

**EXP#23G09850 > 3A22-8 > STEELY (22-19)**  
**NORTHEAST WASHINGTON > HUNTERS**  
**23-OSU-01 (1B21-23) > Incremental Heating > GROUNDMASS > Dan Miggins**

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

Project = **STEELY (22-19)**  
Sample = **3A22-8**  
Material = **GROUNDMASS**  
Location = **Hunters**  
Region = **Northeast Washington**  
Analyst = **Dan Miggins**  
Irradiation = **23-OSU-01 (1B21-23)**  
Position = **X: 999 | Y: 999 | Z/H: 28.61777 mm**  
FCT-NM Age = **28.201 ± 0.023 Ma**  
FCT-NM Reference = **Kuiper et al (2008)**  
FCT-NM 40Ar/39Ar Ratio = **9.50373 ± 0.00855**  
FCT-NM J-value = **0.00163362 ± 0.00000147**  
Air Shot 40Ar/36Ar = **307.2480 ± 0.4547**  
Air Shot MDF = **0.99292166 ± 0.00044000 (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<sup>+</sup>) = **0.580 ± 0.014 E-10 1/a**  
Decay 40K(β<sup>-</sup>) = **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) = **188.07 ± 3.60**  
Trapped 38/36(a) = **0.1885 ± 0.0003**  
Standard MDF 40/36(a) = **298.56 ± 0.31**  
Standard MDF Reference = **Lee et al 2006**

Sub-atmospheric 40/36 = 188.07 ± 1.91 (%SD).

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%n)	K/Ca ± 2σ
Age Plateau		17.70528 ± 0.00652 ± 0.04%	52.19 ± 0.09 ± 0.18%	0.82 65% 1.76 1.0000	39.32 15	1.05 ± 0.23
			Full External Error ± 2.70 Analytical Error ± 0.02		2σ Confidence Limit Error Magnification	
Total Fusion Age		17.89402 ± 0.00478 ± 0.03%	52.74 ± 0.09 ± 0.18%		27	1.11 ± 0.00
			Full External Error ± 2.72 Analytical Error ± 0.01			
Normal Isochron	186.69 ± 7.27 ± 3.89%	17.70804 ± 0.01269 ± 0.07%	52.20 ± 0.10 ± 0.19%	1.05 40% 1.78 1.0262	39.32 15	
			Full External Error ± 2.70 Analytical Error ± 0.04		2σ Confidence Limit Error Magnification	
Inverse Isochron	188.07 ± 7.19 ± 3.82%	17.70544 ± 0.01259 ± 0.07%	52.19 ± 0.10 ± 0.19%	1.03 41% 1.78 1.0171	39.32 15	
Clustered Points			Full External Error ± 2.70 Analytical Error ± 0.04		2σ Confidence Limit Error Magnification Spreading Factor	

