**Supp. Table 2:** Results of 40Ar–39Ar dating of muscovite (MD004) from the Nanwenhe gneissic granites.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample: MD004** | | | | | | | | |
| **T** | **40Ar/39Ar** | **37Ar/39Ar** | **36Ar/39Ar** | **39Ark** | **K/Ca** | **40Ar\*** | **39Ar** | **Age±1σ** |
| **(℃)** | **(10-15mol)** | **(%)** | **(%)** | **（Ma）** |
| 580 | 40.13 | 0.0079 | 37.120 | 1.072 | 65 | 72.7 | 0.8 | 193.60±1.30 |
| 630 | 32.60 | 0.0039 | 4.451 | 1.313 | 130 | 96.0 | 1.7 | 206.99±0.74 |
| 655 | 34.46 | 0.0020 | 7.015 | 1.391 | 250 | 94.0 | 2.7 | 213.85±0.79 |
| 680 | 35.45 | -0.0003 | 7.530 | 1.837 | - | 93.7 | 4.0 | 219.04±0.77 |
| 710 | 35.21 | 0.0018 | 6.267 | 2.757 | 277 | 94.7 | 5.9 | 219.91±0.60 |
| 730 | 34.60 | 0.0001 | 3.526 | 3.299 | 5707 | 97.0 | 8.2 | 221.12±0.50 |
| 750 | 35.91 | 0.0009 | 5.848 | 4.198 | 581 | 95.2 | 11.2 | 225.02±0.49 |
| 770 | 35.80 | 0.0001 | 3.772 | 9.838 | 8489 | 96.9 | 18.1 | 228.10±0.37 |
| 780 | 36.12 | 0.0003 | 1.710 | 14.600 | 1624 | 98.6 | 28.4 | 233.86±0.35 |
| 790 | 35.85 | 0.0001 | 1.342 | 13.750 | 4414 | 98.9 | 38.1 | 232.89±0.42 |
| 800 | 35.93 | 0.0001 | 1.633 | 11.872 | 5726 | 98.7 | 46.5 | 232.83±0.46 |
| 805 | 35.60 | 0.0002 | 2.062 | 9.823 | 2718 | 98.3 | 53.4 | 230.02±0.38 |
| 810 | 35.77 | 0.0001 | 2.267 | 8.686 | 3443 | 98.1 | 59.5 | 230.67±0.36 |
| 820 | 35.65 | -0.0002 | 2.332 | 8.476 | - | 98.1 | 65.5 | 229.80±0.36 |
| 830 | 35.96 | -0.0001 | 2.842 | 7.491 | - | 97.7 | 70.8 | 230.80±0.38 |
| 840 | 36.17 | 0.0001 | 3.889 | 5.764 | 3459 | 96.8 | 74.8 | 230.18±0.45 |
| 850 | 36.67 | -0.0004 | 5.895 | 3.932 | - | 95.2 | 77.6 | 229.60±0.53 |
| 860 | 37.38 | -0.0002 | 9.800 | 2.606 | - | 92.3 | 79.4 | 226.87±0.71 |
| 870 | 38.39 | -0.0011 | 13.860 | 1.874 | - | 89.3 | 80.8 | 225.70±0.74 |
| 880 | 39.08 | 0.0002 | 17.040 | 1.517 | 2105 | 87.1 | 81.8 | 224.12±0.96 |
| 890 | 40.17 | 0.0008 | 19.750 | 1.330 | 676 | 85.5 | 82.8 | 225.94±0.97 |
| 900 | 40.89 | 0.0001 | 21.540 | 1.246 | 4854 | 84.4 | 83.6 | 227.10±1.00 |
| 920 | 40.09 | -0.0001 | 18.470 | 1.534 | - | 86.4 | 84.7 | 227.78±0.97 |
| 945 | 38.93 | 0.0005 | 13.730 | 2.270 | 1033 | 89.6 | 86.3 | 229.27±0.77 |
| 960 | 39.54 | 0.0003 | 16.290 | 2.285 | 1547 | 87.8 | 87.9 | 228.36±0.76 |
| 975 | 40.73 | -0.0001 | 19.140 | 2.168 | - | 86.1 | 89.5 | 230.53±0.71 |
| 990 | 40.99 | -0.0007 | 20.830 | 2.100 | - | 85.0 | 90.9 | 229.02±0.83 |
| 1005 | 41.35 | -0.0001 | 21.610 | 2.192 | - | 84.6 | 92.5 | 229.84±0.83 |
| 1020 | 41.06 | 0.0008 | 20.690 | 2.578 | 634 | 85.1 | 94.3 | 229.74±0.70 |
| 1065 | 39.28 | 0.0003 | 13.790 | 5.073 | 1678 | 89.6 | 97.9 | 231.31±0.61 |
| 1080 | 46.65 | -0.0009 | 40.030 | 2.008 | - | 74.6 | 99.3 | 228.90±1.00 |
| 1150 | 66.31 | 0.0012 | 102.400 | 1.009 | 411 | 54.4 | 100.0 | 236.60±2.00 |