

DR4. ⁴⁰Ar/³⁹Ar Data For Samples From The Southern Talkeetna Mountains

L=laser

05King HO#1																	
Weighted average of J from standards = 5.570e-03 1.672e-05																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.022	339.75173	51.84288	12.32584	1.88727	1.09486	0.1838	94.9345	6.67554	22.81482	3.52397	0.08589	0.02342	17.35975	23.03524	166.34	210.84
1000	0.0484	59.56567	5.53678	5.10782	0.49078	0.17342	0.0612	85.36899	29.32064	9.40608	0.90704	0.01915	0.00931	8.74226	17.54041	85.69	167.9
1500	0.0704	33.52787	3.90693	19.04461	2.21377	0.04748	0.0759	37.19336	66.77993	35.42064	4.17347	0.09197	0.0189	21.32616	22.8172	202.29	204.72
2000	0.1919	9.60396	0.22654	25.83471	0.61465	0.01485	0.01297	23.59911	40.02859	48.28408	1.1701	0.20875	0.00577	7.45118	3.90825	73.29	37.67
2500	0.4422	8.33093	0.14055	25.17005	0.41908	0.01964	0.00685	44.91895	24.37212	47.01937	0.79703	0.21851	0.0046	4.65545	2.06186	46.14	20.17
3000	0.6771	9.56367	0.14434	26.40699	0.39484	0.02328	0.00667	49.32458	20.63771	49.37397	0.75227	0.21483	0.00362	4.92348	2.00692	48.76	19.61
5000	0.9273	9.8004	0.1573	30.77286	0.49459	0.02567	0.00736	51.65787	22.23617	57.71831	0.94827	0.19371	0.00362	4.82861	2.22282	47.83	21.73
9000	1	13.65613	0.50079	32.88802	1.18219	0.03023	0.01964	45.66046	42.5212	61.77989	2.27355	0.22513	0.00972	7.58099	5.93981	74.54	57.21
Integrated		18.63542	0.16869	26.57672	0.24493	0.05023	0.00463	67.99789	7.31351	49.69738	0.46677	0.19978	0.00222	6.0683	1.38816	59.91	13.48
01Sov MU#1																	
Weighted average of J from standards = 5.570e-03 1.672e-05																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.0014	26.63036	1.485	-0.0057	0.06269	0.058	0.03526	64.42867	39.03067	-0.01046	0.11503	-0.00213	0.00821	9.46217	10.39944	92.56	99.17
1000	0.0883	16.29403	0.06122	0.00137	0.00115	0.00277	0.00068	5.02322	1.23066	0.00252	0.00212	0.00001	0.00013	15.44735	0.20857	148.75	1.93
1500	0.5697	15.71504	0.06494	0.00003	0.00015	0.00017	0.00014	0.32619	0.26927	0.00006	0.00027	0.00011	0.00005	15.63418	0.0773	150.48	0.71
2000	0.8441	15.66148	0.03769	0.00072	0.00036	0.00051	0.00015	0.96287	0.28166	0.00132	0.00067	0.00014	0.00008	15.48127	0.05775	149.07	0.53
2500	0.8883	15.94177	0.07997	0.00388	0.00277	0.00159	0.00126	2.95884	2.33934	0.00712	0.00509	0.00026	0.0002	15.4413	0.38028	148.7	3.52
3000	0.9103	16.03604	0.15617	-0.00046	0.00397	0.00239	0.00162	4.41515	2.98368	-0.00084	0.00728	0.00023	0.00044	15.29963	0.50042	147.39	4.63
5000	0.9748	15.92285	0.03571	0.0072	0.00161	0.00075	0.00059	1.3935	1.09584	0.01322	0.00296	0.00045	0.00012	15.67176	0.17772	150.82	1.64
9000	1	16.20457	0.11403	0.00319	0.00474	0.00116	0.00169	2.12501	3.0787	0.00585	0.0087	0.00037	0.0003	15.83119	0.51038	152.3	4.71
Integrated		15.80925	0.0341	0.00103	0.00028	0.00075	0.00014	1.4005	0.26522	0.00189	0.00052	0.00014	0.00004	15.55857	0.0537	149.78	0.66

Appendix 2 continued

03Sov MU#1																	
Weighted average of J from standards = 5.570e-03 1.672e-05																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.0012	46.30248	5.28053	-0.04554	0.13551	0.18643	0.08955	119.06388	55.57825	-0.08356	0.24862	-0.02451	0.01224	-8.8211	25.73423	-90.8	271.68
1000	0.0094	24.04745	0.47844	-0.00825	0.0276	0.01983	0.00937	24.40474	11.51763	-0.01513	0.05064	-0.00182	0.00186	18.15618	2.79031	173.62	25.44
1500	0.6659	16.85493	0.04751	-0.00116	0.00035	0.00137	0.00021	2.39916	0.36498	-0.00212	0.00064	0.00011	0.00005	16.42155	0.077	157.73	0.71
2000	0.8539	16.3564	0.07151	-0.00191	0.00086	0.00061	0.0005	1.1122	0.89898	-0.0035	0.00158	0.00023	0.0001	16.14509	0.16295	155.19	1.5
2500	0.8744	16.51472	0.11168	-0.01139	0.00689	-0.00216	0.00574	-3.86823	10.28903	-0.0209	0.01265	-0.00058	0.00094	17.12256	1.70004	164.17	15.58
3000	0.9169	16.57306	0.12557	-0.00716	0.00285	-0.00283	0.00166	-5.04306	2.96579	-0.01314	0.00524	-0.00008	0.0004	17.37756	0.50797	166.51	4.65
5000	0.972	16.10216	0.11217	-0.00489	0.00254	-0.00164	0.00147	-3.01126	2.69768	-0.00897	0.00465	0.00003	0.00032	16.55639	0.44867	158.97	4.12
9000	1	16.4174	0.17064	-0.00909	0.00462	-0.00085	0.0027	-1.53492	4.86098	-0.01668	0.00848	0.00073	0.0006	16.63914	0.81519	159.73	7.49
Integrated		16.7817	0.0356	-0.0023	0.00048	0.00111	0.00027	1.96242	0.48117	-0.00422	0.00087	0.00008	0.00006	16.42323	0.08786	157.75	0.93
13Sov MU#1																	
Weighted average of J from standards = 5.570e-03 1.672e-05																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.0107	20.17711	0.30652	0.01106	0.01497	0.03826	0.0128	56.10617	18.76342	0.0203	0.02747	0.00089	0.00158	8.84354	3.78312	86.66	36.19
1000	0.1023	19.36072	0.0968	0.00392	0.00149	0.01505	0.00184	23.00866	2.80536	0.00719	0.00273	0.00054	0.00017	14.88325	0.54792	143.53	5.08
1500	0.4094	16.12708	0.04921	0.00017	0.00039	0.001	0.00045	1.83962	0.82819	0.0003	0.00072	0.00024	0.00009	15.80125	0.14182	152.02	1.31
2000	0.6556	16.1885	0.04167	0.00033	0.00072	0.00144	0.00055	2.64154	1.01332	0.0006	0.00132	0.00013	0.00009	15.73197	0.16873	151.38	1.56
2500	0.8581	16.07761	0.06471	-0.00049	0.00058	0.00139	0.00074	2.55604	1.35883	-0.0009	0.00107	0.00032	0.0001	15.63771	0.22702	150.51	2.1
3000	0.9178	16.17744	0.07401	-0.00077	0.00244	0.00451	0.00238	8.2579	4.36218	-0.00141	0.00448	0.00013	0.00044	14.81427	0.70774	142.89	6.56
5000	0.9517	16.42786	0.08409	0.01109	0.00456	0.0049	0.00418	8.82721	7.53441	0.02034	0.00837	0.00008	0.0005	14.95077	1.23794	144.16	11.47
9000	1	16.35496	0.08204	0.00225	0.00304	0.0044	0.00302	7.9672	5.46097	0.00413	0.00559	0.00052	0.0004	15.02462	0.89479	144.84	8.29
Integrated		16.49584	0.02529	0.00095	0.00041	0.00338	0.00041	6.06793	0.73741	0.00174	0.00076	0.00026	0.00006	15.46699	0.12375	148.93	1.22

Appendix 2 continued

01Red SE#1																	
Weighted average of J from standards = 5.570e-03 1.672e-05																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.0141	364.47562	4.36073	1.84936	0.05559	1.13299	0.01875	91.82289	1.05378	3.39776	0.10226	0.02683	0.00203	29.84012	3.86312	277.1	33.25
1000	0.0876	26.60061	0.19811	7.49784	0.07375	0.0595	0.00159	63.83977	1.70933	13.83074	0.13677	0.00549	0.00073	9.65931	0.46316	94.44	4.41
1500	0.2067	13.61165	0.07982	10.2662	0.08325	0.01758	0.00076	32.02281	1.63145	18.97463	0.15499	0.00152	0.00024	9.3002	0.23024	91.02	2.2
2000	0.3567	13.15467	0.06167	4.98761	0.03545	0.01132	0.00076	22.36457	1.69989	9.18393	0.06551	0.00065	0.00015	10.22573	0.2294	99.83	2.18
2500	0.4916	12.73042	0.04159	2.95252	0.02197	0.00792	0.00058	16.50124	1.34808	5.42878	0.04049	0.00044	0.00016	10.62716	0.17568	103.64	1.66
3000	0.606	11.99554	0.0492	3.22238	0.02368	0.00735	0.00075	15.93446	1.85487	5.92611	0.04364	0.00049	0.00022	10.08215	0.22655	98.47	2.15
5000	0.889	14.47488	0.04101	0.478	0.00338	0.01547	0.00046	31.37006	0.93453	0.87736	0.0062	0.00125	0.00009	9.91707	0.13839	96.9	1.32
9000	1	40.33932	0.17352	0.79427	0.01015	0.09481	0.0024	69.34248	1.74068	1.45819	0.01865	0.01105	0.00049	12.36487	0.70475	120.03	6.62
Integrated		22.34723	0.03507	3.54566	0.01116	0.04094	0.00041	52.89723	0.54052	6.52213	0.02058	0.00276	0.0001	10.5386	0.12228	102.8	1.2

01Sov FS#1																	
Weighted average of J from standards = 5.570e-03 1.672e-05																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
300	0.0001	80619.10202	114594.2674	-5.45848	8.15269	261.87984	372.25786	95.98962	1.21513	-9.9771	14.8444	0.12189	0.44758	3220.71333	4663.80764	5300.43	2471.73
600	0.0029	13452.44676	1194.71336	0.3593	0.16665	40.52267	3.63265	89.01314	1.09115	0.65943	0.30594	0.09533	0.03095	1478.37377	197.04717	4006.01	214.18
1000	0.0185	1051.86673	34.36346	0.30456	0.02324	2.50492	0.08778	70.36996	0.89452	0.55894	0.04267	0.0046	0.00221	311.72673	13.87648	1814.06	50.9
1500	0.0949	32.3809	0.22596	0.20605	0.00523	0.07034	0.00283	64.19247	2.54851	0.37813	0.00959	0.00036	0.00037	11.58585	0.82884	112.7	7.82
2000	0.2177	13.47011	0.08739	0.18837	0.00297	0.01436	0.00166	31.44961	3.65403	0.34568	0.00545	0.00023	0.00019	9.21468	0.49511	90.2	4.73
2500	0.3273	7.41366	0.0514	0.16965	0.00629	0.00345	0.00132	13.59996	5.28346	0.31132	0.01154	-0.00009	0.00028	6.38051	0.3929	62.94	3.81
3000	0.4308	13.57862	0.12865	0.18175	0.00419	0.02499	0.00286	54.3841	6.22476	0.33354	0.0077	0.00014	0.00023	6.18126	0.84576	61	8.21
4000	0.6333	11.25676	0.06578	0.10189	0.00256	0.01326	0.00079	34.83841	2.05869	0.18696	0.00469	0.00031	0.00015	7.31626	0.23551	71.99	2.27
5000	0.7572	7.27922	0.03939	0.10677	0.00319	0.00421	0.00132	17.04335	5.39823	0.19592	0.00585	0.00013	0.00018	6.01441	0.3929	59.38	3.82
9000	0.9997	17.9201	0.07152	0.12837	0.00225	0.0307	0.00088	50.65293	1.43883	0.23557	0.00412	0.00014	0.00017	8.82919	0.2602	86.52	2.49
9000	1	-314.03046	178.9693	1.35819	1.46851	-1.48828	0.96214	140.06814	43.03028	2.49448	2.69968	0.08254	0.12682	125.95887	152.94542	957.97	902.25
Integrated		76.6757	0.17558	0.14672	0.00148	0.2017	0.00166	77.74616	0.61657	0.26924	0.00271	0.00054	0.00013	17.05845	0.4747	163.58	4.38

Appendix 2 continued

03Sov FS#1																	
Weighted average of J from standards = 5.570e-03 1.672e-05																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
300	0.0211	362.40419	8.29317	0.20822	0.02473	0.99592	0.03447	81.20783	2.10949	0.38212	0.0454	0.03282	0.00233	68.10806	7.8038	579.62	56.79
600	0.1968	19.51895	0.09403	0.16754	0.00327	0.02423	0.00115	36.66872	1.73031	0.30744	0.006	0.00155	0.00022	12.34425	0.34303	119.84	3.22
1000	0.424	17.68455	0.04938	0.23595	0.00303	0.01508	0.00087	25.13655	1.45711	0.433	0.00555	0.00039	0.00018	13.21924	0.26055	128.04	2.44
1500	0.6173	15.50807	0.05209	0.21315	0.00345	0.0074	0.001	14.01615	1.90943	0.39116	0.00634	0.00058	0.00017	13.31091	0.29914	128.9	2.8
2000	0.7118	13.95551	0.09726	0.21141	0.00494	0.00498	0.00223	10.43956	4.73433	0.38796	0.00907	-0.00012	0.00028	12.47389	0.66527	121.06	6.24
2500	0.768	13.81184	0.08128	0.16797	0.00766	0.00213	0.00312	4.47571	6.68587	0.30823	0.01405	0.00037	0.00046	13.16686	0.92488	127.55	8.65
3000	0.8112	13.81533	0.11839	0.12893	0.00997	0.00448	0.00436	9.52833	9.35287	0.23659	0.01831	0.00043	0.00051	12.47323	1.29407	121.05	12.15
4000	0.8591	13.91926	0.17932	0.12246	0.00946	0.00514	0.00444	10.8687	9.43464	0.22472	0.01736	0.00024	0.00059	12.38102	1.32033	120.19	12.4
5000	0.9076	12.92438	0.06913	0.08404	0.0095	0.00705	0.00394	16.11235	9.03904	0.15422	0.01744	0.00026	0.00052	10.81769	1.16724	105.44	11.05
9000	0.9955	17.18529	0.09846	0.19695	0.00786	0.02028	0.00222	34.84339	3.82606	0.36142	0.01442	0.00022	0.00031	11.17956	0.65991	108.87	6.24
9000	1	4.90318	0.29847	0.20631	0.07828	-0.01088	0.02149	-66.29057	130.31075	0.37861	0.14368	-0.00322	0.00325	8.10533	6.35862	79.58	61.07
01SOV-1 WR#L1																	
Weighted average of J from standards = 4.286e-03 9.931e-06																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.1654	8.4074	0.02626	0.05525	0.00044	0.00878	0.00012	30.89899	0.4188	0.10138	0.00081	0.0006	0.00006	5.7893	0.04049	44.17	0.31
1000	0.523	5.80265	0.01372	0.0841	0.00056	0.00078	0.00005	3.86991	0.24164	0.15432	0.00103	0.0002	0.00001	5.54987	0.01939	42.36	0.15
1500	0.7257	5.77803	0.01402	0.58178	0.00307	0.00106	0.00008	4.61459	0.41794	1.06792	0.00564	0.00028	0.00003	5.48533	0.02763	41.88	0.21
2000	0.8009	6.10746	0.01828	0.5842	0.00359	0.00216	0.00018	9.72897	0.88335	1.07237	0.00659	0.0006	0.00008	5.48873	0.05653	41.9	0.43
2500	0.8859	6.50811	0.02576	0.50026	0.00316	0.00304	0.00024	13.22874	1.10584	0.91823	0.0058	0.00061	0.00005	5.62339	0.07542	42.92	0.57
3000	0.9312	6.75632	0.02548	0.40785	0.00279	0.00427	0.0003	18.24019	1.30214	0.74856	0.00513	0.00116	0.0001	5.50126	0.09035	42	0.68
4000	0.965	7.212	0.02662	1.0744	0.00769	0.00509	0.00062	19.72324	2.53626	1.97288	0.01413	0.00104	0.00011	5.77011	0.18381	44.02	1.39
9000	1	8.20876	0.04197	0.85478	0.00736	0.00946	0.00043	33.30028	1.54045	1.56934	0.01352	0.00281	0.00011	5.45872	0.12975	41.67	0.98
Integrated		6.48646	0.00773	0.32839	0.00084	0.00306	0.00005	13.59757	0.22373	0.60269	0.00154	0.00051	0.00002	5.5801	0.0161	42.59	0.16

Appendix 2 continued

01SOV-2 WR#L1																	
Weighted average of J from standards = 4.286e-03 9.931e-06																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.008	7.88682	0.03852	0.0217	0.00232	0.01661	0.00106	62.44559	3.99676	0.03982	0.00426	0.00055	0.00023	2.95074	0.31462	22.65	2.4
1000	0.0504	7.84707	0.0255	0.01748	0.00042	0.0067	0.00031	25.31349	1.17425	0.03208	0.00076	0.00085	0.00005	5.8386	0.09454	44.54	0.71
1500	0.1697	6.80758	0.01634	0.0152	0.00022	0.00195	0.00008	8.47832	0.36714	0.02788	0.00041	0.00033	0.00002	6.20329	0.02949	47.29	0.22
2000	0.3324	6.56178	0.01423	0.02124	0.00026	0.00156	0.00008	7.03695	0.34675	0.03898	0.00048	0.00035	0.00002	6.07252	0.02647	46.3	0.2
2500	0.4178	6.55349	0.02234	0.06261	0.00042	0.00126	0.00011	5.62295	0.49823	0.11488	0.00077	0.00021	0.00004	6.15724	0.0391	46.94	0.29
3000	0.5333	6.44433	0.01962	0.1171	0.00059	0.00111	0.00007	4.94106	0.32822	0.21488	0.00108	0.00021	0.00002	6.09818	0.02848	46.49	0.21
4000	0.8195	6.39666	0.01373	0.42279	0.00177	0.00151	0.00003	6.44124	0.14565	0.776	0.00325	0.00026	0.00002	5.95863	0.01609	45.44	0.12
9000	1	6.42938	0.01291	0.44573	0.00217	0.00214	0.00009	9.32244	0.39287	0.81811	0.00398	0.00039	0.00002	5.80491	0.02795	44.29	0.21
Integrated		6.57075	0.00637	0.22655	0.00062	0.00196	0.00003	8.55187	0.141	0.41575	0.00114	0.00033	0.00001	5.98263	0.01104	45.62	0.13
01SOV-3 WR#L1																	
Weighted average of J from standards = 4.286e-03 9.931e-06																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.0482	272.34709	1.22349	10.29764	0.05153	0.91234	0.00817	98.68895	0.78959	19.03317	0.09595	0.00558	0.00057	3.59637	2.16681	27.56	16.48
1000	0.1562	71.19239	0.20409	16.96751	0.09991	0.22514	0.00173	91.52072	0.69288	31.51063	0.18779	0.00191	0.00019	6.1073	0.50106	46.56	3.77
1500	0.3439	25.65381	0.05813	14.1344	0.05721	0.07051	0.00093	76.76766	1.08353	26.19617	0.10711	0.0035	0.0002	6.01317	0.28259	45.85	2.13
2000	0.6189	12.81558	0.03188	8.78168	0.04399	0.02687	0.0005	56.43744	1.15174	16.21374	0.08173	0.00724	0.0001	5.60469	0.14984	42.78	1.13
2500	0.7921	11.68519	0.04823	9.25493	0.04437	0.02415	0.00073	54.67676	1.83583	17.09324	0.08248	0.00715	0.00021	5.31749	0.21748	40.61	1.64
3000	0.8375	14.11602	0.07405	9.72271	0.06796	0.03437	0.00228	66.40558	4.76819	17.96318	0.12644	0.00491	0.00036	4.765	0.67713	36.43	5.13
4000	0.8812	13.90216	0.07264	11.95664	0.07725	0.03074	0.00239	58.37655	5.08538	22.12561	0.14416	0.00563	0.00031	5.82347	0.71251	44.43	5.37
9000	1	14.04256	0.07715	15.83258	0.10106	0.03202	0.00078	58.20953	1.61834	29.3791	0.18966	0.00942	0.00025	5.9224	0.23329	45.17	1.76
Integrated		34.10967	0.04361	11.85158	0.0244	0.09985	0.00051	83.71067	0.43372	21.92956	0.04553	0.00595	0.00008	5.5983	0.14982	42.73	1.13

Appendix 2 continued

01SOV-4 WR#L1																	
Weighted average of J from standards = 4.286e-03 9.931e-06																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.1803	10.39321	0.01959	0.23352	0.0007	0.0135	0.00018	38.30723	0.51551	0.42855	0.00128	0.00061	0.00003	6.3946	0.05569	48.72	0.42
1000	0.5201	6.77734	0.01336	0.39881	0.00188	0.00291	0.00004	12.23807	0.17246	0.73198	0.00346	0.00031	0.00002	5.92353	0.0171	45.18	0.13
1500	0.7076	6.61143	0.01805	0.2879	0.00157	0.00257	0.00008	11.19967	0.36935	0.52836	0.00288	0.00028	0.00003	5.84579	0.02961	44.59	0.22
2000	0.7813	6.57627	0.01638	0.22884	0.0015	0.00266	0.00017	11.70044	0.78825	0.41997	0.00275	0.00038	0.00003	5.78153	0.05384	44.11	0.41
2500	0.8798	6.87818	0.01836	0.11819	0.0006	0.00349	0.00014	14.91533	0.62149	0.21688	0.0011	0.00049	0.00003	5.82749	0.04576	44.46	0.34
3000	0.9321	7.20491	0.02453	0.0776	0.00058	0.00439	0.0002	18.00938	0.82367	0.14239	0.00106	0.00055	0.00004	5.88333	0.06334	44.88	0.48
4000	0.9822	7.35785	0.0186	0.10029	0.00099	0.00492	0.00022	19.71391	0.87678	0.18403	0.00181	0.00064	0.00006	5.8839	0.06664	44.88	0.5
9000	1	7.51736	0.0299	0.07874	0.00162	0.00555	0.00079	21.79719	3.12808	0.14448	0.00298	0.00069	0.00014	5.85589	0.23555	44.67	1.77
Integrated		7.45788	0.00734	0.27061	0.00072	0.00502	0.00005	19.66368	0.18954	0.49662	0.00132	0.00042	0.00001	5.96867	0.01554	45.52	0.16

01SOV-5 WR#L1																	
Weighted average of J from standards = 4.286e-03 9.931e-06																	
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age	+/-
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)	(Ma)
500	0.0381	42.39858	0.19809	3.12938	0.01647	0.12813	0.00112	88.75174	0.69512	5.75471	0.03036	0.00884	0.00019	4.77633	0.29793	36.52	2.25
1000	0.1338	11.66321	0.02994	3.63827	0.01613	0.02211	0.00046	53.58814	1.16711	6.69293	0.02974	0.00243	0.00005	5.41328	0.13736	41.33	1.04
1500	0.3278	7.61577	0.02203	2.74105	0.01267	0.00634	0.00011	21.71638	0.44329	5.03921	0.02334	0.00101	0.00004	5.95021	0.03894	45.38	0.29
2000	0.5186	6.75738	0.0165	1.92536	0.00819	0.00372	0.0001	13.97313	0.45436	3.53758	0.01507	0.00279	0.00003	5.79553	0.03428	44.21	0.26
2500	0.7753	7.07068	0.01607	2.25621	0.00997	0.00483	0.0001	17.63873	0.43616	4.14645	0.01835	0.00354	0.00003	5.80834	0.03403	44.31	0.26
3000	0.9161	7.65088	0.02452	2.59293	0.01195	0.00699	0.00017	24.29171	0.66583	4.7664	0.02201	0.0045	0.00007	5.78049	0.05485	44.1	0.41
4000	0.9479	8.23077	0.03378	2.40531	0.01375	0.00855	0.0005	28.39845	1.78848	4.42093	0.02532	0.0039	0.00012	5.88212	0.1494	44.87	1.13
9000	1	8.54855	0.02265	4.88588	0.02155	0.01104	0.0004	33.56703	1.39868	8.99595	0.03981	0.0039	0.00008	5.67899	0.12118	43.34	0.91
Integrated		9.09825	0.00966	2.64206	0.00472	0.01201	0.00008	36.73488	0.25671	4.85688	0.00869	0.00317	0.00002	5.74799	0.02449	43.86	0.21

Appendix 2 continued

02SOV WR#L1																
Weighted average of J from standards = 4.286e-03 9.931e-06																
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)
500	0.0458	65.94839	0.22736	6.45127	0.02956	0.20577	0.00229	91.43687	1.00323	11.89136	0.05473	0.00423	0.0002	5.67055	0.66637	43.27
1000	0.2153	16.82871	0.0513	7.0599	0.0346	0.03827	0.00049	63.85484	0.86069	13.01886	0.06412	0.00179	0.00009	6.10251	0.14799	46.53
1500	0.4563	8.62299	0.02349	3.06689	0.01453	0.00972	0.00029	30.48625	0.99657	5.63954	0.02678	0.00631	0.00005	5.98653	0.08821	45.65
2000	0.7145	8.88443	0.02005	3.5292	0.01625	0.01017	0.0003	30.65402	0.99146	6.49177	0.02997	0.00567	0.00008	6.15579	0.08928	46.93
2500	0.8401	8.70028	0.03803	3.43382	0.0173	0.00972	0.00056	29.84513	1.89863	6.31591	0.0319	0.00544	0.00012	6.09767	0.16769	46.49
3000	0.8955	9.02996	0.03854	3.27112	0.02322	0.01072	0.00098	32.19571	3.2253	6.01596	0.04281	0.00417	0.00019	6.11674	0.29257	46.63
4000	0.9748	9.45323	0.04927	5.23996	0.02832	0.01358	0.00078	37.98473	2.45058	9.65032	0.05235	0.00506	0.00016	5.8658	0.23442	44.74
9000	1	11.64166	0.05532	3.56838	0.02011	0.01985	0.0026	47.96856	6.60886	6.56402	0.03708	0.0028	0.00046	6.05717	0.77004	46.19
Integrated		12.88963	0.01629	4.26216	0.00869	0.0243	0.00021	53.10585	0.48213	7.84408	0.01604	0.00487	0.00004	6.0488	0.06304	46.12
14SOV WR#L1																
Weighted average of J from standards = 4.286e-03 9.931e-06																
Laser Power	Cumulative	40Ar/39Ar	+/-	37Ar/39Ar	+/-	36Ar/39Ar	+/-	% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age
(mW)	39Ar	meas.		meas.		meas.		40Ar								(Ma)
500	0.0493	113.64291	1.10436	10.28376	0.10598	0.36549	0.00842	94.31612	2.00397	19.00732	0.19731	0.01195	0.00139	6.50489	2.29562	49.55
1000	0.1803	33.88527	0.23166	16.35545	0.12265	0.09675	0.00378	80.46308	3.25947	30.36069	0.23034	0.00378	0.00053	6.69169	1.11858	50.96
1500	0.3684	31.82871	0.15051	19.18104	0.11055	0.08851	0.00237	77.2792	2.18301	35.67786	0.20846	0.00368	0.00028	7.3243	0.70586	55.7
2000	0.5125	20.80541	0.16969	21.12181	0.20814	0.05156	0.00244	64.95369	3.43469	39.34247	0.39355	0.00421	0.00046	7.39153	0.72801	56.2
2500	0.7406	17.2347	0.09648	17.72084	0.12912	0.03988	0.00172	60.00226	2.93708	32.92737	0.24296	0.00635	0.0003	6.96898	0.51407	53.04
3000	0.8301	15.36329	0.12599	23.07557	0.19576	0.03811	0.00338	61.041	6.50421	43.04192	0.3712	0.00776	0.0007	6.07297	1.01597	46.3
4000	0.9771	15.21159	0.09877	35.57221	0.23363	0.04043	0.00317	59.36952	6.16474	66.95205	0.45106	0.00973	0.00053	6.32774	0.96197	48.22
9000	1	13.52758	0.27137	21.33051	0.39781	0.02087	0.0117	32.66269	25.5933	39.73715	0.75243	0.00918	0.00235	9.22843	3.51397	69.9
Integrated		26.83001	0.06712	21.15751	0.06296	0.07355	0.00112	74.58467	1.22358	39.40998	0.11905	0.00617	0.00019	6.91482	0.33379	52.63