Appendix 1: $^{40}Ar/^{39}Ar$ data tables

Errors quoted as absolute analytical errors at the 1σ level unless otherwise noted.

Samples are listed below in the order in which they are presented in the manuscript.

Sample #	Mineral	J factor	J abs err
18CD08B	Biotite	2.74791E-03	3.00000E-01

Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.01631136	0.000310769	0.01126096	0.000726515	0.018651326	0.000346896	31755.28653	154.7915723	2.23879E+01
3.85	1	0.012994969	0.000601807	0.032726352	0.010859906	0.005874806	0.00065205	19467.41915	181.8433922	3.61127E+01
3.9	1	0.012280219	0.000544208	0.044347784	0.02064327	0.006339022	0.001213947	10678.15622	120.0990238	4.36409E+01
4	1	0.01226816	0.00056808	0.00790986	0.020556786	0.00643247	0.001158944	10722.93658	98.48918502	5.12007E+01
4.2	1	0.011883756	0.000416748	0.052265132	0.014749059	0.009002537	0.000873334	14351.2551	144.9459583	6.13186E+01
4.4	1	0.012576242	0.000531163	0.00165047	0.018276799	0.008419362	0.001163595	10709.48511	129.4412314	6.88689E+01
4.7	1	0.011808011	0.000351905	0.046995413	0.012710611	0.007171488	0.000800222	15989.71429	157.0849585	8.01418E+01
5.1	1	0.010897293	0.000601706	0.043768057	0.021427376	0.004459751	0.001209368	10301.95691	77.95737314	8.74049E+01
5.6	1	0.010518458	0.000777162	0.088636373	0.030601636	0.008636122	0.00182061	6923.408546	60.79758163	9.22859E+01
fuse	1	0.011225543	0.00051025	0.081696516	0.018616148	0.002396633	0.001506749	10941.72048	139.1787381	1.00000E+02

Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error
3.8	92.24942	66.34496663	3.06497E+08	1.8561E+06	0.61	0.013918511	7.51568E-05	0.000259599	4.69837E-06
3.85	97.70677	74.80556108	3.42136E+08	3.1726E+06	0.93	0.013074407	0.000124099	7.68096E-05	8.49591E-06
3.9	97.54512	75.27858291	3.44108E+08	3.7838E+06	1.10	0.012971072	0.000147831	8.22239E-05	1.57197E-05
4	97.53147	75.94993594	3.46904E+08	3.1714E+06	0.91	0.012853701	0.000120062	8.2681E-05	1.4878E-05
4.2	96.45968	73.30834972	3.35880E+08	3.3837E+06	1.01	0.01317183	0.000134828	0.00011858	1.14426E-05
4.4	96.63778	72.31708752	3.31726E+08	3.9596E+06	1.19	0.013375663	0.000164183	0.000112615	1.55061E-05
4.7	97.07203	71.05851031	3.26438E+08	3.1999E+06	0.98	0.013674937	0.00013639	9.80696E-05	1.09018E-05
5.1	98.18529	72.11426786	3.30875E+08	2.5990E+06	0.79	0.013629027	0.000107666	6.07821E-05	1.64767E-05
5.6	96.44578	70.04482738	3.22168E+08	2.8724E+06	0.89	0.013784607	0.000122981	0.000119046	2.50753E-05
fuse	99.03547	73.54878361	3.36886E+08	4.1108E+06	1.22	0.013479815	0.00017381	3.23062E-05	2.03067E-05

Sample #	Mineral	J factor	J abs err							
18CD08B	Hornblende	2.75773E-03	2.90000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.167072934	0.006693451	1.69338712	0.13672047	1.030500818	0.058529885	130.5607896	2.198924065	6.28937E-01
3.9	1	0.04464988	0.007489354	1.48607791	0.212565385	0.103191388	0.026050532	86.94769843	2.440323752	1.04778E+00
4.1	1	0.054618913	0.003130272	1.806023019	0.082393884	0.276764612	0.014842991	233.5652305	3.440510807	2.17291E+00
4.2	1	0.021173163	0.002428864	4.133875849	0.152047979	0.014268909	0.008434538	265.9792086	5.684404966	3.45419E+00
4.3	1	0.015429246	0.001477188	6.241573407	0.119517642	0.006927624	0.005128274	432.2595006	4.40000995	5.53647E+00
4.4	1	0.016055447	0.000971331	8.22736187	0.186206374	0.006778334	0.003295404	685.9351363	8.785784181	8.84075E+00
4.5	1	0.016050768	0.000527991	7.597592136	0.088682845	0.009555315	0.000955486	3085.592395	24.17731059	2.37047E+01
4.525	1	0.01601051	0.000637057	7.862190816	0.089018631	0.005878615	0.001098338	2676.269397	19.86437717	3.65968E+01
4.55	1	0.014677295	0.000532251	8.228604288	0.128112963	0.00096793	0.001611291	1378.194996	12.59067662	4.32358E+01
4.6	1	0.015055898	0.000374996	7.577194128	0.072014893	0.004137899	0.000576338	5497.111097	35.44005565	6.97165E+01
4.625	1	0.017105653	0.001613776	8.924779993	0.184654909	0.011036568	0.008363147	369.061296	4.197829772	7.14944E+01
4.675	1	0.014306056	0.000696806	8.746692894	0.164530181	0.000776287	0.002084849	1085.97099	11.03047447	7.67257E+01
4.725	1	0.015577321	0.001258792	9.229478682	0.219053726	0.012743474	0.005029636	569.8209264	8.33975135	7.94706E+01
4.825	1	0.018373474	0.002882826	9.226894745	0.23244699	0.000748113	0.010004979	226.2940789	3.244046356	8.05607E+01
5.125	1	0.015514046	0.00138774	9.061564624	0.234713888	0.010997221	0.006401732	458.8432317	6.955840384	8.27711E+01
5.75	1	0.015294924	0.001215017	12.02646588	0.257358483	0.0012737	0.004083301	554.4739759	6.713023768	8.54421E+01
fuse	1	0.016218651	0.000632771	8.357876118	0.099828412	0.003271188	0.000749767	3022.06766	24.02438595	1.00000E+02
	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error	
3.8	66.33809	608.1506356	1.80223E+09	2.9457E+07	1.63	0.001094104	1.85402E-05	0.001127475	6.11939E-05	
3.9	80.40943	126.8736119	5.49081E+08	1.6859E+07	3.07	0.006358754	0.000181313	0.000656169	0.000164655	
4.1	42.47261	61.36879273	2.86150E+08	9.3071E+06	3.25	0.006961976	0.00010389	0.001926828	9.94685E-05	
4.2	94.05852	68.08339179	3.14907E+08	6.8531E+06	2.18	0.013946716	0.000309912	0.000199004	0.000117563	
4.3	97.31917	76.0727196	3.48545E+08	3.5293E+06	1.01	0.01296146	0.000136311	8.97921E-05	6.64641E-05	
4.4	97.74349	89.05215043	4.01908E+08	4.8583E+06	1.21	0.01115019	0.000144358	7.55797E-05	3.67319E-05	
4.5	97.01249	93.96838904	4.21721E+08	3.2939E+06	0.78	0.010472088	8.4361E-05	0.000100064	9.97693E-06	
4.525	98.06064	90.08574582	4.06091E+08	3.0102E+06	0.74	0.011049732	8.44534E-05	6.49571E-05	1.21273E-05	
4.55	99.6741	89.78054825	4.04857E+08	3.5421E+06	0.87	0.011277342	0.000105434	1.09157E-05	1.81708E-05	
4.6	98.63137	90.32730723	4.07068E+08	2.6991E+06	0.66	0.011078347	7.48352E-05	4.58411E-05	6.3787E-06	
4.625	96.23317	85.65481523	3.88090E+08	4.4841E+06	1.16	0.011431674	0.000138556	0.000126166	9.55955E-05	
4.675	99.73622	89.10519056	4.02123E+08	3.8644E+06	0.96	0.011381292	0.000117886	8.83515E-06	2.37281E-05	
4.725	95.62391	84.65069412	3.83986E+08	5.4273E+06	1.41	0.011501821	0.000170844	0.000146573	5.78114E-05	
4.825	99.74362	88.44156558	3.99432E+08	5.3769E+06	1.35	0.011478328	0.00016971	8.58709E-06	0.00011484	
5.125	96.355	88.31351641	3.98913E+08	5.8337E+06	1.46	0.011101538	0.00017273	0.000122086	7.10463E-05	
5.75	99.5985	96.41783427	4.31513E+08	4.8897E+06	1.13	0.010558151	0.000131547	1.34479E-05	4.31118E-05	
fuse	98.9407	92.66278639	4.16480E+08	3.2217E+06	0.77	0.010846277	8.80757E-05	3.54802E-05	8.1275E-06	

Sample #	Mineral	J factor	J abs err							
18CD08D	Biotite	2.76755E-03	2.70000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.013815499	0.000450589	0.006253073	0.001432539	0.00646321	0.000342658	13737.60054	72.66807494	4.70633E+01
3.81	1	0.01393125	0.000485494	0.008292959	0.007932158	0.000934515	0.000795187	2716.482372	20.77636053	5.63697E+01
3.83	1	0.012374714	0.001109421	0.136511613	0.049066409	0.000471394	0.003511397	616.4561044	8.857746644	5.84816E+01
3.9	1	0.011584302	0.000424261	0.056326651	0.020046894	0.000160987	0.001158573	1805.080107	15.24418993	6.46655E+01
4	1	0.012890278	0.000620444	0.009168395	0.007627555	0.002621119	0.000463457	2708.496705	21.59767855	7.39445E+01
4.1	1	0.013403169	0.00051034	0.010254574	0.006521371	0.001926905	0.000361366	3316.052656	23.94385712	8.53049E+01
4.2	1	0.01164415	0.000470054	0.001481349	0.012873963	0.002226615	0.00072142	1605.535372	14.82554024	9.08053E+01
4.4	1	0.011822188	0.000583558	0.034444882	0.017918488	0.001202657	0.000901893	1207.710573	12.25330364	9.49427E+01
4.8	1	0.012827036	0.001482144	0.03250533	0.0539975	0.004599353	0.002948063	400.8166235	6.500405929	9.63159E+01
5.8	1	0.019713869	0.004296074	0.017804509	0.154734003	0.013333657	0.008838632	133.7026997	2.568787031	9.67739E+01
fuse	1	0.015452462	0.001251364	0.011388805	0.02198162	0.002776475	0.001288677	941.6733645	10.86778714	1.00000E+02
Watts	% ^{40}Ar*	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error	
3.8	97.39224	72.13558377	333126354.1	1989411.044	0.60	0.01351412	7.82848E-05	8.73446E-05	4.61223E-06	
3.81	99.625377	74.26744044	342105309.9	2603811.124	0.76	0.013426941	0.000105619	1.25477E-05	1.06765E-05	
3.83	99.799482	70.13090416	324642664.3	4442903.502	1.37	0.014247457	0.000208893	6.71616E-06	5.00284E-05	
3.9	99.933837	72.67197184	335389664.7	2772781.97	0.83	0.013765493	0.000118803	2.21606E-06	1.59483E-05	
4	98.92742	72.24618436	333593266.8	2660022.114	0.80	0.013706024	0.000112463	3.59251E-05	6.34607E-06	
4.1	99.21125	72.43077815	334372284.8	2429667.561	0.73	0.013710311	0.000101716	2.64185E-05	4.95097E-06	
4.2	99.085197	72.07094851	332853434	3027325.924	0.91	0.013761032	0.00013054	3.06405E-05	9.92368E-06	
4.4	99.504662	72.20119757	333403364.4	3266532.826	0.98	0.013795217	0.000142371	1.65909E-05	1.24407E-05	
4.8	98.10885	71.30901245	329633114.7	5166053.938	1.57	0.013772016	0.000228513	6.33424E-05	4.05884E-05	
5.8	94.731958	71.65782073	331108054.6	6456687.227	1.95	0.013233305	0.000265098	0.000176448	0.000116919	
fuse	98.892227	74.07106483	341280054.5	3819767.476	1.12	0.013363666	0.000158163	3.71039E-05	1.72164E-05	

Sample #	Mineral	J factor	J abs err							
18CD08D	White Mica	2.76264E-03	2.80000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.024005802	0.001468033	0.021518395	0.018584638	0.05435691	0.003453067	825.4640001	9.189145213	1.39085E+00
3.9	1	0.014956065	0.00066551	0.023085863	0.006765442	0.010190903	0.00065319	2269.29702	19.736063962	5.21447E+00
3.95	1	0.012793725	0.000578662	0.051641649	0.011692823	0.007127082	0.001072121	1246.266166	14.150056451	7.31435E+00
4	1	0.012943463	0.000377385	0.030541966	0.006311266	0.011975391	0.000582422	2566.756699	22.122745709	1.16392E+01
4.025	1	0.013838684	0.000536931	0.017896766	0.004863123	0.01143679	0.000845391	2995.371762	21.497586896	1.66862E+01
4.05	1	0.013211672	0.000392286	0.011601434	0.00347502	0.004846252	0.000513986	4907.066701	30.040042812	2.49543E+01
4.06	1	0.012577259	0.000430514	0.024514962	0.004356932	0.001324119	0.000343241	3530.887476	25.306770497	3.09036E+01
4.07	1	0.013202053	0.000360323	0.017233087	0.003357807	0.002734423	0.000281061	4828.579142	31.250292845	3.90394E+01
4.08	1	0.013384546	0.000365145	0.019348905	0.003203488	0.004000127	0.000425046	5064.748059	34.965118480	4.75732E+01
4.09	1	0.013252546	0.00059161	0.035111788	0.006378316	0.00201347	0.000529287	2544.591138	20.364038933	5.18607E+01
4.11	1	0.01352998	0.000614449	0.041664449	0.00707667	0.003704204	0.000606579	2294.939913	19.792339212	5.57275E+01
4.15	1	0.011772347	0.000335229	0.034091801	0.005908011	0.006672796	0.000895272	2608.372389	21.359215624	6.01224E+01
4.2	1	0.013963942	0.000445269	0.020793192	0.003762707	0.003194607	0.000338531	4094.987437	27.631449490	6.70222E+01
4.25	1	0.013476876	0.000437801	0.023432394	0.004122549	0.00465922	0.000540566	4148.468126	26.291469671	7.40121E+01
4.3	1	0.013679016	0.000528342	0.023022998	0.004522691	0.005745803	0.0006941	3231.402826	22.920522432	7.94568E+01
4.35	1	0.011324409	0.000376351	0.021876867	0.00710425	0.005664545	0.001075238	2169.82922	20.405877779	8.31129E+01
4.45	1	0.013610997	0.000528984	0.030177538	0.004285467	0.002796466	0.000338772	3797.117968	27.607401535	8.95107E+01
4.55	1	0.013968114	0.000584596	0.008847506	0.00629508	0.001457653	0.00048563	2757.866152	20.072560495	9.41576E+01
4.7	1	0.012460383	0.000536247	0.019753643	0.005504152	0.002343919	0.000425861	2998.617767	20.718144594	9.92101E+01
4.9	1	0.007268472	0.017675732	1.440617419	0.415449275	0.252193098	0.06418966	37.84853038	0.903963688	9.92738E+01
5.1	1	0.013366888	0.0116181	0.592211335	0.296525367	0.059868483	0.022702362	55.76533498	1.636412564	9.93678E+01
5.3	1	0.005122609	0.013972944	0.557457603	0.416765983	0.061660119	0.029927447	43.901558	1.537229049	9.94418E+01
fuse	1	0.013023832	0.001961312	0.091404572	0.047345743	0.026605277	0.006749064	331.3141749	3.936963453	1.00000E+02
Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error	
3.8	8.17147E+01	72.6020176	3.34551E+08	4.3352E+06	1.30	0.0112671796	0.000127997	0.000612449	3.83294E-05	
3.9	9.63458E+01	80.2928119	3.66657E+08	3.1825E+06	0.87	0.0120102559	0.000105996	0.000122395	7.7746E-06	
3.95	9.73997E+01	79.7814199	3.64540E+08	4.0205E+06	1.10	0.0122200209	0.000140899	8.70931E-05	1.30651E-05	
4	9.58446E+01	82.5429195	3.75945E+08	3.2532E+06	0.87	0.0116222984	0.000101974	0.000139182	6.66586E-06	
4.025	9.60608E+01	83.3430971	3.79236E+08	2.8150E+06	0.74	0.0115363856	8.56328E-05	0.000131939	9.70989E-06	
4.05	9.83503E+01	86.3355369	3.91493E+08	2.5125E+06	0.64	0.0114015852	7.35142E-05	5.5255E-05	5.85155E-06	
4.06	9.95331E+01	84.3543640	3.83388E+08	2.7378E+06	0.71	0.0118098730	8.7026E-05	1.56377E-05	4.05217E-06	
4.07	9.90611E+01	86.2109995	3.90985E+08	2.5948E+06	0.66	0.0115006258	7.76774E-05	3.14476E-05	3.22653E-06	
4.08	9.86124E+01	84.9463000	3.85813E+08	2.7117E+06	0.70	0.0116190702	8.33604E-05	4.64778E-05	4.92904E-06	
4.09	9.92989E+01	85.2230649	3.86946E+08	3.0180E+06	0.78	0.0116622400	9.482E-05	2.34816E-05	6.1699E-06	
4.11	9.86971E+01	83.8556796	3.81342E+08	3.2319E+06	0.85	0.0117807880	0.000104202	4.36384E-05	7.13658E-06	
4.15	9.76745E+01	83.7538809	3.80924E+08	3.1018E+06	0.81	0.0116728366	9.77595E-05	7.78905E-05	1.04318E-05	
4.2	9.89117E+01	86.7617671	3.93233E+08	2.6796E+06	0.68	0.0114104770	7.94112E-05	3.6452E-05	3.85546E-06	
4.25	9.84068E+01	85.9963159	3.90108E+08	2.5421E+06	0.65	0.0114533833	7.52012E-05	5.33638E-05	6.18274E-06	
4.3	9.79849E+01	83.4908372	3.79843E+08	2.7349E+06	0.72	0.0117465576	8.59265E-05	6.74934E-05	8.14012E-06	
4.35	9.79860E+01	82.3535458	3.75165E+08	3.4398E+06	0.92	0.0119088818	0.000113735	6.74584E-05	1.27897E-05	
4.45	9.89900E+01	81.9074574	3.73327E+08	2.7262E+06	0.73	0.0120965231	9.06666E-05	3.38275E-05	4.09104E-06	
4.55	9.94600E+01	80.2263527	3.66382E+08	2.6847E+06	0.73	0.0124083274	9.36107E-05	1.8087E-05	6.02452E-06	
4.7	9.91581E+01	82.4966677	3.75754E+08	2.6251E+06	0.70	0.0120305000	8.59272E-05	2.81985E-05	5.11987E-06	
4.9	1.45411E+01	13.0183611	6.46657E+07	1.2513E+07	19.35	0.0113499057	0.000329433	0.002862368	0.000726867	
5.1	8.01076E+01	72.1436751	3.32620E+08	1.1874E+07	3.57	0.0111290283	0.000347457	0.000666278	0.000251998	
5.3	8.04254E+01	75.8008899	3.47974E+08	1.6516E+07	4.75	0.0106330067	0.000445397	0.000655632	0.000317747	
fuse	9.08664E+01	79.1128551	3.61768E+08	4.5002E+06	1.24	0.0114985345	0.000140244	0.000305922	7.75237E-05	

Sample #	Mineral	J factor	J abs err							
18CD08E	Biotite 1	2.77000E-03	2.70000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.016881035	0.000689134	0.061451223	0.009613609	0.01897363	0.001322031	2187.0	17.0	1.83494E+01
3.85	1	0.017081033	0.001249451	0.089121196	0.023879912	0.00827452	0.002680957	963.7	11.8	2.64347E+01
3.9	1	0.013983003	0.001104753	0.079071247	0.03637827	0.00959623	0.004272939	604.4	8.1	3.15061E+01
4	1	0.012806234	0.000849057	0.141240369	0.026091659	0.00018303	0.002626831	807.1	9.6	3.82778E+01
4.1	1	0.01386474	0.001171703	0.088179037	0.035138381	0.00026304	0.003774984	561.6	7.3	4.29900E+01
4.3	1	0.016459851	0.001114613	0.055436681	0.02114728	0.00324927	0.002123738	994.5	11.0	5.13340E+01
4.5	1	0.01240553	0.000702937	0.058498217	0.019662708	0.01079138	0.002433055	1119.7	12.1	6.07286E+01
4.7	1	0.012929707	0.000550145	0.04430608	0.01602983	0.00343519	0.001733411	1254.5	13.2	7.12540E+01
4.9	1	0.01689749	0.000893558	0.073901117	0.014077874	0.00221715	0.001338227	1565.9	13.9	8.43927E+01
5.2	1	0.014557177	0.000846663	0.055521961	0.013724426	9.616E-05	0.001394215	1536.3	14.7	9.72823E+01
5.5	1	0.01306832	0.003043419	0.088278336	0.101928323	0.01445963	0.012912457	216.3	3.1	9.90975E+01
fuse	1	0.017397523	0.005438201	0.340309919	0.205230955	0.01862848	0.025296094	107.6	2.2	1.00000E+02
Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$Ar/^{40}Ar$ error	
3.8	95.87	131.6285853	5.68941E+08	4.2742E+06	0.75	0.00729105	5.81135E-05	0.000138	9.582E-06	
3.85	98.16	131.9780428	5.70239E+08	6.3634E+06	1.12	0.00744565	9.28559E-05	6.16E-05	1.995E-05	
3.9	97.82	128.5006851	5.57284E+08	6.7821E+06	1.22	0.00762027	0.000103289	7.31E-05	3.255E-05	
4	99.96	126.4043329	5.49430E+08	5.9418E+06	1.08	0.00791672	9.67424E-05	1.45E-06	2.08E-05	
4.1	99.94	121.8268729	5.32161E+08	6.2063E+06	1.17	0.00821179	0.000108053	2.16E-06	3.1E-05	
4.3	99.26	130.2795388	5.63923E+08	5.6167E+06	1.00	0.00762675	8.51981E-05	2.48E-05	1.619E-05	
4.5	97.52	126.8386315	5.51060E+08	5.4888E+06	1.00	0.00769651	8.41778E-05	8.31E-05	1.871E-05	
4.7	99.20	127.0470248	5.51841E+08	5.3612E+06	0.97	0.00781581	8.47028E-05	2.68E-05	1.355E-05	
4.9	99.43	115.6559143	5.08619E+08	4.2061E+06	0.83	0.00860608	7.7692E-05	1.91E-05	1.152E-05	
5.2	99.97	104.7717281	4.66345E+08	4.1407E+06	0.89	0.00955165	9.25239E-05	9.18E-07	1.332E-05	
5.5	95.76	97.69527597	4.38327E+08	6.2681E+06	1.43	0.00981322	0.000148984	0.000142	0.0001267	
fuse	94.16	89.82823012	4.06666E+08	8.4919E+06	2.09	0.010499	0.000228731	0.000196	0.0002656	

Sample #	Mineral	J factor	J abs err							
18CD08E	Biotite 2	2.78757E-03	4.00000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.7	1	0.014755233	0.000411649	0.031568715	0.00501501	0.008422001	0.000538512	4475.771	29.47349894	6.88938E+00
3.8	1	0.013516231	0.000326699	0.01690555	0.002725174	0.002675308	0.00029251	7872.232	45.00541834	1.90068E+01
3.9	1	0.014162303	0.000659483	0.04621417	0.009418651	0.002549638	0.00058628	2279.489	17.21750865	2.25155E+01
3.85	1	0.014159038	0.000651585	0.043657221	0.008401642	0.002458363	0.000533374	2324.871	21.60436096	2.60941E+01
3.95	1	0.012436972	0.00047714	0.074942704	0.013225889	0.003596285	0.000737828	1700.54	15.89524807	2.87117E+01
3.825	1	0.013364959	0.000458988	0.035803169	0.005734314	0.002146317	0.000343355	3529.195	24.50942936	3.41441E+01
4.05	1	0.011941038	0.000275376	0.049812202	0.006596575	0.002960757	0.000374194	3259.622	22.21160693	3.91615E+01
4.5	1	0.01412047	0.000626553	0.065556663	0.009518611	0.002930052	0.000580656	2263.446	20.59354645	4.26455E+01
4.6	1	0.014157119	0.000605978	0.082909909	0.00865189	0.004859196	0.000847445	2495.319	20.24296744	4.64864E+01
4.8	1	0.013308916	0.00043191	0.041123134	0.00497821	0.001126703	0.000459165	4201.949	28.69677394	5.29543E+01
4.15	1	0.011895545	0.00027807	0.036427929	0.006558581	0.002932245	0.000372283	3276.952	23.83465492	5.79984E+01
4.25	1	0.01470235	0.000560312	0.048085402	0.007455144	0.002867212	0.000453028	2885.136	22.02076775	6.24394E+01
4.35	1	0.014315719	0.000519698	0.045953025	0.006233256	0.002301678	0.00039829	3299.292	23.09941688	6.75179E+01
4.45	1	0.01430468	0.000413557	0.037636272	0.004605008	0.001866813	0.000268428	4674.987	29.32540393	7.47139E+01
4.55	1	0.014165823	0.000645996	0.072298807	0.009129844	0.001944719	0.000566738	2186.737	18.6830754	7.80799E+01
4.65	1	0.015353801	0.000874999	0.078512719	0.012572303	0.004579512	0.000766732	1609.726	16.61872015	8.05577E+01
4.95	1	0.013976876	0.000436052	0.038245643	0.005654931	0.002373067	0.000698494	3696.985	23.47623371	8.62483E+01
5.1	1	0.013629579	0.00042197	0.043529338	0.005786027	0.000776293	0.000529589	3617.224	27.14091434	9.18161E+01
5.5	1	0.014796904	0.000816697	0.083919708	0.012087864	3.05836E-05	0.001067023	1820.867	15.27924401	9.46189E+01
5.25	1	0.014979081	0.000653871	0.058065595	0.008522961	0.00292022	0.001063294	2290.067	18.07097632	9.81440E+01
6	1	0.012758191	0.000815247	0.145932751	0.026695477	0.000558556	0.002421205	824.8007	9.35793957	9.94135E+01
fuse	1	0.014067128	0.001588519	0.545114166	0.096455739	0.001209164	0.004959618	381.0045	6.255797293	1.00000E+02
Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error	
3.7	96.957107	80.20138994	3.67163E+08	2.5343E+06	0.69	0.012101515	8.35852E-05	0.000102	6.48563E-06	
3.8	99.109405	88.97348743	4.03193E+08	2.4488E+06	0.61	0.011149995	6.85719E-05	2.98E-05	3.25772E-06	
3.9	99.153197	89.22323609	4.04209E+08	2.9939E+06	0.74	0.011124281	8.60476E-05	2.84E-05	6.5186E-06	
3.85	99.178027	88.6496357	4.01876E+08	3.5779E+06	0.89	0.011199011	0.000105982	2.75E-05	5.96798E-06	
3.95	98.795792	88.18406387	3.99980E+08	3.5903E+06	0.90	0.011215427	0.000106612	4.03E-05	8.26676E-06	
3.825	99.284776	89.04320505	4.03477E+08	2.7883E+06	0.69	0.011161341	7.99162E-05	2.4E-05	3.82891E-06	
4.05	99.01734	89.16386968	4.03967E+08	2.7665E+06	0.68	0.011116524	7.85779E-05	3.29E-05	4.15415E-06	
4.5	99.026341	89.06556541	4.03568E+08	3.5160E+06	0.87	0.011130126	0.000102786	3.26E-05	6.45616E-06	
4.6	98.401166	89.38574852	4.04869E+08	3.2084E+06	0.79	0.011020652	9.12145E-05	5.36E-05	9.3297E-06	
4.8	99.631313	90.99514685	4.11397E+08	2.8356E+06	0.69	0.010960174	7.87016E-05	1.23E-05	5.0319E-06	
4.15	99.002212	86.95111867	3.94949E+08	2.8555E+06	0.72	0.011397415	8.54332E-05	3.34E-05	4.23653E-06	
4.25	99.031555	87.6265864	3.97707E+08	2.9881E+06	0.75	0.011313145	8.86378E-05	3.24E-05	5.11951E-06	
4.35	99.230864	88.74884522	4.02279E+08	2.7974E+06	0.70	0.011192499	8.06396E-05	2.58E-05	4.45442E-06	
4.45	99.376556	88.93127708	4.03022E+08	2.5771E+06	0.64	0.011185755	7.32884E-05	2.09E-05	2.99997E-06	
4.55	99.354356	89.44277517	4.05101E+08	3.3473E+06	0.83	0.011119997	9.73027E-05	2.16E-05	6.29955E-06	
4.65	98.497466	89.72697907	4.06255E+08	3.9941E+06	0.98	0.010989386	0.000115022	5.03E-05	8.41032E-06	
4.95	99.221443	90.38500935	4.08925E+08	2.6295E+06	0.64	0.010988757	7.24861E-05	2.61E-05	7.67394E-06	
5.1	99.746787	91.39266897	4.13006E+08	3.0279E+06	0.73	0.010925185	8.42603E-05	8.48E-06	5.78553E-06	
5.5	99.990012	91.5094685	4.13479E+08	3.3398E+06	0.81	0.010938608	9.41865E-05	3.35E-07	1.16717E-05	
5.25	99.056375	91.61898811	4.13921E+08	3.1842E+06	0.77	0.010823114	8.74908E-05	3.16E-05	1.15056E-05	
6	99.81756	91.34950506	4.12831E+08	4.3906E+06	1.06	0.01094009	0.000126351	6.11E-06	2.64881E-05	
fuse	99.601638	90.43496914	4.09128E+08	6.1948E+06	1.51	0.011034718	0.00018341	1.33E-05	5.47276E-05	

Sample #	Mineral	J factor	J abs err							
18CD08E	White Mica	2.78171E-03	3.60000E-01							
Watts	**Time (min)**	**$^{38}Ar/^{39}Ar$**	**$^{38}Ar/^{39}Ar$ error**	**$^{37}Ar/^{39}Ar$**	**$^{37}Ar/^{39}Ar$ error**	**$^{36}Ar/^{39}Ar$**	**$^{36}Ar/^{39}Ar$ error**	**^{39}Ar (cps)**	**^{39}Ar error**	**Cumul % ^{39}Ar**
3.8	1	0.105298116	0.027155762	0.249389824	0.813954116	0.002925624	0.094179833	23.6	0.9	1.31494E-01
4	1	0.01697926	0.002483466	0.011261572	0.080015604	0.001083443	0.008627486	250.4	6.4	1.52628E+00
4.2	1	0.018456651	0.001453951	0.068486181	0.038904471	0.032293146	0.006395017	474.2	7.9	4.16781E+00
4.3	1	0.015785362	0.002542074	0.011120936	0.075794798	0.001069297	0.010724936	253.7	3.8	5.58105E+00
4.4	1	0.009983881	0.004604111	0.021212052	0.128813472	0.00203896	0.02045056	133.0	2.3	6.32220E+00
4.5	1	0.012223259	0.002079392	0.128392951	0.054990379	0.000841234	0.006601715	322.4	7.0	8.11857E+00
4.6	1	0.012850349	0.000377286	0.015522989	0.008736001	0.003600557	0.001009658	2203.2	20.5	2.03924E+01
4.65	1	0.01405862	0.000781975	0.012883534	0.010787131	0.002639906	0.001565358	1784.6	15.2	3.03345E+01
4.7	1	0.011815362	0.000433602	0.039790125	0.009690385	0.002662615	0.001503361	1907.6	17.2	4.09620E+01
4.75	1	0.013230898	0.000455245	0.02438221	0.004647429	0.000598351	0.00053075	3978.8	26.5	6.31283E+01
4.775	1	0.015196846	0.001154537	0.074725987	0.019371389	0.000284088	0.002276834	954.8	9.3	6.84477E+01
4.825	1	0.013392302	0.001084497	0.096558107	0.027379777	0.006449358	0.004132127	676.1	9.7	7.22145E+01
4.95	1	0.014402778	0.001295093	0.066984173	0.03484865	0.000510876	0.004094437	531.0	6.5	7.51725E+01
5.25	1	0.012545266	0.00066585	0.028002022	0.017065896	0.000585444	0.001910547	1130.6	11.2	8.14709E+01
fuse	1	0.013701026	0.000513609	0.020070917	0.005568688	0.000748349	0.000650856	3326.0	24.0	1.00000E+02
Watts	**% $^{40}Ar^*$**	**$^{40}Ar^*/^{39}Ar$**	**Age (yrs)**	**age error (yrs)**	**% error**	**$^{39}Ar/^{40}Ar$**	**$^{39}Ar/^{40}Ar$ error**	**$^{36}Ar/^{40}Ar$**	**$Ar/^{40}Ar$ error**	
3.8	99.30	123.7648573	5.39492E+08	2.0892E+07	3.87	0.008033201	0.000356016	2.35E-05	0.0007566	
4	99.59	79.21379273	3.63062E+08	8.6241E+06	2.38	0.012583792	0.000326451	1.36E-05	0.0001086	
4.2	88.59	74.9676802	3.45324E+08	6.1354E+06	1.78	0.011830625	0.000202407	0.000382	7.54E-05	
4.3	99.60	79.34542307	3.63609E+08	5.2821E+06	1.45	0.012563666	0.000197562	1.34E-05	0.0001347	
4.4	99.26	81.29549495	3.71696E+08	6.3494E+06	1.71	0.012220357	0.000226579	2.49E-05	0.0002499	
4.5	99.67	75.99806433	3.49644E+08	7.1251E+06	2.04	0.013129433	0.000290853	1.1E-05	8.668E-05	
4.6	98.65	78.76472437	3.61194E+08	3.2607E+06	0.90	0.012536229	0.000118409	4.51E-05	1.265E-05	
4.65	99.00	78.11306864	3.58480E+08	3.0026E+06	0.84	0.012685278	0.000110753	3.35E-05	1.986E-05	
4.7	98.99	78.36955465	3.59549E+08	3.1579E+06	0.88	0.012643739	0.000116277	3.37E-05	1.901E-05	
4.75	99.78	80.60303249	3.68829E+08	2.4999E+06	0.68	0.01239026	8.62921E-05	7.41E-06	6.576E-06	
4.775	99.89	78.40554228	3.59699E+08	3.3907E+06	0.94	0.012753199	0.000127735	3.62E-06	2.904E-05	
4.825	97.52	75.71427376	3.48455E+08	4.8264E+06	1.39	0.012893442	0.000188239	8.32E-05	5.326E-05	
4.95	99.81	78.5695137	3.60382E+08	4.2341E+06	1.17	0.012715479	0.000160659	6.5E-06	5.206E-05	
5.25	99.77	77.29793248	3.55080E+08	3.3883E+06	0.95	0.012919571	0.000130774	7.56E-06	2.468E-05	
fuse	99.72	79.44055727	3.64005E+08	2.6012E+06	0.71	0.012564005	9.27566E-05	9.4E-06	8.177E-06	

Sample #	Mineral	J factor	J abs err							
18CD10A	Biotite	2.80514E-03	5.30000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.012831146	0.000315581	0.010442685	0.001335755	0.003350188	0.000349966	18198.1	92.3	3.37070E+01
3.81	1	0.011655399	0.000568296	0.053463943	0.006857647	0.000100188	0.001111596	3698.9	25.8	4.05581E+01
3.82	1	0.010219161	0.000605925	0.06564856	0.012459752	0.000174636	0.002060591	2122.0	21.2	4.44886E+01
3.84	1	0.009839015	0.000530611	0.053960661	0.009884335	0.001500236	0.001670962	2460.7	18.5	4.90464E+01
3.86	1	0.012390052	0.00103508	0.075964363	0.013857176	0.00050519	0.002476762	1685.6	15.9	5.21684E+01
3.9	1	0.00957843	0.000671071	0.049921532	0.012618245	0.000200306	0.002291419	1850.1	17.1	5.55952E+01
3.95	1	0.013331042	0.001155565	0.056185601	0.015369774	0.000234041	0.002761532	1583.4	16.6	5.85281E+01
4.05	1	0.013405624	0.000646599	0.040330632	0.006872416	-9.75064E-06	-0.001425654	3115.2	21.8	6.42982E+01
4.15	1	0.010172496	0.00051221	0.04341657	0.009748719	0.000615355	0.001750636	2497.8	20.3	6.89246E+01
4.25	1	0.012169819	0.000801246	0.062401886	0.010187463	0.000154889	0.001744874	2392.6	19.2	7.33562E+01
4.35	1	0.012260717	0.000930553	0.062572133	0.01246749	0.001286301	0.002225614	1875.8	16.3	7.68306E+01
4.45	1	0.014282267	0.000690327	0.042667343	0.012131488	2.2648E-05	0.001806216	2101.2	15.1	8.07226E+01
4.55	1	0.012061646	0.000649612	0.048918281	0.018107064	9.27489E-05	0.002796651	1408.3	15.3	8.33310E+01
4.7	1	0.014782026	0.000880067	0.049904813	0.014579485	0.001522662	0.002251182	1749.5	14.3	8.65715E+01
4.9	1	0.011771051	0.000474278	0.05373957	0.011660478	0.001593924	0.001833808	2108.4	17.7	9.04767E+01
5.1	1	0.014673877	0.001040591	0.014560475	0.016281393	3.03713E-05	0.002377796	1566.9	13.9	9.33789E+01
5.4	1	0.010981582	0.000590934	0.044978455	0.016783418	0.000878632	0.002589144	1521.1	16.5	9.61964E+01
5.9	1	0.013911536	0.001283888	0.085433961	0.021944018	0.002269858	0.003322435	1121.4	12.1	9.82736E+01
fuse	1	0.01127329	0.000926754	0.071253856	0.026551029	0.000630052	0.00415074	932.1	10.6	1.00000E+02
Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$Ar/^{40}Ar$ error	
3.8	99.02	100.987662	4.52282E+08	2.5460E+06	0.56	0.009814656	5.58928E-05	3.29E-05	3.432E-06	
3.81	99.97	92.45212077	4.18095E+08	2.9154E+06	0.70	0.010824294	7.91853E-05	1.08E-06	1.203E-05	
3.82	99.94	90.23823753	4.09123E+08	3.8706E+06	0.95	0.01108729	0.000113102	1.94E-06	2.285E-05	
3.84	99.50	89.24019064	4.05063E+08	2.9935E+06	0.74	0.011161512	8.64405E-05	1.67E-05	1.865E-05	
3.86	99.83	87.71785704	3.98854E+08	3.6182E+06	0.91	0.01139309	0.000110649	5.76E-06	2.822E-05	
3.9	99.93	88.39882687	4.01634E+08	3.5840E+06	0.89	0.011316573	0.00010817	2.27E-06	2.593E-05	
3.95	99.92	88.50517284	4.02068E+08	3.9739E+06	0.99	0.011301827	0.000120531	2.65E-06	3.121E-05	
4.05	100.00	91.5204495	4.14324E+08	2.8930E+06	0.70	0.010938127	8.00775E-05	-1.1E-07	-1.56E-05	
4.15	99.79	89.35540143	4.05532E+08	3.1889E+06	0.79	0.01117988	9.30597E-05	6.88E-06	1.957E-05	
4.25	99.95	91.31571387	4.13495E+08	3.2248E+06	0.78	0.010957185	9.07287E-05	1.7E-06	1.912E-05	
4.35	99.57	88.0305612	4.00131E+08	3.3666E+06	0.84	0.011322471	0.000101121	1.46E-05	2.52E-05	
4.45	99.99	90.83729927	4.11555E+08	2.9253E+06	0.71	0.011019271	8.22411E-05	2.5E-07	1.99E-05	
4.55	99.97	89.65873331	4.06767E+08	4.1788E+06	1.03	0.011161634	0.000124245	1.04E-06	3.122E-05	
4.7	99.49	89.36263293	4.05562E+08	3.2386E+06	0.80	0.011145395	9.40779E-05	1.7E-05	2.509E-05	
4.9	99.46	88.12756777	4.00527E+08	3.2479E+06	0.81	0.011298162	9.68217E-05	1.8E-05	2.072E-05	
5.1	99.99	89.72714727	4.07045E+08	3.4669E+06	0.85	0.011154758	0.000101584	3.39E-07	2.652E-05	
5.4	99.70	87.46771995	3.97832E+08	4.1279E+06	1.04	0.01141047	0.000127696	1E-05	2.954E-05	
5.9	99.24	88.85203398	4.03482E+08	4.1683E+06	1.03	0.011181902	0.000124191	2.54E-05	3.715E-05	
fuse	99.79	89.79903156	4.07337E+08	4.3312E+06	1.06	0.011124836	0.000128216	7.01E-06	4.618E-05	

Sample #	Mineral	J factor	J abs err							
18CD10A	White Mica	2.79929E-03	4.80000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.037163916	0.005562754	0.186150305	0.191807433	0.124750629	0.026433842	131.0	2.4	3.76584E-01
4	1	0.019318212	0.002231592	0.2809049	0.077615557	0.036380003	0.010417049	309.9	5.0	1.26763E+00
4.1	1	0.020742918	0.002376649	0.19925195	0.074961233	0.038784465	0.010765812	335.6	6.0	2.23277E+00
4.2	1	0.04278919	0.028308143	2.45029026	1.021242592	0.052132235	0.096357555	25.9	0.9	2.30710E+00
4.3	1	0.016047899	0.003522538	0.28426524	0.124731004	0.02750334	0.016715933	201.9	4.5	2.88752E+00
4.4	1	0.019018087	0.001389522	0.063858346	0.037894067	0.038676773	0.005837794	634.5	9.1	4.71192E+00
4.45	1	0.016180782	0.000679104	0.044493568	0.010047798	0.016820781	0.001548641	2395.3	22.6	1.15995E+01
4.475	1	0.013506925	0.000353714	0.020176067	0.003953119	0.003452036	0.000518104	6088.0	37.2	2.91052E+01
4.485	1	0.014064875	0.000478594	0.030229573	0.006256381	0.002766536	0.00085601	4213.3	26.5	4.12202E+01
4.495	1	0.013102437	0.000568218	0.043803113	0.007520672	0.001444966	0.001028791	3352.3	24.8	5.08594E+01
4.505	1	0.014223549	0.000687254	0.049256627	0.009512747	0.000455065	0.001272091	2476.4	19.4	5.79802E+01
4.515	1	0.012032416	0.000595491	0.05907533	0.017312814	0.001960513	0.002337109	1378.9	12.6	6.19453E+01
4.54	1	0.012507315	0.00105784	0.042413191	0.033939283	0.005304903	0.004455761	739.2	8.8	6.40709E+01
4.59	1	0.012545828	0.001364716	0.030315846	0.049696728	0.008584626	0.006150351	535.6	7.3	6.56110E+01
4.69	1	0.013826823	0.00161959	0.036857783	0.056706557	0.000140163	0.005960901	440.7	5.8	6.68781E+01
4.89	1	0.015642181	0.001467621	0.018965197	0.052601132	0.000127657	0.005335456	483.8	7.0	6.82693E+01
5.3	1	0.020160515	0.001836655	0.024734874	0.040547798	0.018710921	0.005019796	657.0	8.8	7.01584E+01
6.1	1	0.014132499	0.000469697	0.003787308	0.00577453	0.004520467	0.000819635	4292.0	26.7	8.24999E+01
6.5	1	0.013796362	0.000531844	0.003073842	0.008773943	0.00163618	0.001108042	3037.8	23.2	9.12351E+01
6.7	1	0.01266359	0.000600066	0.011575836	0.017520754	0.002426434	0.002198304	1434.6	16.3	9.53603E+01
6.9	1	0.011993235	0.000955582	0.012816169	0.033179251	8.41056E-05	0.003515212	734.4	8.6	9.74719E+01
fuse	1	0.012860547	0.000843535	0.018509221	0.030342088	0.006464082	0.003746981	879.2	11.7	1.00000E+02
Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error	
3.8	62.24	61.5265143	2.90828E+08	9.0009E+06	3.09	0.010136892	0.000209181	0.001265	0.000267272	
4	87.11	73.55179857	3.42643E+08	6.2436E+06	1.82	0.011863907	0.000200539	0.000432	0.000123417	
4.1	87.39	80.38252045	3.71435E+08	7.3043E+06	1.97	0.010888377	0.000201709	0.000422	0.000116991	
4.2	80.64	65.26899957	3.07111E+08	2.4266E+07	7.90	0.012435496	0.000862022	0.000648	0.001198663	
4.3	89.84	72.730489	3.39150E+08	8.3201E+06	2.45	0.012373041	0.000294055	0.00034	0.000206713	
4.4	87.43	80.45184505	3.71725E+08	5.8514E+06	1.57	0.010881541	0.000159094	0.000421	6.32493E-05	
4.45	93.99	78.6371917	3.64121E+08	3.7517E+06	1.03	0.01196601	0.000115839	0.000201	1.84379E-05	
4.475	98.74	81.03428744	3.74159E+08	2.7575E+06	0.74	0.012197955	7.93191E-05	4.21E-05	6.31525E-06	
4.485	98.98	80.00367706	3.69850E+08	2.7542E+06	0.74	0.012384608	8.18667E-05	3.43E-05	1.05994E-05	
4.495	99.45	78.06365624	3.61711E+08	2.9806E+06	0.82	0.012753293	9.77789E-05	1.84E-05	1.31198E-05	
4.505	99.83	79.53351449	3.67881E+08	3.1215E+06	0.85	0.012565438	0.000100895	5.72E-06	1.59843E-05	
4.515	99.26	78.11617124	3.61932E+08	3.5071E+06	0.97	0.012720211	0.000120455	2.49E-05	2.97277E-05	
4.54	98.00	77.88154993	3.60945E+08	4.3783E+06	1.21	0.01259777	0.000154015	6.68E-05	5.61274E-05	
4.59	96.78	77.18173993	3.58000E+08	4.9731E+06	1.39	0.012553343	0.000176437	0.000108	7.71943E-05	
4.69	99.95	81.45301652	3.75906E+08	4.8745E+06	1.30	0.012283918	0.000165967	1.72E-06	7.32232E-05	
4.89	99.95	79.41016597	3.67364E+08	5.1959E+06	1.41	0.012599932	0.000187077	1.61E-06	6.72264E-05	
5.3	93.22	76.88700049	3.56757E+08	5.0124E+06	1.40	0.012137885	0.000166342	0.000227	6.08567E-05	
6.1	98.32	79.20560784	3.66506E+08	2.7246E+06	0.74	0.012426432	8.12769E-05	5.62E-05	1.01797E-05	
6.5	99.39	79.23122354	3.66614E+08	3.0915E+06	0.84	0.012556654	9.94856E-05	2.05E-05	1.39125E-05	
6.7	99.08	77.70664428	3.60210E+08	4.1213E+06	1.14	0.012763171	0.000147374	3.1E-05	2.80552E-05	
6.9	99.97	80.01171058	3.69883E+08	4.3195E+06	1.17	0.012507139	0.000149681	1.05E-06	4.39652E-05	
fuse	97.54	76.53847359	3.55288E+08	4.7467E+06	1.34	0.01275727	0.000172879	8.25E-05	4.77891E-05	

Sample #	Mineral	J factor	J abs err							
18CD10B	Hornblende 1	2.81780E-03	5.50000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.097825138	0.015094338	7.048314938	0.648184398	0.411992977	0.078210761	44.2	0.9	3.47359E-01
3.9	1	0.03303944	0.040429462	8.182584939	1.708410762	0.24862124	0.201387759	16.7	0.7	4.78761E-01
4.1	1	0.028009882	0.017726982	6.969663992	0.705378951	0.15115662	0.079206921	40.7	0.9	7.98485E-01
4.3	1	0.019370486	0.010991077	4.90635533	0.429030792	0.090365369	0.054698391	60.2	1.0	1.27137E+00
4.4	1	0.008999006	0.007638706	5.220547036	0.326935209	0.085826408	0.036835843	87.6	1.9	1.95913E+00
4.5	1	0.016189948	0.008740861	8.573731127	0.628055623	0.08312291	0.039057828	82.6	2.1	2.60786E+00
4.6	1	0.029553701	0.013416267	7.028217765	0.56475678	0.118848379	0.06389499	49.4	1.5	2.99590E+00
4.7	1	0.038454508	0.015715678	6.746050715	0.669240508	0.036249564	0.083704092	39.5	0.7	3.30596E+00
4.8	1	0.014594956	0.001471316	9.742405184	0.314300492	0.023819878	0.006566185	481.1	7.5	7.08281E+00
4.85	1	0.023907603	0.005764174	15.30764863	0.552897447	0.039120084	0.025883099	119.0	2.4	8.01727E+00
4.9	1	0.026591052	0.008110602	13.80159703	0.697724377	0.035070669	0.03889381	79.2	1.8	8.63897E+00
5	1	0.019304913	0.005199424	12.30250091	0.489603852	0.000533112	0.026155644	123.5	2.1	9.60813E+00
5.1	1	0.016580191	0.001898153	12.98338061	0.353487328	0.017429912	0.008101473	362.8	7.7	1.24566E+01
5.15	1	0.015703339	0.00187546	15.17819419	0.497023845	0.02656332	0.008834977	349.0	5.9	1.51967E+01
5.2	1	0.017259927	0.001815474	14.55692548	0.335253656	0.000653098	0.005960894	410.8	6.4	1.84220E+01
5.25	1	0.01653909	0.001200473	14.58826481	0.226502919	0.005716307	0.002016645	1168.3	11.3	2.75940E+01
5.275	1	0.014182415	0.001275752	14.14228006	0.354081033	0.014081828	0.00576378	587.6	9.3	3.22068E+01
5.325	1	0.017797928	0.001076134	14.05471819	0.212849855	0.00402796	0.00183711	1306.9	11.5	4.24665E+01
5.375	1	0.013358914	0.000671838	13.81637714	0.223472026	0.010202678	0.002712136	1191.4	10.5	5.18194E+01
5.425	1	0.014121797	0.000975341	14.08801209	0.266495996	0.00339333	0.003318162	753.7	9.4	5.77365E+01
5.5	1	0.01309266	0.0007744	13.80891278	0.259420948	0.00043923	0.002671972	935.9	11.8	6.50839E+01
5.6	1	0.011023103	0.000765864	13.4641262	0.277879435	0.011251363	0.003189602	1013.5	12.8	7.30401E+01
5.7	1	0.009351091	0.004091808	14.60632091	0.432655287	0.00700483	0.016777239	179.2	2.8	7.44472E+01
5.9	1	0.008660661	0.003359098	15.97984114	0.481956528	0.023899956	0.015145871	208.4	4.8	7.60829E+01
6.3	1	0.012464579	0.000972976	14.61443038	0.262422863	0.014879431	0.004281604	754.8	8.3	8.20083E+01
fuse	1	0.012424119	0.000409152	14.09789378	0.183559703	0.010475574	0.001584701	2291.8	18.1	1.00000E+02
Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error	
3.8	96.76	3695.74347	4.45613E+09	3.6539E+07	0.82	0.000263807	5.40703E-06	0.000109	2.0514E-05	
3.9	91.26	782.1140808	2.13095E+09	6.2285E+07	2.92	0.001177839	5.28976E-05	0.000293	0.000236859	
4.1	93.99	711.5292253	2.01365E+09	3.1063E+07	1.54	0.001331852	3.11168E-05	0.000201	0.000105393	
4.3	92.91	355.9180221	1.27123E+09	1.8533E+07	1.46	0.002627877	4.75707E-05	0.000237	0.000143687	
4.4	81.96	117.566239	5.23681E+08	1.3329E+07	2.55	0.007038505	0.000166449	0.000604	0.000258975	
4.5	78.53	92.27797066	4.23002E+08	1.3308E+07	3.15	0.008651986	0.000238279	0.000719	0.000337499	
4.6	62.56	60.3313774	2.87345E+08	1.4156E+07	4.93	0.010551094	0.000352932	0.001254	0.000673449	
4.7	89.54	93.86390143	4.29481E+08	1.2291E+07	2.86	0.009664468	0.000275224	0.00035	0.000808965	
4.8	94.78	131.0759354	5.75280E+08	8.6293E+06	1.50	0.007346635	0.000116231	0.000175	4.81631E-05	
4.85	92.22	141.7090081	6.14893E+08	1.2208E+07	1.99	0.006664377	0.000140853	0.000261	0.000172424	
4.9	94.50	183.4961996	7.62759E+08	1.5653E+07	2.05	0.005252733	0.000122275	0.000184	0.000204261	
5	99.91	180.2538293	7.51703E+08	1.1343E+07	1.51	0.005642012	9.95165E-05	3.01E-06	0.00014757	
5.1	97.02	172.425204	7.24732E+08	1.3490E+07	1.86	0.00573435	0.000122353	9.99E-05	4.64087E-05	
5.15	95.65	178.1560554	7.44515E+08	1.1355E+07	1.53	0.005487262	9.3695E-05	0.000146	4.84172E-05	
5.2	99.88	171.019902	7.19848E+08	9.8972E+06	1.37	0.005965605	9.41568E-05	3.9E-06	3.55603E-05	
5.25	98.85	150.5694615	6.47260E+08	6.1686E+06	0.95	0.006712672	6.61289E-05	3.84E-05	1.35322E-05	
5.275	96.83	131.3490633	5.76308E+08	8.5384E+06	1.48	0.007540932	0.000120585	0.000106	4.34324E-05	
5.325	99.22	156.8507007	6.69863E+08	5.9275E+06	0.88	0.00646086	5.82587E-05	2.6E-05	1.18672E-05	
5.375	97.92	146.6163575	6.32890E+08	5.7427E+06	0.91	0.006822342	6.20409E-05	6.96E-05	1.84936E-05	
5.425	99.28	142.8851711	6.19223E+08	7.2626E+06	1.17	0.007101817	9.01387E-05	2.41E-05	2.35631E-05	
5.5	99.90	130.4007174	5.72735E+08	6.7802E+06	1.18	0.007832618	9.97678E-05	3.44E-06	2.09285E-05	
5.6	97.03	112.366247	5.03426E+08	6.3046E+06	1.25	0.008836406	0.000114509	9.94E-05	2.81578E-05	
5.7	98.46	136.9367114	5.97220E+08	8.8952E+06	1.49	0.007357608	0.000121053	5.15E-05	0.000123438	
5.9	95.17	144.0991195	6.23680E+08	1.3227E+07	2.12	0.006769367	0.000158709	0.000162	0.000102462	
6.3	97.22	158.5355437	6.75878E+08	7.2065E+06	1.07	0.00626761	7.06255E-05	9.33E-05	2.68166E-05	
fuse	97.93	150.881106	6.48388E+08	5.4363E+06	0.84	0.006631136	5.43061E-05	6.95E-05	1.04952E-05	

Sample #	Mineral	J factor	J abs err							
18CD10B	Hornblende 2	2.81780E-03	5.50000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.312841824	0.071757521	18.60951454	11.59900489	1.051727531	0.371227245	9.2	0.5	1.30975E-01
4	1	1.199656189	0.333099966	0.967367243	27.55752243	0.62229385	0.967567057	3.6	0.5	1.83043E-01
4.2	1	0.267098671	0.115756888	0.655575793	16.66629971	0.518155591	0.613602033	5.4	0.4	2.59896E-01
4.4	1	0.175831913	0.104700746	30.89353957	13.76467624	0.063839381	0.53278897	6.7	0.5	3.56194E-01
4.5	1	0.140946104	0.101266929	77.87423871	22.32690259	0.250708381	0.468749166	7.2	0.5	4.58836E-01
4.6	1	0.14800464	0.075760907	0.956799564	11.81010527	0.051090302	0.391027263	8.4	0.5	5.79164E-01
4.7	1	0.010567023	0.065906348	19.65054142	9.316514123	0.265337197	0.294019875	10.3	0.5	7.26083E-01
4.8	1	0.058608036	0.053381357	15.82241972	8.219441609	0.035015865	0.26223379	12.3	0.6	9.01650E-01
4.9	1	0.019373937	0.014562055	13.37532561	1.231804073	0.076155002	0.040012881	89.6	1.9	2.18185E+00
5	1	0.001801676	0.014301682	23.88866691	1.528763374	0.028048768	0.044607556	78.8	2.0	3.30764E+00
5.1	1	0.001836644	0.01408749	19.77710503	1.462859115	0.057199418	0.045483153	77.3	1.6	4.41200E+00
5.2	1	0.018062582	0.016554834	17.00513061	1.361097826	0.074108323	0.039990733	84.7	2.1	5.62216E+00
5.3	1	0.018521633	0.011037299	16.12057426	0.971054944	0.065082306	0.027687785	120.1	2.2	7.33753E+00
5.4	1	0.001802889	0.005187313	18.88311607	0.712103405	0.011316573	0.015920222	212.6	4.6	1.03746E+01
5.5	1	0.005496719	0.0035454	18.24360664	0.710181807	0.001077557	0.009302992	307.3	5.0	1.47642E+01
5.6	1	0.017198101	0.003180599	17.33379852	0.612546154	0.021408798	0.007555414	465.7	7.0	2.14167E+01
5.7	1	0.010868316	0.000816265	14.84875285	0.48739723	0.010725985	0.002416714	1484.3	15.5	4.26219E+01
5.75	1	0.014355965	0.00171051	14.17124731	0.354862632	0.00752215	0.003974459	867.9	10.6	5.50213E+01
5.8	1	0.014257729	0.002744196	14.51204876	0.508704176	0.004009626	0.006642361	539.4	7.7	6.27270E+01
5.9	1	0.009700839	0.001497314	12.07524634	0.251063907	0.019752682	0.004700349	749.0	9.7	7.34275E+01
6.1	1	0.009274488	0.001174524	12.64397372	0.339022807	0.014711411	0.004015151	964.7	11.8	8.72087E+01
6.5	1	0.009696829	0.004400224	13.77676298	0.791651755	0.027067138	0.021629467	142.4	2.5	8.92432E+01
fuse	1	0.014958759	0.00095334	16.38939248	0.427847442	0.028038788	0.004297309	753.0	9.8	1.00000E+02
Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error	
3.8	86.51	2053.065419	3.50427E+09	9.4948E+07	2.71	0.00042969	2.25468E-05	0.000452	0.000157782	
4	38.79	118.3944835	5.26887E+08	1.7555E+08	33.32	0.003294456	0.000490563	0.00205	0.003181175	
4.2	73.52	430.730149	1.45437E+09	1.1752E+08	8.08	0.001711668	0.000146551	0.000887	0.001048263	
4.4	94.05	312.9057157	1.15699E+09	7.6305E+07	6.60	0.003122714	0.000262906	0.000199	0.001663716	
4.5	69.71	192.4001367	7.92779E+08	7.5181E+07	9.48	0.004047286	0.00034118	0.001015	0.001896774	
4.6	93.21	209.9193659	8.50446E+08	6.0814E+07	7.15	0.004452954	0.000370073	0.000228	0.001741212	
4.7	23.63	26.70481248	1.32782E+08	4.2635E+07	32.11	0.009640104	0.000809534	0.002558	0.002836797	
4.8	89.32	90.09322471	4.14038E+08	3.5494E+07	8.57	0.010219816	0.000885118	0.000358	0.002680063	
4.9	79.43	90.09903816	4.14062E+08	1.1320E+07	2.73	0.009048962	0.00021862	0.000689	0.000361885	
5	92.04	101.0690757	4.58633E+08	1.1913E+07	2.60	0.009506277	0.00025731	0.000267	0.000424009	
5.1	86.57	113.8617482	5.09275E+08	1.1958E+07	2.35	0.007866056	0.000181862	0.00045	0.00035769	
5.2	76.87	76.20263907	3.55997E+08	1.1913E+07	3.35	0.01045414	0.000298056	0.000775	0.0004178	
5.3	81.32	87.30186014	4.02522E+08	8.8844E+06	2.21	0.009613929	0.000190225	0.000626	0.000265986	
5.4	96.43	94.40136849	4.31672E+08	9.0195E+06	2.09	0.01058002	0.000236426	0.00012	0.000168417	
5.5	99.65	94.89615103	4.33686E+08	6.7450E+06	1.56	0.010862868	0.000182289	1.17E-05	0.000101057	
5.6	92.99	87.73210812	4.04301E+08	6.2782E+06	1.55	0.010961598	0.000169987	0.000235	8.27475E-05	
5.7	96.22	83.89249013	3.88356E+08	4.2944E+06	1.11	0.011812577	0.000126498	0.000127	2.85187E-05	
5.75	97.36	85.26701493	3.94080E+08	4.9032E+06	1.24	0.01174256	0.000147035	8.83E-05	4.66583E-05	
5.8	98.64	89.42737351	4.11298E+08	5.7893E+06	1.41	0.011343148	0.000166907	4.55E-05	7.53427E-05	
5.9	92.95	79.70893844	3.70822E+08	5.0703E+06	1.37	0.011955202	0.000158265	0.000236	5.61137E-05	
6.1	94.77	81.6088405	3.78806E+08	4.8300E+06	1.28	0.011914431	0.000148635	0.000175	4.77916E-05	
6.5	91.13	85.37719526	3.94538E+08	7.8848E+06	2.00	0.010970163	0.00021803	0.000297	0.000237233	
fuse	91.29	90.50282265	4.15722E+08	5.7054E+06	1.37	0.010408176	0.000138105	0.000292	4.45704E-05	

Sample #	Mineral	J factor	J abs err							
18CD10C	Biotite	2.82460E-03	5.30000E-01							
Watts	Time (min)	$^{38}Ar/^{39}Ar$	$^{38}Ar/^{39}Ar$ error	$^{37}Ar/^{39}Ar$	$^{37}Ar/^{39}Ar$ error	$^{36}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$ error	^{39}Ar (cps)	^{39}Ar error	Cumul % ^{39}Ar
3.8	1	0.012625645	0.000290811	0.008509469	0.001153539	0.001633369	0.000219169	19635.9	100.3	3.41771E+01
3.81	1	0.012429343	0.000447816	0.040565447	0.004973705	2.10091E-05	0.000924942	4337.5	29.1	4.17268E+01
3.82	1	0.014559204	0.000748902	0.044073376	0.010476973	0.001970438	0.002018874	2057.0	17.5	4.53070E+01
3.84	1	0.013933545	0.001026932	0.049285884	0.013633561	0.000311253	0.002091009	1581.0	14.8	4.80588E+01
3.88	1	0.014027414	0.001188789	0.057352202	0.016636687	0.001827046	0.002996421	1362.2	12.5	5.04297E+01
3.95	1	0.014282855	0.000997488	0.060984717	0.014803368	0.000321298	0.002574928	1531.6	12.9	5.30955E+01
4.05	1	0.012975651	0.000539637	0.029817585	0.006699095	0.002483325	0.001204059	3220.2	22.9	5.87004E+01
4.15	1	0.013481692	0.000508042	0.024122333	0.005573719	0.000411536	0.001107842	3813.5	25.3	6.53381E+01
4.25	1	0.013000258	0.000534754	0.019182671	0.003124546	0.000294183	0.000613066	6773.5	39.4	7.71277E+01
4.3	1	0.013687791	0.000471524	0.030877666	0.005521346	0.001892869	0.000928801	4320.0	25.4	8.46467E+01
4.35	1	0.013593394	0.000657375	0.056136391	0.008696614	0.000400841	0.001670671	2485.6	18.6	8.89730E+01
4.4	1	0.014321034	0.000928169	0.030175627	0.013301315	0.000163629	0.002471251	1565.5	15.6	9.16979E+01
4.5	1	0.012261716	0.001329095	0.123019336	0.034312575	0.005280009	0.005370792	654.5	9.3	9.28371E+01
4.7	1	0.017407229	0.001796382	0.060080719	0.026235191	0.004476706	0.00426987	855.4	10.3	9.43259E+01
5.1	1	0.011273512	0.00084669	0.039219278	0.019298085	0.000253321	0.003247612	1103.2	12.1	9.62461E+01
5.5	1	0.010621449	0.000842599	0.00192627	0.022790503	0.005342402	0.004218807	934.9	12.7	9.78733E+01
6	1	0.012796568	0.000783709	0.102312302	0.034821327	0.007412065	0.003736113	1037.9	11.0	9.96799E+01
6.5	1	0.035366661	0.009131038	0.013652408	0.166443375	0.013332488	0.028877153	132.0	1.6	9.99096E+01
fuse	1	0.02247195	0.013590524	0.525504517	0.445005647	0.125192422	0.07864719	51.9	1.0	1.00000E+02
Watts	% $^{40}Ar^*$	$^{40}Ar^*/^{39}Ar$	Age (yrs)	age error (yrs)	% error	$^{39}Ar/^{40}Ar$	$^{39}Ar/^{40}Ar$ error	$^{36}Ar/^{40}Ar$	$^{36}Ar/^{40}Ar$ error	
3.8	99.38	78.11737066	3.64904E+08	2.5903E+06	0.71	0.012734311	7.2934E-05	2.08E-05	2.78947E-06	
3.81	99.99	76.65707687	3.58710E+08	2.8799E+06	0.80	0.013057653	9.23957E-05	2.74E-07	1.20776E-05	
3.82	99.23	75.79138986	3.55027E+08	3.3433E+06	0.94	0.013106237	0.000115773	2.58E-05	2.6459E-05	
3.84	99.88	74.76870358	3.50668E+08	3.5098E+06	1.00	0.013372159	0.000128716	4.16E-06	2.79613E-05	
3.88	99.29	76.86669661	3.59600E+08	3.5585E+06	0.99	0.012931757	0.000122306	2.36E-05	3.87484E-05	
3.95	99.87	76.23968206	3.56935E+08	3.3093E+06	0.93	0.013114243	0.000114229	4.21E-06	3.37682E-05	
4.05	99.02	75.12014783	3.52167E+08	2.9350E+06	0.83	0.013195391	9.7648E-05	3.28E-05	1.58865E-05	
4.15	99.84	77.33102616	3.61571E+08	2.8794E+06	0.80	0.012923971	9.02601E-05	5.32E-06	1.43177E-05	
4.25	99.89	77.38305298	3.61792E+08	2.6928E+06	0.74	0.012921015	8.08052E-05	3.8E-06	7.92141E-06	
4.3	99.27	76.85686527	3.59558E+08	2.6835E+06	0.75	0.012929464	8.06543E-05	2.45E-05	1.20081E-05	
4.35	99.84	76.87128028	3.59620E+08	3.0531E+06	0.85	0.013002493	0.000100022	5.21E-06	2.17229E-05	
4.4	99.93	74.85002956	3.51015E+08	3.6711E+06	1.05	0.013365088	0.000136218	2.19E-06	3.30285E-05	
4.5	97.93	74.74206736	3.50554E+08	5.0404E+06	1.44	0.013118823	0.000191247	6.93E-05	7.04519E-05	
4.7	98.23	74.21750862	3.48313E+08	4.3066E+06	1.24	0.013249951	0.000162716	5.93E-05	5.65713E-05	
5.1	99.90	76.79479248	3.59295E+08	4.0709E+06	1.13	0.013022529	0.000146979	3.3E-06	4.22921E-05	
5.5	97.87	73.45448446	3.45050E+08	4.8089E+06	1.39	0.013337532	0.000187246	7.13E-05	5.62606E-05	
6	97.13	74.87183718	3.51108E+08	3.9702E+06	1.13	0.012987874	0.000141806	9.63E-05	4.8514E-05	
6.5	95.56	85.85094875	3.97367E+08	5.9929E+06	1.51	0.011143047	0.000169487	0.000149	0.000321777	
fuse	61.39	59.58368216	2.84681E+08	1.0955E+07	3.85	0.010330911	0.000261569	0.001293	0.000812398	

Sample #	Mineral	J factor	J abs err							
18CD10C	White Mica	2.83140E-03	5.10000E-01							
Watts	**Time (min)**	**$^{38}Ar/^{39}Ar$**	**$^{38}Ar/^{39}Ar$ error**	**$^{37}Ar/^{39}Ar$**	**$^{37}Ar/^{39}Ar$ error**	**$^{36}Ar/^{39}Ar$**	**$^{36}Ar/^{39}Ar$ error**	**^{39}Ar (cps)**	**^{39}Ar error**	**Cumul % ^{39}Ar**
3.8	1	0.014659122	0.000832021	0.016067	0.010141005	0.01491226	0.001637099	2386.3	21.7	5.71727E+00
3.85	1	0.011481659	0.002603193	0.002841	0.03839408	0.005630462	0.005825184	602.4	7.9	7.16062E+00
4	1	0.012511304	0.000397439	0.010828	0.004078278	0.001592873	0.000642014	5937.7	34.7	2.13866E+01
4.05	1	0.011945153	0.000307686	0.005134	0.002570762	0.002672029	0.00061391	9003.5	52.7	4.29577E+01
4.07	1	0.009395622	0.000720912	0.046831	0.013039056	0.001274949	0.001927096	1859.1	17.1	4.74120E+01
4.125	1	0.008932999	0.001344048	0.076406	0.023164756	0.003564156	0.003539435	991.5	11.0	4.97874E+01
4.225	1	0.008671341	0.001121729	0.049492	0.019640379	0.000199913	0.003164127	1180.1	14.0	5.26148E+01
4.425	1	0.012080881	0.000315058	0.008873	0.001494551	0.002357095	0.000320345	14967.7	76.6	8.84756E+01
4.475	1	0.011387963	0.000683389	0.02499	0.019657761	0.013583057	0.002274729	1137.5	12.1	9.12010E+01
4.575	1	0.017753112	0.001715908	0.058009	0.030557753	0.020953701	0.003604084	769.6	9.6	9.30449E+01
4.775	1	0.015384005	0.001580593	0.054595	0.028871242	0.018087193	0.003338293	775.1	9.2	9.49019E+01
5.175	1	0.015711983	0.00168046	0.017729	0.027167769	0.016355623	0.003417229	783.6	9.0	9.67794E+01
5.975	1	0.0102821	0.001111136	0.072867	0.034984919	0.016033094	0.004181857	707.0	10.0	9.84734E+01
7	1	0.009699627	0.001536593	0.057802	0.042299361	0.031469338	0.00507445	529.5	8.3	9.97419E+01
fuse	1	0.028701371	0.006629727	0.14158	0.218578326	0.213501386	0.028593766	107.7	2.1	1.00000E+02
Watts	**% $^{40}Ar^*$**	**$^{40}Ar^*/^{39}Ar$**	**Age (yrs)**	**ge error (yr**	**% error**	**$^{39}Ar/^{40}Ar$**	**$^{39}Ar/^{40}Ar$ error**	**$^{36}Ar/^{40}Ar$**	**$^{36}Ar/^{40}Ar$ error**	
3.8	94.38	74.89405386	3.51972E+08	########	1.01	0.012615621	0.000117663	0.000188	2.05852E-05	
3.85	97.84	76.18430606	3.57480E+08	########	1.35	0.012855244	0.000175015	7.24E-05	7.48786E-05	
4	99.40	79.35677336	3.70952E+08	########	0.73	0.012538694	7.79294E-05	2E-05	8.04928E-06	
4.05	98.99	78.31575351	3.66542E+08	########	0.74	0.012652485	8.06717E-05	3.38E-05	7.76544E-06	
4.07	99.51	76.67429765	3.59567E+08	########	0.98	0.012991552	0.000122296	1.66E-05	2.50355E-05	
4.125	98.61	75.66268389	3.55255E+08	########	1.14	0.013047858	0.000146729	4.65E-05	4.61793E-05	
4.225	99.92	75.8368456	3.55998E+08	########	1.20	0.013189926	0.000159882	2.64E-06	4.17346E-05	
4.425	99.11	78.73124728	3.68304E+08	########	0.70	0.012601439	7.29005E-05	2.97E-05	4.03474E-06	
4.475	94.73	72.97101582	3.43731E+08	########	1.15	0.012995879	0.000142584	0.000177	2.9506E-05	
4.575	91.85	70.63394818	3.33667E+08	########	1.37	0.013019743	0.000168794	0.000273	4.68083E-05	
4.775	92.98	71.55868944	3.37656E+08	########	1.29	0.013008009	0.00015999	0.000235	4.33419E-05	
5.175	93.66	72.17412244	3.40306E+08	########	1.24	0.012990494	0.000153878	0.000212	4.43283E-05	
5.975	93.83	72.93973688	3.43597E+08	########	1.49	0.012879959	0.000187483	0.000207	5.37866E-05	
7	87.65	66.73411002	3.16748E+08	########	1.76	0.013149747	0.000212788	0.000414	6.64373E-05	
fuse	36.53	36.7954708	1.81379E+08	########	6.02	0.00995777	0.000229674	0.002126	0.000282978	