | 0.0082         | 0.0072         | 0.0012         | 0              | 0              | 0.0489         | 0              | 0              |
| 0              | 0.0058         | 0.005          | 0.0137         | 0.01           | 0.003          | 0              | 0.0518         | 0.0336         | 0              | 0              | 0              |
| 0              | 0.0016         | 0              | 0              | 0              | 0              | 0              | 0.0044         | 0              | 0.0775         | 0              | 0              |
| 0.0117         | 0.0366         | 0.016          | 0              | 0.0034         | 0.0333         | 0.0009         | 0              | 0              | 0              | 0              | 0              |
| 0.0111         | 0.0248         | 0.0254         | 0              | 0              | 0.0529         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0.0013         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.1794         | 0              | 0.0023         |
| 0.0074         | 0.0273         | 0.0327         | 0              | 0              | 0.0318         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0029         | 0.0026         | 0.0026         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0015         | 0              |
| 0.0067         | 0.0581         | 0.0214         | 0              | 0              | 0.0061         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0585         | 0              | 0              | 0.0022         | 0.8923         | 0              | 0.0011         | 0.0034         | 0              | 0              | 0.0156         | 0              |
| 0              | 0.0023         | 0.0021         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0012         | 0              |
| 0              | 0.002          | 0.0852         | 0.001          | 0.2315         | 0              | 0              | 0              | 0              | 0              | 0.0024         | 0              |
| 0.1213         | 0              | 0              | 0              | 0.0021         | 0              | 0              | 0              | 0.0011         | 0              | 0              | 0              |
| 0.0075         | 0.0334         | 0.0222         | 0              | 0              | 0.0395         | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0021         | 0.082          | 0.0375         | 0              | 0.0012         | 0.0093         | 0              | 0.0016         | 0              | 0              | 0              | 0              |
| 0.0724         | 0.0004         | 0.0009         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0007         | 0              | 0.0006         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0006         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0.0009         | 8E-05          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0.0009         |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0188         | 0.0191         | 0.0128         | 0.0035         | 0.0028         | 0.0004         | 0.0004         | 0.0038         | 0.0012         | 0              | 0.0095         | 4E-05          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0091         | 0.0423         | 0.0305         | 0              | 0.0004         | 0.0287         | 0              | 0              | 0              | 0.0001         | 0.0004         | 0              |
| 0.0535         | 0.0013         | 0.0133         | 0              | 0.0033         | 0              | 0              | 0              | 0              | 0              | 0.1865         | 0              |
| 0.1579         | 0.0027         | 0.005          | 0              | 0.0075         | 0              | 0              | 0              | 0              | 0              | 0.0407         | 0              |
| 0.0109         | 0.0206         | 0.0355         | 0.0003         | 0.0002         | 0.0474         | 0.0134         | 0              | 0              | 7E-05          | 0.0007         | 0.0015         |
| 0              | 0.0006         | 0              | 0.0013         | 0.0032         | 0.0034         | 0.001          | 0.0039         | 0              | 0.0353         | 0              | 0.0003         |
| 0              | 0.0002         | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 7E-05          | 0              | 0              |
| 0              | 0              | 0              | 0              | 0.0001         | 0              | 0              | 0              | 0              | 0              | 0              | 0.0105         |
| 0              | 6E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0.2459         | 7E-05          | 4E-05          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0.0764         | 0.0829         | 0.0158         | 4E-05          | 0.0031         | 0              | 6E-05          | 0.0003         | 0.0003         | 8E-05          | 0.0017         | 0.1599         |
| 0              | 0              | 0.0002         | 0              | 8E-05          | 0              | 2E-05          | 0              | 3E-05          | 0.0002         | 0              | 0              |
| 0.0076         | 0.0349         | 0.0273         | 0.0001         | 0.0002         | 0.0306         | 3E-05          | 0.0002         | 3E-05          | 3E-05          | 0.0003         | 3E-05          |
| 5E-05          | 0.0006         | 6E-05          | 0              | 0.0001         | 0              | 0              | 0              | 3E-05          | 0.1592         | 0.0004         | 9E-05          |
| 0.0129         | 0.0407         | 0.0045         | 1E-04          | 0.0001         | 0.0174         | 0.0001         | 0.0005         | 6E-05          | 0              | 0.0004         | 0.0008         |
| 0.0064         | 0.0301         | 0.0341         | 9E-05          | 6E-05          | 0.018          | 0.003          | 0.0003         | 3E-05          | 0              | 0.0004         | 9E-06          |
| 0              | 0              | 0              | 0              | 0.0003         | 0              | 0              | 0              | 3E-05          | 0              | 0              | 1E-05          |
| 0              | 2E-05          | 9E-05          | 0              | 0              | 0              | 1E-05          | 0.0003         | 0.0004         | 0              | 6E-05          | 0              |
| 1E-05          | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 2E-05          | 0              | 0              | 0.0015         |

| Supplementary Table S9. the corresponding output value and POD value of each optimal fungal marker in the train phase |                            |                              |         |              |               |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------|---------|--------------|---------------|
| rownames(Data)                                                                                                        | OTU4 (Cryptococcus_longus) | OTU925 (Cryptococcus_longus) | group   | POD(Control) | POD(COVID-19) |
| Control001                                                                                                            | 0.001596                   | 0                            | Control | 0.781163435  | 0.218836565   |
| Control003                                                                                                            | 0.021841                   | 0.001186                     | Control | 1            | 0             |
| Control004                                                                                                            | 0.001327                   | 0                            | Control | 0.752659574  | 0.247340426   |
| Control005                                                                                                            | 0.039171                   | 0.001919                     | Control | 1            | 0             |
| Control006                                                                                                            | 0.001143                   | 0                            | Control | 0.748502994  | 0.251497006   |
| Control007                                                                                                            | 0.001521                   | 4.80E-05                     | Control | 0.997354497  | 0.002645503   |
| Control008                                                                                                            | 9.21E-04                   | 5.00E-05                     | Control | 0.991758242  | 0.008241758   |
| Control009                                                                                                            | 0.001385                   | 0                            | Control | 0.721311475  | 0.278688525   |
| Control010                                                                                                            | 0.020831                   | 9.18E-04                     | Control | 1            | 0             |
| Control012                                                                                                            | 0.007054                   | 3.54E-04                     | Control | 1            | 0             |
| Control013                                                                                                            | 0.00172                    | 0                            | Control | 0.763297872  | 0.236702128   |
| Control017                                                                                                            | 0.003633                   | 1.07E-04                     | Control | 1            | 0             |
| Control020                                                                                                            | 0.001999                   | 0                            | Control | 0.772357724  | 0.227642276   |
| Control026                                                                                                            | 0.22768                    | 0.010742                     | Control | 1            | 0             |
| Control027                                                                                                            | 0.183046                   | 0.001724                     | Control | 1            | 0             |
| Control028                                                                                                            | 0.005524                   | 1.23E-04                     | Control | 1            | 0             |
| Control030                                                                                                            | 0.007943                   | 1.82E-04                     | Control | 1            | 0             |
| Control031                                                                                                            | 0.008824                   | 4.04E-04                     | Control | 1            | 0             |
| Control033                                                                                                            | 4.90E-04                   | 0                            | Control | 0.704545455  | 0.295454545   |
| Control034                                                                                                            | 0.016037                   | 5.88E-04                     | Control | 1            | 0             |
| Control035                                                                                                            | 0.00835                    | 2.35E-04                     | Control | 1            | 0             |
| Control036                                                                                                            | 0.001156                   | 7.50E-05                     | Control | 1            | 0             |
| Control037                                                                                                            | 0.005697                   | 4.96E-04                     | Control | 1            | 0             |
| Control038                                                                                                            | 0.026219                   | 0.001255                     | Control | 1            | 0             |
| Control039                                                                                                            | 0.016014                   | 7.50E-04                     | Control | 1            | 0             |
| Control040                                                                                                            | 0.001487                   | 5.90E-05                     | Control | 1            | 0             |
| Control041                                                                                                            | 0.02144                    | 0.001113                     | Control | 1            | 0             |
| Control042                                                                                                            | 0.002767                   | 1.85E-04                     | Control | 1            | 0             |
| Control043                                                                                                            | 0.003691                   | 1.08E-04                     | Control | 1            | 0             |
| Control044                                                                                                            | 0.021941                   | 9.71E-04                     | Control | 1            | 0             |
| Control045                                                                                                            | 0.047657                   | 0.002243                     | Control | 1            | 0             |
| Control046                                                                                                            | 0.104847                   | 0.003625                     | Control | 1            | 0             |
| Control047                                                                                                            | 0.041203                   | 0.001806                     | Control | 1            | 0             |
| Control048                                                                                                            | 5.57E-04                   | 0                            | Control | 0.75070028   | 0.24929972    |
| Control049                                                                                                            | 5.32E-04                   | 0                            | Control | 0.723287671  | 0.276712329   |
| Control050                                                                                                            | 8.26E-04                   | 0                            | Control | 0.661375661  | 0.338624339   |
| Control051                                                                                                            | 0.001467                   | 3.50E-05                     | Control | 0.986449864  | 0.013550136   |
| Control052                                                                                                            | 6.82E-04                   | 0                            | Control | 0.552560647  | 0.447439353   |
| Control053                                                                                                            | 0.021993                   | 9.49E-04                     | Control | 1            | 0             |
| Control054                                                                                                            | 0.024901                   | 7.03E-04                     | Control | 1            | 0             |
| Control056                                                                                                            | 0.055479                   | 0.00257                      | Control | 1            | 0             |
| Control058                                                                                                            | 0.028637                   | 0.001422                     | Control | 1            | 0             |
| Control059                                                                                                            | 0.01036                    | 6.58E-04                     | Control | 1            | 0             |
| Control060                                                                                                            | 0.001193                   | 8.90E-05                     | Control | 1            | 0             |
| Control061                                                                                                            | 0.004863                   | 3.23E-04                     | Control | 1            | 0             |
| Control062                                                                                                            | 0.004306                   | 1.39E-04                     | Control | 1            | 0             |
| Control064                                                                                                            | 0.143657                   | 0.005684                     | Control | 1            | 0             |
| Control065                                                                                                            | 0.063355                   | 0.003267                     | Control | 1            | 0             |
| Control067                                                                                                            | 0.051195                   | 0.002432                     | Control | 1            | 0             |
| Control068                                                                                                            | 0.022466                   | 0.001585                     | Control | 1            | 0             |
| Control069                                                                                                            | 0.001359                   | 0                            | Control | 0.754985755  | 0.245014245   |
| Control071                                                                                                            | 0.052091                   | 0.002243                     | Control | 1            | 0             |
| Control074                                                                                                            | 0.037277                   | 0.001365                     | Control | 1            | 0             |
| Control076                                                                                                            | 0.125911                   | 0.005644                     | Control | 1            | 0             |
| Control077                                                                                                            | 0.033895                   | 0.001345                     | Control | 1            | 0             |
| Control079                                                                                                            | 2.91E-04                   | 0                            | Control | 0.437994723  | 0.562005277   |

|              |          |          |          |             |             |
|--------------|----------|----------|----------|-------------|-------------|
| Control081   | 0.024164 | 9.28E-04 | Control  | 1           | 0           |
| Control082   | 0.004394 | 1.23E-04 | Control  | 1           | 0           |
| Control084   | 7.96E-04 | 0        | Control  | 0.593830334 | 0.406169666 |
| Control085   | 0.014115 | 5.18E-04 | Control  | 1           | 0           |
| Control086   | 0.001158 | 8.10E-05 | Control  | 1           | 0           |
| Control087   | 0.159349 | 0.007457 | Control  | 1           | 0           |
| Control088   | 5.37E-04 | 0        | Control  | 0.72        | 0.28        |
| Control090   | 0.004822 | 2.25E-04 | Control  | 1           | 0           |
| Control091   | 0.142871 | 0.007437 | Control  | 1           | 0           |
| Control092   | 0.213342 | 0.009251 | Control  | 1           | 0           |
| Control093   | 0.006833 | 4.14E-04 | Control  | 1           | 0           |
| Control095   | 0.070168 | 0.002917 | Control  | 1           | 0           |
| Control096   | 0.120873 | 0.006055 | Control  | 1           | 0           |
| Control097   | 0.002623 | 0        | Control  | 0.752066116 | 0.247933884 |
| Control098   | 0.014057 | 8.16E-04 | Control  | 1           | 0           |
| Control101   | 0.047108 | 0.001821 | Control  | 1           | 0           |
| Control103   | 0.035124 | 0.001666 | Control  | 1           | 0           |
| Control104   | 0.00273  | 1.87E-04 | Control  | 1           | 0           |
| Control106   | 0.040396 | 0.002242 | Control  | 1           | 0           |
| Control108   | 0.007686 | 2.70E-04 | Control  | 1           | 0           |
| Control110   | 0.012534 | 5.03E-04 | Control  | 1           | 0           |
| Control111   | 0.06849  | 0.003363 | Control  | 1           | 0           |
| Control112   | 0.109598 | 0.005485 | Control  | 1           | 0           |
| Control115   | 3.57E-04 | 7.50E-05 | Control  | 0.986149584 | 0.013850416 |
| Control118   | 0.328527 | 0.020622 | Control  | 1           | 0           |
| Control119   | 0.006889 | 2.62E-04 | Control  | 1           | 0           |
| Control121   | 5.14E-04 | 3.60E-05 | Control  | 0.973544974 | 0.026455026 |
| Control123   | 0.00685  | 0        | Control  | 0.779816514 | 0.220183486 |
| Control124   | 0.367673 | 0.018302 | Control  | 1           | 0           |
| Control126   | 0.020462 | 7.01E-04 | Control  | 1           | 0           |
| Control130   | 0.001559 | 0        | Control  | 0.726688103 | 0.273311897 |
| Control131   | 0.300897 | 0.014381 | Control  | 1           | 0           |
| COVID-19-002 | 7.84E-04 | 0        | COVID-19 | 0.739612188 | 0.260387812 |
| COVID-19-003 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-005 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-006 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-008 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-010 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-011 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-013 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-014 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-015 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-016 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-017 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-018 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-019 | 5.20E-05 | 0        | COVID-19 | 0           | 1           |
| COVID-19-023 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-024 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-025 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-026 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-027 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-028 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-029 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-030 | 7.30E-05 | 0        | COVID-19 | 0           | 1           |
| COVID-19-031 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-032 | 0        | 0        | COVID-19 | 0           | 1           |
| COVID-19-035 | 8.70E-05 | 0        | COVID-19 | 0           | 1           |
| COVID-19-037 | 0        | 0        | COVID-19 | 0           | 1           |

|              |          |   |          |   |   |
|--------------|----------|---|----------|---|---|
| COVID-19-038 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-040 | 1.39E-04 | 0 | COVID-19 | 0 | 1 |
| COVID-19-041 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-043 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-045 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-046 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-047 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-048 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-049 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-050 | 5.70E-05 | 0 | COVID-19 | 0 | 1 |
| COVID-19-051 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-052 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-054 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-055 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-057 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-058 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-061 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-062 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-063 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-064 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-065 | 0        | 0 | COVID-19 | 0 | 1 |
| COVID-19-069 | 0        | 0 | COVID-19 | 0 | 1 |

| Supplementary Table S10. the corresponding output value and POD value of each optimal fungal marker in the test phase |                               |                                 |              |               |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------------|--------------|---------------|
| SampleID                                                                                                              | OTU4<br>(Cryptococcus_longus) | OTU925<br>(Cryptococcus_longus) | POD(Control) | POD(COVID-19) |
| Control002                                                                                                            | 0.001953                      | 7.70E-05                        | 1            | 0             |
| Control011                                                                                                            | 0.001023                      | 0                               | 0.751        | 0.249         |
| Control014                                                                                                            | 0.003433                      | 0                               | 0.755        | 0.245         |
| Control015                                                                                                            | 0.001677                      | 0                               | 0.755        | 0.245         |
| Control016                                                                                                            | 0.144344                      | 2.58E-04                        | 1            | 0             |
| Control018                                                                                                            | 0.038014                      | 1.64E-04                        | 1            | 0             |
| Control019                                                                                                            | 0.001433                      | 0                               | 0.755        | 0.245         |
| Control021                                                                                                            | 9.17E-04                      | 0                               | 0.738        | 0.262         |
| Control022                                                                                                            | 0.004295                      | 0                               | 0.755        | 0.245         |
| Control023                                                                                                            | 0.008039                      | 0                               | 0.755        | 0.245         |
| Control024                                                                                                            | 0.330219                      | 0.00105                         | 1            | 0             |
| Control025                                                                                                            | 0.103649                      | 3.20E-04                        | 1            | 0             |
| Control029                                                                                                            | 0.004014                      | 0                               | 0.755        | 0.245         |
| Control032                                                                                                            | 0.107035                      | 5.69E-04                        | 1            | 0             |
| Control055                                                                                                            | 0.00588                       | 0                               | 0.755        | 0.245         |
| Control057                                                                                                            | 3.18E-04                      | 0                               | 0.706        | 0.294         |
| Control063                                                                                                            | 0.040175                      | 6.90E-05                        | 1            | 0             |
| Control066                                                                                                            | 4.50E-04                      | 0                               | 0.747        | 0.253         |
| Control070                                                                                                            | 0.014752                      | 1.77E-04                        | 1            | 0             |
| Control072                                                                                                            | 0.179666                      | 9.39E-04                        | 1            | 0             |
| Control073                                                                                                            | 0.064218                      | 1.38E-04                        | 1            | 0             |
| Control075                                                                                                            | 3.75E-04                      | 0                               | 0.747        | 0.253         |
| Control078                                                                                                            | 0.044153                      | 2.55E-04                        | 1            | 0             |
| Control080                                                                                                            | 0.111461                      | 2.88E-04                        | 1            | 0             |
| Control083                                                                                                            | 0.021916                      | 2.23E-04                        | 1            | 0             |
| Control089                                                                                                            | 0.038256                      | 1.64E-04                        | 1            | 0             |
| Control094                                                                                                            | 0.132913                      | 4.17E-04                        | 1            | 0             |
| Control099                                                                                                            | 0.026437                      | 9.00E-05                        | 1            | 0             |
| Control100                                                                                                            | 0.048837                      | 4.90E-05                        | 0.999        | 0.001         |
| Control102                                                                                                            | 0.003178                      | 0                               | 0.755        | 0.245         |
| Control105                                                                                                            | 0.081342                      | 1.85E-04                        | 1            | 0             |
| Control107                                                                                                            | 0.271456                      | 0.001014                        | 1            | 0             |
| Control109                                                                                                            | 0.714611                      | 0.002582                        | 1            | 0             |
| Control113                                                                                                            | 0.02026                       | 1.24E-04                        | 1            | 0             |
| Control114                                                                                                            | 8.77E-04                      | 0                               | 0.738        | 0.262         |
| Control116                                                                                                            | 0.026886                      | 2.60E-05                        | 0.99         | 0.01          |
| Control117                                                                                                            | 0.11366                       | 2.82E-04                        | 1            | 0             |
| Control120                                                                                                            | 0.054056                      | 2.49E-04                        | 1            | 0             |
| Control122                                                                                                            | 0.051722                      | 1.30E-04                        | 1            | 0             |
| Control125                                                                                                            | 0.002861                      | 0                               | 0.755        | 0.245         |
| Control127                                                                                                            | 0.003012                      | 0                               | 0.755        | 0.245         |
| Control128                                                                                                            | 0.26702                       | 0.001245                        | 1            | 0             |
| Control129                                                                                                            | 0.377366                      | 0.002035                        | 1            | 0             |
| Control132                                                                                                            | 0.873676                      | 0.0059                          | 1            | 0             |
| COVID-19-001                                                                                                          | 3.50E-04                      | 0                               | 0.747        | 0.253         |
| COVID-19-004                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-007                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-009                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-012                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-020                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-021                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-022                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-033                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-034                                                                                                          | 0                             | 0                               | 0            | 1             |
| COVID-19-036                                                                                                          | 0                             | 0                               | 0            | 1             |

|              |          |   |   |   |
|--------------|----------|---|---|---|
| COVID-19-039 | 0        | 0 | 0 | 1 |
| COVID-19-042 | 0        | 0 | 0 | 1 |
| COVID-19-044 | 9.50E-05 | 0 | 0 | 1 |
| COVID-19-053 | 1.34E-04 | 0 | 0 | 1 |
| COVID-19-056 | 0        | 0 | 0 | 1 |
| COVID-19-059 | 0        | 0 | 0 | 1 |
| COVID-19-060 | 0        | 0 | 0 | 1 |
| COVID-19-066 | 3.30E-05 | 0 | 0 | 1 |
| COVID-19-067 | 0        | 0 | 0 | 1 |
| COVID-19-068 | 0        | 0 | 0 | 1 |
| COVID-19-070 | 0        | 0 | 0 | 1 |
| COVID-19-071 | 0        | 0 | 0 | 1 |

| Supplementary Table S11. the corresponding output value and POD value of each optimal fungal marker in the independent cohort |                            |                              |              |               |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------|--------------|---------------|
| SampleID                                                                                                                      | OTU4 (Cryptococcus longus) | OTU925 (Cryptococcus longus) | POD(Control) | POD(COVID-19) |
| Control002                                                                                                                    | 0.001953                   | 7.70E-05                     | 1            | 0             |
| Control011                                                                                                                    | 0.001023                   | 0                            | 0.751        | 0.249         |
| Control014                                                                                                                    | 0.003433                   | 0                            | 0.755        | 0.245         |
| Control015                                                                                                                    | 0.001677                   | 0                            | 0.755        | 0.245         |
| Control016                                                                                                                    | 0.144344                   | 2.58E-04                     | 1            | 0             |
| Control018                                                                                                                    | 0.038014                   | 1.64E-04                     | 1            | 0             |
| Control019                                                                                                                    | 0.001433                   | 0                            | 0.755        | 0.245         |
| Control021                                                                                                                    | 9.17E-04                   | 0                            | 0.738        | 0.262         |
| Control022                                                                                                                    | 0.004295                   | 0                            | 0.755        | 0.245         |
| Control023                                                                                                                    | 0.008039                   | 0                            | 0.755        | 0.245         |
| Control024                                                                                                                    | 0.330219                   | 0.00105                      | 1            | 0             |
| Control025                                                                                                                    | 0.103649                   | 3.20E-04                     | 1            | 0             |
| Control029                                                                                                                    | 0.004014                   | 0                            | 0.755        | 0.245         |
| Control032                                                                                                                    | 0.107035                   | 5.69E-04                     | 1            | 0             |
| Control055                                                                                                                    | 0.00588                    | 0                            | 0.755        | 0.245         |
| Control057                                                                                                                    | 3.18E-04                   | 0                            | 0.706        | 0.294         |
| Control063                                                                                                                    | 0.040175                   | 6.90E-05                     | 1            | 0             |
| Control066                                                                                                                    | 4.50E-04                   | 0                            | 0.747        | 0.253         |
| Control070                                                                                                                    | 0.014752                   | 1.77E-04                     | 1            | 0             |
| Control072                                                                                                                    | 0.179666                   | 9.39E-04                     | 1            | 0             |
| Control073                                                                                                                    | 0.064218                   | 1.38E-04                     | 1            | 0             |
| Control075                                                                                                                    | 3.75E-04                   | 0                            | 0.747        | 0.253         |
| Control078                                                                                                                    | 0.044153                   | 2.55E-04                     | 1            | 0             |
| Control080                                                                                                                    | 0.111461                   | 2.88E-04                     | 1            | 0             |
| Control083                                                                                                                    | 0.021916                   | 2.23E-04                     | 1            | 0             |
| Control089                                                                                                                    | 0.038256                   | 1.64E-04                     | 1            | 0             |
| Control094                                                                                                                    | 0.132913                   | 4.17E-04                     | 1            | 0             |
| Control099                                                                                                                    | 0.026437                   | 9.00E-05                     | 1            | 0             |
| Control100                                                                                                                    | 0.048837                   | 4.90E-05                     | 0.999        | 0.001         |
| Control102                                                                                                                    | 0.003178                   | 0                            | 0.755        | 0.245         |
| Control105                                                                                                                    | 0.081342                   | 1.85E-04                     | 1            | 0             |
| Control107                                                                                                                    | 0.271456                   | 0.001014                     | 1            | 0             |
| Control109                                                                                                                    | 0.714611                   | 0.002582                     | 1            | 0             |
| Control113                                                                                                                    | 0.02026                    | 1.24E-04                     | 1            | 0             |
| Control114                                                                                                                    | 8.77E-04                   | 0                            | 0.738        | 0.262         |
| Control116                                                                                                                    | 0.026886                   | 2.60E-05                     | 0.99         | 0.01          |
| Control117                                                                                                                    | 0.11366                    | 2.82E-04                     | 1            | 0             |
| Control120                                                                                                                    | 0.054056                   | 2.49E-04                     | 1            | 0             |
| Control122                                                                                                                    | 0.051722                   | 1.30E-04                     | 1            | 0             |
| Control125                                                                                                                    | 0.002861                   | 0                            | 0.755        | 0.245         |
| Control127                                                                                                                    | 0.003012                   | 0                            | 0.755        | 0.245         |
| Control128                                                                                                                    | 0.26702                    | 0.001245                     | 1            | 0             |
| Control129                                                                                                                    | 0.377366                   | 0.002035                     | 1            | 0             |
| Control132                                                                                                                    | 0.873676                   | 0.0059                       | 1            | 0             |
| HZ001                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ002                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ003                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ004                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ005                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ006                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ007                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ008                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ009                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ010                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ011                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ012                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ013                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ014                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ015                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ016                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ017                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ018                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ019                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ020                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ021                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ022                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ023                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ024                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ025                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ026                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ027                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ028                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ029                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ030                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ031                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ032                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ033                                                                                                                         | 0                          | 0                            | 0            | 1             |
| HZ034                                                                                                                         | 0                          | 0                            | 0            | 1             |



|       |   |   |   |   |
|-------|---|---|---|---|
| HZ035 | 0 | 0 | 0 | 1 |
| HZ036 | 0 | 0 | 0 | 1 |
| HZ037 | 0 | 0 | 0 | 1 |
| HZ038 | 0 | 0 | 0 | 1 |
| HZ039 | 0 | 0 | 0 | 1 |
| HZ040 | 0 | 0 | 0 | 1 |
| HZ041 | 0 | 0 | 0 | 1 |
| HZ042 | 0 | 0 | 0 | 1 |
| HZ043 | 0 | 0 | 0 | 1 |
| HZ044 | 0 | 0 | 0 | 1 |
| HZ045 | 0 | 0 | 0 | 1 |
| HZ046 | 0 | 0 | 0 | 1 |
| HZ047 | 0 | 0 | 0 | 1 |
| HZ048 | 0 | 0 | 0 | 1 |
| HZ049 | 0 | 0 | 0 | 1 |
| HZ050 | 0 | 0 | 0 | 1 |
| HZ051 | 0 | 0 | 0 | 1 |
| HZ052 | 0 | 0 | 0 | 1 |
| HZ053 | 0 | 0 | 0 | 1 |
| HZ054 | 0 | 0 | 0 | 1 |
| HZ055 | 0 | 0 | 0 | 1 |
| HZ056 | 0 | 0 | 0 | 1 |
| HZ057 | 0 | 0 | 0 | 1 |
| HZ058 | 0 | 0 | 0 | 1 |
| HZ059 | 0 | 0 | 0 | 1 |
| HZ060 | 0 | 0 | 0 | 1 |
| HZ061 | 0 | 0 | 0 | 1 |
| HZ062 | 0 | 0 | 0 | 1 |
| HZ063 | 0 | 0 | 0 | 1 |
| HZ064 | 0 | 0 | 0 | 1 |
| HZ065 | 0 | 0 | 0 | 1 |
| HZ066 | 0 | 0 | 0 | 1 |
| HZ067 | 0 | 0 | 0 | 1 |
| HZ068 | 0 | 0 | 0 | 1 |
| HZ069 | 0 | 0 | 0 | 1 |
| HZ070 | 0 | 0 | 0 | 1 |
| HZ071 | 0 | 0 | 0 | 1 |
| HZ072 | 0 | 0 | 0 | 1 |
| HZ073 | 0 | 0 | 0 | 1 |
| HZ074 | 0 | 0 | 0 | 1 |
| HZ075 | 0 | 0 | 0 | 1 |

| Supplementary Table S12. The levels of Ig-G antibody |                   |
|------------------------------------------------------|-------------------|
| IgG levels                                           | Number            |
| 0.78                                                 | Control-001       |
| 1.56                                                 | Control-002       |
| 0.74                                                 | Control-003       |
| 0.37                                                 | Control-004       |
| 0.38                                                 | Control-005       |
| 2.31                                                 | Control-006       |
| 10.13                                                | SCR-001           |
| 11.39                                                | SCR-002           |
| 18.75                                                | SCR-003           |
| 25.48                                                | SCR-004           |
| 47.26                                                | SCR-005           |
| 23.75                                                | SCR-006           |
| 18.86                                                | SCR-007           |
| 41.96                                                | SCR-008           |
| 54.28                                                | SCR-009           |
| 313.62                                               | SCR-010           |
| 13.03                                                | SCR-011           |
| 17.21                                                | SCR-012           |
| 29.31                                                | SCR-013           |
| 27.98                                                | SCR-014           |
| 13.86                                                | SCR-015           |
| 341.49                                               | SCR-016           |
| 39.75                                                | SCR-017           |
| 23.57                                                | SCR-018           |
| 15.64                                                | SCR-019           |
| 10.11                                                | SCR-020           |
| 15.26                                                | SCR-021           |
| 57.27                                                | SCR-022           |
| 31.58                                                | SCR-023           |
| 19.64                                                | SCR-024           |
| 25.16                                                | SCR-025           |
| 48.14                                                | SCR-026           |
| 11.27                                                | SCR-027           |
| 22.74                                                | SCR-028           |
| 87.76                                                | SCR-029           |
| 308.06                                               | SCR-030           |
| 43.96                                                | SCR-031           |
| 45.64                                                | SCR-032           |
| 37.46                                                | SCR-033           |
| 21.57                                                | SCR-034           |
| 327.93                                               | SCR-035           |
| 13.67                                                | SCR-036           |
| 451.37                                               | Post-COVID-19-001 |
| 214.03                                               | Post-COVID-19-002 |
| 524.97                                               | Post-COVID-19-003 |
| 282.51                                               | Post-COVID-19-004 |
| 973.87                                               | Post-COVID-19-005 |
| 848.58                                               | Post-COVID-19-006 |
| 147.04                                               | Post-COVID-19-007 |
| 112.88                                               | Post-COVID-19-008 |
| 420.79                                               | Post-COVID-19-009 |
| 188.59                                               | Post-COVID-19-010 |
| 230.16                                               | Post-COVID-19-011 |
| 452.60                                               | Post-COVID-19-012 |
| 336.60                                               | Post-COVID-19-013 |
| 254.92                                               | Post-COVID-19-014 |
| 247.17                                               | Post-COVID-19-015 |
| 201.13                                               | Post-COVID-19-016 |
| 122.54                                               | Post-COVID-19-017 |
| 446.07                                               | Post-COVID-19-018 |
| 448.21                                               | Post-COVID-19-019 |
| 279.65                                               | Post-COVID-19-020 |
| 312.12                                               | Post-COVID-19-021 |
| 225.38                                               | Post-COVID-19-022 |

| Supplementary Table S13. the corresponding output value and POD value of each optimal fungal marker in the SC group |                                     |                                       |              |         |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------|--------------|---------|
| SampleID                                                                                                            | OTU4 ( <i>Cryptococcus longus</i> ) | OTU925 ( <i>Cryptococcus longus</i> ) | POD(Control) | POD(SC) |
| Control002                                                                                                          | 0.001953                            | 7.70E-05                              | 1            | 0       |
| Control011                                                                                                          | 0.001023                            | 0                                     | 0.751        | 0.249   |
| Control014                                                                                                          | 0.003433                            | 0                                     | 0.755        | 0.245   |
| Control015                                                                                                          | 0.001677                            | 0                                     | 0.755        | 0.245   |
| Control016                                                                                                          | 0.144344                            | 2.58E-04                              | 1            | 0       |
| Control018                                                                                                          | 0.038014                            | 1.64E-04                              | 1            | 0       |
| Control019                                                                                                          | 0.001433                            | 0                                     | 0.755        | 0.245   |
| Control021                                                                                                          | 9.17E-04                            | 0                                     | 0.738        | 0.262   |
| Control022                                                                                                          | 0.004295                            | 0                                     | 0.755        | 0.245   |
| Control023                                                                                                          | 0.008039                            | 0                                     | 0.755        | 0.245   |
| Control024                                                                                                          | 0.330219                            | 0.00105                               | 1            | 0       |
| Control025                                                                                                          | 0.103649                            | 3.20E-04                              | 1            | 0       |
| Control029                                                                                                          | 0.004014                            | 0                                     | 0.755        | 0.245   |
| Control032                                                                                                          | 0.107035                            | 5.69E-04                              | 1            | 0       |
| Control055                                                                                                          | 0.00588                             | 0                                     | 0.755        | 0.245   |
| Control057                                                                                                          | 3.18E-04                            | 0                                     | 0.706        | 0.294   |
| Control063                                                                                                          | 0.040175                            | 6.90E-05                              | 1            | 0       |
| Control066                                                                                                          | 4.50E-04                            | 0                                     | 0.747        | 0.253   |
| Control070                                                                                                          | 0.014752                            | 1.77E-04                              | 1            | 0       |
| Control072                                                                                                          | 0.179666                            | 9.39E-04                              | 1            | 0       |
| Control073                                                                                                          | 0.064218                            | 1.38E-04                              | 1            | 0       |
| Control075                                                                                                          | 3.75E-04                            | 0                                     | 0.747        | 0.253   |
| Control078                                                                                                          | 0.044153                            | 2.55E-04                              | 1            | 0       |
| Control080                                                                                                          | 0.111461                            | 2.88E-04                              | 1            | 0       |
| Control083                                                                                                          | 0.021916                            | 2.23E-04                              | 1            | 0       |
| Control089                                                                                                          | 0.038256                            | 1.64E-04                              | 1            | 0       |
| Control094                                                                                                          | 0.132913                            | 4.17E-04                              | 1            | 0       |
| Control099                                                                                                          | 0.026437                            | 9.00E-05                              | 1            | 0       |
| Control100                                                                                                          | 0.048837                            | 4.90E-05                              | 0.999        | 0.001   |
| Control102                                                                                                          | 0.003178                            | 0                                     | 0.755        | 0.245   |
| Control105                                                                                                          | 0.081342                            | 1.85E-04                              | 1            | 0       |
| Control107                                                                                                          | 0.271456                            | 0.001014                              | 1            | 0       |
| Control109                                                                                                          | 0.714611                            | 0.002582                              | 1            | 0       |
| Control113                                                                                                          | 0.02026                             | 1.24E-04                              | 1            | 0       |
| Control114                                                                                                          | 8.77E-04                            | 0                                     | 0.738        | 0.262   |
| Control116                                                                                                          | 0.026886                            | 2.60E-05                              | 0.99         | 0.01    |
| Control117                                                                                                          | 0.11366                             | 2.82E-04                              | 1            | 0       |
| Control120                                                                                                          | 0.054056                            | 2.49E-04                              | 1            | 0       |
| Control122                                                                                                          | 0.051722                            | 1.30E-04                              | 1            | 0       |
| Control125                                                                                                          | 0.002861                            | 0                                     | 0.755        | 0.245   |
| Control127                                                                                                          | 0.003012                            | 0                                     | 0.755        | 0.245   |
| Control128                                                                                                          | 0.26702                             | 0.001245                              | 1            | 0       |
| Control129                                                                                                          | 0.377366                            | 0.002035                              | 1            | 0       |
| Control132                                                                                                          | 0.873676                            | 0.0059                                | 1            | 0       |
| SC001                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC002                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC003                                                                                                               | 9.50E-05                            | 0                                     | 0            | 1       |
| SC004                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC005                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC006                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC007                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC008                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC009                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC010                                                                                                               | 1.19E-04                            | 0                                     | 0            | 1       |
| SC011                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC012                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC013                                                                                                               | 5.70E-05                            | 0                                     | 0            | 1       |
| SC014                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC015                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC016                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC017                                                                                                               | 6.90E-05                            | 0                                     | 0            | 1       |
| SC018                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC019                                                                                                               | 1.27E-04                            | 0                                     | 0            | 1       |
| SC020                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC021                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC022                                                                                                               | 8.11E-04                            | 0                                     | 0.727        | 0.273   |
| SC023                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC024                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC025                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC026                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC027                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC028                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC029                                                                                                               | 1.12E-04                            | 0                                     | 0            | 1       |
| SC030                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC031                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC032                                                                                                               | 7.20E-05                            | 0                                     | 0            | 1       |
| SC033                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC034                                                                                                               | 0                                   | 0                                     | 0            | 1       |
| SC035                                                                                                               | 5.70E-05                            | 0                                     | 0            | 1       |
| SC036                                                                                                               | 0                                   | 0                                     | 0            | 1       |

| Supplementary table S14. The detailed values of oral fungal diversity index and observed OTUs among COVID-19 (n=71), SC (n=36), and control (n=132) groups. |       |       |            |            |          |          |          |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|------------|------------|----------|----------|----------|---------------|
| sample                                                                                                                                                      | reads | label | ace        | chao       | shannon  | simpson  | coverage | observed_otus |
| SC001                                                                                                                                                       | 1161  | 0.97  | 23.337782  | 22.5       | 0.744831 | 0.742697 | 0.996555 | 21            |
| SC021                                                                                                                                                       | 1161  | 0.97  | 142.858466 | 131.47619  | 2.954111 | 0.12118  | 0.96727  | 98            |
| SC022                                                                                                                                                       | 1161  | 0.97  | 164.942887 | 188.625    | 2.854811 | 0.140528 | 0.966408 | 96            |
| SC023                                                                                                                                                       | 1161  | 0.97  | 298.763241 | 210.833333 | 3.066413 | 0.121707 | 0.950043 | 119           |
| SC024                                                                                                                                                       | 1161  | 0.97  | 189.314137 | 141        | 3.470174 | 0.054746 | 0.968992 | 96            |
| SC025                                                                                                                                                       | 1161  | 0.97  | 184.319068 | 178.130435 | 3.299303 | 0.083342 | 0.957795 | 127           |
| SC026                                                                                                                                                       | 1161  | 0.97  | 118.048673 | 118.076923 | 3.212779 | 0.080108 | 0.975883 | 89            |
| SC027                                                                                                                                                       | 1161  | 0.97  | 125.908879 | 101.8      | 2.067735 | 0.263737 | 0.975883 | 64            |
| SC028                                                                                                                                                       | 1161  | 0.97  | 85.520267  | 79         | 2.010759 | 0.265042 | 0.981051 | 58            |
| SC029                                                                                                                                                       | 1161  | 0.97  | 370.601756 | 242.464286 | 3.264262 | 0.133987 | 0.936262 | 146           |
| SC030                                                                                                                                                       | 1161  | 0.97  | 120.234917 | 114.0625   | 2.883208 | 0.109448 | 0.973299 | 85            |
| SC031                                                                                                                                                       | 1161  | 0.97  | 247.745845 | 168.368421 | 3.251912 | 0.078657 | 0.958656 | 109           |
| SC032                                                                                                                                                       | 1161  | 0.97  | 159.23226  | 145.5      | 2.719755 | 0.148338 | 0.968131 | 90            |
| SC033                                                                                                                                                       | 1161  | 0.97  | 229.813396 | 165.666667 | 2.362265 | 0.229858 | 0.965547 | 79            |
| SC034                                                                                                                                                       | 1161  | 0.97  | 226.327903 | 156.607143 | 3.227336 | 0.093207 | 0.959518 | 118           |
| SC035                                                                                                                                                       | 1161  | 0.97  | 195.668738 | 160.363636 | 3.026762 | 0.100172 | 0.966408 | 93            |
| SC020                                                                                                                                                       | 1161  | 0.97  | 193.058645 | 206.1      | 2.757988 | 0.14261  | 0.959518 | 98            |
| SC019                                                                                                                                                       | 1161  | 0.97  | 249.396647 | 216.555556 | 3.356164 | 0.10181  | 0.951766 | 131           |
| SC036                                                                                                                                                       | 1161  | 0.97  | 71.576529  | 65.75      | 2.650975 | 0.115676 | 0.984496 | 53            |
| SC017                                                                                                                                                       | 1161  | 0.97  | 55.018206  | 57.6       | 2.006656 | 0.252885 | 0.988803 | 42            |
| SC002                                                                                                                                                       | 1161  | 0.97  | 96.000942  | 66.375     | 2.207476 | 0.171545 | 0.983635 | 45            |
| SC003                                                                                                                                                       | 1161  | 0.97  | 145.480037 | 138.47619  | 2.803977 | 0.182451 | 0.96727  | 105           |
| SC004                                                                                                                                                       | 1161  | 0.97  | 32.367347  | 26         | 0.521475 | 0.725283 | 0.992248 | 14            |
| SC005                                                                                                                                                       | 1161  | 0.97  | 94.733923  | 105.857143 | 2.705951 | 0.122242 | 0.978467 | 63            |
| SC018                                                                                                                                                       | 1161  | 0.97  | 148.6576   | 148.714286 | 3.606634 | 0.065372 | 0.970715 | 122           |
| SC007                                                                                                                                                       | 1161  | 0.97  | 79.130041  | 86.5       | 2.769719 | 0.121211 | 0.983635 | 58            |
| SC008                                                                                                                                                       | 1161  | 0.97  | 28.878261  | 25.2       | 0.398204 | 0.857295 | 0.992248 | 18            |
| SC006                                                                                                                                                       | 1161  | 0.97  | 153.514751 | 152.157895 | 3.33475  | 0.066232 | 0.964686 | 109           |
| SC010                                                                                                                                                       | 1161  | 0.97  | 111.04198  | 124.142857 | 3.107374 | 0.082701 | 0.976744 | 74            |
| SC011                                                                                                                                                       | 1161  | 0.97  | 320.069029 | 116.428571 | 0.943448 | 0.702842 | 0.973299 | 50            |
| SC012                                                                                                                                                       | 1161  | 0.97  | 141.348866 | 146.352941 | 3.568843 | 0.072182 | 0.973299 | 119           |
| SC013                                                                                                                                                       | 1161  | 0.97  | 225.720371 | 166.954545 | 2.120882 | 0.387263 | 0.956072 | 109           |
| SC014                                                                                                                                                       | 1161  | 0.97  | 235.32522  | 201.105263 | 3.695497 | 0.058658 | 0.956072 | 134           |
| SC015                                                                                                                                                       | 1161  | 0.97  | 240.834414 | 155.714286 | 2.520885 | 0.139957 | 0.96124  | 85            |
| SC016                                                                                                                                                       | 1161  | 0.97  | 275.114698 | 212.956522 | 3.360533 | 0.105403 | 0.94832  | 136           |
| SC009                                                                                                                                                       | 1161  | 0.97  | 80.735766  | 74.230769  | 3.325197 | 0.048032 | 0.986219 | 65            |
| COVID-19-052                                                                                                                                                | 1161  | 0.97  | 128.50878  | 99         | 1.650383 | 0.469497 | 0.976744 | 60            |
| COVID-19-051                                                                                                                                                | 1161  | 0.97  | 187.602734 | 209.5625   | 3.660507 | 0.062593 | 0.956934 | 133           |
| COVID-19-049                                                                                                                                                | 1161  | 0.97  | 848.249242 | 157        | 0.331303 | 0.885793 | 0.985357 | 21            |
| COVID-19-048                                                                                                                                                | 1161  | 0.97  | 531.467374 | 339.125    | 2.70861  | 0.264882 | 0.919035 | 157           |
| COVID-19-047                                                                                                                                                | 1161  | 0.97  | 101.777416 | 85.5       | 1.508825 | 0.448113 | 0.981051 | 47            |
| COVID-19-046                                                                                                                                                | 1161  | 0.97  | 139.489599 | 118.214286 | 1.779718 | 0.335989 | 0.96727  | 68            |
| COVID-19-038                                                                                                                                                | 1161  | 0.97  | 387.82118  | 269        | 2.398014 | 0.332885 | 0.933678 | 136           |
| COVID-19-044                                                                                                                                                | 1161  | 0.97  | 613.555391 | 374.588235 | 2.374443 | 0.333259 | 0.922481 | 139           |
| COVID-19-043                                                                                                                                                | 1161  | 0.97  | 268.371365 | 234.55     | 3.66058  | 0.050965 | 0.946598 | 140           |
| COVID-19-042                                                                                                                                                | 1161  | 0.97  | 86.238635  | 77         | 1.031194 | 0.592878 | 0.982773 | 39            |
| COVID-19-041                                                                                                                                                | 1161  | 0.97  | 220.26437  | 114.666667 | 2.846907 | 0.08374  | 0.973299 | 63            |
| COVID-19-040                                                                                                                                                | 1161  | 0.97  | 235.77996  | 103.25     | 1.556162 | 0.37698  | 0.980189 | 40            |
| COVID-19-039                                                                                                                                                | 1161  | 0.97  | 718.616042 | 403.157895 | 2.685407 | 0.258907 | 0.91559  | 153           |
| COVID-19-053                                                                                                                                                | 1161  | 0.97  | 206.513438 | 174.875    | 3.017554 | 0.115036 | 0.96727  | 87            |
| COVID-19-045                                                                                                                                                | 1161  | 0.97  | 184.473842 | 124.333333 | 2.1401   | 0.206212 | 0.970715 | 62            |
| COVID-19-054                                                                                                                                                | 1161  | 0.97  | 33.936017  | 30.25      | 0.31763  | 0.896694 | 0.991387 | 19            |
| COVID-19-063                                                                                                                                                | 1161  | 0.97  | 151.625555 | 147.428571 | 2.394678 | 0.197268 | 0.971576 | 72            |
| COVID-19-056                                                                                                                                                | 1161  | 0.97  | 195.426883 | 147.571429 | 2.466214 | 0.205444 | 0.964686 | 89            |
| COVID-19-037                                                                                                                                                | 1161  | 0.97  | 272.802393 | 205.8      | 3.553794 | 0.063068 | 0.94832  | 135           |
| COVID-19-071                                                                                                                                                | 1161  | 0.97  | 94.584173  | 82.5       | 2.404128 | 0.179839 | 0.983635 | 54            |
| COVID-19-070                                                                                                                                                | 1161  | 0.97  | 43.715735  | 42.166667  | 2.042991 | 0.202291 | 0.990525 | 33            |
| COVID-19-069                                                                                                                                                | 1161  | 0.97  | 102.670873 | 86.75      | 2.833069 | 0.129892 | 0.982773 | 63            |
| COVID-19-068                                                                                                                                                | 1161  | 0.97  | 84.514889  | 71.666667  | 2.630853 | 0.119444 | 0.985357 | 49            |
| COVID-19-067                                                                                                                                                | 1161  | 0.97  | 51.730104  | 51         | 0.975967 | 0.565194 | 0.986219 | 27            |

|              |      |      |            |            |          |          |          |     |
|--------------|------|------|------------|------------|----------|----------|----------|-----|
| COVID-19-066 | 1161 | 0.97 | 164.047733 | 124.75     | 2.987428 | 0.127041 | 0.969854 | 95  |
| COVID-19-065 | 1161 | 0.97 | 372.916051 | 104        | 1.632065 | 0.333212 | 0.981912 | 34  |
| COVID-19-064 | 1161 | 0.97 | 277.61828  | 196.65     | 2.386726 | 0.310738 | 0.950043 | 114 |
| COVID-19-062 | 1161 | 0.97 | 106.576254 | 104.4      | 3.32563  | 0.061818 | 0.979328 | 86  |
| COVID-19-061 | 1161 | 0.97 | 94.610612  | 90.714286  | 2.937261 | 0.09463  | 0.979328 | 71  |
| COVID-19-060 | 1161 | 0.97 | 462.156197 | 266        | 1.823761 | 0.319221 | 0.94832  | 89  |
| COVID-19-059 | 1161 | 0.97 | 333.901698 | 100        | 0.516028 | 0.824471 | 0.981912 | 30  |
| COVID-19-058 | 1161 | 0.97 | 33.207015  | 32         | 1.222445 | 0.401215 | 0.992248 | 26  |
| COVID-19-057 | 1161 | 0.97 | 301.417131 | 119.857143 | 0.928618 | 0.663082 | 0.972438 | 49  |
| COVID-19-055 | 1161 | 0.97 | 89.077493  | 59.857143  | 1.117057 | 0.614781 | 0.984496 | 38  |
| COVID-19-036 | 1161 | 0.97 | 219.751529 | 153.8125   | 3.357808 | 0.065045 | 0.963824 | 100 |
| COVID-19-050 | 1161 | 0.97 | 316.391581 | 212.545455 | 2.770248 | 0.123633 | 0.955211 | 92  |
| COVID-19-034 | 1161 | 0.97 | 107.938782 | 134        | 1.852562 | 0.378338 | 0.971576 | 68  |
| COVID-19-015 | 1161 | 0.97 | 121.960285 | 124.0625   | 2.848519 | 0.103129 | 0.970715 | 89  |
| COVID-19-014 | 1161 | 0.97 | 451.441662 | 337.75     | 2.865736 | 0.240612 | 0.925926 | 155 |
| COVID-19-013 | 1161 | 0.97 | 419.519902 | 236.387097 | 2.602492 | 0.289792 | 0.933678 | 142 |
| COVID-19-012 | 1161 | 0.97 | 152.157191 | 100        | 1.938388 | 0.384781 | 0.976744 | 61  |
| COVID-19-011 | 1161 | 0.97 | 224.422011 | 216.115385 | 3.031965 | 0.197648 | 0.945736 | 141 |
| COVID-19-010 | 1161 | 0.97 | 427.255455 | 318.789474 | 2.524395 | 0.316374 | 0.929371 | 144 |
| COVID-19-009 | 1161 | 0.97 | 494.725222 | 319.5      | 2.761421 | 0.276614 | 0.921619 | 162 |
| COVID-19-008 | 1161 | 0.97 | 386.676842 | 278.4      | 2.930965 | 0.138677 | 0.940568 | 122 |
| COVID-19-007 | 1161 | 0.97 | 451.622772 | 288.956522 | 2.312381 | 0.366585 | 0.92851  | 141 |
| COVID-19-006 | 1161 | 0.97 | 487.081935 | 306.105263 | 1.891302 | 0.465179 | 0.92851  | 127 |
| COVID-19-005 | 1161 | 0.97 | 416.045656 | 264.142857 | 2.974694 | 0.193126 | 0.937123 | 139 |
| COVID-19-004 | 1161 | 0.97 | 53.104915  | 51.5       | 0.859756 | 0.706987 | 0.98708  | 34  |
| COVID-19-002 | 1161 | 0.97 | 217.174298 | 128.75     | 1.124585 | 0.54092  | 0.976744 | 41  |
| COVID-19-001 | 1161 | 0.97 | 203.569711 | 162.105263 | 3.217839 | 0.091982 | 0.96124  | 110 |
| COVID-19-035 | 1161 | 0.97 | 241.82044  | 162        | 3.080292 | 0.092937 | 0.957795 | 106 |
| COVID-19-016 | 1161 | 0.97 | 270.579709 | 199.103448 | 2.594603 | 0.299152 | 0.947459 | 136 |
| COVID-19-017 | 1161 | 0.97 | 218.41396  | 150.5      | 2.890446 | 0.123193 | 0.96124  | 101 |
| COVID-19-003 | 1161 | 0.97 | 376.928122 | 254.111111 | 2.5696   | 0.279783 | 0.931955 | 140 |
| COVID-19-019 | 1161 | 0.97 | 466.168334 | 235.894737 | 2.568414 | 0.221655 | 0.94143  | 116 |
| COVID-19-018 | 1161 | 0.97 | 500.968322 | 283        | 2.710498 | 0.273871 | 0.925065 | 154 |
| COVID-19-032 | 1161 | 0.97 | 162.833334 | 128.090909 | 3.05133  | 0.100125 | 0.972438 | 83  |
| COVID-19-030 | 1161 | 0.97 | 176.953146 | 144.111111 | 2.456564 | 0.235057 | 0.969854 | 78  |
| COVID-19-029 | 1161 | 0.97 | 103.245946 | 102.25     | 2.419849 | 0.236817 | 0.976744 | 73  |
| COVID-19-028 | 1161 | 0.97 | 235.052693 | 176.5      | 1.834912 | 0.36759  | 0.964686 | 74  |
| COVID-19-027 | 1161 | 0.97 | 191.150007 | 177.357143 | 3.0825   | 0.138241 | 0.955211 | 130 |
| COVID-19-026 | 1161 | 0.97 | 163.484216 | 118.230769 | 1.353496 | 0.520929 | 0.968131 | 67  |
| COVID-19-031 | 1161 | 0.97 | 209.395477 | 202.545455 | 3.587085 | 0.055074 | 0.950904 | 130 |
| COVID-19-024 | 1161 | 0.97 | 130.767842 | 145.583333 | 3.022738 | 0.116359 | 0.969854 | 96  |
| COVID-19-020 | 1161 | 0.97 | 96.967943  | 70.666667  | 2.671143 | 0.122271 | 0.985357 | 48  |
| COVID-19-025 | 1161 | 0.97 | 210.754853 | 220.333333 | 3.04407  | 0.111144 | 0.94832  | 122 |
| COVID-19-021 | 1161 | 0.97 | 172.474607 | 154.4      | 3.199116 | 0.09717  | 0.966408 | 105 |
| COVID-19-033 | 1161 | 0.97 | 200.048146 | 222.352941 | 3.538085 | 0.068903 | 0.952627 | 135 |
| COVID-19-022 | 1161 | 0.97 | 166.126034 | 168        | 2.991241 | 0.111667 | 0.971576 | 80  |
| COVID-19-023 | 1161 | 0.97 | 324.443953 | 214.12     | 2.604299 | 0.210568 | 0.94143  | 123 |
| Control083   | 1161 | 0.97 | 250.497894 | 227.25     | 3.419134 | 0.098505 | 0.951766 | 131 |
| Control096   | 1161 | 0.97 | 178.409985 | 162.12     | 3.374096 | 0.06289  | 0.958656 | 117 |
| Control094   | 1161 | 0.97 | 77.946138  | 72.909091  | 2.772583 | 0.115293 | 0.984496 | 59  |
| Control093   | 1161 | 0.97 | 137.847812 | 83         | 0.271306 | 0.922439 | 0.986219 | 23  |
| Control092   | 1161 | 0.97 | 139.985502 | 98         | 2.471787 | 0.123441 | 0.979328 | 52  |
| Control090   | 1161 | 0.97 | 257.490748 | 177.045455 | 3.162196 | 0.079683 | 0.953488 | 112 |
| Control089   | 1161 | 0.97 | 73.537462  | 79.666667  | 1.687042 | 0.404479 | 0.982773 | 48  |
| Control088   | 1161 | 0.97 | 120.286762 | 67.5       | 1.389625 | 0.488166 | 0.983635 | 39  |
| Control087   | 1161 | 0.97 | 126.962117 | 84.1       | 2.696581 | 0.145929 | 0.981051 | 61  |
| Control086   | 1161 | 0.97 | 103.938776 | 95         | 2.012645 | 0.213327 | 0.978467 | 45  |
| Control085   | 1161 | 0.97 | 292.997627 | 237.896552 | 3.458815 | 0.087888 | 0.940568 | 157 |
| Control084   | 1161 | 0.97 | 256.064431 | 92.333333  | 1.034312 | 0.497006 | 0.982773 | 29  |
| Control095   | 1161 | 0.97 | 206.637282 | 147.375    | 2.928213 | 0.0952   | 0.969854 | 73  |
| Control091   | 1161 | 0.97 | 152.307424 | 101.071429 | 2.443229 | 0.188255 | 0.97416  | 70  |
| Control076   | 1161 | 0.97 | 36.774656  | 35         | 1.751404 | 0.322276 | 0.993109 | 28  |

|            |      |      |            |            |          |          |          |     |
|------------|------|------|------------|------------|----------|----------|----------|-----|
| Control081 | 1161 | 0.97 | 97.82309   | 86         | 2.205264 | 0.261154 | 0.981912 | 56  |
| Control080 | 1161 | 0.97 | 89.510452  | 92.25      | 3.022942 | 0.078344 | 0.981912 | 66  |
| Control079 | 1161 | 0.97 | 226.686252 | 168.666667 | 2.591343 | 0.189894 | 0.965547 | 82  |
| Control078 | 1161 | 0.97 | 147.722023 | 96.625     | 1.951543 | 0.349036 | 0.977606 | 56  |
| Control077 | 1161 | 0.97 | 141.235226 | 135.058824 | 3.158188 | 0.100824 | 0.968992 | 98  |
| Control075 | 1161 | 0.97 | 71.701698  | 56.6       | 2.510962 | 0.142266 | 0.988803 | 41  |
| Control074 | 1161 | 0.97 | 41.042707  | 38         | 2.182768 | 0.219415 | 0.993971 | 35  |
| Control073 | 1161 | 0.97 | 55.89319   | 54         | 1.683156 | 0.311148 | 0.989664 | 32  |
| Control072 | 1161 | 0.97 | 63.251698  | 71.25      | 2.427898 | 0.147477 | 0.98708  | 45  |
| Control071 | 1161 | 0.97 | 182.490922 | 149.375    | 2.552403 | 0.169763 | 0.969854 | 75  |
| Control070 | 1161 | 0.97 | 107.671029 | 79.666667  | 2.272615 | 0.191708 | 0.981051 | 54  |
| Control069 | 1161 | 0.97 | 157.723771 | 152.272727 | 2.690339 | 0.103313 | 0.963824 | 74  |
| Control097 | 1161 | 0.97 | 137.666851 | 96.2       | 2.580427 | 0.133773 | 0.981051 | 50  |
| Control068 | 1161 | 0.97 | 96.087629  | 88.333333  | 1.758392 | 0.391339 | 0.985357 | 43  |
| Control082 | 1161 | 0.97 | 178.079118 | 167.935484 | 2.922534 | 0.19167  | 0.957795 | 130 |
| Control098 | 1161 | 0.97 | 211.253769 | 154.875    | 2.178837 | 0.292463 | 0.96124  | 93  |
| Control116 | 1161 | 0.97 | 75.814498  | 77.5       | 2.318262 | 0.240947 | 0.984496 | 52  |
| Control100 | 1161 | 0.97 | 113.667758 | 95.083333  | 3.16343  | 0.074337 | 0.980189 | 74  |
| Control067 | 1161 | 0.97 | 147.801943 | 140.2      | 1.813566 | 0.381645 | 0.975022 | 59  |
| Control130 | 1161 | 0.97 | 199.474053 | 165.75     | 2.285088 | 0.207982 | 0.97416  | 57  |
| Control129 | 1161 | 0.97 | 97.55556   | 72.090909  | 2.180812 | 0.198816 | 0.981912 | 53  |
| Control128 | 1161 | 0.97 | 114.951615 | 69.1       | 1.902713 | 0.231159 | 0.981051 | 46  |
| Control127 | 1161 | 0.97 | 67.283243  | 65         | 0.385624 | 0.896084 | 0.981912 | 35  |
| Control126 | 1161 | 0.97 | 165.315906 | 138.866667 | 2.48526  | 0.220617 | 0.96727  | 92  |
| Control125 | 1161 | 0.97 | 80.126864  | 79.6       | 1.489677 | 0.480916 | 0.979328 | 52  |
| Control124 | 1161 | 0.97 | 206.159832 | 140.6      | 2.435497 | 0.189716 | 0.968131 | 74  |
| Control123 | 1161 | 0.97 | 87.682168  | 115.2      | 0.984722 | 0.626667 | 0.976744 | 45  |
| Control122 | 1161 | 0.97 | 97.616243  | 72         | 2.562433 | 0.111701 | 0.982773 | 53  |
| Control121 | 1161 | 0.97 | 67.387778  | 72.75      | 0.359458 | 0.899413 | 0.983635 | 30  |
| Control120 | 1161 | 0.97 | 182.419281 | 113.75     | 2.586502 | 0.14757  | 0.975022 | 63  |
| Control119 | 1161 | 0.97 | 138.559826 | 98         | 1.665967 | 0.427619 | 0.976744 | 59  |
| Control118 | 1161 | 0.97 | 90.577774  | 87.428571  | 2.219891 | 0.220958 | 0.978467 | 66  |
| Control099 | 1161 | 0.97 | 154.673251 | 140.12     | 3.219959 | 0.112961 | 0.96727  | 112 |
| Control117 | 1161 | 0.97 | 70.174464  | 62.363636  | 2.165975 | 0.238344 | 0.985357 | 50  |
| Control114 | 1161 | 0.97 | 610.137824 | 310.473684 | 2.025692 | 0.42142  | 0.927649 | 127 |
| Control113 | 1161 | 0.97 | 156.795172 | 122.142857 | 1.88887  | 0.329628 | 0.97416  | 60  |
| Control112 | 1161 | 0.97 | 89.015108  | 84         | 2.830503 | 0.086192 | 0.980189 | 61  |
| Control111 | 1161 | 0.97 | 123.767447 | 94.2       | 2.387957 | 0.136805 | 0.981051 | 48  |
| Control110 | 1161 | 0.97 | 196.456922 | 139.235294 | 2.881161 | 0.114993 | 0.964686 | 91  |
| Control109 | 1161 | 0.97 | 332.296971 | 116.5      | 1.401353 | 0.468256 | 0.983635 | 31  |
| Control108 | 1161 | 0.97 | 373.92205  | 272.433333 | 3.273436 | 0.091161 | 0.92851  | 159 |
| Control107 | 1161 | 0.97 | 106.20442  | 97.5       | 2.49073  | 0.138103 | 0.982773 | 50  |
| Control106 | 1161 | 0.97 | 152.323888 | 182        | 2.749048 | 0.129735 | 0.962102 | 96  |
| Control105 | 1161 | 0.97 | 111.040825 | 86.25      | 3.036538 | 0.073136 | 0.981912 | 60  |
| Control104 | 1161 | 0.97 | 682.365975 | 398.037037 | 2.834972 | 0.234671 | 0.905254 | 176 |
| Control103 | 1161 | 0.97 | 103.127162 | 102.6      | 1.951251 | 0.26949  | 0.980189 | 52  |
| Control102 | 1161 | 0.97 | 226.802311 | 132        | 1.431463 | 0.46194  | 0.96124  | 77  |
| Control101 | 1161 | 0.97 | 102.438804 | 76         | 2.797279 | 0.103325 | 0.983635 | 57  |
| Control115 | 1161 | 0.97 | 60.032739  | 54         | 1.583295 | 0.42197  | 0.98708  | 39  |
| Control066 | 1161 | 0.97 | 198.236722 | 180        | 3.079379 | 0.126982 | 0.953488 | 127 |
| Control013 | 1161 | 0.97 | 268.306557 | 228.3125   | 3.314455 | 0.106653 | 0.950043 | 125 |
| Control064 | 1161 | 0.97 | 231.205168 | 114.8      | 2.178124 | 0.247257 | 0.971576 | 62  |
| Control029 | 1161 | 0.97 | 106.184557 | 88         | 2.890661 | 0.076768 | 0.981912 | 53  |
| Control028 | 1161 | 0.97 | 250.715284 | 204.035714 | 3.603339 | 0.063906 | 0.950043 | 145 |
| Control027 | 1161 | 0.97 | 461.362636 | 379.24     | 4.056134 | 0.047697 | 0.916451 | 193 |
| Control026 | 1161 | 0.97 | 132.573564 | 89.666667  | 2.88151  | 0.089767 | 0.979328 | 59  |
| Control025 | 1161 | 0.97 | 133.132313 | 62.2       | 1.842743 | 0.2628   | 0.985357 | 35  |
| Control024 | 1161 | 0.97 | 346.557825 | 136.8125   | 2.885238 | 0.123646 | 0.963824 | 83  |
| Control023 | 1161 | 0.97 | 199.826896 | 119        | 1.541679 | 0.458064 | 0.972438 | 57  |
| Control022 | 1161 | 0.97 | 171.700977 | 98         | 1.651188 | 0.419121 | 0.975883 | 56  |
| Control021 | 1161 | 0.97 | 63.543488  | 62.142857  | 2.592412 | 0.154108 | 0.988803 | 51  |
| Control020 | 1161 | 0.97 | 138.905418 | 91.428571  | 0.747475 | 0.7634   | 0.977606 | 45  |

|            |      |      |            |            |          |          |          |     |
|------------|------|------|------------|------------|----------|----------|----------|-----|
| Control019 | 1161 | 0.97 | 114.043134 | 119        | 3.158632 | 0.075746 | 0.979328 | 73  |
| Control018 | 1161 | 0.97 | 129.086128 | 122        | 2.870741 | 0.151686 | 0.971576 | 89  |
| Control017 | 1161 | 0.97 | 229.172201 | 98         | 1.326716 | 0.397766 | 0.975883 | 44  |
| Control016 | 1161 | 0.97 | 185.644686 | 223.333333 | 2.447286 | 0.131725 | 0.972438 | 58  |
| Control015 | 1161 | 0.97 | 278.873177 | 228.666667 | 3.134304 | 0.147931 | 0.944014 | 142 |
| Control014 | 1161 | 0.97 | 189.114359 | 144.2      | 2.815957 | 0.10165  | 0.975022 | 63  |
| Control131 | 1161 | 0.97 | 72.521783  | 71.5       | 2.394603 | 0.156644 | 0.984496 | 46  |
| Control012 | 1161 | 0.97 | 302.056335 | 222.071429 | 2.179614 | 0.260891 | 0.950043 | 104 |
| Control011 | 1161 | 0.97 | 196.243984 | 122.8      | 2.698382 | 0.11555  | 0.971576 | 70  |
| Control010 | 1161 | 0.97 | 307.407096 | 183        | 3.35518  | 0.059498 | 0.96124  | 93  |
| Control009 | 1161 | 0.97 | 200.045282 | 99.75      | 1.526234 | 0.376948 | 0.975022 | 49  |
| Control008 | 1161 | 0.97 | 92.614325  | 67.25      | 1.099694 | 0.420936 | 0.984496 | 29  |
| Control007 | 1161 | 0.97 | 204.293264 | 154        | 2.429498 | 0.233694 | 0.959518 | 107 |
| Control006 | 1161 | 0.97 | 183.199277 | 132.461538 | 2.823661 | 0.139974 | 0.968992 | 84  |
| Control005 | 1161 | 0.97 | 154.664984 | 133.111111 | 2.727948 | 0.138568 | 0.972438 | 78  |
| Control004 | 1161 | 0.97 | 245.659438 | 167.2      | 0.911305 | 0.729502 | 0.970715 | 55  |
| Control003 | 1161 | 0.97 | 200.515224 | 164.666667 | 1.836512 | 0.428431 | 0.965547 | 78  |
| Control002 | 1161 | 0.97 | 378.782573 | 227        | 2.191876 | 0.353077 | 0.939707 | 122 |
| Control001 | 1161 | 0.97 | 177.997272 | 94.428571  | 1.767396 | 0.30397  | 0.972438 | 59  |
| Control030 | 1161 | 0.97 | 156.4265   | 221.5      | 2.599654 | 0.128893 | 0.963824 | 78  |
| Control031 | 1161 | 0.97 | 153.015447 | 149.333333 | 3.335041 | 0.076395 | 0.965547 | 106 |
| Control032 | 1161 | 0.97 | 141.290336 | 118.909091 | 3.311081 | 0.058579 | 0.975022 | 82  |
| Control033 | 1161 | 0.97 | 236.142838 | 209.315789 | 3.567941 | 0.069534 | 0.953488 | 134 |
| Control063 | 1161 | 0.97 | 174.171798 | 148.583333 | 3.164894 | 0.073661 | 0.96727  | 90  |
| Control062 | 1161 | 0.97 | 195.748629 | 151.117647 | 3.027117 | 0.107805 | 0.962963 | 98  |
| Control061 | 1161 | 0.97 | 225.268676 | 234.125    | 2.829556 | 0.137077 | 0.959518 | 99  |
| Control060 | 1161 | 0.97 | 165.55496  | 139.428571 | 2.411592 | 0.149719 | 0.971576 | 64  |
| Control059 | 1161 | 0.97 | 165.531759 | 136        | 3.267342 | 0.081162 | 0.971576 | 88  |
| Control058 | 1161 | 0.97 | 82.868001  | 72.857143  | 2.11927  | 0.252051 | 0.984496 | 51  |
| Control057 | 1161 | 0.97 | 175.470426 | 98.625     | 2.640645 | 0.133016 | 0.977606 | 58  |
| Control056 | 1161 | 0.97 | 285.706879 | 195.333333 | 3.662793 | 0.03446  | 0.962963 | 95  |
| Control055 | 1161 | 0.97 | 149.302086 | 151.4      | 2.902043 | 0.108971 | 0.963824 | 94  |
| Control054 | 1161 | 0.97 | 130.592023 | 101.857143 | 2.322021 | 0.196342 | 0.978467 | 59  |
| Control053 | 1161 | 0.97 | 195.346513 | 159        | 1.86382  | 0.447339 | 0.965547 | 81  |
| Control052 | 1161 | 0.97 | 168.87007  | 102.333333 | 2.074063 | 0.223672 | 0.972438 | 61  |
| Control051 | 1161 | 0.97 | 177.038291 | 113.5      | 1.80514  | 0.420458 | 0.969854 | 71  |
| Control050 | 1161 | 0.97 | 200.368186 | 199.055556 | 1.723382 | 0.49828  | 0.949182 | 104 |
| Control065 | 1161 | 0.97 | 241.825829 | 167.625    | 2.551312 | 0.145116 | 0.966408 | 75  |
| Control049 | 1161 | 0.97 | 272.137619 | 219.142857 | 3.212013 | 0.108676 | 0.947459 | 132 |
| Control047 | 1161 | 0.97 | 210.930062 | 141.75     | 2.774164 | 0.131168 | 0.966408 | 80  |
| Control046 | 1161 | 0.97 | 115.734121 | 109.25     | 3.014629 | 0.078958 | 0.97416  | 73  |
| Control045 | 1161 | 0.97 | 351.799689 | 254.066667 | 3.489481 | 0.075347 | 0.946598 | 128 |
| Control044 | 1161 | 0.97 | 168.277257 | 168.473684 | 3.268661 | 0.075702 | 0.960379 | 114 |
| Control043 | 1161 | 0.97 | 170.892434 | 89.909091  | 0.94206  | 0.704604 | 0.975022 | 53  |
| Control042 | 1161 | 0.97 | 225.877276 | 183.142857 | 3.184155 | 0.093588 | 0.955211 | 120 |
| Control041 | 1161 | 0.97 | 204.134584 | 137.333333 | 2.846813 | 0.114629 | 0.970715 | 75  |
| Control040 | 1161 | 0.97 | 117.461298 | 112.615385 | 1.851581 | 0.369993 | 0.971576 | 72  |
| Control039 | 1161 | 0.97 | 205.686318 | 153        | 2.045832 | 0.41296  | 0.965547 | 88  |
| Control038 | 1161 | 0.97 | 142.686778 | 105.1      | 2.829536 | 0.124422 | 0.976744 | 70  |
| Control037 | 1161 | 0.97 | 91.568196  | 54.3       | 1.064402 | 0.619386 | 0.984496 | 39  |
| Control036 | 1161 | 0.97 | 99.407298  | 69.111111  | 2.458787 | 0.121642 | 0.982773 | 48  |
| Control035 | 1161 | 0.97 | 291.621806 | 222        | 2.609647 | 0.310248 | 0.944014 | 142 |
| Control034 | 1161 | 0.97 | 109.55903  | 97.166667  | 2.380188 | 0.160608 | 0.980189 | 55  |
| Control048 | 1161 | 0.97 | 129.307083 | 93         | 2.184379 | 0.27445  | 0.976744 | 66  |
| Control132 | 1161 | 0.97 | 176.845816 | 137        | 1.084853 | 0.664035 | 0.968131 | 63  |

| Supplementary table S15. The relative abundance and distribution of the key 47 OTUs among COVID-19 (n=71), SC (n=36), and Control (n=132) groups. |            |            |            |            |            |            |            |            |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                                                                                                                                                   | Control083 | Control096 | Control094 | Control093 | Control092 | Control090 | Control089 | Control088 | Control087 |
| OTU3781 ( <i>Zanclospora_jonesii</i> )                                                                                                            | 0.0030437  | 0          | 0          | 0.000225   | 0          | 0          | 0.0323432  | 0.0499302  | 0.0186875  |
| OTU106 ( <i>Diversispora_spurca</i> )                                                                                                             | 0          | 0.0208913  | 0          | 0          | 0          | 0.0034181  | 0          | 0          | 0          |
| OTU69 ( <i>Candida_zeilanioides</i> )                                                                                                             | 0          | 0          | 0.00039    | 0          | 0          | 0.0003212  | 0.0001415  | 0          | 0          |
| OTU2542 ( <i>Cladosporium_spe_Incertae_sedis</i> )                                                                                                | 0.0175122  | 0          | 0.0987435  | 0          | 0          | 0          | 0.0001503  | 0          | 0          |
| OTU231 ( <i>Ophiostoma_acarorum</i> )                                                                                                             | 0.006496   | 0.0001634  | 0.0001852  | 0          | 0.0002977  | 0          | 0          | 0          | 0          |
| OTU67 ( <i>Dioszegia_zsoltii_var._yunnanensis</i> )                                                                                               | 0          | 0.0001911  | 0          | 0          | 0.3726453  | 0.000794   | 4.09E-04   | 0          | 0.00E+00   |
| OTU2466 ( <i>Zanclospora_jonesii</i> )                                                                                                            | 0.0050951  | 0.00021    | 0          | 0          | 0          | 0.0002769  | 0.0614311  | 8.09E-02   | 0.0390997  |
| OTU76 ( <i>Aureobasidium_pullulans</i> )                                                                                                          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU3895 ( <i>Blumeria_spe_Incertae_sedis</i> )                                                                                                    | 0          | 0.0025251  | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU72 ( <i>Didymocyrtis_brachylaenae</i> )                                                                                                        | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU3690 ( <i>Aspergillus_subflavus</i> )                                                                                                          | 0          | 0.0026439  | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU1393 ( <i>Cryptococcus_longus</i> )                                                                                                            | 0.0032741  | 0.016621   | 0.0154071  | 0.0011023  | 0.0253683  | 0.0006614  | 0.0050405  | 0          | 0.0203006  |
| OTU80 ( <i>Zanclospora_jonesii</i> )                                                                                                              | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU3193 ( <i>Candida_albicans</i> )                                                                                                               | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU2845 ( <i>Acrodictys_fluminicola</i> )                                                                                                         | 0          | 0.0003642  | 0.0004487  | 0.0002507  | 0.0007891  | 0.0005885  | 0.0001161  | 0.0004724  | 0.0001583  |
| OTU65 ( <i>Milospium_graphideorum</i> )                                                                                                           | 0          | 0.009563   | 0.1149836  | 0.0002967  | 0          | 0          | 0.0321355  | 0          | 0          |
| OTU68 ( <i>Malassezia_globosa</i> )                                                                                                               | 0          | 0.0002988  | 0          | 0          | 0.000191   | 0.001134   | 0          | 0          | 0.0148957  |
| OTU3529 ( <i>Raffaelea_lauricola</i> )                                                                                                            | 0.0002265  | 0.0035157  | 0          | 0          | 0          | 0.0004762  | 9.948E-05  | 9.948E-05  | 7.831E-05  |
| OTU52 ( <i>Diaporthe_kochmanii</i> )                                                                                                              | 0          | 0.0003407  | 0.0002819  | 0.0003428  | 0.0004584  | 0.0004746  | 0.0002251  | 0          | 0          |
| OTU94 ( <i>Zanclospora_jonesii</i> )                                                                                                              | 0.0005337  | 0.0691796  | 0.0031844  | 9.282E-05  | 0.000257   | 0.0005801  | 1.13E-02   | 0          | 8.14E-04   |
| OTU34 ( <i>Acrodictys_fluminicola</i> )                                                                                                           | 6.004E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 3.695E-05  |
| OTU8 ( <i>Acrodictys_fluminicola</i> )                                                                                                            | 0.0237565  | 9.166E-05  | 0          | 0          | 0.0001253  | 0.0262451  | 6.874E-05  | 0          | 9.777E-05  |
| OTU98 ( <i>Chrysosphaeria_jan-nelii</i> )                                                                                                         | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0.00E+00   | 0.00E+00   |
| OTU58 ( <i>Gibberella_fujikuroi</i> )                                                                                                             | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0.00E+00   |
| OTU3860 ( <i>Simplicillium_sympodiophorum</i> )                                                                                                   | 0.012918   | 6.289E-05  | 0          | 0.0003358  | 0.0002516  | 0.0007927  | 3.32E-05   | 0.00E+00   | 4.272E-05  |
| OTU3583 ( <i>Blumeria_spe_Incertae_sedis</i> )                                                                                                    | 0          | 0.0153481  | 6.057E-05  | 7.119E-05  | 0.0001456  | 8.394E-05  | 0          | 0.0001105  | 0          |
| OTU43 ( <i>Rhexothecium_globosum</i> )                                                                                                            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| OTU71 ( <i>Aspergillus_subflavus</i> )                                                                                                            | 7.231E-05  | 0          | 0          | 0.0002726  | 0.000216   | 0.0001681  | 0.0001221  | 0.0541212  | 0.00E+00   |
| OTU3448 ( <i>Zanclospora_jonesii</i> )                                                                                                            | 0.0002515  | 0.0005364  | 0.0003858  | 0.0004395  | 0.0004306  | 0.0007464  | 0.0005697  | 0.0001766  | 0.0165992  |
| OTU3831 ( <i>Acrodictys_fluminicola</i> )                                                                                                         | 0.0112305  | 0.0007969  | 8.38E-05   | 9.328E-05  | 0.0001241  | 0.002812   | 5.376E-05  | 4.19E-05   | 0.0003668  |
| OTU56 ( <i>Penicillium_melanoconidium</i> )                                                                                                       | 0          | 0          | 0.0001744  | 0          | 0          | 0          | 0.00E+00   | 0          | 0.00E+00   |
| OTU26 ( <i>Zanclospora_jonesii</i> )                                                                                                              | 0.0176065  | 0.00489    | 0          | 6.836E-05  | 8.93E-05   | 0          | 0.0536349  | 0.021072   | 0.0113443  |
| OTU13 ( <i>Alternaria_alternata</i> )                                                                                                             | 0.0121314  | 0.0001531  | 9.854E-05  | 0.000265   | 0.0002505  | 9.13E-05   | 0.0002004  | 2.45E-05   | 0          |
| OTU31 ( <i>Arthrographis_grakistii</i> )                                                                                                          | 0.0003246  | 0.0003548  | 0.0001701  | 0.0004145  | 0.000393   | 0.0001378  | 1.70E-04   | 0.0004689  | 0.000274   |
| OTU21 ( <i>Saccharomyces_cerevisiae</i> )                                                                                                         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 1.986E-05  | 0          |
| OTU17 ( <i>Diversispora_spurca</i> )                                                                                                              | 0.0001368  | 0.0006502  | 0          | 7.467E-05  | 0.0001128  | 0.0031826  | 4.464E-05  | 0.0001972  | 0.0004237  |
| OTU18 ( <i>Acrodictys_fluminicola</i> )                                                                                                           | 5.597E-05  | 2.496E-05  | 0          | 0          | 3.342E-05  | 0          | 1.611E-05  | 0.0001401  | 0.0001301  |
| OTU2481 ( <i>Candida_albicans</i> )                                                                                                               | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0.00E+00   |
| OTU9 ( <i>Candida_albicans</i> )                                                                                                                  | 0          | 0          | 0          | 2.114E-05  | 0          | 0          | 0          | 0          | 0          |
| OTU22 ( <i>Hydnobolites_roseus</i> )                                                                                                              | 0          | 0          | 0          | 0          | 0          | 0          | 2.4E-05    | 0          | 1.082E-05  |
| OTU19 ( <i>Zanclospora_jonesii</i> )                                                                                                              | 0.0004141  | 0          | 0          | 0          | 0          | 5.385E-05  | 5.449E-05  | 1.122E-05  | 2.18E-05   |
| OTU7 ( <i>Cladosporium_halotolerans</i> )                                                                                                         | 0.000511   | 0.0001668  | 0.0005176  | 0.0001918  | 0.0003869  | 0.000323   | 0.0002102  | 5.02E-05   | 0.0125844  |
| OTU2920 ( <i>Cladosporium_cladosporioides</i> )                                                                                                   | 0.001684   | 0.0078748  | 8.705E-05  | 1.907E-05  | 0.0397324  | 0.0010236  | 7.905E-05  | 5.29E-05   | 0.014872   |
| OTU15 ( <i>Aspergillus_subflavus</i> )                                                                                                            | 1.445E-05  | 0.0001261  | 0.0285602  | 8.371E-05  | 0.0002041  | 0.0329652  | 9.059E-05  | 2.454E-05  | 1.124E-05  |
| OTU5 ( <i>Cryptococcus_longus</i> )                                                                                                               | 2.56E-03   | 0.0157273  | 0.0158621  | 0.000913   | 0.027585   | 0.0006113  | 0.004646   | 6.974E-05  | 0.0208885  |
| OTU3 ( <i>Zanclospora_jonesii</i> )                                                                                                               | 5.23E-03   | 7.779E-05  | 6.304E-05  | 8.538E-05  | 9.957E-05  | 0.0004454  | 0.0677756  | 0.0746231  | 3.62E-02   |
| OTU3900 ( <i>Acrodictys_fluminicola</i> )                                                                                                         | 0.0101871  | 0.0012233  | 9.186E-05  | 0.0001385  | 0.0001924  | 0.0033047  | 9.729E-05  | 0.000102   | 0.0006411  |



| Control086 | Control085 | Control084 | Control095 | Control091 | Control076 | Control081 | Control080 | Control079 | Control078 | Control077 | Control075 | Control074 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0.0832103  | 0.001845   | 0          | 0.00018    | 0.0002905  | 0.0357264  | 0.0291604  | 0.0096956  | 0.0065169  | 0.182768   | 0.0040991  | 0.0246072  | 0.1508176  |
| 0.0001585  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.0001109  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0001202  | 0          | 0.0001352  | 0.0002742  | 0          | 0.1024473  | 0          | 0          | 0          | 0.0001841  | 0          | 0          |
| 0          | 0.0010458  | 0          | 0          | 0.0002106  | 0          | 0          | 0.0001344  | 0          | 0.0188781  | 0.0022077  | 0          | 0          |
| 0          | 0          | 0          | 0.0005337  | 0.0001944  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0366079  | 0.0044141  | 0          | 0          | 0.0002164  | 0.0707971  | 0.0560941  | 0.0145789  | 0.014913   | 0.06483    | 0.0103207  | 0.0349371  | 0.0409106  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0146324  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0004245  | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0143952  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0005563  | 0          | 0          | 0          |
| 0.0002096  | 0.0013799  | 0          | 0.0074981  | 0.0201264  | 1.47E-02   | 0.0025148  | 0.0148547  | 0          | 0.0039518  | 0.0037477  | 0.0001606  | 3.64E-03   |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0001003  | 0.0002006  | 0.0010952  | 0.0003668  | 0.0001768  | 0          | 0          | 0.0001214  | 0          | 0.0001108  | 0.0001557  | 0          | 0          |
| 0          | 0          | 0          | 0.0005142  | 0.0001187  | 9.642E-05  | 0          | 0          | 0          | 0          | 0          | 0.1458829  | 0.0001088  |
| 0          | 0.0003306  | 0.0001249  | 0.0370799  | 0          | 0          | 0          | 0.0225933  | 0.0046656  | 0.0001053  | 0.0025863  | 0          | 0          |
| 0.0001884  | 0.0351274  | 0.0002392  | 0          | 0.0011472  | 0          | 0          | 9.101E-05  | 0.0004741  | 0          | 0.0002625  | 0          | 0          |
| 0          | 0          | 0          | 0.000286   | 0.0002758  | 0.0002697  | 0          | 0          | 0          | 0          | 0          | 0.1093856  | 0.0001927  |
| 6.783E-05  | 0          | 0.0002088  | 0.0001499  | 0.0012049  | 0          | 0.004641   | 0.0069115  | 0.0070865  | 0          | 0          | 0          | 0          |
| 0          | 0          | 8.775E-05  | 0          | 0          | 0          | 5.234E-05  | 0.0122175  | 0          | 0          | 0          | 0          | 0          |
| 0.0001848  | 0.000191   | 0.0002994  | 0.0011717  | 0.0001696  | 0          | 8.708E-05  | 0.0023862  | 7.18E-05   | 5.652E-05  | 0.0015918  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0001614  | 0.0028468  | 0          | 0.0001293  | 0.0022677  | 0          | 1.71E-04   | 6.764E-05  | 0.0082603  | 0.0001104  | 1.44E-04   | 0          | 0          |
| 7.863E-05  | 0.0175933  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0056477  | 0.0035926  | 0          | 0.00E+00   |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00E+00   | 0          | 0.00E+00   | 0.0002658  | 0.0001798  | 0          | 0          | 4.788E-05  | 0          | 0          | 0.0054049  | 0          | 0          |
| 0.0002303  | 0.0002149  | 0.0005185  | 0.0082621  | 0.0004379  | 0          | 0.0002051  | 0.0002238  | 0.0003451  | 0.0002222  | 0.0001473  | 0          | 0          |
| 0.0002245  | 0.0079584  | 0          | 0.0001202  | 0.0089711  | 0          | 3.162E-05  | 7.352E-05  | 0.0009945  | 6.562E-05  | 3.478E-05  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0.00E+00   | 0.00E+00   | 0          | 0          | 0          |
| 0.071638   | 0.0055274  | 4.12E-04   | 0          | 4.742E-05  | 0.0413298  | 9.05E-02   | 0.0001109  | 3.79E-02   | 0.0001835  | 0.0184164  | 0.0462124  | 0.0899669  |
| 9.631E-05  | 0.0010733  | 3.118E-05  | 0.0001258  | 0.0001548  | 0          | 4.565E-05  | 5.066E-05  | 2.672E-05  | 0          | 0          | 0          | 0          |
| 0.000386   | 0.0004888  | 0.3537419  | 0.0001857  | 0.0002164  | 1.723E-05  | 0.0002794  | 0.0004075  | 0.0002331  | 0.0003327  | 0.0004937  | 0          | 0          |
| 0.0002066  | 0          | 0          | 0.0049106  | 0          | 0.0001031  | 0          | 0          | 0          | 0          | 0.001392   | 7.66E-05   | 5.39E-05   |
| 0.0002739  | 0.0002573  | 0.0002123  | 0.0013218  | 0.0042499  | 1.705E-05  | 0.0002256  | 0.0377933  | 0.0007309  | 0.0003247  | 0.0017585  | 0          | 0          |
| 0.0002891  | 9.221E-05  | 0.0001389  | 0          | 8.939E-05  | 0.00E+00   | 0.0001929  | 0.0002275  | 0.1622133  | 7.006E-05  | 0.0002706  | 0.0051564  | 0          |
| 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 1.364E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 1.875E-05  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0.0048048  | 1.346E-05  | 0          | 0          | 4.455E-05  | 1.987E-05  | 0          | 0          |
| 9.104E-05  | 0.0002828  | 1.40E-05   | 0.0092582  | 1.25E-04   | 0          | 0.0020694  | 2.869E-05  | 1.372E-05  | 1.278E-05  | 0.0001338  | 1.528E-05  | 0          |
| 5.629E-05  | 5.783E-05  | 0.0001627  | 0.0250103  | 8.582E-05  | 0          | 2.922E-05  | 0.0101444  | 0.0035526  | 3.168E-05  | 0.0038174  | 0          | 0          |
| 2.683E-05  | 4.541E-05  | 2.454E-05  | 0.0001195  | 0.0001952  | 0          | 2.729E-05  | 0.000117   | 2.041E-05  | 8.944E-06  | 0.060495   | 0          | 0.0004023  |
| 0.0001532  | 0.0018479  | 0.0001043  | 0.0091067  | 0.0186111  | 0.016333   | 0.0031557  | 0.0133854  | 4.234E-05  | 0.004916   | 0.0043959  | 3.714E-05  | 0.0048578  |
| 0.0347708  | 0.0028605  | 0.000446   | 3.092E-05  | 7.02E-05   | 0.0624976  | 0.0538584  | 0.017728   | 0.013417   | 0.06011    | 0.0108721  | 0.03469    | 0.0486237  |
| 0.0005399  | 0.0087431  | 0.0001407  | 0.0001577  | 0.0142248  | 9.922E-06  | 0.000129   | 0.0001013  | 0.0025878  | 6.979E-05  | 0.0001301  | 6.262E-06  | 1.849E-06  |

| Control073 | Control072 | Control071 | Control070 | Control069 | Control097 | Control068 | Control082 | Control098 | Control116 | Control100 | Control067 | Control130 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0.0141016  | 0.021183   | 0.017403   | 0.0323841  | 0.0079528  | 0          | 0.0034119  | 0.0048846  | 0          | 0          | 0          | 0.0007282  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.0003518  | 0.0003441  | 0          | 0.0001453  | 0          | 0.0001682  | 0          | 0.0002179  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.000139   | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002505  |
| 0          | 0          | 0          | 0          | 0          | 0.0002306  | 0          | 0          | 5.07E-04   | 0          | 0.0002207  | 0          | 0          |
| 0.0228692  | 0.0259053  | 0.0444272  | 0.0069728  | 0.015645   | 0.000226   | 0.0064572  | 0.007361   | 0.00014    | 0          | 0          | 0.0033066  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0005774  | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0010237  | 0          | 0          | 0.0001061  |
| 0.0064693  | 0.0214737  | 0.005925   | 0.0023869  | 0          | 0          | 0.0046513  | 0.0003538  | 0.0022943  | 0.0044689  | 0.0069184  | 0.0068449  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0.0002343  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0.0005648  | 0          | 0.0001715  | 0.0005357  | 0          | 0.0001346  | 0.0001293  | 0          |
| 0.0001805  | 0.0003412  | 0.0004129  | 0          | 0          | 0.0003115  | 0          | 0          | 9.642E-05  | 0          | 0          | 0          | 0.00E+00   |
| 0          | 0          | 0.0068306  | 0          | 0          | 0          | 0          | 0.0013201  | 0.0014009  | 0          | 0          | 0.0200609  | 0          |
| 0          | 0.0008424  | 0.0021886  | 0.0001397  | 0          | 0          | 0.0001206  | 0.0045253  | 0.0022415  | 0          | 0.0001143  | 0          | 7.408E-05  |
| 0          | 0          | 0.0002839  | 0          | 0          | 0.0006429  | 0          | 0          | 0.000217   | 0          | 0.2970574  | 0          | 0.0002637  |
| 0          | 0.0013602  | 0          | 0.0001107  | 0.0001678  | 0          | 0          | 0.0046731  | 0.0012084  | 0.0001499  | 0.0003356  | 0.000473   | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.6983553  | 0          | 0          | 0.0003079  |
| 8.249E-05  | 0          | 0          | 0.0001299  | 0.000139   | 0          | 0.0014788  | 0.0001085  | 0          | 0.0040284  | 0.0010327  | 0.0011962  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   |
| 7.442E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          |
| 0          | 0          | 0.0016281  | 0.000248   | 0.0009624  | 6.289E-05  | 0          | 0.0121229  | 0.0017871  | 5.34E-05   | 0          | 0          | 0          |
| 0.000152   | 0          | 0.003328   | 7.119E-05  | 0          | 0          | 0          | 0          | 0          | 0.0105983  | 0          | 0          | 9.351E-05  |
| 0          | 0          | 0.0001324  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 9.059E-05  |
| 0          | 0          | 0          | 0          | 0          | 0.0003215  | 0          | 0          | 0.0001564  | 0          | 0.0003195  | 0          | 0          |
| 0          | 0          | 0          | 0          | 8.221E-05  | 0.0010223  | 0          | 0.0009173  | 0.0004615  | 0          | 0.0002987  | 0          | 0          |
| 0          | 0.0011827  | 0.0051243  | 0.0001217  | 0.0038705  | 4.664E-05  | 0.0001059  | 0.0145975  | 0.0126456  | 7.431E-05  | 0          | 8.933E-05  | 0.0013281  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002833  | 0          | 0          | 0          | 0          | 0.000123   |
| 4.126E-05  | 0.0083438  | 0.0170454  | 0.019443   | 0.1116135  | 0.0001164  | 0.0114158  | 0.0098028  | 4.681E-05  | 0          | 2.587E-05  | 0.0053421  | 0          |
| 0          | 0          | 0          | 8.351E-05  | 0.0001943  | 0.000245   | 5.901E-05  | 0          | 0.0062246  | 0.0226907  | 0.0001208  | 0.000167   | 0.0001208  |
| 0          | 0          | 0          | 0          | 0          | 0.0004302  | 0          | 0.0003957  | 2.84E-04   | 0          | 0.0004092  | 0          | 0          |
| 0.0001243  | 0.0001277  | 0.0011707  | 0.0005352  | 0.000261   | 3.877E-05  | 8.747E-05  | 0          | 4.255E-05  | 0          | 2.222E-05  | 0.0091125  | 4.444E-05  |
| 0          | 0          | 0.0031306  | 5.763E-05  | 0.0014882  | 2.435E-05  | 0          | 0.0002293  | 0.0006802  | 0.0010308  | 0.0062771  | 0.0004829  | 0.0048595  |
| 0          | 0          | 0          | 0.0003833  | 0.0002267  | 0          | 0.000145   | 0.0001631  | 3.423E-05  | 0.0001321  | 0          | 0.0002674  | 0.1724677  |
| 0          | 0          | 0          | 0          | 6.774E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 7.747E-05  | 1.402E-05  |
| 0          | 0          | 0          | 0          | 0.000227   | 0          | 0          | 0          | 0          | 0          | 0          | 1.432E-05  | 0          |
| 0          | 0          | 0          | 0          | 0          | 2.265E-05  | 0          | 0          | 1.318E-05  | 4.192E-05  | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 2.532E-05  | 0          | 0          | 0          | 0          | 9.231E-05  | 0          | 0          | 0.0001292  |
| 0          | 0          | 0          | 5.051E-05  | 4.864E-05  | 0.0002547  | 0.0058661  | 0.0023622  | 0.0566226  | 9.977E-06  | 0.0002273  | 0.0003551  | 8.699E-05  |
| 0          | 0          | 8.766E-05  | 5.383E-05  | 2.491E-05  | 0.0002224  | 0          | 3.66E-05   | 8.09E-05   | 3.906E-05  | 0.0089977  | 6.49E-05   | 3.906E-05  |
| 5.825E-05  | 0          | 0          | 0.0721481  | 0.0002413  | 0.0001121  | 7.752E-05  | 5.573E-05  | 0.0001358  | 0.0050799  | 0.0001378  | 0.0001456  | 4.518E-05  |
| 0.0077905  | 0.0209748  | 0.0066852  | 0.0017549  | 0.0001778  | 0.0003305  | 0.0029321  | 0.0005758  | 1.85E-03   | 0.003146   | 0.0057438  | 0.0066573  | 0.0002042  |
| 0.020086   | 0.0318844  | 0.0350259  | 0.0080302  | 0.0132415  | 0.000144   | 0.0069339  | 0.0055822  | 8.945E-05  | 0.000171   | 0.0001086  | 0.0023738  | 1.375E-05  |
| 5.244E-06  | 0.0021107  | 0.0092288  | 0.0001545  | 0.002913   | 0.0001615  | 9.118E-05  | 0.0172855  | 0.0189922  | 5.553E-05  | 8.662E-05  | 0.0001076  | 0.0024327  |

|            |            |            |            |            |            |            |            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|            |            |            |            |            |            |            |            |            |            |            |            |            |
| Control129 | Control128 | Control127 | Control126 | Control125 | Control124 | Control123 | Control122 | Control121 | Control120 | Control119 | Control118 | Control099 |
| 0          | 0          | 0          | 0          | 0.0013541  | 0          | 0          | 0          | 0          | 0          | 0.0001759  | 0.0004582  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0024205  | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002026  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0005338  | 0.0005229  | 0.0010167  | 0.0001126  | 0.0006318  | 0.0005556  | 0          | 0.0002505  | 0          | 0          | 0.0052106  | 0          | 0.0366995  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001186  |
| 0          | 0          | 0          | 0          | 0.0025937  | 0          | 0          | 0          | 0          | 0          | 0          | 0.0003055  | 0.00014    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0004526  | 0.0004339  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.000103   | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002409  | 0          | 0          |
| 0.0509571  | 0.0376673  | 0.0006967  | 0.0017718  | 0          | 0.0497024  | 0          | 0.0062543  | 8.709E-05  | 0.0058651  | 0.0007212  | 0.056139   | 0.0028904  |
| 0.0003178  | 0          | 0          | 0.0001993  | 0.0004121  | 0.0001185  | 0          | 0.0002101  | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0008129  |
| 0.0003239  | 0          | 0          | 0.0002299  | 0.0001904  | 0.0001038  | 0          | 0.0003832  | 0          | 0          | 0          | 0.0002225  | 0.0002472  |
| 0.0529136  | 0.0003331  | 0          | 0.0303375  | 0.0003625  | 0.0021185  | 0          | 0.024871   | 0.0001004  | 0          | 0.001996   | 0.011195   | 0.0024369  |
| 0          | 0          | 0          | 0.0002857  | 0          | 0          | 0          | 0          | 0.0001905  | 0          | 0.0001799  | 0          | 0.0011028  |
| 0.0008822  | 0.000574   | 0.0015596  | 0.0005354  | 0.0004949  | 0.0004056  | 0.0045552  | 0.0012595  | 0          | 0          | 0          | 0          | 0.0002758  |
| 0          | 0          | 0          | 0          | 0.0001535  | 0.0004605  | 0          | 0          | 7.14E-05   | 0.0002053  | 6.783E-05  | 0.0008229  | 0.0008497  |
| 0.0003556  | 0.0008652  | 0.0002063  | 0.0001293  | 0.0003664  | 0          | 0          | 0.000525   | 0.0007051  | 0.0007113  | 0.000565   | 0.0021969  | 0          |
| 0.000113   | 0.0004048  | 0          | 0          | 0.0001069  | 2.53E-02   | 0.0007165  | 0          | 5.5E-05    | 0.0001879  | 0.0001192  | 0          | 5.041E-05  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0010226  | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 8.9E-05    | 0.0002979  | 0          | 0.0053613  | 0          | 0.0002575  | 0          | 0          | 4.272E-05  | 0.0001448  | 4.628E-05  | 0.0003857  | 0.0029346  |
| 0.0007343  | 0          | 0          | 9.245E-05  | 0.0001658  | 5.313E-05  | 0.0005069  | 0.0003315  | 7.544E-05  | 0.000934   | 0.0013612  | 0.013479   | 0          |
| 0.0001314  | 0.0001264  | 0          | 1.42E-04   | 0.0001453  | 0          | 0.0009159  | 6.67E-05   | 4.082E-05  | 0          | 3.086E-05  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 6.267E-05  | 0          | 0.0001009  | 0          | 0.0005909  |
| 0          | 0          | 0          | 0.0116408  | 0.0001352  | 0.0006403  | 0          | 5.455E-05  | 6.878E-05  | 0.0010325  | 4.664E-05  | 0.0002585  | 0.0115863  |
| 0.0003238  | 0.0025157  | 0.7473191  | 8.64E-05   | 1.98E-04   | 0.000193   | 0.0017381  | 0.0004803  | 0          | 0          | 0          | 0          | 0.00E+00   |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 4.003E-05  | 4.865E-05  | 0          | 0          | 0          | 5.173E-05  |
| 0.086501   | 0.0003669  | 0.0007371  | 0.0057386  | 0.0004448  | 0.0001921  | 0.0007822  | 0.0607756  | 0.0003051  | 0.0005138  | 0.0002405  | 0.0006497  | 5.82E-03   |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 2.207E-05  | 0          | 1.13E-04   |
| 0          | 0          | 0          | 0          | 0.0060236  | 0          | 0          | 5.579E-05  | 1.513E-05  | 0.0028922  | 0.0029806  | 0          | 0          |
| 0          | 6.128E-05  | 0          | 1.867E-05  | 0          | 0.0018758  | 0          | 0          | 0.0001185  | 0.0005661  | 0.0004501  | 0.0005434  | 0.0119207  |
| 0.0001957  | 0.0003845  | 0.0004276  | 0.0001486  | 0.0003181  | 0.0001196  | 0.0009112  | 0.0002972  | 0.0001317  | 0.0231451  | 0.0002678  | 0.0005424  | 3.463E-05  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 1.44E-05   | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 4.259E-05  | 0          | 3.989E-05  | 0.0055608  |
| 0.0003148  | 0.0005661  | 0.0002205  | 0.00026    | 0.000485   | 2.01E-04   | 0.2499789  | 0.0004657  | 7.18E-05   | 0.0002548  | 0.0001196  | 0.0003212  | 0          |
| 4.646E-05  | 0          | 3.617E-05  | 1.59E-05   | 0.0002887  | 1.497E-05  | 0          | 0          | 3.804E-05  | 0.013966   | 9.354E-06  | 0          | 0.0001559  |
| 7.105E-05  | 0.0001236  | 0          | 1.015E-05  | 0.0002513  | 4.491E-05  | 0          | 0.030385   | 0.0001157  | 3.137E-05  | 0.0015573  | 9.72E-05   | 7.51E-05   |
| 0.0001115  | 0.0011086  | 0.000755   | 3.968E-05  | 0.1588008  | 5.734E-05  | 0.0219194  | 0.0001844  | 6.445E-05  | 0.0001388  | 5.206E-05  | 0.0002481  | 0.0120719  |
| 0.0444705  | 0.0319753  | 0.0003521  | 0.0025783  | 0.0003507  | 0.0478029  | 0.0008879  | 0.006116   | 6.442E-05  | 0.0062002  | 0.0008917  | 0.0429697  | 0.0032281  |
| 0          | 1.65E-05   | 0.0001539  | 0          | 0.001842   | 5.171E-06  | 0          | 5.941E-05  | 5.6E-05    | 7.658E-05  | 7.35E-05   | 0.0002457  | 8.208E-05  |
| 4.701E-05  | 0.0001259  | 5.304E-05  | 0.0153723  | 0.0001939  | 0.0019227  | 0.0001874  | 5.142E-05  | 6.451E-05  | 0.001042   | 9.163E-05  | 0.0002698  | 0.0117833  |

|            |            |            |            |            |            |            |            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|            |            |            |            |            |            |            |            |            |            |            |            |            |
| Control117 | Control114 | Control113 | Control112 | Control111 | Control110 | Control109 | Control108 | Control107 | Control106 | Control105 | Control104 | Control103 |
| 0.0004746  | 0.0001841  | 0          | 0          | 0          | 0          | 8.591E-05  | 0          | 0          | 0.00018    | 0.0002045  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0004053  | 0          | 0          | 0          | 0          | 0          | 0.0010247  | 0          | 0          | 0          | 0.0002371  | 0.0191332  |
| 0          | 0.0003043  | 0.0001953  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002106  | 0          | 0          | 0.0079957  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          |
| 0.0029915  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0.0003214  | 0.0001273  | 0          | 0.00014    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001856  | 0          | 0          | 0          | 0          | 0.0065134  |
| 0.0001654  | 0          | 0.0001904  | 0.0009645  | 0.0002403  | 0.0020444  | 0.0002091  | 0.0128939  | 9.364E-05  | 0.0211808  | 0.0003652  | 0.0001842  | 0.0003777  |
| 0          | 0          | 0          | 0.000264   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0001462  | 0          | 0.0004072  | 0.0022224  | 0          | 0.0015628  | 0.0001692  | 0.0140597  | 0.0001004  | 0.0202107  | 0.0001233  | 0          | 0          |
| 0.0146533  | 1.33E-04   | 0.0023379  | 0.0151404  | 0.0092154  | 0.0014098  | 0.0916754  | 0.0006314  | 0.0308442  | 0.0060447  | 0.009836   | 0.0005552  | 0.0045696  |
| 0          | 0          | 0          | 0.2360385  | 0          | 0          | 9.157E-05  | 0.0003824  | 0          | 0.0001266  | 0.000369   | 0.0001427  | 0.0002559  |
| 0          | 0          | 0          | 0          | 0.0002103  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 8.445E-05  | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0001038  | 0          | 0          | 0.0004871  | 0.0001459  | 0.0005266  | 0.0005538  | 7.911E-05  | 0.0002794  | 0.3663861  | 1.38E-04   | 0.0002818  |
| 0.0474349  | 0.0002425  | 0.0023242  | 0          | 0          | 8.572E-05  | 0.0719091  | 0.0001274  | 0          | 0.0007543  | 0          | 0.0002719  | 0.0079181  |
| 0          | 0.0080389  | 0.0002752  | 0          | 0.0003662  | 0.0108265  | 0.0001206  | 0.0426287  | 8.466E-05  | 9.101E-05  | 7.408E-05  | 0.0271244  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0014238  | 0          | 0          | 0          | 0          | 0          |
| 0.0002678  | 0.0013816  | 0.0002178  | 0.0016975  | 0          | 0.0010496  | 0.0001482  | 0          | 0          | 0          | 0.00E+00   | 0.0093838  | 9.639E-05  |
| 0.000411   | 0.0006512  | 0.0014271  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0001314  | 0.0002796  | 0.0001344  | 0          | 0          | 3.21E-05   | 0          | 0          | 0          | 0.002209   | 8.55E-05   | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0.00E+00   | 0          | 0.00E+00   | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.000108   | 0.027394   | 0.000337   | 6.289E-05  | 0.0001578  | 0.0062834  | 0.00E+00   | 0.009034   | 0.00E+00   | 0          | 0          | 0.0135172  | 0.000197   |
| 4.463E-05  | 0          | 0.001749   | 0.0102519  | 0.0077017  | 0.0080109  | 0          | 0.0185613  | 0.0001126  | 0.0449827  | 4.357E-05  | 0          | 0.0001158  |
| 0          | 0          | 0.0001424  | 0.0050741  | 0          | 0          | 0          | 0.0001822  | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.0002296  | 0.0006606  | 0.0003606  | 0.0001573  | 0.0003577  | 0.0001476  | 0.0001759  | 0.0002629  | 0.0002863  | 0.0001632  |
| 0          | 4.395E-05  | 0          | 0.0001278  | 0.0005209  | 0.0002792  | 0.000337   | 9.767E-05  | 0.0004021  | 8.383E-05  | 0.000175   | 0.0002629  | 0.3265249  |
| 9.249E-05  | 0.0259102  | 8.933E-05  | 9.012E-05  | 5.06E-05   | 0.005039   | 1.976E-05  | 0.0083442  | 3.874E-05  | 4.348E-05  | 0          | 0.0242627  | 0.0001115  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 4.281E-05  | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0.0079583  | 1.417E-05  | 3.88E-05   | 0.0001146  | 2.71E-05   | 5.912E-05  | 3.51E-05   | 0          |
| 0.0262631  | 0.0001854  | 0.0054386  | 7.683E-05  | 0.0001035  | 6.013E-05  | 0.0349067  | 0.0008551  | 0.0136897  | 2.895E-05  | 0.0150018  | 0.0001275  | 3.619E-05  |
| 2.315E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 8.775E-05  | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 3.452E-05  | 0          | 0.0002388  | 1.56E-05   | 0.0005811  | 0          | 0          | 0          |
| 0.0056598  | 1.35E-02   | 0.0393541  | 0.0001242  | 0.0001709  | 9.537E-05  | 0.0001144  | 0.0537817  | 0.0541254  | 6.453E-05  | 0.0003989  | 0.0001226  | 0.0033871  |
| 1.82E-01   | 0.0001816  | 0.0002843  | 0          | 3.342E-05  | 0          | 0          | 0          | 1.892E-05  | 0          | 0          | 2.134E-05  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 2.102E-05  | 0          |
| 0          | 2.114E-05  | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 3.009E-05  | 6.457E-05  | 0          | 1.352E-05  | 2.096E-05  | 2.502E-05  | 0          | 3.955E-05  | 1.251E-05  | 0          | 0.0120817  | 2.163E-05  | 0          |
| 0.0001353  | 7.533E-05  | 0.1723932  | 2.885E-05  | 0.006478   | 5.93E-05   | 0.0056716  | 0.0002423  | 3.558E-05  | 0.0001821  | 0.0001273  | 0.0001407  | 8.783E-05  |
| 1.528E-05  | 0          | 1.871E-05  | 0          | 0          | 9.67E-06   | 0          | 0          | 0          | 0          | 1.434E-05  | 0          | 0          |
| 0.015616   | 0.0001624  | 9.904E-05  | 8.305E-05  | 0.0002402  | 0.0001243  | 8.828E-05  | 0.0001464  | 0.0328653  | 6.275E-05  | 3.80E-02   | 8.735E-05  | 5.95E-03   |
| 6.284E-05  | 1.08E-04   | 8.119E-05  | 0          | 0          | 0          | 0.00E+00   | 1.261E-05  | 0          | 0          | 2.706E-05  | 2.752E-05  | 0          |
| 0.0134222  | 1.03E-04   | 0.0024339  | 0.014233   | 0.0089153  | 0.0016356  | 0.0860926  | 0.0009644  | 0.0329235  | 0.0051487  | 0.009578   | 0.0003584  | 0.0046048  |
| 0.0063138  | 9.649E-05  | 8.395E-05  | 6.37E-05   | 7.735E-05  | 4.962E-05  | 3.895E-05  | 7.944E-05  | 1.628E-05  | 0.0002784  | 5.127E-05  | 7.658E-05  | 2.487E-05  |
| 8.039E-05  | 0.0235091  | 9.665E-05  | 3.648E-05  | 4.44E-05   | 0.0097791  | 2.44E-05   | 0.0071639  | 2.916E-05  | 3.897E-05  | 4.968E-05  | 0.0171015  | 0.000518   |

| Control102 | Control101 | Control115 | Control066 | Control013 | Control064 | Control029 | Control028 | Control027 | Control026 | Control025 | Control024 | Control023 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0          | 0.0003682  | 0.0362828  | 0.0006218  | 0.0003027  | 0.0264236  | 0.0032646  | 0          | 0          | 0.0020905  | 0.0007814  | 0.0001186  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.0001988  | 0.0002332  | 0.0002447  | 0          | 0          | 0          | 0          | 0          | 0.0001109  | 0          |
| 0          | 0          | 0.0002742  | 0          | 0.0002592  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0002433  | 0.0158062  | 0          | 0.0097422  | 0          | 0          | 0          | 0          | 0          | 0.0001198  | 0.0001271  | 0          |
| 0          | 0          | 0          | 0          | 0.0002405  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0.0811815  | 0.0003373  | 0.0003851  | 0.0498947  | 0.0053975  | 0          | 0.0027051  | 0.0044332  | 0.0006874  | 0          | 0.0002737  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0.000181   | 0          | 0          | 0          | 0          | 0.064585   | 0.0025813  | 0          | 9.988E-05  | 0.0027935  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0002409  | 0.0001548  | 0          | 0          | 0          | 0          | 0.0502743  | 0.0098989  | 6.022E-05  | 0.0002839  | 0.0018725  | 0.0005706  |
| 0.00043    | 0.0049425  | 0.0001388  | 0          | 0          | 0.0156657  | 0.0002613  | 0.0002586  | 0.0046676  | 0.0294507  | 0.0114417  | 0.0354846  | 0.0002694  |
| 0.0002208  | 0.0001562  | 0          | 0          | 0          | 0          | 0.0003259  | 0.000369   | 0.0092538  | 0.0001724  | 0.0001589  | 0.0001374  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001544  | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0.000834   | 0          | 0          | 0          | 0.0022644  | 0          | 0          | 0          | 0          |
| 0.0015625  | 0.0015279  | 0          | 0          | 0.000314   | 0          | 0.0004623  | 0.0005068  | 0.008579   | 0.0001088  | 0.0003659  | 0.0004401  | 0.0013796  |
| 0.0004213  | 0.0109599  | 0.0001567  | 0.0003306  | 0.0022018  | 0.0024932  | 0.0416598  | 0.0004139  | 0.0105558  | 0.0137568  | 0.000311   | 0.01565    | 0.0002572  |
| 0.0143824  | 0.0001841  | 0          | 0.0005419  | 0.0033951  | 0.0002688  | 0.0001058  | 0.0772396  | 0.0127463  | 9.736E-05  | 0.0001947  | 0.0001863  | 0.0001884  |
| 0          | 0          | 0          | 0          | 0.0001278  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0002588  | 0          | 0.0001303  | 0          | 0.0020206  | 0          | 0.0002267  | 0          | 0.0046357  | 0.0163703  | 0          | 0          | 0.0006265  |
| 0          | 0          | 0.0005496  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00E+00   | 0.000246   | 0.0063871  | 0.0244929  | 0.0102154  | 0.0001222  | 0          | 0          | 0.0013153  | 5.041E-05  | 0          | 0.0027192  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 8.296E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 7.08E-05   | 0          |
| 0.0101649  | 0          | 0          | 0.0128764  | 0.0013599  | 0.000318   | 4.272E-05  | 0.0018856  | 0          | 0          | 3.56E-05   | 2.61E-05   | 0.000248   |
| 0.0006025  | 0.000254   | 6.588E-05  | 4.888E-05  | 6.482E-05  | 0          | 0.0001615  | 0.0306951  | 0.0045893  | 0.0001679  | 3.507E-05  | 0.0065201  | 0.0004048  |
| 7.566E-05  | 0          | 0          | 0          | 0.0005147  | 5.177E-05  | 0          | 0          | 0          | 0          | 2.987E-05  | 2.887E-05  | 0          |
| 0.0003     | 0.0005238  | 0.00E+00   | 4.3E-05    | 0.000341   | 4.202E-05  | 0.0330137  | 0.0004436  | 0.0261371  | 0.0002463  | 0.0002756  | 0.0002638  | 0.6587211  |
| 0.0001848  | 0.0008367  | 0          | 0          | 0.000617   | 0          | 0.0003142  | 0.0003891  | 0.0167603  | 0.0002067  | 0.0004053  | 0.0002051  | 0.0006487  |
| 0.0062074  | 0          | 0          | 0.0073126  | 0.0105949  | 0.0005431  | 0          | 0.0040081  | 0.003412   | 4.743E-05  | 6.562E-05  | 2.372E-05  | 0.0001376  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          |
| 0          | 0.0100399  | 0          | 0.0037038  | 7.39E-05   | 0.0198495  | 0          | 6.959E-05  | 0.0021229  | 2.648E-05  | 5.235E-05  | 7.21E-05   | 0.0001854  |
| 8.128E-05  | 0.0001308  | 0.0001971  | 0.0008245  | 0.0033036  | 0.0002199  | 7.516E-05  | 0.0001776  | 0.0028727  | 6.848E-05  | 7.293E-05  | 6.291E-05  | 0.0001631  |
| 0          | 0          | 0          | 0          | 0.0004388  | 0.00E+00   | 0          | 0          | 0.0014095  | 0          | 0          | 0.00E+00   | 0          |
| 0          | 0          | 0          | 0.000243   | 0          | 0.0001277  | 1.986E-05  | 5.816E-05  | 0.0004066  | 0          | 0          | 0          | 3.499E-05  |
| 0.0009375  | 0.0024711  | 0.0001287  | 0.0005174  | 0          | 0          | 0.0002224  | 0.0002869  | 0.0084443  | 0.0166824  | 0.0001721  | 0.0001335  | 0.0003527  |
| 0          | 0          | 7.248E-05  | 0.0001566  | 0          | 0.0002118  | 0          | 0          | 0          | 0          | 0          | 1.087E-05  | 3.906E-05  |
| 0          | 2.258E-05  | 0          | 0          | 2.375E-05  | 0          | 1.83E-05   | 0.0006988  | 0          | 0          | 0          | 0          | 3.893E-05  |
| 0          | 0          | 0          | 0          | 2.488E-05  | 0          | 5.011E-05  | 0.0001674  | 0.0002983  | 0          | 0          | 0          | 3.273E-05  |
| 0          | 2.738E-05  | 0          | 0          | 1.961E-05  | 0          | 1.386E-05  | 0          | 0.0005835  | 0          | 2.299E-05  | 0          | 3.482E-05  |
| 0.2053414  | 0.0245079  | 9.488E-05  | 0          | 0          | 0          | 0.0001519  | 0.0001936  | 0.0076932  | 0.0001282  | 0.0001734  | 0.0001962  | 0.0002923  |
| 0          | 0          | 1.808E-05  | 4.147E-05  | 0.0001908  | 1.372E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 4.645E-05  | 0.0177165  | 0          | 4.306E-05  | 0.0001366  | 9.351E-05  | 0.0001138  | 0.0004168  | 0.005284   | 0.000263   | 0.0001587  | 9.474E-05  | 0.0004097  |
| 2.064E-05  | 1.697E-05  | 5.848E-05  | 9.472E-05  | 0.0003172  | 0.0001195  | 5.779E-05  | 0          | 0.0003938  | 3.899E-06  | 2.133E-05  | 0.00E+00   | 0          |
| 0.0003894  | 0.0061529  | 4.974E-05  | 5.429E-05  | 0.0002278  | 1.87E-02   | 0.0004745  | 0.0006903  | 0.0235746  | 2.99E-02   | 0.0123187  | 0.0399671  | 0.000951   |
| 8.23E-05   | 0.0001062  | 0.0698774  | 0.0005319  | 0.0001654  | 0.0509656  | 0.0065471  | 9.462E-05  | 0.0030351  | 0.0040484  | 0.0014218  | 4.137E-05  | 0.0001433  |
| 0.0080723  | 7.805E-05  | 6.277E-05  | 0.0112968  | 0.0117623  | 0.0025421  | 6.391E-05  | 0.0041716  | 0.002306   | 3.041E-05  | 4.467E-05  | 4.331E-05  | 0.0001156  |

| Control022 | Control021 | Control020 | Control019 | Control018 | Control017 | Control016 | Control015 | Control014 | Control013 | Control012 | Control011 | Control010 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0.0927954  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0101374  | 0.0006177  | 0.000225   |
| 0          | 0          | 0          | 0.0004524  | 0          | 0          | 0          | 0.0001237  | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.0856329  | 0.0001071  | 0.0001376  | 9.559E-05  | 0.00E+00   | 0.0003327  | 0          | 0          | 0          | 0          |
| 0          | 0.000432   | 0          | 0          | 0.0001803  | 0.0001164  | 0          | 0.0002367  | 0.000308   | 0          | 0.0078207  | 0.000616   | 0          |
| 0          | 0.0001089  | 0.0003304  | 0.0001852  | 0          | 0.000374   | 0          | 0.0041213  | 0          | 0.0042048  | 0          | 0.0116994  | 0.0002251  |
| 0          | 0.0003459  | 0.0003657  | 0.0008434  | 0.0002372  | 0.0006292  | 0.0001153  | 4.25E-04   | 0.0010839  | 0          | 0          | 0          | 0          |
| 6.55E-02   | 0.00E+00   | 0.0004583  | 0.0002578  | 0          | 1.08E-04   | 0          | 0          | 0          | 0          | 0.0154954  | 0.0002196  | 0.0005983  |
| 0          | 0          | 0          | 0          | 0          | 0.0002454  | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0023971  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0001635  | 0          | 0          | 0.0001233  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0006452  | 0          |
| 0          | 6.532E-05  | 0          | 0          | 0.004077   | 0.0002803  | 0.0147866  | 0.0002994  | 0.0002177  | 0.039186   | 0.0010016  | 0          | 0.002689   |
| 0          | 0.0014489  | 0          | 0          | 0          | 8.888E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 7.987E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001997  | 0          |
| 0          | 2.90E-04   | 0.0006149  | 0.0005146  | 6.334E-05  | 0.5070676  | 0.0005463  | 0.0006044  | 0.0010187  | 0          | 0.0056214  | 0.0001821  | 0.0008656  |
| 0.0006131  | 0.0003016  | 0          | 0.0001656  | 0.0001953  | 0.0003659  | 0          | 0.0001904  | 0          | 0          | 0          | 0          | 0          |
| 0.0001469  | 0.0001323  | 0.0003992  | 0.0442755  | 0.0220055  | 0.0001788  | 7.837E-05  | 0.0051775  | 0.0001984  | 0.0344251  | 0.0008107  | 0          | 0          |
| 0.0003111  | 0          | 0          | 0.000544   | 0.0010583  | 0          | 0.0001333  | 0.0038861  | 0          | 0          | 0.0015155  | 0.0001503  | 0.0003916  |
| 0          | 0          | 0.0003853  | 0.0002637  | 0.0002393  | 0.0005314  | 0.0002596  | 0.00043    | 0.0011642  | 0.0006186  | 0          | 0          | 0          |
| 0.0003427  | 1.96E-04   | 0.0001196  | 0.0021795  | 0.0005194  | 0.0001856  | 7.50E-05   | 2.52E-03   | 0.0005284  | 0.0012959  | 0          | 0.0004141  | 0.0003606  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001016  | 0          | 0.0001108  | 0          |
| 0.0007104  | 2.75E-05   | 0          | 6.416E-05  | 0.0002185  | 1.18E-04   | 5.805E-05  | 0.0047327  | 0.0001299  | 0          | 0.0027177  | 0.0003834  | 9.777E-05  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 6.049E-05  | 0          | 0          | 0          | 0          | 0.0001023  |
| 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 6.883E-05  | 7.357E-05  | 0.0003572  | 0.0002575  | 0.0341769  | 0.0002029  | 0.0003869  | 0.0305624  | 0.0003513  | 0          | 0.0020648  | 0.0001768  | 0.0266215  |
| 0.000306   | 0          | 6.907E-05  | 0          | 3.719E-05  | 0          | 0          | 0          | 8.182E-05  | 4.463E-05  | 0          | 0.0154713  | 0.0001987  |
| 0.0002031  | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001563  | 0          | 0          | 0          |
| 5.44E-04   | 0.0001622  | 6.352E-05  | 0.0003078  | 0.0001788  | 0.000172   | 0.1377577  | 0.0001524  | 0.0001534  | 0          | 0.000343   | 0          | 0.0001124  |
| 0.0004371  | 0.2864798  | 0.0008807  | 0.0003516  | 0.0004053  | 0.0014227  | 0.0005413  | 0.0005527  | 0.0010028  | 0          | 0.0031141  | 0.0005266  | 0.0541178  |
| 0.0001802  | 7.115E-05  | 8.854E-05  | 0.0015289  | 0.0053836  | 0.000147   | 0.0014325  | 0.0104787  | 0.0006285  | 9.17E-05   | 0.0041401  | 0.0001866  | 0.0027551  |
| 0          | 0.00E+00   | 0          | 0          | 0          | 0.00E+00   | 0.00E+00   | 0          | 0          | 0.0001308  | 0          | 0          | 0          |
| 0.0803624  | 3.387E-05  | 0.0025793  | 0.0001102  | 5.36E-05   | 2.032E-05  | 6.282E-05  | 0.0001681  | 0.0002039  | 0          | 0.0021488  | 0.0004921  | 0.0002057  |
| 0.0002895  | 0.0351305  | 0.0021083  | 0.0083224  | 0.0429496  | 0.0003223  | 2.00E-04   | 0.0002745  | 0.0005077  | 0.0227174  | 0.0002071  | 7.961E-05  | 0.0167204  |
| 0          | 0.000176   | 0.0003376  | 0.0004312  | 8.61E-05   | 3.20E-01   | 2.29E-04   | 0.0003316  | 0.0010024  | 0          | 0.0031925  | 0.0007133  | 0.0007618  |
| 2.695E-05  | 1.702E-05  | 0          | 0          | 0          | 1.371E-05  | 0          | 0          | 0.0001466  | 2.884E-05  | 0.0008444  | 3.073E-05  | 0          |
| 0.0002009  | 0.0003259  | 1.867E-05  | 0.0042597  | 2.76E-05   | 5.925E-05  | 0.0015556  | 0.0001258  | 0.0004273  | 0          | 0.0036006  | 0.0004972  | 0.0005463  |
| 0          | 2.295E-05  | 0          | 0          | 1.49E-05   | 0          | 0          | 4.792E-05  | 0          | 0.0002138  | 0.0019513  | 0.0003294  | 0.0003584  |
| 0          | 0          | 0          | 9.071E-05  | 0.00E+00   | 0          | 0          | 2.959E-05  | 0          | 0          | 0          | 0.000111   | 0          |
| 0          | 4.295E-05  | 1.739E-05  | 0          | 0          | 3.41E-05   | 0          | 0          | 0          | 0          | 0          | 0.0001878  | 0          |
| 0          | 0          | 0          | 1.487E-05  | 0          | 0          | 3.009E-05  | 1.318E-05  | 8.823E-05  | 0          | 0          | 0          | 0          |
| 0.0001894  | 0          | 0          | 0          | 0          | 0          | 0          | 1.987E-05  | 0          | 0.0002228  | 0          | 6.924E-05  | 0.0003757  |
| 0          | 0.0084188  | 0.0006604  | 0.0155911  | 8.69E-03   | 2.80E-04   | 0.0001665  | 3.30E-02   | 0.0003386  | 3.274E-05  | 0.0001138  | 0.0002208  | 3.648E-05  |
| 0.0001378  | 0.0034185  | 0.0008551  | 0.0005638  | 0.0078348  | 2.12E-04   | 9.381E-05  | 0.0022248  | 0.0002476  | 1.722E-05  | 0.0003371  | 0.0001424  | 6.182E-05  |
| 0          | 6.88E-05   | 9.587E-05  | 0.0367567  | 0.0001238  | 0.0002163  | 0.0001243  | 0.0001706  | 0.0005383  | 8.761E-05  | 0.0004103  | 6.789E-05  | 6.055E-05  |
| 0.000564   | 9.81E-05   | 0.000261   | 0.0001865  | 4.65E-03   | 4.65E-04   | 0.018029   | 0.0002078  | 0.0004081  | 0.0394391  | 0.0009199  | 0.0001153  | 0.0027837  |
| 0.0708634  | 8.593E-05  | 0.0005525  | 8.351E-05  | 7.592E-05  | 0.0003008  | 0.0001129  | 0.0001605  | 0.0001607  | 1.21E-05   | 0.0310179  | 0.0007051  | 0.0005459  |
| 6.538E-05  | 9.986E-05  | 0.000194   | 0.0012158  | 0.0137342  | 3.64E-04   | 0.0058059  | 0.0135762  | 0.0003473  | 3.659E-05  | 0.0157059  | 0.0002563  | 0.0058259  |

| Control009 | Control008 | Control007 | Control006 | Control005 | Control004 | Control003 | Control002 | Control001 | Control030 | Control031 | Control032 | Control033 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0.0016691  | 0.0006873  | 6.34E-04   | 0.0009286  | 0.0005359  | 0.0002127  | 5.56E-04   | 0.0005114  | 0.0015137  | 0.0003396  | 0          | 0.0015587  | 0          |
| 0          | 0.0016626  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0005582  | 0.0003288  | 0.0003709  | 0          | 0          |
| 0.0002892  | 0          | 0.0003306  | 0.0002705  | 0.0001653  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.0078177  | 0          | 0.000374   | 0.0002614  | 0          | 0.0002142  | 0          | 0          | 0.0002941  | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0012889  | 0.0003087  | 0.0002323  | 0.0010375  | 0          | 0.0001209  | 0.0014289  | 0.0008624  | 0.0002355  | 0.0003437  | 0.0003087  | 0.0012093  | 0.000261   |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002769  | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0.0006149  | 0.0003496  | 0          | 0.1016312  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0.000281   | 0.000952   | 0          | 0.0723517  |
| 0          | 0.0001334  | 0.0001198  | 0          | 0.0052201  | 0          | 0.0030918  | 0          | 0          | 0.0005089  | 0.0011023  | 0.0127291  | 0          |
| 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0.0001077  | 0.0001454  | 0          | 0.0004875  | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.4597875  | 0.0002454  | 0.0010055  | 0.0008867  | 0.0004698  | 0.0001504  | 0.0002666  | 0.0060172  | 0.0011322  | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.001963   | 0          | 0          | 0          |
| 0          | 9.552E-05  | 0          | 0.0157014  | 0.0010237  | 0.00E+00   | 0.0017683  | 0          | 0.0001812  | 0.0002278  | 0.0089394  | 0.0103648  | 0.0001151  |
| 0          | 0          | 0.0050037  | 0.0003535  | 7.831E-05  | 0          | 0.0014414  | 0.0045719  | 0.0003365  | 0          | 0.0003662  | 0.000999   | 0.0051878  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0002606  | 6.962E-05  | 0.0008354  | 0.0002785  | 0.0002499  | 0.0017172  | 0.0005623  | 0.0011478  | 0.0024205  | 0          | 0.0364962  | 0.0522524  | 0.0002588  |
| 0          | 0          | 0          | 0          | 0.021022   | 0.0002217  | 5.234E-05  | 9.391E-05  | 0.0002386  | 0          | 0.0004218  | 0.0017997  | 0.0010392  |
| 0.0006508  | 5.958E-05  | 0.0007577  | 8.708E-05  | 0.0495158  | 0.0003697  | 1.10E-04   | 2.02E-04   | 0.0964911  | 0.0399222  | 0.0632525  | 0.0001207  | 0.0002429  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001973  | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 7.076E-05  | 0          | 0          | 0          | 6.1E-05    | 0          | 0.0006954  |
| 0.0006123  | 4.865E-05  | 0.0021182  | 0.0006337  | 8.781E-05  | 0.0002765  | 0.0049555  | 0.0035398  | 8.425E-05  | 0.0001175  | 0.0001887  | 0.0001922  | 0.000483   |
| 0.0001296  | 0          | 0.0001275  | 7.969E-05  | 3.507E-05  | 9.245E-05  | 0          | 0          | 6.482E-05  | 0.0006747  | 0.0021709  | 9.67E-05   | 0.0266317  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0002877  | 0          | 0.0014096  | 0          | 0          |
| 0          | 7.915E-05  | 9.48E-05   | 0          | 0.000127   | 0.0001016  | 0.00E+00   | 0.000342   | 0          | 0.0011384  | 0          | 0          | 0          |
| 5.55E-04   | 0.0002181  | 0.2197105  | 0.0170883  | 0.0002303  | 0.000127   | 0.0003223  | 0.00042    | 0.0003695  | 0.0008115  | 0.016219   | 0          | 3.093E-05  |
| 0.0020135  | 3.162E-05  | 0.0081964  | 0.0039409  | 0.0002917  | 9.091E-05  | 0.0235757  | 0.0183012  | 0.0003644  | 0.0001463  | 0.0001289  | 0.0001336  | 0.0002237  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0004681  | 0.0002346  | 0.0006639  | 0.0005099  | 0.0129093  | 4.96E-04   | 0.0061002  | 0.0009848  | 0.0004748  | 0.0003849  | 0.000303   | 0          | 0          |
| 0.000157   | 4.788E-05  | 9.019E-05  | 4.12E-05   | 7.516E-05  | 0.0001347  | 0.0031466  | 0.0005467  | 0.0001164  | 0.0003023  | 0.0004276  | 0.000407   | 0.0029918  |
| 0.3010677  | 0.0004172  | 0.0013928  | 0.0009594  | 0.0009621  | 0.0007984  | 0.0005814  | 0.0014444  | 0.0007117  | 5.761E-05  | 0          | 0          | 0          |
| 0          | 3.972E-05  | 0          | 0          | 1.844E-05  | 7.943E-05  | 0          | 7.092E-05  | 0          | 0.0002132  | 0.0001603  | 7.518E-05  | 0          |
| 0.0004046  | 0.0002605  | 0.0052118  | 0.0013575  | 0.0007305  | 0.3429919  | 0.0002431  | 0.0240999  | 0.0004083  | 0.0006153  | 0.0004338  | 0.0004915  | 0.0002804  |
| 0.0005734  | 0.0001462  | 0.0004103  | 0.0004284  | 0.0003169  | 0.0002565  | 0.000209   | 0.0001864  | 0.0007457  | 0          | 0.0002227  | 0.0004325  | 0.0002432  |
| 0.0002254  | 0          | 0          | 0          | 7.202E-05  | 1.62E-04   | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 4.47E-05   | 0          | 0          | 5.42E-05   | 0          | 0.000134   | 2.352E-05  | 0          | 0          | 4.909E-05  | 0          |
| 0.00E+00   | 0          | 0.00E+00   | 0          | 0          | 0.00E+00   | 1.217E-05  | 0.00E+00   | 0          | 3.313E-05  | 3.887E-05  | 0.0238111  | 0          |
| 0          | 1.218E-05  | 0          | 0.0185972  | 9.456E-05  | 3.205E-05  | 2.596E-05  | 2.757E-05  | 0          | 0.0004276  | 0.000292   | 0.0018165  | 0.0001628  |
| 8.294E-05  | 0.0003754  | 4.77E-05   | 0.0049279  | 7.608E-05  | 1.902E-05  | 1.434E-05  | 1.871E-05  | 0          | 0          | 1.621E-05  | 0.011524   | 2.837E-05  |
| 0.0002688  | 4.122E-05  | 0.000116   | 0.0017683  | 0.0091337  | 6.92E-05   | 7.751E-05  | 0.002807   | 0.0001978  | 0.0003156  | 0.0031106  | 0.0293786  | 0.0001753  |
| 4.885E-05  | 7.339E-05  | 8.05E-05   | 0.0001491  | 7.614E-05  | 9.88E-05   | 3.922E-05  | 4.587E-05  | 0.0001085  | 0          | 0.0001303  | 8.83E-05   | 0.0001112  |
| 0.0001901  | 0.0001221  | 0.0001995  | 0.00015    | 0.005099   | 0.0001688  | 0.0028243  | 2.56E-04   | 0.0002213  | 0.0010323  | 0.001173   | 0.0124023  | 6.195E-05  |
| 7.64E-04   | 0.0002693  | 0.0008042  | 0.0008551  | 0.0006601  | 0.0006104  | 0.0009934  | 0.0005692  | 0.0005572  | 0.0001603  | 0.0009196  | 0.002254   | 0.0001129  |
| 0.0021812  | 0.0001369  | 0.0148999  | 0.0067247  | 0.0002197  | 0.0002326  | 0.0244992  | 0.0224049  | 0.0002641  | 0.0001179  | 0.0002475  | 0.0004099  | 0.0002719  |

|            |            |            |            |            |            |            |            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|            |            |            |            |            |            |            |            |            |            |            |            |            |
| Control063 | Control062 | Control061 | Control060 | Control059 | Control058 | Control057 | Control056 | Control055 | Control054 | Control053 | Control052 | Control051 |
| 0.0370028  | 0.0005564  | 0.0015055  | 0          | 0.0062428  | 0.0001595  | 0          | 0          | 0          | 0.0008059  | 9.409E-05  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0004894  | 0.0005047  | 0.0001491  | 0          | 0.0723689  | 8.794E-05  | 0.0004282  | 0.0007265  | 0.0005009  | 0.0003671  | 0.000975   | 0.0020227  | 0.0004894  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0002636  | 0          | 0          | 0.0255553  | 0.00E+00   | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0067691  | 0.0022118  | 0.0046464  | 0          | 0.0118324  | 0.0008847  | 0.0003151  | 0.0008052  | 0          | 0.0012857  | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.0001982  | 0          | 0.0413554  | 0.000107   | 0          | 0          | 0          |
| 0.0002403  | 0.0003683  | 0          | 0          | 0          | 0          | 0          | 0.0003933  | 0.0004869  | 0          | 0.0006648  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.0002437  | 0          | 0          | 0          | 0.000109   | 0          | 0.0002466  | 0          | 8.889E-05  | 0.0002351  | 0.000324   | 0.0001319  |
| 0.0033286  | 0.0004219  | 0.0009526  | 0.0002096  | 0.0017799  | 0.0041178  | 0          | 0.0068286  | 0.0001633  | 0.0018779  | 0.0026509  | 0          | 6.26E-05   |
| 0.0182328  | 0          | 0.0001293  | 0.0004228  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.0001651  | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001821  | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0044966  | 0.0014425  | 0          | 0          | 0.0012099  | 0          | 0          | 0.032669   | 0.0002033  | 0          | 0.0040974  | 0.0002817  | 0          |
| 0          | 0.0003069  | 0          | 0          | 0          | 0          | 0          | 0          | 0.0004932  | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0.0001764  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   |
| 0.0001285  | 0          | 0.000141   | 0.0001464  | 0.000548   | 0          | 0.0001017  | 0          | 0.0025186  | 0          | 0.000116   | 0.0002178  | 7.319E-05  |
| 0          | 0          | 0          | 0.000137   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 7.638E-05  | 0.0164818  | 0.0007715  | 0.0003758  | 0.0003086  | 0.001572   | 0          | 0.0009319  | 0          | 5.805E-05  | 0.001381   | 0          | 0.0003269  |
| 0          | 0          | 0          | 0.0001195  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 8.052E-05  | 0          | 0.0001074  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 7.951E-05  | 0          | 0.0024493  | 0          | 0.0001151  | 0.00E+00   | 0.0001365  | 0          | 0          | 3.56E-05   | 3.441E-05  | 0          | 0          |
| 0.0043035  | 0.0025035  | 5.207E-05  | 0.0002518  | 0.000119   | 0.0001307  | 5.632E-05  | 0.0033631  | 0.0004197  | 0.0005122  | 0.0012634  | 0.0002295  | 0.0001084  |
| 0          | 0          | 0.00E+00   | 0          | 0.0005714  | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001344  | 3.584E-05  |
| 0.0073994  | 0          | 0          | 0.0001603  | 0          | 0.0112954  | 0          | 3.518E-05  | 0          | 0          | 3.713E-05  | 0          | 3.029E-05  |
| 0.0066099  | 0          | 3.26E-05   | 0          | 0          | 0          | 0.0001009  | 0          | 0          | 0          | 6.186E-05  | 0.0002002  | 0          |
| 0.0004735  | 0.0003225  | 0.0128045  | 0.0002071  | 0          | 2.293E-05  | 8.696E-05  | 0.0001051  | 0.000181   | 2.846E-05  | 7.668E-05  | 0.0002886  | 7.352E-05  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 8.329E-05  |
| 0.0224238  | 0.0154134  | 0.0041183  | 0.0020521  | 0.015943   | 0.0272252  | 0.0008598  | 0.0003818  | 0.0018088  | 0.0005469  | 0.0006614  | 0.0011301  | 0.0006331  |
| 0.0002166  | 0.0026433  | 0.0418818  | 0.0006124  | 0.000275   | 1.726E-05  | 2.561E-05  | 7.404E-05  | 0.0018834  | 2.839E-05  | 0.0046987  | 7.905E-05  | 0.0001013  |
| 0          | 0          | 0.00E+00   | 0          | 4.253E-05  | 0.00E+00   | 0          | 0          | 9.045E-05  | 0          | 8.668E-05  | 0          | 0          |
| 0.0003059  | 0.0133796  | 1.42E-04   | 0.0004719  | 0.0002236  | 0.0016203  | 0.0003106  | 0.0178439  | 9.314E-05  | 0.0001423  | 0.0056955  | 0.0002449  | 6.667E-05  |
| 5.357E-05  | 0.0001907  | 0.00E+00   | 0.0029646  | 0.0002658  | 8.441E-05  | 7.711E-05  | 0.0190809  | 8.157E-05  | 0.0004858  | 1.664E-05  | 0.0005183  | 0.0013644  |
| 0.0004578  | 0.0003294  | 0.0001397  | 0.0004929  | 0.0003048  | 0.0013203  | 0.0016352  | 0.0009877  | 0.0026     | 0.0022215  | 0.0019585  | 0.0042915  | 0.2601073  |
| 9.46E-05   | 0          | 0          | 0          | 0          | 0          | 4.283E-05  | 1.752E-05  | 0.0002772  | 0          | 1.246E-05  | 0          | 8.915E-05  |
| 0          | 0          | 0          | 9.613E-05  | 0          | 0          | 0.0001316  | 0          | 0          | 1.193E-05  | 5.182E-05  | 0          | 1.977E-05  |
| 0          | 0          | 0          | 0          | 0          | 1.014E-05  | 0          | 1.386E-05  | 2.4E-05    | 0          | 1.454E-05  | 0          | 7.809E-05  |
| 0.0001718  | 0          | 0          | 0          | 0          | 0          | 1.635E-05  | 0          | 2.564E-05  | 0          | 0          | 0          | 3.975E-05  |
| 2.12E-05   | 0.0008259  | 3.336E-05  | 0          | 3.149E-05  | 3.461E-05  | 7.577E-05  | 0.0122389  | 0.0076593  | 4.989E-06  | 5.02E-05   | 0.0001528  | 2.151E-05  |
| 7.751E-05  | 0.0007687  | 0.0005223  | 8.12E-05   | 0.0082362  | 0.0619867  | 0.0004275  | 0.0004595  | 0.0258736  | 2.861E-05  | 0.004675   | 0.0006687  | 0.0007407  |
| 0.0003387  | 0.0003649  | 0.0001186  | 0.00025    | 0.0014946  | 0.0001271  | 0.0001257  | 7.912E-05  | 0.0001947  | 0.0004541  | 0.0002814  | 0.0813881  | 0.0001018  |
| 0.0047252  | 0.0005618  | 6.41E-04   | 0.000154   | 0.0013452  | 0.0037969  | 4.052E-05  | 0.0072736  | 0.0006814  | 0.0032416  | 0.002873   | 9.507E-05  | 1.96E-04   |
| 0.0086764  | 0.0026002  | 0.0033076  | 0.0004393  | 0.007318   | 0.0012859  | 0.0002624  | 0.0006895  | 0.0001313  | 0.001366   | 0.0001596  | 0.0002189  | 0.0001065  |
| 0.0001696  | 0.0003286  | 0.0115821  | 0.0001294  | 0.0001726  | 9.854E-05  | 0.0001643  | 7.783E-05  | 0.0003232  | 7.696E-05  | 0.000198   | 0.00038    | 0.000103   |



| Control050 | Control065 | Control049 | Control047 | Control046 | Control045 | Control044 | Control043 | Control042 | Control041 | Control040 | Control039 | Control038 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 0          | 1.62E-02   | 0.000225   | 0          | 0          | 0.0013991  | 0.0005155  | 0          | 0          | 0          | 0          | 0.0009041  | 0.0005523  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0003132  |
| 0.0003632  | 0.0001759  | 0.000738   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.0001127  | 0.0507597  |
| 0          | 0          | 0          | 0.0007117  | 0.0001816  | 0.0008533  | 0.0140995  | 0.000374   | 0.8399014  | 0.0006972  | 0          | 0.000719   | 0          |
| 0          | 0.0001351  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0.00E+00   | 0          |
| 0          | 0.0297369  | 0.0002673  | 0          | 0          | 0.0018045  | 0.000366   | 0.00014    | 0.0016294  | 0.00E+00   | 0.0002037  | 0.0018363  | 0.0014639  |
| 0.000107   | 0          | 0.0001919  | 0          | 0          | 0          | 0          | 0.0001699  | 0          | 0          | 0          | 0          | 0          |
| 0          | 0          | 0.0580803  | 0.0019976  | 0          | 0.0009426  | 0.01771    | 0.0001529  | 0          | 0.0044291  | 0.0002154  | 1.94E-04   | 0.0001092  |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 9.18E-05   | 0.0001405  | 0.050908   | 0.0010209  | 0          | 0.0001233  | 0.0125256  | 0          | 0          | 0.0016058  | 0          | 0          | 0.0001147  |
| 0.00E+00   | 0.0088943  | 0          | 0.0047819  | 0.0101598  | 0.0059685  | 0.0026209  | 0.000264   | 0.0005661  | 0.0028441  | 0.0001687  | 0.0018752  | 0.0033013  |
| 0          | 0          | 0          | 0.0004174  | 0          | 0.0824168  | 0.000571   | 0.0002801  | 0.0038513  | 0          | 0          | 0          | 0          |
| 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 9.584E-05  |
| 0          | 0.000132   | 0          | 0          | 0.0001452  | 0.0001161  | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.00E+00   | 0          | 0          | 0.1818505  | 0.0004203  | 0.0004302  | 0.0003807  | 0.0003659  | 0          | 0          | 0          | 0          | 0          |
| 8.082E-05  | 0.0021014  | 0          | 0.0058314  | 0.0258017  | 0.0021601  | 0.0001445  | 0.0003551  | 0.0005021  | 0.0055448  | 0.0002523  | 0.0006956  | 0.0002008  |
| 0.0041528  | 0          | 0.0001545  | 0          | 0          | 0.0081532  | 0.0009504  | 0          | 0.0002307  | 0          | 0.0002984  | 0.0080283  | 0.0002921  |
| 0          | 0          | 0.0003225  | 0.0007038  | 0.0002434  | 0.0009836  | 0.0011013  | 0.0014197  | 0.0006389  | 0.5638509  | 0          | 0          | 0          |
| 6.248E-05  | 0          | 0.000614   | 0          | 0.0002285  | 0          | 0.0003856  | 0.0001107  | 0          | 0          | 0          | 0.0005444  | 0.0028507  |
| 0          | 0          | 0          | 9.237E-05  | 0.0002556  | 0.0006974  | 0.0007297  | 0.0007667  | 0.0002879  | 0.2372348  | 0.0014918  | 0.0005681  | 0.0007975  |
| 4.888E-05  | 0.0035564  | 0.0001024  | 0.000249   | 7.027E-05  | 0.0028155  | 0          | 0          | 0.0011335  | 0          | 0.000967   | 0.000194   | 0.0435106  |
| 0          | 0          | 0.0001916  | 0          | 0          | 0          | 8.21E-05   | 0          | 0          | 0          | 0          | 0          | 0          |
| 0          | 0.00E+00   | 0.0001854  | 0          | 0          | 0          | 0          | 0          | 0          | 7.32E-05   | 0          | 3.172E-05  | 0          |
| 0.0072256  | 5.577E-05  | 0.0001626  | 0          | 6.764E-05  | 0.0083719  | 7.12E-05   | 0          | 0.0001092  | 0.0001293  | 7.357E-05  | 0.0184632  | 0.0002967  |
| 0.0001934  | 0          | 0.0290544  | 0.0354757  | 0.0001211  | 0.0075848  | 0.0220392  | 0.0002688  | 0.0001923  | 0.0115206  | 0.0004909  | 5.313E-05  | 8.607E-05  |
| 0          | 0.00E+00   | 0          | 0.000896   | 0.000226   | 0.0001901  | 0.0904878  | 0.00045    | 0.0069954  | 0.038346   | 0          | 0          | 0          |
| 0.00E+00   | 4.984E-05  | 0.0003342  | 0          | 0          | 0          | 0.0023775  | 5.472E-05  | 0          | 4.886E-05  | 0          | 0          | 0          |
| 0          | 8.383E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          |
| 0.0240074  | 0.0001818  | 0.0001075  | 7.668E-05  | 0          | 0.007058   | 9.17E-05   | 0.0001581  | 0          | 9.17E-05   | 0.0003138  | 0.0199598  | 0.0002103  |
| 0.00E+00   | 0          | 0          | 0.000481   | 0.0005316  | 0.0004297  | 0.0003814  | 0.0003837  | 0.0006935  | 0.0003176  | 0          | 0          | 0          |
| 0.0003627  | 0.0172918  | 0.0002993  | 0          | 0          | 0          | 0          | 0          | 0          | 0.0057381  | 7.76E-05   | 0          | 0          |
| 0.0003552  | 7.19E-03   | 0.0010188  | 0.0003006  | 0.0959857  | 0.0004548  | 0.0073893  | 0.0006018  | 0.0047009  | 0.0003953  | 0.0007042  | 0.0036626  | 0.007666   |
| 0          | 0.00E+00   | 0          | 0          | 3.015E-05  | 4.253E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 2.046E-05  |
| 0.0001087  | 0.0002506  | 0.0013816  | 0          | 0          | 0          | 0          | 0          | 0          | 2.459E-05  | 0.001618   | 0.001017   | 0          |
| 9.943E-05  | 0          | 7.589E-05  | 2.354E-05  | 0          | 4.951E-05  | 2.435E-05  | 0.001166   | 0.0003263  | 2.841E-05  | 0.2298352  | 0.0072142  | 0.000321   |
| 0.0012853  | 0.000486   | 0.0015446  | 0.0003036  | 0.0003886  | 0.0005029  | 0.0004172  | 0.0003805  | 0.0008657  | 0.0001897  | 0.0003306  | 0.0002255  | 0.0002311  |
| 1.168E-05  | 0.00E+00   | 2.102E-05  | 0          | 1.947E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 8.215E-05  |
| 2.25E-05   | 4.977E-05  | 0.0001053  | 0          | 0          | 1.466E-05  | 0          | 0.00E+00   | 0          | 5.318E-05  | 0          | 0          | 0          |
| 0          | 0          | 2.231E-05  | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 2.569E-05  | 5.07E-06   | 0          |
| 0          | 0          | 0          | 0.0004734  | 0.0003981  | 0.0005068  | 0.0003327  | 0.2721921  | 0.0004686  | 0.0003648  | 0.0001648  | 5.449E-05  | 0.0002148  |
| 1.403E-05  | 1.372E-05  | 3.929E-05  | 3.399E-05  | 0.0163375  | 2.37E-05   | 0.0023413  | 3.274E-05  | 0.0036019  | 0          | 1.93E-05   | 1.029E-05  | 0.0014614  |
| 0.0001227  | 3.045E-05  | 0.0001489  | 9.597E-05  | 0.0001744  | 0.0063694  | 0.0009692  | 8.54E-04   | 0.0014663  | 1.753E-05  | 0.0003836  | 2.584E-05  | 0.0115492  |
| 0.0016554  | 0.0536776  | 0.0001592  | 0.0001901  | 0.0001108  | 0.0001628  | 0.0001064  | 0.0002291  | 0.0001816  | 7.431E-05  | 8.669E-05  | 4.426E-05  | 0.0143649  |
| 9.91E-05   | 0.0083132  | 5.87E-05   | 0.0052984  | 0.0136843  | 0.0061767  | 0.0028415  | 0.0005042  | 0.0003555  | 0.0027465  | 0.0001877  | 2.11E-03   | 0.0034251  |
| 7.23E-05   | 0.028757   | 0.0002499  | 0          | 7.152E-06  | 0.0023487  | 0.0003613  | 4.852E-05  | 0.0008122  | 7.152E-06  | 0.0001829  | 0.0015941  | 0.0015861  |
| 0.0255989  | 0.0003346  | 0.0001657  | 6.062E-05  | 5.621E-05  | 0.0091449  | 0.000179   | 0.0002273  | 9.42E-05   | 7.19E-05   | 0.0002887  | 0.0242336  | 0.0001589  |

|            |            |            |            |            |            |              |              |              |              |              |              |              |
|------------|------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|            |            |            |            |            |            |              |              |              |              |              |              |              |
| Control037 | Control036 | Control035 | Control034 | Control048 | Control132 | COVID-19-052 | COVID-19-051 | COVID-19-049 | COVID-19-048 | COVID-19-047 | COVID-19-046 | COVID-19-038 |
| 0          | 0.0015218  | 0          | 0          | 0.0008059  | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     |
| 0          | 0.0001431  | 0          | 0          | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0.0001933    |
| 0          | 0.0001032  | 0          | 0          | 0.001128   | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     |
| 0.0004245  | 0.0002216  | 0          | 0.0001127  | 0          | 0          | 0.0003418    | 0            | 0            | 0            | 0            | 0            | 0            |
| 0          | 0          | 0          | 0          | 0.0002869  | 0.0016957  | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0          | 0          | 0          | 0          | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0004201  | 0.0047705  | 0.0001368  | 0          | 0.0022564  | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0          | 0          | 0          | 0          | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0001373  | 0.0002872  | 0.000284   | 9.988E-05  | 0          | 0          | 0            | 0.0567163    | 0            | 0            | 0            | 0            | 0            |
| 0          | 0          | 0          | 0          | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0          | 0.0001807  | 0.0002782  | 0.0003154  | 0.0002495  | 0          | 0.0002753    | 0.0576153    | 0            | 0            | 0            | 0            | 1.41E-04     |
| 0.0014207  | 0.000166   | 0.0006559  | 0.0017473  | 0          | 0.1212649  | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0          | 0          | 0          | 0          | 0.0002343  | 0          | 0            | 0            | 0            | 0.0035954    | 0.000307     | 0.0015944    | 0.0063371    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.0002556    | 0.0004925    | 0.0003594    | 0            | 0.0001517    | 0.0725621    | 0.0002822    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0.0001188    |
| 0          | 0          | 0.0004895  | 0.00E+00   | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0          | 0.0087753  | 0.0008792  | 0.0022581  | 0.0017536  | 0          | 0            | 0            | 0            | 0.0002253    | 0            | 0            | 0.00E+00     |
| 0          | 0.0002159  | 0.0277404  | 7.831E-05  | 0          | 0          | 0.0155529    | 0            | 0            | 0.0505766    | 0            | 0.0020743    | 0.0137622    |
| 0          | 0          | 0          | 0          | 0          | 0.0035756  | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0001178  | 0.0001017  | 0.0089179  | 0.000116   | 0.0001571  | 0          | 0.0469081    | 0.0006515    | 0            | 0.0039681    | 0            | 8.033E-05    | 0.0016351    |
| 0.000505   | 0.0015518  | 0.0013578  | 0.0010038  | 0          | 0.0006851  | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0002093  | 0.0002612  | 0.0001589  | 0.0217309  | 0          | 0          | 0.0003162    | 0.0155133    | 0.0001772    | 0.000139     | 9.471E-05    | 0            | 0            |
| 0          | 4.033E-05  | 0          | 0.00E+00   | 0.0001685  | 0          | 0            | 0            | 0            | 0.0001224    | 0            | 0.0001772    | 7.201E-05    |
| 0          | 0          | 0          | 0          | 0          | 0          | 0            | 6.1E-05      | 0            | 0.0003026    | 0.0015177    | 0.0002147    | 0.0001305    |
| 0          | 7.832E-05  | 0.0143111  | 0.0001305  | 0          | 0.0005387  | 0.0002539    | 0            | 0.0002563    | 0.0568112    | 0            | 0.0109078    | 0.0549434    |
| 4.782E-05  | 7.544E-05  | 0.0007661  | 0.0001711  | 8.182E-05  | 0          | 0.0004654    | 0.0299693    | 0.0001094    | 0.000102     | 6.269E-05    | 0            | 0            |
| 0          | 0          | 0          | 0          | 0.0007377  | 0.000453   | 0            | 0            | 0.000228     | 0            | 0            | 0            | 0            |
| 0          | 0          | 0          | 0.00E+00   | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0          | 4.884E-05  | 3.825E-05  | 0          | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 3.99E-05     | 0            |
| 6.562E-05  | 0.0001731  | 0.016543   | 0.0001099  | 0.0003605  | 0.0007352  | 0.0007344    | 4.348E-05    | 0            | 0.0298954    | 0            | 0.0089166    | 0.0307262    |
| 0          | 0          | 0          | 0          | 0          | 0.0021218  | 0            | 4.515E-05    | 0            | 0            | 0            | 0            | 0            |
| 0.0026895  | 0          | 2.895E-05  | 2.648E-05  | 0.0004317  | 0          | 0            | 0            | 0            | 0.0001238    | 0            | 2.587E-05    | 8.992E-05    |
| 0.0106266  | 0.0007137  | 0.0003997  | 0.14945    | 4.732E-05  | 0.0017787  | 0.0071711    | 0.0002138    | 0            | 0.0002383    | 0            | 0.000118     | 0.0007349    |
| 0          | 6.353E-05  | 0          | 0          | 0          | 0          | 0            | 0            | 0            | 0            | 0            | 0            | 2.746E-05    |
| 4.019E-05  | 1.182E-05  | 0          | 2.79E-05   | 0.0001253  | 0          | 0            | 0            | 0            | 0.0002076    | 8.227E-05    | 0.0002014    | 9.74E-05     |
| 0.0001875  | 0.0002955  | 2.93E-03   | 0.0102032  | 3.774E-05  | 0.0001952  | 0.0013328    | 5.316E-05    | 5.235E-05    | 0.0008161    | 2.354E-05    | 6.33E-05     | 0.0001424    |
| 0.0002223  | 0.0230775  | 0.0004792  | 0.0003411  | 0.0025569  | 0.0018252  | 0.0049032    | 0.0003845    | 0            | 0            | 0            | 0            | 1.69E-05     |
| 0          | 0          | 0          | 1.402E-05  | 0          | 0          | 0.0016394    | 0.0012264    | 0.0012353    | 0.000577     | 0.0004816    | 0.2006281    | 6.09E-04     |
| 0          | 0          | 0          | 0          | 0          | 0          | 0.0007857    | 0.000513     | 0.0026058    | 8.897E-05    | 0.0001036    | 0.035359     | 9.988E-05    |
| 0          | 8.113E-06  | 0          | 0          | 0          | 0          | 0.0153495    | 5.747E-05    | 0            | 0            | 0            | 0            | 0            |
| 5.641E-05  | 0.0001308  | 0.0002228  | 8.783E-05  | 0          | 0.0020255  | 0            | 0            | 0            | 0            | 0            | 1.763E-05    | 0            |
| 0.0004169  | 4.053E-05  | 0.0014205  | 2.34E-05   | 2.9E-05    | 0          | 0.0018377    | 0.0001812    | 0.0001172    | 5.488E-05    | 0.0011839    | 2.931E-05    | 3.96E-05     |
| 3.383E-05  | 0.0001172  | 1.78E-03   | 5.167E-05  | 0.0003749  | 0          | 0.0012743    | 5.26E-05     | 3.906E-05    | 0.0001578    | 3.599E-05    | 4.829E-05    | 0.0001276    |
| 0.0001479  | 8.83E-05   | 0.0001456  | 0.0567212  | 0.0001784  | 0.000722   | 0            | 1.17E-05     | 0            | 1.812E-05    | 0.0158223    | 9.082E-05    | 8.119E-05    |
| 0.0007482  | 0.0001505  | 0.0010809  | 0.0021222  | 6.883E-05  | 0.1056594  | 0            | 0            | 0            | 0            | 0            | 0.00E+00     | 0            |
| 0.0001569  | 0.0034513  | 9.418E-05  | 0.0001074  | 0.0021443  | 0.0002048  | 0            | 0            | 2.652E-05    | 0            | 0            | 0            | 0            |
| 8.869E-05  | 0.0001801  | 2.07E-02   | 1.48E-04   | 0.0002366  | 0.0003603  | 0.0010214    | 5.406E-05    | 7.194E-05    | 0.0196441    | 1.958E-05    | 7.04E-03     | 0.0222697    |

| COVID-19-044 | COVID-19-043 | COVID-19-042 | COVID-19-041 | COVID-19-040 | COVID-19-039 | COVID-19-053 | COVID-19-045 | COVID-19-054 | COVID-19-063 | COVID-19-056 | COVID-19-037 | COVID-19-071 |           |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0005727 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0008832    | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0312229    | 0            | 0            | 0            | 0.000169  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0008593 |
| 0            | 0            | 0.0001731    | 0            | 0            | 0            | 0            | 0            | 0            | 0.0098708    | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0070884    | 0            | 0         |
| 0            | 0            | 0.000387     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0.0001606    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0057982    | 0            | 0         |
| 0.0002504    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0.0049716    | 0.1898397    | 0.0004013    | 0            | 0.0006544    | 0.000237     | 0            | 0.000843     | 0.0001347    | 0            | 0            | 0            | 0            | 0         |
| 0            | 0.0002556    | 0            | 0.0005617    | 0.0577068    | 0            | 0            | 0.000796     | 0.0005591    | 0            | 0.0001864    | 0            | 0.0004366    | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0009741    | 0         |
| 0            | 0.0008621    | 0            | 0            | 0            | 0            | 0.0010458    | 0            | 0            | 0            | 0.0044991    | 0            | 0.0007078    | 0         |
| 0.0087543    | 0.00029      | 0.0004276    | 0.0004805    | 0.0005143    | 0.0304539    | 0.0143083    | 0.0013568    | 0            | 0.0001312    | 0.0006181    | 0.0002688    | 4.233E-05    | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00  |
| 0.0001678    | 6.962E-05    | 0.0001214    | 0            | 0            | 0.002549     | 0.0110867    | 0            | 0.0005855    | 0.0009032    | 0            | 0.0098354    | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0.0010189    | 0            | 0.0003468    | 0.0002032    | 0            | 0.0007104    | 0            | 7.027E-05    | 0.0002475    | 0.0004064    | 0.0155607    | 0            | 0         |
| 0.0001239    | 0.0002895    | 9.074E-05    | 0.0003428    | 0.0003586    | 0.0001484    | 0            | 0            | 0            | 0            | 0            | 0.0011551    | 0.00E+00     | 0         |
| 0.0004465    | 0.0030123    | 0.0002367    | 0.0002733    | 0.0001757    | 0.0001037    | 0.0001366    | 0.00158      | 0            | 0            | 0.0096774    | 0.0008199    | 0            | 0         |
| 0.0545696    | 0.0089913    | 0.0006076    | 0.001551     | 0.0012341    | 0.0398919    | 0.0104592    | 0.0015082    | 0            | 0.0001258    | 0.000337     | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 7.119E-05    | 0            | 0.000357     | 0            | 0            | 0.000237     | 0.0191691    | 0            | 0         |
| 0            | 0            | 0            | 0.00022      | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0006152    | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0.0002179    | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 4.07E-05     | 0            | 0            | 0            | 0            | 0            | 0            | 3.337E-05    | 0            | 0            | 0            | 0            | 0         |
| 0.0341991    | 0.0042966    | 0.000336     | 0.0012151    | 0.000589     | 0.035332     | 0.0116052    | 0.0012641    | 4.111E-05    | 0.0010087    | 0.0006475    | 0            | 0.0001502    | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 6.59E-05     | 0.0175936    | 0            | 0            | 7.575E-05    | 5.112E-05    | 0            | 0            | 0            | 0.0003135    | 0            | 8.068E-05    | 1.04E-02     | 0         |
| 3.619E-05    | 0.0109746    | 3.674E-05    | 0            | 0.0001676    | 0.0003235    | 0            | 0.0001754    | 5.4E-05      | 0.0004053    | 0            | 0.0018171    | 0            | 0         |
| 0            | 0.0001384    | 0            | 0            | 0            | 0            | 0            | 0            | 5.491E-05    | 0            | 0            | 0            | 0            | 0         |
| 0.000339     | 0.0001721    | 3.262E-05    | 0            | 0.0003083    | 0.000243     | 0            | 0.0010511    | 0            | 0.0002317    | 0.0002766    | 0.0007423    | 0.1563343    | 0         |
| 3.531E-05    | 0.0031294    | 3.044E-05    | 0            | 0            | 9.213E-05    | 0            | 0.0007849    | 0.0003616    | 2.273E-05    | 0.0006023    | 0            | 0            | 0         |
| 0            | 0.0022154    | 9.664E-05    | 0            | 0.0002307    | 0            | 0.0321655    | 0            | 0.0002287    | 0            | 0.0070248    | 0.0008238    | 0.0015426    | 0         |
| 0.0006716    | 0.0009017    | 0.0006221    | 0.0016865    | 0.2194381    | 0.0005116    | 0.0018298    | 0.0030982    | 0.0017862    | 5.412E-05    | 0.0008172    | 0            | 2.725E-05    | 0         |
| 7.397E-05    | 9.034E-05    | 6.75E-05     | 0.0006098    | 0.0042246    | 3.17E-05     | 0.0013124    | 0.0006661    | 0.000932     | 1.943E-05    | 0.0005072    | 0            | 1.02E-04     | 0         |
| 0            | 0.0003786    | 0            | 0            | 0            | 2.873E-05    | 3.786E-05    | 0            | 0.0001281    | 0            | 0.001748     | 8.045E-05    | 9.296E-05    | 0         |
| 0            | 0            | 0            | 0            | 0.0002907    | 0            | 0            | 0            | 0            | 0.0114079    | 0            | 0            | 1.41E-05     | 0         |
| 3.149E-05    | 4.334E-05    | 0.0004321    | 7.14E-05     | 7.545E-05    | 7.483E-05    | 0.0082517    | 9.26E-05     | 0            | 0.0031139    | 0.0067828    | 0.005926     | 0.0758411    | 0         |
| 0.000128     | 0.012308     | 5.014E-05    | 0.0511709    | 0.0001172    | 0.0002119    | 0.0058435    | 0.0003959    | 1.63E-05     | 5.137E-05    | 0            | 0.011838     | 7.69E-06     | 0         |
| 0.0001383    | 3.578E-05    | 4.885E-05    | 0.0003536    | 9.311E-05    | 0.0001887    | 2.454E-05    | 0.0823364    | 0            | 0.0857807    | 2.936E-05    | 3.325E-05    | 0            | 0         |
| 0            | 0            | 0            | 0            | 1.961E-05    | 0            | 1.429E-05    | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 5.391E-06    | 0            | 2.553E-05    | 1.782E-05    | 0            | 0            | 0            | 0            | 0            | 0            | 5.523E-05    | 0.0015062    | 0         |
| 0.0209085    | 0.0035554    | 0.0001924    | 0.0014102    | 0.0004802    | 0.0181279    | 0.010655     | 0.0008304    | 7.975E-05    | 0.0013558    | 0.0012871    | 0.0002097    | 0.0001739    | 0         |

|              |              |              |              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              |              |              |              |              |              |              |              |              |              |              |              |              |
| COVID-19-070 | COVID-19-069 | COVID-19-068 | COVID-19-067 | COVID-19-066 | COVID-19-065 | COVID-19-064 | COVID-19-062 | COVID-19-061 | COVID-19-060 | COVID-19-059 | COVID-19-058 | COVID-19-057 |
| 0            | 0.0032237    | 0            | 0            | 0.0001432    | 0            | 0.0005155    | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0004057    | 0.0001841    | 0.0001653    | 0            | 0.0001052    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.00E+00     | 0.0029597    | 0            | 0            | 0.0002641    | 0            | 0.0004074    | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0008303    | 0            | 0            | 0            | 0            | 0.0002372    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0.0001176    | 0.0005276    | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 5.386E-05    | 0            | 0            | 0            | 0            | 0.00129      | 0.0028494    | 0.0006706    | 0.0036143    |
| 0.0002875    | 0            | 5.75E-04     | 0.0066849    | 0            | 0            | 0.0002822    | 0            | 0            | 0            | 0.0023268    | 0.0333419    | 0.0001917    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     |
| 0            | 0            | 0.00E+00     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0649168    | 0.013867     | 0            | 0            | 0.0001567    | 0            | 0            | 0            | 0.0055767    | 0            | 0            | 0            | 0            |
| 0            | 9.736E-05    | 0.0001079    | 0            | 0.0001058    | 0.0001736    | 0.0153942    | 0.0006646    | 0.0017547    | 0.0182706    | 0            | 0            | 0.0006117    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     |
| 0            | 0            | 0            | 0.0003499    | 0.0001642    | 0.0003106    | 0.0031862    | 0            | 0.0623912    | 0.002217     | 0.0001803    | 0.000432     | 0.00E+00     |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 2.31E-04     | 0.000113     | 0.0009624    | 0.0003055    | 0            | 0            | 0            | 0.0001314    | 0            |
| 0            | 0            | 0.00E+00     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.00E+00     | 6.1E-05      | 0.0801279    | 0            | 0.0125177    | 9.394E-05    | 0            | 5.368E-05    | 0            | 0            | 0            | 0.00E+00     | 0            |
| 6.289E-05    | 0            | 0            | 0            | 0.0033464    | 0.0003251    | 0.0034033    | 0.0002005    | 0.0005162    | 0.00288      | 0.0001175    | 0.0001104    | 0.0007903    |
| 0            | 0.0003602    | 0.0090395    | 0            | 0            | 0            | 0.002241     | 0.0035076    | 0            | 0.0001063    | 0            | 9.457E-05    | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 3.385E-05    | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 3.988E-05    | 7.732E-05    | 0            | 0.0008717    | 0            | 0            | 0            | 0            | 0            | 0            | 6.756E-05    | 5.209E-05    |
| 7.985E-05    | 0.0002719    | 8.696E-05    | 0            | 0.008779     | 0.000415     | 0.0220286    | 0.0004546    | 0.0008641    | 0.0114044    | 0.0002372    | 0            | 0.0033717    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     |
| 0            | 0            | 0            | 4.565E-05    | 5.623E-05    | 4.12E-05     | 2.505E-05    | 0.011769     | 0.0188727    | 0.0001743    | 0            | 9.019E-05    | 7.571E-05    |
| 0            | 0            | 0            | 0            | 5.438E-05    | 0            | 0            | 0            | 3.822E-05    | 0            | 0            | 0            | 0            |
| 2.6E-05      | 0.0154004    | 0.0071045    | 6.619E-05    | 0.0012478    | 0.0001901    | 0.0229333    | 0.0261872    | 0.0152018    | 0.0003196    | 5.154E-05    | 7.612E-05    | 5.91E-05     |
| 0            | 0            | 0            | 0            | 3.166E-05    | 3.977E-05    | 1.542E-05    | 3.166E-05    | 0.0009363    | 3.937E-05    | 0.0155115    | 2.35E-04     | 7.71E-04     |
| 0.0003056    | 0.0002939    | 0.0002867    | 0.0002762    | 0            | 0            | 0.0002339    | 1.369E-05    | 0            | 0.0018933    | 0.0003946    | 0.0007155    | 0.0002525    |
| 8.098E-05    | 6.93E-05     | 2.024E-05    | 0.035372     | 0            | 0            | 3.893E-05    | 0            | 0.0001803    | 0.0001137    | 9.383E-05    | 0.1597721    | 0.0001012    |
| 8.829E-05    | 0.0001742    | 4.74E-05     | 0.0008277    | 4.568E-05    | 0            | 0.0001197    | 0            | 0            | 0.0001851    | 3.784E-05    | 0.0130499    | 0.0001507    |
| 0.0001285    | 0.0001264    | 6.254E-05    | 0.0002045    | 0            | 0            | 7.775E-06    | 0            | 0            | 0.155951     | 0.3090117    | 0.1591448    | 0.2742312    |
| 3.237E-05    | 0            | 2.981E-05    | 2.18E-05     | 0.0005863    | 0            | 3.366E-05    | 0.002187     | 4.712E-05    | 0.0001112    | 0            | 0            | 0            |
| 0.1182055    | 0.0500087    | 0.0825042    | 8.917E-05    | 0            | 2.432E-05    | 0.0023279    | 0            | 0            | 0.0004063    | 6.329E-05    | 0.0001054    | 8.606E-05    |
| 4.952E-05    | 0.0001227    | 0.0506735    | 2.707E-05    | 2.584E-05    | 5.383E-05    | 0.0010602    | 0.0147148    | 4.337E-05    | 6.798E-05    | 6.398E-05    | 2.061E-05    | 1.692E-05    |
| 0            | 0            | 0            | 0            | 2.81E-04     | 0.1298729    | 0            | 0.0280862    | 0.0005403    | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 2.727E-06    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0061249    | 0.0023815    | 7.482E-06    | 0.0002778    | 0            | 0.0010223    | 3.851E-06    | 0            | 1.21E-05     | 1.122E-05    | 0            | 0            |
| 2.396E-05    | 0.0003149    | 1.875E-05    | 4.855E-05    | 0.0128186    | 0.0003479    | 0.0207468    | 0.001046     | 0.000803     | 0.0127851    | 8.726E-05    | 5.84E-05     | 0.0038754    |

|              |              |              |              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              |              |              |              |              |              |              |              |              |              |              |              |              |
| COVID-19-055 | COVID-19-036 | COVID-19-050 | COVID-19-034 | COVID-19-015 | COVID-19-014 | COVID-19-013 | COVID-19-012 | COVID-19-011 | COVID-19-010 | COVID-19-009 | COVID-19-008 | COVID-19-007 |
| 0            | 0.0003314    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0.0010591    | 0.00026      | 0            | 0.0030818    | 0            | 0            | 0            | 0            |
| 0            | 0.0003193    | 0.0002479    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0004118    | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0003214    | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0004994    | 0.0009613    | 0.0016168    | 0            | 0.0009426    | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     |
| 0            | 0            | 0            | 0.000303     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.000123     |
| 0            | 0.0002065    | 0.002013     | 0.0010983    | 0            | 0            | 0            | 0            | 0.000238     | 0.0006997    | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.0001912    | 0            | 0.000342     | 0.00223      | 0.006065     | 0.0003851    | 0.0580865    | 0.000307     | 0.0010396    | 0.2804114    | 0.0012362    |
| 0.0002609    | 0            | 0.0005032    | 0            | 0.000173     | 0            | 0            | 0            | 0            | 0.0002928    | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0001681    | 0.0002423    | 0            | 0            | 0            | 0            |
| 0.0054885    | 0.0003478    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0053233    | 0.000273     | 0.0004085    | 0.0092835    | 0.0036215    | 0.0183447    | 0.0020828    | 0.048987     | 0.0047941    | 0.001126     | 0.0032935    | 0.0167975    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     |
| 0.0031148    | 0.0001624    | 0.0275908    | 0.0001678    | 0.0053818    | 0.0004766    | 0.0002999    | 0.0064813    | 0.0012299    | 0            | 0.0003052    | 0.0005355    | 0.0001178    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0002353    | 0.0760832    | 0            | 0.057287     | 0.0042759    | 0.0094027    | 0            | 0.0052368    | 0.0021555    | 0.0058738    | 0.0022976    | 0.0023954    |
| 0            | 0.0704233    | 0            | 0.1298169    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 6.344E-05    | 0.069317     | 0            | 0.0045971    | 6.588E-05    | 0            | 8.418E-05    | 0            | 0.0003904    | 0            | 0            | 0            | 4.148E-05    |
| 0            | 0.000655     | 7.595E-05    | 0            | 0.0037202    | 0.0240856    | 0.0261112    | 0.0002706    | 0.022073     | 0.0300865    | 0.0232929    | 0.0124765    | 0.0299145    |
| 0.0002221    | 0.0018638    | 0.0048008    | 0.008404     | 0            | 0            | 7.757E-05    | 0.0003762    | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.00067      | 0            | 0            | 0            | 0            | 6.172E-05    | 0            | 0            | 0            | 0.0004649    | 0            | 0            |
| 0            | 0            | 0.0003997    | 0            | 0.0021792    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0.0002369    | 0            | 5.291E-05    | 0            | 0.0006845    | 0            | 0            | 0            | 5.697E-05    |
| 7.985E-05    | 0.0010151    | 4.743E-05    | 0            | 0.0066019    | 0.0284012    | 0.022797     | 0.0037883    | 0.0139808    | 0.0236888    | 0.0225551    | 0.0169043    | 0.0245789    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0002467    | 0            | 0            | 0            | 0            |
| 0            | 4.557E-05    | 4.619E-05    | 0            | 0            | 0            | 4.865E-05    | 0            | 0            | 0            | 0            | 0            | 0            |
| 2.951E-05    | 0.0044771    | 0.0029517    | 5.957E-05    | 7.349E-05    | 0            | 4.565E-05    | 0            | 0.0061679    | 0            | 0            | 3.953E-05    | 8.128E-05    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0010586    | 0.0698551    | 0            | 0.0164184    | 0.0001173    | 0.0002548    | 0            | 0            | 0            | 0            | 0.0003087    | 3.782E-05    | 0.0001674    |
| 0.0015617    | 0            | 0            | 0            | 0            | 0            | 2.719E-05    | 0            | 4.14E-05     | 0            | 3.287E-05    | 0            | 1.299E-05    |
| 4.872E-05    | 0.0004393    | 0.0001381    | 0            | 0.0006096    | 0.000118     | 0.0004127    | 0.0001599    | 0.0123877    | 0.0001023    | 0.0003966    | 0.0361256    | 6.402E-05    |
| 0.000976     | 0.0003632    | 0.0015604    | 0            | 0.0002963    | 0            | 0            | 7.903E-05    | 0            | 4.36E-05     | 0            | 0            | 0            |
| 0.0005055    | 5.352E-05    | 0.0010104    | 0.002796     | 0.000316     | 0.0014573    | 0.0002884    | 0.0005959    | 0            | 0.0001169    | 0            | 0.000481     | 0            |
| 0.0054763    | 0.0029318    | 2.197E-05    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 3.347E-05    | 0            | 0            |
| 0            | 0            | 0            | 0.0002356    | 0            | 0            | 0            | 0            | 0            | 0            | 3.334E-05    | 0            | 0            |
| 1.871E-05    | 0.0131198    | 0.0002831    | 2.9E-05      | 0.0019303    | 0.0002647    | 0.0002217    | 0.0001232    | 0            | 3.18E-05     | 0            | 0.0001936    | 0.0001861    |
| 0            | 0.0158166    | 6.367E-05    | 2.861E-05    | 0.0008748    | 8.305E-05    | 0.000112     | 0            | 0.0007219    | 0            | 5.998E-05    | 3.353E-05    | 3.353E-05    |
| 1.376E-05    | 5.94E-05     | 0            | 1.995E-05    | 0            | 0.0002582    | 0            | 0            | 4.977E-05    | 2.546E-05    | 0.0004121    | 0            | 0.0001601    |
| 0            | 0            | 8.182E-06    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 3.257E-05    | 1.518E-05    | 0            | 0            | 0            | 9.242E-06    | 8.142E-06    | 3.62E-05     | 1.32E-05     | 2.079E-05    | 0            | 0            |
| 2.595E-05    | 0.0010826    | 0.00011      | 3.09E-05     | 0.0062049    | 0.0181714    | 0.0198695    | 0.0016506    | 0.017189     | 0.0210282    | 0.0194927    | 0.0113777    | 0.0227673    |

| COVID-19-006 | COVID-19-005 | COVID-19-004 | COVID-19-002 | COVID-19-001 | COVID-19-035 | COVID-19-016 | COVID-19-017 | COVID-19-003 | COVID-19-019 | COVID-19-018 | COVID-19-032 | COVID-19-030 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0            | 0            | 0            | 0.0002373    | 0.0002659    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0.0004321    | 0.0002638    | 0            | 0            | 0            | 0.001258     | 0            | 0            | 0.0537748    | 0            |
| 0            | 0            | 0.0133539    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0.0002339    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0001591    | 0            | 0.00E+00     | 0.0002323    | 0.0001687    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0003084    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0002108    | 0            | 0            |
| 0.0001592    | 0            | 0            | 0            | 0.0110492    | 0.001339     | 0            | 0            | 0            | 0.0001904    | 0            | 0            | 0.0002622    |
| 0            | 0            | 0            | 0            | 0            | 0.0432628    | 0            | 0            | 0            | 0            | 0            | 0.000192     | 0.00015      |
| 0.00E+00     | 0            | 0            | 0            | 0.017042     | 0.0006624    | 0            | 0            | 0.0003957    | 0.0001577    | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0005871    | 0.0008564    | 0            | 0            | 0            | 0            | 5.656E-05    | 0.0250843    | 0.0008214    | 0            | 0.0007406    | 0            | 0            |
| 0            | 0            | 0.0001411    | 0            | 0            | 0            | 0            | 0            | 0.0028566    | 0            | 0            | 0.0001597    | 0            |
| 0.0002243    | 0.0001795    | 0.00E+00     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.00E+00     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.0001788    | 0            | 0            | 0.0009111    | 0            | 0            | 0            | 0            | 0            | 0.0050379    | 0.0014548    |
| 0.0104434    | 0.0006519    | 0.0001609    | 0.0001312    | 0.0006032    | 0.017896     | 0.0008149    | 0.0045507    | 0.1528981    | 0.0063689    | 0.0043623    | 0.0095248    | 0.0057508    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0002606    | 0            | 0.0002749    | 0.0003374    | 0.0408962    | 0.0002945    | 0.0002035    | 0.0002981    | 0.0013602    | 9.639E-05    | 0.0003606    | 0            | 0.0002035    |
| 0            | 0            | 0            | 9.853E-05    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0076444    | 0            | 0            | 0.0058677    | 0            | 9.47E-04     | 0.0516652    | 0            | 0.0105515    | 0.0044669    | 0.0001069    | 5.5E-05      |
| 0            | 0            | 0.00E+00     | 0            | 0            | 0.0535359    | 0            | 0            | 0            | 0            | 0            | 0.0893546    | 0.0963761    |
| 0            | 0            | 0            | 0            | 0            | 0.1546557    | 0            | 0            | 0.0002025    | 0            | 0            | 0.0005954    | 0.0615746    |
| 0.0488903    | 0.0238613    | 0.0001566    | 0.0001483    | 7.239E-05    | 0.0008556    | 0.036504     | 0.0027744    | 0.0244321    | 0.0161884    | 0.0296581    | 0.0004794    | 6.171E-05    |
| 0.0001148    | 7.544E-05    | 0.0002104    | 5.525E-05    | 0.0260388    | 0.0057614    | 0            | 3.825E-05    | 0            | 0            | 0            | 7.544E-05    | 0.0002168    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00     | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0001524    | 0            | 0            | 0            | 0            |
| 8.628E-05    | 0            | 0            | 0            | 0            | 0            | 0            | 2.767E-05    | 0            | 5.046E-05    | 6.349E-05    | 0            | 3.093E-05    |
| 0.0198017    | 0.0215037    | 0.0001518    | 0.0009969    | 0.0001336    | 0.0013052    | 0.0211084    | 0.0039116    | 0.0165169    | 0.0173676    | 0.0248612    | 0.0031843    | 0.0003391    |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 5.173E-05    | 0            | 0            | 0.0004028    | 0.0001127    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0001464    | 0            | 0            | 0.0002127    | 0.0055232    | 4.565E-05    | 5.79E-05     | 0.000211     | 7.905E-05    | 0.0001214    | 0            | 0.0067853    | 4.509E-05    |
| 6.191E-05    | 5.276E-05    | 0            | 0            | 0.0001454    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0001131    |
| 0            | 0            | 3.404E-05    | 0.0002615    | 5.437E-05    | 0.0746948    | 0.0001674    | 0.0002809    | 0            | 0            | 0.000209     | 0.0042265    | 0.0090742    |
| 0.0006108    | 0            | 0.0028583    | 2.232E-05    | 0            | 0            | 0.0139641    | 0.0001327    | 0            | 0            | 2.76E-05     | 0            | 0            |
| 5.597E-05    | 0.0001264    | 0            | 0.0001586    | 0.0008701    | 0            | 3.02E-05     | 0.0010864    | 0            | 0.0004743    | 0.0001144    | 0            | 4.308E-05    |
| 1.791E-05    | 2.959E-05    | 0.0006615    | 0            | 0            | 0            | 2.92E-05     | 0            | 0.0059247    | 0            | 0            | 5.373E-05    | 0            |
| 0.0006872    | 0.0005805    | 0.2894149    | 0            | 0            | 0            | 0            | 0            | 0.0018749    | 0            | 0            | 0            | 8.863E-05    |
| 0            | 0            | 0            | 0            | 0            | 5.206E-05    | 0            | 0            | 0            | 0            | 0            | 0            | 6.119E-05    |
| 0            | 0            | 0.00E+00     | 0            | 0            | 0            | 1.09E-05     | 0            | 0            | 0            | 1.955E-05    | 0            | 0            |
| 0.0001621    | 7.577E-05    | 0.0009432    | 0            | 0.0021611    | 0.0102706    | 0            | 0            | 0.0001874    | 7.67E-05     | 0            | 0            | 4.272E-05    |
| 2.65E-05     | 2.338E-05    | 0.0002172    | 0            | 0.0021718    | 0.0010249    | 3.383E-05    | 2.461E-05    | 0.0002476    | 0            | 6.736E-05    | 0            | 0            |
| 1.33E-05     | 3.578E-05    | 0            | 8.898E-05    | 0.0001117    | 0            | 0.0001371    | 0.0002894    | 0            | 0            | 0.0004394    | 0            | 0            |
| 0            | 0            | 0            | 0.0001029    | 4.234E-05    | 9.61E-06     | 0            | 0            | 0            | 7.403E-06    | 0            | 0            | 1.182E-05    |
| 0            | 0            | 7.372E-06    | 0.0001508    | 0.0001245    | 0            | 0            | 0            | 0            | 7.262E-06    | 0            | 0            | 0            |
| 0.0261473    | 0.0162435    | 0.000111     | 0.0014845    | 0.00012      | 0.0036658    | 0.0208577    | 0.0036582    | 0.0195154    | 0.0157873    | 0.0208098    | 0.0053917    | 0.0009732    |

| COVID-19-029 | COVID-19-028 | COVID-19-027 | COVID-19-026 | COVID-19-031 | COVID-19-024 | COVID-19-020 | COVID-19-025 | COVID-19-021 | COVID-19-033 | COVID-19-022 | COVID-19-023 | SC001     |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0.0082628    | 0            | 0.0078383    | 0            | 0.0003594    | 0.1158698    | 0            | 0         |
| 0            | 0.0020472    | 0            | 0            | 0.014785     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0.0003631    | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00  |
| 0            | 0            | 0.0002482    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00E+00  |
| 0            | 0            | 0            | 0.0057803    | 0            | 0.0001668    | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0.0005056    | 0.0022473    | 0            | 0            | 0.0031712    | 0            | 0.0001779    | 0            | 0.0692357    | 0.0647192    | 0.0009926    | 0.0018915    | 0         |
| 0            | 0            | 0            | 0            | 0.000285     | 0.000324     | 0            | 0            | 0            | 0.0006929    | 0            | 0            | 0         |
| 0.0004674    | 0.0014453    | 0.0002122    | 0            | 0.0034612    | 0            | 0.0001606    | 0            | 0.0558144    | 0.0530673    | 0.0009635    | 0.0066671    | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0.0004013    | 0            | 0            | 0            | 0.0003259    | 0.0016024    | 0.0007622    | 0            | 0.0004929    | 0            | 0.0003932 |
| 0.0016107    | 0            | 0.0002236    | 0            | 0            | 0            | 0            | 0            | 0            | 0.0002449    | 0            | 0            | 0.0773116 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0.0002376    | 0            | 0            | 0.0382653    | 0.0017438    | 0            | 0            | 0            | 0.0005388    | 0            | 0            | 0         |
| 0.0016975    | 0.002741     | 0.0419408    | 0.0090528    | 0.0121409    | 0.004646     | 0.0003662    | 0.0026415    | 0            | 0.0181669    | 0.0003344    | 0.0219705    | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0.0001196    | 0            | 0            | 0            | 0            | 0.0007319    | 0.0027864    | 0.000407     | 0            | 0.0001642    | 0.1032196    | 0            | 3.21E-05  |
| 0            | 0            | 0.0002586    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0.0028827    | 0.000249     | 0.0008509    | 0            | 0.0001619    | 0.0001726    | 0            | 0            | 0            | 0            | 0.0158769    | 0            | 0.0001253 |
| 0.0969378    | 0.0096313    | 0.0645945    | 0.1864854    | 0.0133026    | 0.0608799    | 0            | 0.0032738    | 0            | 0.0013006    | 0            | 0.119114     | 0         |
| 0.0181934    | 0.2387719    | 0.0359389    | 0.0398553    | 0.0048729    | 0.2045483    | 0            | 0.0073569    | 0            | 0.0026304    | 0            | 0.0224379    | 0.00E+00  |
| 0            | 0.0007642    | 0.0068541    | 0            | 0.0009612    | 0.0001388    | 0.0001163    | 0.0012389    | 0.0002314    | 0.0002456    | 0.0006408    | 0.001513     | 3.09E-05  |
| 0.0091999    | 0.0017777    | 0.0016576    | 0.000272     | 0.0193413    | 5.951E-05    | 0            | 0.0002285    | 0.0574118    | 0.0267667    | 0.0181724    | 0.006366     | 5.951E-05 |
| 0            | 0.0001653    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0            | 0            | 0.0003694    | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0006088    | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.0001579    | 0            | 0            | 0.00E+00  |
| 0            | 0.0001439    | 0.0064793    | 0.0014206    | 0.0024143    | 0.0003597    | 0.000253     | 0.0051583    | 7.985E-05    | 0.0013653    | 0.0001352    | 0.001136     | 5.45E-05  |
| 0            | 0            | 0            | 0            | 0            | 0            | 4.048E-05    | 0            | 0            | 0            | 0            | 0            | 0.00E+00  |
| 0            | 6.097E-05    | 0            | 0            | 0            | 0            | 0            | 0.0001293    | 0            | 0            | 0            | 0            | 0.0008425 |
| 4.621E-05    | 0.0017988    | 0            | 7.738E-05    | 0.0089748    | 0.0013311    | 3.062E-05    | 0.0041464    | 0.0003357    | 0.0003034    | 0            | 0.001507     | 5.122E-05 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0.0304226    | 0.2678243    | 0.020147     | 0.0016147    | 0.0154586    | 0.0005305    | 5.626E-05    | 0.0030151    | 3.924E-05    | 0.0810825    | 0            | 0.0524386    | 8.038E-06 |
| 0            | 7.346E-05    | 3.368E-05    | 0            | 0.0001636    | 0            | 1.786E-05    | 8.36E-05     | 0            | 0            | 0            | 0.0001696    | 8.523E-06 |
| 6.362E-05    | 3.302E-05    | 0            | 0            | 4.55E-05     | 0.0040572    | 2.698E-05    | 0.0008198    | 7.047E-05    | 0            | 0            | 0.0001526    | 2.335E-05 |
| 0.0030826    | 3.66E-05     | 0.0004384    | 4.516E-05    | 0            | 0            | 0            | 0            | 0            | 3.582E-05    | 0            | 7.28E-05     | 0.3370053 |
| 0.0006211    | 3.034E-05    | 0.0002052    | 0            | 0            | 0            | 0.0003535    | 0.0011989    | 0.0003283    | 0.0002127    | 0.0012742    | 7.022E-05    | 0.0064002 |
| 2.468E-05    | 0.0013457    | 0.0072956    | 0.0004415    | 6.119E-05    | 0.021485     | 0            | 0.0001335    | 0            | 0.0005987    | 0            | 0.0002126    | 1.048E-05 |
| 9.712E-05    | 0            | 0            | 0            | 0            | 7.533E-05    | 0            | 0.0002619    | 0            | 0            | 0            | 0            | 0         |
| 0.0010773    | 0.0006061    | 0.0017208    | 3.648E-05    | 0.0003084    | 0.0019821    | 0.0494238    | 0.0011437    | 0.000289     | 3.056E-05    | 0.0003268    | 0.0003932    | 2.027E-05 |
| 0            | 2.307E-05    | 0.001366     | 0.000342     | 0.005666     | 0.0001569    | 0            | 0.0065632    | 3.014E-05    | 0.0002405    | 0            | 0.0002559    | 0         |
| 0            | 0.0001211    | 7.866E-05    | 5.527E-05    | 8.898E-05    | 0            | 1.468E-05    | 0            | 0            | 2.27E-05     | 0            | 0            | 0         |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 8.802E-06    | 1.881E-05    | 0            | 0            | 0            | 6.712E-06    | 0            | 0            | 0            | 0            | 0            | 0            | 0         |
| 0.0002919    | 0.0002437    | 0.0107181    | 0.0007557    | 0.001388     | 0.0007612    | 0.000111     | 0.0034817    | 0.0001733    | 0.0005699    | 0.0002726    | 0.0017143    | 2.965E-05 |

| SC021     | SC022     | SC023     | SC024     | SC025     | SC026     | SC027     | SC028     | SC029     | SC030     | SC031     | SC032     | SC033     |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0         | 0         | 0         | 0         | 0         | 0         | 0.0001186 | 0         | 0         | 0.0003518 | 0         | 0         | 0.0037678 |
| 0.3640406 | 0.0100764 | 0.0016781 | 0.0016317 | 0.5525723 | 0.0013417 | 0.0014654 | 0.0014113 | 0         | 0         | 0.0003557 | 0         | 0         |
| 0.0003021 | 0.0015485 | 0.0008259 | 0.1635383 | 0.0030245 | 0         | 0.0002294 | 0         | 0.0007418 | 0.0136922 | 0.0011203 | 0.0074292 | 0.0816908 |
| 0.0003193 | 0.001341  | 0         | 0.146577  | 0.0016566 | 0         | 0.0005184 | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.0063485 | 0.0002965 | 0.0001944 | 0.000761  |
| 0         | 0         | 0         | 0         | 0         | 0         | 5.03E-04  | 0         | 0         | 0.0002355 | 0         | 0         | 0.0061676 |
| 0         | 0         | 0.0002423 | 0.0001196 | 0         | 0         | 0.0099841 | 0         | 0         | 0         | 0         | 0         | 0         |
| 0.0086958 | 0.0032898 | 0         | 0.0003215 | 0.0380637 | 0.0005056 | 8.74E-05  | 0.000977  | 0         | 0.0002528 | 0.0002872 | 0         | 0.0001529 |
| 0.0019979 | 0.0165468 | 0.0022078 | 0.0030748 | 0.0008669 | 0.0031768 | 0.0011309 | 0.0018449 | 0         | 0         | 0         | 0         | 0         |
| 0.0028762 | 0.0043702 | 0         | 0.0001176 | 0.0349586 | 0.0004387 | 0.0001118 | 0.0005792 | 0         | 0         | 0.0002409 | 0         | 0.0001548 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.0102045 | 0         | 0         | 0         |
| 0.0035301 | 0.0255496 | 0.0021058 | 0.0040679 | 0.0011953 | 0.0075022 | 0.67777   | 0.0024493 | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0.0001346 | 9.501E-05 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0.0011323 | 0         | 0         | 0.0015947 | 0         | 0         | 0         | 0         | 0         |
| 0         | 0.0116873 | 0         | 0.0186992 | 6.613E-05 | 0.0321498 | 0.0012221 | 0.0007078 | 0         | 0         | 0         | 0         | 0.00277   |
| 0         | 0         | 0.0056239 | 0.0019536 | 0.0021695 | 0.0003598 | 6.562E-05 | 0         | 0.0038501 | 0.006225  | 0.0008593 | 0.0040449 | 0.0016425 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0.053252  | 0.0012388 | 0.0019724 | 0.0046446 | 0.0192727 | 0.0010299 | 0.000116  | 0.0005641 | 0         | 0.0003284 | 0         | 0.0002017 | 8.925E-05 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0.0025099 | 0         | 0.0032218 | 8.555E-05 | 0.0002505 | 0.0018439 | 0         | 0         | 0.0134281 | 0.0424397 | 0.0365873 | 0.0401773 | 0.0029102 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0.00E+00  | 0         | 0         | 0         | 0         | 0         | 0         |
| 9.15E-05  | 0         | 0         | 0         | 0         | 0         | 0.00E+00  | 0         | 0.0001342 | 0.0002257 | 0         | 8.052E-05 | 5.734E-05 |
| 0.0001032 | 0         | 0.0081013 | 0         | 0         | 0.0003596 | 3.679E-05 | 0         | 0.0176385 | 0.003395  | 0.0063937 | 0.0030533 | 0.0009909 |
| 0.0323113 | 0.0038965 | 0.000526  | 0.0003337 | 0.0491151 | 0.0006546 | 0.0002444 | 0.0007544 | 0         | 0         | 0         | 6.801E-05 | 0.0001551 |
| 0         | 0         | 0         | 0         | 0.0003156 | 0         | 0         | 0         | 0.0002061 | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 8.599E-05 | 0         | 0         | 0         |
| 0         | 0         | 0         | 3.825E-05 | 0         | 0         | 0         | 0         | 0         | 0.0002059 | 7.163E-05 | 0         | 0         |
| 0.0002134 | 0         | 0.020287  | 0.0008    | 8.775E-05 | 0         | 0.0002553 | 0.0004063 | 0.0178253 | 0.0030989 | 0.0070454 | 0.0048967 | 0.0047322 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0.000481  | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0.0002138 | 0         | 6.514E-05 | 0.0017275 | 0         | 0.0010817 | 0         | 0         | 0         | 4.454E-05 | 0         | 3.34E-05  |
| 0         | 0         | 0         | 9.529E-05 | 0         | 0         | 0.00E+00  | 0         | 0         | 0         | 0         | 0         | 0         |
| 4.444E-05 | 0         | 3.83E-05  | 0         | 0.0001121 | 7.896E-05 | 1.277E-05 | 0.0001962 | 0         | 4.303E-05 | 0         | 5.059E-05 | 0         |
| 0.0001376 | 0         | 0         | 0         | 0         | 0         | 0         | 0.0001161 | 0         | 0         | 0         | 4.667E-05 | 0         |
| 0         | 0.0002903 | 0         | 2.295E-05 | 0.0004208 | 0         | 0.0007739 | 0         | 3.906E-05 | 3.342E-05 | 0         | 2.094E-05 | 0.000145  |
| 0         | 0.0001472 | 0         | 0         | 1.246E-05 | 0         | 0.0003492 | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 6.75E-05  | 8.897E-05 | 1.398E-05 | 0         | 3.92E-03  | 0         | 0         | 5.522E-05 | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0.00E+00  | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0.000117  | 0         | 0         | 0         | 0         | 9.937E-06 | 0         | 0         | 2.628E-05 | 0         | 0         | 0.0006138 |
| 0.0053663 | 0.0165168 | 0.0006934 | 0.0214946 | 0.000545  | 0.0009422 | 0.1417287 | 0.0116447 | 0         | 0         | 0         | 0         | 0.0017598 |
| 0.004575  | 0.0021436 | 0.0072799 | 0.0390475 | 0.0009104 | 0.0194405 | 0.0113274 | 0.0983321 | 0         | 0.0001679 | 0         | 1.907E-05 | 0         |
| 6.743E-05 | 8.83E-05  | 1.926E-05 | 2.5E-05   | 2.706E-05 | 0.0002484 | 1.67E-05  | 0         | 0         | 0         | 0         | 2.867E-05 | 0         |
| 0         | 5.039E-05 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 6.753E-06 | 0         |
| 1.012E-05 | 4.126E-05 | 7.042E-06 | 1.881E-05 | 0         | 0         | 0.0005773 | 2.74E-05  | 0.0001064 | 0.00031   | 0         | 3.147E-05 | 0.0059363 |
| 3.833E-05 | 0.0001795 | 0.0114599 | 0.0018211 | 9.895E-05 | 5.9E-05   | 0.0001561 | 0.0003812 | 0.014039  | 0.0029865 | 0.0055471 | 0.0047775 | 0.0066218 |



| SC034     | SC035     | SC020     | SC019     | SC036     | SC017     | SC002     | SC003     | SC004     | SC005     | SC018     | SC007     | SC008     |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0.0039671 | 0.0022581 | 0         | 0         | 0         | 0.0024669 | 0         | 0         | 0.0022349 | 0.0008429 | 0         |
| 0.0025274 | 0.0003671 | 0.0001912 | 0.0004244 | 0         | 0.0005315 | 0.0025465 | 0.0003479 | 0         | 0         | 0.0005468 | 0.3268932 | 0         |
| 0         | 0         | 0.0004245 | 0.0192326 | 0         | 0.0015176 | 0.0020885 | 0.0006874 | 0.0010518 | 0         | 0.0002968 | 0.2305918 | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.0002578 | 0         |
| 0.0007281 | 0.0007841 | 0         | 0         | 0.5838281 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.00E+00  |
| 0.000226  | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.0002228 | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0.0023914 | 0.002533  | 0.001117  | 0.0014883 | 0         | 0         | 0.8990422 | 0         |
| 0.0002435 | 0.000181  | 0.0213837 | 0.0382978 | 0         | 0.000181  | 0.001673  | 0.0350642 | 0.00E+00  | 0.0017042 | 0.0889807 | 0.0003527 | 0         |
| 0.000651  | 0         | 0.91837   | 0.0025918 | 0         | 0         | 0         | 0         | 0         | 0         | 0.0014279 | 0.000129  | 0         |
| 0         | 0         | 0.0218079 | 0.0562073 | 0         | 0.0003871 | 0.0003957 | 0.0548509 | 0         | 0         | 0.0859096 | 4.93E-04  | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0.0151465 | 0.0006275 | 0.0001804 | 0         | 0.0006706 | 0         | 0         | 0.0012119 | 0.00E+00  | 0         | 0         | 1.33E-02  | 0         |
| 0         | 0         | 0.0012859 | 0.002585  | 0         | 0         | 0         | 0         | 0         | 0.0062004 | 0.0011341 | 0         | 0.0005804 |
| 0         | 0.0001478 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0.0002744 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.0003659 | 0         |
| 0         | 0.0014425 | 0         | 0.0003257 | 0         | 0.0179448 | 0.0427154 | 0         | 0.0001665 | 0         | 0         | 0.0014695 | 0         |
| 0.0017229 | 0.0026415 | 0.0008064 | 0.0005567 | 0.0002963 | 0         | 0         | 0         | 0.0001228 | 0         | 0.0029252 | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0.0304736 | 0.0314714 | 0.0004623 | 0.0004909 | 0.002192  | 0.0142051 | 0.0002178 | 0.0010228 | 0.0062493 | 0.0004123 | 0.0003873 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.000117  | 0         | 0         |
| 0.0381974 | 0.0115231 | 7.944E-05 | 0.0001864 | 0.0011946 | 0         | 0         | 0         | 0         | 0.0008692 | 0.0002017 | 0.0002628 | 0.0001451 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.00E+00  | 0         | 0.000108  | 0         | 0         |
| 0         | 0.0160326 | 0         | 0.0003062 | 0         | 0         | 0         | 0         | 6.344E-05 | 0         | 0.0002696 | 0.00E+00  | 0         |
| 0.0136323 | 0.015264  | 6.052E-05 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 7.001E-05 | 0.00E+00  |
| 0         | 0.0005366 | 0.0421105 | 0.0344003 | 0.0002678 | 0.0005908 | 0.000458  | 0.0344428 | 0.0001211 | 0         | 0.0337011 | 0.0001573 | 0         |
| 0         | 0         | 0         | 0         | 0         | 0.0014156 | 0.0032006 | 0.0021135 | 0.8250014 | 0         | 0.000221  | 0.0009258 | 0         |
| 0         | 0         | 0         | 0.000255  | 0         | 0         | 0.0465928 | 0         | 0         | 0         | 0         | 4.495E-05 | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0.0094771 | 0.0081087 | 5.06E-05  | 7.985E-05 | 0.0001921 | 0         | 0         | 0         | 0         | 0         | 0.0001154 | 0.0003905 | 4.585E-05 |
| 0         | 0         | 0         | 0         | 0         | 5.838E-05 | 0.2381962 | 0.0001331 | 0.0001884 | 0         | 0         | 0         | 0.00E+00  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 4.843E-05 | 3.841E-05 | 0         | 0.0001342 | 0         | 0.0001492 | 8.072E-05 | 0.0002455 | 0.000245  | 0         | 0.0001152 | 0.0068131 | 7.627E-05 |
| 0         | 0.0001346 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 3.262E-05 | 0         | 0         | 0.0075059 | 0.0001768 | 2.979E-05 | 7.045E-05 | 0         | 0         | 0         | 0.0001064 | 0         | 0         |
| 0         | 3.937E-05 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 2.192E-05 | 0         |
| 2.738E-05 | 2.295E-05 | 0         | 0         | 0.0121804 | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 3.825E-05 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.0095189 | 0         | 0         | 0.0013307 |
| 0         | 6.511E-05 | 0         | 4.772E-05 | 0         | 0.0003794 | 0.00107   | 0.0005843 | 0.0003487 | 0.005639  | 0         | 0.0002332 | 0.3172457 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 1.758E-05 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 1.871E-05 | 0.0011193 | 0.002428  | 0         | 8.013E-05 | 0.0002398 | 0.0010392 | 8.761E-05 | 0.0003611 | 0.0006941 | 0.0138952 | 0.0001855 |
| 0         | 0         | 0.0002744 | 0.0007093 | 0         | 0.1146875 | 0.0002919 | 0.0001873 | 3.383E-05 | 0.0215004 | 0.0002049 | 0.0155241 | 1.907E-05 |
| 0         | 0         | 0         | 0         | 9.655E-05 | 0         | 6.353E-05 | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 7.792E-06 | 0         | 1.312E-05 | 0         | 8.312E-06 | 0         | 9.221E-06 | 0         | 0         | 0         | 0         | 0         |
| 0.0001078 | 1.958E-05 | 0         | 2.685E-05 | 2.96E-05  | 5.391E-06 | 0         | 0         | 0         | 0         | 2.465E-05 | 0         | 0         |
| 0.0087811 | 0.0074068 | 4.716E-05 | 9.337E-05 | 0.0007255 | 7.998E-06 | 0         | 3.327E-05 | 9.884E-06 | 0.000542  | 8.22E-05  | 0.0006058 | 7.36E-05  |

|           |           |           |           |           |           |           |           |           |  |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
|           |           |           |           |           |           |           |           |           |  |
| SC006     | SC010     | SC011     | SC012     | SC013     | SC014     | SC015     | SC016     | SC009     |  |
| 0         | 0.0004827 | 0.00E+00  | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 0         | 0         | 0.0226467 | 0         | 0         | 0         | 0         | 0.0012334 | 0         |  |
| 0.0007724 | 0.0008297 | 0.0005697 | 0.0002026 | 0         | 0.0003021 | 0.0016633 | 0.0006347 | 0         |  |
| 0.0003907 | 0.0008226 | 0.0003531 | 0.0006085 | 0         | 0         | 0.0030427 | 0.0019157 | 0.2400804 |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 0         | 0         | 0         | 0         | 0.00E+00  | 0.0003294 | 0         | 0         | 0         |  |
| 0         | 0.0021386 | 0.00E+00  | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 0.0038892 | 0.0021365 | 0.0017401 | 0.0010887 | 0         | 0         | 0.0055348 | 0.0013593 | 0.0014726 |  |
| 0.0090485 | 0.0003589 | 0.0011923 | 0.0669103 | 0         | 0.0948175 | 0         | 0.0418092 | 0.0002497 |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 0.0081611 | 0.0013334 | 0.0030368 | 0.0835811 | 0         | 0.0960293 | 0.0012933 | 0.068274  | 0.0002093 |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 0         | 0         | 0.0001374 | 0.0001266 | 0         | 0.0002451 | 0         | 0         | 0         |  |
| 0         | 0         | 0.0004792 | 0         | 0.0001464 | 0         | 0         | 0.000205  | 0         |  |
| 0         | 0         | 0.0001267 | 0         | 0.00E+00  | 0         | 0         | 0         | 0         |  |
| 0         | 0         | 0.00022   | 0         | 0         | 0         | 0         | 0         | 0.1163236 |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.0040705 |  |
| 0.0021589 | 0.0002561 | 0.0006985 | 0.0008932 | 4.51E-03  | 0.0003641 | 0         | 0.0036512 | 0         |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 0.1092993 | 0.0017761 | 0.0211648 | 0.0099032 | 0.0001946 | 0         | 0.0015851 | 0.0602385 | 0.0005069 |  |
| 0         | 0         | 0         | 7.544E-05 | 0.0054037 | 0         | 0         | 0         | 0         |  |
| 0         | 0         | 6.26E-05  | 0         | 0         | 0.0005194 | 0.0012863 | 0         | 0         |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0.0034686 | 0         |  |
| 0         | 0.0001377 | 0         | 4.865E-05 | 0.0057066 | 0.0004747 | 0         | 0.0001104 | 0         |  |
| 0.0294635 | 0.0029221 | 0.0046297 | 0.0308428 | 0         | 0.0287665 | 0.0013707 | 0.0338828 | 0         |  |
| 0.0027167 | 0.0017939 | 0.0011608 | 0.0006979 | 0         | 0         | 0.0054405 | 0.0010304 | 0.0017989 |  |
| 0.0001114 | 0         | 0         | 0         | 0         | 0         | 0.000387  | 6.254E-05 | 5.863E-05 |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 9.17E-05  | 0         | 0         | 0         | 0.0331912 | 0.000355  | 0         | 0         | 0         |  |
| 0.0001884 | 0.00026   | 1.80E-04  | 0         | 0         | 0         | 0.0009916 | 5.916E-05 | 0.0003798 |  |
| 0         | 0         | 0.00E+00  | 0         | 0         | 0         | 0         | 0         | 0         |  |
| 0.0026416 | 0.0665566 | 6.903E-05 | 0.0002867 | 0.004545  | 5.4E-05   | 0.0002422 | 0.0007588 | 0.0172521 |  |
| 6.46E-05  | 0         | 6.891E-05 | 0         | 0         | 0.000133  | 0         | 0         | 0         |  |
| 0.000661  | 0.0122089 | 2.13E-05  | 6.241E-05 | 5.579E-05 | 0         | 0.0004095 | 3.924E-05 | 3.357E-05 |  |
| 0         | 0         | 0         | 0         | 0         | 0         | 0.000183  | 0         | 0         |  |
| 0         | 0         | 0         | 0         | 2.658E-05 | 6.885E-05 | 0         | 0         | 0         |  |
| 8.954E-05 | 0         | 5.68E-04  | 0         | 0.0009842 | 0.0001643 | 0         | 0         | 3.037E-05 |  |
| 0.000904  | 0.0007094 | 0.2882388 | 0.0001889 | 0.0005505 | 0         | 0.0023382 | 0.0007639 | 0.000631  |  |
| 0         | 0         | 0         | 0         | 1.555E-05 | 0         | 0         | 0         | 0         |  |
| 0         | 0         | 0         | 0         | 0         | 3.205E-05 | 0         | 0         | 0         |  |
| 0.0001419 | 0.0001868 | 9.011E-05 | 0.0002925 | 0         | 0         | 0.0655116 | 0.0001942 | 0.027652  |  |
| 0.000343  | 0.011005  | 0.0003583 | 8.828E-05 | 0.0006558 | 0         | 0.0011654 | 0.0004648 | 0.0003466 |  |
| 0         | 0         | 0         | 4.335E-05 | 0         | 0         | 0         | 0         | 0         |  |
| 0         | 1.507E-05 | 0         | 0         | 8.701E-06 | 0         | 0         | 0         | 0         |  |
| 0         | 0.0026608 | 1.045E-05 | 5.831E-06 | 0         | 9.682E-06 | 0         | 0         | 0         |  |
| 0.0001483 | 0.0001692 | 2.15E-05  | 2.373E-05 | 0.0233539 | 0.0002205 | 1.637E-05 | 0.000103  | 4.64E-06  |  |

| Supplementary table S16. The average abundance and composition at the genus level among COVID-19 (n=71), SC (n=36), Post-COVID-19 (n=22), and SCR (n=36) groups. |             |               |             |             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------|-------------|-------------|
| ID                                                                                                                                                               | COVID-19    | Post-COVID-19 | SC          | SCR         |
| Acrodictys                                                                                                                                                       | 0.273025479 | 0.012352091   | 0.153844361 | 0.225685667 |
| Zanclospora                                                                                                                                                      | 0.128900817 | 0.197568591   | 0.030687861 | 0.217046111 |
| Aspergillus                                                                                                                                                      | 0.089071901 | 0.023247409   | 0.141242306 | 0.026150667 |
| Candida                                                                                                                                                          | 0.055329873 | 0.062074955   | 0.131445611 | 0.012421333 |
| Cladosporium                                                                                                                                                     | 0.039672338 | 0.016867909   | 0.091582    | 0.071947556 |
| Blumeria                                                                                                                                                         | 0.044938958 | 1.71E-05      | 0.128652361 | 0.026109417 |
| Actinomucor                                                                                                                                                      | 2.56E-06    | 0.335261409   | 9.61E-06    | 0.025432889 |
| Malassezia                                                                                                                                                       | 0.029725394 | 0.052714273   | 0.050929111 | 0.082169917 |
| Chrysosphaeria                                                                                                                                                   | 0.066193887 | 0             | 8.81E-04    | 1.41E-04    |
| Fungi_gen_Incertae_sedis                                                                                                                                         | 0.021221451 | 0.006595227   | 0.054046861 | 0.013336667 |
| Hydnobolites                                                                                                                                                     | 0.040220437 | 3.52E-05      | 4.03E-05    | 0.001323444 |
| Simplicillium                                                                                                                                                    | 0.020548577 | 0.001624727   | 0.009427917 | 0.011429806 |
| Saccharomyces                                                                                                                                                    | 0.02825969  | 7.42E-04      | 0.001371111 | 0.001236139 |
| Alternaria                                                                                                                                                       | 0.002753169 | 0.013418864   | 0.006140667 | 0.022140778 |
| Udeniomyces                                                                                                                                                      | 1.86E-05    | 0.064714591   | 2.84E-04    | 5.75E-04    |
| Diversispora                                                                                                                                                     | 0.004459014 | 0.001425227   | 0.010277389 | 0.020178667 |
| Russula                                                                                                                                                          | 0.006937141 | 1.40E-05      | 0.008792278 | 0.009571333 |
| Filobasidiaceae_gen_Incertae_sedis                                                                                                                               | 0.008852056 | 7.69E-05      | 0.00392125  | 0.008247833 |
| Galactomyces                                                                                                                                                     | 0.003749718 | 0.010632      | 8.89E-07    | 0.014582194 |
| Gibberella                                                                                                                                                       | 0.011924648 | 0.002501      | 5.04E-04    | 4.67E-05    |
| Rhexothecium                                                                                                                                                     | 2.49E-04    | 0             | 0.02432775  | 2.00E-05    |
| Aureobasidium                                                                                                                                                    | 0.002952437 | 0.004585227   | 0.012679722 | 0.002306056 |
| Penicillium                                                                                                                                                      | 0.003517831 | 0.006055636   | 0.009427194 | 0.002230083 |
| Rhodotorula                                                                                                                                                      | 0.001000746 | 0.030985727   | 2.43E-05    | 7.18E-04    |
| Pleurotus                                                                                                                                                        | 0.007054535 | 6.67E-04      | 0.005522472 | 0.001426278 |
| Neomicrosphaeropsis                                                                                                                                              | 0.009276366 | 0.001510682   | 2.47E-05    | 0.001692333 |
| Debaryomyces                                                                                                                                                     | 3.11E-04    | 0.030895      | 2.17E-05    | 7.59E-04    |
| Cookeina                                                                                                                                                         | 3.87E-06    | 0.001363591   | 8.75E-06    | 0.017738    |
| Nigrospora                                                                                                                                                       | 0.007665718 | 0.002618682   | 6.38E-04    | 0.001205694 |
| Inocyclus                                                                                                                                                        | 6.90E-07    | 7.34E-05      | 0           | 0.018313972 |
| Raffaelea                                                                                                                                                        | 0.005000901 | 0.007370591   | 0.001732833 | 0.001612806 |
| Kazachstania                                                                                                                                                     | 8.36E-04    | 0.003523955   | 6.79E-04    | 0.012403028 |
| Angustimassarina                                                                                                                                                 | 0.004806141 | 3.92E-04      | 0.002974056 | 0.003392361 |
| Yarrowia                                                                                                                                                         | 1.74E-04    | 0             | 0.00259325  | 0.0127215   |
| Parafuscosporella                                                                                                                                                | 0.005994014 | 1.71E-04      | 0.001566889 | 0.001780028 |
| Novakomyces                                                                                                                                                      | 1.17E-05    | 0.001345955   | 0           | 0.01395225  |
| Botryosphaeria                                                                                                                                                   | 6.95E-05    | 0.011922227   | 2.50E-06    | 0.007304167 |
| Filobasidium                                                                                                                                                     | 0.003139592 | 0.003336909   | 0.002895889 | 0.001647972 |
| Entoloma                                                                                                                                                         | 3.66E-06    | 3.82E-06      | 0           | 0.011148611 |
| Sterigmatomyces                                                                                                                                                  | 5.84E-04    | 0             | 0.009081639 | 6.13E-04    |
| Fantasmomyces                                                                                                                                                    | 0.004061169 | 3.37E-05      | 0.0012935   | 0.00127975  |
| Caloplaca                                                                                                                                                        | 0           | 1.43E-04      | 0           | 0.010405528 |
| Ustilaginoidea                                                                                                                                                   | 0.001433056 | 0.003350318   | 0.003641083 | 0.001740056 |
| Chloridium                                                                                                                                                       | 8.59E-07    | 4.09E-06      | 0           | 0.0101955   |
| Dipodascus                                                                                                                                                       | 7.51E-04    | 0.005336273   | 0           | 0.005268694 |
| Dioszegia                                                                                                                                                        | 9.72E-05    | 0.007831273   | 0.005002222 | 0           |
| Fusarium                                                                                                                                                         | 0.001968254 | 0.003166864   | 0.001904639 | 0.002252667 |
| Mucor                                                                                                                                                            | 6.85E-06    | 0.013766409   | 0           | 0.00127875  |
| Didymocyrtis                                                                                                                                                     | 2.15E-04    | 0             | 0.008834139 | 0           |
| Pseudoveronaea                                                                                                                                                   | 0.002956014 | 0             | 7.78E-04    | 4.04E-04    |
| Others                                                                                                                                                           | 0.060053704 | 0.057663727   | 0.080264667 | 0.064417444 |

| Table S17. The detailed values of oral fungal diversity index and observed OTUs among COVID-19(n=71), Post-COVID-19(n=22), and controls (n=132) |       |       |            |            |          |          |          |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|------------|------------|----------|----------|----------|---------------|
| sample                                                                                                                                          | reads | label | ace        | chao       | shannon  | simpson  | coverage | observed_otus |
| Post-COVID-19-001                                                                                                                               | 1161  | 0.97  | 204.205991 | 148.142857 | 2.26548  | 0.227925 | 0.970715 | 68            |
| Post-COVID-19-022                                                                                                                               | 1161  | 0.97  | 123.299254 | 94.083333  | 3.373911 | 0.050489 | 0.980189 | 73            |
| Post-COVID-19-021                                                                                                                               | 1161  | 0.97  | 41.933099  | 39.6       | 2.484253 | 0.123005 | 0.993109 | 34            |
| Post-COVID-19-020                                                                                                                               | 1161  | 0.97  | 37.540007  | 39         | 1.362154 | 0.485258 | 0.993109 | 32            |
| Post-COVID-19-018                                                                                                                               | 1161  | 0.97  | 55.29644   | 56.2       | 2.169348 | 0.256307 | 0.989664 | 43            |
| Post-COVID-19-017                                                                                                                               | 1161  | 0.97  | 22         | 21         | 0.830195 | 0.626092 | 0.994832 | 18            |
| Post-COVID-19-016                                                                                                                               | 1161  | 0.97  | 116.693813 | 75.3       | 1.429335 | 0.498883 | 0.980189 | 50            |
| Post-COVID-19-015                                                                                                                               | 1161  | 0.97  | 62.7877    | 61.666667  | 2.319243 | 0.207137 | 0.988803 | 53            |
| Post-COVID-19-014                                                                                                                               | 1161  | 0.97  | 38.287725  | 41         | 1.409094 | 0.391335 | 0.991387 | 32            |
| Post-COVID-19-013                                                                                                                               | 1161  | 0.97  | 42.218149  | 42         | 1.037398 | 0.646476 | 0.992248 | 36            |
| Post-COVID-19-012                                                                                                                               | 1161  | 0.97  | 119.666708 | 87.333333  | 2.6952   | 0.096774 | 0.985357 | 42            |
| Post-COVID-19-019                                                                                                                               | 1161  | 0.97  | 76.377462  | 83.857143  | 2.280684 | 0.260247 | 0.984496 | 62            |
| Post-COVID-19-010                                                                                                                               | 1161  | 0.97  | 53.272     | 60.333333  | 2.522192 | 0.144758 | 0.990525 | 42            |
| Post-COVID-19-011                                                                                                                               | 1161  | 0.97  | 42.862475  | 50         | 1.795625 | 0.272212 | 0.991387 | 35            |
| Post-COVID-19-002                                                                                                                               | 1161  | 0.97  | 72.24284   | 75         | 2.874572 | 0.088561 | 0.986219 | 55            |
| Post-COVID-19-004                                                                                                                               | 1161  | 0.97  | 89.753483  | 91.272727  | 2.881441 | 0.126266 | 0.982773 | 74            |
| Post-COVID-19-005                                                                                                                               | 1161  | 0.97  | 94.046472  | 86.076923  | 1.627045 | 0.467767 | 0.978467 | 63            |
| Post-COVID-19-003                                                                                                                               | 1161  | 0.97  | 44.994138  | 41.8       | 1.268717 | 0.572065 | 0.993109 | 39            |
| Post-COVID-19-007                                                                                                                               | 1161  | 0.97  | 67.875149  | 61         | 0.336671 | 0.879557 | 0.991387 | 16            |
| Post-COVID-19-008                                                                                                                               | 1161  | 0.97  | 44.186526  | 43.666667  | 1.797651 | 0.388678 | 0.993109 | 39            |
| Post-COVID-19-009                                                                                                                               | 1161  | 0.97  | 44.257568  | 44.2       | 2.149065 | 0.219705 | 0.993971 | 40            |
| Post-COVID-19-006                                                                                                                               | 1161  | 0.97  | 44.286052  | 41         | 0.971574 | 0.630558 | 0.989664 | 30            |
| COVID-19-051                                                                                                                                    | 1161  | 0.97  | 187.602734 | 209.5625   | 3.660507 | 0.062593 | 0.956934 | 133           |
| COVID-19-046                                                                                                                                    | 1161  | 0.97  | 139.489599 | 118.214286 | 1.779718 | 0.335989 | 0.96727  | 68            |
| COVID-19-050                                                                                                                                    | 1161  | 0.97  | 316.391581 | 212.545455 | 2.770248 | 0.123633 | 0.955211 | 92            |
| COVID-19-049                                                                                                                                    | 1161  | 0.97  | 848.249242 | 157        | 0.331303 | 0.885793 | 0.985357 | 21            |
| COVID-19-048                                                                                                                                    | 1161  | 0.97  | 531.467374 | 339.125    | 2.70861  | 0.264882 | 0.919035 | 157           |
| COVID-19-047                                                                                                                                    | 1161  | 0.97  | 101.777416 | 85.5       | 1.508825 | 0.448113 | 0.981051 | 47            |
| COVID-19-045                                                                                                                                    | 1161  | 0.97  | 184.473842 | 124.333333 | 2.1401   | 0.206212 | 0.970715 | 62            |
| COVID-19-040                                                                                                                                    | 1161  | 0.97  | 235.77996  | 103.25     | 1.556162 | 0.37698  | 0.980189 | 40            |
| COVID-19-043                                                                                                                                    | 1161  | 0.97  | 268.371365 | 234.55     | 3.66058  | 0.050965 | 0.946598 | 140           |
| COVID-19-042                                                                                                                                    | 1161  | 0.97  | 86.238635  | 77         | 1.031194 | 0.592878 | 0.982773 | 39            |
| COVID-19-041                                                                                                                                    | 1161  | 0.97  | 220.26437  | 114.666667 | 2.846907 | 0.08374  | 0.973299 | 63            |
| COVID-19-039                                                                                                                                    | 1161  | 0.97  | 718.616042 | 403.157895 | 2.685407 | 0.258907 | 0.91559  | 153           |
| COVID-19-038                                                                                                                                    | 1161  | 0.97  | 387.82118  | 269        | 2.398014 | 0.332885 | 0.933678 | 136           |
| COVID-19-052                                                                                                                                    | 1161  | 0.97  | 128.50878  | 99         | 1.650383 | 0.469497 | 0.976744 | 60            |
| COVID-19-044                                                                                                                                    | 1161  | 0.97  | 613.555391 | 374.588235 | 2.374443 | 0.333259 | 0.922481 | 139           |
| COVID-19-053                                                                                                                                    | 1161  | 0.97  | 206.513438 | 174.875    | 3.017554 | 0.115036 | 0.96727  | 87            |
| COVID-19-065                                                                                                                                    | 1161  | 0.97  | 372.916051 | 104        | 1.632065 | 0.333212 | 0.981912 | 34            |
| COVID-19-055                                                                                                                                    | 1161  | 0.97  | 89.077493  | 59.857143  | 1.117057 | 0.614781 | 0.984496 | 38            |
| COVID-19-071                                                                                                                                    | 1161  | 0.97  | 94.584173  | 82.5       | 2.404128 | 0.179839 | 0.983635 | 54            |
| COVID-19-070                                                                                                                                    | 1161  | 0.97  | 43.715735  | 42.166667  | 2.042991 | 0.202291 | 0.990525 | 33            |
| COVID-19-069                                                                                                                                    | 1161  | 0.97  | 102.670873 | 86.75      | 2.833069 | 0.129892 | 0.982773 | 63            |
| COVID-19-068                                                                                                                                    | 1161  | 0.97  | 84.514889  | 71.666667  | 2.630853 | 0.119444 | 0.985357 | 49            |
| COVID-19-067                                                                                                                                    | 1161  | 0.97  | 51.730104  | 51         | 0.975967 | 0.565194 | 0.986219 | 27            |
| COVID-19-066                                                                                                                                    | 1161  | 0.97  | 164.047733 | 124.75     | 2.987428 | 0.127041 | 0.969854 | 95            |
| COVID-19-037                                                                                                                                    | 1161  | 0.97  | 272.802393 | 205.8      | 3.553794 | 0.063068 | 0.94832  | 135           |
| COVID-19-064                                                                                                                                    | 1161  | 0.97  | 277.61828  | 196.65     | 2.386726 | 0.310738 | 0.950043 | 114           |
| COVID-19-063                                                                                                                                    | 1161  | 0.97  | 151.625555 | 147.428571 | 2.394678 | 0.197268 | 0.971576 | 72            |
| COVID-19-062                                                                                                                                    | 1161  | 0.97  | 106.576254 | 104.4      | 3.32563  | 0.061818 | 0.979328 | 86            |
| COVID-19-061                                                                                                                                    | 1161  | 0.97  | 94.610612  | 90.714286  | 2.937261 | 0.09463  | 0.979328 | 71            |
| COVID-19-060                                                                                                                                    | 1161  | 0.97  | 462.156197 | 266        | 1.823761 | 0.319221 | 0.94832  | 89            |
| COVID-19-059                                                                                                                                    | 1161  | 0.97  | 333.901698 | 100        | 0.516028 | 0.824471 | 0.981912 | 30            |
| COVID-19-058                                                                                                                                    | 1161  | 0.97  | 33.207015  | 32         | 1.222445 | 0.401215 | 0.992248 | 26            |
| COVID-19-056                                                                                                                                    | 1161  | 0.97  | 195.426883 | 147.571429 | 2.466214 | 0.205444 | 0.964686 | 89            |
| COVID-19-054                                                                                                                                    | 1161  | 0.97  | 33.936017  | 30.25      | 0.31763  | 0.896694 | 0.991387 | 19            |

|              |      |      |            |            |          |          |          |     |
|--------------|------|------|------------|------------|----------|----------|----------|-----|
| COVID-19-036 | 1161 | 0.97 | 219.751529 | 153.8125   | 3.357808 | 0.065045 | 0.963824 | 100 |
| COVID-19-057 | 1161 | 0.97 | 301.417131 | 119.857143 | 0.928618 | 0.663082 | 0.972438 | 49  |
| COVID-19-034 | 1161 | 0.97 | 107.938782 | 134        | 1.852562 | 0.378338 | 0.971576 | 68  |
| COVID-19-014 | 1161 | 0.97 | 451.441662 | 337.75     | 2.865736 | 0.240612 | 0.925926 | 155 |
| COVID-19-013 | 1161 | 0.97 | 419.519902 | 236.387097 | 2.602492 | 0.289792 | 0.933678 | 142 |
| COVID-19-012 | 1161 | 0.97 | 152.157191 | 100        | 1.938388 | 0.384781 | 0.976744 | 61  |
| COVID-19-011 | 1161 | 0.97 | 224.422011 | 216.115385 | 3.031965 | 0.197648 | 0.945736 | 141 |
| COVID-19-010 | 1161 | 0.97 | 427.255455 | 318.789474 | 2.524395 | 0.316374 | 0.929371 | 144 |
| COVID-19-009 | 1161 | 0.97 | 494.725222 | 319.5      | 2.761421 | 0.276614 | 0.921619 | 162 |
| COVID-19-015 | 1161 | 0.97 | 121.960285 | 124.0625   | 2.848519 | 0.103129 | 0.970715 | 89  |
| COVID-19-008 | 1161 | 0.97 | 386.676842 | 278.4      | 2.930965 | 0.138677 | 0.940568 | 122 |
| COVID-19-006 | 1161 | 0.97 | 487.081935 | 306.105263 | 1.891302 | 0.465179 | 0.92851  | 127 |
| COVID-19-005 | 1161 | 0.97 | 416.045656 | 264.142857 | 2.974694 | 0.193126 | 0.937123 | 139 |
| COVID-19-004 | 1161 | 0.97 | 53.104915  | 51.5       | 0.859756 | 0.706987 | 0.98708  | 34  |
| COVID-19-002 | 1161 | 0.97 | 217.174298 | 128.75     | 1.124585 | 0.54092  | 0.976744 | 41  |
| COVID-19-001 | 1161 | 0.97 | 203.569711 | 162.105263 | 3.217839 | 0.091982 | 0.96124  | 110 |
| COVID-19-035 | 1161 | 0.97 | 241.82044  | 162        | 3.080292 | 0.092937 | 0.957795 | 106 |
| COVID-19-007 | 1161 | 0.97 | 451.622772 | 288.956522 | 2.312381 | 0.366585 | 0.92851  | 141 |
| COVID-19-016 | 1161 | 0.97 | 270.579709 | 199.103448 | 2.594603 | 0.299152 | 0.947459 | 136 |
| COVID-19-003 | 1161 | 0.97 | 376.928122 | 254.111111 | 2.5696   | 0.279783 | 0.931955 | 140 |
| COVID-19-018 | 1161 | 0.97 | 500.968322 | 283        | 2.710498 | 0.273871 | 0.925065 | 154 |
| COVID-19-017 | 1161 | 0.97 | 218.41396  | 150.5      | 2.890446 | 0.123193 | 0.96124  | 101 |
| COVID-19-032 | 1161 | 0.97 | 162.833334 | 128.090909 | 3.05133  | 0.100125 | 0.972438 | 83  |
| COVID-19-030 | 1161 | 0.97 | 176.953146 | 144.111111 | 2.456564 | 0.235057 | 0.969854 | 78  |
| COVID-19-029 | 1161 | 0.97 | 103.245946 | 102.25     | 2.419849 | 0.236817 | 0.976744 | 73  |
| COVID-19-028 | 1161 | 0.97 | 235.052693 | 176.5      | 1.834912 | 0.36759  | 0.964686 | 74  |
| COVID-19-027 | 1161 | 0.97 | 191.150007 | 177.357143 | 3.0825   | 0.138241 | 0.955211 | 130 |
| COVID-19-026 | 1161 | 0.97 | 163.484216 | 118.230769 | 1.353496 | 0.520929 | 0.968131 | 67  |
| COVID-19-031 | 1161 | 0.97 | 209.395477 | 202.545455 | 3.587085 | 0.055074 | 0.950904 | 130 |
| COVID-19-024 | 1161 | 0.97 | 130.767842 | 145.583333 | 3.022738 | 0.116359 | 0.969854 | 96  |
| COVID-19-019 | 1161 | 0.97 | 466.168334 | 235.894737 | 2.568414 | 0.221655 | 0.94143  | 116 |
| COVID-19-025 | 1161 | 0.97 | 210.754853 | 220.333333 | 3.04407  | 0.111144 | 0.94832  | 122 |
| COVID-19-020 | 1161 | 0.97 | 96.967943  | 70.666667  | 2.671143 | 0.122271 | 0.985357 | 48  |
| COVID-19-033 | 1161 | 0.97 | 200.048146 | 222.352941 | 3.538085 | 0.068903 | 0.952627 | 135 |
| COVID-19-022 | 1161 | 0.97 | 166.126034 | 168        | 2.991241 | 0.111667 | 0.971576 | 80  |
| COVID-19-023 | 1161 | 0.97 | 324.443953 | 214.12     | 2.604299 | 0.210568 | 0.94143  | 123 |
| COVID-19-021 | 1161 | 0.97 | 172.474607 | 154.4      | 3.199116 | 0.09717  | 0.966408 | 105 |
| Control095   | 1161 | 0.97 | 206.637282 | 147.375    | 2.928213 | 0.0952   | 0.969854 | 73  |
| Control084   | 1161 | 0.97 | 256.064431 | 92.333333  | 1.034312 | 0.497006 | 0.982773 | 29  |
| Control085   | 1161 | 0.97 | 292.997627 | 237.896552 | 3.458815 | 0.087888 | 0.940568 | 157 |
| Control086   | 1161 | 0.97 | 103.938776 | 95         | 2.012645 | 0.213327 | 0.978467 | 45  |
| Control087   | 1161 | 0.97 | 126.962117 | 84.1       | 2.696581 | 0.145929 | 0.981051 | 61  |
| Control088   | 1161 | 0.97 | 120.286762 | 67.5       | 1.389625 | 0.488166 | 0.983635 | 39  |
| Control089   | 1161 | 0.97 | 73.537462  | 79.666667  | 1.687042 | 0.404479 | 0.982773 | 48  |
| Control091   | 1161 | 0.97 | 152.307424 | 101.071429 | 2.443229 | 0.188255 | 0.97416  | 70  |
| Control093   | 1161 | 0.97 | 137.847812 | 83         | 0.271306 | 0.922439 | 0.986219 | 23  |
| Control094   | 1161 | 0.97 | 77.946138  | 72.909091  | 2.772583 | 0.115293 | 0.984496 | 59  |
| Control096   | 1161 | 0.97 | 178.409985 | 162.12     | 3.374096 | 0.06289  | 0.958656 | 117 |
| Control083   | 1161 | 0.97 | 250.497894 | 227.25     | 3.419134 | 0.098505 | 0.951766 | 131 |
| Control090   | 1161 | 0.97 | 257.490748 | 177.045455 | 3.162196 | 0.079683 | 0.953488 | 112 |
| Control092   | 1161 | 0.97 | 139.985502 | 98         | 2.471787 | 0.123441 | 0.979328 | 52  |
| Control075   | 1161 | 0.97 | 71.701698  | 56.6       | 2.510962 | 0.142266 | 0.988803 | 41  |
| Control081   | 1161 | 0.97 | 97.82309   | 86         | 2.205264 | 0.261154 | 0.981912 | 56  |
| Control080   | 1161 | 0.97 | 89.510452  | 92.25      | 3.022942 | 0.078344 | 0.981912 | 66  |
| Control079   | 1161 | 0.97 | 226.686252 | 168.666667 | 2.591343 | 0.189894 | 0.965547 | 82  |
| Control078   | 1161 | 0.97 | 147.722023 | 96.625     | 1.951543 | 0.349036 | 0.977606 | 56  |
| Control077   | 1161 | 0.97 | 141.235226 | 135.058824 | 3.158188 | 0.100824 | 0.968992 | 98  |
| Control076   | 1161 | 0.97 | 36.774656  | 35         | 1.751404 | 0.322276 | 0.993109 | 28  |

|            |      |      |            |            |          |          |          |     |
|------------|------|------|------------|------------|----------|----------|----------|-----|
| Control074 | 1161 | 0.97 | 41.042707  | 38         | 2.182768 | 0.219415 | 0.993971 | 35  |
| Control073 | 1161 | 0.97 | 55.89319   | 54         | 1.683156 | 0.311148 | 0.989664 | 32  |
| Control072 | 1161 | 0.97 | 63.251698  | 71.25      | 2.427898 | 0.147477 | 0.98708  | 45  |
| Control071 | 1161 | 0.97 | 182.490922 | 149.375    | 2.552403 | 0.169763 | 0.969854 | 75  |
| Control070 | 1161 | 0.97 | 107.671029 | 79.666667  | 2.272615 | 0.191708 | 0.981051 | 54  |
| Control069 | 1161 | 0.97 | 157.723771 | 152.272727 | 2.690339 | 0.103313 | 0.963824 | 74  |
| Control097 | 1161 | 0.97 | 137.666851 | 96.2       | 2.580427 | 0.133773 | 0.981051 | 50  |
| Control068 | 1161 | 0.97 | 96.087629  | 88.333333  | 1.758392 | 0.391339 | 0.985357 | 43  |
| Control082 | 1161 | 0.97 | 178.079118 | 167.935484 | 2.922534 | 0.19167  | 0.957795 | 130 |
| Control098 | 1161 | 0.97 | 211.253769 | 154.875    | 2.178837 | 0.292463 | 0.96124  | 93  |
| Control116 | 1161 | 0.97 | 75.814498  | 77.5       | 2.318262 | 0.240947 | 0.984496 | 52  |
| Control100 | 1161 | 0.97 | 113.667758 | 95.083333  | 3.16343  | 0.074337 | 0.980189 | 74  |
| Control067 | 1161 | 0.97 | 147.801943 | 140.2      | 1.813566 | 0.381645 | 0.975022 | 59  |
| Control130 | 1161 | 0.97 | 199.474053 | 165.75     | 2.285088 | 0.207982 | 0.97416  | 57  |
| Control129 | 1161 | 0.97 | 97.55556   | 72.090909  | 2.180812 | 0.198816 | 0.981912 | 53  |
| Control128 | 1161 | 0.97 | 114.951615 | 69.1       | 1.902713 | 0.231159 | 0.981051 | 46  |
| Control127 | 1161 | 0.97 | 67.283243  | 65         | 0.385624 | 0.896084 | 0.981912 | 35  |
| Control126 | 1161 | 0.97 | 165.315906 | 138.866667 | 2.48526  | 0.220617 | 0.96727  | 92  |
| Control125 | 1161 | 0.97 | 80.126864  | 79.6       | 1.489677 | 0.480916 | 0.979328 | 52  |
| Control124 | 1161 | 0.97 | 206.159832 | 140.6      | 2.435497 | 0.189716 | 0.968131 | 74  |
| Control123 | 1161 | 0.97 | 87.682168  | 115.2      | 0.984722 | 0.626667 | 0.976744 | 45  |
| Control122 | 1161 | 0.97 | 97.616243  | 72         | 2.562433 | 0.111701 | 0.982773 | 53  |
| Control121 | 1161 | 0.97 | 67.387778  | 72.75      | 0.359458 | 0.899413 | 0.983635 | 30  |
| Control120 | 1161 | 0.97 | 182.419281 | 113.75     | 2.586502 | 0.14757  | 0.975022 | 63  |
| Control119 | 1161 | 0.97 | 138.559826 | 98         | 1.665967 | 0.427619 | 0.976744 | 59  |
| Control118 | 1161 | 0.97 | 90.577774  | 87.428571  | 2.219891 | 0.220958 | 0.978467 | 66  |
| Control099 | 1161 | 0.97 | 154.673251 | 140.12     | 3.219959 | 0.112961 | 0.96727  | 112 |
| Control117 | 1161 | 0.97 | 70.174464  | 62.363636  | 2.165975 | 0.238344 | 0.985357 | 50  |
| Control114 | 1161 | 0.97 | 610.137824 | 310.473684 | 2.025692 | 0.42142  | 0.927649 | 127 |
| Control113 | 1161 | 0.97 | 156.795172 | 122.142857 | 1.88887  | 0.329628 | 0.97416  | 60  |
| Control112 | 1161 | 0.97 | 89.015108  | 84         | 2.830503 | 0.086192 | 0.980189 | 61  |
| Control111 | 1161 | 0.97 | 123.767447 | 94.2       | 2.387957 | 0.136805 | 0.981051 | 48  |
| Control110 | 1161 | 0.97 | 196.456922 | 139.235294 | 2.881161 | 0.114993 | 0.964686 | 91  |
| Control109 | 1161 | 0.97 | 332.296971 | 116.5      | 1.401353 | 0.468256 | 0.983635 | 31  |
| Control108 | 1161 | 0.97 | 373.92205  | 272.433333 | 3.273436 | 0.091161 | 0.92851  | 159 |
| Control107 | 1161 | 0.97 | 106.20442  | 97.5       | 2.49073  | 0.138103 | 0.982773 | 50  |
| Control106 | 1161 | 0.97 | 152.323888 | 182        | 2.749048 | 0.129735 | 0.962102 | 96  |
| Control105 | 1161 | 0.97 | 111.040825 | 86.25      | 3.036538 | 0.073136 | 0.981912 | 60  |
| Control104 | 1161 | 0.97 | 682.365975 | 398.037037 | 2.834972 | 0.234671 | 0.905254 | 176 |
| Control103 | 1161 | 0.97 | 103.127162 | 102.6      | 1.951251 | 0.26949  | 0.980189 | 52  |
| Control102 | 1161 | 0.97 | 226.802311 | 132        | 1.431463 | 0.46194  | 0.96124  | 77  |
| Control101 | 1161 | 0.97 | 102.438804 | 76         | 2.797279 | 0.103325 | 0.983635 | 57  |
| Control115 | 1161 | 0.97 | 60.032739  | 54         | 1.583295 | 0.42197  | 0.98708  | 39  |
| Control066 | 1161 | 0.97 | 198.236722 | 180        | 3.079379 | 0.126982 | 0.953488 | 127 |
| Control020 | 1161 | 0.97 | 138.905418 | 91.428571  | 0.747475 | 0.7634   | 0.977606 | 45  |
| Control064 | 1161 | 0.97 | 231.205168 | 114.8      | 2.178124 | 0.247257 | 0.971576 | 62  |
| Control029 | 1161 | 0.97 | 106.184557 | 88         | 2.890661 | 0.076768 | 0.981912 | 53  |
| Control028 | 1161 | 0.97 | 250.715284 | 204.035714 | 3.603339 | 0.063906 | 0.950043 | 145 |
| Control027 | 1161 | 0.97 | 461.362636 | 379.24     | 4.056134 | 0.047697 | 0.916451 | 193 |
| Control026 | 1161 | 0.97 | 132.573564 | 89.666667  | 2.88151  | 0.089767 | 0.979328 | 59  |
| Control025 | 1161 | 0.97 | 133.132313 | 62.2       | 1.842743 | 0.2628   | 0.985357 | 35  |
| Control024 | 1161 | 0.97 | 346.557825 | 136.8125   | 2.885238 | 0.123646 | 0.963824 | 83  |
| Control023 | 1161 | 0.97 | 199.826896 | 119        | 1.541679 | 0.458064 | 0.972438 | 57  |
| Control022 | 1161 | 0.97 | 171.700977 | 98         | 1.651188 | 0.419121 | 0.975883 | 56  |
| Control021 | 1161 | 0.97 | 63.543488  | 62.142857  | 2.592412 | 0.154108 | 0.988803 | 51  |
| Control131 | 1161 | 0.97 | 72.521783  | 71.5       | 2.394603 | 0.156644 | 0.984496 | 46  |
| Control019 | 1161 | 0.97 | 114.043134 | 119        | 3.158632 | 0.075746 | 0.979328 | 73  |
| Control018 | 1161 | 0.97 | 129.086128 | 122        | 2.870741 | 0.151686 | 0.971576 | 89  |

|            |      |      |            |            |          |          |          |     |
|------------|------|------|------------|------------|----------|----------|----------|-----|
| Control017 | 1161 | 0.97 | 229.172201 | 98         | 1.326716 | 0.397766 | 0.975883 | 44  |
| Control016 | 1161 | 0.97 | 185.644686 | 223.333333 | 2.447286 | 0.131725 | 0.972438 | 58  |
| Control015 | 1161 | 0.97 | 278.873177 | 228.666667 | 3.134304 | 0.147931 | 0.944014 | 142 |
| Control014 | 1161 | 0.97 | 189.114359 | 144.2      | 2.815957 | 0.10165  | 0.975022 | 63  |
| Control013 | 1161 | 0.97 | 268.306557 | 228.3125   | 3.314455 | 0.106653 | 0.950043 | 125 |
| Control012 | 1161 | 0.97 | 302.056335 | 222.071429 | 2.179614 | 0.260891 | 0.950043 | 104 |
| Control011 | 1161 | 0.97 | 196.243984 | 122.8      | 2.698382 | 0.11555  | 0.971576 | 70  |
| Control010 | 1161 | 0.97 | 307.407096 | 183        | 3.35518  | 0.059498 | 0.96124  | 93  |
| Control009 | 1161 | 0.97 | 200.045282 | 99.75      | 1.526234 | 0.376948 | 0.975022 | 49  |
| Control008 | 1161 | 0.97 | 92.614325  | 67.25      | 1.099694 | 0.420936 | 0.984496 | 29  |
| Control007 | 1161 | 0.97 | 204.293264 | 154        | 2.429498 | 0.233694 | 0.959518 | 107 |
| Control006 | 1161 | 0.97 | 183.199277 | 132.461538 | 2.823661 | 0.139974 | 0.968992 | 84  |
| Control005 | 1161 | 0.97 | 154.664984 | 133.111111 | 2.727948 | 0.138568 | 0.972438 | 78  |
| Control004 | 1161 | 0.97 | 245.659438 | 167.2      | 0.911305 | 0.729502 | 0.970715 | 55  |
| Control003 | 1161 | 0.97 | 200.515224 | 164.666667 | 1.836512 | 0.428431 | 0.965547 | 78  |
| Control002 | 1161 | 0.97 | 378.782573 | 227        | 2.191876 | 0.353077 | 0.939707 | 122 |
| Control001 | 1161 | 0.97 | 177.997272 | 94.428571  | 1.767396 | 0.30397  | 0.972438 | 59  |
| Control030 | 1161 | 0.97 | 156.4265   | 221.5      | 2.599654 | 0.128893 | 0.963824 | 78  |
| Control031 | 1161 | 0.97 | 153.015447 | 149.333333 | 3.335041 | 0.076395 | 0.965547 | 106 |
| Control032 | 1161 | 0.97 | 141.290336 | 118.909091 | 3.311081 | 0.058579 | 0.975022 | 82  |
| Control033 | 1161 | 0.97 | 236.142838 | 209.315789 | 3.567941 | 0.069534 | 0.953488 | 134 |
| Control063 | 1161 | 0.97 | 174.171798 | 148.583333 | 3.164894 | 0.073661 | 0.96727  | 90  |
| Control062 | 1161 | 0.97 | 195.748629 | 151.117647 | 3.027117 | 0.107805 | 0.962963 | 98  |
| Control061 | 1161 | 0.97 | 225.268676 | 234.125    | 2.829556 | 0.137077 | 0.959518 | 99  |
| Control060 | 1161 | 0.97 | 165.55496  | 139.428571 | 2.411592 | 0.149719 | 0.971576 | 64  |
| Control059 | 1161 | 0.97 | 165.531759 | 136        | 3.267342 | 0.081162 | 0.971576 | 88  |
| Control058 | 1161 | 0.97 | 82.868001  | 72.857143  | 2.11927  | 0.252051 | 0.984496 | 51  |
| Control057 | 1161 | 0.97 | 175.470426 | 98.625     | 2.640645 | 0.133016 | 0.977606 | 58  |
| Control056 | 1161 | 0.97 | 285.706879 | 195.333333 | 3.662793 | 0.03446  | 0.962963 | 95  |
| Control055 | 1161 | 0.97 | 149.302086 | 151.4      | 2.902043 | 0.108971 | 0.963824 | 94  |
| Control054 | 1161 | 0.97 | 130.592023 | 101.857143 | 2.322021 | 0.196342 | 0.978467 | 59  |
| Control053 | 1161 | 0.97 | 195.346513 | 159        | 1.86382  | 0.447339 | 0.965547 | 81  |
| Control052 | 1161 | 0.97 | 168.87007  | 102.333333 | 2.074063 | 0.223672 | 0.972438 | 61  |
| Control051 | 1161 | 0.97 | 177.038291 | 113.5      | 1.80514  | 0.420458 | 0.969854 | 71  |
| Control050 | 1161 | 0.97 | 200.368186 | 199.055556 | 1.723382 | 0.49828  | 0.949182 | 104 |
| Control065 | 1161 | 0.97 | 241.825829 | 167.625    | 2.551312 | 0.145116 | 0.966408 | 75  |
| Control049 | 1161 | 0.97 | 272.137619 | 219.142857 | 3.212013 | 0.108676 | 0.947459 | 132 |
| Control047 | 1161 | 0.97 | 210.930062 | 141.75     | 2.774164 | 0.131168 | 0.966408 | 80  |
| Control046 | 1161 | 0.97 | 115.734121 | 109.25     | 3.014629 | 0.078958 | 0.97416  | 73  |
| Control045 | 1161 | 0.97 | 351.799689 | 254.066667 | 3.489481 | 0.075347 | 0.946598 | 128 |
| Control044 | 1161 | 0.97 | 168.277257 | 168.473684 | 3.268661 | 0.075702 | 0.960379 | 114 |
| Control043 | 1161 | 0.97 | 170.892434 | 89.909091  | 0.94206  | 0.704604 | 0.975022 | 53  |
| Control042 | 1161 | 0.97 | 225.877276 | 183.142857 | 3.184155 | 0.093588 | 0.955211 | 120 |
| Control041 | 1161 | 0.97 | 204.134584 | 137.333333 | 2.846813 | 0.114629 | 0.970715 | 75  |
| Control040 | 1161 | 0.97 | 117.461298 | 112.615385 | 1.851581 | 0.369993 | 0.971576 | 72  |
| Control039 | 1161 | 0.97 | 205.686318 | 153        | 2.045832 | 0.41296  | 0.965547 | 88  |
| Control038 | 1161 | 0.97 | 142.686778 | 105.1      | 2.829536 | 0.124422 | 0.976744 | 70  |
| Control037 | 1161 | 0.97 | 91.568196  | 54.3       | 1.064402 | 0.619386 | 0.984496 | 39  |
| Control036 | 1161 | 0.97 | 99.407298  | 69.111111  | 2.458787 | 0.121642 | 0.982773 | 48  |
| Control035 | 1161 | 0.97 | 291.621806 | 222        | 2.609647 | 0.310248 | 0.944014 | 142 |
| Control034 | 1161 | 0.97 | 109.55903  | 97.166667  | 2.380188 | 0.160608 | 0.980189 | 55  |
| Control048 | 1161 | 0.97 | 129.307083 | 93         | 2.184379 | 0.27445  | 0.976744 | 66  |
| Control132 | 1161 | 0.97 | 176.845816 | 137        | 1.084853 | 0.664035 | 0.968131 | 63  |

Supplementary table S18. The abundance and composition at the phylum level of each sample among COVID-19 (n=71), Post-COVID-19 (n=22), and control (n=132) groups.

| (n = 102 groups)          |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |                               |  |
|---------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--|
| phylum                    | Post-<br>COVID<br><br>-19-001 | Post-<br>COVID<br><br>-19-022 | Post-<br>COVID<br><br>-19-021 | Post-<br>COVID<br><br>-19-020 | Post-<br>COVID<br><br>-19-018 | Post-<br>COVID<br><br>-19-017 | Post-<br>COVID<br><br>-19-016 | Post-<br>COVID<br><br>-19-015 | Post-<br>COVID<br><br>-19-014 | Post-<br>COVID<br><br>-19-013 | Post-<br>COVID<br><br>-19-012 | Post-<br>COVID<br><br>-19-019 | Post-<br>COVID<br><br>-19-010 | Post-<br>COVID<br><br>-19-011 |  |
| Ascomycota                | 715318                        | 521575                        | 988399                        | 814754                        | 201053                        | 930920                        | 148552                        | 522412                        | 403146                        | 107171                        | 461177                        | 188542                        | 341092                        | 107243                        |  |
| Basidiomycota             | 34682                         | 416179                        | 1393                          | 106494                        | 283637                        | 2626                          | 37647                         | 39443                         | 6342                          | 32619                         | 321284                        | 286590                        | 335643                        | 472944                        |  |
| Chytridiomycota           | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             |  |
| Fungi phyl Incertae sedis | 20799                         | 3628                          | 9258                          | 424                           | 1963                          | 31835                         | 3005                          | 9508                          | 2378                          | 1500                          | 9373                          | 891                           | 2049                          | 1749                          |  |
| Mucoromycota              | 228667                        | 58618                         | 950                           | 78328                         | 513347                        | 34465                         | 810450                        | 428469                        | 588134                        | 858710                        | 208166                        | 523514                        | 321216                        | 417814                        |  |
| Rozellomycota             | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 39                            | 0                             | 0                             | 0                             | 0                             | 0                             | 0                             | 250                           |  |
| Zoopagomycota             | 534                           | 0                             | 0                             | 0                             | 0                             | 154                           | 307                           | 168                           | 0                             | 0                             | 0                             | 463                           | 0                             | 0                             |  |

Supplementary table S18. The abundance and composition at the genus level of each sample among COVID-19 (n=71), Post-COVID-19 (n=22), and control (n=132) groups.

[illegible]



[illegible]

[illegible]

|                                     |       |       |     |    |      |      |      |      |      |      |       |      |        |      |
|-------------------------------------|-------|-------|-----|----|------|------|------|------|------|------|-------|------|--------|------|
| Nakaseomyces                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Nectriopsis                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Nemania                             | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neoacladium                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neosascochyta                       | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neocelosporium                      | 0     | 28331 | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neooniothyrium                      | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neocucurbitaria                     | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neodevriesia                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neodevriesiaceae gen Incertae sedis | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neovarysiphe                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neofusicoccum                       | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Neomicrosphaeropsis                 | 12494 | 0     | 0   | 0  | 0    | 0    | 46   | 0    | 0    | 0    | 0     | 0    | 6708   | 2715 |
| Neosetophoma                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Nigrograna                          | 0     | 0     | 0   | 0  | 0    | 0    | 1503 | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Nigrospora                          | 837   | 0     | 0   | 0  | 0    | 0    | 461  | 0    | 2083 | 2748 | 0     | 0    | 46     | 1942 |
| Novakomyces                         | 17028 | 12460 | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 63   | 0     | 0    | 0      | 0    |
| Ochrocladosporium                   | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Ochroconis                          | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Ogataea                             | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Oliveonia                           | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Ophiosphaerella                     | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Ophiostoma                          | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 161  | 0    | 0    | 0     | 0    | 0      | 0    |
| Paecilomyces                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Paludomyces                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Papiliotrema                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Paracremonium                       | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Parafuscosporella                   | 438   | 425   | 663 | 0  | 0    | 879  | 82   | 93   | 0    | 0    | 108   | 128  | 0      | 0    |
| Paraleptosphaeria                   | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Paralaratospora                     | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 2876 | 70   | 0     | 0    | 0      | 0    |
| Paraphoma                           | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pararamichloridium                  | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Parasarocladium                     | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Parastagonosporella                 | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Parasympodiella                     | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Parathyridaria                      | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Paratritirachium                    | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Penicillifer                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Penicillium                         | 325   | 204   | 0   | 52 | 0    | 0    | 658  | 0    | 435  | 0    | 16071 | 54   | 8210   | 0    |
| Penidiella                          | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Peniophora                          | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 1970 | 0    | 78   | 46546 | 4166 | 41     | 0    |
| Peniophorella                       | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Periconia                           | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 66   | 0     | 0    | 0      | 8936 |
| Peroneutypa                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pestalotiopsis                      | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Peyronellaea                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Peziza                              | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phacidium                           | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phaeocremonium                      | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phaeophleospora                     | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phaeosphaeria                       | 0     | 0     | 0   | 0  | 0    | 0    | 1586 | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phanerochaete                       | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phialemoniopsis                     | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 4789 | 0     | 0    | 0      | 0    |
| Phialocephala                       | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phlebia                             | 0     | 0     | 0   | 0  | 0    | 0    | 665  | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phlebiopsis                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phomatospora                        | 0     | 0     | 0   | 0  | 2899 | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Phyllachora                         | 11341 | 0     | 688 | 0  | 0    | 2581 | 9703 | 5416 | 0    | 72   | 0     | 4352 | 0      | 0    |
| Phyllosticta                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Physisporinus                       | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 3519   | 0    |
| Pichia                              | 0     | 0     | 0   | 0  | 0    | 85   | 0    | 0    | 352  | 0    | 0     | 0    | 0      | 0    |
| Plectosphaerella                    | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Plenodomus                          | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pleurotus                           | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 1482 | 0     | 6417 | 0      | 0    |
| Podosphaera                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Powellomyces                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Preussia                            | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Protomyces                          | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Psathyrella                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pseudocercospora                    | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pseudogymnoascus                    | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pseudohelminthosporium              | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pseudomicrostoma                    | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pseudophthomyces                    | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pseudoramichloridium                | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pseudorobillarda                    | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pseudoveronaea                      | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Puccinia                            | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Punctularia                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Purpureocillium                     | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pyrenochaeta                        | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pyrenochaetopsis                    | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Pyricularia                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Quambalaria                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Rachicladosporium                   | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Radulomyces                         | 0     | 0     | 0   | 0  | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0      | 0    |
| Raffaelea                           | 0     | 396   | 0   | 0  | 40   | 45   | 88   | 0    | 0    | 61   | 180   | 38   | 159873 | 55   |

[illegible]

[illegible]

| species                        | CCR001 | CCR022 | CCR021 | CCR020 | CCR018 | CCR017 | CCR016 | CCR015 | CCR014 | CCR013 | CCR012 | CCR019 | CCR010 | CCR011 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Acremonium acutatum            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Acremonium alternatum          | 642    | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Acremonium cavaeaeum           | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Acremonium charticola          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Acremonium egyptiacum          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Acremonium vitellinum          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Acrocalymma fici               | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Acrodictys fluminicola         | 7018   | 133812 | 1190   | 3786   | 1959   | 192    | 6535   | 5407   | 396    | 4759   | 45825  | 19214  | 1143   | 5482   |
| Acrodontium crateriforme       | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Actinomucor elegans            | 185170 | 32284  | 445    | 78292  | 504340 | 33704  | 747726 | 421560 | 580785 | 853582 | 182828 | 523021 | 309198 | 414755 |
| Adisciso yakushimense          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Agaricales spe Incertae sedis  | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Agaricus subfloccosus          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Ahmadae dalanensis             | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Akanthomyces thailandicus      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Alloccryptovalsa polyspora     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Alternaria alstroemeriae       | 0      | 0      | 0      | 292    | 0      | 0      | 0      | 140    | 0      | 0      | 0      | 0      | 0      | 0      |
| Alternaria alternata           | 3495   | 210    | 743    | 75139  | 0      | 238    | 2740   | 9022   | 0      | 0      | 112    | 42     | 63003  | 0      |
| Alternaria chlamydospora       | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Alternaria hungarica           | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Alternaria nepalensis          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Amphobotrys ricini             | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Amylostereum orientale         | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Anastomitrabeculia didymospora | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Angustimassarina camporesii    | 1400   | 0      | 0      | 0      | 0      | 345    | 222    | 488    | 32     | 0      | 0      | 2728   | 0      | 0      |
| Anisomeridium guangdongensis   | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Antennariella placitae         | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Anthracina ramosa              | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Anthracina saxicola            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Apiotrichum brassicae          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Apiotrichum domesticum         | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aquapteridospora fusiformis    | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Arachnomycetes jinanicus       | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Archaeorhizomyces borealis     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Arthrinium rasikravindrae      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Arthrographis grakistii        | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 153    | 0      | 471    | 0      | 0      |
| Ascochyta rabiei               | 289    | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 143    |
| Ascomycota spe Incertae sedis  | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Ascosphaera duoformis          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Ascotricha erinacea            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Ascotricha guamensis           | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus amstelodami        | 799    | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 13014  | 51     |
| Aspergillus baarnensis         | 0      | 14349  | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 1511   | 0      | 0      |
| Aspergillus clavatorphorus     | 0      | 0      | 0      | 0      | 303    | 0      | 0      | 74     | 42     | 68     | 0      | 429    | 0      | 0      |
| Aspergillus conicus            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus coremiiformis      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus corrugatus         | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus flavus             | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus foetidus           | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus fumisynnematus     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus glabripes          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus inflatus           | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus insolitus          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Aspergillus kalimae            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 4285   |
| Aspergillus neoglaber          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |

|                                    |       |       |      |      |       |     |      |        |        |      |       |       |       |      |
|------------------------------------|-------|-------|------|------|-------|-----|------|--------|--------|------|-------|-------|-------|------|
| Aspergillus ochraceus              | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 74    | 0     | 0     |      |
| Aspergillus penicillioides         | 1546  | 18378 | 236  | 4606 | 48600 | 46  | 919  | 6632   | 668    | 5542 | 36377 | 19696 | 0     | 1477 |
| Aspergillus pragensis              | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 196    | 0      | 0    | 0     | 0     | 0     | 0    |
| Aspergillus restrictus             | 104   | 195   | 0    | 0    | 2202  | 0   | 0    | 0      | 5757   | 0    | 0     | 0     | 0     | 0    |
| Aspergillus subflavus              | 0     | 3724  | 0    | 0    | 981   | 97  | 141  | 0      | 154    | 67   | 41319 | 1966  | 6172  | 318  |
| Aspergillus tennesseensis          | 0     | 0     | 0    | 86   | 0     | 0   | 160  | 0      | 0      | 1346 | 0     | 3634  | 3685  | 0    |
| Aspergillus thermomutatus          | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Aspergillus unguis                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Aspergillus versicolor             | 93    | 0     | 259  | 1274 | 1664  | 0   | 1262 | 0      | 380    | 87   | 9741  | 213   | 16768 | 0    |
| Aspergillus vitricola              | 0     | 4588  | 0    | 0    | 330   | 80  | 0    | 0      | 0      | 0    | 0     | 2633  | 0     | 0    |
| Aspergillus westerdijkiae          | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Aspergillus whitfieldii            | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Atractiella rhizophila             | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Aureobasidium pullulans            | 0     | 84005 | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Aureobasidium thailandense         | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Auricularia auricula-judae         | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Auricularia delicata               | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Austropleospora keteleeriae        | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Avachytrium platense               | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Bandonia marina                    | 0     | 606   | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 88   | 0     | 0     | 0     | 0    |
| Banksiophoma australiensis         | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Bannoa syzygii                     | 727   | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Basidiodendron globisporum         | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Basidiomycota spe Incertae sedis   | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Beauveria bassiana                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Beauveria lii                      | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Beauveria majiangensis             | 0     | 615   | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 205   | 0     | 0    |
| Bergerella atrofusca               | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Berkeleyomyces basicola            | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Betamyces spe Incertae sedis       | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Biatrisporaceae spe Incertae sedis | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Bjerkandera adusta                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 8173  | 0     | 0    |
| Bjerkandera mikrofumosa            | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Blastobotrys proliferans           | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Blumeria graminis                  | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Blumeria spe Incertae sedis        | 0     | 0     | 0    | 39   | 0     | 0   | 0    | 0      | 35     | 0    | 0     | 0     | 0     | 0    |
| Botryosphaeria corticis            | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Botryosphaeria spe Incertae sedis  | 14217 | 11476 | 243  | 1659 | 0     | 49  | 52   | 118097 | 8878   | 4811 | 28880 | 25214 | 0     | 0    |
| Botryosphaeria wangensis           | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Botrytis cinerea                   | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 3072   | 0      | 0    | 0     | 0     | 0     | 0    |
| Bovista aestivalis                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Bovista psammophila                | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Bradomyces alpinus                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 42    | 0     | 0     | 9488 |
| Bucklezyma armeniaca               | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Bucklezyma aurantiaca              | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Bulleromyces albus                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Byssochlamys spectabilis           | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Cadophora bubakii                  | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Cadophora lacrimiformis            | 981   | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Caloplaca micromontana             | 209   | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 1322  | 0     | 0    |
| Calosphaeria pulchella             | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Calycina spe Incertae sedis        | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Calyptrella capula                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida albicans                   | 317   | 2916  | 4446 | 1007 | 3350  | 0   | 46   | 5346   | 312335 | 141  | 58    | 72    | 110   | 57   |
| Candida apicola                    | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida ethanolica                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida haemulonis                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida inconspicua                | 19951 | 0     | 0    | 0    | 9390  | 150 | 0    | 1790   | 0      | 1147 | 0     | 0     | 0     | 0    |
| Candida intermedia                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida maltosa                    | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida nivariensis                | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida parapsilosis               | 0     | 424   | 0    | 118  | 0     | 0   | 42   | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida saitoana                   | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida saraburiensis              | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida solani                     | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 42     | 0    | 0     | 0     | 0     | 240  |
| Candida spe Incertae sedis         | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida tropicalis                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida vespimorsuum               | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Candida zeylanoides                | 0     | 0     | 0    | 7033 | 0     | 0   | 0    | 0      | 0      | 5808 | 0     | 0     | 0     | 0    |
| Capnodiales spe Incertae sedis     | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Carlosrosaea hohenbergiae          | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Ceraceosorus guamensis             | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Ceratocystis manginecans           | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Ceratocystis pirilliformis         | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Cercospora canescens               | 2008  | 0     | 0    | 0    | 0     | 42  | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Ceriporia lacerata                 | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Ceriporia xylostromatoides         | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Ceriporiopsis fimbriata            | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Cerrena aurantiopora               | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Chaenothecopsis resinophila        | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Chaetomium globosum                | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Chaetosphaeria guttulata           | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Chalara hughesii                   | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Chloridium pini                    | 0     | 0     | 0    | 0    | 38    | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Choanephora cucurbitarum           | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Chrysosphaeria jan-nelii           | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |
| Chytridiomycota spe Incertae sedis | 0     | 0     | 0    | 0    | 0     | 0   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0    |

|                                     |       |       |     |        |      |     |      |       |      |      |       |       |     |      |
|-------------------------------------|-------|-------|-----|--------|------|-----|------|-------|------|------|-------|-------|-----|------|
| Chytridium olla                     | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Ciboria shiraiana                   | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Ciliophora spe Incertae sedis       | 0     | 214   | 0   | 44     | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cladophialophora spe Incertae sedis | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cladosporium cladosporioides        | 22532 | 0     | 702 | 261    | 4433 | 87  | 1334 | 42    | 570  | 3220 | 76390 | 28719 | 92  | 44   |
| Cladosporium coloradense            | 0     | 1031  | 0   | 0      | 0    | 0   | 0    | 30    | 0    | 0    | 58    | 36    | 0   | 0    |
| Cladosporium halotolerans           | 0     | 30073 | 0   | 6030   | 7137 | 215 | 349  | 29182 | 35   | 3370 | 33700 | 35    | 0   | 0    |
| Cladosporium kenpeggii              | 5615  | 0     | 460 | 4836   | 473  | 35  | 138  | 0     | 450  | 83   | 3265  | 4460  | 0   | 0    |
| Cladosporium spe Incertae sedis     | 606   | 0     | 0   | 32     | 57   | 52  | 1613 | 0     | 0    | 0    | 746   | 705   | 0   | 0    |
| Cladosporium sphaerospermum         | 0     | 9497  | 0   | 43     | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Clavispora lusitanae                | 764   | 0     | 0   | 0      | 0    | 346 | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Clonostachys eriocamporesii         | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 3386  | 0    | 0    | 0     | 0     | 0   | 0    |
| Clonostachys rosea                  | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Colletotrichum cliviae              | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Collybiopsis filamentipes           | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coniella quercicola                 | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coniochaeta mutabilis               | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coniosporium apollinis              | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coniosporium spe Incertae sedis     | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coniothyrium spe Incertae sedis     | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cookeina korffii                    | 672   | 12456 | 0   | 4244   | 0    | 0   | 39   | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coprinellus ovatus                  | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coprinellus pseudodissemminatus     | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coprinopsis atramentaria            | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 3253  | 0   | 0    |
| Coprinopsis clastophylla            | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coprinopsis strossmayeri            | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Coprinopsis urticicola              | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cordyceps ghanensis                 | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 1998  | 0    | 0    | 0     | 0     | 0   | 0    |
| Cordyceps lepidopterorum            | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cordyceps succavus                  | 0     | 193   | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 104 | 148  |
| Coronicium gemmiferum               | 758   | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Crustoderma spe Incertae sedis      | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cryptococcus longus                 | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cryptococcus neoformans             | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cryptococcus uniguttulatus          | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cryptomarasmius aucubae             | 0     | 0     | 0   | 4590   | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Curvularia chonburiensis            | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Curvularia soli                     | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cutaneotrichosporon arboriforme     | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cutaneotrichosporon cutaneum        | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cutaneotrichosporon jirovecii       | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cyphellaceae spe Incertae sedis     | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cyphellophora olivacea              | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cyphellophora sessilis              | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cystobasidium slooffiae             | 0     | 9715  | 0   | 0      | 0    | 0   | 0    | 0     | 625  | 4319 | 0     | 0     | 0   | 0    |
| Cystofilobasidium capitatum         | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cystofilobasidium infirmominatum    | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cystofilobasidium macerans          | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cytospora brevispora                | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cytospora myrtagena                 | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Cytospora predappioensis            | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dactylella spe Incertae sedis       | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dactylodendron pinicola             | 0     | 0     | 0   | 0      | 0    | 0   | 54   | 26362 | 0    | 0    | 0     | 0     | 0   | 0    |
| Debaryomyces prosopidis             | 859   | 379   | 0   | 672623 | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 5290  | 0   | 31   |
| Deconica spe Incertae sedis         | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Delastria faustiniana               | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dendryphiella paravinosa            | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dexomyces mrakii                    | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Diaporthe bohemiae                  | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Diaporthe caulivora                 | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Diaporthe celeris                   | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Diaporthe ganjae                    | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Diaporthe kochmanii                 | 942   | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 1213 | 0     | 0     | 0   | 0    |
| Diaporthe miriciae                  | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Diaporthe pseudoculi                | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Didymella dimorpha                  | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Didymella keratinophila             | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Didymella spe Incertae sedis        | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 6558  | 0   | 0    |
| Didymocyrtis brachylaenae           | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dimorphoma saxea                    | 0     | 27250 | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dioszegia catarinonii               | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dioszegia zsoldii var. yunnanensis  | 0     | 0     | 0   | 0      | 0    | 42  | 0    | 0     | 0    | 0    | 0     | 15544 | 0   | 0    |
| Dipodascus geotrichum               | 112   | 1688  | 237 | 0      | 120  | 0   | 88   | 0     | 9728 | 0    | 0     | 0     | 0   | 2937 |
| Diutina catenulata                  | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Diutina rugosa                      | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 2013  | 0    | 0    | 0     | 0     | 0   | 0    |
| Diversispora spurca                 | 323   | 0     | 505 | 0      | 0    | 134 | 1181 | 0     | 5037 | 0    | 0     | 0     | 0   | 0    |
| Dothidea eucalypti                  | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dothidea sambuci                    | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Dothiora spartii                    | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Echinoporia hydnophora              | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Edenia gomezpomae                   | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Effuseotrichosporon vanderwaltii    | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Elaphomyces anthracinus             | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Elsinoe leucopogonis                | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Emergomycetes canadensis            | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 0    | 0    | 0     | 0     | 0   | 0    |
| Emergellopsis robusta               | 0     | 0     | 0   | 0      | 0    | 0   | 0    | 0     | 815  | 0    | 0     | 0     | 0   | 0    |
| Engyodontium album                  | 0     | 6184  | 0   | 0      | 0    | 0   | 1702 | 0     | 704  | 0    | 0     | 0     | 0   | 0    |

|                                     |       |      |      |       |       |       |       |      |      |      |      |      |       |       |
|-------------------------------------|-------|------|------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|
| Entoloma graphitipes f. cystidiatum | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 84   | 0    | 0     | 0     |
| Entorrhiza citriformis              | 1298  | 0    | 0    | 0     | 0     | 84    | 320   | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Entorrhiza parvula                  | 103   | 0    | 0    | 0     | 0     | 0     | 86    | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Entyloma calendulae                 | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Entyloma cosmi                      | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Entyloma linariae                   | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Epicoccum dendrobii                 | 95    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 37    |
| Epicoccum duchesneae                | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Epicoccum viticis                   | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Eremothecium ashbyi                 | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Eremothecium coryli                 | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 3034 | 0    | 0    | 0     | 0     |
| Erysiphe azaleae                    | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 769  | 0    | 0    | 0     | 0     |
| Erysiphe medicaginis                | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Erythrobasidium hasegawianum        | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Erythrobasidium yunnanense          | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Eupendiella venezuelensis           | 227   | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Eutypella spe Incertae sedis        | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Eutypella tamaricis                 | 0     | 0    | 0    | 0     | 0     | 38    | 9057  | 51   | 0    | 0    | 0    | 0    | 0     | 0     |
| Exidia pithya                       | 0     | 0    | 0    | 0     | 0     | 0     | 39    | 0    | 0    | 0    | 0    | 0    | 35773 | 0     |
| Exobasidium spe Incertae sedis      | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Exophiala dermatitidis              | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Extremus spe Incertae sedis         | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fantasmomyces hyalinus              | 0     | 437  | 0    | 0     | 36    | 0     | 0     | 0    | 0    | 0    | 0    | 218  | 0     | 0     |
| Filobasidium globisporum            | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Filobasidium oerense                | 0     | 0    | 0    | 21225 | 44521 | 45    | 40    | 0    | 46   | 0    | 0    | 6396 | 0     | 0     |
| Filobasidium wieringae              | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Flagelloscypha spe Incertae sedis   | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Flammoclaidiella aceris             | 0     | 0    | 0    | 0     | 601   | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Flammulina filiformis               | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Flammulina velutipes                | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Flavodon spe Incertae sedis         | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fomitopsis eucalypticola            | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fracchiaea myricoides               | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fungi spe Incertae sedis            | 19398 | 3628 | 9258 | 424   | 1963  | 31751 | 2599  | 9508 | 2378 | 1500 | 9373 | 891  | 2049  | 1749  |
| Fusarium fujikuroi                  | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 49   | 63   | 0    | 8121 | 0     | 0     |
| Fusarium irregulare                 | 0     | 0    | 0    | 185   | 0     | 0     | 467   | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fusarium lacertarum                 | 0     | 0    | 0    | 4878  | 0     | 0     | 13881 | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fusarium neocosmosporiellum         | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fusarium oxysporum                  | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fusarium poae                       | 3208  | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 3463  |
| Fusarium ramigenum                  | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fuscosporella aquatica              | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Fusicolla acetilerea                | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| GS08 spe Incertae sedis             | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Galactomyces pseudocandidus         | 13743 | 7635 | 0    | 0     | 67851 | 298   | 12763 | 528  | 1145 | 3436 | 0    | 0    | 1853  | 263   |
| Ganoderma australe                  | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Genea brunneocarpa                  | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 34   | 0    | 0    | 0    | 0     | 0     |
| Genolevuria amylolytica             | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Geosmithia rufescens                | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Geotrichum silvicola                | 0     | 0    | 0    | 0     | 0     | 1170  | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Gibberella baccata                  | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Gibberella fujikuroi                | 0     | 0    | 0    | 4723  | 0     | 0     | 0     | 3665 | 0    | 0    | 0    | 0    | 0     | 12196 |
| Gibellula shennongjiaensis          | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Gibellulopsis serrae                | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Gjaerumia minor                     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Glomus macrocarpum                  | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Golovinomyces latissporus           | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Golovinomyces sonchicola            | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Golubevia pallescens                | 0     | 0    | 0    | 0     | 2133  | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Gonatophragmium spe Incertae sedi   | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Graphium penicillioides             | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Gregarithecium curvisporum          | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Groenewaldozyma tartarivorans       | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Gymnopus varicolor                  | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Halosphaeriaceae spe Incertae sedis | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hannaella kunmingensis              | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hannaella oryzae                    | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hannaella pagnoccae                 | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hannaella sinensis                  | 20    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hannaella surugaensis               | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hanseniaspora nectarophila          | 0     | 0    | 0    | 0     | 0     | 44    | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hazslinszkyomyces aloes             | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Heitmania litseae                   | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Helicoma brunneisporum              | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Heliocybe villosa                   | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Henningsia resupinata               | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Heydenia spe Incertae sedis         | 0     | 5036 | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hohenbuehelia portegna              | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 5180 | 0    | 0    | 0    | 0    | 0     | 0     |
| Holtermanniella takashimae          | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Homortomyces tamaricis              | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hormodochis melanochlora            | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hortaea werneckii                   | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Houjia yanglingensis                | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Huntiella tyalla                    | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hydnobolites roseus                 | 0     | 210  | 0    | 91    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 97   | 52    | 0     |
| Hydropisphaera spe Incertae sedis   | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |
| Hypophichia burtonii                | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0     |



|                                       |       |        |      |      |       |     |       |       |      |      |       |        |       |      |      |
|---------------------------------------|-------|--------|------|------|-------|-----|-------|-------|------|------|-------|--------|-------|------|------|
| Hypoxylon perforatum                  | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Hysterobrevium walvisbayicola         | 2752  | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Inocyclus angularis                   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Iodophanus testaceus                  | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Iodosphaeria phyllophila              | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Irpex lacteus                         | 0     | 0      | 0    | 0    | 25513 | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Issatchenkia orientalis               | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Itersonilia perplexans                | 0     | 0      | 0    | 0    | 0     | 47  | 0     | 3583  | 346  | 0    | 0     | 9835   | 0     | 0    | 0    |
| Jaminaea angkorensis                  | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Jattaea ribicola                      | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Kazachstania exigua                   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Kazachstania heterogenica             | 1579  | 21227  | 0    | 0    | 36    | 55  | 0     | 8972  | 0    | 0    | 0     | 0      | 25103 | 5166 |      |
| Kazachstania humilis                  | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Keissleriella quadriseptata           | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Keratinophyton linfenense             | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Kluyveromyces lactis                  | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Kneiffiella efibulata                 | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Knufia cryptophialidica               | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Knufia epidermidis                    | 0     | 0      | 0    | 45   | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Knufia hypolithi                      | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Knufia karalitana                     | 0     | 0      | 0    | 0    | 0     | 0   | 1106  | 0     | 0    | 84   | 0     | 0      | 0     | 0    | 0    |
| Knufia tsunedae                       | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Kodamaea ohmeri                       | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Komagataella phaffii                  | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Komagataella ulmi                     | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Kondoa thailandica                    | 1961  | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Kurtzmaniella quercitrusa             | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Laburnicola dactylidis                | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Laetisaria lichenicola                | 0     | 0      | 0    | 0    | 0     | 0   | 40    | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lecanicillium coprophilum             | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lembosiniella eucalyptorum            | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lentinula edodes                      | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lentinus arcularius                   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lentinus squarrosulus                 | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lentithecium aquaticum                | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Leptospora rubella                    | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 4792 |
| Leptospora spe Incertae sedis         | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Leptosporella bambusae                | 0     | 0      | 0    | 0    | 33    | 38  | 0     | 85    | 0    | 0    | 44    | 0      | 101   | 0    | 0    |
| Leucosporidium golubevii              | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lipomyces doorenjongii                | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lithohypha aloicola                   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 37    | 865  | 0    | 0     | 0      | 0     | 0    | 0    |
| Lophiostoma cynaroidis                | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lophiostoma spe Incertae sedis        | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Lyomyces spe Incertae sedis           | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Macrohyporia dictyopora               | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Malassezia arunalokei                 | 0     | 218320 | 0    | 0    | 0     | 0   | 998   | 0     | 44   | 0    | 0     | 0      | 58179 | 0    | 0    |
| Malassezia cuniculi                   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Malassezia dermatis                   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Malassezia furfur                     | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Malassezia globosa                    | 0     | 72297  | 0    | 0    | 0     | 49  | 566   | 0     | 0    | 66   | 0     | 6785   | 13407 | 4181 | 0    |
| Malassezia japonica                   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Malassezia restricta                  | 6176  | 66675  | 1136 | 4072 | 81743 | 617 | 13734 | 15183 | 1530 | 1915 | 72061 | 131235 | 32501 | 130  |      |
| Malassezia sympodialis                | 0     | 0      | 0    | 0    | 0     | 46  | 831   | 0     | 0    | 81   | 0     | 12701  | 0     | 3479 | 0    |
| Marantokordyana oberwinkleriana       | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Meira argovae                         | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Meira nashicola                       | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Meira spe Incertae sedis              | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Meyerozyma guilliermondii             | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Microascus paisii                     | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Microascus trigonosporus              | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Milospium graphideorum                | 0     | 4247   | 0    | 0    | 0     | 79  | 0     | 102   | 326  | 0    | 0     | 0      | 0     | 0    | 0    |
| Moesziomyces bullatus                 | 310   | 0      | 0    | 0    | 6350  | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Monoblepharis macrandra               | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Montagnula opulenta                   | 0     | 0      | 233  | 5078 | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Mrakia aquatica                       | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Mrakia frigida                        | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Mucor circinelloides                  | 41260 | 26334  | 0    | 36   | 8879  | 186 | 58854 | 5370  | 1386 | 5128 | 25186 | 39     | 12018 | 2733 |      |
| Mucor pseudolusitanicus               | 1709  | 0      | 0    | 0    | 43    | 353 | 2643  | 1268  | 77   | 0    | 152   | 454    | 0     | 326  |      |
| Mucor racemosus                       | 205   | 0      | 0    | 0    | 0     | 0   | 46    | 271   | 849  | 0    | 0     | 0      | 0     | 0    | 0    |
| Mycocarthis spe Incertae sedis        | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Iycosphaerellaceae spe Incertae sedis | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Naganishia albida                     | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Naganishia albidosimilis              | 3122  | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Naganishia globosa                    | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Nectriopsis exigua                    | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Nemania viridis                       | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neoacladium indicum                   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neoaascochyta paspali                 | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neocelosporium corymbiae              | 0     | 28331  | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neooniothyrium viticola               | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neocucurbitaria irregularis           | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neodevriesia lagerstroemiae           | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neodevriesia sexualis                 | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neodevriesia spe Incertae sedis       | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neodevriesiaceae spe Incertae sedis   | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neoerysiphe galeopsidis               | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |
| Neofusicoccum buxi                    | 0     | 0      | 0    | 0    | 0     | 0   | 0     | 0     | 0    | 0    | 0     | 0      | 0     | 0    | 0    |

[illegible]

[illegible]

|                                       |     |      |        |      |       |     |       |       |     |      |     |       |        |        |
|---------------------------------------|-----|------|--------|------|-------|-----|-------|-------|-----|------|-----|-------|--------|--------|
| Sordaria spe Incertae sedis           | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Sphaerulina westendorpii              | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Spiromastix princeps                  | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Sporobolomyces beijingsensis          | 518 | 0    | 0      | 7967 | 0     | 0   | 151   | 38    | 0   | 60   | 0   | 53    | 14961  | 50707  |
| Sporobolomyces koalae                 | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Sporobolomyces patagonicus            | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Sporobolomyces phaffii                | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Sporobolomyces roseus                 | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Sporothrix nigrograna                 | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Stachybotrys aloeticola               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Stagonosporopsis citrulli             | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Stagonosporopsis lupini               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Stagonosporopsis nemophilae           | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Starmerella etchellsii                | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Steccherinum ochraceum                | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Stemphylium lycopersici               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Stemphylium spe Incertae sedis        | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Stephanosporaceae spe Incertae sedis  | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Sterigmatomyces halophilus            | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Strelitziana eucalypti                | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 20579 | 0   | 0    | 0   | 0     | 0      | 0      |
| Striatibotrys yuccae                  | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Strobilurus spe Incertae sedis        | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Subulicystidium brachysporum          | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Symmetrospora marina                  | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Symmetrospora oryzicola               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Symmetrospora spe Incertae sedis      | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Sympodiomyces spe Incertae sedis      | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Talaromyces calidicanius              | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Talaromyces funiculosus               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Talaromyces islandicus                | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Talaromyces rogersiae                 | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Talaromyces scorteus                  | 0   | 0    | 160692 | 35   | 0     | 0   | 0     | 0     | 139 | 0    | 0   | 0     | 0      | 0      |
| Talaromyces stollii                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Talaromyces udagawae                  | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Talaromyces wortmannii                | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Taphrina padi                         | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 189   | 0      | 0      |
| Tausonia pullulans                    | 0   | 0    | 0      | 0    | 0     | 135 | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tetracladium spe Incertae sedis       | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tetrapispora blatae                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Thanatephorus cucumeris               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Thecaphora australiensis              | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Thelebolus balaustiformis             | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Thermomyces lanuginosus               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Thielaviopsis euricoi                 | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tilletia barclayana                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tilletia geeringii                    | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tilletia maclaganii                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tilletia mactaggartii                 | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tilletiopsis washingtonensis          | 0   | 0    | 0      | 0    | 29348 | 0   | 0     | 41    | 0   | 0    | 0   | 0     | 0      | 0      |
| Togniniella acerosa                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Torula fici                           | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Toxicocladosporium spe Incertae sedis | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 1907 | 0   | 0     | 0      | 0      |
| Toxicocladosporium strelitziae        | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trametes cubensis                     | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trametes trogii                       | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trametes versicolor                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 5273  | 0   | 0    | 0   | 0     | 0      | 0      |
| Trechispora spe Incertae sedis        | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trematea chromolaenae                 | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trematea murispora                    | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichoderma asperellum                | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichoderma deliquescens              | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichoderma effusum                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichoderma harzianum                 | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichoderma longibrachiatum           | 0   | 0    | 0      | 5034 | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichoderma pleuroticola              | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichomeriaceae spe Incertae sedis    | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichomerium dioscoreae               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichomerium flexuosum                | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichomonascus ciferrii               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichophaea saccata                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichosporon asahii                   | 0   | 0    | 0      | 0    | 43    | 0   | 17383 | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trichosporonaceae spe Incertae sedis  | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trigonopsis californica               | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Trigonopsis vinaria                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tritirachium cinnamomeum              | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tritirachium oryzae                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tuber alcaracense                     | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 41  | 41    | 0      | 0      |
| Tubeufia tratensis                    | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Tulostoma calcareum                   | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Typhula micans                        | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Typhula setipes                       | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Udeniomyces megalosporus              | 0   | 0    | 0      | 0    | 37    | 559 | 125   | 127   | 90  | 143  | 262 | 71279 | 141    | 328400 |
| Udeniomyces pyricola                  | 0   | 0    | 0      | 0    | 81    | 228 | 234   | 125   | 96  | 237  | 218 | 45    | 148357 | 85966  |
| Umbilicaria maculata                  | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Umthunziomyces hagahagensis           | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |
| Ustilaginoidea virens                 | 942 | 6583 | 0      | 0    | 0     | 0   | 1544  | 38    | 0   | 0    | 0   | 20701 | 17261  | 5768   |
| Uwebraunia musae                      | 0   | 0    | 0      | 0    | 0     | 0   | 0     | 0     | 0   | 0    | 0   | 0     | 0      | 0      |

|                                 |        |       |        |      |       |        |       |        |       |       |        |       |       |       |     |
|---------------------------------|--------|-------|--------|------|-------|--------|-------|--------|-------|-------|--------|-------|-------|-------|-----|
| Vacuiphoma oculihominis         | 96     | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 662   | 128 |
| Valsaria ceratoniae             | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Vandijckella johannae           | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Vanrija musci                   | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 1884   | 0     | 0     | 0     | 0   |
| Vararia gallica                 | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Venturiaceae spe Incertae sedis | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Verrucaria oulankaensis         | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Verrucaria rosula               | 0      | 0     | 0      | 3369 | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Verrucaria vitikainenii         | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Vishniacozyma heimaeyensis      | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Vishniacozyma taibaiensis       | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Vishniacozyma tephrensensis     | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Vishniacozyma victoriae         | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Wallemia canadensis             | 0      | 0     | 0      | 1899 | 0     | 45     | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Wallemia mellicola              | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Wallemia muriae                 | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Wallemia sebi                   | 0      | 0     | 0      | 0    | 0     | 0      | 40    | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Wickerhamiella versatilis       | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Wickerhamomyces anomalus        | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Wickerhamomyces onychis         | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Xenodevriesia strelitzicola     | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Xeromyces bisporus              | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Xylariaceae spe Incertae sedis  | 0      | 0     | 0      | 0    | 0     | 0      | 1402  | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Xylocoremium spe Incertae sedis | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Xylodon filicinus               | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Yamadazyma terventina           | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Yamadazyma triangularis         | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Yarrowia alimentaria            | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Yarrowia bubula                 | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Yarrowia lipolytica             | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Yarrowia porcina                | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zanclospora aurea               | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zanclospora jonesii             | 562963 | 58372 | 815223 | 7380 | 34106 | 922995 | 85521 | 252970 | 52923 | 58194 | 133295 | 29291 | 12555 | 36315 |     |
| Zasmidium spe Incertae sedis    | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zeloasperisporium eucalyptorum  | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zeloasperisporium searsiae      | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zoophthora radicans             | 534    | 0     | 0      | 0    | 0     | 154    | 307   | 168    | 0     | 0     | 0      | 463   | 0     | 0     | 0   |
| Zygoascus polysorbophila        | 1166   | 0     | 0      | 0    | 0     | 481    | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zygosaccharomyces rouxii        | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zygosprium pseudogibbum         | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zygotrulaspora danielsina       | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| Zymoseptoria spe Incertae sedis | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| [Candida] aaseri                | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| [Candida] boidinii              | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| [Candida] glabrata              | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| [Candida] incommunis            | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| [Candida] pseudointermedia      | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| [Candida] pseudolambica         | 0      | 0     | 0      | 0    | 0     | 0      | 0     | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0   |
| [Cryptococcus] ater             | 0      | 0     | 0      | 784  | 319   | 0      | 133   | 205    | 104   | 0     | 0      | 105   | 0     | 0     | 0   |

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|        |       |       |      |    |       |        |      |      |       |       |        |     |        |      |      |       |       |      |
|--------|-------|-------|------|----|-------|--------|------|------|-------|-------|--------|-----|--------|------|------|-------|-------|------|
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 11900  | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 3631 | 0     | 133   | 229    | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 65724  | 92004 | 10235 | 0    | 0  | 18131 | 2905   | 1649 | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 124   | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 1694 | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 441   | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 2070  | 247   | 0    | 37 | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 51   | 0    | 13783 | 60    | 107302 | 351 | 274    | 3122 | 980  | 1121  | 1037  | 2405 |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 533   | 0    | 0  | 0     | 194    | 0    | 0    | 426   | 0     | 0      | 612 | 174    | 2538 | 652  | 545   | 69    |      |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 356  | 0    | 0     | 348   | 0    |
| 0      | 11350 | 0     | 78   | 0  | 0     | 0      | 0    | 0    | 0     | 954   | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 77    | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 192   | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 72    | 19558 | 1750   | 325 | 103035 | 68   | 2585 | 1540  | 24132 | 1147 |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 383  | 0     | 0     | 75     | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 36    | 68178  | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 1529  | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 335  | 180   | 56    | 0      | 82  | 0      | 337  | 132  | 37616 | 144   |      |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 121  | 0     | 0     | 0      | 0   | 0      | 250  | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 137  | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 52     | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 54    | 0     | 0      | 635 | 51     | 0    | 130  | 592   | 224   |      |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 1341 | 0  | 0     | 0      | 0    | 0    | 0     | 1722  | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 125   | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 13004  | 11863 | 1488  | 0    | 0  | 6028  | 0      | 798  | 0    | 0     | 129   | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 2852  | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 232   | 61    | 0      | 644 | 186    | 0    | 267  | 360   | 81    |      |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 72    | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 183904 | 151   | 163   | 0    | 53 | 448   | 601930 | 322  | 0    | 0     | 398   | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |
| 0      | 0     | 0     | 0    | 0  | 0     | 0      | 0    | 0    | 0     | 0     | 0      | 0   | 0      | 0    | 0    | 0     | 0     | 0    |

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| COVID<br>-19-041 | COVID<br>-19-039 | COVID<br>-19-038 | COVID<br>-19-052 | COVID<br>-19-044 | COVID<br>-19-053 | COVID<br>-19-065 | COVID<br>-19-055 | COVID<br>-19-071 | COVID<br>-19-070 | COVID<br>-19-069 | COVID<br>-19-068 | COVID<br>-19-067 | COVID<br>-19-066 | COVID<br>-19-037 | COVID<br>-19-064 | COVID<br>-19-063 | COVID<br>-19-062 |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 536890           | 951716           | 961670           | 962205           | 951581           | 892378           | 984402           | 850777           | 765911           | 788877           | 878220           | 844313           | 969781           | 787890           | 882917           | 897183           | 945099           | 752697           |
| 456340           | 19829            | 11107            | 6442             | 18340            | 47330            | 2339             | 97610            | 233043           | 186949           | 97717            | 119314           | 843              | 158246           | 93773            | 83317            | 41688            | 229951           |
| 0                | 0                | 0                | 512              | 0                | 101              | 0                | 19422            | 0                | 0                | 52               | 0                | 28575            | 0                | 0                | 0                | 0                | 0                |
| 6770             | 26658            | 25136            | 26095            | 27073            | 60067            | 13161            | 28278            | 989              | 24121            | 24011            | 36326            | 374              | 53702            | 6396             | 19189            | 12998            | 17086            |
| 0                | 1797             | 2087             | 4746             | 3006             | 0                | 98               | 3913             | 57               | 53               | 0                | 47               | 427              | 162              | 16914            | 311              | 156              | 266              |
| 0                | 0                | 0                | 0                | 0                | 124              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 59               | 0                |
|                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| COVID<br>-19-041 | COVID<br>-19-039 | COVID<br>-19-038 | COVID<br>-19-052 | COVID<br>-19-044 | COVID<br>-19-053 | COVID<br>-19-065 | COVID<br>-19-055 | COVID<br>-19-071 | COVID<br>-19-070 | COVID<br>-19-069 | COVID<br>-19-068 | COVID<br>-19-067 | COVID<br>-19-066 | COVID<br>-19-037 | COVID<br>-19-064 | COVID<br>-19-063 | COVID<br>-19-062 |
| 0                | 320              | 314              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 57               | 0                |
| 48432            | 725993           | 803919           | 49770            | 785211           | 444774           | 14167            | 2094             | 10573            | 2176             | 319571           | 106370           | 3256             | 411820           | 137272           | 669355           | 47019            | 32317            |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 589              | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 58               | 0                | 0                | 0                | 91               | 0                | 37               | 0                | 35121            |
| 0                | 87               | 58               | 0                | 190              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 659              | 1409             | 13587            | 190              | 0                | 74               | 115              | 0                | 0                | 0                | 0                | 82               | 101              | 3535             | 45               | 801              | 23731            |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 50               | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 194              | 14453            | 15048            | 399              | 13683            | 4071             | 244              | 0                | 18               | 0                | 127              | 0                | 0                | 7762             | 1304             | 7745             | 1105             | 5482             |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 547              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 2562             | 0                | 0                |
| 0                | 92               | 0                | 0                | 107              | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 500              | 51               | 0                | 0                | 0                | 165              | 0                | 0                | 0                | 710              | 102              | 0                | 302              | 0                | 37               | 104              | 68               |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 108              | 40               | 0                | 509              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 33163            | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 22682            | 6903             | 5254             | 21055            | 6233             | 17123            | 824809           | 1133             | 33349            | 165              | 24592            | 81339            | 850989           | 24973            | 113640           | 20358            | 446752           | 268784           |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 90164            | 0                | 0                | 0                | 95               | 0                | 84               | 0                | 0                | 87614            | 49               | 0                | 68               | 0                | 0                | 0                | 15225            | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 53               | 24090            | 80               | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 133              | 0                | 0                | 0                |
| 0                | 90               | 0                | 0                | 403              | 113              | 0                | 0                | 22               | 0                | 0                | 0                | 0                | 710              | 0                | 66               | 0                | 65               |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |                  |                  |                  |                  |

[illegible]

[illegible]

|       |       |      |      |       |       |       |       |      |        |       |       |     |       |       |       |       |      |
|-------|-------|------|------|-------|-------|-------|-------|------|--------|-------|-------|-----|-------|-------|-------|-------|------|
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 28   | 103    | 0     | 0     | 72  | 4579  | 0     | 75    | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 4175 |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 116  | 0     | 101   | 0     | 14534 | 0    | 0      | 0     | 0     | 0   | 0     | 124   | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 52   | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 5977  | 38    | 0   | 0     | 124   | 0     | 0     | 0    |
| 0     | 64    | 0    | 4612 | 0     | 0     | 0     | 57989 | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 59   | 105  | 0     | 30132 | 205   | 0     | 0    | 0      | 0     | 0     | 0   | 139   | 25248 | 0     | 51    | 31   |
| 0     | 0     | 52   | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 698  | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 527   | 565  | 0    | 484   | 0     | 89    | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 30    | 56    | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 4242  | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 851   | 9854  | 9515 | 700  | 10455 | 4996  | 69167 | 340   | 210  | 0      | 291   | 91    | 75  | 6179  | 399   | 7448  | 10730 | 9132 |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 2166  | 496  | 528  | 1430  | 220   | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 67    | 878   | 255   | 0     | 278  |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 2818  | 0     | 0    |
| 0     | 168   | 400  | 0    | 301   | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 131  | 126128 | 32759 | 13313 | 84  | 0     | 264   | 100   | 6288  | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 88106 | 0     | 57   | 0    | 0     | 0     | 0     | 2096  | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 434   | 367  | 0    | 962   | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 114   | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 25640 | 0   | 0     | 0     | 45    | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 663   | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 587   | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 11106 | 0     | 84  | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 767   | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 4852  | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 88    | 0     | 0    | 0      | 0     | 0     | 0   | 13163 | 0     | 0     | 61    | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 85220  | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 437   | 171  | 0    | 415   | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 221   | 0     | 146  | 0    | 186   | 0     | 0     | 0     | 0    | 0      | 23953 | 0     | 0   | 0     | 125   | 0     | 0     | 0    |
| 0     | 0     | 38   | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 36   |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 54    | 0   | 0     | 0     | 37    | 0     | 29   |
| 88257 | 77    | 0    | 0    | 94    | 108   | 0     | 30446 | 0    | 0      | 31554 | 0     | 0   | 0     | 1256  | 44    | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 12666 | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 20   | 0      | 0     | 0     | 0   | 0     | 4279  | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 85    | 0    | 0    | 0     | 0     | 94    | 55    | 0    | 166993 | 52    | 0     | 0   | 0     | 0     | 34    | 2435  | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0      | 0     | 0     | 0   | 0     | 0     | 0     | 0     | 0    |
| 227   | 14548 | 6502 | 7432 | 4136  | 6760  | 234   | 0     | 3438 | 461    | 6417  | 429   | 731 | 210   | 1656  | 12068 | 862   | 471  |

|      |       |       |     |       |       |      |      |        |     |       |       |     |       |       |       |      |        |
|------|-------|-------|-----|-------|-------|------|------|--------|-----|-------|-------|-----|-------|-------|-------|------|--------|
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 580  | 0    | 0      | 0   | 0     | 0     | 0   | 273   | 0     | 0     | 125  | 132699 |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 221  | 0     | 0     | 122 | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 1666  | 79    | 0    | 97     |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 425  | 0     | 0     | 914 | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 392   | 116   | 409 | 1241  | 414   | 596  | 303  | 0      | 0   | 0     | 0     | 0   | 240   | 17509 | 1039  | 246  | 3176   |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 591   | 206   | 0   | 717   | 0     | 402  | 2399 | 342080 | 55  | 34272 | 15542 | 140 | 2897  | 1570  | 50708 | 490  | 58262  |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 354    | 493 | 497   | 64    | 914 | 0     | 0     | 454   | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 66    | 24607 | 0   | 56    | 0     | 4287  | 0    | 7112   |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 3489 | 77740 | 89840 | 632 | 97282 | 15562 | 1159 | 50   | 61     | 53  | 164   | 40    | 70  | 40813 | 1615  | 20276 | 1280 | 390    |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 25494 | 0     | 0     | 46   | 75     |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 76    | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 241  | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 35     |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 201  | 0     | 53    | 95  | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 6834  | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 1009  | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 210   | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 28    | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 445  | 254   | 457   | 0   | 205   | 8809  | 0    | 0    | 4887   | 0   | 0     | 0     | 0   | 0     | 878   | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 68  | 0     | 2485  | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 53    | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 130   | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 241  | 0     | 477   | 0   | 98    | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 25    | 0     | 0     | 0    | 0      |
| 229  | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 48     | 103 | 0     | 50    | 74  | 0     | 111   | 238   | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 101   | 17123 | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 14096 | 0    | 0    | 0      | 0   | 143   | 70181 | 0   | 0     | 0     | 0     | 72   | 40     |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 8842  | 0     | 0     | 0    | 36     |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 4030  | 113   | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 93   | 0    | 0      | 0   | 0     | 0     | 0   | 97174 | 0     | 0     | 162  | 58     |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 224  | 0     | 0     | 0   | 98    | 0     | 83   | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 0     | 0     | 0     | 0    | 0      |
| 0    | 0     | 0     | 0   | 0     | 0     | 0    | 0    | 0      | 0   | 0     | 0     | 0   | 3036  | 0     | 0     | 0    | 0      |



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|-------|-------|------|--------|-------|--------|-----|--------|-------|-----|-------|-------|------|-------|-------|-------|--------|-------|
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 1371  | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 11051 | 0     | 0    | 0      | 0     | 8916   | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 5273  | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 26152 | 0   | 52    | 0     | 88   | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 82  | 0      | 0     | 0   | 0     | 0     | 0    | 59    | 0     | 0     | 0      | 15733 |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 95    | 54   | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 195   | 81    | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 157  | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 199    | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 103    | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 89    | 51   | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 56    | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 27772 | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 9805  | 0   | 317   | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 7385  | 77738 | 7569 | 783021 | 7521  | 137640 | 895 | 806312 | 31500 | 691 | 83878 | 21986 | 6377 | 18847 | 12899 | 16306 | 104608 | 19092 |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 224   | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 59     | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 111    | 0   | 69748  | 0     | 0   | 0     | 0     | 0    | 29    | 145   | 0     | 13618  | 2973  |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 28  | 103   | 0     | 0    | 72    | 4579  | 0     | 75     | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 252   | 0     | 0     | 0      | 0     |
| 0     | 0     | 0    | 0      | 0     | 0      | 0   | 0      | 0     | 0   | 0     | 0     | 0    | 0     | 125   | 0     | 0      | 0     |
| 898   | 16657 | 8657 | 391    | 15143 | 1387   | 854 | 0      | 21    | 0   | 384   | 47    | 76   | 55955 | 127   | 66328 | 2554   | 3748  |

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|--------|------|-----|-----|------|-----|-------|------|-----|-------|-------|--------|-------|-------|-------|------|------|------|
| 43822  | 124  | 0   | 0   | 0    | 0   | 0     | 62   | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 88  | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 82    | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 114  | 105 | 0   | 0    | 0   | 0     | 75   | 91  | 2595  | 792   | 609723 | 0     | 0     | 0     | 56   | 812  | 1683 |
| 0      | 116  | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 57   |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 179027 | 0    | 0   | 0   | 0    | 53  | 0     | 0    | 0   | 576   | 433   | 263    | 0     | 0     | 197   | 55   | 91   | 0    |
| 0      | 0    | 223 | 0   | 0    | 0   | 0     | 555  | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 81  | 0     | 0     | 0      | 1978  | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 67   | 0   | 0     | 65   | 0   | 296   | 527   | 0      | 0     | 373   | 705   | 0    | 106  | 47   |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 63   | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 83   | 0   | 307   | 582   | 0      | 0     | 0     | 0     | 0    | 86   | 207  |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 343    | 4962 | 0   | 0   | 228  | 938 | 400   | 1732 | 95  | 10200 | 11236 | 620    | 10124 | 11190 | 11902 | 3858 | 7786 | 7269 |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 50  | 290   | 136  | 0   | 1137  | 503   | 0      | 729   | 583   | 180   | 60   | 5299 | 489  |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 4872  | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 213   | 0      | 0     | 218   | 215   | 0    | 95   | 253  |
| 4939   | 544  | 341 | 150 | 0    | 0   | 4532  | 62   | 182 | 270   | 0     | 78     | 634   | 0     | 0     | 161  | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 84  | 0    | 0   | 76    | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 112  | 0   | 0   | 0    | 0   | 0     | 66   | 0   | 0     | 86    | 0      | 106   | 428   | 279   | 0    | 3102 | 297  |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 330   | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 77  | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 221  | 0   | 0   | 0    | 51  | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 114   | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 293   | 0    | 0    | 0    |
| 0      | 0    | 96  | 86  | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 74     | 579  | 0   | 88  | 0    | 0   | 0     | 120  | 0   | 0     | 635   | 0      | 0     | 0     | 99    | 0    | 94   | 487  |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 22659 | 0    | 76  | 0     | 0     | 70     | 329   | 0     | 0     | 0    | 98   | 99   |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 110  | 0   | 0   | 67   | 0   | 0     | 0    | 0   | 860   | 211   | 19999  | 0     | 0     | 81    | 0    | 633  | 634  |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 98  | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 94    | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 104  | 0   | 0   | 6646 | 0   | 6088  | 0    | 90  | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 452 | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 52   |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 0      | 0    | 0   | 0   | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0    | 0    | 0    |
| 6105   | 9407 | 718 | 671 | 377  | 0   | 10993 | 1026 | 581 | 2272  | 8729  | 984    | 23144 | 2265  | 532   | 4667 | 1556 | 4934 |

[illegible]

|       |        |       |       |        |        |       |        |       |        |        |        |        |        |        |        |        |        |
|-------|--------|-------|-------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0     | 0      | 0     | 0     | 5301   | 0      | 19397 | 0      | 97    | 0      | 0      | 0      | 218    | 262    | 108    | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 91    | 285    | 0      | 426    | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 67     | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 74    | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 68    | 0      | 0     | 0     | 1010   | 0      | 2617  | 0      | 79    | 268    | 0      | 0      | 0      | 0      | 0      | 0      | 93     | 0      |
| 0     | 0      | 0     | 110   | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 1585   | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 542    | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 8350   | 0      | 0      | 0      | 0      | 0      |
| 75907 | 5016   | 6747  | 22088 | 351293 | 952781 | 39890 | 5318   | 3580  | 9326   | 20754  | 33732  | 81394  | 7586   | 6564   | 82321  | 284257 | 9530   |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 79    | 0      | 0     | 582    | 79     | 0      | 0      | 0      | 0      | 0      | 0      | 53     |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 47     |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 955    | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 97     | 130    | 93     | 602    | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
|       |        |       |       |        |        |       |        |       |        |        |        |        |        |        |        |        |        |
| CC061 | CC060  | CC059 | CC058 | CC056  | CC054  | CC036 | CC057  | CC034 | CC014  | CC013  | CC012  | CC011  | CC010  | CC009  | CC015  | CC008  | CC006  |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 51     | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 108    | 0     | 0     | 0      | 0      | 0     | 53     | 0     | 0      | 605    | 0      | 0      | 119    | 184    | 0      | 91     | 111    |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 27663 | 414174 | 5180  | 4616  | 63030  | 4619   | 38880 | 123508 | 6139  | 766102 | 775125 | 102305 | 654317 | 787942 | 776874 | 569574 | 585595 | 807465 |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 130    | 121   | 0     | 0      | 0      | 0     | 59     | 0     | 0      | 0      | 0      | 0      | 0      | 202    | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 92     | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 230   | 0      | 0     | 0     | 0      | 0      | 300   | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 36064 | 313    | 0     | 162   | 0      | 97     | 8775  | 136    | 107   | 0      | 82     | 0      | 12118  | 0      | 0      | 132    | 71     | 263    |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 97     | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 197    | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 370   | 5293   | 0     | 0     | 536    | 711    | 722   | 1354   | 0     | 14260  | 15226  | 835    | 13209  | 14936  | 15127  | 3874   | 6457   | 9853   |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 62     | 11404  | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 5601  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 650   | 0      | 0     | 0     | 131    | 156    | 0     | 0      | 108   | 0      | 0      | 0      | 0      | 0      | 474    | 3647   | 0      | 115    |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 214    | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 1984  | 0      | 8698  | 0      | 0      | 0      | 114    | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 2464   | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 70    | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 72    | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 2142  | 0      | 0      | 0      | 1676   | 0      | 205    | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 768   | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 70     | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 3343   | 0      | 0     | 0      | 1370  | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 1001  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 99     | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| 0     | 0      | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |



|     |      |      |      |       |    |       |      |     |     |     |     |      |     |     |      |     |     |
|-----|------|------|------|-------|----|-------|------|-----|-----|-----|-----|------|-----|-----|------|-----|-----|
| 0   | 4252 | 6639 | 3352 | 0     | 0  | 0     | 6697 | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 105  | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 141 | 221  | 208  | 67   | 420   | 53 | 74007 | 55   | 93  | 270 | 504 | 0   | 3022 | 0   | 195 | 3363 | 109 | 130 |
| 0   | 0    | 0    | 0    | 502   | 0  | 1715  | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 1393 | 203  | 338  | 24597 | 0  | 45858 | 276  | 93  | 849 | 758 | 395 | 0    | 102 | 0   | 6512 | 621 | 520 |
| 111 | 107  | 0    | 92   | 5552  | 57 | 38856 | 200  | 365 | 0   | 210 | 64  | 220  | 0   | 0   | 540  | 0   | 44  |
| 0   | 112  | 0    | 0    | 0     | 0  | 1887  | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 109  | 0    | 70   | 0     | 0  | 0     | 0    | 80  | 0   | 0   | 0   | 720  | 0   | 0   | 61   | 97  | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 1386 | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 72  | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 205  | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 56   | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 59  |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 116  | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 210 | 177 | 66   | 106 | 42  |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 52  |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 89  | 290 | 0   | 60  | 0    | 0   | 0   | 0    | 188 | 68  |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     | 0  | 0     | 0    | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0    | 0   | 0   |
| 0   | 0    | 0    | 0    | 0     |    |       |      |     |     |     |     |      |     |     |      |     |     |

|        |      |      |     |       |       |       |      |      |       |       |       |       |       |       |       |       |       |
|--------|------|------|-----|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 260   | 0     | 0     |
| 66     | 0    | 0    | 0   | 0     | 0     | 77    | 124  | 90   | 8164  | 6122  | 153   | 926   | 5233  | 7339  | 5799  | 619   | 347   |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 899   | 0     | 0     | 0     | 82    | 0     | 94    | 129   |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 49    |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 283   | 0     | 22122 | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 4232  | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 71     | 0    | 0    | 0   | 0     | 0     | 2428  | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 6776  | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 52    | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 68     | 2931 | 0    | 0   | 3802  | 0     | 529   | 618  | 800  | 5892  | 8765  | 25928 | 9049  | 9107  | 8950  | 2542  | 5162  | 9648  |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 151   | 0    | 516  | 0     | 0     | 24474 | 0     | 0     | 0     | 0     | 81    | 143   |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 214178 | 5665 | 1184 | 159 | 10256 | 26836 | 54139 | 1751 | 5044 | 20955 | 20092 | 20449 | 31141 | 20652 | 19868 | 10560 | 36330 | 47315 |
| 0      | 0    | 0    | 0   | 0     | 56    | 2667  | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 439  | 0    | 65  | 0     | 0     | 0     | 0    | 185  | 0     | 0     | 0     | 114   | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 7274  | 0    | 98   | 0     | 228   | 0     | 1390  | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 70    | 0    | 357  | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 14767 | 52    | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 242    | 0    | 0    | 182 | 0     | 54    | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 245   | 186   | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 83     | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 138   |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 8371  | 0     | 59279 | 0    | 4224 | 0     | 69    | 0     | 320   | 0     | 0     | 54    | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 107   | 0     | 0     | 176   |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 331   | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 0      | 0    | 0    | 0   | 0     | 0     | 0     | 0    | 0    | 0</   |       |       |       |       |       |       |       |       |



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|-----|------|-----|-------|--------|-----|-----|------|-----|-----|--------|--------|--------|-------|--------|--------|-------|--------|
| 0   | 0    | 0   | 0     | 0      | 0   | 77  | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 83  | 0    | 70  | 0     | 239340 | 0   | 0   | 310  | 0   | 0   | 308275 | 563653 | 574815 | 45036 | 226783 | 862351 | 48867 | 324164 |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 90    | 83     | 0      | 0     | 233    |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 319 | 7819 | 422 | 56687 | 45813  | 831 | 161 | 1882 | 343 | 250 | 16564  | 330    | 3769   | 7288  | 15195  | 1596   | 55393 | 27614  |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 429   | 0      | 0      | 0     | 1173   |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 65   | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 6384  | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 70     | 0      | 0     | 0      |
| 0   | 0    | 68  | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 89  | 0    | 0   | 0     | 0      | 0   | 0   | 291  | 78  | 44  | 68     | 0      | 0      | 0     | 0      | 146    | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 852 | 326   | 74     | 0   | 0   | 0    | 0   | 0   | 0      | 91     | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 62  | 0    | 0   | 0     | 4993   | 0   | 0   | 306  | 0   | 0   | 61     | 0      | 0      | 0     | 0      | 1327   | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 105   | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   | 0   | 0      | 0      | 0      | 0     | 0      | 0      | 0     | 0      |
| 0   | 0    | 0   | 0     | 0      | 0   | 0   | 0    | 0   |     |        |        |        |       |        |        |       |        |

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|       |      |      |       |       |       |      |       |       |      |       |       |      |      |       |      |       |       |
|-------|------|------|-------|-------|-------|------|-------|-------|------|-------|-------|------|------|-------|------|-------|-------|
| 0     | 0    | 0    | 0     | 0     | 33    | 67   | 0     | 146   | 90   | 0     | 0     | 0    | 259  | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 3354 | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 9227 | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 52   | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 1166  | 883  | 0    | 0     | 0     | 0     | 0    | 0     | 2833  | 0    | 0     | 98    | 0    | 457  | 0     | 257  | 22077 | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 172   | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 88    | 517  | 0    | 0     | 80    | 78    | 171  | 336   | 335   | 75   | 0     | 0     | 0    | 102  | 0     | 0    | 0     | 13159 |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 13215 | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 87   | 99   | 0     | 0    | 0     | 4382  |
| 523   | 0    | 62   | 0     | 78    | 501   | 80   | 477   | 323   | 300  | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 100   |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 135   | 0    | 0    | 0     | 0     | 0     | 0    | 310   | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 10681 | 113  | 2699 | 130   | 1468  | 10429 | 9213 | 6672  | 13320 | 4955 | 2128  | 433   | 79   | 0    | 5079  | 755  | 104   | 522   |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 74    | 0    | 147  | 1951  | 83    | 474   | 0    | 168   | 216   | 139  | 0     | 0     | 0    | 180  | 581   | 0    | 783   | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 77    | 0    | 0    | 0     | 0     | 208   | 21   | 166   | 62    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 77   | 2903  | 404   | 0     | 0    | 0     | 0     | 0    | 46865 | 135   | 69   | 451  | 0     | 124  | 0     | 3775  |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 5387 | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 56   | 67   | 0     | 0     | 628   | 83   | 303   | 57    | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 1758 | 0     | 0    | 1294  | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 57   | 123   | 0     | 0     | 30   | 0     | 0     | 0    | 0     | 46    | 0    | 0    | 77    | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 53    | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 79    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 75    | 0    | 0    | 0     | 0     | 122   | 0    | 325   | 124   | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 61   | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 80    | 57    | 230  | 365  | 9895  | 237  | 75455 | 2924  |
| 0     | 0    | 0    | 0     | 2161  | 0     | 828  | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 101   | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 2683 | 0     | 0     | 56   | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 1106  | 1450 | 250  | 347   | 10941 | 0     | 0    | 764   | 0     | 0    | 67    | 46    | 77   | 0    | 0     | 0    | 1662  | 2041  |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 66    | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 206   | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 2280 | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 69   | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 63   | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 76    | 0     | 0    | 0     | 0     | 0    | 0     | 22189 | 0    | 0    | 0     | 0    | 0     | 61    |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 47    | 0     | 0    | 0    | 0     | 0    | 112   | 0     |
| 0     | 0    | 0    | 57    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 15239 | 0     | 0    | 0     | 0     | 0    | 0     | 11564 | 0    | 0    | 0     | 0    | 197   | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 361  | 0     | 0     |
| 0     | 0    | 0    | 66    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 82    | 2915 | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0     |
| 308   | 76   | 844  | 2217  | 8845  | 7936  | 424  | 72851 | 2118  | 2150 | 4637  | 2717  | 952  | 1652 | 20609 | 4277 | 7599  | 2195  |

[illegible]



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|       |     |      |       |      |       |      |      |       |      |       |     |    |      |      |     |       |       |
|-------|-----|------|-------|------|-------|------|------|-------|------|-------|-----|----|------|------|-----|-------|-------|
| 1166  | 883 | 0    | 0     | 0    | 0     | 0    | 2833 | 0     | 0    | 0     | 98  | 0  | 457  | 0    | 257 | 22077 | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 172  | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 88    | 517 | 0    | 0     | 80   | 78    | 171  | 336  | 335   | 75   | 0     | 0   | 0  | 102  | 0    | 0   | 0     | 13159 |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 13215 | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 87 | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 99   | 0    | 0   | 0     | 4382  |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 100   |
| 523   | 0   | 62   | 0     | 78   | 501   | 80   | 477  | 323   | 300  | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 135   | 0   | 0    | 0     | 0    | 0     | 0    | 310  | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 10681 | 113 | 2699 | 130   | 1468 | 10429 | 9213 | 6672 | 13320 | 4955 | 2128  | 433 | 79 | 0    | 5079 | 755 | 104   | 522   |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 74    | 0   | 147  | 1951  | 83   | 474   | 0    | 168  | 216   | 139  | 0     | 0   | 0  | 180  | 581  | 0   | 783   | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 77    | 0   | 0    | 0     | 0    | 208   | 21   | 166  | 62    | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 7857  | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 152   | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 80   | 0     | 0    | 0    | 0     | 0    | 27417 | 43  | 0  | 0    | 0    | 0   | 0     | 52    |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 124 | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 262  | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 2122  |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 2730  | 0    | 0     | 0    | 0    | 0     | 0    | 11439 | 92  | 69 | 0    | 0    | 0   | 0     | 1061  |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 113   | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 77   | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 60    | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 189  | 0    | 0   | 0     | 540   |
| 0     | 0   | 0    | 0     | 76   | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 248  | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 5387 | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 56  | 67   | 0     | 0    | 628   | 83   | 303  | 57    | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     | 0    | 0     | 0    | 0    | 0     | 0    | 0     | 0   | 0  | 0    | 0    | 0   | 0     | 0     |
| 0     | 0   | 0    | 0     |      |       |      |      |       |      |       |     |    |      |      |     |       |       |

[illegible]

[illegible]



[illegible]

| COVID<br>-19-019 | COVID<br>-19-025 | COVID<br>-19-020 | COVID<br>-19-033 | COVID<br>-19-022 | COVID<br>-19-023 | COVID<br>-19-021 | Control<br>095 | Control<br>084 | Control<br>085 | Control<br>086 | Control<br>087 | Control<br>088 | Control<br>089 | Control<br>091 | Control<br>093 | Control<br>094 | Control<br>096 |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 928720           | 902109           | 358665           | 975862           | 910653           | 985829           | 988193           | 427347         | 994577         | 923043         | 575979         | 638896         | 869044         | 815686         | 672183         | 18057          | 688810         | 684726         |
| 41848            | 92640            | 605280           | 12165            | 55577            | 9508             | 2876             | 546597         | 3121           | 47008          | 355465         | 342134         | 6867           | 57273          | 218121         | 980746         | 237912         | 291654         |
| 0                | 0                | 0                | 0                | 0                | 0                | 193              | 0              | 0              | 0              | 0              | 0              | 0              | 77             | 0              | 0              | 0              | 121            |
| 26699            | 4419             | 36011            | 11973            | 22778            | 3854             | 8837             | 18473          | 1475           | 17083          | 67672          | 17857          | 123554         | 121015         | 98958          | 885            | 73278          | 16442          |
| 2733             | 832              | 44               | 0                | 10992            | 616              | 94               | 7583           | 827            | 10175          | 884            | 1113           | 535            | 5949           | 10738          | 312            | 0              | 7057           |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 2691           | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
|                  |                  |                  |                  |                  |                  |                  |                |                |                |                |                |                |                |                |                |                |                |
| COVID<br>-19-019 | COVID<br>-19-025 | COVID<br>-19-020 | COVID<br>-19-033 | COVID<br>-19-022 | COVID<br>-19-023 | COVID<br>-19-021 | Control<br>095 | Control<br>084 | Control<br>085 | Control<br>086 | Control<br>087 | Control<br>088 | Control<br>089 | Control<br>091 | Control<br>093 | Control<br>094 | Control<br>096 |
| 651              | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 37             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 43             | 89             | 0              | 0              | 0              | 0              |
| 640546           | 153216           | 4967             | 23637            | 77463            | 75283            | 6886             | 82229          | 7752           | 294114         | 18575          | 20713          | 4637           | 3697           | 508212         | 5504           | 9416           | 37060          |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 72             | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 38             | 0              | 0              | 0              | 0              | 0              | 74             | 63010          | 0              | 0              | 166            |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 70             | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 218              | 8475             | 55               | 739              | 0                | 3103             | 898              | 265            | 56             | 2036           | 173            | 0              | 44             | 394            | 278            | 536            | 177            | 275            |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 4334             | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 13154            | 2657             | 56               | 309              | 170              | 2270             | 0                | 263            | 137            | 5272           | 301            | 255            | 49             | 48             | 6581           | 255            | 0              | 1102           |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 39             | 0              | 0              | 0              | 0              | 0              | 0              | 70             | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 3477             | 0                | 218              | 0                | 0                | 0                | 42343          | 0              | 2983           | 0              | 0              | 0              | 0              | 283            | 0              | 54             | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 302              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 300              | 0                | 0                | 0                | 405            | 973659         | 1282           | 970            | 624            | 1121           | 401            | 402            | 814            | 316            | 950            |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 201              | 0                | 1408             | 190              | 6251             | 281              | 0              | 41             | 587            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 1071           |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 34             | 0              | 65             | 0              | 0              |
| 11911            | 13244            | 85712            | 281163           | 121515           | 74000            | 227427           | 1864           | 2632           | 208304         | 901            | 10721          | 57606          | 8547           | 13998          | 1522           | 138941         | 149339         |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 35             | 0              | 0              | 0              | 0              | 0              | 149            | 72             | 60             | 0              | 0              |
| 59               | 0                | 0                | 0                | 0                | 3663             | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 181            | 0              | 0              | 0              | 70             | 0              | 0              | 0              | 0              |
| 0                | 404              | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 156            | 42             | 33             | 0              | 0              | 0              | 0              | 0              | 167            |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 44             | 0              | 0              | 0              | 0              | 0              | 15250          | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 1047             | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 3638           | 87             | 0              | 0              | 0              | 184            | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 78             | 0              | 53             | 0              | 0              |
| 2717             | 260053           | 1429             | 1493             | 116990           | 1410             | 1351             | 35884          | 0              | 136            | 0              | 0              | 101            | 450            | 291            | 490            | 34859          | 232            |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 578              | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 78             | 36             | 62             | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 46             | 0              | 0              | 0              | 0              | 0              | 74             | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |

|      |       |        |      |       |        |      |        |     |       |      |        |     |       |        |      |        |        |
|------|-------|--------|------|-------|--------|------|--------|-----|-------|------|--------|-----|-------|--------|------|--------|--------|
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 582    | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 13638 | 51     | 4853 | 0     | 522871 | 190  | 35     | 44  | 528   | 0    | 0      | 0   | 37    | 74     | 0    | 10836  | 35765  |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 193    | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 77    | 0      | 0    | 0      | 121    |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 1556 | 154   | 0      | 0    | 0      | 0   | 41    | 94   | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 304  | 81306 | 170488 | 2892 | 16624 | 5354   | 1025 | 186049 | 974 | 1296  | 608  | 111401 | 531 | 1319  | 1364   | 1591 | 62941  | 34179  |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 15779  | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 101  | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 24     | 0   | 0     | 35   | 27     | 46  | 29    | 222    | 47   | 0      | 54     |
| 0    | 0     | 0      | 0    | 10188 | 0      | 0    | 0      | 0   | 38    | 0    | 34     | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 165   | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 69   | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 57   | 196   | 0      | 0    | 0     | 0      | 0    | 74673  | 803 | 15176 | 1342 | 172886 | 537 | 38481 | 154654 | 7500 | 131922 | 130266 |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 432  | 77168 | 159    | 0    | 0     | 401    | 83   | 0      | 0   | 84    | 133  | 0      | 101 | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 208  | 99     | 82  | 0     | 0    | 0      | 0   | 90    | 0      | 62   | 0      | 47     |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 66   | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 5975   |
| 75   | 2867  | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 66     | 124  | 109    | 50     |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 47     |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 45    | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 199  | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 188 | 0     | 0    | 0      | 0   | 0     | 111    | 136  | 215    | 139    |
| 0    | 611   | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 92    | 76   | 35     | 49  | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 231  | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 162    | 0   | 0     | 0    | 0      | 0   | 0     | 124    | 59   | 0      | 58     |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 41    | 0    | 0      | 50  | 0     | 0      | 61   | 0      | 0      |
| 0    | 21209 | 0      | 102  | 0     | 3713   | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 2733 | 832   | 44     | 0    | 10992 | 616    | 94   | 7583   | 827 | 10175 | 884  | 1113   | 535 | 5876  | 10629  | 184  | 0      | 7005   |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 795   | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 115  | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 32085  | 0   | 0     | 0    | 0      | 0   | 0     | 62     | 0    | 0      | 132    |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 7788 | 177   | 64     | 913  | 176   | 0      | 489  | 0      | 0   | 117   | 39   | 73     | 0   | 0     | 0      | 0    | 0      | 66     |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 41     | 0    | 499   | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0      | 0    | 0      | 0   | 0     | 0    | 0      | 0   |       |        |      |        |        |

[illegible]



[illegible]

|        |        |       |       |       |       |       |           |           |           |           |           |           |           |           |           |           |           |
|--------|--------|-------|-------|-------|-------|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 341    | 218    | 0     | 0     | 0     | 394   | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 53        | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 2255   | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 33        | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 26117 | 0     | 0     | 0     | 300   | 45        | 0         | 0         | 39        | 35        | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 11732  | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 60     | 3913   | 0     | 0     | 0     | 0     | 0     | 32        | 269       | 78        | 227       | 57        | 53        | 0         | 0         | 100       | 0         | 0         |
| 187001 | 240513 | 2370  | 10804 | 80612 | 14600 | 3351  | 39781     | 6101      | 59500     | 497828    | 429373    | 798658    | 785022    | 11145     | 3181      | 25084     | 112456    |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 200    | 36659 | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 2691      | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 54     | 411    | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 426       | 46        |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
|        |        |       |       |       |       |       |           |           |           |           |           |           |           |           |           |           |           |
| CC019  | CC025  | CC020 | CC033 | CC022 | CC023 | CC021 | Control09 | Control08 | Control08 | Control08 | Control08 | Control08 | Control08 | Control09 | Control09 | Control09 | Control09 |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 37        | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 651    | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 43        | 89        | 0         | 0         | 0         | 0         |
| 640546 | 153216 | 4967  | 23637 | 77463 | 75283 | 6886  | 82229     | 7752      | 294114    | 18575     | 20713     | 4637      | 3697      | 508212    | 5504      | 9416      | 37060     |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 72        | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 203    | 0     | 101   | 0     | 189   | 98    | 39        | 0         | 0         | 0         | 0         | 0         | 34        | 0         | 0         | 0         | 0         |
| 218    | 8272   | 55    | 638   | 0     | 2914  | 800   | 226       | 56        | 2036      | 173       | 0         | 44        | 360       | 278       | 536       | 177       | 275       |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 4334   | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 13154  | 2657   | 56    | 309   | 170   | 2270  | 0     | 263       | 137       | 5272      | 301       | 255       | 49        | 48        | 6581      | 255       | 0         | 1102      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 39        | 0         | 0         | 0         | 0         | 0         | 0         | 70        | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 402    | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 3075   | 0     | 218   | 0     | 0     | 0     | 42343     | 0         | 2983      | 0         | 0         | 0         | 0         | 283       | 0         | 54        | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 302   | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 300   | 0     | 0     | 0     | 405       | 973659    | 1282      | 970       | 624       | 1121      | 401       | 402       | 814       | 316       | 950       |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 201    | 0     | 1408  | 190   | 6251  | 281   | 0         | 41        | 587       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 1071      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 34        | 0         | 65        | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 58     | 0      | 0     | 0     | 0     | 0     | 0     | 75        | 44        | 112       | 31        | 78        | 51        | 80        | 62        | 64        | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 38        | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 415   | 0         | 0         | 0         | 33        | 36        | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 44        | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 743       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0      | 0      | 0     | 0     | 0     | 0     | 0     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |

[illegible]



|      |       |        |      |       |      |     |       |     |       |      |        |     |       |        |      |        |        |
|------|-------|--------|------|-------|------|-----|-------|-----|-------|------|--------|-----|-------|--------|------|--------|--------|
| 0    | 0     | 0      | 0    | 0     | 193  | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 77    | 0      | 0    | 0      | 121    |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 1556 | 154   | 0    | 0   | 0     | 0   | 41    | 94   | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 26714 | 0      | 1011 | 161   | 2034 | 98  | 92667 | 621 | 229   | 215  | 53371  | 172 | 327   | 342    | 113  | 2724   | 28850  |
| 0    | 1437  | 118    | 0    | 0     | 0    | 0   | 196   | 0   | 0     | 0    | 469    | 0   | 0     | 0      | 0    | 0      | 55     |
| 304  | 3668  | 170370 | 302  | 1048  | 1461 | 927 | 31918 | 143 | 956   | 292  | 43868  | 161 | 674   | 402    | 672  | 3034   | 535    |
| 0    | 45893 | 0      | 418  | 15073 | 1435 | 0   | 54299 | 81  | 36    | 48   | 8934   | 144 | 278   | 547    | 699  | 30738  | 2736   |
| 0    | 1373  | 0      | 1065 | 184   | 220  | 0   | 6969  | 0   | 75    | 0    | 4759   | 0   | 40    | 73     | 107  | 26445  | 2003   |
| 0    | 2221  | 0      | 96   | 158   | 204  | 0   | 0     | 129 | 0     | 53   | 0      | 54  | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 15779  | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 101  | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 24    | 0   | 0     | 35   | 27     | 46  | 29    | 222    | 0    | 0      | 54     |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 47   | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 10188 | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 38    | 0    | 34     | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 165  | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 69     | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 57   | 0     | 0      | 0    | 0     | 0    | 0   | 74673 | 803 | 15176 | 1342 | 172886 | 537 | 38481 | 154654 | 7500 | 131922 | 130266 |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 196   | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 1020  | 63     | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 76148 | 96     | 0    | 0     | 401  | 83  | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 432  | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 84   | 133    | 0   | 101   | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 99  | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 208  | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 82    | 0   | 0     | 0    | 0      | 0   | 90    | 0      | 62   | 0      | 47     |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 66   | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 5975   |
| 75   | 2867  | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 66     | 124  | 109    | 50     |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 47     |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 45    | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 199  | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 47    | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 46   | 0      | 14776  |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 141   | 0   | 0     | 0    | 0      | 0   | 111   | 136    | 169  | 139    | 168    |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 611   | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 92    | 76   | 35     | 49  | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 231  | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 162   | 0   | 0     | 0    | 0      | 0   | 124   | 59     | 0    | 0      | 58     |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 41    | 0    | 0      | 50  | 0     | 0      | 61   | 0      | 0      |
| 0    | 12523 | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 8686  | 0      | 102  | 0     | 3713 | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 2733 | 832   | 44     | 0    | 10992 | 616  | 94  | 7583  | 827 | 10175 | 884  | 1113   | 535 | 5876  | 10629  | 184  | 0      | 7005   |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 795   | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 115  | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 0     | 0   | 0     | 0    | 0      | 0   | 0     | 0      | 0    | 0      | 0      |
| 0    | 0     | 0      | 0    | 0     | 0    | 0   | 32085 | 0   | 0     | 0    | 0      | 0   | 0     | 62     | 0    | 0      | 132    |

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|        |        |       |       |       |       |      |       |      |       |        |        |        |        |       |      |       |        |
|--------|--------|-------|-------|-------|-------|------|-------|------|-------|--------|--------|--------|--------|-------|------|-------|--------|
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 53   | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 2033   | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 222    | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 33     | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 300   | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 45   | 0     | 0      | 39     | 35     | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 26117 | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 11732  | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 60     | 3913   | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 269  | 78    | 184    | 57     | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 32   | 0     | 0      | 43     | 0      | 53     | 0     | 0    | 100   | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 385    | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 186616 | 240513 | 2370  | 10804 | 80612 | 14600 | 3351 | 39781 | 6101 | 59500 | 497828 | 429373 | 798658 | 785022 | 11145 | 3181 | 25084 | 112456 |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 200    | 36659 | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 2691   | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 54     | 411    | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 426   | 46     |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 0      | 0      | 0     | 106   | 0     | 188   | 0    | 0     | 0    | 0     | 0      | 0      | 0      | 0      | 0     | 0    | 0     | 0      |
| 19516  | 986    | 184   | 592   | 183   | 627   | 191  | 182   | 207  | 8839  | 1958   | 176    | 138    | 161    | 7785  | 297  | 273   | 2490   |

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|       |      |       |       |       |        |       |     |        |     |       |        |       |      |     |       |      |      |       |
|-------|------|-------|-------|-------|--------|-------|-----|--------|-----|-------|--------|-------|------|-----|-------|------|------|-------|
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 524   | 0      | 257   | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 1751  | 2022 | 215  | 879   |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 1076  | 60  | 0      | 113 | 0     | 0      | 0     | 0    | 0   | 0     | 283  | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 61    | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 55    | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 129  | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 167   | 295  | 0    | 21907 |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 49    | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 129 | 0     | 0    | 0    | 92    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    | 0     |
| 243   | 504  | 0     | 324   | 288   | 678    | 0     | 78  | 0      | 156 | 114   | 329    | 0     | 169  | 176 | 175   | 0    | 42   |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 97    | 0    | 0    |       |
| 31    | 0    | 0     | 0     | 0     | 0      | 41    | 0   | 5881   | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 37    | 0    | 0     | 64    | 1814  | 38     | 0     | 44  | 225    | 214 | 679   | 0      | 0     | 0    | 0   | 0     | 67   | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 56     | 0     | 56  | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 87    | 343  | 0     | 0     | 143   | 46137  | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 73   | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 39279  | 0     | 37  | 63     | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 80   | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 81  | 35818 | 0      | 0     | 0    | 0   | 0     | 0    | 43   |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 1761  | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 65     | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 66   | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 239   | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 85    | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 64    | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 4093 | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 36    | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 27701  | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 21772 | 4233 | 51422 | 31876 | 42689 | 133882 | 72227 | 646 | 135734 | 503 | 765   | 555458 | 28021 | 8118 | 0   | 77859 | 1397 | 8915 |       |
| 0     | 1247 | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 937  | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 86    | 1136 | 1932  | 59006 | 89    | 0      | 9510  | 0   | 55     | 39  | 44    | 73     | 284   | 167  | 0   | 0     | 1163 | 42   |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 135   | 0   | 0      | 108 | 0     | 0      | 0     | 0    | 210 | 356   | 0    | 184  |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 0    | 0     | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 0      | 0     | 0    | 0   | 0     | 0    | 0    |       |
| 0     | 1417 | 744   | 0     | 0     | 0      | 0     | 0   | 0      | 0   | 0     | 65     | 0     | 0    | 0   | 0     | 1034 | 0    |       |

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|      |       |       |       |      |      |       |      |       |      |     |     |     |      |       |      |      |     |
|------|-------|-------|-------|------|------|-------|------|-------|------|-----|-----|-----|------|-------|------|------|-----|
| 36   | 0     | 0     | 0     | 39   | 0    | 49    | 0    | 15076 | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 65    | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 117  | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 35   | 14029 | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 33   | 0     | 0     | 0     | 2767 | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 81    | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 3658 | 0     | 82    | 0     | 0    | 37   | 0     | 8143 | 608   | 0    | 0   | 0   | 0   | 0    | 70    | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 152  | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 6388 | 12111 | 35814 | 58182 | 972  | 163  | 6763  | 89   | 400   | 3040 | 543 | 218 | 654 | 7738 | 57413 | 1162 | 1515 | 170 |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 64   | 0     | 0     | 0     | 0    | 0    | 0     | 28   | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 462  | 0     | 0     | 0     | 0    | 0    | 221   | 0    | 0     | 0    | 0   | 0   | 112 | 735  | 0     | 95   | 64   | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 442   | 0     | 0    | 187  | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 21032 | 0     | 0    | 8532 | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 2644 | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 13907 | 0     | 37   | 1555 | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 3164 | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 54   | 11674 | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 29   | 0     | 0     | 0     | 49   | 40   | 0     | 47   | 47    | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 72    | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    | 0     | 0     | 0     | 0    | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0   | 0    | 0     | 0    | 0    | 0   |
| 0    |       |       |       |      |      |       |      |       |      |     |     |     |      |       |      |      |     |

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|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Control 082 | Control 098 | Control 116 | Control 100 | Control 067 | Control 130 | Control 129 | Control 128 | Control 127 | Control 126 | Control 125 | Control 124 | Control 123 | Control 122 | Control 121 | Control 120 | Control 119 | Control 118 |
| 913917      | 896184      | 818591      | 599876      | 823866      | 822253      | 289192      | 468926      | 988346      | 853390      | 961371      | 488989      | 980454      | 755467      | 995765      | 546892      | 956310      | 413310      |
| 30375       | 89772       | 112056      | 319727      | 146655      | 135117      | 683476      | 500455      | 11103       | 121712      | 9602        | 471372      | 14641       | 243258      | 2090        | 52618       | 15795       | 368282      |
| 0           | 0           | 0           | 0           | 41          | 0           | 0           | 0           | 0           | 0           | 4091        | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 53745       | 11345       | 33920       | 28832       | 28007       | 8732        | 27263       | 30056       | 276         | 24659       | 21086       | 21152       | 4905        | 1275        | 1195        | 398554      | 26109       | 216887      |
| 1963        | 2019        | 35433       | 51565       | 1431        | 33898       | 69          | 563         | 275         | 239         | 3850        | 18487       | 0           | 0           | 950         | 1936        | 1786        | 1521        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 680         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Control 082 | Control 098 | Control 116 | Control 100 | Control 067 | Control 130 | Control 129 | Control 128 | Control 127 | Control 126 | Control 125 | Control 124 | Control 123 | Control 122 | Control 121 | Control 120 | Control 119 | Control 118 |
| 0           | 0           | 0           | 0           | 8339        | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 40          | 137         | 105         | 313837      |
| 0           | 0           | 0           | 223         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 553827      | 599868      | 479760      | 13786       | 12863       | 757252      | 3125        | 7940        | 4329        | 505179      | 11851       | 357547      | 17783       | 4043        | 11897       | 102118      | 5374        | 15494       |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 124         | 0           | 0           | 0           | 146         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 125         | 0           | 60          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 118         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 12383       | 44353       | 217         | 300         | 217         | 163429      | 659         | 1324        | 11012       | 1393        | 385         | 1405        | 116983      | 548         | 923         | 432         | 1263        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 14539       | 14185       | 124         | 100         | 87          | 1314        | 0           | 0           | 0           | 14383       | 248         | 1486        | 0           | 0           | 37          | 337         | 77          | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 40          | 0           | 148         | 122         | 83          | 68          | 127         | 134         | 42          | 240         | 0           | 0           | 161         | 0           | 0           | 5936        | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1545        | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1234        | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 1093        | 740         | 0           | 955         | 283         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 117         | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 136         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 771         | 0           | 0           | 193         | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 66          | 0           | 41          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 7009        | 1882        | 97710       | 43466       | 9755        | 39147       | 1675        | 5887        | 6925        | 7343        | 853173      | 20309       | 156730      | 195394      | 917         | 20982       | 16067       | 7833        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1210        | 0           | 457         | 31266       | 41          | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 64          | 0           | 0           | 0           | 0           | 57          | 440         | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 1908        | 0           | 0           | 0           | 0           | 199         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 119         | 0           | 0           |
| 0           | 0           | 0           | 0           | 41          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 549         | 0           | 0           | 326         | 340         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 62          | 166         | 0           | 46          | 0           | 285         | 0           | 0           | 0           | 475         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 57          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 66          | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 59          | 0           | 0           | 56          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 566         | 303         | 88303       | 14248       | 851         | 1225        | 10669       | 2143        | 1391        | 1006        | 1778        | 402         | 6448        | 5415        | 600         | 2026        | 14399       | 57758       |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 2078        | 0           | 87          | 8411        | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 43          | 40          | 0           | 0           | 52          | 287         | 121         | 162         | 118         | 230         | 0           | 0           | 0           | 514         | 0           | 0           | 99          |
| 0           | 0           | 0           | 0           | 62          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 90          | 90          | 0           | 0           | 32011       | 66          | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 421         | 2112        | 0           | 0           | 0           | 38          | 0           | 0           | 0           | 33          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 333         | 306         | 199         | 65616       | 668         | 68          | 0           | 543         | 293         | 97          | 14819       | 43          | 450         | 158         | 113         | 110532      | 108         | 1166        |
| 0           | 0           | 0           | 0           | 6905        | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 445         | 0           | 0           | 0           | 0           | 62          | 0           | 132         | 0           | 0           | 0           | 0           | 0           | 290         | 0           | 0           | 0           |
| 52          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |

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|-------|------|-------|-------|-------|--------|--------|--------|------|--------|------|------|------|--------|-------|-----|------|------|
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 132   | 0    | 0     | 49    | 741   | 0      | 219    | 0      | 126  | 128    | 388  | 0    | 0    | 0      | 62    | 0   | 0    | 290  |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 146    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 178   | 35    | 428    | 0      | 0      | 0    | 0      | 0    | 49   | 0    | 0      | 0     | 0   | 39   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 163  | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 50   | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 78   | 0     | 36035 | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 45    | 0     | 33    | 0      | 86     | 230830 | 416  | 86     | 173  | 49   | 458  | 0      | 0     | 0   | 38   | 218  |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 171  | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 1133  | 0    | 11960 | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 67   | 459  | 0      | 33    | 115 | 0    | 0    |
| 0     | 0    | 0     | 0     | 75    | 0      | 0      | 0      | 0    | 0      | 0    | 1289 | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 77    | 50   | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 269  | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 47    | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 231  | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 49   | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 48    | 39   | 124   | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 126 | 2809 | 118  |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 63    | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 35    | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 1250  | 987  | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 903   | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 82   | 0     | 53    | 85    | 0      | 0      | 0      | 0    | 0      | 0    | 3753 | 0    | 62     | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 583   | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 78   | 0     | 111   | 0     | 0      | 0      | 129    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 52    | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 69   | 0     | 111   | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 44    | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 50   | 449  | 0      | 0     | 0   | 0    | 0    |
| 50    | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 13016 | 3323 | 78976 | 68357 | 76995 | 101568 | 310180 | 1847   | 6679 | 15830  | 1317 | 4172 | 3232 | 191575 | 765   | 251 | 1232 | 5808 |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 547  | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 3207  | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 75   | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 68    | 4051 | 0     | 922   | 0     | 269    | 194    | 574    | 131  | 223436 | 830  | 184  | 460  | 599    | 10505 | 113 | 0    | 90   |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 117   | 0      | 0      | 0      | 129  | 44     | 159  | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 1621  | 0    | 0     | 16444 | 0     | 0      | 0      | 0      | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0    | 0    |
| 0     | 572  | 72    | 75947 | 0     | 41     | 0      | 0      | 0    | 0      | 1258 | 0    | 0    | 0      | 37    | 0   | 34   | 124  |





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|       |      |       |       |       |        |        |      |      |        |      |      |      |        |       |     |     |      |
|-------|------|-------|-------|-------|--------|--------|------|------|--------|------|------|------|--------|-------|-----|-----|------|
| 63    | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 35    | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 1250  | 987  | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 903   | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 82   | 0     | 53    | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 3753 | 0    | 62     | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 85    | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 583   | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 78   | 0     | 111   | 0     | 0      | 0      | 129  | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 52    | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 69   | 0     | 111   | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 72   | 0    | 0    | 70     | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 103  |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 50    | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 1502  | 0    | 44297 | 15879 | 0     | 21     | 25752  | 124  | 0    | 0      | 0    | 2897 | 0    | 0      | 176   | 125 | 101 | 301  |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 539   | 607  | 11974 | 0     | 8474  | 0      | 23377  | 136  | 0    | 13277  | 148  | 1053 | 0    | 11206  | 80    | 0   | 895 | 4772 |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 10975 | 2622 | 22705 | 41595 | 68521 | 101504 | 260691 | 1587 | 6528 | 2553   | 1169 | 147  | 3232 | 180235 | 509   | 126 | 236 | 735  |
| 0     | 94   | 0     | 10883 | 0     | 43     | 360    | 0    | 151  | 0      | 0    | 75   | 0    | 134    | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 547  | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 3207  | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 75   | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 68    | 4051 | 0     | 922   | 0     | 269    | 194    | 574  | 131  | 223436 | 830  | 184  | 460  | 599    | 10505 | 113 | 0   | 90   |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    | 0    | 0    | 0      | 0     | 0   | 0   | 0    |
| 0     | 0    | 0     | 0     | 0     | 0      | 0      | 0    | 0    | 0      | 0    |      |      |        |       |     |     |      |

[illegible]



|   |    |    |       |       |     |        |     |      |       |     |      |      |     |     |     |     |     |
|---|----|----|-------|-------|-----|--------|-----|------|-------|-----|------|------|-----|-----|-----|-----|-----|
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 34    | 0   | 0      | 0   | 0    | 0     | 179 | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 51 | 57    | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 46  | 146 | 104 |     |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 160 | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 148   | 39  | 0      | 275 | 0    | 36    | 86  | 42   | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 47 | 0  | 0     | 252   | 278 | 282    | 119 | 0    | 38565 | 281 | 137  | 0    | 222 | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 117 | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 123 | 41  | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 11601 | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 30 | 0  | 107   | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 6659 | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 35 | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 47    | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 36 | 13641 | 0     | 77  | 104714 | 146 | 0    | 0     | 0   | 91   | 1371 | 139 | 0   | 110 | 102 | 320 |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 44    | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 40  | 79     | 116 | 1056 | 48    | 78  | 75   | 455  | 284 | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 36 | 13641 | 0     | 77  | 104714 | 146 | 0    | 0     | 0   | 91   | 1371 | 139 | 0   | 110 | 102 | 320 |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 44    | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 40  | 79     | 116 | 1056 | 48    | 78  | 75   | 455  | 284 | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 36 | 13641 | 0     | 77  | 104714 | 146 | 0    | 0     | 0   | 91   | 1371 | 139 | 0   | 110 | 102 | 320 |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 44    | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 40  | 79     | 116 | 1056 | 48    | 78  | 75   | 455  | 284 | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 36 | 13641 | 0     | 77  | 104714 | 146 | 0    | 0     | 0   | 91   | 1371 | 139 | 0   | 110 | 102 | 320 |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 44    | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 40  | 79     | 116 | 1056 | 48    | 78  | 75   | 455  | 284 | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   |
| 0 | 0  | 0  | 0     | 0     | 0   | 0      | 0   | 0    | 0     | 0   |      |      |     |     |     |     |     |

[illegible]

|      |     |   |    |     |    |    |     |   |      |     |     |      |     |    |   |    |     |
|------|-----|---|----|-----|----|----|-----|---|------|-----|-----|------|-----|----|---|----|-----|
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 63   | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 71 | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 37 | 202 |
| 0    | 0   | 0 | 0  | 35  | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 82 | 67 | 585 | 0 | 251  | 260 | 102 | 1399 | 136 | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 72  | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 52 | 113 | 0  | 0  | 0   | 0 | 3296 | 98  | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 1651 | 352 | 0 | 0  | 49  | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  | 0 | 0  | 0   |
| 0    | 0   | 0 | 0  | 0   | 0  | 0  | 0   | 0 | 0    | 0   | 0   | 0    | 0   | 0  |   |    |     |

| Control 099 | Control 117 | Control 114 | Control 113 | Control 112 | Control 111 | Control 110 | Control 109 | Control 108 | Control 107 | Control 106 | Control 105 | Control 104 | Control 103 | Control 102 | Control 101 | Control 115 | Control 066 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 769588      | 771697      | 915535      | 846613      | 814563      | 694449      | 952296      | 166760      | 820394      | 538851      | 939820      | 738364      | 922655      | 912343      | 978106      | 373242      | 828956      | 897154      |
| 174362      | 207545      | 31512       | 31615       | 176810      | 281967      | 32092       | 827555      | 15509       | 287945      | 50557       | 195641      | 50479       | 58753       | 7332        | 592025      | 100905      | 52784       |
| 131         | 0           | 0           | 0           | 0           | 0           | 1866        | 0           | 0           | 0           | 0           | 166         | 0           | 0           | 0           | 0           | 0           | 0           |
| 17892       | 6310        | 18833       | 12509       | 7876        | 7513        | 13350       | 5260        | 25049       | 20460       | 9418        | 21870       | 24335       | 12606       | 11625       | 27274       | 69569       | 31175       |
| 38027       | 14448       | 34028       | 109263      | 751         | 16071       | 396         | 425         | 138794      | 152744      | 205         | 40915       | 2384        | 16298       | 2937        | 6660        | 570         | 18887       |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 3044        | 0           | 0           | 0           | 799         | 0           | 0           |
| 0           | 0           | 92          | 0           | 0           | 0           | 0           | 0           | 254         | 0           | 0           | 0           | 147         | 0           | 0           | 0           | 0           | 0           |
|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Control 099 | Control 117 | Control 114 | Control 113 | Control 112 | Control 111 | Control 110 | Control 109 | Control 108 | Control 107 | Control 106 | Control 105 | Control 104 | Control 103 | Control 102 | Control 101 | Control 115 | Control 066 |
| 0           | 132         | 166         | 241         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 251         | 0           | 0           | 0           | 0           | 0           |
| 89          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 415313      | 483607      | 790506      | 173424      | 1764        | 2330        | 307255      | 1147        | 235927      | 1079        | 1421        | 77895       | 684041      | 15327       | 262235      | 3321        | 40841       | 695429      |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 51          | 0           | 0           | 0           | 0           | 0           | 0           | 81          | 0           | 0           | 0           | 0           | 0           | 96          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 430         | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 422         | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 11512       | 50854       | 333         | 10352       | 194         | 250         | 108         | 66169       | 1707        | 26438       | 52          | 29630       | 229         | 65          | 214         | 330         | 354         | 1523        |
| 0           | 0           | 62          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 55          | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 9424        | 85          | 15078       | 103         | 49          | 0           | 6067        | 0           | 3803        | 0           | 0           | 162         | 14885       | 63          | 4330        | 72          | 0           | 17316       |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 128         | 0           | 0           | 124         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 55          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 335         | 94          | 0           | 0           | 0           | 0           | 26          | 0           | 215         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 251         |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 70          | 600         | 0           | 1196        | 0           | 814         | 0           | 842         | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 71          | 0           | 0           | 0           | 116         | 5256        | 0           | 67          | 0           | 0           |
| 112090      | 1049        | 3933        | 27530       | 249888      | 80362       | 243455      | 31115       | 239175      | 27277       | 324616      | 8894        | 7866        | 25022       | 8954        | 4081        | 815         | 21620       |
| 4519        | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 47          | 10741       | 0           | 0           | 0           | 0           | 59          | 81          | 0           | 0           | 0           | 11381       | 0           | 0           | 0           | 1722        |
| 97          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 117         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 381         | 0           | 0           | 0           | 368         | 0           | 713         | 0           | 0           | 0           | 300         | 0           | 0           |
| 521         | 0           | 144         | 0           | 0           | 0           | 36          | 0           | 0           | 0           | 0           | 0           | 396         | 0           | 64          | 0           | 0           | 610         |
| 38          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 42          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 630         | 581         | 322         | 30202       | 221800      | 77059       | 184800      | 1123        | 262440      | 4718        | 590572      | 1489        | 1947        | 1646        | 12474       | 6319        | 597         | 2465        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 107         | 0           | 54          | 216         | 361         | 177         | 53          | 0           | 187487      | 134         | 242         | 427         | 147         | 83          | 146         | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 60          | 0           | 0           | 0           | 0           | 40          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 4586        | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 137         | 0           | 1288        | 0           | 0           | 0           | 0           | 19          | 355         | 0           | 42          | 0           | 1128        | 0           | 759         | 79          | 0           | 1290        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 211         | 359         | 607         | 462         | 87          | 79          | 0           | 94          | 268         | 0           | 1847        | 0           | 116         | 9076        | 0           | 58          | 123         | 523         |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 45          | 3275        | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 262         | 184407      | 125         | 153         | 222         | 109         | 56          | 162         | 186         | 52          | 149         | 362         | 77          | 0           |
| 0           | 0           | 0           | 0           | 0           | 208         | 118         | 61142       | 122         | 31          | 0           | 0           | 44          | 0           | 0           | 158         | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 64          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |

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|       |        |     |       |        |        |       |        |      |        |       |        |      |       |      |        |     |      |
|-------|--------|-----|-------|--------|--------|-------|--------|------|--------|-------|--------|------|-------|------|--------|-----|------|
| 131   | 0      | 0   | 0     | 0      | 0      | 1866  | 0      | 0    | 0      | 0     | 166    | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 6939   | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 163   | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 302   | 56070  | 633 | 826   | 322    | 15772  | 457   | 332    | 541  | 117036 | 204   | 139867 | 403  | 21714 | 373  | 71541  | 0   | 201  |
| 0     | 0      | 0   | 0     | 0      | 0      | 35    | 27     | 130  | 36     | 43    | 37515  | 46   | 12501 | 0    | 71     | 0   | 0    |
| 500   | 49     | 0   | 60    | 0      | 0      | 31    | 0      | 0    | 0      | 0     | 46     | 0    | 0     | 0    | 0      | 58  | 182  |
| 475   | 10225  | 582 | 7518  | 1134   | 196409 | 522   | 369    | 791  | 19755  | 348   | 32045  | 827  | 3144  | 554  | 134288 | 67  | 1220 |
| 0     | 3067   | 81  | 113   | 58     | 1541   | 38    | 35     | 0    | 10625  | 0     | 4052   | 0    | 776   | 0    | 8063   | 73  | 0    |
| 0     | 0      | 44  | 123   | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 108    | 0    | 107   | 238  | 0      | 185 | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 49     | 0   | 0     | 0      | 0      | 0     | 0      | 258  | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 30     | 2268  | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 53    | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 2568 |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 23   | 0      | 0     | 0      | 109  | 0     | 84   | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 80  | 0     | 0      | 0      | 0     | 0      | 108  | 0      | 0     | 0      | 0    | 51    | 74   | 0      | 0   | 46   |
| 0     | 0      | 0   | 0     | 0      | 0      | 37    | 33     | 0    | 32     | 0     | 0      | 54   | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 26506 | 111902 | 882 | 19976 | 118221 | 74253  | 13379 | 714460 | 7711 | 272009 | 42906 | 79299  | 2964 | 38342 | 3241 | 50558  | 497 | 418  |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 43   | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 41     | 0     | 9108   | 0    | 53    | 72   | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 49  | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 440  | 0     | 0    | 0      | 0   | 0    |
| 143   | 0      | 39  | 0     | 0      | 0      | 0     | 0      | 47   | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     | 0      | 0    | 0     | 0    | 0      | 0   | 0    |
| 0     | 0      | 0   | 0     | 0      | 0      | 0     | 0      | 0    | 0      | 0     |        |      |       |      |        |     |      |

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|-------|-------|-------|--------|--------|-------|--------|-------|------|--------|------|-------|--------|--------|--------|--------|--------|-------|
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 41    |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 224    | 65    | 209    | 154   | 120  | 264    | 43   | 171   | 48     | 109    | 236    | 475    | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 161    | 133   | 32     | 64    | 129  | 79     | 0    | 38    | 67     | 110    | 139    | 164    | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 56     | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 39    |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 299    | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 57     | 0     | 0      | 0     | 0    | 0      | 48   | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 123   | 76     | 54    | 157  | 29     | 48   | 39    | 192    | 150    | 0      | 159    | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 48     | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 1909 | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 31    | 0    | 26     | 0    | 21476 | 0      | 52     | 449    | 87     | 0      | 2100  |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 467   |
| 62137 | 60696 | 18782 | 543137 | 309664 | 23557 | 170630 | 20646 | 7854 | 125415 | 8058 | 15818 | 107747 | 767935 | 647813 | 121402 | 778303 | 79053 |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 92    | 0      | 0      | 0     | 0      | 0     | 254  | 0      | 0    | 0     | 147    | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 1637  | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 86    |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 71    | 0      | 0     | 46   | 0      | 0    | 0     | 0      | 6999   | 0      | 88     | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 0     | 0     | 0     | 0      | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0     | 0      | 0      | 0      | 0      | 0      | 0     |
| 59576 | 55    | 27865 | 58     | 0      | 128   | 930    | 70    | 3533 | 165    | 46   | 34    | 42492  | 168    | 1083   | 0      | 0      | 1214  |



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|-------|--------|--------|-------|--------|-------|--------|-------|--------|--------|--------|--------|-------|-------|------|-------|-------|--------|
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 310   | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 46     | 334   | 7744   | 98    | 143295 | 85    | 190    | 66     | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 118260 | 358   | 5172   | 79    | 69     | 105   | 285    | 177    | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 131686 | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 92     | 0     | 850    | 8310  | 59     | 0     | 74     | 0      | 0      | 0      | 126   | 0     | 0    | 0     | 30    | 0      |
| 0     | 0      | 236    | 316   | 5133   | 44548 | 92     | 73    | 183    | 131    | 335    | 0      | 0     | 0     | 0    | 34    | 5384  | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 42     | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 471   | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 56     | 0     | 0      | 0     | 0      | 33    | 0      | 0      | 21641  | 0      | 41    | 0     | 81   | 34    | 70    | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 102   | 0      |
| 22910 | 522932 | 212982 | 8705  | 190958 | 50297 | 724127 | 74013 | 128436 | 902855 | 556314 | 5882   | 35435 | 25647 | 7684 | 3779  | 8450  | 784250 |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 52    | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 439   | 0     | 0    | 0     | 0     | 65     |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 31     | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 0     | 0      | 0      | 0     | 0      | 0     | 0      | 0     | 0      | 0      | 0      | 0      | 0     | 0     | 0    | 0     | 0     | 0      |
| 521   | 2599   | 39     | 15596 | 1728   | 61    | 59     | 156   | 200    | 0      | 364    | 149    | 619   | 25242 | 827  | 15598 | 17598 | 468    |

|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Control 013 | Control 012 | Control 011 | Control 010 | Control 009 | Control 008 | Control 007 | Control 006 | Control 005 | Control 004 | Control 003 | Control 002 | Control 001 | Control 030 | Control 031 | Control 032 | Control 033 | Control 063 |
| 780306      | 859752      | 775774      | 717947      | 981729      | 530429      | 882378      | 865920      | 735997      | 40212       | 874884      | 849951      | 807757      | 799318      | 694207      | 568384      | 977283      | 742973      |
| 191810      | 103783      | 165853      | 236634      | 12908       | 5766        | 59614       | 117019      | 203133      | 12353       | 106678      | 75236       | 151897      | 166111      | 261860      | 384638      | 3112        | 240223      |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 114         | 0           | 1708        | 0           | 6506        |
| 27776       | 25086       | 56998       | 43878       | 4155        | 462599      | 41931       | 13237       | 29268       | 47012       | 17638       | 13714       | 8107        | 19467       | 13238       | 43910       | 18606       | 9588        |
| 108         | 10999       | 1375        | 1541        | 1208        | 1206        | 16077       | 3824        | 31602       | 900423      | 800         | 61099       | 32239       | 14990       | 30695       | 1360        | 999         | 710         |
| 0           | 380         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Control 013 | Control 012 | Control 011 | Control 010 | Control 009 | Control 008 | Control 007 | Control 006 | Control 005 | Control 004 | Control 003 | Control 002 | Control 001 | Control 030 | Control 031 | Control 032 | Control 033 | Control 063 |
| 0           | 0           | 0           | 0           | 82          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 207         | 96          | 223         | 0           |
| 69          | 0           | 0           | 68          | 0           | 58          | 47          | 0           | 0           | 0           | 40          | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 420475      | 476757      | 12717       | 174481      | 270833      | 6470        | 464110      | 208840      | 571326      | 10970       | 770575      | 728129      | 771624      | 238422      | 448286      | 17719       | 13366       | 9156        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 65          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 381         | 0           | 0           | 358         | 91          | 0           | 0           | 0           | 0           | 0           | 0           | 114         | 0           | 0           | 109         |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 6350        | 1084        | 143         | 31703       | 282         | 86          | 162         | 74          | 176         | 242         | 6080        | 982         | 209         | 626         | 825         | 879         | 5946        | 389         |
| 3301        | 0           | 0           | 0           | 142         | 0           | 0           | 0           | 0           | 0           | 0           | 951         | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 7365        | 10881       | 83          | 3040        | 1114        | 0           | 9260        | 3286        | 185         | 95          | 13659       | 14869       | 607         | 281         | 201         | 248         | 114         | 460         |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 13225       | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 2275        | 59          | 0           | 0           | 0           | 0           | 0           | 0           |
| 51          | 0           | 0           | 57          | 68          | 0           | 1314        | 0           | 0           | 0           | 0           | 124         | 0           | 0           | 0           | 0           | 0           | 4637        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 68          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 1047        | 9061        | 2537        | 2313        | 670395      | 1123        | 3420        | 2547        | 13549       | 1808        | 1530        | 3534        | 2150        | 283         | 0           | 0           | 0           | 2441        |
| 0           | 0           | 80          | 0           | 0           | 459         | 0           | 0           | 0           | 55          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 68          | 0           | 0           | 48          | 0           | 0           | 0           | 0           | 0           | 0           | 101         | 404         | 0           | 1479        | 66          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 54          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 4159        | 0           | 0           | 0           |
| 4656        | 9710        | 251212      | 123775      | 3273        | 1862        | 18477       | 12752       | 6915        | 2416        | 2363        | 6727        | 7712        | 260898      | 82332       | 55696       | 397841      | 319690      |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 88          | 53          | 0           | 0           | 0           |
| 172         | 0           | 0           | 0           | 66          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 55          | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 164         | 366         | 0           | 254         | 133         | 0           | 295         | 137         | 38          | 0           | 175         | 139         | 0           | 0           | 0           | 0           | 0           | 0           |
| 200         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 2109        | 161698      | 169         | 150         | 78          | 1834        | 304         | 266         | 307         | 0           | 443         | 153         | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 441         | 6678        | 400010      | 1920        | 1442        | 918         | 2525        | 1308        | 1636        | 1130        | 538         | 1041        | 1586        | 9298        | 29685       | 912         | 521376      | 80397       |
| 0           | 0           | 0           | 125         | 76          | 80          | 91          | 0           | 41          | 0           | 0           | 76          | 0           | 0           | 0           | 0           | 0           | 0           |
| 62          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 52          | 0           | 0           | 638         | 106         | 0           | 136         | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 258         |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 135         | 0           | 0           | 55          | 0           | 44          | 0           | 78          | 37          | 0           | 71          | 286         | 0           | 0           | 0           | 0           | 0           | 68          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 108         | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 610         | 0           | 1135        | 0           | 651         | 1144        | 6228        | 0           | 228         | 677         | 0           | 518         | 879         | 86          | 6088        | 617         | 573         | 1173        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 746         | 0           | 174         | 0           | 0           | 197         |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 73          | 84          | 0           | 42          | 0           | 0           | 49          | 70          | 55          | 0           | 431         | 0           | 0           | 0           | 68          |
| 0           | 0           | 146         | 127         | 76          | 0           | 27          | 0           | 42          | 48          | 0           | 0           | 0           | 94          | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 9834        |
| 0           | 0           | 0           | 0           | 78          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |



[illegible]

|       |      |      |        |      |      |      |       |       |      |      |      |      |      |        |        |      |       |
|-------|------|------|--------|------|------|------|-------|-------|------|------|------|------|------|--------|--------|------|-------|
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 106    | 0      | 0    | 1549  |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 85   | 72     | 0    | 0    | 134  | 0     | 0     | 8582 | 0    | 748  | 0    | 0    | 63     | 86     | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 126   | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 58   | 0    | 0    | 0    | 0    | 50     | 0      | 570  | 0     |
| 251   | 0    | 0    | 54     | 0    | 0    | 114  | 0     | 0     | 0    | 0    | 571  | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 56    | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 11307  | 34   | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 43   | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 842    | 0      | 0    | 127   |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 84   | 0      | 268  | 1766 | 90   | 0     | 398   | 4654 | 0    | 408  | 289  | 300  | 687    | 0      | 0    | 64    |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 288    | 0      | 0    | 79    |
| 0     | 0    | 0    | 0      | 0    | 35   | 0    | 0     | 45    | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 58    | 679  | 0    | 0      | 202  | 0    | 88   | 79    | 39    | 83   | 71   | 0    | 73   | 98   | 115    | 70438  | 0    | 53    |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 706  | 55   | 77     | 132  | 37   | 81   | 79    | 0     | 144  | 40   | 58   | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 541  | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 605  | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 293  | 0    | 77     | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 1386 | 66   | 82     | 335  | 171  | 127  | 149   | 89    | 111  | 169  | 189  | 154  | 0    | 0      | 0      | 0    | 0     |
| 0     | 366  | 143  | 71     | 218  | 37   | 38   | 73    | 75    | 78   | 40   | 0    | 69   | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 68    | 0    | 0    | 0      | 0    | 0    | 723  | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 67    |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 61   | 27   | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 40   | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 62    | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 4841 | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 69    | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 564  | 0      | 0      | 41   | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 46   | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 60    | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 330  | 73   | 129    | 0    | 0    | 0    | 85    | 35    | 51   | 30   | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 62441 | 9757 | 1147 | 125818 | 2903 | 1977 | 8424 | 80196 | 79491 | 1773 | 6842 | 1808 | 1412 | 2149 | 153120 | 159155 | 1402 | 16609 |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 1759  | 0    | 67   | 40009  | 71   | 47   | 427  | 45630 | 73    | 94   | 88   | 2152 | 136  | 878  | 0      | 86     | 53   | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 382   |
| 0     | 0    | 0    | 0      | 0    | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 0      | 0    | 0     |
| 85    | 0    | 0    | 0      | 0    | 39   | 42   | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 2888   | 0      | 0    | 0     |
| 475   | 0    | 0    | 0      | 73   | 0    | 0    | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0      | 19638  | 0    | 0     |



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|       |      |     |       |      |      |      |       |       |      |       |       |      |      |       |        |     |         |
|-------|------|-----|-------|------|------|------|-------|-------|------|-------|-------|------|------|-------|--------|-----|---------|
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 114  | 0     | 1708   | 0   | 6506    |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 28   | 31   | 87    | 10545 | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 6785    |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 2803  | 1421 | 552 | 201   | 1151 | 134  | 769  | 6865  | 32591 | 283  | 292   | 10191 | 915  | 1114 | 12313 | 113291 | 799 | 1192    |
| 49    | 0    | 0   | 0     | 0    | 0    | 0    | 154   | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 334    | 0   | 0       |
| 866   | 721  | 708 | 117   | 327  | 1253 | 153  | 17007 | 380   | 61   | 96    | 60    | 0    | 0    | 52    | 38765  | 144 | 68      |
| 32846 | 354  | 211 | 50    | 554  | 633  | 3996 | 1516  | 1645  | 42   | 0     | 5166  | 76   | 1259 | 5868  | 74758  | 134 | 8973    |
| 459   | 2432 | 164 | 62    | 77   | 47   | 267  | 290   | 528   | 48   | 67    | 207   | 58   | 188  | 489   | 4485   | 94  | 151     |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 23015 | 0     | 0    | 41    | 72    | 0    | 0    | 1038  | 70     | 36  | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 989  | 0     | 0     | 57   | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 28  | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 124   | 1062 | 82  | 52554 | 119  | 0    | 157  | 141   | 0     | 63   | 79    | 0     | 65   | 0    | 0     | 0      | 0   | 0       |
| 56    | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 340  | 235 | 113   | 90   | 106  | 0    | 0     | 183   | 48   | 44    | 0     | 78   | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 115   | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 43    | 63    | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 80   | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 0     | 0    | 0   | 0     | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0    | 0     | 0      | 0   | 0       |
| 1754  | 7451 | 951 | 23094 | 1601 | 989  | 1580 | 1155  | 42309 | 1352 | 23433 | 2037  | 1762 | 8218 | 9767  | 103282 | 477 | 38587</ |





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|      |      |      |       |      |      |      |      |      |     |       |      |      |      |      |       |       |      |
|------|------|------|-------|------|------|------|------|------|-----|-------|------|------|------|------|-------|-------|------|
| 0    | 706  | 68   | 24867 | 70   | 2063 | 671  | 0    | 83   | 100 | 47    | 0    | 69   | 84   | 0    | 0     | 406   | 1404 |
| 56   | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 948  | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 324  | 148  | 70    | 0    | 0    | 0    | 0    | 0    | 0   | 43    | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 73   | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 95   | 104  | 10222 | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 2407 |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 73   |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 1130 | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 86   | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 3310 | 0    | 3222 | 62    | 0    | 0    | 0    | 2153 | 0    | 103 | 72    | 73   | 59   | 0    | 58   | 81    | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 40   | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 63   |
| 7146 | 7641 | 146  | 2783  | 8942 | 96   | 7780 | 2103 | 1405 | 161 | 10003 | 9996 | 2045 | 1053 | 792  | 222   | 248   | 417  |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 120  | 0     | 0     | 0    |
| 0    | 681  | 0    | 65    | 88   | 0    | 75   | 76   | 0    | 0   | 77    | 69   | 167  | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 288  | 0     | 1052 | 0    | 39   | 0    | 0    | 0   | 122   | 67   | 0    | 179  | 159  | 0     | 10031 | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 55   | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 55   | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 122   | 0    | 41   | 55   | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 108   | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 105  | 0     | 0     | 66   |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 52   | 0     | 0     | 0    |
| 61   | 371  | 82   | 0     | 0    | 40   | 541  | 0    | 0    | 0   | 0     | 73   | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 70   | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0    |
| 0    | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    |     |       |      |      |      |      |       |       |      |

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|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Control 062 | Control 061 | Control 060 | Control 059 | Control 058 | Control 057 | Control 056 | Control 055 | Control 054 | Control 053 | Control 052 | Control 051 | Control 050 | Control 065 | Control 049 | Control 047 | Control 046 | Control 045 |
| 927388      | 835326      | 976127      | 849301      | 915857      | 980280      | 618908      | 471719      | 942001      | 211520      | 978299      | 980752      | 922902      | 865505      | 973834      | 863931      | 718643      | 887448      |
| 34597       | 123158      | 4048        | 139477      | 38210       | 3576        | 237352      | 523290      | 28331       | 84846       | 9215        | 6633        | 61059       | 100052      | 3760        | 83836       | 263379      | 84612       |
| 55          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 728         | 0           | 66          |
| 25186       | 37024       | 12344       | 10102       | 44248       | 14399       | 10457       | 1832        | 18587       | 18940       | 6701        | 7981        | 14558       | 28073       | 20191       | 45276       | 17978       | 23419       |
| 12774       | 416         | 7481        | 1120        | 1576        | 1618        | 49799       | 2676        | 10996       | 684434      | 5296        | 4607        | 1236        | 6370        | 2147        | 6229        | 0           | 4455        |
| 0           | 4076        | 0           | 0           | 109         | 127         | 83484       | 483         | 85          | 260         | 489         | 27          | 245         | 0           | 68          | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Control 062 | Control 061 | Control 060 | Control 059 | Control 058 | Control 057 | Control 056 | Control 055 | Control 054 | Control 053 | Control 052 | Control 051 | Control 050 | Control 065 | Control 049 | Control 047 | Control 046 | Control 045 |
| 0           | 43          | 0           | 0           | 65          | 0           | 34          | 0           | 0           | 40          | 245         | 55          | 158         | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 153255      | 400750      | 16216       | 8718        | 25884       | 9528        | 9786        | 18908       | 9881        | 20739       | 36892       | 722082      | 818793      | 137843      | 10080       | 4921        | 4430        | 450405      |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 198         | 218         | 0           | 0           | 26          | 124         | 45          | 209         | 19          | 38          | 140         | 33          | 0           | 311         | 55          | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 5160        | 81859       | 1271        | 494         | 31          | 46          | 133         | 4790        | 51          | 9146        | 142         | 218         | 679         | 14017       | 2087        | 540         | 185221      | 817         |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 80          | 32          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 488         | 8182        | 0           | 0           | 777         | 0           | 0           | 511         | 29          | 209         | 367         | 36          | 16481       | 1075        | 143         | 0           | 48          | 5549        |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 193         | 0           | 168         | 370         | 142         | 132         | 41799       | 0           | 55          | 129         | 0           | 126         | 460         | 2880        | 137         | 0           | 287         | 76          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1214        | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 204         | 88          | 247         | 385         | 28          | 0           | 0           | 245         | 47          | 161         | 2133        | 0           | 0           | 261         | 0           | 71          | 56          | 79          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 293         | 0           | 0           | 0           | 0           | 0           | 0           | 66          | 0           | 206         | 0           | 33          | 28          | 0           | 2829        | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 38          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 46130       | 7715        | 4805        | 14874       | 16919       | 2013        | 69024       | 10377       | 10854       | 36757       | 720040      | 3579        | 13761       | 246761      | 443526      | 75732       | 48561       | 51176       |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 34          | 0           | 0           | 0           | 6791        | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 63          | 0           | 40926       | 34          | 25          | 0           | 74          | 60          | 0           | 61          | 0           | 61          | 120         |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 20625       | 0           | 101         |
| 0           | 0           | 0           | 0           | 105         | 120         | 61351       | 161         | 25          | 352         | 674         | 288         | 117         | 0           | 124         | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 728         | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1749        | 0           | 0           | 79          | 0           | 0           | 0           |
| 0           | 0           | 0           | 9615        | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 58          | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 663         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 34          | 56          | 148         | 13407       | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 167         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 70          | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 85          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 39672       | 301         | 5174        | 1638        | 1449        | 1397        | 55858       | 4339        | 11093       | 26289       | 1983        | 839         | 793         | 536         | 468812      | 584274      | 2095        | 149439      |
| 0           | 0           | 0           | 0           | 38          | 0           | 0           | 360         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 36          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 53          | 122         |
| 0           | 45          | 0           | 88          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 84          | 0           | 0           | 0           | 0           |
| 5388        | 0           | 163         | 86          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 50          | 60          | 37          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 70          | 28          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 46          |
| 0           | 209         | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 152         | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 23          | 950         | 0           | 0           | 0           | 0           | 0           |
| 73          | 37          | 0           | 14303       | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 42          | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 922         | 571         | 1487        | 61408       | 1071        | 1875        | 1299        | 2935        | 35332       | 2839        | 4681        | 1683        | 1274        | 1633        | 2885        | 1586        | 90378       | 179         |
| 147         | 0           | 91          | 21423       | 0           | 0           | 0           | 1913        | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 55          | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 27708       | 76          | 88          | 114         | 0           | 35          | 91          | 0           | 73          | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 40          | 0           | 0           | 0           | 0           | 40          | 0           | 34          | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 6447        | 0           | 0           | 0           | 0           | 0           | 66          | 0           | 0           | 0           | 0           | 0           | 138         | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 42          |
| 0           | 42          | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 38          |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |

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|--------|-------|--------|-------|-----|-------|-------|------|--------|------|-------|------|-------|------|------|-----|-------|------|
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 52   | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 27   | 0     | 0    | 0    | 0   | 0     | 34   |
| 0      | 52    | 0      | 19279 | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 3956 | 0      | 0    | 0     | 0    | 36    | 0    | 0    | 0   | 0     | 36   |
| 0      | 0     | 0      | 0     | 0   | 790   | 0     | 0    | 0      | 34   | 0     | 0    | 0     | 0    | 0    | 64  | 110   | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 100   | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 123 | 110   | 62   |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 13254 | 0    |
| 0      | 38    | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 232    | 0    | 0     | 0    | 69    | 0    | 231  | 246 | 168   | 381  |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 126  | 0     | 31   | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 5781   | 6251  | 7096   | 389   | 984 | 1063  | 91    | 350  | 4153   | 400  | 97172 | 6884 | 12278 | 677  | 253  | 0   | 0     | 4572 |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 9055  | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 749   | 0      | 0     | 0   | 0     | 0     | 0    | 31     | 55   | 0     | 484  | 31    | 47   | 7122 | 226 | 0     | 396  |
| 62     | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 44   | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 68    | 0     | 0    | 0      | 0    | 0     | 0    | 69    | 0    | 0    | 0   | 0     | 0    |
| 145    | 5295  | 75     | 18692 | 39  | 0     | 42685 | 393  | 25     | 76   | 360   | 249  | 70    | 36   | 122  | 618 | 2588  | 552  |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 30    | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 88   | 1024   | 0    | 0     | 0    | 400   | 0    | 0    | 0   | 0     | 144  |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 33    | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 670  | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 64   |
| 0      | 36    | 0      | 30649 | 0   | 0     | 0     | 0    | 32     | 0    | 0     | 0    | 0     | 169  | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 75     | 0     | 108    | 86    | 48  | 75    | 0     | 148  | 0      | 124  | 0     | 72   | 29    | 129  | 70   | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 586    | 64039 | 720    | 874   | 31  | 0     | 0     | 0    | 0      | 0    | 0     | 392  | 0     | 583  | 0    | 237 | 200   | 387  |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 54    | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 51    | 92     | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 2144 | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 2111  | 0   | 0     | 0     | 0    | 0      | 34   | 0     | 0    | 0     | 38   | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 55     | 0     | 167    | 41270 | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 312   | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 1467 |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 115 | 146   | 179  |
| 0      | 0     | 0      | 0     | 0   | 14027 | 0     | 0    | 65     | 0    | 31    | 0    | 0     | 24   | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 18026 | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 50  | 90424 | 231  |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 0      | 0     | 0      | 0     | 0   | 0     | 0     | 0    | 0      | 0    | 0     | 0    | 0     | 0    | 0    | 0   | 0     | 0    |
| 240762 | 360   | 782440 | 1067  | 468 | 1348  | 1053  | 1990 | 713079 | 1922 | 3183  | 1308 | 2749  | 1134 | 4452 | 661 | 0     | 4259 |

[illegible]

[illegible]

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|      |       |      |        |        |      |       |       |       |       |      |      |     |       |     |       |        |       |
|------|-------|------|--------|--------|------|-------|-------|-------|-------|------|------|-----|-------|-----|-------|--------|-------|
| 55   | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 66     |       |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      |       |
| 79   | 483   | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 52    | 0      |       |
| 0    | 0     | 0    | 0      | 0      | 138  | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 11849 | 0      |       |
| 3282 | 2560  | 264  | 44878  | 225429 | 1590 | 4105  | 99351 | 117   | 17465 | 2690 | 2843 | 542 | 234   | 552 | 312   | 3590   | 23454 |
| 0    | 0     | 0    | 0      | 67     | 257  | 70270 | 8346  | 65    | 272   | 719  | 182  | 30  | 0     | 189 | 0     | 58     | 0     |
| 2803 | 107   | 0    | 101    | 111    | 243  | 39253 | 25404 | 16    | 161   | 490  | 69   | 45  | 44    | 126 | 109   | 55821  | 76    |
| 8670 | 13133 | 2568 | 246403 | 26419  | 966  | 44637 | 29238 | 62    | 13196 | 879  | 1188 | 322 | 1171  | 0   | 321   | 44421  | 4052  |
| 211  | 122   | 86   | 2270   | 4655   | 67   | 495   | 3765  | 0     | 559   | 0    | 197  | 0   | 0     | 0   | 0     | 280    | 2057  |
| 0    | 89    | 0    | 17011  | 106    | 53   | 800   | 53151 | 16839 | 154   | 133  | 30   | 97  | 33    | 71  | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 58    | 33    | 0    | 0    | 0   | 0     | 0   | 0     | 63200  | 36    |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 69   | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 89   | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 76    | 0   | 0     | 119    | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 5100   | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 80    | 0    | 93     | 0      | 243  | 0     | 0     | 0     | 0     | 490  | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 4675 | 5456  | 1263 | 11208  | 31405  | 312  | 59740 | 5448  | 26569 | 23706 | 732  | 1531 | 802 | 68502 | 452 | 43939 | 110874 | 51074 |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 52    | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 78    |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 1616   | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0   | 0     | 0   | 0     | 0      | 0     |
| 0    | 0     | 0    | 0      | 0      | 0    | 0     | 0     | 0     | 0     | 0    | 0</  |     |       |     |       |        |       |

|     |     |   |   |   |     |    |    |     |    |     |     |     |     |   |     |   |     |
|-----|-----|---|---|---|-----|----|----|-----|----|-----|-----|-----|-----|---|-----|---|-----|
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 265 | 328 | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 663 | 36  | 0 | 0   | 0 | 887 |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 116 | 56 | 78 | 641 | 58 | 261 | 253 | 58  | 205 | 0 | 135 | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 74  | 0  | 46  | 0   | 0   | 43  | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 | 0 | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0   | 0   | 0 | 0   | 0 | 0   |
| 0   | 0   | 0 | 0 |   |     |    |    |     |    |     |     |     |     |   |     |   |     |



[illegible]



[illegible]

[illegible]

|        |        |       |        |        |        |       |        |       |      |       |        |      |        |       |       |       |     |
|--------|--------|-------|--------|--------|--------|-------|--------|-------|------|-------|--------|------|--------|-------|-------|-------|-----|
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 2081   | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 44     | 0     | 92     | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 26   | 0      | 0     | 0     | 0     | 0   |
| 0      | 6331   | 0     | 105    | 0      | 0      | 0     | 651    | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 203   | 205   | 223 |
| 0      | 0      | 0     | 0      | 0      | 473    | 121   | 340261 | 261   | 334  | 996   | 174    | 139  | 0      | 277   | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 109    | 71     | 15857 | 108817 | 57    | 258  | 384   | 59     | 33   | 0      | 190   | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 174    | 0     | 59102  | 86    | 0    | 0     | 31     | 66   | 0      | 63    | 0     | 0     | 0   |
| 64     | 0      | 0     | 0      | 77     | 123    | 26090 | 127    | 32    | 82   | 0     | 0      | 0    | 0      | 73    | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 52  |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 27     | 59     | 17252 | 0      | 20    | 65   | 134   | 25     | 34   | 0      | 79    | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 35     | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 602   | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 0      | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 0   |
| 57     | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     | 0    | 0     | 0      | 0    | 0      | 0     | 0     | 0     | 194 |
| 335995 | 248948 | 23904 | 131077 | 573454 | 845312 | 41326 | 136948 | 28678 | 8907 | 15258 | 200166 | 5929 | 341490 | 17060 | 64879 | 56133 | 93  |

|                |                |                |                |                |                |                |                |                |                |                |                |                |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                |                |                |                |                |                |                |                |                |                |                |                |                |
| Control<br>044 | Control<br>043 | Control<br>042 | Control<br>041 | Control<br>040 | Control<br>039 | Control<br>038 | Control<br>037 | Control<br>036 | Control<br>035 | Control<br>034 | Control<br>048 | Control<br>132 |
| 936362         | 952224         | 929541         | 920893         | 305423         | 869654         | 768523         | 970242         | 862339         | 869922         | 826949         | 879423         | 97620          |
| 53599          | 42050          | 61576          | 69711          | 28999          | 72466          | 158156         | 25674          | 126771         | 98285          | 108257         | 17817          | 894779         |
| 0              | 54             | 116            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 9866           | 631            | 6754           | 9223           | 32602          | 38183          | 12666          | 3341           | 9800           | 23146          | 20205          | 27335          | 5768           |
| 173            | 5041           | 2013           | 173            | 632976         | 19697          | 60234          | 743            | 1090           | 8647           | 44589          | 75335          | 1833           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 90             | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 421            | 0              | 0              | 0              | 0              | 0              | 0              |
|                |                |                |                |                |                |                |                |                |                |                |                |                |
| Control<br>044 | Control<br>043 | Control<br>042 | Control<br>041 | Control<br>040 | Control<br>039 | Control<br>038 | Control<br>037 | Control<br>036 | Control<br>035 | Control<br>034 | Control<br>048 | Control<br>132 |
| 0              | 0              | 592            | 0              | 120            | 141            | 163            | 129            | 227            | 7252           | 123            | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 8833           | 31336          | 11304          | 158026         | 232221         | 759466         | 472380         | 54437          | 70712          | 671403         | 203447         | 16258          | 25409          |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 89             | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 14669          | 1081           | 9023           | 760            | 1265           | 7126           | 14648          | 21125          | 1348           | 770            | 287840         | 85             | 3195           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 57             | 141            | 104            | 50             | 143            | 10315          | 85             | 56             | 67             | 13642          | 0              | 289            | 1331           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 107            | 38             | 200            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 267            | 890            |
| 0              | 0              | 0              | 0              | 0              | 23             | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 53             | 0              | 0              | 0              | 0              | 0              | 38             | 2845           | 118            | 51             | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 1150           | 0              | 0              | 0              | 64             | 0              | 0              | 0              | 1409           | 0              | 0              | 91             | 0              |
| 1708           | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 29             | 0              | 0              |
| 242305         | 5226           | 20523          | 132286         | 6926           | 1423           | 71339          | 1564           | 109017         | 19658          | 315839         | 19312          | 8951           |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 54             | 0              | 0              | 0              | 0              | 0              |
| 0              | 967            | 118            | 62             | 0              | 0              | 47             | 0              | 30             | 0              | 0              | 0              | 441            |
| 55             | 0              | 0              | 60             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 191            | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 587            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 475            | 95             | 357            | 0              | 0              | 0              | 0              | 1816           | 0              |
| 0              | 53             | 0              | 0              | 0              | 136            | 0              | 0              | 0              | 280            | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 52             | 0              | 6426           | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 68             | 25             | 40             | 0              | 0              | 2165           | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 333909         | 5090           | 4447           | 162257         | 5376           | 540            | 4913           | 904            | 975            | 10672          | 868            | 7588           | 8081           |
| 0              | 121            | 83             | 51             | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 61169          | 102            | 86             | 98             | 74             | 27             | 17569          | 1862           | 125            | 105            | 30             | 0              | 441            |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 470            |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 46             | 0              | 0              | 0              | 298            | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 126            | 926            | 8029           | 4341           | 492            | 184            | 493            | 257            | 167443         | 424            | 444            | 54788          | 915            |
| 0              | 812            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 92             | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 4437           | 0              |
| 0              | 0              | 4829           | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 57             | 8145           | 0              | 0              | 0              | 0              | 33             | 0              | 0              |
| 55             | 0              | 8012           | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 0              | 0              | 0              | 0              | 0              | 0              | 0              | 633            | 0              | 0              | 0              | 0              | 0              |

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|      |      |        |      |      |       |       |       |        |       |      |      |     |      |
|------|------|--------|------|------|-------|-------|-------|--------|-------|------|------|-----|------|
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   |      |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 41    | 40   | 7037 | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 12519  | 60   | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 455  |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 7242 | 57   | 0      | 0    | 0    | 0     | 0     | 1238  | 0      | 0     | 0    | 0    | 91  | 0    |
| 0    | 0    | 11793  | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 118  | 0    | 95     | 0    | 45   | 24    | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 313    | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 445  |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 4596 | 155  | 290203 | 192  | 0    | 219   | 0     | 0     | 0      | 0     | 47   | 0    | 79  | 467  |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 58   | 0     | 0     | 0     | 98     | 19273 | 24   | 0    | 0   | 0    |
| 0    | 260  | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 142  | 48   | 385    | 58   | 0    | 9299  | 1579  | 38    | 762    | 8984  | 1029 | 1533 | 450 | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 674  | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 3364 | 0    | 0      | 784  | 0    | 148   | 0     | 0     | 0      | 110   | 0    | 76   | 454 | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 1732 | 0    | 0   | 0    |
| 595  | 493  | 1106   | 408  | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 2726 |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 120  | 6468  | 44    | 0     | 31     | 49    | 33   | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 7565 | 475  | 104    | 0    | 63   | 23    | 21888 | 78    | 65     | 2970  | 0    | 92   | 464 | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 68   | 0     | 38    | 42    | 64     | 0     | 75   | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 65   | 0    | 198    | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 1384 | 0      | 0    | 1347 | 299   | 359   | 276   | 252963 | 378   | 590  | 85   | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 10325 | 92    | 36    | 34     | 0     | 38   | 86   | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 11820 | 0     | 157   | 88     | 55    | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 92   | 0     | 93    | 49    | 59625  | 36    | 67   | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 45   | 344  | 5918   | 48   | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 456  |
| 0    | 46   | 0      | 9744 | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 30    | 14363 | 41     | 0     | 52   | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 37    | 0      | 0     | 4995 | 0    | 0   | 0    |
| 0    | 0    | 0      | 65   | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 125  | 0     | 0     | 0     | 0      | 0     | 30   | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0     | 0     | 0      | 0     | 0    | 0    | 0   | 0    |
| 0    | 0    | 0      | 0    | 0    | 0     | 0</   |       |        |       |      |      |     |      |

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|           |           |           |           |           |           |           |           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 528       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 195       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 1584      | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 455       | 651       | 173       | 264       | 0         | 30        | 34        | 34        | 136       | 0         | 23749     | 0         | 1360      |
| 0         | 0         | 4283      | 0         | 256       | 0         | 68        | 0         | 0         | 1120      | 0         | 1766      | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 841       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 923       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 57        | 0         | 0         | 0         | 0         | 24        | 18786     | 35        | 0         | 0         |
| 14870     | 852233    | 316187    | 60009     | 27642     | 25317     | 33865     | 847253    | 60437     | 27997     | 5850      | 742978    | 11887     |
| 68        | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 439       |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 421       | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 56        | 0         | 0         | 0         | 0         | 0         | 148       | 0         | 0         | 0         | 742       | 176       | 0         |
| 0         | 364       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
|           |           |           |           |           |           |           |           |           |           |           |           |           |
| Control04 | Control04 | Control04 | Control04 | Control04 | Control03 | Control03 | Control03 | Control03 | Control03 | Control03 | Control04 | Control13 |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 58        | 85        | 163       | 81        | 227       | 176       | 95        | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 62        | 56        | 0         | 48        | 0         | 7076      | 28        | 0         | 0         |
| 0         | 0         | 592       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 8833      | 31336     | 11304     | 158026    | 232221    | 759466    | 472380    | 54437     | 70712     | 671403    | 203447    | 16258     | 25409     |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 89        | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 568       | 0         | 207       | 0         | 0         | 55        | 200       | 483       | 0         | 0         | 1142      | 0         | 0         |
| 14101     | 1081      | 8816      | 760       | 1265      | 7071      | 14448     | 20642     | 1348      | 770       | 286698    | 85        | 3195      |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 57        | 141       | 104       | 50        | 143       | 10315     | 85        | 56        | 67        | 13642     | 0         | 289       | 1331      |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 107       | 38        | 200       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 267       | 890       |
| 0         | 0         | 0         | 0         | 0         | 23        | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 53        | 0         | 0         | 0         | 0         | 0         | 38        | 2845      | 118       | 51        | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 1150      | 0         | 0         | 0         | 64        | 0         | 0         | 0         | 1409      | 0         | 0         | 91        | 0         |
| 1708      | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 29        | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 105       | 647       | 4368      | 384       | 314       | 0         | 0         | 0         | 0         | 0         | 0         | 6726      | 1752      |
| 0         | 0         | 482       | 0         | 0         | 0         | 0         | 0         | 0         | 286       | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 25        | 0         | 0         | 0         | 0         |
| 11452     | 47        | 972       | 15451     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 181       | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 2100      | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |

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|       |        |        |       |       |       |       |        |       |       |       |        |       |
|-------|--------|--------|-------|-------|-------|-------|--------|-------|-------|-------|--------|-------|
| 528   | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 195    | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 1584   | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 30    | 34    | 34     | 108   | 0     | 23749 | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 455   | 651    | 173    | 264   | 0     | 0     | 0     | 0      | 28    | 0     | 0     | 0      | 1360  |
| 0     | 0      | 4283   | 0     | 63    | 0     | 27    | 0      | 0     | 0     | 0     | 534    | 0     |
| 0     | 0      | 0      | 0     | 193   | 0     | 41    | 0      | 0     | 0     | 0     | 175    | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 1120  | 0     | 1057   | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 841    | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 923   | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 24    | 18786 | 35    | 0      | 0     |
| 0     | 0      | 0      | 57    | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 14870 | 852233 | 316187 | 60009 | 27642 | 25317 | 33865 | 847253 | 60437 | 27997 | 5850  | 742978 | 11887 |
| 68    | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 439   |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 421   | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 56    | 0      | 0      | 0     | 0     | 0     | 148   | 0      | 0     | 0     | 742   | 176    | 0     |
| 0     | 364    | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 94     | 4079  | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 0     | 0      | 0      | 0     | 0     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0     |
| 1728  | 215    | 205    | 160   | 200   | 2038  | 113   | 41     | 233   | 44098 | 71    | 841    | 1414  |

| Supplementary Table S19. The relative abundance and distribution of the key 49 OTUs among control, COVID-19, and Post-COVID-19 groups |             |             |             |             |             |             |             |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                                                                                                                       | Control095  | Control084  | Control085  | Control086  | Control087  | Control088  | Control089  |
| OTU57 ( <i>Botrytis_cinerea</i> )                                                                                                     | 0.000116913 | 0           | 0.005024167 | 0           | 0           | 0           | 0.000203059 |
| OTU94 ( <i>Zanclospora_jonesii</i> )                                                                                                  | 0.00023931  | 0.000333325 | 0           | 0.000108259 | 0.001299112 | 0           | 0.018067913 |
| OTU65 ( <i>Milospium_graphideorum</i> )                                                                                               | 0.000584312 | 0           | 0           | 0           | 0           | 0           | 0.036513903 |
| OTU3891 ( <i>Acrodictys_fluminicola</i> )                                                                                             | 0.000340227 | 0.000131701 | 0.002291042 | 0.000214013 | 0.000263401 | 0           | 0           |
| OTU1393 ( <i>Cryptococcus_longus</i> )                                                                                                | 0.007498088 | 0           | 0.001379866 | 0.000209565 | 0.020300631 | 0           | 0.005040457 |
| OTU2845 ( <i>Acrodictys_fluminicola</i> )                                                                                             | 0.000367025 | 0.001095793 | 0.000200675 | 0.000100338 | 0.000158428 | 0.000472643 | 0.000116181 |
| OTU68 ( <i>Malassezia_globosa</i> )                                                                                                   | 0.039677548 | 0.000133656 | 0.000353796 | 0           | 0.015939158 | 0           | 0           |
| OTU2936 ( <i>Angustimassarina_camporesii</i> )                                                                                        | 0           | 0.000156011 | 0.009894252 | 0.00052908  | 0.000513253 | 0           | 0.000108529 |
| OTU3529 ( <i>Raffaelea_lauricola</i> )                                                                                                | 0           | 0.000250951 | 0.036856412 | 0.000197651 | 8.22E-05    | 0.000104378 | 0.000104378 |
| OTU52 ( <i>Diaporthe_kochmanii</i> )                                                                                                  | 0.000284723 | 0           | 0           | 0           | 0           | 0           | 0.000224144 |
| OTU8 ( <i>Acrodictys_fluminicola</i> )                                                                                                | 0.001461181 | 0.000373392 | 0.000238132 | 0.000230512 | 0.000121924 | 0           | 8.57E-05    |
| OTU646 ( <i>Arthrographis_grakistii</i> )                                                                                             | 0.000112816 | 0.493364521 | 0.00055468  | 0.000248196 | 0.000156063 | 0.000470068 | 0.000159823 |
| OTU3583 ( <i>Blumeria_spe_Incertae_sedis</i> )                                                                                        | 0           | 0           | 0.027784024 | 0.000124178 | 0           | 0.000174521 | 0           |
| OTU34 ( <i>Acrodictys_fluminicola</i> )                                                                                               | 0           | 8.82E-05    | 0           | 0           | 3.72E-05    | 0           | 0           |
| OTU40 ( <i>Udeniomyces_pyricola</i> )                                                                                                 | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU51 ( <i>Rhodotorula_mucilaginoso</i> )                                                                                             | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU98 ( <i>Chrysosphaeria_jan-nelii</i> )                                                                                             | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU29 ( <i>Debaryomyces_prosopidis</i> )                                                                                              | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU35 ( <i>Aspergillus_amstelodami</i> )                                                                                              | 9.73E-05    | 5.71E-05    | 0.000145366 | 4.02E-05    | 0.000101237 | 6.62E-05    | 0.000103833 |
| OTU3860 ( <i>Simplicillium_sympodiophorum</i> )                                                                                       | 0.000139925 | 0           | 0.003079637 | 0.000174585 | 4.62E-05    | 0           | 3.59E-05    |
| OTU58 ( <i>Gibberella_fujikuroi</i> )                                                                                                 | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU33 ( <i>Aspergillus_subflavus</i> )                                                                                                | 0           | 0.000201869 | 0.043649389 | 7.46E-05    | 3.78E-05    | 5.07E-05    | 0           |
| OTU39 ( <i>Udeniomyces_megalosporus</i> )                                                                                             | 9.93E-05    | 0           | 0           | 0           | 0           | 0           | 0.000204417 |
| OTU3831 ( <i>Acrodictys_fluminicola</i> )                                                                                             | 0.000135152 | 0           | 0.008951126 | 0.00025252  | 0.000412568 | 4.71E-05    | 6.05E-05    |
| OTU3448 ( <i>Zanclospora_jonesii</i> )                                                                                                | 0.008261907 | 0.000518455 | 0.00021487  | 0.000230334 | 0.016598692 | 0.000176616 | 0.000569731 |
| OTU3897 ( <i>Acrodictys_fluminicola</i> )                                                                                             | 0.000176337 | 4.33E-05    | 0.009795362 | 0.000583329 | 0.000802176 | 6.93E-05    | 4.09E-05    |
| OTU1152 ( <i>Russula_xerophila</i> )                                                                                                  | 0.000948025 | 0.000242099 | 0.000167667 | 0.000218594 | 4.70E-05    | 0.000231914 | 2.90E-05    |
| OTU3894 ( <i>[Cryptococcus]_ater</i> )                                                                                                | 7.67E-05    | 0.00013931  | 0.005948603 | 0.001317724 | 0.000118447 | 9.29E-05    | 0.000108352 |
| OTU26 ( <i>Zanclospora_jonesii</i> )                                                                                                  | 0           | 0.000412552 | 0.005534616 | 0.071731092 | 0.011359067 | 0.021099375 | 0.053704585 |
| OTU31 ( <i>Arthrographis_grakistii</i> )                                                                                              | 0.00018583  | 0.353917569 | 0.000489083 | 0.000386204 | 0.000274167 | 0.000469154 | 0.00017021  |
| OTU2481 ( <i>Candida_albicans</i> )                                                                                                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU42 ( <i>Zanclospora_jonesii</i> )                                                                                                  | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU21 ( <i>Saccharomyces_cerevisiae</i> )                                                                                             | 0.004983049 | 0           | 0           | 0.000209666 | 0           | 2.02E-05    | 0           |
| OTU9 ( <i>Candida_albicans</i> )                                                                                                      | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU7 ( <i>Cladosporium_halotolerans</i> )                                                                                             | 0.012840411 | 1.95E-05    | 0.000392222 | 0.000126272 | 0.01745367  | 6.96E-05    | 0.000291464 |
| OTU17 ( <i>Diversispora_spurca</i> )                                                                                                  | 0.001309556 | 0.000210285 | 0.000254915 | 0.0002714   | 0.000419766 | 0.000195408 | 4.42E-05    |
| OTU14 ( <i>Cladosporium_kenpeggii</i> )                                                                                               | 0.020959438 | 3.24E-05    | 1.44E-05    | 1.92E-05    | 0.003552081 | 5.76E-05    | 9.69E-05    |
| OTU3577 ( <i>Acrodictys_fluminicola</i> )                                                                                             | 0.024040253 | 0.000648038 | 0.000139737 | 0.000165984 | 0.000139737 | 6.17E-05    | 7.17E-05    |
| OTU3791 ( <i>Blumeria_spe_Incertae_sedis</i> )                                                                                        | 6.50E-05    | 9.73E-05    | 0.033884552 | 5.99E-05    | 6.74E-05    | 5.14E-05    | 0           |
| OTU22 ( <i>Hydnobolites_roseus</i> )                                                                                                  | 0           | 0           | 0           | 0           | 1.08E-05    | 0           | 2.40E-05    |
| OTU10 ( <i>Aspergillus_subflavus</i> )                                                                                                | 1.20E-05    | 8.91E-05    | 0.039258461 | 0.000100745 | 1.33E-05    | 9.48E-05    | 2.49E-05    |
| OTU3842 ( <i>Blumeria_spe_Incertae_sedis</i> )                                                                                        | 1.08E-05    | 7.98E-05    | 0.025641792 | 0.000100489 | 7.26E-05    | 6.31E-05    | 3.32E-05    |
| OTU19 ( <i>Zanclospora_jonesii</i> )                                                                                                  | 0           | 0           | 0           | 0           | 2.18E-05    | 1.12E-05    | 5.45E-05    |
| OTU2777 ( <i>Acrodictys_fluminicola</i> )                                                                                             | 0.002007297 | 0.000245205 | 0.000188054 | 0.000222856 | 0.00014144  | 0.000139524 | 6.74E-05    |
| OTU15 ( <i>Aspergillus_subflavus</i> )                                                                                                | 0.000119573 | 2.46E-05    | 4.54E-05    | 2.69E-05    | 1.12E-05    | 2.46E-05    | 9.07E-05    |
| OTU4 ( <i>Actinomucor_elegans</i> )                                                                                                   | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| OTU5 ( <i>Cryptococcus_longus</i> )                                                                                                   | 0.009107784 | 0.000104299 | 0.001848158 | 0.000153266 | 0.020890973 | 6.97E-05    | 0.004646566 |
| OTU3 ( <i>Zanclospora_jonesii</i> )                                                                                                   | 3.12E-05    | 0.000450531 | 0.00288933  | 0.035120823 | 0.036519757 | 0.075374294 | 0.068457861 |
| OTU3900 ( <i>Acrodictys_fluminicola</i> )                                                                                             | 0.000173059 | 0.000154424 | 0.009597457 | 0.000592682 | 0.000703748 | 0.000111977 | 0.0001068   |

|             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control091  | Control093  | Control094  | Control096  | Control083  | Control090  | Control092  | Control075  | Control081  | Control080  |
| 0.000239979 | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.001923028 | 0.000148144 | 0.005082491 | 0.110413123 | 0.00085183  | 0.000925902 | 0.000410246 | 0           | 0.007407217 | 0.011031056 |
| 0.000134841 | 0.000337103 | 0.130649991 | 0.010865962 | 0           | 0           | 0           | 0.165759297 | 0           | 0           |
| 0.002768457 | 0.000126213 | 0           | 0.001081043 | 0.01712108  | 0.00108653  | 0.000345714 | 0           | 0.000117982 | 0           |
| 0.020126447 | 0.00110226  | 0.015407142 | 0.016620989 | 0.00327412  | 0.000661356 | 0.025368304 | 0.000160576 | 0.002514785 | 0.014854651 |
| 0.000176911 | 0.000250844 | 0.000448879 | 0.000364384 | 0           | 0.000588824 | 0.000789499 | 0           | 0           | 0.000121461 |
| 0           | 0           | 0           | 0.000319727 | 0           | 0.001213389 | 0.000204415 | 0           | 0           | 0.024176049 |
| 0.012935332 | 0.000420551 | 0           | 0.001768123 | 0.010511512 | 0.003235529 | 0.000156011 | 0           | 9.27E-05    | 0           |
| 0.001203674 | 0           | 0           | 0.00368875  | 0.000237626 | 0.00049968  | 0           | 0           | 0           | 9.55E-05    |
| 0.000274627 | 0.000341264 | 0.000280684 | 0.000339245 | 0           | 0.000472519 | 0.000456365 | 0.108909612 | 0           | 0           |
| 0.000211462 | 0           | 0           | 0.000114304 | 0.02962558  | 0.032728921 | 0.000156215 | 0           | 0.000108588 | 0.002975703 |
| 0           | 8.27E-05    | 0           | 0.000547159 | 0           | 0           | 0.000297083 | 0           | 0.000253837 | 0.000462547 |
| 0           | 0.000112432 | 9.57E-05    | 0.024238234 | 0           | 0.000132569 | 0.000229897 | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 6.04E-05    | 0           | 0           | 0           | 5.26E-05    | 0.012285172 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 8.67E-05    | 0.000162847 | 0.000143148 | 6.57E-05    | 0           | 9.19E-05    | 0.000110316 | 0           | 0           | 0           |
| 8.05E-05    | 8.31E-05    | 0           | 0           | 3.63E-05    | 0.000201176 | 0           | 0           | 0.000107726 | 0.000163537 |
| 0.002453183 | 0.000363292 | 0           | 6.80E-05    | 0.013974541 | 0.000857523 | 0.000272148 | 0           | 0.000184855 | 7.32E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 6.36E-05    | 0.000101432 | 0.038651398 | 3.98E-05    | 0           | 0           | 0           | 4.77E-05    | 4.77E-05    |
| 6.07E-05    | 5.69E-05    | 0.000404012 | 0.000565039 | 0           | 0.005796951 | 0.000226594 | 0           | 0           | 0           |
| 0.010090134 | 0.00010492  | 9.43E-05    | 0.000896268 | 0.012631339 | 0.003162725 | 0.000139597 | 0           | 3.56E-05    | 8.27E-05    |
| 0.000437879 | 0.000439506 | 0.000385789 | 0.000536361 | 0.000251495 | 0.000746347 | 0.000430554 | 0           | 0.000205103 | 0.000223823 |
| 0.012518352 | 0           | 8.27E-05    | 0.001013938 | 0.012638797 | 0.003579484 | 0.000170826 | 0           | 0.000144848 | 6.69E-05    |
| 5.88E-05    | 8.62E-05    | 0           | 0.000242099 | 0.024681569 | 0.030572647 | 5.88E-05    | 3.60E-05    | 7.05E-05    | 0.003191947 |
| 0.005151777 | 0.00019988  | 0.000183728 | 0.001675758 | 0.006991073 | 0.012305042 | 0.000191131 | 0           | 7.94E-05    | 0.000124504 |
| 4.75E-05    | 6.85E-05    | 0           | 0.004896362 | 0.017629371 | 0           | 8.94E-05    | 0.046272475 | 0.090622171 | 0.000111001 |
| 0.000216533 | 0.000414751 | 0.00017021  | 0.000354963 | 0.000324799 | 0.000137891 | 0.000393206 | 0           | 0.000279553 | 0.000407749 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 7.77E-05    | 0           | 0           |
| 0           | 2.97E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.00017384  | 0.00026595  | 0.000717849 | 0.000231355 | 0.000708767 | 0.000448007 | 0.000536657 | 2.12E-05    | 0.002870097 | 3.98E-05    |
| 0.004210523 | 7.40E-05    | 0           | 0.000644123 | 0.000135499 | 0.003153067 | 0.000111777 | 0           | 0.000223553 | 0.037442775 |
| 0.000188532 | 0.000279795 | 0.011936737 | 0.00090143  | 0.00030021  | 0.000190933 | 0.010083843 | 3.36E-05    | 2.04E-05    | 0.011329112 |
| 0.000208496 | 0.000142324 | 4.33E-05    | 8.02E-05    | 0.027244585 | 0.056625884 | 5.77E-05    | 0           | 0.000103139 | 0.000173377 |
| 2.52E-05    | 3.57E-05    | 1.63E-05    | 0.039595398 | 2.31E-05    | 0           | 0.000111977 | 0           | 5.17E-05    | 7.93E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 4.62E-05    | 2.39E-05    | 0.000186196 | 0.02225443  | 4.49E-05    | 5.49E-05    | 7.45E-05    | 1.70E-05    | 7.18E-05    | 7.78E-05    |
| 2.50E-05    | 3.42E-05    | 5.09E-05    | 0.028245313 | 5.42E-05    | 2.76E-05    | 0           | 0           | 5.06E-05    | 0.001210795 |
| 0           | 0           | 0           | 0           | 0.000414464 | 5.39E-05    | 0           | 0           | 1.35E-05    | 0           |
| 2.08E-05    | 5.27E-05    | 0           | 0           | 0.029319879 | 0.032489664 | 4.73E-05    | 0           | 0.00013697  | 0.004504365 |
| 0.00019531  | 8.38E-05    | 0.028580635 | 0.000126228 | 1.45E-05    | 0.03298876  | 0.000204261 | 0           | 2.73E-05    | 0.000117048 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 2.50E-05    | 0           |
| 0.01861328  | 0.000913103 | 0.015863969 | 0.015729147 | 0.002562015 | 0.000611377 | 0.02758832  | 3.71E-05    | 0.003156116 | 0.01338703  |
| 7.09E-05    | 8.62E-05    | 6.37E-05    | 7.86E-05    | 0.005286232 | 0.000449864 | 0.000100575 | 0.035039252 | 0.054400619 | 0.017906422 |
| 0.015614886 | 0.000152022 | 0.000100837 | 0.001342811 | 0.011182608 | 0.003627651 | 0.000211199 | 6.87E-06    | 0.000141586 | 0.000111119 |

|             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control079  | Control078  | Control077  | Control076  | Control074  | Control073  | Control072  | Control071  | Control070  | Control069  |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.011310251 | 0           | 0           | 0           | 0           | 0           | 0.002170885 | 0           | 0.000176634 | 0.000267799 |
| 0           | 0           | 0           | 0.000109559 | 0.000123605 | 0.000205071 | 0.000387669 | 0.000469135 | 0           | 0           |
| 0.000126213 | 0.000353945 | 0           | 0           | 0           | 0           | 0.000348458 | 0.0012978   | 0.000224989 | 0.071735677 |
| 0           | 0.003951805 | 0.003747683 | 0.014688632 | 0.003644261 | 0.006469312 | 0.021473653 | 0.005924986 | 0.002386869 | 0           |
| 0           | 0.0001109   | 0.000155788 | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.004992452 | 0.000112691 | 0.00276747  | 0           | 0           | 0           | 0           | 0.00730916  | 0           | 0           |
| 0.003402845 | 0           | 0.000151489 | 0           | 0           | 0           | 0.002236155 | 0.014104283 | 0           | 0.001042333 |
| 0.000497459 | 0           | 0.000275379 | 0           | 0           | 0           | 0.000883879 | 0.002296308 | 0.000146573 | 0           |
| 0           | 0           | 0           | 0.000268569 | 0.000191835 | 0           | 0           | 0.000282704 | 0           | 0           |
| 8.95E-05    | 7.05E-05    | 0.001985072 | 0           | 0           | 0.000102873 | 0           | 0           | 0.00016193  | 0.00017336  |
| 0.000304604 | 0.00055656  | 0.001340634 | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0.008919012 | 0.005673599 | 0           | 0           | 0.000239966 | 0           | 0.005255757 | 0.000112432 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000246897 |
| 7.92E-05    | 0           | 0.000329669 | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.008935953 | 0.000119386 | 0.00015533  | 0           | 0           | 0           | 0           | 0.001761259 | 0.000268297 | 0.001041094 |
| 0           | 0           | 0           | 0           | 0           | 7.13E-05    | 0           | 0           | 0           | 0           |
| 0           | 0.016759082 | 0.005418634 | 0           | 0           | 6.36E-05    | 0           | 0.000759742 | 0           | 0.000268495 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.001118557 | 7.38E-05    | 3.91E-05    | 0           | 0           | 0           | 0.001330176 | 0.005763504 | 0.00013693  | 0.004353304 |
| 0.000345094 | 0.000222195 | 0.000147316 | 0           | 0           | 0           | 0           | 0           | 0           | 8.22E-05    |
| 0.002335678 | 0.000107849 | 0.000103126 | 0           | 0           | 0           | 0.002168788 | 0.009161651 | 0.000253484 | 0.001587033 |
| 0.00023113  | 9.79E-05    | 0.002028461 | 0           | 0           | 0           | 0           | 0           | 0.000131627 | 6.74E-05    |
| 0.000402451 | 7.27E-05    | 8.55E-05    | 2.49E-05    | 3.97E-05    | 0           | 0.0021482   | 0.022821936 | 0.00027189  | 0.000539069 |
| 0.037981342 | 0.000183768 | 0.018440293 | 0.041383512 | 0.090083818 | 4.13E-05    | 0.00835465  | 0.017067585 | 0.019468282 | 0.111758546 |
| 0.00023323  | 0.000332878 | 0.000493931 | 1.72E-05    | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 9.06E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 4.58E-05    |
| 0           | 0           | 0.001412488 | 0.000104593 | 5.47E-05    | 0.000126184 | 0.000129542 | 0.001187948 | 0.000543117 | 0.000264841 |
| 0           | 0           | 0           | 1.92E-05    | 2.63E-05    | 0           | 0           | 0           | 0           | 0.000319051 |
| 1.90E-05    | 1.77E-05    | 0.000185516 | 0           | 0           | 0           | 0           | 0           | 7.01E-05    | 6.75E-05    |
| 0.000724136 | 0.00032166  | 0.001742188 | 1.69E-05    | 0           | 0           | 0           | 0.003101602 | 5.71E-05    | 0.001474407 |
| 0.000164515 | 0           | 0.000784148 | 0           | 2.16E-05    | 0           | 0           | 0.012412269 | 0.000268588 | 0.000241369 |
| 0.000698683 | 0.000337512 | 0.028382441 | 0           | 0           | 0           | 0           | 0           | 0.000245094 | 0.000129386 |
| 8.17E-05    | 0.013096926 | 0.003664621 | 0           | 0           | 0.000226678 | 0           | 0.00084953  | 0.000120827 | 0.000122869 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 1.73E-05    | 0.007499382 | 0.000300574 | 0           | 0           | 0           | 0           | 0.00485573  | 0.000102075 | 0.000274972 |
| 4.79E-05    | 0.004868138 | 0.009791446 | 0           | 0           | 0           | 0           | 0.000344487 | 0.000180289 | 0.000123477 |
| 0           | 4.46E-05    | 1.99E-05    | 0.004808676 | 0           | 0           | 0           | 0           | 0           | 2.53E-05    |
| 0.000174006 | 0.000120048 | 0.002631803 | 2.27E-05    | 0           | 0           | 4.47E-05    | 0           | 4.73E-05    | 0.000135693 |
| 2.04E-05    | 8.95E-06    | 0.060538224 | 0           | 0.000402554 | 5.83E-05    | 0           | 0           | 0.072199663 | 0.000241441 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 3.44E-05    | 0           |
| 4.23E-05    | 0.0049166   | 0.004396404 | 0.016334938 | 0.004858411 | 0.007791382 | 0.020977348 | 0.006686047 | 0.001755159 | 0.000177815 |
| 0.013552034 | 0.060715159 | 0.010981543 | 0.063126731 | 0.049113164 | 0.020288211 | 0.032205377 | 0.035378539 | 0.008110995 | 0.013374778 |
| 0.002840666 | 7.66E-05    | 0.000142787 | 1.09E-05    | 2.03E-06    | 5.76E-06    | 0.002316935 | 0.010130672 | 0.000169622 | 0.003197675 |

|             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control097  | Control068  | Control082  | Control098  | Control116  | Control100  | Control067  | Control130  | Control129  | Control128  |
| 0.000224595 | 0           | 0           | 0.000132296 | 0.000123066 | 0           | 0           | 0.000159986 | 0.000882998 | 0.000372274 |
| 0           | 0           | 0.007458498 | 0.001928725 | 0.00023931  | 0.000535599 | 0.000754966 | 0           | 0           | 0           |
| 0.000353958 | 0           | 0           | 0.000109559 | 0           | 0           | 0           | 0           | 0.000368004 | 0           |
| 0.000175601 | 0.000101519 | 0.006118591 | 0.017038767 | 0           | 0.000139932 | 0.000208526 | 0.000406077 | 0           | 0           |
| 0           | 0.004651264 | 0.000353812 | 0.002294333 | 0.004468915 | 0.006918381 | 0.006844897 | 0           | 0.050957061 | 0.037667346 |
| 0.00056506  | 0           | 0.00017163  | 0.000536015 | 0           | 0.000134664 | 0.000129383 | 0           | 0           | 0           |
| 0           | 0           | 0.001412563 | 0.001499046 | 0           | 0           | 0.021466235 | 0           | 0.056620437 | 0.000356417 |
| 0           | 0.000185404 | 0.011908826 | 0.025355151 | 0.000196709 | 0           | 0           | 0.002749408 | 0           | 0           |
| 0           | 0.000126586 | 0.004748072 | 0.002351828 | 0           | 0.000119923 | 0           | 7.77E-05    | 0           | 0           |
| 0.000640122 | 0           | 0           | 0.000216066 | 0           | 0.295764694 | 0           | 0.000262511 | 0.000878401 | 0.000571465 |
| 0           | 0.001844098 | 0.000135259 | 0           | 0.005023642 | 0.00128782  | 0.001491662 | 0           | 0.000140974 | 0.000504841 |
| 0.000406139 | 0           | 0.000560321 | 0.0002764   | 0           | 0.000293322 | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0.016737202 | 0           | 0           | 0.000147671 | 0.001159556 | 0           |
| 0           | 0           | 0           | 0           | 0.702222353 | 0           | 0           | 0.000309606 | 0.000357595 | 0.000869993 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000101123 | 0.000102436 | 0           | 4.60E-05    | 0.000111629 | 0.000127388 | 0.000158907 | 0           | 0           | 0           |
| 0.00026088  | 5.32E-05    | 8.18E-05    | 0           | 0           | 0.000189495 | 0           | 0.000208963 | 0.000480226 | 0.000346542 |
| 6.80E-05    | 0           | 0.013114451 | 0.001933278 | 5.78E-05    | 0           | 0           | 0           | 9.63E-05    | 0.000322213 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 5.77E-05    | 3.58E-05    | 0           | 4.77E-05    | 0.005262509 | 0.000141209 | 4.08E-05    | 0           | 0.00015712  | 0.00013922  |
| 0.000502364 | 0           | 0           | 0.000354837 | 0           | 0.000564075 | 0           | 0           | 0           | 0           |
| 5.25E-05    | 0.000119147 | 0.016418252 | 0.014222927 | 8.36E-05    | 0           | 0.000100475 | 0.001493781 | 0           | 0           |
| 0.001022259 | 0           | 0.000917266 | 0.000461482 | 0           | 0.000298702 | 0           | 0           | 0           | 0           |
| 8.97E-05    | 3.78E-05    | 0.019574981 | 0.023098572 | 6.22E-05    | 0.000141699 | 0.00011887  | 0.003814075 | 0           | 0.0001047   |
| 0           | 0.002214149 | 9.56E-05    | 1.88E-05    | 0.004353866 | 0.001707229 | 0.001266907 | 2.43E-05    | 0           | 0.000206058 |
| 0.000351303 | 8.41E-05    | 0.003121351 | 0.030516961 | 3.23E-05    | 6.66E-05    | 0.00015277  | 0.020707385 | 0           | 0.000189112 |
| 0.000116551 | 0.011430601 | 0.009815542 | 4.69E-05    | 0           | 2.59E-05    | 0.005348998 | 0           | 0           | 0           |
| 0.000430372 | 0           | 0.000395899 | 0.000284401 | 0           | 0.000409365 | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0.000103665 | 1.88E-05    | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 3.93E-05    | 8.88E-05    | 0           | 4.32E-05    | 0           | 2.25E-05    | 0.0092469   | 4.51E-05    | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 2.01E-05    | 0           | 0           | 0           |
| 0.000353303 | 0.008135907 | 0.003276158 | 0.078531351 | 1.38E-05    | 0.000315248 | 0.000492548 | 0.00012065  | 6.44E-05    | 0           |
| 2.41E-05    | 0           | 0.000227172 | 0.000673877 | 0.001021269 | 0.006218884 | 0.000478469 | 0.004814439 | 0           | 6.07E-05    |
| 0.000519163 | 0.000135695 | 0.004995889 | 0.000323026 | 0           | 0.070058529 | 0.035722549 | 9.05E-05    | 0           | 0.000268187 |
| 0.000130125 | 0.000111641 | 0.000155633 | 9.09E-05    | 0.000149348 | 0.000120514 | 0.000132713 | 8.65E-05    | 0.000165984 | 0.00033973  |
| 0.00021953  | 9.29E-05    | 8.47E-05    | 6.84E-05    | 0.012293684 | 4.90E-05    | 0.000142269 | 7.59E-05    | 0.002607473 | 9.22E-05    |
| 2.26E-05    | 0           | 0           | 1.32E-05    | 4.19E-05    | 0           | 0           | 0           | 0           | 0           |
| 2.09E-05    | 0.000922668 | 6.65E-05    | 5.22E-05    | 0.018425439 | 0.006878285 | 0.000125682 | 2.93E-05    | 0.000140645 | 0.000125682 |
| 3.88E-05    | 0.000277166 | 8.41E-05    | 2.04E-05    | 0.009659431 | 0.004398532 | 7.16E-05    | 0.000193097 | 0.000334964 | 0.000473547 |
| 0           | 0           | 0           | 0           | 9.24E-05    | 0           | 0           | 0.000129279 | 0.000315018 | 0.000566519 |
| 2.84E-05    | 0.003252798 | 0.000187416 | 3.03E-05    | 0.006495379 | 0.002944695 | 0.002006977 | 7.34E-05    | 4.57E-05    | 4.73E-05    |
| 0.000112229 | 7.76E-05    | 5.58E-05    | 0.000135868 | 0.005083562 | 0.000137933 | 0.000145736 | 4.52E-05    | 0.00011154  | 0.001109433 |
| 0           | 7.10E-06    | 0           | 0           | 0           | 0           | 1.76E-05    | 0           | 0           | 0           |
| 0.000330562 | 0.002932452 | 0.000575918 | 0.001854132 | 0.003146375 | 0.005744498 | 0.006658121 | 0.000204182 | 0.044475796 | 0.031979139 |
| 0.000145472 | 0.007003672 | 0.005638411 | 9.04E-05    | 0.0001727   | 0.000109688 | 0.00239768  | 1.39E-05    | 0           | 1.67E-05    |
| 0.000177324 | 0.000100092 | 0.018974605 | 0.020848146 | 6.10E-05    | 9.51E-05    | 0.000118147 | 0.002670465 | 5.16E-05    | 0.00013819  |

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|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control127  | Control126  | Control125  | Control124  | Control123  | Control122  | Control121  | Control120  | Control119  | Control118  |
| 0.000498417 | 0.000363045 | 0.000707629 | 0           | 0           | 0           | 0.001581397 | 0           | 0           | 0.000304588 |
| 0           | 0           | 0.000245008 | 0.000735024 | 0           | 0           | 0.000113957 | 0.000327627 | 0.000108259 | 0.001313357 |
| 0           | 0.000261255 | 0.000216308 | 0.000117986 | 0           | 0.000435425 | 0           | 0           | 0           | 0.000252827 |
| 0           | 0.004233626 | 0.000230476 | 0.000559728 | 0           | 0           | 9.88E-05    | 0           | 0           | 0.000820385 |
| 0.000696737 | 0.001771781 | 0           | 0.04970239  | 0           | 0.006254304 | 8.71E-05    | 0.005865111 | 0.000721232 | 0.056139043 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0.032462734 | 0.000387865 | 0.002266914 | 0           | 0.026613309 | 0.000107449 | 0           | 0.002135879 | 0.011979265 |
| 0           | 0.020713263 | 0.000178621 | 0.001799777 | 0           | 0           | 8.37E-05    | 0.000761966 | 0.000174099 | 0           |
| 0           | 0.000299808 | 0           | 0           | 0           | 0           | 0.000199872 | 0           | 0.000188768 | 0           |
| 0.001552851 | 0.000533099 | 0.000492712 | 0.000403863 | 0.004535376 | 0.001253993 | 0           | 0           | 0           | 0           |
| 0           | 0           | 0.000133354 | 0.031559215 | 0.000893473 | 0           | 6.86E-05    | 0.000234322 | 0.000148595 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0.000145993 | 0.000261781 | 8.39E-05    | 0.000800446 | 0.000523562 | 0.000119144 | 0.001475035 | 0.002149625 | 0.021286486 |
| 0.000207436 | 0.000130035 | 0.000368431 | 0           | 0           | 0.000527878 | 0.000708998 | 0.00071519  | 0.000568127 | 0.00220904  |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0.000596458 | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0.001022722 | 0           | 0           | 0           | 0           |
| 0           | 0           | 0.000638255 | 0           | 0           | 0           | 0           | 0           | 5.25E-05    | 0.000149714 |
| 0.000867003 | 0.000154451 | 0.000425714 | 0.006873726 | 0.001727517 | 0.242049658 | 0           | 0           | 0           | 0           |
| 0           | 0.005799833 | 0           | 0.000278567 | 0           | 0           | 4.62E-05    | 0.000156613 | 5.01E-05    | 0.000417208 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0.00012132  | 0           | 4.87E-05    | 0.000458431 | 0.000125298 | 7.06E-05    | 0.000360977 | 0.001592078 | 9.84E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 3.76E-05    | 0           | 0           | 0           |
| 0           | 0.013092811 | 0.000152046 | 0.000720216 | 0           | 6.14E-05    | 7.74E-05    | 0.001161237 | 5.25E-05    | 0.000290754 |
| 0           | 0           | 0           | 0           | 0           | 0           | 6.27E-05    | 0           | 0.000100924 | 0           |
| 0.000103126 | 0.020450368 | 0.000187358 | 0.001926324 | 0           | 5.59E-05    | 4.96E-05    | 0.001074554 | 0.00015272  | 0.00026608  |
| 0           | 0           | 0           | 0.038709996 | 0.000358839 | 0           | 0.000106555 | 0.000274222 | 0.000155915 | 0.000234264 |
| 0.000443504 | 0.026880096 | 0.000615117 | 5.99E-05    | 0.000609061 | 0.000133926 | 5.65E-05    | 0.000229491 | 2.36E-05    | 7.74E-05    |
| 0           | 0           | 0           | 0           | 0           | 4.01E-05    | 4.87E-05    | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 2.21E-05    | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1.93E-05    | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0.006112464 | 0           | 0           | 5.66E-05    | 1.54E-05    | 0.002934846 | 0.003024566 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 5.02E-05    | 2.21E-05    | 0.000400438 | 2.08E-05    | 0           | 0           | 5.28E-05    | 0.019369807 | 1.30E-05    | 0           |
| 0           | 1.85E-05    | 0           | 0.001858388 | 0           | 0           | 0.000117406 | 0.000560894 | 0.0004459   | 0.000538378 |
| 0.001386568 | 6.96E-05    | 0.000725307 | 0.004672063 | 0.000188532 | 0.049004225 | 0.00044391  | 0.000140498 | 0.010547366 | 0.000166917 |
| 0.000249899 | 0.00010203  | 0.000214041 | 0.061309651 | 0.001177781 | 0.000103139 | 2.62E-05    | 0.000196666 | 0.000114229 | 0.000693878 |
| 0.000266499 | 8.37E-05    | 0.000199109 | 5.55E-05    | 0.000646337 | 0.001187845 | 4.22E-05    | 7.35E-05    | 0.001718801 | 0.000326742 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 4.26E-05    | 0           | 3.99E-05    |
| 4.52E-05    | 2.66E-05    | 0.00024804  | 2.56E-05    | 0.000297249 | 2.29E-05    | 0.000115043 | 0.000835223 | 0.002593114 | 0.001821065 |
| 0.000116252 | 0.000205904 | 0.000187514 | 4.79E-05    | 0.001337227 | 0.000324127 | 6.73E-05    | 7.75E-05    | 0.001757574 | 0           |
| 0.000220705 | 0.000260163 | 0.000485359 | 0.000201458 | 0.250178842 | 0.000466111 | 7.19E-05    | 0.00025503  | 0.000119656 | 0.000321434 |
| 4.53E-05    | 8.01E-05    | 0.000159958 | 0.034593063 | 0.000871308 | 9.61E-05    | 0.000191566 | 0.000259253 | 0.000222856 | 0.000302994 |
| 0.000755534 | 3.97E-05    | 0.158914215 | 5.74E-05    | 0.021935054 | 0.000184523 | 6.45E-05    | 0.000138851 | 5.21E-05    | 0.000248326 |
| 2.07E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000352123 | 0.00257864  | 0.000350694 | 0.047808558 | 0.000888035 | 0.006116753 | 6.44E-05    | 0.00620092  | 0.000891802 | 0.042974826 |
| 0.000155474 | 0           | 0.001860578 | 5.22E-06    | 0           | 6.00E-05    | 5.66E-05    | 7.73E-05    | 7.42E-05    | 0.000248159 |
| 5.82E-05    | 0.016874459 | 0.000212897 | 0.002110622 | 0.000205691 | 5.64E-05    | 7.08E-05    | 0.001143787 | 0.000100589 | 0.000296175 |

|             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control099  | Control117  | Control114  | Control113  | Control112  | Control111  | Control110  | Control109  | Control108  | Control107  |
| 0           | 0.000329201 | 0           | 0.000166139 | 0.000664556 | 0.00111067  | 0.000544567 | 0.000163062 | 0           | 0.563928142 |
| 0.001356091 | 0.000427339 | 0.002205072 | 0.000347569 | 0.002709332 | 0           | 0.001675171 | 0.000236461 | 0           | 0           |
| 0.000280919 | 0           | 0.000117986 | 0           | 0           | 0.000553411 | 0.000165742 | 0.000598358 | 0.000629259 | 8.99E-05    |
| 0.00196179  | 0.000318276 | 0.031802954 | 0           | 0           | 0           | 0.001251156 | 0           | 0.005213149 | 0           |
| 0.00289037  | 0.014653251 | 0.00013336  | 0.002337879 | 0.015140422 | 0.009215436 | 0.001409804 | 0.091675353 | 0.000631418 | 0.030844222 |
| 0.000813264 | 0           | 0           | 0           | 0           | 0           | 0           | 8.45E-05    | 0           | 0           |
| 0.002607606 | 0.050757909 | 0.00025945  | 0.002487054 | 0           | 0           | 9.17E-05    | 0.076946663 | 0.000136277 | 0           |
| 0.018352752 | 8.14E-05    | 0.027860368 | 0.000106268 | 0.00011079  | 0           | 0.010965978 | 0           | 0.006127382 | 0           |
| 0.001157037 | 0           | 0.008434602 | 0.000288704 | 0           | 0.000384199 | 0.011359397 | 0.000126586 | 0.04472693  | 8.88E-05    |
| 0.000274627 | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.001417558 | 0           |
| 6.29E-05    | 0           | 0.000163835 | 0.000348626 | 0.000167645 | 0           | 0           | 4.00E-05    | 0           | 0           |
| 0.000235034 | 9.59E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 9.78E-05    | 0           |
| 0           | 7.05E-05    | 0           | 0.002762125 | 0.016190147 | 0.012162747 | 0.012651069 | 0           | 0.029312758 | 0.000177877 |
| 0           | 0.000413324 | 0.000654817 | 0.001435025 | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 8.14E-05    | 0           | 0           | 0           | 0           | 0           | 0           |
| 5.45E-05    | 0           | 5.84E-05    | 0.004826924 | 6.10E-05    | 0           | 0           | 0           | 0           | 0           |
| 0.003174632 | 0.000116818 | 0.029634603 | 0.000364576 | 6.80E-05    | 0.000170734 | 0.006797281 | 0           | 0.009772936 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 4.47E-05    | 0.003084713 | 0.041494465 | 0.017246351 | 0.029199367 | 0.000179991 | 0.036446752 | 0.000484286 |
| 0.000297947 | 0           | 9.64E-05    | 0           | 0           | 0           | 0.00641695  | 0           | 5.69E-05    | 0           |
| 0.013031459 | 0.000104031 | 0.029142063 | 0.000100475 | 0.000101364 | 5.69E-05    | 0.005667476 | 2.22E-05    | 0.009385034 | 4.36E-05    |
| 0.000590892 | 0           | 4.40E-05    | 0           | 0.000127782 | 0.000520896 | 0.000279168 | 0.000336955 | 9.77E-05    | 0.000402067 |
| 0.011926364 | 7.48E-05    | 0.030005629 | 0           | 3.94E-05    | 0           | 0.020715661 | 5.12E-05    | 0.006370174 | 2.83E-05    |
| 5.95E-05    | 8.70E-05    | 0.000230347 | 0.000282841 | 2.90E-05    | 0.00016375  | 0.000135544 | 1.80E-05    | 0.000297727 | 3.68E-05    |
| 0.039839289 | 3.70E-05    | 0.018539668 | 3.90E-05    | 0           | 8.61E-05    | 0.000625885 | 4.71E-05    | 0.002290875 | 0           |
| 5.18E-05    | 0           | 0           | 0           | 0           | 0           | 0.007968614 | 1.42E-05    | 3.89E-05    | 0.000114701 |
| 0.000113114 | 2.32E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 8.78E-05    | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 3.50E-05    | 0           | 0.000242292 | 1.58E-05    |
| 0           | 0           | 2.97E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000216219 | 2.12E-05    | 0           | 2.59E-05    | 0           | 0           | 1.34E-05    | 0           | 0           | 0           |
| 0.011810131 | 0.005607329 | 0.013414006 | 0.038989153 | 0.000123035 | 0.000169273 | 9.45E-05    | 0.000113385 | 0.053282897 | 0.053623454 |
| 0.000190133 | 0.003500445 | 0.000198939 | 0.002801156 | 0.000453917 | 0.075389452 | 0.000208946 | 0.000136896 | 0.000316621 | 0.007892312 |
| 0.002632447 | 0.000173377 | 7.17E-05    | 0.000137149 | 5.51E-05    | 6.77E-05    | 5.55E-05    | 4.29E-05    | 4.51E-05    | 2.77E-05    |
| 0.000171199 | 7.01E-05    | 2.96E-05    | 0.003433859 | 0.027822459 | 0.003476744 | 0.02176411  | 0.000119465 | 0.034236822 | 0.000265138 |
| 0.005559592 | 3.01E-05    | 6.46E-05    | 0           | 1.35E-05    | 2.10E-05    | 2.50E-05    | 0           | 3.95E-05    | 1.25E-05    |
| 0.001116512 | 6.82E-05    | 4.49E-05    | 0.005276666 | 0.051397452 | 0.002114656 | 0.023246922 | 0.000164917 | 0.050519338 | 0.003222191 |
| 1.61E-05    | 5.75E-05    | 1.54E-05    | 0.004015951 | 0.034091084 | 0.016928469 | 0.026640443 | 0.000148763 | 0.022364075 | 0.000996681 |
| 0           | 0.000135374 | 7.54E-05    | 0.17253107  | 2.89E-05    | 0.006483212 | 5.93E-05    | 0.005676099 | 0.000242519 | 3.56E-05    |
| 6.07E-05    | 0.000117494 | 0.0001325   | 0.000235627 | 3.54E-05    | 0           | 9.90E-06    | 4.41E-05    | 2.14E-05    | 0           |
| 0.012080517 | 6.29E-05    | 0.000108097 | 8.12E-05    | 0           | 0           | 0           | 0           | 1.26E-05    | 0           |
| 0           | 0           | 0           | 0           | 7.24E-06    | 0           | 0           | 0           | 0           | 0           |
| 0.003228463 | 0.013423788 | 0.00010261  | 0.002434206 | 0.014234671 | 0.008916331 | 0.001635793 | 0.086102918 | 0.000964538 | 0.032927442 |
| 8.29E-05    | 0.00637733  | 9.75E-05    | 8.48E-05    | 6.43E-05    | 7.81E-05    | 5.01E-05    | 3.93E-05    | 8.02E-05    | 1.64E-05    |
| 0.012934772 | 8.82E-05    | 0.025806391 | 0.000106096 | 4.00E-05    | 4.87E-05    | 0.010734659 | 2.68E-05    | 0.00786397  | 3.20E-05    |

|             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control106  | Control105  | Control104  | Control103  | Control102  | Control101  | Control115  | Control066  | Control020  | Control064  |
| 0.000412271 | 0.000744549 | 0.001313729 | 0.000452267 | 0.000255362 | 0.000449191 | 0           | 0           | 0           | 0           |
| 0           | 0           | 0.014976824 | 0.000153842 | 0.000413095 | 0           | 0.000207972 | 0           | 0.000190878 | 0           |
| 0.000317439 | 0.416305685 | 0.000157315 | 0.000320248 | 0.001775411 | 0.001736082 | 0           | 0           | 0           | 0           |
| 0           | 0           | 0.02402713  | 0           | 0.009836389 | 0           | 0           | 0.009498907 | 0.000161882 | 0.000148163 |
| 0.006044738 | 0.009835967 | 0.000555212 | 0.004569615 | 0.000430017 | 0.004942478 | 0.000138803 | 0           | 0           | 0.015665697 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000615229 | 0           |
| 0.000807179 | 0           | 0.000290899 | 0.008472755 | 0.000450762 | 0.011727677 | 0.000167725 | 0.000353796 | 0.000427176 | 0.002667883 |
| 0           | 0           | 0.020857969 | 0.000142445 | 0.006731076 | 0.000162794 | 0           | 0.012546436 | 0           | 0.002713232 |
| 9.55E-05    | 7.77E-05    | 0.028459564 | 0           | 0.015090342 | 0.00019321  | 0           | 0.000568525 | 0           | 0.000282042 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000383669 | 0           |
| 0           | 0.002754716 | 0.000106683 | 0           | 0           | 0.000306715 | 0.007965054 | 0.030543818 | 0           | 0.000152405 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.00020871  | 0           |
| 0.071038297 | 6.88E-05    | 0           | 0.000182911 | 0.000951473 | 0.000401062 | 0.000104041 | 7.72E-05    | 0.000109075 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0.000552647 | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 9.00E-05    | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 6.83E-05    | 0.000119509 | 0           | 6.17E-05    |
| 0           | 0.008854336 | 0           | 5.58E-05    | 0.00019858  | 0.000106429 | 0           | 0           | 0.000206368 | 0           |
| 0           | 0           | 0.014622818 | 0.000213097 | 0.010996318 | 0           | 0           | 0.013929611 | 0.000386399 | 0.000344036 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.103008739 | 0.000109387 | 0.000204852 | 5.27E-05    | 0.001481697 | 0.000387827 | 6.76E-05    | 0.000636433 | 3.78E-05    | 5.17E-05    |
| 4.44E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.00041944  | 0           |
| 4.89E-05    | 0           | 0.027289063 | 0.000125371 | 0.006981647 | 0           | 0           | 0.008224686 | 9.96E-05    | 0.00061085  |
| 8.38E-05    | 0.000174989 | 0.00026289  | 0.326515829 | 0.000184755 | 0.00083669  | 0           | 0           | 0.000880641 | 0           |
| 4.33E-05    | 6.14E-05    | 0.019619065 | 0.000153508 | 0.007602958 | 0.000361333 | 5.83E-05    | 0.011853939 | 0.000281824 | 0.001482333 |
| 0           | 0.002768861 | 4.70E-05    | 0           | 5.25E-05    | 0.000260119 | 0.004863919 | 0.023297922 | 0           | 3.53E-05    |
| 3.10E-05    | 2.29E-05    | 0.028479132 | 0.000113063 | 0.000728854 | 0           | 0           | 0.000742314 | 0.00035063  | 0.001712099 |
| 2.71E-05    | 5.92E-05    | 3.52E-05    | 0           | 0           | 0.01005296  | 0           | 0.003708655 | 0.002582615 | 0.019875285 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000337726 | 0           |
| 0           | 0           | 2.81E-05    | 0           | 0           | 3.02E-05    | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000589656 | 0           | 0           | 0           | 0           | 0           | 0           | 0.00024661  | 0           | 0.000129542 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 2.44E-05    | 0           |
| 0           | 1.99E-05    | 0           | 0           | 0           | 0           | 2.51E-05    | 5.75E-05    | 0.000915906 | 1.90E-05    |
| 6.39E-05    | 0.000395239 | 0.000121426 | 0.003355713 | 0.000928792 | 0.002448231 | 0.000127458 | 0.000512645 | 1.85E-05    | 0           |
| 0.000139297 | 0.011692966 | 0.000331031 | 0.001126787 | 0.000221755 | 0.051678492 | 2.68E-05    | 0.000488341 | 0.000220554 | 0.010773524 |
| 0           | 0.022091333 | 0.000253596 | 3.84E-05    | 5.84E-05    | 0.000109793 | 0.000133452 | 0.053162041 | 5.62E-05    | 0.000177443 |
| 0.083816243 | 0.000171199 | 0.000127974 | 0.000117763 | 0.001034344 | 0.000298833 | 6.67E-05    | 0.000170519 | 7.52E-05    | 5.82E-05    |
| 0           | 0.012079017 | 2.16E-05    | 0           | 0           | 2.74E-05    | 0           | 0           | 0           | 0           |
| 0.053089509 | 0.000115375 | 0.00025469  | 0.000330498 | 0.00120695  | 0.000584855 | 5.85E-05    | 0.001035051 | 7.25E-05    | 4.32E-05    |
| 0.055087391 | 0.00018226  | 0.00031526  | 0.000192768 | 0.001526055 | 0.001506679 | 4.07E-05    | 0.000362549 | 0.000109027 | 9.00E-05    |
| 0.00018221  | 0.000127355 | 0.000140828 | 8.79E-05    | 0.20550563  | 0.024527457 | 9.50E-05    | 0           | 0           | 0           |
| 3.13E-05    | 0.004270654 | 0.000182307 | 5.11E-05    | 4.34E-05    | 2.17E-05    | 0.010516996 | 0.031989357 | 1.66E-05    | 8.46E-05    |
| 0           | 2.71E-05    | 2.75E-05    | 0           | 2.07E-05    | 1.70E-05    | 5.85E-05    | 9.48E-05    | 9.59E-05    | 0.000119573 |
| 0           | 1.15E-05    | 0           | 0           | 0           | 0           | 0           | 1.36E-05    | 0           | 1.18E-05    |
| 0.005149357 | 0.009579142 | 0.000358487 | 0.004605392 | 0.0003894   | 0.006153641 | 4.97E-05    | 5.43E-05    | 0.000261072 | 0.018677574 |
| 0.000281165 | 5.18E-05    | 7.73E-05    | 2.51E-05    | 8.31E-05    | 0.000107243 | 0.070580822 | 0.000537214 | 0.000558107 | 0.051478727 |
| 4.28E-05    | 5.45E-05    | 0.01877264  | 0.000568622 | 0.008861077 | 8.57E-05    | 6.89E-05    | 0.012400729 | 0.00021298  | 0.002790517 |



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|             |             |             |             |             |             |             |             |             |             |
| Control029  | Control028  | Control027  | Control026  | Control025  | Control024  | Control023  | Control022  | Control021  | Control0131 |
| 0.001190663 | 0.001178356 | 0.03175409  | 0.000695323 | 0.000507647 | 0.000544567 | 0.001126053 | 0.001206046 | 0.023997859 | 0.000166139 |
| 0.000361814 | 0           | 0.007398671 | 0.026127535 | 0           | 0           | 0.000999974 | 0.000546995 | 0.000313382 | 0.002068323 |
| 0.000525319 | 0.000575885 | 0.009747903 | 0.000123605 | 0.000415761 | 0.000500037 | 0.00156753  | 0.00069668  | 0.000342722 | 0           |
| 0           | 0.004156801 | 0           | 0.000115238 | 0           | 7.68E-05    | 0.00029907  | 0           | 5.76E-05    | 0           |
| 0.000261276 | 0.000258555 | 0.004667594 | 0.029450748 | 0.011441729 | 0.0354846   | 0.000269441 | 0           | 6.53E-05    | 0.039186015 |
| 0           | 0           | 0.00226552  | 0           | 0           | 0           | 0           | 0           | 0.000290451 | 0           |
| 0.044578275 | 0.0004429   | 0.01129526  | 0.014720527 | 0.00033283  | 0.016746336 | 0.000275175 | 0.000157243 | 0.000141518 | 0.036836698 |
| 0           | 0.004849902 | 0.001953527 | 4.52E-05    | 7.24E-05    | 7.69E-05    | 0.000386636 | 0.000122095 | 0.000124356 | 0           |
| 0.00011104  | 0.081041467 | 0.013373663 | 0.000102157 | 0.000204314 | 0.00019543  | 0.000197651 | 0.000326458 | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.00061589  |
| 0           | 0           | 0.001640256 | 6.29E-05    | 0           | 0.003391006 | 0           | 0.000885853 | 3.43E-05    | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000165464 | 0           |
| 0.000255069 | 0.04847479  | 0.007247641 | 0.000265137 | 5.54E-05    | 0.010296719 | 0.00063935  | 0.000483288 | 0           | 7.05E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.00010217  |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 8.85E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 4.47E-05    | 0           |
| 0.06448142  | 0.000123301 | 0.005558945 | 7.66E-05    | 7.53E-05    | 0           | 0.000329669 | 7.27E-05    | 0.072362324 | 0.079459291 |
| 4.62E-05    | 0.002039826 | 0           | 0           | 3.85E-05    | 2.82E-05    | 0.000268297 | 7.45E-05    | 7.96E-05    | 0           |
| 0           | 0           | 0           | 0           | 0           | 6.78E-05    | 0           | 0           | 0           | 0           |
| 0.000131264 | 0.022889726 | 0.01369028  | 0.000240651 | 0.000366944 | 0.024334629 | 0.000674222 | 0.000360977 | 2.29E-05    | 6.86E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000179347 | 0           |
| 0           | 0.004508017 | 0.003837594 | 5.33E-05    | 7.38E-05    | 2.67E-05    | 0.000154713 | 0.000202727 | 8.00E-05    | 0.000103142 |
| 0.000314166 | 0.000389045 | 0.016759845 | 0.000206731 | 0.000405323 | 0.000205103 | 0.000648679 | 0.000437065 | 0.286471911 | 0           |
| 7.87E-05    | 0.004661909 | 0.002056215 | 5.51E-05    | 8.74E-05    | 2.76E-05    | 6.61E-05    | 9.92E-05    | 2.44E-05    | 0           |
| 0           | 0.000184121 | 0.003407407 | 3.92E-05    | 9.79E-05    | 0.002413939 | 0           | 0.000712194 | 1.80E-05    | 8.54E-05    |
| 2.62E-05    | 0.010496031 | 0.001162935 | 4.11E-05    | 3.97E-05    | 0.000104987 | 0.000134599 | 0           | 0.00024497  | 0.000100276 |
| 0           | 6.97E-05    | 0.002125663 | 2.65E-05    | 5.24E-05    | 7.22E-05    | 0.000185618 | 0.080466844 | 3.39E-05    | 0           |
| 0           | 0           | 0.001410155 | 0           | 0           | 0           | 0           | 0           | 0.000176135 | 0           |
| 2.45E-05    | 0.00093507  | 0           | 0           | 0           | 0           | 5.21E-05    | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 2.02E-05    | 5.90E-05    | 0.000412615 | 0           | 0           | 0           | 3.55E-05    | 2.73E-05    | 1.73E-05    | 2.93E-05    |
| 7.04E-05    | 0.000235216 | 0.000419174 | 0           | 0           | 0           | 4.60E-05    | 0           | 6.04E-05    | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.011676285 | 4.54E-05    |
| 0.000220337 | 0.000284267 | 0.008365962 | 0.01652767  | 0.00017048  | 0.000132282 | 0.000349403 | 0.000199027 | 0.000322866 | 0           |
| 0.023047296 | 0.000508355 | 0.013451795 | 0.044120814 | 0.00034304  | 0.000258581 | 0.000795756 | 0.00027179  | 0.007150194 | 8.61E-05    |
| 0           | 4.18E-05    | 0.000629554 | 2.55E-05    | 5.03E-05    | 1.96E-05    | 7.32E-05    | 0.000442499 | 0.000102769 | 4.14E-05    |
| 0.000202853 | 0.044350181 | 0.009054169 | 0.000111977 | 0.000289303 | 0.020576945 | 0.000370648 | 0.000270243 | 2.59E-05    | 0.000115381 |
| 1.39E-05    | 0           | 0.000583335 | 0           | 2.30E-05    | 0           | 3.48E-05    | 0           | 0           | 0           |
| 0.000269652 | 0.032543097 | 0.010296647 | 0.000110388 | 0.000197501 | 0.016225332 | 0.000538971 | 0.000199828 | 4.62E-05    | 3.69E-05    |
| 0.000300482 | 0.042684214 | 0.011636701 | 0.000144166 | 0.000301139 | 0.015051359 | 0.000531673 | 0.000390134 | 4.53E-05    | 0.000192111 |
| 0.000152056 | 0.000193759 | 0.007699336 | 0.000128317 | 0.000173549 | 0.000196325 | 0.000292563 | 0.000189588 | 0           | 0.000222951 |
| 6.99E-05    | 2.08E-05    | 0.000830121 | 1.88E-05    | 6.07E-05    | 0.003834521 | 9.13E-05    | 0.000748705 | 2.43E-05    | 2.01E-05    |
| 5.78E-05    | 0           | 0.000394062 | 3.90E-06    | 2.13E-05    | 0           | 0           | 0           | 6.89E-05    | 8.77E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000474606 | 0.000690348 | 0.023577419 | 0.029916669 | 0.012320141 | 0.039971846 | 0.00095116  | 0.000564098 | 9.81E-05    | 0.039443856 |
| 0.006613042 | 9.56E-05    | 0.003065697 | 0.004089115 | 0.001436163 | 4.18E-05    | 0.000144694 | 0.07157679  | 8.68E-05    | 1.22E-05    |
| 7.02E-05    | 0.004579247 | 0.002531322 | 3.34E-05    | 4.90E-05    | 4.75E-05    | 0.000126926 | 7.18E-05    | 0.000109616 | 4.02E-05    |

|             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control019  | Control018  | Control017  | Control016  | Control015  | Control014  | Control013  | Control012  | Control011  | Control010  |
| 0           | 0           | 0           | 0           | 0.000110759 | 0.000246132 | 0.000190752 | 0           | 0           | 0           |
| 0.003478543 | 0.000829039 | 0.000296289 | 0.000119655 | 0.004014142 | 0.000843283 | 0.003224989 | 0           | 0.000660952 | 0.000575484 |
| 0.000188216 | 0.000221926 | 0.000415761 | 0           | 0.000216308 | 0           | 0.000356768 | 0           | 0           | 0           |
| 0.000801179 | 0.003133377 | 0.00032102  | 0.000559728 | 0.049157253 | 0.000428027 | 0.005937503 | 0.000960317 | 0           | 0.000304558 |
| 0           | 0.004077    | 0.000280328 | 0.014786611 | 0.000299379 | 0.00021773  | 0           | 0.001001559 | 0           | 0.00268897  |
| 0.000514891 | 6.34E-05    | 0.507323333 | 0.000546577 | 0.000604667 | 0.00101922  | 0.000834387 | 0.005624193 | 0.000182192 | 0.000866073 |
| 0.047377194 | 0.023547078 | 0.000191312 | 8.39E-05    | 0.005540181 | 0.000212278 | 0.002356018 | 0.000867455 | 0           | 0           |
| 0.001094337 | 0.014475091 | 0.000250974 | 0.00339154  | 0.017764885 | 0           | 0.015481248 | 0.023053426 | 0.000187665 | 0.005711353 |
| 0.000570746 | 0.0011104   | 0           | 0.00013991  | 0.00407739  | 0           | 0.003562165 | 0.001590093 | 0.000157677 | 0.000410848 |
| 0.000262511 | 0.000238279 | 0.00052906  | 0.000258472 | 0.000428094 | 0.001159085 | 0.000127217 | 0           | 0           | 0           |
| 8.00E-05    | 0.000272424 | 0.00014669  | 7.24E-05    | 0.005901874 | 0.00016193  | 0.012739133 | 0.003389101 | 0.00047817  | 0.000121924 |
| 7.71E-05    | 0.000157943 | 0.280419978 | 0.000184267 | 0.00041366  | 0.001045431 | 0.000436223 | 0.005202712 | 0.000989023 | 0.001562506 |
| 0           | 5.87E-05    | 0           | 0           | 0           | 0.000129212 | 0.000102363 | 0           | 0.024432892 | 0.000313802 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000111458 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 6.05E-05    | 0           | 0           | 0           | 0           | 0.000102272 |
| 5.65E-05    | 0.023098006 | 0.000111629 | 0.000107689 | 0.005268888 | 0.000120822 | 0.000170727 | 0           | 0           | 0           |
| 0.000120706 | 3.89E-05    | 0.000140174 | 0.000102535 | 0.00036601  | 0.000321881 | 0.000281646 | 0.00139655  | 0.14212883  | 0.086211014 |
| 0.000278567 | 0.036972328 | 0.000219516 | 0.000418492 | 0.033062127 | 0.00037998  | 0.001471139 | 0.002233667 | 0.000191274 | 0.028798903 |
| 0           | 0           | 0           | 0           | 0           | 0           | 7.95E-05    | 0           | 0           | 0           |
| 0.000117342 | 0           | 3.48E-05    | 4.08E-05    | 4.67E-05    | 0           | 6.26E-05    | 0.00101531  | 0.026031122 | 0.000258551 |
| 0.000499471 | 0.000195739 | 0.001063546 | 0.220832767 | 0.00035098  | 0.000415583 | 0.000515863 | 0           | 0           | 0           |
| 0.001719626 | 0.006055147 | 0.000165383 | 0.001611149 | 0.011785753 | 0.000706878 | 0.011916459 | 0.004656506 | 0.000209841 | 0.003098706 |
| 0.000351605 | 0.000405323 | 0.001422699 | 0.000541244 | 0.000552639 | 0.001002726 | 0.000616937 | 0.003113984 | 0.000526594 | 0.054116262 |
| 0.001466588 | 0.012457736 | 0.000147997 | 0.001738966 | 0.013581097 | 0.000426673 | 0.015612909 | 0.008537387 | 0.00030859  | 0.005430235 |
| 0.000102637 | 2.98E-05    | 0.000168451 | 0.000137895 | 0.003984841 | 0.000199007 | 0.013450209 | 0.002468    | 0.000358839 | 0.000246017 |
| 0.000416584 | 0.016898233 | 0.000556567 | 0.007855871 | 0.011686559 | 0.000314962 | 0.028306172 | 0.0507196   | 0.000304867 | 0.000565316 |
| 0.000110384 | 5.37E-05    | 2.04E-05    | 6.29E-05    | 0.000168351 | 0.000204118 | 7.40E-05    | 0.002151563 | 0.00049272  | 0.000205968 |
| 0.000431449 | 8.62E-05    | 0.319840628 | 0.00022946  | 0.000331801 | 0.001002944 | 0.00043899  | 0.003194124 | 0.000713696 | 0.000762173 |
| 0.000121377 | 0           | 0           | 0           | 3.96E-05    | 0           | 3.18E-05    | 0           | 0.000148465 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 3.39E-05    | 0           |
| 0           | 0           | 1.39E-05    | 0           | 0           | 0.000148733 | 0           | 0.000856896 | 3.12E-05    | 0           |
| 0           | 0           | 4.79E-05    | 0           | 0           | 0           | 3.50E-05    | 0           | 0.00026396  | 0           |
| 0.021623679 | 0.012050345 | 0.00038833  | 0.000230922 | 0.0457088   | 0.000469629 | 0.000264653 | 0.00015784  | 0.000306167 | 5.06E-05    |
| 0.004220173 | 2.73E-05    | 5.87E-05    | 0.001541151 | 0.000124643 | 0.000423384 | 0           | 0.003567204 | 0.000492541 | 0.000541192 |
| 0.052615146 | 0.001782445 | 0.000598018 | 0.000210547 | 0.001072349 | 0.000656859 | 0.01287219  | 0.000141699 | 8.45E-05    | 2.00E-05    |
| 0.000106836 | 0.000126798 | 0.000239179 | 5.36E-05    | 0.003937395 | 0.000375219 | 0.000145282 | 0.001521207 | 0.000309417 | 0.000393333 |
| 0.000116402 | 6.06E-05    | 2.11E-05    | 1.19E-05    | 0           | 0.000240973 | 6.91E-05    | 0.000344101 | 0.037082884 | 0.000241313 |
| 1.49E-05    | 0           | 0           | 3.01E-05    | 1.32E-05    | 8.82E-05    | 1.96E-05    | 0           | 0           | 0           |
| 0.000114045 | 0.001653821 | 4.29E-05    | 4.29E-05    | 0           | 0.000146962 | 8.35E-05    | 0.000928653 | 0.020177013 | 0.000211798 |
| 3.68E-05    | 4.83E-05    | 0           | 6.17E-05    | 0           | 0.000155003 | 1.90E-05    | 0.00150865  | 0.073063771 | 0.000233489 |
| 0           | 0           | 0           | 0           | 1.99E-05    | 0           | 0           | 0           | 6.93E-05    | 0.000375969 |
| 5.81E-05    | 7.34E-06    | 7.44E-05    | 4.85E-05    | 0.001944718 | 7.69E-05    | 0.005285317 | 0.001653537 | 0.000422085 | 0.000383771 |
| 0.036782957 | 0.000123933 | 0.000216424 | 0.000124392 | 0.000170753 | 0.000538651 | 0.000317407 | 0.000410587 | 6.79E-05    | 6.06E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000186517 | 0.004652151 | 0.000465124 | 0.018031128 | 0.000207819 | 0.000408104 | 0.000227821 | 0.000919987 | 0.000115339 | 0.002783991 |
| 8.43E-05    | 7.67E-05    | 0.000303836 | 0.000114022 | 0.000162142 | 0.000162364 | 0.000167032 | 0.03133021  | 0.000712247 | 0.000551439 |
| 0.00133457  | 0.015076246 | 0.000399083 | 0.006373278 | 0.014902814 | 0.000381193 | 0.012911664 | 0.017240662 | 0.000281309 | 0.006395185 |

| Control009  | Control008  | Control007  | Control006  | Control005  | Control004  | Control003  | Control002  | Control001  | Control030  |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0           | 0           | 0           | 0           | 0           | 0           | 0.000159986 | 0           | 0           | 0.001962902 |
| 0.000415944 | 0.000111108 | 0.001333299 | 0.000444433 | 0.00039885  | 0.00274067  | 0.000897413 | 0.001831862 | 0.003863149 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.0022305   |
| 0.001325237 | 0.000263401 | 0.004774147 | 0.000573446 | 0           | 0.000137188 | 0.01096682  | 0.015982418 | 0.000194807 | 0           |
| 0           | 0.00013336  | 0.000119752 | 0           | 0.005220085 | 0           | 0.003091771 | 0           | 0           | 0.000508945 |
| 0.460019381 | 0.000245563 | 0.001006018 | 0.000887197 | 0.000470003 | 0.000150507 | 0.000266687 | 0.006020263 | 0.00113276  | 0           |
| 0           | 0.000102208 | 0           | 0.016801371 | 0.001095457 | 0           | 0.001892153 | 0           | 0.000193933 | 0.000243726 |
| 0.002030402 | 0           | 0.015467682 | 0.006731076 | 0.000203492 | 0.000214798 | 0.030381413 | 0.026128422 | 0.000174099 | 0.000445422 |
| 0           | 0           | 0.005249973 | 0.000370874 | 8.22E-05    | 0           | 0.001512365 | 0.00479693  | 0.000353107 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000811555 | 7.43E-05    | 0.000944909 | 0.000108588 | 0.061748692 | 0.000461024 | 0.000137164 | 0.000251468 | 0.12032927  | 0.049784919 |
| 0.199620937 | 0.000586645 | 0.00124662  | 0.001197733 | 0.000797235 | 0.000533997 | 0.000774672 | 0.001600111 | 0.001429007 | 0           |
| 0.000204726 | 0           | 0.00020137  | 0.000125856 | 5.54E-05    | 0.000145993 | 0           | 0           | 0.000102363 | 0.001065583 |
| 0           | 0           | 0           | 0           | 0.02113836  | 0.000222916 | 5.26E-05    | 9.44E-05    | 0.000239945 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000197342 | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0.000645061 | 0.013903202 | 0.000227134 | 0.000430906 | 0.000436097 | 0.000115514 | 0.000258284 | 0.000197282 | 0.000354329 |
| 0.000662398 | 5.26E-05    | 0.002291435 | 0.000685505 | 9.50E-05    | 0.000299106 | 0.005360801 | 0.003829327 | 9.11E-05    | 0.000127088 |
| 0           | 0           | 0           | 0           | 0           | 6.78E-05    | 0           | 0           | 0           | 0           |
| 6.86E-05    | 0           | 0.000124303 | 0.000320206 | 0.000191924 | 5.07E-05    | 0.000118337 | 0.000402743 | 0.000135242 | 0.001249995 |
| 5.50E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.002264678 | 3.56E-05    | 0.009218762 | 0.004432439 | 0.000328098 | 0.000102253 | 0.026516388 | 0.020583944 | 0.000409901 | 0.000164494 |
| 0.00055508  | 0.000218125 | 0.219704375 | 0.017087847 | 0.000230334 | 0.000126969 | 0.000322305 | 0.000419973 | 0.000369511 | 0.000811459 |
| 0.00317564  | 0.000202315 | 0.014387996 | 0.008742064 | 2.99E-05    | 0.000177911 | 0.025960899 | 0.025198871 | 0.000107849 | 0.000127529 |
| 0.000441106 | 0.000253851 | 0.000570382 | 0.000399581 | 0.061849653 | 0.000600155 | 0.000267954 | 0.000435622 | 0.115062088 | 0.120593542 |
| 0.003486114 | 0.000169595 | 0.017073212 | 0.001078811 | 0.000255065 | 0.000575411 | 0.047590846 | 0.045969601 | 0.000368128 | 6.60E-05    |
| 0.000468669 | 0.000234951 | 0.000664771 | 0.000510603 | 0.012926027 | 0.000497036 | 0.00610812  | 0.000986056 | 0.000475453 | 0.000385419 |
| 0.301217214 | 0.000417445 | 0.001393457 | 0.000959853 | 0.000962546 | 0.0007988   | 0.000581729 | 0.001445166 | 0.00071208  | 5.76E-05    |
| 0.000301619 | 0           | 0           | 0           | 9.64E-05    | 0.000216707 | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 4.03E-05    | 0           | 0           | 1.87E-05    | 8.06E-05    | 0           | 7.20E-05    | 0           | 0.000216383 |
| 0           | 0           | 6.28E-05    | 0           | 0           | 7.62E-05    | 0           | 0.000188269 | 3.31E-05    | 0           |
| 0.000115029 | 0.000520657 | 6.62E-05    | 0.006834698 | 0.000105515 | 2.64E-05    | 1.99E-05    | 2.59E-05    | 0           | 0           |
| 0.000400868 | 0.000258132 | 0.005163439 | 0.001344939 | 0.000723734 | 0.339810752 | 0.000240843 | 0.023876383 | 0.000404487 | 0.000609545 |
| 0.000137696 | 0.000253377 | 0.001445409 | 0.000583608 | 0.000466326 | 1.68E-05    | 0           | 0.001960169 | 3.04E-05    | 0.000503952 |
| 0.00041921  | 0.000207017 | 0.000563383 | 0.000448414 | 0.089385262 | 0.000377437 | 4.69E-05    | 0.000281322 | 0.065257396 | 0.016050864 |
| 0.000269563 | 9.90E-05    | 0.000203533 | 0.000150438 | 0.000225656 | 0.000149757 | 0.000111297 | 0.000134441 | 0.000152139 | 0.000862464 |
| 0           | 0           | 0           | 0           | 0           | 0           | 1.22E-05    | 0           | 0           | 3.31E-05    |
| 0.0002374   | 0.00013466  | 0.000146629 | 0.000132332 | 0.000647364 | 0.00010806  | 5.25E-05    | 0.000145632 | 0.000116373 | 0.001054003 |
| 0.000173393 | 0.000133329 | 0.000372072 | 0.000232504 | 0.000221995 | 0.000147778 | 5.62E-05    | 0.000166825 | 0.000287346 | 0.000913268 |
| 0           | 1.22E-05    | 0           | 0.018612047 | 9.46E-05    | 3.21E-05    | 2.60E-05    | 2.76E-05    | 0           | 0.000427937 |
| 0.000727314 | 0.000222856 | 0.001124176 | 0.000545964 | 0.0773542   | 0.000401012 | 0.000168259 | 0.00030044  | 0.155824274 | 0.046138452 |
| 4.89E-05    | 7.34E-05    | 8.06E-05    | 0.000149179 | 7.62E-05    | 9.89E-05    | 3.92E-05    | 4.59E-05    | 0.000108556 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000190154 | 0.000122093 | 0.000199506 | 0.000150019 | 0.005099611 | 0.000168853 | 0.002824646 | 0.000255617 | 0.000221327 | 0.001032469 |
| 0.000771703 | 0.000272052 | 0.000812266 | 0.000863721 | 0.000666794 | 0.000616562 | 0.001003414 | 0.000574888 | 0.000562774 | 0.00016192  |
| 0.002394291 | 0.000150282 | 0.016355904 | 0.007381815 | 0.000241181 | 0.000255302 | 0.026893196 | 0.024594234 | 0.000289881 | 0.000129452 |

|             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control031  | Control032  | Control033  | Control063  | Control062  | Control061  | Control060  | Control059  | Control058  | Control057  |
| 0.000326125 | 0           | 0.000418424 | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.058249219 | 0.083396722 | 0.000413095 | 0.000205123 | 0           | 0.000225065 | 0.000233612 | 0.000874621 | 0           | 0.000162389 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000285351 | 0           | 0.000749047 | 0.000186576 | 0.000192063 | 0.003429703 | 0.000235964 | 0           | 0.000126213 | 0           |
| 0.00110226  | 0.012729059 | 0           | 0.003328552 | 0.000421853 | 0.00095257  | 0.000209565 | 0.001779945 | 0.004117825 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.009565591 | 0.011090844 | 0.000123173 | 0.004811623 | 0.001543598 | 0           | 0           | 0.001294631 | 0           | 0           |
| 0.000223842 | 0.00037533  | 9.04E-05    | 0.000406985 | 0.000782315 | 0.017683488 | 0           | 0           | 0           | 0           |
| 0.000384199 | 0.001048218 | 0.005443183 | 0           | 0.000322016 | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0.00017568  | 0           | 0           | 0           |
| 0.078878987 | 0.0001505   | 0.000302904 | 9.53E-05    | 0.020553686 | 0.000962055 | 0.000468645 | 0.000384822 | 0.001960306 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.003428324 | 0.000152706 | 0.0420578   | 0.006796237 | 0.003953564 | 8.22E-05    | 0.000397706 | 0.000187945 | 0.000206404 | 8.89E-05    |
| 0.00042416  | 0.001809648 | 0.001044921 | 0           | 0           | 0           | 0.000137775 | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.001430918 | 0.001740031 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0.000119558 | 0           | 0           | 0           |
| 0.000154967 | 0.000220631 | 0.000173353 | 0.000413684 | 0.000471468 | 0.000116882 | 0.000231138 | 0.000114256 | 0.000148401 | 0.000559458 |
| 0           | 0           | 0.001322569 | 8.44E-05    | 0.003356393 | 0.001806689 | 0           | 0           | 4.67E-05    | 0.000231028 |
| 0.000204111 | 0.000207962 | 0.000522473 | 8.60E-05    | 0           | 0.002649592 | 0           | 0.000124521 | 0           | 0.000147627 |
| 5.85E-05    | 0           | 0.000666526 | 0           | 7.72E-05    | 0           | 0.000102902 | 0           | 0           | 0           |
| 0.004954236 | 0           | 0.027299016 | 0.012027597 | 0.003377075 | 7.76E-05    | 0.000463403 | 0.000389815 | 7.36E-05    | 6.66E-05    |
| 0           | 0           | 4.05E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0.0001186   |
| 0.000144932 | 0.000150267 | 0.000251631 | 0.000532604 | 0.000362775 | 0.014401647 | 0.000232959 | 0           | 2.58E-05    | 9.78E-05    |
| 0.016218601 | 0           | 3.09E-05    | 0.006609688 | 0           | 3.26E-05    | 0           | 0           | 0           | 0.000100924 |
| 0.000160593 | 0.000185784 | 0.00027159  | 0.000317249 | 0.000323547 | 0.016885054 | 6.06E-05    | 0           | 5.59E-05    | 0           |
| 0.044515673 | 0.000180203 | 0.000227213 | 0.000325933 | 0.019047477 | 0.000685556 | 0.000246017 | 0.000380777 | 0.003287533 | 4.94E-05    |
| 0.000179017 | 9.96E-05    | 9.56E-05    | 0.000315635 | 0.000419949 | 0.02317795  | 0.000209974 | 0.00029208  | 0.000155462 | 0.00035736  |
| 0.000303402 | 0           | 0           | 0.022452967 | 0.015433408 | 0.004123674 | 0.002054746 | 0.015963745 | 0.027260528 | 0.000860872 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 4.26E-05    | 0           | 0           |
| 0           | 0           | 0           | 0.000126586 | 0           | 0           | 0           | 0           | 0           | 5.73E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000162647 | 7.63E-05    | 0           | 0.000310421 | 0.013576962 | 0.000143936 | 0.000478826 | 0.000226938 | 0.001644224 | 0.000315219 |
| 0           | 6.90E-05    | 0           | 0           | 0           | 0           | 0.000135094 | 0           | 0           | 0.000184915 |
| 2.25E-05    | 0.015982945 | 3.94E-05    | 2.94E-05    | 0.001145531 | 4.63E-05    | 0           | 4.37E-05    | 4.80E-05    | 0.000105083 |
| 0.000429818 | 0.000486912 | 0.000277833 | 5.31E-05    | 0.000188975 | 0           | 0.002937153 | 0.000263359 | 8.36E-05    | 7.64E-05    |
| 0.002252373 | 0.028542734 | 5.36E-05    | 0.003462818 | 0.00327829  | 0.005120776 | 0.000993894 | 0.09437311  | 0.009257265 | 0.00038667  |
| 0.071418379 | 0.000648038 | 0.000253966 | 0.000277255 | 0.020907638 | 0.00019223  | 0.000263208 | 0.000164874 | 0.001411784 | 2.55E-05    |
| 0.004160861 | 6.50E-05    | 0.048443651 | 0.010320977 | 0.004435869 | 4.12E-05    | 0.000570778 | 3.30E-05    | 0.000106872 | 0.000106191 |
| 3.89E-05    | 0.023805871 | 0           | 0           | 0           | 0           | 0           | 0           | 1.01E-05    | 0           |
| 0.013087594 | 0.000159264 | 0.061856356 | 0.002686544 | 0.010063902 | 4.12E-05    | 0.000544956 | 3.03E-05    | 0.001290738 | 0.000182871 |
| 0.00221076  | 2.53E-05    | 0.031955527 | 0.010212777 | 0.003702333 | 4.30E-05    | 0.000349413 | 0.000248596 | 5.58E-05    | 0.000139897 |
| 0.000292242 | 0.00181793  | 0.000162962 | 0.000171945 | 0           | 0           | 0           | 0           | 0           | 1.64E-05    |
| 0.052543475 | 0.000294054 | 0.000323747 | 0.000196036 | 0.017682538 | 0.001176856 | 0.000139205 | 0.000244566 | 0.004452004 | 2.01E-05    |
| 0.00013036  | 8.84E-05    | 0.000111311 | 0.000338981 | 0.000365144 | 0.000118655 | 0.000250162 | 0.001495692 | 0.000127146 | 0.000125769 |
| 0           | 0           | 0           | 9.23E-06    | 2.81E-05    | 3.10E-05    | 0           | 0           | 3.69E-06    | 1.76E-05    |
| 0.001173136 | 0.012403788 | 6.20E-05    | 0.004725797 | 0.00056189  | 0.00064151  | 0.000154046 | 0.001345366 | 0.003797367 | 4.05E-05    |
| 0.000928844 | 0.002276657 | 0.000114022 | 0.008763786 | 0.002626391 | 0.003340861 | 0.000443751 | 0.007391635 | 0.001298804 | 0.000265051 |
| 0.000271701 | 0.000449936 | 0.000298494 | 0.000186145 | 0.000360736 | 0.012713924 | 0.000142083 | 0.000189416 | 0.000108167 | 0.000180306 |

|             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control056  | Control055  | Control054  | Control053  | Control052  | Control051  | Control050  | Control065  | Control049  | Control047  |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0.00401984  | 0           | 0.00018518  | 0.000347569 | 0.000116806 | 9.97E-05    | 0           | 0.000980032 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.20662745  |
| 0           | 0           | 0.00016737  | 0           | 0           | 0.000159138 | 0.016580558 | 0.000367664 | 0.000222245 | 0           |
| 0.006828567 | 0.000163298 | 0.001877924 | 0.002650867 | 0           | 6.26E-05    | 0           | 0.008894284 | 0           | 0.004781902 |
| 0           | 0           | 0           | 0.000182192 | 0           | 0           | 0           | 0.000132023 | 0           | 0           |
| 0.034957649 | 0.000217519 | 0           | 0.004384448 | 0.000301382 | 0           | 8.65E-05    | 0.002248569 | 0           | 0.00623991  |
| 0           | 0.000823014 | 6.56E-05    | 0.000391158 | 0.000284889 | 0           | 0.032353028 | 0.000278106 | 0.000323327 | 0           |
| 0           | 0.000517447 | 0           | 0           | 0           | 0           | 0.004357211 | 0           | 0.000162118 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000321071 | 0.000700702 |
| 0.001162086 | 0           | 7.24E-05    | 0.001722174 | 0           | 0.000407683 | 6.10E-05    | 0.004434978 | 0.000127639 | 0.000310525 |
| 0           | 0.000144781 | 0           | 0           | 0           | 0           | 0           | 7.52E-05    | 0           | 0           |
| 0.005311133 | 0.000662843 | 0.000808836 | 0.001995241 | 0.000362466 | 0.000171164 | 0.000305411 | 0           | 0.04588383  | 0.056024487 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 9.29E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.001455589 | 0.003403147 | 0.000920083 | 0.003139023 | 0.006770014 | 0.001571688 | 0.001454138 | 0           | 0.002356807 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.00019158  | 0           |
| 0.000144461 | 0.000718365 | 0.000161534 | 0.000618556 | 0.001143869 | 0.000479348 | 0.00026003  | 0.000165474 | 0.000545012 | 0           |
| 0.055385674 | 0.007054136 | 0.000125897 | 0.000140174 | 0.000314094 | 5.06E-05    | 0.000237517 | 0           | 9.99E-05    | 0.000471141 |
| 0           | 0           | 3.85E-05    | 3.72E-05    | 0           | 0           | 0.007816552 | 6.03E-05    | 0.000175869 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.00017774  | 0           |
| 0.001874495 | 0.000265512 | 0.002641199 | 0.003530217 | 0.000123309 | 0.000258551 | 0.000203858 | 3.88E-05    | 0.036570061 | 0.047415285 |
| 3.95E-05    | 6.17E-05    | 2.02E-05    | 0.009701118 | 0.000122457 | 0           | 0           | 0           | 0           | 0           |
| 0.000118258 | 0.000203617 | 3.20E-05    | 8.62E-05    | 0.000324542 | 8.27E-05    | 0.027001866 | 0.000204506 | 0.000120925 | 8.62E-05    |
| 0           | 0           | 0           | 6.19E-05    | 0.00020022  | 0           | 0           | 8.38E-05    | 0           | 0           |
| 3.39E-05    | 0.000319611 | 9.29E-05    | 0.000240889 | 0.000221996 | 0.000157444 | 0.026545015 | 0.000244038 | 6.69E-05    | 4.72E-05    |
| 0.001233217 | 0           | 0           | 0.001993987 | 0.000100287 | 0.000167667 | 5.41E-05    | 0.004757364 | 4.94E-05    | 4.31E-05    |
| 0.000120466 | 0.000583487 | 5.65E-05    | 0.000471097 | 0.000446196 | 0.000310924 | 0.038024894 | 0.000286023 | 0.000174979 | 0.000121139 |
| 0.000382336 | 0.001811161 | 0.000547603 | 0.000662304 | 0.00113159  | 0.000633937 | 0.000363219 | 0.017314253 | 0.000299702 | 0           |
| 0           | 9.05E-05    | 0           | 8.67E-05    | 0           | 0           | 0           | 0           | 0           | 0           |
| 2.34E-05    | 0.000370902 | 0           | 1.67E-05    | 0           | 0.000119293 | 1.56E-05    | 0           | 2.81E-05    | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.018107094 | 9.45E-05    | 0.000144415 | 0.005779493 | 0.000248529 | 6.76E-05    | 0.000110351 | 0.000254286 | 0.001401932 | 0           |
| 0           | 0           | 1.68E-05    | 7.28E-05    | 0           | 2.78E-05    | 3.16E-05    | 6.99E-05    | 0.000148028 | 0           |
| 0.016974527 | 0.010622863 | 6.92E-06    | 6.96E-05    | 0.000211895 | 2.98E-05    | 1.95E-05    | 1.90E-05    | 5.45E-05    | 4.71E-05    |
| 0.018903929 | 8.08E-05    | 0.000481283 | 1.65E-05    | 0.000513449 | 0.001351774 | 9.85E-05    | 0           | 7.52E-05    | 2.33E-05    |
| 0.0171816   | 0.010378048 | 1.16E-05    | 0.00492504  | 0.000351846 | 0.000435904 | 0.000116481 | 0.000468727 | 0           | 0.00012849  |
| 0           | 0           | 1.29E-05    | 1.04E-05    | 4.99E-05    | 1.18E-05    | 1.26E-05    | 0.03278008  | 5.21E-05    | 0.000317919 |
| 0.004760569 | 0.000527213 | 0.000910114 | 0.004711218 | 0.00020966  | 7.35E-05    | 7.90E-05    | 7.28E-05    | 0.053393799 | 0.045070716 |
| 1.39E-05    | 2.40E-05    | 0           | 1.45E-05    | 0           | 7.81E-05    | 0           | 0           | 2.23E-05    | 0           |
| 0.007013277 | 0.000383032 | 0.00106963  | 0.008408419 | 0.000257682 | 0.000172896 | 0.000160594 | 0.000118035 | 0.085974077 | 0.004516587 |
| 0.007103855 | 0.000254178 | 0.001549042 | 0.001815371 | 0.000243998 | 5.25E-05    | 5.19E-05    | 3.28E-05    | 0.031679675 | 0.105287926 |
| 0           | 2.57E-05    | 0           | 0           | 0           | 3.98E-05    | 0           | 0           | 0           | 0.00047381  |
| 0.001217724 | 2.55E-05    | 1.15E-05    | 0.002516863 | 4.02E-05    | 0.000182627 | 4.50E-05    | 0.007989916 | 4.37E-05    | 8.88E-05    |
| 7.92E-05    | 0.000194851 | 0.000454422 | 0.000281604 | 0.081446238 | 0.000101901 | 0.001656576 | 0.053715923 | 0.000159277 | 0.000190261 |
| 6.39E-06    | 2.97E-05    | 2.70E-06    | 5.40E-06    | 1.99E-05    | 4.69E-06    | 0           | 4.42E-05    | 7.81E-06    | 0           |
| 0.007274433 | 0.000681515 | 0.003241971 | 0.002873353 | 9.51E-05    | 0.000195869 | 9.91E-05    | 0.008314176 | 5.87E-05    | 0.005298987 |
| 0.000696466 | 0.000132581 | 0.001379708 | 0.000161253 | 0.000221153 | 0.000107576 | 7.30E-05    | 0.029046551 | 0.000252382 | 0           |
| 8.54E-05    | 0.000354731 | 8.45E-05    | 0.000217328 | 0.000417097 | 0.000113054 | 0.028100384 | 0.000367279 | 0.000181838 | 6.65E-05    |

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|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |             |             |             |             |
| Control046  | Control045  | Control044  | Control043  | Control042  | Control041  | Control040  | Control039  | Control038  | Control037  |
| 0.000163062 | 0.000375351 | 0.184841968 | 0.000313818 | 0.000264592 | 0.000301512 | 0.000227672 | 8.31E-05    | 0.053601371 | 0.005368752 |
| 0.000364663 | 0           | 0.000615369 | 0.000176634 | 0           | 0           | 0           | 0.000868924 | 0.004549741 | 0.000188029 |
| 0.000477563 | 0.0004888   | 0.000432616 | 0.000415761 | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0.001701133 | 0           | 0.000142676 | 0           | 0           | 0.001399319 | 0.00668655  | 0           | 0           |
| 0.010159841 | 0.005968533 | 0.002620929 | 0.000263998 | 0.000566099 | 0.002844102 | 0.000168741 | 0.001875202 | 0.003301336 | 0.00142069  |
| 0.000145226 | 0.000116181 | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.027609179 | 0.002311466 | 0.000154622 | 0.000380003 | 0.000537246 | 0.005933287 | 0.000269933 | 0.000744282 | 0.000214898 | 0           |
| 0           | 0.007612876 | 0           | 0.000196709 | 0.000235147 | 0           | 0.000323327 | 0.022440688 | 0.000117573 | 0.000126617 |
| 0           | 0.008554525 | 0.00099714  | 0           | 0.000242067 | 0           | 0.000313133 | 0.008423498 | 0.000306471 | 0           |
| 0.000242318 | 0.000979367 | 0.001096487 | 0.001413519 | 0.000636084 | 0.561397203 | 0           | 0           | 0           | 0           |
| 8.76E-05    | 0.003511025 | 0           | 0           | 0.001413554 | 0           | 0.001205903 | 0.000241943 | 0.054259903 | 0.000260993 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.000191301 | 0.011978158 | 0.034805124 | 0.000424555 | 0.000303733 | 0.018193778 | 0.000775274 | 8.39E-05    | 0.000135925 | 7.55E-05    |
| 0.000256973 | 0.000701258 | 0.000733767 | 0.000770919 | 0.000289482 | 0.238548443 | 0.001500042 | 0.000571223 | 0.00080188  | 0.000507754 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 8.21E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0.00034802  | 3.02E-05    | 0           | 0.038462094 |
| 0.000621698 | 0.00057757  | 0.00013628  | 0.000778745 | 0.00531364  | 0.000498397 | 0.000407543 | 0           | 0           | 0           |
| 7.32E-05    | 0.009056622 | 7.70E-05    | 0           | 0.000118102 | 0.000139925 | 7.96E-05    | 0.01997335  | 0.000320929 | 0           |
| 0           | 0           | 0           | 0           | 0           | 7.02E-05    | 0           | 3.04E-05    | 0           | 0           |
| 0.000358988 | 0.010367898 | 0.032657985 | 0.000532019 | 0.000598645 | 0.019430114 | 7.26E-05    | 2.09E-05    | 0.000409704 | 3.88E-05    |
| 0           | 0           | 0.001356672 | 5.98E-05    | 0           | 0           | 0.009706903 | 0           | 2.51E-05    | 4.24E-05    |
| 0           | 0.007938378 | 0.000103142 | 0.000177831 | 0           | 0.000103142 | 0.000352995 | 0.022449392 | 0.000236515 | 7.38E-05    |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 4.17E-05    | 0.008277605 | 0.000238527 | 0.000148784 | 0.000238527 | 0           | 0.00032827  | 0.022416053 | 3.78E-05    | 8.82E-05    |
| 8.85E-05    | 0.004861569 | 3.76E-05    | 0.0001661   | 0.000908067 | 0.000188822 | 0.002138934 | 6.50E-05    | 0.061586399 | 0.00024445  |
| 0.000116428 | 0.000524936 | 0.001162935 | 0.000144694 | 0.000137964 | 0.000107679 | 0.000134599 | 0.001245714 | 7.60E-05    | 2.76E-05    |
| 0           | 0           | 0           | 0           | 0           | 0.005745517 | 7.77E-05    | 0           | 0           | 0.002692999 |
| 3.02E-05    | 4.26E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 2.05E-05    | 0           |
| 2.60E-05    | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.000109916 | 0           |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           | 2.49E-05    | 0.001641825 | 0.001032018 | 0           | 4.08E-05    |
| 0           | 2.06E-05    | 0           | 0           | 0           | 7.47E-05    | 0           | 0           | 0           | 0           |
| 0.022658938 | 3.29E-05    | 0.003247184 | 4.54E-05    | 0.004995535 | 0           | 2.68E-05    | 1.43E-05    | 0.002026841 | 0.000578171 |
| 0           | 4.91E-05    | 2.41E-05    | 0.00115516  | 0.000323268 | 2.81E-05    | 0.227703568 | 0.007147274 | 0.000318041 | 0.000185758 |
| 0.017070722 | 0.001610725 | 0.000202141 | 0.001463022 | 0.014406461 | 5.96E-05    | 0.001298507 | 2.00E-05    | 0.003215045 | 0.001038325 |
| 0.000117556 | 0.022359347 | 0.000106836 | 0.00018114  | 0.000408859 | 0.000112381 | 0.000312744 | 0.000112381 | 0.04362298  | 0.000164135 |
| 0.000248801 | 0.012509811 | 0.043531963 | 0.000370648 | 0.000497942 | 0.018442228 | 0.00044825  | 3.64E-05    | 0.000320616 | 0.000156904 |
| 0           | 0           | 0           | 0           | 0           | 0           | 2.57E-05    | 5.07E-06    | 0           | 0           |
| 0.000111053 | 0.004199056 | 0.047704783 | 0.000616442 | 0.000578538 | 0.029071204 | 0.000917349 | 0.000104735 | 0.000250367 | 4.12E-05    |
| 0.000310334 | 0.029002922 | 0.032384412 | 0.000542181 | 0.000532658 | 0.022928258 | 0.000288331 | 3.35E-05    | 0.000976649 | 4.83E-05    |
| 0.000398424 | 0.000507173 | 0.000332982 | 0.272409747 | 0.000468998 | 0.000365062 | 0.000164887 | 5.45E-05    | 0.000214931 | 5.65E-05    |
| 7.15E-05    | 0.006280824 | 9.45E-05    | 0.000208169 | 0.00067144  | 7.09E-05    | 0.000913453 | 8.91E-05    | 0.087404732 | 0.000135693 |
| 0.000110851 | 0.000162949 | 0.000106491 | 0.000229277 | 0.000181769 | 7.44E-05    | 8.68E-05    | 4.43E-05    | 0.01437512  | 0.000148031 |
| 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 0.013685899 | 0.00617741  | 0.002841791 | 0.00050422  | 0.0003555   | 0.002746843 | 0.000187686 | 0.00210845  | 0.003425501 | 0.000748277 |
| 7.22E-06    | 0.002372342 | 0.000364959 | 4.90E-05    | 0.000820379 | 7.22E-06    | 0.000184702 | 0.001610197 | 0.001602084 | 0.000158475 |
| 6.17E-05    | 0.010038573 | 0.000196498 | 0.000249505 | 0.000103405 | 7.89E-05    | 0.000316964 | 0.0266017   | 0.000174467 | 9.74E-05    |

|             |             |             |             |             |              |              |              |              |              |
|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
|             |             |             |             |             |              |              |              |              |              |
| Control036  | Control035  | Control034  | Control048  | Control132  | COVID-19-051 | COVID-19-046 | COVID-19-050 | COVID-19-049 | COVID-19-048 |
| 0.000384581 | 0.000323048 | 9.23E-05    | 0           | 0.001356802 | 0            | 0            | 0            | 0            | 0            |
| 0.000162389 | 0.014233253 | 0.00018518  | 0.000250706 | 0           | 0.001039859  | 0.000128202  | 0.044035908  | 0            | 0.006333171  |
| 0           | 0.00055622  | 0           | 0           | 0           | 0            | 0            | 0            | 0            | 0            |
| 0           | 0.025190486 | 6.59E-05    | 0.000238707 | 0           | 0.000172857  | 0.009482444  | 0.000186576  | 0            | 0.046616529  |
| 0.000166019 | 0.000655913 | 0.001747286 | 0           | 0.121264904 | 0            | 0            | 0            | 0            | 0            |
| 0           | 0           | 0           | 0           | 0           | 0            | 0            | 0            | 0            | 0            |
| 0.009390004 | 0.000940835 | 0.002416295 | 0.001876428 | 0           | 0            | 0            | 0            | 0            | 0.000241105  |
| 6.33E-05    | 0.024371604 | 0           | 0.000411507 | 0.000965458 | 0            | 0.00909837   | 0            | 0            | 0.020120874  |
| 0.000226522 | 0.029105817 | 8.22E-05    | 0           | 0           | 0            | 0.002176385  | 0.000286483  | 0            | 0.053066038  |
| 0           | 0           | 0           | 0           | 0.003560048 | 0            | 0            | 0            | 0            | 0            |
| 0.000325765 | 0.000198126 | 0.027099471 | 0           | 0           | 0.019345879  | 0            | 0.094879581  | 0.000220987  | 0.00017336   |
| 0           | 0           | 0           | 0           | 0           | 0            | 0            | 0            | 0            | 0            |
| 0.000119144 | 0.001209898 | 0.000270171 | 0.000129212 | 0           | 0.047328659  | 0            | 0.00758158   | 0.000172843  | 0.000161096  |
| 0.001560415 | 0.001365363 | 0.001009316 | 0           | 0.000688874 | 0            | 0            | 0            | 0            | 0            |
| 0           | 0           | 0           | 0           | 0           | 0            | 0            | 0            | 0            | 0            |
| 0           | 0           | 0           | 0.00238438  | 0           | 0            | 0            | 0            | 0            | 0            |
| 4.03E-05    | 0           | 0           | 0.000168533 | 0           | 0            | 0.000177176  | 0            | 0            | 0.000122439  |
| 4.20E-05    | 0.000133955 | 0.000122135 | 0.000126075 | 0.000566025 | 0            | 0            | 0.00017204   | 0            | 0            |
| 0           | 0           | 0           | 0.008729736 | 0.002273937 | 0            | 0            | 0.000625592  | 0            | 0            |
| 8.47E-05    | 0.015481625 | 0.000141209 | 0           | 0.000582807 | 0            | 0.011799925  | 8.22E-05     | 0.000277283  | 0.061457943  |
| 0           | 0           | 0           | 0           | 0           | 5.85E-05     | 0.000205804  | 0            | 0            | 0.000289997  |
| 8.65E-05    | 0.003455635 | 7.46E-05    | 0.000728915 | 0           | 0.03534791   | 5.97E-05     | 0.003744019  | 0.000239657  | 0.000162092  |
| 2.41E-05    | 0           | 0.011115643 | 8.29E-05    | 0           | 0            | 0            | 0.000383764  | 0            | 0            |
| 0.000194725 | 0.018606463 | 0.000123593 | 0.000405455 | 0.000826914 | 4.89E-05     | 0.010028782  | 5.33E-05     | 0            | 0.033624295  |
| 4.88E-05    | 3.83E-05    | 0           | 0           | 0           | 0            | 3.99E-05     | 0            | 0            | 0            |
| 0.000109423 | 0.019407303 | 0.000184209 | 0.000266867 | 0.000373929 | 0.000100764  | 0.006501639  | 0            | 0.000181848  | 0.024303016  |
| 0.000302428 | 0.000196657 | 0.037474429 | 7.52E-05    | 0           | 0.010798872  | 4.70E-05     | 0.084009944  | 8.93E-05     | 0            |
| 0.000156808 | 0.029123861 | 4.78E-05    | 5.52E-05    | 0.000951615 | 8.14E-05     | 0.002608529  | 8.75E-05     | 0.000154116  | 0.012618657  |
| 0           | 2.90E-05    | 2.65E-05    | 0.000432286 | 0           | 0            | 2.59E-05     | 4.63E-05     | 0            | 0.000123951  |
| 6.36E-05    | 0           | 0           | 0           | 0           | 0            | 0            | 0            | 0            | 0            |
| 0           | 0           | 1.88E-05    | 0           | 0           | 0.00164093   | 0.268450957  | 0.002087888  | 0.001652912  | 0.000772019  |
| 0           | 0           | 0           | 0           | 0           | 0            | 0            | 0            | 0            | 0            |
| 1.20E-05    | 0           | 2.83E-05    | 0.000127143 | 0           | 0            | 0.000204388  | 0            | 0            | 0.000210626  |
| 0           | 0           | 0           | 0           | 0           | 0.000720978  | 0.049690506  | 0.00141992   | 0.0036619    | 0.000125033  |
| 5.62E-05    | 0.001970192 | 3.24E-05    | 4.02E-05    | 0           | 0.000251247  | 4.06E-05     | 0.000392655  | 0.000162597  | 7.61E-05     |
| 0.00029271  | 0.002900565 | 0.010108552 | 3.74E-05    | 0.000193398 | 5.27E-05     | 6.27E-05     | 0            | 5.19E-05     | 0.000808572  |
| 7.65E-05    | 0.000167317 | 4.08E-05    | 0.000116481 | 0.000910636 | 2.40E-05     | 6.96E-05     | 0.00015731   | 3.80E-05     | 6.40E-05     |
| 0.000243985 | 0.000178183 | 0.038345887 | 9.46E-05    | 0.001152643 | 0.010859536  | 1.89E-05     | 0.071025046  | 0.000259141  | 0            |
| 6.40E-05    | 0.001446516 | 9.05E-05    | 0.001306289 | 0.001079611 | 0.046922256  | 0            | 0.003248705  | 8.13E-05     | 2.82E-05     |
| 8.11E-06    | 0           | 0           | 0           | 0           | 5.75E-05     | 0            | 2.20E-05     | 0            | 0            |
| 0.000135325 | 0.001996954 | 8.61E-05    | 0.001889891 | 0.000753762 | 0.057044848  | 6.28E-05     | 0.001877921  | 0            | 5.79E-05     |
| 9.26E-05    | 0.001146429 | 3.58E-05    | 0.000649238 | 0.001161207 | 0.0324606    | 0            | 0.004276697  | 0            | 5.29E-05     |
| 0.000130883 | 0.000222951 | 8.79E-05    | 0           | 0.002027086 | 0            | 1.76E-05     | 0            | 0            | 0            |
| 0.000380259 | 0.00014591  | 0.020654372 | 0.000262446 | 0.000290223 | 0.009883869  | 0            | 0.084968326  | 0.000178157  | 2.65E-05     |
| 8.84E-05    | 0.000145736 | 0.0567617   | 0.000178556 | 0.000722485 | 1.17E-05     | 9.09E-05     | 0            | 0            | 1.81E-05     |
| 0           | 0           | 0           | 1.26E-05    | 0           | 0            | 0            | 0            | 0            | 0            |
| 0.000150539 | 0.001081047 | 0.002122478 | 6.88E-05    | 0.105672034 | 0            | 0            | 8.18E-06     | 0            | 0            |
| 0.003486    | 9.51E-05    | 0.000108465 | 0.002165858 | 0.000206817 | 0            | 0            | 1.53E-05     | 2.68E-05     | 0            |
| 0.000197657 | 0.022770635 | 0.000162333 | 0.000259775 | 0.00039548  | 5.93E-05     | 0.007728347  | 0.000120797  | 7.90E-05     | 0.021563654  |

|              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              |              |              |              |              |              |              |              |              |              |
| COVID-19-047 | COVID-19-045 | COVID-19-040 | COVID-19-043 | COVID-19-042 | COVID-19-041 | COVID-19-039 | COVID-19-038 | COVID-19-052 | COVID-19-044 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0.000111108  | 0.000193727  | 0            | 0.004068272  | 0.00260962   | 0.074867026  | 0.000267799  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.000170113  | 0.00441197   | 0.001404807  | 0.005240587  | 0.001015192  | 0.002987958  | 0.052715914  | 0.045601337  | 0            | 0.057437929  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00025039   |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.000118821  | 0            | 0            |
| 0            | 0            | 0            | 0.00092249   | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.00114634   | 0.004085675  | 0            | 0.000438639  | 0.018563027  | 0.028077427  | 0.00090215   | 0.025981455  |
| 0            | 0.001423533  | 0.000539655  | 0.00030425   | 0.000448602  | 0.000504122  | 0.031952883  | 0.014439648  | 0.016318445  | 0.009185233  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.000118114  | 0            | 0.000253373  | 0.001270675  | 0            | 0.000432448  | 0            | 0            | 0.000394347  | 0            |
| 0            | 0            | 0            | 0.000103415  | 0            | 0            | 0            | 0            | 0            | 0            |
| 9.90E-05     | 0.000563836  | 0            | 0            | 0            | 0            | 0.000112432  | 0            | 0.000735     | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.000179953  | 0            | 0            | 0.000291698  | 0            | 0            | 0.001326429  | 0            |
| 0            | 0            | 0.000358673  | 0.000289531  | 9.07E-05     | 0.000342828  | 0.000148367  | 7.20E-05     | 0            | 0.000123879  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0.000977326  | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.001631604  | 0.001335065  | 0.009726722  | 0.000657263  | 0.001677818  | 0.043154708  | 0.059437373  | 0.000274715  | 0.059033002  |
| 0.001454663  | 0.001514299  | 0.000168385  | 0.002887108  | 0.000226853  | 0.000261933  | 9.94E-05     | 0.00012512   | 0            | 0.00042798   |
| 0            | 0.000306284  | 0            | 4.28E-05     | 0            | 0            | 0            | 5.27E-05     | 0.003781807  | 0            |
| 0            | 0            | 0            | 0            | 0            | 0.000215988  | 0            | 0            | 0            | 9.45E-05     |
| 0            | 0.001421759  | 0.000662421  | 0.004832559  | 0.000377891  | 0.001366632  | 0.039739015  | 0.034558797  | 0.000826025  | 0.038464856  |
| 0            | 0            | 0            | 4.07E-05     | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.00127923   | 0.000717156  | 0.004010092  | 0.00020389   | 0.001520119  | 0.022472733  | 0.026906349  | 0.001123361  | 0.023150528  |
| 0.00015043   | 0.000767822  | 0            | 0.000759987  | 5.01E-05     | 0            | 0            | 0            | 0.000161399  | 0            |
| 0.000117774  | 0.000644056  | 0.000275928  | 0.001409252  | 3.84E-05     | 0.00060435   | 0.010782727  | 0.00537252   | 0.000263141  | 0.009643346  |
| 0            | 0            | 7.59E-05     | 0.017616421  | 0            | 0            | 5.12E-05     | 9.00E-05     | 0            | 6.60E-05     |
| 0            | 0            | 0            | 0.00013843   | 0            | 0            | 0            | 2.75E-05     | 0            | 0            |
| 0.000644391  | 0.004145562  | 0.293619699  | 0.001206474  | 0.000832446  | 0.00225667   | 0.000684502  | 0.000815256  | 0.002193637  | 0.000898605  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 8.35E-05     | 0.001066563  | 0.00031282   | 0.000174642  | 3.31E-05     | 0            | 0.00024661   | 9.88E-05     | 0            | 0.000344006  |
| 0.000145633  | 0.000936074  | 0.005936934  | 0.00012695   | 9.49E-05     | 0.00085703   | 4.46E-05     | 0.000140363  | 0.001104223  | 0.000103955  |
| 0.001641971  | 0.000128434  | 0.00010465   | 6.01E-05     | 0.00059936   | 9.90E-05     | 0.000103785  | 5.49E-05     | 0.002548795  | 4.37E-05     |
| 2.33E-05     | 0.000777612  | 0            | 0.003100396  | 3.02E-05     | 0            | 9.13E-05     | 0.000141128  | 0.001320412  | 3.50E-05     |
| 0.007209035  | 0.000507554  | 0.000107275  | 0.034658205  | 0.000135294  | 0.037245612  | 0.000102472  | 0.000107675  | 4.00E-05     | 0.000170119  |
| 2.33E-05     | 0.000237331  | 0            | 0.000444348  | 3.18E-05     | 8.13E-05     | 0.000156002  | 1.81E-05     | 0            | 0            |
| 0            | 0.000551718  | 0            | 3.17E-05     | 2.01E-05     | 6.71E-05     | 7.93E-05     | 7.56E-05     | 0.001088801  | 4.22E-05     |
| 0            | 0            | 0            | 0.000378525  | 0            | 0            | 2.87E-05     | 0            | 0.015346165  | 0            |
| 0            | 0.00084819   | 4.75E-05     | 1.60E-05     | 2.33E-05     | 6.98E-05     | 2.89E-05     | 7.15E-05     | 0.001960047  | 6.28E-05     |
| 2.33E-05     | 0.000203605  | 0            | 1.64E-05     | 0            | 0            | 5.45E-05     | 3.05E-05     | 0.002009782  | 3.32E-05     |
| 0            | 0            | 0.000290959  | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.000255103  | 0.000312892  | 0            | 0.000654519  | 0            | 6.45E-05     | 0            | 0            | 0.000203699  | 2.84E-05     |
| 0.015833632  | 0.082395246  | 9.32E-05     | 3.58E-05     | 4.89E-05     | 0.000353899  | 0.000188884  | 8.12E-05     | 0            | 0.000138392  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 1.96E-05     | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 1.80E-05     | 5.45E-06     | 0            | 2.58E-05     | 0            | 0            | 0            | 0            |
| 2.15E-05     | 0.000911592  | 0.000527169  | 0.003902873  | 0.00021124   | 0.001548046  | 0.019899324  | 0.024445857  | 0.001121259  | 0.022951604  |



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|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              |              |              |              |              |              |              |              |              |              |
| COVID-19-053 | COVID-19-065 | COVID-19-055 | COVID-19-071 | COVID-19-070 | COVID-19-069 | COVID-19-068 | COVID-19-067 | COVID-19-066 | COVID-19-037 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.000169216  | 0            | 0.047681899  |
| 0.017694703  | 0.000495714  | 0.004971383  | 0            | 0            | 0            | 0            | 0.00055839   | 0.000262102  | 0.015697603  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.001106822  |
| 0.032030686  | 0.000773741  | 0.000150907  | 0.000134444  | 0            | 0.000142676  | 0            | 0            | 0.004000406  | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.001119043  | 0            | 0.005873011  | 0.000757385  | 0.069464537  | 0.014838459  | 0            | 0            | 0.000167725  | 0            |
| 0.008234658  | 0.000165055  | 0            | 4.07E-05     | 0            | 0.00028715   | 0            | 0            | 0.01654167   | 0.000624043  |
| 0.015012614  | 0.000182106  | 0            | 4.44E-05     | 0            | 0.000102157  | 0.000113261  | 0            | 0.00011104   | 0.000282042  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.000885853  | 0.000140974  | 0            | 0            | 0            | 0            | 0            | 0            | 0.000287664  | 0.019404936  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 4.89E-05     | 0            |
| 0            | 0            | 0.000350719  | 0            | 0            | 0.00056887   | 0.014275454  | 0            | 0            | 0.030272621  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.001155243  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.000242709  | 0            | 0            | 0            | 0.000197282  | 0.070733448  | 0            | 0.015511311  | 0.0053383    |
| 0.01131468   | 0.000351738  | 0            | 0            | 6.80E-05     | 0            | 0            | 0            | 0.003620081  | 0            |
| 0.000130966  | 9.00E-05     | 6.08E-05     | 0            | 0            | 5.85E-05     | 0.076797777  | 0            | 0.01199746   | 0.000785799  |
| 0.000120326  | 0            | 6.26E-05     | 0.001482691  | 0            | 5.57E-05     | 0.000287389  | 0            | 0            | 0.039351474  |
| 0            | 8.00E-05     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.013052799  | 0.000466807  | 8.98E-05     | 0.000168939  | 8.98E-05     | 0.000305869  | 9.78E-05     | 0            | 0.009874069  | 0            |
| 0            | 0            | 0            | 0            | 0            | 3.99E-05     | 7.73E-05     | 0            | 0.000871688  | 0            |
| 0.0080808    | 0.000352674  | 5.75E-05     | 0.000154295  | 0            | 9.60E-05     | 0            | 0            | 0.012675009  | 8.50E-05     |
| 0.000324366  | 0.000466961  | 0.000148864  | 0            | 0            | 0            | 0            | 0            | 0.000148864  | 0.013718164  |
| 0.00071001   | 0.000574738  | 0            | 1.41E-05     | 0            | 0.00025843   | 3.16E-05     | 5.11E-05     | 0.037571295  | 8.55E-05     |
| 0            | 0            | 0            | 0.010450095  | 0            | 0            | 0            | 0            | 0            | 8.08E-05     |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 5.44E-05     | 0            |
| 0.002448372  | 0            | 0.001305972  | 3.65E-05     | 0.000108353  | 9.27E-05     | 2.71E-05     | 0.047329634  | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.00107771   | 0            |
| 0            | 0.000192874  | 0.001074239  | 0.15864002   | 2.64E-05     | 0.015627564  | 0.007209253  | 6.72E-05     | 0.001266153  | 0.000753263  |
| 0.001844364  | 0            | 0.000710439  | 0.000142759  | 0.000124075  | 0.000244797  | 6.66E-05     | 0.001163147  | 6.42E-05     | 0            |
| 0.011444498  | 3.37E-05     | 2.59E-05     | 0.105186024  | 0.163942373  | 0.069358455  | 0.114427245  | 0.000123678  | 0            | 0.008218935  |
| 0            | 3.94E-05     | 0.001547182  | 0            | 0            | 0            | 0            | 0            | 3.14E-05     | 0            |
| 0.001003501  | 0.000172921  | 2.48E-05     | 0            | 2.16E-05     | 2.12E-05     | 0.003789447  | 0            | 0.006768727  | 0.001015509  |
| 0.00035156   | 0.000227719  | 8.80E-05     | 0            | 0            | 0            | 1.52E-05     | 3.33E-05     | 0.00015859   | 0.021187111  |
| 0.000196726  | 3.37E-05     | 0.000313469  | 3.00E-05     | 0            | 0.000255948  | 0            | 2.38E-05     | 1.16E-05     | 0.023667384  |
| 3.79E-05     | 0            | 0.0054751    | 9.29E-05     | 0.000128428  | 0.0001264    | 6.25E-05     | 0.000204471  | 0            | 8.04E-05     |
| 0.000120363  | 3.46E-05     | 2.09E-05     | 0.000827243  | 0            | 0.001639524  | 0            | 0            | 2.56E-05     | 0.012677298  |
| 0.000103445  | 0            | 5.16E-05     | 8.54E-06     | 5.39E-05     | 0.001470227  | 3.12E-05     | 2.53E-05     | 2.43E-05     | 0.033820486  |
| 0            | 0            | 0            | 1.41E-05     | 3.24E-05     | 0            | 2.98E-05     | 2.18E-05     | 0.000586729  | 0            |
| 4.05E-05     | 0.000169856  | 0.000150699  | 0            | 1.37E-05     | 0            | 0            | 4.31E-05     | 0.000210085  | 0.01492462   |
| 2.46E-05     | 0.129965682  | 1.38E-05     | 0            | 0            | 0            | 0            | 0            | 0.000281604  | 3.33E-05     |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 1.43E-05     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 2.73E-06     | 0            |
| 0            | 0            | 0            | 0.001521402  | 0            | 0.006186516  | 0.00240546   | 7.56E-06     | 0.000280609  | 5.58E-05     |
| 0.011696153  | 0.000381939  | 2.85E-05     | 0.000190866  | 2.63E-05     | 0.000345704  | 2.06E-05     | 5.33E-05     | 0.014071188  | 0.000230165  |

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|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              |              |              |              |              |              |              |              |              |              |
| COVID-19-064 | COVID-19-063 | COVID-19-062 | COVID-19-061 | COVID-19-060 | COVID-19-059 | COVID-19-058 | COVID-19-056 | COVID-19-054 | COVID-19-036 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.000193829  |
| 0.00508534   | 0.001441558  | 0            | 0.099578643  | 0.003538371  | 0.000287742  | 0.000689441  | 0            | 0.000934449  | 0.000259253  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.006837457  | 0            | 0.000200295  | 0.00034297   | 0.006530155  | 0            | 0            | 0.000359433  | 0            | 0.000227732  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0.005967356  | 0            | 0            | 0            | 0.004814244  | 0            | 0.000372141  |
| 0.015499336  | 0.001854042  | 0.001304612  | 0.000664742  | 0.007660358  | 0            | 0            | 0.000764227  | 0            | 0.001304612  |
| 0.016151885  | 0.00013769   | 0.000697331  | 0.001841044  | 0.019169953  | 0            | 0            | 0.000648474  | 0            | 0.005585314  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.001200187  | 0.00030862   | 0.000381012  | 0            | 0            | 0            | 0.000163835  | 0.000506746  | 8.76E-05     | 0.000293379  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.000101535  | 0            |
| 0.003539078  | 0            | 0.005539353  | 0            | 0.000167808  | 0            | 0.000149349  | 0.000374213  | 0            | 0.002943358  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.070430955  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.020479707  | 9.34E-05     | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.0036817    | 0.000136074  | 0.000216948  | 0.000558417  | 0.003115581  | 0.000127088  | 0.000119386  | 0.000364576  | 0            | 0.000708612  |
| 0            | 0            | 5.15E-05     | 0            | 0            | 0            | 0            | 0.009275229  | 0            | 0.066436228  |
| 0.00143297   | 0            | 0.003243822  | 0            | 0.000218774  | 0            | 7.36E-05     | 0.000409704  | 0            | 0.004634031  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.024776311  | 0.001134562  | 0.000511264  | 0.000971847  | 0.012826953  | 0.000266747  | 0            | 0.000728218  | 4.62E-05     | 0.001141675  |
| 0            | 0            | 0            | 0            | 0            | 0            | 6.76E-05     | 0            | 3.34E-05     | 0            |
| 0.015767204  | 0.001198147  | 0.000758879  | 0.00093679   | 0.011424118  | 0            | 0            | 0.000694327  | 6.85E-05     | 0.00071322   |
| 0.000595454  | 0.000192739  | 0.002488371  | 0.000230347  | 7.52E-05     | 0            | 6.58E-05     | 4.54E-05     | 0.000251501  | 0.000113606  |
| 0.044441902  | 0.001718829  | 0.002522385  | 0.000526282  | 0.01854236   | 8.48E-05     | 0            | 4.11E-05     | 0.000102295  | 0.000666265  |
| 0            | 0.000313885  | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 4.56E-05     |
| 0            | 0            | 0            | 3.82E-05     | 0            | 0            | 0            | 0            | 5.49E-05     | 0            |
| 5.21E-05     | 7.24E-05     | 0            | 0.000241191  | 0.000152112  | 0.000125544  | 0.2137835    | 0.001093432  | 0.002390028  | 0.000486028  |
| 0            | 0.030615326  | 0.001439936  | 0            | 5.38E-05     | 0.000812144  | 0.000332331  | 0            | 0            | 0            |
| 0.023271502  | 0.000235095  | 0.026573384  | 0.015426054  | 0.000324335  | 5.23E-05     | 7.72E-05     | 0.000280674  | 0            | 0.070885386  |
| 0.000168148  | 2.73E-05     | 0            | 0            | 0.000260127  | 5.32E-05     | 0.018339201  | 0.000712835  | 0.001309738  | 7.52E-05     |
| 0.003228589  | 0.004318768  | 0            | 0            | 0.000563468  | 8.78E-05     | 0.000146164  | 0.009407278  | 0            | 0.018196167  |
| 1.53E-05     | 2.25E-05     | 3.14E-05     | 0.000927586  | 3.90E-05     | 0.015367685  | 0.000232399  | 0.000596678  | 0.000358248  | 0            |
| 0.006334024  | 0.001198837  | 0.000805763  | 4.44E-05     | 4.28E-05     | 0            | 0            | 0.002174319  | 2.28E-05     | 0.01509134   |
| 5.43E-05     | 0.000173747  | 4.99E-05     | 0.000164874  | 0            | 4.25E-05     | 0            | 0.001061333  | 0.000184467  | 0.000257293  |
| 0.002442059  | 1.94E-05     | 0.006949063  | 3.10E-05     | 0            | 0            | 3.30E-05     | 0.000249822  | 9.84E-05     | 0.002179985  |
| 7.77E-06     | 0            | 0            | 0            | 0.155916995  | 0.308944353  | 0.159110127  | 0.001747638  | 0.00012809   | 0.002931206  |
| 0.005385391  | 3.29E-05     | 0.008681728  | 9.34E-05     | 0            | 0            | 0            | 0.000677953  | 0.000156937  | 0.003458261  |
| 0.003228786  | 2.53E-05     | 0.012816627  | 6.76E-05     | 0            | 3.68E-05     | 0            | 0.000204919  | 5.35E-05     | 0.001712912  |
| 3.37E-05     | 0.011416997  | 0.002188766  | 4.72E-05     | 0.000111315  | 0            | 0            | 0            | 0            | 0            |
| 0.000878332  | 0.000270747  | 0.000148783  | 0.000305868  | 7.02E-05     | 0            | 0.000110789  | 0.000188374  | 0.000131223  | 0.000201783  |
| 0            | 0.08584197   | 0.028106246  | 0.000540717  | 0            | 0            | 0            | 2.94E-05     | 0            | 5.94E-05     |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.001032642  | 0            | 3.89E-06     | 0            | 1.22E-05     | 1.13E-05     | 0            | 0            | 0            | 3.29E-05     |
| 0.022774155  | 0.00148829   | 0.001148218  | 0.000881486  | 0.014034456  | 9.58E-05     | 6.41E-05     | 0.001412921  | 8.75E-05     | 0.001188387  |

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|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              |              |              |              |              |              |              |              |              |              |
| COVID-19-057 | COVID-19-034 | COVID-19-014 | COVID-19-013 | COVID-19-012 | COVID-19-011 | COVID-19-010 | COVID-19-009 | COVID-19-015 | COVID-19-008 |
| 0            | 0.011922013  | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.000267799  | 0.000760664  | 0.00047862   | 0.010344464  | 0.001962913  | 0            | 0.000487167  | 0.008589523  | 0.000854679  |
| 0            | 0            | 0            | 0            | 0.000191025  | 0.000275301  | 0            | 0            | 0            | 0            |
| 0.003410497  | 0.000776485  | 0.026941006  | 0.027001369  | 0.000205782  | 0.019296883  | 0.032672727  | 0.032527307  | 0.005303693  | 0.019895024  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.002220328  | 0            | 0.017516172  | 0.021106682  | 0.001587241  | 0.021472968  | 0.023989491  | 0.025061217  | 0.004931299  | 0.010975022  |
| 0.000641811  | 0.000428615  | 0.00379979   | 0.019247681  | 0.002185268  | 0.051398216  | 0.005030114  | 0.001181466  | 0.009740433  | 0.003455566  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.005332261  | 0.011725641  | 0            | 0.006530544  | 0.002688039  | 0.007324954  | 0.07143973   | 0.002865209  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.01327196   | 0            | 0.0001225    | 0.000594041  | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0.000612421  | 0            | 0            | 0            | 0            |
| 0            | 0.12983092   | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.000359839  | 0            | 0            | 0.02444806   | 0            | 0            | 0            | 0            |
| 0            | 0.002780121  | 0            | 0            | 0            | 0.002175296  | 0            | 0.000266071  | 0            | 0            |
| 0.000854955  | 0            | 0.0260556    | 0.028246905  | 0.000292687  | 0.023878417  | 0.032547356  | 0.025198078  | 0.004024452  | 0.013496999  |
| 0            | 0.004406085  | 0            | 8.07E-05     | 0            | 0.00037419   | 0            | 0            | 6.31E-05     | 0            |
| 0            | 0.017077299  | 0            | 0.000281423  | 6.07E-05     | 9.35E-05     | 0.000116348  | 0            | 0            | 0.000271479  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.003792247  | 0            | 0.031943791  | 0.02564057   | 0.004260832  | 0.01572471   | 0.026643537  | 0.025368488  | 0.007425335  | 0.019012807  |
| 5.21E-05     | 0            | 0            | 5.29E-05     | 0            | 0.000684491  | 0            | 0            | 0.000236845  | 0            |
| 0.003621206  | 0.000142487  | 0.028856289  | 0.024400631  | 0.002381337  | 0.020274818  | 0.029930056  | 0.025793221  | 0.006825973  | 0.015309042  |
| 0            | 7.21E-05     | 0.002063718  | 0.009738807  | 5.17E-05     | 0.00535987   | 0.0028762    | 0.006542159  | 0.095052482  | 0.000651082  |
| 0.004593864  | 0.000922003  | 0.021391148  | 0.017890901  | 0.000236894  | 0.018503326  | 0.024855054  | 0.020861501  | 0.01074302   | 0.012663748  |
| 0            | 0            | 0            | 4.87E-05     | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.000135442  | 0            | 0            | 0            | 0.000105749  | 0            | 5.83E-05     | 0            | 0.000396428  | 0            |
| 0.00010513   | 0            | 0            | 0            | 0            | 0            | 0            | 0.00013652   | 0            | 0            |
| 6.00E-05     | 0.016660541  | 0.000258604  | 0            | 0            | 0            | 0            | 0.0003133    | 0.000118987  | 3.84E-05     |
| 0.000211743  | 0.003929213  | 0.002047962  | 0.000405281  | 0.000837389  | 0            | 0.000164316  | 0            | 0.000444084  | 0.000675947  |
| 0.000119353  | 4.02E-05     | 0.000367141  | 0.000307464  | 0.000170813  | 0            | 4.41E-05     | 0            | 0.00267723   | 0.000268545  |
| 0.000763941  | 0            | 0            | 2.69E-05     | 0            | 4.10E-05     | 0            | 3.26E-05     | 0            | 0            |
| 8.01E-05     | 0.000146102  | 0            | 8.41E-05     | 2.56E-05     | 8.81E-05     | 0            | 0            | 0.000216151  | 0            |
| 0            | 3.66E-05     | 0.001671295  | 0.008832245  | 7.98E-05     | 0.0094947    | 0.001690888  | 0.005545106  | 0.039196507  | 0.000909397  |
| 0            | 0.009987427  | 0.0001906    | 4.97E-05     | 0.000151459  | 0.000366224  | 4.29E-05     | 3.30E-05     | 0            | 0.000116742  |
| 0.274171384  | 0            | 0            | 0            | 0            | 0            | 0            | 3.35E-05     | 0            | 0            |
| 0            | 0.0196806    | 0.000462165  | 2.33E-05     | 2.86E-05     | 0.000222438  | 8.05E-05     | 6.18E-05     | 0            | 9.84E-05     |
| 2.63E-05     | 0.012540774  | 0.000267314  | 6.54E-05     | 0.000158944  | 0.000563527  | 3.19E-05     | 2.89E-05     | 0            | 8.64E-05     |
| 0            | 0.000235782  | 0            | 0            | 0            | 0            | 0            | 3.34E-05     | 0            | 0            |
| 2.20E-05     | 9.23E-05     | 0.004744781  | 0.010271791  | 6.77E-05     | 0.005326823  | 0.002714177  | 0.007182783  | 0.055879285  | 0.00050797   |
| 0            | 2.00E-05     | 0.000258424  | 0            | 0            | 4.98E-05     | 2.55E-05     | 0.000412423  | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 9.34E-06     | 8.22E-06     | 3.66E-05     | 1.33E-05     | 2.10E-05     | 0            | 0            |
| 0.004254084  | 3.39E-05     | 0.019947072  | 0.021811088  | 0.001811879  | 0.018868674  | 0.023083003  | 0.021397511  | 0.006811205  | 0.012489557  |

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| COVID-19-006 | COVID-19-005 | COVID-19-004 | COVID-19-002 | COVID-19-001 | COVID-19-035 | COVID-19-007 | COVID-19-016 | COVID-19-003 | COVID-19-018 |
| 0.000126143  | 0            | 0            | 0            | 0            | 0.000215365  | 0            | 0            | 0            | 0            |
| 0.000415944  | 0            | 0.000438735  | 0.000538448  | 0.065271831  | 0.000470073  | 0.000188029  | 0.000324778  | 0.002170885  | 0.000575484  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.017033279  | 0.026480054  | 0            | 0.000175601  | 0.000148163  | 0.000790204  | 0.026968444  | 0.022605861  | 0.017502463  | 0.030826174  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.00022444   | 0.000179552  | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.000191312  | 0            | 0            | 0.000974904  | 0            | 0            | 0            | 0            |
| 0.01753426   | 0.020862491  | 0            | 0.000700918  | 0.000429595  | 0.003276227  | 0.02680673   | 0.023044382  | 0.01861277   | 0.029081322  |
| 0.010957432  | 0.000684007  | 0.000168781  | 0.00013769   | 0.000632928  | 0.018776872  | 0.017624276  | 0.000855008  | 0.160423995  | 0.004577071  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.009532918  | 0            | 0            | 0.007317333  | 0            | 0.002987133  | 0.001181137  | 0            | 0.005570394  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.000181233  | 0.000119144  | 0.00033226   | 8.73E-05     | 0.041121429  | 0.009098567  | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 9.91E-05     | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 8.13E-05     | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0.053541642  | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0.000154967  | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0.016127818  | 0.00011811   | 3.63E-05     | 4.15E-05     | 0            | 8.96E-05     |
| 0.052889133  | 0.025812978  | 0.000169451  | 0.000160465  | 7.83E-05     | 0.00092556   | 0.032361217  | 0.039489697  | 0.026430446  | 0.032083935  |
| 0            | 0            | 0            | 0            | 0            | 0.14822827   | 3.98E-05     | 0            | 0.000194111  | 0            |
| 5.57E-05     | 0.000301311  | 0.000128281  | 0.000120326  | 0.042582368  | 0.010894945  | 0.000108393  | 0            | 0.000498208  | 0            |
| 0            | 0            | 0            | 0            | 5.88E-05     | 0            | 0            | 0            | 0            | 0            |
| 0.02227156   | 0.024185912  | 0.000170718  | 0.001121225  | 0.000150267  | 0.001467995  | 0.027644726  | 0.023741334  | 0.01857712   | 0.027962154  |
| 8.63E-05     | 0            | 0            | 0            | 0            | 0            | 5.70E-05     | 0            | 0            | 6.35E-05     |
| 0.016429255  | 0.025234296  | 6.22E-05     | 0.002463207  | 8.66E-05     | 0.002740308  | 0.027381829  | 0.019132564  | 0.012543543  | 0.031945336  |
| 4.47E-05     | 0.007921889  | 4.62E-05     | 3.92E-05     | 0.002950631  | 6.03E-05     | 0.002279962  | 0.0007404    | 0            | 0.003365882  |
| 0.004568963  | 0.017874076  | 4.04E-05     | 0.000136618  | 3.97E-05     | 0.000655497  | 0.023314568  | 0.010496031  | 0.013737175  | 0.021099068  |
| 5.18E-05     | 0            | 0            | 0.000403302  | 0.000112851  | 0            | 0            | 0            | 0            | 0            |
| 6.19E-05     | 5.28E-05     | 0            | 0            | 0.000145432  | 0            | 0            | 0            | 0            | 0            |
| 2.40E-05     | 3.96E-05     | 0.00088506   | 0            | 0            | 0            | 0            | 3.91E-05     | 0.007927516  | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 7.27E-05     | 0            | 3.69E-05     |
| 0            | 0            | 3.45E-05     | 0.000265321  | 5.52E-05     | 0.075796467  | 0.000169844  | 0.000169844  | 0            | 0.000212065  |
| 0.000965776  | 0.000815831  | 0.40671904   | 0            | 0            | 0            | 0            | 0            | 0.002634805  | 0            |
| 0.000224868  | 0.000105083  | 0.001308128  | 0            | 0.002997235  | 0.01424454   | 0.000258166  | 0            | 0.000259896  | 0            |
| 0.000605122  | 0            | 0.00283181   | 2.21E-05     | 0            | 0            | 1.29E-05     | 0.013834575  | 0            | 2.73E-05     |
| 1.76E-05     | 0            | 5.52E-05     | 0.000138497  | 0.008069236  | 0.002243567  | 0            | 0            | 6.56E-05     | 4.96E-05     |
| 3.70E-05     | 0.006466703  | 5.03E-05     | 0.00011386   | 0.007952791  | 2.85E-05     | 0.002761093  | 0.000311635  | 0            | 0.00309343   |
| 6.40E-05     | 0.000192642  | 0.000101767  | 0.00018141   | 0.040650844  | 0.007560003  | 3.74E-05     | 0            | 0.000111977  | 4.08E-05     |
| 0            | 0            | 0            | 0            | 0            | 5.20E-05     | 0            | 0            | 0            | 0            |
| 8.64E-05     | 5.92E-05     | 6.52E-05     | 8.71E-05     | 0.078636951  | 0.012881781  | 0.000124685  | 2.89E-05     | 5.62E-05     | 0            |
| 6.21E-05     | 0.000178976  | 6.34E-05     | 3.68E-05     | 0.0213825    | 0.006357412  | 1.38E-05     | 2.30E-05     | 0.000103773  | 5.68E-05     |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 1.09E-05     | 0            | 1.96E-05     |
| 4.82E-05     | 0.010679189  | 2.01E-05     | 7.82E-05     | 0.000798513  | 0            | 0.002945334  | 0.000951766  | 0            | 0.0041886    |
| 1.33E-05     | 3.58E-05     | 0            | 8.90E-05     | 0.00011177   | 0            | 0.000160195  | 0.000137245  | 0            | 0.000439734  |
| 0            | 0            | 0            | 8.52E-06     | 8.24E-06     | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0.00010287   | 4.23E-05     | 9.61E-06     | 0            | 0            | 0            | 0            |
| 0            | 0            | 7.45E-06     | 0.000152362  | 0.000125802  | 0            | 0            | 0            | 0            | 0            |
| 0.028702342  | 0.017830776  | 0.000121833  | 0.001629544  | 0.000131772  | 0.004024043  | 0.024992116  | 0.022895864  | 0.021422441  | 0.022843271  |

|              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              |              |              |              |              |              |              |              |              |              |
| COVID-19-017 | COVID-19-032 | COVID-19-030 | COVID-19-029 | COVID-19-028 | COVID-19-027 | COVID-19-026 | COVID-19-031 | COVID-19-024 | COVID-19-019 |
| 0            | 0            | 0            | 0.000239979  | 0            | 0            | 0            | 0.00515954   | 0            | 0            |
| 0.000475771  | 0            | 0.000324778  | 0.000190878  | 0            | 0            | 0            | 0            | 0.001168061  | 0.000153842  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.005361312  | 0.001338956  | 0.000222245  | 0            | 0            | 0.002713581  | 0            | 0.000784716  | 0            | 0.017491487  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0.0053908    | 0.001556702  | 0            | 0.000254209  | 0            | 0            | 0.040945971  | 0.001865945  | 0            |
| 0.004619277  | 0.007174237  | 0.001370182  | 0.000146967  | 0.000212536  | 0.013080038  | 0.000850146  | 0.001408619  | 0.000262279  | 0.017305897  |
| 0.004774722  | 0.009993604  | 0.006033916  | 0.001781082  | 0.002875937  | 0.04400517   | 0.009498365  | 0.012738514  | 0.004874658  | 0.00668239   |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.064429111  | 0.000133354  | 6.86E-05     | 0.003594847  | 0.000310525  | 0.001061118  | 0            | 0.000201936  | 0.000215272  | 0.013158246  |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 6.04E-05     | 0.000119144  | 0.000342329  | 0.014528845  | 0.002807433  | 0.00261781   | 0.000429589  | 0.030544471  | 9.40E-05     | 0            |
| 0            | 0            | 0            | 0            | 0            | 0.000260069  | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0            | 0.000110294  | 0            | 0.000756094  | 0            | 0            | 0            | 0            |
| 0            | 0.08936427   | 0.096386479  | 0.096948256  | 0.00963231   | 0.064601441  | 0.186505547  | 0.013304025  | 0.060886512  | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 9.85E-05     |
| 5.71E-05     | 0            | 5.58E-05     | 9.22E-05     | 0.001789817  | 0            | 0.001885862  | 0            | 0.012369073  | 7.53E-05     |
| 0.00300133   | 0.000518622  | 6.68E-05     | 0            | 0.000826714  | 0.007414748  | 0            | 0.001039811  | 0.000150195  | 0.017512465  |
| 0            | 0.000570639  | 0.059015577  | 0.017437244  | 0.22884863   | 0.03444534   | 0.038198931  | 0.004670356  | 0.196047386  | 0            |
| 0            | 0.000820402  | 0.000152147  | 0.001201268  | 0.003288571  | 0.004443101  | 0.000696099  | 0.035520941  | 0.00019093   | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0.000389549  | 0            | 0            |
| 0.00439954   | 0.003581517  | 0.000381448  | 0            | 0.000161826  | 0.007287516  | 0.001597812  | 0.00271548   | 0.000404566  | 0.019533851  |
| 2.77E-05     | 0            | 3.09E-05     | 0            | 0            | 0            | 0            | 0            | 0            | 5.05E-05     |
| 0.005224771  | 0.005466447  | 0.00093679   | 0.000197592  | 0.000120444  | 0.012183784  | 0.000751007  | 0.001191849  | 0.000605371  | 0.0206763    |
| 0.058100643  | 0.000112039  | 3.45E-05     | 0.002080955  | 0.000209976  | 0.000537476  | 0.000104204  | 0            | 0.000153564  | 0.014375514  |
| 0.004797782  | 0.002115223  | 2.76E-05     | 5.25E-05     | 0.000185747  | 0.012079588  | 9.69E-05     | 0.001473186  | 0.000785385  | 0.012741816  |
| 0            | 0            | 0            | 0            | 6.11E-05     | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 0.000113114  | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 7.19E-05     | 0            | 0.004124725  | 4.90E-05     | 0.000586567  | 6.04E-05     | 0            | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0.000284992  | 0.0042888    | 0.009208038  | 0.0308713    | 0.271774332  | 0.020444128  | 0.001638466  | 0.015686577  | 0.000538319  | 0            |
| 0            | 0            | 0.000124554  | 0.000872839  | 4.26E-05     | 0.000288391  | 0            | 0            | 0            | 0            |
| 0            | 0            | 5.92E-05     | 0.001494077  | 0.000840661  | 0.002386631  | 5.06E-05     | 0.000427682  | 0.002749015  | 0.00010638   |
| 0.000131478  | 0            | 0            | 0            | 7.28E-05     | 3.34E-05     | 0            | 0.000162036  | 0            | 0            |
| 6.80E-05     | 2.40E-05     | 3.36E-05     | 0            | 0.001318921  | 0.001162812  | 9.13E-05     | 0.009272476  | 0.007318711  | 0            |
| 0.083546635  | 0            | 0            | 0.000624749  | 0.000200733  | 0.002205104  | 4.18E-05     | 0.000115708  | 0.001330456  | 0.007617127  |
| 6.06E-05     | 0.000644976  | 0.000120827  | 0.007554898  | 0.001677959  | 0.00205099   | 0.000330827  | 0.027253723  | 0.000156904  | 0.000138185  |
| 0            | 0            | 6.12E-05     | 2.47E-05     | 0.001345455  | 0.00729405   | 0.000441388  | 6.12E-05     | 0.021480305  | 0            |
| 4.56E-05     | 0.000373722  | 0.000199163  | 0.008855954  | 0.003817021  | 0.00435433   | 0.000409632  | 0.004475357  | 9.24E-05     | 8.25E-05     |
| 7.65E-05     | 0.000276838  | 0.000275852  | 0.005134467  | 0.002246226  | 0.003572288  | 0.000442021  | 0.034081233  | 9.72E-05     | 0.000124462  |
| 0            | 0            | 0            | 9.72E-05     | 0            | 0            | 0            | 0            | 7.54E-05     | 0            |
| 0.074164299  | 0            | 0            | 0.000814157  | 0.000137928  | 0.001019133  | 0.00011494   | 3.03E-05     | 0.000119729  | 0.013331107  |
| 0.000289637  | 0            | 0            | 0            | 0.000121179  | 7.87E-05     | 5.53E-05     | 8.90E-05     | 0            | 0            |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| 0            | 0            | 1.18E-05     | 0            | 0            | 0            | 0            | 0            | 0            | 7.40E-06     |
| 0            | 0            | 0            | 8.89E-06     | 1.90E-05     | 0            | 0            | 0            | 6.78E-06     | 7.33E-06     |
| 0.004015719  | 0.005918538  | 0.001068294  | 0.000320401  | 0.00026756   | 0.011765476  | 0.000829556  | 0.001523614  | 0.000835561  | 0.017330069  |

| COVID-19-025 | COVID-19-020 | COVID-19-033 | COVID-19-022 | COVID-19-023 | COVID-19-021 | Post-COVID-19-001 | Post-COVID-19-022 | Post-COVID-19-021 | Post-COVID-19-020 |
|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|-------------------|-------------------|-------------------|
| 0.000658403  | 0            | 0.000319971  | 0.026932981  | 0.001849066  | 0            | 0                 | 0                 | 0                 | 0                 |
| 0.000649556  | 0.004447179  | 0.000262102  | 0.164742215  | 0            | 0            | 0                 | 0.001216493       | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0.000142676  | 0.000823129  | 0            | 0.00226086   | 0.000271633  | 0                 | 0.003476347       | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0.000576556  | 0            | 0            | 0            | 0                 | 0.007581714       | 0                 | 0                 |
| 0.002181891  | 0.000126617  | 0.000698657  | 0            | 0.003741999  | 0            | 0                 | 0                 | 0                 | 0                 |
| 0.00277156   | 0.000384199  | 0.019061134  | 0.000350887  | 0.023051913  | 0            | 0                 | 0.000879437       | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0.001902193       | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0.019799283  | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0.000360788  | 0            | 0.042270916  | 0.028698579  | 0.010053397  | 0.090666837  | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0.000442627  | 0            | 0            | 0            | 0            | 0.022347577       | 0.069305206       | 0                 | 0.093935577       |
| 0.00327415   | 0            | 0.001300729  | 0            | 0.119126913  | 0            | 0                 | 0                 | 0                 | 0                 |
| 0.00376518   | 0            | 0            | 0            | 0            | 0            | 0.001128109       | 0.000497734       | 0                 | 0.883343774       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0.001037029       | 0                 | 0                 | 0                 |
| 0.0013402    | 0.000125804  | 0.000265729  | 0.000693207  | 0.001636739  | 0.000250325  | 0                 | 0                 | 0                 | 0                 |
| 0.007051139  | 0            | 0.002521104  | 0            | 0.021505389  | 0            | 0                 | 0                 | 0                 | 0.005084304       |
| 0.00019988   | 0.01336908   | 0.020551828  | 0.047341697  | 0.009788147  | 0.041487504  | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0.005801738  | 0.00028453   | 0.001535571  | 0.000152046  | 0.001277716  | 8.98E-05     | 0.000104031       | 0.000367221       | 0                 | 3.65E-05          |
| 0            | 0            | 0.000157897  | 0            | 0            | 0            | 8.46E-05          | 0                 | 0                 | 0                 |
| 0.004262002  | 4.57E-05     | 0.000643945  | 0.000400694  | 0.00217666   | 6.38E-05     | 0                 | 0.000332994       | 0                 | 0                 |
| 0.000146513  | 5.48E-05     | 0            | 0.008201596  | 0            | 0            | 0                 | 0                 | 0.000201357       | 0                 |
| 0.000521571  | 0.000123831  | 0.000398413  | 0.000123158  | 0.000275255  | 0.000128542  | 0                 | 0                 | 0                 | 0.000527628       |
| 0.000129501  | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 4.79E-05     | 0            | 9.74E-05     | 0            | 0                 | 0.000878809       | 0.0009856         | 0.000173991       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0.217284809       | 0                 | 0.001546062       | 0.002823071       |
| 0.00305959   | 5.71E-05     | 0.082278366  | 0            | 0.053212018  | 3.98E-05     | 0                 | 0                 | 0                 | 0                 |
| 0.001684838  | 0.000496781  | 0.000298931  | 0.001790709  | 9.87E-05     | 0.00046133   | 0.000151861       | 0.000588759       | 0.000997393       | 0.000303721       |
| 0.001586186  | 0.0685472    | 4.24E-05     | 0.000453196  | 0.000545306  | 0.000400871  | 0                 | 0.012394566       | 0                 | 0.002569552       |
| 8.28E-05     | 1.77E-05     | 0            | 0            | 0.000168067  | 0            | 0                 | 0                 | 0.000203048       | 0                 |
| 0.016774115  | 0            | 0.000167317  | 0.005895317  | 0.000574401  | 0            | 0.002123483       | 0                 | 0.000184129       | 0.001880113       |
| 0.000220695  | 7.36E-05     | 3.99E-05     | 0.005273766  | 0.000228458  | 0.000106096  | 3.25E-05          | 0                 | 0                 | 0                 |
| 0.000209319  | 3.40E-05     | 0.034931149  | 0.03061951   | 0.008392516  | 0.072599787  | 0                 | 0                 | 0                 | 0                 |
| 0.000133498  | 0            | 0.000598543  | 0            | 0.000212583  | 0            | 0                 | 7.10E-05          | 0                 | 3.08E-05          |
| 0.000125682  | 0.000103073  | 0.040739385  | 0.017437934  | 0.013750918  | 0.021002261  | 0                 | 0                 | 0                 | 0                 |
| 6.21E-05     | 0.003020912  | 0.030054773  | 0.017968827  | 0.011090579  | 0.064796081  | 0                 | 0                 | 0                 | 1.28E-05          |
| 0.000262087  | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0.000129946  | 0.000151018  | 0            | 0.010777527  | 0.000131542  | 6.07E-05     | 0                 | 0                 | 0                 | 0                 |
| 0            | 1.47E-05     | 2.27E-05     | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0.02494942        | 0.004320078       | 6.32E-05          | 0.010670594       |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0                 | 0                 | 0                 | 0                 |
| 0.003821954  | 0.000121833  | 0.000625604  | 0.000299198  | 0.001881782  | 0.000190286  | 5.69E-05          | 0.000439791       | 2.85E-05          | 0.000139101       |

| Post-COVID-19-018 | Post-COVID-19-017 | Post-COVID-19-016 | Post-COVID-19-015 | Post-COVID-19-014 | Post-COVID-19-013 | Post-COVID-19-012 | Post-COVID-19-019 | Post-COVID-19-010 | Post-COVID-19-011 |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 0                 | 0                 | 0                 | 0.009451464       | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0.001772471       | 0                 | 0                 | 0                 | 0.000625578       | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0.000128415       | 0.001483322       | 0                 | 0                 | 0.000172967       | 0                 | 0.010370149       | 0.034035159       | 0.010488801       |
| 0                 | 0                 | 0                 | 9.50E-05          | 0                 | 0                 | 0                 | 0.000269062       | 0                 | 0                 |
| 0                 | 0                 | 0.000119923       | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0.002449426       | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0.000124614       | 0.000350764       | 0.000359995       | 0.000192305       | 0.00014769        | 0.00036461        | 0.00033538        | 6.92E-05          | 0.228238378       | 0.132253553       |
| 0.133134901       | 0.001179855       | 0.003871897       | 0.000182856       | 0.004868895       | 0.029042126       | 0.293059611       | 0.008449094       | 0.039338643       | 0.00011755        |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0.006947263       | 0                 | 4.07E-05          |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0.016352356       | 6.62E-05          |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0.004062298       | 0                 | 0                 | 0                 | 0                 | 0                 | 0.013683653       |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 3.57E-05          | 0.000507185       | 0.000120529       | 0.000122457       | 8.68E-05          | 0.000137885       | 0.000252628       | 0.067231898       | 0.000135956       | 0.308243106       |
| 0                 | 0                 | 0.000105809       | 0                 | 0                 | 0                 | 0                 | 0.000288975       | 0                 | 0                 |
| 0                 | 0                 | 4.15E-05          | 0                 | 3.83E-05          | 6.59E-05          | 0                 | 0                 | 0                 | 0                 |
| 3.78E-05          | 0                 | 0                 | 0                 | 0                 | 5.90E-05          | 0                 | 0.000647094       | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0.000214685       | 0                 | 8.95E-05          | 0.000137964       | 7.00E-05          | 0                 | 0                 | 7.07E-05          | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0.00136067        | 0                 | 0                 | 6.25E-05          | 0.125783805       | 7.35E-05          | 3.02E-05          | 1.67E-05          | 5.73E-05          | 0                 |
| 0.00108319        | 0.066534          | 0.034476247       | 0.045452643       | 0.001405557       | 0.001538589       | 0.03924946        | 0.010087522       | 0.000402086       | 0.01421949        |
| 0.006681969       | 0                 | 2.25E-05          | 0                 | 0.000363197       | 0                 | 4.61E-05          | 0                 | 2.93E-05          | 8.20E-05          |
| 0.00020264        | 0                 | 2.20E-05          | 0.002441746       | 0.024937232       | 0                 | 0                 | 1.92E-05          | 0                 | 2.73E-05          |
| 0.002956585       | 9.30E-05          | 0.00010984        | 0.012119102       | 1.51E-05          | 0.001391589       | 0.014092321       | 1.51E-05          | 0                 | 0                 |
| 0                 | 0                 | 0.000136705       | 0                 | 0.001950865       | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0.000160512       | 1.40E-05          | 5.52E-05          | 0                 | 0.000180126       | 3.32E-05          | 0.000919042       | 0.001770837       | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 1.19E-05          | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 3.28E-05          | 1.76E-05          | 0                 |
| 0                 | 0                 | 0                 | 0                 | 3.86E-05          | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 1.06E-05          | 0                 | 0                 | 0                 |
| 0.068302029       | 0.004579848       | 0.101500033       | 0.057360587       | 0.078873061       | 0.115859389       | 0.024784241       | 0.070712819       | 0.041692865       | 0.055933627       |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 6.82E-05          | 3.15E-06          | 4.71E-05          | 1.26E-05          | 6.92E-06          | 2.34E-05          | 1.99E-06          | 0.000721182       | 0                 | 0                 |

| Post-COVID-19-002 | Post-COVID-19-004 | Post-COVID-19-005 | Post-COVID-19-003 | Post-COVID-19-007 | Post-COVID-19-008 | Post-COVID-19-009 | Post-COVID-19-006 |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 0                 | 0                 | 0                 | 0                 | 0                 | 0.000132296       | 0                 | 0                 |
| 0                 | 0                 | 0.000914506       | 0                 | 0                 | 0                 | 0.000339023       | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0.002122775       | 0                 | 0                 | 0.000676143       | 0                 | 0                 | 0.007652473       | 0.000159863       |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 9.55E-05          | 0.000466368       | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 8.98E-05          | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0.000353841       | 0.637209639       | 0                 |
| 0.092320352       | 0.130682313       | 0.014606686       | 0                 | 0                 | 0.02574637        | 0.004215839       | 0.002393087       |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0.000667147       |
| 0                 | 0                 | 0.000119408       | 0                 | 0                 | 0                 | 0                 | 0.000151855       |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0.02246542        | 0                 | 0                 | 0.003860002       | 0                 | 0                 | 0.011875849       | 0.000396407       |
| 0                 | 0                 | 0.000502186       | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0.172182544       | 0.000145599       | 0.000157169       | 0                 | 5.11E-05          | 0.000210202       | 0.176015358       | 0.000310482       |
| 0                 | 0                 | 0                 | 0                 | 0                 | 6.49E-05          | 4.62E-05          | 0                 |
| 0                 | 0                 | 6.27E-05          | 0                 | 0                 | 0                 | 5.05E-05          | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 4.33E-05          | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 4.00E-05          | 0                 |
| 0                 | 0                 | 0                 | 0                 | 2.83E-05          | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 2.59E-05          | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0.000197953       | 0                 | 0.000787126       | 4.38E-05          | 8.13E-05          | 0                 |
| 0.000189832       | 0.148987511       | 0.332767656       | 0.000814137       | 0.000910797       | 0.000976067       | 0                 | 0.044489032       |
| 0                 | 0                 | 0.000255726       | 0                 | 0                 | 0                 | 9.31E-05          | 0                 |
| 0.000117848       | 0.000419174       | 0.000515464       | 0.000339171       | 0.449386593       | 0                 | 0                 | 0.000245755       |
| 0                 | 0                 | 0.000470494       | 0.002731717       | 7.39E-05          | 2.03E-05          | 4.02E-05          | 0.000763687       |
| 0                 | 0                 | 2.85E-05          | 0                 | 0                 | 0                 | 4.10E-05          | 0.007462501       |
| 0.001659959       | 0.006253167       | 5.72E-05          | 0.00147463        | 0                 | 0                 | 0                 | 4.84E-05          |
| 0                 | 5.55E-05          | 0                 | 0                 | 1.52E-05          | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 2.25E-05          |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0.000109502       | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 1.76E-05          |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 4.99E-05          |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 4.63E-05          | 1.95E-05          | 1.21E-05          | 0                 | 1.18E-05          | 2.52E-05          |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0.000258208       | 0.015840996       | 0.012744493       | 0.105711601       | 0.000545673       | 0.084480911       | 0.008890978       | 0.111536612       |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 | 0                 |
| 1.70E-06          | 4.63E-05          | 0                 | 2.69E-06          | 1.15E-05          | 2.35E-05          | 0.00015227        | 1.92E-05          |



| Supplementary table S20. The different degree of mycobiome at phylum level (p value) |                          |              |             |                          |                     |                   |
|--------------------------------------------------------------------------------------|--------------------------|--------------|-------------|--------------------------|---------------------|-------------------|
| ID                                                                                   | Control.median           | Control.mean | Control.se  | COVID-19-.median         | COVID-19-.mean      | COVID-19-.se      |
| Ascomycota                                                                           | 0.8321(0.6878,0.9221)    | 0.761666985  | 0.019339415 | 0.9311(0.854,0.9643)     | 0.886777718         | 0.015097384       |
| Basidiomycota                                                                        | 0.1025(0.0325,0.2375)    | 0.173362538  | 0.017232085 | 0.0399(0.0116,0.1054)    | 0.084652211         | 0.013988332       |
| Mucoromycota                                                                         | 0.002(0.0007,0.0146)     | 0.029712848  | 0.009831287 | 0.0009(0.0002,0.003)     | 0.004963225         | 0.001289598       |
| Fungi phy Incertae sedis                                                             | 0.02(0.0122,0.0355)      | 0.034391371  | 0.004977698 | 0.0192(0.0066,0.0283)    | 0.022389183         | 0.003252399       |
| Chytridiomycota                                                                      | <0.0001(<0.0001,<0.0001) | 1.22E-04     | 6.09E-05    | <0.0001(<0.0001,<0.0001) | 9.98E-04            | 5.00E-04          |
| Supplementary table S20. The different degree of mycobiome at genus level (p value)  |                          |              |             |                          |                     |                   |
| ID                                                                                   | Control.median           | Control.mean | Control.se  | Post-COVID-19-.median    | Post-COVID-19-.mean | Post-COVID-19-.se |
| Acrodictys                                                                           | 0.0341(0.0091,0.3007)    | 0.182386333  | 0.021014763 | 0.0041(0.0018,0.0063)    | 0.012352091         | 0.006156511       |
| Zanclospora                                                                          | 0.0732(0.0146,0.3212)    | 0.219290856  | 0.023972723 | 0.0583(0.0258,0.2231)    | 0.197568591         | 0.062035001       |
| Blumeria                                                                             | 0.0016(0.0006,0.0102)    | 0.045476582  | 0.010298081 | <0.0001(<0.0001,<0.0001) | 1.71E-05            | 1.75E-05          |
| Malassezia                                                                           | 0.0083(0.0014,0.0549)    | 0.043632636  | 0.007024666 | 0.0145(0.0026,0.0793)    | 0.052714273         | 0.017481361       |
| Cryptococcus                                                                         | 0.0163(0.002,0.0547)     | 0.062697288  | 0.010848808 | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Actinomucor                                                                          | <0.0001(<0.0001,<0.0001) | 2.04E-05     | 4.73E-06    | 0.2472(0.0687,0.5663)    | 0.335261409         | 0.064155939       |
| Candida                                                                              | 0.0005(0.0001,0.0015)    | 0.007517788  | 0.001990505 | 0.0023(0.0002,0.0071)    | 0.062074955         | 0.045881074       |
| Fungi gen Incertae sedis                                                             | 0.02(0.0119,0.0342)      | 0.034133735  | 0.004981074 | 0.0022(0.0012,0.0093)    | 0.006595227         | 0.001893437       |
| Chrysosphaeria                                                                       | 0.0001(<0.0001,0.0004)   | 0.003136106  | 0.001357543 | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Diversispora                                                                         | 0.0017(0.0006,0.0146)    | 0.029246371  | 0.009827942 | <0.0001(<0.0001,0.0006)  | 0.001425227         | 8.76E-04          |
| Raffaelea                                                                            | 0.0006(0.0002,0.0024)    | 0.022378985  | 0.009303262 | <0.0001(<0.0001,<0.0001) | 0.007370591         | 0.007262171       |
| Hydnobolites                                                                         | <0.0001(<0.0001,<0.0001) | 0.001495652  | 7.19E-04    | <0.0001(<0.0001,<0.0001) | 3.52E-05            | 1.75E-05          |
| Arthrographis                                                                        | 0.0001(<0.0001,0.0008)   | 0.018769386  | 0.010507771 | <0.0001(<0.0001,<0.0001) | 3.43E-05            | 2.22E-05          |
| Simplicillium                                                                        | 0.0004(0.0002,0.0045)    | 0.007369144  | 0.001244761 | <0.0001(<0.0001,<0.0001) | 0.001624727         | 0.001581303       |
| Saccharomyces                                                                        | <0.0001(<0.0001,0.0003)  | 0.001335606  | 4.36E-04    | <0.0001(<0.0001,<0.0001) | 7.42E-04            | 6.52E-04          |
| Alternaria                                                                           | 0.0005(0.0002,0.0042)    | 0.011653902  | 0.003172624 | 0.0002(<0.0001,0.0027)   | 0.013418864         | 0.007218787       |
| Udeniomyces                                                                          | <0.0001(<0.0001,<0.0001) | 0.002256402  | 0.001837952 | 0.0003(<0.0001,0.0007)   | 0.064714591         | 0.032991027       |
| Milosporium                                                                          | 0.0002(<0.0001,0.001)    | 0.012120864  | 0.006864569 | <0.0001(<0.0001,<0.0001) | 7.54E-04            | 5.61E-04          |
| Filobasidiaceae gen Incertae sedis                                                   | 0.0004(0.0001,0.0017)    | 0.006671242  | 0.001369177 | <0.0001(<0.0001,<0.0001) | 7.69E-05            | 3.81E-05          |
| Talaromyces                                                                          | 0.0002(<0.0001,0.0007)   | 0.00927128   | 0.00249715  | <0.0001(<0.0001,<0.0001) | 0.007314455         | 0.007303696       |
| Russula                                                                              | 0.0003(<0.0001,0.0023)   | 0.007204371  | 0.001965241 | <0.0001(<0.0001,<0.0001) | 1.40E-05            | 1.18E-05          |
| Parafuscospora                                                                       | 0.0008(0.0001,0.0053)    | 0.004611189  | 0.00102376  | <0.0001(<0.0001,0.0002)  | 1.71E-04            | 5.34E-05          |
| Trigonopsis                                                                          | <0.0001(<0.0001,<0.0001) | 0.007453674  | 0.007256765 | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Gibberella                                                                           | <0.0001(<0.0001,<0.0001) | 1.08E-05     | 4.77E-06    | <0.0001(<0.0001,0.0027)  | 0.002501            | 0.001109519       |
| Rhodotorula                                                                          | <0.0001(<0.0001,<0.0001) | 2.59E-04     | 1.07E-04    | 0.0081(0.001,0.0436)     | 0.030985727         | 0.01040955        |
| Debaryomyces                                                                         | <0.0001(<0.0001,<0.0001) | 4.52E-04     | 2.59E-04    | <0.0001(<0.0001,<0.0001) | 0.030895            | 0.030559423       |
| Angustimassarina                                                                     | 0.0002(<0.0001,0.0026)   | 0.002792644  | 4.37E-04    | <0.0001(<0.0001,0.0003)  | 3.92E-04            | 1.68E-04          |
| Wallemia                                                                             | <0.0001(<0.0001,0.0002)  | 0.005041136  | 0.003876742 | <0.0001(<0.0001,<0.0001) | 2.69E-04            | 1.94E-04          |
| Nigrospora                                                                           | <0.0001(<0.0001,<0.0001) | 7.29E-04     | 4.13E-04    | <0.0001(<0.0001,0.001)   | 0.002618682         | 0.001516297       |
| Diaporthe                                                                            | <0.0001(<0.0001,0.0002)  | 0.004993924  | 0.002618011 | <0.0001(<0.0001,<0.0001) | 9.80E-05            | 6.82E-05          |
| Trametes                                                                             | <0.0001(<0.0001,0.0001)  | 0.003461841  | 0.0019619   | <0.0001(<0.0001,<0.0001) | 2.42E-04            | 2.40E-04          |
| Fantasmomyces                                                                        | <0.0001(<0.0001,0.0013)  | 0.002100992  | 5.46E-04    | <0.0001(<0.0001,<0.0001) | 3.37E-05            | 2.17E-05          |
| Galactomyces                                                                         | <0.0001(<0.0001,0.0001)  | 4.50E-04     | 1.41E-04    | 0.0026(0.0003,0.0115)    | 0.010632            | 0.003976429       |
| Phaeosphaeria                                                                        | <0.0001(<0.0001,0.0003)  | 0.003694295  | 0.002261968 | <0.0001(<0.0001,<0.0001) | 8.15E-05            | 7.18E-05          |
| Naganishia                                                                           | <0.0001(<0.0001,<0.0001) | 0.003228561  | 0.001988718 | <0.0001(<0.0001,<0.0001) | 0.001282136         | 0.001021883       |
| Ophiostoma                                                                           | <0.0001(<0.0001,0.0001)  | 0.002659076  | 0.002199468 | <0.0001(<0.0001,<0.0001) | 7.32E-06            | 7.32E-06          |
| Trichomonascus                                                                       | <0.0001(<0.0001,<0.0001) | 0.002685682  | 0.002636044 | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Botrytis                                                                             | <0.0001(<0.0001,0.0001)  | 0.002253955  | 0.00149656  | <0.0001(<0.0001,<0.0001) | 1.42E-04            | 1.40E-04          |
| Yarrowia                                                                             | <0.0001(<0.0001,<0.0001) | 0.002302538  | 0.001100581 | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Mucor                                                                                | <0.0001(<0.0001,<0.0001) | 6.52E-05     | 1.50E-05    | 0.0062(0.001,0.0158)     | 0.013766409         | 0.003747505       |
| Botryosphaeria                                                                       | <0.0001(<0.0001,<0.0001) | 2.94E-04     | 2.13E-04    | 0.0032(<0.0001,0.0135)   | 0.011922227         | 0.005396176       |
| Dioszegia                                                                            | <0.0001(<0.0001,<0.0001) | 9.34E-04     | 8.58E-04    | <0.0001(<0.0001,<0.0001) | 0.007831273         | 0.006914264       |
| Coprinellus                                                                          | <0.0001(<0.0001,<0.0001) | 0.001563667  | 7.24E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Zygotorulaspora                                                                      | <0.0001(<0.0001,<0.0001) | 8.48E-04     | 6.13E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Verrucaria                                                                           | <0.0001(<0.0001,<0.0001) | 0.002133992  | 0.001404692 | <0.0001(<0.0001,<0.0001) | 1.53E-04            | 1.53E-04          |
| Golubevia                                                                            | <0.0001(<0.0001,<0.0001) | 0.002123689  | 0.001756926 | <0.0001(<0.0001,<0.0001) | 9.70E-05            | 9.70E-05          |
| Togniniella                                                                          | <0.0001(<0.0001,<0.0001) | 0.002026803  | 0.001167777 | <0.0001(<0.0001,<0.0001) | 1.59E-06            | 1.59E-06          |
| Peniophora                                                                           | <0.0001(<0.0001,<0.0001) | 8.83E-04     | 5.51E-04    | <0.0001(<0.0001,<0.0001) | 0.002402591         | 0.002112006       |
| Sporobolomyces                                                                       | <0.0001(<0.0001,<0.0001) | 7.86E-04     | 4.00E-04    | <0.0001(<0.0001,0.0001)  | 0.006484955         | 0.003774442       |
| Hannaella                                                                            | <0.0001(<0.0001,<0.0001) | 7.11E-04     | 6.51E-04    | <0.0001(<0.0001,<0.0001) | 1.73E-05            | 1.73E-05          |
| Leptospora                                                                           | <0.0001(<0.0001,<0.0001) | 0.001543909  | 9.01E-04    | <0.0001(<0.0001,<0.0001) | 2.37E-04            | 2.18E-04          |
| Cercospora                                                                           | <0.0001(<0.0001,<0.0001) | 0.001679379  | 0.001400235 | <0.0001(<0.0001,<0.0001) | 9.32E-05            | 9.12E-05          |
| Dipodascus                                                                           | <0.0001(<0.0001,<0.0001) | 3.39E-04     | 1.78E-04    | <0.0001(<0.0001,0.0006)  | 0.005336273         | 0.004330608       |
| Pseudoveronaea                                                                       | <0.0001(<0.0001,<0.0001) | 3.60E-06     | 3.23E-06    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Kazachstania                                                                         | <0.0001(<0.0001,<0.0001) | 5.55E-04     | 3.55E-04    | <0.0001(<0.0001,0.0043)  | 0.003523955         | 0.001490126       |
| Purpureocillium                                                                      | <0.0001(<0.0001,<0.0001) | 0.001540924  | 9.95E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Apiotrichum                                                                          | <0.0001(<0.0001,0.0001)  | 0.001397636  | 5.66E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Vishniacozyma                                                                        | <0.0001(<0.0001,<0.0001) | 0.001290758  | 0.001012621 | <0.0001(<0.0001,<0.0001) | 1.55E-04            | 1.55E-04          |
| Rhexothecium                                                                         | <0.0001(<0.0001,0.0001)  | 0.001278152  | 7.55E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Pichia                                                                               | <0.0001(<0.0001,<0.0001) | 4.25E-05     | 2.52E-05    | <0.0001(<0.0001,<0.0001) | 1.99E-05            | 1.63E-05          |
| Ustilaginoidea                                                                       | <0.0001(<0.0001,<0.0001) | 1.08E-05     | 3.68E-06    | <0.0001(<0.0001,0.0054)  | 0.003350318         | 0.001243569       |
| Stagonosporopsis                                                                     | <0.0001(<0.0001,<0.0001) | 0.00122497   | 8.78E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Cystofilobasidium                                                                    | <0.0001(<0.0001,<0.0001) | 0.001066076  | 7.57E-04    | <0.0001(<0.0001,<0.0001) | 9.09E-06            | 9.09E-06          |
| Ramularia                                                                            | <0.0001(<0.0001,<0.0001) | 4.47E-07     | 4.47E-07    | <0.0001(<0.0001,<0.0001) | 2.05E-04            | 2.05E-04          |
| Trichophaea                                                                          | <0.0001(<0.0001,<0.0001) | 8.84E-06     | 7.03E-06    | <0.0001(<0.0001,<0.0001) | 0.001508227         | 8.04E-04          |
| Didymella                                                                            | <0.0001(<0.0001,<0.0001) | 6.73E-04     | 3.37E-04    | <0.0001(<0.0001,<0.0001) | 7.64E-04            | 5.41E-04          |
| Setophaeosphaeria                                                                    | <0.0001(<0.0001,<0.0001) | 9.64E-04     | 8.91E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Leucosporidium                                                                       | <0.0001(<0.0001,<0.0001) | 3.69E-05     | 3.28E-05    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Entorrhiza                                                                           | <0.0001(<0.0001,<0.0001) | 2.58E-04     | 8.14E-05    | <0.0001(<0.0001,<0.0001) | 1.38E-04            | 7.41E-05          |
| Pyrenochaetopsis                                                                     | <0.0001(<0.0001,<0.0001) | 8.55E-04     | 6.97E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Ceriporia                                                                            | <0.0001(<0.0001,<0.0001) | 7.54E-04     | 5.06E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Parasympodiella                                                                      | <0.0001(<0.0001,0.0001)  | 3.93E-04     | 1.17E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Tilletia                                                                             | <0.0001(<0.0001,<0.0001) | 7.45E-04     | 5.68E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Starmella                                                                            | <0.0001(<0.0001,<0.0001) | 7.76E-05     | 7.52E-05    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Rozellomyces gen Incertae sedis                                                      | <0.0001(<0.0001,<0.0001) | 7.11E-04     | 6.33E-04    | <0.0001(<0.0001,<0.0001) | 3.32E-05            | 2.25E-05          |
| Auricularia                                                                          | <0.0001(<0.0001,<0.0001) | 4.85E-04     | 2.93E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Papiliotrema                                                                         | <0.0001(<0.0001,<0.0001) | 1.51E-04     | 1.46E-04    | <0.0001(<0.0001,<0.0001) | 0                   | 0                 |
| Leptosporella                                                                        | <0.0001(<0.0001,<0.0001) | 2.43E-06     | 2.43E-06    | <0.0001(<0.0001,<0.0001) | 0.003733            | 0.003716672       |
| Phyllachora                                                                          | <0.0001(<0.0001,<0.0001) | 1.99E-04     | 1.15E-04    | <0.0001(<0.0001,0.0034)  | 0.002221364         | 7.56E-04          |
| Knufia                                                                               | <0.0001(<0.0001,<0.0001) | 5.83E-04     | 3.23E-04    | <0.0001(<0.0001,<0.0001) | 5.61E-05            | 5.02E-05          |

|                                       |                          |          |          |                          |             |             |
|---------------------------------------|--------------------------|----------|----------|--------------------------|-------------|-------------|
| Ascomycota gen Incertae sedis         | <0.0001(<0.0001,<0.0001) | 1.23E-04 | 3.24E-05 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Henningsia                            | <0.0001(<0.0001,<0.0001) | 2.05E-07 | 2.05E-07 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Mycosphaerellaceae gen Incertae sedis | <0.0001(<0.0001,<0.0001) | 2.85E-04 | 1.47E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Coprinopsis                           | <0.0001(<0.0001,<0.0001) | 4.88E-04 | 3.10E-04 | <0.0001(<0.0001,<0.0001) | 1.48E-04    | 1.48E-04    |
| Flammulina                            | <0.0001(<0.0001,<0.0001) | 5.76E-04 | 5.26E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Typhula                               | <0.0001(<0.0001,<0.0001) | 5.70E-04 | 3.81E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Russulales gen Incertae sedis         | <0.0001(<0.0001,<0.0001) | 5.01E-04 | 4.90E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Eupeniidiella                         | <0.0001(<0.0001,<0.0001) | 4.96E-04 | 4.73E-04 | <0.0001(<0.0001,<0.0001) | 1.03E-05    | 1.03E-05    |
| Thielaviopsis                         | <0.0001(<0.0001,<0.0001) | 4.53E-04 | 2.43E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Spiromastix                           | <0.0001(<0.0001,<0.0001) | 4.50E-04 | 4.40E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Lentinus                              | <0.0001(<0.0001,<0.0001) | 4.43E-04 | 4.03E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Thecaphora                            | <0.0001(<0.0001,<0.0001) | 4.25E-04 | 2.93E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Heitmania                             | <0.0001(<0.0001,0.0002)  | 2.33E-04 | 5.75E-05 | <0.0001(<0.0001,<0.0001) | 2.45E-06    | 2.45E-06    |
| Nakaseomyces                          | <0.0001(<0.0001,<0.0001) | 3.94E-07 | 3.94E-07 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Dothidea                              | <0.0001(<0.0001,<0.0001) | 3.71E-04 | 2.83E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Diutina                               | <0.0001(<0.0001,<0.0001) | 1.05E-05 | 7.87E-06 | <0.0001(<0.0001,<0.0001) | 9.15E-05    | 9.15E-05    |
| Roussoella                            | <0.0001(<0.0001,<0.0001) | 3.69E-04 | 3.33E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Thlebolus                             | <0.0001(<0.0001,<0.0001) | 3.62E-04 | 3.46E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Acrocalymma                           | <0.0001(<0.0001,<0.0001) | 3.60E-04 | 2.51E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Novakomyces                           | <0.0001(<0.0001,<0.0001) | 1.26E-04 | 1.02E-04 | <0.0001(<0.0001,<0.0001) | 0.001345955 | 9.37E-04    |
| Pseudocercospora                      | <0.0001(<0.0001,<0.0001) | 3.46E-04 | 2.69E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Lecanicillium                         | <0.0001(<0.0001,<0.0001) | 3.41E-04 | 2.63E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Zeloasperisporium                     | <0.0001(<0.0001,<0.0001) | 3.08E-06 | 3.08E-06 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Keissleriella                         | <0.0001(<0.0001,<0.0001) | 3.08E-04 | 2.98E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Hortaea                               | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Dendrvphiella                         | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Rhodospodiobolus                      | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Agaricus                              | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Exidia                                | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0.001627818 | 0.001625962 |
| Peniophorella                         | <0.0001(<0.0001,<0.0001) | 2.57E-04 | 2.43E-04 | <0.0001(<0.0001,<0.0001) | 1.30E-05    | 1.30E-05    |
| Geotrichum                            | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0.001478091 | 0.001423368 |
| Toxicocladosporium                    | <0.0001(<0.0001,<0.0001) | 2.32E-04 | 1.89E-04 | <0.0001(<0.0001,<0.0001) | 8.67E-05    | 8.67E-05    |
| Ramophialophora                       | <0.0001(<0.0001,<0.0001) | 2.45E-04 | 2.31E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Cookeina                              | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,0.0004)  | 0.001363591 | 6.90E-04    |
| Stachybotrys                          | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Macrohyporia                          | <0.0001(<0.0001,<0.0001) | 2.17E-04 | 2.10E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Neocelosporium                        | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0.001287773 | 0.001287773 |
| Neoonothyrium                         | <0.0001(<0.0001,<0.0001) | 2.08E-04 | 2.04E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Sistotrema                            | <0.0001(<0.0001,<0.0001) | 1.93E-06 | 1.93E-06 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Stemphylium                           | <0.0001(<0.0001,<0.0001) | 1.97E-04 | 1.16E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Peroneutypa                           | <0.0001(<0.0001,<0.0001) | 2.50E-07 | 2.50E-07 | <0.0001(<0.0001,<0.0001) | 6.00E-06    | 4.19E-06    |
| Parastagonospora                      | <0.0001(<0.0001,<0.0001) | 1.94E-04 | 1.82E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Golovinomyces                         | <0.0001(<0.0001,<0.0001) | 4.57E-05 | 4.52E-05 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Hypoxylon                             | <0.0001(<0.0001,<0.0001) | 1.85E-04 | 1.73E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Halosphaeriaceae gen Incertae sedis   | <0.0001(<0.0001,<0.0001) | 1.81E-04 | 1.14E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Basidiomycota gen Incertae sedis      | <0.0001(<0.0001,<0.0001) | 1.57E-04 | 1.03E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Tulostoma                             | <0.0001(<0.0001,<0.0001) | 1.57E-04 | 1.52E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Nigrograna                            | <0.0001(<0.0001,<0.0001) | 1.45E-04 | 1.11E-04 | <0.0001(<0.0001,<0.0001) | 6.83E-05    | 6.83E-05    |
| Monoblepharis                         | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Phlebiopsis                           | <0.0001(<0.0001,<0.0001) | 1.49E-04 | 1.02E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Phanerochaete                         | <0.0001(<0.0001,<0.0001) | 4.47E-07 | 4.47E-07 | <0.0001(<0.0001,<0.0001) | 2.44E-04    | 2.44E-04    |
| Cytospora                             | <0.0001(<0.0001,<0.0001) | 1.37E-04 | 9.50E-05 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Xylocoremium                          | <0.0001(<0.0001,<0.0001) | 1.34E-04 | 1.31E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Venturiaceae gen Incertae sedis       | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Bergerella                            | <0.0001(<0.0001,<0.0001) | 1.20E-04 | 1.16E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Didymocyrtis                          | <0.0001(<0.0001,<0.0001) | 6.67E-07 | 6.67E-07 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Preussia                              | <0.0001(<0.0001,<0.0001) | 1.14E-04 | 1.09E-04 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| GS08 gen Incertae sedis               | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Issatchenkia                          | <0.0001(<0.0001,<0.0001) | 1.08E-06 | 6.57E-07 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Anisomeridium                         | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Resupinatus                           | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 5.46E-04    | 5.41E-04    |
| Rosellinia                            | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 5.35E-04    | 4.59E-04    |
| Calyptralla                           | <0.0001(<0.0001,<0.0001) | 8.90E-05 | 8.54E-05 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Phacidium                             | <0.0001(<0.0001,<0.0001) | 0        | 0        | <0.0001(<0.0001,<0.0001) | 0           | 0           |

Supplementary table S20. The different degree of mycobiome at species level (p value)

| ID                               | COVID-19-.median         | COVID-19-.mean | COVID-19-.se | Post-COVID-19-.median    | Post-COVID-19-.mean | Post-COVID-19-.se |
|----------------------------------|--------------------------|----------------|--------------|--------------------------|---------------------|-------------------|
| Gibberella fujikuroi             | <0.0001(<0.0001,0.0013)  | 0.011762423    | 0.004326877  | <0.0001(<0.0001,0.0027)  | 0.002501            | 0.001109519       |
| Nigrospora oryzae                | <0.0001(<0.0001,0.0002)  | 0.007665718    | 0.004770595  | <0.0001(<0.0001,0.001)   | 0.002618682         | 0.001516297       |
| Penicillium hirsutum             | <0.0001(<0.0001,<0.0001) | 0.002781732    | 0.001800867  | <0.0001(<0.0001,<0.0001) | 8.01E-04            | 7.28E-04          |
| Ramularia coryli                 | <0.0001(<0.0001,<0.0001) | 0.001912141    | 0.001868451  | <0.0001(<0.0001,<0.0001) | 2.05E-04            | 2.05E-04          |
| Aspergillus tennesseensis        | <0.0001(<0.0001,<0.0001) | 5.51E-04       | 3.39E-04     | <0.0001(<0.0001,<0.0001) | 4.42E-04            | 2.32E-04          |
| Peroneutypa scoparia             | <0.0001(<0.0001,<0.0001) | 3.62E-04       | 3.61E-04     | <0.0001(<0.0001,<0.0001) | 6.00E-06            | 4.19E-06          |
| Phanerochaete spe Incertae sedis | <0.0001(<0.0001,<0.0001) | 1.90E-04       | 1.85E-04     | <0.0001(<0.0001,<0.0001) | 3.36E-06            | 3.36E-06          |
| Zanclospora jonesii              | 0.0175(0.0069,0.0817)    | 0.128822352    | 0.030364494  | 0.0583(0.0258,0.2231)    | 0.197568591         | 0.062035001       |
| Malassezia restricta             | 0.0009(0.0003,0.0118)    | 0.023624972    | 0.007145966  | 0.0109(0.0016,0.0616)    | 0.029506            | 0.007900158       |
| Raffaelea lauricola              | 0.0013(0.0004,0.006)     | 0.004718183    | 0.001156914  | <0.0001(<0.0001,<0.0001) | 0.007366455         | 0.007262345       |
| Milosporium graphideorum         | <0.0001(<0.0001,0.0005)  | 5.92E-04       | 2.21E-04     | <0.0001(<0.0001,<0.0001) | 7.54E-04            | 5.61E-04          |
| Diaporthe kochmanii              | <0.0001(<0.0001,<0.0001) | 0              | 0            | <0.0001(<0.0001,<0.0001) | 9.80E-05            | 6.82E-05          |
| Naganishia alba                  | <0.0001(<0.0001,<0.0001) | 2.85E-05       | 2.77E-05     | <0.0001(<0.0001,<0.0001) | 0.001140227         | 0.001019567       |
| Acremonium alternatum            | <0.0001(<0.0001,<0.0001) | 7.18E-07       | 7.18E-07     | <0.0001(<0.0001,<0.0001) | 2.92E-05            | 2.92E-05          |
| Malassezia sympodialis           | <0.0001(<0.0001,<0.0001) | 2.08E-04       | 1.09E-04     | <0.0001(<0.0001,0.0002)  | 0.001197227         | 6.43E-04          |
| Golubevia pallens                | <0.0001(<0.0001,<0.0001) | 3.83E-06       | 3.83E-06     | <0.0001(<0.0001,<0.0001) | 9.70E-05            | 9.70E-05          |
| Cercospora canescens             | <0.0001(<0.0001,<0.0001) | 0              | 0            | <0.0001(<0.0001,<0.0001) | 9.32E-05            | 9.12E-05          |
| Wallemia mellicola               | <0.0001(<0.0001,<0.0001) | 1.29E-04       | 9.79E-05     | <0.0001(<0.0001,<0.0001) | 1.79E-04            | 1.79E-04          |
| Rozellomycota spe Incertae sedis | <0.0001(<0.0001,<0.0001) | 0              | 0            | <0.0001(<0.0001,<0.0001) | 3.32E-05            | 2.25E-05          |
| Eupeniidiella venezuelensis      | <0.0001(<0.0001,<0.0001) | 0              | 0            | <0.0001(<0.0001,<0.0001) | 1.03E-05            | 1.03E-05          |
| Talaromyces rogersiae            | <0.0001(<0.0001,<0.0001) | 0              | 0            | <0.0001(<0.0001,<0.0001) | 2.36E-06            | 2.36E-06          |
| Nigrograna spe Incertae sedis    | <0.0001(<0.0001,<0.0001) | 0              | 0            | <0.0001(<0.0001,<0.0001) | 6.83E-05            | 6.83E-05          |
| Acrodactys fluminicola           | 0.0813(0.0214,0.6131)    | 0.273025479    | 0.0369043    | 0.0041(0.0018,0.0063)    | 0.012352091         | 0.006156511       |
| Aspergillus subflavus            | 0.0118(0.0034,0.0449)    | 0.078625169    | 0.021054706  | 0.0004(<0.0001,0.0017)   | 0.004887045         | 0.002656537       |

|                                       |                          |             |             |                          |             |             |
|---------------------------------------|--------------------------|-------------|-------------|--------------------------|-------------|-------------|
| Blumeria spe Incertae sedis           | 0.001(0.0003,0.0123)     | 0.044938958 | 0.014639124 | <0.0001(<0.0001,<0.0001) | 1.71E-05    | 1.05E-05    |
| Cryptococcus longus                   | <0.0001(<0.0001,<0.0001) | 2.59E-05    | 1.31E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Actinomyces elegans                   | <0.0001(<0.0001,<0.0001) | 2.56E-06    | 1.92E-06    | 0.2472(0.0687,0.5663)    | 0.335261409 | 0.064155939 |
| Chrysosphaeria jan-nelii              | <0.0001(<0.0001,0.001)   | 0.066193887 | 0.021231607 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Candida albicans                      | 0.0011(0.0002,0.0042)    | 0.042165972 | 0.019177875 | 0.0004(<0.0001,0.0026)   | 0.059656182 | 0.045962837 |
| Diversispora spurca                   | 0.0008(0.0001,0.0029)    | 0.004459014 | 0.001221663 | <0.0001(<0.0001,0.0006)  | 0.001425227 | 8.76E-04    |
| Hydnobolites roseus                   | 0.0002(<0.0001,0.0014)   | 0.040220437 | 0.01918065  | <0.0001(<0.0001,<0.0001) | 3.52E-05    | 1.75E-05    |
| Cladosporium cladosporioides          | 0.0003(0.0001,0.0015)    | 0.010090634 | 0.003886534 | 0.0005(<0.0001,0.0041)   | 0.008137    | 0.00375922  |
| Cladosporium kenpeggii                | 0.0002(<0.0001,0.0029)   | 0.006398183 | 0.002061383 | 0.0001(<0.0001,0.0036)   | 0.002004545 | 7.82E-04    |
| Cladosporium halotolerans             | 0.0005(0.0001,0.0037)    | 0.021684408 | 0.008248247 | 0.0002(<0.0001,0.0054)   | 0.005566545 | 0.002274955 |
| Arthrographis grakistii               | <0.0001(<0.0001,0.0001)  | 1.37E-04    | 5.33E-05    | <0.0001(<0.0001,<0.0001) | 3.43E-05    | 2.22E-05    |
| Simplicillium sympodiophorum          | 0.002(0.0004,0.0306)     | 0.020537676 | 0.003583054 | <0.0001(<0.0001,<0.0001) | 3.93E-05    | 2.17E-05    |
| Saccharomyces cerevisiae              | 0.0005(<0.0001,0.0058)   | 0.02825969  | 0.010399467 | <0.0001(<0.0001,<0.0001) | 7.42E-04    | 6.52E-04    |
| Alternaria alternata                  | 0.0001(<0.0001,0.0007)   | 0.002669831 | 7.59E-04    | 0.0002(<0.0001,0.0027)   | 0.013371136 | 0.007190993 |
| [Cryptococcus] ater                   | 0.0012(0.0002,0.0159)    | 0.008852056 | 0.001666522 | <0.0001(<0.0001,<0.0001) | 7.69E-05    | 3.81E-05    |
| Russula xerophila                     | 0.0004(0.0001,0.0036)    | 0.006937141 | 0.002469854 | <0.0001(<0.0001,<0.0001) | 1.40E-05    | 1.18E-05    |
| Malassezia arunalohei                 | <0.0001(<0.0001,0.0002)  | 0.002747592 | 0.001098368 | <0.0001(<0.0001,0.0031)  | 0.017355864 | 0.010292212 |
| Udeniomyces megalosporus              | <0.0001(<0.0001,<0.0001) | 1.86E-05    | 8.63E-06    | 0.0001(<0.0001,0.0003)   | 0.035168727 | 0.018303815 |
| Parafuscospora mucosa                 | 0.0015(0.0003,0.0083)    | 0.005994014 | 0.001686826 | <0.0001(<0.0001,0.0002)  | 1.71E-04    | 5.34E-05    |
| Talaromyces scorteus                  | <0.0001(<0.0001,<0.0001) | 2.02E-04    | 1.24E-04    | <0.0001(<0.0001,<0.0001) | 0.007312091 | 0.007303808 |
| Trigonopsis californica               | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Penicillium melanoconidium            | <0.0001(<0.0001,<0.0001) | 6.01E-06    | 4.57E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Aspergillus penicillioides            | <0.0001(<0.0001,0.001)   | 0.002247155 | 6.99E-04    | 0.0035(0.0009,0.0074)    | 0.010302818 | 0.00347919  |
| Aspergillus amstelodami               | <0.0001(<0.0001,<0.0001) | 0.001732451 | 8.69E-04    | <0.0001(<0.0001,<0.0001) | 6.40E-04    | 5.90E-04    |
| Debaryomyces prosopidis               | <0.0001(<0.0001,<0.0001) | 3.11E-04    | 2.65E-04    | <0.0001(<0.0001,<0.0001) | 0.030895    | 0.030559423 |
| Rhodotula mucilaginosa                | <0.0001(<0.0001,<0.0001) | 4.94E-04    | 4.35E-04    | 0.0081(0.001,0.0436)     | 0.030882955 | 0.010415869 |
| Malassezia globosa                    | <0.0001(<0.0001,0.0001)  | 0.003036465 | 0.002334474 | <0.0001(<0.0001,0.0011)  | 0.004655182 | 0.003291282 |
| Angustimassarina camporesii           | 0.001(0.0002,0.0078)     | 0.004806141 | 7.49E-04    | <0.0001(<0.0001,0.0003)  | 3.92E-04    | 1.68E-04    |
| Candida spe Incertae sedis            | <0.0001(<0.0001,0.0005)  | 0.007386211 | 0.003796915 | <0.0001(<0.0001,<0.0001) | 1.35E-04    | 1.11E-04    |
| Udeniomyces pyricola                  | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,0.0002)  | 0.029545864 | 0.01983428  |
| Fantasmomyces hyalinus                | 0.0006(<0.0001,0.0073)   | 0.004061169 | 7.41E-04    | <0.0001(<0.0001,<0.0001) | 3.37E-05    | 2.17E-05    |
| Candida parapsilosis                  | <0.0001(<0.0001,<0.0001) | 0.001069211 | 4.94E-04    | <0.0001(<0.0001,<0.0001) | 2.65E-05    | 1.97E-05    |
| Galactomyces pseudocandidus           | <0.0001(<0.0001,<0.0001) | 0.003749718 | 0.00366281  | 0.0026(0.0003,0.0115)    | 0.010632    | 0.003976429 |
| Phaeosphaeria oryzae                  | <0.0001(<0.0001,<0.0001) | 9.50E-05    | 7.04E-05    | <0.0001(<0.0001,<0.0001) | 8.15E-05    | 7.18E-05    |
| Aureobasidium pullulans               | <0.0001(<0.0001,<0.0001) | 0.002952437 | 0.001765841 | <0.0001(<0.0001,<0.0001) | 0.004585227 | 0.003858678 |
| Trichomonascus ciferrii               | <0.0001(<0.0001,<0.0001) | 3.13E-06    | 3.13E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Ophiostoma acarorum                   | <0.0001(<0.0001,<0.0001) | 1.41E-06    | 1.41E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Botrytis cinerea                      | <0.0001(<0.0001,<0.0001) | 4.41E-04    | 2.57E-04    | <0.0001(<0.0001,<0.0001) | 1.42E-04    | 1.40E-04    |
| Dioszegia zsoitii var. yunnanensis    | <0.0001(<0.0001,<0.0001) | 2.76E-06    | 2.01E-06    | <0.0001(<0.0001,<0.0001) | 0.007831273 | 0.006914264 |
| Aspergillus versicolor                | <0.0001(<0.0001,0.0001)  | 0.001585099 | 6.32E-04    | 0.0002(<0.0001,0.0013)   | 0.002851045 | 0.001429236 |
| Zygotorulaspora danielisina           | <0.0001(<0.0001,0.0001)  | 0.002452873 | 0.001462589 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Mucor circinelloides                  | <0.0001(<0.0001,<0.0001) | 5.28E-06    | 3.92E-06    | 0.0053(0.0005,0.0121)    | 0.012393864 | 0.003620619 |
| Coprinellus ovatus                    | <0.0001(<0.0001,<0.0001) | 0.00121662  | 0.001208325 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Togniella acerosa                     | <0.0001(<0.0001,<0.0001) | 8.19E-05    | 2.80E-05    | <0.0001(<0.0001,<0.0001) | 1.59E-06    | 1.59E-06    |
| Botryosphaeria spe Incertae sedis     | <0.0001(<0.0001,<0.0001) | 6.95E-05    | 6.75E-05    | 0.0032(<0.0001,0.0135)   | 0.011922227 | 0.005396176 |
| Talaromyces funiculosus               | <0.0001(<0.0001,<0.0001) | 6.65E-04    | 3.52E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Cladosporium spe Incertae sedis       | <0.0001(<0.0001,0.0003)  | 8.92E-04    | 3.99E-04    | <0.0001(<0.0001,0.0005)  | 2.62E-04    | 8.89E-05    |
| Trametes cubensis                     | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Dipodascus geotrichum                 | <0.0001(<0.0001,<0.0001) | 7.51E-04    | 7.12E-04    | <0.0001(<0.0001,0.0006)  | 0.005336273 | 0.004330608 |
| Pseudoveronaea ellipsoidea            | <0.0001(<0.0001,<0.0001) | 0.002956014 | 0.002361643 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Leptospora rubella                    | <0.0001(<0.0001,<0.0001) | 3.43E-04    | 2.52E-04    | <0.0001(<0.0001,<0.0001) | 2.18E-04    | 2.18E-04    |
| Purpureocillium lilacinum             | <0.0001(<0.0001,<0.0001) | 9.30E-07    | 9.30E-07    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Apiotrichum domesticum                | <0.0001(<0.0001,<0.0001) | 1.42E-04    | 8.94E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Kazachstania heterogenica             | <0.0001(<0.0001,0.0002)  | 6.27E-04    | 4.97E-04    | <0.0001(<0.0001,0.0043)  | 0.003523955 | 0.001490126 |
| Rhexothecium globosum                 | <0.0001(<0.0001,<0.0001) | 2.49E-04    | 9.28E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Ustilagoidea virens                   | <0.0001(<0.0001,0.0002)  | 0.001433056 | 5.18E-04    | <0.0001(<0.0001,0.0054)  | 0.003350318 | 0.001243569 |
| Yarrowia bubula                       | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Bjerkandera mikrofumosa               | <0.0001(<0.0001,<0.0001) | 2.99E-06    | 2.99E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Trametes trogii                       | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Verrucaria oulankaensis               | <0.0001(<0.0001,<0.0001) | 4.58E-06    | 4.58E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Sporobolomyces beijiangensis          | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,0.0001)  | 0.006338545 | 0.003661641 |
| Pleurotus eryngii                     | <0.0001(<0.0001,<0.0001) | 1.76E-06    | 1.24E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Cystofilobasidium macerans            | <0.0001(<0.0001,<0.0001) | 5.68E-05    | 5.34E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Yarrowia lipolytica                   | <0.0001(<0.0001,<0.0001) | 6.05E-05    | 6.05E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Hannaella sinensis                    | <0.0001(<0.0001,<0.0001) | 0.001870423 | 0.001817328 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Filobasidium wieringae                | <0.0001(<0.0001,<0.0001) | 3.62E-06    | 2.25E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Trichophaea saccata                   | <0.0001(<0.0001,<0.0001) | 0.001390915 | 0.001368353 | <0.0001(<0.0001,<0.0001) | 0.001508227 | 8.04E-04    |
| Setophaeosphaeria badalingensis       | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Verrucaria vitikainenii               | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Leucosporidium golubevii              | <0.0001(<0.0001,<0.0001) | 0.001663155 | 0.001589186 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Stagonosporopsis citrulli             | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Ceriporia lacerata                    | <0.0001(<0.0001,<0.0001) | 1.02E-04    | 7.68E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Entorrhiza citriformis                | <0.0001(<0.0001,0.0004)  | 0.001127423 | 3.11E-04    | <0.0001(<0.0001,<0.0001) | 9.08E-05    | 6.07E-05    |
| Penicillium estinogenum               | <0.0001(<0.0001,<0.0001) | 1.60E-05    | 1.60E-05    | <0.0001(<0.0001,<0.0001) | 0.004776318 | 0.004429901 |
| Aspergillus restrictus                | <0.0001(<0.0001,<0.0001) | 6.81E-04    | 3.21E-04    | <0.0001(<0.0001,0.0002)  | 9.76E-04    | 4.71E-04    |
| Pichia kluyveri                       | <0.0001(<0.0001,<0.0001) | 0.001421944 | 5.86E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Diaporthe bohemiae                    | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Parasymphodiella longispora           | 0.0001(<0.0001,0.0005)   | 6.76E-04    | 1.95E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Didymella keratinophila               | <0.0001(<0.0001,<0.0001) | 3.39E-04    | 3.25E-04    | <0.0001(<0.0001,<0.0001) | 3.22E-04    | 3.22E-04    |
| Stammerella etchellsii                | <0.0001(<0.0001,<0.0001) | 0.001195042 | 7.08E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Pyrenochaetopsis microspora           | <0.0001(<0.0001,<0.0001) | 1.15E-06    | 1.15E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Phlebia tuberculata                   | <0.0001(<0.0001,<0.0001) | 0.001202845 | 0.001200246 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Cutaneotrichosporon cutaneum          | <0.0001(<0.0001,<0.0001) | 0.00118693  | 0.001073328 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Leptospora bambusae                   | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0.003733    | 0.003716672 |
| Phyllachora cynodonticola             | <0.0001(<0.0001,<0.0001) | 7.72E-05    | 2.43E-05    | <0.0001(<0.0001,0.0034)  | 0.002221364 | 7.56E-04    |
| Ascomycota spe Incertae sedis         | <0.0001(<0.0001,0.0002)  | 8.97E-04    | 2.66E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Candida vespimorsuum                  | <0.0001(<0.0001,<0.0001) | 9.48E-04    | 4.84E-04    | <0.0001(<0.0001,<0.0001) | 1.32E-05    | 1.03E-05    |
| Henningsia resupinata                 | <0.0001(<0.0001,<0.0001) | 0.001115606 | 0.001080069 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Mycosphaerellaceae spe Incertae sedis | <0.0001(<0.0001,<0.0001) | 5.70E-04    | 2.21E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Typhula micans                        | <0.0001(<0.0001,<0.0001) | 0           | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| [Candida] pseudolambica               | <0.0001(<0.0001,<0.0001) | 0.001042113 | 9.36E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |

|                                     |                          |            |             |                          |             |             |
|-------------------------------------|--------------------------|------------|-------------|--------------------------|-------------|-------------|
| Candida intermedia                  | <0.0001(<0.0001,<0.0001) | 0.00101238 | 0.001003373 | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Naganishia globosa                  | <0.0001(<0.0001,<0.0001) | 9.17E-06   | 9.17E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Symmetrorpora spe Incertae sedis    | <0.0001(<0.0001,<0.0001) | 9.31E-04   | 9.26E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Papiliotrema terrestris             | <0.0001(<0.0001,<0.0001) | 9.33E-04   | 9.10E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Russulales spe Incertae sedis       | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Peniophora pseudoversicolor         | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0.002213227 | 0.002112966 |
| Sporobolomyces roseus               | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Thielaviopsis euricoi               | <0.0001(<0.0001,<0.0001) | 1.15E-06   | 1.15E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Spiromastix princeps                | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Coprinopsis aruticola               | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Talaromyces wortmannii              | <0.0001(<0.0001,<0.0001) | 4.27E-05   | 3.22E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Tilletia geeringii                  | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Thecaphora australiensis            | <0.0001(<0.0001,<0.0001) | 1.83E-06   | 1.83E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Cutaneotrichosporon jirovecii       | <0.0001(<0.0001,<0.0001) | 6.08E-06   | 6.08E-06    | <0.0001(<0.0001,<0.0001) | 6.69E-04    | 6.54E-04    |
| Heitmania litseae                   | <0.0001(<0.0001,0.0003)  | 3.52E-04   | 1.76E-04    | <0.0001(<0.0001,<0.0001) | 2.45E-06    | 2.45E-06    |
| Lentinus arcularius                 | <0.0001(<0.0001,<0.0001) | 8.73E-07   | 8.73E-07    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| [Candida] glabrata                  | <0.0001(<0.0001,<0.0001) | 6.97E-04   | 6.19E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Thelebolus balaustriformis          | <0.0001(<0.0001,<0.0001) | 1.21E-05   | 1.21E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Acrocalymma fici                    | <0.0001(<0.0001,<0.0001) | 8.03E-07   | 8.03E-07    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Novakomyces olei                    | <0.0001(<0.0001,<0.0001) | 1.17E-05   | 8.40E-06    | <0.0001(<0.0001,<0.0001) | 0.001345955 | 9.37E-04    |
| Roussioella neopustulans            | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Pseudocercospora spe Incertae sedis | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Lecanicillium coprophilum           | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Candida solani                      | <0.0001(<0.0001,<0.0001) | 2.86E-04   | 2.73E-04    | <0.0001(<0.0001,<0.0001) | 1.28E-05    | 1.10E-05    |
| Diaporthe caulivora                 | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Stagonosporopsis lupini             | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Zeloasporium eucalyptorum           | <0.0001(<0.0001,<0.0001) | 5.75E-04   | 5.17E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Keissleriella quadripetata          | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Hortaea werneckii                   | <0.0001(<0.0001,<0.0001) | 5.66E-04   | 5.30E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Candida apicola                     | <0.0001(<0.0001,<0.0001) | 5.61E-04   | 5.05E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Candida inconspicua                 | <0.0001(<0.0001,<0.0001) | 3.11E-06   | 2.19E-06    | <0.0001(<0.0001,0.0003)  | 0.001519318 | 9.76E-04    |
| Dendryphiella parvinosa             | <0.0001(<0.0001,<0.0001) | 5.48E-04   | 5.38E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Penicillium pimitoeiense            | <0.0001(<0.0001,<0.0001) | 1.07E-06   | 1.07E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Dothidea sambuci                    | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Rhodosporeidiobolus colostri        | <0.0001(<0.0001,<0.0001) | 5.23E-04   | 5.08E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Simplicillium lanosoniveum          | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0.001585455 | 0.001583028 |
| Agaricus subfloccosus               | <0.0001(<0.0001,<0.0001) | 5.06E-04   | 4.95E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Exidia pithya                       | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0.001627818 | 0.001625962 |
| Nigrospora spe Incertae sedis       | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Peniophorella spe Incertae sedis    | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Ascotricha guamensis                | <0.0001(<0.0001,<0.0001) | 4.73E-04   | 4.67E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Diutina catenulata                  | <0.0001(<0.0001,<0.0001) | 4.65E-04   | 3.30E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Tilletia maclaganii                 | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Aureobasidium thailandense          | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Geotrichum silvicola                | <0.0001(<0.0001,<0.0001) | 7.18E-07   | 7.18E-07    | <0.0001(<0.0001,<0.0001) | 0.001478091 | 0.001423368 |
| Ramophialophora spe Incertae sedis  | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Talaromyces islandicus              | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Ascotricha erinacea                 | <0.0001(<0.0001,<0.0001) | 3.47E-05   | 3.47E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Cookeina korffii                    | <0.0001(<0.0001,<0.0001) | 3.87E-06   | 3.04E-06    | <0.0001(<0.0001,0.0004)  | 0.001363591 | 6.90E-04    |
| Botryosphaeria wangensis            | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Stachybotrys aloeticola             | <0.0001(<0.0001,<0.0001) | 4.17E-04   | 3.96E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Macrohyphoria dictyopora            | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Neocelosporium corymbiae            | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0.001287773 | 0.001287773 |
| Penicillium bialowiezense           | <0.0001(<0.0001,<0.0001) | 3.94E-04   | 3.86E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Neoconiothyrium viticola            | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Sistotrema brinkmannii              | <0.0001(<0.0001,<0.0001) | 3.82E-04   | 3.59E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Knufia hypolithi                    | <0.0001(<0.0001,<0.0001) | 2.78E-05   | 2.78E-05    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Parastagonospora fallopiae          | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Fusarium neocosmosporiellum         | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Toxicocladosporium strelitziae      | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Vishniacozyma heimaeyensis          | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Hypoxylon perforatum                | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Halosphaeriaceae spe Incertae sedis | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Malassezia japonica                 | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Trichoderma deliquescens            | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Stemphylium lycopersici             | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Basidiomycota spe Incertae sedis    | <0.0001(<0.0001,<0.0001) | 4.04E-06   | 2.85E-06    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Tulostoma calcareum                 | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Monoblepharis macrandra             | <0.0001(<0.0001,<0.0001) | 2.79E-04   | 2.72E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Golovinomyces sonchicola            | <0.0001(<0.0001,<0.0001) | 2.60E-04   | 2.53E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Xylocoremium spe Incertae sedis     | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Venturiaceae spe Incertae sedis     | <0.0001(<0.0001,<0.0001) | 2.25E-04   | 2.22E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Bergerella atrofusca                | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Didymocyrtis brachylaenae           | <0.0001(<0.0001,<0.0001) | 2.15E-04   | 2.03E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Preussia procaviae                  | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| GS08 spe Incertae sedis             | <0.0001(<0.0001,<0.0001) | 2.10E-04   | 2.08E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Neodevriesia sexualis               | <0.0001(<0.0001,<0.0001) | 2.08E-04   | 2.05E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Kazachstania humilis                | <0.0001(<0.0001,<0.0001) | 2.04E-04   | 1.98E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Issatchenkia orientalis             | <0.0001(<0.0001,<0.0001) | 1.96E-04   | 1.75E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Sporobolomyces koalae               | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Anisomeridium guangdongensis        | <0.0001(<0.0001,<0.0001) | 1.69E-04   | 1.61E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Resupinatus hausknechtii            | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 5.46E-04    | 5.41E-04    |
| Rosellinia australiensis            | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 5.35E-04    | 4.59E-04    |
| Calyptralla capula                  | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Phacidium lacerum                   | <0.0001(<0.0001,<0.0001) | 1.59E-04   | 1.56E-04    | <0.0001(<0.0001,<0.0001) | 0           | 0           |
| Phlebiopsis flavidoalba             | <0.0001(<0.0001,<0.0001) | 0          | 0           | <0.0001(<0.0001,<0.0001) | 0           | 0           |

| Post-COVID-19-.median    | Post-COVID-19-.mean | Post-COVID-19-.se | p-value   | z-score     | Sig.<br>mark | q-value  | fixp    | fixps      |
|--------------------------|---------------------|-------------------|-----------|-------------|--------------|----------|---------|------------|
| 0.4322(0.1623,0.6927)    | 0.455621818         | 0.066166685       | 5.03E-10  | -6.21803904 | ***          | 1.76E-09 | <0.0001 | ***<0.0001 |
| 0.073(0.0188,0.3126)     | 0.186674182         | 0.046195836       | 3.93E-04  | -3.54454467 | ***          | 5.51E-04 | 0.0004  | ***0.0004  |
| 0.2749(0.0726,0.572)     | 0.350466136         | 0.065932518       | 9.67E-12  | -6.81134673 | ***          | 6.77E-11 | <0.0001 | ***<0.0001 |
| 0.0022(0.0012,0.0093)    | 0.006733682         | 0.001937744       | 9.20E-07  | -4.90807724 | ***          | 2.15E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.29E-04            | 2.26E-04          | 0.0139669 | -2.45811317 | *            | 0.016295 | 0.014   | * 0.014    |
| COVID-19-.median         | COVID-19-.mean      | COVID-19-.se      | p-value   | z-score     | Sig.<br>mark | q-value  | fixp    | fixps      |
| 0.0813(0.0214,0.6131)    | 0.273025479         | 0.0369043         | 4.48E-08  | -5.47097249 | ***          | 8.32E-07 | <0.0001 | ***<0.0001 |
| 0.0175(0.0069,0.0819)    | 0.128900817         | 0.030360855       | 0.0011162 | -3.25947615 | **           | 0.005296 | 0.0011  | ** 0.0011  |
| 0.001(0.0003,0.0123)     | 0.044938958         | 0.014639124       | 2.25E-13  | -7.33289775 | ***          | 1.41E-11 | <0.0001 | ***<0.0001 |
| 0.0012(0.0004,0.0152)    | 0.029725394         | 0.008616667       | 1.02E-04  | -3.88572693 | ***          | 6.59E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 3.87E-05            | 1.38E-05          | 1.82E-37  | -12.7917425 | ***          | 8.13E-35 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.56E-06            | 1.92E-06          | 6.17E-27  | -10.7462368 | ***          | 1.38E-24 | <0.0001 | ***<0.0001 |
| 0.0028(0.001,0.0131)     | 0.055329873         | 0.019839717       | 1.66E-08  | -5.64366991 | ***          | 3.37E-07 | <0.0001 | ***<0.0001 |
| 0.0172(0.0066,0.027)     | 0.021221451         | 0.00324287        | 4.42E-07  | -5.04987112 | ***          | 5.98E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.066193887         | 0.021231607       | 2.72E-07  | -5.14168204 | ***          | 3.80E-06 | <0.0001 | ***<0.0001 |
| 0.0008(0.0001,0.0029)    | 0.004459014         | 0.001221663       | 9.04E-07  | -4.91151513 | ***          | 1.09E-05 | <0.0001 | ***<0.0001 |
| 0.0017(0.0006,0.0063)    | 0.005000901         | 0.001156586       | 6.34E-09  | -5.80741171 | ***          | 1.57E-07 | <0.0001 | ***<0.0001 |
| 0.0002(<0.0001,0.0014)   | 0.040220437         | 0.01918065        | 1.70E-07  | -5.2290576  | ***          | 2.62E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0001)  | 1.37E-04            | 5.33E-05          | 5.87E-07  | -4.99530293 | ***          | 7.71E-06 | <0.0001 | ***<0.0001 |
| 0.002(0.0004,0.0306)     | 0.020548577         | 0.003582231       | 8.12E-12  | -6.83644071 | ***          | 3.29E-10 | <0.0001 | ***<0.0001 |
| 0.0005(<0.0001,0.0058)   | 0.02825969          | 0.010399467       | 1.79E-07  | -5.21970803 | ***          | 2.66E-06 | <0.0001 | ***<0.0001 |
| 0.0001(<0.0001,0.0008)   | 0.002753169         | 7.79E-04          | 8.84E-04  | -3.32503438 | ***          | 0.00443  | 0.0009  | ***0.0009  |
| <0.0001(<0.0001,<0.0001) | 1.86E-05            | 8.63E-06          | 4.17E-10  | -6.24750759 | ***          | 1.43E-08 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0005)  | 5.92E-04            | 2.21E-04          | 2.16E-05  | -4.24796626 | ***          | 1.92E-04 | <0.0001 | ***<0.0001 |
| 0.0012(0.0002,0.0159)    | 0.008852056         | 0.001666522       | 7.21E-10  | -6.16151437 | ***          | 2.17E-08 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0003)  | 9.95E-04            | 3.74E-04          | 2.52E-09  | -5.96040793 | ***          | 7.01E-08 | <0.0001 | ***<0.0001 |
| 0.0004(0.0001,0.0036)    | 0.006937141         | 0.002469854       | 7.31E-10  | -6.15930267 | ***          | 2.17E-08 | <0.0001 | ***<0.0001 |
| 0.0015(0.0003,0.0083)    | 0.005994014         | 0.001686826       | 1.62E-06  | -4.79640578 | ***          | 1.90E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.27E-05            | 2.97E-05          | 8.83E-05  | -3.92070669 | ***          | 6.28E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0017)  | 0.011924648         | 0.004325223       | 6.66E-14  | -7.49436153 | ***          | 4.95E-12 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001000746         | 9.25E-04          | 9.66E-16  | -8.03107563 | ***          | 1.08E-13 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.11E-04            | 2.65E-04          | 2.85E-05  | -4.18541638 | ***          | 2.44E-04 | <0.0001 | ***<0.0001 |
| 0.001(0.0002,0.0078)     | 0.004806141         | 7.49E-04          | 1.01E-05  | -4.41541307 | ***          | 9.37E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 5.58E-04            | 3.80E-04          | 9.48E-04  | -3.30555682 | ***          | 0.004646 | 0.0009  | ***0.0009  |
| <0.0001(<0.0001,0.0002)  | 0.007665718         | 0.004770595       | 0.004764  | -2.82257104 | **           | 0.016863 | 0.0048  | ** 0.0048  |
| <0.0001(<0.0001,<0.0001) | 6.94E-06            | 6.94E-06          | 8.68E-13  | -7.14997125 | ***          | 3.87E-11 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001720169         | 0.001099574       | 0.0071772 | -2.68850712 | **           | 0.023711 | 0.0072  | ** 0.0072  |
| 0.0006(<0.0001,0.0073)   | 0.004061169         | 7.41E-04          | 8.33E-09  | -5.76160827 | ***          | 1.81E-07 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.003749718         | 0.00366281        | 3.93E-08  | -5.49412396 | ***          | 7.61E-07 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.66E-04            | 9.50E-05          | 9.60E-05  | -3.90048986 | ***          | 6.30E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.76E-05            | 2.91E-05          | 1.16E-04  | -3.8535021  | ***          | 7.11E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 9.88E-05            | 2.14E-05          | 2.30E-04  | -3.68361685 | ***          | 0.001298 | 0.0002  | ***0.0002  |
| <0.0001(<0.0001,<0.0001) | 3.13E-06            | 3.13E-06          | 0.005671  | -2.76622191 | **           | 0.019017 | 0.0057  | ** 0.0057  |
| <0.0001(<0.0001,<0.0001) | 4.41E-04            | 2.57E-04          | 3.77E-05  | -4.12143467 | ***          | 3.11E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.74E-04            | 1.29E-04          | 4.79E-08  | -5.45904242 | ***          | 8.54E-07 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 6.85E-06            | 4.72E-06          | 1.21E-19  | -9.06839369 | ***          | 1.80E-17 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 6.95E-05            | 6.75E-05          | 5.26E-15  | -7.82060228 | ***          | 4.69E-13 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 9.72E-05            | 8.29E-05          | 6.88E-04  | -3.39420773 | ***          | 0.003611 | 0.0007  | ***0.0007  |
| <0.0001(<0.0001,<0.0001) | 0.00121662          | 0.001208325       | 2.94E-06  | -4.67508809 | ***          | 2.91E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0001)  | 0.002452873         | 0.001462589       | 0.0052485 | -2.79137365 | **           | 0.018006 | 0.0052  | ** 0.0052  |
| <0.0001(<0.0001,<0.0001) | 4.58E-06            | 4.58E-06          | 0.0011611 | -3.24827603 | **           | 0.005451 | 0.0012  | ** 0.0012  |
| <0.0001(<0.0001,<0.0001) | 3.83E-06            | 3.83E-06          | 2.76E-05  | -4.19274643 | ***          | 2.41E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 8.19E-05            | 2.80E-05          | 0.0458853 | -1.99644732 | *            | 0.102324 | 0.0459  | * 0.0459   |
| <0.0001(<0.0001,<0.0001) | 0.001357577         | 0.001241904       | 0.0271441 | -2.20943949 | *            | 0.067257 | 0.0271  | * 0.0271   |
| <0.0001(<0.0001,<0.0001) | 2.15E-04            | 1.89E-04          | 5.57E-05  | -4.03014193 | ***          | 4.44E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0001)  | 0.002209606         | 0.001819739       | 9.37E-04  | -3.30864481 | ***          | 0.004646 | 0.0009  | ***0.0009  |
| <0.0001(<0.0001,<0.0001) | 3.90E-04            | 2.55E-04          | 0.0127437 | -2.4908525  | *            | 0.034447 | 0.0127  | * 0.0127   |
| <0.0001(<0.0001,<0.0001) | 0                   | 0                 | 1.98E-07  | -5.20120983 | ***          | 2.85E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 7.51E-04            | 7.12E-04          | 1.25E-05  | -4.36923397 | ***          | 1.13E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.002956014         | 0.002361643       | 9.60E-08  | -5.33414432 | ***          | 1.53E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0002)  | 8.36E-04            | 5.31E-04          | 0.0068624 | -2.7034471  | **           | 0.022841 | 0.0069  | ** 0.0069  |
| <0.0001(<0.0001,<0.0001) | 9.30E-07            | 9.30E-07          | 2.13E-06  | -4.74026199 | ***          | 2.36E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.70E-04            | 9.43E-05          | 2.79E-06  | -4.68578396 | ***          | 2.83E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.95E-04            | 1.54E-04          | 0.0017116 | -3.1361805  | **           | 0.007558 | 0.0017  | ** 0.0017  |
| <0.0001(<0.0001,<0.0001) | 2.49E-04            | 9.28E-05          | 0.0025144 | -3.02160153 | **           | 0.010195 | 0.0025  | ** 0.0025  |
| <0.0001(<0.0001,0.0001)  | 0.002466662         | 0.001195413       | 2.08E-04  | -3.70953065 | ***          | 0.001187 | 0.0002  | ***0.0002  |
| <0.0001(<0.0001,0.0002)  | 0.001433056         | 5.18E-04          | 2.67E-09  | -5.95066016 | ***          | 7.01E-08 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0                   | 0                 | 7.95E-08  | -5.36827953 | ***          | 1.31E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.22E-04            | 7.10E-05          | 0.0128551 | -2.48775785 | *            | 0.034538 | 0.0129  | * 0.0129   |
| <0.0001(<0.0001,<0.0001) | 0.001912141         | 0.001868451       | 2.90E-04  | -3.6239484  | ***          | 0.001598 | 0.0003  | ***0.0003  |
| <0.0001(<0.0001,<0.0001) | 0.001390915         | 0.001368353       | 0.0010592 | -3.27430705 | **           | 0.005102 | 0.0011  | ** 0.0011  |
| <0.0001(<0.0001,<0.0001) | 3.49E-04            | 3.35E-04          | 0.0016606 | -3.14504192 | **           | 0.007406 | 0.0017  | ** 0.0017  |
| <0.0001(<0.0001,<0.0001) | 0                   | 0                 | 4.64E-04  | -3.50090499 | ***          | 0.002522 | 0.0005  | ***0.0005  |
| <0.0001(<0.0001,<0.0001) | 0.001663155         | 0.001589186       | 0.0118627 | -2.51620331 | *            | 0.032459 | 0.0119  | * 0.0119   |
| <0.0001(<0.0001,0.0005)  | 0.001167732         | 3.18E-04          | 6.25E-05  | -4.00314711 | ***          | 4.89E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 4.60E-05            | 4.11E-05          | 0.0050824 | -2.80176293 | **           | 0.017572 | 0.0051  | ** 0.0051  |
| <0.0001(<0.0001,<0.0001) | 1.34E-04            | 8.22E-05          | 6.80E-04  | -3.3976039  | ***          | 0.003609 | 0.0007  | ***0.0007  |
| <0.0001(<0.0001,0.0005)  | 6.76E-04            | 1.95E-04          | 2.29E-06  | -4.72633067 | ***          | 2.43E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.07E-05            | 2.02E-05          | 3.20E-05  | -4.15909023 | ***          | 2.69E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001195042         | 7.08E-04          | 7.27E-08  | -5.38441164 | ***          | 1.25E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0                   | 0                 | 0.0049979 | -2.80717046 | **           | 0.017414 | 0.005   | ** 0.005   |
| <0.0001(<0.0001,<0.0001) | 3.89E-04            | 3.41E-04          | 0.0113687 | -2.53115652 | *            | 0.031299 | 0.0114  | * 0.0114   |
| <0.0001(<0.0001,<0.0001) | 9.43E-04            | 9.10E-04          | 0.027905  | -2.19861939 | *            | 0.068714 | 0.0279  | * 0.0279   |
| <0.0001(<0.0001,<0.0001) | 0                   | 0                 | 6.26E-13  | -7.19480448 | ***          | 3.10E-11 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 7.72E-05            | 2.43E-05          | 0.0017517 | -3.1293952  | **           | 0.007659 | 0.0018  | ** 0.0018  |
| <0.0001(<0.0001,<0.0001) | 2.85E-05            | 2.78E-05          | 7.03E-04  | -3.3884148  | ***          | 0.003646 | 0.0007  | ***0.0007  |

|                          |              |             |           |             |           |          |         |            |
|--------------------------|--------------|-------------|-----------|-------------|-----------|----------|---------|------------|
| <0.0001(<0.0001,0.0002)  | 8.97E-04     | 2.66E-04    | 0.0039732 | -2.88027969 | **        | 0.01429  | 0.004   | ** 0.004   |
| <0.0001(<0.0001,<0.0001) | 0.001115606  | 0.001080069 | 6.86E-06  | -4.49810223 | ***       | 6.51E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 5.70E-04     | 2.21E-04    | 0.0108387 | -2.547858   | *         | 0.030025 | 0.0108  | * 0.0108   |
| <0.0001(<0.0001,<0.0001) | 1.46E-04     | 1.43E-04    | 0.0200566 | -2.3252866  | *         | 0.052311 | 0.0201  | * 0.0201   |
| <0.0001(<0.0001,<0.0001) | 8.31E-06     | 6.80E-06    | 0.0264286 | -2.21985482 | *         | 0.06585  | 0.0264  | * 0.0264   |
| <0.0001(<0.0001,<0.0001) | 2.13E-06     | 1.49E-06    | 1.12E-04  | -3.86330855 | ***       | 7.11E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0173753 | -2.37866926 | *         | 0.046127 | 0.0174  | * 0.0174   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.014968  | -2.43315304 | *         | 0.039974 | 0.015   | * 0.015    |
| <0.0001(<0.0001,<0.0001) | 1.15E-06     | 1.15E-06    | 0.0025103 | -3.02209273 | **        | 0.010195 | 0.0025  | ** 0.0025  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0079618 | -2.65368762 | **        | 0.025547 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 8.73E-07     | 8.73E-07    | 0.0054782 | -2.7774797  | **        | 0.01851  | 0.0055  | ** 0.0055  |
| <0.0001(<0.0001,<0.0001) | 1.83E-06     | 1.83E-06    | 0.0280404 | -2.19672037 | *         | 0.068714 | 0.028   | * 0.028    |
| <0.0001(<0.0001,0.0003)  | 3.52E-04     | 1.76E-04    | 0.0020284 | -3.08603749 | **        | 0.008783 | 0.002   | ** 0.002   |
| <0.0001(<0.0001,<0.0001) | 6.97E-04     | 6.19E-04    | 2.17E-06  | -4.73701543 | ***       | 2.36E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0035977 | -2.91144062 | **        | 0.013371 | 0.0036  | ** 0.0036  |
| <0.0001(<0.0001,<0.0001) | 6.42E-04     | 4.10E-04    | 0.0187415 | -2.35063392 | *         | 0.049169 | 0.0187  | * 0.0187   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0010639 | -3.27307019 | **        | 0.005102 | 0.0011  | ** 0.0011  |
| <0.0001(<0.0001,<0.0001) | 1.21E-05     | 1.21E-05    | 0.0094284 | -2.5961151  | **        | 0.027814 | 0.0094  | ** 0.0094  |
| <0.0001(<0.0001,<0.0001) | 8.03E-07     | 8.03E-07    | 0.0024749 | -3.02639573 | **        | 0.010195 | 0.0025  | ** 0.0025  |
| <0.0001(<0.0001,<0.0001) | 1.17E-05     | 8.40E-06    | 0.0184079 | -2.35730986 | *         | 0.048579 | 0.0184  | * 0.0184   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0016026 | -3.15542451 | **        | 0.00722  | 0.0016  | ** 0.0016  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0024055 | -3.03497914 | **        | 0.010027 | 0.0024  | ** 0.0024  |
| <0.0001(<0.0001,<0.0001) | 5.75E-04     | 5.17E-04    | 8.75E-05  | -3.92276537 | ***       | 6.28E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0035976 | -2.91144557 | **        | 0.013371 | 0.0036  | ** 0.0036  |
| <0.0001(<0.0001,<0.0001) | 5.66E-04     | 5.30E-04    | 1.29E-04  | -3.82746888 | ***       | 7.60E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 5.48E-04     | 5.38E-04    | 0.0012888 | -3.218458   | **        | 0.005926 | 0.0013  | ** 0.0013  |
| <0.0001(<0.0001,<0.0001) | 5.23E-04     | 5.08E-04    | 1.29E-04  | -3.82746888 | ***       | 7.60E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 5.06E-04     | 4.95E-04    | 3.81E-06  | -4.62123521 | ***       | 3.70E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 9.44E-05  | -3.9046723  | ***       | 6.28E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0034143 | -2.9277457  | **        | 0.013015 | 0.0034  | ** 0.0034  |
| <0.0001(<0.0001,<0.0001) | 7.18E-07     | 7.18E-07    | 0.0026044 | -3.01094213 | **        | 0.010464 | 0.0026  | ** 0.0026  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0428526 | -2.02514418 | *         | 0.097511 | 0.0429  | * 0.0429   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0255354 | -2.23320495 | *         | 0.063982 | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 3.87E-06     | 3.04E-06    | 1.07E-11  | -6.79628968 | ***       | 3.99E-10 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 4.17E-04     | 3.96E-04    | 1.29E-04  | -3.82746888 | ***       | 7.60E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0079618 | -2.65368762 | **        | 0.025547 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0099157 | -2.57875545 | **        | 0.027814 | 0.0099  | ** 0.0099  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0255354 | -2.23320495 | *         | 0.063982 | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 3.82E-04     | 3.59E-04    | 8.55E-04  | -3.33429785 | ***       | 0.004334 | 0.0009  | ***0.0009  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0016026 | -3.15542922 | **        | 0.00722  | 0.0016  | ** 0.0016  |
| <0.0001(<0.0001,<0.0001) | 3.62E-04     | 3.61E-04    | 0.0438919 | -2.01512162 | *         | 0.099369 | 0.0439  | * 0.0439   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0053615 | -2.78447306 | **        | 0.018254 | 0.0054  | ** 0.0054  |
| <0.0001(<0.0001,<0.0001) | 2.60E-04     | 2.53E-04    | 0.0254876 | -2.23393109 | *         | 0.063982 | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0035976 | -2.91144557 | **        | 0.013371 | 0.0036  | ** 0.0036  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0024055 | -3.03498397 | **        | 0.010027 | 0.0024  | ** 0.0024  |
| <0.0001(<0.0001,<0.0001) | 4.04E-06     | 2.85E-06    | 0.0100528 | -2.57400867 | *         | 0.028022 | 0.0101  | * 0.0101   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0373998 | -2.0813731  | *         | 0.086277 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0428526 | -2.02514418 | *         | 0.097511 | 0.0429  | * 0.0429   |
| <0.0001(<0.0001,<0.0001) | 2.79E-04     | 2.72E-04    | 0.0012888 | -3.218458   | **        | 0.005926 | 0.0013  | ** 0.0013  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0079619 | -2.65368236 | **        | 0.025547 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 1.90E-04     | 1.85E-04    | 0.0443516 | -2.01075212 | *         | 0.099903 | 0.0444  | * 0.0444   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0255354 | -2.23320495 | *         | 0.063982 | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0374003 | -2.08136696 | *         | 0.086277 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 2.25E-04     | 2.22E-04    | 0.0040049 | -2.87777488 | **        | 0.01429  | 0.004   | ** 0.004   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0255354 | -2.23320495 | *         | 0.063982 | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 2.15E-04     | 2.03E-04    | 2.53E-04  | -3.6594048  | ***       | 0.001409 | 0.0003  | ***0.0003  |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0079618 | -2.65368762 | **        | 0.025547 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 2.10E-04     | 2.08E-04    | 0.0375284 | -2.07996857 | *         | 0.086277 | 0.0375  | * 0.0375   |
| <0.0001(<0.0001,<0.0001) | 1.96E-04     | 1.75E-04    | 0.0029237 | -2.9756486  | **        | 0.011438 | 0.0029  | ** 0.0029  |
| <0.0001(<0.0001,<0.0001) | 1.69E-04     | 1.61E-04    | 0.0375284 | -2.07996857 | *         | 0.086277 | 0.0375  | * 0.0375   |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 9.44E-05  | -3.9046723  | ***       | 6.28E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 8.61E-07  | -4.92094549 | ***       | 1.07E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0            | 0           | 0.0374003 | -2.08136696 | *         | 0.086277 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 1.59E-04     | 1.56E-04    | 0.0375284 | -2.07996857 | *         | 0.086277 | 0.0375  | * 0.0375   |
|                          |              |             |           |             |           |          |         |            |
| Control.median           | Control.mean | Control.se  | p-value   | z-score     | Sig_ mark | q-value  | fixp    | fixps      |
| <0.0001(<0.0001,<0.0001) | 1.04E-05     | 4.71E-06    | 6.07E-14  | -7.50660782 | ***       | 3.93E-12 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 4.70E-04     | 3.32E-04    | 1.55E-05  | -4.32122962 | ***       | 1.67E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.57E-04     | 1.72E-04    | 0.0014709 | -3.18037176 | **        | 0.007815 | 0.0015  | ** 0.0015  |
| <0.0001(<0.0001,<0.0001) | 4.47E-07     | 4.47E-07    | 2.90E-04  | -3.6239484  | ***       | 0.001931 | 0.0003  | ***0.0003  |
| <0.0001(<0.0001,<0.0001) | 2.06E-04     | 1.35E-04    | 0.0066051 | -2.71612593 | **        | 0.02584  | 0.0066  | ** 0.0066  |
| <0.0001(<0.0001,<0.0001) | 2.50E-07     | 2.50E-07    | 0.0438919 | -2.01512162 | *         | 0.104519 | 0.0439  | * 0.0439   |
| <0.0001(<0.0001,<0.0001) | 4.47E-07     | 4.47E-07    | 0.0437136 | -2.01682718 | *         | 0.104443 | 0.0437  | * 0.0437   |
| 0.0732(0.0146,0.3211)    | 0.219275682  | 0.02397338  | 0.0010212 | -3.28462546 | **        | 0.005864 | 0.001   | ** 0.001   |
| 0.0054(0.0008,0.0336)    | 0.033443803  | 0.006106216 | 0.0022642 | -3.0531984  | **        | 0.011273 | 0.0023  | ** 0.0023  |
| 0.0005(<0.0001,0.002)    | 0.022160894  | 0.009304678 | 1.30E-07  | -5.27909613 | ***       | 2.89E-06 | <0.0001 | ***<0.0001 |
| 0.0002(<0.0001,0.001)    | 0.012120864  | 0.006864569 | 2.16E-05  | -4.24796626 | ***       | 2.16E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0001)  | 0.003735326  | 0.002402676 | 7.32E-08  | -5.38301577 | ***       | 1.74E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.002664174  | 0.001944802 | 0.001071  | -3.27118081 | **        | 0.005957 | 0.0011  | ** 0.0011  |
| <0.0001(<0.0001,<0.0001) | 0.002392182  | 0.002376475 | 0.0107776 | -2.54982902 | *         | 0.033509 | 0.0108  | * 0.0108   |
| <0.0001(<0.0001,0.0002)  | 0.002014068  | 5.11E-04    | 1.67E-06  | -4.78947107 | ***       | 2.53E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.002123689  | 0.001756926 | 2.76E-05  | -4.19274643 | ***       | 2.62E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001679379  | 0.001400235 | 1.98E-07  | -5.20120983 | ***       | 4.03E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001571917  | 8.98E-04    | 7.68E-06  | -4.47401348 | ***       | 9.26E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 7.11E-04     | 6.33E-04    | 0.0049979 | -2.80717046 | **        | 0.020451 | 0.005   | ** 0.005   |
| <0.0001(<0.0001,<0.0001) | 4.96E-04     | 4.73E-04    | 0.014968  | -2.43315304 | *         | 0.043677 | 0.015   | * 0.015    |
| <0.0001(<0.0001,<0.0001) | 2.37E-04     | 2.29E-04    | 0.0411914 | -2.04159862 | *         | 0.099756 | 0.0412  | * 0.0412   |
| <0.0001(<0.0001,<0.0001) | 1.45E-04     | 1.11E-04    | 0.0428526 | -2.02514418 | *         | 0.102731 | 0.0429  | * 0.0429   |
| 0.0341(0.0091,0.3007)    | 0.182386333  | 0.021014763 | 4.48E-08  | -5.47097249 | ***       | 1.14E-06 | <0.0001 | ***<0.0001 |
| 0.007(0.0018,0.0609)     | 0.073276591  | 0.013280155 | 3.80E-07  | -5.07872363 | ***       | 7.31E-06 | <0.0001 | ***<0.0001 |

|                          |             |             |           |             |     |          |         |            |
|--------------------------|-------------|-------------|-----------|-------------|-----|----------|---------|------------|
| 0.0016(0.0006,0.0102)    | 0.045389758 | 0.010297678 | 2.25E-13  | -7.33289775 | *** | 1.23E-11 | <0.0001 | ***<0.0001 |
| 0.0163(0.002,0.0547)     | 0.062696962 | 0.010848822 | 7.68E-38  | -12.8588002 | *** | 5.47E-35 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.04E-05    | 4.73E-06    | 6.17E-27  | -10.7462368 | *** | 1.10E-24 | <0.0001 | ***<0.0001 |
| 0.0001(<0.0001,0.0004)   | 0.003136106 | 0.001357543 | 2.72E-07  | -5.14168204 | *** | 5.39E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.03E-04    | 2.53E-05    | 1.13E-19  | -9.07517376 | *** | 1.35E-17 | <0.0001 | ***<0.0001 |
| 0.0017(0.0006,0.0146)    | 0.029246371 | 0.009827942 | 9.04E-07  | -4.91151513 | *** | 1.46E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001495652 | 7.19E-04    | 1.70E-07  | -5.2290576  | *** | 3.68E-06 | <0.0001 | ***<0.0001 |
| 0.0009(0.0003,0.0069)    | 0.013676712 | 0.002940598 | 0.0059761 | -2.74909012 | **  | 0.023686 | 0.006   | ** 0.006   |
| 0.0011(0.0003,0.0089)    | 0.016085189 | 0.003427974 | 3.84E-05  | -4.11675927 | *** | 3.51E-04 | <0.0001 | ***<0.0001 |
| 0.0001(<0.0001,0.0009)   | 0.006277659 | 0.001909053 | 0.0079863 | -2.65264869 | **  | 0.029928 | 0.008   | ** 0.008   |
| 0.0001(<0.0001,0.0008)   | 0.018769386 | 0.010507771 | 5.87E-07  | -4.99530293 | *** | 1.07E-05 | <0.0001 | ***<0.0001 |
| 0.0004(0.0002,0.0043)    | 0.007263674 | 0.001244374 | 1.19E-13  | -7.4175612  | *** | 7.08E-12 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0003)  | 0.001335606 | 4.36E-04    | 1.79E-07  | -5.21970803 | *** | 3.75E-06 | <0.0001 | ***<0.0001 |
| 0.0005(0.0002,0.0036)    | 0.011541795 | 0.003154792 | 5.68E-04  | -3.44655781 | *** | 0.003485 | 0.0006  | ***0.0006  |
| 0.0004(0.0001,0.0017)    | 0.006671242 | 0.001369177 | 7.21E-10  | -6.16151437 | *** | 2.48E-08 | <0.0001 | ***<0.0001 |
| 0.0003(<0.0001,0.0023)   | 0.007204371 | 0.001965241 | 7.31E-10  | -6.15930267 | *** | 2.48E-08 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0005)  | 0.004933727 | 0.002462598 | 0.0129401 | -2.4854127  | *   | 0.038072 | 0.0129  | * 0.0129   |
| <0.0001(<0.0001,<0.0001) | 0.002256402 | 0.001837952 | 2.88E-09  | -5.93811845 | *** | 8.93E-08 | <0.0001 | ***<0.0001 |
| 0.0008(0.0001,0.0053)    | 0.004611189 | 0.00102376  | 1.62E-06  | -4.79640578 | *** | 2.50E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0002)  | 0.006259318 | 0.002105115 | 5.27E-07  | -5.01623132 | *** | 9.87E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.007453303 | 0.007256768 | 9.15E-06  | -4.43632293 | *** | 1.07E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.007387523 | 0.007272743 | 0.0046701 | -2.82894975 | **  | 0.019559 | 0.0047  | ** 0.0047  |
| <0.0001(<0.0001,0.0007)  | 0.003245568 | 0.001012255 | 1.79E-05  | -4.2895777  | *** | 1.85E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0003)  | 0.004919364 | 0.001874499 | 2.03E-05  | -4.26151873 | *** | 2.07E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 4.52E-04    | 2.59E-04    | 2.85E-05  | -4.18541638 | *** | 2.67E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.45E-04    | 4.87E-05    | 3.75E-17  | -8.42046365 | *** | 3.34E-15 | <0.0001 | ***<0.0001 |
| 0.0002(<0.0001,0.0019)   | 0.003037455 | 6.24E-04    | 1.53E-05  | -4.32422736 | *** | 1.67E-04 | <0.0001 | ***<0.0001 |
| 0.0002(<0.0001,0.0026)   | 0.002792644 | 4.37E-04    | 1.01E-05  | -4.41541307 | *** | 1.16E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0002)  | 0.001231159 | 5.36E-04    | 4.38E-05  | -4.08650335 | *** | 3.90E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0           | 0           | 5.49E-26  | -10.5427611 | *** | 7.81E-24 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0013)  | 0.002100992 | 5.46E-04    | 8.33E-09  | -5.76160827 | *** | 2.33E-07 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0001)  | 0.003701871 | 0.001402354 | 4.76E-05  | -4.06687231 | *** | 4.19E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0001)  | 4.50E-04    | 1.41E-04    | 3.93E-08  | -5.49412396 | *** | 1.04E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0003)  | 0.003418773 | 0.002252957 | 7.69E-05  | -3.95399643 | *** | 6.44E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 5.65E-04    | 3.34E-04    | 0.0187636 | -2.35019508 | *   | 0.053653 | 0.0188  | * 0.0188   |
| <0.0001(<0.0001,<0.0001) | 0.002685682 | 0.002636044 | 0.005671  | -2.76622191 | **  | 0.022684 | 0.0057  | ** 0.0057  |
| <0.0001(<0.0001,0.0001)  | 0.002643091 | 0.002199588 | 6.94E-12  | -6.85883207 | *** | 3.09E-10 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,0.0001)  | 0.002253955 | 0.00149656  | 3.77E-05  | -4.12143467 | *** | 3.48E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 9.34E-04    | 8.58E-04    | 2.56E-05  | -4.20925228 | *** | 2.47E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 9.05E-04    | 2.84E-04    | 0.004879  | -2.81491415 | **  | 0.02016  | 0.0049  | ** 0.0049  |
| <0.0001(<0.0001,<0.0001) | 8.48E-04    | 6.13E-04    | 0.0052485 | -2.79137365 | **  | 0.021354 | 0.0052  | ** 0.0052  |
| <0.0001(<0.0001,<0.0001) | 6.52E-05    | 1.50E-05    | 1.52E-19  | -9.04297285 | *** | 1.55E-17 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001422523 | 7.13E-04    | 1.78E-05  | -4.29052596 | *** | 1.85E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.002026803 | 0.001167777 | 0.0458853 | -1.99644732 | *   | 0.108539 | 0.0459  | * 0.0459   |
| <0.0001(<0.0001,<0.0001) | 0           | 0           | 1.43E-29  | -11.2924111 | *** | 5.09E-27 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001596409 | 0.001110429 | 6.59E-04  | -3.40598313 | *** | 0.003944 | 0.0007  | ***0.0007  |
| <0.0001(<0.0001,0.0005)  | 0.001297705 | 3.36E-04    | 0.0306802 | -2.16119628 | *   | 0.083058 | 0.0307  | * 0.0307   |
| <0.0001(<0.0001,<0.0001) | 0.00164572  | 0.001554348 | 3.04E-04  | -3.61152312 | *** | 0.001988 | 0.0003  | ***0.0003  |
| <0.0001(<0.0001,<0.0001) | 3.39E-04    | 1.78E-04    | 1.25E-05  | -4.36923397 | *** | 1.39E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.60E-06    | 3.23E-06    | 9.60E-08  | -5.33414432 | *** | 2.20E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001338455 | 7.65E-04    | 0.0055741 | -2.77183695 | **  | 0.022422 | 0.0056  | ** 0.0056  |
| <0.0001(<0.0001,<0.0001) | 0.001540924 | 9.95E-04    | 2.13E-06  | -4.74026199 | *** | 3.09E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001397182 | 5.66E-04    | 8.77E-07  | -4.91741974 | *** | 1.45E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 5.02E-04    | 3.52E-04    | 0.0128613 | -2.48758796 | *   | 0.037997 | 0.0129  | * 0.0129   |
| <0.0001(<0.0001,0.0001)  | 0.001278152 | 7.55E-04    | 0.0025144 | -3.02160153 | **  | 0.011935 | 0.0025  | ** 0.0025  |
| <0.0001(<0.0001,<0.0001) | 1.08E-05    | 3.68E-06    | 2.67E-09  | -5.95066016 | *** | 8.64E-08 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001271977 | 7.50E-04    | 5.44E-05  | -4.03566607 | *** | 4.73E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001260856 | 0.001224797 | 3.57E-04  | -3.5698259  | *** | 0.002291 | 0.0004  | ***0.0004  |
| <0.0001(<0.0001,<0.0001) | 0.001189083 | 0.001169493 | 7.04E-04  | -3.38815283 | *** | 0.004175 | 0.0007  | ***0.0007  |
| <0.0001(<0.0001,<0.0001) | 0.001181667 | 0.001086488 | 3.57E-04  | -3.5698259  | *** | 0.002291 | 0.0004  | ***0.0004  |
| <0.0001(<0.0001,<0.0001) | 5.60E-05    | 5.52E-05    | 3.37E-16  | -8.15945556 | *** | 2.66E-14 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0.001097886 | 6.52E-04    | 8.94E-04  | -3.32195645 | *** | 0.005174 | 0.0009  | ***0.0009  |
| <0.0001(<0.0001,<0.0001) | 0.001043568 | 7.57E-04    | 6.18E-04  | -3.4233832  | *** | 0.003764 | 0.0006  | ***0.0006  |
| <0.0001(<0.0001,<0.0001) | 0.001013424 | 4.51E-04    | 7.22E-06  | -4.48723832 | *** | 8.87E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.72E-05    | 3.10E-05    | 0.0012713 | -2.50424405 | *   | 0.036551 | 0.0123  | * 0.0123   |
| <0.0001(<0.0001,<0.0001) | 0.001014879 | 8.14E-04    | 1.47E-04  | -3.79654626 | *** | 0.001024 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 8.84E-06    | 7.03E-06    | 0.0010592 | -3.27430705 | **  | 0.005957 | 0.0011  | ** 0.0011  |
| <0.0001(<0.0001,<0.0001) | 9.64E-04    | 8.91E-04    | 4.64E-04  | -3.50090499 | *** | 0.002871 | 0.0005  | ***0.0005  |
| <0.0001(<0.0001,<0.0001) | 9.52E-04    | 8.96E-04    | 4.64E-04  | -3.50090941 | *** | 0.002871 | 0.0005  | ***0.0005  |
| <0.0001(<0.0001,<0.0001) | 3.69E-05    | 3.28E-05    | 0.0118627 | -2.51620331 | *   | 0.035941 | 0.0119  | * 0.0119   |
| <0.0001(<0.0001,<0.0001) | 8.82E-04    | 8.28E-04    | 0.0010639 | -3.27307019 | **  | 0.005957 | 0.0011  | ** 0.0011  |
| <0.0001(<0.0001,<0.0001) | 7.54E-04    | 5.06E-04    | 7.57E-05  | -3.95772108 | *** | 6.41E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.85E-04    | 6.50E-05    | 6.10E-06  | -4.52282771 | *** | 8.05E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0           | 0           | 0.0026044 | -3.01094213 | **  | 0.01211  | 0.0026  | ** 0.0026  |
| <0.0001(<0.0001,<0.0001) | 2.62E-04    | 1.38E-04    | 0.0034747 | -2.92228738 | **  | 0.015462 | 0.0035  | ** 0.0035  |
| <0.0001(<0.0001,<0.0001) | 2.64E-06    | 2.64E-06    | 1.29E-10  | -6.42837288 | *** | 4.83E-09 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 7.62E-04    | 6.69E-04    | 0.0024055 | -3.03497914 | **  | 0.011651 | 0.0024  | ** 0.0024  |
| <0.0001(<0.0001,0.0001)  | 3.93E-04    | 1.17E-04    | 2.29E-06  | -4.72633067 | *** | 3.19E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 5.00E-04    | 3.02E-04    | 0.0062336 | -2.73523547 | **  | 0.024521 | 0.0062  | ** 0.0062  |
| <0.0001(<0.0001,<0.0001) | 7.76E-05    | 7.52E-05    | 7.27E-08  | -5.38441164 | *** | 1.74E-06 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 7.16E-04    | 6.85E-04    | 0.0026194 | -3.00919851 | **  | 0.01211  | 0.0026  | ** 0.0026  |
| <0.0001(<0.0001,<0.0001) | 0           | 0           | 0.0375284 | -2.07996857 | *   | 0.091822 | 0.0375  | * 0.0375   |
| <0.0001(<0.0001,<0.0001) | 8.05E-06    | 5.72E-06    | 1.76E-05  | -4.29390059 | *** | 1.85E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.43E-06    | 2.43E-06    | 6.26E-13  | -7.19480448 | *** | 2.97E-11 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.99E-04    | 1.15E-04    | 0.0017517 | -3.1293952  | **  | 0.008973 | 0.0018  | ** 0.0018  |
| <0.0001(<0.0001,<0.0001) | 1.23E-04    | 3.24E-05    | 0.0039732 | -2.88027969 | **  | 0.016873 | 0.004   | ** 0.004   |
| <0.0001(<0.0001,<0.0001) | 9.24E-05    | 5.29E-05    | 0.0331106 | -2.13073913 | *   | 0.088627 | 0.0331  | * 0.0331   |
| <0.0001(<0.0001,<0.0001) | 2.05E-07    | 2.05E-07    | 6.86E-06  | -4.49810223 | *** | 8.72E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.85E-04    | 1.47E-04    | 0.0108387 | -2.547858   | *   | 0.033553 | 0.0108  | * 0.0108   |
| <0.0001(<0.0001,<0.0001) | 5.70E-04    | 3.81E-04    | 9.15E-06  | -4.43632293 | *** | 1.07E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.41E-07    | 3.41E-07    | 6.86E-06  | -4.49810223 | *** | 8.72E-05 | <0.0001 | ***<0.0001 |

|                          |          |          |           |             |     |          |         |            |
|--------------------------|----------|----------|-----------|-------------|-----|----------|---------|------------|
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 1.29E-04  | -3.82746888 | *** | 9.13E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 5.14E-04 | 4.32E-04 | 3.79E-04  | -3.5542861  | *** | 0.002409 | 0.0004  | ***0.0004  |
| <0.0001(<0.0001,<0.0001) | 6.82E-06 | 6.32E-06 | 0.0264135 | -2.22007807 | *   | 0.072332 | 0.0264  | * 0.0264   |
| <0.0001(<0.0001,<0.0001) | 2.35E-07 | 2.35E-07 | 7.33E-05  | -3.96536602 | *** | 6.29E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 5.01E-04 | 4.90E-04 | 0.0173753 | -2.37866926 | *   | 0.050289 | 0.0174  | * 0.0174   |
| <0.0001(<0.0001,<0.0001) | 1.24E-04 | 1.22E-04 | 8.22E-05  | -3.93794624 | *** | 6.80E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 4.64E-04 | 3.71E-04 | 3.04E-04  | -3.61151444 | *** | 0.001988 | 0.0003  | ***0.0003  |
| <0.0001(<0.0001,<0.0001) | 4.53E-04 | 2.43E-04 | 0.0025103 | -3.02209273 | **  | 0.011935 | 0.0025  | ** 0.0025  |
| <0.0001(<0.0001,<0.0001) | 4.50E-04 | 4.40E-04 | 0.0079618 | -2.65368762 | **  | 0.029928 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 4.49E-04 | 3.08E-04 | 1.99E-04  | -3.72015559 | *** | 0.001363 | 0.0002  | ***0.0002  |
| <0.0001(<0.0001,<0.0001) | 4.11E-04 | 1.91E-04 | 0.0081701 | -2.64496024 | **  | 0.030341 | 0.0082  | ** 0.0082  |
| <0.0001(<0.0001,<0.0001) | 4.27E-04 | 2.86E-04 | 2.25E-05  | -4.23853125 | *** | 2.22E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 4.25E-04 | 2.93E-04 | 0.0280404 | -2.19672037 | *   | 0.076201 | 0.028   | * 0.028    |
| <0.0001(<0.0001,<0.0001) | 3.08E-04 | 2.53E-04 | 0.005988  | -2.74843735 | **  | 0.023686 | 0.006   | ** 0.006   |
| <0.0001(<0.0001,0.0002)  | 2.33E-04 | 5.75E-05 | 0.0020284 | -3.08603749 | **  | 0.010243 | 0.002   | ** 0.002   |
| <0.0001(<0.0001,<0.0001) | 4.12E-04 | 4.02E-04 | 0.0081819 | -2.64447109 | **  | 0.030341 | 0.0082  | ** 0.0082  |
| <0.0001(<0.0001,<0.0001) | 3.94E-07 | 3.94E-07 | 2.17E-06  | -4.73701543 | *** | 3.09E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.62E-04 | 3.46E-04 | 0.0094284 | -2.5961151  | **  | 0.031101 | 0.0094  | ** 0.0094  |
| <0.0001(<0.0001,<0.0001) | 3.60E-04 | 2.51E-04 | 0.0024749 | -3.02639573 | **  | 0.011906 | 0.0025  | ** 0.0025  |
| <0.0001(<0.0001,<0.0001) | 1.26E-04 | 1.02E-04 | 0.0184079 | -2.35730986 | *   | 0.052848 | 0.0184  | * 0.0184   |
| <0.0001(<0.0001,<0.0001) | 3.47E-04 | 3.32E-04 | 0.0035976 | -2.91144557 | **  | 0.015715 | 0.0036  | ** 0.0036  |
| <0.0001(<0.0001,<0.0001) | 3.46E-04 | 2.69E-04 | 0.0016026 | -3.15542451 | **  | 0.008329 | 0.0016  | ** 0.0016  |
| <0.0001(<0.0001,<0.0001) | 3.41E-04 | 2.63E-04 | 0.0024055 | -3.03497914 | **  | 0.011651 | 0.0024  | ** 0.0024  |
| <0.0001(<0.0001,<0.0001) | 1.69E-04 | 4.13E-05 | 2.47E-04  | -3.66551208 | *** | 0.001674 | 0.0002  | ***0.0002  |
| <0.0001(<0.0001,<0.0001) | 3.17E-04 | 1.73E-04 | 8.42E-05  | -3.93214221 | *** | 6.89E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.12E-04 | 2.99E-04 | 0.0016026 | -3.15542451 | **  | 0.008329 | 0.0016  | ** 0.0016  |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 1.25E-05  | -4.36903173 | *** | 1.39E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.08E-04 | 2.98E-04 | 0.0035976 | -2.91144557 | **  | 0.015715 | 0.0036  | ** 0.0036  |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 1.29E-04  | -3.82746888 | *** | 9.13E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 5.15E-07 | 5.15E-07 | 7.23E-06  | -4.48688299 | *** | 8.87E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 4.52E-05 | 9.64E-06 | 1.96E-04  | -3.72371708 | *** | 0.001357 | 0.0002  | ***0.0002  |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0012888 | -3.218458   | **  | 0.0069   | 0.0013  | ** 0.0013  |
| <0.0001(<0.0001,<0.0001) | 2.83E-04 | 2.43E-04 | 0.039725  | -2.05659671 | *   | 0.096533 | 0.0397  | * 0.0397   |
| <0.0001(<0.0001,<0.0001) | 2.81E-04 | 2.69E-04 | 0.0117822 | -2.51860126 | *   | 0.03585  | 0.0118  | * 0.0118   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 1.29E-04  | -3.82746888 | *** | 9.13E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 9.76E-06 | 9.29E-06 | 0.0179648 | -2.36634277 | *   | 0.051785 | 0.018   | * 0.018    |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 3.81E-06  | -4.62123521 | *** | 5.12E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 9.44E-05  | -3.9046723  | *** | 7.07E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.59E-04 | 2.50E-04 | 0.0079619 | -2.65368236 | **  | 0.029928 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 2.57E-04 | 2.43E-04 | 0.0010638 | -3.27307941 | **  | 0.005957 | 0.0011  | ** 0.0011  |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0375284 | -2.07996857 | *   | 0.091822 | 0.0375  | * 0.0375   |
| <0.0001(<0.0001,<0.0001) | 2.68E-06 | 1.31E-06 | 0.0422775 | -2.03077849 | *   | 0.101714 | 0.0423  | * 0.0423   |
| <0.0001(<0.0001,<0.0001) | 2.50E-04 | 2.45E-04 | 0.0255354 | -2.23320495 | *   | 0.07047  | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 2.47E-04 | 2.37E-04 | 0.0374003 | -2.08136696 | *   | 0.091822 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0026044 | -3.01094213 | **  | 0.01211  | 0.0026  | ** 0.0026  |
| <0.0001(<0.0001,<0.0001) | 2.45E-04 | 2.31E-04 | 0.0255354 | -2.23320495 | *   | 0.07047  | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 2.41E-04 | 2.36E-04 | 0.0117818 | -2.51861213 | *   | 0.03585  | 0.0118  | * 0.0118   |
| <0.0001(<0.0001,<0.0001) | 2.12E-04 | 1.25E-04 | 0.0018869 | -3.10748485 | **  | 0.009596 | 0.0019  | ** 0.0019  |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 1.07E-11  | -6.79628968 | *** | 4.50E-10 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 2.25E-04 | 2.04E-04 | 0.011782  | -2.51860669 | *   | 0.03585  | 0.0118  | * 0.0118   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 1.29E-04  | -3.82746888 | *** | 9.13E-04 | 0.0001  | ***0.0001  |
| <0.0001(<0.0001,<0.0001) | 2.17E-04 | 2.10E-04 | 0.0079618 | -2.65368762 | **  | 0.029928 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0099157 | -2.57875545 | **  | 0.031101 | 0.0099  | ** 0.0099  |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0012888 | -3.218458   | **  | 0.0069   | 0.0013  | ** 0.0013  |
| <0.0001(<0.0001,<0.0001) | 2.08E-04 | 2.04E-04 | 0.0255354 | -2.23320495 | *   | 0.07047  | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 1.93E-06 | 1.93E-06 | 8.55E-04  | -3.33429785 | *** | 0.004991 | 0.0009  | ***0.0009  |
| <0.0001(<0.0001,<0.0001) | 1.87E-04 | 1.69E-04 | 0.0137964 | -2.46252096 | *   | 0.040424 | 0.0138  | * 0.0138   |
| <0.0001(<0.0001,<0.0001) | 1.94E-04 | 1.82E-04 | 0.0053615 | -2.78447306 | **  | 0.02169  | 0.0054  | ** 0.0054  |
| <0.0001(<0.0001,<0.0001) | 1.89E-04 | 1.77E-04 | 0.0016026 | -3.15542922 | **  | 0.008329 | 0.0016  | ** 0.0016  |
| <0.0001(<0.0001,<0.0001) | 1.89E-04 | 1.85E-04 | 0.0373998 | -2.0813731  | *   | 0.091822 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 1.86E-04 | 1.80E-04 | 0.0079618 | -2.65368762 | **  | 0.029928 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 1.85E-04 | 1.73E-04 | 0.0035976 | -2.91144557 | **  | 0.015715 | 0.0036  | ** 0.0036  |
| <0.0001(<0.0001,<0.0001) | 1.81E-04 | 1.14E-04 | 0.0024055 | -3.03498397 | **  | 0.011651 | 0.0024  | ** 0.0024  |
| <0.0001(<0.0001,<0.0001) | 1.73E-04 | 1.26E-04 | 0.0255354 | -2.23320495 | *   | 0.07047  | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 1.72E-04 | 1.68E-04 | 0.0373998 | -2.0813731  | *   | 0.091822 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 1.67E-04 | 1.12E-04 | 0.0079618 | -2.65368762 | **  | 0.029928 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 1.57E-04 | 1.03E-04 | 0.0100528 | -2.57400867 | *   | 0.031393 | 0.0101  | * 0.0101   |
| <0.0001(<0.0001,<0.0001) | 1.57E-04 | 1.52E-04 | 0.0373998 | -2.0813731  | *   | 0.091822 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0012888 | -3.218458   | **  | 0.0069   | 0.0013  | ** 0.0013  |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0012888 | -3.218458   | **  | 0.0069   | 0.0013  | ** 0.0013  |
| <0.0001(<0.0001,<0.0001) | 1.34E-04 | 1.31E-04 | 0.0374003 | -2.08136696 | *   | 0.091822 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0040049 | -2.87777488 | **  | 0.016873 | 0.004   | ** 0.004   |
| <0.0001(<0.0001,<0.0001) | 1.20E-04 | 1.16E-04 | 0.0255354 | -2.23320495 | *   | 0.07047  | 0.0255  | * 0.0255   |
| <0.0001(<0.0001,<0.0001) | 6.67E-07 | 6.67E-07 | 2.53E-04  | -3.6594048  | *** | 0.001698 | 0.0003  | ***0.0003  |
| <0.0001(<0.0001,<0.0001) | 1.14E-04 | 1.09E-04 | 0.0079618 | -2.65368762 | **  | 0.029928 | 0.008   | ** 0.008   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0375284 | -2.07996857 | *   | 0.091822 | 0.0375  | * 0.0375   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0375284 | -2.07996857 | *   | 0.091822 | 0.0375  | * 0.0375   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0040049 | -2.87777488 | **  | 0.016873 | 0.004   | ** 0.004   |
| <0.0001(<0.0001,<0.0001) | 1.08E-06 | 6.57E-07 | 0.0029237 | -2.9756486  | **  | 0.013259 | 0.0029  | ** 0.0029  |
| <0.0001(<0.0001,<0.0001) | 9.45E-05 | 8.94E-05 | 0.0374003 | -2.08136696 | *   | 0.091822 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0375284 | -2.07996857 | *   | 0.091822 | 0.0375  | * 0.0375   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 9.44E-05  | -3.9046723  | *** | 7.07E-04 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 8.61E-07  | -4.92094549 | *** | 1.45E-05 | <0.0001 | ***<0.0001 |
| <0.0001(<0.0001,<0.0001) | 8.90E-05 | 8.54E-05 | 0.0374003 | -2.08136696 | *   | 0.091822 | 0.0374  | * 0.0374   |
| <0.0001(<0.0001,<0.0001) | 0        | 0        | 0.0375284 | -2.07996857 | *   | 0.091822 | 0.0375  | * 0.0375   |
| <0.0001(<0.0001,<0.0001) | 8.15E-05 | 7.80E-05 | 0.0374003 | -2.08136696 | *   | 0.091822 | 0.0374  | * 0.0374   |



| Supplementary table S21. The cladogram of oral fungal structure and their predominant fungal among the COVID-19 (n=71), Post-COVID-19 (n=22), and controls (n=132) groups |                 |          |            |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|------------|----------|
| Biomaker_names                                                                                                                                                            | Logarithm value | Groups   | LDA_value  | P_value  |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Vanrija                                                                                | 2.811263389     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Cordyceps                                                                                        | 2.443594836     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Tausonia                                                                                   | 2.799518075     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Thyridariaceae.g_Roussoella.s_Roussoella_neopustulans                                                             | 2.54088528      |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Lecanicillium                                                                                    | 2.532435865     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Ustilaginomycetes.o_Urocystidales.f_Glomosporiaceae.g_Thecaphora                                                                                | 2.628535992     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Amorosiaceae.g_Angustimassarina                                                                                   | 3.681796494     | COVID-19 | 4.03002792 | 1.01E-05 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Zymoseptoria.s_Zymoseptoria_spe_Incertae_sedis                                                | 0.440527452     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Gibellula.s_Gibellula_shennongjiaensis                                                           | 1.706083861     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Botryosphaeriaceae.g_Botryosphaeria                                                                          | 4.076357397     | st-COVID | 3.95331679 | 5.26E-15 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Ascotricha.s_Ascotricha_erinacea                                                                      | 2.325465905     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Sporobolomyces.s_Sporobolomyces_roseus                                                | 2.666411606     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariomycetes_ord_Incertae_sedis.f_Phomatosporaceae.g_Phomatospora.s_Phomatospora_biseriata                                    | 2.119825535     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Chaetosphaeriaceae.g_Zanclospora.s_Zanclospora_jonesii                                                       | 5.34099047      | Control  | 4.72646337 | 0.001021 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Mycosphaerellales.f_Neodevriesiaceae.g_Neodevriesia                                                                              | 2.53237752      |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Xeromyces.s_Xeromyces_bisporus                                                                      | 1.932216439     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporaceae.g_Trametes.s_Trametes_versicolor                                                                    | 3.23557112      |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Cerrenaceae.g_Cerrena.s_Cerrena_aurantiopora                                                                     | 0.768727771     |          |            | -        |
| k_Fungi.p_Fungi_phy_Incertae_sedis.c_Entorrhizomycetes.o_Entorrhizales.f_Entorrhizaceae.g_Entorrhiza                                                                      | 3.067343328     | COVID-19 | 3.86796121 | 6.25E-05 |
| k_Fungi.p_Ascomycota.c_Ascomycota_cla_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Novakomyces.s_Novakomyces_olei                     | 3.129030393     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Typhulaceae.g_Typhula.s_Typhula_micans                                                                            | 2.756111448     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Anthracina.s_Anthracina_amosa                                                                 | 1.557320777     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Penicillifer.s_Penicillifer_martinii                                                                 | 1.5400297       |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_versicolor                                                                | 3.455004141     | st-COVID | 3.01190922 | 0.004879 |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Derxomyces.s_Derxomyces_mrakii                                                             | 2.043004834     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Beauveria.s_Beauveria_majiangensis                                                               | 1.846739987     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pyrenochaetopsidaceae.g_Pyrenochaetopsis.s_Pyrenochaetopsis_microspora                                            | 2.854802725     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Hypoxylon                                                                                             | 2.267793736     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Zasmidium                                                                                     | 2.012613567     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Ramularia                                                                                     | 3.281519879     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Trichomeriaceae_gen_Incertae_sedis                                                            | 2.103948189     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Paraphoma.s_Paraphoma_chlamydocopiosa                                                         | 2.640887805     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Talaromyces.s_Talaromyces_udagawae                                                                  | 1.83778399      |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Verrucariales.f_Verrucariaceae.g_Verrucaria                                                                                       | 3.329192873     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Cystobasidiomycetes_ord_Incertae_sedis.f_Symmetrosporaceae.g_Symmetrospora.s_Symmetrospora_orvzicola                      | 2.737806844     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tritirachiomycetes.o_Tritirachiales.f_Tritirachiaceae.g_Tritirachium                                                                            | 0.978069795     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Sarocladiaceae.g_Parasarocladium.s_Parasarocladium_aestuarinum                                                     | 1.842032142     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Itersonilia.s_Itersonilia_perplexans                                                       | 3.000650954     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Cyphellophoraceae.g_Cyphellophora.s_Cyphellophora_olivacea                                                      | 0.434520517     |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Glomeromycetes.o_Glomerales.f_Glomeraceae.g_Glomus                                                                                               | 2.692400025     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Peyronellaea                                                                                      | 1.843872949     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_apicola                                             | 2.748941054     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_fumisynnematus                                                            | 1.081641845     |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Dioszegia.s_Dioszegia_zsolitii                                                             | 3.893832349     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Bradomyces.s_Bradomyces_alpinus                                                               | 2.638761457     |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Extremaceae.g_Extremus.s_Extremus_spe_Incertae_sedis                                                               | 1.205265375     |          |            | -        |

|                                                                                                                                                                                                        |             |          |            |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Blastobotrys                                                                                                          | 3.088270888 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trigonopsidaceae.g_Trigonopsis.s_Trigonopsis_californica                                                                                  | 3.872348779 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Vishniacozyma.s_Vishniacozyma_taiwanensis                                                                               | 2.190713607 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Stagonosporopsis.s_Stagonosporopsis_citrulli                                                                                   | 2.9456215   |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Apiotrichum.s_Apiotrichum_brassicaceae                                                                              | 1.454952159 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Trichomerium.s_Trichomerium_dioscoreae                                                                                     | 2.283460492 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Metschnikowiaceae.g_Kodamaea.s_Kodamaea_ohmeri                                                                                            | 1.702624678 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariales.f_Sordariaceae.g_Sordaria                                                                                                                         | 2.047245359 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Didymocyrtis                                                                                                               | 2.331755114 |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Mucoraceae.g_Mucor.s_Mucor_circinelloides                                                                                                         | 4.093206714 | st-COVID | 3.97149496 | 1.52E-19 |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_vespimorsuum                                                                     | 2.97684705  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Fomitopsidaceae.g_Skeletocutis                                                                                                                | 1.986466359 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Microstromatales.f_Quambalariaceae.g_Quambalaria                                                                                                         | 1.504223648 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariales_fam_Incertae_sedis.g_Phialemoniopsis.s_Phialemoniopsis_spe_Incertae_sedis                                                             | 2.337822156 |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Rhizopodaceae.g_Rhizopus.s_Rhizopus_arrhizus                                                                                                      | 1.999242615 |          |            | -        |
| k_Fungi.p_Rozellomycota.c_Rozellomycota_cla_Incertae_sedis.o_Rozellomycota_ord_Incertae_sedis.f_Rozellomycota_fam_Incertae_sedis.g_Rozellomycota_gen_Incertae_sedis.s_Rozellomycota_spe_Incertae_sedis | 2.852100911 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Coprinopsis.s_Coprinopsis_clastophylla                                                                                       | 2.159338387 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Aposporaceae.g_Arthrimum                                                                                                                         | 0.987314094 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Udeniomyces                                                                                                             | 4.81100221  | st-COVID | 4.56019524 | 4.17E-10 |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Hyphopichia.s_Hyphopichia_burtonii                                                                                    | 1.017412802 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Fuscosporrellales.f_Fuscosporrellaceae.g_Parafuscosporrella                                                                                                   | 3.777717759 | COVID-19 | 3.51240705 | 1.62E-06 |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Neovarysiphia.s_Neovarysiphia_galeopsidis                                                                                          | 0.895623422 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Stemphylium                                                                                                                    | 2.293546695 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Ceratocystis.s_Ceratocystis_pirilliformis                                                                                  | 0.952881084 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Diutina.s_Diutina_catenulata                                                                       | 2.667505568 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Neosetophoma.s_Neosetophoma_samararum                                                                                      | 2.285096791 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Hannaella.s_Hannaella_kunmingensis                                                                                      | 1.802532839 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Rhodotorula.s_Rhodotorula_glutinis                                                                                 | 2.702721716 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Robbauerales.f_Robbaueraceae.g_Robbauera.s_Robbauera_albescens                                                                                           | 0.656127253 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Schizoporaceae.g_Kneiffiella.s_Kneiffiella_effibulata                                                                                     | 1.598840229 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Gloeophyllales.f_Gloeophyllales_fam_Incertae_sedis.g_Heliocybe                                                                                              | 1.659959394 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Acremonium.s_Acremonium_cavaraeanum                                                                            | 0.610208344 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Vishniacozyma.s_Vishniacozyma_victoriae                                                                                 | 3.020756669 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Coniochaetales.f_Coniochaetaceae.g_Coniochaeta                                                                                                                | 2.529296163 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Radulomycetaceae.g_Radulomyces.s_Radulomyces_paumanokensis                                                                                     | 2.035278094 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Trichosporonaceae_gen_Incertae_sedis.s_Trichosporonaceae_spe_Incertae_sedis                                         | 2.11272684  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideales.f_Aureobasidiaceae.g_Aureobasidium.s_Aureobasidium_pullulans                                                                                      | 3.661360867 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Rosellinia.s_Rosellinia_australiensis                                                                                              | 2.72794771  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_penicillioideus                                                                                        | 4.012956036 | st-COVID | 3.60147189 | 1.79E-05 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Boletales.f_Rhizopogonaceae.g_Rhizopogon.s_Rhizopogon_larici                                                                                                | 0.657577319 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Ustilaginomycetes.o_Urocystidales.f_Glomosporiaceae.g_Thecaphora.s_Thecaphora_australiensis                                                                                  | 2.628535992 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Lophiostomataceae.g_Lophiostoma                                                                                                                | 1.769902978 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Thielaviopsis.s_Thielaviopsis_euricoi                                                                                      | 2.656555526 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Phanerochaetaceae.g_Bjerkandera                                                                                                               | 3.137435637 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Lentitheciaceae.g_Lentithecium                                                                                                                 | 1.396714918 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Schizophyllaceae.g_Schizophyllum.s_Schizophyllum commune                                                                                       | 3.917187522 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Tuberaceae.g_Tuber.s_Tuber_alcaracense                                                                                                              | 2.881834545 | COVID-19 | 3.60090266 | 8.51E-09 |

|                                                                                                                                                |             |  |  |   |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--|--|---|
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida ethanolica               | 2.622359985 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Coprinellus.s_Coprinellus_ovatus                                     | 3.153059214 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Zygoascus.s_Zygoascus polysorbophila                          | 2.125629111 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Phanerochaetaceae.g_Phlebiopsis                                                       | 2.17360561  |  |  | - |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Choanephoraceae.g_Choanephora                                                             | 0.452297671 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Monoblastiales.f_Monoblastiaceae.g_Anisomeridium.s_Anisomeridium guangdongensis                       | 2.228393128 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_pimiteouiense                                  | 2.451228037 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Tremellaceae.g_Bulleromyces.s_Bulleromyces_albus                                     | 2.561705923 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Zeloasperisporium           | 0.487952102 |  |  | - |
| k_Fungi.p_Chytridiomycota.c_Chytridiomycetes.o_Chytridiales.f_Chytriomycetaceae.g_Avachytrium.s_Avachytrium platense                           | 0.741557448 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Cystobasidiomycetes_ord_Incertae_sedis.f_Buckleyzymaceae.g_Buckleyzyma.s_Buckleyzyma armeniaca | 0.040794071 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Microascaceae.g_Microascus.s_Microascus_paisii                                         | 1.168568905 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Diatrypaceae.g_Eutypella                                                                 | 2.618808516 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Phanerochaetaceae.g_Phanerochaete.s_Phanerochaete spe_Incertae_sedis                  | 2.278399325 |  |  | - |
| k_Fungi.p_Ascomycota.c_Lecanoromycetes.o_Umbilicariales.f_Umbilicariaceae.g_Umbilicaria.s_Umbilicaria_maculata                                 | 1.432269016 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Cucurbitariaceae.g_Pyrenochaeta.s_Pyrenochaeta spe_Incertae_sedis                      | 2.030090422 |  |  | - |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Sclerotiniaceae.g_Ciboria                                                                  | 1.724524109 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Pseudocercospora                                                   | 2.539351772 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Pleurotaceae.g_Pleurotus                                                               | 3.848468406 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Yamadazyma.s_Candida aaseri                                   | 1.743699766 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Rhodosporidiobolus                                         | 2.718443207 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Yamadazyma.s_Yamadazyma terventina                            | 2.592348808 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Dictyosporiaceae.g_Gregarithecium.s_Gregarithecium curvisporum                         | 0.112422179 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Edenia                                                                 | 0           |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Ophiocordycipitaceae.g_Purpureocillium.s_Purpureocillium lilacinum                      | 3.187781288 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Sporobolomyces.s_Sporobolomyces patagonicus                | 2.229227931 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meruliaceae.g_Ceriporiopsis                                                           | 2.139521318 |  |  | - |
| k_Fungi.p_Ascomycota.c_Lecanoromycetes.o_Teloschistales.f_Teloschistaceae.g_Caloplaca.s_Caloplaca_micromontana                                 | 2.155059857 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Yarrowia.s_Yarrowia_porcinana                                     | 0           |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Glomerellales.f_Plectosphaerellaceae.g_Gibellulopsis.s_Gibellulopsis serrae                           | 0.668569645 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Parastagonospora.s_Parastagonospora fallopiae                      | 2.286799975 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Candida.s_Candida_saraburiensis                               | 1.864995477 |  |  | - |
| k_Fungi.p_Ascomycota.c_Taphrinomycetes.o_Taphrinales.f_Taphrinaceae.g_Taphrina.s_Taphrina_padi                                                 | 0.934039123 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Didymella.s_Didymella_dimorpha                                         | 1.579437131 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Walleliomycetes.o_Walleliales.f_Walleliaceae.g_Wallelia.s_Wallelia_sebi                                              | 2.579864074 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Cercospora                                                         | 3.225148663 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Pichiaceae.g_Pichia.s_Pichia_mandshurica                                          | 0           |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Gonatophragmium             | 2.012645526 |  |  | - |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Vandijkellaceae.g_Vandijkella                                                              | 1.870799423 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Strophariaceae.g_Deconica.s_Deconica spe_Incertae_sedis                                | 2.097830268 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Leptospora                                                         | 3.188621724 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Vishniacozyma                                                   | 3.110844683 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Phaeosphaeria.s_Phaeosphaeria fuckelii                             | 1.569267478 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Steccheriaceae.g_Steccherinum                                                         | 1.644647435 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meruliaceae.g_Scopuloides.s_Scopuloides_rimosa                                        | 0.327718599 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Radulomycetaceae.g_Radulomyces                                                         | 2.035278094 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Physalacriaceae.g_Cryptomarasmius.s_Cryptomarasmius aucubae                            | 2.797236055 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Cyphellophoraceae.g_Cyphellophora                                                    | 1.188630248 |  |  | - |

|                                                                                                                                                               |             |          |            |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Exobasidiales.f_Brachybasidiaceae.g_Marantokordyana                                                             | 0.975292522 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Georgefischeriales.f_Gjaerumiaceae.g_Gjaerumia                                                                  | 0.820937501 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Exobasidiales.f_Brachybasidiaceae.g_Meira                                                                       | 2.229692656 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Tremellaceae.g_Cryptococcus.s_Cryptococcus_uni_guttulatus                                           | 0.763638867 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Physalacriaceae.g_Strobilurus                                                                         | 0.991024594 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Rhynchogastremataceae.g_Papiliotrema.s_Papiliotrema_terrestris                                      | 2.969671798 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Hyphopichia                                                                  | 1.017412802 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Phyllostictaceae.g_Phyllosticta                                                                  | 2.018076064 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Knufia                                                                            | 2.765832183 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Edenia.s_Edenia_gomezpompae                                                           | 0           |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Mucoraceae.g_Actinomucor.s_Actinomucor_elegans                                                           | 5.525383566 | st-COVID | 5.22787772 | 6.17E-27 |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Yarrowia.s_Yarrowia_bubula                                                       | 3.104479352 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporales_fam_Incertae_sedis.g_Pseudohelminthosporium                                              | 1.21065085  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_insolutus                                                     | 2.137790808 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Auriculariaceae.g_Auricularia.s_Auricularia_auricula_judae                                        | 2.589587788 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Sporocadaceae.g_Pestalotiopsis.s_Pestalotiopsis_vismia                                                  | 1.650351683 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreaceae.g_Trichoderma                                                                             | 2.399830989 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_multicolor                                                    | 0.285966249 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Trichomeriaceae_gen_Incertae_sedis.s_Trichomeriaceae_spe_Incertae_sedis           | 2.103948189 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Groenewaldozyma                                                              | 0.453457337 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Archaeorhizomycetes.o_Archaeorhizomycetales.f_Archaeorhizomycetaceae.g_Archaeorhizomyces.s_Archaeorhizomyces_borealis                  | 0.970741228 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Diutina.s_Diutina_rugosa                                  | 2.247558368 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Issatchenkia                                                                | 2.291162406 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Eremomycetales.f_Eremomycetaceae.g_Rhexothecium                                                                      | 3.106582339 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Malasseziomycetes.o_Malasseziales.f_Malasseziaceae.g_Malassezia.s_Malassezia_sympodialis                                            | 3.304074169 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Peniophoraceae.g_Peniophora.s_Peniophora_pseudo_versicolor                                            | 3.345026013 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Clavicipitaceae.g_Paecilomyces.s_Paecilomyces_spe_Incertae_sedis                                       | 1.776312315 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Hyaloscyphaceae.g_Calycina                                                                                | 2.04692063  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Teratosphaeriaceae.g_Penidiella                                                                        | 1.379662544 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Pichiaceae.g_Ogataea.s_Candida_boidinii                                                          | 1.462397998 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Sporobolomyces.s_Sporobolomyces_beijingensis                              | 3.801989609 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Paracremonium.s_Paracremonium_binewijzendii                                              | 0.388628591 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Lembosiniella.s_Lembosiniella_eucalyptorum | 1.69860284  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Omphalotaceae.g_Lentinula                                                                             | 2.562443664 |          |            | -        |
| k_Fungi.p_Fungi_phy_Incertae_sedis.c_Entorrhizomycetes.o_Entorrhizales.f_Entorrhizaceae.g_Entorrhiza.s_Entorrhiza_citriformis                                 | 3.052086711 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Coniothyriaceae.g_Neoconiothyrium                                                                     | 2.318253108 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Sporothrix                                                                      | 2.327891132 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Sporobolomyces.s_Sporobolomyces_koalae                                    | 1.975466623 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Chaetosphaeriaceae.g_Chaetosphaeria                                                              | 0.307104143 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Effuseotrichosporon                                                        | 1.04910878  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporales_fam_Incertae_sedis.g_Ochrocladosporium.s_Ochrocladosporium_frigidarii                    | 2.269808819 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Ustilaginoidea                                                        | 3.525086054 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Golubeviales.f_Golubeviaceae.g_Golubevia                                                                        | 3.327090998 |          |            | -        |
| k_Fungi.p_Zoopagomycota.c_Entomophthoromycetes.o_Entomophthorales.f_Entomophthoraceae.g_Zoophthora.s_Zoophthora_radicans                                      | 2.38446746  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Cyphellaceae.g_Cyphellaceae_gen_Incertae_sedis                                                        | 1.593336423 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Pucciniomycetes.o_Septobasidiales.f_Septobasidiaceae.g_Septobasidium                                                                | 0           |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Herpotrichiellaceae.g_Cladophialophora.s_Cladophialophora_spe_Incertae_sedis                        | 1.968235235 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Ascomycota_cla_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Milospium.s_Milospium_graphideorum     | 4.083533565 | Control  | 3.84853686 | 2.16E-05 |

|                                                                                                                                                                                                        |             |          |            |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariomycetes_ord_Incertae_sedis.f_Sordariomycetes_fam_Incertae_sedis.g_Pararamichloridium.s_Pararamichloridium_caricicola                                  | 0.708085965 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_nivariensis                                                                      | 1.081914386 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Thermoascaceae.g_Byssoschlamys                                                                                                                    | 0.903853918 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Thielaviopsis                                                                                                              | 2.656555526 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Kluyveromyces                                                                                                        | 1.564882682 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Venturiales.f_Sympoventuriaceae.g_Ochroconis.s_Ochroconis_mirabilis                                                                                           | 0.992597074 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meripilaceae.g_Physisporinus.s_Physisporinus_tibeticus                                                                                        | 2.203996586 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Rachicladosporium                                                                                                             | 2.203069992 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Mycosphaerellales.f_Teratosphaeriaceae.g_Eupeniella                                                                                                           | 2.695269359 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Dimorphoma                                                                                                                     | 3.092943826 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Physalacriaceae.g_Flammulina                                                                                                                   | 2.760148221 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Pleurotaceae.g_Pleurotus.s_Pleurotus_eryngii                                                                                                   | 3.040557391 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Incertae_sedis.f_Sordariomycetes_fam_Incertae_sedis.g_Aquapteridospira                                                                                        | 1.418021041 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Onygenales_fam_Incertae_sedis.g_Spiromastix                                                                                                       | 2.652927277 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Acrodontium                                                                                                                | 1.744568428 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Thyridariaceae.g_Parathyridaria                                                                                                                | 0.84509804  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Basidiomycota_cla_Incertae_sedis.o_Basidiomycota_ord_Incertae_sedis.f_Basidiomycota_fam_Incertae_sedis.g_Basidiomycota_gen_Incertae_sedis.s_Basidiomycota_spe_Incertae_sedis | 2.195794859 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Helotiales_fam_Incertae_sedis.g_Cadophora.s_Cadophora_lacrimiformis                                                                                | 1.649246327 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Gonatophragmium.s_Gonatophragmium_spe_Incertae_sedis                                | 2.012645526 |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Glomeromycetes.o_Diversisporales.f_Diversisporaceae.g_Diversispora                                                                                                            | 4.466071988 | Control  | 4.18749128 | 9.04E-07 |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Debaryomyces                                                                                                          | 4.4898882   |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Trichomonascus                                                                                                        | 3.429054559 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Pucciniomycetes.o_Septobasidiales.f_Septobasidiaceae.g_Septobasidium.s_Septobasidium_spe_Incertae_sedis                                                                      | 0           |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Ascochyta.s_Ascochyta_rabiei                                                                                                   | 2.152982882 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Ganodermataceae.g_Ganoderma.s_Ganoderma_austriacale                                                                                           | 1.567400689 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaporthales.f_Diaporthaceae.g_Diaporthe.s_Diaporthe_celeris                                                                                                  | 1.075602254 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Knufia.s_Knufia_hypolithi                                                                                                  | 2.272193347 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Filobasidium                                                                                                            | 3.523344375 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Tremateia.s_Tremateia_muriispora                                                                                          | 0.028645181 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Coniothyriaceae.g_Hazslinszkyomyces.s_Hazslinszkyomyces_aloes                                                                                  | 0.922395142 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Extremaceae.g_Extremus                                                                                                                          | 1.205265375 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Golovinomyces.s_Golovinomyces_latisporus                                                                                           | 1.660103343 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Tremateia.s_Tremateia_chromolaenae                                                                                        | 0.670414544 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Knufia.s_Knufia_cryptophialidica                                                                                           | 0.738564366 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Anastomitrabeculiaceae.g_Anastomitrabeculia                                                                                                    | 1.785630558 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporaceae.g_Lentinus.s_Lentinus_squarrosulus                                                                                               | 1.491467813 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Stachybotryaceae.g_Striatibotrys                                                                                                                | 1.491573907 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Thermomyces                                                                                                                      | 2.070793235 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Chaetosphaeriaceae.g_Zanclospora                                                                                                          | 5.341020523 | Control  | 4.72607084 | 0.001116 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Teratosphaeriaceae.g_Recurvomyces.s_Recurvomyces_spe_Incertae_sedis                                                                             | 2.660879845 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Lecanoromycetes.o_Teloschistales.f_Teloschistaceae.g_Caloplaca                                                                                                                  | 2.155059857 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_ochraceus                                                                                              | 1.508956265 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaporthales.f_Diaporthaceae.g_Diaporthe                                                                                                                      | 3.69844195  | Control  | 3.46758287 | 8.68E-13 |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_mallochii                                                                                              | 1.811290582 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Toxicocladosporium                                                                                                            | 2.364806739 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Cutaneotrichosporon                                                                                                 | 3.082163132 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Tuberaceae.g_Tuber                                                                                                                                  | 2.881834545 | COVID-19 | 3.44442268 | 8.51E-09 |
| k_Fungi.p_Ascomycota.c_Schizosaccharomycetes.o_Schizosaccharomycetales.f_Schizosaccharomycetaceae.g_Schizosaccharomyces.s_Schizosaccharomyces_octosporus                                               | 0.544068044 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Phaeosphaeria.s_Phaeosphaeria_orvzae                                                                                       | 3.533870231 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusarium.s_Fusarium_irregulare                                                                                                    | 1.805253643 |          |            | -        |

|                                                                                                                                                                   |             |         |            |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------|------------|----------|
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Kazachstania.s_Kazachstania heterogenica                                        | 3.547030298 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Calosphaeriales.f_Calosphaeriaceae.g_Jattaia.s_Jattaia_ribicola                                                          | 0.415984511 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Cystofilobasidiaceae.g_Cystofilobasidium.s_Cystofilobasidium infirmominium                      | 1.352328721 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Geotrichum                                                                           | 3.169701146 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Coprinellus                                                                             | 3.194144178 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Thelebolales.f_Pseudeurotiaceae.g_Pseudogymnoascus                                                                         | 2.001379652 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Homortomyces.s_Homortomyces tamaricis          | 1.34152445  |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Holtermanniales.f_Holtermanniales_fam_Incertae_sedis.g_Holtermannii.s_Holtermannii takashimae                         | 2.077495853 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Ceratocystis.s_Ceratocystis_manginecans                                               | 1.537532904 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Cystobasidiomycetes_ord_Incertae_sedis.f_Buckleyzymaceae.g_Buckleyzyma                                            | 1.397940009 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Coprinopsis.s_Coprinopsis_urticola                                                      | 2.652085103 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Peniophoraceae.g_Peniophora.s_Peniophora_crassitunicata                                                   | 3.096929586 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Taphrinomycetes.o_Taphrinales.f_Protomycetaceae.g_Protomyces.s_Protomyces_inouyei                                                          | 1.506676498 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Cantharellales_fam_Incertae_sedis.g_Sistotrema.s_Sistotrema brinkmannii                               | 2.582399498 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meripilaceae.g_Henningsia                                                                                | 3.047510699 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Cladosporium.s_Cladosporium_hyalotolerans                                                | 4.336147579 |         |            | -        |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Choanephoraceae.g_Choanephora.s_Choanephora_cucurbitarum                                                     | 0.452297671 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Myriangiales.f_Elsinoaceae.g_Elsinoe                                                                                     | 1.856554969 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Onygenaceae.g_Keratinophyton.s_Keratinophyton_linfense                                                       | 0.730805014 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Hymenochaetales_fam_Incertae_sedis.g_Echinoporia                                                     | 0           |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Naganishia.s_Naganishia_globosa                                                    | 2.711302239 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Pseudopithomyces.s_Pseudopithomyces angolensis                                       | 0.220623659 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Schizoporaceae.g_Lyomyces                                                                            | 1.744055793 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Magnaporthales.f_Magnaporthaceae.g_Pyricularia.s_Pyricularia_oryzae                                                      | 1.349542422 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Austropleospora.s_Austropleospora_keteleeriae                                        | 2.682254505 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideales.f_Dothideales_fam_Incertae_sedis.g_Hortaea.s_Hortaea_werneckii                                               | 2.753129724 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Cucurbitariaceae.g_Pyrenochaeta                                                                           | 2.030090422 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Emericellopsis                                                            | 1.568734928 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Ceratobasidiaceae.g_Thanatephorus                                                                     | 1.511275531 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Ophiosphaerella.s_Ophiosphaerella_aquatica                                            | 2.517895358 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Periconiaceae.g_Periconia.s_Periconia_homothallica                                                        | 1.804222065 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Tremellaceae.g_Cryptococcus.s_Cryptococcus_longoi                                                       | 4.797246498 | Control | 4.50395001 | 7.68E-38 |
| k_Fungi.p_Ascomycota.c_Ascomycota_cla_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Phialocephala.s_Phialocephala trigonospora | 0.893816443 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreaceae.g_Trichoderma.s_Trichoderma_harziinum                                                         | 2.087161297 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Sclerococcales.f_Dactylosporaceae.g_Rhopalophora.s_Rhopalophora clavisporea                                               | 1.862646283 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_sumatraense                                                       | 0.543193332 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Leptosphaeriaceae.g_Paraleptosphaeria.s_Paraleptosphaeria_rumicis                                         | 0.193293289 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Russulaceae.g_Russula.s_Russula_xerophila                                                                 | 3.857596082 | Control | 3.58065963 | 7.31E-10 |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Cystobasidiomycetes_ord_Incertae_sedis.f_Buckleyzymaceae.g_Buckleyzyma.s_Buckleyzyma aurantiaca                   | 1.397940009 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pyrenochaetopsidaceae.g_Pyrenochaetopsis                                                                  | 2.932046917 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Pichiaceae.g_Pichia.s_Pichia_kluyveri                                                                | 3.15288239  |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Eremasaceae.g_Dactylodendron.s_Dactylodendron_pinnicola                                                      | 3.079444375 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideales.f_Dothideaceae.g_Dothidea                                                                                    | 2.569825954 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meripilaceae.g_Henningsia.s_Henningsia_resupinata                                                        | 3.047510699 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Alternaria.s_Alternaria_alstroemeriae                                                     | 2.033271409 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Malasseziomycetes.o_Malasseziales.f_Malasseziaceae.g_Malassezia.s_Malassezia_aurunalekei                                                | 4.239446229 |         |            | -        |

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| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariales.f_Chaetomiaceae.g_Chaetomium.s_Chaetomium_globosum                                                                       | 2.255765741 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Microstromatales.f_Microstromatales_fam_Incertae_sedis.g_Sympodiomyces.s_Sympodiomyces spe_Incertae_sedis                       | 2.115560086 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tritirachiomycetes.o_Tritirachiales.f_Tritirachiaceae.g_Tritirachium.s_Tritirachium_oryzae                                                          | 0.20576193  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Cladosporium.s_Cladosporium_cladosporioides                                                          | 4.135981706 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Lycoperdaceae.g_Bovista                                                                                               | 2.788735849 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Talaromyces                                                                                             | 3.967139712 | Control  | 3.64576285 | 2.52E-09 |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Cystobasidiales.f_Cystobasidiaceae.g_Cystobasidium                                                                            | 2.823681664 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Huntia                                                                                            | 1.633927298 |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Rhizophyidiomycetes.o_Rhizophydiales.f_Alphamycetaceae.g_Betamyces.s_Betamyces spe_Incertae_sedis                                                 | 2.359145304 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Taphrinomycetes.o_Taphrinales.f_Taphrinaceae.g_Taphrina                                                                                                | 0.934039123 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Parastagonosporella                                                                               | 2.286799975 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Coniothyriaceae.g_Neoconiothyrium.s_Neoconiothyrium_viticola                                                          | 2.318253108 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_haemulonis                                              | 1.987314094 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meruliaceae.g_Phlebia                                                                                                | 3.080209693 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Filobasidium.s_Filobasidium_wieringae                                                          | 3.006414175 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Helotiales_fam_Incertae_sedis.g_Mycoarthritis                                                                             | 1.14700099  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Glomerellales.f_Glomerellaceae.g_Colletotrichum                                                                                      | 1.640150041 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Cordyceps.s_Cordyceps_lepidopterorum                                                                 | 1.53237752  |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Monoblepharidomycetes.o_Monoblepharidiales.f_Monoblepharidaceae.g_Monoblepharis                                                                   | 2.445297157 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Acremonium.s_Acremonium_egyptiacum                                                    | 1.782516056 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Peziza.s_Peziza_fruticosa                                                                                     | 0.917379753 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Physalacriaceae.g_Cryptomarasmius                                                                                     | 2.797236055 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Fuscosporellales.f_Fuscosporellaceae.g_Parafuscosporella.s_Parafuscosporella_mucosa                                                  | 3.777717759 | COVID-19 | 3.51240705 | 1.62E-06 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Montagnula.s_Montagnula_opulenta                                                                 | 2.382753621 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Peniophoraceae.g_Peniophora.s_Peniophora_cinerea                                                                      | 2.031493807 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Neosetophoma.s_Neosetophoma_poaceicola                                                            | 2.942301561 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycotina_cls_Incertae_sedis.o_Pezizomycotina_ord_Incertae_sedis.f_Pezizomycotina_fam_Incertae_sedis.g_Ciliophora.s_Ciliophora spe_Incertae_sedis | 2.401922467 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleraceae.g_Genolevuria.s_Genolevuria_amylosticta                                                                 | 2.145987008 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Botryosphaeriaceae.g_Botryosphaeria.s_Botryosphaeria spe_Incertae_sedis                                          | 4.076357397 | st-COVID | 3.84161077 | 1.43E-29 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Austropleospora                                                                                  | 2.682254505 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Alternaria.s_Alternaria_alternata                                                                     | 4.126168318 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_coremiiformis                                                                 | 2.354035643 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Microascaceae.g_Microascus.s_Microascus_trigonosporus                                                                 | 2.443120689 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Cladosporium.s_Cladosporium_coloradense                                                              | 3.023112101 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Exobasidiales.f_Exobasidiaceae.g_Exobasidium.s_Exobasidium spe_Incertae_sedis                                                   | 2.363559017 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Fomitopsidaceae.g_Skeletocutis.s_Skeletocutis_nivea                                                                  | 1.986466359 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meruliaceae.g_Ceriporiopsis.s_Ceriporiopsis_fimbriata                                                                | 2.139521318 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Hydnobolites.s_Hydnobolites_roseus                                                                            | 4.604446781 | COVID-19 | 4.33996792 | 1.70E-07 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Biatrisporaceae.g_Biatrisporaceae_gen_Incertae_sedis                                                                  | 1.694671661 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Iodophanus                                                                                                    | 0.72823077  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Lipomycetaceae.g_Lipomyces.s_Lipomyces_doorengii                                                                 | 1.657939081 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_adametzoides                                                                  | 2.043998404 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Schizosaccharomycetes.o_Schizosaccharomycetales.f_Schizosaccharomycetaceae.g_Schizosaccharomycetes                                                     | 0.544068044 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Podosphaera                                                                                               | 1.936787832 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Morosphaeriaceae.g_Acrocalymma                                                                                        | 2.555827002 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Myriangiales.f_Elsinoaceae.g_Elsinoe.s_Elsinoe_leucopogonis                                                                          | 1.856554969 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Sarocladium                                                                           | 2.368033184 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Sarocladium.s_Sarocladium_kiliense                                                    | 0.748657789 |          |            | -        |

|                                                                                                                                          |             |          |            |          |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Herpotrichiellaceae.g_Cladophialophora                                         | 1.968235235 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Simplicillium.s_Simplicillium_aogashimaense                     | 1.980966941 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Neoascochyta.s_Neoascochyta_paspali                              | 1.994503785 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Venturiales.f_Venturiaceae.g_Venturiaceae_gen_Incertae_sedis.s_Venturiaceae_spe_Incertae_sedis  | 2.352943057 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_hirsutum                                 | 3.444315348 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Pleurotaceae.g_Pleurotus.s_Pleurotus_ostreatus                                   | 3.848360007 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Dissoconiaceae.g_Pseudoveronaea                                                   | 3.470706499 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Herpotrichiellaceae.g_Exophiala                                                | 1.605990285 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Teratosphaeriaceae.g_Recurvomyces                                                 | 2.660879845 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Helotiales_fam_Incertae_sedis.g_Amphobotrys                                          | 1.544349962 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Magnaporthales.f_Magnaporthaceae.g_Pyricularia                                                  | 1.349542422 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Hysteriales.f_Hysteriaceae.g_Hysterobrevium                                                     | 2.097225749 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaportheales.f_Diaportheaceae.g_Diaporthe.s_Diaporthe_miriciae                                 | 0.294399417 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Trechisporales.f_Hydodontaceae.g_Trechispora                                                  | 1.858154246 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Paraphoma                                                    | 2.640887805 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Houjia                                                       | 0.7038361   |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Homortomyces          | 1.34152445  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Bionectriaceae.g_Hydropsisphaera                                                  | 0.417245164 |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Spizellomyces.o_Spizellomyces.f_Powellomycetaceae.g_Powellomyces.s_Powellomyces_spe_Incertae_sedis           | 0.462608872 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Phanerochaetaceae.g_Bjerkandera.s_Bjerkandera_austriaca                         | 2.875289565 |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Monoblepharidomycetes.o_Monoblepharidales.f_Monoblepharidaceae.g_Monoblepharis.s_Monoblepharis_macrandra     | 2.445297157 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusarium.s_Fusarium_poa                                             | 3.068129617 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Rhynchogastremataceae.g_Papiliotrema.s_Papiliotrema_flavescens                 | 2.090893693 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Leptospora.s_Leptospora_spe_Incertae_sedis                   | 2.312715754 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Ophiostoma.s_Ophiostoma_pusillum                           | 1.988533836 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_spe_Incertae_sedis | 3.868421726 | COVID-19 | 3.60458421 | 4.38E-05 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Dictyosporiaceae.g_Dendryphiella                                                 | 2.738947958 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_incommunis         | 1.499874454 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Calosphaeriales.f_Calosphaeriaceae.g_Calosphaeria                                               | 2.511337209 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreaceae.g_Trichoderma.s_Trichoderma_pleuroticola                             | 1.33350834  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Mycocaliciales.f_Mycocaliciaceae.g_Chaenothecopsis                                               | 0.035232376 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Candida                                                 | 1.864995477 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Dissoconiaceae.g_Uwebraunia                                                       | 2.006660488 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Trichosphaeriales.f_Trichosphaeriaceae.g_Nigrospora                                             | 3.884552856 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporaceae.g_Trametes.s_Trametes_trogii                                       | 3.075212292 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Emericellopsis.s_Emericellopsis_robusta          | 1.568734928 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_restrictus                               | 2.989510492 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Leptosphaeriaceae.g_Plenodorus                                                   | 1.604955807 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Nakaseomyces                                           | 2.842995763 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Bionectriaceae.g_Clonostachys.s_Clonostachys_rosea                                | 0.691567078 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Trechisporales.f_Trechisporales_fam_Incertae_sedis.g_Sistotrema.s_Sistotrema_rum              | 2.325217025 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_clavatorphorus                           | 1.673356076 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_inflatus                                 | 0.353642333 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Rhodotorula.s_Rhodotorula_ingeniosa                  | 0.440997723 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Trimorphomycetaceae.g_Carlosrosaea                                             | 2.330859401 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporaceae.g_Lentinus.s_Lentinus_arcularius                                   | 2.614393825 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Metschnikowiaceae.g_Clavispora                                              | 2.717928845 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Saccharomyces                                          | 4.451167396 | COVID-19 | 4.13935125 | 1.79E-07 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusarium.s_Fusarium_fujikuroi                                       | 2.651762447 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Anastomitrabeculiaceae.g_Anastomitrabeculia.s_Anastomitrabeculia_didymospora     | 1.785630558 |          |            | -        |



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| k_Fungi.p_Basidiomycota.c_Basidiomycota_cla_Incertae_sedis.o_Basidiomycota_ord_Incertae_sedis.f_Basidiomycota_fam_Incertae_sedis.g_Basidiomycota_gen_Incertae_sedis | 2.195794859 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Periconiaceae.g_Periconia.s_Periconia_byssoides                                                             | 2.611916328 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Cucurbitariaceae.g_Neocucurbitaria.s_Neocucurbitaria_irregularis                                            | 1.693801236 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Montagnula                                                                             | 2.382753621 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Leptosphaeriaceae.g_Paraleptosphaeria                                                                       | 0.193293289 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideales.f_Dothideaceae.g_Dothidea.s_Dothidea_eucalypti                                                                 | 1.954242509 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Phaffomycetaceae.g_Komagataella                                                                        | 1.249383676 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Udeniomyces.s_Udeniomyces_pyricola                                                   | 4.470496689 | st-COVID | 4.23028608 | 5.49E-26 |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Zygorulasporea.s_Zygorulasporea_danielsina                                        | 3.389675105 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Cystofilobasidiaceae.g_Cystofilobasidium                                                          | 3.027788068 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Cucurbitariaceae.g_Neocucurbitaria                                                                          | 1.693801236 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Botryobasidiaceae.g_Neoaccladium                                                                        | 0.808333759 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Filobasidiaceae_gen_Incertae_sedis                                                   | 3.947044169 | COVID-19 | 3.66637087 | 7.21E-10 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaportheales.f_Diaportheaceae.g_Diaporthe.s_Diaporthe_ganjae                                                              | 2.21444243  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Irpicaceae.g_Irpex.s_Irpex_lacteus                                                                         | 3.265949953 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Ascomycota_cla_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Ascomycota_gen_Incertae_sedis                | 2.953010603 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Physalacriaceae.g_Flammulina.s_Flammulina_velutipes                                                         | 1.308693735 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Bionectriaceae.g_Nectriopsis.s_Nectriopsis_exigua                                                            | 1.744707754 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Knufia.s_Knufia_tsunetae                                                                | 1.895999815 |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Rhizopodaceae.g_Rhizopus.s_Rhizopus_microsporus                                                                | 0.895623422 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Clavicipitaceae.g_Paeciliomyces                                                                              | 1.776312315 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideales.f_Aureobasidiaceae.g_Aureobasidium.s_Aureobasidium_thailandense                                                | 2.392989901 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Talaromyces.s_Talaromyces_scorteus                                                            | 3.864041582 | st-COVID | 3.55787609 | 5.27E-07 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Schizophyllaceae.g_Schizophyllum                                                                            | 3.917187522 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Irpicaceae.g_Ceriporia                                                                                     | 2.877471696 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Mrakia                                                                               | 0.993218827 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Iodophanus.s_Iodophanus_testaceus                                                                   | 0.72823077  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Neomicrosphaeropsis                                                                         | 3.967377885 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Ascomycota_cla_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Milospium                                    | 4.083533565 | Control  | 3.84879104 | 2.16E-05 |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Cystofilobasidiaceae.g_Cystofilobasidium.s_Cystofilobasidium_capitatum                            | 1.794949263 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Alternaria                                                                                  | 4.12771574  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariomycetes_ord_Incertae_sedis.f_Sordariomycetes_fam_Incertae_sedis.g_Aquapteridosporea.s_Aquapteridosporea_fusiformis | 1.418021041 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Neomicrosphaeropsis.s_Neomicrosphaeropsis_alhagi_pseudalhagi                                | 3.967377885 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Coprinellus.s_Coprinellus_pseudo_disseminatus                                             | 2.149662235 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Microbotryomycetes_ord_Incertae_sedis.f_Microbotryomycetes_fam_Incertae_sedis.g_Heitmania                            | 2.546438387 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_bialowiezensis                                                      | 2.595682481 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Meyerozyma                                                                         | 1.400433321 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Atractiellomycetes.o_Atractiellales.f_Hoehnelomycetaceae.g_Atractiella.s_Atractiella_rhizophila                                           | 1.941932844 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tritirachiomycetes.o_Tritirachiales.f_Tritirachiaceae.g_Tritirachium.s_Tritirachium_cinnamomeum                                           | 0.897710377 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporales_fam_Incertae_sedis.g_Pseudorobillardia.s_Pseudorobillardia_soiae                               | 0.373580663 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Typhulaceae.g_Typhula.s_Typhula_setipes                                                                     | 0.327718599 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Auriculariales_fam_Incertae_sedis.g_Oliveonia                                                           | 0.932504512 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Torulaceae.g_Torula                                                                                         | 2.384875668 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Ascomycota_cla_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Phialocephala                                | 0.893816443 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Omphalotaceae.g_Gymnopus                                                                                    | 2.047422381 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Chaetosphaeriaceae.g_Chaetosphaeria.s_Chaetosphaeria_guttulata                                         | 0.307104143 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporaceae.g_Lentinus                                                                                    | 2.645943015 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Zygoascus                                                                          | 2.125629111 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Nakaseomyces.s_Nakaseomyces_glabrata                                              | 2.842995763 |          |            | -        |

|                                                                                                                                                  |             |  |  |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--|--|---|
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Monoblastiales.f_Monoblastiaceae.g_Anisomeridium                                                        | 2.228393128 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Trichomerium.s_Trichomerium flexuosum                                | 2.211783722 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Zygosaccharomyces                                              | 2.064883226 |  |  | - |
| k_Fungi.p_Rozellomycota.c_Rozellomycotina_cls_Incertae_sedis.o_GS08.f_GS08_fam_Incertae_sedis.g_GS08_gen_Incertae_sedis.s_GS08spe_Incertae_sedis | 2.323179448 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_neoglaber                                        | 1.75898067  |  |  | - |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Hannaella.s_Hannaella_surugaensis                                 | 2.152460615 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Dictyosporiaceae.g_Dendryphiella.s_Dendryphiella paravinosae                             | 2.738947958 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Morosphaeriaceae.g_Acrocalymma.s_Acrocalymma fici                                        | 2.555827002 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Sporocadaceae.g_Adisciso.s_Adisciso_yakushimense                                           | 0.918856946 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycodaceae.g_Hanseniaspora                                                  | 1.671967693 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_flavus                                           | 3.175656747 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Herpotrichiellaceae.g_Coniosporium.s_Coniosporium apollinis                            | 1.240776093 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Botryosphaeriaceae.g_Neofusicoccum                                                  | 1.877030856 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Sarocladium.s_Sarocladium subulatum                      | 1.271066772 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Sporocadaceae.g_Adisciso                                                                   | 0.918856946 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida inconspicua                | 3.181648735 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Epicoccum.s_Epicoccum_viticis                                            | 1.77528731  |  |  | - |
| k_Fungi.p_Basidiomycota.c_Pucciniomycetes.o_Pucciniales.f_Pucciniaceae.g_Puccinia.s_Puccinia_striiformis                                         | 1.045856183 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Coprinopsis.s_Coprinopsis atramentaria                                 | 2.169861382 |  |  | - |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Delastria                                                                        | 0.438134639 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Irpicaceae.g_Flavodon                                                                   | 2.597454177 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Gibberella.s_Gibberella_baccata                                             | 2.210118725 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_westerdijkiae                                    | 0.447594728 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Nemania                                                                      | 1.769398131 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Cladosporium.s_Cladosporium_spe_Incertae_sedis                          | 3.113175826 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Bionectriaceae.g_Hydropsisphaera.s_Hydropsisphaera_spe_Incertae_sedis                     | 0.417245164 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_pancosmium                                       | 1.097698922 |  |  | - |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Helotiaceae.g_Tetracladium.s_Tetracladium_spe_Incertae_sedis                                 | 0.755643909 |  |  | - |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Pichiaceae.g_Pichia                                                                 | 3.392109638 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_ludwigii                                         | 2.036640991 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Beauveria.s_Beauveria_bassiana                                          | 0.00327771  |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Septoria.s_Septoria_spe_Incertae_sedis                               | 2.356083829 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Trimorphomycetaceae.g_Carlososaea.s_Carlososaea hohenbergiae                           | 2.330859401 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Ascotricha.s_Ascotricha_guamensis                                            | 2.67480941  |  |  | - |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Vishniacozyma.s_Vishniacozyma tephrensis                          | 2.112954124 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Flammoclaidiella                                         | 1.436451791 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Tilletiales.f_Tilletiaceae.g_Tilletia                                                              | 2.871961914 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Physalacriaceae.g_Strobilurus.s_Strobilurus_spe_Incertae_sedis                           | 0.991024594 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Sarocladiaceae.g_Parasarocladium                                                          | 1.842032142 |  |  | - |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_brevicompactum                                   | 2.057135675 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Venturiales.f_Sympoventuriaceae.g_Ochroconis                                                            | 0.992597074 |  |  | - |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Lycoperdaceae.g_Bovista.s_Bovista_psammophila                                            | 0.360929256 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Neodevriesiaceae.g_Neodevriesia.s_Neodevriesia_lagerstroemiae                             | 2.123667637 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Peyronellaea.s_Peyronellaea_spe_Incertae_sedis                           | 1.843872949 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariomycetes_ord_Incertae_sedis.f_Phomatosporaceae.g_Phomatospora                                    | 2.119825535 |  |  | - |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Dimorphoma.s_Dimorphoma_saxea                                            | 3.092943826 |  |  | - |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Stachybotryaceae.g_Stachybotrys.s_Stachybotrys_alboeticola                                | 2.619681089 |  |  | - |

|                                                                                                                                                                     |             |          |            |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Sordariomycetes_ord_Incertae_sedis.f__Sordariomycetes_fam_Incertae_sedis.g__Acrodictys.s__Acrodictys_fluminicola        | 5.436203178 | COVID-19 | 5.09245678 | 4.48E-08 |
| k_Fungi.p__Ascomycota.c__Eurotiomycetes.o__Eurotiales.f__Trichocomaceae.g__Talaromyces.s__Talaromyces_funiculosus                                                   | 3.203144192 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Agaricales.f__Pleurotaceae.g__Hohenbuehelia                                                                           | 2.375497345 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Polyporales.f__Ganodermataceae.g__Ganoderma                                                                           | 1.567400689 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Pezizomycetes.o__Pezizales.f__Pyrenomataceae.g__Trichophaea.s__Trichophaea_saccata                                                         | 3.17846679  |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Cystobasidiomycetes.o__Cystobasidiales.f__Cystobasidiaceae.g__Cystobasidium.s__Cystobasidium_sloffiae                                   | 2.823681664 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Pleosporales.f__Periconiaceae.g__Periconia.s__Periconia_macrospinosus                                                   | 0.745713408 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Microascales.f__Graphiaceae.g__Graphium                                                                                 | 0.456917869 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Eurotiomycetes.o__Eurotiales.f__Aspergillaceae.g__Aspergillus.s__Aspergillus_conicus                                                       | 1.706083861 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Saccharomycetes.o__Saccharomycetales.f__Phaffomycetaceae.g__Wickerhamomyces                                                                | 0.447594728 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Hypocreales.f__Hypocreales_fam_Incertae_sedis.g__Sarocladium.s__Sarocladium_strictum                                    | 2.368033184 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Saccharomycetes.o__Saccharomycetales.f__Dipodascaceae.g__Galactomyces.s__Galactomyces_pseudocandidus                                       | 4.026614968 | st-COVID | 3.79509839 | 3.93E-08 |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Hypocreales.f__Cordycipitaceae.g__Simplicillium                                                                         | 4.312781762 | COVID-19 | 4.0091166  | 8.12E-12 |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Hypocreales.f__Hypocreales_fam_Incertae_sedis.g__Sarocladium.s__Sarocladium_zeae                                        | 1.252545372 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Pleosporales.f__Torulaceae.g__Torula.s__Torula_fici                                                                     | 2.384875668 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Hymenochaetales.f__Hymenochaetales_fam_Incertae_sedis.g__Peniophorella.s__Peniophorella_praetermissa                  | 1.115459216 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Eurotiomycetes.o__Onygenales.f__Onygenaceae.g__Keratinophyton                                                                              | 0.730805014 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Pleosporales.f__Didymellaceae.g__Stagonosporopsis                                                                       | 3.088125345 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Ascomycota_cla_Incertae_sedis.o__Ascomycota_ord_Incertae_sedis.f__Ascomycota_fam_Incertae_sedis.g__Hormodochis.s__Hormodochis_melanochlora | 1.922434479 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Tremellomycetes.o__Filobasidiales.f__Filobasidiaceae.g__Naganishia                                                                      | 3.509008943 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Hypocreales.f__Hypocreaceae.g__Trichoderma.s__Trichoderma_effusum                                                       | 0.873836172 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Corticiales.f__Punctulariaceae.g__Punctularia.s__Punctularia_atropurpurens                                            | 0.706248853 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Capnodiales.f__Capnodiales_fam_Incertae_sedis.g__Capnodiales_gen_Incertae_sedis.s__Capnodiales_spe_Incertae_sedis       | 2.433939457 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Polyporales.f__Meruliaceae.g__Phlebia.s__Phlebia_spe_Incertae_sedis                                                   | 1.480398964 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Tremellomycetes.o__Trichosporonales.f__Trichosporonaceae.g__Cutaneotrichosporon.s__Cutaneotrichosporon_arboriforme                      | 1.183370108 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Russulales.f__Lachnocladiaceae.g__Vararia.s__Vararia_gallica                                                          | 0.16946068  |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Capnodiales.f__Cladosporiaceae.g__Cladosporium                                                                          | 4.604511593 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Capnodiales.f__Mycosphaerellaceae.g__Mycosphaerellaceae_gen_Incertae_sedis.s__Mycosphaerellaceae_spe_Incertae_sedis     | 2.756089428 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Pleosporales.f__Cucurbitariaceae.g__Pyrenochaetopsis                                                                    | 2.14407864  |          |            | -        |
| k_Fungi.p__Ascomycota.c__Saccharomycetes.o__Saccharomycetales.f__Metschnikowiaceae.g__Kodamaea                                                                      | 1.702624678 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Pleosporales.f__Phaeosphaeriaceae.g__Leptospora.s__Leptospora_rubella                                                   | 3.126603627 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Agaricales.f__Typhulaceae.g__Typhula                                                                                  | 2.756111448 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Exobasidiomycetes.o__Georgisphaeriales.f__Gjaerumiaceae.g__Gjaerumia.s__Gjaerumia_minor                                                 | 0.820937501 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Hypocreales.f__Nectriaceae.g__Fusarium.s__Fusarium_oxysporum                                                            | 1.191710725 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Capnodiales.f__Mycosphaerellaceae.g__Septoria                                                                           | 2.356083829 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Hypocreales.f__Hypocreales_fam_Incertae_sedis.g__Acremonium.s__Acremonium_acutatum                                      | 2.40372453  |          |            | -        |
| k_Fungi.p__Chytridiomycota.c__Chytridiomycetes.o__Chytridiales.f__Chytriomycetaceae.g__Avachytrium                                                                  | 0.741557448 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Leotiomycetes.o__Helotiales.f__Helotiales_fam_Incertae_sedis.g__Cadophora.s__Cadophora_bubakii                                             | 2.582837829 |          |            | -        |
| k_Fungi.p__Mucoromycota.c__Mucoromycetes.o__Mucorales.f__Mucoraceae.g__Mucor                                                                                        | 4.138820671 | st-COVID | 4.01488092 | 1.21E-19 |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Diaporthales.f__Diaporthaceae.g__Diaporthe.s__Diaporthe_bohemiae                                                        | 2.882062901 |          |            | -        |
| k_Fungi.p__Chytridiomycota.c__Chytridiomycetes.o__Rhizophydiales.f__Halomycetaceae.g__Paludomyces.s__Paludomyces_mangrovei                                          | 0           |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Exobasidiomycetes.o__Ceraceosorales.f__Ceraceosoraceae.g__Ceraceosorus                                                                  | 1.295489665 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Cantharellales.f__Cantharellales_fam_Incertae_sedis.g__Sistotrema                                                     | 2.582399498 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Wallemiomycetes.o__Wallemiales.f__Wallemiaceae.g__Wallemia.s__Wallemia_canadensis                                                       | 3.43327292  |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Malasseziomycetes.o__Malasseziales.f__Malasseziaceae.g__Malassezia.s__Malassezia_glabra                                                 | 3.667936648 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Saccharomycetes.o__Saccharomycetales.f__Saccharomycetaceae.g__Kazachstania.s__Kazachstania_humilis                                         | 2.309360224 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Dothideales.f__Dothioraceae.g__Dothiora                                                                                 | 0.711295843 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricostilbomycetes.o__Agaricostilbales.f__Kondooaceae.g__Kondoa.s__Kondoa_thailandica                                                 | 1.950054913 |          |            | -        |

|                                                                                                                                                                                  |             |         |            |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------|------------|----------|
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Lentitheciaceae.g_Keissleriella.s_Keissleriella_quad<br>riseptata                                                        | 2.488198062 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meruliaceae.g_Scopuloides                                                                                               | 0.327718599 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Thyridariaceae.g_Rousoella                                                                                               | 2.567605538 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Coniochaetales.f_Coniochaetaeae.g_Coniochaeta.s_Coniochaeta_m<br>utabilis                                                               | 2.529296163 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Microstromatales.f_Microstromatales_fam_Incertae_sedis.g_Pse<br>udomicrostroma.s_Pseudomicrostroma_phylloplanum                    | 2.695296653 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Chaetothyriales_fam_Incertae_sedis.g_Strelitziana                                                                      | 2.971001586 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_baarnensis                                                                       | 2.862835831 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incert<br>ae_sedis.g_Lembosiniella                                             | 1.69860284  |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Lycoperdaceae.g_Bovista.s_Bovista_aestivalis                                                                             | 2.787111086 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Exobasidiales.f_Brachybasidiaceae.g_Meira.s_Meira_nashicola                                                                        | 0.617413395 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Walleimomycetes.o_Walleimiales.f_Walleimiaceae.g_Walleimia.s_Walleimia_mellicola                                                                       | 3.196429519 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariales.f_Sordariaceae.g_Sordaria.s_Sordaria_spe_Incertae_sedi<br>s                                                                 | 1.082186756 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Wickerhamiella                                                                                  | 2.369712239 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Wickerhamiella.s_Wic<br>kerhamiella_versatilis                                                  | 2.369712239 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Debaryomyces.s_Deba<br>ryomyces_prospodidis                                                     | 4.4898882   |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Bionectriaceae.g_Nectriopsis                                                                                              | 1.744707754 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Diatrypaeae.g_Eutypella.s_Eutypella_tamaricis                                                                              | 2.618808516 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incert<br>ae_sedis.g_Inocyclus.s_Inocyclus_angularis                           | 1.865749846 |         |            | -        |
| k_Fungi.p_Chytridiomycota.c_Chytridiomycota_cla_Incertae_sedis.o_Chytridiomycota_ord_Incertae_sedis.f_Chytid<br>iomycota_fam_Incertae_sedis.g_Chytridiomycota_gen_Incertae_sedis | 0.383216752 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Star<br>merella.s_Starmerella_etchellsii                                     | 3.077383261 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Ophiosphaerella.s_Ophiospha<br>erella_agrostidis                                                     | 1.547722718 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Yamadazyma                                                                                      | 2.733479836 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_amstelodami                                                                      | 3.691908927 | Control | 3.26430341 | 2.03E-05 |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Microstromatales.f_Microstromatales_fam_Incertae_sedis.g_Ja<br>minaea.s_Jaminaea_angkorensis                                       | 1.930539986 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Cordyceps.s_Cordyceps_succavu<br>s                                                                      | 2.423072022 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Tausonia.s_Tausonia_pullula<br>ns                                                                 | 2.799518075 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Chaetothyriales_fam_Incertae_sedis.g_Strelitziana.s<br>Strelitziana_eucalypti                                          | 2.971001586 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Rachicladosporium.s_Rachiclado<br>sporium_spe_Incertae_sedis                                            | 2.203069992 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Auriculariales_fam_Incertae_sedis.g_Oliveonia.s_<br>Oliveonia_spe_Incertae_sedis                                     | 0.932504512 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Hysteriales.f_Hysteriaceae.g_Hysterobrevium.s_Hysterobrevium_w<br>alvisbavicola                                                         | 2.097225749 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Ophiocordycipitaceae.g_Purpureocillium                                                                                    | 3.187781288 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Orbiliomycetes.o_Orbiliales.f_Orbiliaceae.g_Dactylella.s_Dactylella_spe_Incertae_sedis                                                                    | 1.804222065 |         |            | -        |
| k_Fungi.p_Chytridiomycota.c_Chytridiomycetes.o_Chytridiales.f_Chytridiaceae.g_Chytridium.s_Chytridium_olla                                                                       | 2.854477108 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Banksiophoma.s_Banksiopho<br>ma_austaliensis                                                         | 1.873258935 |         |            | -        |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Mucoraceae.g_Mucor.s_Mucor_racemosus                                                                                        | 2.671971835 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Tremellaceae.g_Bulleromyces                                                                                            | 2.561705923 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Capnodiales_fam_Incertae_sedis.g_Xenodevriesia.s_<br>Xenodevriesia_strelitzicola                                          | 0.830277528 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Ramularia.s_Ramularia_coryl<br>i                                                                     | 3.281519879 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Cordyceps.s_Cordyceps_ghanensi<br>s                                                                     | 1.958172803 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Ajellomycetaceae.g_Emergomyces                                                                                              | 0           |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Beauveria.s_Beauveria_lii                                                                               | 1.348222566 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Paracremonium                                                                                               | 0.388628591 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Venturiales.f_Venturiaceae.g_Venturiaceae_gen_Incertae_sedis                                                                            | 2.352943057 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Alternaria.s_Alternaria_chlamydos<br>pora                                                                | 0.245651664 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Malasseziomycetes.o_Malasseziales.f_Malasseziaceae.g_Malassezia.s_Malassezia_ja<br>ponica                                                              | 2.239128777 |         |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Capnodiales_fam_Incertae_sedis.g_Xenodevriesia                                                                            | 0.830277528 |         |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Exidiaceae.g_Basidioidendron                                                                                         | 0.700939597 |         |            | -        |

|                                                                                                                                                                                                                    |             |          |            |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Agariceae.g_Agaricus.s_Agaricus_subfloccosus                                                                                                               | 2.704416384 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Halosphaeriaceae.g_Halosphaeriaceae_gen_Incertae_sedis.s_Halosphaeriaceae_spe_Incertae_sedis                                                               | 2.258713453 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Tilletiales.f_Tilletiaceae.g_Tilletia.s_Tilletia_maclaganii                                                                                                          | 2.397360563 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Lophiostomataceae.g_Lophiostoma.s_Lophiostoma_cynaroidis                                                                                                   | 1.368962698 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Botryosphaeriaceae.g_Botryosphaeria.s_Botryosphaeria_corticis                                                                                         | 1.838467461 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Sporormiaceae.g_Preussia                                                                                                                                   | 2.057971383 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pyronemataceae.g_Heydenia                                                                                                                                       | 2.359663041 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Phacidiales.f_Phacidaceae.g_Phacidium                                                                                                                                       | 2.200549946 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Helotiaceae.g_Tetracladium                                                                                                                                     | 0.755643909 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Saprochaete.s_Saprochaete_gigas                                                                                                       | 3.782445477 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Tubeufiales.f_Tubeufiaceae.g_Tubeufia                                                                                                                                     | 2.073412832 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Agariceae.g_Agaricus                                                                                                                                       | 2.704416384 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Akanthomyces                                                                                                                              | 1.516715616 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Coronophorales.f_Nitschkiaceae.g_Fracchiacea                                                                                                                              | 0.376628356 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Deбaryomycetaceae.g_Kurtzmanielli.s_Kurtzmanielli_quercitrusa                                                                                         | 1.344917836 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Entylomatales.f_Entylomataceae.g_Entyloma.s_Entyloma_linariae                                                                                                        | 0.091613673 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Chaetosphaeriaceae.g_Chloridium.s_Chloridium_pini                                                                                                     | 0.611819829 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Rhodotorula.s_Rhodotorula_mucilaginosae                                                                                        | 4.489718842 | st-COVID | 4.1536698  | 3.75E-17 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Vacuiphoma.s_Vacuiphoma_oculi_hominis                                                                                                      | 1.654976011 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Metschnikowiaceae.g_Clavispora.s_Candida_pseudointermedia                                                                                             | 0.550142192 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Pucciniomycetes.o_Pucciniales.f_Pucciniaceae.g_Puccinia.s_Puccinia_recondita                                                                                                             | 0.803880086 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Neoseptophoma                                                                                                                          | 2.957836523 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Pseudopithomyces.s_Pseudopithomyces_karoo                                                                                             | 1.795928949 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Exidiaceae.g_Basidioidendron.s_Basidioidendron_globisporum                                                                                             | 0.700939597 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Botryobasidiaceae.g_Neoaccladium.s_Neoaccladium_indicum                                                                                                | 0.808333759 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideales.f_Dothioraceae.g_Dothiora.s_Dothiora_spartii                                                                                                                  | 0.711295843 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Trichosporonaceae_gen_Incertae_sedis                                                                                            | 2.11272684  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Strophariaceae.g_Deconica                                                                                                                                  | 2.097830268 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Thelebolales.f_Thelebolaceae.g_Thelebolus                                                                                                                                   | 2.559180926 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Malasseziomycetes.o_Malasseziiales.f_Malasseziaceae.g_Malassezia.s_Malassezia_dermatis                                                                                                   | 1.952267047 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Exidiaceae.g_Exidia                                                                                                                                    | 3.211605895 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_whitfieldii                                                                                                        | 2.638852152 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Trichosporon.s_Trichosporon_asahii                                                                                              | 2.898775029 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Phaeophleospora.s_Phaeophleospora_hymenocallidicola                                                                                    | 2.081450964 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Periconiaceae.g_Periconia.s_Periconia_epilithographicola                                                                                                   | 0.556119678 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Psathyrella                                                                                                                              | 2.63512962  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Rhynchogastremataceae.g_Papiliotrema.s_Papiliotrema_aurea                                                                                                | 1.4459814   |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Glomeromycetes.o_Diversisporales.f_Diversisporaceae.g_Diversispora.s_Diversispora_spurca                                                                                                  | 4.466071988 | Control  | 4.18514436 | 9.04E-07 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Neodevriesiaceae.g_Neodevriesiaceae_gen_Incertae_sedis.s_Neodevriesiaceae_spe_Incertae_sedis                                                                | 2.170617257 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Hymenochaetales_fam_Incertae_sedis.g_Peniochaeta.s_Peniochaeta_phorella                                                                               | 2.410419326 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaporthales.f_Valsaceae.g_Cytospora.s_Cytospora_myrtagena                                                                                                                | 1.191603425 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_melanoconidium                                                                                                     | 3.86849883  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_kalimae                                                                                                            | 2.289528145 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Microbotryomycetes_ord_Incertae_sedis.f_Microbotryomycetes_fam_Incertae_sedis.g_Heitmania.s_Heitmania_litsea                                                        | 2.546438387 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Coronophorales.f_Scortechiniaceae.g_Parasymphodiella                                                                                                                      | 2.829829049 | COVID-19 | 3.55001854 | 2.29E-06 |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Apiotrichum                                                                                                                     | 3.145394192 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Rickenellaceae.g_Sidera                                                                                                                               | 0.819942554 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Elaphomycetaceae.g_Elaphomyces                                                                                                                                | 1.30218001  |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Chytridiomycota_cla_Incertae_sedis.o_Chytridiomycota_ord_Incertae_sedis.f_Chytridiomycota_fam_Incertae_sedis.g_Chytridiomycota_gen_Incertae_sedis.s_Chytridiomycota_spe_Incertae_sedis | 0.383216752 |          |            | -        |

|                                                                                                                                                      |             |          |            |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_jiangxiense                                          | 2.176354388 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricostilbomycetes.o_Agaricostilbales.f_Kondoaceae.g_Kondoa                                                              | 1.950054913 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporales_fam_Incertae_sedis.g_Pseudohelminthosporium.s_Pseudohelminthosporium_clematidis | 1.21065085  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Xeromyces                                                                      | 1.932216439 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomyces.o_Helotiales.f_Vandijckellaceae.g_Vandijckella.s_Vandijckella_johannae                                            | 1.870799423 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Zasmidium.s_Zasmidium_spe_Incertae_sedis                                 | 2.012613567 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Toxicocladosporium.s_Toxicocladosporium_spe_Incertae_sedis                  | 1.937928012 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_aurantiogriseum                                      | 1.979900005 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Coniothyriaceae.g_Hazslinszkyomyces                                                          | 0.922395142 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Lecanicillium.s_Lecanicillium_coloprothum                                   | 2.532435865 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Cladosporium.s_Cladosporium_koenigii                                        | 4.206426179 | Control  | 3.80660222 | 3.84E-05 |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Arachnomycetaceae.g_Arachnomycetes.s_Arachnomycetes_jinanicus                                   | 0.532638583 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Saprochaete                                                             | 3.782445477 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreaceae.g_Trichoderma.s_Trichoderma_longirachiatum                                       | 2.35949053  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Dioszegia                                                             | 3.893832349 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideales.f_Aureobasidiaceae.g_Aureobasidium                                                              | 3.661360867 |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Spizellomycetes.o_Spizellomycetales.f_Powellomycetaceae.g_Powellomyces                                                   | 0.462608872 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Yarrowia.s_Yarrowia_alimentaria                                         | 2.053132571 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Chaetosphaeriaceae.g_Zanclospora.s_Zanclospora_aurea                                    | 1.89467481  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_corrugatus                                           | 2.499562124 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Diatrypaceae.g_Eutypella.s_Eutypella_spe_Incertae_sedis                                        | 1.782407469 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Sphaerulina                                                              | 1.240776093 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_foetidus                                             | 2.559071966 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariales.f_Sordariales_fam_Incertae_sedis.g_Ramophialophora.s_Ramophialophora_spe_Incertae_sedis         | 2.388883983 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pyrrenomataceae.g_Genea                                                                           | 2.357039245 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Ahmadea                                                                              | 2.69057193  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Tetrapispora                                                       | 1.249456738 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Ascomycota_cla_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Hormodochis                   | 1.922434479 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporales.f_Tetragonomycetaceae.g_Bandonia.s_Bandonia_marina                                        | 1.68857021  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Iodosphaeriaceae.g_Iodosphaeria                                                                | 0.661181443 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Ustilaginomycetes.o_Ustilaginales.f_Ustilaginaceae.g_Moesziomyces.s_Moesziomyces_bullatus                                  | 2.488871064 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Acremonium.s_Acremonium_charticola                           | 2.508284805 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Rhynchogastremataceae.g_Papillotrema                                                       | 2.974433847 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Schizoporaceae.g_Lyomyces.s_Lyomyces_spe_Incertae_sedis                                 | 1.744055793 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Erythrobasidiales.f_Erythrobasidiaceae.g_Erythrobasidium.s_Erythrobasidium_hasegawianum              | 2.189383543 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Togniniales.f_Togniniaceae.g_Phaeoacremonium.s_Phaeoacremonium_griseo_olivaceum                             | 1.033537015 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomyces.o_Helotiales.f_Helotiales_fam_Incertae_sedis.g_Cadophora                                                          | 2.630705173 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Glomerellales.f_Glomerellaceae.g_Colletotrichum.s_Colletotrichum_cliviae                                    | 1.640150041 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Saccharomyces.s_Saccharomyces_cerevisiae                           | 4.451167396 | COVID-19 | 4.13957459 | 1.79E-07 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Trichosphaeriales.f_Trichosphaeriaceae.g_Nigrospora.s_Nigrospora_oryzae                                     | 3.884552856 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Omphalotaceae.g_Collybiopsis                                                                 | 1.041990475 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Didymella.s_Didymella_keratinophila                                          | 2.699252862 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Irpicaceae.g_Irpex                                                                          | 3.265949953 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Periconiaceae.g_Periconia.s_Periconia_circinata                                              | 0.907997321 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Knufia.s_Knufia_karalitana                                               | 1.733124281 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Stachybotryaceae.g_Striatibotrys.s_Striatibotrys_yuccae                                       | 1.491573907 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Rhodosporiobolus.s_Rhodosporiobolus_colostri                     | 2.718443207 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Arachnomycetaceae.g_Arachnomycetes                                                              | 0.532638583 |          |            | -        |

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| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Phacidiales.f_Phacidaceae.g_Phacidium.s_Phacidium_lacerum                                        | 2.200549946 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Thelebolales.f_Pseudeurotiaceae.g_Pseudogymnoascus.s_Pseudogymnoascus spe Incertae sedis         | 2.001379652 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Zymoseptoria                                                | 0.440527452 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Golovinomyces                                                       | 2.415678562 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Ophiostoma                                                | 3.424730711 | Control  | 3.1098834  | 0.00023  |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Pichiaceae.g_Pichia.s_Pichia_fermentans                                    | 1.432337519 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Herpotrichiellaceae.g_Exophiala.s_Exophiala_dermatitidis                      | 1.605990285 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Schizoporaceae.g_Xylodon                                                   | 0.87546886  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Ajellomycetaceae.g_Emergomyces.s_Emergomyces_candidensis                           | 0           |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariomycetes_ord_Incertae_sedis.f_Sordariomycetes_fam_Incertae_sedis.g_Fantasmomyces        | 3.608651064 | COVID-19 | 3.53858944 | 8.33E-09 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Boletales.f_Rhizopogonaceae.g_Rhizopogon                                                     | 0.657577319 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Cercospora.s_Cercospora_cannescens                          | 3.225148663 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Nemania.s_Nemania_viridis                                           | 1.769398131 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Knufia.s_Knufia_epidermidis                                 | 2.493996387 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Sclerococcales.f_Dactylosporaceae.g_Rhopalophora                                                | 1.862646283 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Groenewaldozyma.s_Groenewaldozyma_tartarivorans        | 0.453457337 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariales.f_Chaetomiaceae.g_Chaetomium                                                       | 2.255765741 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaporthales.f_Schizoparmaceae.g_Coniella                                                      | 0.695667369 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Zygorulasporea                                        | 3.389675105 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Exobasidiales.f_Exobasidiaceae.g_Exobasidium                                              | 2.363559017 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Lophiostomataceae.g_Lophiostoma.s_Lophiostoma_spe_Incertae_sedis                | 1.550042955 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Irpicaceae.g_Ceriporia.s_Ceriporia_lacerata                                    | 2.877471696 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Tubeufiales.f_Tubeufiaceae.g_Helicoma                                                          | 2.28526741  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Mycosphaerellales.f_Teratosphaeriaceae.g_Eupeniella.s_Eupeniella_venezuelensis                 | 2.695269359 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Amylostereaceae.g_Amylostereum.s_Amylostereum_orientale                         | 0.527139552 |          |            | -        |
| k_Fungi.p_Zoopagomycota.c_Entomophthoromycetes.o_Entomophthorales.f_Entomophthoraceae.g_Zoophthora                                      | 2.38446746  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_vitricola                               | 2.780475514 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Phanerochaetaceae.g_Phanerochaete.s_Phanerochaete_chrysosporium                | 2.380540128 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Trichomerium                                                | 2.283460492 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Didymella                                                       | 2.882912451 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Onygenales_fam_Incertae_sedis.g_Zeloasperisporium.s_Zeloasperisporium_eucalyptorum | 2.759423103 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Valsariales.f_Valsariaceae.g_Valsaria.s_Valsaria_ceratoniae                                    | 2.450509321 |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Glomeromycetes.o_Glomerales.f_Glomeraceae.g_Glomus.s_Glomus_macrocarpum                                        | 2.692400025 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Itersonilia                                              | 3.000650954 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Leptosphaeriaceae.g_Plenodomus.s_Plenodomus_entreroleucus                       | 1.604955807 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Wallemiomycetes.o_Wallemiales.f_Wallemiaceae.g_Wallemia.s_Wallemia_muriae                                     | 2.654103584 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Malasseziomycetes.o_Malasseziales.f_Malasseziaceae.g_Malassezia.s_Malassezia_furfur                           | 1.43343039  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_pragensis                               | 1.820654664 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Schizoporaceae.g_Xylodon.s_Xylodon_filicin                                 | 0.87546886  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Ruhlandiella.s_Ruhlandiella_patagonica                                  | 2.233226934 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Botryosphaeriaceae.g_Neofusicoccum.s_Neofusicoccum_buxi                    | 1.877030856 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Clonostachys.s_Clonostachys_eriocamporesii                         | 2.187264273 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Periconiaceae.g_Paraloratospora                                                 | 2.126810062 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_zeylanoides       | 2.852600252 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Fomitopsidaceae.g_Fomitopsis                                                   | 1.620814061 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_oxalicum                                | 1.888026241 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Gibberella.s_Gibberella_fujikuroi                                  | 4.070496776 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Dissoconiaceae.g_Pseudoveronaea.s_Pseudoveronaea_ellipsoidea                     | 3.470706499 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_tennesseensis                           | 2.74077399  |          |            | -        |

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| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Phanerochaetaceae.g_Phanerochaete                                                                   | 2.386580028 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Sphaerulina.s_Sphaerulina_w<br>estendorpii                                       | 1.240776093 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Bionectriaceae.g_Geosmithia                                                                           | 0.84509804  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Mycocaliciales.f_Mycocaliciaceae.g_Chaenothecopsis.s_Chaenothec<br>opsis_resinophila                                 | 0.035232376 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Toxicocladosporium.s_Toxicocla<br>dosporium_strelitziae                             | 2.275573088 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Delastria.s_Delastria_faustiniana                                                            | 0.438134639 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Hannaella.s_Hannaella_pagno<br>ccae                                           | 2.822034274 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Tricholomataceae.g_Flagelloscypha.s_Flagelloscypha<br>spe_Incertae_sedis                             | 0.986636038 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Graphiaceae.g_Graphium.s_Graphium_penicillioides                                                     | 0.456917869 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Neodevriesiaceae.g_Neodevriesia                                                                       | 2.123667637 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Can<br>dida.s_Candida_solani                             | 2.456686727 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariomycetes_ord_Incertae_sedis.f_Sordariomycetes_fam_Incertae<br>sedis.g_Paramamichloridium                     | 0.708085965 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Talaromyces.s_Talaromyces_islandic<br>us                                               | 2.382235418 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Ascotricha                                                                               | 2.705562583 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Valsariales.f_Valsariaceae.g_Valsaria                                                                               | 2.450509321 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Eremothecium.s_Erem<br>othecium_ashbvi                                     | 1.784526887 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Vacuiphoma                                                                           | 1.654976011 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Phaffomycetaceae.g_Komagataella.s_Komaga<br>taella_ulmi                                         | 0.645094624 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Rickenellaceae.g_Sidera.s_Sidera_vesiculosa                                                     | 0.819942554 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Ophiosphaerella                                                                  | 2.518852789 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Stephanosporaceae.g_Stephanosporaceae_gen_Incerta<br>e_sedis.s_Stephanosporaceae_spe_Incertae_sedis  | 0.754487332 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Thyridariaceae.g_Parathyridaria.s_Parathyridaria_ro<br>sae                                           | 0.84509804  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Ustilaginomycetes.o_Ustilaginales.f_Ustilaginaceae.g_Moesziomyces                                                                  | 2.488871064 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Coprinopsis                                                                        | 2.688520941 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium                                                                            | 3.938126857 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Zygosporium                                                                              | 0           |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Atractiellomycetes.o_Atractiellales.f_Hoehnelomycetaceae.g_Atractiella                                                             | 1.941932844 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Microstromatales.f_Microstromatales_fam_Incertae_sedis.g_Ja<br>minaea                                          | 1.930539986 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Rhodotorula                                                              | 4.491161694 | st-COVID | 4.15510304 | 9.66E-16 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Lachnocladiaceae.g_Vararia                                                                           | 0.16946068  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tritirachiomycetes.o_Tritirachiales.f_Tritirachiaceae.g_Paratritirachium                                                           | 2.034667991 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Dioszegia.s_Dioszegia_catari<br>nonii                                         | 1.975269958 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaportheales.f_Diaportheaceae.g_Diaporthe.s_Diaporthe_pseudoocul<br>i                                              | 0.112422179 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariomycetes_ord_Incertae_sedis.f_Sordariomycetes_fam_Incertae<br>sedis.g_Fantasmomyces.s_Fantasmomyces_hyalinus | 3.608651064 | COVID-19 | 3.55451134 | 8.33E-09 |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Issatchenkia.s_Issatch<br>enkia_orientalis                                 | 2.291162406 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trigonopsidaceae.g_Trigonopsis                                                                  | 3.872370408 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Simplicillium.s_Simplicillium_lan<br>osoniveum                                      | 3.200153795 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Onygenales_fam_Incertae_sedis.g_Spiromastix.s_Spiro<br>mastix_princeps                                  | 2.652927277 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Golovinomyces.s_Golovinomyces_sonc<br>hicola                                             | 2.415678562 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tritirachiomycetes.o_Tritirachiales.f_Tritirachiaceae.g_Paratritirachium.s_Paratritirac<br>hium_cylindroconium                     | 2.034667991 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Entylomatales.f_Entylomataceae.g_Entyloma                                                                      | 1.38728194  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Thyridariaceae.g_Roussoella.s_Roussoella_solani                                                      | 1.343319058 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Dictyosporiaceae.g_Gregarithecium                                                                    | 0.112422179 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incert<br>ae_sedis.g_Inocyclus                             | 1.865749846 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideales.f_Dothideaceae.g_Dothidea.s_Dothidea_sambuci                                                            | 2.449303047 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Pleurotaceae.g_Hohenbuehelia.s_Hohenbuehelia_por<br>tegna                                            | 2.375497345 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Xylariaceae_gen_Incertae_sedis                                                           | 1.804325333 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Onygenales_fam_Incertae_sedis.g_Zeloasperisporium                                                       | 2.759423103 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Lithohypha                                                                       | 1.612783857 |          |            | -        |



|                                                                                                                                                                                      |             |          |            |          |
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| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Podosphaera.s_Podosphaera_aphanis                                                                                | 1.739917602 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Cystobasidiomycetes_ord_Incertae_sedis.f_Symmetrosporaceae.g_Symmetrospora.s_Symmetrospora_marina                                    | 1.377598729 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Galactomyces                                                                                            | 4.026614968 | st-COVID | 3.79487918 | 3.93E-08 |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Leucosporidiales.f_Leucosporidiaceae.g_Leucosporidium                                                                                 | 3.220932707 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Capnodiales_fam_Incertae_sedis.g_Capnodiales_gen_Incertae_sedis                                                               | 2.433939457 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Hymenochaetales_fam_Incertae_sedis.g_Peniophorella.s_Peniophorella_spe_Incertae_sedis                                   | 2.410419326 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Erysiphe.s_Erysiphe_azaleae                                                                                      | 1.543503659 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trigonopsidaceae.g_Trigonopsis.s_Trigonopsis_vinaria                                                                    | 1.514790861 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Xylariaceae_gen_Incertae_sedis.s_Xylariaceae_spe_Incertae_sedis                                                  | 1.804325333 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariomycetes_ord_Incertae_sedis.f_Sordariomycetes_fam_Incertae_sedis.g_Acrodictys                                                        | 5.436203178 | COVID-19 | 5.09245678 | 4.48E-08 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Berkeleyomyces.s_Berkeleyomyces_basicola                                                                 | 1.235457315 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Hypoxylon.s_Hypoxylon_perforatum                                                                                 | 2.267793736 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida                                                                          | 4.79291641  | st-COVID | 4.41993702 | 1.66E-08 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Stachybotryaceae.g_Stachybotrys                                                                                               | 2.619681089 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariales.f_Sordariales_fam_Incertae_sedis.g_Ramphialophora                                                                               | 2.388883983 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Togniniales.f_Togniniaceae.g_Phaeoacremonium                                                                                                | 1.033537015 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Diutina                                                                          | 2.807458799 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Diatrypaceae.g_Peroneutypa.s_Peroneutypa_scoparia                                                                              | 2.558421221 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Biatrisporaceae.g_Biatrisporaceae_gen_Incertae_sedis.s_Biatrisporaceae_spe_Incertae_sedis                                    | 1.694671661 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Podosphaera.s_Podosphaera_cunningtonii                                                                           | 1.875368232 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Diatrypaceae.g_Alloccryptovalsa                                                                                                | 1.582031336 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Phaeophleospora                                                                                          | 2.081450964 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Microascaceae.g_Scopulariopsis                                                                                               | 0.43204288  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Raffaelea.s_Raffaelea_albimanens                                                                       | 2.451353936 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Talaromyces.s_Talaromyces_stollii                                                                              | 1.171170022 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Neocelosporium                                                    | 3.109839223 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Tilletiales.f_Tilletiaceae.g_Tilletia.s_Tilletia_mactaggartii                                                                          | 1.669570434 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Tricholomataceae.g_Resupinatus                                                                                               | 2.737192643 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Omphalotaceae.g_Collybiopsis.s_Collybiopsis_filamentipes                                                                     | 1.041990475 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Ustilaginoidea.s_Ustilaginoidea_virens                                                       | 3.525086054 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida                                                                          | 2.514245803 |          |            | -        |
| k_Fungi.p_Rozellomycota.c_Rozellomycotina_cls_Incertae_sedis.o_GS08.f_GS08_fam_Incertae_sedis.g_GS08_gen_Incertae_sedis                                                              | 2.323179448 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Glomerellales.f_Plectosphaerellaceae.g_Gibellulopsis                                                                                        | 0.668569645 |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Chytridiomycetes.o_Rhizophydiales.f_Halomycetaceae.g_Paludomyces                                                                                         | 0           |          |            | -        |
| k_Fungi.p_Ascomycota.c_Ascomycota_cls_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Ascomycota_gen_Incertae_sedis.s_Ascomycota_spe_Incertae_sedis | 2.953010603 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Hymenochaetales_fam_Incertae_sedis.g_Echinoporia.s_Echinoporia_hydrophora                                               | 0           |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Ceratobasidiaceae.g_Rhizoctonia.s_Rhizoctonia_spe_Incertae_sedis                                                         | 2.033789169 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meruliaceae.g_Phlebia.s_Phlebia_tuberculata                                                                                 | 3.080209693 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Neoascochyta                                                                                                 | 1.994503785 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Xylocoremium.s_Xylocoremium_spe_Incertae_sedis                                                                   | 2.127276636 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Acremonium                                                                                   | 3.454412891 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida                                                                          | 3.005343678 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Cyphellophoraceae.g_Cyphellophora.s_Cyphellophora_sessilis                                                                 | 1.104476765 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Yarrowia.s_Yarrowia_lipolytica                                                                          | 3.005791289 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Yamadazyma.s_Yamadazyma_triangularis                                                                | 2.176661788 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaportheales.f_Diaportheaceae.g_Diaporthe.s_Diaporthe_kochmanii                                                                            | 3.572328483 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Coronophorales.f_Nitschkiaceae.g_Fracchiacea.s_Fracchiacea_myricoides                                                                       | 0.376628356 |          |            | -        |

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| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Raffaelea                                                        | 4.349840382 | Control  | 3.91275175 | 6.34E-09 |
| k_Fungi.p_Basidiomycota.c_Wallemiomycetes.o_Wallemiales.f_Wallemiaceae.g_Wallemia                                                              | 3.702528445 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Eremomycetales.f_Eremomycetaceae.g_Arthrographis_s_Arthrographis_grakistii                            | 4.273450074 | Control  | 3.9229007  | 5.87E-07 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreaceae.g_Trichoderma.s_Trichoderma_deliquescens                                   | 2.235643203 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Talaromyces.s_Talaromyces_wortmannii                                     | 2.613577572 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Tremateia                                                         | 0.759667845 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Neodevriesiaceae.g_Neodevriesia.s_Neodevriesia_spe_Incertae_sedis                       | 0           |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Rhodotorula.s_Rhodotorula_diobovata                        | 2.011877882 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporaceae.g_Trametes.s_Trametes_cubensis                                           | 3.216355867 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Lentitheciaceae.g_Lentithecium.s_Lentithecium_aquaticum                                | 1.396714918 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Filobasidium.s_Filobasidium_globisporum                         | 1.667028215 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Entylomatales.f_Entylomatales_fam_Incertae_sedis.g_Tilletiopsis.s.s_Tilletiopsis_washingtonensis | 3.234229591 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Hyaloscyphaceae.g_Calycina.s_Calycina_spe_Incertae_sedis                                   | 2.04692063  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_glabripes                                      | 1.053485877 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Apiotrichum.s_Apiotrichum_domesticum                        | 3.145252925 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Stemphylium.s_Stemphylium_spe_Incertae_sedis                           | 1.471824915 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus                                                              | 4.949740723 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Psathyrella.s_Psathyrella_candolleana                                | 2.63512962  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Simplicillium.s_Simplicillium_spe_Incertae_sedis                      | 1.037482612 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusarium.s_Fusarium_ramigenum                                             | 2.238929139 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Periconiaceae.g_Paraloratospora.s_Paraloratospora_gahniae                              | 2.126810062 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Herpotrichiellaceae.g_Coniosporium.s_Coniosporium_spe_Incertae_sedis                 | 2.369241997 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Ahmadea.s_Ahmadea_dalanensis                                                   | 2.69057193  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Cyphellaceae.g_Cyphellaceae_gen_Incertae_sedis.s_Cyphellaceae_spe_Incertae_sedis       | 1.593336423 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Phyllostictaceae.g_Phyllosticta.s_Phyllosticta_capitalensis                       | 2.018076064 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Calosphaeriales.f_Calosphaeriaceae.g_Togniniella.s_Togniniella_acerosa                                | 3.306811545 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_citrinum                                       | 0.411192741 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporales_fam_Incertae_sedis.g_Nigrograna                                           | 2.162070836 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Tilletiales.f_Tilletiaceae.g_Tilletia.s_Tilletia_geeringii                                       | 2.630027021 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Alternaria.s_Alternaria_hungarica                                      | 0.617413395 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Tubeufiales.f_Tubeufiaceae.g_Tubeufia.s_Tubeufia_tratensis                                            | 2.073412832 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Bionectriaceae.g_Geosmithia.s_Geosmithia_rufescens                                      | 0.84509804  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Filobasidiaceae_gen_Incertae_sedis.s_Cryptococcus_ater          | 3.947044169 | COVID-19 | 3.66590193 | 7.21E-10 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Tricholomataceae.g_Calyptella.s_Calyptella_capula                                      | 1.949390007 |          |            | -        |
| k_Fungi.p_Fungi_phy_Incertae_sedis.c_Entorrhizomycetes.o_Entorrhizales.f_Entorrhizaceae.g_Entorrhiza.s_Entorrhiza_parvula                      | 1.860383385 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Lentitheciaceae.g_Keissleriella                                                        | 2.488198062 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Capnodiales_fam_Incertae_sedis.g_Pseudoramichloridium.s_Pseudoramichloridium_henryi     | 2.502633996 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Engyodontium                                                          | 2.591570483 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Vishniacozyma.s_Vishniacozyma_heimaeensis                       | 2.270184598 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusicolla.s_Fusicolla_acetilerea                                          | 1.833185761 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Sarcoscyphaceae.g_Cookeina                                                                  | 3.134684097 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_cinnamopurpureum                               | 2.574136538 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Naganishia.s_Naganishia_albidosimilis                           | 2.152010218 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaryomycetaceae.g_Kurtzmaniella                                                 | 1.344917836 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Microstromatales.f_Microstromatales_fam_Incertae_sedis.g_Pseudomicrostroma                       | 2.695296653 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Hymenochaetales.f_Schizoporaceae.g_Kneiffiella                                                      | 1.598840229 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Udeniomyces.s_Udeniomyces_megalosporus                          | 4.546156652 | st-COVID | 4.31002827 | 2.88E-09 |

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| k_Fungi.p_Ascomycota.c_Orbiliomycetes.o_Orbiliales.f_Orbiliaeae.g_Dactylella                                                                   | 1.804222065 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Blumeria.s_Blumeria_graminis                                               | 1.939519253 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Metschnikowiaceae.g_Clavispora.s_Clavispora_lusitaniae                            | 2.717928845 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusarium.s_Fusarium_neocosmosporiellum                                    | 2.275625416 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Phaeosphaeria.s_Phaeosphaeria_acaciae                              | 2.377364211 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Verrucariales.f_Verrucariaceae.g_Verrucaria.s_Verrucaria_vitikainenii                                  | 2.978785531 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Cryptococcaceae.g_Cryptococcus.s_Cryptococcus_neoformans                             | 0.846842197 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporales_fam_Incertae_sedis.g_Pseudorobillarda                                     | 0.373580663 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Cystobasidiomycetes_ord_Incertae_sedis.f_Symmetrosporaceae.g_Symmetrospora                     | 3.156502228 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Geotrichum.s_Geotrichum_silvicola                                 | 3.169701146 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Exobasidiales.f_Brachybasidiaceae.g_Meira.s_Meira_spe_Incertae_sedis                             | 2.229692656 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Sarcoscyphaceae.g_Cookeina.s_Cookeina_korfii                                                | 3.134684097 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Eremothecium                                                 | 2.139592896 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Anthraccina                                                        | 1.567042943 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Sporocadaceae.g_Pestalotiopsis.s_Pestalotiopsis_draconomelon                             | 2.307139328 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Cladosporiaceae.g_Cladosporium.s_Cladosporium_sphaerospermum                            | 3.263521303 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Microascaceae.g_Scopulariopsis.s_Scopulariopsis_cordiae                                | 0.43204288  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Psathyrellaceae.g_Coprinopsis.s_Coprinopsis_strossmayeri                               | 1.59417483  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Ceraceosorales.f_Ceraceosoraceae.g_Ceraceosorus.s_Ceraceosorus_guamensis                         | 1.295489665 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Tetrapispora.s_Tetrapispora_blatiae                          | 1.249456738 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Fuscosporellales.f_Fuscosporellaceae.g_Fuscosporella                                                  | 1.727060413 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Holtermanniales.f_Holtermanniales_fam_Incertae_sedis.g_Holtermanniiella                            | 2.077495853 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Russulaceae.g_Russula                                                                  | 3.857596082 | Control  | 3.62222768 | 7.31E-10 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Apiosporaceae.g_Arthrimum.s_Arthrimum_rasikravindrae                                     | 0.987314094 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Epicoccum                                                              | 2.598636403 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Cutaneotrichosporon.s_Cutaneotrichosporon_cutaneum          | 3.074424952 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Ruhlandiella                                                                   | 2.233226934 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Sporocadaceae.g_Pestalotiopsis                                                           | 2.393641665 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_thermophilus                                   | 3.395540491 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Tremellaceae.g_Cryptococcus                                                          | 4.797248755 | Control  | 4.50523444 | 1.82E-37 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Trechisporales.f_Trechisporales_fam_Incertae_sedis.g_Sistotremastrum.s_Sistotremastrum_guttuliferum | 2.325217025 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Mycosphaerellales.f_Neodevriesiaceae.g_Neodevriesia.s_Neodevriesia_sexualis                           | 2.317563114 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Hydnoabolites                                                                  | 4.604446781 | COVID-19 | 4.34097226 | 1.70E-07 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Akanthomyces.s_Akanthomyces_thailandicus                              | 1.516715616 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Russulales_fam_Incertae_sedis.g_Russulales_gen_Incertae_sedis                          | 2.699936221 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Fuscosporellales.f_Fuscosporellaceae.g_Fuscosporella.s_Fuscosporella_aquatica                         | 1.727060413 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Archaeorhizomycetes.o_Archaeorhizomycetales.f_Archaeorhizomycetaceae.g_Archaeorhizomyces                                | 0.970741228 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Robbauerales.f_Robbaueraceae.g_Robbauera                                                         | 0.656127253 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Laburnicola                                                       | 1.662042001 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Setophaeosphaeria                                                  | 2.984008769 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Blumeria.s_Blumeria_spe_Incertae_sedis                                     | 4.656957863 | Control  | 4.42898616 | 2.25E-13 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Ceratobasidiaceae.g_Rhizoctonia                                                    | 2.033789169 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Ceratocystis                                                       | 1.537532904 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Trechisporales.f_Hydnothaceae.g_Trechispora.s_Trechispora_spe_Incertae_sedis                        | 1.858154246 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycopsidaceae.g_Saccharomycopsis.s_Saccharomycopsis_fibuligera            | 0.907997321 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Pterulaceae.g_Coronicium                                                               | 1.537246525 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Helotiales_fam_Incertae_sedis.g_Mycoarthris.s_Mycoarthris_spe_Incertae_sedis               | 1.14700099  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Talaromyces.s_Talaromyces_calidicanius                                   | 2.7211671   |          |            | -        |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Bionectriaceae.g_Clonostachys                                                                                | 2.187264273 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Dipodascus.s_Dipodascus_geotrichum                                                     | 3.727238017 | st-COVID | 3.68086588 | 1.25E-05 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Stemphylium.s_Stemphylium_lycopersici                                                       | 2.22257854  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Kluyveromyces.s_Kluyveromyces_lactis                                              | 1.564882682 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Hannaella.s_Hannaella_sinensis                                                       | 3.271939726 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Zygosaccharomyces.s_Zygosaccharomyces_rouxii                                      | 2.064883226 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Dissoconiaceae.g_Uwebraunia.s_Uwebraunia_musae                                                               | 2.006660488 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Malasseziomycetes.o_Malasseziales.f_Malasseziaceae.g_Malassezia.s_Malassezia_cuniculi                                                     | 1.278753601 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Pichiaceae.g_Ogataea                                                                                   | 1.462397998 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Cystofilobasidiaceae.g_Cystofilobasidium.s_Cystofilobasidium_macerans                             | 3.018520829 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Beauveria                                                                                  | 1.954853761 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Hannaella.s_Hannaella_oryzae                                                         | 2.119367428 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Mrakia.s_Mrakia_aquatica                                                             | 0.952198767 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Mycosphaerellaceae_gen_Incertae_sedis                                                   | 2.756089428 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Trichosphaeriales.f_Trichosphaeriaceae.g_Nigrospora.s_Nigrospora_spe_Incertae_sedis                                        | 2.413541056 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pyronemataceae.g_Genea.s_Genea_brunneocarpa                                                                      | 2.357039245 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Diatrypidae.g_Peroneutypa                                                                                     | 2.558421221 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycodaceae.g_Hanseniaspora.s_Hanseniaspora_nectarophila                                        | 1.671967693 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Ophiostoma.s_Ophiostoma_rachisporum                                                   | 0.864403195 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Chrysosphaeria.s_Chrysosphaeria_jan_nelii                                             | 4.820817886 | COVID-19 | 4.5212986  | 2.72E-07 |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Setophoma                                                                               | 2.52868302  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Ascochyta                                                                                   | 2.152982882 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Erythrobasidiales.f_Erythrobasidiaceae.g_Bannoa                                                                     | 1.51911173  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Phaffomycetaceae.g_Komagataella.s_Komagataella_phaffii                                                 | 1.125185425 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Periconiaceae.g_Periconia                                                                                   | 2.611916328 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Curvularia.s_Curvularia_chonburiensis                                                       | 0.705500871 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Erythrobasidiales.f_Erythrobasidiaceae.g_Erythrobasidium.s_Erythrobasidium_yunnanense                               | 1.979715049 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Lecanoromycetes.o_Umbilicariales.f_Umbilicariaceae.g_Umbilicaria                                                                             | 1.432269016 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Blumeria                                                                                        | 4.657789493 | Control  | 4.43312512 | 2.25E-13 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Tricholomataceae.g_Flagelloscypha                                                                           | 0.986636038 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Houjia.s_Houjia_yanglingensis                                                           | 0.7038361   |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Coniothyriaceae.g_Coniothyrium.s_Coniothyrium_spe_Incertae_sedis                                            | 1.965645491 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporales_fam_Incertae_sedis.g_Crustoderma                                                               | 1.554379017 |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Rhizopodaceae.g_Rhizopus                                                                                       | 1.999242615 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Sporormiaceae.g_Preussia.s_Preussia_procaviae                                                               | 2.057971383 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Neodevriesiaceae.g_Neodevriesiaceae_gen_Incertae_sedis                                                       | 2.170617257 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Sordariales.f_Sordariaceae.g_Sordaria.s_Sordaria_euiccola                                                                  | 1.997426102 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Agaricales_fam_Incertae_sedis.g_Agaricales_gen_Incertae_sedis                                               | 2.073434354 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Cystofilobasidiales.f_Mrakiaceae.g_Mrakia.s_Mrakia_frigida                                                              | 0.25782397  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporales_fam_Incertae_sedis.g_Nigrograna.s_Nigrograna_spe_Incertae_sedis                                | 2.162070836 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Tricholomataceae.g_Resupinatus.s_Resupinatus_hausknechtii                                                   | 2.737192643 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Halosphaeriaceae.g_Halosphaeriaceae_gen_Incertae_sedis                                                      | 2.258713453 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonasaceae.g_Blastobotrys.s_Blastobotrys_proliferans                                             | 3.088270888 |          |            | -        |
| k_Fungi.p_Rozellomycota.c_Rozellomycota_cla_Incertae_sedis.o_Rozellomycota_ord_Incertae_sedis.f_Rozellomycota_fam_Incertae_sedis.g_Rozellomycota_gen_Incertae_sedis | 2.852100911 |          |            | -        |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Mucoraceae.g_Mucor.s_Mucor_pseudolusitanicus                                                                   | 2.955534695 | st-COVID | 3.51035921 | 1.93E-28 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Hydnaeae.g_Bergerella                                                                                   | 2.0804953   |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Rhizophyidiomycetes.o_Rhizophydiales.f_Alphamycetaceae.g_Betamyces                                                                      | 2.359145304 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Coniothyriaceae.g_Coniothyrium                                                                              | 1.965645491 |          |            | -        |

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| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meruliaceae.g_Macrohyporia                                                    | 2.337065783 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Kazachstania                                         | 3.547030298 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Zygosporium.s_Zygosporium_pseudogibbum                             | 0           |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Amylostereaceae.g_Amylostereum                                                 | 0.527139552 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Debaromycetaceae.g_Meyerozyma.s_Meyerozyma_guilliermondii                 | 1.400433321 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Microascaceae.g_Microascus                                                     | 2.443120689 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Golubeviales.f_Golubeviaceae.g_Golubevia.s_Golubevia_pallezens                           | 3.327090998 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_subflavus                              | 4.895561592 | COVID-19 | 4.61274412 | 3.80E-07 |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Microstromatales.f_Microstromatales_fam_Incertae_sedis.g_Sympodiomyces                   | 2.115560086 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Irpicaceae.g_Flavodon.s_Flavodon_spe_Incertae_sedis                           | 2.597454177 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Periconiaceae.g_Periconia.s_Periconia_cortaderiae                              | 2.09084896  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Anthraxina.s_Anthraxina_saxicola                           | 0           |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Huntia.s_Huntia_tyalia                                     | 1.633927298 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Acremonium.s_Acremonium_vitellinum             | 0.651747776 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Gibberella                                                        | 4.076445564 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleoporaceae.g_Curvularia.s_Curvularia_solis                                   | 0.600411813 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Erythrobasidiales.f_Erythrobasidiaceae.g_Erythrobasidium                               | 2.398111246 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Laburnicola.s_Laburnicola_dactylidis                      | 1.662042001 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomyces.o_Erysiphales.f_Erysiphaceae.g_Erysiphe                                                             | 1.90259619  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Peniophoraceae.g_Peniophora                                                    | 3.380679829 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Pterulaceae.g_Coronicium.s_Coronicium_gemmiferum                               | 1.537246525 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomyces.o_Helotiales.f_Helotiales_fam_Incertae_sedis.g_Amphobotrys.s_Amphobotrys_ricini                     | 1.544349962 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporales_fam_Incertae_sedis.g_Crustoderma.s_Crustoderma_spe_Incertae_sedis | 1.554379017 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomyces.o_Erysiphales.f_Erysiphaceae.g_Podosphaera.s_Podosphaera_xanthii                                    | 1.936787832 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Derxomyces                                              | 2.043004834 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Entolomataceae.g_Entoloma                                                      | 0.581856605 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricostilbomycetes.o_Agaricostilbales.f_Agaricostilbaceae.g_Sterigmatomyces.s_Sterigmatomyces_halophilus   | 2.766454741 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariales_fam_Incertae_sedis.g_Phialemoniopsis                                  | 2.337822156 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Phyllachorales.f_Phyllachoraceae.g_Phyllachora                                                | 3.346619658 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Chaetosphaeriaceae.g_Chloridium                                           | 0.611819829 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Pichiaceae.g_Pichia.s_Candida_pseudolamblia                               | 3.017914679 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleoporaceae.g_Curvularia                                                      | 0.957157248 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Phaeosphaeria                                              | 3.567531626 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Diatrypidae.g_Allocliptoals.s_Allocliptoals_polyspora                            | 1.582031336 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycopsidaceae.g_Saccharomycopsis                                  | 0.907997321 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_glabrum                                | 1.59122142  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Trichomonascaceae.g_Trichomonascus.s_Trichomonascus_ciferrii              | 3.429054559 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Corticiales.f_Punctulariaceae.g_Punctularia                                                 | 0.706248853 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Penicillifer                                                      | 1.5400297   |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Calosphaeriales.f_Calosphaeriaceae.g_Jattaea                                                  | 0.415984511 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Cucurbitariaceae.g_Pyrenochaetopsis.s_Pyrenochaetopsis_leptospora              | 2.14407864  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Vanrija.s_Vanrija_muscicola                         | 2.811263389 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Acrodontium.s_Acrodontium_crateriforme                     | 1.744568428 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Herpotrichiellaceae.g_Coniosporium                                           | 2.369241997 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Physalacriaceae.g_Flammulina.s_Flammulina_filiformis                           | 2.744512268 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Phaffomycetaceae.g_Wickerhamomyces.s_Wickerhamomyces_onychidis            | 0.233534508 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Tilletiales.f_Tilletiaceae.g_Tilletia.s_Tilletia_barclayana                              | 1.335792102 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaphorales.f_Schizoparmaceae.g_Coniella.s_Coniella_quercicola                                | 0.695667369 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Exobasidiales.f_Brachybasidiaceae.g_Meira.s_Meira_argovae                                | 0.85116566  |          |            | -        |

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| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Stephanosporaceae.g_Stephanosporaceae_gen_Incertae_sedis                                                  | 0.754487332 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_estinogenum                                                       | 3.67909325  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Epicoccum.s_Epicoccum_dendrobiji                                                          | 2.527956493 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Omphalotaceae.g_Gymnopus.s_Gymnopus_variicolor                                                            | 2.047422381 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporaceae.g_Alternaria.s_Alternaria_nepalensis                                                        | 0.135513386 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Entylomatales.f_Entylomataceae.g_Entyloma.s_Entyloma_cosmi                                                          | 0.81392452  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Microstromatales.f_Quambalariaiaceae.g_Quambalaria.s_Quambalaria_cyanescens                                         | 1.504223648 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Irpicaceae.g_Ceriporia.s_Ceriporia_xylostromatoideis                                                     | 1.505913909 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Thermoasceae.g_Byssoschlamys.s_Byssoschlamys_specabilis                                                      | 0.903853918 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Setophoma.s_Setophoma_vernoniae                                                       | 2.52868302  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Epicoccum.s_Epicoccum_duchesneae                                                          | 0.747482431 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Steccherinaceae.g_Steccherinum.s_Steccherinum_ochraceum                                                  | 1.644647435 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaporthales.f_Valsaceae.g_Cytospora                                                                                     | 2.137344519 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Zeloasperisporium.s_Zeloasperisporium_searsiae | 0.487952102 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleraceae.g_Genolevuria                                                                               | 2.145987008 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Sarocladium.s_Sarocladium_orvaze                                          | 0.982202684 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pezizaceae.g_Peziza                                                                                            | 0.917379753 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Kazachstania.s_Kazachstania_exigua                                              | 1.720660364 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Banksiophoma                                                                          | 1.873258935 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Agaricaceae.g_Tulostoma.s_Tulostoma_calcareum                                                             | 2.1949346   |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Calosphaeriales.f_Calosphaeriaceae.g_Togniniella                                                                         | 3.306811545 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Tricholomataceae.g_Calyptella                                                                             | 1.949390007 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Russulales.f_Russulales_fam_Incertae_sedis.g_Russulales_gen_Incertae_sedis.s_Russulales_spe_Incertae_sedis             | 2.699936221 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Sclerotiniaceae.g_Ciboria.s_Ciboria_shiraiana                                                                 | 1.724524109 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Glomerellales.f_Plectosphaerellaceae.g_Plectosphaerella                                                                  | 2.670077097 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Exidiaceae.g_Exidia.s_Exidia_pithya                                                                   | 3.211605895 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Eremasceae.g_Dactylodendron                                                                                  | 3.079444375 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Raffaelea.s_Raffaelea_lauricola                                                     | 4.345587275 | Control  | 3.90887259 | 1.30E-07 |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Erythrobasidiales.f_Erythrobasidiaceae.g_Bannoa.s_Bannoa_syzvgii                                                  | 1.51911173  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Pichiaceae.g_Pichia.s_Pichia_cactophila                                                              | 1.204119983 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pyrrenomataceae.g_Trichophaea                                                                                  | 3.17846679  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Amorosiaceae.g_Angustimassarina.s_Angustimassarina_camporesii                                             | 3.681796494 | COVID-19 | 4.13266498 | 1.01E-05 |
| k_Fungi.p_Mucoromycota.c_Mucoromycetes.o_Mucorales.f_Mucoraceae.g_Actinomucor                                                                                     | 5.525383566 | st-COVID | 5.22791074 | 6.17E-27 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusarium.s_Fusarium_lacertarum                                                               | 3.369300211 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Glomerellales.f_Plectosphaerellaceae.g_Plectosphaerella.s_Plectosphaerella_niemeijeriarum                                | 0.083546051 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Planistromellaceae.g_Umthunziomyces                                                                  | 1.655246684 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Capnodiales_fam_Incertae_sedis.g_Pseudoramichloridium                                                      | 2.502633996 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Verrucariales.f_Verrucariaceae.g_Verrucaria.s_Verrucaria_oulankaensis                                                     | 3.072494985 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Sporobolomyces                                                                | 3.811906936 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Sporothrix.s_Sporothrix_nigrograna                                                  | 2.327891132 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Stagonosporopsis.s_Stagonosporopsis_nemophilae                                            | 1.491892033 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Ceratobasidiaceae.g_Thanatephorus.s_Thanatephorus_cucumeris                                           | 1.511275531 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Entylomatales.f_Entylomatales_fam_Incertae_sedis.g_Tilletiopsis                                                     | 3.234229591 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Starmerella                                                   | 3.077383261 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Leptosporaceae.g_Leptosporella.s_Leptosporella_bambusae                                              | 3.57205799  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Dothideomycetes_ord_Incertae_sedis.f_Dothideomycetes_fam_Incertae_sedis.g_Neocelosporium.s_Neocelosporium_corymbiae      | 3.109839223 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Phanerochaetaceae.g_Phlebiopsis.s_Phlebiopsis_spectabilis_Incertae_sedis                                 | 1.830326158 |          |            | -        |

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| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Cordycipitaceae.g_Engyodontium.s_Engyodontium_album                                                   | 2.591570483 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Capnodiaceae.g_Antennariella                                                                          | 2.012293857 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Malasseziomycetes.o_Malasseziales.f_Malasseziaceae.g_Malassezia                                                                    | 4.721928219 | st-COVID | 4.13110212 | 0.000102 |
| k_Fungi.p_Ascomycota.c_Pezizomycotina_cls_Incertae_sedis.o_Pezizomycotina_ord_Incertae_sedis.f_Pezizomycotina_fam_Incertae_sedis.g_Ciliophora                | 2.401922467 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Trechisporales.f_Hydodontaceae.g_Subulicystidium.s_Subulicystidium_brachysporum                                   | 2.041170198 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Erysiphe.s_Erysiphe_medicaginis                                                          | 1.652773611 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Auriculariaceae.g_Auricularia                                                                    | 2.685470305 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaporthales.f_Valsaceae.g_Cytospora.s_Cytospora_brevipora                                                          | 1.484299839 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_tropicalis                             | 3.117527397 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Botryosphaeriales.f_Botryosphaeriaceae.g_Botryosphaeria.s_Botryosphaeria_wangensis                                  | 2.351348223 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Lipomycetaceae.g_Lipomyces                                                                      | 1.657939081 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Teratosphaeriaceae.g_Penidiella.s_Penidiella_sp_Incertae_sedis                                        | 1.379662544 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Dipodascaceae.g_Dipodascus                                                                      | 3.727238017 | st-COVID | 3.6848318  | 1.25E-05 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Omphalotaceae.g_Lentinula.s_Lentinula_edodes                                                         | 2.562443664 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_maltosa                                | 1.119725651 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Didymella.s_Didymella_sp_Incertae_sedis                                              | 2.642194632 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Cerrenaceae.g_Cerrena                                                                               | 0.768727771 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Fomitopsidaceae.g_Fomitopsis.s_Fomitopsis_eucalypticola                                             | 1.620814061 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Tetragonomycetaceae.g_Bandonia                                                                | 1.68857021  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Phaffomycetaceae.g_Wickerhamomyces.s_Wickerhamomyces_anomalus                                   | 0.447594728 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Ascomycota_cls_Incertae_sedis.o_Ascomycota_ord_Incertae_sedis.f_Ascomycota_fam_Incertae_sedis.g_Novakomyces                           | 3.129030393 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Chrysosphaeria                                                                 | 4.820817886 | COVID-19 | 4.52129873 | 2.72E-07 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Phanerochaetaceae.g_Phlebiopsis.s_Phlebiopsis_flavidoalba                                           | 1.911076862 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Helotiales_fam_Incertae_sedis.g_Chalara.s_Chalara_hughesi                                                | 1.991762905 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Glomerellales.f_Plectosphaerellaceae.g_Plectosphaerella.s_Plectosphaerella_cucumerina                               | 2.668950375 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Diaporthales.f_Diaporthaceae.g_Diaporthe.s_Diaporthe_caulivora                                                      | 2.50159863  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Naganishia.s_Naganishia_albida                                                | 3.425562625 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Thermomyces.s_Thermomyces_lanuginosus                                                  | 2.070793235 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Coronophorales.f_Scortechiniaceae.g_Parasymphodiella.s_Parasymphodiella_longispora                                  | 2.829829049 | COVID-19 | 3.7106865  | 2.29E-06 |
| k_Fungi.p_Basidiomycota.c_Cystobasidiomycetes.o_Cystobasidiomycetes_ord_Incertae_sedis.f_Symmetrosporaceae.g_Symmetrospora.s_Symmetrospora_sp_Incertae_sedis | 2.968719664 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Ophiostomatales.f_Ophiostomataceae.g_Ophiostoma.s_Ophiostoma_acarorum                                               | 3.422112101 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Eremomycetales.f_Eremomycetaceae.g_Rhexothecium.s_Rhexothecium_globosum                                             | 3.106582339 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Phaeosphaeriaceae.g_Setophaeosphaeria.s_Setophaeosphaeria_badalingensis                              | 2.984008769 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Auriculariales.f_Auriculariaceae.g_Auricularia.s_Auricularia_delicatata                                           | 2.211096259 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Iodosphaeriaceae.g_Iodosphaeria.s_Iodosphaeria_phyllophila                                             | 0.661181443 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Cryptococcaceae.g_Cryptococcus                                                                     | 0.846842197 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Bradomyces                                                                       | 2.638761457 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Exobasidiales.f_Brachybasidiaceae.g_Marantokordyana.s_Marantokordyana_oberwinkleriana                          | 0.975292522 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Sclerotiniaceae.g_Botrytis                                                                               | 3.352945154 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Acremonium.s_Acremonium_alternatum                                   | 3.378794185 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymosphaeriaceae.g_Pseudopithomyces                                                                | 1.807325367 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusicolla                                                                               | 1.833185761 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Chaetothyriales.f_Trichomeriaceae.g_Lithohypha.s_Lithohypha_aloicola                                                 | 1.612783857 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Mycosphaerellaceae.g_Pseudocercospora.s_Pseudocercospora_sp_Incertae_sedis                            | 2.539351772 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Polyporaceae.g_Trametes                                                                             | 3.539307106 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Xylariales.f_Xylariaceae.g_Xylocoremium                                                                             | 2.127276636 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Trichosporonales.f_Trichosporonaceae.g_Trichosporon                                                              | 2.898775029 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Microascales.f_Ceratocystidaceae.g_Berkeleyomyces                                                                   | 1.235457315 |          |            | -        |

|                                                                                                                                                                           |             |          |            |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p_Ascomycota.c_Pezizomycetes.o_Pezizales.f_Pyronemataceae.g_Heydenia.s_Heydenia_spe_Incertae_sedis                                                                | 2.359663041 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Thelebolales.f_Thelebolaceae.g_Thelebolus.s_Thelebolus_balaustiformis                                                              | 2.559180926 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Calosphaeriales.f_Calosphaeriaceae.g_Calosphaeria.s_Calosphaeria_pulchella                                                       | 2.511337209 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Erysiphales.f_Erysiphaceae.g_Neoverysiph                                                                                           | 0.895623422 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Exobasidiomycetes.o_Entylomatales.f_Entylomataceae.g_Entyloma.s_Entyloma_calendulae                                                             | 1.221256126 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_ianosocoeruleum                                                           | 2.08270379  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Tubeufiales.f_Tubeufiaceae.g_Helicoma.s_Helicoma_brunneisporum                                                                   | 2.28526741  |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Agaricaceae.g_Tulostoma                                                                                           | 2.1949346   |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Malasseziomycetes.o_Malasseziales.f_Malasseziaceae.g_Malassezia.s_Malassezia_restricta                                                          | 4.524315657 | Control  | 3.81584547 | 0.002264 |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Sclerotiniaceae.g_Botrytis.s_Botrytis_cinerea                                                                         | 3.352945154 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Ascosphaeraceae.g_Ascosphaera                                                                                        | 1.121470308 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Phyllachorales.f_Phyllachoraceae.g_Phyllachora.s_Phyllachora_cynodonticola                                                       | 3.346619658 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Leucosporidiales.f_Leucosporidiaceae.g_Leucosporidium.s_Leucosporidium_golubevii                                           | 3.220932707 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Microbotryomycetes.o_Sporidiobolales.f_Sporidiobolaceae.g_Sporobolomyces.s_Sporobolomyces_phaffii                                               | 2.267832504 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Pucciniomycetes.o_Pucciniales.f_Pucciniaceae.g_Puccinia                                                                                         | 1.064684834 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Chaetosphaeriales.f_Leptosporiaceae.g_Leptospora                                                                                 | 3.57205799  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreales_fam_Incertae_sedis.g_Flammoclaadiella.s_Flammoclaadiella_aceris                                        | 1.436451791 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Didymellaceae.g_Stagonosporopsis.s_Stagonosporopsis_lupini                                                        | 2.493627013 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Verrucariales.f_Verrucariaceae.g_Verrucaria.s_Verrucaria_rosula                                                                   | 2.18507833  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_steckii                                                                   | 1.75529726  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetaceae.g_Eremothecium.s_Eremothecium_coryli                                                      | 2.139592896 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Elaphomycetaceae.g_Elaphomyces.s_Elaphomyces_anthracinus                                                             | 1.30218001  |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Pleosporales.f_Pleosporales_fam_Incertae_sedis.g_Ochrocladosporium                                                               | 2.269808819 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Tremellales.f_Bulleribasidiaceae.g_Hannaella                                                                                  | 3.344314769 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meruliaceae.g_Macrohyporia.s_Macrohyporia_dictyopora                                                             | 2.337065783 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_albicans                                            | 4.775655454 | st-COVID | 4.40458681 | 1.13E-19 |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Hypocreaceae.g_Trichoderma.s_Trichoderma_asperillum                                                                | 1.580389247 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Corticiales.f_Corticiaceae.g_Laetisaria.s_Laetisaria_lichenicola                                                               | 3.354291831 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Tremellomycetes.o_Filobasidiales.f_Filobasidiaceae.g_Filobasidium.s_Filobasidium_oeirense                                                       | 3.517255896 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Onygenales.f_Ascosphaeraceae.g_Ascosphaera.s_Ascosphaera_duoformis                                                                | 1.121470308 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Eremomycetales.f_Eremomycetaceae.g_Arthrographis                                                                                 | 4.273450074 | Control  | 3.92343596 | 5.87E-07 |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Agaricales_fam_Incertae_sedis.g_Agaricales_gen_Incertae_sedis.s_Agaricales_spe_Incertae_sedis                     | 2.073434354 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Sordariomycetes.o_Hypocreales.f_Nectriaceae.g_Fusarium                                                                                             | 3.500629363 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Penicillium.s_Penicillium_fructuariae_cella                                                         | 1.556642191 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Cantharellales.f_Hydniaceae.g_Bergerella.s_Bergerella_atrofusca                                                                | 2.0804953   |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Polyporales.f_Meripilaceae.g_Physisporinus                                                                                     | 2.203996586 |          |            | -        |
| k_Fungi.p_Fungi_phy_Incertae_sedis.c_Fungi_cla_Incertae_sedis.o_Fungi_ord_Incertae_sedis.f_Fungi_fam_Incertae_sedis.g_Fungi_gen_Incertae_sedis                            | 4.533183811 | Control  | 4.13465305 | 4.42E-07 |
| k_Fungi.p_Basidiomycota.c_Agaricostilbomycetes.o_Agaricostilbales.f_Agaricostilbaceae.g_Sterigmatomyces                                                                   | 2.766454741 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Dothideomycetes.o_Capnodiales.f_Capnodiaceae.g_Antennariella.s_Antennariella_placitae                                                              | 2.012293857 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Saccharomycetes.o_Saccharomycetales.f_Saccharomycetales_fam_Incertae_sedis.g_Candida.s_Candida_parapsilosis                                        | 3.568421306 | Control  | 3.28462592 | 4.76E-05 |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Aspergillaceae.g_Aspergillus.s_Aspergillus_unguis                                                                    | 1.992970233 |          |            | -        |
| k_Fungi.p_Chytridiomycota.c_Chytridiomycetes.o_Chytridiales.f_Chytridiaceae.g_Chytridium                                                                                  | 2.854477108 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Leotiomycetes.o_Helotiales.f_Helotiales_fam_Incertae_sedis.g_Chalara                                                                               | 1.991762905 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Agaricales.f_Entolomataceae.g_Entoloma.s_Entoloma_graphitipes_f_cystidiatum                                                    | 0.581856605 |          |            | -        |
| k_Fungi.p_Ascomycota.c_Eurotiomycetes.o_Eurotiales.f_Trichocomaceae.g_Talaromyces.s_Talaromyces_rogersiae                                                                 | 2.375594343 |          |            | -        |
| k_Fungi.p_Basidiomycota.c_Agaricomycetes.o_Corticiales.f_Corticiaceae.g_Laetisaria                                                                                        | 3.354291831 |          |            | -        |
| k_Fungi.p_Fungi_phy_Incertae_sedis.c_Fungi_cla_Incertae_sedis.o_Fungi_ord_Incertae_sedis.f_Fungi_fam_Incertae_sedis.g_Fungi_gen_Incertae_sedis.s_Fungi_spe_Incertae_sedis | 4.533183811 | Control  | 4.13465305 | 4.42E-07 |
| k_Fungi.p_Ascomycota.c_Taphrinomycetes.o_Taphriniales.f_Protomycetaceae.g_Protomyces                                                                                      | 1.506676498 |          |            | -        |



|                                                                                                                                                     |             |          |            |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|------------|----------|
| k_Fungi.p__Basidiomycota.c__Tremellomycetes.o__Trichosporonales.f__Trichosporonaceae.g__Effuseotrichosporon.s__<br>Effuseotrichosporon vanderwaltii | 1.04910878  |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Xylariales.f__Xylariaceae.g__Rosellinia                                                                 | 2.72794771  |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Hypocreales.f__Cordycipitaceae.g__Simplicillium.s__Simplicillium_sy<br>mpodiophorum                     | 4.312551299 | COVID-19 | 4.03129844 | 1.19E-13 |
| k_Fungi.p__Ascomycota.c__Saccharomycetes.o__Saccharomycetales.f__Dipodascaceae.g__Yarrowia                                                          | 3.362206783 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Botryosphaeriales.f__Planistromellaceae.g__Umthunziomyces.s__Umth<br>unziomyces hagahagensis            | 1.655246684 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Trechisporales.f__Hydnodontaceae.g__Subulicystidium                                                   | 2.041170198 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Diaporthales.f__Valsaceae.g__Cytospora.s__Cytospora_predappioensis                                      | 1.959763892 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Sordariomycetes.o__Hypocreales.f__Cordycipitaceae.g__Gibellula                                                             | 1.706083861 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Pleosporales.f__Phaeosphaeriaceae.g__Didymocyrtis.s__Didymocyrtis<br>brachylaenae                       | 2.331755114 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Tremellomycetes.o__Trichosporonales.f__Trichosporonaceae.g__Cutaneotrichosporon.s__<br>Cutaneotrichosporon jirovecii    | 2.825632623 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Gloeophyllales.f__Gloeophyllales_fam_Incertae_sedis.g__Heliocybe.s<br>Heliocybe villosa               | 1.659959394 |          |            | -        |
| k_Fungi.p__Ascomycota.c__Dothideomycetes.o__Dothideales.f__Dothideales_fam_Incertae_sedis.g__Hortaea                                                | 2.753129724 |          |            | -        |
| k_Fungi.p__Basidiomycota.c__Agaricomycetes.o__Polyporales.f__Phanerochaetaceae.g__Bjerkandera.s__Bjerkandera_m<br>ikrofumosa                        | 3.10066551  |          |            | -        |

| Supplementary table S7. The corresponding LDA value and p value of fungal community gene function for samples in the COVID-19(n=71), Post-COVID-19(n=22), and control (n=132) cohorts. |                 |               |             |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|-------------|-------------|
| Biomaker_names                                                                                                                                                                         | Logarithm value | Groups        | LDA_value   | P_value     |
| COLANSYN_PWY_colanic_acid_building_blocks_biosynthesis                                                                                                                                 | 4.474480998     | Post-COVID-19 | 3.836749681 | 0.002368171 |
| GLYOXYLATE_BYPASS_glyoxylate_cycle                                                                                                                                                     | 5.489855066     | COVID-19      | 4.067676428 | 2.04E-05    |
| GLYCOCAT_PWY_glycogen_degradation_I_bacterial                                                                                                                                          | 4.46200971      | Post-COVID-19 | 3.973177423 | 0.000421436 |
| PWY_5920_superpathway_of_heme_biosynthesis_from_glycine                                                                                                                                | 5.223242361     | COVID-19      | 4.079085634 | 1.21E-06    |
| COA_PWY_coenzyme_A_biosynthesis_I                                                                                                                                                      | 5.198318458     |               |             | -           |
| PWY_5667_CDP_diacylglycerol_biosynthesis_I                                                                                                                                             | 5.148157039     | Control       | 4.00940875  | 6.25E-06    |
| PWY_7209_superpathway_of_pyrimidine_ribonucleosides_deg                                                                                                                                | 4.684458179     | Post-COVID-19 | 3.946696005 | 0.017237337 |
| PWY_7385_13_propanediol_biosynthesis_engineered                                                                                                                                        | 5.153311281     | COVID-19      | 4.424666801 | 2.70E-14    |
| GLUCOSE1PMETAB_PWY_glucose_and_glucose_1_phospha                                                                                                                                       | 4.251733287     | Post-COVID-19 | 3.807215932 | 0.000384608 |
| PWY_7219_adenosine_ribonucleotides_de_novo_biosynthesis                                                                                                                                | 5.403849711     |               |             | -           |
| PWY_6737_starch_degradation_V                                                                                                                                                          | 4.378684412     | Post-COVID-19 | 4.001284736 | 0.000382783 |
| PWY_6121_5_aminimidazole_ribonucleotide_biosynthesis_I                                                                                                                                 | 4.853985193     | COVID-19      | 3.941699442 | 0.016180737 |
| PWY_7007_methyl_ketone_biosynthesis                                                                                                                                                    | 5.402503549     | Control       | 4.348328501 | 2.33E-08    |
| PWY_621_sucrose_degradation_III_sucrose_invertase                                                                                                                                      | 4.600711889     | Post-COVID-19 | 3.984328967 | 0.000392217 |
| POLYAMINSYN3_PWY_superpathway_of_polyamine_biosyn                                                                                                                                      | 3.246405877     |               |             | -           |
| PWY_5189_tetrapyrrole_biosynthesis_II_from_glycine                                                                                                                                     | 5.22204894      | COVID-19      | 4.210423946 | 8.84E-08    |
| PANTOSYN_PWY_pantothenate_and_coenzyme_A_biosynthe                                                                                                                                     | 4.630936778     | Post-COVID-19 | 4.186496454 | 8.83E-05    |
| PWY0_166_superpathway_of_pyrimidine_deoxyribonucleotides                                                                                                                               | 5.315312748     | Control       | 4.226295638 | 2.11E-08    |
| VALSYN_PWY_L_valine_biosynthesis                                                                                                                                                       | 5.332750158     | COVID-19      | 3.726573988 | 0.007249592 |
| PWY_7220_adenosine_deoxyribonucleotides_de_novo_biosynt                                                                                                                                | 5.504690969     | Control       | 4.623617439 | 2.16E-13    |
| PWY_6277_superpathway_of_5_aminimidazole_ribonucleotid                                                                                                                                 | 4.820879298     | COVID-19      | 3.939955855 | 0.018792291 |
| PWY_922_mevalonate_pathway_I                                                                                                                                                           | 5.225201964     | COVID-19      | 3.693477889 | 0.016810506 |
| GLYCOGENSYNTH_PWY_glycogen_biosynthesis_I_from_A                                                                                                                                       | 4.114933947     | Post-COVID-19 | 3.566197489 | 0.000100715 |
| PWY_7208_superpathway_of_pyrimidine_nucleobases_salvage                                                                                                                                | 5.301706053     | Control       | 3.982658935 | 1.40E-09    |
| PWY_7198_pyrimidine_deoxyribonucleotides_de_novo_biosyn                                                                                                                                | 5.082184278     | COVID-19      | 4.159279739 | 3.37E-05    |
| PWY_7228_superpathway_of_guanosine_nucleotides_de_novo                                                                                                                                 | 5.32590072      | Control       | 3.971510038 | 4.88E-07    |
| HSERMETANA_PWY_L_methionine_biosynthesis_III                                                                                                                                           | 4.752802386     | Control       | 4.407724213 | 3.05E-19    |
| GLUTORN_PWY_L_ornithine_biosynthesis                                                                                                                                                   | 3.296341466     |               |             | -           |
| PWY_5989_stearate_biosynthesis_II_bacteria_and_plants                                                                                                                                  | 4.509008163     | Post-COVID-19 | 3.99483562  | 1.85E-05    |
| PWY_7222_guanosine_deoxyribonucleotides_de_novo_biosynt                                                                                                                                | 5.504690969     | Control       | 4.623617439 | 2.16E-13    |
| THRESYN_PWY_superpathway_of_L_threonine_biosynthesis                                                                                                                                   | 5.245199043     |               |             | -           |
| PHOSLIPSYN_PWY_superpathway_of_phospholipid_biosynth                                                                                                                                   | 4.376072649     | Post-COVID-19 | 3.841765947 | 0.000436373 |
| PWY_7431_aromatic_biogenic_amine_degradation_bacteria                                                                                                                                  | 5.074092551     | COVID-19      | 4.193996108 | 0.000119097 |
| PANTO_PWY_phosphopantothenate_biosynthesis_I                                                                                                                                           | 5.277107514     | COVID-19      | 3.771129802 | 0.031254274 |
| PWY_6126_superpathway_of_adenosine_nucleotides_de_novo                                                                                                                                 | 5.384543881     | Control       | 3.853478673 | 0.00024915  |
| PWY_4984_urea_cycle                                                                                                                                                                    | 5.207634057     |               |             | -           |
| TCA_TCA_cycle_I_prokaryotic                                                                                                                                                            | 5.174007794     | Control       | 4.275891832 | 0.000111895 |
| PWY_7347_sucrose_biosynthesis_III                                                                                                                                                      | 4.121056491     | Post-COVID-19 | 3.753422293 | 8.03E-08    |
| PWY_7663_gondolate_biosynthesis_anaerobic                                                                                                                                              | 4.417951355     | Post-COVID-19 | 3.864710436 | 0.000269882 |
| PWY_7210_pyrimidine_deoxyribonucleotides_biosynthesis_fro                                                                                                                              | 5.133453082     | COVID-19      | 4.11808041  | 0.000352911 |
| PWY_7196_superpathway_of_pyrimidine_ribonucleosides_salv                                                                                                                               | 4.809559246     | Control       | 4.464544738 | 3.28E-19    |
| TYRFUMCAT_PWY_I_tyrosine_degradation_I                                                                                                                                                 | 4.781365102     | Control       | 4.069620583 | 0.000207385 |
| PWY_7328_superpathway_of_UDP_glucose_derived_O_antige                                                                                                                                  | 4.230994418     | Post-COVID-19 | 3.758972187 | 0.000375822 |
| PWY_7111_pyruvate_fermentation_to_isobutanol_engineered                                                                                                                                | 5.379012687     | COVID-19      | 3.711182384 | 0.013648921 |
| PWY_7229_superpathway_of_adenosine_nucleotides_de_novo                                                                                                                                 | 5.381012093     |               |             | -           |
| FAO_PWY_fatty_acid_beta_oxidation_I                                                                                                                                                    | 5.532547825     | Control       | 4.381217691 | 0.007608357 |
| HEME_BIOSYNTHESIS_II_heme_biosynthesis_I_aerobic                                                                                                                                       | 5.227114551     |               |             | -           |
| PWY_5651_L_tryptophan_degradation_to_2_amino_3_carboxy                                                                                                                                 | 4.797239723     | Post-COVID-19 | 4.390259964 | 1.40E-09    |
| PWY_3781_aerobic_respiration_I_cytochrome_c                                                                                                                                            | 5.829479204     | Control       | 4.526459091 | 2.60E-05    |
| LEU_DEG2_PWY_L_leucine_degradation_I                                                                                                                                                   | 4.844648531     | Control       | 4.271583402 | 5.24E-10    |
| PWY_6609_adenine_and_adenosine_salvage_III                                                                                                                                             | 5.156366701     | COVID-19      | 4.230429243 | 4.28E-09    |
| PWY4FS_8_phosphatidylglycerol_biosynthesis_II_non_plastidi                                                                                                                             | 4.193877619     | Post-COVID-19 | 3.671842333 | 0.000555014 |
| PWY_6608_guanosine_nucleotides_degradation_III                                                                                                                                         | 5.210718413     | Post-COVID-19 | 4.07534897  | 0.000405062 |
| PWY_5705_allantoin_degradation_to_glyoxylate_III                                                                                                                                       | 3.68353599      | Post-COVID-19 | 3.171706995 | 0.0019789   |
| PWY_5695_urate_biosynthesis_inosine_5_phosphate_degradati                                                                                                                              | 5.173605379     | Post-COVID-19 | 4.001787698 | 0.005666586 |
| NAD_BIOSYNTHESIS_II_NAD_salvage_pathway_II                                                                                                                                             | 4.946682013     |               |             | -           |

|                                                         |             |               |             |             |
|---------------------------------------------------------|-------------|---------------|-------------|-------------|
| PWY_6125_superpathway_of_guanosine_nucleotides_de_novo  | 5.301793265 | Control       | 3.889491277 | 4.67E-06    |
| SER_GLYSYN_PWY_superpathway_of_L_serine_and_glycine     | 5.321931072 | COVID-19      | 3.877821908 | 2.06E-07    |
| ARGSYNSUB_PWY_L_arginine_biosynthesis_II_acetyl_cyc     | 3.807218623 |               |             | -           |
| PWY_7197_pyrimidine_deoxyribonucleotide_phosphorylation | 5.260833272 | Control       | 4.073512572 | 2.89E-08    |
| SUCSYN_PWY_sucrose_biosynthesis_I_from_photosynthesis   | 4.419332725 | Post-COVID-19 | 3.980589653 | 9.68E-08    |
| PWY_6122_5_aminimidazole_ribonucleotide_biosynthesis_II | 4.820879298 | COVID-19      | 3.939955855 | 0.018792291 |
| SO4ASSIM_PWY_sulfate_reduction_I_assimilatory           | 5.125434005 | Post-COVID-19 | 4.208859791 | 0.000183208 |
| PWY_7221_guanosine_ribonucleotides_de_novo_biosynthesis | 5.255386162 |               |             | -           |
| ARGSYN_PWY_L_arginine_biosynthesis_I_via_L_ornithine    | 3.888073091 |               |             | -           |
| PWY0_1319_CDP_diacylglycerol_biosynthesis_II            | 5.148157039 | Control       | 4.00940875  | 6.25E-06    |
| PWY_7323_superpathway_of_GDP_mannose_derived_O_antig    | 5.111588063 | Control       | 4.533702572 | 2.97E-15    |
| PWY_5659_GDP_mannose_biosynthesis                       | 5.410777385 | COVID-19      | 4.023555313 | 1.50E-07    |
| PENTOSE_P_PWY_pentose_phosphate_pathway                 | 5.28297737  | COVID-19      | 3.860968019 | 8.44E-05    |
| FASYN_ELONG_PWY_fatty_acid_elongation_saturated         | 5.432707834 | Post-COVID-19 | 4.694623677 | 5.78E-08    |
| GLUCONEO_PWY_gluconeogenesis_I                          | 3.22725185  |               |             | -           |
| PWY4FS_7_phosphatidylglycerol_biosynthesis_I_plastidic  | 4.193877619 | Post-COVID-19 | 3.671842333 | 0.000555014 |
| PWY_6317_galactose_degradation_I_Leloir_pathway         | 5.136886043 | COVID-19      | 4.169712709 | 3.47E-06    |
| LIPASYN_PWY_phospholipases                              | 4.447427423 | Post-COVID-19 | 3.995048306 | 1.93E-06    |
| P221_PWY_octane_oxidation                               | 4.838205406 | Post-COVID-19 | 4.270682297 | 0.001071624 |
| ANAGLYCOLYSIS_PWY_glycolysis_III_from_glucose           | 5.209195683 | COVID-19      | 3.645732384 | 0.039198893 |
| PWY_6545_pyrimidine_deoxyribonucleotides_de_novo_biosyn | 5.140422529 | COVID-19      | 4.163470792 | 0.000162563 |
| CALVIN_PWY_Calvin_Benson_Bassham_cycle                  | 5.310742201 | COVID-19      | 3.817575786 | 1.73E-05    |
| TRNA_CHARGING_PWY_tRNA_charging                         | 5.379444746 | COVID-19      | 3.88077515  | 0.042662869 |
| PWY_7184_pyrimidine_deoxyribonucleotides_de_novo_biosyn | 5.343942575 | Control       | 4.24810478  | 1.94E-08    |
| NONOXIPENT_PWY_pentose_phosphate_pathway_non_oxida      | 5.35465835  | COVID-19      | 3.821422949 | 0.001488145 |

| Supplementary table S23a. The correlation coefficient between 20 oral fungal OTUs and 11 clinical indicators of COVID-19 (n=71) and controls (n=132) obtained by spearman correlation analysis. |            |            |            |            |            |             |             |             |            |              |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|------------|--------------|------------|
| rownames.ssCor.                                                                                                                                                                                 | ALT        | AST        | TBil       | Alb        | Cre        | WBC         | Hb          | PLT         | Neut       | Lymph        | N.L        |
| Acrodictys                                                                                                                                                                                      | 0.04614933 | 0.0143897  | -0.0153178 | -0.2185968 | -0.0079014 | -0.18019918 | -0.02380696 | -0.16811778 | -0.1382449 | -0.236277347 | 0.0392898  |
| Arthrographis                                                                                                                                                                                   | -0.1571621 | -0.18516   | -0.3117921 | -0.0064324 | 0.01416    | 0.05440317  | 0.02765187  | 0.03605063  | -0.0826685 | 0.162968987  | -0.1598436 |
| Botrytis                                                                                                                                                                                        | -0.1075423 | -0.1619897 | -0.1053559 | -0.1347813 | 0.07569934 | 0.22725971  | 0.04999452  | 0.11826145  | 0.15233436 | 0.041513638  | 0.0904271  |
| Candida                                                                                                                                                                                         | 0.0922822  | 0.2693271  | 0.22514553 | -0.1596442 | -6.241E-05 | -0.31054951 | -0.22248743 | -0.20103345 | -0.1253716 | -0.23326138  | 0.0361699  |
| Cercospora                                                                                                                                                                                      | -0.1329963 | -0.1755866 | -0.2375697 | -0.0327414 | 0.16962037 | 0.14025209  | 0.11169839  | 0.02477406  | 0.08000466 | 0.094996389  | 0.0173086  |
| Cryptococcus                                                                                                                                                                                    | -0.2002837 | -0.2802065 | -0.3311106 | 0.22057121 | 0.08536466 | 0.27294736  | 0.19577783  | 0.22413762  | -0.0668745 | 0.341267459  | -0.2817122 |
| Diaporthe                                                                                                                                                                                       | -0.1739559 | -0.2361141 | -0.1351083 | 0.17021416 | -0.1098383 | 0.13340351  | 0.01208603  | 0.04036323  | -0.0365314 | 0.100033152  | -0.0915557 |
| Diversispora                                                                                                                                                                                    | -0.0318412 | -0.0143575 | -0.2693623 | -0.0977328 | 0.09300019 | -0.09144082 | 0.02612058  | -0.07500934 | -0.1689016 | 0.059747566  | -0.1529328 |
| Fungi_gen_Incertae_sedis                                                                                                                                                                        | -0.0538734 | -0.1130257 | -0.1024036 | 0.0884518  | -0.091135  | -0.08118617 | 0.03660508  | 0.04210334  | -0.2200509 | 0.026592284  | -0.1855548 |
| Gibberella                                                                                                                                                                                      | -0.012928  | 0.0838627  | 0.33589055 | -0.1099527 | -0.0449423 | -0.11601885 | -0.12714239 | -0.03214062 | 0.0954636  | -0.282504499 | 0.2559908  |
| Hannaella                                                                                                                                                                                       | -0.0672315 | -0.0265844 | 0.21082004 | -0.0201669 | -0.0274549 | 0.10531343  | -0.12812637 | -0.00051713 | 0.10576204 | -0.017216961 | 0.100509   |
| Hydnobolites                                                                                                                                                                                    | 0.02458657 | 0.0467154  | 0.18765497 | -0.1072366 | 0.06255695 | -0.04523974 | -0.07352956 | -0.10556414 | 0.10548709 | -0.169986277 | 0.2095137  |
| Malassezia                                                                                                                                                                                      | 0.03717163 | -0.0835488 | -0.1226518 | 0.07590893 | 0.18048282 | 0.12268588  | 0.20061082  | 0.10562164  | -0.0035917 | 0.091316314  | -0.0497561 |
| Milospium                                                                                                                                                                                       | -0.09302   | -0.2116734 | -0.1485531 | -0.0939237 | 0.00608751 | 0.13181701  | 0.02284172  | -0.05114322 | 0.02952839 | 0.083157949  | -0.0279585 |
| Saccharomyces                                                                                                                                                                                   | 0.02220342 | 0.0935566  | 0.28216875 | 0.11782911 | -0.0117552 | -0.13088212 | -0.17258468 | -0.00851361 | -0.0615198 | -0.105093815 | 0.0140949  |
| Simplicillium                                                                                                                                                                                   | 0.10085845 | 0.0684185  | -0.0150279 | -0.2746045 | 0.04926285 | -0.11285896 | -0.03154202 | -0.17882318 | -0.0192425 | -0.185549536 | 0.0956283  |
| Talaromyces                                                                                                                                                                                     | -0.1435353 | -0.1215423 | -0.166565  | -0.003117  | 0.12527873 | 0.26343136  | -0.02960404 | 0.14129418  | 0.13116727 | 0.132098118  | 0.0033769  |
| Trametes                                                                                                                                                                                        | -0.1644974 | -0.1760721 | -0.229475  | -0.132095  | 0.00341825 | 0.05148637  | 0.02224761  | -0.03995408 | 0.07373128 | 0.097486185  | 0.0057923  |
| Udeniomyces                                                                                                                                                                                     | -0.0573321 | -0.0823909 | -0.2344288 | -0.1236713 | 0.02546287 | 0.14236849  | 0.00628334  | 0.020095    | 0.09797862 | 0.141697394  | 0.0221992  |
| Yarrowia                                                                                                                                                                                        | -0.0521842 | -0.1239807 | -0.3010757 | -0.0846621 | 0.2348942  | 0.189383    | 0.14444407  | -0.04333969 | 0.07302195 | 0.195162873  | -0.0682121 |
| Supplementary table S23b. The p value between 20 oral fungal OTUs and 11 clinical indicators of COVID-19 (n=71) and controls (n=132) obtained by spearman correlation analysis.                 |            |            |            |            |            |             |             |             |            |              |            |
| wnames.ssCor.                                                                                                                                                                                   | ALT        | AST        | TBil       | Alb        | Cre        | WBC         | Hb          | PLT         | Neut       | Lymph        | N.L        |
| Acrodictys                                                                                                                                                                                      | 0.5132311  | 0.8385358  | 0.82827818 | 0.00172868 | 0.910915   | 0.01009134  | 0.73600368  | 0.0165025   | 0.04918566 | 0.00068923   | 0.5778336  |
| Arthrographis                                                                                                                                                                                   | 0.02513498 | 0.0081753  | 5.9456E-06 | 0.92742643 | 0.84107926 | 0.44076003  | 0.69533857  | 0.60960552  | 0.24096418 | 0.020170286  | 0.0227251  |
| Botrytis                                                                                                                                                                                        | 0.12670807 | 0.0209426  | 0.13465685 | 0.05520783 | 0.28307804 | 0.00111126  | 0.47872377  | 0.09286714  | 0.03002907 | 0.556478986  | 0.1994703  |
| Candida                                                                                                                                                                                         | 0.19036649 | 0.000102   | 0.00123969 | 0.02289721 | 0.99929487 | 6.5036E-06  | 0.00142043  | 0.00402726  | 0.0747039  | 0.000810268  | 0.6084216  |
| Cercospora                                                                                                                                                                                      | 0.05854209 | 0.0122184  | 0.00064266 | 0.64283658 | 0.01554819 | 0.04595343  | 0.11260359  | 0.72570069  | 0.25651284 | 0.177599503  | 0.8063754  |
| Cryptococcus                                                                                                                                                                                    | 0.00416918 | 5.142E-05  | 1.3981E-06 | 0.00156534 | 0.22591063 | 8.1495E-05  | 0.00512102  | 0.00130558  | 0.34313295 | 6.27077E-07  | 4.666E-05  |
| Diaporthe                                                                                                                                                                                       | 0.01305961 | 0.0006953  | 0.05461442 | 0.01518456 | 0.11875635 | 0.05776725  | 0.86411187  | 0.56747825  | 0.60484131 | 0.155602977  | 0.1938947  |
| Diversispora                                                                                                                                                                                    | 0.65200411 | 0.8388929  | 0.00010183 | 0.16537995 | 0.18692575 | 0.19445718  | 0.71143769  | 0.2875017   | 0.01599853 | 0.397122313  | 0.0293814  |
| Fungi_gen_Incertae_sedis                                                                                                                                                                        | 0.445229   | 0.1083678  | 0.1459901  | 0.20950668 | 0.19595977 | 0.24953327  | 0.60411269  | 0.550881    | 0.00160696 | 0.706464427  | 0.0080377  |
| Gibberella                                                                                                                                                                                      | 0.8547463  | 0.2342121  | 9.6208E-07 | 0.11837059 | 0.52432225 | 0.09927517  | 0.0706599   | 0.64894868  | 0.17546723 | 4.43224E-05  | 0.0002274  |
| Hannaella                                                                                                                                                                                       | 0.34055709 | 0.7065479  | 0.00253459 | 0.77519334 | 0.69740215 | 0.13481498  | 0.06849098  | 0.99415756  | 0.13315211 | 0.807380124  | 0.1536361  |
| Hydnobolites                                                                                                                                                                                    | 0.72769433 | 0.5080718  | 0.00733979 | 0.12779737 | 0.37525971 | 0.52157788  | 0.29714392  | 0.13388374  | 0.13416939 | 0.015323222  | 0.0026994  |
| Malassezia                                                                                                                                                                                      | 0.59852298 | 0.2359744  | 0.08127837 | 0.28174349 | 0.00997193 | 0.08119326  | 0.00410671  | 0.13367083  | 0.95943855 | 0.195067883  | 0.4808262  |
| Milospium                                                                                                                                                                                       | 0.18683125 | 0.0024319  | 0.03440976 | 0.18256754 | 0.93130834 | 0.0608348   | 0.74633407  | 0.4686647   | 0.67579506 | 0.23818078   | 0.6921308  |
| Saccharomyces                                                                                                                                                                                   | 0.7531904  | 0.1842909  | 4.5298E-05 | 0.09407618 | 0.86779656 | 0.06270431  | 0.01380594  | 0.90404482  | 0.38324361 | 0.135634829  | 0.8418001  |
| Simplicillium                                                                                                                                                                                   | 0.15220351 | 0.3320807  | 0.83147975 | 7.3444E-05 | 0.48519139 | 0.10889289  | 0.65506232  | 0.01068871  | 0.78524046 | 0.008039552  | 0.1747202  |
| Talaromyces                                                                                                                                                                                     | 0.04104985 | 0.0840909  | 0.01754197 | 0.96479595 | 0.07492097 | 0.0001462   | 0.67501156  | 0.04434659  | 0.06212916 | 0.0602817    | 0.9618625  |
| Trametes                                                                                                                                                                                        | 0.01901417 | 0.0119773  | 0.00098989 | 0.06028778 | 0.96139593 | 0.46568242  | 0.75271519  | 0.57141502  | 0.29581708 | 0.16645485   | 0.9346322  |
| Udeniomyces                                                                                                                                                                                     | 0.41651599 | 0.2425535  | 0.00076127 | 0.07876148 | 0.71839229 | 0.04273959  | 0.92910422  | 0.77597324  | 0.16431387 | 0.043737615  | 0.753236   |
| Yarrowia                                                                                                                                                                                        | 0.45964996 | 0.07801    | 1.2719E-05 | 0.2297675  | 0.0007425  | 0.00680655  | 0.0397731   | 0.5392345   | 0.3005004  | 0.005265034  | 0.3335447  |

Supplementary table S24. The different bacteria of genus level (p value) between the controls (n=79) and COVID-19 patients (n=71)

| ID                           | Control.median           | Control.mean | Control.se  | COVID-19.median         | COVID-19.mean | COVID-19.se |
|------------------------------|--------------------------|--------------|-------------|-------------------------|---------------|-------------|
| Neisseria                    | 0.3268(0.1585,0.4095)    | 0.299284962  | 0.018877357 | 0.0509(0.0013,0.2194)   | 0.175431014   | 0.031709665 |
| Streptococcus                | 0.1211(0.0793,0.1823)    | 0.143722835  | 0.009554251 | 0.0327(0.0121,0.1033)   | 0.090550099   | 0.017305104 |
| Veillonella                  | 0.0408(0.0228,0.0748)    | 0.058230304  | 0.005986286 | 0.0961(0.0335,0.1721)   | 0.127348859   | 0.014207342 |
| Leptotrichia                 | 0.0167(0.0077,0.0298)    | 0.024119013  | 0.002898956 | 0.0233(0.0068,0.1148)   | 0.107714535   | 0.020167493 |
| Fusobacterium                | 0.0546(0.034,0.0729)     | 0.058394684  | 0.004690731 | 0.0055(0.0005,0.035)    | 0.032040085   | 0.006882701 |
| Actinomyces                  | 0.0342(0.0209,0.0615)    | 0.046695519  | 0.004029718 | 0.0341(0.006,0.0801)    | 0.057540028   | 0.009206086 |
| Porphyromonas                | 0.0365(0.015,0.061)      | 0.042509342  | 0.003724136 | 0.0022(0.0004,0.0265)   | 0.029854493   | 0.008390899 |
| Haemophilus                  | 0.0431(0.0216,0.0746)    | 0.054656671  | 0.004393875 | 0.0014(0.0003,0.0068)   | 0.006312225   | 0.001581705 |
| Alloprevotella               | 0.0203(0.0104,0.037)     | 0.028683962  | 0.003029083 | 0.0004(<0.0001,0.0017)  | 0.00156231    | 3.09E-04    |
| Granulicatella               | 0.0114(0.0077,0.0193)    | 0.013507506  | 9.42E-04    | 0.003(0.0007,0.0127)    | 0.012785408   | 0.002728566 |
| Lachnoanaerobaculum          | 0.006(0.0038,0.0082)     | 0.006536519  | 4.43E-04    | 0.0062(0.0017,0.0112)   | 0.010363394   | 0.001819624 |
| Capnocytophaga               | 0.0048(0.0015,0.0126)    | 0.012582316  | 0.002833114 | 0.0004(<0.0001,0.0018)  | 0.004023408   | 0.001459131 |
| Saccharimonadaceae_TM7x      | 0.0061(0.002,0.0101)     | 0.007351633  | 7.59E-04    | 0.0011(0.0001,0.0058)   | 0.006727451   | 0.002147223 |
| Gemella                      | 0.0047(0.0027,0.0077)    | 0.00659962   | 8.13E-04    | 0.0009(0.0002,0.0034)   | 0.005612014   | 0.001656386 |
| Peptostreptococcus           | 0.0041(0.0025,0.007)     | 0.005309595  | 4.63E-04    | 0.0014(0.0004,0.0045)   | 0.004461141   | 7.92E-04    |
| Lactobacillales_unclassified | 0.0039(0.0029,0.0061)    | 0.004600962  | 2.69E-04    | 0.0021(0.0006,0.0049)   | 0.005153563   | 8.88E-04    |
| Campylobacter                | 0.0033(0.0017,0.0061)    | 0.005508241  | 7.61E-04    | 0.0003(0.0001,0.0008)   | 0.002177577   | 9.94E-04    |
| Oribacterium                 | 0.0019(0.0013,0.003)     | 0.002334101  | 1.88E-04    | 0.0017(0.0002,0.0052)   | 0.00411207    | 6.62E-04    |
| Pasteurellaceae_unclassified | 0.0039(0.0016,0.0078)    | 0.005198759  | 5.09E-04    | 0.0003(<0.0001,0.001)   | 0.00119793    | 2.74E-04    |
| Actinobacteria_unclassified  | 0.0008(0.0004,0.0017)    | 0.001285177  | 1.51E-04    | 0.0013(0.0003,0.0062)   | 0.006017507   | 0.001470451 |
| Solobacterium                | 0.0019(0.0011,0.0033)    | 0.002824937  | 4.11E-04    | 0.0015(0.0003,0.003)    | 0.003180408   | 6.05E-04    |
| Burkholderiales_unclassified | 0.0032(0.0018,0.0053)    | 0.003801557  | 2.98E-04    | 0.0006(<0.0001,0.0029)  | 0.002582845   | 4.65E-04    |
| [Eubacterium]_nodatum_group  | 0.0017(0.0009,0.0027)    | 0.002205127  | 2.10E-04    | 0.0016(0.0004,0.0034)   | 0.002367535   | 2.89E-04    |
| Megasphaera                  | 0.0001(<0.0001,0.0011)   | 0.002312608  | 6.09E-04    | 0.0007(0.0001,0.0022)   | 0.002294085   | 5.12E-04    |
| Lachnospiraceae_uncultured   | 0.0003(<0.0001,0.002)    | 0.002755354  | 7.70E-04    | <0.0001(<0.0001,0.0011) | 0.001779549   | 5.04E-04    |
| Clostridia_UCG-014           | 0.0009(0.0004,0.0019)    | 0.001515506  | 1.94E-04    | 0.0001(<0.0001,0.0008)  | 0.001195549   | 3.08E-04    |
| Lactobacillales_P5D1-392     | 0.0008(0.0005,0.0021)    | 0.001351544  | 1.54E-04    | 0.0003(<0.0001,0.001)   | 0.001448099   | 3.71E-04    |
| Parvimonas                   | 0.0012(0.0004,0.0022)    | 0.001739962  | 2.24E-04    | <0.0001(<0.0001,0.0002) | 4.61E-04      | 1.70E-04    |
| Corynebacterium              | 0.0003(0.0001,0.0008)    | 8.60E-04     | 1.97E-04    | 0.0001(<0.0001,<0.0001) | 0.001444873   | 8.43E-04    |
| Absconditabacteriales_(SR1)  | 0.0008(0.0002,0.0018)    | 0.001431367  | 2.09E-04    | <0.0001(<0.0001,0.0001) | 6.89E-04      | 3.47E-04    |
| Moraxella                    | <0.0001(<0.0001,0.0002)  | 0.001996127  | 9.19E-04    | 0.0001(<0.0001,<0.0001) | 5.21E-07      | 5.21E-07    |
| Lachnospiraceae_unclassified | 0.0003(0.0002,0.0005)    | 4.05E-04     | 4.15E-05    | 0.0007(0.0002,0.0018)   | 0.00135007    | 2.44E-04    |
| Lautropia                    | 0.0005(0.0002,0.0012)    | 0.001282924  | 2.48E-04    | <0.0001(<0.0001,0.0003) | 3.57E-04      | 8.88E-05    |
| Saccharimonadales            | 0.0005(0.0001,0.0016)    | 0.001201747  | 1.94E-04    | 0.0001(<0.0001,<0.0001) | 3.85E-04      | 2.33E-04    |
| Aggregatibacter              | 0.0007(0.0003,0.0013)    | 0.00115681   | 2.10E-04    | 0.0001(<0.0001,<0.0001) | 1.33E-05      | 4.11E-06    |
| Halomonas                    | <0.0001(<0.0001,<0.0001) | 1.09E-05     | 1.79E-06    | <0.0001(<0.0001,0.0003) | 0.001316577   | 4.88E-04    |
| Neisseriaceae_unclassified   | 0.0003(0.0001,0.0005)    | 7.31E-04     | 2.55E-04    | <0.0001(<0.0001,0.0001) | 1.68E-04      | 6.66E-05    |
| Treponema                    | 0.0003(0.0002,0.0007)    | 7.71E-04     | 1.56E-04    | 0.0001(<0.0001,<0.0001) | 5.29E-05      | 2.61E-05    |
| Kingella                     | <0.0001(<0.0001,<0.0001) | 2.62E-05     | 8.83E-06    | 0.0001(<0.0001,<0.0001) | 4.09E-04      | 3.98E-04    |
| Gracilibacteria              | <0.0001(<0.0001,<0.0001) | 3.41E-04     | 2.28E-04    | 0.0001(<0.0001,<0.0001) | 4.46E-06      | 4.46E-06    |
| Saccharimonadaceae           | <0.0001(<0.0001,0.0001)  | 1.40E-04     | 4.87E-05    | 0.0001(<0.0001,<0.0001) | 2.09E-04      | 1.60E-04    |
| Olsenella                    | <0.0001(<0.0001,<0.0001) | 3.09E-05     | 1.14E-05    | 0.0001(<0.0001,<0.0001) | 2.25E-04      | 2.13E-04    |

| Post-COVID-19.median     | Post-COVID-19.mean | Post-COVID-19.se | p-value     | z-score      | Sig_mark | q-value     | fixp    |
|--------------------------|--------------------|------------------|-------------|--------------|----------|-------------|---------|
| 0.1819(0.0942,0.3198)    | 0.217002143        | 0.041365966      | 3.88E-07    | -5.074902337 | ***      | 1.28E-06    | <0.0001 |
| 0.0189(0.0091,0.0302)    | 0.021907143        | 0.003418262      | 4.42E-13    | -7.242151734 | ***      | 3.93E-12    | <0.0001 |
| 0.1583(0.0998,0.2101)    | 0.153356333        | 0.014331311      | 1.86E-07    | -5.212412444 | ***      | 6.38E-07    | <0.0001 |
| 0.0617(0.0411,0.1562)    | 0.096804952        | 0.02173324       | 4.98E-04    | -3.48192288  | ***      | 0.001107665 | 0.0005  |
| 0.0995(0.0559,0.2125)    | 0.143009238        | 0.024858639      | 3.37E-11    | -6.629488795 | ***      | 2.14E-10    | <0.0001 |
| 0.0011(0.0005,0.007)     | 0.004866048        | 0.001557925      | 4.83E-09    | -5.852940181 | ***      | 2.46E-08    | <0.0001 |
| 0.0107(0.0035,0.0422)    | 0.032060905        | 0.008961202      | 3.39E-08    | -5.520149671 | ***      | 1.40E-07    | <0.0001 |
| 0.019(0.0094,0.0351)     | 0.029216714        | 0.007220317      | 3.53E-21    | -9.445694137 | ***      | 1.57E-19    | <0.0001 |
| 0.0082(0.0034,0.0125)    | 0.008897857        | 0.001389605      | 4.37E-25    | -10.34575241 | ***      | 3.89E-23    | <0.0001 |
| 0.0041(0.0024,0.0096)    | 0.008283524        | 0.00227276       | 1.40E-06    | -4.825041855 | ***      | 4.30E-06    | <0.0001 |
| 0.014(0.0097,0.0239)     | 0.020260714        | 0.00438395       | 2.59E-04    | -3.653164194 | ***      | 6.40E-04    | 0.0003  |
| 0.0059(0.0025,0.0223)    | 0.013916333        | 0.003581929      | 2.49E-12    | -7.003902783 | ***      | 1.85E-11    | <0.0001 |
| 0.0044(0.0002,0.0102)    | 0.008829476        | 0.002351444      | 4.29E-05    | -4.091455512 | ***      | 1.14E-04    | <0.0001 |
| 0.0017(0.0002,0.0041)    | 0.002264286        | 4.59E-04         | 5.58E-09    | -5.828945623 | ***      | 2.76E-08    | <0.0001 |
| 0.0038(0.0014,0.0073)    | 0.004433333        | 7.86E-04         | 2.92E-04    | -3.622437254 | ***      | 7.12E-04    | 0.0003  |
| 0.0015(0.0006,0.0025)    | 0.002068524        | 4.14E-04         | 8.08E-06    | -4.462992736 | ***      | 2.28E-05    | <0.0001 |
| 0.0039(0.0023,0.0057)    | 0.004627762        | 8.41E-04         | 2.31E-16    | -8.204802786 | ***      | 4.11E-15    | <0.0001 |
| 0.0078(0.0038,0.0105)    | 0.009251571        | 0.00211987       | 4.98E-04    | -3.48206511  | ***      | 0.001107665 | 0.0005  |
| 0.0017(0.0007,0.0026)    | 0.002060571        | 4.26E-04         | 6.38E-14    | -7.499946647 | ***      | 7.10E-13    | <0.0001 |
| 0.0001(<0.0001,0.0005)   | 3.59E-04           | 1.34E-04         | 1.12E-05    | -4.392588024 | ***      | 3.07E-05    | <0.0001 |
| 0.0022(0.0015,0.0048)    | 0.003214143        | 5.39E-04         | 0.033146095 | -2.130309194 | *        | 0.05841589  | 0.0331  |
| 0.0007(0.0001,0.0009)    | 7.95E-04           | 2.04E-04         | 1.26E-08    | -5.691460858 | ***      | 5.61E-08    | <0.0001 |
| 0.004(0.0032,0.0071)     | 0.005037           | 8.36E-04         | 8.99E-04    | -3.320381139 | ***      | 0.001927861 | 0.0009  |
| 0.0008(<0.0001,0.0073)   | 0.003738905        | 0.001084001      | 0.029421551 | -2.177791655 | *        | 0.052370362 | 0.0294  |
| <0.0001(<0.0001,<0.0001) | 0.001331762        | 7.47E-04         | 0.001140427 | -3.253375478 | **       | 0.002388188 | 0.0011  |
| 0.0004(<0.0001,0.0018)   | 0.002107476        | 7.48E-04         | 1.04E-05    | -4.408451775 | ***      | 2.90E-05    | <0.0001 |
| <0.0001(<0.0001,0.0002)  | 1.54E-04           | 3.73E-05         | 1.38E-08    | -5.675505877 | ***      | 6.00E-08    | <0.0001 |
| <0.0001(<0.0001,0.0006)  | 0.001721714        | 9.49E-04         | 2.43E-14    | -7.62580782  | ***      | 3.32E-13    | <0.0001 |
| <0.0001(<0.0001,0.0001)  | 6.35E-04           | 4.04E-04         | 1.94E-10    | -6.365969809 | ***      | 1.15E-09    | <0.0001 |
| <0.0001(<0.0001,0.0002)  | 5.78E-04           | 3.44E-04         | 8.57E-14    | -7.461250341 | ***      | 8.97E-13    | <0.0001 |
| <0.0001(<0.0001,<0.0001) | 0                  | 0                | 6.74E-10    | -6.171977732 | ***      | 3.87E-09    | <0.0001 |
| 0.0009(0.0004,0.001)     | 9.42E-04           | 1.58E-04         | 4.75E-04    | -3.494466177 | ***      | 0.001083999 | 0.0005  |
| 0.0006(0.0003,0.0015)    | 9.80E-04           | 2.10E-04         | 1.62E-09    | -6.032203729 | ***      | 8.72E-09    | <0.0001 |
| <0.0001(<0.0001,<0.0001) | 3.38E-06           | 3.38E-06         | 4.53E-20    | -9.174593466 | ***      | 1.51E-18    | <0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.52E-04           | 1.21E-04         | 7.14E-27    | -10.73273994 | ***      | 1.27E-24    | <0.0001 |
| <0.0001(<0.0001,<0.0001) | 0                  | 0                | 6.45E-09    | -5.804758576 | ***      | 3.10E-08    | <0.0001 |
| <0.0001(<0.0001,0.0002)  | 2.00E-04           | 6.61E-05         | 2.09E-12    | -7.028162622 | ***      | 1.62E-11    | <0.0001 |
| <0.0001(<0.0001,<0.0001) | 4.47E-05           | 1.30E-05         | 7.32E-24    | -10.07232189 | ***      | 4.34E-22    | <0.0001 |
| <0.0001(<0.0001,<0.0001) | 8.24E-06           | 4.13E-06         | 0.029022107 | -2.183186115 | *        | 0.052370362 | 0.029   |
| <0.0001(<0.0001,<0.0001) | 0                  | 0                | 3.40E-14    | -7.581957487 | ***      | 4.33E-13    | <0.0001 |
| <0.0001(<0.0001,<0.0001) | 1.00E-05           | 4.72E-06         | 1.01E-08    | -5.728783166 | ***      | 4.62E-08    | <0.0001 |
| <0.0001(<0.0001,<0.0001) | 0                  | 0                | 0.003589995 | -2.912107134 | **       | 0.00717999  | 0.0036  |

|            |
|------------|
|            |
| fixps      |
| ***<0.0001 |
| ***<0.0001 |
| ***<0.0001 |
| ***0.0005  |
| ***<0.0001 |
| ***<0.0001 |
| ***<0.0001 |
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| ***<0.0001 |
| ***0.0003  |
| ***<0.0001 |
| ***<0.0001 |
| ***<0.0001 |
| ***0.0003  |
| ***<0.0001 |
| ***<0.0001 |
| ***0.0005  |
| ***<0.0001 |
| ***<0.0001 |
| * 0.0331   |
| ***<0.0001 |
| ***0.0009  |
| * 0.0294   |
| ** 0.0011  |
| ***<0.0001 |
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| ***<0.0001 |
| ***0.0005  |
| ***<0.0001 |
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| ***<0.0001 |
| ***<0.0001 |
| ***<0.0001 |
| ***<0.0001 |
| * 0.029    |
| ***<0.0001 |
| ***<0.0001 |
| ** 0.0036  |

| Supplementary Table S25. The p value of correlation between fungi and bacteria in COVID-19 patients and controls.   |                 |                  |                  |                  |                |                |                 |                 |
|---------------------------------------------------------------------------------------------------------------------|-----------------|------------------|------------------|------------------|----------------|----------------|-----------------|-----------------|
| p.value                                                                                                             | B_Absconditabac | B_Aggregatibacte | B_Alloprevotella | B_Burkholderiale | B_Campylobacte | B_Capnocytopha | B_Clostridia_UC | B_Corynebacteri |
| I_Acrodictys                                                                                                        | 0.209818992     | 0.076631932      | 0.028222791      | 0.341463019      | 0.27753953     | 0.897444228    | 0.429433313     | 0.053224564     |
| I_Altemaria                                                                                                         | 0.059890013     | 0.002772763      | 0.171664318      | 0.003738641      | 0.389052106    | 0.631238133    | 0.298261528     | 0.068008417     |
| I_Angustimassarina                                                                                                  | 0.090526661     | 0.003527768      | 0.00035956       | 0.614143668      | 0.015712951    | 0.117740185    | 0.139997587     | 0.117434518     |
| I_Apiotrichum                                                                                                       | 0.001899594     | 2.25971E-07      | 0.008723443      | 0.00032284       | 0.084949524    | 0.153188453    | 0.154884799     | 1.93297E-06     |
| I_Arthrographis                                                                                                     | 7.79399E-05     | 1.72683E-05      | 1.73912E-07      | 0.023824683      | 2.80359E-05    | 7.28765E-06    | 0.002832059     | 0.001926112     |
| I_Botrytis                                                                                                          | 0.149955427     | 0.005459878      | 0.266004253      | 0.959299732      | 0.149394263    | 0.413066582    | 0.034496433     | 0.299834297     |
| I_Candida                                                                                                           | 0.000157638     | 3.52234E-05      | 2.47503E-07      | 0.006530916      | 0.002052157    | 2.28702E-05    | 0.000861719     | 0.079011311     |
| I_Coprinellus                                                                                                       | 0.03231796      | 0.001155542      | 6.97122E-07      | 0.006309777      | 0.021865117    | 0.014697546    | 0.112986465     | 0.196620974     |
| I_Cryptococcus                                                                                                      | 6.35048E-14     | 0                | 0                | 2.30257E-05      | 6.80034E-12    | 1.48856E-10    | 8.65548E-05     | 4.93314E-08     |
| I_Debaryomyces                                                                                                      | 0.054869441     | 6.05059E-05      | 0.057497962      | 0.020323487      | 0.044867464    | 0.108223546    | 0.96992817      | 2.95105E-05     |
| I_Diaporthe                                                                                                         | 0.000499471     | 3.70961E-10      | 5.29628E-08      | 0.004153486      | 3.48118E-05    | 0.0007953      | 0.02673163      | 0.000268093     |
| I_Dipodascus                                                                                                        | 0.208788765     | 0.015924692      | 0.020557663      | 0.423053686      | 0.007438883    | 0.160744768    | 0.381676924     | 6.86896E-05     |
| I_Diversispora                                                                                                      | 0.662527154     | 0.176007989      | 0.212234451      | 0.247880354      | 0.087443056    | 0.472345105    | 0.709179014     | 0.190507622     |
| I_Entorrhiza                                                                                                        | 0.00061899      | 0.000249044      | 1.13711E-05      | 0.064761835      | 0.000451165    | 0.00119001     | 0.025959985     | 0.017402632     |
| I_Fantasmomyces                                                                                                     | 0.188367831     | 0.006430042      | 0.000415362      | 0.968651045      | 0.02605118     | 0.254240483    | 0.153660006     | 0.055814215     |
| I_Filobasidiaceae_gen_Incertae                                                                                      | 0.346383203     | 0.166181333      | 0.011332444      | 0.564725654      | 0.406023821    | 0.597464935    | 0.816392348     | 0.090249484     |
| I_Fungi_gen_Incertae_sedis                                                                                          | 0.051737477     | 0.389044263      | 0.001156751      | 0.957218821      | 0.22995936     | 0.465926048    | 0.308031853     | 0.993276094     |
| I_Gibberella                                                                                                        | 0.013095203     | 1.25652E-08      | 3.64465E-09      | 0.314432257      | 7.30765E-07    | 0.002257083    | 0.054014466     | 0.000614378     |
| I_Hannaella                                                                                                         | 0.277019943     | 0.295633444      | 0.001475638      | 0.338699925      | 0.000965471    | 0.008738551    | 0.949014444     | 0.424241367     |
| I_Hydnobolites                                                                                                      | 0.007727087     | 0.000342122      | 0.000374832      | 0.024077167      | 0.015692647    | 0.013377072    | 0.397052233     | 0.18834684      |
| I_Kazachstania                                                                                                      | 0.047644095     | 0.005600478      | 0.021847911      | 0.836379477      | 0.211605524    | 0.400369626    | 0.943196329     | 0.082032821     |
| I_Leptospora                                                                                                        | 0.255168666     | 0.066078473      | 0.458589526      | 0.053082723      | 0.273343262    | 0.950021222    | 0.077219459     | 0.572767798     |
| I_Malassezia                                                                                                        | 0.000298558     | 0.00099136       | 0.000830867      | 0.000976678      | 0.332672694    | 0.000347759    | 0.030463839     | 0.011416915     |
| I_Milospium                                                                                                         | 0.049793158     | 0.0064449        | 0.119667252      | 0.021608625      | 0.217948633    | 0.011759382    | 0.374645547     | 0.811751285     |
| I_Nigrospora                                                                                                        | 0.008627734     | 0.002372772      | 0.000970624      | 0.516252988      | 0.000179977    | 0.043886999    | 0.137944151     | 4.48605E-05     |
| I_Parasymphodiella                                                                                                  | 0.009495105     | 0.003930483      | 0.0002856        | 0.008570478      | 0.015883533    | 0.002891177    | 0.459021935     | 0.005579034     |
| I_Phaeosphaeria                                                                                                     | 0.913671512     | 0.030445903      | 0.075692809      | 0.626926622      | 0.112786502    | 0.67954984     | 0.495059044     | 0.825613603     |
| I_Pichia                                                                                                            | 0.30123156      | 0.027562639      | 0.001319556      | 0.397088398      | 0.060650195    | 0.026326795    | 0.244087721     | 0.312540197     |
| I_Raffaelea                                                                                                         | 0.027867507     | 0.000672836      | 0.000206356      | 0.268761519      | 0.015756619    | 0.121130681    | 0.209166449     | 0.713230768     |
| I_Saccharomyces                                                                                                     | 0.599431002     | 0.001574922      | 0.004082757      | 0.57291831       | 0.002577651    | 0.004256984    | 0.683340785     | 0.962629238     |
| I_Simplicillium                                                                                                     | 0.009645426     | 0.001063165      | 0.000144679      | 0.342890014      | 0.003974791    | 0.156687778    | 0.262159202     | 0.005492594     |
| I_Talaromyces                                                                                                       | 0.021379424     | 5.32023E-05      | 0.001474556      | 0.154185098      | 0.00044549     | 0.194682646    | 0.00783583      | 0.000284601     |
| I_Trametes                                                                                                          | 0.197998845     | 0.144691188      | 0.231964605      | 0.579351513      | 0.08424834     | 0.121065241    | 0.858999548     | 0.401484099     |
| I_Udeniomyces                                                                                                       | 0.330414512     | 0.001099105      | 0.023566428      | 0.062869392      | 0.01393016     | 0.051643384    | 0.101565519     | 0.004322382     |
| I_Ustilaginoidea                                                                                                    | 0.067672834     | 0.000108443      | 5.5812E-07       | 0.750262338      | 0.004044491    | 0.003049436    | 0.247794022     | 0.267836046     |
| I_Vishniacozyma                                                                                                     | 0.84564433      | 0.01364618       | 0.141681287      | 0.305404472      | 0.015058179    | 0.653837408    | 0.316890679     | 0.263654837     |
| I_Wallemia                                                                                                          | 0.037161569     | 0.069983625      | 0.056392054      | 0.006724179      | 0.176434835    | 0.010924322    | 0.14323072      | 0.249258033     |
| I_Yarrowia                                                                                                          | 1.42084E-05     | 0.000154006      | 2.62265E-07      | 0.010222683      | 0.000340831    | 9.28517E-07    | 0.001459413     | 0.557946474     |
| I_Zanclospora                                                                                                       | 0.130538894     | 0.050421727      | 0.004167327      | 0.58339143       | 0.014416578    | 0.300251888    | 0.807345748     | 0.117652654     |
| Supplementary Table S25. The Correlation coefficients between fungi and bacteria in COVID-19 patients and controls. |                 |                  |                  |                  |                |                |                 |                 |
| rho                                                                                                                 | B_Absconditabac | B_Aggregatibacte | B_Alloprevotella | B_Burkholderiale | B_Campylobacte | B_Capnocytopha | B_Clostridia_UC | B_Corynebacteri |
| I_Acrodictys                                                                                                        | -0.102982862    | -0.145014526     | -0.17919998      | -0.078206757     | -0.08922982    | -0.010612353   | -0.064991875    | -0.158164654    |
| I_Altemaria                                                                                                         | 0.154002689     | 0.242653149      | 0.11219077       | 0.23536971       | 0.070832079    | 0.039505781    | 0.085488984     | 0.149418958     |
| I_Angustimassarina                                                                                                  | -0.138693826    | -0.236801345     | -0.287562554     | -0.041494489     | -0.196937989   | -0.128271799   | -0.121067657    | -0.128377804    |
| I_Apiotrichum                                                                                                       | 0.251576324     | 0.40757761       | 0.213454856      | 0.289732304      | 0.14113056     | 0.117203165    | 0.116724653     | 0.377365804     |
| I_Arthrographis                                                                                                     | 0.316867443     | 0.343056141      | 0.411066863      | 0.18448024       | 0.334891373    | 0.357049915    | 0.242144449     | 0.251254727     |
| I_Botrytis                                                                                                          | 0.118126312     | 0.225820198      | 0.091394186      | 0.004201908      | 0.118288071    | 0.067318276    | 0.172770366     | 0.08521221      |
| I_Candida                                                                                                           | -0.303749808    | -0.330965148     | -0.406355483     | -0.221168896     | -0.249779083   | -0.338350415   | -0.269279657    | -0.143870158    |
| I_Coprinellus                                                                                                       | 0.174881314     | 0.262848773      | 0.392095414      | 0.222070426      | 0.187107254    | 0.19887418     | 0.12994522      | 0.106018685     |
| I_Cryptococcus                                                                                                      | 0.563117158     | 0.761207911      | 0.758140192      | 0.338236007      | 0.522741006    | 0.492833182    | 0.314953276     | 0.427324223     |
| I_Debaryomyces                                                                                                      | 0.157099276     | 0.32143777       | 0.155450268      | 0.189320552      | 0.1640417      | 0.1316779      | 0.003104019     | 0.334014179     |
| I_Diaporthe                                                                                                         | 0.280833138     | 0.483398737      | 0.42643019       | 0.232753528      | 0.331168682    | 0.271010687    | 0.180906001     | 0.293435079     |
| I_Dipodascus                                                                                                        | 0.103214809     | 0.196548027      | 0.188975213      | 0.065892463      | 0.21773094     | 0.115101344    | 0.071937182     | 0.31915714      |



|                                |              |              |              |              |              |              |              |              |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| I_Diversispora                 | -0.0359231   | 0.111071148  | 0.102442224  | 0.094928144  | 0.140025778  | 0.059122278  | 0.030701621  | 0.10747505   |
| I_Entorrhiza                   | -0.276347863 | -0.294889925 | -0.349916385 | -0.151195343 | -0.28293373  | -0.262195731 | -0.181821001 | -0.193945188 |
| I_Fantasmomyces                | -0.107992842 | -0.221576709 | -0.284629285 | -0.00323591  | -0.181711662 | -0.093668346 | -0.117069749 | -0.156499219 |
| I_Filobasidiaceae_gen_Incertae | -0.077415752 | -0.113634445 | -0.206256823 | -0.047386847 | -0.068335919 | -0.043458237 | -0.019116218 | -0.138812059 |
| I_Fungi_gen_Incertae_sedis     | 0.159151526  | 0.070833247  | 0.262825567  | 0.004416941  | 0.098603244  | 0.059980832  | 0.083784888  | -0.000693888 |
| I_Gibberella                   | -0.202181282 | -0.444053164 | -0.458452023 | -0.08268769  | -0.391430238 | -0.247547056 | -0.157649694 | -0.276505491 |
| I_Hannaella                    | -0.089325988 | -0.085953631 | -0.257365188 | 0.07865414   | -0.266806477 | -0.213407978 | 0.005265053  | 0.065724211  |
| I_Hydnobolites                 | -0.216717581 | -0.288566042 | -0.286720046 | -0.184155391 | -0.196975622 | -0.201574771 | -0.069647508 | -0.107997943 |
| I_Kazachstania                 | -0.161994951 | -0.225165417 | -0.187131203 | -0.017003864 | -0.102582567 | -0.069160494 | 0.005866819  | -0.142456278 |
| I_Leptospora                   | 0.093486318  | 0.150466373  | 0.060970103  | 0.158257792  | 0.090009987  | 0.005160951  | 0.144729318  | 0.046412201  |
| I_Malassezia                   | 0.291296555  | 0.266227447  | 0.270067925  | 0.266554102  | 0.079638151  | 0.288236565  | 0.176775263  | 0.206049234  |
| I_Milospium                    | 0.160477906  | 0.221516286  | 0.127608367  | 0.187465967  | 0.10118053   | 0.205221196  | 0.07300291   | -0.019608448 |
| I_Nigrospora                   | -0.213753519 | -0.246366945 | -0.266690095 | -0.053410368 | -0.30121134  | -0.164789719 | -0.121693859 | -0.326745373 |
| I_Parasypodiella               | -0.211147362 | -0.234129056 | -0.292180218 | -0.213933593 | -0.196623474 | -0.241646775 | -0.060911555 | -0.225264327 |
| I_Phaeosphaeria                | 0.008926026  | 0.176794057  | 0.145474097  | 0.040005171  | 0.130016805  | -0.034002325 | 0.056133939  | 0.018140198  |
| I_Pichia                       | -0.084967125 | -0.179945518 | -0.259886705 | -0.069642186 | -0.153552603 | -0.181383187 | 0.095690061  | -0.083010509 |
| I_Raffaelea                    | -0.179599345 | -0.27458347  | -0.29856702  | -0.090871135 | -0.196857192 | -0.127110066 | -0.103129681 | -0.030254146 |
| I_Saccharomyces                | -0.043225496 | -0.255885088 | -0.233182463 | 0.046394022  | -0.244399433 | -0.232137542 | 0.03357709   | -0.003857908 |
| I_Simplicillium                | -0.210717244 | -0.26469115  | -0.305380513 | -0.077976605 | -0.233850269 | -0.116220362 | -0.092129794 | -0.225666506 |
| I_Talaromyces                  | 0.18778963   | 0.323731947  | 0.257381813  | 0.116921547  | 0.283193983  | 0.10647684   | 0.216343924  | 0.292249865  |
| I_Trametes                     | 0.10569499   | 0.119662148  | 0.098182274  | 0.045619086  | 0.141445895  | 0.127132249  | -0.014626467 | 0.068997421  |
| I_Udeniomyces                  | 0.080009753  | 0.263957582  | 0.184815586  | 0.152264615  | 0.20041646   | 0.159214755  | 0.134203082  | 0.23175521   |
| I_Ustilaginoidea               | -0.14959933  | -0.310792466 | -0.395214503 | -0.026203292 | -0.233417312 | -0.240358383 | -0.094945397 | -0.091046288 |
| I_Vishniacozyma                | 0.016028531  | 0.201006062  | 0.120559406  | 0.084239608  | 0.198173531  | 0.036911073  | 0.082270121  | 0.09184279   |
| I_Wallemia                     | 0.170336016  | 0.148371738  | 0.156136331  | 0.220402997  | 0.11096223   | 0.207279375  | 0.120095728  | 0.094653377  |
| I_Yarrowia                     | 0.346278692  | 0.304193868  | 0.405575047  | 0.209118644  | 0.28864221   | 0.388027503  | 0.257615666  | 0.048213574  |
| I_Zanclospora                  | 0.124013031  | 0.16004448   | 0.232670354  | 0.045134487  | 0.199430524  | 0.085138884  | -0.020076341 | 0.128302132  |

|                 |              |                   |                  |               |              |              |                 |                 |                   |
|-----------------|--------------|-------------------|------------------|---------------|--------------|--------------|-----------------|-----------------|-------------------|
|                 |              |                   |                  |               |              |              |                 |                 |                   |
| B_Fusobacterium | B_Gemella    | B_Gracilibacteria | B_Granulicatella | B_Haemophilus | B_Halomonas  | B_Kingella   | B_Lachnospirace | B_Lachnospirace | B_Lactobacillales |
| 0.559009392     | 0.615970968  | 0.79020678        | 0.998122145      | 0.134916992   | 0.312301382  | 0.533122142  | 0.535496979     | 0.907846832     | 0.841366923       |
| 0.082574972     | 0.277632241  | 0.100910088       | 0.060203523      | 0.254385062   | 0.002128186  | 0.223655834  | 0.070699858     | 0.201417617     | 0.999930857       |
| 0.047560719     | 0.104457418  | 0.872524429       | 0.336134401      | 0.017937613   | 0.241329446  | 0.822847012  | 0.40555225      | 0.894353602     | 0.614505353       |
| 0.055872012     | 0.001762901  | 0.036257827       | 0.063489404      | 0.002691039   | 0.055752527  | 0.361023405  | 0.256165094     | 0.444954844     | 0.004712096       |
| 0.010235841     | 0.012904906  | 2.61273E-05       | 0.000837889      | 2.30017E-05   | 0.028882778  | 0.005740129  | 0.224300241     | 0.087603368     | 0.115678147       |
| 0.020354715     | 0.009977433  | 0.438771071       | 0.711977126      | 0.163161995   | 0.082014591  | 0.753467532  | 0.543290964     | 0.11152299      | 0.569936616       |
| 0.001005205     | 0.003164909  | 0.000164839       | 0.000241512      | 8.74369E-07   | 0.02504842   | 0.380743375  | 0.011493475     | 0.638815494     | 0.055248034       |
| 0.436699624     | 0.011489703  | 1.80123E-06       | 0.001165056      | 0.000107228   | 0.069272915  | 0.529677335  | 0.011463476     | 0.489907653     | 0.020116051       |
| 9.76041E-09     | 5.17277E-08  | 3.46123E-12       | 4.40888E-06      | 0             | 8.59293E-05  | 0.157380887  | 0.000844005     | 0.168152375     | 0.000581148       |
| 0.071770384     | 0.176262096  | 0.102824951       | 0.83636138       | 0.006315186   | 0.092071873  | 0.225234542  | 0.240686561     | 0.331930762     | 0.748525621       |
| 0.003794219     | 3.83485E-05  | 1.99261E-05       | 0.071383726      | 1.23018E-07   | 0.027404381  | 0.55367671   | 0.174967225     | 0.190226918     | 0.031259799       |
| 0.247535308     | 0.452809002  | 0.834618129       | 0.962201413      | 0.045423217   | 0.114154506  | 0.000505421  | 0.666924185     | 0.223535714     | 0.809849455       |
| 0.803469312     | 0.236237466  | 0.93175477        | 0.739755492      | 0.757873696   | 0.030932595  | 0.87260878   | 0.682771847     | 0.169273055     | 0.706378708       |
| 0.00068641      | 0.075887086  | 0.008029086       | 0.109773623      | 0.000297639   | 0.018103937  | 0.903285772  | 0.829688785     | 0.439109085     | 0.292825994       |
| 0.127629181     | 0.247486758  | 0.356013148       | 0.903204105      | 0.101784368   | 0.181692132  | 0.279536096  | 0.358038406     | 0.809385789     | 0.452262926       |
| 0.414544622     | 0.255011891  | 0.852586407       | 0.711870347      | 0.229606546   | 0.665369174  | 0.620075151  | 0.553977665     | 0.714268525     | 0.322460118       |
| 0.353747426     | 0.450036298  | 0.193419764       | 0.081661954      | 0.040801437   | 0.698721809  | 0.253765939  | 0.414455785     | 0.55455861      | 0.743349895       |
| 0.07982645      | 0.009234803  | 0.000549844       | 0.002551897      | 6.5508E-09    | 0.281935752  | 0.005670203  | 0.00414286      | 0.248999226     | 0.085061709       |
| 0.101132594     | 0.58401247   | 0.126362383       | 0.314085303      | 0.00928455    | 0.872587215  | 0.453303302  | 0.121605294     | 0.967922441     | 0.462391834       |
| 0.190259429     | 0.290854317  | 0.014030818       | 0.489651368      | 4.62798E-05   | 0.219475709  | 0.044247366  | 0.302008538     | 0.170745273     | 0.36086925        |
| 0.157648539     | 0.165907904  | 0.686044518       | 0.943058409      | 0.300603285   | 0.088798336  | 0.849990449  | 0.197135137     | 0.193123001     | 0.285935474       |
| 0.150098252     | 0.733807338  | 0.621428786       | 0.088689781      | 0.515523009   | 0.010750789  | 0.355890938  | 0.022449128     | 0.318157263     | 0.34227459        |
| 0.000409126     | 0.00101665   | 0.002546668       | 0.01875995       | 0.001191066   | 0.041709072  | 0.802829662  | 0.130449453     | 0.794088546     | 0.01912545        |
| 0.147784007     | 0.346233052  | 0.004377415       | 0.590708369      | 0.003283466   | 0.733342117  | 0.887489475  | 0.557716434     | 0.541013946     | 0.276129771       |
| 0.004210207     | 0.002231335  | 0.15976816        | 0.098472367      | 0.031007553   | 0.320434762  | 0.826383151  | 0.343431689     | 0.380355757     | 0.435821528       |
| 0.012480066     | 0.039293846  | 0.198254434       | 0.0108717        | 0.000215344   | 0.294813514  | 0.115000816  | 0.167373105     | 0.407454268     | 0.10528776        |
| 0.788495877     | 0.38609717   | 0.48302031        | 0.184621168      | 0.69583403    | 0.00562226   | 0.030125145  | 0.114798815     | 0.288255124     | 0.067244906       |
| 0.756179664     | 0.851094906  | 0.005133992       | 0.092646797      | 0.001975679   | 0.38650575   | 0.538446129  | 0.000822301     | 0.641577924     | 0.779725181       |
| 0.111194465     | 0.024539652  | 0.024861398       | 0.169677793      | 0.00043967    | 0.191535066  | 0.613369228  | 0.050473328     | 0.599601087     | 0.860531258       |
| 0.405066887     | 0.114113048  | 0.000217803       | 0.004045171      | 0.000276228   | 0.782079892  | 0.823380085  | 0.05719922      | 0.394430762     | 0.002102049       |
| 0.01598395      | 0.067209936  | 0.658225787       | 0.393624636      | 0.00177652    | 0.169670572  | 0.771400562  | 0.295200513     | 0.539663419     | 0.484248358       |
| 0.484986406     | 0.068184     | 0.065233474       | 0.302202368      | 0.018068785   | 0.024942908  | 0.311144125  | 0.793606889     | 0.129481041     | 0.571305648       |
| 0.358692002     | 0.204029166  | 0.562913678       | 0.028149184      | 0.043952015   | 0.498994831  | 0.74500154   | 0.170880716     | 0.252705149     | 0.198298319       |
| 0.171725388     | 0.038425057  | 0.011046944       | 0.259999957      | 0.018009155   | 0.081357358  | 0.982091485  | 0.455067938     | 0.479485355     | 0.34738995        |
| 0.413088247     | 0.244091857  | 0.007878777       | 0.031231764      | 4.03178E-05   | 0.087348106  | 0.959380736  | 0.061475889     | 0.511480929     | 0.130283748       |
| 0.39009732      | 0.376553338  | 0.088416513       | 0.468194857      | 0.059256922   | 0.354397627  | 0.064463507  | 0.605736439     | 0.035884085     | 0.276790638       |
| 0.01516889      | 0.198723272  | 0.023341762       | 0.259322006      | 0.016420605   | 0.045394438  | 0.742263711  | 0.885422122     | 0.332745572     | 0.024154537       |
| 0.000398266     | 0.133727959  | 0.000232592       | 0.006149288      | 0.00029729    | 0.00818306   | 0.257134919  | 0.849416225     | 0.079791919     | 0.023544457       |
| 0.902521199     | 0.194995966  | 0.128794594       | 0.124117006      | 0.015740905   | 0.106766329  | 0.293106215  | 0.73252709      | 0.78282041      | 0.048831376       |
|                 |              |                   |                  |               |              |              |                 |                 |                   |
| B_Fusobacterium | B_Gemella    | B_Gracilibacteria | B_Granulicatella | B_Haemophilus | B_Halomonas  | B_Kingella   | B_Lachnospirace | B_Lachnospirace | B_Lactobacillales |
| -0.048083633    | -0.041280779 | 0.021902869       | -0.000193787     | -0.122630104  | 0.083051346  | 0.051283422  | 0.050986732     | 0.00953086      | -0.016478539      |
| 0.142207027     | 0.089212674  | 0.134458644       | -0.153816502     | 0.093639962   | -0.248928315 | 0.099943657  | 0.147997935     | 0.104898821     | -7.13523E-06      |
| -0.162054945    | -0.13309076  | -0.013210857      | -0.079071615     | -0.193050223  | 0.096249365  | 0.018432756  | 0.068404429     | -0.010934007    | -0.041452166      |
| 0.156462783     | 0.253301775  | 0.171144495       | 0.15191143       | 0.243370618   | -0.156538143 | 0.075103039  | -0.093291413    | 0.062832299     | 0.229578966       |
| 0.209083143     | 0.202597249  | 0.336093625       | 0.269886157      | 0.338253627   | -0.178469351 | 0.224529428  | -0.099805412    | 0.139955615     | 0.128991104       |
| 0.189274302     | 0.209787835  | 0.06368745        | 0.030392503      | 0.114444626   | -0.142464682 | -0.025855752 | 0.050017593     | 0.130471435     | 0.046754576       |
| -0.265923476    | -0.239455881 | -0.302896748      | -0.295493862     | -0.38888479   | 0.182932404  | -0.072077986 | 0.205862246     | -0.038631583    | -0.156857804      |
| 0.063975438     | 0.205871433  | 0.378408676       | 0.262666769      | 0.311001881   | -0.148745743 | 0.051714964  | -0.205935385    | -0.056805129    | 0.189629338       |
| 0.447046576     | 0.426727466  | 0.528915235       | 0.364906702      | 0.721518311   | -0.315086115 | 0.11602766   | -0.269729       | 0.11311145      | 0.277674554       |
| 0.147444916     | 0.111006284  | 0.133715637       | -0.017005771     | 0.222048039   | -0.138039928 | 0.099605474  | -0.096380364    | 0.079760063     | 0.026391798       |
| 0.235004502     | 0.329489038  | 0.340667965       | 0.147643881      | 0.415620163   | -0.180126508 | 0.048736756  | -0.111337538    | 0.107542733     | 0.175950536       |
| 0.094997125     | 0.061755759  | -0.017189549      | 0.003902107      | 0.163623744   | -0.129529035 | 0.280587497  | -0.035425139    | 0.099969458     | -0.019810356      |

|              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.020488572  | 0.097293705  | 0.007051153  | 0.027345838  | 0.025378733  | -0.176287381 | 0.013202041  | 0.033640852  | 0.112816118  | 0.031011412  |
| -0.274159237 | -0.145378649 | -0.215691069 | -0.131107572 | -0.291358005 | 0.192776699  | 0.010004833  | 0.017709673  | -0.06364053  | -0.086453025 |
| -0.124951954 | -0.095006837 | -0.075887797 | -0.010013323 | -0.134118039 | 0.109636394  | 0.088861412  | 0.075569758  | -0.019859599 | 0.061830268  |
| -0.067106004 | -0.093517032 | -0.015299186 | -0.030404291 | -0.098677578 | 0.035601096  | 0.040801778  | 0.048699816  | 0.030139679  | -0.081331851 |
| 0.07624494   | 0.062134597  | 0.106777127  | 0.142627544  | 0.167238696  | -0.031860716 | 0.093761586  | -0.06711875  | 0.048628536  | 0.026954396  |
| -0.143484499 | -0.211906597 | -0.278833621 | -0.244638806 | -0.451713949 | 0.088420961  | -0.224846133 | 0.232817547  | -0.094704914 | -0.141080302 |
| -0.13437174  | 0.04506013   | -0.125365885 | -0.082746791 | -0.211760051 | -0.013204294 | -0.061688359 | 0.126949461  | 0.003311158  | 0.06045631   |
| -0.10753489  | -0.086805655 | -0.200209992 | -0.056838619 | -0.326197387 | 0.100847348  | -0.164513179 | 0.084831164  | -0.112430344 | -0.075127083 |
| -0.115953416 | -0.113707361 | 0.033274352  | -0.005881088 | -0.085077234 | 0.13943583   | -0.015571779 | 0.105897704  | 0.106847898  | 0.087692379  |
| 0.118085215  | -0.027994964 | 0.040644096  | -0.139482818 | 0.0535032    | -0.207724377 | -0.075907025 | 0.186303822  | 0.08205581   | -0.078075789 |
| 0.284938351  | 0.265675068  | 0.244687669  | 0.191718669  | 0.262175994  | -0.166502652 | -0.020556643 | -0.124041652 | 0.021488279  | 0.191143007  |
| 0.118754799  | 0.077439786  | 0.231437473  | 0.044260718  | 0.238559663  | -0.028045807 | -0.011648984 | 0.048241712  | 0.050300012  | 0.089491027  |
| -0.232414256 | -0.24781715  | -0.115368766 | -0.135420796 | -0.176209948 | 0.081671835  | -0.018058862 | 0.0778894    | -0.07213651  | -0.064097753 |
| -0.203545639 | -0.168492206 | -0.105635126 | -0.207413655 | -0.297737597 | 0.086099155  | -0.129229554 | 0.113317673  | -0.06812839  | -0.132775862 |
| -0.022085775 | -0.071273315 | -0.057708406 | -0.108909914 | 0.032181898  | -0.225065293 | 0.177131763  | 0.12930088   | 0.087272956  | -0.149830397 |
| -0.025562031 | 0.015455783  | -0.227397799 | -0.13779886  | -0.250664258 | -0.071212184 | -0.050619204 | 0.270291531  | 0.038313957  | -0.023025135 |
| -0.130590302 | -0.183567861 | -0.183164699 | -0.112709815 | -0.283464102 | 0.107227932  | -0.041585146 | 0.160009098  | -0.043205377 | 0.01446594   |
| -0.068474992 | -0.12954375  | -0.297516262 | -0.233413125 | -0.292842789 | 0.022772654  | 0.018376367  | 0.155634517  | 0.070034077  | -0.249217639 |
| -0.196439701 | -0.149849333 | -0.036411491 | -0.07015326  | -0.253124496 | 0.11271171   | -0.023919471 | 0.086030436  | -0.050467795 | -0.057546844 |
| 0.057449853  | 0.149324872  | 0.150932836  | 0.084797282  | 0.192834325  | -0.183063274 | 0.083249522  | 0.021539692  | 0.124352506  | 0.046588919  |
| 0.075467358  | 0.104297188  | 0.047607352  | 0.179282366  | 0.164739687  | 0.05562362   | 0.026774729  | -0.112394977 | -0.093970451 | 0.105624853  |
| 0.112174884  | 0.169233045  | 0.206968665  | 0.092546123  | 0.192932302  | -0.142768674 | 0.00184824   | -0.061448076 | 0.058174702  | 0.077254775  |
| -0.067315161 | -0.095689226 | -0.216197614 | -0.17597928  | -0.328615872 | 0.140067382  | 0.004193538  | 0.15306894   | 0.054018465  | -0.124094716 |
| 0.07067649   | 0.072712553  | 0.139601304  | -0.059676641 | 0.154381121  | -0.076142304 | 0.151362194  | -0.042481358 | 0.171483816  | -0.089368467 |
| 0.197961374  | 0.105525459  | 0.185109894  | 0.092677329  | 0.195652078  | -0.163645282 | 0.027072621  | 0.01186449   | 0.079626185  | 0.184056432  |
| 0.285487099  | 0.123002247  | 0.29623217   | 0.222742496  | 0.291381424  | -0.21518081  | -0.093102212 | -0.015632099 | 0.143500772  | 0.184844262  |
| -0.010084317 | 0.106402558  | 0.124573935  | 0.126107499  | 0.196886245  | -0.132219928 | 0.086403037  | -0.028134903 | 0.022693296  | 0.161149972  |

|                   |              |               |              |              |                 |              |              |                   |                      |
|-------------------|--------------|---------------|--------------|--------------|-----------------|--------------|--------------|-------------------|----------------------|
|                   |              |               |              |              |                 |              |              |                   |                      |
| B_Lactobacillales | B_Lautropia  | B_Megasphaera | B_Moraxella  | B_Neisseria  | B_Neisseriaceae | B_Olsenella  | B_Parvimonas | B_Pasteurellaceae | B_Peptostreptococcus |
| 0.196644509       | 0.65348367   | 0.702382421   | 0.617576158  | 0.45855183   | 0.669088764     | 0.96262706   | 0.244100539  | 0.038515795       | 0.53633566           |
| 0.217175353       | 0.221373761  | 0.567694113   | 0.149533774  | 0.15677046   | 0.024899178     | 0.989595109  | 0.06888041   | 0.445879241       | 0.156156263          |
| 0.660304028       | 0.311206005  | 0.647180248   | 0.342388128  | 0.4937201    | 0.474745627     | 0.984075629  | 0.037452493  | 0.031288588       | 0.054956657          |
| 0.078445507       | 0.006235826  | 0.064562967   | 0.014492054  | 0.000959431  | 0.000387076     | 0.250189806  | 0.000318447  | 0.007266268       | 0.12038048           |
| 0.003484842       | 0.019584923  | 0.431029701   | 0.001448564  | 0.014679591  | 0.01276087      | 0.007127023  | 5.93986E-05  | 0.002166944       | 0.191022737          |
| 0.704292432       | 0.545975349  | 0.112622341   | 0.461332057  | 0.858913937  | 0.011743754     | 0.053937651  | 0.065211436  | 0.466752735       | 0.270824512          |
| 0.024290766       | 0.003030179  | 0.138015139   | 0.026441207  | 0.000732607  | 0.000284953     | 0.516805329  | 1.74366E-05  | 0.000103172       | 0.04309697           |
| 0.038891441       | 7.43364E-05  | 0.221717199   | 0.044898737  | 0.001986993  | 0.000847764     | 0.767631543  | 0.009420079  | 0.004678864       | 0.46658245           |
| 0.002917778       | 6.35269E-09  | 0.002672574   | 3.64462E-06  | 8.33005E-08  | 2.50266E-12     | 0.171648739  | 0            | 1.55431E-15       | 0.000308549          |
| 0.601767818       | 0.012937219  | 0.145857274   | 0.00206978   | 0.037511813  | 0.166269752     | 0.428934625  | 0.02210216   | 0.016247961       | 0.822167102          |
| 0.109650279       | 3.16512E-05  | 0.307019525   | 0.064734336  | 0.005644913  | 5.40305E-07     | 0.883583933  | 0.000135803  | 2.91135E-05       | 0.035306469          |
| 0.940874463       | 0.027229158  | 0.560618471   | 0.008524349  | 0.373014142  | 0.445812376     | 0.126281191  | 0.032225263  | 0.136032757       | 0.521462629          |
| 0.398870339       | 0.590948417  | 0.674671254   | 0.007528586  | 0.381203546  | 0.611719596     | 0.829567663  | 0.508406068  | 0.892806424       | 0.698982936          |
| 0.807197002       | 0.007569133  | 0.439118905   | 0.036301957  | 0.011393651  | 0.017841639     | 0.489464774  | 0.003064983  | 0.002715283       | 0.115366001          |
| 0.160260118       | 0.998769154  | 0.961221209   | 0.136130677  | 0.707160496  | 0.869299368     | 0.662239801  | 0.139924613  | 0.091832636       | 0.157673448          |
| 0.912779745       | 0.788183984  | 0.425807049   | 0.336734044  | 0.609726778  | 0.518390294     | 0.996980318  | 0.134511445  | 0.103435881       | 0.060483817          |
| 0.072790665       | 0.809622338  | 0.536513187   | 0.556967294  | 0.433087993  | 0.853888164     | 0.664427127  | 0.142640524  | 0.181472182       | 0.129502446          |
| 0.036052816       | 0.000923333  | 0.559122765   | 0.009212431  | 0.01848735   | 2.46053E-06     | 0.050349103  | 0.000142787  | 1.06165E-05       | 0.030405957          |
| 0.457130549       | 0.288685636  | 0.620201127   | 0.379272607  | 0.614953352  | 0.119195723     | 0.090707206  | 0.213441037  | 0.100352727       | 0.052406921          |
| 0.570073507       | 0.019923732  | 0.639217711   | 0.14946144   | 0.022314115  | 0.052833589     | 0.40608482   | 0.000347308  | 9.21931E-05       | 0.001637217          |
| 0.138020543       | 0.358622094  | 0.839492667   | 0.834959918  | 0.341027859  | 0.28550519      | 0.533919062  | 0.176884761  | 0.846641088       | 0.04848719           |
| 0.181769637       | 0.932546264  | 0.927355162   | 0.264420052  | 0.451853949  | 0.649301946     | 0.202203511  | 0.748674108  | 0.65352081        | 0.971976976          |
| 0.058268918       | 0.028978472  | 0.001634771   | 0.001005402  | 0.000249908  | 0.020185048     | 0.355676221  | 0.000519366  | 0.001540763       | 0.188302426          |
| 0.211379904       | 0.024226261  | 0.130654145   | 0.203423606  | 0.031530365  | 0.000526729     | 0.629533392  | 0.105461729  | 0.008334947       | 0.726445084          |
| 0.450545897       | 0.148691227  | 0.266866597   | 0.002714774  | 0.096022395  | 0.111516645     | 0.114734919  | 0.002191726  | 0.094745277       | 0.106806963          |
| 0.112889248       | 0.002431755  | 0.267802211   | 0.123512983  | 0.008479828  | 0.21157666      | 0.025098635  | 0.002199768  | 0.000463004       | 0.005632245          |
| 0.209855488       | 0.740446647  | 0.156264873   | 0.887023479  | 0.526461603  | 0.653148402     | 0.586173952  | 0.473764192  | 0.742982311       | 0.742520328          |
| 0.836151091       | 0.027733462  | 0.90266834    | 0.915172117  | 0.031882392  | 0.043512893     | 0.847038797  | 0.087645342  | 0.010327057       | 0.572755527          |
| 0.974798187       | 0.358350375  | 0.050552559   | 0.1066738    | 0.051268883  | 0.028946271     | 0.823447683  | 0.071498705  | 0.012693081       | 0.249993324          |
| 0.007956836       | 0.094800033  | 0.133427608   | 0.057398995  | 0.408582005  | 0.075880345     | 0.563672188  | 0.013550547  | 0.001692146       | 0.140104861          |
| 0.66834509        | 0.183997551  | 0.768776697   | 0.25272391   | 0.254760088  | 0.471171004     | 0.962176976  | 0.007141106  | 0.0020066         | 0.018839373          |
| 0.207836324       | 0.031627882  | 0.639377427   | 0.069494829  | 0.803870714  | 0.04842753      | 0.134708057  | 0.009230362  | 0.218181613       | 0.692605557          |
| 0.136282503       | 0.249378246  | 0.64566714    | 0.096395439  | 0.491276664  | 0.264427043     | 0.361360462  | 0.854689135  | 0.256897692       | 0.680541352          |
| 0.287539376       | 0.008837953  | 0.381431008   | 0.107839305  | 0.145931231  | 0.396375718     | 0.895558914  | 0.083694185  | 0.082515411       | 0.53062585           |
| 0.250896863       | 0.006562866  | 0.626109798   | 0.005171734  | 0.328482495  | 0.000694753     | 0.085744939  | 0.017572062  | 0.005589237       | 0.471389179          |
| 0.762270928       | 0.195060555  | 0.661432556   | 0.824463983  | 0.211456522  | 0.125869036     | 0.991045099  | 0.244136868  | 0.15465807        | 0.81513845           |
| 0.124191337       | 0.215748458  | 0.14520447    | 0.003456965  | 0.093698157  | 0.097649012     | 0.769108333  | 0.05295032   | 0.004118521       | 0.16928236           |
| 0.0997555         | 0.376817013  | 0.012029929   | 3.96097E-08  | 0.006829355  | 0.013120283     | 0.869161932  | 0.00038926   | 0.001066883       | 0.053794633          |
| 0.074573577       | 0.78102592   | 0.362420106   | 0.126381486  | 0.834208157  | 0.896337803     | 0.263689339  | 0.19708649   | 0.114064143       | 0.63015178           |
|                   |              |               |              |              |                 |              |              |                   |                      |
| B_Lactobacillales | B_Lautropia  | B_Megasphaera | B_Moraxella  | B_Neisseria  | B_Neisseriaceae | B_Olsenella  | B_Parvimonas | B_Pasteurellaceae | B_Peptostreptococcus |
| 0.106013142       | -0.036951402 | 0.031454267   | -0.041093272 | -0.060975209 | 0.035180474     | -0.003858133 | -0.095687472 | -0.169155015      | -0.050882112         |
| -0.101349881      | 0.100435514  | -0.047026332  | 0.118247813  | 0.116197341  | 0.183117653     | -0.001073773 | 0.148953634  | 0.062705043       | -0.116368572         |
| 0.036175364       | -0.083238913 | 0.037671525   | -0.078057483 | -0.056308036 | -0.058802845    | -0.001643439 | -0.170079284 | -0.175921042      | -0.157043527         |
| 0.14413974        | 0.222378188  | -0.151306497  | 0.19928015   | 0.266943593  | 0.286067233     | 0.094468138  | 0.290007051  | 0.218354693       | 0.127364925          |
| 0.237102188       | 0.190432692  | -0.064767727  | 0.257784561  | 0.198909453  | 0.202915681     | 0.218867524  | 0.321768299  | 0.248505176       | 0.107351035          |
| -0.031242494      | 0.049685398  | -0.130075647  | 0.060599278  | 0.014635441  | 0.205258519     | -0.157699498 | 0.150945067  | 0.0598699         | 0.090482169          |
| -0.183882848      | -0.240511882 | 0.121672092   | -0.181247694 | -0.272771074 | -0.292225273    | -0.05334017  | -0.342894972 | -0.311717354      | -0.165402679         |
| 0.168833616       | 0.317727525  | -0.100361263  | 0.164018066  | 0.250531361  | 0.26963294      | -0.024325301 | 0.211364291  | 0.229758116       | 0.059892741          |
| 0.241425827       | 0.452070492  | -0.243535453  | 0.367829507  | 0.420668346  | 0.531835814     | 0.112194823  | 0.610785138  | 0.591662864       | 0.29063912           |
| 0.04294931        | 0.202526241  | -0.11931834   | 0.249579363  | 0.170027142  | 0.113610886     | 0.065061994  | 0.186778949  | 0.195961284       | 0.018504689          |
| 0.131152723       | 0.33281144   | -0.083959789  | 0.151210696  | 0.224961532  | 0.395666847     | -0.012056175 | 0.306578115  | 0.334246217       | 0.172014151          |
| 0.006107054       | 0.180327945  | 0.04788715    | 0.214079446  | 0.073251921  | 0.062714243     | 0.125392524  | 0.174973784  | 0.122283168       | 0.052749793          |

|              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.069380299  | 0.044232137  | -0.034550889 | 0.217411854  | 0.072008554  | 0.041778423  | 0.017722462  | 0.054411844  | 0.01109509   | -0.031831696 |
| -0.02009215  | -0.217268726 | 0.063639167  | -0.171104623 | -0.206106269 | -0.193209058 | -0.056863008 | -0.240235091 | -0.243155745 | -0.129100858 |
| 0.115233902  | -0.000127018 | -0.004003375 | -0.122252825 | -0.030924881 | -0.013548048 | -0.035955688 | -0.12108979  | -0.138140593 | -0.115946511 |
| 0.009018595  | 0.02211913   | 0.065502826  | -0.078973857 | -0.042012213 | 0.05313895   | -0.00031162  | -0.122756749 | -0.133480877 | -0.153650714 |
| 0.146924045  | 0.019834475  | 0.050859977  | 0.048333383  | 0.064479425  | 0.015162555  | 0.035707771  | 0.120271896  | 0.109691294  | 0.124345616  |
| -0.171330257 | -0.267780063 | 0.04806978   | -0.211972731 | -0.192154369 | -0.373772743 | -0.160094327 | -0.305630021 | -0.351028668 | -0.176835949 |
| 0.061167877  | -0.087195362 | -0.040787097 | -0.072300242 | -0.041399759 | -0.12776993  | 0.138616967  | -0.102173809 | -0.134677    | -0.158704397 |
| -0.046738004 | -0.189918088 | 0.0385853    | -0.118268682 | -0.186487948 | -0.158421882 | -0.06832706  | -0.28826276  | -0.313794778 | -0.254999265 |
| 0.121670436  | -0.075478306 | -0.016675874 | 0.01715351   | -0.078277063 | -0.087770429 | -0.051183789 | -0.110847633 | -0.015923735 | -0.161393152 |
| -0.109617061 | -0.006969181 | 0.007506935  | 0.091696379  | 0.061886102  | 0.037428819  | -0.104717182 | 0.026375675  | 0.036947167  | -0.002892452 |
| 0.154978394  | 0.178364599  | -0.255033454 | 0.265919168  | 0.294821787  | 0.189526326  | -0.075940816 | 0.280022108  | 0.256384468  | 0.108008737  |
| 0.102632987  | 0.183964937  | -0.123976174 | 0.104436197  | 0.175674253  | 0.279729196  | -0.039703063 | 0.132710134  | 0.214685733  | 0.028800811  |
| -0.062064872 | -0.118491374 | -0.091230205 | -0.243160233 | -0.136406942 | -0.130473728 | -0.129323461 | -0.248238215 | -0.136928923 | -0.132204736 |
| -0.129980011 | -0.245785217 | 0.091052699  | -0.126308764 | -0.214220882 | -0.102589016 | -0.182870286 | -0.248152167 | -0.282400332 | -0.225019512 |
| -0.10297466  | 0.027270522  | 0.116338256  | -0.011697553 | 0.052119085  | 0.036989633  | 0.044801617  | 0.058933336  | 0.026994399  | 0.027044685  |
| -0.017027936 | -0.179751151 | 0.01006902   | 0.008770282  | -0.175317784 | -0.165078817 | 0.015881928  | -0.139937262 | -0.208838133 | -0.046413683 |
| 0.002601153  | -0.075520867 | 0.159954829  | -0.132254541 | -0.159467364 | -0.178399815 | -0.018369217 | -0.147584625 | -0.20306664  | -0.09450716  |
| -0.215933494 | -0.136906429 | 0.123096651  | -0.155511219 | -0.067965081 | -0.145381958 | -0.047515005 | -0.201207031 | -0.254243292 | -0.121035136 |
| 0.035264497  | -0.109063876 | 0.024201935  | -0.093966751 | -0.093566389 | -0.059278836 | -0.003904631 | -0.218815255 | -0.250302678 | -0.191592757 |
| 0.103429973  | 0.175575168  | 0.038566925  | 0.148628629  | 0.020445863  | 0.16143545   | 0.122695314  | 0.211919713  | 0.101129591  | 0.032541548  |
| 0.12220581   | 0.094629452  | -0.037844811 | 0.136255511  | 0.056626392  | 0.091695043  | -0.07505049  | 0.015078507  | 0.093148447  | 0.03389102   |
| 0.087402131  | 0.213101311  | -0.071974252 | 0.131820265  | 0.119296605  | 0.069747122  | -0.010808546 | 0.1416966    | 0.142234345  | 0.051596     |
| -0.094327892 | -0.2210409   | 0.040099945  | -0.22721058  | -0.080328976 | -0.273902332 | -0.140775359 | -0.193659198 | -0.225217225 | -0.059249728 |
| -0.02490352  | 0.106387256  | 0.036047265  | 0.018261739  | 0.102615861  | 0.125527954  | 0.000924129  | 0.095680135  | 0.116788381  | -0.019249138 |
| 0.126082783  | 0.101663505  | -0.119510554 | 0.237299351  | 0.137361079  | 0.135750019  | -0.024166218 | 0.158344919  | 0.232964742  | 0.112813672  |
| 0.134912038  | 0.072672494  | -0.204581889 | 0.430070635  | 0.21999438   | 0.202126858  | 0.013562423  | 0.285952793  | 0.264614219  | 0.157792381  |
| 0.146027863  | -0.022885638 | 0.074885481  | 0.12535962   | -0.017232781 | -0.010727485 | 0.091836182  | 0.105909141  | 0.129561113  | 0.039631474  |

|               |                 |                 |                 |                 |                 |              |               |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|---------------|
|               |                 |                 |                 |                 |                 |              |               |
| B_Porphyrmona | B_Saccharimonad | B_Saccharimonad | B_Saccharimonad | B_Solobacterium | B_Streptococcus | B_Treponema  | B_Veillonella |
| 0.110070383   | 0.598455628     | 0.747705869     | 0.522964794     | 0.673927846     | 0.433813636     | 0.3917828    | 0.934966942   |
| 0.848089315   | 0.039735089     | 0.947057425     | 0.229072372     | 0.885924704     | 0.26671009      | 0.097698922  | 0.634384766   |
| 0.022642842   | 0.293029173     | 0.182998773     | 0.130332283     | 0.130023653     | 0.201345736     | 0.155606605  | 0.720914578   |
| 0.006618363   | 0.000249715     | 0.185237703     | 0.000724838     | 0.606442005     | 0.010428018     | 0.000293056  | 0.039157998   |
| 0.045017609   | 0.000741197     | 0.000821719     | 9.55252E-06     | 0.272956889     | 0.00015058      | 2.02405E-06  | 0.082992361   |
| 0.066417757   | 0.095346341     | 0.700157888     | 0.75486439      | 0.484469122     | 0.10390945      | 0.042501613  | 0.897262934   |
| 0.024856193   | 0.327451834     | 0.00482091      | 0.003891807     | 0.291074878     | 0.01443635      | 5.19024E-07  | 0.006615137   |
| 0.001061793   | 0.216754127     | 0.282647926     | 0.003194312     | 0.37037585      | 0.00527082      | 0.011415741  | 0.012980583   |
| 9.91363E-12   | 4.0004E-06      | 0.000386942     | 3.55271E-15     | 0.073671298     | 7.86702E-06     | 0            | 3.09952E-05   |
| 0.33059008    | 0.001932103     | 0.072336549     | 0.003615059     | 0.67776442      | 0.042598114     | 0.004280839  | 0.078775168   |
| 0.000377334   | 0.034032829     | 0.292882461     | 6.04678E-06     | 0.196037179     | 0.001846682     | 2.71727E-06  | 0.064680493   |
| 0.236311093   | 1.90006E-05     | 0.000228405     | 0.000885899     | 0.080194961     | 0.140621006     | 0.007548936  | 0.776755486   |
| 0.057280099   | 0.113833785     | 0.854897741     | 0.995844398     | 0.647434907     | 0.409623757     | 0.015228801  | 0.814866744   |
| 0.000432531   | 0.155339986     | 0.079829289     | 0.002671969     | 0.230939809     | 0.223311454     | 0.001441316  | 0.365913217   |
| 0.393051947   | 0.423279686     | 0.16958707      | 0.169828445     | 0.208391677     | 0.561172742     | 0.243840855  | 0.827110399   |
| 0.330393226   | 0.53592926      | 0.738652825     | 0.789708485     | 0.668000931     | 0.495686917     | 0.842715838  | 0.309159309   |
| 0.569298005   | 0.755763687     | 0.054581729     | 0.186382485     | 0.04979123      | 0.571218607     | 0.227804138  | 0.273708001   |
| 0.028733873   | 0.136916985     | 0.175947172     | 1.11942E-05     | 0.394749129     | 0.004401308     | 3.05267E-08  | 0.047683153   |
| 0.568637075   | 0.199575327     | 0.896434051     | 0.301490622     | 0.688645986     | 0.181495769     | 0.055525781  | 0.940344506   |
| 0.048901966   | 0.048226197     | 0.140430915     | 0.000726873     | 0.350648109     | 0.029041807     | 0.000761115  | 0.160934561   |
| 0.008475684   | 0.036784662     | 0.568882862     | 0.219755181     | 0.096491812     | 0.872313548     | 0.369377092  | 0.711102886   |
| 0.563964494   | 0.071281297     | 0.127555503     | 0.470289396     | 0.684395808     | 0.610657865     | 0.081286007  | 0.107028076   |
| 0.012927768   | 0.002619358     | 0.243580012     | 0.005779773     | 0.487205863     | 0.008302461     | 0.021440397  | 0.000156289   |
| 0.163529364   | 0.742695972     | 0.952352825     | 0.399083962     | 0.23694504      | 0.226510372     | 0.004204596  | 0.035892215   |
| 0.169969464   | 0.010109485     | 0.002288922     | 0.000501155     | 0.127199877     | 0.063139876     | 0.005247844  | 0.140647458   |
| 0.000146424   | 0.038447088     | 0.145732527     | 0.002346018     | 0.212290605     | 0.063422586     | 0.004468408  | 0.132086592   |
| 0.513004079   | 0.470883732     | 0.325235455     | 0.5323812       | 0.448592693     | 0.477909363     | 0.056147883  | 0.456217112   |
| 0.228129276   | 0.794969347     | 0.242564268     | 0.225137959     | 0.243197836     | 0.929259498     | 0.060122195  | 0.062461815   |
| 0.043435355   | 0.649876685     | 0.57597696      | 0.084367535     | 0.914562593     | 0.300116245     | 0.007303732  | 0.183157044   |
| 0.303249106   | 0.280458488     | 0.092370625     | 0.089027767     | 0.345334526     | 0.069344077     | 0.008443192  | 0.141885197   |
| 0.02130619    | 0.240259798     | 0.146009697     | 0.008669219     | 0.239667011     | 0.22183719      | 0.048828313  | 0.577337694   |
| 0.094700307   | 0.000904527     | 0.000986655     | 0.003451645     | 0.135204347     | 0.001247898     | 0.000182977  | 0.655109544   |
| 0.128131145   | 0.17296528      | 0.120973162     | 0.256426739     | 0.58864671      | 0.426209299     | 0.373883515  | 0.890587089   |
| 0.243548852   | 0.007676188     | 0.732137185     | 0.003629341     | 0.563410424     | 0.019170675     | 0.001387999  | 0.266154236   |
| 0.107251873   | 0.388211767     | 0.512880971     | 0.008556497     | 0.822150999     | 0.055725223     | 0.000110094  | 0.112787547   |
| 0.382279671   | 0.48834337      | 0.624159365     | 0.24472154      | 0.411033991     | 0.342564927     | 0.042217721  | 0.79456495    |
| 0.308822989   | 0.002644244     | 0.24425482      | 0.01498937      | 0.243528866     | 0.107492553     | 0.003797139  | 0.123822668   |
| 0.034352043   | 0.207680323     | 0.007510805     | 0.00072968      | 0.871221649     | 0.08573786      | 4.66872E-06  | 0.00046708    |
| 0.599822173   | 0.060151765     | 0.186368671     | 0.135819219     | 0.343460491     | 0.017453376     | 0.054539591  | 0.068331954   |
|               |                 |                 |                 |                 |                 |              |               |
| B_Porphyrmona | B_Saccharimonad | B_Saccharimonad | B_Saccharimonad | B_Solobacterium | B_Streptococcus | B_Treponema  | B_Veillonella |
| -0.130999103  | -0.043340916    | -0.026480822    | -0.052559947    | -0.034634613    | -0.064377972    | -0.070426119 | -0.006718521  |
| 0.015771518   | 0.168121206     | -0.005467434    | 0.098790277     | -0.011812092    | 0.091259939     | 0.13573      | -0.039142224  |
| -0.186041298  | -0.086416777    | -0.109311258    | -0.124079168    | -0.124178112    | -0.10491546     | -0.116522238 | 0.029407959   |
| 0.220819882   | 0.29483694      | 0.108758074     | 0.272998802     | 0.042398305     | 0.208569159     | 0.291667283  | -0.168607133  |
| 0.163928359   | 0.272521889     | 0.27030682      | 0.352731272     | 0.090082227     | 0.304621747     | 0.376683515  | -0.142016028  |
| 0.150280447   | 0.136682567     | 0.031701172     | 0.025704433     | 0.057517824     | 0.13329965      | 0.16587084   | -0.010631217  |
| -0.183171186  | -0.080499762    | -0.229000173    | -0.234374726    | -0.08676613     | -0.199391065    | -0.396226222 | 0.220832685   |
| 0.264719607   | 0.101442311     | 0.088290728     | 0.23923082      | 0.073656035     | 0.226724819     | 0.206052108  | -0.20243119   |
| 0.519239992   | 0.366403034     | 0.286074264     | 0.585513548     | 0.1464792       | 0.35583553      | 0.67941164   | -0.33317167   |
| 0.079980804   | 0.251182636     | 0.147155144     | 0.236199617     | -0.034202908    | 0.165794585     | 0.231997471  | -0.143982481  |
| 0.286585071   | 0.173209948     | 0.08644295      | 0.359992293     | 0.106156328     | 0.252230393     | 0.372282389  | -0.151240774  |
| 0.097278493   | 0.341463536     | 0.296587866     | 0.268679776     | 0.143311188     | 0.120878928     | 0.217339935  | 0.023343863   |

|              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| -0.155584557 | 0.129642979  | 0.01505662   | -0.000428843 | 0.037642377  | 0.06781446   | 0.197847127  | -0.019277947 |
| -0.283800013 | -0.116596924 | -0.143483161 | -0.243540873 | -0.098397093 | -0.100017653 | -0.257898043 | 0.07434364   |
| -0.070238019 | -0.065860426 | -0.112733626 | -0.112670294 | -0.103304428 | -0.047819531 | -0.095739939 | -0.017982012 |
| -0.080013263 | -0.050932797 | -0.027466045 | -0.021956128 | -0.035303394 | -0.056052385 | -0.016336573 | 0.083590539  |
| 0.046831914  | -0.02560706  | 0.157283705  | 0.108477117  | 0.160479242  | 0.046599446  | 0.099058591  | -0.089941855 |
| -0.178632941 | -0.122009768 | -0.111086682 | -0.350170817 | -0.069987048 | -0.231300643 | -0.433298592 | 0.161966877  |
| -0.046911998 | 0.105326632  | -0.010717469 | -0.084921767 | -0.032983484 | 0.109685404  | -0.156681519 | 0.006161894  |
| -0.161100273 | -0.161578512 | -0.120936407 | -0.272938948 | -0.076735806 | -0.178295431 | -0.2719541   | 0.115049515  |
| -0.214234081 | -0.170671156 | -0.046882212 | -0.100786551 | -0.136216466 | 0.013232898  | -0.073809479 | -0.030489038 |
| 0.047479434  | 0.147696735  | 0.124975942  | 0.059396532  | 0.033458905  | -0.041902939 | 0.142801796  | 0.132122143  |
| 0.202546994  | 0.24401633   | 0.09579268   | 0.224351404  | -0.057158655 | 0.214790945  | 0.187703237  | -0.303913525 |
| 0.114345455  | -0.027025565 | -0.004919892 | 0.069348951  | -0.09714765  | 0.099333393  | 0.232447634  | -0.171476403 |
| -0.112633325 | -0.20942574  | -0.247216903 | -0.280763314 | -0.125091875 | -0.152110187 | -0.226836726 | 0.120870935  |
| -0.305153243 | -0.169214085 | -0.119355021 | -0.246635144 | -0.102429708 | -0.151949356 | -0.230919902 | 0.123520146  |
| -0.053824056 | 0.059317174  | 0.080868203  | 0.051376124  | 0.062332357  | -0.058383189 | 0.156289297  | 0.061291877  |
| -0.098989703 | 0.021394281  | 0.095998429  | -0.099626115 | 0.095870023  | 0.007309626  | -0.153864724 | 0.152498344  |
| -0.165138996 | 0.037363129  | -0.046025076 | -0.141392143 | 0.00883354   | -0.085162695 | -0.218218204 | 0.109271991  |
| -0.084614558 | 0.08869181   | 0.137914511  | -0.139336671 | 0.077583747  | -0.148708154 | -0.214337761 | 0.120498165  |
| -0.187893676 | -0.096467459 | -0.119273554 | -0.213623707 | -0.096588616 | -0.100335341 | -0.16115213  | 0.045861234  |
| 0.136947404  | 0.268227788  | 0.266331645  | 0.237337138  | 0.122540545  | 0.261136908  | 0.300893091  | 0.036766113  |
| 0.124788811  | 0.111853257  | -0.127163477 | 0.093240321  | -0.044506412 | 0.065446024  | 0.073119141  | 0.011326228  |
| 0.095798982  | 0.216894081  | 0.028177538  | 0.236102413  | -0.047546868 | 0.191072442  | 0.258749202  | -0.091365639 |
| -0.132038684 | -0.070957353 | -0.053839758 | -0.213977727 | -0.018506393 | -0.156555382 | -0.310511527 | 0.13001643   |
| 0.071846383  | 0.057009686  | 0.040326464  | 0.095562161  | 0.06761092   | 0.078028983  | 0.166096015  | 0.021437434  |
| 0.083648465  | 0.243790363  | 0.095656319  | 0.198306078  | -0.095803025 | 0.131949081  | 0.234985445  | -0.12620548  |
| 0.172906736  | 0.103465283  | 0.217474836  | 0.272856603  | -0.01334704  | 0.140778508  | 0.364021866  | -0.28221965  |
| 0.04317923   | 0.153847185  | 0.108480499  | 0.122349397  | 0.077884766  | 0.193859283  | 0.157310783  | 0.149245744  |

| Supplementary Table S26. The p value of correlation between fungi and bacteria in COVID-19 patients and Post-COVID-19.   |                               |                 |                  |              |                 |                  |                 |               |              |                   |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------|------------------|--------------|-----------------|------------------|-----------------|---------------|--------------|-------------------|
| p.value                                                                                                                  | B_Actinobacteria_unclassified | B_Actinomycetes | B_Alloprevotella | B_Atopobium  | B_Campylobacter | B_Capnocytophaga | B_Fusobacterium | B_Haemophilus | B_Halomonas  | B_Lachnospirillum |
| I_Acremonium                                                                                                             | 0.315739173                   | 0.021087933     | 0.039087758      | 0.137746585  | 0.203128952     | 0.058969467      | 0.060202603     | 0.078216104   | 0.00959375   | 0.610597268       |
| I_Acrodictys                                                                                                             | 0.010494283                   | 1.18534E-06     | 9.04076E-05      | 0.035224577  | 0.016603953     | 0.012955347      | 0.008210967     | 0.027620696   | 6.54294E-05  | 0.226202368       |
| I_Actinomucor                                                                                                            | 0.000124997                   | 1.99756E-06     | 1.78108E-08      | 0.067143201  | 1.28797E-05     | 6.01795E-06      | 4.32025E-07     | 1.69016E-05   | 5.1878E-05   | 0.00529217        |
| I_Angustimassarina                                                                                                       | 0.040117662                   | 0.000821189     | 0.000409312      | 0.35076834   | 0.031388308     | 0.002961991      | 0.000708228     | 0.061570392   | 0.002263978  | 0.425976851       |
| I_Ascomyces_gen_Incertae_sedis                                                                                           | 0.042828467                   | 0.092967287     | 0.061665891      | 0.813798359  | 0.012617527     | 0.413373578      | 0.793890071     | 0.104353038   | 0.824899974  | 0.679845287       |
| I_AspERGILLUS                                                                                                            | 0.401687981                   | 0.247325264     | 0.694501626      | 0.837151908  | 0.014968683     | 0.824998429      | 0.86393761      | 0.283266348   | 0.638337993  | 0.028993435       |
| I_Blumeria                                                                                                               | 0.000106361                   | 0.00018558      | 1.2095E-06       | 0.295336045  | 1.93257E-06     | 0.000157857      | 0.005597376     | 0.000291734   | 0.036487852  | 0.089515964       |
| I_Chrysosphaeria                                                                                                         | 0.224674333                   | 0.073841059     | 0.003769601      | 0.734021229  | 0.004956633     | 0.026855635      | 0.172348831     | 0.01502263    | 0.642909685  | 0.191855233       |
| I_Dipodascus                                                                                                             | 8.1295E-05                    | 5.32683E-05     | 2.33045E-05      | 0.05276311   | 0.017360114     | 0.01164249       | 0.015135753     | 0.203344076   | 0.0040836    | 0.034953614       |
| I_Diversispora                                                                                                           | 0.117457787                   | 0.001551237     | 0.005419881      | 0.004755105  | 0.677197128     | 0.022733633      | 0.005473087     | 0.064778096   | 0.0600216    | 0.398653896       |
| I_Entorrhiza                                                                                                             | 0.295387438                   | 0.016086821     | 0.018819897      | 0.045665894  | 0.190345179     | 0.045433266      | 0.008044017     | 0.355518638   | 0.002292785  | 0.361839324       |
| I_Fantasmomyces                                                                                                          | 0.006801034                   | 0.00011135      | 8.22005E-06      | 0.46655699   | 0.004025508     | 0.009877198      | 0.00199152      | 0.097964092   | 0.000734887  | 0.249134003       |
| I_Filobasidiaceae_gen_Incertae_sedis                                                                                     | 0.082191244                   | 0.000721235     | 0.001901565      | 0.227829664  | 0.005573463     | 0.006371837      | 0.000617297     | 0.105542599   | 0.000550056  | 0.350218455       |
| I_Fungi_gen_Incertae_sedis                                                                                               | 0.032244354                   | 0.010270839     | 0.005923354      | 0.112296275  | 0.100341724     | 0.004149887      | 0.026487734     | 0.425671819   | 0.004761345  | 0.82196629        |
| I_Fusarium                                                                                                               | 0.293979397                   | 0.233545753     | 0.64705504       | 0.059289706  | 0.959033094     | 0.193095766      | 0.02256598      | 0.383327532   | 0.098588409  | 0.160228965       |
| I_Galactomyces                                                                                                           | 0.010566551                   | 0.001970957     | 6.00918E-05      | 0.225648725  | 0.015156609     | 0.015594841      | 0.001813427     | 0.003263919   | 0.02909238   | 0.073537665       |
| I_Hannaella                                                                                                              | 0.131457214                   | 0.26422665      | 0.032604986      | 0.215545703  | 0.002405464     | 0.127120204      | 0.462310634     | 0.099887754   | 0.383164377  | 0.141047221       |
| I_Heitmania                                                                                                              | 0.878690488                   | 0.030322113     | 0.075889531      | 0.031584625  | 0.484585217     | 0.11822567       | 0.011713865     | 0.075340599   | 0.000209119  | 0.644297295       |
| I_Hydnoholites                                                                                                           | 0.064558884                   | 0.005156722     | 0.038816424      | 0.077303319  | 0.114560411     | 0.065362126      | 0.208479032     | 0.067660653   | 0.506278583  | 0.12124078        |
| I_Malassezia                                                                                                             | 0.17794441                    | 0.007995351     | 0.005778761      | 0.124527255  | 0.653163021     | 0.050522705      | 0.001750938     | 0.392030142   | 0.004820419  | 0.040790928       |
| I_Milospium                                                                                                              | 0.21720101                    | 0.041957725     | 0.005443415      | 0.734241722  | 0.009237153     | 0.154650941      | 0.202092767     | 0.519050422   | 0.016480313  | 0.696420296       |
| I_Mucor                                                                                                                  | 0.002825615                   | 8.23371E-05     | 6.44026E-07      | 0.149830543  | 0.000562637     | 0.000107606      | 3.99402E-07     | 1.85603E-05   | 0.000146645  | 0.061294745       |
| I_Paratuscosporella                                                                                                      | 0.034232258                   | 0.000116433     | 0.000713166      | 0.138315358  | 0.0048793       | 0.004647225      | 0.00019799      | 0.043241271   | 0.001187256  | 0.146785898       |
| I_Parasymphodella                                                                                                        | 0.015113797                   | 3.72532E-05     | 0.000726052      | 0.094635748  | 0.033128648     | 0.000136746      | 0.000767023     | 0.001191882   | 0.016465809  | 0.219430524       |
| I_Periconia                                                                                                              | 0.665229037                   | 0.023789807     | 0.242354836      | 0.010326356  | 0.673292772     | 0.073807004      | 0.304260798     | 0.146697998   | 0.003589808  | 0.244959444       |
| I_Phyllachora                                                                                                            | 0.339868791                   | 0.554231735     | 0.414599719      | 0.304074337  | 0.180059033     | 0.48884709       | 0.799624017     | 0.415234982   | 0.635751599  | 0.178825088       |
| I_Pichia                                                                                                                 | 0.706337027                   | 0.460636052     | 0.120091665      | 0.76991975   | 0.589491487     | 0.127453447      | 0.679081132     | 0.12992267    | 0.428261194  | 0.871221934       |
| I_Raffaelea                                                                                                              | 0.002315913                   | 1.23568E-05     | 0.000360932      | 0.014438449  | 0.005964961     | 0.08481943       | 0.012760297     | 0.012382767   | 0.011522555  | 0.044960871       |
| I_Rhodotorula                                                                                                            | 0.00364477                    | 0.000142242     | 0.00585667       | 0.431804015  | 0.035802125     | 0.004002137      | 0.000123568     | 0.000642733   | 0.000968309  | 0.005904019       |
| I_Russula                                                                                                                | 0.000441243                   | 8.72429E-06     | 1.62727E-06      | 0.01936995   | 0.00110075      | 0.000269271      | 1.43946E-06     | 0.001027062   | 0.000177672  | 0.017771884       |
| I_Saccharomyces                                                                                                          | 0.108464452                   | 0.203655105     | 0.819392509      | 0.851556715  | 0.038074393     | 0.35440156       | 0.811841687     | 0.167672434   | 0.993914325  | 0.339810879       |
| I_Simplicillium                                                                                                          | 0.012788456                   | 2.09777E-05     | 1.62761E-05      | 0.094847146  | 0.007297654     | 0.002192125      | 0.000705578     | 0.01924926    | 5.0439E-05   | 0.120939512       |
| I_Starmerella                                                                                                            | 0.945130428                   | 0.084679497     | 0.077717395      | 0.755360366  | 0.163646942     | 0.002162365      | 0.017093682     | 0.0008004     | 0.390450742  | 0.361451921       |
| I_Talaromyces                                                                                                            | 0.225726652                   | 0.001600287     | 0.63351698       | 0.248498459  | 0.579239416     | 0.02056998       | 0.005381527     | 0.005225662   | 0.713068681  | 0.321830966       |
| I_Udeniomyces                                                                                                            | 0.002090613                   | 0.000164815     | 0.000168336      | 0.022201146  | 0.000274029     | 0.001890601      | 0.000178887     | 0.017696909   | 0.000633737  | 0.037542842       |
| I_Zygorhynchus                                                                                                           | 0.957334291                   | 0.202205294     | 0.02572141       | 0.582050441  | 0.020195062     | 0.088481032      | 0.130161652     | 0.023615656   | 0.362282186  | 0.180994721       |
| Supplementary Table S26. The Correlation coefficients between fungi and bacteria in COVID-19 patients and Post-COVID-19. |                               |                 |                  |              |                 |                  |                 |               |              |                   |
| rho                                                                                                                      | B_Actinobacteria_unclassified | B_Actinomycetes | B_Alloprevotella | B_Atopobium  | B_Campylobacter | B_Capnocytophaga | B_Fusobacterium | B_Haemophilus | B_Halomonas  | B_Lachnospirillum |
| I_Acremonium                                                                                                             | 0.105748508                   | 0.240211611     | -0.215521704     | 0.15592595   | -0.13391929     | -0.197637001     | -0.19670191     | -0.184553316  | 0.268728105  | -0.053786922      |
| I_Acrodictys                                                                                                             | 0.265625344                   | 0.481420403     | -0.396708934     | 0.219853615  | -0.249187789    | -0.258199707     | -0.274030145    | -0.229700987  | 0.403874114  | -0.127399039      |
| I_Actinomucor                                                                                                            | -0.389362517                  | -0.472340816    | 0.546230572      | -0.191711839 | 0.437613889     | 0.452253866      | 0.498271935     | 0.432217      | -0.408917906 | 0.288477037       |
| I_Angustimassarina                                                                                                       | 0.214427506                   | 0.342850425     | -0.360881643     | 0.098391357  | -0.224569675    | -0.30651349      | -0.34677292     | -0.1956828    | 0.314501761  | -0.084000309      |
| I_Ascomyces_gen_Incertae_sedis                                                                                           | 0.2116555                     | 0.176182739     | -0.195612336     | -0.024892109 | -0.25914203     | -0.086300092     | 0.027610821     | -0.170413803  | -0.023383171 | -0.043599923      |
| I_AspERGILLUS                                                                                                            | 0.088469173                   | 0.12182792      | -0.041497102     | -0.021723293 | -0.252989719    | 0.02336981       | 0.018112102     | -0.113055742  | 0.049652003  | -0.227766454      |



|                                      |              |              |              |              |              |              |              |              |              |              |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| I_Blumeria                           | 0.3930452    | 0.380160554  | -0.48107413  | 0.11027847   | -0.472924071 | -0.383960742 | -0.286673239 | -0.369282638 | 0.218395082  | -0.178041166 |
| I_Chrysosphaeria                     | 0.127815912  | 0.187277775  | -0.299156224 | -0.03590413  | -0.290569984 | -0.230814797 | -0.143503791 | -0.252858688 | 0.048977861  | -0.137299028 |
| I_Dipodascus                         | -0.399081235 | -0.408347223 | 0.425716708  | -0.202601692 | 0.247538184  | 0.261990664  | 0.252585241  | 0.133856123  | -0.296673042 | 0.220172162  |
| I_Diversispora                       | 0.164353305  | 0.325386617  | -0.287711301 | 0.291888412  | -0.043981664 | -0.237326656 | -0.287397004 | -0.193363158 | 0.196838181  | -0.089038412 |
| I_Entorrhiza                         | 0.110266806  | 0.250353697  | -0.244521506 | 0.208906068  | -0.137762517 | -0.209126065 | -0.27472249  | -0.097429882 | 0.314130736  | -0.096162826 |
| I_Fantasmomyces                      | 0.280316949  | 0.39200402   | -0.446335636 | 0.076847238  | -0.297119289 | -0.267724935 | -0.31823834  | -0.173586277 | 0.345798248  | -0.121366418 |
| I_Pilobasidiaceae_gen_Incertae_sedis | 0.182181713  | 0.346293278  | -0.319573772 | 0.126957253  | -0.286811375 | -0.282460095 | -0.350370525 | -0.169839996 | 0.353357536  | -0.098503177 |
| I_Fungi_gen_Incertae_sedis           | 0.223476861  | 0.266372803  | -0.284840594 | 0.166674441  | -0.172387218 | -0.296170713 | -0.231360023 | -0.084055503 | 0.29184685   | -0.023781451 |
| I_Fusarium                           | -0.11058685  | -0.125422704 | 0.04836828   | -0.19739264  | -0.005429576 | 0.136920234  | 0.237612232  | 0.091954002  | -0.173269237 | 0.147623491  |
| I_Galactomyces                       | -0.265386573 | -0.318538737 | 0.405732974  | -0.127549853 | 0.252535021  | 0.251493363  | 0.320938756  | 0.303573827  | -0.227630034 | 0.187471467  |
| I_Hannaella                          | 0.158430656  | 0.117602156  | -0.223023789 | -0.130348863 | -0.312718683 | -0.160211549 | -0.077579098 | -0.172614424 | -0.091985412 | -0.154646054 |
| I_Heitmania                          | -0.016132259 | 0.225966484  | -0.18598646  | 0.22431686   | -0.073779612 | -0.164014759 | -0.261775217 | -0.186329723 | 0.377325678  | -0.048773633 |
| I_Hydnobolites                       | 0.193518675  | 0.289307305  | -0.215813978 | 0.185111456  | -0.165646307 | -0.192950901 | -0.132362335 | -0.191356848 | 0.070167766  | -0.162701617 |
| I_Malassezia                         | -0.141673568 | -0.274926695 | 0.28564217   | -0.161298592 | 0.047472966  | 0.204512048  | 0.321943308  | 0.090290114  | -0.291455759 | 0.21372481   |
| I_Milospium                          | 0.129884012  | 0.212529573  | -0.287571944 | 0.035873215  | -0.270027743 | -0.149597607 | -0.134224216 | 0.068078833  | 0.24946366   | -0.041223032 |
| I_Mucor                              | -0.307930398 | -0.398797771 | 0.491713138  | -0.151346887 | 0.352774149  | 0.392781244  | 0.499545845  | 0.430336405  | -0.385675947 | 0.195886684  |
| I_Paraluscoporella                   | 0.221030416  | 0.390986781  | -0.346589916 | 0.155703752  | -0.291070173 | -0.292614745 | -0.37862716  | -0.21124627  | 0.332852478  | -0.152473616 |
| I_Parasymphodiella                   | 0.252638175  | 0.415978177  | -0.346117643 | 0.175303801  | -0.222373356 | -0.387294353 | -0.344665368 | -0.332745236 | 0.249496139  | -0.129261852 |
| I_Periconia                          | 0.045714059  | 0.235567863  | -0.123108224 | 0.266185771  | 0.044545524  | -0.187299484 | -0.108272626 | -0.152506405 | 0.300662572  | 0.122435082  |
| I_Phyllachora                        | -0.100628631 | -0.062454614 | 0.086074584  | 0.108314137  | 0.140992886  | 0.07306341   | -0.026826017 | 0.085957901  | -0.050034275 | 0.141389369  |
| I_Pichia                             | 0.039810782  | 0.077868725  | -0.163199082 | 0.030908449  | -0.056987808 | -0.160073078 | -0.043710021 | -0.159055581 | -0.083587687 | 0.017133804  |
| I_Raffaelea                          | 0.313835888  | 0.438428932  | -0.364028991 | 0.254299852  | -0.284613153 | -0.180663499 | -0.258741139 | -0.259809893 | 0.2623553    | -0.2095757   |
| I_Rhodotorula                        | -0.30019506  | -0.386382875 | 0.285208089  | -0.082950228 | 0.219181447  | 0.29730044   | 0.389626298  | 0.34931778   | -0.338421841 | 0.284946772  |
| I_Russula                            | 0.358986671  | 0.445193067  | -0.475938776 | 0.243436883  | -0.334931413 | -0.371237402 | -0.478071545 | -0.336822999 | 0.381187868  | -0.246665783 |
| I_Saccharomyces                      | 0.16845169   | 0.133764881  | -0.024131144 | 0.019778433  | -0.216622084 | -0.097655261 | 0.02515857   | -0.145067185 | -0.000806228 | -0.100640638 |
| I_Simplicillium                      | 0.258662531  | 0.427859866  | -0.432971448 | 0.175193311  | -0.277981447 | -0.315446054 | -0.346871646 | -0.243672578 | 0.40952385   | -0.162831687 |
| I_Starmerella                        | 0.007274675  | 0.180743383  | -0.184857611 | -0.032925748 | -0.146438968 | -0.315845352 | -0.248112218 | -0.343533714 | -0.090590431 | -0.096240091 |
| I_Talaromyces                        | 0.12752861   | 0.324505254  | -0.050365074 | 0.121528314  | -0.058561247 | -0.241159505 | -0.287939566 | -0.288882327 | 0.038856108  | -0.104432966 |
| I_Udeniomyces                        | -0.316828834 | -0.382952197 | 0.382456682  | -0.238239998 | 0.37081112   | 0.31974042   | 0.381027306  | 0.246823323  | -0.349685701 | 0.217209101  |
| I_Zygorhiza                          | 0.005654936  | 0.134191047  | -0.232516685 | 0.058128564  | -0.241858486 | -0.178609483 | -0.15895789  | -0.235853218 | 0.096074564  | -0.140693558 |

| B_Lactobacill<br>ales_P5D1.39<br>2 | B_Oribacteriu<br>m | B_Pasteurellac<br>eae_unclassifi<br>ed | B_Saccharimo<br>nadales | B_Solobacteri<br>um | B_Streptococc<br>us | B_Veillonella | B_Eubacteriu<br>m._nodatum_g<br>roup |
|------------------------------------|--------------------|----------------------------------------|-------------------------|---------------------|---------------------|---------------|--------------------------------------|
| 0.219100152                        | 0.1048699          | 0.298950868                            | 0.873924531             | 0.213961425         | 0.668949469         | 0.974264641   | 0.633295197                          |
| 0.318135403                        | 0.221270331        | 0.022357295                            | 0.021930958             | 0.427009123         | 0.130791565         | 0.203133426   | 0.123664147                          |
| 0.013435235                        | 0.001998425        | 0.021425287                            | 0.011507532             | 0.008507081         | 0.080233674         | 0.019152381   | 0.000957117                          |
| 0.639261132                        | 0.227434645        | 0.05943662                             | 0.031573056             | 0.107572289         | 0.401538963         | 0.691718546   | 0.025884852                          |
| 0.019871692                        | 0.502466728        | 0.702909359                            | 0.109891566             | 0.734210316         | 0.145394463         | 0.070084294   | 0.994337731                          |
| 0.821638799                        | 0.548937084        | 0.602852263                            | 0.345269836             | 0.94872821          | 0.229845156         | 0.017069827   | 0.254371709                          |
| 0.00021626                         | 0.649727291        | 0.030763176                            | 0.085144398             | 0.216761975         | 0.009065481         | 0.008215682   | 0.015733581                          |
| 0.028197501                        | 0.991727606        | 0.140099973                            | 0.255394602             | 0.230746296         | 0.309706036         | 0.084749167   | 0.645414313                          |
| 0.03383283                         | 0.103426803        | 0.86664865                             | 0.628239481             | 0.063047743         | 0.262400064         | 0.228978482   | 0.028434046                          |
| 0.524385062                        | 0.902872107        | 0.004736098                            | 0.817960708             | 0.796120049         | 0.530322844         | 0.115841463   | 0.353358996                          |
| 0.843942843                        | 0.069319004        | 0.170446914                            | 0.574301417             | 0.160131656         | 0.149076303         | 0.812975063   | 0.088063236                          |
| 0.064629725                        | 0.158545281        | 0.290735122                            | 0.049429152             | 0.090274194         | 0.200644267         | 0.112395255   | 0.135753937                          |
| 0.636591971                        | 0.226136112        | 0.213758416                            | 0.008011941             | 0.480375883         | 0.383643777         | 0.4586687     | 0.099516091                          |
| 0.147601797                        | 0.654640079        | 0.575177199                            | 0.324981163             | 0.460392083         | 0.147320053         | 0.159269977   | 0.061930343                          |
| 0.550149937                        | 0.493296678        | 0.935384452                            | 0.566177566             | 0.556720919         | 0.811847697         | 0.834272789   | 0.735612238                          |
| 0.07733829                         | 0.174287406        | 0.050645686                            | 0.122618187             | 0.04003895          | 0.335731614         | 0.057787643   | 0.144722331                          |
| 0.070294828                        | 0.69518219         | 0.479100114                            | 0.193213233             | 0.865792112         | 0.175981277         | 0.172922684   | 0.764131639                          |
| 0.52851381                         | 0.544486455        | 0.08403501                             | 0.0075309               | 0.422388447         | 0.528251921         | 0.726627976   | 0.371383493                          |
| 0.055394402                        | 0.397033683        | 0.148400172                            | 0.721686185             | 0.987006165         | 0.168083123         | 0.553853334   | 0.979604108                          |
| 0.633673119                        | 0.067235254        | 0.280755718                            | 0.758470867             | 0.699728889         | 0.569487496         | 0.087484631   | 0.280289465                          |
| 0.304436878                        | 0.487398644        | 0.050285613                            | 0.775067209             | 0.073919856         | 0.771894412         | 0.078206315   | 0.692593521                          |
| 0.024025666                        | 0.00939609         | 0.015019371                            | 0.021199772             | 0.016420012         | 0.14143298          | 0.023723005   | 0.006461134                          |
| 0.747284872                        | 0.148801517        | 0.158967503                            | 0.021840938             | 0.158286785         | 0.467571901         | 0.317265096   | 0.279964848                          |
| 0.098709014                        | 0.881276898        | 0.006705853                            | 0.333909678             | 0.154236404         | 0.025719312         | 0.829635436   | 0.10857848                           |
| 0.687361654                        | 0.778702659        | 0.078178117                            | 0.055065722             | 0.43489706          | 0.608772923         | 0.477194525   | 0.635304518                          |
| 0.397769496                        | 0.101641417        | 0.702082955                            | 0.8628167               | 0.767855104         | 0.422533487         | 0.060895441   | 0.489356023                          |
| 0.077750499                        | 0.382158679        | 0.17477616                             | 0.095981237             | 0.322099923         | 0.019471663         | 0.763891573   | 0.325941622                          |
| 0.068899153                        | 0.237894152        | 0.068347238                            | 0.012867968             | 0.171301035         | 0.095884147         | 0.086330369   | 0.261413086                          |
| 0.484490807                        | 0.006755231        | 0.007333537                            | 0.08625875              | 0.086556583         | 0.257333841         | 0.346698      | 0.040544852                          |
| 0.099615624                        | 0.038829364        | 0.033598018                            | 0.194729603             | 0.071258182         | 0.354266544         | 0.947673247   | 0.109668715                          |
| 0.395546784                        | 0.853566061        | 0.237396008                            | 0.020173988             | 0.92693212          | 0.209744532         | 0.0635102     | 0.978755717                          |
| 0.256929231                        | 0.063284018        | 0.044983034                            | 0.100530444             | 0.112357057         | 0.134513626         | 0.345221448   | 0.061224605                          |
| 0.739354983                        | 0.620196503        | 0.009806207                            | 0.063236824             | 0.468234115         | 0.756147665         | 0.837260063   | 0.94556094                           |
| 0.980277435                        | 0.690784425        | 0.006686176                            | 0.805990363             | 0.388848812         | 0.503734545         | 0.125802771   | 0.140565405                          |
| 0.013820474                        | 0.017309928        | 0.218476715                            | 0.476665894             | 0.347593711         | 0.087483341         | 0.252705728   | 0.051759987                          |
| 0.128850759                        | 0.111800791        | 0.122354615                            | 0.409975072             | 0.297574474         | 0.467086915         | 0.689691254   | 0.573719245                          |
|                                    |                    |                                        |                         |                     |                     |               |                                      |
| B_Lactobacilla                     | B_Oribacterium     | B_Pasteurellac                         | B_Saccharimom           | B_Solobacterium     | B_Streptococcus     | B_Veillonella | B_Eubacterium._nodatum_group         |
| 0.129353762                        | -0.170163861       | -0.10946131                            | 0.016771212             | -0.130796141        | -0.045174247        | 0.00340996    | -0.050397932                         |
| 0.105229101                        | -0.128751795       | -0.237970243                           | 0.238710618             | -0.083813693        | 0.158701046         | -0.133917975  | -0.161664281                         |
| -0.256897188                       | 0.31813809         | 0.239604899                            | -0.262401207            | 0.272832055         | -0.183337883        | 0.243862694   | 0.338736375                          |
| 0.049515718                        | -0.127064291       | -0.197280897                           | 0.224331721             | -0.168872476        | 0.088497072         | -0.041895138  | -0.232267557                         |
| 0.242470359                        | 0.07079647         | -0.040298115                           | 0.16778416              | -0.035877618        | 0.152994399         | -0.189722784  | 0.000750134                          |
| -0.023825932                       | -0.06328958        | -0.054955728                           | 0.099514463             | 0.006797007         | 0.126413131         | -0.248163989  | -0.120042859                         |

|              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.376523876  | -0.047976162 | -0.225383702 | 0.180478387  | -0.130007059 | 0.270669179  | -0.274010773 | -0.251168862 |
| 0.228878418  | -0.001095933 | -0.155011031 | 0.119786559  | -0.126170931 | 0.107067636  | -0.180703598 | -0.048609361 |
| -0.221512204 | 0.170864138  | 0.017747831  | -0.051148263 | 0.194602552  | -0.1180498   | 0.126646696  | 0.228545205  |
| -0.067214074 | 0.012898755  | -0.292015313 | 0.024325791  | -0.027305429 | 0.066256738  | 0.165071536  | -0.097866004 |
| 0.020805556  | -0.190233758 | -0.144135814 | 0.059323679  | -0.147657488 | 0.151624394  | -0.025004207 | -0.178840403 |
| 0.19346837   | -0.148213896 | -0.111328133 | 0.205469955  | -0.177628089 | 0.134652361  | -0.16662916  | -0.156709934 |
| 0.049909997  | -0.127417074 | -0.130853624 | 0.274856959  | -0.074490287 | 0.091893143  | -0.078209728 | -0.172801041 |
| 0.152169968  | -0.047256962 | -0.059188236 | 0.103758939  | -0.077910969 | 0.15227468   | -0.147959203 | -0.195417675 |
| 0.06309797   | 0.072319183  | -0.008569384 | -0.060584692 | -0.062063398 | 0.025157751  | 0.022112865  | 0.035681125  |
| -0.185089976 | 0.142864842  | 0.204405393  | -0.162110077 | 0.2145103    | -0.101489648 | 0.198548281  | 0.153247308  |
| 0.189583003  | 0.041399857  | -0.074706337 | 0.136884457  | -0.017862898 | 0.142310806  | -0.143314103 | -0.031709063 |
| -0.066547833 | -0.063994469 | -0.181112664 | 0.276932609  | -0.084651056 | -0.066590015 | -0.036942495 | -0.094275144 |
| 0.200441344  | -0.089343439 | -0.15187406  | -0.037638514 | -0.001721477 | 0.144928607  | -0.06251416  | 0.002702304  |
| -0.050341944 | 0.191648525  | 0.113643275  | -0.032493799 | 0.040751059  | -0.060069895 | -0.179161642 | 0.113752773  |
| 0.108233442  | -0.073306446 | 0.204718269  | -0.030197914 | -0.187227574 | 0.030635714  | -0.184559274 | -0.041769937 |
| -0.23518422  | 0.26944315   | 0.252866591  | -0.24000956  | 0.249598856  | -0.154497951 | 0.23567711   | 0.282003905  |
| 0.034049724  | -0.151725758 | -0.148065402 | 0.238868519  | -0.148304953 | 0.076672858  | -0.105417456 | -0.113829079 |
| 0.173208173  | -0.015785754 | -0.28078169  | 0.101870952  | -0.149746422 | 0.232519891  | -0.022740966 | -0.168398104 |
| 0.04251944   | -0.029696901 | -0.184576439 | 0.200706536  | -0.08239613  | -0.054061647 | 0.075029622  | 0.050100419  |
| -0.089204821 | 0.171741163  | -0.040415736 | -0.018262776 | 0.031193829  | -0.084624692 | 0.196183361  | 0.072978106  |
| 0.184837364  | 0.092179202  | -0.142704575 | 0.174603853  | 0.104375254  | 0.243239227  | 0.031742308  | 0.103554269  |
| 0.190516026  | -0.124272778 | -0.190889201 | 0.258441378  | -0.143851344 | 0.174654102  | -0.179807551 | -0.118292561 |
| -0.073795515 | 0.28053987   | 0.277818187  | -0.179847853 | 0.179680427  | -0.119302575 | 0.099221682  | 0.213980515  |
| 0.17275101   | -0.215800001 | -0.221797669 | 0.136424018  | -0.188947673 | 0.097682531  | -0.006937057 | -0.167887953 |
| 0.089624017  | -0.01950768  | -0.124403767 | 0.241898103  | 0.009693257  | 0.131998234  | -0.194268631 | 0.002814735  |
| 0.119403349  | -0.1944317   | -0.209554518 | 0.172293003  | -0.166646631 | 0.157202341  | -0.099524396 | -0.195938683 |
| 0.035157135  | -0.052347218 | -0.267973793 | 0.194465785  | -0.076559188 | 0.032816366  | 0.021708665  | 0.00721751   |
| -0.002613075 | 0.042028867  | -0.280878495 | 0.025956355  | 0.090895775  | 0.07058709   | 0.160761713  | 0.154831467  |
| -0.255880498 | 0.247645728  | 0.12952747   | -0.075119427 | 0.099038441  | -0.17916236  | 0.120461806  | 0.203448619  |
| -0.159495455 | -0.166901576 | -0.162222874 | 0.086927178  | -0.109771685 | -0.076756161 | -0.04218545  | -0.059413767 |

| Supplementary Table S27a. The Correlation coefficients between fungi and lipid in COVID-19 patients and Post-COVID-19. |                        |                        |                        |                        |                        |             |             |                        |                        |             |                        |
|------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------|-------------|------------------------|------------------------|-------------|------------------------|
| rownames.ssCo<br>r.r.                                                                                                  | TG.24.4.16.<br>0.18.1. | TG.24.1.18.<br>2.18.3. | TG.20.0.18.<br>1.18.2. | TG.18.1.18.<br>2.22.1. | TG.24.0.18.<br>2.18.3. | SiE.18.1.   | TG.60.3.    | TG.16.0.18.<br>1.22.1. | TG.18.1.18.<br>2.22.0. | TG.59.2.    | TG.18.3.22.<br>1.22.1. |
| Acrodictys                                                                                                             | -0.34383669            | -0.35014199            | -0.41546693            | -0.47420669            | -0.3498292             | 0.29703256  | -0.42183809 | -0.43171585            | -0.49404453            | -0.40977075 | -0.32134831            |
| Actinomucor                                                                                                            | 0.66314723             | 0.64358736             | 0.60502429             | 0.68507567             | 0.61829706             | -0.53577886 | 0.62756398  | 0.63259585             | 0.68855759             | 0.57194061  | 0.63159166             |
| Blumeria                                                                                                               | -0.51954034            | -0.48114899            | -0.53250838            | -0.61573375            | -0.44367566            | 0.42827611  | -0.5141232  | -0.49831014            | -0.57592815            | -0.44767027 | -0.52032603            |
| Botryosphaeria                                                                                                         | 0.45811854             | 0.41932928             | 0.41858696             | 0.5009611              | 0.41903471             | -0.39152168 | 0.45966209  | 0.45701095             | 0.49932328             | 0.42400709  | 0.47957517             |
| Chrysosphaeria                                                                                                         | -0.29589079            | -0.26694223            | -0.40030643            | -0.39687611            | -0.2189828             | 0.38384275  | -0.34649966 | -0.38276438            | -0.36628211            | -0.36055561 | -0.29729453            |
| Galactomyces                                                                                                           | 0.44120372             | 0.45894908             | 0.48590067             | 0.50822056             | 0.45502261             | -0.35398271 | 0.43920236  | 0.46201782             | 0.49350583             | 0.40815275  | 0.37977162             |
| Raffaelea                                                                                                              | -0.38245804            | -0.37120055            | -0.48141848            | -0.52872302            | -0.41517564            | 0.4239855   | -0.48329748 | -0.46293345            | -0.51866875            | -0.40995896 | -0.34986406            |
| Rhodotorula                                                                                                            | 0.44055926             | 0.39087073             | 0.38463293             | 0.36442285             | 0.2953795              | -0.30510339 | 0.33739861  | 0.34483562             | 0.38106317             | 0.28599957  | 0.33371729             |
| Russula                                                                                                                | -0.40074212            | -0.38181015            | -0.29215799            | -0.38282511            | -0.30383425            | 0.27531466  | -0.36016043 | -0.33351978            | -0.40997744            | -0.32467032 | -0.34488568            |
| Simplicillium                                                                                                          | -0.36701646            | -0.43271057            | -0.41422636            | -0.49863593            | -0.38523638            | 0.32388664  | -0.4430016  | -0.44699908            | -0.51028148            | -0.41473843 | -0.34474951            |
| Udeniomyces                                                                                                            | 0.4912782              | 0.47970103             | 0.45121989             | 0.52590234             | 0.47710207             | -0.29672151 | 0.4876053   | 0.47113091             | 0.54177531             | 0.37737512  | 0.47274184             |
| Supplementary Table S27b. The p value of correlation between fungi and lipid in COVID-19 patients and Post-COVID-19.   |                        |                        |                        |                        |                        |             |             |                        |                        |             |                        |
| rownames.ssCo<br>r.P.                                                                                                  | TG.24.4.16.<br>0.18.1. | TG.24.1.18.<br>2.18.3. | TG.20.0.18.<br>1.18.2. | TG.18.1.18.<br>2.22.1. | TG.24.0.18.<br>2.18.3. | SiE.18.1.   | TG.60.3.    | TG.16.0.18.<br>1.22.1. | TG.18.1.18.<br>2.22.0. | TG.59.2.    | TG.18.3.22.<br>1.22.1. |
| Acrodictys                                                                                                             | 0.00090631             | 0.0007168              | 4.6604E-05             | 2.3422E-06             | 0.00072528             | 0.00446951  | 3.4585E-05  | 2.152E-05              | 7.4779E-07             | 6.054E-05   | 0.00201296             |
| Actinomucor                                                                                                            | 1.0696E-12             | 7.836E-12              | 2.6852E-10             | 9.5479E-14             | 8.3998E-11             | 5.2792E-08  | 3.6109E-11  | 2.2562E-11             | 6.3727E-14             | 3.8999E-09  | 2.4799E-11             |
| Blumeria                                                                                                               | 1.5448E-07             | 1.5835E-06             | 6.5836E-08             | 1.0558E-10             | 1.1875E-05             | 2.5429E-05  | 2.1832E-07  | 5.7947E-07             | 2.8694E-09             | 9.687E-06   | 1.4685E-07             |
| Botryosphaeria                                                                                                         | 5.6177E-06             | 3.8923E-05             | 4.0301E-05             | 4.9367E-07             | 3.9464E-05             | 0.00013569  | 5.1753E-06  | 5.9568E-06             | 5.4513E-07             | 3.1203E-05  | 1.7318E-06             |
| Chrysosphaeria                                                                                                         | 0.00463266             | 0.01097894             | 9.2546E-05             | 0.0001076              | 0.03811147             | 0.00018796  | 0.00082131  | 0.00019663             | 0.00038448             | 0.00048137  | 0.00443281             |
| Galactomyces                                                                                                           | 1.3452E-05             | 5.3754E-06             | 1.2053E-06             | 3.1612E-07             | 6.6143E-06             | 0.00061988  | 1.4871E-05  | 4.5628E-06             | 7.7207E-07             | 6.5155E-05  | 0.00022268             |
| Raffaelea                                                                                                              | 0.00019916             | 0.00031592             | 1.5594E-06             | 8.476E-08              | 4.7237E-05             | 3.1235E-05  | 1.4004E-06  | 4.3437E-06             | 1.6339E-07             | 6.0024E-05  | 0.00072433             |
| Rhodotorula                                                                                                            | 1.3895E-05             | 0.00013953             | 0.00018183             | 0.00041377             | 0.00470742             | 0.00345492  | 0.00114589  | 0.00087353             | 0.00021107             | 0.00628306  | 0.00130745             |
| Russula                                                                                                                | 9.0781E-05             | 0.00020461             | 0.00520365             | 0.00019613             | 0.00359938             | 0.00863144  | 0.00048882  | 0.00131667             | 5.9973E-05             | 0.0017958   | 0.00087191             |
| Simplicillium                                                                                                          | 0.00037344             | 2.0499E-05             | 4.9356E-05             | 5.6821E-07             | 0.00017727             | 0.00184503  | 1.2287E-05  | 1.0026E-05             | 2.7801E-07             | 4.8202E-05  | 0.00087631             |
| Udeniomyces                                                                                                            | 8.8065E-07             | 1.7195E-06             | 8.0662E-06             | 1.0211E-07             | 1.9915E-06             | 0.00451344  | 1.0918E-06  | 2.7781E-06             | 3.5002E-08             | 0.0002458   | 2.5411E-06             |

| TG.18.1.18.<br>2.24.1. | TG.18.1.18.<br>1.18.1..rep. | TG.22.1.18.<br>2.22.1. | TG.20.1.18.<br>1.22.1. | TG.16.0.18.<br>1.24.1. | TG.25.0.18.<br>1.18.2. | TG.24.1.18.<br>2.22.1. | TG.26.0.18.<br>1.18.2. | TG.18.1.18.<br>1.24.0. | TG.18.1.22.<br>1.23.1. | TG.25.0.18.<br>1.18.1. | TG.29.0.18.<br>1.18.3. |
|------------------------|-----------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| -0.42932872            | -0.3549821                  | -0.40988599            | -0.45212989            | -0.4165041             | -0.34184467            | -0.3960242             | -0.43309874            | -0.40382763            | -0.44161008            | -0.31772647            | -0.36327942            |
| 0.6114642              | 0.62748758                  | 0.64718934             | 0.64038923             | 0.62464965             | 0.54811293             | 0.6712244              | 0.69115539             | 0.60154237             | 0.6994727              | 0.56172407             | 0.58209165             |
| -0.51538031            | -0.55698059                 | -0.45053184            | -0.51022783            | -0.48511053            | -0.45159873            | -0.55786553            | -0.53845482            | -0.45041606            | -0.42429803            | -0.36656214            | -0.29944757            |
| 0.45144942             | 0.43040519                  | 0.48919                | 0.46224255             | 0.46148844             | 0.4349416              | 0.53597983             | 0.52529276             | 0.44250621             | 0.54756241             | 0.45243919             | 0.45065997             |
| -0.29779653            | -0.32289644                 | -0.27978966            | -0.33213693            | -0.33927646            | -0.26787185            | -0.26793693            | -0.35164979            | -0.32794431            | -0.23812381            | -0.26192224            | -0.00867341            |
| 0.4199131              | 0.4297674                   | 0.42101861             | 0.45345964             | 0.44774148             | 0.32224692             | 0.45629966             | 0.47139561             | 0.43407508             | 0.3955728              | 0.31420338             | 0.28496452             |
| -0.43661927            | -0.43599294                 | -0.41262911            | -0.44804983            | -0.40481644            | -0.40559112            | -0.42541947            | -0.46290049            | -0.38242508            | -0.40558287            | -0.30579007            | -0.31107269            |
| 0.30934249             | 0.29800105                  | 0.34581173             | 0.30493606             | 0.27780956             | 0.2794457              | 0.36626351             | 0.37196212             | 0.2495954              | 0.36963806             | 0.28901156             | 0.28533024             |
| -0.36828851            | -0.32067758                 | -0.34147171            | -0.36778523            | -0.32238037            | -0.28231874            | -0.43644194            | -0.36538623            | -0.29938016            | -0.43648388            | -0.28246134            | -0.39402325            |
| -0.42611968            | -0.38218045                 | -0.42151102            | -0.45509315            | -0.43297486            | -0.31610642            | -0.3796366             | -0.44980722            | -0.40071422            | -0.46176662            | -0.35105958            | -0.38120586            |
| 0.43760221             | 0.48530705                  | 0.48253626             | 0.49286765             | 0.45491427             | 0.39683508             | 0.49703457             | 0.5246136              | 0.42986977             | 0.55479158             | 0.43777404             | 0.53982072             |
|                        |                             |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| TG.18.1.18.<br>2.24.1. | TG.18.1.18.<br>1.18.1..rep. | TG.22.1.18.<br>2.22.1. | TG.20.1.18.<br>1.22.1. | TG.16.0.18.<br>1.24.1. | TG.25.0.18.<br>1.18.2. | TG.24.1.18.<br>2.22.1. | TG.26.0.18.<br>1.18.2. | TG.18.1.18.<br>1.24.0. | TG.18.1.22.<br>1.23.1. | TG.25.0.18.<br>1.18.1. | TG.29.0.18.<br>1.18.3. |
| 2.4167E-05             | 0.0005967                   | 6.0224E-05             | 7.6938E-06             | 4.4413E-05             | 0.00097505             | 0.00011167             | 2.0113E-05             | 7.9146E-05             | 1.318E-05              | 0.00227647             | 0.00043279             |
| 1.5382E-10             | 3.6365E-11                  | 5.4894E-12             | 1.0706E-11             | 4.7231E-11             | 2.2471E-08             | 4.4986E-13             | 4.7073E-14             | 3.6105E-10             | 1.7319E-14             | 8.4045E-09             | 1.7712E-09             |
| 2.0159E-07             | 1.19E-08                    | 8.3589E-06             | 2.7895E-07             | 1.2616E-06             | 7.9091E-06             | 1.1157E-08             | 4.399E-08              | 8.4092E-06             | 3.0773E-05             | 0.00038024             | 0.00414118             |
| 7.9707E-06             | 2.2938E-05                  | 9.9542E-07             | 4.5081E-06             | 4.6942E-06             | 1.8372E-05             | 5.2077E-08             | 1.0629E-07             | 1.2598E-05             | 2.3362E-08             | 7.5709E-06             | 8.3037E-06             |
| 0.00436322             | 0.00190898                  | 0.00756753             | 0.00138294             | 0.00107066             | 0.01069334             | 0.01067359             | 0.00067721             | 0.00160272             | 0.02381639             | 0.01263913             | 0.93533495             |
| 3.787E-05              | 2.3659E-05                  | 3.595E-05              | 7.1785E-06             | 9.6517E-06             | 0.001952               | 6.1846E-06             | 2.7378E-06             | 1.9172E-05             | 0.00011389             | 0.00256218             | 0.00648273             |
| 1.691E-05              | 1.7443E-05                  | 5.3123E-05             | 9.5001E-06             | 7.5721E-05             | 7.3135E-05             | 2.9169E-05             | 4.3514E-06             | 0.00019944             | 7.3162E-05             | 0.00337894             | 0.00284268             |
| 0.00300925             | 0.00433515                  | 0.00084254             | 0.00347367             | 0.00802314             | 0.007645               | 0.00038476             | 0.00030637             | 0.01767054             | 0.00033637             | 0.00573261             | 0.00641155             |
| 0.00035501             | 0.00205958                  | 0.00098843             | 0.0003622              | 0.00194309             | 0.00701886             | 1.7059E-05             | 0.00039835             | 0.00415004             | 1.7024E-05             | 0.00698899             | 0.00012181             |
| 2.8207E-05             | 0.00020148                  | 3.5124E-05             | 6.5899E-06             | 2.0235E-05             | 0.00240408             | 0.00022393             | 8.678E-06              | 9.0893E-05             | 4.6247E-06             | 0.00069246             | 0.00020982             |
| 1.6105E-05             | 1.2474E-06                  | 1.4629E-06             | 8.0181E-07             | 6.652E-06              | 0.00010779             | 6.2561E-07             | 1.1112E-07             | 2.3542E-05             | 1.3946E-08             | 1.5968E-05             | 4.0054E-08             |

| TG.18.1.22.<br>1.24.1. | TG.26.0.18.<br>1.18.1. | TG.30.0.18.<br>2.18.2. | TG.18.1.22.<br>1.23.0. | TG.29.0.18.<br>1.18.2. | TG.30.0.18.<br>1.18.2. | TG.18.1.22.<br>1.24.0. | TG.30.0.18.<br>1.18.1. | PC.40.8p.   | PC.39.7p.   | SM.d34.2..r<br>ep..rep. | SM.d34.2..r<br>ep. |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------|-------------|-------------------------|--------------------|
| -0.45912664            | -0.42526238            | -0.37812899            | -0.40583611            | -0.36563362            | -0.39388402            | -0.44050706            | -0.37531382            | -0.34116969 | -0.4195662  | -0.65231922             | -0.60291394        |
| 0.70507215             | 0.64511547             | 0.58318316             | 0.62618868             | 0.55266453             | 0.65353102             | 0.67736961             | 0.59788581             | 0.50062131  | 0.61277401  | 0.73347325              | 0.72553797         |
| -0.54950412            | -0.48722776            | -0.46969444            | -0.31167954            | -0.25318277            | -0.52485823            | -0.48342336            | -0.46906588            | -0.35523991 | -0.47765059 | -0.6052303              | -0.51579383        |
| 0.5372406              | 0.48677451             | 0.47703007             | 0.47552186             | 0.43449385             | 0.51429933             | 0.50806618             | 0.43921879             | 0.44837409  | 0.54078725  | 0.52889832              | 0.5536306          |
| -0.33664562            | -0.33349418            | -0.2421212             | -0.10449001            | 0.01416751             | -0.31439036            | -0.34919557            | -0.33074249            | -0.36259149 | -0.45026456 | -0.45296977             | -0.30120826        |
| 0.49596464             | 0.45580409             | 0.32447701             | 0.33454097             | 0.26674265             | 0.47469308             | 0.48866445             | 0.44038412             | 0.25101771  | 0.33177719  | 0.5352484               | 0.45778638         |
| -0.48108883            | -0.42396077            | -0.35616858            | -0.30024374            | -0.26624051            | -0.41270328            | -0.41993906            | -0.35795693            | -0.26999026 | -0.39781966 | -0.59672948             | -0.50917488        |
| 0.37187846             | 0.30171955             | 0.27090244             | 0.29932112             | 0.24347846             | 0.29824275             | 0.3267358              | 0.30276073             | 0.21356308  | 0.32035856  | 0.39577915              | 0.44688072         |
| -0.38753923            | -0.31855539            | -0.38167594            | -0.40911346            | -0.41844943            | -0.34764537            | -0.34897069            | -0.30249215            | -0.33429988 | -0.35461589 | -0.60254336             | -0.59205822        |
| -0.46589625            | -0.43191768            | -0.34805322            | -0.4248808             | -0.36985765            | -0.37299616            | -0.44169664            | -0.34342803            | -0.42714383 | -0.52009347 | -0.71529268             | -0.64170273        |
| 0.5624381              | 0.48000173             | 0.48176301             | 0.47007844             | 0.44430365             | 0.51157585             | 0.50154516             | 0.48483451             | 0.31680437  | 0.41434046  | 0.595258                | 0.55094684         |
|                        |                        |                        |                        |                        |                        |                        |                        |             |             |                         |                    |
| TG.18.1.22.<br>1.24.1. | TG.26.0.18.<br>1.18.1. | TG.30.0.18.<br>2.18.2. | TG.18.1.22.<br>1.23.0. | TG.29.0.18.<br>1.18.2. | TG.30.0.18.<br>1.18.2. | TG.18.1.22.<br>1.24.0. | TG.30.0.18.<br>1.18.1. | PC.40.8p.   | PC.39.7p.   | SM.d34.2..r<br>ep..rep. | SM.d34.2..r<br>ep. |
| 5.3249E-06             | 2.9389E-05             | 0.0002383              | 7.2334E-05             | 0.00039447             | 0.00012255             | 1.3931E-05             | 0.00026743             | 0.00099939  | 3.8493E-05  | 3.2794E-12              | 3.2144E-10         |
| 8.6597E-15             | 6.7417E-12             | 1.6245E-09             | 4.1001E-11             | 1.6252E-08             | 2.8995E-12             | 2.2848E-13             | 4.9085E-10             | 5.0396E-07  | 1.3713E-10  | 2.2204E-16              | 4.4409E-16         |
| 2.0363E-08             | 1.116E-06              | 3.007E-06              | 0.00278625             | 0.01605354             | 1.0936E-07             | 1.3903E-06             | 3.1126E-06             | 0.00059086  | 1.9309E-06  | 2.6383E-10              | 1.9636E-07         |
| 4.7795E-08             | 1.1458E-06             | 1.9996E-06             | 2.1762E-06             | 1.8781E-05             | 2.159E-07              | 3.1916E-07             | 1.4859E-05             | 9.3431E-06  | 3.7475E-08  | 8.378E-08               | 1.5163E-08         |
| 0.00117738             | 0.00131787             | 0.02149481             | 0.32703237             | 0.89456302             | 0.00254624             | 0.00074272             | 0.0014528              | 0.00044462  | 8.4753E-06  | 7.3644E-06              | 0.00391554         |
| 6.6698E-07             | 6.3481E-06             | 0.00180784             | 0.0012696              | 0.01104111             | 2.2795E-06             | 1.0265E-06             | 1.4017E-05             | 0.01701338  | 0.00140066  | 5.4726E-08              | 5.7174E-06         |
| 1.589E-06              | 3.1271E-05             | 0.00057022             | 0.00403775             | 0.01119891             | 5.2943E-05             | 3.7824E-05             | 0.00053233             | 0.01006666  | 0.00010325  | 5.4048E-10              | 2.979E-07          |
| 0.00030741             | 0.00385211             | 0.00980688             | 0.00415782             | 0.0207519              | 0.00430219             | 0.00167169             | 0.00372576             | 0.04326966  | 0.00208209  | 0.00011287              | 1.0087E-05         |
| 0.00016083             | 0.00221356             | 0.00020576             | 6.2377E-05             | 4.0561E-05             | 0.00078703             | 0.000749               | 0.003758               | 0.00128058  | 0.0006051   | 3.3171E-10              | 7.9448E-10         |
| 3.7007E-06             | 2.1309E-05             | 0.00077514             | 2.993E-05              | 0.00033343             | 0.00029384             | 1.3123E-05             | 0.00092004             | 2.6854E-05  | 1.4907E-07  | 2.2204E-15              | 9.4222E-12         |
| 7.9721E-09             | 1.6903E-06             | 1.529E-06              | 2.9441E-06             | 1.1503E-05             | 2.5636E-07             | 4.7646E-07             | 1.2819E-06             | 0.00234833  | 4.9097E-05  | 6.1062E-10              | 1.8377E-08         |

| SM.d34.1.   | PC.33.2p.   | PC.34.3p.   | PC.14.0e.20.4. | PC.36.4p.   | PC.32.1p.   | PC.33.1p.   | PC.20.2.20.4. | DG.22.1.18.2. | DG.18.1.22.1. | DG.20.0.18.1. | DG.18.1.22.0. |
|-------------|-------------|-------------|----------------|-------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|
| -0.36751039 | -0.50020167 | -0.47988641 | -0.48094003    | -0.51017821 | -0.54802651 | -0.42399473 | -0.37063835   | -0.43270363   | -0.50833436   | -0.35623328   | -0.40204964   |
| 0.73053709  | 0.59056177  | 0.70685131  | 0.71012584     | 0.60618129  | 0.59040896  | 0.51502925  | 0.64104414    | 0.70346762    | 0.68862308    | 0.55706332    | 0.54567886    |
| -0.49219829 | -0.4041678  | -0.51438786 | -0.49156973    | -0.38488942 | -0.60573479 | -0.56026395 | -0.50971506   | -0.63254754   | -0.59489225   | -0.44718232   | -0.42255297   |
| 0.59234915  | 0.50030126  | 0.574828    | 0.57581777     | 0.44923424  | 0.48679808  | 0.47229335  | 0.53956183    | 0.51460568    | 0.49666035    | 0.41121087    | 0.42301732    |
| -0.22700548 | -0.4133212  | -0.48497681 | -0.47916664    | -0.35952372 | -0.50655344 | -0.46437629 | -0.42224562   | -0.40153354   | -0.40169158   | -0.31023493   | -0.3486378    |
| 0.38183016  | 0.31298351  | 0.40472186  | 0.40950605     | 0.36084451  | 0.39042646  | 0.27873172  | 0.39612556    | 0.4025299     | 0.35670837    | 0.31662407    | 0.32571594    |
| -0.38471613 | -0.41065122 | -0.4206066  | -0.43731977    | -0.34672416 | -0.49661527 | -0.38005985 | -0.39014709   | -0.4854814    | -0.52006151   | -0.38380136   | -0.3769694    |
| 0.65785943  | 0.33769609  | 0.43798419  | 0.46594735     | 0.44756864  | 0.34103345  | 0.29458932  | 0.39602086    | 0.43710105    | 0.4454305     | 0.33528836    | 0.26058358    |
| -0.48197262 | -0.40846758 | -0.46972597 | -0.49843009    | -0.49774227 | -0.42708919 | -0.32753906 | -0.46432403   | -0.43972169   | -0.42620005   | -0.3033729    | -0.3208034    |
| -0.40495948 | -0.59216372 | -0.57194507 | -0.56477604    | -0.55716101 | -0.51941621 | -0.42896087 | -0.46293944   | -0.49465497   | -0.5412702    | -0.3626721    | -0.40226696   |
| 0.47379431  | 0.42134261  | 0.48461972  | 0.47920701     | 0.46750096  | 0.45388328  | 0.36485287  | 0.3876206     | 0.51758997    | 0.53354886    | 0.39870376    | 0.39709283    |
|             |             |             |                |             |             |             |               |               |               |               |               |
| SM.d34.1.   | PC.33.2p.   | PC.34.3p.   | PC.14.0e.20.4. | PC.36.4p.   | PC.32.1p.   | PC.33.1p.   | PC.20.2.20.4. | DG.22.1.18.2. | DG.18.1.22.1. | DG.20.0.18.1. | DG.18.1.22.0. |
| 0.00036618  | 5.1693E-07  | 1.7015E-06  | 1.6025E-06     | 2.7981E-07  | 2.2609E-08  | 3.1221E-05  | 0.00032315    | 2.0506E-05    | 3.1389E-07    | 0.00056881    | 8.5669E-05    |
| 4.4409E-16  | 8.9767E-10  | 7.1054E-15  | 4.4409E-15     | 2.4317E-10  | 9.089E-10   | 2.0614E-07  | 1.0046E-11    | 1.0658E-14    | 6.3283E-14    | 1.1828E-08    | 2.6669E-08    |
| 8.3416E-07  | 7.7952E-05  | 2.1469E-07  | 8.6566E-07     | 0.00017988  | 2.5267E-10  | 9.3595E-09  | 2.8803E-07    | 2.2665E-11    | 6.2936E-10    | 9.9323E-06    | 3.3434E-05    |
| 7.7578E-10  | 5.1383E-07  | 3.1242E-09  | 2.8941E-09     | 8.9384E-06  | 1.1442E-06  | 2.6051E-06  | 4.0773E-08    | 2.1175E-07    | 6.3979E-07    | 5.6691E-05    | 3.2706E-05    |
| 0.03142622  | 5.1459E-05  | 1.2714E-06  | 1.7723E-06     | 0.00050105  | 3.5051E-07  | 4.0184E-06  | 3.3924E-05    | 8.7654E-05    | 8.7042E-05    | 0.00292227    | 0.00075839    |
| 0.00020444  | 0.00266837  | 7.6043E-05  | 6.1274E-05     | 0.00047599  | 0.00014221  | 0.00780803  | 0.00011118    | 8.386E-05     | 0.00055853    | 0.00236262    | 0.00173197    |
| 0.00018119  | 5.8159E-05  | 3.6655E-05  | 1.6333E-05     | 0.00081449  | 6.4152E-07  | 0.00022004  | 0.00014392    | 1.2349E-06    | 1.4938E-07    | 0.00018828    | 0.00024992    |
| 1.8592E-12  | 0.00113366  | 1.5802E-05  | 3.6904E-06     | 9.7376E-06  | 0.00100437  | 0.00482507  | 0.00011169    | 1.6511E-05    | 1.0862E-05    | 0.00123613    | 0.01311715    |
| 1.5108E-06  | 6.4232E-05  | 3.0018E-06  | 5.753E-07      | 5.996E-07   | 2.6925E-05  | 0.00162555  | 4.0298E-06    | 1.449E-05     | 2.8099E-05    | 0.00365322    | 0.00205076    |
| 7.5237E-05  | 7.8765E-10  | 3.8986E-09  | 6.7001E-09     | 1.1745E-08  | 1.5572E-07  | 2.4601E-05  | 4.3423E-06    | 7.2114E-07    | 3.6246E-08    | 0.00044322    | 8.4846E-05    |
| 2.3966E-06  | 3.5404E-05  | 1.2979E-06  | 1.7683E-06     | 3.391E-06   | 7.0213E-06  | 0.00040682  | 0.00016028    | 1.7509E-07    | 6.1385E-08    | 9.9317E-05    | 0.00010658    |