

**Table S1.** U–Pb LA-ICP-MS data of the standards and reference materials used for age dating of zircon from the Kurjevo (meta)granitoid KUIA (03-09-2025).

| Grain point   | Isotopic ratios |                |           |                |                  |                  |      |                  |                   |                   | Age (Ma) |                   |                  |                   |              |                   |        |         |        |        |        |        |      |    |      |    |      |    |     |         |
|---------------|-----------------|----------------|-----------|----------------|------------------|------------------|------|------------------|-------------------|-------------------|----------|-------------------|------------------|-------------------|--------------|-------------------|--------|---------|--------|--------|--------|--------|------|----|------|----|------|----|-----|---------|
|               | U<br>(μg/g) ±   | Th<br>(μg/g) ± | Th/U<br>± | Pb<br>(μg/g) ± | 207Pb/<br>235U ± | 206Pb/<br>238U ± | r ±  | 238U/<br>206Pb ± | 207Pb/<br>206Pb ± | 208Pb/<br>232Th ± | rTW ±    | 208Pb/<br>232Th ± | 207Pb/<br>235U ± | 207Pb/<br>206Pb ± | %<br>Conc. ± | 208Pb/<br>232Th ± |        |         |        |        |        |        |      |    |      |    |      |    |     |         |
| G_NIST610_1   | 400             | 13             | 406       | 10             | 1.02             | 0.04             | 1903 | 55               | 28.9700           | 0.4600            | 0.2300   | 0.0032            | 0.82             | 4.3478            | 0.0605       | 0.9119            | 0.0160 | -0.0003 | 0.0000 | 0.2547 | 0.5101 | 0.0093 | 1334 | 17 | 3451 | 15 | 5215 | 35 | 39  | 1208321 |
| G_NIST610_2   | 416             | 14             | 408       | 10             | 0.98             | 0.04             | 1988 | 56               | 28.4000           | 0.4400            | 0.2250   | 0.0032            | 0.81             | 4.4444            | 0.0632       | 0.9116            | 0.0160 | 0.0000  | 0.0000 | 0.3914 | 0.5097 | 0.0092 | 1308 | 17 | 3432 | 15 | 5214 | 36 | 38  | 1208317 |
| G_NIST610_3   | 417             | 13             | 420       | 11             | 1.01             | 0.04             | 1954 | 57               | 28.3300           | 0.4500            | 0.2263   | 0.0034            | 0.78             | 4.4189            | 0.0664       | 0.9061            | 0.0160 | -0.0007 | 0.0000 | 0.3875 | 0.5014 | 0.0092 | 1315 | 18 | 3430 | 15 | 5202 | 36 | 38  | 1208206 |
| G_NIST610_4   | 412             | 13             | 410       | 10             | 1.00             | 0.04             | 1959 | 57               | 28.1900           | 0.4300            | 0.2268   | 0.0033            | 0.83             | 4.4092            | 0.0642       | 0.9043            | 0.0160 | -0.0004 | 0.0000 | 0.3055 | 0.5061 | 0.0091 | 1317 | 17 | 3425 | 15 | 5197 | 35 | 38  | 1208269 |
| G_NIST610_5   | 399             | 12             | 406       | 10             | 1.02             | 0.04             | 1921 | 55               | 28.3100           | 0.4400            | 0.2273   | 0.0033            | 0.81             | 4.3995            | 0.0639       | 0.9049            | 0.0160 | -0.0004 | 0.0000 | 0.3522 | 0.5035 | 0.0087 | 1320 | 17 | 3429 | 14 | 5199 | 35 | 38  | 1208235 |
| G_NIST610_6   | 407             | 13             | 405       | 10             | 1.00             | 0.04             | 1891 | 57               | 28.2400           | 0.4500            | 0.2273   | 0.0035            | 0.84             | 4.3995            | 0.0677       | 0.9011            | 0.0160 | -0.0003 | 0.0000 | 0.3152 | 0.5058 | 0.0091 | 1320 | 18 | 3425 | 15 | 5190 | 35 | 39  | 1208275 |
| Z_M257_1      | 818             | 22             | 228       | 5              | 0.28             | 0.01             | 62   | 1                | 0.7487            | 0.0120            | 0.0915   | 0.0011            | 0.58             | 10.9242           | 0.1313       | 0.0591            | 0.0011 | 0.0000  | 0.0000 | 0.21   | 0.0288 | 0.0004 | 565  | 6  | 567  | 7  | 567  | 39 | 100 | 8573    |
| Z_M257_2      | 825             | 20             | 236       | 6              | 0.29             | 0.01             | 63   | 1                | 0.7439            | 0.0120            | 0.0915   | 0.0010            | 0.54             | 10.9266           | 0.1194       | 0.0589            | 0.0011 | 0.0000  | 0.0000 | 0.15   | 0.0283 | 0.0004 | 565  | 6  | 564  | 7  | 560  | 39 | 100 | 8564    |
| Z_M257_3      | 846             | 19             | 239       | 5              | 0.28             | 0.01             | 63   | 1                | 0.7523            | 0.0120            | 0.0916   | 0.0011            | 0.50             | 10.9123           | 0.1310       | 0.0595            | 0.0011 | 0.0000  | 0.0000 | 0.31   | 0.0283 | 0.0004 | 565  | 6  | 569  | 7  | 583  | 38 | 99  | 8565    |
| Z_M257_4      | 827             | 18             | 235       | 5              | 0.28             | 0.01             | 62   | 1                | 0.7419            | 0.0120            | 0.0915   | 0.0011            | 0.50             | 10.9553           | 0.1320       | 0.0590            | 0.0011 | 0.0000  | 0.0000 | 0.20   | 0.0285 | 0.0004 | 563  | 6  | 563  | 7  | 563  | 40 | 100 | 8568    |
| Z_M257_5      | 830             | 19             | 234       | 5              | 0.28             | 0.01             | 63   | 1                | 0.7389            | 0.0110            | 0.0911   | 0.0011            | 0.58             | 10.9818           | 0.1327       | 0.0588            | 0.0010 | 0.0000  | 0.0000 | 0.20   | 0.0285 | 0.0004 | 562  | 6  | 561  | 7  | 557  | 38 | 100 | 8568    |
| Z_M257_6      | 830             | 19             | 236       | 6              | 0.28             | 0.01             | 62   | 1                | 0.7332            | 0.0120            | 0.0912   | 0.0011            | 0.62             | 10.9685           | 0.1323       | 0.0584            | 0.0010 | 0.0000  | 0.0000 | 0.12   | 0.0284 | 0.0004 | 562  | 7  | 559  | 7  | 538  | 39 | 101 | 8567    |
| Z_M257_7      | 849             | 21             | 239       | 6              | 0.28             | 0.01             | 65   | 1                | 0.7336            | 0.0110            | 0.0913   | 0.0011            | 0.57             | 10.9579           | 0.1320       | 0.0582            | 0.0011 | 0.0000  | 0.0000 | 0.12   | 0.0286 | 0.0004 | 563  | 6  | 559  | 7  | 531  | 40 | 101 | 8570    |
| Z_Plesovice_1 | 608             | 17             | 56        | 1              | 0.09             | 0.00             | 9    | 0.2              | 0.3982            | 0.0072            | 0.0540   | 0.0007            | 0.43             | 18.5117           | 0.2262       | 0.0533            | 0.0011 | 0.0000  | 0.0000 | 0.19   | 0.0172 | 0.0004 | 339  | 4  | 341  | 5  | 334  | 47 | 100 | 7344    |
| Z_Plesovice_2 | 652             | 17             | 63        | 2              | 0.10             | 0.00             | 10   | 0.2              | 0.4038            | 0.0075            | 0.0538   | 0.0006            | 0.40             | 18.5943           | 0.2178       | 0.0544            | 0.0011 | 0.0000  | 0.0000 | 0.11   | 0.0170 | 0.0003 | 338  | 4  | 344  | 5  | 375  | 46 | 98  | 6340    |
| Z_Plesovice_3 | 594             | 15             | 60        | 1              | 0.10             | 0.00             | 10   | 0.2              | 0.4043            | 0.0077            | 0.0541   | 0.0007            | 0.50             | 18.4945           | 0.2258       | 0.0542            | 0.0011 | 0.0000  | 0.0000 | 0.14   | 0.0179 | 0.0004 | 339  | 4  | 344  | 6  | 372  | 47 | 99  | 8359    |
| Z_Plesovice_4 | 673             | 17             | 70        | 1              | 0.10             | 0.00             | 12   | 0.3              | 0.4022            | 0.0074            | 0.0542   | 0.0007            | 0.50             | 18.4604           | 0.2317       | 0.0539            | 0.0011 | 0.0001  | 0.0001 | 0.17   | 0.0184 | 0.0004 | 340  | 4  | 343  | 5  | 356  | 45 | 99  | 8369    |
| Z_Plesovice_5 | 641             | 17             | 61        | 2              | 0.10             | 0.00             | 10   | 0.3              | 0.3987            | 0.0069            | 0.0537   | 0.0006            | 0.41             | 18.6116           | 0.2217       | 0.0539            | 0.0011 | 0.0001  | 0.0000 | 0.23   | 0.0170 | 0.0004 | 337  | 4  | 341  | 5  | 360  | 45 | 99  | 7341    |
| Z_Plesovice_6 | 500             | 14             | 46        | 1              | 0.09             | 0.00             | 7    | 0.2              | 0.3905            | 0.0075            | 0.0539   | 0.0007            | 0.41             | 18.5460           | 0.2373       | 0.0526            | 0.0011 | 0.0000  | 0.0000 | 0.25   | 0.0170 | 0.0004 | 339  | 4  | 334  | 6  | 299  | 47 | 101 | 7340    |
| Z_Plesovice_7 | 467             | 12             | 43        | 1              | 0.09             | 0.00             | 7    | 0.2              | 0.3970            | 0.0076            | 0.0545   | 0.0007            | 0.28             | 18.3352           | 0.2320       | 0.0527            | 0.0011 | 0.0001  | 0.0000 | 0.27   | 0.0171 | 0.0004 | 342  | 4  | 339  | 6  | 304  | 49 | 101 | 8343    |
| Z_91500_1     | 79              | 2              | 29        | 1              | 0.37             | 0.02             | 15   | 0.3              | 1.8460            | 0.0360            | 0.1798   | 0.0022            | 0.26             | 5.5617            | 0.0681       | 0.0742            | 0.0016 | 0.0001  | 0.0000 | 0.27   | 0.0534 | 0.0010 | 1066 | 12 | 1060 | 13 | 1040 | 44 | 101 | 191051  |
| Z_91500_2     | 81              | 2              | 30        | 1              | 0.37             | 0.01             | 15   | 0.3              | 1.8250            | 0.0360            | 0.1790   | 0.0022            | 0.25             | 5.5866            | 0.0687       | 0.0739            | 0.0017 | 0.0001  | 0.0001 | 0.25   | 0.0541 | 0.0009 | 1061 | 12 | 1053 | 13 | 1027 | 46 | 101 | 181064  |
| Z_91500_3     | 82              | 2              | 31        | 1              | 0.37             | 0.01             | 15   | 0.3              | 1.8360            | 0.0340            | 0.1779   | 0.0022            | 0.26             | 5.6211            | 0.0695       | 0.0750            | 0.0016 | 0.0001  | 0.0000 | 0.30   | 0.0541 | 0.0010 | 1056 | 12 | 1058 | 13 | 1056 | 45 | 100 | 181065  |
| Z_91500_4     | 80              | 2              | 30        | 1              | 0.38             | 0.01             | 15   | 0.3              | 1.8830            | 0.0380            | 0.1798   | 0.0022            | 0.26             | 5.5617            | 0.0681       | 0.0759            | 0.0017 | 0.0001  | 0.0000 | 0.22   | 0.0536 | 0.0010 | 1066 | 12 | 1073 | 13 | 1078 | 46 | 99  | 181055  |
| Z_91500_5     | 80              | 2              | 30        | 1              | 0.38             | 0.01             | 15   | 0.3              | 1.8710            | 0.0360            | 0.1786   | 0.0022            | 0.34             | 5.5991            | 0.0690       | 0.0760            | 0.0016 | 0.0001  | 0.0001 | 0.22   | 0.0531 | 0.0010 | 1059 | 12 | 1069 | 13 | 1087 | 43 | 99  | 181045  |
| Z_91500_6     | 79              | 2              | 30        | 1              | 0.37             | 0.01             | 15   | 0.3              | 1.8480            | 0.0390            | 0.1802   | 0.0023            | 0.13             | 5.5494            | 0.0708       | 0.0745            | 0.0018 | 0.0001  | 0.0001 | 0.36   | 0.0534 | 0.0009 | 1068 | 13 | 1060 | 14 | 1043 | 49 | 101 | 171052  |
| Z_91500_7     | 79              | 2              | 29        | 1              | 0.37             | 0.01             | 15   | 0.3              | 1.8530            | 0.0360            | 0.1796   | 0.0022            | 0.33             | 5.5679            | 0.0682       | 0.0749            | 0.0016 | 0.0001  | 0.0000 | 0.19   | 0.0543 | 0.0010 | 1065 | 12 | 1062 | 13 | 1053 | 44 | 100 | 191069  |
| Z_91500_8     | 82              | 3              | 30        | 1              | 0.37             | 0.02             | 15   | 0.4              | 1.8460            | 0.0360            | 0.1784   | 0.0023            | 0.19             | 5.6054            | 0.0723       | 0.0751            | 0.0017 | 0.0001  | 0.0000 | 0.34   | 0.0538 | 0.0009 | 1058 | 12 | 1060 | 13 | 1056 | 45 | 100 | 181061  |
| Z_91500_9     | 84              | 3              | 31        | 1              | 0.37             | 0.02             | 15   | 0.5              | 1.8540            | 0.0390            | 0.1824   | 0.0024            | 0.44             | 5.4825            | 0.0721       | 0.0734            | 0.0017 | 0.0001  | 0.0000 | 0.07   | 0.0541 | 0.0010 | 1080 | 13 | 1062 | 14 | 1013 | 47 | 102 | 191064  |
| Z_91500_10    | 77              | 2              | 29        | 1              | 0.38             | 0.01             | 15   | 0.4              | 1.8440            | 0.0340            | 0.1779   | 0.0022            | 0.42             | 5.6211            | 0.0695       | 0.0749            | 0.0016 | 0.0003  | 0.0002 | 0.18   | 0.0539 | 0.0010 | 1055 | 12 | 1061 | 12 | 1058 | 42 | 100 | 191062  |
| Z_91500_11    | 81              | 2              | 31        | 1              | 0.38             | 0.01             | 15   | 0.3              | 1.8400            | 0.0350            | 0.1783   | 0.0022            | 0.43             | 5.6085            | 0.0692       | 0.0747            | 0.0016 | 0.0001  | 0.0000 | 0.12   | 0.0540 | 0.0010 | 1058 | 12 | 1060 | 13 | 1053 | 43 | 100 | 181063  |
| Z_91500_12    | 80              | 2              | 30        | 1              | 0.37             | 0.01             | 15   | 0.3              | 1.8820            | 0.0380            | 0.1789   | 0.0022            | 0.40             | 5.5897            | 0.0687       | 0.0764            | 0.0016 | 0.0001  | 0.0000 | 0.08   | 0.0539 | 0.0010 | 1061 | 12 | 1072 | 13 | 1095 | 45 | 99  | 191060  |

| Grain point | Isotopic ratios          |                           |               |                           |       |                |                         |                         |        |                | Age (Ma)                 |                          |              |                          |                         |                          |            |                          |        |      |        |        |      |    |      |    |      |    |     |        |
|-------------|--------------------------|---------------------------|---------------|---------------------------|-------|----------------|-------------------------|-------------------------|--------|----------------|--------------------------|--------------------------|--------------|--------------------------|-------------------------|--------------------------|------------|--------------------------|--------|------|--------|--------|------|----|------|----|------|----|-----|--------|
|             | U<br>( $\mu\text{g/g}$ ) | Th<br>( $\mu\text{g/g}$ ) | Th/U<br>$\pm$ | Pb<br>( $\mu\text{g/g}$ ) | $\pm$ | 207Pb/<br>235U | 206Pb/<br>238U<br>$\pm$ | 206Pb/<br>238U<br>$\pm$ | r      | 238U/<br>206Pb | 207Pb/<br>206Pb<br>$\pm$ | 204Pb/<br>206Pb<br>$\pm$ | rTW<br>$\pm$ | 208Pb/<br>232Th<br>$\pm$ | 206Pb/<br>238U<br>$\pm$ | 207Pb/<br>206Pb<br>$\pm$ | %<br>Conc. | 208Pb/<br>232Th<br>$\pm$ |        |      |        |        |      |    |      |    |      |    |     |        |
| Z_91500_13  | 79                       | 2                         | 30            | 1                         | 0.38  | 0.01           | 15                      | 0.3                     | 1.8520 | 0.0390         | 0.1790                   | 0.0022                   | 0.34         | 5.5866                   | 0.0687                  | 0.0751                   | 0.0017     | 0.0001                   | 0.0000 | 0.10 | 0.0533 | 0.0009 | 1061 | 12 | 1061 | 14 | 1056 | 46 | 100 | 181048 |
| Z_91500_14  | 81                       | 2                         | 30            | 1                         | 0.37  | 0.01           | 15                      | 0.3                     | 1.8540 | 0.0370         | 0.1790                   | 0.0022                   | 0.33         | 5.5866                   | 0.0687                  | 0.0747                   | 0.0016     | 0.0001                   | 0.0000 | 0.13 | 0.0530 | 0.0009 | 1061 | 12 | 1063 | 13 | 1056 | 45 | 100 | 181043 |
| Z_91500_15  | 80                       | 2                         | 30            | 1                         | 0.38  | 0.01           | 15                      | 0.3                     | 1.8570 | 0.0370         | 0.1795                   | 0.0023                   | 0.22         | 5.5710                   | 0.0714                  | 0.0751                   | 0.0017     | 0.0001                   | 0.0000 | 0.29 | 0.0540 | 0.0010 | 1064 | 12 | 1065 | 13 | 1060 | 45 | 100 | 181063 |
| Z_91500_16  | 80                       | 2                         | 30            | 1                         | 0.37  | 0.01           | 15                      | 0.3                     | 1.8270 | 0.0380         | 0.1788                   | 0.0024                   | 0.41         | 5.5928                   | 0.0751                  | 0.0743                   | 0.0017     | 0.0002                   | 0.0003 | 0.12 | 0.0545 | 0.0010 | 1060 | 13 | 1054 | 14 | 1033 | 46 | 101 | 191072 |
| Z_91500_17  | 80                       | 2                         | 30            | 1                         | 0.38  | 0.01           | 15                      | 0.3                     | 1.8390 | 0.0380         | 0.1796                   | 0.0023                   | 0.27         | 5.5679                   | 0.0713                  | 0.0743                   | 0.0017     | 0.0001                   | 0.0001 | 0.22 | 0.0536 | 0.0009 | 1065 | 13 | 1057 | 14 | 1034 | 47 | 101 | 171055 |
| Z_91500_18  | 82                       | 2                         | 31            | 1                         | 0.37  | 0.01           | 15                      | 0.3                     | 1.8630 | 0.0340         | 0.1788                   | 0.0022                   | 0.29         | 5.5928                   | 0.0688                  | 0.0757                   | 0.0016     | 0.0001                   | 0.0000 | 0.31 | 0.0541 | 0.0010 | 1060 | 12 | 1067 | 12 | 1081 | 43 | 99  | 191065 |
| Z_91500_19  | 79                       | 2                         | 30            | 1                         | 0.37  | 0.01           | 15                      | 0.3                     | 1.8350 | 0.0360         | 0.1788                   | 0.0022                   | 0.25         | 5.5928                   | 0.0688                  | 0.0744                   | 0.0017     | 0.0002                   | 0.0001 | 0.26 | 0.0533 | 0.0009 | 1060 | 12 | 1057 | 13 | 1040 | 45 | 100 | 181050 |
| Z_91500_20  | 79                       | 2                         | 30            | 1                         | 0.38  | 0.01           | 15                      | 0.3                     | 1.8480 | 0.0380         | 0.1799                   | 0.0023                   | 0.29         | 5.5586                   | 0.0711                  | 0.0743                   | 0.0017     | 0.0001                   | 0.0000 | 0.20 | 0.0538 | 0.0010 | 1066 | 12 | 1063 | 13 | 1034 | 48 | 100 | 191059 |

ONLINE FIRST

**Table S1.** U–Pb LA-ICP-MS data of the standards and reference materials used for age dating of zircon from the Kutjevo (meta)granitoid KUI1A (28-11-2025).

| Grain.<br>point | U<br>(μg/g) | Th<br>(μg/g) | Th/U ± | Pb<br>(μg/g) ± | Isotopic ratios                          |                                          |       |                                          |                                           | Age (Ma) |                                           |                                          |                                          |                                           |              |                                           |        |         |        |        |      |    |      |    |      |    |     |       |     |
|-----------------|-------------|--------------|--------|----------------|------------------------------------------|------------------------------------------|-------|------------------------------------------|-------------------------------------------|----------|-------------------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|--------------|-------------------------------------------|--------|---------|--------|--------|------|----|------|----|------|----|-----|-------|-----|
|                 |             |              |        |                | <sup>206</sup> Pb/<br><sup>238</sup> U ± | <sup>207</sup> Pb/<br><sup>235</sup> U ± | r ±   | <sup>238</sup> U/<br><sup>206</sup> Pb ± | <sup>207</sup> Pb/<br><sup>206</sup> Pb ± | rTW ±    | <sup>208</sup> Pb/<br><sup>232</sup> Th ± | <sup>206</sup> Pb/<br><sup>238</sup> U ± | <sup>207</sup> Pb/<br><sup>235</sup> U ± | <sup>207</sup> Pb/<br><sup>206</sup> Pb ± | %<br>Conc. ± | <sup>208</sup> Pb/<br><sup>232</sup> Th ± |        |         |        |        |      |    |      |    |      |    |     |       |     |
| G_NIST610_1     | 214         | 14           | 198    | 12             | 0.93                                     | 0.08                                     | 11420 | 680                                      | 30.8500                                   | 0.3600   | 0.2454                                    | 0.0027                                   | 0.94                                     | 4.0750                                    | 0.0448       | 0.9112                                    | 0.0038 | 0.27    | 0.5201 | 0.0240 | 1415 | 14 | 3516 | 12 | 5213 | 9  | 40  | 8463  | 320 |
| G_NIST610_2     | 220         | 14           | 205    | 12             | 0.93                                     | 0.08                                     | 11810 | 660                                      | 31.1600                                   | 0.3500   | 0.2480                                    | 0.0026                                   | 0.93                                     | 4.0323                                    | 0.0423       | 0.9107                                    | 0.0035 | -0.03   | 0.5197 | 0.0240 | 1428 | 13 | 3524 | 11 | 5212 | 8  | 41  | 8458  | 320 |
| G_NIST610_3     | 220         | 14           | 208    | 12             | 0.95                                     | 0.08                                     | 11910 | 660                                      | 31.3900                                   | 0.3300   | 0.2511                                    | 0.0025                                   | 0.89                                     | 3.9825                                    | 0.0397       | 0.9064                                    | 0.0038 | 0.19    | 0.5175 | 0.0240 | 1444 | 13 | 3531 | 10 | 5202 | 9  | 41  | 8429  | 310 |
| G_NIST610_4     | 197         | 14           | 180    | 12             | 0.91                                     | 0.09                                     | 10810 | 730                                      | 31.5800                                   | 0.3300   | 0.2522                                    | 0.0025                                   | 0.92                                     | 3.9651                                    | 0.0393       | 0.9077                                    | 0.0035 | 0.15    | 0.5401 | 0.0250 | 1450 | 13 | 3537 | 10 | 5205 | 8  | 41  | 8728  | 330 |
| G_NIST610_5     | 44          | 5            | 36     | 5              | 0.82                                     | 0.15                                     | 2390  | 290                                      | 30.6100                                   | 1.0000   | 0.2438                                    | 0.0081                                   | 0.99                                     | 4.1017                                    | 0.1363       | 0.9096                                    | 0.0056 | 0.25    | 0.6270 | 0.0400 | 1413 | 40 | 3499 | 34 | 5209 | 13 | 40  | 9790  | 480 |
| G_NIST610_6     | 20          | 1            | 12     | 1              | 0.58                                     | 0.06                                     | 821   | 49                                       | 23.5000                                   | 1.2000   | 0.1886                                    | 0.0092                                   | 0.98                                     | 5.3022                                    | 0.2586       | 0.9044                                    | 0.0096 | 0.15    | 0.6770 | 0.0700 | 1111 | 50 | 3233 | 47 | 5198 | 22 | 34  | 10270 | 770 |
| G_NIST610_7     | 201         | 15           | 186    | 13             | 0.93                                     | 0.09                                     | 10940 | 740                                      | 31.5700                                   | 0.3900   | 0.2518                                    | 0.0030                                   | 0.93                                     | 3.9714                                    | 0.0473       | 0.9084                                    | 0.0037 | 0.16    | 0.5278 | 0.0240 | 1448 | 15 | 3536 | 12 | 5207 | 8  | 41  | 8566  | 320 |
| G_NIST610_8     | 216         | 17           | 202    | 14             | 0.94                                     | 0.10                                     | 11740 | 830                                      | 31.4100                                   | 0.3600   | 0.2512                                    | 0.0028                                   | 0.93                                     | 3.9809                                    | 0.0444       | 0.9068                                    | 0.0036 | 0.25    | 0.5189 | 0.0240 | 1445 | 14 | 3532 | 11 | 5203 | 8  | 41  | 8447  | 320 |
| G_NIST610_9     | 223         | 14           | 211    | 12             | 0.95                                     | 0.08                                     | 12070 | 680                                      | 31.2700                                   | 0.3700   | 0.2497                                    | 0.0027                                   | 0.93                                     | 4.0048                                    | 0.0433       | 0.9084                                    | 0.0037 | 0.01    | 0.5118 | 0.0230 | 1437 | 14 | 3527 | 12 | 5207 | 8  | 41  | 8353  | 310 |
| G_NIST610_10    | 225         | 13           | 212    | 12             | 0.94                                     | 0.08                                     | 12100 | 640                                      | 31.0200                                   | 0.3500   | 0.2472                                    | 0.0025                                   | 0.93                                     | 4.0453                                    | 0.0409       | 0.9102                                    | 0.0036 | 0.29    | 0.5087 | 0.0230 | 1424 | 13 | 3519 | 10 | 5211 | 8  | 40  | 8311  | 310 |
| KARA_18_1       | 70          | 2            | 28     | 1              | 0.40                                     | 0.01                                     | 424   | 9                                        | 12.4300                                   | 0.1600   | 0.5044                                    | 0.0058                                   | 0.89                                     | 1.9826                                    | 0.0228       | 0.1781                                    | 0.0009 | 0.08    | 0.1363 | 0.0069 | 2632 | 25 | 2637 | 12 | 2635 | 9  | 100 | 2582  | 120 |
| KARA_18_2       | 119         | 1            | 65     | 1              | 0.55                                     | 0.01                                     | 984   | 10                                       | 12.4170                                   | 0.1400   | 0.5050                                    | 0.0046                                   | 0.84                                     | 1.9802                                    | 0.0188       | 0.1781                                    | 0.0008 | 0.03    | 0.1361 | 0.0065 | 2635 | 21 | 2636 | 10 | 2636 | 8  | 100 | 2579  | 120 |
| KARA_18_3       | 85          | 1            | 40     | 1              | 0.47                                     | 0.01                                     | 617   | 11                                       | 12.6300                                   | 0.1600   | 0.5165                                    | 0.0061                                   | 0.86                                     | 1.9361                                    | 0.0229       | 0.1772                                    | 0.0010 | 0.11    | 0.1382 | 0.0067 | 2684 | 26 | 2652 | 12 | 2626 | 9  | 101 | 2616  | 120 |
| KARA_18_4       | 79          | 2            | 31     | 1              | 0.39                                     | 0.01                                     | 481   | 8                                        | 12.6600                                   | 0.1600   | 0.5174                                    | 0.0058                                   | 0.84                                     | 1.9327                                    | 0.0217       | 0.1774                                    | 0.0012 | 0.10    | 0.1415 | 0.0074 | 2688 | 25 | 2654 | 12 | 2627 | 11 | 101 | 2673  | 130 |
| KARA_18_5       | 89          | 2            | 37     | 1              | 0.41                                     | 0.01                                     | 568   | 11                                       | 12.7100                                   | 0.1800   | 0.5197                                    | 0.0066                                   | 0.87                                     | 1.9242                                    | 0.0244       | 0.1773                                    | 0.0011 | 0.10    | 0.1401 | 0.0071 | 2697 | 28 | 2658 | 13 | 2627 | 10 | 101 | 2649  | 130 |
| KARA_18_6       | 190         | 4            | 93     | 2              | 0.49                                     | 0.02                                     | 1587  | 33                                       | 12.2900                                   | 0.1400   | 0.5029                                    | 0.0050                                   | 0.88                                     | 1.9885                                    | 0.0198       | 0.1771                                    | 0.0008 | 0.00    | 0.1529 | 0.0072 | 2626 | 22 | 2626 | 11 | 2625 | 7  | 100 | 2876  | 130 |
| KARA_18_7       | 202         | 5            | 108    | 2              | 0.54                                     | 0.02                                     | 1827  | 37                                       | 12.3900                                   | 0.1500   | 0.5056                                    | 0.0052                                   | 0.91                                     | 1.9778                                    | 0.0203       | 0.1776                                    | 0.0008 | -0.15   | 0.1511 | 0.0070 | 2638 | 22 | 2634 | 11 | 2630 | 8  | 100 | 2845  | 120 |
| KARA_18_8       | 165         | 6            | 75     | 4              | 0.45                                     | 0.03                                     | 1261  | 67                                       | 12.4900                                   | 0.1600   | 0.5100                                    | 0.0058                                   | 0.88                                     | 1.9608                                    | 0.0223       | 0.1777                                    | 0.0010 | 0.09    | 0.1519 | 0.0075 | 2656 | 25 | 2642 | 12 | 2630 | 9  | 101 | 2856  | 130 |
| KARA_18_9       | 163         | 6            | 73     | 4              | 0.45                                     | 0.03                                     | 1213  | 62                                       | 12.2800                                   | 0.1800   | 0.5015                                    | 0.0070                                   | 0.95                                     | 1.9940                                    | 0.0278       | 0.1776                                    | 0.0008 | 0.02    | 0.1486 | 0.0073 | 2619 | 30 | 2625 | 14 | 2630 | 8  | 100 | 2800  | 130 |
| Z_GJ1_1         | 342         | 6            | 9      | 1              | 0.03                                     | 0.00                                     | 31    | 1                                        | 0.8056                                    | 0.0110   | 0.0973                                    | 0.0009                                   | 0.5067                                   | 10.2796                                   | 0.0940       | 0.0600                                    | 0.0006 | 0.0241  | 0.0328 | 0.0041 | 598  | 5  | 600  | 6  | 602  | 21 | 100 | 650   | 78  |
| Z_GJ1_2         | 338         | 6            | 9      | 1              | 0.03                                     | 0.00                                     | 30    | 1                                        | 0.8140                                    | 0.0120   | 0.0973                                    | 0.0009                                   | 0.4865                                   | 10.2817                                   | 0.0951       | 0.0607                                    | 0.0007 | -0.0064 | 0.0320 | 0.0029 | 598  | 5  | 604  | 7  | 623  | 25 | 99  | 636   | 57  |
| Z_GJ1_3         | 334         | 4            | 9      | 1              | 0.03                                     | 0.00                                     | 30    | 1                                        | 0.8020                                    | 0.0110   | 0.0974                                    | 0.0009                                   | 0.5462                                   | 10.2691                                   | 0.0928       | 0.0597                                    | 0.0006 | -0.0549 | 0.0310 | 0.0031 | 599  | 5  | 598  | 6  | 594  | 21 | 100 | 616   | 60  |
| Z_GJ1_4         | 338         | 5            | 10     | 1              | 0.03                                     | 0.00                                     | 30    | 1                                        | 0.8029                                    | 0.0120   | 0.0977                                    | 0.0009                                   | 0.5087                                   | 10.2344                                   | 0.0985       | 0.0597                                    | 0.0007 | 0.0006  | 0.0292 | 0.0025 | 601  | 6  | 598  | 7  | 590  | 25 | 100 | 580   | 50  |
| Z_GJ1_5         | 340         | 5            | 10     | 1              | 0.03                                     | 0.00                                     | 30    | 1                                        | 0.8070                                    | 0.0120   | 0.0971                                    | 0.0009                                   | 0.4842                                   | 10.2955                                   | 0.0954       | 0.0603                                    | 0.0007 | 0.0070  | 0.0321 | 0.0037 | 598  | 5  | 601  | 7  | 611  | 24 | 100 | 637   | 73  |
| Z_GJ1_6         | 347         | 5            | 10     | 1              | 0.03                                     | 0.00                                     | 31    | 1                                        | 0.8135                                    | 0.0110   | 0.0972                                    | 0.0009                                   | 0.6622                                   | 10.2870                                   | 0.0974       | 0.0607                                    | 0.0005 | -0.1078 | 0.0298 | 0.0030 | 598  | 5  | 604  | 6  | 625  | 19 | 99  | 593   | 58  |
| Z_GJ1_7         | 345         | 6            | 10     | 1              | 0.03                                     | 0.00                                     | 31    | 1                                        | 0.8040                                    | 0.0130   | 0.0975                                    | 0.0010                                   | 0.6666                                   | 10.2617                                   | 0.1021       | 0.0598                                    | 0.0007 | -0.2086 | 0.0296 | 0.0030 | 599  | 6  | 599  | 7  | 592  | 24 | 100 | 589   | 58  |
| Z_GJ1_8         | 345         | 6            | 10     | 1              | 0.03                                     | 0.00                                     | 31    | 1                                        | 0.8111                                    | 0.0110   | 0.0978                                    | 0.0009                                   | 0.4775                                   | 10.2218                                   | 0.0972       | 0.0601                                    | 0.0006 | 0.1409  | 0.0314 | 0.0032 | 602  | 5  | 603  | 6  | 605  | 21 | 100 | 624   | 61  |
| Z_GJ1_9         | 349         | 5            | 10     | 1              | 0.03                                     | 0.00                                     | 32    | 1                                        | 0.8100                                    | 0.0120   | 0.0981                                    | 0.0009                                   | 0.5138                                   | 10.1916                                   | 0.0945       | 0.0599                                    | 0.0007 | 0.0307  | 0.0309 | 0.0032 | 603  | 5  | 602  | 7  | 598  | 24 | 100 | 615   | 62  |
| Z_GJ1_10        | 347         | 5            | 9      | 1              | 0.03                                     | 0.00                                     | 31    | 1                                        | 0.8060                                    | 0.0120   | 0.0981                                    | 0.0009                                   | 0.4518                                   | 10.1947                                   | 0.0946       | 0.0596                                    | 0.0007 | 0.0173  | 0.0325 | 0.0036 | 603  | 5  | 600  | 7  | 584  | 26 | 101 | 645   | 70  |

| Grain point | U (μg/g) | Th (μg/g) | Th/U ± | Pb (μg/g) | Isotopic ratios                       |                                       |     |                                       |                                        | Age (Ma) |        |        |                                       |                                       |         |                                        |        |         |        |        |     |   |     |   |     |    |     |     |     |
|-------------|----------|-----------|--------|-----------|---------------------------------------|---------------------------------------|-----|---------------------------------------|----------------------------------------|----------|--------|--------|---------------------------------------|---------------------------------------|---------|----------------------------------------|--------|---------|--------|--------|-----|---|-----|---|-----|----|-----|-----|-----|
|             |          |           |        |           | <sup>207</sup> Pb/ <sup>235</sup> U ± | <sup>206</sup> Pb/ <sup>238</sup> U ± | r ± | <sup>238</sup> U/ <sup>206</sup> Pb ± | <sup>207</sup> Pb/ <sup>206</sup> Pb ± | ±        | ±      | ±      | <sup>207</sup> Pb/ <sup>235</sup> U ± | <sup>206</sup> Pb/ <sup>238</sup> U ± | % Conc. | <sup>208</sup> Pb/ <sup>232</sup> Th ± |        |         |        |        |     |   |     |   |     |    |     |     |     |
| Z_GJ1_11    | 346      | 5         | 9      | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8177                                 | 0.0120   | 0.0981 | 0.0009 | 0.4221                                | 10.1978                               | 0.0905  | 0.0605                                 | 0.0007 | 0.0409  | 0.0340 | 0.0040 | 603 | 5 | 607 | 6 | 616 | 23 | 99  | 675 | 78  |
| Z_GJ1_12    | 346      | 5         | 10     | 1         | 0.03                                  | 0.00                                  | 32  | 1                                     | 0.8150                                 | 0.0120   | 0.0984 | 0.0009 | 0.3107                                | 10.1616                               | 0.0929  | 0.0601                                 | 0.0008 | 0.1365  | 0.0318 | 0.0029 | 605 | 5 | 605 | 7 | 602 | 28 | 100 | 632 | 57  |
| Z_GJ1_13    | 347      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 32  | 1                                     | 0.8153                                 | 0.0110   | 0.0982 | 0.0009 | 0.2838                                | 10.1864                               | 0.0923  | 0.0602                                 | 0.0007 | 0.2532  | 0.0315 | 0.0034 | 604 | 5 | 605 | 6 | 608 | 24 | 100 | 626 | 66  |
| Z_GJ1_14    | 344      | 5         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8168                                 | 0.0110   | 0.0982 | 0.0009 | 0.3189                                | 10.1833                               | 0.0913  | 0.0603                                 | 0.0007 | 0.1636  | 0.0318 | 0.0039 | 604 | 5 | 606 | 6 | 611 | 24 | 100 | 631 | 75  |
| Z_GJ1_15    | 343      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8210                                 | 0.0120   | 0.0986 | 0.0008 | 0.2473                                | 10.1399                               | 0.0864  | 0.0604                                 | 0.0008 | 0.1557  | 0.0283 | 0.0027 | 606 | 5 | 609 | 7 | 613 | 27 | 100 | 564 | 52  |
| Z_GJ1_16    | 344      | 6         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8222                                 | 0.0110   | 0.0987 | 0.0009 | 0.3631                                | 10.1317                               | 0.0873  | 0.0604                                 | 0.0007 | 0.0778  | 0.0314 | 0.0044 | 607 | 5 | 609 | 6 | 614 | 24 | 100 | 623 | 84  |
| Z_GJ1_17    | 345      | 5         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8089                                 | 0.0110   | 0.0979 | 0.0009 | 0.4316                                | 10.2166                               | 0.0898  | 0.0599                                 | 0.0006 | 0.0422  | 0.0292 | 0.0031 | 602 | 5 | 602 | 6 | 598 | 21 | 100 | 580 | 60  |
| Z_GJ1_18    | 345      | 5         | 10     | 1         | 0.03                                  | 0.00                                  | 32  | 1                                     | 0.8107                                 | 0.0110   | 0.0980 | 0.0009 | 0.3779                                | 10.2072                               | 0.0906  | 0.0600                                 | 0.0007 | 0.1072  | 0.0319 | 0.0037 | 603 | 5 | 603 | 6 | 600 | 24 | 100 | 632 | 71  |
| Z_GJ1_19    | 349      | 5         | 11     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8124                                 | 0.0100   | 0.0982 | 0.0008 | 0.3299                                | 10.1792                               | 0.0870  | 0.0600                                 | 0.0006 | 0.1527  | 0.0276 | 0.0028 | 604 | 5 | 604 | 6 | 599 | 22 | 100 | 550 | 55  |
| Z_GJ1_20    | 340      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 30  | 1                                     | 0.8093                                 | 0.0110   | 0.0978 | 0.0008 | -0.0261                               | 10.2208                               | 0.0825  | 0.0600                                 | 0.0007 | 0.3555  | 0.0314 | 0.0052 | 602 | 5 | 602 | 6 | 604 | 27 | 100 | 622 | 99  |
| Z_GJ1_21    | 341      | 5         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8138                                 | 0.0120   | 0.0981 | 0.0009 | 0.3106                                | 10.1916                               | 0.0883  | 0.0601                                 | 0.0007 | 0.1261  | 0.0297 | 0.0029 | 603 | 5 | 604 | 7 | 605 | 25 | 100 | 590 | 57  |
| Z_GJ1_22    | 345      | 5         | 9      | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8136                                 | 0.0110   | 0.0982 | 0.0008 | 0.3503                                | 10.1875                               | 0.0872  | 0.0603                                 | 0.0007 | 0.0582  | 0.0322 | 0.0032 | 604 | 5 | 604 | 6 | 609 | 25 | 100 | 640 | 63  |
| Z_GJ1_23    | 337      | 5         | 9      | 1         | 0.03                                  | 0.00                                  | 30  | 1                                     | 0.8193                                 | 0.0110   | 0.0978 | 0.0008 | 0.3395                                | 10.2270                               | 0.0879  | 0.0608                                 | 0.0007 | 0.1215  | 0.0340 | 0.0048 | 601 | 5 | 608 | 6 | 627 | 24 | 99  | 674 | 92  |
| Z_GJ1_24    | 339      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 30  | 1                                     | 0.8133                                 | 0.0110   | 0.0980 | 0.0009 | 0.5067                                | 10.2083                               | 0.0896  | 0.0602                                 | 0.0006 | 0.1978  | 0.0293 | 0.0029 | 602 | 5 | 604 | 6 | 608 | 23 | 100 | 583 | 56  |
| Z_GJ1_25    | 342      | 5         | 10     | 1         | 0.03                                  | 0.00                                  | 30  | 1                                     | 0.8128                                 | 0.0110   | 0.0976 | 0.0009 | 0.2731                                | 10.2512                               | 0.0946  | 0.0604                                 | 0.0007 | 0.2534  | 0.0310 | 0.0029 | 600 | 5 | 604 | 6 | 615 | 25 | 99  | 617 | 56  |
| Z_GJ1_26    | 335      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8130                                 | 0.0120   | 0.0976 | 0.0009 | 0.5201                                | 10.2501                               | 0.0956  | 0.0604                                 | 0.0007 | -0.0446 | 0.0315 | 0.0036 | 600 | 5 | 604 | 7 | 615 | 25 | 99  | 625 | 71  |
| Z_GJ1_27    | 340      | 4         | 9      | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8084                                 | 0.0120   | 0.0975 | 0.0008 | 0.1838                                | 10.2543                               | 0.0831  | 0.0603                                 | 0.0007 | 0.1416  | 0.0375 | 0.0093 | 600 | 5 | 601 | 7 | 609 | 26 | 100 | 840 | 270 |
| Z_GJ1_28    | 340      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8116                                 | 0.0110   | 0.0981 | 0.0009 | 0.5335                                | 10.1895                               | 0.0914  | 0.0600                                 | 0.0006 | -0.0168 | 0.0320 | 0.0038 | 604 | 5 | 603 | 6 | 600 | 20 | 100 | 635 | 74  |
| Z_GJ1_29    | 341      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 30  | 1                                     | 0.8070                                 | 0.0120   | 0.0972 | 0.0010 | 0.4964                                | 10.2870                               | 0.1005  | 0.0603                                 | 0.0008 | 0.0361  | 0.0302 | 0.0035 | 598 | 6 | 602 | 7 | 610 | 27 | 99  | 601 | 69  |
| Z_GJ1_30    | 346      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 30  | 1                                     | 0.8090                                 | 0.0100   | 0.0973 | 0.0010 | 0.3413                                | 10.2764                               | 0.1056  | 0.0603                                 | 0.0007 | 0.4304  | 0.0299 | 0.0031 | 599 | 6 | 602 | 6 | 612 | 24 | 99  | 594 | 61  |
| Z_GJ1_31    | 343      | 3         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8090                                 | 0.0130   | 0.0977 | 0.0009 | 0.5592                                | 10.2386                               | 0.0975  | 0.0601                                 | 0.0007 | -0.1045 | 0.0301 | 0.0034 | 601 | 5 | 602 | 7 | 603 | 24 | 100 | 598 | 66  |
| Z_GJ1_32    | 347      | 4         | 10     | 1         | 0.03                                  | 0.00                                  | 32  | 1                                     | 0.8010                                 | 0.0120   | 0.0975 | 0.0010 | 0.4454                                | 10.2564                               | 0.0999  | 0.0597                                 | 0.0007 | 0.0545  | 0.0314 | 0.0034 | 600 | 6 | 597 | 7 | 591 | 24 | 100 | 623 | 67  |
| Z_GJ1_33    | 345      | 3         | 10     | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8020                                 | 0.0120   | 0.0975 | 0.0010 | 0.4879                                | 10.2522                               | 0.0999  | 0.0596                                 | 0.0007 | 0.0020  | 0.0307 | 0.0032 | 600 | 6 | 598 | 7 | 586 | 26 | 100 | 610 | 63  |
| Z_GJ1_34    | 343      | 5         | 9      | 1         | 0.03                                  | 0.00                                  | 31  | 1                                     | 0.8140                                 | 0.0130   | 0.0981 | 0.0010 | 0.4850                                | 10.1926                               | 0.1039  | 0.0602                                 | 0.0007 | 0.0895  | 0.0359 | 0.0058 | 603 | 6 | 604 | 7 | 605 | 26 | 100 | 710 | 110 |
| Z_M257_1    | 807      | 14        | 203    | 3         | 0.25                                  | 0.01                                  | 635 | 11                                    | 0.7410                                 | 0.0088   | 0.0914 | 0.0008 | 0.6033                                | 10.9469                               | 0.0947  | 0.0587                                 | 0.0004 | 0.0117  | 0.0283 | 0.0013 | 564 | 5 | 563 | 5 | 555 | 16 | 100 | 563 | 26  |
| Z_M257_2    | 820      | 15        | 211    | 3         | 0.26                                  | 0.01                                  | 652 | 12                                    | 0.7455                                 | 0.0091   | 0.0920 | 0.0009 | 0.6707                                | 10.8743                               | 0.1017  | 0.0588                                 | 0.0004 | -0.0096 | 0.0279 | 0.0013 | 567 | 5 | 566 | 5 | 557 | 16 | 100 | 555 | 25  |
| Z_M257_3    | 826      | 14        | 212    | 3         | 0.26                                  | 0.01                                  | 654 | 10                                    | 0.7493                                 | 0.0084   | 0.0921 | 0.0008 | 0.6564                                | 10.8637                               | 0.0980  | 0.0590                                 | 0.0004 | -0.0109 | 0.0278 | 0.0013 | 568 | 5 | 568 | 5 | 564 | 15 | 100 | 553 | 25  |
| Z_M257_4    | 814      | 13        | 209    | 3         | 0.26                                  | 0.01                                  | 645 | 9                                     | 0.7466                                 | 0.0093   | 0.0923 | 0.0008 | 0.5981                                | 10.8342                               | 0.0939  | 0.0586                                 | 0.0005 | -0.1174 | 0.0277 | 0.0013 | 569 | 5 | 566 | 5 | 551 | 18 | 101 | 551 | 25  |
| Z_M257_5    | 802      | 15        | 206    | 3         | 0.26                                  | 0.01                                  | 640 | 12                                    | 0.7527                                 | 0.0082   | 0.0925 | 0.0008 | 0.5222                                | 10.8120                               | 0.0888  | 0.0590                                 | 0.0004 | 0.0725  | 0.0278 | 0.0013 | 570 | 5 | 570 | 5 | 565 | 15 | 100 | 555 | 25  |
| Z_M257_6    | 810      | 13        | 208    | 2         | 0.26                                  | 0.00                                  | 637 | 10                                    | 0.7449                                 | 0.0088   | 0.0917 | 0.0008 | 0.2299                                | 10.9039                               | 0.0892  | 0.0589                                 | 0.0005 | 0.2443  | 0.0274 | 0.0013 | 566 | 4 | 565 | 5 | 561 | 20 | 100 | 547 | 25  |
| Z_M257_7    | 827      | 11        | 214    | 2         | 0.26                                  | 0.00                                  | 652 | 9                                     | 0.7426                                 | 0.0095   | 0.0916 | 0.0007 | 0.5445                                | 10.9135                               | 0.0881  | 0.0588                                 | 0.0005 | -0.1823 | 0.0272 | 0.0013 | 565 | 4 | 564 | 6 | 556 | 20 | 100 | 543 | 25  |

| Grain.<br>point | U                   |       | Th                  |       | Pb   |       | Isotopic ratios     |       |                                  |        |                                  |        |        |                                  |        |                                   | Age (Ma) |         |                                   |        |                                  |       |                                  |       |                                   |       |         |                                   |       |
|-----------------|---------------------|-------|---------------------|-------|------|-------|---------------------|-------|----------------------------------|--------|----------------------------------|--------|--------|----------------------------------|--------|-----------------------------------|----------|---------|-----------------------------------|--------|----------------------------------|-------|----------------------------------|-------|-----------------------------------|-------|---------|-----------------------------------|-------|
|                 | ( $\mu\text{g/g}$ ) | $\pm$ | ( $\mu\text{g/g}$ ) | $\pm$ | Th/U | $\pm$ | ( $\mu\text{g/g}$ ) | $\pm$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm$  | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm$  | r      | $^{238}\text{U}/^{206}\text{Pb}$ | $\pm$  | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm$    | rTW     | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm$  | $^{206}\text{Pb}/^{238}\text{U}$ | $\pm$ | $^{207}\text{Pb}/^{235}\text{U}$ | $\pm$ | $^{207}\text{Pb}/^{206}\text{Pb}$ | $\pm$ | % Conc. | $^{208}\text{Pb}/^{232}\text{Th}$ | $\pm$ |
| Z_M257_8        | 838                 | 12    | 217                 | 2     | 0.26 | 0.00  | 660                 | 10    | 0.7466                           | 0.0089 | 0.0919                           | 0.0008 | 0.5407 | 10.8873                          | 0.0972 | 0.0589                            | 0.0005   | 0.0704  | 0.0272                            | 0.0013 | 567                              | 5     | 566                              | 5     | 563                               | 17    | 100     | 542                               | 25    |
| Z_M257_9        | 826                 | 10    | 214                 | 2     | 0.26 | 0.00  | 648                 | 9     | 0.7438                           | 0.0100 | 0.0919                           | 0.0009 | 0.6902 | 10.8838                          | 0.1031 | 0.0587                            | 0.0005   | -0.1433 | 0.0270                            | 0.0012 | 567                              | 5     | 564                              | 6     | 554                               | 18    | 100     | 538                               | 25    |
| Z_91500_1       | 77                  | 2     | 26                  | 1     | 0.34 | 0.01  | 148                 | 3     | 1.8280                           | 0.0340 | 0.1762                           | 0.0022 | 0.6501 | 5.6754                           | 0.0709 | 0.0750                            | 0.0009   | -0.0196 | 0.0503                            | 0.0026 | 1046                             | 12    | 1055                             | 12    | 1069                              | 26    | 99      | 992                               | 50    |
| Z_91500_2       | 78                  | 1     | 27                  | 1     | 0.34 | 0.01  | 153                 | 3     | 1.8410                           | 0.0410 | 0.1777                           | 0.0028 | 0.6727 | 5.6275                           | 0.0887 | 0.0751                            | 0.0012   | -0.0038 | 0.0525                            | 0.0029 | 1054                             | 15    | 1059                             | 15    | 1066                              | 31    | 100     | 1035                              | 55    |
| Z_91500_3       | 76                  | 1     | 26                  | 1     | 0.34 | 0.01  | 149                 | 2     | 1.8830                           | 0.0390 | 0.1818                           | 0.0025 | 0.5657 | 5.5006                           | 0.0756 | 0.0751                            | 0.0012   | 0.0677  | 0.0524                            | 0.0029 | 1077                             | 14    | 1074                             | 14    | 1065                              | 32    | 100     | 1032                              | 55    |
| Z_91500_4       | 78                  | 1     | 27                  | 1     | 0.34 | 0.01  | 154                 | 2     | 1.8150                           | 0.0320 | 0.1786                           | 0.0021 | 0.4893 | 5.5991                           | 0.0658 | 0.0737                            | 0.0010   | 0.1482  | 0.0521                            | 0.0029 | 1059                             | 12    | 1050                             | 11    | 1028                              | 28    | 101     | 1026                              | 56    |
| Z_91500_5       | 78                  | 1     | 26                  | 1     | 0.34 | 0.01  | 152                 | 2     | 1.8670                           | 0.0370 | 0.1796                           | 0.0026 | 0.4376 | 5.5679                           | 0.0806 | 0.0754                            | 0.0013   | 0.2533  | 0.0526                            | 0.0031 | 1065                             | 14    | 1068                             | 13    | 1073                              | 34    | 100     | 1035                              | 60    |
| Z_91500_6       | 79                  | 1     | 27                  | 1     | 0.35 | 0.01  | 154                 | 3     | 1.8330                           | 0.0420 | 0.1786                           | 0.0021 | 0.6629 | 5.5991                           | 0.0658 | 0.0743                            | 0.0013   | -0.2693 | 0.0507                            | 0.0029 | 1059                             | 12    | 1056                             | 15    | 1044                              | 35    | 100     | 1000                              | 57    |
| Z_91500_7       | 79                  | 1     | 27                  | 1     | 0.34 | 0.01  | 151                 | 3     | 1.8140                           | 0.0380 | 0.1778                           | 0.0020 | 0.2806 | 5.6243                           | 0.0633 | 0.0742                            | 0.0014   | 0.2406  | 0.0508                            | 0.0028 | 1055                             | 11    | 1049                             | 14    | 1038                              | 39    | 101     | 1002                              | 55    |
| Z_91500_8       | 78                  | 1     | 27                  | 1     | 0.34 | 0.01  | 152                 | 3     | 1.8930                           | 0.0380 | 0.1797                           | 0.0025 | 0.5233 | 5.5648                           | 0.0774 | 0.0764                            | 0.0012   | 0.1274  | 0.0521                            | 0.0032 | 1065                             | 14    | 1078                             | 14    | 1100                              | 33    | 99      | 1025                              | 62    |
| Z_91500_9       | 82                  | 2     | 28                  | 1     | 0.35 | 0.01  | 161                 | 3     | 1.8610                           | 0.0400 | 0.1785                           | 0.0025 | 0.6742 | 5.6022                           | 0.0785 | 0.0756                            | 0.0011   | -0.0976 | 0.0508                            | 0.0026 | 1059                             | 14    | 1066                             | 14    | 1079                              | 30    | 99      | 1002                              | 50    |