

| Performance (STRESS values) for large colour difference data (LCD)                |                                                                   |                         |       |       |       |                                            |                             |                              |                                  |                               |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------|-------|-------|-------|--------------------------------------------|-----------------------------|------------------------------|----------------------------------|-------------------------------|
| data set                                                                          | Calculations with data for grey surrounds (D65) and 0,1 < Y < 190 |                         |       |       |       | Colour difference formula and STRESS value |                             |                              |                                  |                               |
|                                                                                   | Difference $\Delta E^*_{CIELAB}$                                  |                         |       |       |       |                                            |                             |                              |                                  |                               |
| Name                                                                              | Pairs                                                             | $\Delta E^*_{ab}$ range | min   | max   | mean  | CIE LAB<br>$\Delta E_{ab\_PF}$             | CMC<br>$\Delta E_{CMs\_PF}$ | CIE94<br>$\Delta E_{94\_PF}$ | CIEDE2000<br>$\Delta E_{00\_PF}$ | LABJND<br>$\Delta E_{85\_PF}$ |
| OS_0128                                                                           | 128                                                               | 0.0 to <99.0            | 7.33  | 21.63 | 14.32 | 21.7                                       | 21.7                        | 18.5                         | 19.0                             | 19.1                          |
| MU_0844                                                                           | 844                                                               | 0.0 to <99.0            | 4.17  | 22.59 | 10.05 | 12.7                                       | 24.0                        | 24.6                         | 23.7                             | 25.9                          |
| PO_1308                                                                           | 1308                                                              | 0.0 to <99.0            | 0.87  | 26.19 | 8.9   | 26.4                                       | 30.1                        | 25.9                         | 28.0                             | 30.8                          |
| GU_0292                                                                           | 292                                                               | 0.0 to <99.0            | 4.79  | 20.86 | 11.42 | 21.1                                       | 18.2                        | 14.4                         | 14.7                             | 16.7                          |
| ZH_0144                                                                           | 144                                                               | 0.0 to <99.0            | 4.85  | 19.79 | 9.91  | 20.6                                       | 24.7                        | 22.5                         | 21.2                             | 18.3                          |
| BA_0238                                                                           | 238                                                               | 0.0 to <99.0            | 4.11  | 35.78 | 11.74 | 27.3                                       | 21.1                        | 19.2                         | 17.9                             | 23.4                          |
| RL_0080                                                                           | 80                                                                | 0.0 to <99.0            | 1.38  | 36.6  | 11.11 | 38.4                                       | 43.2                        | 45.5                         | 46.9                             | 38.7                          |
| KL_0624                                                                           | 624                                                               | 0.0 to <99.0            | 1.91  | 43.77 | 21.21 | 20.6                                       | 22.3                        | 25.2                         | 23.2                             | 22.8                          |
| OS_0128                                                                           | 0                                                                 |                         |       |       |       |                                            |                             |                              |                                  |                               |
| MU_0844                                                                           | 17                                                                | 0.0 to <5.0             | 4.17  | 4.97  | 4.63  | 2.5                                        | 9.0                         | 4.1                          | 12.0                             | 8.6                           |
| PO_1308                                                                           | 268                                                               | 0.0 to <5.0             | 0.87  | 4.99  | 3.36  | 25.3                                       | 28.4                        | 24.1                         | 25.8                             | 27.5                          |
| GU_0292                                                                           | 1                                                                 | 0.0 to <5.0             | 4.79  | 4.79  | 4.79  | 0.1                                        | 0.1                         | 0.1                          | 0.1                              | 0.1                           |
| ZH_0144                                                                           | 3                                                                 | 0.0 to <5.0             | 4.85  | 4.96  | 4.91  | 0.8                                        | 7.2                         | 0.7                          | 4.1                              | 10.7                          |
| BA_0238                                                                           | 8                                                                 | 0.0 to <5.0             | 4.11  | 4.92  | 4.63  | 21.2                                       | 11.9                        | 23.3                         | 18.4                             | 27.4                          |
| RL_0080                                                                           | 13                                                                | 0.0 to <5.0             | 1.38  | 4.93  | 3.27  | 19.2                                       | 20.9                        | 18.9                         | 17.6                             | 10.1                          |
| KL_0624                                                                           | 6                                                                 | 0.0 to <5.0             | 1.91  | 4.88  | 3.23  | 47.4                                       | 48.0                        | 48.0                         | 50.2                             | 52.7                          |
| OS_0128                                                                           | 128                                                               | 5.0 to <99.0            | 7.33  | 21.63 | 14.32 | 21.7                                       | 21.7                        | 18.5                         | 19.0                             | 19.1                          |
| MU_0844                                                                           | 827                                                               | 5.0 to <99.0            | 5.01  | 22.59 | 10.16 | 12.8                                       | 24.1                        | 24.6                         | 23.8                             | 26.0                          |
| PO_1308                                                                           | 1040                                                              | 5.0 to <99.0            | 5.01  | 26.19 | 10.33 | 26.1                                       | 30.2                        | 26.0                         | 28.1                             | 28.6                          |
| GU_0292                                                                           | 291                                                               | 5.0 to <99.0            | 5.33  | 20.86 | 11.44 | 21.1                                       | 18.2                        | 14.4                         | 14.7                             | 16.5                          |
| ZH_0144                                                                           | 141                                                               | 5.0 to <99.0            | 5.0   | 19.79 | 10.01 | 20.6                                       | 24.7                        | 22.6                         | 21.2                             | 18.1                          |
| BA_0238                                                                           | 230                                                               | 5.0 to <99.0            | 5.0   | 35.78 | 11.98 | 27.4                                       | 21.1                        | 19.0                         | 17.9                             | 22.1                          |
| RL_0080                                                                           | 67                                                                | 5.0 to <99.0            | 5.14  | 36.6  | 12.63 | 38.6                                       | 43.4                        | 45.8                         | 47.2                             | 33.8                          |
| KL_0624                                                                           | 618                                                               | 5.0 to <99.0            | 5.02  | 43.77 | 21.38 | 20.5                                       | 22.3                        | 25.2                         | 23.1                             | 22.6                          |
| OS_0128                                                                           | 9                                                                 | 5.0 to <10.0            | 7.33  | 9.86  | 8.71  | 22.6                                       | 24.5                        | 20.9                         | 20.2                             | 21.7                          |
| MU_0844                                                                           | 411                                                               | 5.0 to <10.0            | 5.01  | 9.99  | 8.58  | 12.0                                       | 24.4                        | 25.8                         | 25.5                             | 20.6                          |
| PO_1308                                                                           | 567                                                               | 5.0 to <10.0            | 5.01  | 9.99  | 7.44  | 25.2                                       | 29.2                        | 24.9                         | 28.4                             | 24.9                          |
| GU_0292                                                                           | 95                                                                | 5.0 to <10.0            | 5.33  | 9.97  | 8.64  | 20.5                                       | 14.5                        | 13.8                         | 13.0                             | 18.3                          |
| ZH_0144                                                                           | 70                                                                | 5.0 to <10.0            | 5.0   | 9.98  | 7.4   | 22.2                                       | 22.9                        | 19.3                         | 18.5                             | 17.9                          |
| BA_0238                                                                           | 33                                                                | 5.0 to <10.0            | 5.0   | 9.96  | 7.09  | 23.8                                       | 21.3                        | 28.7                         | 19.4                             | 39.4                          |
| RL_0080                                                                           | 27                                                                | 5.0 to <10.0            | 5.14  | 9.99  | 7.54  | 37.2                                       | 45.8                        | 44.5                         | 48.2                             | 36.6                          |
| KL_0624                                                                           | 68                                                                | 5.0 to <10.0            | 5.02  | 9.99  | 8.08  | 41.6                                       | 41.1                        | 41.0                         | 42.1                             | 38.4                          |
| OS_0128                                                                           | 115                                                               | 10.0 to <20.0           | 10.2  | 19.7  | 14.54 | 21.8                                       | 21.6                        | 18.1                         | 19.1                             | 18.4                          |
| MU_0844                                                                           | 412                                                               | 10.0 to <20.0           | 10.0  | 19.34 | 11.63 | 13.0                                       | 22.4                        | 23.1                         | 21.5                             | 28.9                          |
| PO_1308                                                                           | 460                                                               | 10.0 to <20.0           | 10.02 | 19.87 | 13.55 | 26.3                                       | 30.8                        | 26.4                         | 28.1                             | 28.2                          |
| GU_0292                                                                           | 195                                                               | 10.0 to <20.0           | 10.01 | 18.64 | 12.76 | 21.4                                       | 19.1                        | 14.4                         | 15.0                             | 13.8                          |
| ZH_0144                                                                           | 71                                                                | 10.0 to <20.0           | 10.02 | 19.79 | 12.59 | 19.0                                       | 24.1                        | 22.4                         | 22.3                             | 18.1                          |
| BA_0238                                                                           | 191                                                               | 10.0 to <20.0           | 10.11 | 19.3  | 12.39 | 27.1                                       | 21.3                        | 17.8                         | 17.9                             | 18.7                          |
| RL_0080                                                                           | 33                                                                | 10.0 to <20.0           | 10.1  | 19.9  | 14.34 | 34.1                                       | 41.1                        | 40.7                         | 45.2                             | 31.4                          |
| KL_0624                                                                           | 211                                                               | 10.0 to <20.0           | 10.0  | 19.95 | 14.86 | 27.0                                       | 25.7                        | 26.4                         | 26.9                             | 21.9                          |
| OS_0128                                                                           | 4                                                                 | 20.0 to <99.0           | 20.01 | 21.63 | 20.85 | 16.4                                       | 17.4                        | 19.3                         | 12.1                             | 29.0                          |
| MU_0844                                                                           | 4                                                                 | 20.0 to <99.0           | 20.81 | 22.59 | 21.89 | 11.8                                       | 3.8                         | 8.3                          | 1.2                              | 3.3                           |
| PO_1308                                                                           | 13                                                                | 20.0 to <99.0           | 20.02 | 26.19 | 22.77 | 21.7                                       | 17.4                        | 19.8                         | 16.8                             | 22.1                          |
| GU_0292                                                                           | 1                                                                 | 20.0 to <99.0           | 20.86 | 20.86 | 20.86 | 0.1                                        | 0.1                         | 0.1                          | 0.1                              | 0.1                           |
| ZH_0144                                                                           | 0                                                                 |                         |       |       |       |                                            |                             |                              |                                  |                               |
| BA_0238                                                                           | 6                                                                 | 20.0 to <99.0           | 20.19 | 35.78 | 26.08 | 12.8                                       | 6.6                         | 11.2                         | 11.8                             | 10.8                          |
| RL_0080                                                                           | 7                                                                 | 20.0 to <99.0           | 20.07 | 36.6  | 24.25 | 34.2                                       | 37.2                        | 45.3                         | 41.2                             | 35.2                          |
| KL_0624                                                                           | 339                                                               | 20.0 to <99.0           | 20.06 | 43.77 | 28.11 | 15.9                                       | 19.3                        | 22.9                         | 20.0                             | 18.6                          |
| data sets: OS_0128, MU_0844, PO_1308, GU_0292, ZH_0144, BA_0238, RL_0080, KL_0624 |                                                                   |                         |       |       |       |                                            |                             |                              |                                  |                               |

| Performance (STRESS values) for large colour difference data (LCD)                |                                                                   |                          |       |       |       |                                            |                   |                     |                         |                      |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------|-------|-------|-------|--------------------------------------------|-------------------|---------------------|-------------------------|----------------------|
| data set                                                                          | Calculations with data for grey surrounds (D65) and 0,1 < Y < 190 |                          |       |       |       | Colour difference formula and STRESS value |                   |                     |                         |                      |
|                                                                                   | Difference $\Delta E^*_{CIEDE2000}$                               |                          |       |       |       | Colour difference formula and STRESS value |                   |                     |                         |                      |
| Name                                                                              | Pairs                                                             | $\Delta E^*_{C00}$ range | min   | max   | mean  | CIELAB<br>$\Delta E$                       | CMC<br>$\Delta E$ | CIE94<br>$\Delta E$ | CIEDE2000<br>$\Delta E$ | LABJND<br>$\Delta E$ |
| OS_0128                                                                           | 128                                                               | 0.0 to <99.0             | 7.33  | 21.63 | 14.32 | 21.7                                       | 21.7              | 18.5                | 19.0                    | 19.1                 |
| MU_0844                                                                           | 844                                                               | 0.0 to <99.0             | 4.17  | 22.59 | 10.05 | 12.7                                       | 24.0              | 24.6                | 23.7                    | 25.9                 |
| PO_1308                                                                           | 1308                                                              | 0.0 to <99.0             | 0.87  | 26.19 | 8.9   | 26.4                                       | 30.1              | 25.9                | 28.0                    | 30.8                 |
| GU_0292                                                                           | 292                                                               | 0.0 to <99.0             | 4.79  | 20.86 | 11.42 | 21.1                                       | 18.2              | 14.4                | 14.7                    | 16.7                 |
| ZH_0144                                                                           | 144                                                               | 0.0 to <99.0             | 4.85  | 19.79 | 9.91  | 20.6                                       | 24.7              | 22.5                | 21.2                    | 18.3                 |
| BA_0238                                                                           | 238                                                               | 0.0 to <99.0             | 4.11  | 35.78 | 11.74 | 27.3                                       | 21.1              | 19.2                | 17.9                    | 23.4                 |
| RL_0080                                                                           | 80                                                                | 0.0 to <99.0             | 1.38  | 36.6  | 11.11 | 38.4                                       | 43.2              | 45.5                | 46.9                    | 38.7                 |
| KL_0624                                                                           | 624                                                               | 0.0 to <99.0             | 1.91  | 43.77 | 21.21 | 20.6                                       | 22.3              | 25.2                | 23.2                    | 22.8                 |
| OS_0128                                                                           | 7                                                                 | 0.0 to <5.0              | 7.33  | 16.91 | 10.65 | 13.7                                       | 15.4              | 15.9                | 11.9                    | 16.6                 |
| MU_0844                                                                           | 228                                                               | 0.0 to <5.0              | 4.17  | 15.18 | 8.58  | 11.2                                       | 21.6              | 20.1                | 22.4                    | 19.3                 |
| PO_1308                                                                           | 543                                                               | 0.0 to <5.0              | 0.87  | 12.69 | 5.17  | 26.1                                       | 30.5              | 26.2                | 27.1                    | 31.0                 |
| GU_0292                                                                           | 35                                                                | 0.0 to <5.0              | 4.79  | 15.27 | 9.73  | 19.3                                       | 17.4              | 20.4                | 19.2                    | 23.7                 |
| ZH_0144                                                                           | 73                                                                | 0.0 to <5.0              | 4.85  | 16.42 | 8.06  | 22.8                                       | 17.5              | 15.8                | 15.5                    | 18.2                 |
| BA_0238                                                                           | 38                                                                | 0.0 to <5.0              | 4.11  | 20.19 | 8.22  | 28.0                                       | 19.7              | 30.1                | 21.8                    | 35.4                 |
| RL_0080                                                                           | 34                                                                | 0.0 to <5.0              | 1.38  | 20.07 | 7.45  | 34.5                                       | 45.4              | 50.0                | 48.7                    | 52.9                 |
| KL_0624                                                                           | 41                                                                | 0.0 to <5.0              | 1.91  | 15.72 | 8.12  | 51.6                                       | 49.3              | 48.7                | 49.8                    | 47.7                 |
| OS_0128                                                                           | 121                                                               | 5.0 to <99.0             | 8.75  | 21.63 | 14.54 | 21.5                                       | 21.8              | 18.5                | 19.0                    | 18.5                 |
| MU_0844                                                                           | 616                                                               | 5.0 to <99.0             | 5.76  | 22.59 | 10.6  | 13.2                                       | 21.2              | 20.3                | 18.7                    | 25.9                 |
| PO_1308                                                                           | 765                                                               | 5.0 to <99.0             | 4.12  | 26.19 | 11.55 | 25.8                                       | 30.0              | 25.7                | 27.7                    | 27.8                 |
| GU_0292                                                                           | 257                                                               | 5.0 to <99.0             | 6.31  | 20.86 | 11.65 | 19.5                                       | 18.2              | 13.8                | 14.1                    | 16.0                 |
| ZH_0144                                                                           | 71                                                                | 5.0 to <99.0             | 6.3   | 19.79 | 11.81 | 17.5                                       | 25.6              | 22.7                | 22.6                    | 16.8                 |
| BA_0238                                                                           | 200                                                               | 5.0 to <99.0             | 5.12  | 35.78 | 12.4  | 25.8                                       | 20.7              | 17.9                | 17.6                    | 18.5                 |
| RL_0080                                                                           | 46                                                                | 5.0 to <99.0             | 6.44  | 36.6  | 13.82 | 39.8                                       | 40.1              | 40.6                | 43.1                    | 29.9                 |
| KL_0624                                                                           | 583                                                               | 5.0 to <99.0             | 5.68  | 43.77 | 22.13 | 19.3                                       | 21.5              | 24.4                | 22.3                    | 21.7                 |
| OS_0128                                                                           | 82                                                                | 5.0 to <10.0             | 8.75  | 21.63 | 14.4  | 20.9                                       | 19.6              | 19.7                | 18.7                    | 18.7                 |
| MU_0844                                                                           | 532                                                               | 5.0 to <10.0             | 5.76  | 19.17 | 10.36 | 13.8                                       | 22.6              | 20.6                | 18.8                    | 24.7                 |
| PO_1308                                                                           | 542                                                               | 5.0 to <10.0             | 4.12  | 20.02 | 10.19 | 25.9                                       | 30.9              | 26.4                | 28.5                    | 26.6                 |
| GU_0292                                                                           | 185                                                               | 5.0 to <10.0             | 6.31  | 20.86 | 11.13 | 19.1                                       | 15.6              | 14.5                | 12.6                    | 17.6                 |
| ZH_0144                                                                           | 60                                                                | 5.0 to <10.0             | 6.3   | 16.88 | 11.11 | 17.9                                       | 23.3              | 16.9                | 17.3                    | 17.7                 |
| BA_0238                                                                           | 147                                                               | 5.0 to <10.0             | 5.12  | 29.29 | 11.7  | 22.7                                       | 18.1              | 18.7                | 15.2                    | 19.8                 |
| RL_0080                                                                           | 33                                                                | 5.0 to <10.0             | 6.44  | 24.29 | 12.62 | 38.9                                       | 38.2              | 38.0                | 38.6                    | 30.1                 |
| KL_0624                                                                           | 146                                                               | 5.0 to <10.0             | 5.68  | 29.88 | 12.87 | 32.0                                       | 30.5              | 29.6                | 30.6                    | 29.5                 |
| OS_0128                                                                           | 39                                                                | 10.0 to <20.0            | 10.63 | 20.68 | 14.81 | 17.3                                       | 24.3              | 16.6                | 18.7                    | 18.2                 |
| MU_0844                                                                           | 84                                                                | 10.0 to <20.0            | 10.35 | 22.59 | 12.1  | 8.6                                        | 10.4              | 18.0                | 13.9                    | 30.6                 |
| PO_1308                                                                           | 220                                                               | 10.0 to <20.0            | 7.82  | 25.81 | 14.73 | 25.5                                       | 28.3              | 24.3                | 25.2                    | 27.6                 |
| GU_0292                                                                           | 72                                                                | 10.0 to <20.0            | 9.25  | 18.64 | 12.98 | 16.3                                       | 21.8              | 12.4                | 15.5                    | 12.3                 |
| ZH_0144                                                                           | 11                                                                | 10.0 to <20.0            | 10.34 | 19.79 | 15.66 | 15.1                                       | 24.8              | 15.2                | 19.2                    | 12.1                 |
| BA_0238                                                                           | 53                                                                | 10.0 to <20.0            | 9.83  | 35.78 | 14.36 | 18.5                                       | 20.6              | 13.5                | 19.1                    | 9.5                  |
| RL_0080                                                                           | 12                                                                | 10.0 to <20.0            | 9.99  | 26.36 | 15.23 | 44.5                                       | 45.3              | 37.2                | 48.0                    | 30.3                 |
| KL_0624                                                                           | 301                                                               | 10.0 to <20.0            | 10.79 | 41.13 | 22.71 | 18.8                                       | 20.0              | 21.8                | 21.0                    | 21.6                 |
| OS_0128                                                                           | 0                                                                 | 20.0 to <99.0            | 24.26 | 26.19 | 25.31 | 7.8                                        | 5.0               | 6.9                 | 6.5                     | 7.6                  |
| MU_0844                                                                           | 0                                                                 |                          |       |       |       |                                            |                   |                     |                         |                      |
| PO_1308                                                                           | 3                                                                 |                          |       |       |       |                                            |                   |                     |                         |                      |
| GU_0292                                                                           | 0                                                                 |                          |       |       |       |                                            |                   |                     |                         |                      |
| ZH_0144                                                                           | 0                                                                 |                          |       |       |       |                                            |                   |                     |                         |                      |
| BA_0238                                                                           | 0                                                                 |                          |       |       |       |                                            |                   |                     |                         |                      |
| RL_0080                                                                           | 1                                                                 | 20.0 to <99.0            | 36.6  | 36.6  | 36.6  | 0.1                                        | 0.1               | 0.1                 | 0.1                     | 0.1                  |
| KL_0624                                                                           | 136                                                               | 20.0 to <99.0            | 23.23 | 43.77 | 30.79 | 11.3                                       | 14.8              | 16.6                | 13.5                    | 16.5                 |
| data sets: OS_0128, MU_0844, PO_1308, GU_0292, ZH_0144, BA_0238, RL_0080, KL_0624 |                                                                   |                          |       |       |       |                                            |                   |                     |                         |                      |

| Performance (STRESS values) for large colour difference data (LCD)                |                                                                   |                          |      |       |       |                                            |                   |                     |                         |                      |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------|------|-------|-------|--------------------------------------------|-------------------|---------------------|-------------------------|----------------------|
| data set                                                                          | Calculations with data for grey surrounds (D65) and 0,1 < Y < 190 |                          |      |       |       | Colour difference formula and STRESS value |                   |                     |                         |                      |
|                                                                                   | Difference $\Delta E^*_{LABJND}$                                  |                          |      |       |       | Colour difference formula and STRESS value |                   |                     |                         |                      |
| Name                                                                              | Pairs                                                             | $\Delta E^*_{C85}$ range | min  | max   | mean  | CIELAB<br>$\Delta E$                       | CMC<br>$\Delta E$ | CIE94<br>$\Delta E$ | CIEDE2000<br>$\Delta E$ | LABJND<br>$\Delta E$ |
| OS_0128                                                                           | 116                                                               | 0.0 to <99.0             | 7.33 | 21.63 | 14.23 | 20.5                                       | 21.7              | 19.1                | 19.6                    | 19.5                 |
| MU_0844                                                                           | 701                                                               | 0.0 to <99.0             | 4.17 | 22.59 | 9.95  | 14.0                                       | 22.4              | 24.5                | 24.2                    | 24.2                 |
| PO_1308                                                                           | 1283                                                              | 0.0 to <99.0             | 0.87 | 25.81 | 8.7   | 26.2                                       | 29.8              | 25.4                | 27.8                    | 30.9                 |
| GU_0292                                                                           | 242                                                               | 0.0 to <99.0             | 4.79 | 20.86 | 11.37 | 18.4                                       | 16.9              | 15.9                | 15.4                    | 18.8                 |
| ZH_0144                                                                           | 141                                                               | 0.0 to <99.0             | 4.85 | 19.79 | 9.82  | 20.3                                       | 25.1              | 23.0                | 21.5                    | 18.6                 |
| BA_0238                                                                           | 212                                                               | 0.0 to <99.0             | 4.11 | 35.78 | 11.38 | 25.6                                       | 19.5              | 19.6                | 16.8                    | 25.1                 |
| RL_0080                                                                           | 76                                                                | 0.0 to <99.0             | 1.38 | 36.6  | 10.81 | 39.0                                       | 45.2              | 48.8                | 49.4                    | 41.3                 |
| KL_0624                                                                           | 273                                                               | 0.0 to <99.0             | 1.91 | 41.4  | 16.6  | 28.3                                       | 30.4              | 31.7                | 30.9                    | 33.3                 |
| OS_0128                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| MU_0844                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| PO_1308                                                                           | 16                                                                | 0.0 to <5.0              | 0.87 | 2.94  | 1.71  | 29.2                                       | 33.7              | 31.0                | 35.6                    | 21.9                 |
| GU_0292                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| ZH_0144                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| BA_0238                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| RL_0080                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| KL_0624                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| OS_0128                                                                           | 116                                                               | 5.0 to <99.0             | 7.33 | 21.63 | 14.23 | 20.5                                       | 21.7              | 19.1                | 19.6                    | 19.5                 |
| MU_0844                                                                           | 701                                                               | 5.0 to <99.0             | 4.17 | 22.59 | 9.95  | 14.0                                       | 22.4              | 24.5                | 24.2                    | 24.2                 |
| PO_1308                                                                           | 1267                                                              | 5.0 to <99.0             | 1.12 | 25.81 | 8.79  | 26.2                                       | 29.8              | 25.4                | 27.8                    | 30.8                 |
| GU_0292                                                                           | 242                                                               | 5.0 to <99.0             | 4.79 | 20.86 | 11.37 | 18.4                                       | 16.9              | 15.9                | 15.4                    | 18.8                 |
| ZH_0144                                                                           | 141                                                               | 5.0 to <99.0             | 4.85 | 19.79 | 9.82  | 20.3                                       | 25.1              | 23.0                | 21.5                    | 18.6                 |
| BA_0238                                                                           | 212                                                               | 5.0 to <99.0             | 4.11 | 35.78 | 11.38 | 25.6                                       | 19.5              | 19.6                | 16.8                    | 25.1                 |
| RL_0080                                                                           | 76                                                                | 5.0 to <99.0             | 1.38 | 36.6  | 10.81 | 39.0                                       | 45.2              | 48.8                | 49.4                    | 41.3                 |
| KL_0624                                                                           | 273                                                               | 5.0 to <99.0             | 1.91 | 41.4  | 16.6  | 28.3                                       | 30.4              | 31.7                | 30.9                    | 33.3                 |
| OS_0128                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| MU_0844                                                                           | 2                                                                 | 5.0 to <10.0             | 4.69 | 5.26  | 4.97  | 3.1                                        | 4.5               | 4.5                 | 4.9                     | 3.4                  |
| PO_1308                                                                           | 52                                                                | 5.0 to <10.0             | 1.12 | 7.58  | 3.13  | 22.7                                       | 26.2              | 22.0                | 26.6                    | 28.9                 |
| GU_0292                                                                           | 1                                                                 | 5.0 to <10.0             | 7.57 | 7.57  | 7.57  | 0.1                                        | 0.1               | 0.1                 | 0.1                     | 0.1                  |
| ZH_0144                                                                           | 1                                                                 | 5.0 to <10.0             | 7.55 | 7.55  | 7.55  | 0.1                                        | 0.1               | 0.1                 | 0.1                     | 0.1                  |
| BA_0238                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| RL_0080                                                                           | 4                                                                 | 5.0 to <10.0             | 2.31 | 7.44  | 5.14  | 18.8                                       | 25.0              | 24.1                | 25.3                    | 31.7                 |
| KL_0624                                                                           | 0                                                                 |                          |      |       |       |                                            |                   |                     |                         |                      |
| OS_0128                                                                           | 4                                                                 | 10.0 to <20.0            | 7.33 | 10.69 | 9.1   | 23.5                                       | 12.5              | 8.1                 | 7.7                     | 26.2                 |
| MU_0844                                                                           | 133                                                               | 10.0 to <20.0            | 4.42 | 15.18 | 8.88  | 14.4                                       | 32.3              | 26.3                | 33.5                    | 21.0                 |
| PO_1308                                                                           | 259                                                               | 10.0 to <20.0            | 1.31 | 10.26 | 4.9   | 21.8                                       | 25.2              | 21.7                | 26.6                    | 30.6                 |
| GU_0292                                                                           | 34                                                                | 10.0 to <20.0            | 5.33 | 14.0  | 9.25  | 22.2                                       | 13.8              | 14.5                | 13.6                    | 18.9                 |
| ZH_0144                                                                           | 31                                                                | 10.0 to <20.0            | 4.85 | 12.61 | 7.58  | 22.3                                       | 19.7              | 15.7                | 14.9                    | 20.9                 |
| BA_0238                                                                           | 28                                                                | 10.0 to <20.0            | 5.12 | 20.19 | 9.63  | 29.2                                       | 16.9              | 18.0                | 15.8                    | 19.1                 |
| RL_0080                                                                           | 20                                                                | 10.0 to <20.0            | 1.38 | 20.72 | 7.98  | 41.2                                       | 47.1              | 49.4                | 50.8                    | 44.4                 |
| KL_0624                                                                           | 6                                                                 | 10.0 to <20.0            | 1.91 | 8.58  | 6.39  | 30.3                                       | 30.5              | 30.7                | 31.3                    | 35.1                 |
| OS_0128                                                                           | 112                                                               | 20.0 to <99.0            | 7.51 | 21.63 | 14.42 | 20.4                                       | 21.7              | 18.7                | 19.5                    | 19.2                 |
| MU_0844                                                                           | 566                                                               | 20.0 to <99.0            | 4.17 | 22.59 | 10.22 | 13.6                                       | 20.2              | 23.7                | 22.2                    | 23.6                 |
| PO_1308                                                                           | 956                                                               | 20.0 to <99.0            | 2.11 | 25.81 | 10.15 | 25.8                                       | 30.1              | 25.7                | 27.8                    | 29.9                 |
| GU_0292                                                                           | 207                                                               | 20.0 to <99.0            | 4.79 | 20.86 | 11.74 | 17.2                                       | 17.2              | 15.7                | 15.4                    | 18.8                 |
| ZH_0144                                                                           | 109                                                               | 20.0 to <99.0            | 4.92 | 19.79 | 10.48 | 19.6                                       | 25.8              | 23.4                | 22.4                    | 17.5                 |
| BA_0238                                                                           | 184                                                               | 20.0 to <99.0            | 4.11 | 35.78 | 11.65 | 25.0                                       | 19.7              | 19.1                | 16.7                    | 25.2                 |
| RL_0080                                                                           | 52                                                                | 20.0 to <99.0            | 2.51 | 36.6  | 12.33 | 38.7                                       | 43.4              | 47.4                | 47.9                    | 40.2                 |
| KL_0624                                                                           | 267                                                               | 20.0 to <99.0            | 2.02 | 41.4  | 16.83 | 28.3                                       | 30.2              | 31.5                | 30.6                    | 33.3                 |
| data sets: OS_0128, MU_0844, PO_1308, GU_0292, ZH_0144, BA_0238, RL_0080, KL_0624 |                                                                   |                          |      |       |       |                                            |                   |                     |                         |                      |