

| Relative Abundances |        | 36Ar [fA]   | %1σ    | 37Ar [fA] | %1σ    | 38Ar [fA] | %1σ    | 39Ar [fA] | %1σ   | 40Ar [fA] | %1σ   | 40(r)/39(k) ± 2σ   | Age ± 2σ (Ma) | 40Ar(r) (%) | 39Ar(k) (%) | K/Ca ± 2σ     |
|---------------------|--------|-------------|--------|-----------|--------|-----------|--------|-----------|-------|-----------|-------|--------------------|---------------|-------------|-------------|---------------|
| 14D28381            | 1.8 %  | 0.1158417   | 1.067  | 11.90866  | 29.316 | 0.242697  | 15.850 | 13.68652  | 0.291 | 290.733   | 0.048 | 18.81735 ± 0.13018 | 58.65 ± 0.40  | 88.53       | 1.49        | 0.494 ± 0.290 |
| 14D28382            | 1.9 %  | 0.0355544   | 2.734  | 5.23652   | 69.128 | 0.104511  | 36.852 | 14.14913  | 0.265 | 257.234   | 0.054 | 17.46734 ± 0.11092 | 54.51 ± 0.34  | 96.05       | 1.54        | 1.162 ± 1.606 |
| 14D28383            | 2.0 %  | 0.0272601   | 3.437  | 13.89928  | 23.688 | 0.244563  | 15.352 | 17.43490  | 0.222 | 311.900   | 0.045 | 17.49593 ± 0.09050 | 54.60 ± 0.28  | 97.75       | 1.90        | 0.539 ± 0.255 |
| 14D28385            | 2.1 %  | 0.0130798   | 7.044  | 5.62543   | 63.757 | 0.117327  | 31.930 | 9.88857   | 0.367 | 176.979   | 0.078 | 17.55419 ± 0.15413 | 54.78 ± 0.47  | 98.04       | 1.08        | 0.756 ± 0.963 |
| 14D28386            | 2.2 %  | 0.0163541   | 5.569  | 8.24112   | 42.463 | 0.175168  | 23.856 | 15.93576  | 0.244 | 281.015   | 0.050 | 17.37391 ± 0.09945 | 54.22 ± 0.31  | 98.49       | 1.73        | 0.831 ± 0.706 |
| 14D28388            | 2.3 %  | 0.0107902   | 8.551  | 7.36437   | 45.592 | 0.097584  | 38.877 | 11.11511  | 0.326 | 195.747   | 0.070 | 17.38015 ± 0.13479 | 54.24 ± 0.41  | 98.65       | 1.21        | 0.649 ± 0.592 |
| 14D28390            | 2.4 %  | 0.0154172   | 5.960  | 12.58311  | 28.083 | 0.234579  | 16.386 | 21.73395  | 0.184 | 382.832   | 0.037 | 17.45343 ± 0.07489 | 54.47 ± 0.23  | 99.05       | 2.36        | 0.742 ± 0.417 |
| 14D28391            | 2.5 %  | 0.0091104   | 9.702  | 5.66921   | 61.395 | 0.128714  | 30.600 | 12.94181  | 0.287 | 228.484   | 0.061 | 17.48251 ± 0.11819 | 54.55 ± 0.36  | 99.00       | 1.41        | 0.981 ± 1.205 |
| 14D28392            | 2.6 %  | 0.0091283   | 9.882  | 14.82164  | 24.020 | 0.170444  | 22.157 | 13.65844  | 0.272 | 240.399   | 0.058 | 17.49770 ± 0.11275 | 54.60 ± 0.35  | 99.34       | 1.49        | 0.396 ± 0.190 |
| 14D28394            | 2.7 %  | 0.0097386   | 9.115  | 11.61200  | 31.011 | 0.182342  | 20.622 | 15.54375  | 0.255 | 275.272   | 0.050 | 17.58822 ± 0.10432 | 54.88 ± 0.32  | 99.26       | 1.69        | 0.575 ± 0.357 |
| 14D28395            | 2.8 %  | 0.0146775   | 6.164  | 16.77173  | 21.219 | 0.328079  | 11.790 | 25.75046  | 0.157 | 451.176   | 0.032 | 17.40781 ± 0.06337 | 54.33 ± 0.19  | 99.31       | 2.80        | 0.660 ± 0.280 |
| 14D28396            | 2.9 %  | 0.0116039   | 7.987  | 15.33353  | 23.305 | 0.221282  | 17.281 | 19.79832  | 0.196 | 348.043   | 0.041 | 17.47251 ± 0.08074 | 54.52 ± 0.25  | 99.34       | 2.15        | 0.555 ± 0.259 |
| 14D28398            | 3.0 %  | ✓ 0.0141519 | 6.694  | 27.62041  | 13.018 | 0.328891  | 12.210 | 26.93697  | 0.158 | 474.767   | 0.030 | 17.55890 ± 0.06378 | 54.79 ± 0.20  | 99.56       | 2.93        | 0.419 ± 0.109 |
| 14D28399            | 3.2 %  | ✓ 0.0148698 | 6.158  | 28.10000  | 12.928 | 0.336555  | 11.309 | 28.45042  | 0.151 | 501.510   | 0.029 | 17.55867 ± 0.06074 | 54.79 ± 0.19  | 99.54       | 3.09        | 0.435 ± 0.112 |
| 14D28400            | 3.4 %  | ✓ 0.0190884 | 4.801  | 32.99389  | 10.863 | 0.442100  | 9.289  | 36.60130  | 0.122 | 645.576   | 0.023 | 17.56176 ± 0.04869 | 54.80 ± 0.15  | 99.51       | 3.98        | 0.477 ± 0.104 |
| 14D28402            | 3.6 %  | ✓ 0.0200147 | 4.674  | 36.03518  | 10.221 | 0.487928  | 8.430  | 41.31809  | 0.113 | 729.711   | 0.020 | 17.59284 ± 0.04494 | 54.89 ± 0.14  | 99.56       | 4.49        | 0.493 ± 0.101 |
| 14D28403            | 3.9 %  | ✓ 0.0181072 | 5.004  | 30.08512  | 11.589 | 0.464908  | 8.161  | 36.68742  | 0.123 | 647.061   | 0.023 | 17.56179 ± 0.04865 | 54.80 ± 0.15  | 99.52       | 3.99        | 0.524 ± 0.121 |
| 14D28404            | 4.2 %  | ✓ 0.0205859 | 4.664  | 40.09149  | 8.887  | 0.633399  | 6.107  | 52.41809  | 0.100 | 928.463   | 0.016 | 17.66209 ± 0.03900 | 55.11 ± 0.12  | 99.66       | 5.70        | 0.562 ± 0.100 |
| 14D28406            | 4.5 %  | ✓ 0.0209176 | 4.714  | 33.61571  | 10.917 | 0.641057  | 6.245  | 50.53819  | 0.108 | 895.006   | 0.017 | 17.64369 ± 0.04202 | 55.05 ± 0.13  | 99.58       | 5.50        | 0.646 ± 0.141 |
| 14D28407            | 4.8 %  | ✓ 0.0171306 | 5.477  | 31.23325  | 11.136 | 0.602051  | 6.340  | 47.55803  | 0.104 | 841.639   | 0.018 | 17.64641 ± 0.04088 | 55.06 ± 0.13  | 99.67       | 5.17        | 0.654 ± 0.146 |
| 14D28408            | 5.1 %  | ✓ 0.0083746 | 10.934 | 15.36126  | 23.482 | 0.281356  | 13.782 | 23.67240  | 0.165 | 419.772   | 0.034 | 17.68301 ± 0.06835 | 55.17 ± 0.21  | 99.68       | 2.57        | 0.662 ± 0.311 |
| 14D28410            | 5.4 %  | ✓ 0.0067418 | 13.396 | 17.22723  | 20.674 | 0.302799  | 12.601 | 22.00563  | 0.181 | 389.156   | 0.036 | 17.66114 ± 0.07439 | 55.10 ± 0.23  | 99.82       | 2.39        | 0.549 ± 0.227 |
| 14D28411            | 5.8 %  | 0.0153472   | 5.870  | 22.03226  | 15.620 | 0.474519  | 8.199  | 37.21719  | 0.122 | 655.164   | 0.022 | 17.53178 ± 0.04813 | 54.71 ± 0.15  | 99.55       | 4.05        | 0.726 ± 0.227 |
| 14D28412            | 6.2 %  | 0.0093136   | 9.867  | 18.50107  | 18.887 | 0.343796  | 11.303 | 26.80762  | 0.156 | 471.091   | 0.031 | 17.52910 ± 0.06292 | 54.70 ± 0.19  | 99.70       | 2.92        | 0.623 ± 0.235 |
| 14D28414            | 6.8 %  | 0.0209309   | 4.416  | 21.73648  | 15.414 | 0.545229  | 7.133  | 41.71535  | 0.114 | 728.870   | 0.020 | 17.36758 ± 0.04417 | 54.20 ± 0.14  | 99.36       | 4.54        | 0.825 ± 0.254 |
| 14D28415            | 7.4 %  | 0.0179528   | 5.147  | 13.75113  | 25.995 | 0.451546  | 8.152  | 32.12516  | 0.139 | 561.956   | 0.026 | 17.36267 ± 0.05503 | 54.19 ± 0.17  | 99.23       | 3.49        | 1.004 ± 0.522 |
| 14D28416            | 8.3 %  | 0.0219835   | 4.271  | 19.13104  | 17.479 | 0.564007  | 6.788  | 36.72728  | 0.127 | 633.161   | 0.023 | 17.10618 ± 0.04888 | 53.40 ± 0.15  | 99.19       | 4.00        | 0.825 ± 0.288 |
| 14D28418            | 9.3 %  | 0.0251801   | 3.822  | 21.12357  | 17.305 | 0.569542  | 6.492  | 37.92663  | 0.120 | 648.397   | 0.022 | 16.94659 ± 0.04656 | 52.91 ± 0.14  | 99.09       | 4.13        | 0.772 ± 0.267 |
| 14D28419            | 10.4 % | 0.0275600   | 3.372  | 23.22612  | 15.306 | 0.520320  | 7.532  | 33.49947  | 0.135 | 563.841   | 0.026 | 16.64711 ± 0.05161 | 51.99 ± 0.16  | 98.86       | 3.64        | 0.620 ± 0.190 |
| 14D28420            | 11.7 % | 0.0307580   | 3.131  | 24.42505  | 14.270 | 0.546538  | 6.886  | 31.52166  | 0.136 | 521.831   | 0.028 | 16.33258 ± 0.05187 | 51.02 ± 0.16  | 98.61       | 3.43        | 0.555 ± 0.158 |
| 14D28422            | 13.5 % | 0.0415702   | 2.384  | 28.31858  | 12.472 | 0.492581  | 8.067  | 26.53533  | 0.157 | 428.264   | 0.034 | 15.76865 ± 0.05923 | 49.28 ± 0.18  | 97.63       | 2.89        | 0.403 ± 0.100 |
| 14D28423            | 15.5 % | 0.0498231   | 2.056  | 40.65392  | 8.363  | 0.385584  | 9.942  | 22.91366  | 0.173 | 362.406   | 0.039 | 15.32827 ± 0.06511 | 47.92 ± 0.20  | 96.80       | 2.49        | 0.242 ± 0.040 |
| 14D28424            | 17.6 % | 0.0437581   | 2.299  | 39.33730  | 9.050  | 0.234312  | 16.731 | 14.14564  | 0.274 | 223.621   | 0.061 | 15.13825 ± 0.10322 | 47.33 ± 0.32  | 95.58       | 1.54        | 0.154 ± 0.028 |
| 14D28426            | 19.8 % | 0.0491770   | 2.078  | 51.57507  | 7.221  | 0.226023  | 17.010 | 10.49478  | 0.357 | 166.208   | 0.083 | 14.88580 ± 0.13641 | 46.56 ± 0.42  | 93.68       | 1.14        | 0.087 ± 0.013 |
| 14D28427            | 22.1 % | 0.0503007   | 1.940  | 56.13056  | 6.376  | 0.207000  | 18.109 | 6.81508   | 0.538 | 111.413   | 0.123 | 14.89604 ± 0.20457 | 46.59 ± 0.63  | 90.61       | 0.74        | 0.052 ± 0.007 |
| 14D28428            | 24.5 % | 0.0378560   | 2.527  | 42.76140  | 8.569  | 0.104857  | 38.421 | 3.30240   | 1.150 | 57.347    | 0.236 | 15.12721 ± 0.43758 | 47.30 ± 1.35  | 86.35       | 0.36        | 0.033 ± 0.006 |
| Σ                   |        | 0.8900503   | 0.640  | 844.13370 | 2.516  | 12.434187 | 1.868  | 919.57053 | 0.028 | 16046.046 | 0.005 |                    |               |             |             |               |

**Information on Analysis and Constants Used in Calculations**

Project = RURUTU (13-INT-08)  
 Sample = RR1310-D07-22B  
 Material = Groundmass  
 Location = Rurutu Hotspot  
 Region = Tuvalu  
 Analyst = Kevin Konrad  
 Irradiation = 14-OSU-02 (2A43-14)  
 Position = X: 0 | Y: 0 | Z/H: 51.8 mm  
 FCT-NM Age = 28.201 ± 0.023 Ma  
 FCT-NM Reference = Kuiper et al. (2008)  
 FCT-NM 40Ar/39Ar Ratio = 8.97135 ± 0.00843  
 FCT-NM J-value = 0.00175195 ± 0.00000165  
 Air Shot 40Ar/36Ar = 303.6980 ± 0.4707  
 Air Shot MDF = 0.99324280 ± 0.00068974 (LIN)  
 Experiment Type = Incremental Heating  
 Extraction Method = Bulk Laser Heating  
 Heating = 77 sec  
 Isolation = 10.00 min  
 Instrument = ARGUS-VI-D  
 Preferred Age = Plateau Age  
 Age Classification = Eruption Age  
 IGSN = IEKK1-RR1310-D07-22B  
 Rock Class = Igneous>Volcanic>Mafic  
 Lithology = Basalt  
 Lat-Lon = 5°58.1'S - 176°57.6'E

Age Equations = Min et al. (2000)  
 Negative Intensities = Allowed  
 Collector Calibrations = 40Ar 36Ar  
 Decay 40K = 5.530 ± 0.048 E-10 1/a  
 Decay 39Ar = 2.940 ± 0.016 E-07 1/h  
 Decay 37Ar = 8.230 ± 0.012 E-04 1/h  
 Decay 36Cl = 2.257 ± 0.015 E-06 1/a  
 Decay 40K(EC,β<sup>+</sup>) = 0.580 ± 0.009 E-10 1/a  
 Decay 40K(β<sup>-</sup>) = 4.950 ± 0.043 E-10 1/a  
 Atmospheric 40/36(a) = 295.50  
 Atmospheric 38/36(a) = 0.1869  
 Production 39/37(ca) = 0.0006756 ± 0.0000089  
 Production 38/37(ca) = 0.0000718 ± 0.0000092  
 Production 36/37(ca) = 0.0002663 ± 0.0000004  
 Production 40/39(k) = 0.003823 ± 0.000102  
 Production 38/39(k) = 0.012031 ± 0.000019  
 Production 36/38(cl) = 262.80 ± 1.71  
 Scaling Ratio K/Ca = 0.430  
 Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04  
 Atomic Weight K = 39.0983 ± 0.0001 g

**Results**

|                         | 40(a)/36(a) ± 2σ | 40(r)/39(k) ± 2σ   | Age ± 2σ (Ma)   | M <sub>SD</sub> | 39Ar(k) (%),n        | K/Ca ± 2σ     |
|-------------------------|------------------|--------------------|---|-----------------|----------------------|---------------|
| <b>Age Plateau</b>      |                  | 17.61596 ± 0.02983 | 54.97 ± 0.14  | 3.62            | 39.82                | 0.516 ± 0.050 |
| <b>Error Mean</b>       |                  | ± 0.17%            | ± 0.25%   | 0%              | 10                   |               |
|                         |                  |                    | Full External Error ± 1.24  | 1.94            | 2σ Confidence Limit  |               |
|                         |                  |                    | Analytical Error ± 0.09   | 1.9037          | Error Magnification  |               |
| <b>Total Fusion Age</b> |                  | 17.24276 ± 0.01099 | 53.82 ± 0.11  |                 | 36                   | 0.468 ± 0.024 |
|                         |                  | ± 0.06%            | ± 0.20%   |                 |                      |               |
|                         |                  |                    | Full External Error ± 1.21  |                 |                      |               |
|                         |                  |                    | Analytical Error ± 0.03   |                 |                      |               |
| <b>Normal Isochron</b>  | 175.22 ± 461.63  | 17.72138 ± 0.10525 | 55.29 ± 0.34  | 1.88            | 39.82                |               |
|                         | #####            | ± 0.59%            | ± 0.61%   | 6%              | 10                   |               |
|                         |                  |                    | Full External Error ± 1.28  | 2.00            | 2σ Confidence Limit  |               |
|                         |                  |                    | Analytical Error ± 0.32   | 1.3701          | Error Magnification  |               |
|                         |                  |                    |   | 1               | Number of Iterations |               |
|                         |                  |                    |   | 0.0000027877    | Convergence          |               |
| <b>Inverse Isochron</b> | 829.14 ± 576.36  | 17.87054 ± 0.12118 | 55.75 ± 0.39  | 0.68            | 39.82                |               |
| <b>Clustered Points</b> | ± 69.51%         | ± 0.68%            | ± 0.69%   | 71%             | 10                   |               |
|                         |                  |                    | Full External Error ± 1.31  | 2.00            | 2σ Confidence Limit  |               |
|                         |                  |                    | Analytical Error ± 0.37   | 1.0000          | Error Magnification  |               |
| <b>Notes</b>            |                  |                    |   | 8               | Number of Iterations |               |
|                         |                  |                    | This is the second attempt at analyzing this sample with the low temperature steps included. The plateau formed the same shape as the other attempt and produced an age within error of the previous analyses, strengthening the age determination. The intercept | 0.0001448238    | Convergence          |               |
|                         |                  |                    |   | 1%              | Spreading Factor     |               |

| Incremental Heating |        | 36Ar(a)<br>[fA] | 37Ar(ca)<br>[fA] | 38Ar(cl)<br>[fA] | 39Ar(k)<br>[fA] | 40Ar(r)<br>[fA] | Age ± 2σ<br>(Ma) | 40Ar(r)<br>(%) | 39Ar(k)<br>(%) | K/Ca ± 2σ     |
|---------------------|--------|-----------------|------------------|------------------|-----------------|-----------------|------------------|----------------|----------------|---------------|
| 14D28381            | 1.8 %  | 0.1126502       | 11.90866         | 0.0562222        | 13.67847        | 257.393         | 58.65 ± 0.40     | 88.53          | 1.49           | 0.494 ± 0.290 |
| 14D28382            | 1.9 %  | 0.0341599       | 5.23652          | 0.0000000        | 14.14559        | 247.086         | 54.51 ± 0.34     | 96.05          | 1.54           | 1.162 ± 1.606 |
| 14D28383            | 2.0 %  | 0.0235480       | 13.89928         | 0.0295179        | 17.42551        | 304.875         | 54.60 ± 0.28     | 97.75          | 1.90           | 0.539 ± 0.255 |
| 14D28385            | 2.1 %  | 0.0115817       | 5.62543          | 0.0000000        | 9.88477         | 173.519         | 54.78 ± 0.47     | 98.04          | 1.08           | 0.756 ± 0.963 |
| 14D28386            | 2.2 %  | 0.0141595       | 8.24112          | 0.0000000        | 15.93020        | 276.770         | 54.22 ± 0.31     | 98.49          | 1.73           | 0.831 ± 0.706 |
| 14D28388            | 2.3 %  | 0.0088291       | 7.36437          | 0.0000000        | 11.11013        | 193.096         | 54.24 ± 0.41     | 98.65          | 1.21           | 0.649 ± 0.592 |
| 14D28390            | 2.4 %  | 0.0120663       | 12.58311         | 0.0000000        | 21.72545        | 379.184         | 54.47 ± 0.23     | 99.05          | 2.36           | 0.742 ± 0.417 |
| 14D28391            | 2.5 %  | 0.0076007       | 5.66921          | 0.0000000        | 12.93798        | 226.188         | 54.55 ± 0.36     | 99.00          | 1.41           | 0.981 ± 1.205 |
| 14D28392            | 2.6 %  | 0.0051798       | 14.82164         | 0.0042077        | 13.64843        | 238.816         | 54.60 ± 0.35     | 99.34          | 1.49           | 0.396 ± 0.190 |
| 14D28394            | 2.7 %  | 0.0066464       | 11.61200         | 0.0000000        | 15.53591        | 273.249         | 54.88 ± 0.32     | 99.26          | 1.69           | 0.575 ± 0.357 |
| 14D28395            | 2.8 %  | 0.0102057       | 16.77173         | 0.0152997        | 25.73913        | 448.062         | 54.33 ± 0.19     | 99.31          | 2.80           | 0.660 ± 0.280 |
| 14D28396            | 2.9 %  | 0.0075206       | 15.33353         | 0.0000000        | 19.78796        | 345.745         | 54.52 ± 0.25     | 99.34          | 2.15           | 0.555 ± 0.259 |
| 14D28398            | 3.0 %  | ✓ 0.0067959     | 27.62041         | 0.0017831        | 26.91831        | 472.656         | 54.79 ± 0.20     | 99.56          | 2.93           | 0.419 ± 0.109 |
| 14D28399            | 3.2 %  | ✓ 0.0073868     | 28.10000         | 0.0000000        | 28.43143        | 499.218         | 54.79 ± 0.19     | 99.54          | 3.09           | 0.435 ± 0.112 |
| 14D28400            | 3.4 %  | ✓ 0.0103021     | 32.99389         | 0.0000000        | 36.57901        | 642.392         | 54.80 ± 0.15     | 99.51          | 3.98           | 0.477 ± 0.104 |
| 14D28402            | 3.6 %  | ✓ 0.0104185     | 36.03518         | 0.0000000        | 41.29374        | 726.474         | 54.89 ± 0.14     | 99.56          | 4.49           | 0.493 ± 0.101 |
| 14D28403            | 3.9 %  | ✓ 0.0100884     | 30.08512         | 0.0197206        | 36.66710        | 643.940         | 54.80 ± 0.15     | 99.52          | 3.99           | 0.524 ± 0.121 |
| 14D28404            | 4.2 %  | ✓ 0.0099095     | 40.09149         | 0.0000000        | 52.39100        | 925.335         | 55.11 ± 0.12     | 99.66          | 5.70           | 0.562 ± 0.100 |
| 14D28406            | 4.5 %  | ✓ 0.0119554     | 33.61571         | 0.0286566        | 50.51548        | 891.280         | 55.05 ± 0.13     | 99.58          | 5.50           | 0.646 ± 0.141 |
| 14D28407            | 4.8 %  | ✓ 0.0088037     | 31.23325         | 0.0262459        | 47.53693        | 838.856         | 55.06 ± 0.13     | 99.67          | 5.17           | 0.654 ± 0.146 |
| 14D28408            | 5.1 %  | ✓ 0.0042839     | 15.36126         | 0.0000000        | 23.66202        | 418.416         | 55.17 ± 0.21     | 99.68          | 2.57           | 0.662 ± 0.311 |
| 14D28410            | 5.4 %  | ✓ 0.0021410     | 17.22723         | 0.0365517        | 21.99399        | 388.439         | 55.10 ± 0.23     | 99.82          | 2.39           | 0.549 ± 0.227 |
| 14D28411            | 5.8 %  | 0.0094715       | 22.03226         | 0.0235862        | 37.20230        | 652.223         | 54.71 ± 0.15     | 99.55          | 4.05           | 0.726 ± 0.227 |
| 14D28412            | 6.2 %  | 0.0043798       | 18.50107         | 0.0192770        | 26.79512        | 469.694         | 54.70 ± 0.19     | 99.70          | 2.92           | 0.623 ± 0.235 |
| 14D28414            | 6.8 %  | 0.0151284       | 21.73648         | 0.0391403        | 41.70067        | 724.240         | 54.20 ± 0.14     | 99.36          | 4.54           | 0.825 ± 0.254 |
| 14D28415            | 7.4 %  | 0.0142687       | 13.75113         | 0.0615055        | 32.11587        | 557.617         | 54.19 ± 0.17     | 99.23          | 3.49           | 1.004 ± 0.522 |
| 14D28416            | 8.3 %  | 0.0168464       | 19.13104         | 0.1177746        | 36.71436        | 628.042         | 53.40 ± 0.15     | 99.19          | 4.00           | 0.825 ± 0.288 |
| 14D28418            | 9.3 %  | 0.0195158       | 21.12357         | 0.1082544        | 37.91236        | 642.485         | 52.91 ± 0.14     | 99.09          | 4.13           | 0.772 ± 0.267 |
| 14D28419            | 10.4 % | 0.0213345       | 23.22612         | 0.1118213        | 33.48377        | 557.408         | 51.99 ± 0.16     | 98.86          | 3.64           | 0.620 ± 0.190 |
| 14D28420            | 11.7 % | 0.0241953       | 24.42505         | 0.1612239        | 31.50516        | 514.561         | 51.02 ± 0.16     | 98.61          | 3.43           | 0.555 ± 0.158 |
| 14D28422            | 13.5 % | 0.0339693       | 28.31858         | 0.1651828        | 26.51620        | 418.125         | 49.28 ± 0.18     | 97.63          | 2.89           | 0.403 ± 0.100 |
| 14D28423            | 15.5 % | 0.0389608       | 40.65392         | 0.1000391        | 22.88620        | 350.806         | 47.92 ± 0.20     | 96.80          | 2.49           | 0.242 ± 0.040 |
| 14D28424            | 17.6 % | 0.0332626       | 39.33730         | 0.0554042        | 14.11907        | 213.738         | 47.33 ± 0.32     | 95.58          | 1.54           | 0.154 ± 0.028 |
| 14D28426            | 19.8 % | 0.0354101       | 51.57507         | 0.0898583        | 10.45994        | 155.705         | 46.56 ± 0.42     | 93.68          | 1.14           | 0.087 ± 0.013 |
| 14D28427            | 22.1 % | 0.0353116       | 56.13056         | 0.1148340        | 6.77715         | 100.953         | 46.59 ± 0.63     | 90.61          | 0.74           | 0.052 ± 0.007 |
| 14D28428            | 24.5 % | 0.0264478       | 42.76140         | 0.0574604        | 3.27351         | 49.519          | 47.30 ± 1.35     | 86.35          | 0.36           | 0.033 ± 0.006 |
| Σ                   |        | 0.6647360       | 844.13370        | 1.4435676        | 919.00023       | 15846.103       |                  |                |                |               |

| Information on Analysis  | Results                                 | 40(r)/39(k) ± 2σ              | Age ± 2σ (Ma)   | MSWD           | 39Ar(k) (%n)                               | K/Ca ± 2σ     |
|--|---|-------------------------------|---|----------------|--|---------------|
| Project = RURUTU (13-INT-08)<br>Sample = RR1310-D07-22B<br>Material = Groundmass<br>Location = Rurutu Hotspot<br>Region = Tuvalu<br>Analyst = Kevin Konrad<br>Irradiation = 14-OSU-02 (2A43-14)<br>J = 0.00175195 ± 0.00000165<br>FCT-NM = 28.201 ± 0.023 Ma | <b>Age Plateau</b><br><b>Error Mean</b> | 17.61596 ± 0.02983<br>± 0.17% | <b>54.97 ± 0.14</b><br>± 0.25%                        | 3.62<br>0%     | 39.82<br>10                                | 0.516 ± 0.050 |
|  |   |                               | Full External Error ± 1.24<br>Analytical Error ± 0.09 | 1.94<br>1.9037 | 2σ Confidence Limit<br>Error Magnification |               |
|  | <b>Total Fusion Age</b>                 | 17.24276 ± 0.01099<br>± 0.06% | <b>53.82 ± 0.11</b><br>± 0.20%                        |                | 36   | 0.468 ± 0.024 |
|  |   |                               | Full External Error ± 1.21<br>Analytical Error ± 0.03 |                |  |               |

| Normal Isochron |        | 39(k)/36(a) ± 2σ      | 40(a+r)/36(a) ± 2σ    | r.i.   |
|-----------------|--------|-----------------------|-----------------------|--------|
| 14D28381        | 1.8 %  | 121.42 ± 3.41         | 2580.38 ± 70.91       | 0.9776 |
| 14D28382        | 1.9 %  | 414.10 ± 33.27        | 7528.71 ± 603.56      | 0.9977 |
| 14D28383        | 2.0 %  | 740.00 ± 80.72        | 13242.45 ± 1443.30    | 0.9991 |
| 14D28385        | 2.1 %  | 853.48 ± 195.69       | 15277.67 ± 3501.25    | 0.9995 |
| 14D28386        | 2.2 %  | 1125.05 ± 207.14      | 19842.07 ± 3652.01    | 0.9996 |
| 14D28388        | 2.3 %  | 1258.35 ± 366.34      | 22165.89 ± 6451.47    | 0.9997 |
| 14D28390        | 2.4 %  | 1800.51 ± 392.58      | 31720.58 ± 6915.31    | 0.9999 |
| 14D28391        | 2.5 %  | 1702.21 ± 573.77      | 30054.43 ± 10129.09   | 0.9998 |
| 14D28392        | 2.6 %  | 2634.95 ± 1331.58     | 46401.11 ± 23447.61   | 0.9999 |
| 14D28394        | 2.7 %  | 2337.50 ± 919.24      | 41407.98 ± 16282.75   | 0.9999 |
| 14D28395        | 2.8 %  | 2522.03 ± 647.68      | 44198.56 ± 11349.83   | 0.9999 |
| 14D28396        | 2.9 %  | 2631.17 ± 929.54      | 46268.64 ± 16344.83   | 0.9999 |
| 14D28398        | 3.0 %  | ✓ 3960.95 ± 1570.28   | 69845.35 ± 27688.68   | 1.0000 |
| 14D28399        | 3.2 %  | ✓ 3848.96 ± 1388.22   | 67878.14 ± 24480.98   | 1.0000 |
| 14D28400        | 3.4 %  | ✓ 3550.62 ± 912.20    | 62650.70 ± 16095.05   | 1.0000 |
| 14D28402        | 3.6 %  | ✓ 3963.51 ± 1031.35   | 70024.80 ± 18220.61   | 1.0000 |
| 14D28403        | 3.9 %  | ✓ 3634.57 ± 934.95    | 64125.03 ± 16494.73   | 1.0000 |
| 14D28404        | 4.2 %  | ✓ 5286.92 ± 1440.56   | 93673.62 ± 25523.20   | 1.0000 |
| 14D28406        | 4.5 %  | ✓ 4225.32 ± 981.44    | 74845.67 ± 17384.07   | 1.0000 |
| 14D28407        | 4.8 %  | ✓ 5399.64 ± 1617.46   | 95579.70 ± 28630.21   | 1.0000 |
| 14D28408        | 5.1 %  | ✓ 5523.46 ± 3422.31   | 97966.85 ± 60698.96   | 1.0000 |
| 14D28410        | 5.4 %  | ✓ 10272.60 ± 12568.33 | 181721.28 ± 222331.69 | 1.0000 |
| 14D28411        | 5.8 %  | 3927.80 ± 1066.02     | 69156.83 ± 18768.65   | 1.0000 |
| 14D28412        | 6.2 %  | 6117.85 ± 3653.93     | 107535.96 ± 64225.68  | 1.0000 |
| 14D28414        | 6.8 %  | 2756.45 ± 468.24      | 48168.41 ± 8181.69    | 0.9999 |
| 14D28415        | 7.4 %  | 2250.79 ± 418.59      | 39375.26 ± 7322.07    | 0.9999 |
| 14D28416        | 8.3 %  | 2179.36 ± 334.88      | 37576.05 ± 5773.10    | 0.9999 |
| 14D28418        | 9.3 %  | 1942.65 ± 272.57      | 33216.83 ± 4659.98    | 0.9998 |
| 14D28419        | 10.4 % | 1569.46 ± 195.25      | 26422.56 ± 3286.32    | 0.9998 |
| 14D28420        | 11.7 % | 1302.12 ± 144.02      | 21562.44 ± 2384.18    | 0.9997 |
| 14D28422        | 13.5 % | 780.59 ± 62.85        | 12604.40 ± 1014.16    | 0.9992 |
| 14D28423        | 15.5 % | 587.42 ± 41.28        | 9299.56 ± 652.78      | 0.9987 |
| 14D28424        | 17.6 % | 424.47 ± 35.36        | 6721.27 ± 558.78      | 0.9977 |
| 14D28426        | 19.8 % | 295.39 ± 23.86        | 4692.68 ± 377.54      | 0.9958 |
| 14D28427        | 22.1 % | 191.92 ± 14.98        | 3154.41 ± 243.89      | 0.9898 |
| 14D28428        | 24.5 % | 123.77 ± 13.11        | 2167.83 ± 224.28      | 0.9746 |

| Results         | 40(a)/36(a) ± 2σ  | 40(r)/39(k) ± 2σ              | Age ± 2σ (Ma)   | MSWD                                   |
|-----------------|---|-------------------------------|---|--|
| Normal Isochron | <b>175.22 ± 461.63</b><br>± 263.46%                                 | 17.72138 ± 0.10525<br>± 0.59% | <b>55.29 ± 0.34</b><br>± 0.61%<br>Full External Error ± 1.28<br>Analytical Error ± 0.32 | 1.88<br>6%                             |
| Statistics      | 2σ Confidence Limit<br>Error Magnification<br>Number of Data Points | 2.00<br>1.3701<br>10          | Convergence<br>Number of Iterations<br>Calculated Line                                  | 0.000002787722<br>1<br>Weighted York-2 |

| Inverse Isochron |        | 39(k)/40(a+r) ± 2σ      | 36(a)/40(a+r) ± 2σ      | r.i.   |
|------------------|--------|-------------------------|-------------------------|--------|
| 14D28381         | 1.8 %  | 0.0470567 ± 0.0002783   | 0.00038754 ± 0.00001065 | 0.0058 |
| 14D28382         | 1.9 %  | 0.0550027 ± 0.0002988   | 0.00013282 ± 0.00001065 | 0.0027 |
| 14D28383         | 2.0 %  | 0.0558807 ± 0.0002532   | 0.00007551 ± 0.00000823 | 0.0016 |
| 14D28385         | 2.1 %  | 0.0558646 ± 0.0004202   | 0.00006546 ± 0.00001500 | 0.0014 |
| 14D28386         | 2.2 %  | 0.0567004 ± 0.0002835   | 0.00005040 ± 0.00000928 | 0.0011 |
| 14D28388         | 2.3 %  | 0.0567699 ± 0.0003792   | 0.00004511 ± 0.00001313 | 0.0010 |
| 14D28390         | 2.4 %  | 0.0567616 ± 0.0002139   | 0.00003153 ± 0.00000687 | 0.0007 |
| 14D28391         | 2.5 %  | 0.0566376 ± 0.0003326   | 0.00003327 ± 0.00001121 | 0.0008 |
| 14D28392         | 2.6 %  | 0.0567864 ± 0.0003163   | 0.00002155 ± 0.00001089 | 0.0005 |
| 14D28394         | 2.7 %  | 0.0564505 ± 0.0002943   | 0.00002415 ± 0.00000950 | 0.0005 |
| 14D28395         | 2.8 %  | 0.0570614 ± 0.0001828   | 0.00002263 ± 0.00000581 | 0.0005 |
| 14D28396         | 2.9 %  | 0.0568672 ± 0.0002288   | 0.00002161 ± 0.00000763 | 0.0005 |
| 14D28398         | 3.0 %  | ✓ 0.0567102 ± 0.0001825 | 0.00001432 ± 0.00000568 | 0.0003 |
| 14D28399         | 3.2 %  | ✓ 0.0567040 ± 0.0001746 | 0.00001473 ± 0.00000531 | 0.0003 |
| 14D28400         | 3.4 %  | ✓ 0.0566733 ± 0.0001411 | 0.00001596 ± 0.00000410 | 0.0003 |
| 14D28402         | 3.6 %  | ✓ 0.0566015 ± 0.0001304 | 0.00001428 ± 0.00000372 | 0.0003 |
| 14D28403         | 3.9 %  | ✓ 0.0566794 ± 0.0001417 | 0.00001559 ± 0.00000401 | 0.0003 |
| 14D28404         | 4.2 %  | ✓ 0.0564398 ± 0.0001147 | 0.00001068 ± 0.00000291 | 0.0002 |
| 14D28406         | 4.5 %  | ✓ 0.0564537 ± 0.0001240 | 0.00001336 ± 0.00000310 | 0.0002 |
| 14D28407         | 4.8 %  | ✓ 0.0564936 ± 0.0001199 | 0.00001046 ± 0.00000313 | 0.0002 |
| 14D28408         | 5.1 %  | ✓ 0.0563809 ± 0.0001906 | 0.00001021 ± 0.00000632 | 0.0002 |
| 14D28410         | 5.4 %  | ✓ 0.0565294 ± 0.0002097 | 0.00000550 ± 0.00000673 | 0.0001 |
| 14D28411         | 5.8 %  | 0.0567955 ± 0.0001412   | 0.00001446 ± 0.00000392 | 0.0003 |
| 14D28412         | 6.2 %  | 0.0568912 ± 0.0001815   | 0.00000930 ± 0.00000555 | 0.0002 |
| 14D28414         | 6.8 %  | 0.0572253 ± 0.0001326   | 0.00002076 ± 0.00000353 | 0.0004 |
| 14D28415         | 7.4 %  | 0.0571626 ± 0.0001623   | 0.00002540 ± 0.00000472 | 0.0005 |
| 14D28416         | 8.3 %  | 0.0579987 ± 0.0001499   | 0.00002661 ± 0.00000409 | 0.0005 |
| 14D28418         | 9.3 %  | 0.0584840 ± 0.0001428   | 0.00003011 ± 0.00000422 | 0.0006 |
| 14D28419         | 10.4 % | 0.0593987 ± 0.0001641   | 0.00003785 ± 0.00000471 | 0.0008 |
| 14D28420         | 11.7 % | 0.0603882 ± 0.0001678   | 0.00004638 ± 0.00000513 | 0.0010 |
| 14D28422         | 13.5 % | 0.0619302 ± 0.0001993   | 0.00007934 ± 0.00000638 | 0.0017 |
| 14D28423         | 15.5 % | 0.0631659 ± 0.0002251   | 0.00010753 ± 0.00000755 | 0.0024 |
| 14D28424         | 17.6 % | 0.0631536 ± 0.0003558   | 0.00014878 ± 0.00001237 | 0.0032 |
| 14D28426         | 19.8 % | 0.0629479 ± 0.0004642   | 0.00021310 ± 0.00001714 | 0.0046 |
| 14D28427         | 22.1 % | 0.0608431 ± 0.0006761   | 0.00031702 ± 0.00002451 | 0.0070 |
| 14D28428         | 24.5 % | 0.0570950 ± 0.0013549   | 0.00046129 ± 0.00004772 | 0.0091 |

| Results          | 40(a)/36(a) ± 2σ       | 40(r)/39(k) ± 2σ   | Age ± 2σ (Ma)              | MSWD            |
|------------------|------------------------|--------------------|----------------------------|-----------------|
| Inverse Isochron | <b>829.14</b> ± 576.36 | 17.87054 ± 0.12118 | <b>55.75</b> ± 0.39        | 0.68            |
| Clustered Points | ± 69.51%               | ± 0.68%            | ± 0.69%                    | 71%             |
|                  |                        |                    | Full External Error ± 1.31 |                 |
|                  |                        |                    | Analytical Error ± 0.37    |                 |
| Statistics       | 2σ Confidence Limit    | 2.00               | Convergence                | 0.0001448238    |
|                  | Error Magnification    | 1.0000             | Number of Iterations       | 8               |
|                  | Number of Data Points  | 10                 | Calculated Line            | Weighted York-2 |
|                  | Spreading Factor       | 0.6%               |                            |                 |

| Degassing Patterns |        | 36Ar(a) [fA] | %1σ   | 36Ar(c) [fA] | %1σ  | 36Ar(ca) [fA] | %1σ   | 36Ar(cl) [fA] | %1σ    | 37Ar(ca) [fA] | %1σ   | 38Ar(a) [fA] | %1σ   | 38Ar(c) [fA] | %1σ  | 38Ar(k) [fA] | %1σ  | 38Ar(ca) [fA] | %1σ   | 38Ar(cl) [fA] | %1σ    | 39Ar(k) [fA] | %1σ  | 39Ar(ca) [fA] | %1σ   | 40Ar(r) [fA] | %1σ  | 40Ar(a) [fA] | %1σ   | 40Ar(c) [fA] | %1σ  | 40Ar(k) [fA] | %1σ  |
|--------------------|--------|--------------|-------|--------------|------|---------------|-------|---------------|--------|---------------|-------|--------------|-------|--------------|------|--------------|------|---------------|-------|---------------|--------|--------------|------|---------------|-------|--------------|------|--------------|-------|--------------|------|--------------|------|
| 14D28381           | 1.8 %  | 0.1126502    | 1.37  | 0.0000000    | 0.00 | 0.0031713     | 29.32 | 0.0000203     | 68.44  | 11.90866      | 29.32 | 0.0210543    | 1.37  | 0.0000000    | 0.00 | 0.164566     | 0.33 | 0.0008550     | 32.00 | 0.0562222     | 68.45  | 13.67847     | 0.29 | 0.0080455     | 29.35 | 257.393      | 0.19 | 33.28813     | 1.37  | 0.0000000    | 0.00 | 0.0522928    | 2.68 |
| 14D28382           | 1.9 %  | 0.0341599    | 4.01  | 0.0000000    | 0.00 | 0.0013945     | 69.13 | 0.0000000     | 0.00   | 5.23652       | 69.13 | 0.0063845    | 4.01  | 0.0000000    | 0.00 | 0.170186     | 0.31 | 0.0003760     | 70.31 | 0.0000000     | 0.00   | 14.14559     | 0.27 | 0.0035378     | 69.14 | 247.086      | 0.17 | 10.09426     | 4.01  | 0.0000000    | 0.00 | 0.0540786    | 2.67 |
| 14D28383           | 2.0 %  | 0.0235480    | 5.45  | 0.0000000    | 0.00 | 0.0037014     | 23.69 | 0.0000106     | 127.23 | 13.89928      | 23.69 | 0.0044011    | 5.45  | 0.0000000    | 0.00 | 0.209646     | 0.27 | 0.0009980     | 26.93 | 0.0295179     | 127.23 | 17.42551     | 0.22 | 0.0093904     | 23.72 | 304.875      | 0.13 | 6.95845      | 5.45  | 0.0000000    | 0.00 | 0.0666177    | 2.67 |
| 14D28385           | 2.1 %  | 0.0115817    | 11.46 | 0.0000000    | 0.00 | 0.0014981     | 63.76 | 0.0000000     | 0.00   | 5.62543       | 63.76 | 0.0021646    | 11.46 | 0.0000000    | 0.00 | 0.118924     | 0.40 | 0.0004039     | 65.03 | 0.0000000     | 0.00   | 9.88477      | 0.37 | 0.0038005     | 63.77 | 173.519      | 0.24 | 3.42240      | 11.46 | 0.0000000    | 0.00 | 0.0377895    | 2.69 |
| 14D28386           | 2.2 %  | 0.0141595    | 9.20  | 0.0000000    | 0.00 | 0.0021946     | 42.46 | 0.0000000     | 0.00   | 8.24112       | 42.46 | 0.0026464    | 9.20  | 0.0000000    | 0.00 | 0.191656     | 0.29 | 0.0005917     | 44.36 | 0.0000000     | 0.00   | 15.93020     | 0.24 | 0.0055677     | 42.48 | 276.770      | 0.15 | 4.18413      | 9.20  | 0.0000000    | 0.00 | 0.0609011    | 2.67 |
| 14D28388           | 2.3 %  | 0.0088291    | 14.55 | 0.0000000    | 0.00 | 0.0019611     | 45.59 | 0.0000000     | 0.00   | 7.36437       | 45.59 | 0.0016502    | 14.55 | 0.0000000    | 0.00 | 0.133666     | 0.36 | 0.0005288     | 47.36 | 0.0000000     | 0.00   | 11.11013     | 0.33 | 0.0049754     | 45.61 | 193.096      | 0.21 | 2.60900      | 14.55 | 0.0000000    | 0.00 | 0.0424740    | 2.68 |
| 14D28390           | 2.4 %  | 0.0120663    | 10.90 | 0.0000000    | 0.00 | 0.0033509     | 28.08 | 0.0000000     | 0.00   | 12.58311      | 28.08 | 0.0022552    | 10.90 | 0.0000000    | 0.00 | 0.261379     | 0.24 | 0.0009035     | 30.87 | 0.0000000     | 0.00   | 21.72545     | 0.18 | 0.0085011     | 28.11 | 379.184      | 0.11 | 3.56559      | 10.90 | 0.0000000    | 0.00 | 0.0830564    | 2.67 |
| 14D28391           | 2.5 %  | 0.0076007    | 16.85 | 0.0000000    | 0.00 | 0.0015097     | 61.40 | 0.0000000     | 0.00   | 5.66921       | 61.39 | 0.0014206    | 16.85 | 0.0000000    | 0.00 | 0.155657     | 0.33 | 0.0004070     | 62.72 | 0.0000000     | 0.00   | 12.93798     | 0.29 | 0.0038301     | 61.41 | 226.188      | 0.18 | 2.24600      | 16.85 | 0.0000000    | 0.00 | 0.0494619    | 2.68 |
| 14D28392           | 2.6 %  | 0.0051798    | 25.27 | 0.0000000    | 0.00 | 0.0039470     | 24.02 | 0.0000015     | 897.73 | 14.82164      | 24.02 | 0.0009681    | 25.27 | 0.0000000    | 0.00 | 0.164204     | 0.32 | 0.0010642     | 27.23 | 0.0042077     | 897.73 | 13.64843     | 0.27 | 0.0100135     | 24.06 | 238.816      | 0.17 | 1.53062      | 25.27 | 0.0000000    | 0.00 | 0.0521779    | 2.67 |
| 14D28394           | 2.7 %  | 0.0066464    | 19.66 | 0.0000000    | 0.00 | 0.0030923     | 31.01 | 0.0000000     | 0.00   | 11.61200      | 31.01 | 0.0012422    | 19.66 | 0.0000000    | 0.00 | 0.186912     | 0.30 | 0.0008337     | 33.56 | 0.0000000     | 0.00   | 15.53591     | 0.26 | 0.0078451     | 31.04 | 273.249      | 0.15 | 1.96400      | 19.66 | 0.0000000    | 0.00 | 0.0593938    | 2.67 |
| 14D28395           | 2.8 %  | 0.0102057    | 12.84 | 0.0000000    | 0.00 | 0.0044663     | 21.22 | 0.0000055     | 252.89 | 16.77173      | 21.22 | 0.0019074    | 12.84 | 0.0000000    | 0.00 | 0.309667     | 0.22 | 0.0012042     | 24.79 | 0.0152997     | 252.89 | 25.73913     | 0.16 | 0.0113310     | 21.26 | 448.062      | 0.09 | 3.01579      | 12.84 | 0.0000000    | 0.00 | 0.0984007    | 2.66 |
| 14D28396           | 2.9 %  | 0.0075206    | 17.66 | 0.0000000    | 0.00 | 0.0040833     | 23.31 | 0.0000000     | 0.00   | 15.33353      | 23.31 | 0.0014056    | 17.66 | 0.0000000    | 0.00 | 0.238069     | 0.25 | 0.0011009     | 26.60 | 0.0000000     | 0.00   | 19.78796     | 0.20 | 0.0103593     | 23.34 | 345.745      | 0.12 | 2.22234      | 17.66 | 0.0000000    | 0.00 | 0.0756494    | 2.67 |
| 14D28398           | 3.0 %  | ✓ 0.0067959  | 19.82 | 0.0000000    | 0.00 | 0.0073553     | 13.02 | 0.0000006     | #####  | 27.62041      | 13.02 | 0.0012702    | 19.82 | 0.0000000    | 0.00 | 0.323854     | 0.22 | 0.0019831     | 18.27 | 0.0017831     | #####  | 26.91831     | 0.16 | 0.0186603     | 13.08 | 472.656      | 0.09 | 2.00820      | 19.82 | 0.0000000    | 0.00 | 0.1029087    | 2.66 |
| 14D28399           | 3.2 %  | ✓ 0.0073868  | 18.03 | 0.0000000    | 0.00 | 0.0074830     | 12.93 | 0.0000000     | 0.00   | 28.10000      | 12.93 | 0.0013806    | 18.03 | 0.0000000    | 0.00 | 0.342059     | 0.22 | 0.0020176     | 18.21 | 0.0000000     | 0.00   | 28.43143     | 0.15 | 0.0189844     | 13.00 | 499.218      | 0.08 | 2.18279      | 18.03 | 0.0000000    | 0.00 | 0.1086934    | 2.66 |
| 14D28400           | 3.4 %  | ✓ 0.0103021  | 12.85 | 0.0000000    | 0.00 | 0.0087863     | 10.86 | 0.0000000     | 0.00   | 32.99389      | 10.86 | 0.0019255    | 12.85 | 0.0000000    | 0.00 | 0.440082     | 0.20 | 0.0023690     | 16.80 | 0.0000000     | 0.00   | 36.57901     | 0.12 | 0.0222907     | 10.94 | 642.392      | 0.06 | 3.04428      | 12.85 | 0.0000000    | 0.00 | 0.1398416    | 2.66 |
| 14D28402           | 3.6 %  | ✓ 0.0104185  | 13.01 | 0.0000000    | 0.00 | 0.0095962     | 10.22 | 0.0000000     | 0.00   | 36.03518      | 10.22 | 0.0019472    | 13.01 | 0.0000000    | 0.00 | 0.496805     | 0.20 | 0.0025873     | 16.40 | 0.0000000     | 0.00   | 41.29374     | 0.11 | 0.0243454     | 10.31 | 726.474      | 0.06 | 3.07866      | 13.01 | 0.0000000    | 0.00 | 0.1578660    | 2.66 |
| 14D28403           | 3.9 %  | ✓ 0.0100884  | 12.86 | 0.0000000    | 0.00 | 0.0080117     | 11.59 | 0.0000071     | 192.48 | 30.08512      | 11.59 | 0.0018855    | 12.86 | 0.0000000    | 0.00 | 0.441142     | 0.20 | 0.0021601     | 17.28 | 0.0197206     | 192.48 | 36.66710     | 0.12 | 0.0203255     | 11.66 | 643.940      | 0.06 | 2.98113      | 12.86 | 0.0000000    | 0.00 | 0.1401783    | 2.66 |
| 14D28404           | 4.2 %  | ✓ 0.0099095  | 13.62 | 0.0000000    | 0.00 | 0.0106764     | 8.89  | 0.0000000     | 0.00   | 40.09149      | 8.89  | 0.0018521    | 13.62 | 0.0000000    | 0.00 | 0.630316     | 0.19 | 0.0028786     | 15.60 | 0.0000000     | 0.00   | 52.39100     | 0.10 | 0.0270858     | 8.98  | 925.335      | 0.05 | 2.92827      | 13.62 | 0.0000000    | 0.00 | 0.2002908    | 2.66 |
| 14D28406           | 4.5 %  | ✓ 0.0119554  | 11.61 | 0.0000000    | 0.00 | 0.0089519     | 10.92 | 0.0000103     | 139.78 | 33.61571      | 10.92 | 0.0022345    | 11.61 | 0.0000000    | 0.00 | 0.607752     | 0.19 | 0.0024136     | 16.84 | 0.0286566     | 139.78 | 50.51548     | 0.11 | 0.0227108     | 11.00 | 891.280      | 0.05 | 3.53283      | 11.61 | 0.0000000    | 0.00 | 0.1931207    | 2.66 |
| 14D28407           | 4.8 %  | ✓ 0.0088037  | 14.98 | 0.0000000    | 0.00 | 0.0083174     | 11.14 | 0.0000095     | 145.52 | 31.23325      | 11.14 | 0.0016454    | 14.98 | 0.0000000    | 0.00 | 0.571917     | 0.19 | 0.0022425     | 16.98 | 0.0262459     | 145.52 | 47.53693     | 0.10 | 0.0211012     | 11.21 | 838.856      | 0.05 | 2.60150      | 14.98 | 0.0000000    | 0.00 | 0.1817337    | 2.66 |
| 14D28408           | 5.1 %  | ✓ 0.0042839  | 30.98 | 0.0000000    | 0.00 | 0.0040907     | 23.48 | 0.0000000     | 0.00   | 15.36126      | 23.48 | 0.0008007    | 30.98 | 0.0000000    | 0.00 | 0.284678     | 0.23 | 0.0011029     | 26.75 | 0.0000000     | 0.00   | 23.66202     | 0.17 | 0.0103781     | 23.52 | 418.416      | 0.10 | 1.26590      | 30.98 | 0.0000000    | 0.00 | 0.0904599    | 2.67 |
| 14D28410           | 5.4 %  | ✓ 0.0021410  | 61.17 | 0.0000000    | 0.00 | 0.0045876     | 20.67 | 0.0000132     | 104.42 | 17.22723      | 20.67 | 0.0004002    | 61.17 | 0.0000000    | 0.00 | 0.264610     | 0.24 | 0.0012369     | 24.33 | 0.0365517     | 104.42 | 21.99399     | 0.18 | 0.0116387     | 20.72 | 388.439      | 0.11 | 0.63268      | 61.17 | 0.0000000    | 0.00 | 0.0840830    | 2.67 |
| 14D28411           | 5.8 %  | 0.0094715    | 13.57 | 0.0000000    | 0.00 | 0.0058672     | 15.62 | 0.0000085     | 165.01 | 22.03226      | 15.62 | 0.0017702    | 13.57 | 0.0000000    | 0.00 | 0.447581     | 0.20 | 0.0015819     | 20.21 | 0.0235862     | 165.02 | 37.20230     | 0.12 | 0.0148850     | 15.68 | 652.223      | 0.06 | 2.79884      | 13.57 | 0.0000000    | 0.00 | 0.1422244    | 2.66 |
| 14D28412           | 6.2 %  | 0.0043798    | 29.86 | 0.0000000    | 0.00 | 0.0049268     | 18.89 | 0.0000070     | 201.65 | 18.50107      | 18.89 | 0.0008186    | 29.86 | 0.0000000    | 0.00 | 0.322372     | 0.22 | 0.0013284     | 22.83 | 0.0192770     | 201.65 | 26.79512     | 0.16 | 0.0124993     | 18.93 | 469.694      | 0.09 | 1.29424      | 29.86 | 0.0000000    | 0.00 | 0.1024377    | 2.66 |
| 14D28414           | 6.8 %  | 0.0151284    | 8.49  | 0.0000000    | 0.00 | 0.0057884     | 15.42 | 0.0000141     | 99.41  | 21.73648      | 15.41 | 0.0028275    | 8.49  | 0.0000000    | 0.00 | 0.501701     | 0.20 | 0.0015607     | 20.05 | 0.0391403     | 99.42  | 41.70067     | 0.11 | 0.0146852     | 15.47 | 724.240      | 0.06 | 4.47044      | 8.49  | 0.0000000    | 0.00 | 0.1594216    | 2.66 |
| 14D28415           | 7.4 %  | 0.0142687    | 9.30  | 0.0000000    | 0.00 | 0.0036619     | 26.00 | 0.0000222     | 59.88  | 13.75113      | 26.00 | 0.0026668    | 9.30  | 0.0000000    | 0.00 | 0.386386     | 0.21 | 0.0009873     | 28.98 | 0.0615055     | 59.89  | 32.11587     | 0.14 | 0.0092903     | 26.03 | 557.617      | 0.08 | 4.21640      | 9.30  | 0.0000000    | 0.00 | 0.1227790    | 2.66 |
| 14D28416           | 8.3 %  | 0.0168464    | 7.68  | 0.0000000    | 0.00 | 0.0050946     | 17.48 | 0.0000425     | 32.53  | 19.13104      | 17.48 | 0.0031486    | 7.68  | 0.0000000    | 0.00 | 0.441710     | 0.20 | 0.0013736     | 21.68 | 0.1177746     | 32.55  | 36.71436     | 0.13 | 0.0129249     | 17.53 | 628.042      | 0.07 | 4.97811      | 7.68  | 0.0000000    | 0.00 | 0.1403590    | 2.66 |
| 14D28418           | 9.3 %  | 0.0195158    | 7.01  | 0.0000000    | 0.00 | 0.0056252     | 17.31 | 0.0000391     | 34.18  | 21.12357      | 17.30 | 0.0036475    | 7.01  | 0.0000000    | 0.00 | 0.456124     | 0.20 | 0.0015167     | 21.54 | 0.1082544     | 34.20  | 37.91236     | 0.12 | 0.0142711     | 17.36 | 642.485      | 0.07 | 5.76691      | 7.01  | 0.0000000    | 0.00 | 0.1449389    | 2.66 |
| 14D28419           | 10.4 % | 0.0213345    | 6.22  | 0.0000000    | 0.00 | 0.0061851     | 15.31 | 0.0000404     | 35.07  | 23.22612      | 15.31 | 0.0039874    | 6.22  | 0.0000000    | 0.00 | 0.402843     | 0.21 | 0.0016676     | 19.97 | 0.1118213     | 35.08  | 33.48377     | 0.14 | 0.0156916     | 15.36 | 557.408      | 0.07 | 6.30435      | 6.22  | 0.0000000    | 0.00 | 0.1280085    | 2.66 |
| 14D28420           | 11.7 % | 0.0241953    | 5.53  | 0.0000000    | 0.00 | 0.0065044     | 14.27 | 0.0000583     | 23.37  | 24.42505      | 14.27 | 0.0045221    | 5.53  | 0.0000000    | 0.00 | 0.379039     | 0.21 | 0.0017537     | 19.18 | 0.1612239     | 23.39  | 31.50516     | 0.14 | 0.0165016     | 14.33 | 514.561      | 0.08 | 7.14972      | 5.53  | 0.0000000    | 0.00 | 0.1204442    | 2.66 |
| 14D28422           | 13.5 % |              |       |              |      |               |       |               |        |               |       |              |       |              |      |              |      |               |       |               |        |              |      |               |       |              |      |              |       |              |      |              |      |

| Additional Parameters |        | 40Ar/39Ar   | 1σ       | 37Ar/39Ar | 1σ       | 36Ar/39Ar | 1σ       | Time (days) | 37Ar (decay) | 39Ar (decay) | 40Ar (moles) |
|-----------------------|--------|-------------|----------|-----------|----------|-----------|----------|-------------|--------------|--------------|--------------|
| 14D28381              | 1.8 %  | 21.242296   | 0.062675 | 0.870102  | 0.255088 | 0.008464  | 0.000094 | 222.038     | 80.492692    | 1.00156881   | 1.396E-11    |
| 14D28382              | 1.9 %  | 18.180215   | 0.049263 | 0.370095  | 0.255841 | 0.002513  | 0.000069 | 222.049     | 80.510360    | 1.00156889   | 1.235E-11    |
| 14D28383              | 2.0 %  | 17.889434   | 0.040446 | 0.797211  | 0.188850 | 0.001564  | 0.000054 | 222.061     | 80.529136    | 1.00156897   | 1.497E-11    |
| 14D28385              | 2.1 %  | 17.897365   | 0.067137 | 0.568882  | 0.362710 | 0.001323  | 0.000093 | 222.083     | 80.564490    | 1.00156913   | 8.495E-12    |
| 14D28386              | 2.2 %  | 17.634219   | 0.043987 | 0.517146  | 0.219597 | 0.001026  | 0.000057 | 222.095     | 80.583279    | 1.00156922   | 1.349E-11    |
| 14D28388              | 2.3 %  | 17.610915   | 0.058688 | 0.662555  | 0.302078 | 0.000971  | 0.000083 | 222.118     | 80.619763    | 1.00156938   | 9.396E-12    |
| 14D28390              | 2.4 %  | 17.614484   | 0.033119 | 0.578961  | 0.162595 | 0.000709  | 0.000042 | 222.141     | 80.656264    | 1.00156954   | 1.838E-11    |
| 14D28391              | 2.5 %  | 17.654703   | 0.051717 | 0.438054  | 0.268946 | 0.000704  | 0.000068 | 222.152     | 80.673967    | 1.00156962   | 1.097E-11    |
| 14D28392              | 2.6 %  | 17.600756   | 0.048878 | 1.085164  | 0.260670 | 0.000668  | 0.000066 | 222.163     | 80.691674    | 1.00156970   | 1.154E-11    |
| 14D28394              | 2.7 %  | 17.709513   | 0.046056 | 0.747053  | 0.231680 | 0.000627  | 0.000057 | 222.186     | 80.728208    | 1.00156986   | 1.321E-11    |
| 14D28395              | 2.8 %  | 17.521089   | 0.028001 | 0.651318  | 0.138209 | 0.000570  | 0.000035 | 222.198     | 80.747034    | 1.00156994   | 2.166E-11    |
| 14D28396              | 2.9 %  | 17.579438   | 0.035280 | 0.774487  | 0.180502 | 0.000586  | 0.000047 | 222.209     | 80.764757    | 1.00157002   | 1.671E-11    |
| 14D28398              | 3.0 %  | ✓ 17.625105 | 0.028293 | 1.025372  | 0.133488 | 0.000525  | 0.000035 | 222.232     | 80.801324    | 1.00157018   | 2.279E-11    |
| 14D28399              | 3.2 %  | ✓ 17.627496 | 0.027073 | 0.987683  | 0.127696 | 0.000523  | 0.000032 | 222.243     | 80.819059    | 1.00157026   | 2.407E-11    |
| 14D28400              | 3.4 %  | ✓ 17.638064 | 0.021916 | 0.901440  | 0.097929 | 0.000522  | 0.000025 | 222.255     | 80.837907    | 1.00157034   | 3.099E-11    |
| 14D28402              | 3.6 %  | ✓ 17.660802 | 0.020305 | 0.872140  | 0.089150 | 0.000484  | 0.000023 | 222.278     | 80.874506    | 1.00157051   | 3.503E-11    |
| 14D28403              | 3.9 %  | ✓ 17.637142 | 0.022010 | 0.820039  | 0.095040 | 0.000494  | 0.000025 | 222.289     | 80.892258    | 1.00157058   | 3.106E-11    |
| 14D28404              | 4.2 %  | ✓ 17.712651 | 0.017976 | 0.764841  | 0.067979 | 0.000393  | 0.000018 | 222.301     | 80.911123    | 1.00157067   | 4.457E-11    |
| 14D28406              | 4.5 %  | ✓ 17.709491 | 0.019418 | 0.665155  | 0.072619 | 0.000414  | 0.000020 | 222.323     | 80.946645    | 1.00157082   | 4.296E-11    |
| 14D28407              | 4.8 %  | ✓ 17.697101 | 0.018748 | 0.656740  | 0.073135 | 0.000360  | 0.000020 | 222.335     | 80.965523    | 1.00157091   | 4.040E-11    |
| 14D28408              | 5.1 %  | ✓ 17.732554 | 0.029900 | 0.648910  | 0.152382 | 0.000354  | 0.000039 | 222.346     | 80.983294    | 1.00157099   | 2.015E-11    |
| 14D28410              | 5.4 %  | ✓ 17.684372 | 0.032734 | 0.782856  | 0.161853 | 0.000306  | 0.000041 | 222.369     | 81.019959    | 1.00157115   | 1.868E-11    |
| 14D28411              | 5.8 %  | 17.603794   | 0.021845 | 0.591991  | 0.092472 | 0.000412  | 0.000024 | 222.381     | 81.038854    | 1.00157123   | 3.145E-11    |
| 14D28412              | 6.2 %  | 17.573023   | 0.027969 | 0.690142  | 0.130353 | 0.000347  | 0.000034 | 222.392     | 81.056641    | 1.00157131   | 2.261E-11    |
| 14D28414              | 6.8 %  | 17.472457   | 0.020208 | 0.521067  | 0.080321 | 0.000502  | 0.000022 | 222.415     | 81.093340    | 1.00157147   | 3.499E-11    |
| 14D28415              | 7.4 %  | 17.492716   | 0.024795 | 0.428049  | 0.111273 | 0.000559  | 0.000029 | 222.426     | 81.111139    | 1.00157155   | 2.697E-11    |
| 14D28416              | 8.3 %  | 17.239522   | 0.022242 | 0.520894  | 0.091048 | 0.000599  | 0.000026 | 222.438     | 81.130055    | 1.00157163   | 3.039E-11    |
| 14D28418              | 9.3 %  | 17.096087   | 0.020830 | 0.556959  | 0.096383 | 0.000664  | 0.000025 | 222.460     | 81.166787    | 1.00157180   | 3.112E-11    |
| 14D28419              | 10.4 % | 16.831331   | 0.023201 | 0.693328  | 0.106124 | 0.000823  | 0.000028 | 222.472     | 81.184602    | 1.00157188   | 2.706E-11    |
| 14D28420              | 11.7 % | 16.554669   | 0.022948 | 0.774866  | 0.110578 | 0.000976  | 0.000031 | 222.483     | 81.202421    | 1.00157195   | 2.505E-11    |
| 14D28422              | 13.5 % | 16.139389   | 0.025908 | 1.067203  | 0.133112 | 0.001567  | 0.000037 | 222.506     | 81.239186    | 1.00157212   | 2.056E-11    |
| 14D28423              | 15.5 % | 15.816162   | 0.028099 | 1.774222  | 0.148403 | 0.002174  | 0.000045 | 222.517     | 81.258132    | 1.00157220   | 1.740E-11    |
| 14D28424              | 17.6 % | 15.808471   | 0.044363 | 2.780877  | 0.251778 | 0.003093  | 0.000072 | 222.528     | 81.275967    | 1.00157228   | 1.073E-11    |
| 14D28426              | 19.8 % | 15.837225   | 0.058080 | 4.914354  | 0.355285 | 0.004686  | 0.000099 | 222.551     | 81.312765    | 1.00157244   | 7.978E-12    |
| 14D28427              | 22.1 % | 16.348056   | 0.090158 | 8.236233  | 0.527033 | 0.007381  | 0.000149 | 222.563     | 81.331728    | 1.00157252   | 5.348E-12    |
| 14D28428              | 24.5 % | 17.365231   | 0.203879 | 12.948583 | 1.119499 | 0.011463  | 0.000318 | 222.574     | 81.349580    | 1.00157260   | 2.753E-12    |

| Procedure |        | 36Ar ± 1σ (SE)        | 37Ar ± 1σ (SE)        | 38Ar ± 1σ (SE)        | 39Ar ± 1σ (SE)        | 40Ar ± 1σ (SE)        |
|-----------|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Blanks    |        | [fA]                  | [fA]                  | [fA]                  | [fA]                  | [fA]                  |
| 14D28381  | 1.8 %  | 0.0244680 ± 0.0006916 | 0.0419270 ± 0.0302085 | 0.0698805 ± 0.0269696 | 0.0336195 ± 0.0255061 | 6.8248446 ± 0.1320953 |
| 14D28382  | 1.9 %  | 0.0245707 ± 0.0006916 | 0.0322903 ± 0.0302085 | 0.0691738 ± 0.0269696 | 0.0298414 ± 0.0255061 | 6.9037573 ± 0.1320953 |
| 14D28383  | 2.0 %  | 0.0246401 ± 0.0006916 | 0.0248774 ± 0.0302085 | 0.0683842 ± 0.0269696 | 0.0264349 ± 0.0255061 | 6.9672955 ± 0.1320953 |
| 14D28385  | 2.1 %  | 0.0246743 ± 0.0006916 | 0.0175508 ± 0.0302085 | 0.0668477 ± 0.0269696 | 0.0215061 ± 0.0255061 | 7.0380262 ± 0.1320953 |
| 14D28386  | 2.2 %  | 0.0246486 ± 0.0006916 | 0.0165370 ± 0.0302085 | 0.0660341 ± 0.0269696 | 0.0195663 ± 0.0255061 | 7.0536539 ± 0.1320953 |
| 14D28388  | 2.3 %  | 0.0245293 ± 0.0006916 | 0.0188196 ± 0.0302085 | 0.0645267 ± 0.0269696 | 0.0168956 ± 0.0255061 | 7.0496847 ± 0.1320953 |
| 14D28390  | 2.4 %  | 0.0243393 ± 0.0006916 | 0.0249757 ± 0.0302085 | 0.0631947 ± 0.0269696 | 0.0153680 ± 0.0255061 | 7.0115809 ± 0.1320953 |
| 14D28391  | 2.5 %  | 0.0242286 ± 0.0006916 | 0.0287987 ± 0.0302085 | 0.0626380 ± 0.0269696 | 0.0149407 ± 0.0255061 | 6.9844460 ± 0.1320953 |
| 14D28392  | 2.6 %  | 0.0241091 ± 0.0006916 | 0.0329128 ± 0.0302085 | 0.0621515 ± 0.0269696 | 0.0146720 ± 0.0255061 | 6.9533600 ± 0.1320953 |
| 14D28394  | 2.7 %  | 0.0238444 ± 0.0006916 | 0.0416080 ± 0.0302085 | 0.0614038 ± 0.0269696 | 0.0144893 ± 0.0255061 | 6.8816036 ± 0.1320953 |
| 14D28395  | 2.8 %  | 0.0237031 ± 0.0006916 | 0.0458634 ± 0.0302085 | 0.0611691 ± 0.0269696 | 0.0145280 ± 0.0255061 | 6.8429589 ± 0.1320953 |
| 14D28396  | 2.9 %  | 0.0235697 ± 0.0006916 | 0.0495495 ± 0.0302085 | 0.0610506 ± 0.0269696 | 0.0146123 ± 0.0255061 | 6.8068449 ± 0.1320953 |
| 14D28398  | 3.0 %  | 0.0233005 ± 0.0006916 | 0.0557265 ± 0.0302085 | 0.0611422 ± 0.0269696 | 0.0148427 ± 0.0255061 | 6.7365704 ± 0.1320953 |
| 14D28399  | 3.2 %  | 0.0231759 ± 0.0006916 | 0.0578566 ± 0.0302085 | 0.0613587 ± 0.0269696 | 0.0149450 ± 0.0255061 | 6.7059519 ± 0.1320953 |
| 14D28400  | 3.4 %  | 0.0230497 ± 0.0006916 | 0.0594041 ± 0.0302085 | 0.0617170 ± 0.0269696 | 0.0150247 ± 0.0255061 | 6.6767567 ± 0.1320953 |
| 14D28402  | 3.6 %  | 0.0228278 ± 0.0006916 | 0.0601228 ± 0.0302085 | 0.0628015 ± 0.0269696 | 0.0150443 ± 0.0255061 | 6.6318706 ± 0.1320953 |
| 14D28403  | 3.9 %  | 0.0227331 ± 0.0006916 | 0.0593408 ± 0.0302085 | 0.0635157 ± 0.0269696 | 0.0149725 ± 0.0255061 | 6.6164206 ± 0.1320953 |
| 14D28404  | 4.2 %  | 0.0226427 ± 0.0006916 | 0.0576991 ± 0.0302085 | 0.0644104 ± 0.0269696 | 0.0148302 ± 0.0255061 | 6.6048689 ± 0.1320953 |
| 14D28406  | 4.5 %  | 0.0225034 ± 0.0006916 | 0.0524330 ± 0.0302085 | 0.0664740 ± 0.0269696 | 0.0143711 ± 0.0255061 | 6.5971438 ± 0.1320953 |
| 14D28407  | 4.8 %  | 0.0224466 ± 0.0006916 | 0.0485723 ± 0.0302085 | 0.0677695 ± 0.0269696 | 0.0140288 ± 0.0255061 | 6.6004774 ± 0.1320953 |
| 14D28408  | 5.1 %  | 0.0224042 ± 0.0006916 | 0.0443501 ± 0.0302085 | 0.0691126 ± 0.0269696 | 0.0136504 ± 0.0255061 | 6.6081735 ± 0.1320953 |
| 14D28410  | 5.4 %  | 0.0223503 ± 0.0006916 | 0.0342050 ± 0.0302085 | 0.0722491 ± 0.0269696 | 0.0127321 ± 0.0255061 | 6.6369687 ± 0.1320953 |
| 14D28411  | 5.8 %  | 0.0223397 ± 0.0006916 | 0.0284612 ± 0.0302085 | 0.0740490 ± 0.0269696 | 0.0122116 ± 0.0255061 | 6.6578021 ± 0.1320953 |
| 14D28412  | 6.2 %  | 0.0223398 ± 0.0006916 | 0.0229090 ± 0.0302085 | 0.0758510 ± 0.0269696 | 0.0117122 ± 0.0255061 | 6.6804926 ± 0.1320953 |
| 14D28414  | 6.8 %  | 0.0223681 ± 0.0006916 | 0.0116488 ± 0.0302085 | 0.0798741 ± 0.0269696 | 0.0107289 ± 0.0255061 | 6.7341982 ± 0.1320953 |
| 14D28415  | 7.4 %  | 0.0223937 ± 0.0006916 | 0.0066277 ± 0.0302085 | 0.0819600 ± 0.0269696 | 0.0103175 ± 0.0255061 | 6.7621545 ± 0.1320953 |
| 14D28416  | 8.3 %  | 0.0224280 ± 0.0006916 | 0.0018871 ± 0.0302085 | 0.0842622 ± 0.0269696 | 0.0099626 ± 0.0255061 | 6.7920289 ± 0.1320953 |
| 14D28418  | 9.3 %  | 0.0225099 ± 0.0006916 | 0.0046378 ± 0.0302085 | 0.0889472 ± 0.0269696 | 0.0096359 ± 0.0255061 | 6.8464181 ± 0.1320953 |
| 14D28419  | 10.4 % | 0.0225540 ± 0.0006916 | 0.0060463 ± 0.0302085 | 0.0913022 ± 0.0269696 | 0.0097130 ± 0.0255061 | 6.8689017 ± 0.1320953 |
| 14D28420  | 11.7 % | 0.0225989 ± 0.0006916 | 0.0059717 ± 0.0302085 | 0.0936982 ± 0.0269696 | 0.0099889 ± 0.0255061 | 6.8873030 ± 0.1320953 |
| 14D28422  | 13.5 % | 0.0226862 ± 0.0006916 | 0.0000303 ± 0.0302085 | 0.0987231 ± 0.0269696 | 0.0113424 ± 0.0255061 | 6.9069404 ± 0.1320953 |
| 14D28423  | 15.5 % | 0.0227240 ± 0.0006916 | 0.0068623 ± 0.0302085 | 0.1013283 ± 0.0269696 | 0.0125427 ± 0.0255061 | 6.9042907 ± 0.1320953 |
| 14D28424  | 17.6 % | 0.0227521 ± 0.0006916 | 0.0160570 ± 0.0302085 | 0.1037728 ± 0.0269696 | 0.0140453 ± 0.0255061 | 6.8917661 ± 0.1320953 |
| 14D28426  | 19.8 % | 0.0227768 ± 0.0006916 | 0.0449413 ± 0.0302085 | 0.1087322 ± 0.0269696 | 0.0184878 ± 0.0255061 | 6.8282198 ± 0.1320953 |
| 14D28427  | 22.1 % | 0.0227664 ± 0.0006916 | 0.0658452 ± 0.0302085 | 0.1112108 ± 0.0269696 | 0.0215951 ± 0.0255061 | 6.7717350 ± 0.1320953 |
| 14D28428  | 24.5 % | 0.0227384 ± 0.0006916 | 0.0897920 ± 0.0302085 | 0.1134744 ± 0.0269696 | 0.0251022 ± 0.0255061 | 6.7012314 ± 0.1320953 |

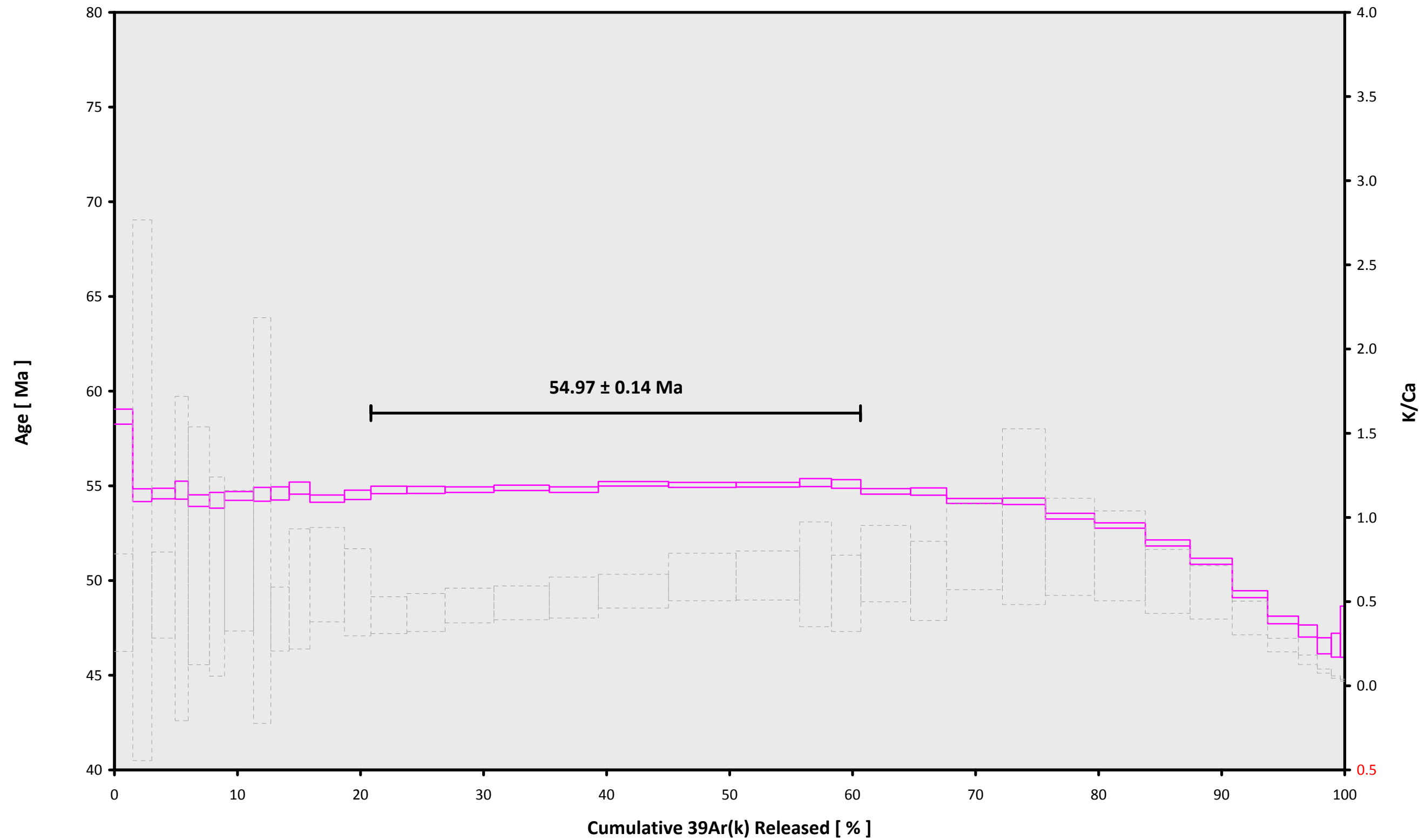
| Intercept Values |        | 36Ar ± 1σ (SE) [fA]   | r2     | Regression (type,n) | 37Ar ± 1σ (SE) [fA]   | r2     | Regression (type,n) | 38Ar ± 1σ (SE) [fA]          | r2     | Regression (type,n) | 39Ar ± 1σ (SE) [fA]    | r2     | Regression (type,n) | 40Ar ± 1σ (SE) [fA]   | r2     | Regression (type,n) |
|------------------|--------|-----------------------|--------|---------------------|-----------------------|--------|---------------------|------------------------------|--------|---------------------|------------------------|--------|---------------------|-----------------------|--------|---------------------|
| 14D28381         | 1.8 %  | 0.1349275 ± 0.0009021 | 0.4074 | EXP 150 of 150      | 0.1030254 ± 0.0298702 | 0.0052 | EXP 149 of 150      | 0.1695374 ± 0.0266936        | 0.0110 | EXP 150 of 150      | 13.5393002 ± 0.0286602 | 0.8873 | EXP 150 of 150      | 298.338567 ± 0.050057 | 0.8689 | EXP 150 of 150      |
| 14D28382         | 1.9 %  | 0.0584732 ± 0.0006099 | 0.7530 | EXP 150 of 150      | 0.0314347 ± 0.0320599 | 0.0114 | EXP 150 of 150      | 0.0339248 ± 0.0267612        | 0.0460 | EXP 150 of 150      | 14.0018477 ± 0.0253387 | 0.9176 | EXP 150 of 150      | 264.828652 ± 0.047942 | 0.8418 | EXP 150 of 150      |
| 14D28383         | 2.0 %  | 0.0506336 ± 0.0005607 | 0.8059 | EXP 150 of 150      | 0.1442283 ± 0.0262830 | 0.0208 | EXP 149 of 150      | 0.1728745 ± 0.0253832        | 0.0075 | EXP 150 of 150      | 17.2637498 ± 0.0259641 | 0.9442 | EXP 150 of 150      | 319.705231 ± 0.045938 | 0.9898 | EXP 150 of 150      |
| 14D28385         | 2.1 %  | 0.0371463 ± 0.0005407 | 0.7395 | EXP 150 of 150      | 0.0508609 ± 0.0314601 | 0.0003 | EXP 150 of 150      | 0.0488937 ± 0.0252655        | 0.0001 | EXP 150 of 150      | 9.7849910 ± 0.0244454  | 0.8473 | EXP 150 of 150      | 184.492680 ± 0.042840 | 0.7491 | EXP 150 of 150      |
| 14D28386         | 2.2 %  | 0.0402429 ± 0.0005234 | 0.8193 | EXP 150 of 150      | 0.0836613 ± 0.0299539 | 0.0008 | EXP 150 of 150      | 0.1067666 ± 0.0311766        | 0.0038 | EXP 150 of 150      | 15.7839249 ± 0.0268502 | 0.9300 | EXP 150 of 150      | 288.822982 ± 0.049062 | 0.9893 | EXP 150 of 150      |
| 14D28388         | 2.3 %  | 0.0348182 ± 0.0005432 | 0.7263 | EXP 150 of 150      | 0.0706784 ± 0.0274232 | 0.0062 | EXP 150 of 150      | 0.0317385 ± 0.0259478        | 0.0050 | EXP 149 of 150      | 11.0059512 ± 0.0240852 | 0.8948 | EXP 150 of 150      | 203.322521 ± 0.040893 | 0.9107 | EXP 150 of 150      |
| 14D28390         | 2.4 %  | 0.0390401 ± 0.0005364 | 0.7991 | EXP 150 of 150      | 0.1278755 ± 0.0304802 | 0.0007 | EXP 150 of 150      | 0.1682149 ± 0.0266534        | 0.0002 | EXP 150 of 150      | 21.5381801 ± 0.0265527 | 0.9638 | EXP 150 of 150      | 390.871956 ± 0.051827 | 0.9978 | EXP 150 of 150      |
| 14D28391         | 2.5 %  | 0.0329157 ± 0.0004812 | 0.8136 | EXP 150 of 150      | 0.0400520 ± 0.0295644 | 0.0135 | EXP 150 of 150      | 0.0643367 ± 0.0279687        | 0.0006 | EXP 150 of 150      | 12.8194437 ± 0.0249511 | 0.9124 | EXP 150 of 150      | 236.081798 ± 0.045465 | 0.9847 | EXP 150 of 150      |
| 14D28392         | 2.6 %  | 0.0328132 ± 0.0005109 | 0.7878 | EXP 150 of 150      | 0.1470515 ± 0.0308965 | 0.0168 | EXP 150 of 150      | 0.1059897 ± 0.0257015        | 0.0082 | EXP 150 of 150      | 13.5303919 ± 0.0247854 | 0.9186 | EXP 150 of 150      | 247.997748 ± 0.046297 | 0.9893 | EXP 149 of 150      |
| 14D28394         | 2.7 %  | 0.0331305 ± 0.0004874 | 0.7993 | EXP 150 of 150      | 0.0993211 ± 0.0315694 | 0.0011 | EXP 150 of 150      | 0.1184747 ± 0.0254678        | 0.0000 | EXP 150 of 150      | 15.4002340 ± 0.0279748 | 0.9260 | EXP 150 of 150      | 282.893043 ± 0.041210 | 0.9962 | EXP 150 of 150      |
| 14D28395         | 2.8 %  | 0.0376987 ± 0.0005143 | 0.8304 | EXP 150 of 150      | 0.1576393 ± 0.0308272 | 0.0030 | EXP 150 of 150      | 0.2624767 ± 0.0269889        | 0.0049 | EXP 150 of 150      | 25.5221728 ± 0.0252280 | 0.9779 | EXP 150 of 150      | 459.230502 ± 0.054832 | 0.9987 | EXP 150 of 150      |
| 14D28396         | 2.9 %  | 0.0346345 ± 0.0005493 | 0.7771 | EXP 150 of 150      | 0.1364618 ± 0.0310672 | 0.0033 | EXP 150 of 150      | 0.1572413 ± 0.0263735        | 0.0030 | EXP 150 of 150      | 19.6193616 ± 0.0255448 | 0.9600 | EXP 150 of 150      | 355.784799 ± 0.053628 | 0.9973 | EXP 150 of 150      |
| 14D28398         | 3.0 %  | 0.0367949 ± 0.0005799 | 0.7769 | EXP 150 of 150      | 0.2791853 ± 0.0313570 | 0.0311 | EXP 150 of 150      | 0.2633044 ± 0.0290114        | 0.0205 | EXP 150 of 150      | 26.6985113 ± 0.0279415 | 0.9745 | EXP 150 of 150      | 482.778265 ± 0.055770 | 0.9989 | EXP 150 of 150      |
| 14D28399         | 3.2 %  | 0.0373548 ± 0.0005314 | 0.8243 | EXP 150 of 150      | 0.2827957 ± 0.0319658 | 0.0077 | EXP 150 of 150      | 0.2706489 ± 0.0261193        | 0.0099 | EXP 149 of 150      | 28.1992931 ± 0.0279141 | 0.9768 | EXP 150 of 150      | 509.562187 ± 0.057754 | 0.9990 | EXP 150 of 150      |
| 14D28400         | 3.4 %  | 0.0412513 ± 0.0005318 | 0.8506 | EXP 150 of 150      | 0.3404829 ± 0.0311030 | 0.0021 | EXP 150 of 150      | 0.3744097 ± 0.0302237        | 0.0021 | EXP 150 of 150      | 36.2824345 ± 0.0261342 | 0.9877 | EXP 150 of 150      | 653.986394 ± 0.063673 | 0.9994 | EXP 150 of 150      |
| 14D28402         | 3.6 %  | 0.0419126 ± 0.0005607 | 0.8636 | EXP 149 of 150      | 0.3764271 ± 0.0327131 | 0.0039 | EXP 150 of 150      | 0.4185333 ± 0.0303093        | 0.0000 | EXP 150 of 150      | 40.9600372 ± 0.0263537 | 0.9902 | EXP 150 of 150      | 738.301888 ± 0.064085 | 0.9995 | EXP 150 of 150      |
| 14D28403         | 3.9 %  | 0.0399990 ± 0.0005157 | 0.8644 | EXP 150 of 150      | 0.3050469 ± 0.0294092 | 0.0006 | EXP 150 of 150      | 0.3951106 ± 0.0259451        | 0.0157 | EXP 149 of 150      | 36.3678834 ± 0.0265783 | 0.9874 | EXP 150 of 150      | 655.415222 ± 0.065776 | 0.9993 | EXP 150 of 150      |
| 14D28404         | 4.2 %  | 0.0422722 ± 0.0005975 | 0.8768 | EXP 150 of 150      | 0.4277714 ± 0.0306372 | 0.0035 | EXP 150 of 150      | 0.5604300 ± 0.0269815        | 0.0175 | EXP 150 of 150      | 51.9680918 ± 0.0276066 | 0.9934 | EXP 150 of 150      | 937.561208 ± 0.075702 | 0.9996 | EXP 150 of 150      |
| 14D28406         | 4.5 %  | 0.0424492 ± 0.0006345 | 0.8600 | EXP 150 of 150      | 0.3544432 ± 0.0324533 | 0.0002 | EXP 150 of 150      | 0.5659205 ± 0.0288366        | 0.0116 | EXP 149 of 150      | 50.1042585 ± 0.0330240 | 0.9899 | EXP 150 of 150      | 904.006086 ± 0.075061 | 0.9996 | EXP 150 of 150      |
| 14D28407         | 4.8 %  | 0.0387813 ± 0.0005658 | 0.8831 | EXP 150 of 150      | 0.3293790 ± 0.0291971 | 0.0028 | EXP 150 of 150      | 0.5261463 ± 0.0262674        | 0.0460 | EXP 150 of 150      | 47.1491748 ± 0.0265635 | 0.9926 | EXP 150 of 150      | 850.499725 ± 0.073553 | 0.9996 | EXP 150 of 150      |
| 14D28408         | 5.1 %  | 0.0303897 ± 0.0005326 | 0.8087 | EXP 150 of 150      | 0.1414947 ± 0.0314707 | 0.0017 | EXP 150 of 150      | 0.2084414 ± 0.0271242        | 0.0003 | EXP 149 of 150      | 23.4622202 ± 0.0242712 | 0.9736 | EXP 150 of 150      | 427.507469 ± 0.051404 | 0.9987 | EXP 150 of 150      |
| 14D28410         | 5.4 %  | 0.0287789 ± 0.0005129 | 0.8190 | EXP 150 of 150      | 0.1741204 ± 0.0306671 | 0.0180 | EXP 150 of 150      | 0.2264580 ± 0.0262539        | 0.0156 | EXP 150 of 150      | 21.8102041 ± 0.0262534 | 0.9666 | EXP 150 of 150      | 396.837715 ± 0.052154 | 0.9985 | EXP 150 of 150      |
| 14D28411         | 5.8 %  | 0.0369739 ± 0.0005080 | 0.8532 | EXP 150 of 150      | 0.2379083 ± 0.0285566 | 0.0101 | EXP 150 of 150      | 0.3940585 ± 0.0272975        | 0.0157 | EXP 150 of 150      | 36.8959855 ± 0.0269198 | 0.9874 | EXP 150 of 150      | 663.580743 ± 0.063746 | 0.9994 | EXP 150 of 150      |
| 14D28412         | 6.2 %  | 0.0312207 ± 0.0005375 | 0.8108 | EXP 150 of 150      | 0.2007195 ± 0.0294826 | 0.0472 | EXP 150 of 150      | 0.2632996 ± 0.0272404        | 0.0047 | EXP 150 of 150      | 26.5733361 ± 0.0270962 | 0.9754 | EXP 150 of 150      | 479.036315 ± 0.058391 | 0.9989 | EXP 150 of 150      |
| 14D28414         | 6.8 %  | 0.0423266 ± 0.0005435 | 0.8377 | EXP 150 of 150      | 0.2509682 ± 0.0268906 | 0.0185 | EXP 150 of 150      | 0.4579879 ± 0.0272772        | 0.0172 | EXP 149 of 150      | 41.3582777 ± 0.0274082 | 0.9900 | EXP 150 of 150      | 737.561054 ± 0.053598 | 0.9997 | EXP 150 of 150      |
| 14D28415         | 7.4 %  | 0.0395124 ± 0.0005437 | 0.8183 | EXP 150 of 150      | 0.1594750 ± 0.0308320 | 0.0000 | EXP 150 of 150      | 0.3634843 ± 0.0243086        | 0.0254 | EXP 150 of 150      | 31.8481183 ± 0.0288366 | 0.9802 | EXP 150 of 150      | 570.227433 ± 0.065560 | 0.9991 | EXP 150 of 150      |
| 14D28416         | 8.3 %  | 0.0433901 ± 0.0005655 | 0.8302 | EXP 150 of 150      | 0.2291467 ± 0.0267543 | 0.0028 | EXP 150 of 150      | 0.4721242 ± 0.0264304        | 0.0757 | EXP 150 of 150      | 36.4123818 ± 0.0291365 | 0.9853 | EXP 150 of 150      | 641.652982 ± 0.065068 | 0.9994 | EXP 150 of 150      |
| 14D28418         | 9.3 %  | 0.0465201 ± 0.0005993 | 0.8086 | EXP 150 of 150      | 0.2596187 ± 0.0321169 | 0.0075 | EXP 150 of 150      | 0.4728992 ± 0.0245483        | 0.0167 | EXP 149 of 150      | 37.6020890 ± 0.0264377 | 0.9883 | EXP 150 of 150      | 656.984402 ± 0.061126 | 0.9995 | EXP 150 of 150      |
| 14D28419         | 10.4 % | 0.0488336 ± 0.0005491 | 0.7809 | EXP 150 of 150      | 0.2863455 ± 0.0304071 | 0.0067 | EXP 150 of 150      | 0.4219869 ± 0.0276917        | 0.0315 | EXP 150 of 150      | 33.2116070 ± 0.0290537 | 0.9821 | EXP 150 of 150      | 572.223509 ± 0.058696 | 0.9993 | EXP 150 of 150      |
| 14D28420         | 11.7 % | 0.0519278 ± 0.0005984 | 0.7312 | EXP 150 of 150      | 0.3006752 ± 0.0291918 | 0.0003 | EXP 150 of 150      | 0.4454552 ± 0.0255029        | 0.0422 | EXP 149 of 150      | 31.2499496 ± 0.0261385 | 0.9832 | EXP 150 of 150      | 530.119250 ± 0.058423 | 0.9992 | EXP 150 of 150      |
| 14D28422         | 13.5 % | 0.0623250 ± 0.0006344 | 0.5547 | EXP 150 of 150      | 0.3414965 ± 0.0299445 | 0.0011 | EXP 150 of 150      | 0.3872026 ± 0.0284421        | 0.0165 | EXP 149 of 150      | 26.3036636 ± 0.0268875 | 0.9760 | EXP 150 of 150      | 436.320998 ± 0.058045 | 0.9986 | EXP 150 of 150      |
| 14D28423         | 15.5 % | 0.0702323 ± 0.0006767 | 0.4722 | EXP 149 of 150      | 0.4833164 ± 0.0275173 | 0.0355 | EXP 149 of 150      | 0.2790454 ± 0.0265036        | 0.0030 | EXP 150 of 150      | 22.7108616 ± 0.0255467 | 0.9697 | EXP 150 of 150      | 370.283638 ± 0.051230 | 0.9983 | EXP 150 of 150      |
| 14D28424         | 17.6 % | 0.0644771 ± 0.0006543 | 0.4224 | EXP 150 of 150      | 0.4581426 ± 0.0303175 | 0.0229 | EXP 150 of 150      | 0.1273731 ± 0.0277153        | 0.0002 | EXP 150 of 150      | 14.0141420 ± 0.0270245 | 0.9149 | EXP 150 of 150      | 231.113234 ± 0.039329 | 0.9952 | EXP 150 of 150      |
| 14D28426         | 19.8 % | 0.0696690 ± 0.0006733 | 0.3244 | EXP 150 of 150      | 0.5764998 ± 0.0329238 | 0.0073 | EXP 148 of 150      | 0.1142368 ± 0.0266635        | 0.0089 | EXP 150 of 150      | 10.3891493 ± 0.0260811 | 0.8586 | EXP 150 of 150      | 173.482731 ± 0.039018 | 0.9844 | EXP 150 of 150      |
| 14D28427         | 22.1 % | 0.0707301 ± 0.0006077 | 0.3629 | EXP 149 of 150      | 0.6103284 ± 0.0304340 | 0.0172 | EXP 150 of 150      | 0.0929921 ± 0.0252972        | 0.0387 | EXP 150 of 150      | 6.7368919 ± 0.0254551  | 0.7236 | EXP 150 of 150      | 118.484155 ± 0.036587 | 0.3978 | EXP 150 of 150      |
| 14D28428         | 24.5 % | 0.0588355 ± 0.0005861 | 0.4374 | EXP 150 of 150      | 0.4252178 ± 0.0319888 | 0.0003 | EXP 149 of 150      | <b>0.0100338</b> ± 0.0291914 | 0.0006 | EXP 150 of 150      | 3.2498758 ± 0.0276226  | 0.2490 | EXP 150 of 150      | 64.202162 ± 0.030926  | 0.9851 | EXP 150 of 150      |

| Project Info |        | Analyst      | Irradiation | X-pos | Y-pos | Z/H-pos | Project                             | Experiment | Nmb |
|--------------|--------|--------------|-------------|-------|-------|---------|-------------------------------------|------------|-----|
| 14D28381     | 1.8 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28382     | 1.9 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28383     | 2.0 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28385     | 2.1 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28386     | 2.2 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28388     | 2.3 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28390     | 2.4 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28391     | 2.5 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28392     | 2.6 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28394     | 2.7 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28395     | 2.8 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28396     | 2.9 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28398     | 3.0 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28399     | 3.2 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28400     | 3.4 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28402     | 3.6 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28403     | 3.9 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28404     | 4.2 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28406     | 4.5 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28407     | 4.8 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28408     | 5.1 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28410     | 5.4 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28411     | 5.8 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28412     | 6.2 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28414     | 6.8 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28415     | 7.4 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28416     | 8.3 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28418     | 9.3 %  | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28419     | 10.4 % | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28420     | 11.7 % | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28422     | 13.5 % | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28423     | 15.5 % | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28424     | 17.6 % | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28426     | 19.8 % | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28427     | 22.1 % | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |
| 14D28428     | 24.5 % | Kevin Konrad | 14-OSU-02   | 0.00  | 0.00  | 51.80   | French Polynesia\Rurutu (13-INT-08) | 14D28380   | 01  |

| Sample Parameters | Sample | Material       | Location   | Standard Name  | Standard (in Ma) | %1σ    | Standard Reference | Standard 40Ar/39Ar   | %1σ     | J     | %1σ        | Air 40Ar/36Ar | %1σ     | MDF (lin) | %1σ       | Volume Ratio | Sensitivity (mol/volt) | Day     | Month | Year | Hour | Min | Resist |   |
|-------------------|--------|----------------|------------|----------------|------------------|--------|--------------------|----------------------|---------|-------|------------|---------------|---------|-----------|-----------|--------------|------------------------|---------|-------|------|------|-----|--------|---|
| 14D28381          | 1.8 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 16  | 4      | 1 |
| 14D28382          | 1.9 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 16  | 20     | 1 |
| 14D28383          | 2.0 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 16  | 37     | 1 |
| 14D28385          | 2.1 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 17  | 9      | 1 |
| 14D28386          | 2.2 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 17  | 26     | 1 |
| 14D28388          | 2.3 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 17  | 59     | 1 |
| 14D28390          | 2.4 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 18  | 32     | 1 |
| 14D28391          | 2.5 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 18  | 48     | 1 |
| 14D28392          | 2.6 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 19  | 4      | 1 |
| 14D28394          | 2.7 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 19  | 37     | 1 |
| 14D28395          | 2.8 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 19  | 54     | 1 |
| 14D28396          | 2.9 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 20  | 10     | 1 |
| 14D28398          | 3.0 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 20  | 43     | 1 |
| 14D28399          | 3.2 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 20  | 59     | 1 |
| 14D28400          | 3.4 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 21  | 16     | 1 |
| 14D28402          | 3.6 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 21  | 49     | 1 |
| 14D28403          | 3.9 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 22  | 5      | 1 |
| 14D28404          | 4.2 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 22  | 22     | 1 |
| 14D28406          | 4.5 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 22  | 54     | 1 |
| 14D28407          | 4.8 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 23  | 11     | 1 |
| 14D28408          | 5.1 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 22    | OCT  | 2014 | 23  | 27     | 1 |
| 14D28410          | 5.4 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 0   | 0      | 1 |
| 14D28411          | 5.8 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 0   | 17     | 1 |
| 14D28412          | 6.2 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 0   | 33     | 1 |
| 14D28414          | 6.8 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 1   | 6      | 1 |
| 14D28415          | 7.4 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 1   | 22     | 1 |
| 14D28416          | 8.3 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 1   | 39     | 1 |
| 14D28418          | 9.3 %  | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 2   | 12     | 1 |
| 14D28419          | 10.4 % | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 2   | 28     | 1 |
| 14D28420          | 11.7 % | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 2   | 44     | 1 |
| 14D28422          | 13.5 % | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 3   | 17     | 1 |
| 14D28423          | 15.5 % | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 3   | 34     | 1 |
| 14D28424          | 17.6 % | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 3   | 50     | 1 |
| 14D28426          | 19.8 % | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 4   | 23     | 1 |
| 14D28427          | 22.1 % | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 4   | 40     | 1 |
| 14D28428          | 24.5 % | RR1310-D07-22b | Groundmass | Rurutu Hotspot | FCT-NM (2A43-14) | 28.201 | 0.082              | Kuiper et al. (2008) | 8.97135 | 0.094 | 0.00175195 | 0.094         | 303.698 | 0.155     | 0.9932428 | 0.069        | 1                      | 4.8E-14 | 23    | OCT  | 2014 | 4   | 56     | 1 |



14D28380.AGE >>> RR1310-D07-22B >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



**Ar-Ages in Ma**

**WEIGHTED PLATEAU**

$54.97 \pm 0.14$

**TOTAL FUSION**

$53.82 \pm 0.11$

**NORMAL ISOCHRON**

$55.29 \pm 0.34$

**INVERSE ISOCHRON**

$55.75 \pm 0.39$

**MSWD (PROBABILITY)**

$3.62$  (0%)

**Sample Info**

Groundmass

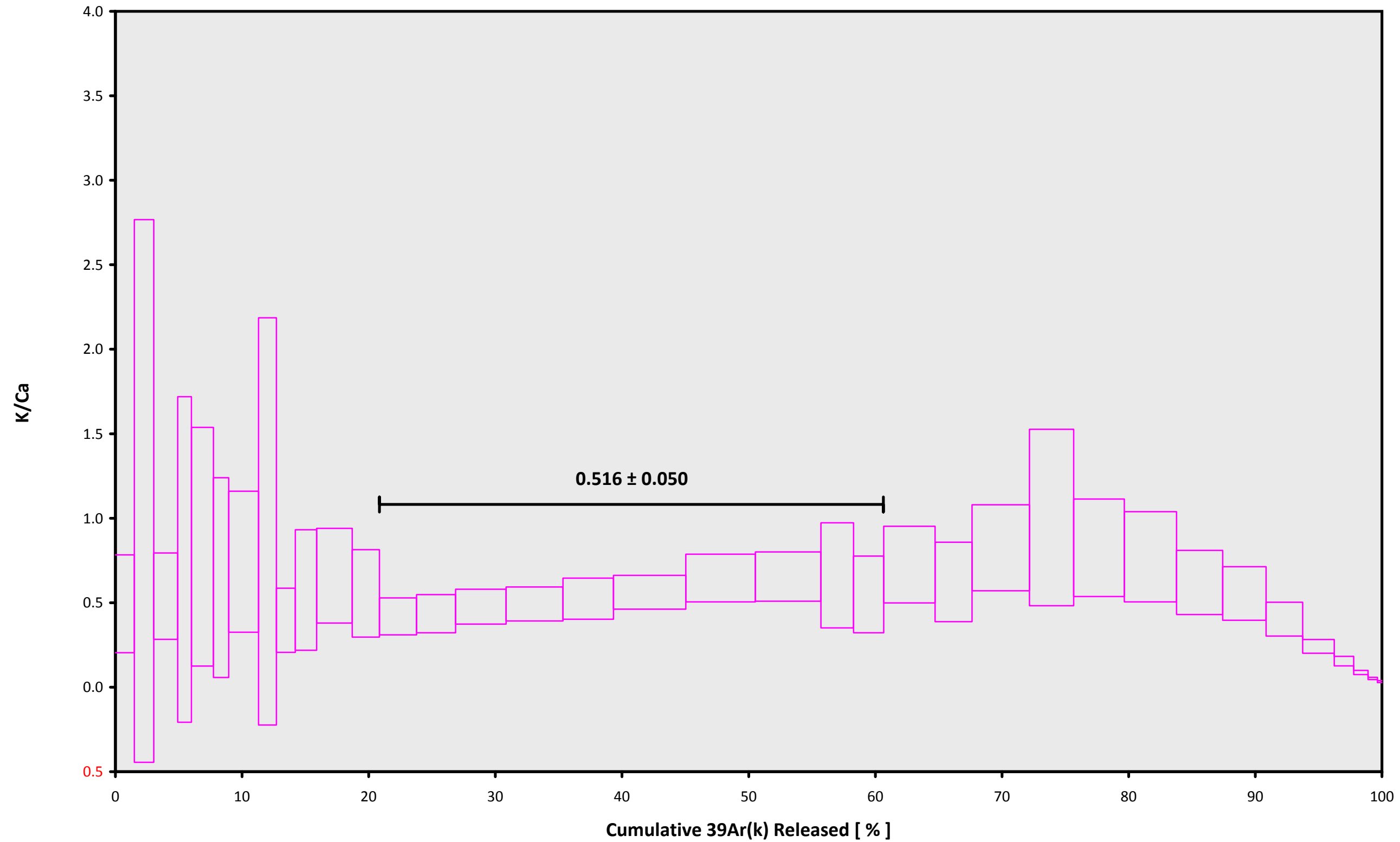
Rurutu Hotspot

Kevin Konrad

IRR = 14-OSU-02 (2A43-14)

J =  $0.00175195 \pm 0.00000165$

14D28380.AGE >>> RR1310-D07-22B >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



**Ar-Ages in Ma**

**WEIGHTED PLATEAU**

$54.97 \pm 0.14$

**TOTAL FUSION**

$53.82 \pm 0.11$

**NORMAL ISOCHRON**

$55.29 \pm 0.34$

**INVERSE ISOCHRON**

$55.75 \pm 0.39$

**Sample Info**

**Groundmass**

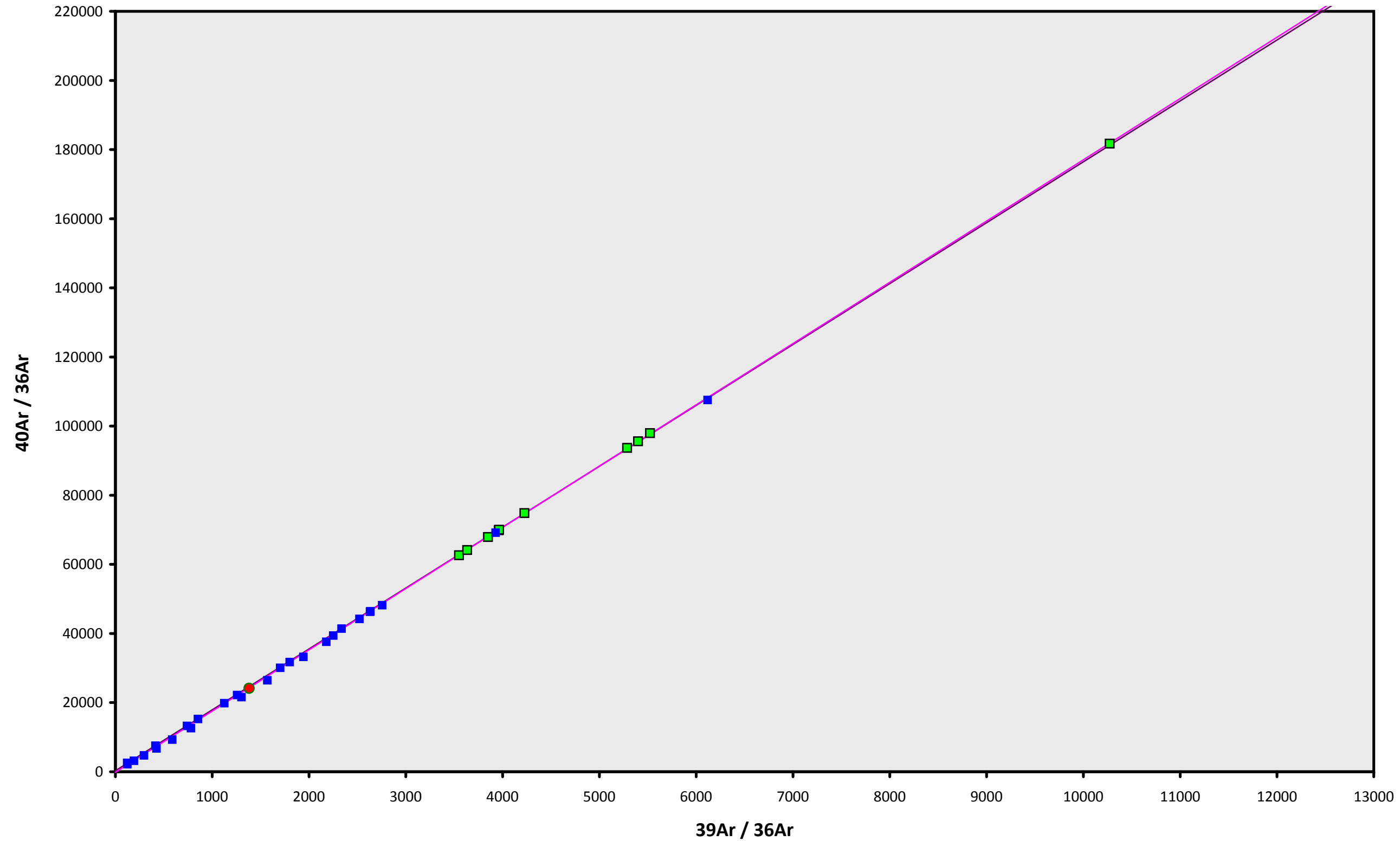
**Rurutu Hotspot**

**Kevin Konrad**

**IRR = 14-OSU-02 (2A43-14)**

**J =  $0.00175195 \pm 0.00000165$**

14D28380.AGE >>> RR1310-D07-22B >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



**Ar-Ages in Ma**

**WEIGHTED PLATEAU**  
54.97 ± 0.14

**TOTAL FUSION**  
53.82 ± 0.11

**NORMAL ISOCHRON**  
55.29 ± 0.34

**INVERSE ISOCHRON**  
55.75 ± 0.39

**MSWD (PROBABILITY)**  
1.88 (6%)

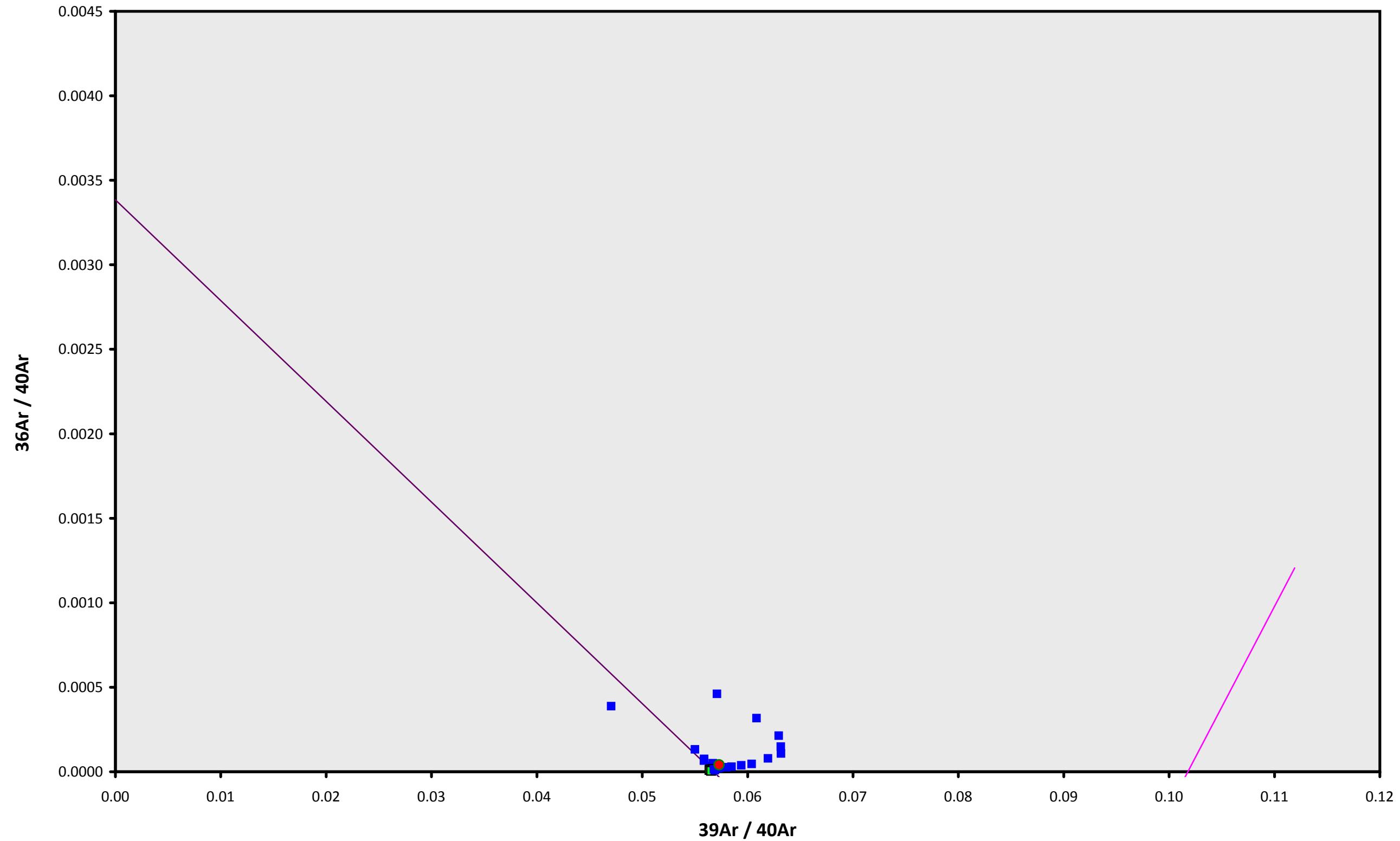
**40AR/36AR INTERCEPT**  
-175.2 ± 461.6 (NEG)

**Sample Info**

Groundmass  
Rurutu Hotspot  
Kevin Konrad

IRR = 14-OSU-02 (2A43-14)  
J = 0.00175195 ± 0.00000165

14D28380.AGE >>> RR1310-D07-22B >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



### Ar-Ages in Ma

**WEIGHTED PLATEAU**  
54.97 ± 0.14

**TOTAL FUSION**  
53.82 ± 0.11

**NORMAL ISOCHRON**  
55.29 ± 0.34

**INVERSE ISOCHRON**  
55.75 ± 0.39

**MSWD (PROBABILITY)**  
0.68 (71%)

**SPREADING FACTOR**  
0.6%

**40AR/36AR INTERCEPT**  
-829.1 ± 576.4 (NEG)

### Sample Info

**Groundmass**  
Rurutu Hotspot  
Kevin Konrad

**IRR = 14-OSU-02 (2A43-14)**  
**J = 0.00175195 ± 0.00000165**