

EXP#16D44828 > 172-DFWJ-15 > Groundmass > MCCLAUGHRY (15-17)
CENTRAL CORDILLERA OF ... > DUFUR
16-OSU-10 (10C11-16) > Incremental Heating > Dan Miggins

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

Project = MCCLAUGHRY (15-17)
Sample = 172-DFWJ-15
Material = Groundmass
Location = Dufur
Region = Central Cordillera of ...
Analyst = Dan Miggins
Irradiation = 16-OSU-10 (10C11-16)
Position = X: 0 | Y: 0 | Z/H: 19.86723 mm
FCT-NM Age = 28.201 ± 0.023 Ma
FCT-NM Reference = Kuiper et al (2008)
FCT-NM 40Ar/39Ar Ratio = 5.80343 ± 0.00772
FCT-NM J-value = 0.00270829 ± 0.00000360
Air Shot 40Ar/36Ar = 305.2310 ± 0.4609
Air Shot MDF = 0.99201951 ± 0.00068102 (LIN)
Experiment Type = Incremental Heating
Extraction Method = Undefined
Heating = 77 sec
Isolation = 3.00 min
Instrument = ARGUS-VI-D
Preferred Age = Undefined
Age Classification = Undefined
IGSN = 15.6
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Collector Calibrations = 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⁺) = 0.580 ± 0.009 E-10 1/a
Decay 40K(β⁻) = 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) | MSWD | 39Ar(k) (%n) | K/Ca ± 2σ |
|------------------|---------------------------|---|------------------------|----------------|--|---------------|
| Age Plateau | | 0.76065 ± 0.00180 ± 0.24% | 3.72 ± 0.01 ± 0.36% | 1.45 7% | 64.23 25 | 0.122 ± 0.012 |
| | | Full External Error ± 0.09 Analytical Error ± 0.01 | | 1.58 1.2032 | 2σ Confidence Limit Error Magnification | |
| Total Fusion Age | | 0.75213 ± 0.00124 ± 0.16% | 3.68 ± 0.01 ± 0.31% | | 40 | 0.140 ± 0.000 |
| | | Full External Error ± 0.08 Analytical Error ± 0.01 | | | | |
| Normal Isochron | 297.22 ± 13.81 ± 4.65% | 0.75985 ± 0.00425 ± 0.56% | 3.72 ± 0.02 ± 0.62% | 1.46 7% | 64.23 25 | |
| No Convergence | | Full External Error ± 0.09 Analytical Error ± 0.02 | | 1.59 1.2072 | 2σ Confidence Limit Error Magnification | |
| Inverse Isochron | 302.32 ± 13.85 ± 4.58% | 0.75877 ± 0.00423 ± 0.56% | 3.71 ± 0.02 ± 0.62% | 1.45 8% | 64.23 25 | |
| | | Full External Error ± 0.09 Analytical Error ± 0.02 | | 1.59 1.2029 | 2σ Confidence Limit Error Magnification | |
| | | | | 24% | Spreading Factor | |

