EXP#23G09740 > 3A22-7 > STEELY (22-19)
NORTHEAST WASHINGTON > HUNTERS
23-OSU-01 (1B22-23) > Incremental Heating > PLAGIOCLASE > Dan Miggins

Information on Analysis and Constants Used in Calculations

Project = **STEELY (22-19)**
Sample = **3A22-7**
Material = **PLAGIOCLASE**
Location = **Hunters**
Region = **Northeast Washington**
Analyst = **Dan Miggins**
Irradiation = **23-OSU-01 (1B22-23)**
Position = **X: 999 | Y: 999 | Z/H: 30.33123 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.52046 ± 0.00857**
FCT-NM J-value = **0.00163075 ± 0.00000147**
Air Shot 40Ar/36Ar = **308.2000 ± 0.4746**
Air Shot MDF = **0.99217030 ± 0.00045062 (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		17.67405 ± 0.02126	**52.01 ± 0.11**	0.99	37.09	0.0556 ± 0.0009
		± 0.12%	**± 0.21%**	47%	19	
		Full External Error ± 2.69		1.67	2σ Confidence Limit	
		Analytical Error ± 0.06		1.0000	Error Magnification	
Total Fusion Age		17.59414 ± 0.01331	**51.78 ± 0.10**		30	0.0544 ± 0.0001
		± 0.08%	**± 0.19%**			
		Full External Error ± 2.67				
		Analytical Error ± 0.04				
Normal Isochron	**261.78 ± 29.45**	17.76142 ± 0.06141	**52.27 ± 0.20**	2.85	37.09	
Error Chron	**± 11.25%**	± 0.35%	**± 0.38%**	0%	19	
		Full External Error ± 2.71		1.69	2σ Confidence Limit	
		Analytical Error ± 0.18		1.6887	Error Magnification	
Inverse Isochron	**298.74 ± 18.60**	17.67392 ± 0.04008	**52.01 ± 0.15**	1.05	37.09	
	± 6.23%	± 0.23%	**± 0.29%**	40%	19	
		Full External Error ± 2.69		1.69	2σ Confidence Limit	
		Analytical Error ± 0.12		1.0241	Error Magnification	
				19%	Spreading Factor