**Table S6. Hg isotopic composition in paddy soil samples**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Location** | **Sample****name**　 | **204/198δ** | **202/198δ** | **201/198δ** | **200/198δ** | **199/198δ** | **∆201** | **∆200** | **∆199** |
| 　 | ‰ | ‰ | ‰ | ‰ | ‰ | ‰ | ‰ | ‰ |
| Dashuixi | DSX1-PS | 0.39 | ± | 0.37 | 0.30 | ± | 0.16 | 0.13 | ± | 0.15 | 0.15 | ± | 0.04 | 0.00 | ± | 0.09 | -0.09 | ± | 0.09 | 0.00 | ± | 0.12 | -0.07 | ± | 0.08 |
| DSX2-PS | -0.65 | ± | 0.26 | -0.41 | ± | 0.24 | -0.41 | ± | 0.12 | -0.21 | ± | 0.20 | -0.14 | ± | 0.20 | -0.10 | ± | 0.09 | 0.00 | ± | 0.08 | -0.04 | ± | 0.14 |
| DSX3-PS | 0.33 | ± | 0.21 | 0.19 | ± | 0.09 | 0.06 | ± | 0.09 | 0.08 | ± | 0.08 | -0.03 | ± | 0.09 | -0.08 | ± | 0.09 | -0.02 | ± | 0.07 | -0.08 | ± | 0.10 |
| DSX4-PS | 0.22 | ± | 0.21 | 0.06 | ± | 0.09 | 0.00 | ± | 0.11 | 0.03 | ± | 0.08 | -0.08 | ± | 0.16 | -0.05 | ± | 0.12 | 0.01 | ± | 0.07 | -0.09 | ± | 0.16 |
| Meizixi | MZX1-PS | -0.72 | ± | 0.38 | -0.53 | ± | 0.32 | -0.48 | ± | 0.30 | -0.30 | ± | 0.08 | -0.25 | ± | 0.09 | -0.08 | ± | 0.09 | -0.03 | ± | 0.08 | -0.11 | ± | 0.08 |
| MZX2-PS | -0.57 | ± | 0.42 | -0.37 | ± | 0.35 | -0.30 | ± | 0.21 | -0.16 | ± | 0.15 | -0.11 | ± | 0.09 | -0.02 | ± | 0.09 | 0.02 | ± | 0.07 | -0.01 | ± | 0.08 |
| MZX3-PS | -0.39 | ± | 0.21 | -0.27 | ± | 0.09 | -0.29 | ± | 0.09 | -0.13 | ± | 0.08 | -0.12 | ± | 0.09 | -0.09 | ± | 0.09 | 0.01 | ± | 0.07 | -0.05 | ± | 0.08 |
| Baigoushu | BGS1-PS | -1.65 | ± | 1.04 | -1.31 | ± | 0.03 | -0.90 | ± | 0.45 | -0.56 | ± | 0.29 | -0.31 | ± | 0.10 | -0.07 | ± | 0.09 | 0.00 | ± | 0.07 | -0.03 | ± | 0.08 |
| BGS2-PS | -2.02 | ± | 0.48 | -1.27 | ± | 0.19 | -1.07 | ± | 0.28 | -0.63 | ± | 0.25 | -0.37 | ± | 0.23 | -0.11 | ± | 0.14 | 0.01 | ± | 0.15 | -0.05 | ± | 0.18 |
| Gouxi | GX3-PS1 | -0.69 | ± | 0.21 | -0.46 | ± | 0.09 | -0.34 | ± | 0.10 | -0.23 | ± | 0.08 | -0.09 | ± | 0.09 | 0.01 | ± | 0.09 | 0.00 | ± | 0.07 | 0.03 | ± | 0.08 |
| GX3-PS2 | -1.72 | ± | 0.21 | -1.16 | ± | 0.09 | -0.89 | ± | 0.10 | -0.60 | ± | 0.08 | -0.31 | ± | 0.14 | -0.02 | ± | 0.09 | -0.01 | ± | 0.07 | -0.01 | ± | 0.13 |
| GX3-PS3 | -1.74 | ± | 0.21 | -1.16 | ± | 0.09 | -0.93 | ± | 0.09 | -0.57 | ± | 0.08 | -0.16 | ± | 0.09 | -0.06 | ± | 0.09 | 0.01 | ± | 0.07 | 0.13 | ± | 0.08 |
| GX4-PS1 | -1.80 | ± | 0.21 | -1.16 | ± | 0.12 | -0.94 | ± | 0.10 | -0.56 | ± | 0.15 | -0.27 | ± | 0.17 | -0.06 | ± | 0.09 | 0.02 | ± | 0.09 | 0.02 | ± | 0.14 |
| GX4-PS2 | -0.92 | ± | 0.21 | -0.72 | ± | 0.09 | -0.63 | ± | 0.09 | -0.31 | ± | 0.08 | -0.18 | ± | 0.09 | -0.09 | ± | 0.09 | 0.06 | ± | 0.07 | 0.00 | ± | 0.08 |

Results are expressed as mean value ± 2SD. SD means standard deviation. ND: not determined. PS: paddy soil.