**Table S4**. In situ zircon Hf isotope data for the later Jurassic low-Sr and high-Yb A-type granites in the Xianghualing Sn-polymetallic deposit, South China

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Spot** | **176Hf/177Hf** | **176Lu/177Hf** | **176Yb/177Hf** | **2σ** | ***ε*Hf(0)** | ***ε*Hf(*t*)** | **TDM**  **(Ma)** | **TDMC**  **(Ma)** | **fLu/Hf** |
| **ZK57 Age = 152.8±0.6 Ma** | | | | | | | | | |
| 01 | 0.282567 | 0.001456 | 0.042503 | 0.000021 | -7.2 | **-4.0** | 981 | 1461 | -0.96 |
| 02 | 0.282616 | 0.001309 | 0.042553 | 0.000026 | -5.5 | **-2.3** | 908 | 1350 | -0.96 |
| 03 | 0.282558 | 0.001418 | 0.039972 | 0.000021 | -7.6 | **-4.4** | 993 | 1481 | -0.96 |
| 04 | 0.282565 | 0.000845 | 0.023609 | 0.000023 | -7.3 | **-4.1** | 968 | 1461 | -0.97 |
| 05 | 0.282561 | 0.001024 | 0.028241 | 0.000024 | -7.5 | **-4.2** | 978 | 1471 | -0.97 |
| 06 | 0.282569 | 0.000776 | 0.021808 | 0.000020 | -7.2 | **-3.9** | 961 | 1452 | -0.98 |
| 07 | 0.282561 | 0.000964 | 0.027150 | 0.000021 | -7.5 | **-4.2** | 977 | 1471 | -0.97 |
| 08 | 0.282557 | 0.001731 | 0.045788 | 0.000022 | -7.6 | **-4.4** | 1003 | 1485 | -0.95 |
| 09 | 0.282533 | 0.001445 | 0.040890 | 0.000025 | -8.5 | **-5.2** | 1029 | 1537 | -0.96 |
| 10 | 0.282561 | 0.002422 | 0.069906 | 0.000023 | -7.5 | **-4.4** | 1016 | 1480 | -0.93 |
| 11 | 0.282514 | 0.002785 | 0.081639 | 0.000030 | -9.1 | **-6.1** | 1096 | 1588 | -0.92 |
| 12 | 0.282551 | 0.002692 | 0.079159 | 0.000022 | -7.8 | **-4.7** | 1038 | 1504 | -0.92 |
| 13 | 0.282562 | 0.002490 | 0.072048 | 0.000024 | -7.4 | **-4.3** | 1017 | 1479 | -0.92 |
| 14 | 0.282560 | 0.001767 | 0.052917 | 0.000027 | -7.5 | **-4.3** | 1000 | 1478 | -0.95 |
| 15 | 0.282522 | 0.001317 | 0.037635 | 0.000039 | -8.8 | **-5.6** | 1041 | 1560 | -0.96 |
| **ZK65 Age = 152.7±2.0 Ma** | | | | | | | | | |
| 01 | 0.282572 | 0.001406 | 0.039616 | 0.000035 | -7.1 | **-3.9** | 972 | 1449 | -0.96 |
| 02 | 0.282539 | 0.002095 | 0.057209 | 0.000018 | -8.2 | **-5.1** | 1039 | 1528 | -0.94 |
| 03 | 0.282594 | 0.002850 | 0.083815 | 0.000023 | -6.3 | **-3.2** | 979 | 1409 | -0.91 |
| 04 | 0.282586 | 0.002463 | 0.066858 | 0.000026 | -6.6 | **-3.5** | 981 | 1424 | -0.93 |
| 05 | 0.282545 | 0.001451 | 0.042699 | 0.000026 | -8.0 | **-4.8** | 1012 | 1510 | -0.96 |
| 06 | 0.282628 | 0.003445 | 0.099840 | 0.000026 | -5.1 | **-2.1** | 945 | 1336 | -0.90 |
| 07 | 0.282583 | 0.002395 | 0.070438 | 0.000025 | -6.7 | **-3.6** | 983 | 1431 | -0.93 |
| 08 | 0.282609 | 0.003208 | 0.092521 | 0.000022 | -5.8 | **-2.7** | 967 | 1377 | -0.90 |
| 09 | 0.282567 | 0.002206 | 0.064032 | 0.000029 | -7.2 | **-4.1** | 1001 | 1465 | -0.93 |

Initial ratios are calculated back to t = 153 Ma.