EXP#23G11278 > 15A22-1 > STEELY (22-19)
NORTHEAST WASHINGTON > HUNTERS
23-OSU-01 (1B26-23) > Incremental Heating > Groundmass > Dan Miggins

Information on Analysis and Constants Used in Calculations

Project = **STEELY (22-19)**
Sample = **15A22-1**
Material = **Groundmass**
Location = **Hunters**
Region = **Northeast Washington**
Analyst = **Dan Miggins**
Irradiation = **23-OSU-01 (1B26-23)**
Position = **X: 999 | Y: 999 | Z/H: 36.16336 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.58472 ± 0.00853**
FCT-NM J-value = **0.00161982 ± 0.00000144**
Air Shot 40Ar/36Ar = **308.9480 ± 0.6210**
Air Shot MDF = **0.99158319 ± 0.00054746 (LIN)**
Experiment Type = **Incremental Heating**
Extraction Method = **Bulk Laser Heating**
Heating = **50 sec**
Isolation = **2.00 min**
Instrument = **ARGUS-VI-G**
Preferred Age = **Mini Plateau**
Age Classification = **Crystallization Age**
IGSN = Undefined
Rock Class = Undefined
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **36Ar**
Decay 40K(total) = **5.463 ± 0.107 E-10 1/a**
Decay 40K(EC,β^+) = **0.580 ± 0.014 E-10 1/a**
Decay 40K(β^-) = **4.884 ± 0.099 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**
Production 39/37(ca) = **0.0006425 ± 0.0000059**
Production 38/37(ca) = **0.0001800 ± 0.0000173**
Production 36/37(ca) = **0.0002703 ± 0.0000005**
Production 40/39(k) = **0.000607 ± 0.000059**
Production 38/39(k) = **0.012077 ± 0.000011**
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**
Trapped 40/36(a) = **298.56 ± 0.31**
Trapped 38/36(a) = **0.1885 ± 0.0003**
Standard MDF 40/36(a) = **298.56 ± 0.31**
Standard MDF Reference = **Lee et al 2006**

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		17.12991 ± 0.01578 ± 0.09%	**50.10 ± 0.10** **± 0.20%**	1.94 7%	36.55 7	1.23 ± 0.05
			Full External Error ± 2.59	2.15	2σ Confidence Limit	
			Analytical Error ± 0.05	1.3918	Error Magnification	
Total Fusion Age		16.80592 ± 0.00680 ± 0.04%	**49.16 ± 0.09** **± 0.18%**		27	1.29 ± 0.00
			Full External Error ± 2.54			
			Analytical Error ± 0.02			
Normal Isochron Error Chron	**306.05 ± 56.44** **± 18.44%**	17.03063 ± 0.74603 ± 4.38%	**49.81 ± 2.15** **± 4.33%**	2.49 3%	36.55 7	
			Full External Error ± 3.36	2.26	2σ Confidence Limit	
			Analytical Error ± 2.15	1.5783	Error Magnification	
Inverse Isochron Error Chron	**306.21 ± 56.07** **± 18.31%**	17.02878 ± 0.73938 ± 4.34%	**49.81 ± 2.14** **± 4.29%**	2.48 3%	36.55 7	
			Full External Error ± 3.34	2.26	2σ Confidence Limit	
			Analytical Error ± 2.13	1.5748	Error Magnification	
				1%	Spreading Factor