

Supplemental Item S11 - Detrital sand-sized volcanic-lithic ⁴⁰Ar/³⁹Ar (DARL) fusion ages from modern rivers, Wrangell Arc, Wrangell-St. Elias Mountains, Alaska-Canada

BOULDER CREEK

Weighted average of J from standards = 1.347e-04 2.749e-06

Grain #	Cumulative 40Ar/39Ar meas.		37Ar/39Ar meas.		36Ar/39Ar meas.		% Atm. 40Ar	Ca/K	Cl/K	40*/39K		Age (Ma)	(Ma)	%error				
1	0.0178	11.71061	0.28222	0.54391	0.07881	0.03397	0.00838	85.5616	21.123	0.99838	0.14471	0.03625	0.0026	1.68719	2.46938	0.41	0.6	146.34
2	0.0408	3.9751	0.08163	0.47118	0.0929	0.0078	0.00621	57.41749	46.54556	0.86483	0.17058	0.00412	0.0019	1.68061	1.83792	0.41	0.45	109.76
3	0.0561	73.30415	2.19846	1.53865	0.16266	0.23011	0.01435	92.6262	5.08707	2.82629	0.29912	0.02953	0.00357	5.40899	3.73583	1.31	0.91	69.47
4	0.0722	64.15777	1.19933	2.43551	0.14285	0.22025	0.01127	101.1779	4.84484	4.47652	0.26302	0.0248	0.00297	-0.75665	3.11224	-0.18	0.76	-422.22
5	0.0832	19.21514	0.60757	2.78849	0.21871	0.06442	0.0144	98.02478	21.98165	5.12658	0.40288	0.02315	0.00363	0.3797	4.22578	0.09	1.03	1144.44
6	0.1119	30.18829	0.33766	0.54566	0.05557	0.10032	0.00655	98.14729	6.34032	1.0016	0.10203	0.03	0.00174	0.55897	1.91298	0.14	0.46	328.57
7	0.1707	13.68587	0.17581	0.14571	0.0522	0.03889	0.00357	84.05528	7.66243	0.26739	0.0958	0.00514	0.00068	2.17766	1.04737	0.53	0.25	47.17
8	0.1854	702.1165	27.74833	1.18672	0.21416	2.39245	0.09725	100.6813	0.9884	2.17929	0.39361	0.02549	0.00357	-4.78735	6.94631	-1.16	1.69	-145.69
9	0.1965	29.27055	1.51551	1.63825	0.30411	0.0816	0.01466	81.99958	14.21478	3.00944	0.55929	0.02555	0.00355	5.26958	4.17201	1.28	1.01	78.91
10	0.2142	13.89006	0.43761	1.65153	0.19591	0.02476	0.00879	51.81386	18.68771	3.03386	0.36031	0.03817	0.0027	6.68659	2.60345	1.62	0.63	38.89
11	0.2236	70.81104	4.3228	2.97196	0.38611	0.22387	0.02022	93.11776	6.22689	5.46461	0.71145	0.01076	0.00496	4.88159	4.42741	1.18	1.07	90.68
12	0.2306	46.60685	3.01195	1.4354	0.43466	0.14225	0.0224	89.9937	12.98344	2.63643	0.79916	0.02274	0.00683	4.66538	6.0625	1.13	1.47	130.09
13	0.2436	6.24775	0.26252	0.92326	0.2137	0.02872	0.01313	135.2582	62.28295	1.69517	0.39262	0.01575	0.00465	-2.19381	3.87441	-0.53	0.94	-177.36
14	0.2638	3.77093	0.13488	0.44088	0.13506	0.00982	0.00964	76.56194	76.12263	0.8092	0.24798	0.01225	0.00222	0.87715	2.84961	0.21	0.69	328.57
15	0.2896	45.23268	1.18051	0.39646	0.13325	0.16195	0.00897	105.7974	5.18099	0.72765	0.24664	0.0329	0.00202	-2.62135	2.34337	-0.64	0.57	-89.06
16	0.2954	102.4838	9.99432	2.0244	0.52076	0.34097	0.04429	98.1791	8.46056	3.71981	0.95826	0.02477	0.00791	1.86826	8.68309	0.45	2.11	468.89
17	0.3163	58.60066	1.55417	0.98204	0.1303	0.18705	0.01061	94.22917	4.74937	1.80316	0.23942	0.02906	0.00316	3.38238	2.78585	0.82	0.68	82.93
18	0.3354	5.62752	0.16501	0.69314	0.15903	0.02327	0.00901	121.8312	47.4716	1.27244	0.29208	0.0092	0.00215	-1.22267	2.65824	-0.3	0.65	-216.67
19	0.3366	627.9518	202.35332	7.581	3.20703	0.49419	0.2275	23.15708	7.64605	13.98497	5.94798	0.04102	0.03463	485.111	164.42396	114.07	37.46	32.84
20	0.3608	102.9313	2.20272	0.47629	0.10706	0.35747	0.01887	102.6155	4.9692	0.87422	0.19658	0.03064	0.00196	-2.69231	5.11502	-0.65	1.24	-190.77
21	0.3775	26.13487	0.91892	2.06993	0.1861	0.06959	0.0129	78.11487	14.34742	3.80359	0.34246	0.03569	0.00386	5.72152	3.75694	1.39	0.91	65.47
22	0.3944	64.05776	1.67157	1.43306	0.18733	0.19919	0.01396	91.74539	5.99035	2.63214	0.34442	0.03089	0.00284	5.29062	3.84265	1.28	0.93	72.66
23	0.4044	4314.396	202.62139	1.32513	0.2379	14.90308	0.7035	102.0718	0.51185	2.4337	0.43733	0.0243	0.00803	-89.4674	22.47879	-21.85	5.52	-25.26
24	0.4294	6.47888	0.25556	0.2025	0.08974	0.01056	0.00985	48.11384	45.14384	0.37162	0.1647	0.00232	0.00158	3.34671	2.91851	0.81	0.71	87.65
25	0.4425	934.5347	37.40292	1.2149	0.26115	3.18486	0.13035	100.6978	0.92776	2.23109	0.48	0.03444	0.00458	-6.52682	8.67718	-1.59	2.11	-132.70
26	0.4547	593.3983	29.31677	2.49046	0.33565	2.07216	0.10454	103.1596	1.09761	4.57771	0.61805	0.00575	0.00451	-18.781	6.58246	-4.56	1.6	-35.09
27	0.4753	64.00361	1.60613	0.90324	0.19325	0.19081	0.00981	88.02015	3.96439	1.65837	0.35505	0.01395	0.00228	7.66887	2.54587	1.86	0.62	33.33
28	0.4897	9.46499	0.39109	0.62129	0.25376	0.0153	0.01027	47.3665	32.10358	1.14048	0.46603	0.01539	0.0032	4.96831	3.03861	1.21	0.74	61.16
29	0.5036	665.3221	25.19785	0.83774	0.26711	2.26155	0.08952	100.4398	1.20649	1.53805	0.4907	0.03811	0.00357	-2.92737	8.03077	-0.71	1.95	-274.65
30	0.5169	58.59722	2.51543	0.65759	0.25168	0.18836	0.01324	94.94176	5.30374	1.20715	0.46224	0.03447	0.00489	2.96386	3.11085	0.72	0.75	104.17
31	0.5223	3.81055	0.66	1.99938	0.43981	0.06487	0.0324	50.6272	257.8495	3.67377	0.80928	0.02804	0.01126	-15.2444	9.52907	-3.7	2.32	-62.70
32	0.5506	216.5848	5.5041	0.41255	0.07008	0.73452	0.01957	100.2135	0.85715	0.7572	0.12867	0.03367	0.00307	-0.46241	1.85654	-0.11	0.45	-409.09
33	0.5563	113.5206	11.22823	4.26368	0.58831	0.42486	0.0528	110.3132	8.34758	7.8469	1.08599	0.0361	0.01168	-11.7399	9.57053	-2.85	2.33	-81.75
34	0.5759	28.11919	0.76362	1.40125	0.1563	0.08118	0.00724	84.99369	7.28093	2.57365	0.28736	0.02089	0.00375	4.21938	2.05161	1.02	0.5	49.02
35	0.5944	520.5583	16.9732	1.51019	0.13713	1.76968	0.05895	100.4395	0.73444	2.77396	0.25215	0.03608	0.00422	-2.28994	3.82669	-0.56	0.93	-166.07
36	0.6057	9.18567	0.59656	1.48391	0.24258	0.05383	0.01406	172.3898	44.50169	2.72564	0.44603	0.0298	0.00522	-6.63496	4.08085	-1.61	0.99	-61.49
37	0.6101	8.48201	0.89745	0.42295	0.63548	-0.04508	0.03423	-157.999	119.1412	0.77628	1.16671	0.00339	0.00849	21.81342	10.24951	5.29	2.48	46.88
38	0.6223	76.22816	3.1287	4.43917	0.33147	0.22368	0.01559	86.26351	4.89135	8.17087	0.61204	0.02916	0.00362	10.49992	3.76475	2.55	0.91	35.69
39	0.6363	32.50314	1.07308	0.56007	0.1888	0.08972	0.01311	81.49729	11.6302	1.02806	0.3467	0.03189	0.00365	6.01085	3.78408	1.46	0.92	63.01
40	0.6452	138.4006	6.92073	2.10097	0.32637	0.44563	0.03266	95.04227	5.10725	3.86071	0.60063	0.05693	0.00544	6.87025	7.08642	1.67	1.72	102.99
41	0.6881	284.2811	3.02938	0.39526	0.07283	0.97932	0.01546	101.7956	1.21946	0.72545	0.13371	0.02668	0.00142	-5.10537	3.46609	-1.24	0.84	-67.74
42	0.6935	53.12918	6.30762	3.27599	0.65934	0.13454	0.03675	74.36356	18.42975	6.02493	1.21542	0.02924	0.00915	13.6444	9.9453	3.31	2.41	72.81
43	0.723	10.60901	0.15161	0.46918	0.11527	0.02239	0.0042	62.18627	11.70141	0.86116	0.21165	0	0.00161	4.00176	1.24054	0.97	0.3	30.93
44	0.7427	19.65515	0.49968	0.28661	0.13541	0.05477	0.00875	82.34117	13.01886	0.52599	0.24856	0.03308	0.00243	3.46633	2.55743	0.84	0.62	73.81
45	0.7635	4.27488	0.14738	0.58526	0.12107	0.00181	0.00547	11.44039	38.10125	1.07431	0.22233	0.00944	0.0023	3.76108	1.62395	0.91	0.39	42.86
46	0.7735	5.85087	0.33374	2.92271	0.28348	0.01126	0.01635	53.00536	82.97594	5.37386	0.5223	0.07397	0.006	2.74133	4.84514	0.67	1.18	176.12
47	0.7886	5.40305	0.2337	0.67927	0.18158	0.01122	0.01096	60.63377	60.27442	1.24696	0.33349	0.03205	0.00435	2.1163	3.24297	0.51	0.79	154.90
48	0.8064	2.20869	0.12766	0.49862	0.17427	-0.00809	0.00703	-111.62	95.42447	0.91522	0.31998	0.03221	0.00292	4.61284	2.08319	1.12	0.51	45.54
49	0.8144	14.93273	1.28674	1.62345	0.44713	0.07855	0.02581	154.8602	49.55366	2.98223	0.82231	0.03785	0.01454	-8.18524	7.41791	-1.99	1.8	-90.45
50	0.8216	174.0806	15.27588	4.75466	0.59829	0.64673	0.06093	109.576	3.78455	8.75354	1.10519	0.0395	0.01549	-16.7233	6.76809	-4.06	1.65	-40.64
51	0.832	32.28032	2.08968	0.69488	0.28642	0.10949	0.01638	100.1462	13.56795	1.27564	0.52606	0.02959	0.01034	-0.40719	4.37794	-0.01	1.06	-10600.00
52	0.8508	58.74012	2.22061	0.54204	0.17491	0.21329	0.01232	107.2748	4.71061	0.99495	0.32118	0.02237	0.00577	-4.2727	2.77055	-1.04	0.	

Integrated 141.0691 0.60124 1.10272 0.02317 0.47482 0.00268 99.41813 0.37459 2.02492 0.04259 0.02454 0.00048 0.82131 0.52881 0.2 0.13 65.00

DROP CREEK

Weighted average of J from standards = 1.347e-04 2.749e-06

Grain #	Cumulative 40Ar/39Ar 39Ar meas.		37Ar/39Ar meas.		36Ar/39Ar meas.		% Atm. 40Ar	Ca/K	Cl/K	40*/39K			Age (Ma)	(Ma)	%error			
1	0.0064	22.75187	0.50452	1.09591	0.09198	0.07498	0.00769	97.11971	9.77536	2.0124	0.16903	0.03153	0.00179	0.65497	2.22306	0.16	0.54	337.50
2	0.0171	133.6778	1.60292	1.14993	0.05644	0.45506	0.00888	100.5448	1.58064	2.11167	0.10373	0.04098	0.00153	-0.72864	2.11402	-0.18	0.51	-283.33
3	0.0198	103.4992	4.15335	2.63954	0.26838	0.36662	0.02904	104.4928	7.16384	4.85224	0.49428	0.02533	0.0049	-4.65733	7.428	-1.13	1.8	-159.29
4	0.0205	5385.265	14343.536	-0.71466	9.17025	18.27796	48.68412	100.2964	1.888368	-0.31064	16.80918	0.00875	0.17633	-15.9525	109.8912	-3.88	26.73	-688.92
5	0.0351	5.88722	0.09826	0.40233	0.05018	0.10144	0.00347	52.11122	17.51282	0.73843	0.09212	0.00325	0.00077	2.80589	1.02815	0.68	0.25	36.76
6	0.0388	16.216	0.67985	2.22899	0.21255	0.05353	0.01362	96.58579	24.56076	4.09633	0.39123	0.02201	0.00324	0.55351	3.98207	0.13	0.97	746.15
7	0.0421	45.95639	1.34733	0.80053	0.26286	0.16379	0.0145	105.2387	8.81855	1.46969	0.48287	0.04377	0.00386	-2.40734	4.05268	-0.58	0.98	-168.97
8	0.0457	62.71006	2.01077	2.13517	0.20008	0.21253	0.01542	99.91288	6.53056	3.92365	0.36822	0.01896	0.00338	0.05469	4.0996	0.01	1	10000.00
9	0.0623	188.9446	2.13799	0.35044	0.04833	0.65989	0.00989	103.2051	1.06851	0.64317	0.08872	0.00859	0.00137	-6.05469	2.01717	-1.47	0.49	-33.33
10	0.0693	7.27032	0.20344	2.81103	0.11963	0.02728	0.0102	108.1465	41.63154	5.16812	0.22037	0.03167	0.00182	-0.59103	3.01987	-0.14	0.73	-521.43
11	0.0766	13.20846	0.60576	3.00076	0.25765	0.0534	0.01017	117.8567	22.4778	5.51768	0.47476	0.05064	0.0046	-2.3583	2.96367	-0.57	0.72	-126.32
12	0.079	212.3043	15.78356	6.0186	0.60496	0.74315	0.06272	103.2168	4.14142	11.09044	1.11952	0.06937	0.00795	-6.85761	8.84294	-1.67	2.15	-128.74
13	0.0828	16.49564	0.60186	2.91728	0.25674	0.03191	0.01747	55.80493	31.28585	5.36386	0.47303	0.04286	0.00436	7.29218	5.17033	1.77	1.25	70.62
14	0.1176	3.06614	0.02643	0.06854	0.02064	0.00018	0.00195	1.57019	18.93476	0.12576	0.03787	0.00035	0.00035	2.98891	0.57557	0.73	0.14	19.18

15	0.1267	112.0727	2.19739	5.13366	0.14404	0.35495	0.0106	93.23473	2.13365	9.45384	0.26623	0.00776	0.00133	7.6076	2.40601	1.85	0.58	31.35
16	0.1387	89.30623	1.43708	0.96779	0.05073	0.29965	0.00714	99.09415	1.76771	1.77698	0.09321	0.03471	0.00136	0.80926	1.57949	0.2	0.38	190.00
17	0.1499	18.48009	0.28876	1.45024	0.07836	0.05176	0.00627	82.25368	9.96611	2.66371	0.14407	0.0224	0.00129	3.27763	1.84166	0.8	0.45	56.25
18	0.1666	5.87767	0.0776	0.05616	0.03627	0.00852	0.00444	42.95493	22.40776	0.10304	0.06655	0.00446	0.0007	3.33611	1.31144	0.81	0.32	39.51
19	0.1768	8.99264	0.14006	1.63107	0.06988	0.01523	0.00605	48.70407	19.93323	2.99625	0.12852	0.01321	0.00128	4.60294	1.79048	1.12	0.43	38.39
20	0.1873	96.65488	1.32863	1.4486	0.08718	0.3302	0.00893	100.8591	2.39483	2.66071	0.16028	0.01899	0.00153	-0.83095	2.31606	-0.2	0.56	-280.00
21	0.1945	205.0807	5.5138	1.90572	0.14353	0.68154	0.02149	98.141	1.64236	3.50144	0.26407	0.01237	0.00181	3.81704	3.3748	0.93	0.82	88.17
22	0.2082	3.20417	0.06885	1.23798	0.07702	-0.00078	0.00579	-10.4628	53.9188	2.27352	0.14156	0.00663	0.00087	3.50971	1.71469	0.85	0.42	49.41
23	0.2293	26.78016	0.27439	0.05844	0.04549	0.07513	0.00438	82.97533	4.76547	0.10724	0.08348	0.0302	0.00108	4.55437	1.27614	1.11	0.31	27.93
24	0.2395	60.7342	1.32536	0.96757	0.09552	0.18798	0.00888	91.37623	3.84401	1.77658	0.17551	0.01614	0.0013	5.2386	2.33865	1.27	0.57	44.88
25	0.2491	152.2368	2.9194	2.68784	0.12237	0.51151	0.01406	99.16099	1.9819	4.94119	0.22539	0.0382	0.00158	1.27947	3.02277	0.31	0.73	235.48
26	0.2554	151.9892	4.79419	1.17869	0.1788	0.50026	0.02026	97.2165	2.48807	2.16453	0.32862	0.02854	0.0019	4.23332	3.78711	1.03	0.92	89.32
27	0.2889	5.24964	0.04188	0.12965	0.03111	0.00571	0.00254	32.13577	14.4054	0.23791	0.05709	0.00307	0.0004	3.5428	0.75264	0.86	0.18	20.93
28	0.2969	33.11268	2.45842	2.14705	0.34483	0.10466	0.0142	92.94497	10.62652	3.94552	0.63463	0.03023	0.00655	2.33756	3.52565	0.57	0.86	150.88
29	0.3107	164.334	2.3086	0.28425	0.07443	0.54414	0.01057	97.84802	1.33859	0.52166	0.13662	0.01956	0.00138	3.5365	2.20132	0.86	0.53	61.63
30	0.3159	42.93086	1.58323	1.6799	0.20484	0.1252	0.01681	85.91497	11.14374	3.08605	0.37675	0.03782	0.00312	6.04982	4.79247	1.47	1.16	78.91
31	0.3186	33.84981	1.67188	3.14264	0.33498	0.10361	0.01061	89.76047	15.14158	5.77913	0.61738	0.04343	0.00522	3.47073	5.13655	0.84	1.25	148.81
32	0.3284	28.84539	0.36572	1.24945	0.06775	0.09049	0.00637	92.43443	6.44047	2.29458	0.12453	0.0303	0.00175	2.182	1.858	0.53	0.45	84.91
33	0.3323	21.86908	0.7187	3.95801	0.22532	0.05038	0.01629	66.6673	21.93338	7.28275	0.41575	0.01239	0.0025	7.30009	4.81084	1.77	1.17	66.10
34	0.3439	125.2117	1.33778	2.14356	0.0828	0.41679	0.00921	98.24378	1.93375	3.9391	0.15239	0.01205	0.00114	2.2018	2.42516	0.53	0.59	111.32
35	0.3543	2.21967	0.08492	1.68609	0.06053	-0.00102	0.00486	-20.0566	65.54322	3.09744	0.11134	0.00463	0.00135	2.63238	1.43966	0.64	0.35	54.69
36	0.3595	87.63284	1.54253	1.62083	0.10673	0.27444	0.01389	92.42053	4.41041	2.9774	0.19628	0.04122	0.00272	6.64747	3.87107	1.61	0.94	58.39
37	0.3752	2.06068	0.04618	0.09757	0.02891	0.0007	0.00296	9.81605	43.07898	0.17904	0.05305	0.00202	0.00067	1.83175	0.87617	0.44	0.21	47.73
38	0.3852	410.7025	5.16823	2.56318	0.07331	1.428	0.0231	102.7002	1.07777	4.71162	0.13499	0.04195	0.00214	-11.1091	4.43283	-2.7	1.08	-40.00
39	0.3905	12.67636	0.30208	1.66231	0.12006	0.03714	0.00983	85.70501	22.92954	3.05369	0.22081	0.021	0.00295	1.80997	2.90451	0.44	0.7	159.09
40	0.3961	252.7366	5.15286	1.77176	0.15519	0.87144	0.0194	101.8435	0.95542	3.255	0.28546	0.01513	0.00297	-4.66457	2.41728	-1.13	0.59	-52.21
41	0.4041	21.99523	0.41376	1.69907	0.12037	0.07052	0.00642	94.23071	8.46727	3.1213	0.22139	0.0291	0.0019	1.26878	1.86249	0.31	0.45	145.16
42	0.4131	10.32863	0.23478	0.44939	0.09778	0.01343	0.00481	38.18109	13.78388	0.82482	0.17952	0.01741	0.00237	6.36872	1.4286	1.55	0.35	22.58
43	0.4182	203.249	6.35968	1.81332	0.19244	0.67369	0.02504	97.88735	1.99964	3.33147	0.354	0.00852	0.00277	4.29882	4.07259	1.04	0.99	95.19
44	0.4218	46.1856	2.26045	2.22963	0.25154	0.15397	0.0175	98.17919	10.13007	4.09753	0.46299	0.03865	0.00408	0.84174	4.68337	0.2	1.14	570.00
45	0.4306	287.3095	7.24767	1.55932	0.1221	1.00209	0.02635	103.0317	0.87642	2.8643	0.22452	0.0216	0.00197	-8.71914	2.5213	-2.12	0.61	-28.77
46	0.4362	186.7955	5.41732	1.40633	0.18097	0.61627	0.02146	97.44423	1.89518	2.583	0.33271	0.01679	0.00244	4.77805	3.54666	1.16	0.86	74.14
47	0.4491	10.52018	0.12973	0.49293	0.07066	0.02459	0.00358	68.89093	10.0721	0.90478	0.12974	0.02092	0.0011	3.26463	1.0584	0.79	0.26	32.91
48	0.4552	8.44597	0.23152	1.69632	0.18154	0.02155	0.00866	73.98569	30.36271	3.11625	0.33389	0.01379	0.0021	2.19207	2.56026	0.53	0.62	116.98
49	0.4632	439.9772	10.40754	2.08875	0.13242	1.50068	0.03656	100.757	0.67659	3.83822	0.2437	0.04371	0.00245	-3.33515	2.97935	-0.81	0.72	-88.89
50	0.468	187.8953	6.07206	2.19867	0.18948	0.63923	0.02367	100.4495	1.84257	4.04053	0.34876	0.0416	0.00305	-0.84572	3.46686	-0.21	0.84	-400.00
51	0.4774	1.9747	0.08766	0.53236	0.05325	-0.00187	0.00548	-30.6737	83.29251	0.97717	0.09777	0.03608	0.00196	2.54257	1.62324	0.62	0.39	62.90
52	0.4856	102.1662	2.37469	1.89068	0.1033	0.32796	0.01326	94.73187	3.15159	3.47377	0.19006	0.01808	0.00197	5.38788	3.22643	1.31	0.78	59.54
53	0.4871	363.7324	51.73813	3.45778	0.67208	1.2118	0.18182	98.37767	4.71467	6.36009	1.23922	0.00239	0.01078	5.91489	17.21108	1.44	4.17	289.58
54	0.4936	81.46328	2.59736	0.73676	0.11552	0.2761	0.01235	100.1157	3.15835	1.35255	0.21218	0.00058	0.00223	-0.09427	2.5733	-0.02	0.62	-3100.00
55	0.5057	105.3467	1.80111	0.47894	0.05902	0.33745	0.00942	94.64356	2.11024	0.87908	0.10837	0.02076	0.00136	5.64315	2.22646	1.37	0.54	39.42
56	0.5124	112.6121	3.80392	2.94055	0.13711	0.35981	0.01477	94.22589	2.20988	5.40674	0.25263	0.00176	0.00238	6.51416	2.50339	1.58	0.61	38.61
57	0.5191	72.75628	2.03867	2.53906	0.11231	0.2451	0.01074	99.30143	3.3689	4.66719	0.20682	0.12971	0.00439	0.50896	2.45463	0.12	0.6	500.00
58	0.5338	150.0803	2.15496	0.24783	0.04458	0.51293	0.0104	100.9988	1.47367	0.45482	0.08182	0.01359	0.00114	-1.49894	2.21132	-0.36	0.54	-150.00
59	0.539	23.41441	0.88122	0.65145	0.12512	0.0766	0.01229	96.56243	15.11543	1.19586	0.22979	0.03716	0.00351	0.80424	3.53665	0.2	0.86	430.00
60	0.5699	10.24535	0.08332	0.23569	0.02964	0.02347	0.00212	67.69017	6.11974	0.43253	0.0544	0.00085	0.00045	3.30121	0.62604	0.8	0.15	18.75
61	0.5816	25.04953	0.38169	1.45938	0.08447	0.08385	0.00606	98.55687	7.00503	2.68053	0.1553	0.03845	0.00152	0.36144	1.75451	0.09	0.43	477.78
62	0.5999	33.73128	0.28279	1.4465	0.04727	0.11577	0.00494	101.156	4.24787	2.65684	0.08691	0.00239	0.00071	-0.38997	1.43306	-0.09	0.35	-388.89
63	0.6103	17.60046	0.35963	1.92557	0.09515	0.06707	0.00342	111.8897	5.29628	3.53796	0.17505	0.0146	0.00118	-2.09196	0.93222	-0.51	0.23	-45.10
64	0.6151	60.48734	1.57495	1.2419	0.10978	0.19868	0.01184	96.93787	5.22496	2.28071	0.20179	0.03308	0.00376	1.85292	3.16241	0.45	0.77	171.11
65	0.6275	8.9046	0.10627	0.41193	0.04669	0.02212	0.00411	73.27189	13.68017	0.75605	0.08572	0.01826	0.00126	2.37278	1.21511	0.58	0.29	50.00
66	0.6311	166.6596	5.73495	3.08594	0.20755	0.56972	0.03067	100.8814	4.19957	5.67464	0.38249	0.03528	0.00454	-1.47186	7.013	-0.36	1.7	-472.22
67	0.6364	28.38524	0.82288	1.29652	0.12927	0.08488	0.01375	88.07535	14.11319	3.28111	0.23762	0.03038	0.00372	3.3844	4.00734	0.82	0.97	118.29
68	0.6396	39.19458	1.45385	2.42906	0.29221	0.13318	0.01884	99.9738	13.72691	4.46446	0.53801	0.02091	0.00506	0.01028	5.38542	0	1.31	
69	0.6465	74.7623	1.2699	2.11127	0.11117	0.25957	0.01054	102.4021	3.79766	3.87968	0.20459	0.04902	0.00249	-1.79784	2.84228	-0.44	0.69	-156.82
70	0.6572	1.73416	0.09726	0.21002	0.06579	0.01748	0.00606	72.44224	25.20457	0.38541	0.12076	0.00431	0.00136	1.95812	1.79147	0.48	0.43	89.58
71	0.661	643.0716	19.02195	0.92905	0.22964	2.12539	0.07119	97.65707	1.56481	1								

107	0.9291	5.40747	0.08479	0.0409	0.04082	0.0065	0.00291	35.67354	15.96324	0.07505	0.0749	0.00189	0.00116	3.45943	0.86069	0.84	0.21	25.00
108	0.9341	201.979	5.9289	1.40779	0.20308	0.67535	0.02284	98.76263	1.68522	2.58568	0.37336	0.02203	0.00289	2.50135	3.40819	0.61	0.83	136.07
109	0.9405	6.82668	0.17181	1.12917	0.09793	0.00369	0.00508	14.68063	22.0911	2.07352	0.17998	0.00369	0.00176	5.80379	1.51037	1.41	0.37	26.24
110	0.9437	52.0321	2.17682	1.30251	0.26931	0.17378	0.01766	98.54385	9.16257	2.39212	0.49507	0.03629	0.00456	0.75793	4.76942	0.18	1.16	644.44
111	0.9488	154.2975	3.92393	1.37774	0.16924	0.50937	0.01686	97.49542	2.07482	2.53042	0.31113	0.00881	0.00236	3.86752	3.2058	0.94	0.78	82.98
112	0.9542	39.80772	1.04575	1.72822	0.14156	0.12766	0.01017	94.47473	7.14431	3.17491	0.26038	0.03968	0.00288	2.20053	2.84627	0.53	0.69	130.19
113	0.957	95.67645	3.47815	1.43141	0.38998	0.32002	0.02717	98.7462	7.95382	2.62911	0.717	0.03031	0.00564	1.20043	7.27091	0.29	1.76	606.90
114	0.9595	-1.3361	0.21982	1.67909	0.30912	-0.02195	0.02223	484.9838	486.3305	3.08456	0.56855	0.05204	0.00551	5.2642	6.57883	1.28	1.6	125.00
115	0.9629	25.83076	1.13197	1.57125	0.19467	0.06123	0.01251	69.62229	14.01354	2.88624	0.35799	0.02564	0.00254	7.84649	3.67789	1.9	0.88	46.32
116	0.9701	11.14412	0.29096	1.30804	0.10329	0.0271	0.00801	71.08983	21.21598	2.40229	0.18987	0.0012	0.00232	3.21618	2.36244	0.78	0.57	73.08
117	0.9866	3.41948	0.05059	0.06615	0.04131	-0.00123	0.00314	-10.8517	27.34484	0.12139	0.07581	0.00098	0.00083	3.75781	0.92853	0.91	0.23	25.27
118	0.9912	246.3503	8.69677	1.09858	0.18318	0.79952	0.03283	95.87865	2.02641	2.01731	0.33663	0.02133	0.0023	10.15961	5.00994	2.46	1.21	49.19
119	0.9946	7.6539	0.36502	2.11825	0.22206	0.00054	0.01141	-0.19512	44.23918	3.89252	0.40867	0.04515	0.00363	7.65057	3.39784	1.86	0.82	44.09
120	0.9971	12.15833	0.72803	2.13045	0.34687	-0.00566	0.01482	-15.2279	36.10672	3.91496	0.63838	0.01489	0.00731	13.99667	4.46215	3.39	1.08	31.86
121	1	15.78384	0.80127	1.20072	0.29548	0.02958	0.01593	54.8541	29.74964	2.20503	0.54309	0.01684	0.00474	7.1184	4.70625	1.73	1.14	65.90

Integrated 72.87173 0.19426 1.11287 0.01177 0.23817 0.00103 96.49204 0.33058 2.04357 0.02163 0.01806 0.00022 2.55728 0.24118 0.62 0.06 9.68

COPPER RIVER

Weighted average of J from standards = 1.347e-04 2.749e-06

Grain #	Cumulative 40Ar/39Ar 39Ar		37Ar/39Ar meas.		36Ar/39Ar meas.		% Atm. 40Ar	Ca/K	Cl/K	40*/39K		Age (Ma)	%error					
1	0.0059	103.3567	2.54175	0.32573	0.25628	0.34519	0.01768	98.69256	4.44582	0.59781	0.47045	0.02728	0.00416	1.35125	4.59512	0.33	1.12	339.39
2	0.0099	28.7127	1.27107	1.78412	0.39511	0.07614	0.02828	77.93331	28.93528	3.27774	0.7268	0.03692	0.00425	6.33738	8.31553	1.54	2.02	131.17
3	0.0186	12.00211	0.24411	0.5051	0.1819	0.02636	0.00877	64.70802	21.6216	0.92713	0.33399	0.00637	0.00188	4.22681	2.59184	1.03	0.63	61.17
4	0.0219	9.56318	0.61984	0.23342	0.60153	0.03946	0.02653	122.1145	82.03058	0.42837	1.10409	0.02344	0.00561	-2.10863	7.81986	-0.51	1.9	-372.55
5	0.029	87.60679	2.29391	1.12662	0.23462	0.28706	0.01491	96.7518	4.35408	2.06884	0.43119	0.01122	0.00232	2.84695	3.81723	0.69	0.93	134.78
6	0.0373	53.75545	1.31635	0.87539	0.18509	0.19669	0.01045	108.0487	5.1265	1.60721	0.34003	0.02471	0.00312	-4.3269	2.75687	-1.05	0.67	-63.81
7	0.0441	13.12991	0.46432	0.38568	0.21986	0.03383	0.01051	76.07262	23.62169	0.70786	0.40363	0.01588	0.00224	3.13539	3.09985	0.76	0.75	98.68
8	0.0593	58.47374	1.12629	0.65952	0.10688	0.20034	0.00866	101.2034	3.92877	1.2107	0.1963	0.0263	0.00148	-0.70364	2.29721	-0.17	0.56	-329.41
9	0.0606	892.1233	129.61193	1.4686	1.2078	2.93542	0.43541	97.22033	2.91164	2.69748	2.22075	0.07522	0.01705	24.823	26.253	6.02	6.35	105.48
10	0.072	59.63358	0.88277	0.48854	0.13352	0.19751	0.01039	97.85051	4.95499	0.89671	0.24516	0.0326	0.00187	1.28162	2.95463	0.31	0.72	232.26
11	0.0738	49.58366	5.00671	-0.36753	0.64858	0.12379	0.04643	73.87792	26.70305	-0.67418	1.18944	0.03596	0.01178	12.94116	13.30048	3.14	3.22	102.55
12	0.079	66.91206	3.33049	0.96574	0.2301	0.21192	0.01984	93.51341	7.44006	1.7732	0.42278	0.03748	0.00397	4.34135	4.98508	1.05	1.21	115.24
13	0.0907	20.01497	0.33954	0.65832	0.10652	0.06084	0.00767	89.68316	11.26516	1.20848	0.19563	0.01188	0.00148	2.06281	2.2532	0.5	0.55	110.00
14	0.0986	11.14111	0.40565	0.40216	0.15432	0.03624	0.01079	96.08801	28.52593	0.73812	0.28332	0.03298	0.00359	0.4348	3.17085	0.11	0.77	700.00
15	0.1056	34.70293	0.98849	0.93331	0.16491	0.08339	0.01182	70.85004	9.8832	1.71362	0.30299	0.0247	0.00335	10.1139	3.44318	2.45	0.83	33.88
16	0.1142	97.56185	2.65018	0.52075	0.13795	0.33009	0.01526	99.96487	3.75994	0.95586	0.2533	0.04037	0.00273	0.03428	3.66853	0.01	0.89	8900.00
17	0.1291	19.46455	0.32686	0.26435	0.07591	0.05884	0.00793	89.35928	11.97382	0.48513	0.13933	0.03568	0.00172	2.06839	2.32817	0.5	0.56	112.00
18	0.1388	11.23354	0.33438	0.58749	0.11951	0.03566	0.00947	93.61173	24.87962	1.07841	0.21947	0.03654	0.00194	0.71603	2.78911	0.17	0.68	400.00
19	0.1443	3.78878	0.25715	0.95909	0.21788	0.00596	0.01363	44.71302	107.1596	1.76099	0.40032	0.0337	0.00466	2.0797	4.03643	0.5	0.98	196.00
20	0.1498	50.46423	1.76076	0.55117	0.31351	0.1745	0.01798	102.1502	9.93858	1.01172	0.5757	0.03084	0.00384	-1.08484	5.01435	-0.26	1.22	-469.23
21	0.1724	1.53923	0.04205	0.50532	0.0526	0.00672	0.00574	128.7756	112.3211	0.92752	0.09658	0.01545	0.00101	-0.43453	1.69584	-0.11	0.41	-372.73
22	0.1814	115.0911	2.9419	1.38995	0.11579	0.35535	0.01814	91.16179	4.04264	2.55288	0.21289	0.02739	0.0034	10.17936	4.66442	2.47	1.13	45.75
23	0.1876	18.42211	0.83514	1.35712	0.18309	0.05748	0.02128	91.73626	33.94604	2.49251	0.33659	0.03478	0.00402	1.52136	6.25016	0.37	1.52	410.81
24	0.1928	30.18638	1.09062	1.41257	0.19281	0.08571	0.02664	83.60025	25.93177	2.59447	0.35449	0.01854	0.00451	4.95056	7.83046	1.2	1.9	158.33
25	0.1979	7.40759	0.35533	0.94611	0.27598	0.05356	0.02322	213.4775	92.82326	1.73715	0.50706	0.02988	0.00503	-8.37786	6.8493	-2.03	1.66	-81.77
26	0.2029	9.25911	0.44224	1.07538	0.30076	0.06268	0.03514	199.7369	112.1879	1.97467	0.55269	0.0198	0.00631	-9.21215	10.36757	-2.24	2.52	-112.50
27	0.2091	90.65142	3.46476	1.51579	0.2766	0.28025	0.0273	91.2459	8.198	2.78425	0.50861	0.0042	0.00448	7.94162	7.44429	1.93	1.81	93.78
28	0.2154	13.49455	0.51493	1.31701	0.19519	0.03832	0.02311	83.29766	50.63016	2.41879	0.35882	0.02516	0.00367	2.25104	6.8247	0.55	1.66	301.82
29	0.2334	178.4317	2.21798	0.28271	0.07051	0.61224	0.01392	101.3974	1.95442	0.51884	0.12942	0.02267	0.00157	-2.49344	3.48699	-0.61	0.85	-139.34
30	0.2437	7.94275	0.23807	1.17793	0.12911	0.0148	0.01235	54.02593	46.08741	2.16314	0.23729	0.01747	0.00269	3.64099	3.65222	0.88	0.89	101.14
31	0.2487	68.60022	2.98748	1.06307	0.39086	0.25456	0.02071	109.5745	7.54522	1.95206	0.71826	0.02637	0.00381	-6.57019	5.18528	-1.6	1.26	-78.75
32	0.2518	-2.43863	0.44724	1.14825	0.71509	-0.01947	0.03245	236.929	390.0171	2.10859	1.31422	0.02699	0.00702	3.38257	9.59865	0.82	2.33	284.15
33	0.2605	22.21263	0.63928	0.68506	0.27303	0.04912	0.0173	65.18282	22.98034	1.25759	0.50146	0.02415	0.00286	7.72721	5.10585	1.87	1.24	66.31
34	0.27	230.0952	6.90638	0.49772	0.17788	0.78685	0.02742	101.047	1.83654	0.91356	0.32661	0.02085	0.00273	-2.40962	4.22625	-0.59	1.03	-174.58
35	0.2736	87.64424	6.69962	1.09102	0.48804	0.32418	0.04771	109.2347	13.77407	2.00342	0.89686	0.03464	0.00709	-8.09177	12.09152	-1.97	2.94	-149.24
36	0.2794	131.7483	6.25512	1.1324	0.30006	0.41951	0.02672	94.04333	3.99854	2.07947	0.55144	0.03412	0.00542	8.75233	5.28468	1.91	1.28	67.02
37	0.2828	282.7526	19.67908	2.04713	0.53211	0.92711	0.07981	96.84104	4.91564	3.76163	0.97917	0.03953	0.00738	8.94405	13.93241	2.17	3.38	155.76
38	0.2911	97.78022	2.9496	1.36508	0.22995	0.32603	0.01848	98.44312	4.73641	2.50715	0.42274	0.01997	0.0029	1.52333	4.63474	0.37	1.12	302.70
39	0.2964	1.27551	0.22625	0.85741	0.32556	0.02735	0.0183	642.9983	447.7951	1.57417	0.59809	0.03634	0.00414	-6.76891	5.41305	-1.64	1.32	-80.49
40	0.3052	120.4463	2.78494	0.62086	0.19831	0.42186	0.02047	103.481	4.43859	1.13969	0.36419	0.03194	0.00269	-4.19352	5.34716	-1.02	1.3	-127.45
41	0.3147	0.11326	0.1039	0.49025	0.15255	-0.01281	0.01049	-45.79	29.6723	0.89985	0.2801	0.02491	0.00224	3.91174	3.10216	0.95	0.75	78.95
42	0.3214	3.6568	0.22354	0.69146	0.2264	0.01521	0.01577	122.3414	128.5374	1.26935	0.41583	0.03473	0.0033	-0.81074	4.6628	-0.2	1.13	-565.00
43	0.3262	8.62249	0.41684	0.75846	0.32449	0.00617	0.0205	20.50477	70.48888	1.39241	0.59604	0.03744	0.00494	6.83453	6.07015	1.66	1.47	88.55
44	0.3368	13.69549	0.31944	1.22747	0.14813	0.0186	0.00851	39.47383	18.38256	2.25419	0.27228	0.02726	0.00214	8.27857	5.22268	2.01	0.61	30.35
45	0.3458	7.78448	0.25468	0.8298	0.1481	0.00629	0.00886	23.07058	33.74814	1.52346	0.27207	0.03278	0.00224	5.96922	2.62679	1.45	0.64	44.14
46	0.3516	8.49747	0.34734	1.04682	0.273	0.0105	0.01744	35.62267	60.85317	1.92219	0.50166	0.01483	0.00319	5.45537	5.16259	1.32	1.25	94.70
47	0.3695	24.71157	0.35689	0.69387	0.0801	0.08947	0.00517	106.8841	6.02683	1.27379	1.4712	0.01651	0.00127	-1.69996	1.48799	-0.41	0.36	-87.80
48	0.3763	27.1525	1.04134	2.547	0.28727	0.06693	0.01348	72.14138	14.44081	4.68182	0.52901	0.05515	0.00407	7.56967	3.93667	1.84	0.95	51.63
49	0.3798	59.00021	4.11516	2.62767	0.45217	0.15423	0.0362	76.91853	17.32855	4.83038	0.83275	0.02515	0.00659	13.63658	10.28343	3.31	2.49	70.23
50	0.3883	57.82157	1.59059	0.44027	0.15251	0.16868	0.01187	86.18722	5.60855	0.80809	0.28002	0.03123	0.00259	7.98515	3.25165	1.94	0.79	47.72
51	0.3972	14.79422	0.38321	0.82299	0.19204	0.04628	0.01352	92.1015	26.97661	1.52365	0.35279	0.02403	0.00295	1.15672	3.98604	0.28	0.97	346.43
52	0.3996	124.5583	13.3639	3.44471	0.84255	0.33947	0.07204	80.37866	14.75984	6.52038	1.55373	0.05047	0.01196	24.57042	18.61895	5.95	4.5	75.63
53	0.4163	32.98158	0.56367	0.52165	0.1237	0.05165	0.00807	46.18293	7.19484	0.9575	0.22714	0.00293	0.00162	17.74028	2.39252	4.3	0.58	13.49
54	0.4262	17.95396	0.52888	0.9545	0.16181	0.03777	0.01044	61.83515	17.12343	1.75256	0.2973	0.03013	0.00281	6.84539	3.07925	1.66	0.75	45.18
55	0.4344	17.89497	0.60277	0.90317	0.25966	0.04105	0.016	67.45757	26.8636	1.65825	0.47705	0.04314	0.0036	5.81429	4.72233	1.41	1.15	81.56
56	0.4432	33.03139	0.95777	1.59592	0.22956	0.08847	0.01564	78.8224	13.82711	2.9316	0.42217	0.0168	0.00285	6.99686	4.57401			

69	0.5436	4.60329	0.18405	0.51105	0.14235	0.01784	0.00884	114.3501	57.1378	0.93804	0.26139	0.00918	0.00197	-0.65655	2.61317	-0.16	0.63	-393.75
70	0.5473	133.3618	10.359	0.80861	0.4032	0.43303	0.04189	95.9206	5.54528	1.48454	0.74066	0.04345	0.00798	5.44226	7.41077	1.32	1.8	136.36
71	0.5674	15.11949	0.20129	0.152	0.09253	0.03926	0.00773	76.79992	15.11108	0.27892	0.16982	0.00152	0.00074	3.50122	2.28122	0.85	0.55	64.71
72	0.5744	51.80171	1.85126	0.36841	0.21767	0.17365	0.0187	99.05448	10.07605	0.67615	0.3996	0.01916	0.00304	0.48964	5.21803	0.12	1.27	1058.33
73	0.5785	45.08255	2.81353	1.89078	0.3524	0.114	0.03236	74.42653	20.71161	3.47396	0.64834	0.00581	0.00464	11.53699	9.37253	2.8	2.27	81.07
74	0.587	2.28876	0.12317	0.29418	0.17708	0.01492	0.01518	194.0249	198.6541	0.53989	0.32506	0.00182	0.00169	-2.12452	4.48548	-0.52	1.09	-209.62
75	0.5901	3.55316	0.47561	0.12056	0.48747	0.00601	0.04362	50.15928	365.8638	0.22124	0.8946	0.02206	0.00687	1.75627	12.89658	0.43	3.13	727.91
76	0.5959	66.70062	2.77827	0.62922	0.36049	0.21735	0.02264	96.25676	9.21764	1.15505	0.66204	0.03144	0.00536	2.49676	6.14966	0.61	1.49	244.26
77	0.6039	8.19742	0.29279	0.1652	0.18868	0.01121	0.01398	39.38887	50.58054	2.13973	0.34677	0.01477	0.00257	4.95464	4.13959	1.2	1	83.33
78	0.6152	3.78604	0.11742	1.41571	0.12599	0.00737	0.01044	54.8644	82.14258	2.60022	0.23165	0.0069	0.00161	1.69716	3.08967	0.41	0.75	182.93
79	0.6189	5.8188	0.41621	0.14586	0.35308	0.00864	0.03128	43.87167	159.6758	0.26766	0.64799	0.02791	0.00627	3.24966	9.24905	0.79	2.24	283.54
80	0.6277	481.2075	14.39385	0.1899	0.14144	1.60748	0.05229	98.7151	1.28927	0.34849	0.2596	0.02921	0.00433	6.18348	6.20904	1.5	1.51	100.67
81	0.6333	4.79621	0.35517	0.71853	0.3707	-0.00716	0.02268	-45.6432	140.583	1.31907	0.68088	0.03634	0.00736	6.94564	6.71812	1.69	1.63	96.45
82	0.6395	207.9935	10.66467	2.5569	0.33609	0.67386	0.04409	95.64947	3.89927	4.70004	0.61891	0.02109	0.0066	9.0639	8.13794	2.2	1.97	89.55
83	0.6446	3.85054	0.38483	0.89207	0.43941	-0.01887	0.02593	-147.878	200.5272	1.63787	0.80727	0.03891	0.00821	9.47703	7.68972	2.3	1.86	80.87
84	0.6494	0.80826	0.58309	1.17028	0.40868	0.02138	0.02657	77.20013	97.35178	2.14908	0.75111	0.01894	0.00863	1.83887	7.85455	0.45	1.91	424.44
85	0.6531	179.4411	15.54715	0.43074	0.54448	0.61288	0.0631	100.9244	5.63125	0.79059	0.99966	0.02786	0.01123	-1.65898	10.10701	-0.4	2.45	-612.50
86	0.6566	-5.62193	0.63628	0.86068	0.55208	-0.02577	0.04185	135.9799	218.6853	1.58018	1.01422	0.02897	0.01145	2.03468	12.36307	0.49	3	612.24
87	0.656	59.22817	31.27112	2.2733	3.45889	0.36024	0.26688	179.5052	93.94032	4.17791	6.36701	0.02688	0.06671	-47.1416	60.90125	-11.48	14.88	-129.62
88	0.6581	-13.4451	2.20463	0.61375	1.01865	-0.17072	0.06744	374.7639	136.2561	1.12664	1.87071	0.03572	0.0195	37.03996	19.18979	8.97	4.64	51.73
89	0.6633	83.68118	4.79869	0.23704	0.38129	0.24868	0.0287	87.82246	8.81197	0.43501	0.69984	0.02762	0.00798	10.1884	7.39729	2.47	1.79	72.47
90	0.6668	31.71324	2.6361	0.66786	0.59605	0.0554	0.03386	51.46666	31.2781	1.226	1.09471	0.04127	0.0114	15.39308	10.00692	3.73	2.42	64.88
91	0.6714	40.00605	2.36972	1.60048	0.34694	0.11141	0.01981	82.02173	13.8131	2.93999	0.63803	0.01911	0.00609	7.1952	5.54563	1.75	1.34	76.57
92	0.6793	1.25347	0.15089	0.72272	0.17963	-0.01338	0.01066	-327.94	259.7264	1.32677	0.32993	0.01791	0.00327	5.23976	3.1574	1.27	0.77	60.63
93	0.6849	8.60249	0.55154	0.99853	0.23531	0.03805	0.01866	130.1981	63.83682	1.83345	0.43237	0.01715	0.00603	-2.59065	5.47749	-0.63	1.33	-211.11
94	0.702	8.65684	0.16044	0.18319	0.07989	0.00454	0.00469	15.35991	16.07806	0.33618	0.14663	0.00131	0.00166	7.30297	1.39436	1.77	0.34	19.21
95	0.7116	7.3644	0.2613	0.53216	0.16564	0.01227	0.00819	48.82119	32.96745	0.97682	0.30416	0.02259	0.00322	3.75523	2.4235	0.91	0.59	64.84
96	0.7188	131.6933	6.05665	1.01311	0.21412	0.40158	0.02294	90.06449	3.07279	1.86024	0.39344	0.01477	0.0051	13.09082	4.09644	3.17	0.99	31.23
97	0.7331	138.7467	3.1757	0.90702	0.12181	0.47019	0.01343	100.1076	1.75168	1.66532	0.22379	0.01924	0.00251	-0.14929	2.4314	-0.04	0.59	-1475.00
98	0.7396	68.82569	3.2876	0.98828	0.20787	0.21694	0.01514	93.06516	4.76489	1.81462	0.38195	0.03465	0.00434	4.77423	3.28959	1.16	0.8	68.97
99	0.7452	1602.271	85.24481	0.22432	0.25225	5.51801	0.29555	101.767	0.68751	0.41165	0.463	0.01888	0.00634	-28.3162	11.10421	-6.89	2.71	-39.33
100	0.7543	7.12476	0.29254	0.15964	0.17882	0.00472	0.01032	19.45288	42.96795	0.29295	0.32818	0.00203	0.00313	5.71552	3.05995	1.39	0.74	53.24
101	0.7632	85.66933	1.88677	0.38729	0.24087	0.30316	0.01484	104.5675	4.58406	0.71081	0.4422	0.02479	0.00232	-3.91269	3.92745	-0.95	0.95	-100.00
102	0.7687	100.3968	3.61926	2.26664	0.35916	0.32988	0.0223	96.9357	5.5608	4.16564	0.66112	0.02211	0.00441	3.08048	5.59164	0.75	1.36	181.33
103	0.7802	6.56826	0.2074	0.39659	0.18692	0.01466	0.0095	65.75577	42.90011	0.72788	0.34316	0.00986	0.0022	2.23971	2.80791	0.54	0.68	125.93
104	0.8176	9.32296	0.09825	0.25151	0.05626	0.01146	0.00274	36.22944	8.71082	0.46158	0.10326	-0.00002	0.0007	5.92742	0.81241	1.44	0.2	13.89
105	0.8425	3.40741	0.06964	0.34229	0.08008	0.00378	0.00649	32.23524	36.6987	0.62821	0.14701	0.00164	0.00086	2.28945	1.24124	0.56	0.3	53.57
106	0.8595	3.29358	0.07165	0.14788	0.11048	0.00445	0.00462	39.93308	59.97445	0.27137	0.20275	0.00058	0.00141	1.96072	1.95863	0.48	0.48	100.00
107	0.8645	12.92364	0.603	0.98651	0.37535	0.04513	0.02106	102.8047	48.10057	1.81137	0.68968	0.00992	0.00438	-0.36188	6.20624	-0.09	1.51	-1677.78
108	0.8717	3.76455	0.19815	0.89357	0.28151	0.01631	0.01483	127.074	117.4315	1.64061	0.51719	0.00135	0.00318	-1.01182	4.38695	-0.25	1.07	-428.00
109	0.8826	5.8516	0.1552	0.50047	0.20376	0.01334	0.00996	67.00053	50.54598	0.91861	0.37414	0.02582	0.00191	1.92188	2.94487	0.47	0.71	151.06
110	0.8867	29.26171	1.83952	1.39412	0.53015	0.1094	0.02976	110.2012	29.32101	2.56054	0.97467	0.02664	0.00602	-2.98497	8.58028	-0.72	2.08	-288.89
111	0.9161	10.15962	0.13936	0.10425	0.04848	0.01464	0.00305	42.61426	8.87507	0.1913	0.08897	0.00102	0.00092	5.81356	0.90334	1.41	0.22	15.60
112	0.9294	159.232	3.97841	0.79805	0.12751	0.5372	0.01687	99.66997	1.94652	1.46513	0.23422	0.01968	0.00204	0.52572	3.10096	0.13	0.75	576.92
113	0.9391	244.6505	7.93427	0.82756	0.17434	0.80856	0.03077	97.646	1.97524	1.51935	0.32027	0.02115	0.00304	5.76173	4.84018	1.4	1.17	83.57
114	0.953	6.1931	0.19569	0.46915	0.09741	0.01818	0.00597	86.54912	28.58925	0.86112	0.17885	0.00907	0.00188	0.82931	1.7639	0.2	0.43	215.00
115	0.9596	31.3518	1.3612	1.38121	0.22553	0.06014	0.01521	56.37005	14.15376	2.53681	0.41463	0.00914	0.00394	13.67917	4.48256	3.32	1.09	32.83
116	0.9641	120.6655	6.95523	0.89069	0.31	0.39116	0.03205	95.75378	5.59058	1.63532	0.56953	0.02563	0.00653	5.12569	6.75575	1.24	1.64	132.26
117	0.9744	21.16434	0.70301	2.49179	0.17375	0.05295	0.00911	73.06811	12.52124	4.58016	0.31993	0.00592	0.00274	5.70201	2.65973	1.38	0.65	47.10
118	0.9784	13.76417	0.92672	0.30855	0.37369	0.05154	0.02246	110.7001	47.92997	0.56627	0.68597	0.03116	0.00646	-1.46992	6.58255	-0.36	1.6	-444.44
119	0.9882	35.09228	1.12089	0.253	0.15327	0.11228	0.01164	94.56911	9.95915	0.4643	0.28133	0.02539	0.00311	1.90455	3.28324	0.46	0.8	173.91
120	0.9972	7.73765	0.27987	0.84097	0.18738	0.01961	0.00928	74.27116	35.52564	1.54398	0.34422	0.00813	0.00272	1.98435	2.74264	0.48	0.67	139.58
121	1	53.46829	4.03482	2.27495	0.62782	0.14857	0.05186	81.80206	28.01139	4.18093	1.15568	0.03432	0.01228	9.74038	15.01271	2.36	3.64	154.24

Integrated	59.7706	0.17525	0.76663	0.01827	0.19069	0.0014	94.21872	0.63938	1.40742	0.03356	0.01949	0.00029	3.45566	0.38243	0.84	0.09	10.71
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NABESNA RIVER

Weighted average of J from standards = 9.109e-05 +/- 5.287e-07

Grain #	Cumulative 40Ar/39Ar +/- 39Ar meas.	37Ar/39Ar +/- meas.	36Ar/39Ar +/- meas.	% Atm. 40Ar +/-	Ca/K +/-	Cl/K +/-	40*/39K +/-	Age (Ma)	+/- (Ma)	%error
1	0.0053	110.2699	0.90841	1.8432	0.03063	0.27872	0.00617	74.57324	1.54794	3.38643</

31	0.2608	820.6472	6.07638	2.2551	0.03594	2.65793	0.02467	95.68802	0.5386	4.14439	0.06615	0.04174	0.00128	35.44134	4.43578	5.81	0.73	12.56
32	0.2631	3900.736	61.01218	5.46387	0.10538	12.6934	0.20148	96.14798	0.26558	10.06429	0.19486	0.00271	0.00547	150.8382	10.67499	24.59	1.73	7.04
33	0.2674	60.95549	0.55697	1.97732	0.03192	0.08622	0.0047	41.55137	2.24868	6.33319	0.05874	0.00475	0.00088	35.66011	1.41148	5.84	0.23	3.94
34	0.2712	1032.896	10.82656	4.52892	0.06384	3.30592	0.03885	94.54509	0.50528	8.3366	0.11789	0.01026	0.00178	56.52268	5.27105	9.25	0.86	9.30
35	0.2757	37.03631	0.22802	2.6349	0.03085	0.10285	0.00379	81.53854	2.98583	4.84369	0.05681	0.07581	0.00173	6.84471	1.10811	1.12	0.18	16.07
36	0.2888	463.4722	2.28032	0.56478	0.00701	1.50991	0.00946	96.26466	0.37772	1.0367	0.01287	0.01415	0.00048	17.31808	1.75403	2.84	0.29	10.21
37	0.2958	201.611	1.39452	1.24838	0.02447	0.58291	0.00821	85.39885	1.07602	2.29262	0.04497	0.01799	0.00088	29.45916	2.18975	4.83	0.36	7.45
38	0.3016	40.30892	0.22156	0.96329	0.02372	0.05371	0.00396	39.20397	2.89971	1.76871	0.04359	0.00711	0.00063	24.50485	1.17938	4.02	0.19	4.73
39	0.3108	31.0818	0.17961	0.23008	0.01327	0.00441	0.00248	4.13835	2.36202	0.42224	0.02436	-0.00051	0.00035	29.7719	1.75386	4.88	0.12	2.46
40	0.3126	2292.312	39.345	8.9694	0.17515	3.36728	0.06315	43.37564	0.32909	16.56252	0.32548	0.01475	0.0024	1306.265	23.81678	202.6	3.49	1.72
41	0.3187	23.37521	0.12674	0.56331	0.02079	0.05368	0.00388	67.74482	4.90678	1.034	0.03819	0.02381	0.00072	7.53314	1.14783	1.24	0.19	15.32
42	0.325	73.74489	0.49357	0.452	0.02056	0.14053	0.0037	56.28326	1.44304	0.82963	0.03775	0.00328	0.00053	32.23617	1.09157	5.28	0.18	3.41
43	0.3277	583.2794	8.61753	3.8744	0.06804	1.88454	0.0298	95.42429	0.59715	7.1285	0.12554	0.00543	0.00115	26.76105	3.53062	4.39	0.58	13.21
44	0.3321	30.94589	0.21327	0.96836	0.02545	0.08763	0.00418	83.50195	3.95383	1.77802	0.04676	0.00346	0.00056	5.10406	1.22401	0.84	0.2	23.81
45	0.3508	221.5779	1.01542	0.12691	0.0068	0.63583	0.00394	84.80146	0.35748	0.23289	0.01248	0.00669	0.00022	33.6751	0.8083	5.52	0.13	2.36
46	0.3565	149.0512	0.96252	0.77451	0.02619	0.40758	0.00453	80.77727	0.76357	1.42189	0.04811	0.00521	0.00068	28.66169	1.16477	4.7	0.19	4.04
47	0.3687	60.56856	0.21912	1.18861	0.01094	0.17241	0.00187	83.99412	0.90891	2.18277	0.0201	0.02334	0.00042	9.69792	0.55711	1.59	0.09	5.66
48	0.3731	3.46365	0.06057	1.04797	0.08002	0.00673	0.00319	55.35985	27.43161	1.92431	0.14704	0.04101	0.0011	1.53407	0.94399	0.25	0.15	60.00
49	0.3964	148.4206	0.46685	0.04046	0.00492	0.09395	0.00115	18.70676	0.22066	0.07425	0.00903	0.01239	0.0002	120.6352	0.50242	19.69	0.08	0.41
50	0.3983	795.2697	7.71492	16.61153	0.18526	0.65005	0.01734	23.98287	0.60528	30.84168	0.34804	0.01519	0.00207	611.6949	7.81059	97.71	1.21	1.24
51	0.4008	183.7978	1.64336	1.61929	0.04938	0.53792	0.01017	86.42465	1.46301	2.97457	0.09081	0.01383	0.00138	24.97573	2.7071	4.1	0.44	10.73
52	0.4074	22.48321	0.10062	0.45905	0.01688	0.01273	0.00235	16.57954	3.09598	0.84256	0.03099	0.00321	0.00045	18.73691	0.70075	3.07	0.11	3.58
53	0.4176	177.1467	0.86249	0.64255	0.01657	0.49604	0.00518	82.72936	0.76619	1.17953	0.03042	0.01927	0.00053	30.60311	1.36643	5.02	0.22	4.38
54	0.4235	108.668	0.91128	1.34587	0.02562	0.31016	0.00406	84.26133	0.87816	2.47183	0.04709	0.0157	0.00054	17.11449	0.9717	2.81	0.16	5.69
55	0.4297	41.92899	0.19977	1.40507	0.08049	0.02054	0.00361	56.4914	2.53387	2.58067	0.03777	0.02379	0.00076	18.24791	1.06744	2.99	0.17	5.69
56	0.4367	17.80415	0.08769	1.42824	0.02377	0.04449	0.00263	73.29693	4.36575	2.62327	0.0437	0.05262	0.00066	4.75112	0.77762	0.78	0.13	16.67
57	0.4523	163.2442	0.74754	0.38553	0.00746	0.11099	0.00154	20.07476	0.26297	0.70759	0.01369	0.05712	0.00041	130.4851	0.73703	21.29	0.12	0.56
58	0.4561	366.1737	3.49173	2.54541	0.04421	1.16538	0.01296	93.99611	0.95987	4.67888	0.08142	0.0234	0.00144	22.02246	2.2087	3.61	0.36	9.97
59	0.4618	50.50115	0.48346	1.97915	0.02913	0.10224	0.00431	59.53868	2.46115	3.63655	0.0536	0.02833	0.0007	20.45002	1.26107	3.35	0.21	6.27
60	0.4714	62.32913	0.38948	0.25004	0.01295	0.0814	0.00246	38.57565	1.14469	0.45888	0.02378	0.00166	0.00037	38.27378	0.75677	6.27	0.12	1.91
61	0.4776	78.67879	0.3488	2.04147	0.02324	0.2365	0.0049	88.6422	1.82424	3.75122	0.04277	0.03355	0.00072	8.94571	1.43979	1.47	0.24	16.33
62	0.4893	10.53301	0.06277	0.72844	0.01031	0.01328	0.00413	36.80231	4.0057	1.33728	0.01893	0.00989	0.00035	6.64127	0.42301	1.09	0.07	6.42
63	0.4941	2.09696	0.05324	0.93195	0.02872	0.00099	0.00451	10.38941	64.42142	1.71112	0.05276	0.00099	0.00099	1.85372	1.33367	0.3	0.22	73.33
64	0.5038	36.81345	0.21059	0.99704	0.01439	0.03813	0.00182	30.4067	1.45308	1.83072	0.02644	0.0215	0.00056	25.61707	0.55659	4.2	0.09	2.14
65	0.5116	6.59542	0.05737	0.98234	0.01793	0.00484	0.00214	20.53335	9.64348	1.80371	0.03294	0.0397	0.00066	5.2212	0.63539	0.86	0.1	11.63
66	0.5144	94.58303	0.92249	3.20967	0.05727	0.19598	0.0076	60.96952	2.30677	5.90268	0.10556	0.03837	0.00131	36.98849	2.22033	6.06	0.36	5.94
67	0.5182	17.34618	0.14187	0.92489	0.03847	0.03687	0.00552	62.47108	9.40526	1.69816	0.03698	0.02284	0.00113	6.50294	1.63079	1.07	0.27	25.23
68	0.5188	582.3257	22.44223	0.38557	0.43222	1.7975	0.07859	91.08535	1.90565	17.33614	0.80669	0.02714	0.005	52.25601	11.36575	8.56	1.86	21.73
69	0.5296	36.75673	0.18369	0.12994	0.01239	0.03697	0.0021	29.71996	1.68151	0.23844	0.02274	0.00003	0.00044	25.81414	0.63248	4.23	0.1	2.36
70	0.5482	41.54066	0.11856	0.03248	0.00607	0.06845	0.00118	48.72131	0.83624	0.0596	0.01114	0.00034	0.00016	21.28676	0.35728	3.49	0.06	1.72
71	0.5659	26.13794	0.19462	0.15953	0.00698	0.0004	0.00117	0.39715	1.32123	0.29275	0.01282	0.00136	0.00018	26.00748	0.39578	4.26	0.06	1.41
72	0.5697	65.12334	0.61035	0.03669	0.03364	0.10952	0.00535	49.71113	2.38413	0.06732	0.06173	-0.00056	0.00091	32.7357	1.58365	5.37	0.26	4.84
73	0.5743	283.0642	1.92864	2.53419	0.03208	0.87019	0.01286	90.77808	1.2242	4.65822	0.05908	0.01754	0.00122	26.148	3.48513	4.29	0.57	13.29
74	0.5933	952.4906	3.92772	0.56556	0.00798	0.14086	0.00124	4.36516	0.03412	1.03814	0.01465	0.00101	0.0002	911.2484	3.77498	143.7	0.57	0.40
75	0.6033	137.651	0.68371	0.50964	0.0139	0.38173	0.00484	81.93468	0.97328	0.93546	0.02553	0.00422	0.00039	24.87068	1.35061	4.08	0.22	5.39
76	0.6057	170.475	2.44473	1.39393	0.05213	0.1775	0.00788	30.70637	1.29438	2.56018	0.09584	0.02065	0.00114	118.2242	2.78967	19.3	0.45	2.33
77	0.6111	12.07893	0.08927	0.2118	0.02791	0.00665	0.00233	16.17058	5.71913	0.38868	0.05122	0.03743	0.00088	10.10232	0.69367	1.66	0.11	6.63
78	0.6152	44.62502	0.3645	0.35165	0.02809	0.05022	0.00398	33.20958	2.62178	0.64539	0.05156	0.00111	0.00078	29.79281	1.19569	4.88	0.2	4.10
79	0.6208	49.1718	0.41223	0.75263	0.04036	0.07668	0.00356	45.98446	2.11049	1.38171	0.07413	0.00302	0.00087	26.5585	1.06308	4.35	0.17	3.91
80	0.6305	13.1062	0.06579	1.33013	0.02431	0.03442	0.00173	76.94311	3.90689	2.44289	0.04668	0.00909	0.00044	3.01788	0.5119	0.5	0.08	16.00
81	0.6374	17.74854	0.11326	1.33842	0.02255	0.04686	0.00265	77.53091	4.38895	2.45814	0.04146	0.06467	0.00098	3.98503	0.77913	0.65	0.13	20.00
82	0.6486	279.5663	1.75485	1.07208	0.01776	0.90655	0.00701	95.80037	0.43588	1.96861	0.03264	0.0253	0.00057	11.74839	1.22205	1.93	0.2	10.36
83	0.6708	45.25353	0.20676	0.0594	0.00642	0.05425	0.00101	35.43647	0.64221	0.109	0.01178	0.00029	0.0002	29.19933	0.32343	4.79	0.05	1.04
84	0.6892	50.20786	0.22149	0.20781	0.00755	0.08567	0.00134	50.41931	0.77154	0.38135	0.01386	0.00063	0.00027	24.88233	0.40884	4.08	0.07	1.72
85	0.701	72.24457	0.30655	0.12066	0.00888	0.13673	0.00182	55.93746	0.73023	0.22142	0.0163	0.00032	0.00042	31.82242	0.55657	5.22	0.09	1.72
86	0.7286	39.84457	0.11914	0.06082	0.00392	0.02568	0.00077	19.04607	0.57226	0.1116	0.0072	0.00056	0.00021	32.23309	0.25192	5.28	0.04	0.76
87	0.7458	87.26481	0.31602	0.01013	0.00676	0.21118	0.00155	71.53451										

Integrated 135.5701 0.08784 0.74679 0.00168 0.28415 0.00039 61.9048 0.07531 1.37097 0.00309 0.01183 0.00005 51.66164 0.10851 8.46 0.05 0.59

MONTE CRISTO CREEK

Weighted average of J from standards = 9.588e-05 +/- 4.822e-07

Grain #	Cumulative 40Ar/39Ar +/- meas.	37Ar/39Ar +/- meas.	36Ar/39Ar +/- meas.	% Atm. 40Ar	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age (Ma)	+/- (Ma)	%error	
1	0.0135 77.92563	1.06647 2.652	0.04833 0.22057	0.00854	83.39263	3.04346	4.87519	0.08901	0.00747	0.00125	12.96075	2.38394	2.24	0.41	18.30
2	0.0307 8.62804	0.08088 1.80345	0.0306 0.00005	0.00532	-1.54188	18.27403	3.3133	0.05629	0.03475	0.00205	8.74209	1.5754	1.51	0.27	17.88
3	0.0432 17.7033	0.17791 3.80195	0.06842 0.03844	0.00621	62.49612	10.36524	6.99483	0.12622	0.04664	0.00139	6.64616	1.83879	1.15	0.32	27.83
4	0.0543 33.16158	0.43747 1.7471	0.04582 0.08391	0.01411	74.40324	12.55185	3.20965	0.08427	0.0329	0.00146	8.49117	4.16575	1.47	0.72	48.98
5	0.0586 71.63528	2.44036 7.20653	0.29751 0.21657	0.02181	88.54446	4.848372	13.29062	0.55149	0.03168	0.00354	8.24478	6.11375	1.42	1.06	74.65
6	0.0795 8.36079	0.06007 1.10804	0.02611 0.0017	0.00356	4.93143	12.63757	2.0347	0.04799	0.04071	0.00102	7.92648	1.05528	1.37	0.18	13.14
7	0.0877 75.51036	1.09295 7.7603	0.13626 0.23106	0.0125	89.60965	4.72009	14.31754	0.25279	0.08808	0.00248	7.88594	3.58472	1.36	0.62	45.59
8	0.1028 217.1525	2.67947 7.5569	0.11329 0.70756	0.01178	96.07848	1.08477	10.60624	0.20957	0.03629	0.00187	8.54929	2.36812	1.48	0.41	27.70
9	0.1145 -10.9317	0.19199 1.71692	0.04282 -0.05662	0.00847	153.9191	22.74226	3.15413	0.07876	0.03746	0.00127	5.91746	2.49549	1.02	0.43	42.16
10	0.1246 -9.24927	0.17088 1.59576	0.04808 -0.05234	0.00973	168.0908	30.95945	2.93131	0.08843	0.03866	0.00194	6.32523	2.87397	1.09	0.5	45.87
11	0.1246 3725.536	13947.732 0.81037	10.61525 9.3366	35.10837	74.05435	26.05653	1.48778	19.49984	-0.38673	1.54424	967.1604	3751.0623	159.8	593.1	371.15
12	0.1317 -18.3052	0.33146 1.44912	0.05059 -0.08125	0.01409	131.6044	22.62422	2.66165	0.09302	0.00871	0.00162	5.80056	4.15186	1	0.72	72.00
13	0.1425 -12.1858	0.17397 1.17474	0.03593 -0.06591	0.00851	160.2294	20.5544	2.15727	0.06604	0.04048	0.00223	7.36339	2.51131	1.27	0.43	33.86
14	0.1424 14.41542	25.71683 1.1119	3.87075 -0.84525	1.932	-1736.89	3497.151	2.04178	7.11347	-0.01059	0.22939	264.4577	585.79939	45.12	98.71	218.77
15	0.1511 1.492	0.1362 1.81877	0.0681 -0.04853	0.01432	-990.968	302.6593	3.34148	0.12528	0.01058	0.00159	15.97418	4.24174	2.76	0.73	26.45
16	0.1641 35.79676	0.4898 2.25638	0.06513 -0.02839	0.00742	-23.9781	6.12038	4.14676	0.11989	0.00653	0.001	44.41416	2.27164	7.66	0.39	5.09
17	0.1709 27.34389	0.50632 2.2221	0.06593 0.06683	0.01761	71.63424	19.01479	4.08365	0.12136	0.00838	0.0017	7.76007	5.20468	1.34	0.9	67.16
18	0.1741 1317.839	30.45236 11.38511	0.34202 4.37182	0.11264	97.96073	1.12475	21.05944	0.63778	0.11024	0.0065	27.09157	14.95768	4.67	2.58	55.25
19	0.1801 8.50493	0.17726 1.99684	0.07014 -0.02108	0.01369	-75.4477	47.7324	3.6691	0.12906	0.03824	0.00252	14.89067	4.05552	2.57	0.7	27.24
20	0.188 49.35883	0.63572 2.09569	0.08204 0.12845	0.01202	76.59867	7.14352	3.85101	0.15098	0.03227	0.00306	11.56079	3.53413	2	0.61	30.50
21	0.1936 166.1621	4.69345 4.411	0.16198 0.51165	0.02754	90.7892	4.18071	8.11887	0.29906	0.04509	0.00412	15.34996	6.98263	2.65	1.2	45.28
22	0.1977 13.45401	0.37888 6.45365	0.21816 0.00592	0.01631	9.0579	35.90239	11.89577	0.40396	0.04004	0.00288	12.26437	4.85496	2.12	0.84	39.62
23	0.2023 360.7465	8.50825 5.22626	0.16452 1.15834	0.03616	94.77237	1.95467	9.62499	0.30411	0.03726	0.00246	18.92682	7.09401	3.27	1.22	37.31
24	0.2202 10.12487	0.10984 1.12792	0.04037 0.00044	0.00439	0.37136	12.85058	2.07122	0.07419	0.02658	0.00076	10.06572	1.30296	1.74	0.22	12.64
25	0.2256 9.51952	0.32831 1.60204	0.0884 0.01952	0.00891	59.39027	27.69105	2.94286	0.16257	0.02458	0.00239	3.85817	2.63686	0.67	0.46	68.66
26	0.2431 20.80152	0.31824 0.19764	0.02136 0.02104	0.00461	29.85319	6.53859	0.36269	0.0392	0.00458	0.00078	14.5728	1.37744	2.52	0.24	9.52
27	0.2461 689.2406	22.73943 6.68047	0.26991 2.26253	0.09303	96.96211	2.38245	12.31586	0.49996	0.05043	0.0052	21.28599	16.51354	3.67	2.85	77.66
28	0.252 18.15158	0.48403 2.78805	0.116 0.01804	0.01255	28.14408	20.45951	5.12577	0.21368	0.00745	0.00262	13.04737	3.73259	2.25	0.64	28.44
29	0.2567 8.73685	0.35866 1.45481	0.11102 -0.02292	0.013	-79.1498	44.05294	2.67213	0.20412	0.04236	0.00334	15.61493	3.88578	2.7	0.67	24.81
30	0.2592 102.2197	4.29644 2.34662	0.17273 0.03416	0.04747	90.0425	4.31288	0.31798	0.04871	0.00553	0.156809	9.24862	2.71	1.6	59.04	
31	0.2669 113.2419	1.48034 1.0716	0.05851 0.31735	0.01755	82.75567	4.4604	1.96773	0.10751	0.02188	0.00201	19.53747	5.06238	3.37	0.87	25.82
32	0.276 301.0153	6.89789 7.89514	0.19114 0.97803	0.02907	95.80396	1.82946	14.56772	0.35465	0.07256	0.00534	12.70029	5.54653	2.19	0.96	43.84
33	0.2839 1145.747	19.89205 5.15868	0.13017 0.84502	0.0719	99.13254	0.70618	9.50008	0.24059	0.00908	0.0037	9.97497	8.12401	1.72	1.4	81.40
34	0.2941 24.50238	0.31032 1.13649	0.03645 0.00402	0.00796	4.46646	9.61489	2.08698	0.06699	0.00277	0.00127	23.39842	2.37392	4.04	0.41	10.15
35	0.3092 31.02026	0.53937 1.03759	0.04792 0.05099	0.00694	48.3394	6.56588	1.90524	0.08805	0.00233	0.00091	16.02166	2.05638	2.77	0.35	12.64
36	0.3146 80.04374	1.1787 4.11928	0.10598 0.24529	0.01563	90.16363	5.62542	7.58037	0.1956	0.04706	0.00291	7.89345	4.51648	1.36	0.78	57.35
37	0.3202 532.0438	13.53468 7.90537	0.24333 1.6905	0.05144	93.77377	1.5711	14.58671	0.4515	0.07676	0.00323	33.31042	8.44989	5.75	1.46	25.39
38	0.3279 69.46782	1.4316 5.21297	0.13243 0.19312	0.01365	81.56447	5.56305	9.60042	0.24479	0.02969	0.00281	12.84861	3.88717	2.22	0.67	30.18
39	0.3315 186.9973	3.07739 5.10926	0.18143 0.6072	0.03464	95.74243	5.24969	9.40873	0.33532	0.03973	0.00346	7.98911	9.85224	1.38	1.7	123.19
40	0.3422 356.7637	4.76953 4.31487	0.09412 1.12764	0.02824	93.30852	1.98335	7.9414	0.17375	0.04545	0.00238	23.94375	7.10555	4.13	1.22	29.54
41	0.3443 51.57326	2.28428 11.77758	0.58746 0.14461	0.02376	81.01927	13.1562	21.79149	1.09607	0.03024	0.00752	9.86545	6.85706	1.7	1.18	69.41
42	0.3465 35.3624	1.73256 3.30261	0.27986 0.08342	0.02961	68.99739	24.55581	6.074	0.51592	0.03171	0.00959	10.97969	8.71735	1.9	1.5	78.95
43	0.3572 124.4959	1.99884 3.03169	0.0916 0.38324	0.01048	90.78564	2.02264	5.57468	0.1688	0.0233	0.0023	11.49338	2.53065	1.98	0.44	22.22
44	0.3785 16.17665	0.09492 0.74406	0.03272 0.00042	0.00408	0.39766	7.47531	1.36597	0.0601	0.00395	0.00094	16.09121	1.21139	2.78	0.21	7.55
45	0.3962 34.23268	0.33608 0.99978	0.03145 0.00582	0.00497	4.78818	4.28949	1.83576	0.05778	0.00058	0.00097	32.58831	1.50297	5.62	0.26	4.63
46	0.4079 10.86283	0.17573 1.36164	0.044 0.00209	0.00479	4.67833	13.06866	2.50083	0.08089	0.02794	0.00152	10.33629	1.42722	1.78	0.25	14.04
47	0.4219 12.4938	0.11623 2.55837	0.07603 0.00806	0.00518	17.42326	12.28807	4.70275	0.14	0.03436	0.00148	10.31112	1.53796	1.78	0.27	15.17
48	0.4288 40.58422	0.59751 1.16438	0.10119 0.08232	0.00932	59.74772	7.6421	2.13824	0.18598	0.03622	0.00324	16.33756	2.74799	2.82	0.47	16.67
49	0.4362 48.33855	0.78336 2.71346	0.08661 0.11259	0.01165	68.40522	7.04281	4.98839	0.15952	0.02964	0.00234	15.2924	3.41902	2.64	0.59	22.35
50	0.4461 10.19436	0.16486 1.29752	0.06377 0.00921	0.00614	25.7352	17.83257	3.28295	0.11722	0.04669	0.00185	7.55571	1.81912	1.3	0.31	23.85
51	0.4561 28.43921	0.38327 0.48479	0.06228 0.00513	0.00766	5.1999	7.96917	0.88982	0.11436	0.00947	0.00144	26.94148	2.30289	4.65	0.4	8.60
52	0.4924 49.46668	0.46313 0.34318	0.01597 0.02307	0.00229	13.73366	1.36164	0.62984	0.02931	0.00384	0.0005	42.65782	0.78386	7.36	0.13	1.77
53	0.4945 729.4496	32.07065 2.94875	0.2761 0.8454	0.0624	34.21504	2.03165	5.42184	0.50872	0.03779	0.00729	480.85	25.8829	81.22	4.27	5.26
54	0.4955 388.1881	23.75105 13.65709	1.06423 1.17933	0.10848	89.49059	6.1722	20.32092	1.99093	0.05978	0.01485	41.49514	24.32762	7.1	4.19	59.01
55	0.4969 75.10593	3.22483 11.86346	0.65159 0.1261	0.05081	48.3321	19.88919	21.95173	1.21586	0.01949	0.01127	39.11818	15.15531	6.75	2.61	38.67
56	0.5034 15.13755	0.20613 1.68552	0.10281 0.02777	0.02035	53.40569	39.79592	3.09639	0.18908	0.02124	0.00319	7.04781	8.02062	1.22	1.04	85.25
57	0.5101 15.50027	0.22124 1.86437	0.11513 0.01825	0.01476	33.8594	28.19242	3.42537	0.21181	0.00934	0.00327	10.24584	4.37026	1.77	0.75	42.37
58	0.5279 9.15143	0.09621 1.41282	0.04316 0.00292	0.00615	8.17141	19.90683	2.59493	0.07935	0.02951	0.00121</					

84	0.7062	8.80107	0.18758	1.17421	0.06751	0.01064	0.01158	34.72795	38.99774	2.1563	0.12407	0.0453	0.00233	5.73002	3.42626	0.99	0.59	59.60
85	0.7125	16.20238	0.37853	2.37546	0.12123	0.02897	0.01375	51.7211	25.11067	4.36596	0.2232	0.00797	0.00196	7.82113	4.0739	1.35	0.7	51.85
86	0.7142	89.0315	4.21042	5.00758	0.41031	0.32615	0.05045	107.824	15.96631	9.22083	0.75822	0.02249	0.00804	-6.98821	14.26342	-1.21	2.47	-204.13
87	0.716	104.1779	7.28059	4.21439	0.38844	0.33444	0.04339	94.55596	10.39295	7.75592	0.717	0.03	0.01031	5.6868	10.86504	0.98	1.88	191.84
88	0.7167	67.05451	5.47564	4.40565	0.69504	0.25547	0.15313	112.0915	66.92142	8.10899	1.28328	0.04966	0.02243	-8.1296	44.99626	-1.41	7.78	-551.77
89	0.7177	154.5265	11.9675	8.08662	0.83058	0.43154	0.15551	82.10723	29.06026	14.92307	1.54156	0.04922	0.01551	27.80256	45.2107	4.8	7.79	162.29
90	0.7203	40.89404	1.17816	0.33819	0.22626	0.09913	0.05788	71.06834	41.81328	5.58665	0.41694	0.03773	0.00928	11.84817	17.12805	2.05	2.96	144.39
91	0.7221	72.3906	2.34977	10.02468	0.46304	0.2069	0.07452	83.34757	30.32124	18.52506	0.86178	0.03822	0.00903	12.1358	22.10302	2.1	3.81	181.43
92	0.7293	9.87385	0.16411	1.25249	0.08411	-0.00143	0.01827	-5.34162	54.83037	2.30018	0.1546	0.02674	0.00252	10.3792	5.40511	1.79	0.93	51.96
93	0.732	235.6918	8.07688	5.03284	0.30651	0.76182	0.05681	95.34979	6.33279	9.2675	0.56642	0.01036	0.00688	10.99788	14.98279	1.9	2.59	136.32
94	0.7419	8.90138	0.10975	0.95809	0.0543	0.00665	0.01508	21.27018	50.2239	1.75915	0.09976	0.04082	0.00184	6.9894	4.45983	1.21	0.77	63.64
95	0.7448	240.4139	8.56971	4.9067	0.2419	0.78976	0.05854	96.91579	6.31323	9.03442	0.44694	0.05474	0.00671	7.43974	15.23147	1.28	2.63	205.47
96	0.7537	9.06486	0.2148	1.01028	0.10139	0.00647	0.01753	20.25034	57.31638	1.85506	0.1863	0.03885	0.00227	7.21067	5.18531	1.25	0.9	72.00
97	0.7594	8.55353	0.28434	1.29005	0.09443	-0.00736	0.00852	-26.7692	29.52583	2.36921	0.17358	0.05106	0.00303	10.81548	2.54229	1.87	0.44	23.53
98	0.762	274.1371	7.50893	4.77725	0.24071	0.86881	0.03069	93.51792	2.10964	8.79527	0.44466	0.05984	0.00631	17.82801	5.82684	3.08	1.01	32.79
99	0.7642	73.65384	3.43265	10.92558	0.5755	0.18946	0.02367	74.81743	8.82925	20.20282	1.07245	0.043	0.00751	18.68468	6.61379	3.23	1.14	35.29
100	0.7649	120.3791	10.52831	7.88836	0.90229	0.29163	0.11582	71.06534	27.75648	14.55514	1.67418	0.0312	0.01804	35.01782	33.74144	6.04	5.81	96.19
101	0.7662	270.0145	10.00256	8.06037	0.57305	0.81517	0.06842	88.97482	6.72794	14.87433	1.06354	0.0539	0.00917	29.93674	18.30539	5.16	3.15	61.05
102	0.7681	98.94401	4.42037	8.62881	0.53405	0.2811	0.03377	83.25638	9.38673	15.92976	0.99196	0.05686	0.00871	16.66341	9.37606	2.88	1.62	56.25
103	0.7853	401.9403	5.62941	2.04449	0.05434	1.26387	0.02677	92.88271	1.48306	3.75679	0.09999	0.0085	0.00126	28.6465	5.9846	4.94	1.03	20.85
104	0.7883	138.3733	6.06422	1.80823	0.18388	0.43308	0.03277	92.39824	5.7182	3.3221	0.33826	0.0452	0.00553	10.53	7.93594	1.82	1.37	75.27
105	0.7934	107.9819	2.703	4.79459	0.15948	0.35097	0.02159	95.70485	5.40072	8.8273	0.29461	0.02135	0.00338	4.65247	5.85131	0.8	1.01	126.25
106	0.8034	9.41398	0.17382	1.25543	0.06973	-0.00348	0.00785	-12.053	24.71377	2.30559	0.12816	0.0228	0.00158	10.52473	2.32926	1.82	0.4	21.98
107	0.8105	21.20182	0.44232	1.72284	0.0829	0.01081	0.01036	14.41592	14.45351	3.16503	0.15248	0.01175	0.00216	18.14207	3.08768	3.13	0.53	16.93
108	0.813	341.1508	13.75425	1.77707	0.24019	1.10756	0.06915	95.90078	4.57711	3.26478	0.44182	0.01518	0.00834	14.0009	15.64395	2.42	2.7	111.57
109	0.8187	8.8502	0.21091	1.14065	0.10946	-0.00446	0.01537	-16.023	51.50594	2.09462	0.20117	0.03927	0.00267	10.2421	4.55271	1.77	0.79	44.63
110	0.8206	196.3226	10.9164	4.17524	0.39952	0.54654	0.07982	82.10069	11.11372	7.68365	0.73741	0.0462	0.01152	35.23901	21.96899	6.08	3.78	62.17
111	0.8306	335.0402	5.86942	0.59358	0.05599	0.14885	0.01111	13.11478	0.95285	1.08959	0.10282	0.00624	0.00223	291.1967	6.02185	49.62	1.01	2.04
112	0.8779	117.2604	0.73404	0.66879	0.02259	0.36165	0.00613	91.11413	1.44281	1.22771	0.04149	0.00577	0.00059	10.42188	1.69414	1.8	0.29	16.11
113	0.9062	922.9186	7.42226	0.01282	0.01672	0.3431	0.00568	10.98553	0.15928	0.02351	0.03068	0.00362	0.00063	821.5121	6.77273	136.62	1.08	0.79
114	0.9099	17.01172	0.61929	2.09207	0.1509	0.03972	0.02259	68.09438	39.24083	3.84435	0.2777	0.04359	0.00449	5.42625	6.67792	0.94	1.15	122.34
115	0.911	33.73288	2.13996	11.66185	0.80466	0.09767	0.05341	82.78278	46.54953	21.57559	1.50107	0.03441	0.01061	5.85098	15.82639	1.01	2.73	270.30
116	0.9151	145.7407	3.33274	0.70308	0.13004	0.37781	0.02533	76.57938	4.83781	1.2907	0.23884	0.00772	0.00439	34.14336	7.10035	5.89	1.22	20.71
117	0.9171	60.97546	2.53659	1.0117	0.21598	0.16107	0.03296	77.95998	15.6633	1.85766	0.39686	0.04112	0.00721	13.44207	9.5725	2.32	1.65	71.12
118	0.9348	28.78829	0.21381	2.14457	0.04412	0.06369	0.00537	64.82523	5.50225	3.94096	0.08119	0.00849	0.00079	10.13113	1.58736	1.75	0.27	15.43
119	0.9593	134.8719	1.10713	0.42594	0.02048	0.03021	0.02068	6.59389	0.58449	0.78178	0.0376	0.00242	0.00054	125.9888	1.30177	21.64	0.22	1.02
120	0.9738	963.5302	7.46672	0.01133	0.02737	0.05385	0.00521	1.65141	0.15915	0.02078	0.05022	0.00101	0.00084	947.5968	7.50263	156.71	1.19	0.76
121	1	28.70319	0.21862	0.83337	0.02463	0.03639	0.00391	37.25775	4.01507	1.53002	0.04525	0.03002	0.00088	18.001	1.16028	3.11	0.2	6.43

Integrated	151.1563	0.23174	2.20337	0.00741	0.26898	0.0013	52.47407	0.24211	4.04919	0.01363	0.0245	0.0002	71.93629	0.38333	12.39	0.09	0.73
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JACKSINA CREEK

Weighted average of f from standards = 1.347e-04 2.749e-06

Grain #	Cumulativ 39Ar	40Ar/39Ar meas.	37Ar/39Ar meas.	36Ar/39Ar meas.	% Atm. 40Ar	Ca/K	Cl/K	40*/39K	Age (Ma)	(Ma)	%error							
1	0.0024	14.95225	0.40917	1.63294	0.12941	0.04247	0.0133	83.19015	26.24235	2.99968	0.238	0.03409	0.00217	2.51136	3.92145	0.61	0.95	155.74
2	0.0084	29.04315	0.42985	1.03864	0.04879	0.05992	0.00651	60.73114	6.56879	1.90716	0.08965	0.0078	0.00079	11.40162	1.91547	2.77	0.46	16.61
3	0.0169	31.52785	0.37435	1.56692	0.03883	0.06704	0.00323	62.48739	2.94719	2.87828	0.07141	0.01248	0.0008	11.82888	0.94114	2.87	0.23	8.01
4	0.0257	6.83684	0.05915	0.78216	0.03607	0.0131	0.0046	55.90899	19.94456	1.43595	0.06625	0.01235	0.00074	3.003	1.35883	0.73	0.33	45.21
5	0.0347	81.91543	1.04684	0.95776	0.03787	0.26103	0.00783	94.09985	2.57728	1.75855	0.06958	0.012	0.00101	4.83466	2.11375	1.17	0.51	43.59
6	0.0452	106.6677	0.74276	1.67029	0.04471	0.35346	0.00498	97.81702	1.2263	3.06838	0.08223	0.01889	0.00092	2.33063	1.31	0.57	0.32	56.14
7	0.0598	9.27202	0.0929	0.36054	0.02527	0.00626	0.0018	19.70143	5.76696	0.6617	0.04639	0.00286	0.0006	7.42335	0.53857	1.8	0.13	7.22
8	0.0779	13.77921	0.14369	1.15638	0.0283	0.03115	0.00825	66.24332	17.72952	2.12353	0.05201	0.034	0.00078	4.64518	2.44035	1.13	0.59	52.21
9	0.0793	380.8561	16.4019	1.16633	0.32738	1.31097	0.06087	101.6986	1.78416	2.14182	0.60169	0.01071	0.00647	-6.47397	6.80476	-1.57	1.65	-105.10
10	0.0885	32.49261	0.3629	1.04845	0.04361	0.06251	0.00418	56.63767	3.76583	1.92518	0.08013	0.00507	0.00084	14.08711	1.23595	3.42	0.3	8.77
11	0.1138	18.87109	0.10294	1.08871	0.0197	0.02283	0.00116	35.71723	1.81002	0.3463	0.03615	0.01382	0.00041	12.11338	3.34889	2.94	0.08	2.72
12	0.122	15.35477	0.24744	1.53633	0.05679	0.03869	0.00416	73.78231	7.93703	2.82202	0.10443	0.00756	0.00103	4.02225	1.21991	0.98	0.3	30.61
13	0.1244	64.26682	1.94876	2.59386	0.23928	0.22259	0.02076	101.7168	9.04038	7.94995	0.44234	0.02359	0.00385	-1.10697	5.82912	-0.27	1.42	-525.93
14	0.1334	240.3253	1.98792	1.92746	0.05219	0.78474	0.01051	96.43578	1.05303	3.54144	0.09603	0.05022	0.00158	8.57634	2.53807	2.08	0.62	29.81
15	0.1342	715.3021	49.90712	13.82464	1.08196	1.05682	0.09005	43.50114	2.13938	25.61642	2.02459	-0.00039	0.01054	408.1053	32.66196	96.44	7.52	7.80
16	0.1463	42.79073	0.28516	0.32548	0.02657	0.13241	0.00401	91.43892	2.71638	0.59374	0.04877	0.00385	0.00067	3.66165	1.16273	0.89	0.28	31.46
17	0.1591	100.9346	1.20492	0.96541	0.04204	0.33405	0.00669	97.74654	1.59565	1.7726	0.07724	0.02851	0.00136	2.2754	1.61193	0.55	0.39	70.91
18	0.1715	25.88956	0.28492	0.84498	0.04271	0.08205	0.00432	93.49045	4.28588	1.55134	0.07846	0.00137	0.00085	1.68437	1.24962	0.41	0.3	73.17
19	0.181	26.26302	0.31073	0.64021	0.04494	0.07039	0.00579	79.08528	8.64584	1.17523	0.08253	0.00327	0.00083	5.48911	1.69881	1.33	0.41	30.83
20	0.1884	13.94665	0.1548	0.95106	0.05951	0.01236	0.00619	25.68444	13.13155	1.74623	0.10934	0.0234	0.00126	10.34943	1.83274	2.51	0.44	17.53
21	0.1972	7.288	0.10188	0.75157	0.04821	0.01534	0.00504	61.60244	20.50699	1.37975	0.08855	0.02955	0.00125	2.78849	1.49015	0.68	0.36	52.94
22	0.2005	96.89012	2.21925	1.86091	0.1246	0.29462	0.01794	89.72361	5.08745	3.41901	0.22923	0.02954	0.00224	9.96685	4.94118	2.42	1.2	49.59
23	0.2212	11.41326	0.06383	0.1757	0.01732	-0.00018	0.00257	-0.58653	6.66033	0.32243	0.0318	0.00191	0.00039	11.45175	0.76099	2.78	0.18	6.47
24	0.2286	11.85338	0.15129	1.52278	0.05747	0.02759	0.00616	67.84984	15.38985	2.7971	0.10568	0.02272	0.00123	3.80127	1.82268	0.92	0.44	47.83
25	0.242	36.87553	0.22978	0.703	0.03641	0.11208	0.00434	89.73113	3.44365	1.29055	0.06687	0.01534	0.00058	3.78553	1.2701	0.92	0.31	33.70
26	0.2504	9.27852	0.10541	1.20095	0.06263	0.01678	0.0046	52.53671	14.67936	2.20544	0.1151	0.0055	0.00103	4.39353	1.36024	1.07	0.33	30.84
27	0.2597	27.04489	0.19477	0.80802	0.0526	0.04826	0.00439	52.52723	4.78438	1.55694	0.09664	0.0016	0.00088	12.83255	1.29726	3.11	0.31	9.97
28	0.267	51.79864	0.5496	0.68771	0.06098	0.09526	0.00616	54.26619	3.47372	1.26247	0.112	0.00485	0.00094	23.68742	1.81828	5.74	0.44	7.67
29	0.2708	32.36869	0.53113	2.55897	0.1443	0.07942	0.0093	71.91562	8.43085	4.70385	0.26572	0.01489	0.00257	9.09866	2.73708	2.21	0.66	29.86
30	0.2857	37.91116	0.33668	0.63216	0.02923	0.11781	0.00316	91.76214	2.37292	1.16044	0.05369	0.01888	0.00084	3.12202	0.90124	0.76	0.22	28.95
31	0.2951	30.9937	0.35065	0.62915	0.05542	0.08424	0.00458	80.22628	4.28792	1.15491	0.10178	0.0267	0.0014	6.12546	1.33118	-0.49	0.32	21.48
32	0.3079	117.3762	1.32603	0.96686	0.03871	0.39874	0.00526	100.1149	0.75388	1.77527	0.07113	0.01185	0.00088	-0.13493	0.88518	-1.03	0.21	-700.00
33	0.309	150.2996	13.97536	0.14985	0.4225	0.42709	0.05491	83.97801	7.46766	0.27498	0.7754	-0.00694	0.00913	24.07878	11.44796	5.84	2.77	47.43
34	0.3238	39.54675	0.54746	1.01257	0.03324	0.1195	0.00352	89.14618	2.3795	1.85925	0.06107	0.00866	0.00066	4.29218	0.94565	0.10	0.23	22.12
35	0.3246	92.68522	11.41493	8.77517	1.20698	0.2968	0.064	93.87539	16.77912	16.20163	2.24235	0.00484	0.0101	5.71019	15.66143	1.39	3.8	273.38
36	0.3269	129.9511	5.68414	4.20427	0.27547	0.41193	0.02366	93.42404	3.50646	7.73723	0.50847	0.00039	0.00363	8.56903	4.58658	2.08	1.11	53.37
37	0.3304	22.08184	0.50934	1.67225	0.11794	0.0484	0.00743	64.23323	9.84634	3.07197	0.21692	0.00099	0.00253	7.89666	2.18254	1.92	0.53	27.60
38	0.3424	4.60756	0.04351	0.52115	0.07196	-0.00573	0.00254	-37.8998	16.42536	0.95659	0.13214	0.02189	0.00086	6.3152	0.75422	1.53	0.18	11.76
39	0.3428	79.79819	16.28313	5.88202	1.58835	0.20407	0.10946	74.98846	37.51927	10.83772	2.93878	0.04503	0.02019	20.03458	30.33947	4.86	7.34	151.03
40	0.348	134.483	1.97641	1.32922	0.10376	0.1804	0.00756	39.57229	1.56462	2.27579	1.19072	0.08676	0.0026	81.38126	2.43563	19.63	0.58	2.95
41	0.3619	21.85008	0.18929	0.25982	0.02608	0.03679	0.00228	49.72362	3.05787	0.47682	0.04788	0.00304	0.00057	10.97251	0.67548	2.66	0.16	6.02
42	0.3742	53.93768	0.44976	0.48173	0.02907	0.14538	0.00357	79.61975	1.86644	0.8842	0.05337	0.01289	0.00063	10.99032	1.1043	2.67	0.25	9.36
43	0.3801	25.08274	0.55271	0.89421	0.0688	0.07162	0.0057	84.17637	6.4681	1.64178	0.1264	0.00543	0.00132	3.96681	1.62435	0.96	0.39	40.63
44	0.3865	9.94116	0.19364	0.26976	0.10185	-0.00149	0.00293	-4.702	8.81401	0.49507	0.18696	0.00584	0.00136	10.27476	0.08826	2.49	0.22	8.84
45	0.3943	12.93583	0.17355	1.57807	0.05731	0.03054	0.00407	68.92066	9.28486	2.89877	0.10539	0.0049	0.00158	4.01563	1.20818	0.97	0.29	29.90

46	0.4144	117.9597	0.73254	0.44817	0.01874	0.36184	0.00558	90.6349	1.31399	0.82259	0.03441	0.01086	0.00056	11.04776	1.5556	2.68	0.38	14.18
47	0.4186	137.2131	3.60631	1.70221	0.09806	0.42719	0.01482	91.91619	2.09866	3.12708	0.18036	0.00095	0.00225	11.103	2.89911	2.69	0.7	26.02
48	0.4265	19.4479	0.26005	1.37402	0.0576	0.03897	0.00335	58.7206	5.04106	2.52358	0.10589	0.00339	0.00098	8.02351	0.98641	1.95	0.24	12.31
49	0.4321	44.92169	0.93237	0.27348	0.05225	0.10885	0.00952	71.6002	6.09856	0.5019	0.09591	0.00285	0.00191	12.7517	2.75252	3.09	0.67	21.68
50	0.437	50.1133	0.92192	0.15352	0.0654	0.13041	0.01041	76.91683	5.98129	0.28171	0.12003	0.00291	0.00182	11.56214	3.00442	2.8	0.73	26.07
51	0.4532	16.64042	0.156	0.48489	0.026	0.01274	0.00275	22.42496	4.88703	0.89001	0.04774	0.00246	0.00062	12.8902	0.82155	3.13	0.2	6.39
52	0.4578	4.96821	0.14599	0.86178	0.07881	-0.00838	0.00965	-51.5881	57.72662	1.58221	0.14479	0.00551	0.0019	7.49078	2.85738	1.82	0.69	37.91
53	0.4623	208.0631	4.21097	1.51517	0.08671	0.70536	0.02043	100.1324	2.1007	2.78311	0.15943	0.03233	0.00306	-0.27565	4.37479	-0.07	1.06	-1514.29
54	0.4698	14.29152	0.1735	1.77442	0.04822	0.03149	0.00571	64.2285	11.81174	3.25989	0.0887	0.01082	0.0011	5.10808	1.68871	1.24	0.41	33.06
55	0.4709	114.7815	9.60624	3.95122	0.50485	0.40439	0.0543	103.852	10.9558	7.27023	0.93153	-0.00373	0.00892	-4.43255	12.61171	-1.08	3.06	-283.33
56	0.4801	154.1981	1.64826	1.7031	0.04999	0.51369	0.0107	98.36985	1.78716	3.12873	0.09195	0.01973	0.0012	2.5162	2.75938	0.61	0.67	109.84
57	0.4862	33.8651	0.61821	0.93344	0.08553	0.10577	0.0095	92.14695	8.13484	1.71386	0.15715	0.03215	0.00188	2.65887	2.75499	0.65	0.67	103.08
58	0.4918	82.06505	1.57331	1.33602	0.10314	0.27042	0.00931	97.27504	2.80031	2.45374	0.1896	0.02553	0.00209	2.23755	2.30015	0.54	0.56	103.70
59	0.4985	117.7322	1.87214	1.52128	0.06972	0.40162	0.01144	100.7229	2.40918	2.79434	0.1282	0.01202	0.00169	-0.8518	2.83852	-0.21	0.69	-328.57
60	0.501	55.65284	1.90798	1.73974	0.22864	0.17461	0.02424	92.5049	12.48994	3.1961	0.42056	0.0186	0.00404	4.17414	6.9579	1.01	1.69	167.33
61	0.5091	12.07786	0.15751	0.27624	0.05247	-0.0048	0.00452	-11.9734	11.08743	0.50697	0.09631	0.0026	0.00101	13.49337	1.34737	3.27	0.33	10.09
62	0.5143	339.2332	5.35722	1.79161	0.1028	1.1116	0.02788	96.79456	1.91452	3.29152	0.18911	0.00047	0.00216	10.88674	6.50771	2.64	1.58	59.85
63	0.519	5.32468	0.12829	0.83722	0.08157	-0.0117	0.00678	-66.6251	37.79448	1.53709	0.14985	0.0037	0.00204	8.82802	2.01147	2.14	0.49	22.90
64	0.5208	92.75928	4.21027	2.11055	0.29799	0.2979	0.02763	94.74339	7.68955	3.87835	0.54841	0.01013	0.00483	4.88171	7.14523	1.18	1.73	146.61
65	0.5268	105.4215	1.74609	0.56723	0.07602	0.38088	0.01088	86.33686	2.71713	1.04121	0.1396	0.01793	0.0021	14.4056	2.87853	3.49	0.7	20.06
66	0.5343	31.1748	0.51774	0.81702	0.06148	0.08796	0.00796	83.2422	7.43268	1.49999	0.11294	0.00786	0.00098	5.22225	2.31832	1.27	0.56	44.09
67	0.5381	605.7379	16.16105	0.96317	0.13187	2.05799	0.05807	100.3877	0.96333	1.76849	0.2423	0.01975	0.00299	-2.35019	5.83834	-0.57	1.42	-249.12
68	0.5434	66.81111	1.23729	1.40328	0.0811	0.20734	0.008	91.57144	3.11367	2.57738	0.14911	0.00728	0.00189	5.6343	2.08471	1.37	0.51	37.23
69	0.5523	113.6709	1.45062	1.13738	0.05216	0.35552	0.01082	92.43542	2.56546	0.25211	0.09572	-0.00032	0.00184	8.59732	2.91875	2.09	0.71	33.97
70	0.5569	11.70648	0.28128	1.64081	0.00258	0.00258	0.00923	5.36171	23.35674	3.01416	0.22508	0.02069	0.00229	11.06356	2.74378	2.68	0.67	25.00
71	0.567	4.83432	0.06582	1.18539	0.04476	0.00138	0.00359	6.46685	22.09033	2.17685	0.08227	0.00378	0.0012	4.4977	1.06413	1.09	0.26	23.85
72	0.5709	11.90899	0.29763	0.95449	0.13046	0.02205	0.00882	54.19247	21.91574	1.75254	0.23971	0.00338	0.00337	5.44529	2.60976	1.32	0.63	47.73
73	0.5754	32.58452	0.96046	1.37205	0.11795	0.09652	0.00741	87.26398	6.21462	2.51996	0.21683	0.02369	0.00175	4.15021	2.02917	1.01	0.49	48.51
74	0.5776	127.1506	4.99805	5.54065	0.3548	0.43917	0.02411	101.7291	3.93707	10.20626	0.65613	0.05174	0.00521	-2.20672	5.02478	-0.54	1.22	-225.93
75	0.5803	41.76656	1.1176	1.3161	0.19981	0.09131	0.00937	64.38703	6.40839	2.4171	0.3673	0.02048	0.00445	14.87758	2.70819	3.61	0.66	18.28
76	0.5825	79.41284	3.41582	1.27704	0.28152	0.25139	0.01804	93.44742	5.40038	2.34531	0.51748	0.0268	0.00412	5.20634	4.29823	1.26	1.04	82.54
77	0.5947	13.85916	0.14821	0.24384	0.04768	0.0143	0.00294	30.41855	6.26868	0.44749	0.08751	0.00431	0.00082	9.6244	0.87373	2.33	0.21	9.01
78	0.5978	11.22074	0.42085	0.73121	0.18634	0.02083	0.0079	54.47086	20.77866	3.14237	0.34226	0.0049	0.0024	5.09782	2.33623	1.24	0.57	45.97
79	0.6043	13.2676	0.20406	0.91762	0.08772	0.02214	0.00578	48.85729	12.87266	1.6848	0.16116	0.02538	0.00184	6.77462	1.70882	1.64	0.41	25.00
80	0.6112	50.25321	0.7281	1.22236	0.08849	0.15896	0.00584	93.32422	3.18943	2.24479	0.16265	0.01823	0.0018	3.35571	1.60511	0.81	0.39	48.15
81	0.6325	70.76096	0.41592	0.38735	0.03707	0.22801	0.00446	95.21421	1.81773	0.71094	0.06806	0.02256	0.00062	3.38597	1.28761	0.82	0.31	37.80
82	0.6407	25.19136	0.26305	1.07968	0.08383	0.02951	0.00501	34.30391	5.87084	1.98258	0.15405	0.00916	0.00138	16.54285	1.48901	4.01	0.36	8.98
83	0.6486	4.91347	0.06838	1.74812	0.084	-0.00739	0.00624	-47.6635	37.73761	3.21152	0.15451	0.05012	0.00164	7.22051	1.8475	1.75	0.45	25.71
84	0.6751	22.06449	0.13856	0.56668	0.02493	0.06115	0.00187	81.79601	2.4663	1.0402	0.04579	0.00332	0.00052	4.01282	0.54494	0.97	0.13	13.40
85	0.6872	60.34127	0.76897	0.57156	0.03521	0.16558	0.00575	81.05072	2.62942	1.04915	0.06466	0.00349	0.00123	11.43322	1.59472	2.77	0.39	14.08
86	0.6939	164.3131	4.42156	1.13872	0.073	0.54631	0.01628	98.20795	1.33048	2.09108	0.13416	0.02561	0.00231	2.94641	2.19108	0.72	0.53	73.61
87	0.702	34.11765	0.58906	0.88204	0.06083	0.099	0.00769	85.6031	6.50656	1.61943	0.11175	0.01228	0.00169	4.91067	2.22142	1.19	0.54	45.38
88	0.7155	9.5513	0.12625	0.70112	0.02824	0.01797	0.00344	55.15518	10.66974	1.28709	0.05187	0.00498	0.00105	4.27207	1.01846	1.04	0.25	24.04
89	0.7272	113.212	1.57125	0.20833	0.04025	0.35893	0.00755	93.69454	1.50194	0.38231	0.07387	0.03311	0.00142	7.13772	1.7047	1.73	0.41	23.70
90	0.7369	26.63652	0.44858	0.27269	0.04297	0.05072	0.00496	56.24779	5.43589	0.50044	0.07888	0.00255	0.00149	11.64332	1.46113	2.82	0.35	12.41
91	0.7463	13.51173	0.18443	1.55228	0.05083	0.00042	0.00491	-0.03753	10.76125	2.85134	0.09347	0.03242	0.00164	13.50192	1.46415	3.27	0.35	10.70
92	0.7513	76.76122	2.07572	3.2418	0.14028	0.22566	0.01042	86.55476	3.28859	5.96191	0.25857	0.01905	0.00253	10.34042	2.54887	2.51	0.62	24.70
93	0.7533	31.36299	2.74411	3.12106	0.45216	0.05119	0.02446	47.45239	22.68584	5.73936	0.83333	0.00357	0.01088	16.5013	7.27234	4	1.76	44.00
94	0.7593	1.15677	0.10521	1.13512	0.07981	-0.00967	0.00676	-261.876	17.85655	2.08445	0.14667	0.00816	0.0027	4.08194	2.00178	0.99	0.49	49.49
95	0.7638	24.40331	0.61497	0.78178	0.10887	0.04951	0.0099	59.76436	11.92308	1.43525	0.19997	0.02035	0.00263	9.8123	2.92014	2.38	0.71	29.83
96	0.771	4.263	0.10644	1.317	0.08987	-0.01269	0.00595	-91.1639	41.49245	2.41877	0.16521	0.00806	0.00185	8.10013	1.76558	1.97	0.43	21.83
97	0.777	50.81526	0.7951	0.95273	0.10944	0.12965	0.01019	75.28492	5.81081	1.74931	0.20107	0.00665	0.00193	12.56015	2.96006	3.05	0.72	23.61
98	0.7826	100.0265	1.56893	0.83275	0.10796	0.22358	0.01109	66.00144	3.1165	1.52887	0.19832	0.02535	0.00345	34.01749	3.16789	8.24	0.77	9.34
99	0.7977	5.03447	0.06659	0.59749	0.03539	0.00087	0.00335	4.12528	19.76572	1.09677	0.065	0.005	0.00074	4.80035	0.99177	1.16	0.24	20.69
100	0.805	898.8085	11.48535	0.61441	0.10821	3.13617	0.04252	103.105	0.47808	1.12785	0.19872	0.01555	0.00205	-27.9195	4.31068	-6.79	1.05	-15.46
101	0.8154	21.20478	0.3207	0.90231	0.06314	0.02462	0.00508	33.99935	7.07006	1.65667	0.116	0.00465	0.00131	13.98462	1.51328	3.39	0.37	10.91
102	0.8191	34.8154	1.1352	1.97197	0.19229</													

8	0.023	1033.683	10.10334	1.921	0.04526	0.33928	0.01588	9.68413	0.44404	3.52955	0.08327	0.00896	0.00094	934.8215	10.23996	154.68	1.62	1.05
9	0.0239	1762.042	54.69955	5.1605	0.39894	0.90835	0.08086	15.20945	1.27139	9.50344	0.73736	0.0038	0.00727	1499.485	51.869	242.06	7.84	3.24
10	0.0243	1025.506	109.75102	9.95647	1.3144	2.82118	0.332	81.2147	3.98791	18.39812	2.44601	0.34362	0.04211	194.0029	46.21026	33.21	7.84	23.61
11	0.0243	58384.68	100215.72	1242.225	2132.436	155.4112	266.7958	78.48228	2.24809	18572.88	259794.9	7.81315	13.90858	102369.5	1431941.9	4290.57	22876.39	533.18
12	0.0273	3246.181	94.82257	10.31938	0.3198	7.38347	0.22405	67.18617	0.55299	19.07365	0.59543	0.02525	0.00384	1073.006	36.39077	176.46	5.7	3.23
13	0.0373	1870.377	22.63674	2.97053	0.06035	0.38122	0.0137	6.00981	0.20375	5.46198	0.1112	0.006	0.00108	1761.639	21.70527	281.24	3.21	1.14
14	0.0375	5124.883	704.74254	143.765	19.84784	10.79014	1.51733	61.9849	1.83128	293.5977	45.11371	0.12956	0.05635	2168.372	347.96565	340.37	49.77	14.62
15	0.0376	2991.065	593.94411	228.6844	45.46666	6.95064	1.44434	68.03861	4.21319	500.4228	118.6563	0.11499	0.07101	1140.105	309.08629	186.94	48.14	25.75
16	0.0389	1685.7	32.21319	62.44964	1.29214	2.24503	0.06022	39.05025	0.74537	119.8732	2.59473	0.01645	0.0077	1074.815	25.25313	176.74	3.96	2.24
17	0.0409	1216.493	38.60766	4.82196	0.18967	0.65696	0.04797	15.92613	1.04964	8.87786	0.3504	0.01079	0.00515	1026.223	35.10724	169.12	5.52	3.26
18	0.0434	738.7927	19.68	21.35144	0.6134	0.16374	0.02818	6.31115	1.11349	39.77674	1.16022	1.29828	0.03554	702.7353	20.76299	117.5	3.36	2.86
19	0.0447	2297.145	88.15559	11.5064	0.53278	3.25164	0.16994	41.78763	1.48462	21.28562	0.99366	0.04301	0.00929	1348.161	62.48664	219.06	9.56	4.36
20	0.0514	1766.724	13.00856	11.6356	0.20024	3.55383	0.04062	59.38754	0.52018	21.52661	0.37353	0.08197	0.00389	723.4428	10.71648	120.85	1.73	1.43
21	0.061	2065.864	19.38552	0.02907	0.01248	0.23971	0.01199	3.42879	0.16854	0.05334	0.0229	0.00319	0.0013	1995.042	19.0432	315.41	2.76	0.88
22	0.0661	223.1851	4.83465	1.82496	0.06381	0.21209	0.0297	28.01672	3.88651	3.35288	0.11739	0.00645	0.00256	160.8419	9.36142	27.58	1.59	5.77
23	0.1155	171.0712	0.92411	0.6831	0.00542	0.11157	0.00279	19.24286	0.47107	1.25399	0.00996	0.00142	0.00024	138.1949	1.09939	23.72	0.19	0.80
24	0.1157	1916.691	443.97143	197.6612	45.79802	4.16103	1.01718	63.30215	5.01808	421.5218	113.5117	0.06898	0.04015	817.4892	246.88359	135.98	39.56	29.09
25	0.1163	804.9894	94.34468	24.24057	2.87608	1.05878	0.151	38.61961	3.16497	45.25279	5.46264	0.98701	0.1214	502.6934	65.34039	84.83	10.77	12.70
26	0.1184	859.8395	21.25216	15.39416	0.40439	0.22568	0.02793	7.60873	0.94045	28.55662	0.7584	0.02949	0.00402	803.1207	21.67173	133.68	3.48	2.60
27	0.1297	1047.377	13.98817	0.7262	0.02671	0.009716	0.00623	2.7355	0.172	1.33317	0.04906	0.01038	0.00138	1019.219	13.73841	168.01	2.16	1.29
28	0.1311	1728.944	63.15718	9.32076	0.39761	0.41561	0.04009	7.05902	0.63427	17.21563	0.73926	0.00562	0.00694	1617.518	60.49996	259.81	9.05	3.48
29	0.1323	2073.309	84.71962	1.26554	0.20592	1.71563	0.08322	24.44751	0.64071	2.32461	0.3785	0.03978	0.006	1567.815	65.50876	252.36	9.84	3.90
30	0.1329	1301.944	78.02928	7.26764	0.60739	1.1768	0.12443	26.6643	2.32851	13.40391	1.12601	-0.01186	0.01368	959.694	65.38598	158.62	10.35	6.53
31	0.139	1506.605	23.44927	4.68312	0.10349	0.59538	0.02013	11.65224	0.35058	8.62139	0.19116	0.00481	0.00216	1335.443	21.5184	217.11	3.3	1.52
32	0.1394	2229.045	217.79658	0.40208	0.54032	2.20967	0.25713	29.2921	1.8532	0.37798	0.99198	-0.01239	0.02214	1576.538	159.55922	253.67	23.95	9.44
33	0.14	1302.341	130.42066	18.08238	1.91949	2.69029	0.28878	60.92938	2.37527	33.60786	3.61371	0.16571	0.02638	515.4029	61.02502	86.92	10.05	11.56
34	0.143	1441.429	45.81606	7.55307	0.27512	1.82894	0.07493	37.45168	0.97107	13.93317	0.51023	0.00788	0.00485	906.4062	32.22245	150.17	5.12	3.43
35	0.1475	2169.172	40.7427	-0.06075	0.05322	0.36539	0.01656	4.97792	0.20525	-0.11146	0.09765	0.00193	0.00265	2061.076	38.96696	324.96	5.62	1.71
36	0.1561	2081.913	15.51743	0.70751	0.05041	0.22872	0.00732	3.24368	0.10108	1.29884	0.09259	0.00201	0.00186	2015.361	15.17672	318.35	2.2	0.69
37	0.1571	1958.97	116.74455	22.28667	1.41472	3.58601	0.24674	58.07296	1.36088	41.54689	2.6795	0.52871	0.034	834.4597	57.36525	138.7	9.18	6.62
38	0.1753	664.9729	5.7742	0.63041	0.0159	0.09842	0.00425	4.36578	0.18497	1.15724	0.02919	-0.00042	0.00087	636.1964	5.66261	106.7	0.92	0.86
39	0.1822	1587.968	19.49949	0.17511	0.03467	0.24807	0.01094	4.61539	0.19548	0.32135	0.06363	0.00193	0.00162	1514.836	18.86186	244.38	2.85	1.17
40	0.1832	1332.245	83.90713	54.58792	3.49677	2.58648	0.1811	57.03318	1.75658	104.1775	6.94093	0.0135	0.0135	595.3627	45.98342	100.04	7.52	7.52
41	0.1896	1690.51	18.1327	3.62392	0.06179	0.56449	0.01797	9.84983	0.2957	6.66645	0.11396	0.00426	0.0019	1527.882	17.17931	246.35	2.59	1.05
42	0.2024	1788.92	17.68614	0.25373	0.01778	0.14239	0.00686	2.35089	0.11083	0.46564	0.03263	0.00198	0.00056	1747.148	17.39032	279.09	2.57	0.92
43	0.2025	27559.14	19670.831	-5.53394	5.23513	90.1503	64.38753	96.66446	2.4722	-10.1145	9.53109	0.37346	0.32932	915.6666	940.48491	151.64	149.38	98.51
44	0.2026	5286.41	1676.6647	286.9193	91.07385	14.38598	4.62183	79.96779	4.12204	660.2396	262.8293	0.13272	0.09953	1328.085	594.81878	215.98	91.16	42.21
45	0.2215	1802.243	6.6042	-0.00184	0.00998	0.14473	0.00391	2.37301	0.06354	-0.00338	0.01832	0.00093	0.00064	1759.445	6.54927	280.91	0.97	0.35
46	0.2221	1584.554	101.68964	20.69133	1.39584	2.12603	0.1954	39.54101	2.61175	38.52874	2.6377	0.01678	0.01191	972.1938	76.02429	160.6	12.02	7.48
47	0.2257	1215.625	37.07163	33.05613	1.04443	2.07021	0.07121	50.10064	0.80281	62.10323	2.0097	0.88761	0.02752	621.0735	21.8279	104.23	3.56	3.42
48	0.2352	1812.115	21.85491	1.43722	0.03006	0.37948	0.01255	6.18165	0.19055	2.63977	0.00519	0.00134	0.00134	1701.796	20.83508	272.37	3.09	1.13
49	0.2493	1904.341	15.03185	0.5471	0.02144	0.13512	0.00464	2.09435	0.07002	1.00424	0.03936	0.00076	0.00058	1865.149	14.78911	296.47	2.17	0.73
50	0.2534	2052.431	12.36461	3.04311	0.0983	1.15054	0.04068	16.553	0.57716	5.95571	0.18114	0.00416	0.0026	1716.356	15.76136	274.53	2.34	0.85
51	0.2541	5251.089	388.22045	45.62771	3.40772	14.29347	1.07441	80.36397	1.09964	86.50811	6.67602	0.10908	0.02204	1065.431	100.9787	175.27	15.83	9.03
52	0.2601	2673.792	42.69161	0.43669	0.05414	1.51019	0.03589	16.68902	0.29389	0.80152	0.09399	0.02087	0.00279	2228.225	36.4488	348.91	5.19	1.49
53	0.3602	144.3651	0.5898	0.01741	0.00174	0.01383	0.00072	2.82962	0.14772	0.03194	0.0032	0.00162	0.0002	140.2529	0.61158	24.07	0.1	0.42
54	0.3609	1935.342	110.51016	25.48906	1.51949	2.46103	0.20791	37.46851	2.3399	47.62623	2.8912	0.06696	0.01207	1232.364	85.22422	201.25	13.17	6.54
55	0.4095	1121.729	4.95344	-0.00243	0.00458	0.06104	0.00175	1.60811	0.0456	-0.00445	0.00839	0.00072	0.00021	1103.66	4.90172	181.26	0.77	0.42
56	0.4108	927.9491	34.0618	17.0235	0.77742	1.05459	0.07791	33.41762	2.51366	34.77556	1.46489	0.97932	0.03785	626.1006	30.87238	105.05	5.03	4.79
57	0.4131	1582.229	57.61266	2.22391	0.15883	0.92074	0.03778	17.18457	0.32589	4.08699	0.29236	0.00647	0.00278	1312.366	48.14581	213.57	7.39	3.46
58	0.4142	2473.531	111.86075	39.46636	1.85534	4.18184	0.20095	49.82734	0.81431	74.49155	3.60229	0.01788	0.00849	1276.603	62.92246	208.08	9.69	4.66
59	0.4221	964.0482	12.5602	2.33404	0.04693	0.31508	0.01407	9.6382	0.41263	4.28972	0.0864	0.00246	0.00153	872.5427	12.06473	144.78	1.92	1.33
60	0.4263	696.2933	9.36016	0.54329	0.05034	0.49893	0.01387	21.16871	0.51597	0.99724	0.09243	-0.0014	0.00261	549.0843	8.2206	92.46	1.35	1.46
61	0.4269	6157.407	442.20302	46.2264	3.41664	17.67782	1.3042	84.77612	1.43894	87.68151	6.69341	0.04062	0.02274	969.0267	116.5231	160.1	18.42	11.51
62	0.4382	306.0112	3.01187	0.86386	0.02512	0.52328	0.01241	50.51187	1.09139	1.58603	0.04615	0.00272	0.00077	151.517	3.66242	25.99	0.62	2.39
63	0.4471	1379.052	25.29956	0.22308	0.10426	0.												

99	0.7715	417.4208	26.79352	8.23553	0.59436	0.58028	0.10895	40.91917	7.25115	15.19946	1.10336	0.02868	0.00949	248.0409	34.41391	42.35	5.81	13.72
100	0.7743	1459.48	70.12281	13.93976	0.68697	2.80177	0.15242	56.6496	1.44892	25.83183	1.28568	0.11024	0.00808	638.9681	37.65864	107.15	6.13	5.72
101	0.7745	7994.438	3054.5232	2.24759	1.94249	25.10131	9.64052	92.78048	3.61911	4.13057	3.57554	0.09697	0.08228	578.0753	364.59492	97.21	59.69	61.40
102	0.7747	4185.232	1212.4707	37.8854	11.01842	11.99482	3.52272	84.61586	4.08487	71.42059	21.34414	0.17975	0.07284	661.5577	263.89974	110.82	42.88	38.69
103	0.7827	1034.933	18.53739	2.49277	0.06024	0.64271	0.02617	18.33161	0.67124	4.58195	0.11091	0.02162	0.00185	846.6793	16.7116	140.65	2.67	1.90
104	0.7836	2010.17	175.92294	1.79916	0.44154	1.93314	0.26235	28.41073	2.94795	3.30541	0.81222	0.02545	0.01734	1440.875	139.51735	233.19	21.18	9.08
105	0.8268	615.1909	2.22047	0.00431	0.00636	0.02716	0.00258	1.30442	0.12366	0.00791	0.01167	0.0018	0.00034	607.1388	2.31995	101.96	0.38	0.37
106	0.8276	1233.936	95.56637	9.45165	0.83639	2.61767	0.26033	62.62559	3.9122	17.45901	1.55535	0.01947	0.01897	464.2641	60.60501	78.48	10.02	12.77
107	0.8297	1240.593	50.74646	12.48154	0.53623	1.94776	0.10402	46.31236	1.59358	23.10557	1.00149	0.51964	0.02374	671.9522	34.16615	112.51	5.55	4.93
108	0.8301	1792.242	297.38748	93.39296	15.55307	2.04294	0.40753	33.25444	3.7309	183.4637	32.71031	0.00788	0.03912	1280.692	238.52996	208.71	36.71	17.59
109	0.8366	267.1475	4.48496	1.0368	0.05504	0.34692	0.0201	38.34621	2.12939	1.90378	0.10115	0.00558	0.00287	164.8089	6.33459	28.25	1.08	3.82
110	0.8532	793.0978	8.98831	0.42859	0.02207	0.07226	0.00605	2.68792	0.22353	0.78665	0.04053	0.00123	0.00103	771.9847	8.93001	128.67	1.44	1.12
111	0.854	2020.565	125.03258	167.3622	10.5311	2.28934	0.20434	32.79834	2.15425	348.2471	24.85025	0.04171	0.01931	1539.834	118.83526	248.15	17.89	7.21
112	0.8547	3837.229	385.83473	164.4895	16.57358	7.99282	0.82501	61.19871	1.43619	341.4842	38.92937	0.0594	0.02499	1684.572	201.55001	269.81	29.98	11.11
113	0.8556	2639.332	163.18654	25.62927	1.72289	2.86548	0.23213	32.00231	1.67993	47.89304	3.27889	0.03943	0.01739	1827.747	123.65108	290.98	18.18	6.25
114	0.8578	2306.575	81.35428	2.88072	0.21982	1.35363	0.08848	17.33149	0.9546	5.2965	0.04948	0.11135	0.0094	1910.674	71.05072	303.13	10.38	3.42
115	0.8671	147.7952	1.45216	0.54195	0.04653	0.05153	0.0125	10.27427	2.4985	0.99478	0.08545	0.00653	0.00153	132.6344	3.91728	22.77	0.67	2.94
116	0.8732	171.2466	3.39597	0.9654	0.07518	0.06747	0.02191	11.59855	3.77533	1.77259	0.13813	0.00398	0.00235	151.4615	7.13437	25.98	1.22	4.70
117	0.8887	158.8409	1.39313	0.17802	0.0277	0.05426	0.00811	10.08716	1.50709	0.32669	0.05084	0.00786	0.00079	142.8097	2.70271	24.51	0.46	1.88
118	0.9235	973.5466	7.55814	1.02688	0.02194	0.10593	0.00424	3.20679	0.12616	1.88556	0.04031	0.01879	0.00051	942.9822	7.42909	155.98	1.18	0.76
119	0.951	752.077	3.75165	0.45407	0.02018	2.03195	0.02681	79.83576	0.97577	0.83342	0.03704	0.00598	0.00129	151.6933	7.38053	26.02	1.26	4.84
120	0.9838	1019.245	9.76952	0.23606	0.01699	0.22288	0.00756	6.46002	0.21015	0.43322	0.03118	0.00176	0.00068	953.5326	9.38965	157.65	1.49	0.95
121	1	272.9243	1.9626	0.70083	0.02192	0.37635	0.01141	40.73124	1.20184	1.28657	0.04025	0.01146	0.0013	161.8213	3.48656	27.74	0.59	2.13
Integrated		953.1111	1.14522	2.66054	0.00606	0.5795	0.00169	17.94422	0.04773	4.89091	0.01117	0.01726	0.00015	783.5305	1.04785	130.53	0.66	0.51

CROSS CREEK

Weighted average of J from standards = 9.588e-05 +/- 4.822e-07

Grain #	Cumulative 40Ar/39Ar +/-		37Ar/39Ar +/-		36Ar/39Ar +/-		% Atm.	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age (Ma)	+/- (Ma)	%error	
1	0.0029	1655.773	34.11737	12.76547	0.32994	1.07204	0.04155	19.06919	0.62862	23.63595	0.61647	0.01732	0.00469	1352.197	30.03001	219.68	4.59	2.09
2	0.0064	1375.638	31.38192	33.40264	0.78719	0.17891	0.02342	3.64298	0.49551	62.76995	1.51501	0.0254	0.0055	1357.519	32.47764	220.49	4.97	2.25
3	0.0085	1624.276	113.26892	38.22929	2.68271	1.15226	0.09157	20.76905	0.7996	72.09182	5.19935	0.04756	0.00896	1322.615	95.73591	215.15	14.68	6.82
4	0.0343	236.8063	2.48421	0.66712	0.01555	0.62982	0.01206	78.58625	1.26353	0.85739	0.02856	0.00443	0.00071	50.71948	3.04237	8.74	0.52	5.95
5	0.0375	1743.803	25.30533	26.70136	0.50798	0.83998	0.02987	14.10808	0.46251	49.93495	0.96824	0.01428	0.00471	1526.547	24.04431	246.15	3.62	1.47
6	0.0709	1593.858	13.08727	0.13184	0.00987	0.07866	0.00506	1.45771	0.09311	0.24193	0.01811	0.00173	0.00055	1570.741	12.98416	252.8	1.95	0.77
7	0.0755	1548.843	32.16066	32.7624	0.715	0.33587	0.01367	6.23371	0.2247	61.53833	1.3748	0.00973	0.00166	1486.662	31.8076	240.13	4.81	2.00
8	0.0855	1358.029	12.30576	14.91246	0.1497	0.19845	0.00854	4.2278	0.18176	27.65354	0.28055	0.00797	0.00104	1314.429	12.29399	213.89	1.89	0.88
9	0.0945	2511.78	40.41124	0.56255	0.02251	1.34709	0.02997	15.8463	0.24366	1.03261	0.04133	0.00633	0.0021	2114.571	34.58243	332.66	4.97	1.49
10	0.0946	5718.744	2771.7116	186.8193	90.6203	16.14968	7.86492	83.18004	3.98106	394.8869	220.6602	0.12682	0.14706	1108.08	672.05151	181.95	104.96	57.69
11	0.1	843.3684	26.30809	1.26258	0.07164	0.30856	0.01525	10.79939	0.4151	2.31873	0.13168	0.00854	0.0015	752.9347	23.7747	125.61	3.83	3.05
12	0.1077	2217.229	34.17463	38.80345	0.07626	3.10822	0.06336	41.41103	0.55284	6.99761	0.14068	0.01369	0.00339	1302.533	23.58948	212.06	3.62	1.71
13	0.1081	1809.459	269.20267	57.3741	8.5648	1.92916	0.3343	31.24402	2.80059	109.7192	17.07055	-0.00783	0.02869	1296.629	207.89103	211.16	31.95	15.13
14	0.1119	1767.502	50.84706	20.18847	0.59837	1.41541	0.05177	23.56974	0.53574	37.57883	1.12991	0.01257	0.00414	1370.422	41.14854	222.46	6.28	2.82
15	0.1181	1433.217	31.06232	10.14519	0.24149	0.7094	0.02129	14.5684	0.30369	18.74937	0.44952	0.01688	0.00272	1233.231	27.27685	201.39	4.21	2.09
16	0.1191	2947.325	141.01226	85.3771	4.13476	7.75476	0.40133	77.51153	1.53928	166.7067	8.59153	0.18227	0.02578	705.3298	60.20988	117.92	9.74	8.26
17	0.1331	84.98991	1.15359	4.93795	0.07637	0.08245	0.00631	28.19828	2.1589	9.09216	0.14111	0.01503	0.00097	61.21644	2.02203	10.55	0.35	3.32
18	0.1609	1721.74	9.9883	2.26467	0.03259	0.16421	0.00434	8.80756	0.07268	4.16201	0.05998	0.0028	0.0006	1676.052	9.81981	268.54	1.46	0.54
19	0.1669	1514.273	25.49223	14.37944	0.28185	0.50248	0.0147	9.72739	0.23462	26.65497	0.52783	0.02009	0.00222	1380.971	23.76098	224.07	3.63	1.62
20	0.1763	1479.917	24.37376	12.71595	0.22568	0.22119	0.01142	4.34576	0.21619	23.54344	0.42164	0.02061	0.00136	1428.402	23.9579	231.29	3.64	1.57
21	0.1905	1409.074	24.979	4.17464	0.08697	0.90245	0.01926	18.9015	0.22502	7.68254	0.16052	0.01233	0.00124	1146.093	20.62522	187.87	3.21	1.71
22	0.1957	1267.955	34.45384	4.49369	0.14372	1.28809	0.04682	29.99077	0.72558	8.27156	0.26538	0.01289	0.00261	890.4911	25.97889	147.64	4.14	2.80
23	0.1969	2014.296	150.25829	22.72945	1.73847	2.0183	0.17135	29.5161	1.20217	42.38578	3.29478	0.01333	0.00833	1442.895	112.1478	233.5	17.02	7.29
24	0.2046	1323.078	20.29096	8.73082	0.17321	0.58421	0.01392	12.99371	0.2381	16.11923	0.32178	0.01939	0.00195	1158.277	18.15419	189.77	2.82	1.49
25	0.2058	1624.144	143.11875	25.60999	2.26939	1.45795	0.14368	26.39679	1.17212	47.85635	4.31882	0.03671	0.01158	1217.419	110.97754	198.94	17.17	8.63
26	0.2097	1436.933	33.08908	18.37417	0.52506	0.19596	0.01923	3.9245	0.3845	34.1573	0.98892	0.00605	0.00315	1398.662	33.1116	226.77	5.04	2.22
27	0.2113	665.9557	26.6326	11.52162	0.49431	1.63706	0.10007	72.5006	3.36115	21.31402	0.92194	0.04916	0.00693	184.628	23.76957	31.62	4.04	12.78
28	0.2121	2764.75	294.18013	57.99528	6.18329	4.84577	0.54061	51.61981	1.73946	110.9579	12.33522	0.07697	0.02016	139.734	162.68556	226.17	24.79	10.96
29	0.2168	1399.67	30.80877	5.41083	0.16351	0.41277	0.0157	8.68271	0.2704	9.96621	0.30233	0.00427	0.00289	1283.016	28.60708	209.06	4.4	2.10
30	0.2395	65.33375	0.48331	0.50517	0.02156	0.04245	0.0052	19.14301	2.34788	0.92725	0.03959	0.0045	0.00052	52.82174	1.58369	9.1	0.27	2.97
31	0.2438	1425.341	32.78878	28.42923	0.68642	0.29121	0.02749	5.87297	0.55274	53.23247	1.31162	0.02452	0.00452	1369.091	33.13397	222.26	5.06	2.28
32	0.2455	54.0017	19.00082	13.81888	0.61238	0.62443	0.06106	40.40183	3.59513	24.85736	1.14523	0.00666	0.01186	273.1477	20.13315	46.59	3.39	7.28
33	0.2499	1421.122	19.70238	11.32218	0.18305	0.28224	0.01885	5.80312	0.38361	20.94208	0.34132	0.02198	0.0036	1349.414	19.68277	219.25	3.01	1.37
34	0.2538	1165.749	22.11186	2.6243	0.10095	0.34205	0.0258	8.65222	0.63292	4.82417	0.18592	0.01514	0.00393	1066.836	21.58205	175.49	3.38	1.93
35	0.2593	1270.015	25.85254	16.75954	0.36352	3.26686	0.07484	75.90448	0.80387	31.11978	0.68309	0.11642	0.00456	309.6751	12.16041	52.73	2.04	3.87
36	0.2637	1508.301	27.04309	15.0059	0.30838	0.47747	0.02189	9.27262	0.39475	27.82868	0.57802	0.02424	0.0033	1383.072	25.77928	224.39	3.93	1.75
37	0.2701	1306.712	23.64582	11.73587	0.23913	1.49797	0.03754	32.46035	0.59179	21.71368	0.44614	0.03975	0.00454	926.6805	18.04668	153.39	2.86	1.86
38	0.2737	1508.038	46.58926	22.66586	0.7417	0.40257	0.03147	7.76455	0.86621	42.26527	1.40555	0.04067	0.00518	1413.545	45.22696	229.03	6.88	3.00
39	0.2744	2557.749	260.14235	70.31488	7.19579	3.35617	0.37509	38.54809	1.50161	135.7596	14.61914	0.05345	0.02635	1653.897	183.57955	265.24	27.38	10.32
40	0.2746	12400.2	2285.3979	754.1287	139.0632	39.86335	7.36751	94.49419	1.31519	2960.32	1167.872	2.11225	0.39972	1460.625	673.49265	236.18	102.07	43.22
41	0.2795	1398.66	38.59926	18.90657	0.54982	0.51897	0.02683	10.85324	0.47946	35.16041	1.03633	0.00539	0.0049	1263.707	35.9982	206.09	5.55	2.69
42	0.2834	1688.373	49.49061	12.75082	0.6431	0.66216	0.03849	11.52711	0.58203	23.60859	0.7965	0.01029	0.00466	1507.299	45.68241	243.24	6.9	2.84
43	0.3159	56.20641	0.33275	0.8825	0.01458	0.02249	0.00463	11.70187	2.43582	1.62027	0.02679	0.00276	0.0005	49.63393	1.40167	8.56	0.24	2.80
44	0.3187	1351.945	53.69915	9.56057	0.41396	0.91159	0.06331	19.86724	1.13556	17.66158	0.76993	0.05908	0.00771	1090.691	46.28216	179.23	7.24	4.04
45	0.3212	1581.62	49.79804	37.31213	1.23779	0.58874	0.05209	10.80584	0.90956	70.15889	2.39948	0.00911	0.00749	1448.78	49.12822	234.39	7.45	3.18
46	0.3235	1143.508	33.67247	22.41481	0.70724	0.49455	0.0673	12.61871	1.69823	41.7896	1.33976	0.03126	0.00867	1015.258	36.22913	167.39	5.7	3.41
47	0.3285	1568.342	32.66158	4.92299	0.15884	0.6158	0.0277	11.57694	0.4627	9.06453	0.29348	0.00632	0.00376	1391.588	29.98552	225.69	4.57	2.02
48	0.3516	61.73492	0.33857	0.39006	0.01955	0.02989	0.00477	14.26389	2.28206	0.7159	0.0359	0.00146	0.00076	52.91824	1.43894	9.12	0.25	2.74
49	0.3522	1372.023	235.69943	15.78537	2.76651	0.84829	0.19323	18.17568	2.73413	29.29051	5.19126	0.0642	0.0251	1135.28	200.86328	186.19	31.3	16.81
50	0.3577	1734.734	33.10948	14.09939	0.35026	0.43355	0.02789	9.23492	0.55614	26.13064	0.65567	0.00901	0.0029	1260.301	31.62153	205.57	4.87	2.37
51	0.3585	973.2352	64.11341	26.51053	1.81781	1.02864	0.08576	31.0087	1.59688	49.57126	3.46392	0.03331	0.00841	684.2379	48.597	114.5	7.88	6.88
52	0.362	1200.079	30.91547	27.29947	0.73858	1.17538	0.02211	4.13098	0.53305	51.07547	1.409	0.02422	0.00338	1173.093	31.50069	192.07	4.89	2.55
53	0.3686	1680.116	37.49666	21.66462	0.51727	0.86309	0.02817	15.07407	0.36168	40.36925	0.97884	0.02369	0.00264	1448.999	33.41778	234.42	5.07	2.16
54	0.3992	59.81595	0.32149	0.73987	0.02129	0.01803	0.00255	8.80993	1.11003	1.35826	0.02981	0.00463	0.00047	54.54763	0.72648	9.4	0.12	1.28
55	0.4027	2460.316	71.90355	14.94289	0.49561	0.49561	0.13054	50.51368	0.52806	27.71058	0.93888	0.04168	0.00636	1230.49</				

61	0.4509	1601.94	35.54287	14.31313	0.34601	0.47149	0.01578	8.62383	0.21795	26.53081	0.64791	0.00921	0.00294	1478.711	33.33226	238.92	5.04	2.11
62	0.4527	1469.233	75.29095	29.99462	1.56966	0.79394	0.06	15.80012	0.88721	56.22704	3.00612	0.05742	0.01078	1263.84	67.49951	206.11	10.4	5.05
63	0.4724	2419.701	26.55542	0.85933	0.02871	0.36903	0.00797	4.50379	0.08389	1.57772	0.05274	0.00313	0.00114	2312.098	25.4719	360.82	3.6	1.00
64	0.4839	367.3522	5.3612	4.74945	0.08673	1.01205	0.02711	81.30942	1.8294	8.74392	0.16022	0.00944	0.00174	68.88577	6.81839	11.86	1.17	0.97
65	0.4978	68.15961	0.29392	4.29844	0.03631	0.03048	0.00495	12.69856	2.14416	7.91106	0.06702	0.01294	0.00121	59.65957	1.48834	10.28	0.26	2.53
66	0.5081	1444.289	14.17318	4.89734	0.06536	0.96499	0.01302	19.71603	0.18298	9.01712	0.12076	0.00975	0.00176	1163.533	11.76248	190.59	1.83	0.96
67	0.5097	1679.157	66.78141	58.76229	2.35739	1.54587	0.07925	26.91644	0.88178	112.4889	4.70815	0.05123	0.01068	1280.298	55.34612	208.65	8.52	4.08
68	0.5103	2382.752	399.53603	53.6075	9.04362	4.77686	0.81013	59.05612	1.51117	102.2328	17.92536	0.02041	0.02958	1013.967	180.65302	167.19	28.45	17.02
69	0.5259	2205.854	29.76649	0.0091	0.01647	0.20829	0.00968	2.79032	0.12404	0.01669	0.03022	-0.00039	0.00102	2144.288	29.06562	336.93	4.17	1.24
70	0.5283	2190.447	65.16805	7.49085	0.27481	3.09181	0.09793	41.68208	0.45453	13.81779	0.50962	0.0683	0.00957	1284.199	39.70197	209.25	6.11	2.92
71	0.5433	222.2178	3.39737	5.11273	0.09861	0.5362	0.01123	71.12223	1.02612	9.41516	0.18225	0.00412	0.00145	64.39552	2.49658	11.09	0.43	3.88
72	0.5441	2163.25	213.01115	34.92293	3.50435	2.9076	0.3015	39.58528	1.29276	65.6991	6.75931	0.05704	0.02124	1339.951	138.29962	217.8	21.17	9.72
73	0.5456	1308.777	62.87108	17.62889	0.87853	1.89103	0.11752	42.58616	1.68808	32.75437	1.65287	0.02222	0.01376	760.8751	43.29096	126.89	6.97	5.49
74	0.5463	2418.844	262.68911	149.2738	16.27162	5.6444	0.62953	68.44731	1.75752	306.1735	37.30742	0.22791	0.0317	853.1392	113.98911	141.68	18.21	12.85
75	0.5515	3275.735	75.01269	0.01858	0.04957	5.10565	0.12855	46.05785	0.48223	0.0341	0.09096	0.01765	0.00459	1767.009	43.44244	282.03	6.42	2.28
76	0.5518	2049.253	587.46713	163.1585	46.80269	4.5139	1.3125	64.34444	3.16887	338.3609	109.7005	-0.02068	0.03404	823.7335	276.8265	136.98	44.33	32.36
77	0.5551	1813.006	50.238	2.8209	0.05371	0.397468	0.39058	5.18629	0.26957	0.01014	0.00375	0.05672	0.01014	1392.732	43.98693	251.59	6.61	2.63
78	0.5603	1555.726	29.28078	20.48044	0.43192	0.47436	0.02032	8.90172	0.34704	38.13029	0.81594	0.02828	0.00297	1438.011	28.01301	232.75	4.25	1.83
79	0.5657	1651.181	29.88356	15.2	0.29074	0.31156	0.02055	5.49996	0.35367	28.19253	0.5451	0.01353	0.00288	1577.271	29.45424	253.78	4.42	1.74
80	0.5679	1581.93	53.11155	13.3491	0.46013	0.6927	0.07159	12.87012	1.26493	24.72688	0.86041	0.01108	0.00644	1391.425	51.30848	225.67	7.82	3.47
81	0.5808	1176.319	11.87426	2.55399	0.05266	0.34647	0.01206	6.88595	0.28996	4.6947	0.09697	0.01873	0.00159	1076.058	11.40657	176.94	1.79	1.01
82	0.5823	1362.122	103.46845	19.18059	0.03468	0.06512	0.24308	1.57444	1.35488	35.67702	2.83381	0.01886	0.01601	1309.582	102.56852	213.15	15.74	7.38
83	0.5955	214.3636	2.32328	0.62739	0.02192	0.12297	0.00674	16.92985	0.91198	1.15168	0.04025	0.00306	0.0013	178.1264	2.75202	30.52	0.47	1.54
84	0.6038	1470.342	20.23559	11.34602	0.2078	0.57397	0.01732	11.47181	0.30971	20.98655	0.38747	0.01683	0.00148	1312.155	18.77584	213.54	2.88	1.35
85	0.6063	1530.719	47.29796	18.32326	0.6218	1.21195	0.06006	23.29814	0.90755	34.06142	1.17102	0.024	0.00533	1189.459	39.82732	194.61	6.18	3.18
86	0.6115	1453.853	31.46917	18.78706	0.4549	0.63311	0.02858	12.76194	0.51002	34.93518	0.85727	0.02659	0.00277	1285.341	29.18642	209.42	4.49	2.14
87	0.6127	1157.044	50.63541	50.80613	2.27942	0.84042	0.09724	21.10214	2.29935	96.69155	4.49952	0.03174	0.0108	946.8324	51.08294	156.59	8.09	5.17
88	0.6167	1733.163	60.49697	18.51696	0.6884	1.59331	0.06382	27.07789	0.53534	34.42626	1.29682	0.02156	0.0037	1280.584	46.27298	208.69	7.12	3.41
89	0.6212	1463.827	19.2246	2.30993	0.09418	0.69616	0.02916	14.0405	0.55936	4.24532	0.17338	0.01159	0.0043	1260.329	18.51036	205.57	2.85	1.39
90	0.6236	1484.511	63.27282	17.61633	0.79559	1.08617	0.06998	21.52341	1.04508	32.73075	1.4968	0.00995	0.0054	1179.646	53.28797	193.09	8.27	4.28
91	0.6272	1444.067	52.96078	5.74783	0.23181	0.39198	0.03054	7.98848	0.55147	10.58947	0.42882	-0.00063	0.00563	1334.096	49.77743	216.91	7.63	3.52
92	0.6353	1783.091	37.94112	5.2276	0.14024	1.65429	0.04263	27.39179	0.39874	9.62747	0.25923	0.0083	0.00272	1299.446	28.65726	211.59	4.4	2.08
93	0.636	1640.043	215.21785	23.58498	3.22922	2.1107	0.30564	37.9124	2.32988	44.0082	6.1276	0.09262	0.02755	1035.492	143.56219	170.57	22.56	13.23
94	0.6584	90.35796	0.86947	1.68259	0.02257	0.13087	0.00577	42.65853	1.84253	3.09099	0.04152	0.00661	0.00085	51.8572	1.74135	8.94	0.3	3.36
95	0.6613	956.0132	37.87242	0.06662	0.13209	0.29559	0.03392	9.13633	0.98413	0.12225	0.2424	0.00481	0.00568	868.6826	35.67993	144.16	5.69	3.95
96	0.6631	3106.041	109.95816	-0.12375	0.1886	4.21133	0.16344	40.06613	0.63816	-0.22704	0.34599	0.01437	0.00665	1861.39	68.82079	295.92	10.09	3.41
97	0.6705	1255.708	20.16878	2.23383	0.07027	0.29029	0.01424	6.81681	0.31671	4.10524	0.12935	0.0088	0.0019	1171.93	19.26994	191.89	2.99	1.56
98	0.6711	1297.327	130.28626	1.1117	0.36512	0.61631	0.15592	14.03138	3.25994	2.04142	0.671	0.06768	0.01948	1116.145	119.90348	183.21	18.71	10.21
99	0.6877	1250.927	12.16677	3.59241	0.05658	0.3929	0.00877	9.25784	0.18661	6.60834	0.10435	0.00479	0.00098	1137.978	11.34142	186.61	1.77	0.95
100	0.6885	1368.481	137.85261	52.48284	5.34534	2.83893	0.32453	60.98698	3.31471	100.0054	10.57754	0.11824	0.02706	554.424	74.7326	93.33	12.26	13.14
101	0.6914	1679.404	51.35102	11.51	0.41211	1.30718	0.06246	22.94441	0.84525	21.29235	0.76861	0.01224	0.00557	1304.657	42.70219	212.39	6.56	3.09
102	0.6922	1324.128	114.19136	60.0827	5.24784	-0.03413	0.09993	-1.13568	2.22912	115.1285	10.50132	0.01011	0.01814	1398.476	129.66457	226.74	19.75	8.71
103	0.7016	289.5699	6.09137	0.88589	0.0425	0.47481	0.01624	48.43334	1.3083	1.6265	0.07807	0.00412	0.0012	149.3997	4.92933	25.63	0.84	3.28
104	0.7016	101263	999212.09	-5.90287	61.68496	349.0812	3444.584	101.8674	4.03973	-10.786	112.2456	0.7746	7.75394	-1883.15	18947.657	-358.83	3994.99	-1113.34
105	0.7053	1456.007	52.93496	10.34868	0.42168	1.06984	0.04517	21.65457	0.46628	19.12821	0.78515	0.05153	0.00389	1149.09	42.63914	188.34	6.64	3.53
106	0.7053	1282.173	1203.8365	35.56308	33.55109	2.85825	2.82296	65.64649	20.21053	66.93442	64.77441	-0.08153	0.13635	451.8086	509.9992	76.42	84.46	110.52
107	0.7409	178.2151	1.47038	0.27007	0.01011	0.12077	0.00316	20.01575	0.49779	0.49563	0.01855	0.00071	0.0004	142.5474	1.47489	24.46	0.25	1.02
108	0.7902	243.6736	1.84539	0.59003	0.015	0.14086	0.00243	17.06347	0.26515	1.08308	0.02755	0.00134	0.00024	202.154	1.66287	34.59	0.28	0.81
109	0.8727	53.12746	0.1804	0.07748	0.00395	0.00109	5.43748	0.60544	0.14217	0.00725	0.00142	0.00017	0.00017	50.21333	0.36464	8.65	0.06	0.69
110	0.8982	176.2588	1.60635	0.40041	0.01298	0.10216	0.00354	17.11187	0.57472	0.73491	0.02384	0.00299	0.00058	146.1144	1.6805	25.07	0.29	1.16
111	0.9064	3569.98	64.19846	-0.02611	0.03748	8.36189	0.17076	69.21502	0.67018	-0.0479	0.06877	0.02063	0.00442	1098.988	31.03652	180.53	4.85	2.69
112	0.9265	287.892	2.31269	1.206	0.02649	0.44789	0.00936	45.94257	0.88765	2.21473	0.04868	0.0109	0.00074	155.7436	2.85077	26.71	0.49	1.83
113	0.9282	2148.058	91.45805	1.07683	0.18061	2.57676	0.12724	35.44386	0.88784	1.97733	0.3319	0.02482	0.00757	1387.739	62.15018	225.1	9.48	4.21
114	0.9398	1127.486	17.04417	1.30746	0.04357	3.51846	0.06461	92.2074	0.68162	2.40122	0.08009	0.04	0.00234	87.9394	10.93599	15.13	1.87	1.36
115	0.9399	5784.931	2613.6449	452.7913	204.5971	14.88953	6.77072	75.41224	3.92178	1221.362	811.3133	0.40361	0.23352	2091.021	1428.3735	329.28	205.57	62.43

23	0.1831	275.6109	0.67442	0.08419	0.00512	0.04553	0.00142	4.87959	0.15219	0.15449	0.0094	0.00357	0.00021	262.1495	0.76716	42.53	0.12	0.28
24	0.1842	815.1444	29.7055	12.32663	0.48709	1.15695	0.05761	41.81781	1.42766	22.81629	0.9095	0.00695	0.00057	478.4165	21.17422	76.87	3.33	4.33
25	0.1863	12520.75	290.66197	9.76678	0.25364	38.98993	0.91042	92.01324	0.23615	18.04517	0.47189	0.03924	0.01263	1006.945	37.99616	158.15	5.71	3.61
26	0.193	1141.666	15.93701	3.53181	0.05786	0.7377	0.0126	19.06896	0.18831	6.49659	0.1067	0.00795	0.00109	926.2486	13.14273	145.97	1.99	1.36
27	0.1954	1377.058	36.21689	5.11968	0.14601	0.40616	0.02161	8.68535	0.40325	9.42801	0.26986	0.00654	0.00182	1261.991	33.7755	196.09	4.97	2.53
28	0.2066	166.3912	0.94494	0.2377	0.01528	0.41084	0.0046	72.96305	0.72454	0.43622	0.02805	0.00165	0.00061	44.98662	1.24422	7.37	0.2	2.71
29	0.2078	516.0179	159.5627	13.87213	0.55257	1.31573	0.05888	75.12882	1.79999	27.70528	0.13045	0.53866	0.02311	129.6021	10.62366	21.15	1.72	8.13
30	0.21	1298.593	32.22635	7.784	0.2168	1.09484	0.03037	24.86467	0.31767	14.36152	0.4022	0.00176	0.00311	981.0733	24.88763	154.25	3.75	2.43
31	0.2103	1779.098	209.95739	131.8513	15.57496	5.15678	0.61762	85.0422	1.76631	266.7692	34.74772	0.04079	0.02307	293.4329	51.60253	47.54	8.25	17.35
32	0.2113	759.1332	36.86375	2.0949	0.17887	0.66628	0.04163	25.91382	1.02134	3.84956	0.32917	0.00414	0.00532	563.2241	28.48243	90.16	4.45	4.94
33	0.2212	266.4683	1.84356	2.22294	0.02838	0.66077	0.00616	73.21506	0.51768	4.0852	0.05223	0.00207	0.00057	71.47765	1.518	11.7	0.25	2.14
34	0.2235	1599.949	32.01434	15.59984	0.32539	3.85657	0.07812	71.14917	0.22756	28.94241	0.61042	0.01416	0.00391	466.7321	10.14378	75.03	1.6	2.13
35	0.2258	2213.81	61.50696	0.11742	0.09053	1.35784	0.04064	18.12424	0.20197	0.21546	0.16614	0.00076	0.00298	1812.7	50.56809	275.4	7.12	2.59
36	0.2285	1681.725	28.12812	0.17107	0.05928	2.40098	0.05367	52.10241	0.44579	0.31392	0.1088	0.00423	0.00255	652.298	14.78533	104.02	2.29	2.20
37	0.2345	1204.563	11.32255	3.11775	0.04603	1.76767	0.01897	43.3437	0.22578	5.73327	0.08483	0.00824	0.00085	683.9501	7.00331	108.91	1.08	0.99
38	0.2353	1822.908	126.95739	15.00374	1.09686	1.32387	0.10478	21.39288	0.80913	27.82462	0.20593	0.05855	0.00999	1448.258	103.05155	223.31	14.94	6.69
39	0.2365	1249.438	49.83042	10.91418	0.47429	0.95591	0.05057	22.53644	0.78822	20.18157	0.88383	0.04568	0.00527	975.3541	40.46378	153.39	6.1	3.98
40	0.2443	4112.919	37.98421	2.86901	0.04367	13.27215	0.1302	95.35106	0.31942	5.27492	0.08046	0.0061	0.00306	191.5939	13.29082	31.18	2.14	6.86
41	0.2524	1884.833	17.67049	0.2839	0.02774	1.3834	0.01671	21.68768	0.16558	0.52103	0.05091	0.00076	0.00101	1476.329	14.19718	227.38	2.05	0.90
42	0.2542	710.062	20.23462	23.881	0.69439	1.42507	0.04456	59.03101	0.76995	44.57003	1.3182	0.01533	0.00313	295.8834	10.24105	47.93	1.64	3.42
43	0.2542	1148.304	553.35997	3.25407	3.60927	2.80333	1.49371	72.11837	16.44798	5.98452	6.65306	0.05883	0.10181	320.895	244.82928	51.92	39.05	75.21
44	0.2559	2871.938	54.36065	11.3324	0.27183	8.37521	0.16554	86.14269	0.4929	20.96115	0.50685	0.01851	0.00547	401.18	16.20321	64.68	2.57	3.97
45	0.2584	1609.894	18.88934	0.68187	0.09953	0.65859	0.01656	12.08525	0.26895	1.25173	0.18281	0.0046	0.00287	1415.99	17.1806	218.63	2.5	1.14
46	0.2857	29.46755	0.09811	0.06731	0.00828	0.00465	0.00159	4.65176	1.59118	0.1235	0.01519	0.00265	0.00022	28.07858	4.67797	4.6	0.08	1.74
47	0.3058	53.68905	0.32225	0.55918	0.01294	0.00874	0.00171	4.72566	0.93908	0.10263	0.02375	0.00298	0.00028	51.1438	0.59103	8.38	0.1	1.19
48	0.3062	1522.321	203.65975	20.77454	2.90532	3.99369	0.54942	77.411	2.49994	38.686	5.4908	0.07006	0.02052	348.9908	61.17365	56.4	9.73	17.25
49	0.3095	1148.485	20.6608	0.17816	0.05174	0.28731	0.01152	7.39116	0.26491	0.32695	0.09497	0.00909	0.00199	1063.705	19.37965	166.66	2.9	1.74
50	0.3266	66.70589	0.36832	0.27401	0.0135	0.1003	0.0025	44.41957	1.08414	0.50287	0.02478	0.00184	0.00046	37.06609	0.75501	6.07	0.12	1.98
51	0.3267	11600.12	3408.5186	663.4198	194.9646	35.95177	10.5674	91.11179	0.73141	2290.353	1266.427	0.19787	0.11718	1939.932	1084.4815	293.24	151.29	51.59
52	0.3281	2709.62	65.89561	9.31509	0.27732	2.83823	0.08032	30.92454	0.44824	17.20509	0.51561	0.00618	0.0046	1884.056	47.72084	285.43	6.69	2.34
53	0.3313	409.3331	5.75016	1.78828	0.07322	1.34536	0.02263	97.09348	0.93351	3.2854	0.1347	0.03232	0.002	11.91152	3.83355	1.95	0.63	32.31
54	0.334	1760.282	26.84469	10.02651	0.20649	1.56174	0.03572	26.1705	0.44708	18.52846	0.3843	0.01958	0.0031	1308.853	21.61343	202.98	3.17	1.56
55	0.3393	615.8587	6.5203	0.11676	0.03931	0.11331	0.00667	5.43567	0.3149	0.21426	0.07215	0.0111	0.00111	582.4026	6.46514	93.15	1.01	1.08
56	0.372	747.7	1.57507	0.04993	0.00532	0.03553	0.00105	1.40369	0.04131	0.09162	0.00977	0.00512	0.00025	737.2013	1.58416	117.12	0.24	0.20
57	0.3755	2638.354	41.25912	-0.01515	0.06505	0.97134	0.01992	10.87932	0.14445	-0.02779	0.11936	0.00159	0.00168	2351.268	36.96934	349.73	5	1.43
58	0.3777	1265.494	26.50954	21.04342	0.46361	1.67985	0.04319	39.08924	0.59169	39.19426	0.87652	0.03758	0.00422	782.4319	18.34901	124.07	2.81	2.26
59	0.3847	1495.808	12.55049	6.83118	0.06718	1.59483	0.01513	31.46921	0.14026	12.59504	0.12447	0.00749	0.00095	1030.038	8.94426	161.62	1.34	0.83
60	0.3902	1992.082	18.90132	1.37294	0.04281	3.41056	0.03473	50.58635	0.18894	2.5216	0.07871	0.00758	0.00169	985.3008	10.10153	154.89	1.52	0.98
61	0.3968	1060.605	13.74845	3.74029	0.05898	1.17812	0.019	32.79609	0.31531	6.88109	0.10879	0.01521	0.0014	714.6358	9.87902	113.65	1.52	1.34
62	0.3976	3322.831	235.55693	14.91052	1.14658	7.83658	0.56041	69.65452	0.66756	27.64991	2.14883	0.00854	0.00869	1019.051	76.42821	159.97	11.48	7.18
63	0.4285	103.0073	0.37797	0.11129	0.00698	0.21617	0.00197	62.02317	0.51792	0.20422	0.0128	0.00094	0.00025	39.1107	0.55327	6.41	0.09	1.40
64	0.4383	359.8429	2.27131	0.84331	0.03197	1.0058	0.00961	82.58314	0.59476	1.54829	0.05873	0.00081	0.00101	62.70552	2.17923	10.26	0.36	3.51
65	0.4409	1523.777	39.30803	5.9409	0.1796	0.95723	0.03092	18.53148	0.36808	10.94665	0.33233	0.01216	0.00315	1246.605	32.76494	193.83	4.83	2.49
66	0.4413	3030.601	402.88192	8.0094	1.19398	2.78805	0.37818	27.1635	0.73482	14.77975	2.21579	0.01753	0.02042	2219.919	297.65107	331.88	40.64	12.25
67	0.4578	176.1343	1.46397	0.10508	0.01882	0.49169	0.005	82.49909	0.52703	0.19283	0.03454	0.0116	0.00057	30.82219	0.97787	5.05	0.16	3.17
68	0.4753	172.3672	0.170155	0.34215	0.0259	0.0582	0.00341	9.96262	0.18534	0.62794	0.04755	0.00136	0.00054	155.2057	1.39864	25.3	0.23	0.91
69	0.4762	2390.48	154.89242	0.08446	0.34892	4.58561	0.3005	56.68562	0.57123	0.15499	0.64029	0.00299	0.00739	1035.471	68.53323	162.43	10.28	6.33
70	0.4775	908.4437	35.37175	4.07993	0.29739	2.78264	0.1137	90.4801	1.14611	7.50774	0.54882	0.00713	0.00815	86.73002	10.99934	14.18	1.79	12.62
71	0.4779	5160.061	752.59713	60.22539	8.83964	12.50473	1.82832	71.51471	7.5837	115.4141	17.69252	0.35885	0.05531	1535.143	237.4863	235.87	34.2	14.50
72	0.4813	293.149	5.24194	1.41588	0.10369	0.74543	0.01898	75.1082	1.37812	2.60054	0.19063	0.00476	0.00235	73.03572	4.26418	11.95	0.7	5.86
73	0.4962	153.6638	0.76186	0.77051	0.01914	0.08476	0.00629	16.26129	0.39593	1.41455	0.03515	0.00082	0.00046	128.7213	0.89546	21.01	0.15	0.71
74	0.5002	60.1645	0.97571	0.48155	0.07768	0.07941	0.00818	38.9539	3.97006	0.88389	0.14264	-0.00086	0.00182	36.72245	2.46284	6.02	0.4	6.64
75	0.5071	174.9544	1.791	0.65151	0.03794	0.0727	0.00383	12.25042	0.63647	1.19598	0.06968	0.00993	0.00114	153.5663	1.93552	25.03	0.31	1.24
76	0.5128	252.1927	2.80835	0.22447	0.04782	0.34144	0.00774	40.00435	0.80002	0.41194	0.08777	0.01701	0.00136	151.3108	2.658	24.67	0.43	1.74
77	0.5133	1347.272	124.08146	2.48543	0.69629	1.62766	0.16217	35.68548	1.36213	4.56844	1.28208	0.02602	0.01575	867.9958	82.19716	137.13	12.5	9.12
78	0.5249	1502.111	10.17518	-0.00631	0.02938	0.17353	0.0042	3.41385	0.07938	-0.01157	0.05391	-0.00014	0.00065					

114	0.8979	4858.692	246.39144	11.07906	0.61515	13.58969	0.69456	82.63261	0.52774	20.48886	1.14659	0.07189	0.0084	850.4774	50.58282	134.47	7.71	5.73
115	0.9187	135.8606	0.53866	0.22537	0.01212	0.28884	0.00243	62.82371	0.50132	0.41359	0.02225	0.0053	0.00031	50.50492	0.73528	8.27	0.12	1.45
116	0.9349	89.59666	0.44628	0.47458	0.01839	0.16564	0.00202	54.60585	0.62626	0.87109	0.03376	0.0023	0.0005	40.6718	0.60377	6.66	0.1	1.50
117	0.9666	86.87313	0.29957	0.01772	0.00662	0.15464	0.00168	52.61702	0.56317	0.03251	0.01215	0.00037	0.0002	41.14952	0.52368	6.74	0.09	1.34
118	0.9821	318.5549	2.36782	0.67671	0.0154	0.46372	0.00508	43.00211	0.34755	1.24226	0.02829	0.00343	0.00048	181.6395	1.7491	29.57	0.28	0.95
119	0.9958	601.1579	4.08008	0.46357	0.02406	0.05674	0.00238	2.78263	0.11558	0.85086	0.04418	0.00087	0.00045	584.5924	4.02989	93.5	0.63	0.67
120	1	107.9446	1.53735	0.62385	0.05264	0.21307	0.00759	58.29767	1.90862	1.14518	0.09668	0.00116	0.00151	45.02287	2.16172	7.38	0.35	4.74
121	1	14872.52	6548.1979	951.4101	418.9386	49.66337	21.87019	98.14822	0.87501	5320.651	7140.702	-0.0145	0.17536	839.3983	1194.4354	132.78	182.14	137.17

Integrated 506.9859 0.42252 1.55603 0.00325 0.61024 0.00083 35.5453 0.03872 2.85824 0.00598 0.00434 0.00009 327.1166 0.33747 52.91 0.31 0.59

WILLOW CREEK

Weighted average of J from standards = 1.347e-04 2.749e-06

Grain #	Cumulative 40Ar/39Ar meas.			37Ar/39Ar meas.	36Ar/39Ar meas.	% Atm.	Ca/K	Cl/K	40*/39K			Age (Ma)	(Ma)	%error				
10	0.0007	69.35314	47.20833	2.63658	2.54457	0.67511	0.52607	287.4626	110.7892	4.84678	4.68637	0.12847	0.12934	-130.198	116.99245	-31.89	28.91	-90.66
11	0.0111	128.5308	5.13665	0.55212	0.09952	0.07254	0.01231	16.64582	2.75311	1.01346	0.18275	0.00331	0.00367	107.1528	5.56133	25.82	1.33	5.15
12	0.0165	710.5426	60.70274	4.10851	0.41974	1.32965	0.12145	55.25183	1.79534	7.56048	0.77465	0.01207	0.00623	318.8667	30.1887	75.79	7.03	9.28
13	0.0386	685.0458	17.96256	0.54278	0.052	0.0951	0.00793	4.09602	0.32511	0.99631	0.09549	0.00613	0.00137	657.2097	17.38851	152.86	3.88	2.54
14	0.045	793.2516	60.23771	1.65049	0.23094	0.46373	0.04405	17.25809	0.98737	3.03196	0.42473	0.02499	0.00727	657.0929	50.57769	152.84	11.28	7.38
15	0.0513	723.2085	51.23069	3.01542	0.31067	1.40183	0.11387	57.24615	2.28249	5.54469	0.57248	0.03835	0.00693	309.8467	27.54123	73.69	6.42	8.71
16	0.0916	108.5376	1.78683	0.16169	0.03661	-0.00441	0.00412	-1.21232	1.12235	0.29671	0.06719	0.00242	0.00168	109.8359	2.18043	26.47	0.52	1.96
17	0.1192	462.8663	617.01591	2.66962	5.49612	0.86661	1.21257	55.28143	23.52831	4.90764	10.12276	0.06423	0.16496	207.3649	297.70253	49.65	70.3	141.59
18	0.155	308.3924	14.83469	2.2051	0.12158	0.14196	0.00929	13.54442	0.60504	4.05236	0.22378	0.01785	0.00424	267.0126	13.006	63.68	3.05	4.79
19	0.1958	106.6556	1.94242	0.25102	0.03856	0.0176	0.00614	4.85721	1.6991	0.46068	0.07077	0.005	0.00204	101.4649	2.58922	24.46	0.62	2.53
20	0.2847	129.4582	1.41026	0.09923	0.01944	0.02395	0.00241	5.46214	0.54778	0.18209	0.03568	0.00188	0.0008	122.3675	1.51243	29.46	0.36	1.22
21	0.2996	498.028	29.19474	0.42506	0.10489	0.13991	0.01729	8.29464	0.90377	0.78017	0.19258	0.01514	0.00448	456.8283	27.16774	107.61	6.21	5.77
22	0.3081	63.51022	5.70933	3.96522	0.39994	0.03265	0.02083	14.68399	9.59906	7.29606	0.73796	0.00052	0.00783	54.31121	7.83263	13.14	1.89	14.38
23	0.3221	988.9918	53.01212	1.26423	0.14572	0.63542	0.03836	18.97562	0.52974	2.32176	0.26786	0.0523	0.00724	802.0164	43.36228	184.87	9.5	5.14
24	0.3257	821.9612	184.38382	1.61852	0.60244	0.05054	0.07425	1.80091	2.63817	2.97317	1.10792	-0.01587	0.0216	808.053	182.77229	186.19	40.01	21.49
25	0.3268	1321.586	1033.3325	0.34039	1.63847	0.31088	0.31346	6.94915	4.42557	0.62473	3.00782	-0.04051	0.07083	1230.015	963.76761	276.27	200.7	72.65
26	0.3554	442.3732	15.01065	0.35818	0.062	0.11477	0.00715	7.66005	0.40083	0.65738	0.11383	0.00014	0.00266	408.5631	13.98433	96.54	3.22	3.34
27	0.3868	127.3777	3.24368	0.03999	0.05421	0.01532	0.00642	3.55124	1.48716	0.07337	0.09948	-0.00391	0.00219	122.829	3.65789	29.57	0.87	2.94
28	0.3978	624.6727	37.78519	1.1536	0.15298	0.14781	0.01754	6.9772	0.71411	2.11842	0.28116	0.01622	0.00384	581.5343	35.49145	135.91	7.99	5.88
29	0.4419	113.7673	1.91513	0.55065	0.0341	0.1111	0.00475	28.82375	1.13602	1.01076	0.06262	0.00267	0.00125	80.98562	1.88481	19.55	0.45	2.30
30	0.4634	846.0103	27.94471	0.13806	0.0768	0.13378	0.00977	4.67175	0.30456	0.25334	0.14095	-0.00046	0.00297	806.5371	26.77198	185.86	5.86	3.15
31	0.544	113.4391	1.03015	0.18346	0.01792	0.01443	0.00146	3.74628	0.37896	0.33668	0.03289	0.00063	0.00059	109.175	1.0828	26.31	0.26	0.99
32	0.6367	120.8563	2.00554	0.22007	0.03596	0.02392	0.00301	5.83387	0.73034	0.40387	0.066	0.00234	0.00123	113.7954	2.08726	27.41	0.5	1.82
33	0.6636	521.3467	19.58025	0.88845	0.09427	0.0653	0.00817	3.68749	0.44178	1.6312	0.17319	0.01079	0.00241	502.4088	19.02478	118.01	4.33	3.67
34	0.7143	126.1271	1.69001	0.33207	0.03924	0.01812	0.00446	4.22487	1.04341	0.60944	0.07204	0.00094	0.00112	120.7983	2.08934	29.09	0.5	1.72
35	0.7153	1636.638	1044.2371	5.18271	3.76131	3.03224	1.94975	54.72281	4.37356	9.54449	6.95229	-0.05359	0.08302	743.7325	481.68952	172.05	106.28	61.77
36	0.7522	113.1356	2.03291	0.04808	0.05804	-0.00869	0.00529	-2.27345	1.38025	0.08823	0.1065	-0.00504	0.0022	115.6812	2.59982	27.86	0.62	2.23
37	0.7694	239.4363	11.01387	-0.14411	0.10563	0.27883	0.01586	34.42118	1.15283	-0.2644	0.19378	-0.00755	0.00366	156.984	7.73488	37.71	1.84	4.88
38	0.8045	452.7337	9.24364	1.53122	0.067	1.09228	0.02354	71.27027	0.52787	2.81262	0.12321	0.0012	0.00219	130.2014	3.62215	31.33	0.86	2.74
39	0.8692	122.2889	1.30539	-0.00161	0.02712	0.03366	0.00274	8.13525	0.65564	-0.00296	0.04975	-0.00206	0.00112	112.3129	1.44416	27.06	0.35	1.29
40	0.9347	131.5191	1.72854	0.15483	0.03313	0.01525	0.00381	3.41773	0.8549	0.28413	0.0608	-0.00022	0.00108	127.0093	2.01405	30.57	0.48	1.57
41	0.9965	455.3441	7.11621	0.16268	0.03835	0.09227	0.00494	5.98512	0.30677	0.29853	0.07038	0.01211	0.00112	428.1125	6.83685	101.04	1.57	1.55
42	0.9959	-892.836	1326.7233	-2.26672	4.8904	-1.24598	1.89456	41.21556	13.30419	-4.15246	8.94456	0.16142	0.27383	-524.027	786.41007	-131.92	205.39	-155.69
43	1	927.9873	174.46443	4.12789	0.93131	0.3215	0.07702	10.20123	1.5207	7.59626	1.71883	0.00072	0.01971	835.7309	158.2224	192.24	34.52	17.96

Integrated 262.8603 9.76922 0.53871 0.118 0.14219 0.01155 15.96918 1.15424 0.98884 0.21667 0.00647 0.00388 220.9428 8.75843 52.85 2.32 4.39

LIME CREEK

Weighted average of J from standards = 1.347e-04 2.749e-06

Grain #	Cumulative 40Ar/39Ar		37Ar/39Ar	36Ar/39Ar	% Atm.	Ca/K	Cl/K	40*/39K		Age	%error							
	39Ar	meas.	meas.	meas.	40Ar					(Ma)	(Ma)							
1	0.0378	365.0054	1.26872	0.27066	0.00895	0.13522	0.00171	10.94156	0.13281	0.49672	0.01643	0.0028	0.00035	325.1038	1.23116	77.24	0.29	0.38
2	0.0537	970.2882	12.13631	1.56625	0.03904	0.20685	0.00458	6.28634	0.11529	2.87704	0.07179	0.00979	0.00164	910.2716	11.45406	208.43	2.48	1.19
3	0.0585	998.8869	24.48847	1.06564	0.06663	0.28125	0.01601	8.31167	0.42775	1.95678	0.12244	0.01903	0.00336	916.5252	22.89834	209.78	4.95	2.36
4	0.07	163.8117	1.80695	0.8169	0.02638	0.12889	0.006	23.2142	1.05321	1.49977	0.04847	0.00637	0.00096	125.8339	2.21843	30.29	0.53	1.75
5	0.0856	512.6564	4.49165	1.56853	0.03722	0.15375	0.00552	8.83732	0.3089	2.88122	0.06845	0.00696	0.00085	467.8425	4.39995	110.13	1	0.91
6	0.0896	511.3836	12.9627	0.29267	0.23052	0.26961	0.01411	15.44632	0.72529	15.30554	4.2797	0.02615	0.00255	434.9157	11.17026	102.6	2.56	2.50
7	0.0922	980.6165	48.21592	12.59264	0.63542	0.26256	0.02501	7.80644	0.64586	23.31308	1.18692	0.00645	0.00449	912.1499	45.70962	208.84	9.88	4.73
8	0.1002	566.2394	12.80834	4.42414	0.11581	0.12908	0.00712	6.67207	0.3392	8.14312	0.21382	0.00461	0.00134	530.0881	12.18867	124.29	2.76	2.22
9	0.1006	1154.1	317.48507	210.1607	57.82687	3.67977	1.01984	92.71925	3.1943	452.8232	146.3123	-0.01951	0.03905	98.66666	53.78175	23.79	12.88	54.14
10	0.1039	290.22	10.65757	0.83583	0.11845	0.56981	0.0288	58.00027	2.01933	1.53454	0.21759	0.00659	0.00609	121.9511	7.38743	29.36	1.76	5.9
11	0.1076	160.7222	1.72832	0.29277	0.09417	0.08396	0.01315	15.42406	2.32109	0.5373	0.17286	0.00869	0.00425	135.9353	7.09653	32.7	1.69	5.17
12	0.1098	1310.855	89.90947	6.36141	0.45532	0.10412	0.02067	2.30711	0.4373	11.72499	0.84301	0.03505	0.00686	1286.362	88.81869	287.97	18.38	6.38
13	0.1139	405.9066	14.22275	2.58463	0.14481	0.15784	0.01675	11.43894	1.15156	4.75111	0.26668	0.0129	0.00422	360.1062	13.48851	85.36	3.12	3.66
14	0.1141	2739.825	1528.3074	7.19551	4.40313	3.81454	2.13686	41.12003	2.12332	3.12702	8.16188	0.16921	0.11854	1621.43	910.97882	355.99	181.49	50.98
15	0.1183	253.4495	13.29266	1.23532	0.12417	0.44758	0.0253	52.14975	1.11444	2.26862	0.22823	0.06278	0.00507	121.3679	6.98398	29.22	1.67	5.72
16	0.1352	483.8097	7.22436	1.15791	0.03218	0.07396	0.00399	4.49811	0.23434	2.12635	0.05915	0.00252	0.00122	462.3972	7.00343	108.89	1.6	1.47
17	0.1463	954.2273	17.95927	1.30994	0.05935	0.12258	0.00814	3.78469	0.24182	2.40578	0.1091	0.01247	0.00183	918.9344	17.46526	210.3	3.77	1.79
18	0.1486	1390.253	94.53102	14.02565	0.98004	1.61452	0.11787	34.23448	0.91615	25.9926	1.8344	0.00981	0.00824	923.4348	64.73082	211.27	13.97	6.61
19	0.1504	774.0578	53.46043	15.00715	1.05415	1.08331	0.08106	11.19755	1.1968	27.83102	1.97588	0.05005	0.00957	460.0231	33.47095	108.34	7.65	7.06
20	0.1565	167.3603	5.88021	0.57449	0.05758	0.15113	0.01495	26.66087	2.46863	1.05453	0.10573	0.00821	0.00425	122.7686	5.98025	29.56	1.43	4.84
21	0.1663	196.3889	2.7077	2.80439	0.05283	0.32368	0.008	48.59335	1.01208	5.15589	0.09733	0.00589	0.00187	101.1421	2.45374	24.39	0.59	2.42
22	0.1834	1698.598	19.71237	0.03891	0.02073	0.27813	0.00671	4.83842	0.10237	0.0714	0.03804	0.00151	0.00111	1616.429	18.84092	355	3.76	1.06
23	0.1869	1423.76	68.85224	0.31042	0.10055	0.95888	0.04862	19.90011	0.30573	0.5697	0.18458	0.01404	0.00487	1140.656	55.35855	257.57	11.65	4.52
24	0.1906	531.3928	18.11341	15.63533	0.55259	1.30477	0.04968	72.31808	1.23604	29.00899	1.0367	0.12196	0.00641	148.7339	8.39844	35.75	2	5.59
25	0.1912	414.4675	100.32813	0.70698	0.64937	1.09453	0.31109	78.02729	11.70548	1.29785	1.1927	0.05242	0.03299	91.10871	53.40474	21.98	12.81	58.28
26	0.2033	1378.201	19.68914	0.05717	0.02345	0.09774	0.00725	2.0953	0.1525	0.10489	0.04304	0.0023	0.00156	1349.349	19.3927	300.96	3.98	1.32
27	0.2045	772.0535	75.38325	5.82956	0.66376	0.85465	0.11304	32.65044	2.92255	10.74066	1.128	0.01781	0.01341	522.1042	56.00758	122.48	12.7	10.37
28	0.205	261.2234	73.4209	13.18869	3.74241	0.02492	0.19869	2.40288	22.46442	24.24694	6.99654	0.0309	0.04088	257.3144	94.02097	6.14	22.06	35.93
29	0.2105	191.967	4.49056	2.27337	0.08236	0.2332	0.02011	35.80465	2.98394	4.17804	0.15161	0.0025	0.00292	123.413	6.43447	29.71	1.54	5.18
30	0.2167	166.8499	4.30939	2.19355	0.07533	0.15611	0.01518	27.54412	2.59439	4.0311	0.13864	0.00259	0.00306	121.0586	5.357	29.15	1.28	4.39
31	0.2185	570.4939	44.71909	0.80915	0.15469	0.75083	0.07308	38.88149	2.24583	1.48552	0.28416	0.02531	0.00707	348.8586	30.22476	82.75	7.01	8.47
32	0.2263	174.0544	3.28688	1.29407	0.04094	0.09321	0.00921	15.76566	1.53618	2.37662	0.07526	0.01929	0.00173	146.7226	3.85712	35.27	0.92	2.61
33	0.2423	161.5629	1.31715	0.71673	0.01694	0.18155	0.00446	33.17532	0.77485	1.31577	0.03056	0.00955	0.00078	107.9888	1.54708	26.03	0.37	1.42

34	0.2435	4375.771	1274.8892	375.687	109.4651	11.19579	3.26477	74.89892	0.93154	938.2723	372.1153	0.07959	0.04876	1495.01	595.49327	330.63	120.32	36.39
35	0.2468	1141.589	54.36339	6.46794	0.32714	0.52089	0.04014	13.43683	0.81756	11.92223	0.60577	0.01267	0.00466	992.7047	48.41836	226.17	10.37	4.59
36	0.2589	130.8115	2.33799	0.11364	0.01707	0.06202	0.00487	14.00522	1.07087	0.20853	0.03133	0.0009	0.0012	112.4745	2.4517	27.1	0.59	2.18
37	0.2596	297.779	77.57507	0.93067	0.51786	0.20473	0.73543	72.95261	8.47835	1.70858	0.95146	0.04266	0.02861	80.58637	32.62072	19.46	7.83	40.24
38	0.2656	790.8586	31.22	1.14135	0.09826	0.07978	0.01265	2.96897	0.45789	2.09592	0.18058	0.00101	0.00314	767.9685	30.55947	177.39	6.72	3.79
39	0.2666	1945.06	353.12987	61.14316	11.11517	1.09106	0.2146	16.3169	1.25475	117.2523	22.27714	0.01602	0.01723	1701.118	323.79536	371.8	63.95	17.20
40	0.2734	221.2943	6.96797	0.39349	0.06781	0.25932	0.01803	34.61704	2.14867	0.72219	0.12449	0.01161	0.00259	144.7096	6.59397	34.79	1.57	4.51
41	0.2819	169.0155	3.89624	0.81141	0.04157	0.18146	0.01071	31.69178	1.72483	1.48968	0.07636	0.00325	0.00203	115.4974	3.95453	27.82	0.95	3.41
42	0.2875	2101.226	97.05237	0.08585	0.07249	0.62436	0.03178	8.78033	0.18795	0.15753	0.13303	0.0262	0.00422	1916.821	88.63039	413.9	17.1	4.13
43	0.2886	4075.395	1039.1467	-0.18787	0.42961	9.19969	2.34804	66.70628	0.7676	-0.34466	0.78807	0.03412	0.02141	1356.661	347.32371	302.46	71.28	23.57
44	0.2897	1774.953	453.74951	16.56114	4.26576	3.78807	0.97208	62.98915	1.42255	30.74702	8.01343	0.05987	0.02157	664.6882	173.84633	154.53	38.73	25.06
45	0.3036	1341.566	29.55177	0.02837	0.03299	0.04231	0.00384	0.93187	0.08204	0.05206	0.06054	0.00131	0.00123	1329.062	29.29834	296.78	6.03	2.03
46	0.3044	12581.2	4411.9272	-0.23343	0.59789	31.10038	10.90686	73.04713	0.29089	-0.42823	1.09668	0.11936	0.05236	3390.427	1189.3244	677.89	198.19	29.24
47	0.3122	1598.95	53.53452	-0.01287	0.06093	0.11744	0.01019	2.17057	0.17372	-0.02361	0.11179	0.00258	0.0024	1564.201	52.44538	344.56	10.52	3.05
48	0.3132	1814.649	574.03596	3.98994	1.37416	0.20068	0.08423	3.24983	0.90149	7.34168	2.53566	0.0239	0.02042	1760.608	558.76587	383.51	109.64	28.59
49	0.3409	819.4093	6.86695	0.17865	0.01587	0.06681	0.00323	2.40757	0.11474	0.32783	0.02913	0.00172	0.00058	799.7534	6.76923	184.37	1.48	0.80
50	0.3597	520.6984	6.31215	0.89414	0.02593	0.07897	0.00495	4.46772	0.2759	1.64166	0.04763	0.01053	0.00075	497.721	6.20678	116.94	1.41	1.21
51	0.3706	299.9338	6.48678	4.66804	0.11668	0.1593	0.00746	15.56746	0.65293	8.59354	0.21551	0.00442	0.0016	254.0543	5.85638	60.64	1.37	2.26
52	0.3813	161.7208	5.07787	1.7695	0.07914	0.15625	0.00989	28.46457	1.56981	3.25085	0.14558	0.01169	0.00176	115.8111	4.44282	27.9	1.06	3.80
53	0.3878	1372.377	57.25774	0.01904	0.06789	0.09571	0.01261	2.06073	0.25749	0.03493	0.12458	-0.00022	0.00343	1344.085	56.19071	299.87	11.55	3.85
54	0.3967	1370.296	40.50981	0.06145	0.07553	0.26855	0.01649	5.79087	0.31181	0.11275	0.13859	0.003	0.00236	1290.972	38.40614	288.92	7.94	2.75
55	0.4216	365.9436	3.65491	0.19825	0.01706	0.04835	0.00412	3.98983	0.33007	0.36382	0.03132	0.00154	0.00107	351.6932	3.71548	83.41	0.86	1.03
56	0.4273	1148.475	48.97108	0.15105	0.08618	0.13779	0.01539	3.5443	0.36613	0.27719	0.15816	-0.00459	0.00422	1107.859	47.43599	250.66	10.02	4.00
57	0.4286	238.8956	50.1697	8.75706	1.8844	0.31566	0.09273	38.7482	8.03963	16.16799	3.50078	-0.01062	0.01853	147.2203	36.66445	35.39	8.73	24.67
58	0.4294	4064.118	1221.1069	0.64884	0.53958	7.35115	2.21105	53.44894	0.74991	1.19107	0.99096	0.05487	0.03183	1892.743	569.80551	409.25	110.22	26.93
59	0.4463	1454.43	26.65769	1.36739	0.03572	0.1682	0.00534	3.40978	0.0887	2.5114	0.06566	-0.00097	0.00156	1406.166	25.83119	312.59	5.27	1.69
60	0.4485	1505.601	182.07957	0.17516	0.19791	1.62794	0.2033	31.95088	0.9981	0.32143	0.36323	0.00293	0.01088	1024.655	124.85351	232.99	26.63	11.43
61	0.4534	1419.054	84.66844	0.19777	0.09372	0.83403	0.05368	17.36679	0.41939	0.36293	0.17201	0.00896	0.00386	1172.749	70.23763	264.31	14.72	5.57
62	0.4608	1000.066	43.24086	5.4045	0.24696	0.32001	0.01689	9.41127	0.28627	9.95452	0.45661	0.00939	0.00265	909.3911	39.57711	208.24	8.56	4.11
63	0.4692	494.418	16.79206	5.17195	0.19057	0.12109	0.04203	72.24186	0.5489	9.5246	0.35223	0.00495	0.00292	137.7361	5.44897	33.13	1.3	3.92
64	0.4738	1415.674	98.50903	-0.18021	0.11129	0.13383	0.01768	2.79463	0.31385	-0.33061	0.20415	-0.00082	0.00652	1375.907	95.83736	306.4	19.63	6.41
65	0.4882	148.497	3.23031	0.60151	0.03304	0.19439	0.00596	38.65658	0.83949	1.10416	0.06067	0.00793	0.00193	91.11363	2.34766	21.98	0.56	2.55
66	0.4911	2391.013	252.58207	10.85541	1.17007	0.96404	0.1066	11.8771	0.38935	20.07207	2.18022	0.01965	0.00888	2123.282	226.2308	453.3	42.7	9.42
67	0.4913	1839.887	1362.8042	22.1019	16.51132	1.466	1.11076	23.44642	3.75952	41.19698	31.26437	0.06329	0.078	1430.81	1078.9346	317.61	219.58	69.14
68	0.4926	1161.08	190.47552	66.9713	11.00747	1.73676	0.28867	43.72686	1.18962	128.9836	22.25231	0.05961	0.01881	685.7957	118.99642	159.23	26.44	16.60
69	0.5066	794.3968	14.76045	2.23975	0.05914	0.30937	0.00992	11.48508	0.3009	4.11614	0.10886	0.00257	0.00134	704.2473	13.32433	163.32	2.95	1.81
70	0.5088	2551.133	286.28935	16.59274	1.89543	4.22327	0.47871	48.86544	0.78782	30.80639	3.56082	0.01433	0.00922	1319.964	51.28535	294.91	31.18	10.57
71	0.5124	1010.564	58.87232	0.52822	0.15814	0.50359	0.0354	14.72158	0.58066	0.96958	0.29038	-0.0022	0.00516	862.0896	50.59331	197.98	11	5.56
72	0.519	1295.198	59.91191	11.79423	0.55622	1.63308	0.07685	37.18449	0.32344	21.82255	1.03781	0.01643	0.00298	820.4	38.50379	188.89	8.42	4.46
73	0.5247	1343.188	65.85435	16.04742	0.79311	1.57354	0.07813	34.5201	0.27241	29.78233	1.4888	0.02304	0.00374	889.5802	44.27283	203.95	9.6	4.71
74	0.526	3720.077	804.99736	-0.42201	0.37036	6.95898	1.50855	55.27925	0.72546	-0.7741	0.67915	0.04034	0.0197	1663.138	360.82669	364.28	71.56	19.64
75	0.5313	786.9515	39.4415	4.18359	0.23553	0.27522	0.01844	10.29099	0.46004	6.79907	0.43472	0.00481	0.00402	708.0317	35.7819	164.16	7.93	4.83
76	0.5364	157.5736	8.48194	0.87307	0.10698	0.10183	0.01456	19.05491	2.35154	1.60295	1.9654	0.02147	0.00459	127.6028	7.95325	30.71	1.9	6.19
77	0.5628	51.29631	0.49647	1.69334	0.02626	0.01455	0.00261	8.11314	1.50353	3.11077	0.04831	0.00427	0.00084	47.16371	0.89787	11.41	0.22	1.93
78	0.5749	108.3572	2.62059	0.17209	0.04097	0.004	0.00585	1.07731	1.59684	0.13579	0.07518	0.00111	0.00158	107.1735	3.11739	25.83	0.75	2.90
79	0.583	121.712	3.80794	0.88259	0.06304	0.04617	0.01133	11.15256	2.72896	0.62044	0.11581	0.00064	0.00231	108.1791	4.74685	26.07	1.14	4.37
80	0.5904	691.6728	23.48606	4.92678	0.18419	0.30007	0.0138	12.76143	0.39882	9.07152	0.34033	0.00936	0.00221	605.4863	20.82451	141.29	4.67	3.31
81	0.5978	267.4388	9.55575	1.4585	0.0861	0.48256	0.0203	53.28053	1.19069	2.6789	0.15831	0.00512	0.00359	125.0609	5.50377	30.1	1.31	4.35
82	0.6128	276.3205	4.65948	0.76977	0.03677	0.54568	0.01468	58.33858	1.236	1.41319	0.06755	0.00867	0.00114	115.1693	3.95184	27.74	0.94	3.39
83	0.6166	1907.792	127.5043	19.82157	1.34478	0.49571	0.0421	7.59254	0.40248	36.8862	2.53804	-0.00381	0.00876	1787.943	121.44354	388.87	23.76	6.11
84	0.623	938.0171	40.47868	4.23746	0.21305	0.44573	0.02463	14.00499	0.48605	7.7985	0.39327	0.00223	0.00312	809.0436	35.32528	186.41	7.73	4.15
85	0.6525	435.7214	4.51417	1.08595	0.02104	0.09653	0.00317	6.52612	0.20411	1.99411	0.03867	0.0017	0.00084	407.5706	4.31914	96.31	0.99	1.03
86	0.6568	174.2377	10.95323	1.09313	0.1449	0.15866	0.02441	26.86064	3.78305	2.0073	0.26629	0.00478	0.00555	127.5131	10.39764	30.69	2.48	8.08
87	0.6764	1214.912	17.63367	0.67785	0.03003	0.20353	0.00655	4.94591	0.14211	1.24435	0.05515	0.00224	0.00126	1155.349	16.8668	260.66	3.54	1.36
88	0.6866	229.5422	6.67699	3.10721	0.1127	0.34414	0.01439	44.19684	1.33319	5.71385	0.20771	0.00534	0.00227	128.3569	4.84159	30.89	1.16	3.76
89	0.6922	1500.328	67.25151	4.3056														

WHITE RIVER

Weighted average of J from standards = 9.588e-05 +/- 4.822e-07

Grain #	Cumulative 40Ar/39Ar +/- 39Ar meas.	37Ar/39Ar +/- meas.	36Ar/39Ar +/- meas.	% Atm. +/- 40Ar	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age (Ma)	+/- (Ma)	%error				
1	0.0017 131.0604	2.27389 2.95159	0.08615 0.21219	0.01247 47.69016	2.688	4.76392	0.15866	0.00473	0.00183	68.66765	3.72776	11.83	0.64	5.41			
2	0.006 131.5435	0.8265 1.98519	0.02135 0.06743	0.00535 15.02539	1.2	3.64767	0.03929	0.04287	0.00074	111.9103	1.73727	19.23	0.3	1.56			
3	0.0172 2257.046	11.37692 0.25332	0.00765 0.19499	0.0042 2.55201	0.05343	0.46489	0.01403	0.00168	0.00047	2199.811	11.15664	344.87	1.59	0.46			
4	0.0345 1306.356	7.43379 0.40394	0.00778 0.24726	0.00468 5.59054	0.10096	0.74139	0.01428	0.01007	0.00043	1233.648	7.14584	201.45	1.1	0.55			
5	0.0545 75.02337	0.27869 0.24421	0.00448 0.06197	0.0016 24.39257	0.62596	0.44816	0.00821	0.00216	0.00015	56.71057	0.51632	9.77	0.09	0.92			
6	0.0682 82.2422	0.57501 0.51997	0.00786 0.10148	0.00182 36.42245	0.60505	0.95443	0.01444	0.00228	0.00022	52.28791	0.62047	9.01	0.11	1.22			
7	0.0742 1238.946	12.86062 2.31482	0.03581 0.15301	0.00532 3.63406	0.12106	4.25432	0.06592	0.00608	0.00072	1195.848	12.52461	195.6	1.94	0.99			
8	0.0899 1104.016	5.26133 0.09149	0.00334 0.09165	0.00229 2.45245	0.06029	0.16788	0.00613	0.00379	0.00028	1076.981	5.17629	177.08	0.81	0.46			
9	0.0923 2182.03	27.11253 1.15462	0.04085 0.60264	0.01978 8.15693	0.24802	2.1203	0.07508	0.01664	0.00191	2005.652	25.52394	316.95	3.7	1.17			
10	0.094 2202.101	57.82103 8.9247	0.2569 1.12082	0.03601 15.00714	0.27854	16.47946	0.47737	0.0388	0.0037	1883.475	50.15164	299.15	7.34	2.45			
11	0.0952 90.3141	1.46378 3.74598	0.08069 0.1488	0.02518 48.3598	8.20958	6.89159	0.14885	0.00527	0.00387	46.74675	7.47674	8.06	1.29	16.00			
12	0.1019 78.74003	0.6974 0.5199	0.01311 0.06088	0.00335 22.80078	1.24288	0.9543	0.02407	0.00402	0.00054	60.78609	1.11886	10.47	0.19	1.81			
13	0.1061 101.1146	1.10068 4.20205	0.0542 0.13766	0.00853 39.9007	2.45571	7.73313	0.10004	0.0033	0.00114	60.93219	2.57922	10.5	0.44	4.19			
14	0.1084 87.84419	1.06057 0.7737	0.03232 0.09842	0.00961 33.04735	3.21148	1.42041	0.05937	0.00515	0.00187	58.82628	2.91231	10.14	0.5	4.93			
15	0.1423 778.4588	2.2639 0.08605	0.00278 0.05425	0.00092 2.05833	0.03425	0.1579	0.0051	0.0008	0.00022	762.4528	2.23388	127.14	0.36	0.28			
16	0.1724 77.53897	0.17727 0.11835	0.00342 0.08646	0.00149 32.94966	0.56437	0.21718	0.00627	0.00165	0.00025	51.97458	0.45493	8.96	0.08	0.89			
17	0.1751 339.8108	3.82095 3.1764	0.06013 0.77033	0.01405 66.91659	0.96838	5.84136	0.11083	0.00246	0.002	112.6639	3.54388	19.36	0.61	3.15			
18	0.1853 130.0111	1.19566 0.69937	0.01676 0.06414	0.00284 14.53629	0.63293	1.28389	0.03079	0.03362	0.001	111.1418	1.31586	19.1	0.22	1.15			
19	0.1892 326.1886	4.28407 2.0508	0.04111 0.90198	0.02018 81.66752	1.48547	3.7684	0.07564	0.00144	0.00137	59.87976	4.91957	10.32	0.85	8.24			
20	0.2019 116.2426	0.92719 0.75987	0.01438 0.19499	0.0032 49.52657	0.71222	1.39501	0.02641	0.00122	0.00027	58.68813	0.95251	10.11	0.16	1.58			
21	0.2071 108.5707	1.18143 2.29928	0.02861 0.17528	0.00634 47.54439	1.64679	4.22572	0.05267	0.00383	0.00081	57.02845	1.89719	9.83	0.33	3.36			
22	0.2161 96.61519	0.68744 0.87267	0.01663 0.15783	0.00381 48.2123	1.11919	1.60223	0.03056	0.00658	0.0004	50.05026	1.14357	8.63	0.2	2.32			
23	0.2304 94.21737	0.31964 1.677	0.01199 0.12193	0.00309 38.10833	0.96228	3.08071	0.02206	0.0029	0.00045	58.36347	0.93115	10.06	0.16	1.59			
24	0.2411 135.073	0.92506 1.09018	0.01697 0.2477	0.00434 54.13591	0.87996	2.00187	0.03119	0.00127	0.00064	61.98413	1.26924	10.68	0.22	2.06			
25	0.2427 854.5339	17.81063 17.53177	0.39461 0.41086	0.0278 14.03916	0.91501	32.57165	0.74323	0.03253	0.0034	743.7478	17.58678	124.13	2.84	2.29			
26	0.2502 122.831	0.62183 0.92121	0.01565 0.0405	0.00484 9.68388	1.16292	1.69139	0.02875	0.01486	0.00075	110.9816	1.53671	19.07	0.26	1.36			
27	0.2541 207.3382	2.16526 3.61626	0.05001 0.47536	0.01219 67.61422	1.59675	6.65233	0.09224	0.00465	0.00146	67.31042	3.40211	11.59	0.58	5.00			
28	0.2701 118.2727	0.91553 0.50733	0.00803 0.04125	0.00214 10.27412	0.59427	0.93121	0.01474	0.02633	0.00055	106.1326	1.08376	18.24	0.19	1.04			
29	0.2777 119.8193	0.92924 2.3438	0.03398 0.17793	0.0056 43.73067	1.34046	4.30768	0.06255	0.0021	0.00054	67.51658	1.69382	11.63	0.29	2.49			
30	0.279 472.7617	10.58617 6.78871	0.20663 0.78275	0.03154 48.81072	1.64081	12.51636	0.3828	0.01789	0.00379	243.1539	9.52975	41.53	1.61	3.88			
31	0.281 1020.773	23.37011 6.12202	0.15953 0.73249	0.02919 21.15567	0.69301	11.28184	0.29526	0.00812	0.00178	808.2927	19.91609	134.51	3.19	2.37			
32	0.2869 137.373	1.27135 1.74014	0.02474 0.29027	0.00667 62.34945	1.31952	3.19685	0.04551	0.00523	0.00074	51.77415	1.88139	8.92	0.32	3.59			
33	0.288 1223.263	46.09927 15.77716	0.61208 0.24777	0.037 5.87918	0.86496	29.2751	1.14854	0.02408	0.00481	1164.29	45.64677	190.7	7.09	3.72			
34	0.3034 68.03121	0.36136 1.44377	0.01381 0.05715	0.00192 24.66149	0.82432	2.65183	0.0254	0.00059	0.00034	51.28363	0.62421	8.84	0.11	1.24			
35	0.3063 447.6505	6.54427 13.59567	0.24195 0.59175	0.01967 38.81424	1.16786	25.18803	0.45259	0.01117	0.00168	276.5356	6.68397	47.16	1.12	2.37			
36	0.3078 1456.875	41.52295 17.77999	0.53494 0.4513	0.03434 9.05341	0.64607	33.03868	1.00667	0.01419	0.0022	1341.8	39.89251	218.09	6.11	2.80			
37	0.3125 223.2365	2.14868 0.59415	0.02331 0.38381	0.00903 50.79067	1.09562	1.09065	0.04281	0.00531	0.00095	109.8847	2.67449	18.89	0.46	2.44			
38	0.3128 944.4672	92.42801 41.6861	4.10152 2.15567	0.02177 67.08373	4.85891	78.80832	7.98919	0.3152	0.01344	320.3034	57.29786	54.51	9.6	17.61			
39	0.3298 136.2291	0.77417 1.27073	0.01545 0.26255	0.00367 56.88694	0.7326	2.33371	0.02839	0.00323	0.00046	58.7725	1.05706	10.13	0.18	1.78			
40	0.3394 70.59535	0.69733 0.41679	0.01259 0.07129	0.0042 29.80343	1.73603	0.76498	0.02312	0.00099	0.00036	49.54926	1.32253	8.54	0.23	2.69			
41	0.3464 107.3341	1.10424 1.77754	0.0266 0.17234	0.00603 47.32412	1.5908	2.36564	0.04892	0.00166	0.00051	56.59459	1.80871	9.75	0.31	3.18			
42	0.3644 107.9405	0.59718 0.27042	0.00637 0.15499	0.00313 42.42174	0.82869	0.49627	0.01169	0.00087	0.00024	62.14504	0.96572	10.71	0.17	1.59			
43	0.3654 1758.562	36.95139 18.94059	0.41327 3.71805	0.10036 62.38852	1.06205	53.22455	0.779	0.02646	0.00672	670.3772	23.7402	112.25	3.85	3.43			
44	0.3665 1364.208	24.32118 27.49689	0.5141 0.32281	0.02751 6.86268	0.85301	51.45214	0.98104	0.01129	0.0045	1296.227	24.93366	211.1	3.83	1.81			
45	0.3729 94.24648	0.62905 0.82417	0.02036 0.10924	0.00492 34.18889	1.52649	1.51313	0.0374	0.00143	0.00083	62.04123	1.4995	10.69	0.26	2.43			
46	0.3735 796.078	40.96651 14.91325	0.83673 1.43042	0.10324 52.94389	2.69024	27.65502	1.56814	0.03783	0.00896	378.5767	29.27555	64.25	4.88	7.60			
47	0.3749 2587.447	60.08254 14.53602	0.36148 1.06234	0.03664 12.08629	0.3094	26.94823	0.6771	0.00773	0.00352	2298.287	54.52688	358.86	7.72	2.15			
48	0.3758 807.7271	30.4278	12.085	0.487	0.62252	0.06844	22.65183	2.35287	22.3652	0.90903	0.01614	0.00517	630.1172	30.67849	105.71	5	4.73
49	0.384 63.41034	0.37 1.30712	0.01416 0.02613	0.0047 12.01115	2.18854	2.4006	0.02602	0.0045	0.00058	55.81944	1.42668	9.62	0.25	2.60			
50	0.392 72.36522	0.5854 0.34291	0.01417 0.03675	0.00389 14.97365	1.58498	0.62934	0.02601	0.0018	0.00057	61.51915	1.25102	10.6	0.21	1.98			
51	0.4073 91.20034	0.44043 0.75518	0.01411 0.11813	0.00353 38.2205	1.1307	1.38638	0.02592	0.00106	0.00033	56.35483	1.06926	9.71	0.18	1.85			
52	0.4091 374.5372	4.99337 22.55789	0.3496 0.91836	0.02775 71.96549	1.96838	42.06068	0.66241	0.01924	0.00304	106.6911	7.63417	18.34	1.31	7.14			
53	0.4418 145.6707	0.88111 0.19738	0.0035 0.31027	0.00348 62.94088	0.59525	0.36222	0.00643	0.00186	0.00028	53.98078	0.92693	9.3	0.16	1.72			
54	0.4483 186.3331	1.84021 8.24494	0.10768 0.40962	0.00794 64.60656	1.08986	15.21694	0.19899	0.00774	0.00073	66.32543	2.15193	11.42	0.37	3.24			
55	0.4498 1862.174	42.9527 7.5181	0.19723 1.48065	0.04509 23.46288	0.46768	13.8683	0.36577	0.05454	0.00494	1432.839	34.36811	231.97	5.22	2.25			
56	0.4562 62.71483	0.50467 1.46783	0.02292 0.02081	0.00405 9.61691	1.90949	2.69606	0.04214	0.00354	0.00055	56.71558	1.28377	9.77	0.22	2.25			
57	0.4701 99.51213	0.65477 0.78841	0.00971 0.15353	0.00271 45.53956	0.75304	1.44742	0.01784	0.00305	0.00034	54.20876	0.8354	9.34	0.14	1.50			
58	0.4735 591.0393	7.76083 7.07348	0.12055 0.31969	0.00897 15.88579	0.3978	13.04403	0.22342	0.00373	0.00154	499.619	7.019	84.32	1.16	1.38			
59	0.4771 78.67936	0.68037 1.39246	0.02305 0.12832	0.00087 48.06517	3.24906	2.55748	0.04237	0.00458	0.00144	40.88679	2.58807	7.05	0.45	6.38			
60	0.4849 1273.341	14.35371 1.93881	0.03836 0.44171	0.00956 10.23827	0.18												

87	0.6871	1546.393	180.11575	45.0429	5.30246	1.94221	0.25549	36.87432	2.27027	85.36292	10.37909	0.05518	0.01424	1008.224	126.60718	166.28	19.95	12.00
88	0.6903	1855.925	29.72444	0.96411	0.04396	0.07277	0.0119	1.15445	0.18852	1.77021	0.08078	0.00143	0.00165	1835.72	29.62906	292.15	4.35	1.49
89	0.7066	77.12561	0.42721	0.26491	0.00635	0.05529	0.00283	21.16484	1.07814	0.48616	0.01166	0.00065	0.00035	60.79006	0.9007	10.47	0.15	1.43
90	0.7081	1628.994	49.42735	1.63769	0.00181	0.28999	0.02584	5.25215	0.44078	3.00842	0.01758	0.00352	0.00452	1545.195	47.48967	248.96	7.15	2.87
91	0.7087	2221.024	150.40616	2.10283	0.23853	1.09303	0.10038	14.5348	0.90281	3.86414	0.43897	0.05099	0.01275	1901	130.49503	301.72	19.07	6.32
92	0.7096	1286.979	55.64371	19.57919	0.87846	0.90289	0.07155	20.60612	1.37707	36.42883	1.65736	0.02096	0.00866	1036.086	48.85741	170.67	7.68	4.50
93	0.7125	132.5289	2.09041	2.91677	0.0846	0.18996	0.02187	42.1841	4.83285	5.36292	0.01587	0.01332	0.0028	76.76377	6.53149	13.21	1.12	8.48
94	0.7171	98.02786	1.11374	1.58595	0.03629	0.14228	0.01272	42.76787	3.80484	2.91326	0.06674	0.00624	0.00178	56.14934	3.78919	9.68	0.65	6.71
95	0.7187	1121.01	24.59686	5.34079	0.16755	0.58261	0.03311	15.31877	0.80618	9.83672	0.30976	0.0097	0.00552	952.854	22.8869	157.54	3.62	2.30
96	0.7251	60.50984	0.35734	1.95253	0.03328	0.02432	0.00698	11.6149	3.40993	3.58758	0.06122	0.00781	0.00124	53.52928	2.08971	9.22	0.36	3.90
97	0.7291	58.38175	0.78477	1.65643	0.03477	0.00876	0.00959	4.20112	4.85574	3.04287	0.06396	0.00996	0.0014	55.96611	2.93525	9.64	0.5	5.19
98	0.7331	124.8387	2.03761	3.02918	0.07305	0.1701	0.01104	40.07206	2.53182	5.57005	0.13461	0.00832	0.00204	74.95588	3.39747	12.9	0.58	4.50
99	0.7386	1503.214	21.45989	3.49279	0.06549	0.11596	0.00768	2.26048	0.14743	6.42463	0.12077	0.00866	0.00111	1472.838	21.19561	238.03	3.21	1.35
100	0.7392	682.4831	67.67881	28.79877	2.86395	0.55012	0.09046	23.47232	3.12487	53.93879	5.4754	0.04508	0.01114	533.1086	58.19673	89.83	9.57	10.65
101	0.7398	1382.997	124.68071	38.71615	3.50186	2.4707	0.23108	52.56088	1.31996	73.03574	6.79176	0.08917	0.01376	674.5102	65.29748	112.93	10.6	9.39
102	0.75	79.6541	0.68954	1.13013	0.01538	0.08361	0.00444	30.91339	1.62918	2.07528	0.02826	0.00689	0.00066	55.05375	1.38767	9.49	0.24	2.53
103	0.7619	73.66763	0.73467	1.16753	0.01733	0.05593	0.00339	22.31437	1.34377	2.14403	0.03184	0.00847	0.00085	57.25332	1.14661	9.86	0.2	2.03
104	0.7692	96.72718	1.44452	0.18201	0.02006	0.13424	0.00668	41.00794	1.95192	0.33401	0.03681	0.00378	0.00144	57.05117	2.07585	9.83	0.36	3.66
105	0.7737	356.0868	6.76694	0.79117	0.03492	0.84075	0.01871	69.75773	0.81747	1.45251	0.06415	0.02667	0.00239	107.74	3.57264	18.52	0.61	3.29
106	0.7872	72.90826	0.70269	0.55004	0.01606	0.08885	0.00406	35.96305	1.61239	1.00963	0.02949	0.0025	0.00075	46.68735	1.2622	8.05	0.22	2.73
107	0.7878	165.762	236.07361	26.01711	3.7697	3.04207	0.44482	54.82486	1.29734	48.63134	7.17824	0.08002	0.02205	752.776	112.7846	125.58	18.17	14.47
108	0.7928	1069.677	17.38481	0.22842	0.03252	0.08642	0.00825	2.38559	0.2246	0.41918	0.05969	0.0057	0.00193	1044.298	17.1449	171.96	2.69	1.56
109	0.8132	67.25109	0.29973	0.22175	0.01063	0.03089	0.00157	13.55238	0.68652	0.40694	0.01952	0.00189	0.00043	58.1204	0.53144	10.01	0.09	0.90
110	0.8235	209.4417	1.59479	1.97681	0.02867	0.5578	0.00752	78.63293	0.98995	3.63225	0.05276	0.00872	0.0009	44.80776	1.92897	7.73	0.33	4.27
111	0.8448	87.23567	0.49445	0.48774	0.01134	0.075	0.00226	25.36741	0.75588	0.89524	0.02083	0.00249	0.00045	65.10651	0.76271	11.21	0.13	1.16
112	0.847	1282.441	46.10528	5.81234	0.22519	0.62544	0.02858	14.37427	0.4066	10.7088	0.41661	0.02526	0.00443	1102.6	40.14762	181.09	6.27	3.46
113	0.8654	75.14598	0.44475	0.15702	0.01098	0.07614	0.00134	29.93414	0.50312	0.28815	0.02014	0.00279	0.0005	52.63671	0.49943	9.07	0.09	0.99
114	0.8768	772.465	0.46073	7.72668	0.05539	0.34171	0.00457	12.98988	0.15662	14.25517	0.10276	0.00702	0.00077	675.7846	4.23307	113.13	0.69	0.61
115	0.9235	91.66482	0.28231	0.16298	0.00467	0.11349	0.00118	36.58433	0.36535	0.29909	0.00857	0.00092	0.00018	58.11772	0.38015	10.01	0.07	0.70
116	0.9766	61.42683	0.23765	0.0111	0.00315	0.04226	0.00029	20.33812	0.46678	0.02036	0.00577	0.00088	0.00031	48.91049	0.3545	8.43	0.06	0.71
117	1	69.9009	0.19277	0.66871	0.00694	0.04137	0.00144	17.41842	0.60569	1.22756	0.01274	0.0036	0.00031	57.72801	0.45452	9.95	0.08	0.80
118	0.9277	274.6356	5.65689	0.86135	0.04209	0.67144	0.01619	72.22696	0.92823	1.58142	0.07732	-0.0038	0.00202	76.31281	3.01713	13.14	0.52	3.96
119	0.9352	78.99803	0.97619	0.32033	0.02203	0.05388	0.00472	20.12874	1.75064	0.5879	0.04044	-0.00379	0.00106	63.08728	1.5889	10.87	0.27	2.48
120	0.9411	255.5728	3.9169	0.4568	0.0348	0.41021	0.01185	47.42043	1.16916	0.83843	0.06389	0.00554	0.0012	134.4068	3.6472	23.07	0.62	2.69
121	0.9539	44.42542	0.31554	0.478	0.02073	0.14603	0.0024	97.10826	1.45887	0.87736	0.03806	0.00629	0.00071	1.28424	0.64821	0.22	0.11	50.00

Integrated 285.8563 0.22348 1.44154 0.00227 0.19144 0.00053 19.75 0.0526 2.64773 0.00418 0.00515 0.00007 229.6096 0.23472 39.24 0.2 0.51

CHITSTONE RIVER

Weighted average of J from standards = 1.347e-04 2.749e-06

Grain #	Cumulative 40Ar/39Ar 39Ar meas.		37Ar/39Ar meas.	36Ar/39Ar meas.	% Atm. 40Ar	Ca/K	Cl/K	40*/39K	Age (Ma)	(Ma)	%error							
1	0.0066	1247.89	29.99682	2.60205	0.1796	0.48747	0.01426	11.52637	0.19575	4.78319	0.33076	0.01672	0.00371	1106.06	26.77963	250.28	5.66	2.26
2	0.0091	827.0884	47.09091	-0.29955	0.35253	0.21506	0.03131	7.68695	0.12092	-0.54952	0.64658	0.01755	0.00408	763.3216	44.28359	176.37	9.75	5.53
3	0.0111	685.8748	53.38574	3.77277	0.85559	0.29823	0.04772	12.80389	1.79662	6.941	1.57828	0.02609	0.00669	599.6279	48.40855	139.98	10.87	7.77
4	0.0219	233.5346	4.69148	0.54796	0.10019	0.03334	0.0061	4.2	0.7675	1.00582	0.18397	0.00481	0.00132	223.7843	4.84319	53.52	1.14	2.13
5	0.0329	72.19373	1.21218	0.71637	0.10191	0.1016	0.00603	41.52359	2.36961	1.3151	0.18718	0.00706	0.00127	42.2203	1.85377	10.22	0.45	4.40
6	0.0436	91.03849	1.377	0.37964	0.10916	0.10209	0.00579	33.11342	1.82036	0.69677	0.2004	0.01605	0.00151	60.889	1.91192	14.72	0.46	3.13
7	0.0483	184.1555	9.1148	0.64704	0.29764	0.07109	0.01504	11.38077	2.34756	1.18777	0.54664	0.0051	0.0034	163.2455	9.17255	39.2	2.18	5.56
8	0.0666	1275.337	16.59632	-0.04999	0.09074	0.0571	0.00374	1.32327	0.085	-0.09172	0.16649	0.00081	0.00099	1258.388	16.38527	282.17	3.4	1.20
9	0.0686	974.5822	99.78026	16.21151	1.85972	1.33836	0.14635	40.44424	1.55989	30.09039	3.49183	0.11711	0.01491	587.1242	62.73165	137.17	14.11	10.29
10	0.0704	226.581	29.30557	7.38908	1.26313	0.27761	0.05344	35.94144	5.1652	13.62907	2.34206	0.01679	0.00905	45.8869	22.32683	35.07	5.32	15.17
11	0.0764	852.1142	40.84393	0.7872	0.27959	0.11569	0.0117	4.00436	0.35744	1.44522	0.51358	-0.0008	0.00326	818.419	39.37294	188.46	8.61	4.57
12	0.0787	771.0959	66.9764	16.38707	1.6177	0.89384	0.08501	34.07982	1.32994	30.42006	0.30816	0.00624	0.00739	514.2397	46.37948	120.69	10.53	8.72
13	0.0818	1697.904	99.09835	-0.58992	0.48354	0.53421	0.04151	9.30036	0.47773	-1.08198	0.88649	-0.00953	0.0069	1539.324	90.1844	339.56	18.13	5.34
14	0.0933	705.5746	11.67185	0.09168	0.15077	0.11847	0.01119	4.96062	0.46179	0.16823	0.27667	-0.00072	0.00255	670.5889	11.5714	155.84	2.58	1.66
15	0.1079	44.62956	0.66594	0.00732	0.12728	0.00502	0.00549	3.32573	3.6372	0.01343	0.23355	0.00057	0.00163	43.11681	1.74558	10.44	0.42	4.02
16	0.1137	796.5988	34.32562	-0.49987	0.27363	0.20095	0.01945	7.54966	0.6468	-0.91687	0.50172	0.0004	0.00469	736.8876	32.16657	170.54	7.1	4.16
17	0.1138	8982.015	32361.347	-16.8327	67.04538	5.39671	19.48236	17.77019	4.02929	-30.5229	120.1456	0.68373	2.49845	7299.101	25992.014	1233.9	3181.4	257.83
18	0.1138	54399.15	1258568.8	2555.242	59117.89	150.0281	3471.055	81.1091	8.10256	-5827.51	167578.1	-17.2698	399.5221	-12773	367349.05	-26001.7	123753	-475.94
19	0.1142	861.8433	434.59996	36.88698	19.20474	2.10896	1.07921	71.95944	6.30802	69.49282	37.14828	0.15114	0.09558	248.1212	140.10709	59.25	32.91	55.54
20	0.1227	49.83062	1.67847	0.75243	0.24543	0.01358	0.00416	7.93313	2.45594	1.38134	0.45082	0.00722	0.00294	45.87454	1.97373	11.1	0.48	4.32
21	0.1273	785.1615	51.86563	10.7953	0.43376	0.11887	0.02837	4.46255	1.02602	1.9823	0.7971	0.00893	0.00496	750.6673	50.27937	173.58	11.08	6.38
22	0.1285	1143.188	189.11542	19.16064	3.59244	0.86735	0.15283	22.28229	1.36115	35.63939	6.77371	0.22631	0.04243	900.6235	151.86636	206.34	32.88	15.93
23	0.1335	1271.345	58.68447	-0.17539	0.35477	0.18269	0.01602	4.24751	0.31675	-0.32178	0.6508	0.00434	0.00423	1217.166	56.32685	273.6	11.75	4.29
24	0.1348	494.2648	81.87045	9.48884	2.12549	0.47354	0.10738	28.1542	4.38569	17.52818	3.95279	0.05651	0.01974	357.4828	63.49075	87.75	14.7	17.35
25	0.1663	102.0124	0.86855	0.20134	0.07399	0.18722	0.00392	54.23122	1.04746	0.36949	0.1358	0.00108	0.00074	46.6829	1.14795	11.3	0.28	2.48
26	0.1691	42.82116	3.57613	0.37109	0.80487	-0.03768	0.02489	-26.7831	17.05372	7.3069	1.48515	0.00758	0.00634	54.40666	8.61405	13.16	2.08	15.81
27	0.172	1145.47	80.19789	-0.09905	0.60627	0.24702	0.03228	6.77323	0.70326	-0.18174	1.11227	0.00494	0.00622	1072.362	75.51097	243.14	16.02	6.59
28	0.1727	2746.564	899.66135	7.07195	4.30935	5.28202	1.73694	56.80088	1.66189	13.04119	7.98665	0.0883	0.04751	1192.236	395.21651	268.39	82.66	30.80
29	0.1797	58.34013	1.88937	0.99086	0.31972	0.00573	0.01229	2.76278	6.22673	1.81937	0.58746	0.01061	0.00381	56.73917	4.07326	13.72	0.98	7.14
30	0.1863	810.5845	27.02466	-0.14805	0.30136	0.03192	0.0119	1.16522	0.43215	-0.27162	0.55284	0.00614	0.00271	801.0263	26.93497	184.65	5.9	3.20
31	0.1979	819.2778	24.52524	0.32185	0.15874	0.93214	0.03269	33.61878	0.61406	0.59069	0.29141	-0.00059	0.00166	543.9506	17.05056	127.43	3.86	3.03
32	0.2021	514.1636	38.69597	3.94527	0.56959	0.25089	0.02453	14.35646	0.90034	7.25926	1.50597	0.00388	0.00377	441.5528	33.65187	104.12	7.71	7.40
33	0.2147	1130.027	27.96633	0.10813	0.13998	0.19579	0.00909	5.11912	0.20126	0.19842	0.25689	-0.00178	0.00138	1072.233	26.63673	243.11	5.65	2.32
34	0.2287	642.0668	15.58244	0.35679	0.1374	0.04805	0.00559	2.20684	0.25179	0.65483	0.25223	0.00639	0.00157	628.0266	15.32033	146.34	3.43	2.34
35	0.2513	1138.709	14.98778	0.00777	0.0967	0.06652	0.0036	1.72614	0.09062	0.01412	0.17743	0.00087	0.00111	1119.03	14.76588	253.01	3.11	1.23
36	0.2726	437.2886	6.3934	0.13714	0.08906	0.47027	0.01003	31.77812	0.49351	0.25165	0.15611	0.01015	0.00108	298.3351	4.86868	71	1.14	1.61
37	0.28	674.9037	22.57424	4.50218	0.28986	0.61026	0.02637	27.03098	0.72002	8.28723	0.55205	0.00697	0.00309	494.0198	17.30251	116.1	3.94	3.69
38	0.2937	61.37537	1.27985	1.36599	0.1371	0.0951	0.00599	45.62616	2.7266	2.50882	0.25204	0.00093	0.00198	33.38822	1.818	8.09	0.44	5.44
39	0.2937	-21113.1	407667.48	-3451.97	66653.21	-58.2857	1125.438	80.22867	8.55537	-1842.41	10347.98	-0.34959	6.72126	-1214.25	6840.0315	-321.85	1985.05	-616.76
40	0.3208	160.0902	12.84641	3.61183	0.74042	0.19803	0.01854	36.37291	1.79588	6.64416	1.2984	0.04715	0.0091	102.1023	8.73714	24.62	2.09	8.49
41	0.3283	332.7633	23.62526	5.07986	0.60256	0.22302	0.02183	19.68014	1.33465	9.3544	1.11359	0.04403	0.00748	268.2135	19.62735	63.96	4.6	7.19
42	0.3325	855.9989	63.73502	7.16851	0.78591	2.5652	0.19232	88.59202	0.78251	13.22016	1.45675	0.05552	0.01008	98.64156	10.01545	23.79	2.4	10.09
43	0.3374	874.044	62.44642	-0.19131	0.71511	0.13613	0.02304	4.60435	0.70613	-0.35099	1.31178	0.00958	0.00891	833.659	59.8774	191.79	13.07	6.81
44	0.3658	554.9631	5.89596	-0.13336	0.09381	0.00476	0.00249	0.25545	0.13231	-0.24467	0.17209	0.00097	0.00115	553.4637	5.92564	129.58	1.34	1.03
45	0.3729	1110.219	46.06095	0.37426	0.3052	0.1516	0.01427	4.0325	0.34097	0.6869	0.5603	0.00821	0.00482	1065.702	44.39252	241.73	9.42	3.90
46	0.3834	70.37077	2.25748	2.38076	0.27614	0.09425	0.00858	39.31567	3.38088	4.37573	0.50838	0.0061	0.00305	42.75793	2.75652	10.35	0.67	6.47
47	0.3833	-10954.3	87824.474	-328.397	2633.399	-25.5277	204.6817	68.61337	7.21113	-489.126	3183.876	-1.14461	9.20023	-2790.76	18173.619	-849.23	7068.87	-832.39
48	0.3997	48.2783	0.83094	-0.16121	0.10708	0.01861	0.00649	11.42441	3.96923	-0.29577	0.19644	0.00232	0.002	42.73162	2.0537	10.34	0.5	4.84

49	0.4019	776.511	89.31946	1.11336	1.00826	0.14504	0.03567	5.50776	1.19991	2.04447	1.85293	0.00327	0.01285	734.292	85.04998	169.97	18.79	11.05
50	0.4018	-20340.3	58791.986	157.869	456.8501	0.23973	1.3517	-0.28429	1.68608	326.015	1061.823	1.72436	5.0031	-22957.7	74685.788	-437790	8664.14	-1.98
51	0.4075	1020.457	46.30231	-2.21146	0.30549	0.19007	0.01755	5.52211	0.44299	-4.0514	0.55878	-0.02179	0.00459	962.5751	43.84941	219.7	9.42	4.29
52	0.4359	55.94851	0.4827	-0.18126	0.05722	0.0096	0.00309	5.09734	1.63238	-0.33254	0.10497	-0.00128	0.00068	53.06164	1.02195	12.83	0.25	1.95
53	0.4361	57033.95	60101.752	167.7557	176.9773	170.4093	179.5761	88.26696	0.26245	349.1761	417.877	-0.15731	0.20717	7591.146	9076.3207	1269.3	1089.32	85.82
54	0.4366	2750.982	1916.1452	32.44188	23.05231	2.19221	1.53903	23.45091	2.06868	60.92216	44.30469	1.31536	0.92024	2155.208	1537.5147	459.32	289.25	62.97
55	0.4376	1531.002	474.35931	66.48869	20.68903	3.4349	1.06663	65.94047	1.38209	128.0083	41.7943	0.02133	0.03001	547.1331	179.27396	128.15	40.53	31.63
56	0.4534	372.7022	20.30867	0.94082	0.13655	0.23438	0.008	7.11263	0.19242	1.72742	0.25088	0.00097	0.00195	904.0906	18.98277	207.09	4.11	1.98
57	0.4552	326.2494	63.8479	0.63592	1.16722	0.18958	0.05889	17.15646	4.14367	1.16735	2.14361	0.01024	0.01551	270.3734	54.64837	64.46	12.8	19.86
58	0.4551	239.9605	1094.7062	1.96807	43.09731	0.02683	0.99228	3.23704	121.2776	3.61616	79.29791	0.08173	0.64273	232.4874	1101.5311	55.57	259.27	466.56
59	0.4555	1643.723	1115.3429	35.12163	24.24325	1.64046	1.12687	29.31574	3.15502	66.08242	46.77459	0.03712	0.07097	1191.383	830.70879	268.21	173.76	64.79
60	0.4571	1945.86	381.81772	46.68802	9.26507	2.92592	0.57575	44.2361	0.67211	88.58695	18.17915	0.08632	0.02508	1122.068	228.11283	253.65	48.1	18.96
61	0.4731	113.2234	2.05392	0.03937	0.20025	0.25738	0.00832	67.18789	1.82342	0.07224	0.36745	0.00203	0.00156	37.14229	2.18441	8.99	0.53	5.90
62	0.474	1970.872	693.97807	13.31767	5.70452	3.02354	1.075	45.27801	2.23613	24.6681	10.6671	0.04612	0.04491	1088.724	389.57864	246.61	82.47	33.44
63	0.4744	2943.983	1733.8711	55.08442	32.88171	5.27756	3.11666	52.81932	2.30163	105.1633	65.31638	0.40254	0.24409	1445.198	888.45617	320.54	180.52	56.32
64	0.4887	46.94859	0.91453	1.43687	0.1882	0.02693	0.00914	16.71131	5.74476	2.63915	0.34603	0.04296	0.00269	39.11785	2.80501	9.47	0.68	7.18
65	0.5107	755.1828	9.16316	-0.0188	0.11286	0.12498	0.00435	4.89069	0.15953	-0.03449	0.20707	0.00162	0.00135	718.2113	8.79848	166.41	1.95	1.17
66	0.5248	571.9254	12.74309	0.04889	0.18169	0.21174	0.00977	10.94005	0.44336	0.08971	0.33339	0.00144	0.00187	509.3476	11.64285	119.58	2.64	2.21
67	0.5275	1154.184	108.2885	0.81451	0.9357	0.0914	0.03614	2.33433	0.899	1.49538	1.71887	0.01202	0.00548	1127.861	106.39437	254.88	22.42	8.80
68	0.5454	58.43438	1.03811	0.13134	0.14258	0.02967	0.00563	14.99128	2.8378	0.24101	0.26166	0.00469	0.00097	49.65368	1.87917	12.01	0.45	3.75
69	0.5884	54.96102	0.46455	0.02564	0.05697	0.05361	0.00251	28.83538	1.33384	0.04705	0.10454	0.00251	0.00054	39.09238	0.80801	9.46	0.2	2.11
70	0.592	1101.626	84.59711	8.86805	0.10397	0.50151	0.04824	13.38645	0.78035	16.3742	1.93048	0.02906	0.00533	960.1447	74.71191	219.18	16.06	7.33
71	0.5944	1004.104	104.20117	4.33458	1.16091	1.46668	0.15718	43.12907	1.16199	7.97779	2.14322	0.03626	0.00873	572.7797	60.78451	133.94	13.7	10.23
72	0.598	3265.565	254.70576	52.99751	4.20563	4.83601	0.38031	43.62754	0.43992	101.0242	8.32851	0.06834	0.00916	1912.441	155.69251	413.06	30.05	7.27
73	0.5994	877.1281	144.98775	11.46374	2.48341	0.42281	0.12083	14.13696	3.32141	21.20606	4.63141	0.06262	0.01466	759.2504	129.90863	175.48	28.61	16.30
74	0.6009	869.7947	129.34251	8.99304	1.98675	0.87787	0.15214	29.74014	2.65895	16.60645	3.69216	0.04237	0.01368	615.0017	94.96291	143.43	21.29	14.84
75	0.6127	98.65176	1.94179	1.77149	0.1941	0.14139	0.01008	42.21692	2.91178	3.25451	0.35704	0.00533	0.00176	57.05827	3.09847	13.8	0.75	5.43
76	0.6154	978.3033	86.44513	0.61319	0.77536	0.05245	0.05245	6.65225	1.47108	1.1256	1.42392	0.03154	0.00765	913.592	82.04312	209.15	17.73	8.48
77	0.6187	138.7022	10.2993	0.44495	0.6133	0.14045	0.0371	29.90325	7.59747	0.81668	1.12603	0.02428	0.00489	97.23675	12.80835	23.45	3.07	13.09
78	0.6226	71.29629	4.88321	0.79086	0.73894	0.16585	0.03979	67.98415	15.90336	12.52034	1.36895	0.04396	0.00526	22.9266	11.52748	5.56	2.79	50.18
79	0.6239	98.15261	15.9272	6.9347	1.63791	0.17534	0.05387	52.22191	13.85552	12.78684	3.03499	0.02983	0.0205	47.11205	15.738	11.4	3.8	33.33
80	0.6417	71.27347	0.79706	0.47285	0.11691	0.07963	0.00364	32.97386	1.46755	0.86791	0.21465	0.00632	0.00143	47.76791	1.18782	11.56	0.28	2.42
81	0.657	649.7469	9.31042	0.23286	0.08603	0.01725	0.00485	0.78148	0.22012	0.42733	0.15791	0.00216	0.00132	644.7458	9.35095	150.08	2.09	1.39
82	0.6725	166.6664	2.67167	-0.55009	0.08017	-0.04526	0.00396	-7.99896	0.69094	-1.00895	0.14698	-0.00454	0.00113	179.896	3.10036	43.15	0.73	1.69
83	0.6827	1455.864	33.49842	0.01887	0.12228	1.34885	0.03377	27.37845	0.27078	0.03462	0.22437	-0.00072	0.0024	1057.263	24.64879	239.94	5.24	2.18
84	0.6887	107.044	53.70244	0.16306	0.23616	-0.06089	0.01111	-1.67667	0.29411	0.29923	0.43342	-0.01148	0.00444	1092.143	54.70554	247.33	11.58	4.68
85	0.6891	2594.517	1796.4347	8.20922	7.73703	5.12428	3.56637	58.33481	2.77731	16.47244	14.37697	0.11004	0.11197	1087.852	761.50152	246.42	161.22	65.42
86	0.7088	46.51895	0.90186	0.60367	0.12702	0.02137	0.00536	13.47399	3.39554	1.10812	0.23236	0.00044	0.00178	40.24246	1.76236	9.74	0.43	4.41
87	0.7095	7356.63	3360.3221	21.75934	10.45432	22.02589	10.06308	88.44925	0.87827	40.5485	19.78566	0.27955	0.13669	863.0042	405.7597	198.18	88.24	44.53
88	0.712	1527.183	227.32045	0.65586	0.96256	2.36646	0.35597	45.78671	1.00253	1.20397	1.76781	0.03743	0.01632	828.3039	124.32297	190.62	27.15	14.24
89	0.7121	1816.123	3685.7647	4.82757	15.74365	1.25099	2.62165	20.33324	10.63659	8.88823	29.08542	0.53438	1.1089	1451.772	2962.8493	321.87	601.57	186.90
90	0.7123	4558.606	10311.477	18.06981	43.58206	2.68968	6.16967	17.4026	6.64181	33.58418	82.04778	0.30413	0.74217	3813.936	8744.1164	747.12	1402.2	187.68
91	0.7126	450.7052	425.38684	62.86543	59.70249	1.38039	1.33741	89.3595	19.84057	120.7085	119.9611	0.12005	0.13789	50.18218	105.91959	12.14	25.54	210.38
92	0.7127	84514.26	611894.16	-38.6475	284.0028	257.7869	1866.413	90.13774	1.16842	-69.0288	493.784	0.10901	0.98023	8113.567	57191.548	1330.93	6633.24	498.39
93	0.7216	138.5508	6.14463	1.66927	0.30577	0.19705	0.01815	41.93631	3.3966	0.30649	0.56237	0.01466	0.00302	80.5254	5.91943	19.44	1.42	7.30
94	0.7316	1047.762	36.64608	1.93529	0.23397	0.3295	0.0164	9.27779	0.32926	3.55586	0.43048	0.00091	0.00304	951.8267	33.51672	217.39	7.21	3.32
95	0.7479	426.7763	11.48477	0.55489	0.14275	0.05766	0.00718	3.98224	0.48576	0.10185	0.26213	0.00342	0.00184	409.9132	11.2316	96.85	2.58	2.66
96	0.749	1485.743	469.88235	2.78655	2.54449	1.37807	0.44848	27.39353	2.10493	5.12301	4.68722	0.0446	0.02963	1080.851	343.95623	244.94	72.88	29.75
97	0.7712	179.6775	10.18409	0.09811	0.11996	0.026	0.00514	1.32421	0.26105	0.18003	0.22013	0.00116	0.00116	572.0117	10.16416	133.76	2.29	1.71
98	0.7885	65.89811	1.20156	0.18438	0.15253	0.03569	0.00692	15.99045	3.0913	0.33835	0.27995	-0.00023	0.0014	55.34296	2.27402	13.38	0.55	4.11
99	0.8151	447.0946	5.71993	0.04326	0.10978	0.0236	0.0055	1.55931	0.36307	0.07937	0.20144	-0.00123	0.00123	440.1072	5.86062	103.79	1.34	1.29
100	0.8211	96.1286	5.69475	0.35208	0.41913	0.16563	0.0208	50.90181	5.64586	0.64617	0.76942	0.00278	0.00419	47.19456	6.11029	11.42	1.47	12.87
101	0.8289	56.49367	2.55137	0.19109	0.32716	0.01914	0.01351	9.98939	7.05522	0.35066	0.60045	0.00206	0.00288	50.83043	4.60002	12.3	1.11	9.02
102	0.8414	1296.253	39.48257	-0.09331	0.20174	0.055	0.01077	1.25434	0.24251	-0.1712	0.37012	-0.00146	0.00194	1279.88	39.10932	286.63	8.1	2.83
103	0.8462	662.227	43.01947	1.84036	0.47695	0.21863	0.02375	9.73344	0.8495	3.3812	0.87741	0.05812	0.00807	598.5207	39.34			

11	0.1059	772.339	10.57089	0.04148	0.02265	0.07957	0.00583	3.0441	0.21933	0.07611	0.04156	0.00112	0.00145	748.8214	10.38908	173.18	2.29	1.32
12	0.1085	679.1433	23.6188	0.71588	0.05273	0.04641	0.00909	2.01077	0.38923	1.31421	0.09685	-0.00043	0.003	665.7948	23.31943	154.78	5.19	3.35
13	0.1174	701.4876	9.30323	0.25065	0.01446	0.06841	0.00313	2.87886	0.12631	0.45999	0.02654	0.00124	0.00112	681.3845	9.08222	158.25	2.02	1.28
14	0.1217	849.008	19.71558	0.23892	0.03216	0.31909	0.00926	11.10397	0.1937	0.43847	0.05903	0.00004	0.00231	754.8354	17.61009	174.5	3.88	2.22
15	0.1511	330.7053	1.28322	0.0366	0.00434	0.071	0.00133	6.34373	0.1165	0.06715	0.00796	0.00123	0.00038	309.7065	1.26301	73.65	0.29	0.39
16	0.1709	31.07322	0.18278	0.02566	0.00686	0.04975	0.00122	47.34637	1.12714	0.04709	0.01259	0.00379	0.00056	16.34583	0.3633	3.96	0.09	2.27
17	0.1892	189.4818	1.2131	0.01894	0.00566	0.10259	0.00139	16.00098	0.19191	0.03475	0.01039	0.00096	0.00053	159.14	1.08279	38.22	0.26	0.68
18	0.2101	86.33966	0.56956	0.07099	0.00588	0.03796	0.00152	12.98895	0.51331	0.13026	0.01079	0.00059	0.00051	75.10297	0.66917	18.14	0.16	0.88
19	0.2234	152.6495	0.94358	0.00644	0.00898	0.07013	0.00243	13.57717	0.46445	0.01181	0.01648	0.00141	0.00065	131.8989	1.08959	31.74	0.26	0.82
20	0.2267	678.8907	14.63218	-0.00765	0.03595	0.00242	0.00794	0.10544	0.34555	-0.01403	0.06596	-0.00065	0.00214	678.1415	14.8038	157.52	3.29	2.09
21	0.2289	1216.492	48.6371	0.12828	0.06288	0.08873	0.01292	2.15466	0.30178	0.23539	0.1154	0.00241	0.00336	1190.36	47.73935	268	9.99	3.73
22	0.2413	570.5696	4.24641	0.05436	0.01077	0.26965	0.00308	13.96539	0.12135	0.09975	0.01976	0.00272	0.00073	490.8806	3.72064	115.38	0.85	0.74
23	0.2477	689.9221	10.79079	0.56144	0.02166	0.10667	0.00469	4.56225	0.18771	1.03058	0.03978	0.00077	0.00141	658.679	10.38817	153.19	2.32	1.51
24	0.2538	57.99429	0.78707	0.0447	0.02167	0.11573	0.00555	58.99147	2.71569	0.08201	0.03977	0.00597	0.0014	23.77118	1.60865	5.76	0.39	6.77
25	0.2551	102.7119	6.56009	4.00427	0.2806	0.24835	0.02557	71.15035	5.80184	7.36812	0.51779	0.02945	0.00645	29.70748	6.28198	7.2	1.52	21.11
26	0.2683	732.6105	5.85289	0.17784	0.0113	0.03975	0.00299	1.60121	0.12012	0.32634	0.02073	-0.00011	0.00069	720.9411	5.82773	167.02	1.29	0.77
27	0.2748	766.905	15.35811	0.71785	0.03035	0.04903	0.00466	1.88148	0.17546	1.31782	0.05575	-0.00042	0.00118	752.8283	15.14455	174.06	3.34	1.92
28	0.2757	756.1146	81.21572	3.61972	0.4326	0.21398	0.03629	8.3235	1.09788	6.6587	0.79784	0.00219	0.00844	694.9287	75.30035	161.25	16.71	10.36
29	0.291	739.5357	4.63821	0.03612	0.01044	0.3525	0.00373	14.0853	0.12038	0.06629	0.01916	0.0016	0.00059	635.3605	4.08625	147.98	0.91	0.61
30	0.2917	577.1816	85.33232	9.73311	1.45689	1.62674	0.24506	83.1498	2.42739	17.98253	2.71032	0.0049	0.01136	97.92436	20.30435	23.62	4.86	20.58
31	0.2962	802.9267	16.6025	0.1152	0.03173	0.03746	0.00689	1.37753	0.25197	0.2114	0.05824	-0.00144	0.00203	791.9013	16.5011	182.65	3.62	1.98
32	0.3014	61.86337	1.60578	1.94436	0.04562	0.13337	0.00628	63.47602	2.75836	3.57254	0.08394	0.01185	0.00166	22.61518	1.76287	5.48	0.43	7.85
33	0.3225	178.3241	1.26065	0.00869	0.00755	0.00179	0.00137	0.29631	0.2278	0.01594	0.01385	0.00126	0.00051	177.7672	1.32093	42.64	0.31	0.73
34	0.3258	246.0369	6.75687	1.87521	0.0769	0.0377	0.00957	4.46611	1.14329	3.44531	0.14147	0.01239	0.00277	235.3319	7.05984	56.24	1.66	2.95
35	0.3878	32.04544	0.0859	0.02204	0.00224	0.02716	0.00098	25.06487	0.90177	0.04044	0.00412	0.00219	0.00016	23.99141	0.29834	5.81	0.07	1.20
36	0.3905	783.4556	26.77737	1.43011	0.07265	0.16309	0.01403	6.13638	0.48587	2.6267	0.13358	0.0004	0.00355	736.0953	25.47896	170.37	5.63	3.30
37	0.4133	318.3456	1.40061	0.01625	0.00508	0.29897	0.00206	27.75333	0.14839	0.02981	0.00932	0.00416	0.00046	229.9753	1.11994	54.98	0.26	0.47
38	0.4147	406.9167	23.71343	0.91888	0.10791	0.03612	0.01473	2.60442	0.15903	0.68712	0.19825	-0.00221	0.00606	396.5473	23.52471	93.78	5.42	5.78
39	0.4179	646.3578	18.27498	0.58636	0.03901	0.1623	0.00866	7.41306	0.33624	1.07633	0.07164	0.00021	0.00255	598.6633	17.07963	139.76	3.84	2.75
40	0.4409	42.11872	0.2503	0.06362	0.00701	0.06797	0.00105	47.70865	0.6953	0.11674	0.01285	0.00101	0.00045	22.00991	0.32724	5.33	0.08	1.50
41	0.4488	574.6797	6.06668	0.38698	0.0159	0.01395	0.00365	0.71192	0.18775	0.71025	0.02918	-0.00095	0.00125	570.7149	6.12272	133.47	1.38	1.03
42	0.4492	140.3471	32.36918	42.41185	9.77593	0.36318	0.12243	73.9917	18.85116	80.22273	19.06229	1.03903	0.24124	37.62122	28.72202	9.11	6.94	76.18
43	0.4577	107.6099	0.99248	0.31071	0.01635	0.2701	0.00503	74.16606	1.22695	0.57023	0.03001	0.00098	0.00028	27.7983	1.35445	6.74	0.33	4.40
44	0.4636	1285.169	20.82074	0.03216	0.02679	0.11552	0.00471	2.656	0.09952	0.059	0.04915	0.00144	0.00149	1251.035	20.30937	280.65	4.22	1.50
45	0.4678	99.73549	1.93581	0.79764	0.03735	0.08707	0.00709	25.73986	2.03991	1.46439	0.06861	0.01075	0.00194	74.08341	2.49399	17.89	0.6	3.35
46	0.4929	290.3055	0.98055	0.00806	0.00585	0.0444	0.00118	4.52017	0.11869	0.01479	0.01073	0.00061	0.00036	277.1564	0.99826	66.05	0.23	0.35
47	0.502	554.3487	6.98669	0.03643	0.01712	0.06386	0.00292	3.40387	0.14968	0.06684	0.03142	-0.00004	0.00086	535.4645	6.8003	125.51	1.54	1.23
48	0.5165	186.1358	0.10102	0.52766	0.01201	0.09076	0.00234	14.38811	0.3631	0.96855	0.02205	0.00332	0.00058	159.3884	1.09884	38.28	0.26	0.68
49	0.5253	116.0894	1.25961	0.01701	0.01842	0.13663	0.00447	34.78708	1.07872	0.03121	0.0338	0.00164	0.00096	75.68681	1.50585	18.28	0.36	1.97
50	0.5254	2168.326	1605.6181	53.31076	39.50119	5.66411	4.20418	76.98892	3.95593	101.6447	78.26121	0.02598	0.0655	518.4685	408.81366	121.65	92.76	76.25
51	0.527	833.0651	42.63734	5.848	0.31745	0.77481	0.04493	27.42662	0.75493	10.77477	0.58732	0.04182	0.00496	607.0692	31.85703	141.65	7.15	5.05
52	0.5417	815.7206	7.08919	0.0153	0.00956	0.04795	0.00234	1.73687	0.08347	0.02808	0.01753	-0.00038	0.00045	801.532	6.99969	184.76	1.53	0.83
53	0.5499	173.7484	2.15279	1.32748	0.02559	0.51814	0.0089	88.07363	1.06431	2.43803	0.04704	0.00166	0.00088	20.73779	1.87198	5.03	0.45	8.95
54	0.5878	518.8812	2.18241	0.04558	0.00344	0.01873	0.0012	1.06621	0.06796	0.08363	0.00632	0.00009	0.0002	513.336	2.1881	120.49	0.5	0.41
55	0.5879	1740.705	2807.8576	37.69068	60.85912	1.96838	3.21897	33.23705	9.01505	71.04836	117.8589	-0.00972	0.15918	1193.906	1985.1778	268.74	415.13	154.47
56	0.5896	1114.608	71.62757	6.27037	0.022	6.80462	0.38336	11.55645	0.78083	0.00349	0.00571	0.00435	0.00571	1043.356	67.49129	236.98	14.36	6.00
57	0.5926	62.41602	2.60793	0.67796	0.06255	0.04271	0.01129	20.14173	5.28578	1.24455	0.11488	0.00095	0.003	49.84451	3.91276	12.06	0.94	7.79
58	0.6003	582.6487	9.773	0.29923	0.02529	0.51152	0.00961	25.93988	0.22019	0.54915	0.04642	0.00828	0.00148	431.5796	7.35642	101.83	1.69	1.66
59	0.6033	39.16217	1.50811	0.06233	0.0588	0.06178	0.01455	46.63955	10.86878	0.11437	0.1079	0.00861	0.00368	20.88219	4.34346	5.06	1.05	20.75
60	0.6106	518.6473	9.6806	0.42916	0.02816	0.0736	0.00459	4.18665	0.2494	0.78768	0.0517	0.00434	0.00147	497.0556	9.37108	116.79	2.13	1.82
61	0.6147	93.43004	1.83585	0.89811	0.02989	0.25702	0.00919	81.23668	2.44877	1.64895	0.05491	0.00938	0.00197	17.53613	2.31892	4.25	0.56	13.18
62	0.6215	1030.201	14.97251	0.17714	0.01606	0.04503	0.00377	1.29035	0.1065	0.32506	0.02948	0.00232	0.00114	1017.006	14.82385	231.36	3.16	1.37
63	0.6237	45.63405	1.57438	2.39099	0.11023	0.09113	0.01179	58.6191	7.37456	4.39456	0.20294	0.04199	0.00398	18.90343	3.43565	4.58	0.83	18.12
64	0.6387	906.3423	5.88017	0.52279	0.01087	0.05693	0.00191	1.8513	0.06115	0.95959	0.01995	0.00104	0.0005	889.8626	5.80256	204.01	1.26	0.62
65	0.6547	203.8752	1.0126	0.03975	0.00657	0.19124	0.00259	27.7216	0.34897	0.07294	0.01205	0.00598	0.00057	147.3404	1.02212	35.42	0.24	0.68
66	0.6851	502.7685	1.86669	0.03614	0.00388	0.02884	0.00081	1.69435	0.04729	0.06631	0.00712	0.00288	0.00028	494.2332	1.85088	116.15	0.42	0.36
67	0																	

102	0.9129	441.6029	180.31871	-0.66259	0.84979	1.19758	0.50699	80.1544	8.98812	-1.2152	1.55779	0.11263	0.06055	87.59185	53.43524	21.14	12.82	60.64
103	0.9136	948.5945	129.95377	30.90664	4.24971	0.1475	0.04807	4.32629	1.3589	57.97483	8.1495	0.08886	0.02214	927.7781	130.60951	212.21	28.18	13.28
104	0.9181	53.47403	1.13107	0.19878	0.04057	0.09964	0.00976	55.05949	5.27474	0.36479	0.07447	0.01084	0.00232	24.02153	2.8675	5.82	0.69	11.86
105	0.93	55.55635	0.60446	0.01302	0.01585	0.14782	0.0044	66.65822	1.89132	0.0239	0.02908	0.00094	0.00094	21.84796	1.2576	5.3	0.3	5.66
106	0.9437	1382.466	12.68815	0.00173	0.01462	0.09492	0.00372	2.02884	0.07731	0.00317	0.02683	-0.00026	0.00082	1354.39	12.47716	301.99	2.56	0.85
107	0.9453	176.9998	12.57622	11.0796	0.79846	0.15337	0.02292	25.09268	3.37931	20.48987	1.48826	0.02163	0.00745	133.6092	11.34528	32.14	2.71	8.43
108	0.9479	121.2832	5.70904	1.3172	0.07606	0.31829	0.01716	77.48	2.64661	2.41913	0.13983	0.01174	0.00386	27.33171	3.41472	6.62	0.83	12.54
109	0.9501	961.0961	63.36524	2.826	0.20969	0.15113	0.01887	4.6226	0.49278	5.19569	0.38629	0.00671	0.00473	918.4732	60.86499	210.2	13.15	6.26
110	0.9601	46.70784	0.70473	0.07862	0.0186	0.08778	0.0029	55.55773	1.63626	0.14427	0.03414	0.00373	0.00084	20.74598	0.82788	5.03	0.2	3.98
111	0.962	911.3722	68.63001	1.80461	0.17028	0.08387	0.01616	2.70308	0.48253	3.31543	0.31324	0.01247	0.00548	887.8397	67.0913	203.57	14.55	7.15
112	0.9653	732.2648	31.51877	0.12064	0.06153	-0.00492	0.0084	-0.20009	0.33897	0.22138	0.11292	0.00412	0.00279	733.7627	31.68452	169.85	7	4.12
113	0.9672	883.9626	62.29705	2.0803	0.18726	0.0416	0.01793	1.37137	0.59134	3.82268	0.34461	0.00184	0.00468	873.0936	61.84618	200.37	13.43	6.70
114	0.9682	-22.6056	3.21959	3.54624	0.49148	-0.19108	0.04105	250.7416	45.00953	6.5232	0.90633	0.00433	0.00915	34.20642	10.7356	8.28	2.59	31.28
115	0.9764	50.39663	0.86551	0.25816	0.0221	0.10586	0.00673	62.0654	3.80431	0.47378	0.04057	0.0065	0.00127	19.10998	1.94605	4.63	0.47	10.15
116	0.9793	733.5498	31.69665	0.30695	0.07401	0.08368	0.01526	3.36754	0.59752	0.56332	0.13585	0.00323	0.00366	708.9722	30.957	164.37	6.86	4.17
117	0.9818	81.23368	3.79987	2.94318	0.15863	0.17171	0.02042	62.18499	6.84535	5.41158	0.29228	0.03544	0.0044	30.77128	5.76075	7.45	1.39	18.66
118	0.9825	469.7057	80.45459	0.26565	0.26974	1.48993	0.26901	93.73558	5.36265	0.48752	0.49512	0.01848	0.01623	29.42801	25.69592	7.13	6.21	87.10
119	0.9909	83.23566	1.39603	0.62309	0.02841	0.22454	0.00712	79.68369	2.15015	1.14379	0.05217	0.00484	0.00125	16.91182	1.81355	4.1	0.44	10.73
120	0.9987	107.9881	1.65654	0.26836	0.02364	0.28549	0.00865	78.1242	2.04643	0.4925	0.0434	0.00344	0.00148	23.62124	2.2408	5.72	0.54	9.44
121	1	59.43764	4.92864	3.82015	0.34073	0.14594	0.03118	72.0639	14.38871	7.02842	0.62859	0.01189	0.00802	16.64118	8.70357	4.04	2.11	52.23

Integrated 404.3971 0.47647 0.47747 0.00195 0.12902 0.00042 9.41889 0.02894 0.87639 0.00359 0.00374 0.00011 366.404 0.44766 86.82 1.73 1.99

NIZINA RIVER

Weighted average of J from standards = 1.347e-04 2.749e-06

Grain #	Cumulative 40Ar/39Ar 39Ar		40Ar/39Ar meas.	37Ar/39Ar meas.	36Ar/39Ar meas.	% Atm. 40Ar	Ca/K	Cl/K	40*/39K	Age (Ma)	%error (Ma)							
1	0.008	748.7954	9.28778	0.34071	0.09186	0.11688	0.00625	4.60889	0.23984	0.6253	0.16864	0.00054	0.00135	714.4278	9.0448	165.58	2	1.21
2	0.0145	1124.776	16.36735	1.35857	0.11714	0.16161	0.01037	4.23587	0.26534	2.49519	0.21534	-0.00007	0.00234	1078.138	15.98663	244.37	3.39	1.39
3	0.019	1103.424	25.239	1.05002	0.1751	0.13524	0.01115	3.61409	0.28704	1.92808	0.32176	0.00452	0.00288	1064.305	24.57266	241.43	5.22	2.16
4	0.0382	62.96468	0.39201	0.23281	0.03517	0.0409	0.00225	19.17234	1.04866	0.42724	0.06455	0.00354	0.0006	50.87724	0.73532	12.31	0.18	1.46
5	0.0577	734.7071	6.07909	0.14751	0.0341	0.0965	0.00362	3.87958	0.14211	0.27069	0.06257	0.00141	0.00071	706.2485	5.93763	163.77	1.32	0.81
6	0.0756	48.42061	0.50696	0.38588	0.04113	0.0765	0.00234	46.64857	1.34621	0.70824	0.0755	0.00512	0.00064	25.82429	0.70619	6.26	0.17	2.72
7	0.0883	118.9041	1.34937	0.74727	0.07068	0.28109	0.00838	69.82129	1.93138	1.37187	0.12982	0.00211	0.00108	35.89372	2.33616	8.69	0.56	6.44
8	0.1002	63.11723	0.60707	0.0905	0.06326	0.0826	0.00534	38.67881	2.47331	0.16607	0.1161	0.0019	0.00113	38.68849	1.60588	9.37	0.39	4.16
9	0.1098	235.8654	2.34108	0.92815	0.10602	0.71511	0.01181	89.57049	1.20945	1.70415	0.19478	0.00646	0.00173	24.61265	2.87188	5.96	0.69	11.58
10	0.1115	51.94149	3.84336	1.06498	0.50536	0.06636	0.04217	37.60714	23.8466	1.95557	0.92867	0.00371	0.00751	32.41364	12.62552	7.85	3.05	38.85
11	0.1192	52.7368	0.7214	0.44165	0.13343	0.08202	0.00842	45.91512	4.68319	0.81063	0.24498	0.00112	0.00175	28.51547	2.50166	6.91	0.6	8.68
12	0.122	55.0319	2.00855	1.06884	0.2893	0.03355	0.02155	17.86453	11.56248	1.96266	0.53163	0.0073	0.00454	45.21046	6.57843	10.94	1.59	14.53
13	0.1297	69.41123	1.42947	0.59782	0.12099	0.13156	0.00664	55.95962	2.58529	1.09739	0.22218	0.00032	0.00136	30.5688	1.9043	7.41	0.46	6.21
14	0.1303	1677.345	321.20846	13.71022	3.0035	3.07957	0.59845	54.18669	1.80454	25.40231	5.6193	0.02048	0.01901	775.9467	153.16632	179.15	33.66	18.79
15	0.1316	1145.529	102.42012	0.68461	0.5912	0.47012	0.05579	12.12265	0.94691	1.25677	1.08583	0.01087	0.00824	1007.121	90.75056	229.25	19.4	8.46
16	0.1572	235.0038	1.50803	0.25546	0.0351	0.63262	0.00564	79.54818	0.49396	0.46882	0.06443	0.00483	0.00064	48.06516	1.20258	11.63	0.29	2.49
17	0.1681	1156.191	15.8801	3.6648	0.11036	0.21085	0.00769	5.36292	0.18215	6.74185	0.20355	0.00356	0.00145	1096.996	15.2544	248.36	3.23	1.30
18	0.1795	103.3487	1.61103	1.04912	0.08588	0.23289	0.00711	66.52361	1.75507	1.92641	0.15782	0.00206	0.00106	34.61312	1.89592	8.38	0.46	5.49
19	0.2062	52.65047	0.25547	0.52174	0.04	0.07782	0.00179	43.62065	0.98799	0.95767	0.07344	0.00274	0.00061	29.67819	0.54291	7.19	0.13	1.81
20	0.2063	665.6647	579.57043	13.78025	13.09805	1.444	1.30142	63.93378	14.9495	25.53334	24.50781	0.08788	0.1353	242.4288	235.71223	57.91	55.41	95.68
21	0.227	28.1453	0.15482	0.02791	0.03378	0.02464	0.00231	25.89246	2.42602	0.05122	0.06199	0.00109	0.00072	20.83619	0.69264	5.05	0.17	3.37
22	0.2313	184.4722	4.23517	0.64312	0.15206	0.49706	0.0163	79.6068	1.87715	1.18056	0.27926	0.01484	0.00369	37.63081	3.57642	9.11	0.86	9.44
23	0.2344	1755.229	57.80141	0.37066	0.2556	0.143	0.01366	2.40571	0.21594	0.68029	0.46923	0.00796	0.00462	1713.423	56.56884	374.23	11.16	2.98
24	0.249	88.60045	1.13766	0.70395	0.04862	0.21198	0.00487	70.65655	1.35377	1.29229	0.0893	0.00275	0.00111	26.00264	1.24716	6.3	0.3	4.76
25	0.2538	657.4016	34.64922	9.05498	0.57379	0.87046	0.04661	39.01516	0.38943	16.72157	1.06643	0.0251	0.00468	403.4774	21.58362	95.37	4.97	5.21
26	0.2558	923.5996	52.85456	6.44551	0.54046	0.70154	0.05004	22.38867	0.96084	11.88069	1.00077	0.0243	0.00608	720.0728	42.3799	166.83	9.38	5.62
27	0.2672	52.87912	0.58541	0.1425	0.05582	0.06313	0.00382	35.27578	2.10431	0.2615	0.10245	0.00177	0.00104	34.20982	1.17758	8.29	0.28	3.38
28	0.275	1079.713	23.4885	1.07796	0.13556	0.29376	0.0105	8.03173	0.22792	1.97942	0.24911	0.01126	0.00188	993.7222	21.77565	226.38	4.66	2.06
29	0.2805	48.74169	1.22798	1.4688	0.11611	0.06517	0.01148	39.28635	6.89789	2.69785	0.21348	0.00653	0.00214	29.60555	3.45011	7.17	0.83	11.58
30	0.2845	176.3954	5.85864	0.5572	0.18277	0.19429	0.012	32.52794	1.6976	1.02278	0.33562	0.00906	0.00293	119.0444	4.96711	28.67	1.19	4.15
31	0.2961	1189.789	18.33645	1.2246	0.09011	0.10188	0.00597	2.522	0.14298	2.24892	0.16563	0.00026	0.00131	1160.757	17.98625	261.79	3.78	1.44
32	0.3188	41.59007	0.34283	0.00522	0.04082	0.03942	0.00341	28.02462	2.41233	0.00957	0.07491	-0.00031	0.00067	29.91334	1.03353	7.25	0.25	3.45
33	0.3237	69.74258	1.96923	1.20274	0.18986	0.11042	0.01366	46.66405	5.63944	2.20874	0.34896	-0.00094	0.00304	37.21365	4.07636	9.01	0.98	10.88
34	0.3326	53.14189	1.02669	-0.19989	0.09911	0.09829	0.00664	54.71625	3.54503	-0.36672	0.1818	-0.00066	0.00174	24.04779	1.94186	5.83	0.47	8.06
35	0.3332	521.1643	101.98455	1.72077	1.56708	1.54799	0.32397	87.74889	6.53559	3.16121	2.88237	-0.03412	0.02818	63.92244	36.34518	15.45	8.75	56.63
36	0.3361	1498.351	69.40441	0.59469	0.31247	0.13364	0.02023	2.63242	0.37991	1.09163	0.57382	-0.0053	0.0054	1459.492	67.87719	323.44	13.77	4.26
37	0.3423	1139.236	21.70491	0.51236	0.15701	0.14407	0.00907	3.73334	0.22418	0.94046	0.2883	0.00467	0.00138	1097.073	21.06609	248.38	4.46	1.80
38	0.3592	68.54999	0.72581	0.04634	0.06495	0.10554	0.00362	45.50737	1.48752	0.08502	0.11919	0.00067	0.00068	37.33973	1.09601	9.04	0.26	2.88
39	0.3624	1079.677	40.55964	5.38557	0.36985	0.56149	0.02544	15.32682	0.39188	9.9195	0.68381	0.01065	0.00356	917.6619	34.88423	210.03	7.54	3.59
40	0.3631	4800.733	987.29166	16.48892	3.65657	17.41517	0.3068	90.77269	0.91276	30.61135	6.68334	0.02568	0.02568	448.1948	103.41233	105.64	23.67	22.41
41	0.3695	1481.195	27.25198	0.06669	0.15075	0.13615	0.00904	2.71586	0.17323	0.12238	0.27662	0.00113	0.00136	1441.007	26.63915	319.68	5.42	1.70
42	0.4009	762.6519	5.42074	0.10181	0.03264	0.10705	0.00173	4.148	0.06025	0.01983	0.0599	0.00125	0.00041	730.9942	5.21709	24.624	1.15	0.68
43	0.4039	1120.666	50.87953	2.01081	0.45663	0.41247	0.03336	10.86163	0.72868	3.6948	0.84023	0.01007	0.00537	1000.338	46.22455	227.8	9.89	4.34
44	0.451	44.28267	0.17533	0.06245	0.02551	0.02558	0.00157	17.06624	1.04845	0.11459	0.0468	0.00061	0.00029	36.70227	0.48921	8.89	0.12	1.35
45	0.4629	40.71722	0.5501	0.64345	0.1127	0.04131	0.0058	29.87187	4.20017	1.18118	0.20698	0.00177	0.00128	28.54638	1.75911	6.92	0.43	6.21
46	0.4638	2147.324	344.86567	135.2806	21.78522	5.70034	0.92258	77.92578	1.5822	274.4406	48.86343	0.02534	0.02092	52.00669	100.38706	122.92	22.76	18.52
47	0.4735	55.21561	1.004	0.02402	0.12535	0.09945	0.00787	53.24672	1.12908	0.04407	0.23001	0.00023	0.00141	25.81661	2.33845	6.25	0.57	9.12
48	0.4787	988.5241	25.63771	0.29047	0.23623	0.17558	0.0139	5.24651	0.39268	0.53308	0.43363	0.00055	0.00285	936.8252	24.61676	214.16	5.31	2.48
49	0.4788	-349.858	525.65851	4.71164	14.29337	-0.79958	1.48829	67.64055	74.50579	8.67407	26.40177	0.15368	0.31841	-113.6	313.04764	-27.79	77.17	-277.69
50	0.4792	135.8559	255.11376	76.41095	14.58202	1.71235	0.36641	36.82858	3.81265	148.2009	29.89542	0.05047	0.03916	906.0207	188.21692	207.51	40.72	19.62
51	0.4845	1127.25	24.65938	1.11565	0.18561	0.11783	0.0132	3.08071	0.33946	2.04867	0.3411	0.00813	0.00305	1093.355	24.24269	247.59	5.13	2.07
52	0.4854	517.629	66.81907	40.44216	5.37284	1.41521	0.19577	80.15099	0.40472	76.38749	10.44663	0.02621	0.02054	105.7591	25.37783	25.49	6.16	24.17
53	0.4938	156.7809	2.65719	0.88802	0.09812	0.39306	0.00967	74.05148	1.33917	1.63043	0.18027	0.01481	0.00187	40.70014	2.22035	9.85	0.54	5.48
54	0.4948	915.8805	77.65937	25.0918	2.38156	1.94114	0.17579	62.40506	2.00028	46.87055	4.52893	0.08073	0.01633	350.5251	35.57258	83.14	8.25	9.92
55	0.5007	1264.675	23.30033	1.72161	0.14902	0.10753	0.01153	2.50133	0.26259	3.16277	0.2741	0.00028	0.00251	1234.513	23.04875	272.21	4.8	1.73
56	0.5033	730.9544	24.74529	12.4852	0.50162	0.21788	0.03624</											

64	0.5682	40.52848	0.70459	0.14152	0.11737	0.07772	0.00631	56.68026	4.51162	0.25969	0.21541	0.00108	0.00152	17.54572	1.85634	4.25	0.45	10.59
65	0.5731	608.8497	18.9113	2.83206	0.25926	0.11036	0.01256	5.31826	0.58684	5.20685	0.47761	0.00376	0.00248	577.5967	18.33703	135.02	4.13	3.06
66	0.575	51.17615	4.87679	2.54031	0.65299	0.04306	0.02313	24.46963	13.16325	4.6695	1.20246	0.0184	0.00646	38.70057	7.70567	9.37	1.86	19.85
67	0.5861	1159.8	16.07247	1.00318	0.09869	0.10133	0.00525	2.57462	0.12883	1.84201	0.18134	0.0055	0.00151	1130.712	15.75261	255.48	3.32	1.30
68	0.5911	155.3073	5.40787	1.15494	0.2494	0.39128	0.0174	74.40086	2.06807	2.12089	0.45837	0.00653	0.00311	39.78218	3.50528	9.63	0.85	8.83
69	0.5914	134.4332	89.43365	-2.55116	5.33506	0.35522	0.3337	78.25626	51.93387	-4.67261	9.75393	0.04447	0.07399	29.17176	72.37403	7.07	17.5	247.52
70	0.6029	85.67582	1.35189	0.82123	0.11271	0.20356	0.00645	70.15468	1.94109	1.50771	0.20706	0.00137	0.00151	25.5762	1.71577	6.2	0.42	6.77
71	0.6058	220.3173	10.74965	12.69734	0.73324	0.65366	0.03695	87.20793	2.51317	23.50867	1.36985	0.03995	0.00579	28.43434	5.76314	6.89	1.39	20.17
72	0.606	396.6976	255.46485	2.50613	5.86711	1.5298	1.02297	113.911	20.6832	4.60657	10.80355	-0.0095	0.09041	-55.2783	89.51632	-13.47	21.89	-162.51
73	0.6101	166.6382	4.97629	6.33505	0.36592	0.47691	0.02095	84.27228	2.74619	11.67619	0.67746	0.00296	0.00364	26.32151	4.67029	6.38	1.13	17.71
74	0.6193	1025.844	20.06993	1.95663	0.1051	0.10078	0.00575	2.88732	0.15557	3.59511	0.19337	0.00358	0.00164	997.5742	19.61008	227.21	4.2	1.85
75	0.6241	871.9738	23.48527	0.35124	0.19114	0.64255	0.02187	21.7725	0.45568	0.64464	0.35089	0.00425	0.00348	682.2692	18.8216	158.44	4.18	2.64
76	0.6314	1215.401	20.92766	1.01301	0.141	0.10454	0.0099	2.53486	0.23664	1.86007	0.25909	0.00249	0.00196	1185.412	20.62888	266.96	4.32	1.62
77	0.6394	956.2292	19.79473	1.98318	0.13235	0.14298	0.00764	40.4159	2.01754	3.64396	0.24352	0.00103	0.00192	915.3936	19.09116	209.54	4.13	1.97
78	0.6401	260.8419	48.82675	8.87932	2.20521	0.68774	0.14857	77.63999	8.48074	16.39514	4.09748	0.03054	0.02318	58.68566	24.90755	14.19	6	42.28
79	0.6445	442.9146	17.55658	2.05486	0.25532	0.60044	0.02884	40.02402	1.09331	3.77586	0.46984	0.00216	0.00292	266.0106	11.64011	63.44	2.73	4.30
80	0.6483	1174.406	48.23926	1.72683	0.20419	0.22333	0.01265	5.60736	0.21985	3.17236	0.37558	0.00436	0.00358	1109.878	45.72642	251.08	9.66	3.85
81	0.6681	842.7935	8.48049	0.20262	0.04162	0.10291	0.00339	3.60647	0.11328	0.37183	0.07638	0.00204	0.00058	812.486	8.23317	187.16	1.8	0.96
82	0.6705	849.6905	60.33934	3.99461	0.45683	0.40831	0.03707	14.1617	0.80364	7.35029	0.84298	0.01538	0.00487	731.3978	52.54074	169.33	11.61	6.86
83	0.6762	1064.135	26.9763	0.58362	0.14971	0.34453	0.01054	9.56313	0.16393	1.0713	0.27492	0.00323	0.00167	962.7402	24.48049	219.74	5.26	2.39
84	0.682	1112.784	35.1301	8.65523	0.26669	0.62197	0.02315	16.46604	0.32571	12.6396	0.49411	0.00236	0.00278	934.0501	29.8568	213.56	6.44	3.02
85	0.6826	942.9828	232.24469	29.63906	7.44846	2.57917	0.64192	80.56616	2.91684	55.54627	14.25751	0.05589	0.02488	187.1699	54.85419	44.87	12.99	28.95
86	0.6872	1285.037	48.54732	2.3843	0.21114	0.00554	0.01176	0.11209	0.2703	4.38224	0.38871	-0.00827	0.00192	1285.731	48.78122	287.84	10.09	3.51
87	0.6944	35.34981	0.99832	0.09122	0.12853	0.00766	0.00755	6.38495	6.31495	0.16738	0.23587	-0.00464	0.00177	33.06707	2.42007	8.01	0.58	7.24
88	0.7039	114.5557	2.03831	1.94923	0.11126	0.27894	0.01113	71.83277	2.58324	3.58149	0.2047	-0.00214	0.0012	32.30329	3.02405	7.82	0.73	9.34
89	0.7172	50.7251	0.699	0.04337	0.07007	0.08249	0.00438	48.07394	2.47251	0.07958	0.12858	-0.00322	0.0006	26.32493	1.30858	6.38	0.32	5.02
90	0.7232	1337.107	39.42035	0.50168	0.17341	0.2562	0.01451	5.65903	0.27375	0.92084	0.31841	-0.00623	0.00147	1261.859	37.39657	282.89	7.76	2.74
91	0.7291	69.19536	2.55902	0.84657	0.1647	0.07145	0.01727	30.42398	7.296	1.55427	0.30256	0.00889	0.00257	48.15151	5.35843	11.65	1.29	11.07
92	0.7304	1105.776	187.16518	12.79026	2.34913	0.38399	0.09037	10.16648	1.67802	23.68227	4.38926	0.01798	0.01373	1002.385	172.24105	228.24	36.84	16.14
93	0.741	941.0805	20.31874	0.60038	0.09417	0.07966	0.00838	2.49628	0.25753	1.10244	0.17294	0.00179	0.00148	917.9489	19.97636	210.09	4.32	2.06
94	0.7482	42.56848	1.39793	0.77698	0.16892	0.06011	0.01282	41.60413	8.80639	1.42644	0.31029	0.00094	0.00229	24.85454	3.84182	6.02	0.93	15.45
95	0.7685	173.9115	2.18377	0.23263	0.06614	0.47541	0.00844	80.78222	1.04217	0.42691	0.1214	0.01467	0.00084	33.42171	1.87194	8.09	0.45	5.56
96	0.7689	1932.467	1208.9322	56.92455	35.74475	4.70527	2.95973	71.70813	4.72926	108.8235	71.19592	0.13956	0.09874	569.6225	383.32496	133.22	86.42	64.87
97	0.7916	44.30495	0.37791	0.09677	0.04331	0.04386	0.00226	29.25265	1.49172	0.17757	0.07948	0.00229	0.00067	31.32571	0.71558	7.59	0.17	2.24
98	0.792	1789.462	798.68962	0.98493	2.08023	3.33345	1.49325	55.04285	2.10677	1.80847	3.82226	-0.0015	0.03606	805.0377	361.56085	185.53	79.18	42.68
99	0.8041	1192.47	20.81205	1.38045	0.08345	0.06756	0.00522	1.66466	0.1259	2.53541	0.15342	0.00232	0.00116	1173.735	20.56088	264.52	4.31	1.63
100	0.8062	1333.111	116.94705	5.38833	0.84574	1.47478	0.1313	32.65763	0.50761	9.92461	1.5637	0.00554	0.00837	901.158	79.6764	206.46	17.25	8.36
101	0.8187	47.47579	0.62536	0.16949	0.06975	0.08648	0.00435	53.83274	2.61566	0.31103	0.12801	0.00235	0.00116	21.90718	1.27598	5.31	0.31	5.84
102	0.8261	76.32226	1.95941	0.40651	0.14807	0.17467	0.00651	67.61067	1.88989	0.7461	0.27184	0.00136	0.00188	24.71775	1.59583	5.99	0.39	6.51
103	0.8495	980.8602	7.65395	1.36016	0.0599	0.10463	0.00278	3.14091	0.08012	2.49811	0.11012	0.00347	0.00049	950.937	7.47013	217.2	1.61	0.74
104	0.8575	70.75963	1.83978	0.09546	0.15712	0.16459	0.01075	68.75032	4.13652	0.17517	0.28832	0.00296	0.00153	22.10437	2.98705	5.36	0.72	13.43
105	0.8579	1232.555	536.20094	37.21096	16.58869	2.74503	1.21024	65.56373	4.71598	32.10307	0.10823	0.05578	0.00578	435.8907	203.71497	102.82	46.71	45.43
106	0.8819	64.62905	0.65064	0.5315	0.05426	0.10663	0.00292	48.70707	1.25215	0.97559	0.09963	0.00255	0.00037	33.14734	0.88104	8.03	0.21	2.62
107	0.8831	573.3568	82.01327	5.91047	1.37551	0.24127	0.05603	12.35035	2.27517	10.89035	2.54508	0.02277	0.00943	504.6257	73.66681	118.51	16.74	14.13
108	0.8938	1115.013	18.38318	4.48282	0.14894	0.2005	0.00673	5.28057	0.15538	8.25148	0.27502	0.00454	0.00093	1059.46	17.61014	240.4	3.74	1.56
109	0.8949	534.825	78.38367	7.38638	1.36168	0.19216	0.01631	10.5038	3.31762	13.62407	0.25246	0.03486	0.01203	481.1314	73.10327	113.16	16.67	14.73
110	0.8962	1988.925	308.46367	2.17858	0.9883	6.35664	0.98834	94.43469	1.09279	4.00356	1.81899	0.00869	0.01134	110.8587	27.80613	26.71	6.65	24.90
111	0.9073	36.50702	0.80693	0.09004	0.11007	0.03121	0.00626	25.25948	5.0424	0.16521	0.20199	0.00077	0.00128	27.26507	1.93875	6.61	0.47	7.11
112	0.9227	22.32494	0.29758	-0.04249	0.07104	0.00071	0.00453	0.95111	0.60443	-0.07796	0.13034	0.00086	0.00086	22.08252	1.37084	5.35	0.33	6.17
113	0.9257	7.19341	0.81535	1.52349	0.45811	-0.12437	0.02606	-514.768	109.0954	2.7984	0.84238	0.00353	0.00508	44.08782	7.95571	10.67	1.92	17.99
114	0.9459	68.49663	0.66892	0.30012	0.05463	0.15045	0.00453	84.89758	1.86375	0.5508	0.10029	0.00017	0.00065	24.03865	1.30243	5.83	0.32	5.49
115	0.958	1089.818	13.98931	1.72088	0.11404	0.11313	0.00535	3.05448	0.13963	3.16142	0.20976	0.00364	0.0014	1057.786	13.6809	240.05	2.91	1.21
116	0.9605	439.7499	39.13232	1.94938	0.52735	1.35698	0.12562	91.1552	3.23837	3.58178	0.97029	0.00853	0.00698	38.94601	10.8258	9.43	2.61	27.68
117	0.9674	1150.506	34.07872	3.3904	0.13581	0.0097	0.46391	0.22672	6.23584	0.40691	0.00715	0.00283	0.00113	291.391	33.16031	251.8	7	2.78
118	0.9691	80.82541	9.12959	1.13949	0.76545	0.16566	0.0345	60.46999	10.64895	2.09249	1.40676	0.02286	0.00968	31.96429	9.363	7.74	2.26	29.20
119	0.9821	181.8759	3.14841	0.81419	0.09015	0.52708	0.01087											

26	0.195	1009.73	19.86708	19.5106	0.43287	0.75464	0.02048	21.92616	0.41966	36.29942	0.81661	0.00424	0.00175	799.3256	16.57871	122.17	2.45	2.01
27	0.2083	367.1725	2.15949	0.41017	0.00999	0.15973	0.00184	12.84676	0.12783	0.75282	0.01834	0.00234	0.00038	320.0696	1.94169	49.92	0.3	0.60
28	0.2142	81.31618	0.46169	0.73882	0.02046	0.22214	0.00331	80.67966	1.12512	1.35634	0.03758	0.00027	0.00066	15.71302	0.92146	2.48	0.15	6.05
29	0.2152	846.6141	21.06191	2.16881	0.11972	2.3468	0.06515	81.89383	1.0294	3.98556	0.22035	0.01418	0.00401	153.5191	9.5641	24.12	1.49	6.18
30	0.2161	1220.419	39.99775	17.40543	0.63363	1.17541	0.04804	28.3434	0.6983	32.33402	1.19175	0.05242	0.0047	885.373	30.65007	134.84	4.5	3.34
31	0.2161	4838.099	4813.2076	-6.68605	7.25529	16.26273	16.19312	99.34104	4.14636	-12.2103	13.18763	0.08858	0.13815	31.73094	202.13115	5.01	31.88	636.33
32	0.2192	1112.94	10.89572	3.56076	0.05352	0.88823	0.01157	23.55793	0.20279	6.54997	0.0987	0.02074	0.00169	852.8766	8.67441	130.06	1.28	0.98
33	0.2248	558.9773	5.05407	0.09305	0.01355	0.25153	0.0044	13.29628	0.19926	0.17075	0.02486	0.00264	0.00079	484.6603	4.52294	75.06	0.69	0.92
34	0.2405	1201.73	8.05512	1.0248	0.01288	0.22552	0.00307	5.53863	0.06579	1.88173	0.02366	0.00235	0.00029	1135.965	7.662	171.24	1.1	0.64
35	0.2424	2496.656	50.26944	16.89411	0.35123	4.66865	0.09632	55.20225	0.24974	31.37267	0.66011	0.00834	0.00235	1131.938	23.92199	170.66	3.44	2.02
36	0.2428	2971.686	274.74165	35.66568	3.34034	8.00256	0.74242	79.47807	0.658	67.13252	6.44989	0.01463	0.00692	625.5986	62.74406	96.31	9.41	9.77
37	0.243	6477.404	1078.3424	68.71182	11.45008	18.55845	3.09154	84.57683	0.61012	132.5067	23.20691	0.2092	0.04077	1049.967	188.61598	158.83	27.31	17.19
38	0.2497	3082.724	20.53803	0.27154	0.01523	10.30252	0.104	98.75685	0.19688	0.49833	0.02796	0.00396	0.00184	38.32973	6.08423	6.05	0.96	15.87
39	0.2572	712.7416	3.20388	4.63157	0.04324	1.00607	0.01044	94.94781	0.69482	8.52618	0.07987	0.00355	0.0009	15.85065	2.18341	2.5	0.34	13.60
40	0.2583	1311.427	61.80317	4.55801	0.23478	0.79359	0.04566	17.85353	0.59235	8.39033	0.43358	0.01341	0.00419	1080.745	51.70782	163.28	7.47	4.57
41	0.2663	72.75465	0.54819	0.04533	0.01127	0.20708	0.00385	84.13852	1.44468	0.08317	0.02067	0.00212	0.00062	11.53562	1.05605	1.82	0.17	9.34
42	0.2704	2848.671	53.94039	3.66899	0.07295	6.16436	0.12088	63.9345	0.32721	6.74959	0.13456	0.02426	0.00283	1030.046	21.68301	155.94	3.14	2.01
43	0.2706	12595.01	2340.1022	74.52519	13.87647	41.93525	7.79736	98.33853	0.71857	144.3402	28.36899	0.05827	0.03777	220.8872	104.90335	34.6	16.27	47.02
44	0.2745	146.4415	2.26921	2.13284	0.04181	0.3523	0.00879	70.98388	1.4001	3.91936	0.07695	0.00651	0.00088	42.54713	2.16269	6.72	0.34	5.06
45	0.275	4762.078	264.54808	67.49549	3.81835	7.07822	0.40026	43.80572	0.46476	130.0436	7.72504	0.54563	0.0327	2809.939	165.57009	397.19	21	5.29
46	0.2862	471.0134	2.46213	1.18997	0.02829	1.38741	0.00993	87.02653	0.4275	2.18527	0.052	0.00305	0.00056	61.15433	2.04205	9.65	0.32	3.32
47	0.2889	1172.415	23.37895	1.33849	0.04622	0.86188	0.02257	21.71435	0.35542	2.45828	0.08497	0.00228	0.0016	918.6778	19.26688	139.72	2.82	2.02
48	0.2926	48.52571	0.78404	0.16514	0.02438	0.05898	0.00672	35.9121	4.06254	0.30304	0.04474	0.00195	0.00111	31.0837	2.04196	4.91	0.32	6.52
49	0.2937	9907.2	165.64299	66.43278	1.14202	29.07438	0.49156	86.66451	0.22136	127.8953	2.30682	0.05251	0.00708	1386.205	33.51886	206.87	4.73	2.29
50	0.3095	129.3123	0.52764	0.2579	0.00877	0.20802	0.00248	47.50951	0.54245	1.05346	0.0161	0.00325	0.00026	67.8886	0.76685	10.7	0.12	1.12
51	0.3185	1081.059	7.83286	0.15156	0.01847	0.12206	0.00358	3.33525	0.09487	0.27813	0.03389	0.00284	0.00053	1045.086	7.64292	158.12	1.11	0.70
52	0.3212	680.2312	7.85802	3.99445	0.09006	2.12599	0.03353	92.31084	1.00588	7.35001	0.16619	0.0118	0.00186	52.44977	6.89634	8.28	1.09	13.16
53	0.3647	113.5484	0.23579	0.21214	0.00347	0.1042	0.00062	27.10809	0.15214	0.3893	0.00637	0.00126	0.00017	82.75832	2.24484	13.04	0.04	0.31
54	0.3648	2313.479	1060.9922	-1.45017	1.70603	6.42659	3.22679	89.10258	5.90204	-2.65814	3.12394	0.02766	0.06455	232.0353	170.69462	36.33	26.45	72.80
55	0.3787	532.3582	1.10614	0.21673	0.00707	0.58557	0.00431	32.502	0.22982	0.39773	0.01298	0.00191	0.00047	359.3661	1.43822	55.95	0.22	0.39
56	0.3828	1559.701	13.85722	0.06356	0.02591	1.72428	0.01866	32.66836	0.20249	0.11663	0.04755	0.00303	0.00124	1050.199	9.85718	158.87	1.43	0.90
57	0.3898	1565.676	14.84512	2.63607	0.03266	5.06236	0.04915	95.5311	0.20443	4.84585	0.06014	0.00493	0.00115	70.06618	3.2784	11.05	0.52	4.71
58	0.4052	911.7924	2.39715	1.29687	0.01215	0.17196	0.00294	5.56154	0.09433	2.38176	0.02234	0.00152	0.00037	861.844	2.42777	131.38	0.36	0.27
59	0.4067	2273.769	59.14417	8.62325	0.23783	3.83885	0.10352	49.85919	0.35589	15.91942	0.44175	0.01063	0.00362	1147.057	31.10969	172.84	4.47	2.59
60	0.415	266.8423	1.73402	0.52661	0.01613	0.49426	0.00564	54.72377	0.52328	0.96661	0.02962	0.00753	0.00061	120.8476	1.6221	19.01	0.25	1.32
61	0.4173	3280.391	74.09488	81.18275	0.9536	5.8254	0.13222	52.37262	0.1196	77.82823	1.85612	0.01499	0.00329	1609.151	37.66234	238.03	5.22	2.19
62	0.4321	3891.887	32.91603	1.45825	0.01953	12.81879	0.11199	97.3271	0.21778	2.67845	0.0359	0.01305	0.00169	104.1327	8.53501	16.39	1.34	8.18
63	0.4371	1080.441	16.54679	1.49924	0.04167	1.33135	0.02321	36.40182	0.30373	2.75381	0.07662	0.00234	0.00114	687.85	11.04869	105.62	1.65	1.56
64	0.4423	1140.364	10.01918	5.61084	0.06397	1.09732	0.01154	28.39486	0.16514	10.33608	0.11832	0.01311	0.00137	819.7863	7.47878	125.19	1.1	0.88
65	0.4587	1026.405	4.6011	0.26797	0.01051	0.12015	0.00221	3.4571	0.06179	0.49178	0.0193	0.00216	0.00024	991.0803	4.48961	150.28	0.65	0.43
66	0.4593	2979.81	242.93775	95.73949	7.81369	6.59474	0.54388	65.13411	0.18772	188.4075	16.49176	0.02092	0.00701	1114.266	100.92188	168.12	14.54	8.65
67	0.4594	672.6152	353.11889	5.26156	3.36746	1.22056	0.72329	53.5607	14.82401	9.69024	6.22501	0.07971	0.06177	331.509	193.4209	48.91	29.77	60.87
68	0.4809	28.09572	0.09702	0.01147	0.0067	0.06609	0.00159	69.57941	1.66691	0.02104	0.01229	0.00082	0.00016	8.53792	0.46972	1.35	0.07	5.19
69	0.4903	40.11776	0.34836	0.88721	0.01803	0.08714	0.00383	64.05301	2.77705	1.62893	0.03312	0.00667	0.00046	14.4195	1.12319	2.28	0.18	7.89
70	0.5057	66.67068	0.32091	0.11516	0.01065	0.18321	0.00226	81.22509	0.93724	0.21132	0.01955	0.00023	0.00035	12.5128	0.62995	1.98	0.1	5.05
71	0.5102	1304.14	19.10684	3.25591	0.03169	4.33976	0.06577	98.33376	0.38475	0.43293	0.05817	0.00994	0.00132	21.73327	5.02923	3.43	0.79	23.03
72	0.5173	53.98385	0.66471	0.19491	0.02095	0.14018	0.00561	76.74427	2.93737	0.35769	0.03845	0.00157	0.00064	12.54916	1.59497	1.98	0.25	12.63
73	0.5271	143.11	1.05624	0.18079	0.01036	0.38579	0.00487	79.66581	0.83425	0.33178	0.01901	0.00179	0.0003	29.09793	1.21911	4.6	0.19	4.13
74	0.5439	20.81619	0.0953	0.37455	0.00696	0.0219	0.0018	30.98212	2.69451	0.68743	0.01278	0.00077	0.00018	14.3502	0.56458	2.27	0.09	3.96
75	0.5576	58.20427	0.23012	0.54489	0.01135	0.06785	0.00254	34.3868	1.28625	1.00018	0.02084	0.00071	0.00021	38.1849	0.76586	6.03	0.12	1.99
76	0.5851	67.04687	0.27094	0.03936	0.00309	0.14323	0.0171	63.15067	0.72051	0.07223	0.00567	0.00243	0.0002	24.69607	0.49701	3.9	0.08	2.05
77	0.5918	61.95933	0.41361	0.34142	0.02116	0.1496	0.00505	71.33737	2.36514	0.62661	0.03884	0.00518	0.00042	17.75494	1.47051	2.81	0.23	8.19
78	0.6024	61.36257	0.52475	0.90359	0.01861	0.13249	0.00321	63.71198	1.45044	1.65903	0.03419	0.00313	0.00042	22.2707	0.91184	3.52	0.14	3.98
79	0.6025	581.2125	189.42856	-0.83802	1.86695	1.81067	0.72066	92.07466	21.073	-1.53674	3.42155	-0.04944	0.05927	46.03344	123.33744	7.27	19.43	267.26
80	0.6095	65.39272	0.54584	0.11064	0.01923	0.15667	0.00469	70.8136	2.03659	0.20302	0.03529	0.00082	0.0006	19.0786	1.34152	3.01	0.21	6.98
81	0.6161	63.01022	0.38291	0.79295	0.02376	0.14579	0.00532	68.29956	2.46261	1.45577								

117	0.9657	122.5757	0.5085	1.14777	0.02064	0.2445	0.00451	58.88015	1.06673	2.10771	0.03793	0.00213	0.0004	50.43163	1.33053	7.96	0.21	2.64
118	0.9808	15.45512	0.11435	0.00952	0.00833	0.0167	0.00265	31.98497	5.06409	0.01747	0.01528	0.00041	0.00023	10.49168	0.78521	1.66	0.12	7.23
119	1	114.6741	0.56392	0.33019	0.00912	0.32698	0.0035	84.25773	0.81433	0.606	0.01674	0.00233	0.00029	18.05185	0.94105	2.85	0.15	5.26

Integrated	458.9013	0.2956	1.38322	0.00209	0.8419	0.00085	54.19085	0.04275	2.5405	0.00383	0.00415	0.00006	210.4108	0.2397	32.97	0.08	0.24
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KUSKULANA RIVER

Weighted average of J from standards = 9.588e-05 +/- 4.822e-07

Grain #	Cumulative 39Ar	40Ar/39Ar +/- meas.	37Ar/39Ar +/- meas.	36Ar/39Ar +/- meas.	% Atm. 40Ar	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age (Ma)	+/- (Ma)	%error			
1	0.0025	29.88472	0.64164	0.31813	0.04222	0.03336	0.009	32.93066	8.88146	0.58385	0.0775	0.00672	0.00138	20.02807	2.68767	3.46	0.46	13.29
2	0.0033	15360.32	485.07727	3.30596	0.21101	48.62716	1.61708	93.54678	0.97535	6.08017	0.38898	0.06429	0.02455	993.5523	153.43072	163.97	24.2	14.76
3	0.0096	269.678	2.32843	0.73503	0.02321	0.82883	0.01254	90.8067	1.1353	1.34939	0.04262	0.00422	0.00096	24.80246	3.07235	4.28	0.53	12.38
4	0.0153	51.30914	0.42051	2.07845	0.03233	0.10646	0.00465	61.01605	2.6382	3.81928	0.05949	0.00955	0.00075	20.02015	1.36612	3.46	0.24	6.94
5	0.0199	162.1027	1.05781	0.42021	0.03075	0.50264	0.00772	91.62209	1.28929	0.77126	0.05645	0.00249	0.00097	13.58237	2.09438	2.35	0.36	15.32
6	0.0361	109.5546	0.2224	0.49701	0.01371	0.30107	0.00306	81.1915	0.8136	0.91227	0.02517	0.00326	0.00038	20.60723	0.89376	3.56	0.15	4.21
7	0.0461	151.5576	1.06868	0.53437	0.01882	0.46457	0.00562	90.56773	0.91153	0.99758	0.03456	0.00214	0.00056	14.29802	1.38885	2.47	0.24	9.72
8	0.0463	1948.224	204.16401	91.6906	9.67264	2.65815	0.295	39.93056	1.47807	179.888	20.29066	0.50536	0.05728	1251.296	143.58791	204.18	22.15	10.85
9	0.0471	1251.431	26.70825	16.94158	0.39464	0.41694	0.02021	9.73384	0.42859	31.4619	0.74175	0.04856	0.00584	1143.271	25.28998	187.43	3.94	2.10
10	0.0475	865.543	34.09977	29.97122	1.22986	0.99723	0.05365	33.76139	1.24988	56.18223	2.35527	0.12294	0.01231	585.7014	26.05388	98.46	4.26	4.33
11	0.0477	325.3006	26.29084	0.62771	0.3285	0.85611	0.10863	77.75982	7.61644	1.15227	0.60328	0.04085	0.01827	72.37292	25.47457	12.46	4.37	35.07
12	0.055	86.02606	0.69127	0.65784	0.01717	0.21198	0.00433	72.77794	1.37189	1.2076	0.03153	0.0023	0.00071	23.42086	1.19684	4.04	0.21	5.20
13	0.0692	187.5786	0.86421	0.33616	0.00971	0.56794	0.00376	89.46965	0.43971	0.61695	0.01782	0.00306	0.00051	19.75424	0.83275	3.41	0.14	4.11
14	0.0821	73.01259	0.42499	0.22464	0.01419	0.20013	0.00308	81.00559	1.16054	0.41225	0.02604	0.00177	0.00046	13.86487	0.852	2.39	0.15	6.28
15	0.0824	1142.875	90.4408	16.94317	1.51438	0.96956	0.10138	24.94732	1.71507	31.46487	2.84638	0.06647	0.01605	868.1242	72.32477	144.07	11.54	8.01
16	0.0945	50.48728	0.23236	0.92644	0.01323	0.11468	0.00168	67.01275	0.94662	1.70101	0.02431	0.00484	0.00051	16.65547	0.48735	2.88	0.08	2.78
17	0.0967	347.9898	6.86489	7.14643	0.17755	0.16305	0.00877	13.67762	0.69379	13.17924	0.32909	0.03741	0.00234	301.8912	6.46684	51.42	1.09	2.12
18	0.1022	463.1449	3.68659	7.91253	0.07931	0.55107	0.00813	35.02123	0.43873	14.6	0.14717	0.0174	0.00114	302.6177	3.17805	51.54	0.53	1.03
19	0.1091	30.21766	0.26668	1.52196	0.02695	0.03949	0.00283	38.23926	2.75063	2.7956	0.04956	0.00755	0.00042	18.66439	0.84946	3.22	0.15	4.66
20	0.1118	376.5386	4.12691	8.75702	0.12871	0.23282	0.01313	18.08064	1.01153	16.16791	0.23911	0.05152	0.00217	310.3532	5.14545	52.84	0.86	1.63
21	0.1121	6086.023	443.81664	130.1391	9.54297	13.77647	1.02498	66.71415	0.99254	262.9545	21.23369	0.62879	0.0534	2230.8	191.17063	349.28	27.21	7.79
22	0.1137	578.649	8.32543	11.76484	0.26393	1.75329	0.03041	89.37242	0.88227	21.76772	0.49243	0.05217	0.00235	62.00846	5.23619	10.68	0.9	8.43
23	0.1506	52.44823	0.17206	0.16895	0.00406	0.12888	0.00141	72.62442	0.76625	0.31004	0.00744	0.00136	0.00018	14.35159	0.40549	2.48	0.07	2.82
24	0.1511	1597.091	82.15827	46.51843	2.42609	2.01829	0.1248	37.1038	1.28373	88.25426	4.75909	0.21185	0.01465	1038.612	59.19587	171.06	9.3	5.44
25	0.152	1679.535	39.49447	29.66548	0.736	1.34733	0.03819	23.56003	0.37664	55.59683	1.40887	0.11369	0.00698	1311.286	32.16891	213.41	4.94	2.31
26	0.1524	1790.982	110.18926	48.49061	3.03585	2.22595	0.15482	36.50401	1.19317	92.12852	5.9724	0.14895	0.05152	117.7507	78.22908	192.76	12.14	6.30
27	0.1529	807.6725	35.71897	20.54987	1.05514	2.26834	0.10674	82.7842	1.35661	38.26146	1.99348	0.84561	0.04017	141.0898	12.82861	24.21	2.19	9.05
28	0.1542	1185.244	31.88008	25.83696	0.74216	1.49989	0.04572	37.21595	0.54154	48.28836	1.41285	0.12277	0.00642	757.9561	21.80277	126.42	3.51	2.78
29	0.1682	93.98643	0.53838	0.26466	0.01098	0.24214	0.00421	76.13045	1.25386	0.48571	0.02015	0.00205	0.00039	22.43124	1.18675	3.87	0.2	5.17
30	0.1763	162.5772	1.25546	1.16344	0.02532	0.48302	0.00772	87.75027	1.23986	2.13651	0.04654	0.00045	0.00059	19.928	2.0253	3.44	0.35	10.17
31	0.1905	46.41978	0.22656	1.06397	0.01083	0.10226	0.00201	64.94969	1.24528	1.95371	0.0199	0.00327	0.00055	16.2721	0.58513	2.81	0.1	3.56
32	0.2109	131.5798	0.57964	0.44764	0.00836	0.37459	0.0051	84.1162	1.08977	0.82161	0.01536	0.00344	0.00039	20.90176	1.43872	3.61	0.25	6.93
33	0.2185	86.34111	0.50745	0.3975	0.01588	0.23414	0.00384	80.12354	1.23924	0.72956	0.02916	0.00172	0.00066	17.16047	1.07701	2.96	0.19	6.42
34	0.2261	740.7913	6.82063	1.61761	0.02525	2.40822	0.02975	96.04914	0.79173	2.97148	0.04643	0.01171	0.00125	29.29996	5.87797	5.06	1.01	19.96
35	0.232	542.7685	4.84284	4.43035	0.05781	0.30157	0.00482	35.35188	0.21784	8.1546	0.10674	0.01488	0.00097	45.4158	4.24618	77.02	0.7	0.91
36	0.2583	178.5657	0.73119	0.30116	0.00495	0.53378	0.00468	88.333	0.68591	0.5527	0.00909	0.00172	0.00039	20.83423	1.22801	3.6	0.21	5.83
37	0.2708	130.9585	0.40529	0.79577	0.0106	0.37067	0.00332	83.60784	0.71486	1.46095	0.01947	0.00131	0.00047	21.47412	0.94181	3.71	0.16	4.31
38	0.2736	387.7088	8.68442	12.28423	0.29461	0.74492	0.02056	56.51846	0.92074	22.73712	0.55007	0.03624	0.00268	170.0442	5.27639	29.14	0.9	3.09
39	0.2749	1724.599	36.63424	25.20786	0.55955	1.86302	0.05396	31.80182	0.63126	47.09128	1.06425	0.08848	0.00654	1197.442	28.20863	195.85	4.37	2.23
40	0.2928	97.69621	0.73036	0.31081	0.00927	0.26365	0.00353	79.74477	1.02823	0.57042	0.01701	0.00097	0.00039	19.78692	1.00797	3.42	0.17	4.97
41	0.3011	293.3633	1.85573	0.86891	0.01727	0.9217	0.01008	92.82619	0.84272	1.59532	0.03173	0.00175	0.00094	21.05611	2.48039	3.63	0.43	11.85
42	0.3171	73.09484	0.23658	0.53052	0.01059	0.17887	0.00365	72.28044	1.4633	0.9738	0.01944	0.00191	0.00055	20.26093	1.07284	3.5	0.19	5.43
43	0.352	27.56735	0.09643	0.23733	0.00345	0.00349	0.00085	36.94335	0.90646	0.43554	0.00634	0.00067	0.00013	17.36724	0.25781	3	0.04	1.33
44	0.3552	211.7838	2.47586	3.63136	0.09228	0.63966	0.01846	89.12248	2.37208	6.68018	0.1702	0.0037	0.00171	23.09283	5.04735	3.99	0.87	21.80
45	0.3628	97.31393	0.9284	1.24691	0.02259	0.27376	0.00601	83.04833	1.65226	2.28993	0.41502	0.00294	0.00065	16.50584	1.61791	2.85	0.28	9.82
46	0.363	1937.484	167.99694	129.235	11.33655	3.15556	0.30305	47.57866	1.98961	260.9442	25.18909	0.41357	0.04505	1117.646	114.80377	183.44	17.92	9.77
47	0.3757	39.32242	0.28319	1.06076	0.01668	0.07112	0.00261	53.26303	1.92798	1.94782	0.03064	0.00136	0.00024	18.37801	0.77067	3.17	0.13	4.10
48	0.3763	976.741	33.89552	31.31233	1.2619	2.5407	0.10457	76.60365	1.71697	58.75304	2.42132	0.17837	0.01007	233.6824	19.09304	39.93	3.23	8.09
49	0.3806	32.68158	0.3797	2.05607	0.03416	0.04389	0.00755	39.20583	6.81583	3.7781	0.06287	0.00859	0.0012	19.87933	2.24204	3.43	0.39	11.37
50	0.4015	336.2988	1.76266	0.409														

81	0.7101	382.055	2.38874	0.31258	0.00826	1.21427	0.01254	93.91813	0.7731	0.57366	0.01516	0.0032	0.00059	23.23941	2.95785	4.01	0.51	12.72
82	0.7111	104.6722	3.18903	16.30991	0.58904	0.17663	0.04515	48.59304	12.67486	30.27516	1.10614	1.15757	0.03481	54.42053	13.53987	9.38	2.33	24.84
83	0.7329	127.6147	0.70577	0.09597	0.01118	0.36266	0.0049	83.98969	1.03575	0.1761	0.02052	0.00227	0.00037	20.42814	1.32667	3.53	0.23	6.52
84	0.7426	133.57469	0.21047	1.82719	0.03467	0.03448	0.00462	29.9281	4.06654	3.35698	0.06377	0.01358	0.00056	23.53601	1.37592	4.06	0.24	5.91
85	0.7525	30.99126	0.17496	1.53679	0.02216	0.04567	0.004	43.18104	3.81172	2.82286	0.04074	0.00172	0.00057	17.61117	1.18673	3.04	0.2	6.58
86	0.757	249.7768	3.67057	3.46382	0.07354	0.06145	0.00716	7.15609	0.84001	6.37122	0.1356	0.00573	0.0008	232.4436	4.02086	39.72	0.68	1.71
87	0.7571	9316.409	1817.8952	444.4011	86.8958	28.26423	5.5455	89.25612	1.84211	1188.379	338.6529	0.17431	0.07426	1458.764	484.53355	235.9	73.44	31.13
88	0.7655	45.95	0.39619	0.69154	0.02524	0.10016	0.00482	64.32717	3.05807	1.26949	0.04636	0.00147	0.00057	16.38908	1.41317	2.83	0.24	8.48
89	0.7672	813.5792	11.92463	10.76416	0.19664	-0.09319	0.02392	-3.49392	0.86726	19.90205	0.36635	0.01265	0.0023	848.4241	14.40361	140.93	2.3	1.63
90	0.7755	43.63271	0.2604	0.24284	0.02106	0.08449	0.0047	57.21227	3.17402	0.44565	0.03865	0.00105	0.00058	18.65994	1.39104	3.22	0.24	7.45
91	0.7767	429.4769	8.02986	12.80244	0.3422	0.87909	0.0399	60.24412	2.50657	23.70504	0.6394	0.03945	0.0052	172.2883	11.35104	29.52	1.93	6.54
92	0.7784	721.9978	11.68706	16.85581	0.37701	1.06067	0.03608	43.22045	1.30069	31.3007	0.70853	0.07728	0.00367	414.869	11.69798	70.29	1.94	2.76
93	0.7785	1206.432	170.53433	145.3769	20.59877	2.86877	0.45131	69.27497	4.85803	297.266	46.93943	0.49264	0.07714	413.0781	92.22485	69.99	15.33	21.90
94	0.79	52.80985	0.29451	0.83049	0.01968	0.12901	0.0036	72.10165	1.98609	1.52473	0.03615	0.00697	0.00048	14.73344	1.05489	2.54	0.18	7.09
95	0.7907	843.897	40.15111	15.34789	0.78797	2.72072	0.14407	95.12253	2.22307	28.46984	1.47767	0.11594	0.00966	41.61044	19.07438	7.17	3.28	45.75
96	0.7947	1057.27	11.1862	6.31109	0.09146	0.74829	0.01268	20.86566	0.27679	11.63182	0.16932	0.01299	0.00148	840.3854	9.40435	139.65	1.5	1.07
97	0.7977	940.159	11.35937	8.33729	0.1459	1.14304	0.02005	35.85461	0.46051	15.38839	0.27089	0.05151	0.0018	606.6215	8.59315	101.87	1.4	1.37
98	0.7983	1215.58	67.57443	42.363	2.38934	3.89323	0.23715	94.35692	2.36568	80.12748	4.6587	0.21081	0.01637	70.70999	29.92519	12.18	5.14	42.20
99	0.8015	587.2501	9.76313	9.06522	0.17941	0.72552	0.01707	36.38214	0.61221	16.7406	0.33345	0.04042	0.00184	375.9842	7.27899	63.82	1.21	1.90
100	0.8018	3345.484	262.37722	315.9202	24.84517	10.35914	0.82771	90.72245	1.40226	746.1393	75.5307	0.01327	0.01862	399.5106	72.63704	67.74	12.09	17.85
101	0.8046	602.0088	5.27141	5.94679	0.12618	0.47871	0.013	23.41765	0.6047	10.95755	0.23349	0.01049	0.00146	462.9541	5.48227	78.26	0.91	1.16
102	0.8047	2169.872	375.42891	134.2643	23.37204	4.62057	0.85655	62.41509	4.19327	272.1628	52.3395	0.3935	0.08623	900.963	199.45385	149.3	31.72	21.25
103	0.8143	51.56882	0.38538	0.49741	0.02124	0.11365	0.00428	65.08094	2.41318	0.913	0.039	0.00063	0.00041	18.0033	1.25331	3.11	0.22	7.07
104	0.8328	453.0261	1.82489	0.08984	0.00898	1.45374	0.0123	94.82944	0.70624	0.16485	0.01647	0.00347	0.00074	23.42395	3.20104	4.04	0.55	13.61
105	0.8415	98.14512	0.77279	0.80291	0.03023	0.25248	0.00686	75.9728	1.98069	1.47406	0.05552	0.00093	0.00065	23.58776	1.9543	4.07	0.34	8.35
106	0.8638	40.34263	0.23232	0.55648	0.01192	0.0704	0.00233	51.49269	1.68172	1.02146	0.02189	0.00817	0.00027	19.56241	0.68804	3.38	0.12	3.55
107	0.868	58.37339	0.49059	2.45281	0.04963	0.1658	0.01074	83.62652	5.39822	4.50838	0.09138	0.0169	0.00133	9.56948	3.15653	1.65	0.54	32.73
108	0.8778	20.53889	0.21614	0.81536	0.02349	0.01761	0.0043	25.05138	6.19284	1.49693	0.04315	0.00386	0.00049	15.38022	1.28151	2.66	0.22	8.27
109	0.8909	152.511	0.73662	3.14231	0.02585	0.44144	0.00424	85.37872	0.72577	5.77853	0.04764	0.01404	0.00042	22.3443	1.11837	3.86	0.19	4.92
110	0.8967	56.78506	0.52374	0.15057	0.13391	0.00715	69.69751	3.66823	0.27631	0.05103	0.00265	0.00079	17.20012	2.0886	2.97	0.36	12.12	
111	0.9012	104.3335	0.8409	2.27944	0.0527	0.29737	0.00831	84.06674	2.25985	4.18921	0.09701	0.00574	0.00108	16.64581	2.36612	2.87	0.41	14.29
112	0.9251	25.97467	0.12366	0.08205	0.00616	0.03802	0.00176	43.27543	2.00014	0.15057	0.0113	0.00101	0.00026	14.71803	0.52429	2.54	0.09	3.54
113	0.9338	86.63584	0.46231	1.62994	0.02578	0.23177	0.00465	78.92567	1.53914	2.99416	0.04742	0.00174	0.00058	18.27271	1.34056	3.15	0.23	7.30
114	0.9439	34.47326	0.19118	0.13912	0.01683	0.0637	0.00412	54.61715	3.52927	0.25529	0.03089	0.0021	0.00046	15.633	1.21998	2.7	0.21	7.78
115	0.9566	40.74501	0.25271	0.62237	0.01554	0.07265	0.00339	52.60175	2.43806	1.14246	0.02854	0.00015	0.00028	19.30684	1.00083	3.33	0.17	5.11
116	0.9628	45.78662	0.50126	0.06904	0.02549	0.1028	0.0061	66.37489	3.87582	0.12669	0.04677	-0.00014	0.0007	15.38657	1.78193	2.66	0.31	11.65
117	0.9717	52.14986	0.36368	0.68707	0.02148	0.12021	0.00425	68.04719	2.36819	1.26129	0.03945	0.00051	0.00061	16.66195	1.24121	2.88	0.21	7.29
118	0.9802	67.13125	0.41902	0.44458	0.02046	0.16305	0.00675	71.75076	2.94076	0.816	0.03756	0.00004	0.00066	18.96163	1.97835	3.27	0.34	10.40
119	0.9934	285.6066	1.40416	1.04865	0.02302	0.90475	0.01132	93.58872	1.07811	1.92555	0.04231	0.00331	0.00092	18.32271	3.08255	3.16	0.53	16.77
120	0.9984	81.82061	0.94562	0.08824	0.03347	0.21255	0.00823	76.78289	2.84061	0.16192	0.06142	-0.00077	0.00079	18.99067	2.33477	3.28	0.4	12.20
121	1	427.0896	8.84027	2.58206	0.11208	1.37463	0.03705	95.06655	1.73603	4.74638	0.2064	0.00805	0.00327	21.10726	7.43996	3.64	1.28	35.16
Integrated		180.1925	0.126	2.24492	0.00329	0.44757	0.00087	73.30638	0.13305	4.12566	0.00606	0.00832	0.00007	48.16836	0.24264	8.3	0.06	0.72

KOTSINA RIVER

Weighted average of J from standards = 9.588E-05 +/- 4.822E-07

Grain #	Cumulative 40Ar/39Ar +/- meas.			37Ar/39Ar +/- meas.			36Ar/39Ar +/- meas.			% Atm. 40Ar	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age (Ma)	+/- (Ma)	%error
1	0.008	24.02549	0.18065	0.94004	0.03653	0.07153	0.00434	87.76512	5.31576	1.72598	0.06711	0.03724	0.00129	2.93781	1.27687	0.51	0.22	43.14		
2	0.0086	913.1711	79.34373	106.2318	9.27393	1.24064	0.11715	39.18904	1.50144	210.7302	19.88864	0.04388	0.01563	600.3296	58.36766	100.85	9.54	9.46		
3	0.0213	400.189	1.5326	1.40796	0.02536	1.35086	0.00712	99.72591	0.38247	2.58598	0.04662	0.02458	0.00139	1.0979	1.53223	0.19	0.26	136.84		
4	0.0241	136.2886	2.25622	2.31878	0.10419	0.44036	0.02185	95.35931	4.46891	4.26162	0.19179	0.02823	0.00348	6.33372	6.10037	1.09	1.05	96.33		
5	0.0353	5.49809	0.05517	0.86315	0.02298	0.0185	0.00257	98.66835	13.89532	1.58472	0.04222	0.01239	0.00087	0.07286	0.76034	0.01	0.13	1300.00		
6	0.0519	2.96286	0.02365	0.73071	0.01856	0.00641	0.00272	62.51818	27.42339	1.34144	0.03409	0.00936	0.0005	1.09998	0.80493	0.19	0.14	73.68		
7	0.0575	7.33086	0.10725	1.12197	0.05119	0.01392	0.00706	55.08375	28.55781	2.0603	0.09408	0.0228	0.00137	3.28202	2.08795	0.57	0.36	63.16		
8	0.0577	3972.308	705.33358	1.9432	1.29855	10.61526	1.91179	78.96348	2.38209	3.5704	2.38922	0.02086	0.04296	836.7774	176.42331	139.07	28.22	20.29		
9	0.0652	0.82005	0.06541	1.3184	0.04159	0.00416	0.00451	141.632	169.1533	2.42134	0.07646	0.02258	0.00106	-0.32936	1.33662	-0.06	0.23	-383.33		
10	0.0737	1148.534	7.52131	4.42571	0.04876	0.7253	0.01328	18.62967	0.31915	8.14603	0.09002	0.01114	0.00108	937.4718	7.17785	155.1	1.14	0.74		
11	0.0885	99.92529	0.77003	0.82956	0.0209	0.33888	0.00543	100.174	1.4225	1.52302	0.03839	0.01543	0.00064	-0.1739	1.42182	-0.03	0.25	-833.33		
12	0.0954	63.90605	0.69791	0.77679	0.034	0.22595	0.00749	104.4255	3.27574	1.42608	0.06246	0.03219	0.00127	-2.82836	2.09365	-0.49	0.36	-73.47		
13	0.1085	369.231	2.52122	0.59068	0.02009	1.26072	0.0115	100.8916	0.63002	1.08427	0.03689	0.01904	0.00138	-3.29302	2.32646	-0.57	0.4	-70.18		
14	0.1249	1.24517	0.02815	0.44409	0.01907	0.00468	0.00315	110.6565	76.63372	0.8151	0.03502	0.01477	0.0006	-0.12957	0.93167	-0.02	0.16	-800.00		
15	0.1355	870.5084	6.15437	1.06839	0.02863	2.85665	0.02699	96.96424	0.61072	1.96184	0.05262	0.0198	0.00139	26.4456	5.3243	4.56	0.92	20.18		
16	0.1531	20.15533	0.11523	0.43695	0.01838	0.06232	0.004	92.64294	5.84977	0.802	0.03374	0.00799	0.00057	1.48111	1.17778	0.26	0.2	76.92		
17	0.1827	50.81901	0.29531	0.63993	0.01281	0.11402	0.00218	66.23392	1.21975	1.17471	0.02353	0.00143	0.00026	17.15732	0.63093	2.96	0.01	3.72		
18	0.1916	207.7936	2.69897	0.84534	0.03743	0.72613	0.01537	103.2431	1.73543	1.55201	0.06877	0.02768	0.00135	-6.74209	3.6082	-1.17	0.62	-52.99		
19	0.2005	1187.035	11.99882	6.74338	0.09067	1.11936	0.01569	27.81919	0.2712	12.43239	0.16796	0.02963	0.00113	860.8899	9.32941	142.92	1.49	1.04		
20	0.2092	9.24834	0.13243	1.17124	0.03029	0.02954	0.00435	93.63015	13.91873	2.15085	0.05567	0.03378	0.00119	0.5877	1.28443	0.1	0.22	220.00		
21	0.2133	11.8684	0.25114	0.10783	0.05474	0.03226	0.00426	79.81674	10.5776	1.86893	0.10059	0.02193	0.00201	2.39116	1.25661	0.41	0.22	53.66		
22	0.2263	803.3025	6.64452	0.89976	0.02112	2.68635	0.02972	98.81339	0.72872	1.65199	0.03881	0.03122	0.00186	9.53776	5.85809	1.65	1.01	61.21		
23	0.2283	611.8766	12.75114	11.25197	0.29692	1.02459	0.02549	49.33236	0.68327	20.81119	0.55358	0.01644	0.00541	312.4917	7.8421	53.2	1.32	2.48		
24	0.2403	8.01439	0.11478	1.09345	0.02822	0.02338	0.00213	85.40787	7.80803	2.00787	0.05186	0.03919	0.00115	1.16604	0.62469	0.2	0.11	55.00		
25	0.2529	18.82145	0.1407	0.89504	0.02308	0.05436	0.00985	85.09206	15.47176	1.64332	0.04239	0.03198	0.00083	2.80324	2.90941	0.48	0.5	104.17		
26	0.2636	76.04119	0.79814	2.13134	0.06444	0.25143	0.00494	97.5151	1.63829	3.91662	0.11859	0.02997	0.00076	1.89166	1.24759	0.33	0.22	66.67		
27	0.2726	503.1789	6.38052	0.70565	0.02374	1.69356	0.02444	99.45124	0.70731	1.29542	0.0436	0.02294	0.00144	2.76247	3.56139	0.48	0.62	129.17		
28	0.3073	90.1223	0.63913	0.35497	0.00855	0.3052	0.00377	100.0733	1.03839	0.65148	0.0157	0.02178	0.00043	-0.06606	0.93573	-0.01	0.16	-1600.00		
29	0.3184	147.8736	1.04988	0.68141	0.02737	0.48543	0.00785	96.98599	1.42121	1.25089	0.05027	0.02824	0.0011	4.58187	2.10297	0.77	0.36	46.75		
30	0.3365	12.37521	0.09383	0.38969	0.01562	0.03865	0.00207	92.25333	4.92347	0.71523	0.02867	0.02761	0.00062	0.95663	0.60817	0.17	0.11	64.71		
31	0.3448	38.69087	0.19951	0.70935	0.02814	0.13286	0.00372	101.397	2.81448	1.30222	0.05168	0.03475	0.00095	-0.54037	1.08857	-0.09	0.19	-211.11		
32	0.3604	1.33733	0.02204	1.07695	0.01849	0.00503	0.00263	106.7721	59.36139	1.97756	0.03397	0.03734	0.00051	-0.08862	0.7768	-0.02	0.13	-650.00		
33	0.3708	16.64053	0.16321	1.06865	0.03447	0.05246	0.00322	92.79996	5.67321	1.96231	0.06335	0.04598	0.00107	1.19689	0.94332	0.21	0.16	76.19		
34	0.3817	25.11872	0.17351	0.37467	0.02494	0.07607	0.00369	89.47141	4.30985	0.68764	0.04579	0.02626	0.00118	2.64214	1.08192	0.46	0.19	41.30		
35	0.3924	7.91513	0.06663	0.52625	0.02461	0.02767	0.00313	103.1294	11.71151	0.96595	0.04519	0.0139	0.00073	-0.24686	0.92381	-0.04	0.16	-400.00		
36	0.393	2535.143	133.38218	35.68623	1.9816	5.98441	0.32166	69.63899	0.77878	67.17221	3.8264	0.04214	0.01108	789.5624	47.24332	131.5	7.59	5.77		
37	0.4029	4.35526	0.00870	1.42402	0.0229	0.01545	0.00298	102.8638	20.35734	2.61552	0.04211	0.01563	0.00097	-0.124	0.88143	0.02	0.15	-750.00		
38	0.4126	45.05435	0.45173	1.05628	0.02815	0.14903	0.00413	97.61491	2.55932	1.93957	0.05172	0.02721	0.00086	1.07468	1.1536	0.19	0.2	105.26		
39	0.421	7.62515	0.10244	1.43876	0.03792	0.02265	0.00391	86.56488	15.96656	2.64261	0.06973	0.02825	0.0012	1.0215	1.15583	0.18	0.2	111.11		
40	0.4283	1220.779	16.91637	5.08119	0.10261	1.1051	0.02045	26.71619	0.32845	9.35687	0.18962	0.01083	0.0013	897.8339	13.12306	148.81	2.09	1.40		
41	0.4357	1.91695	0.06796	0.98935	0.04437	0.00077	0.00589	7.70238	92.2324	1.8166	0.08153	0.01019	0.00097	1.74312	1.7432	0.3	0.3	100.00		
42	0.4387	889.3476	21.36114	24.91074	0.60418	0.17166	0.01349	5.47283	0.46627	46.52628	1.2171	0.09926	0.00347	855.7014	21.27781	142.09	3.4	2.39		

43	0.4501	17.59785	0.13904	0.99175	0.0191	0.06021	0.00382	100.8095	6.38896	1.82099	0.0351	0.03749	0.00091	-0.14232	1.1232	-0.02	0.19	-950.00
44	0.4501	15133.58	5868.4158	1114.77	432.3235	31.92197	12.40851	61.72404	1.68681	9615.082	17528.36	2.5216	1.24281	27229.02	49651.271	2313.63	2375.91	102.69
45	0.4587	1.26863	0.04527	1.43922	0.04237	-0.00093	0.00415	-31.8529	98.91046	2.64346	0.07791	0.02584	0.00095	1.63527	1.22754	0.28	0.21	75.00
46	0.4737	45.45452	0.30797	0.67196	0.01557	0.14899	0.00364	96.80215	2.29083	0.02859	0.03302	0.00063	1.45331	1.04142	0.25	0.18	72.00	
47	0.4873	20.22346	0.19178	1.05919	0.01958	0.06422	0.00284	93.54196	4.07045	1.94492	0.03599	0.04503	0.00107	1.3051	0.82279	0.23	0.14	60.87
48	0.4943	899.5536	9.73615	1.87192	0.03998	0.07891	0.00507	2.57526	1.06424	3.43927	0.07356	0.00028	0.00112	877.519	9.62532	145.57	1.53	1.05
49	0.4954	1480.313	55.85134	26.86742	1.07483	2.0554	0.09287	40.881	1.02349	50.25151	2.04919	0.01544	0.00946	892.0549	37.65406	147.89	5.99	4.05
50	0.4981	1208.841	21.06764	15.78099	0.30275	1.33908	0.03043	32.62677	0.48156	29.2823	0.5681	0.02542	0.0042	823.5941	15.70315	136.96	2.51	1.83
51	0.5179	52.2915	0.21381	0.83527	0.01486	0.17307	0.00302	97.72454	1.66683	1.53351	0.02729	0.02222	0.00082	1.1899	0.87171	0.21	0.15	71.43
52	0.5353	406.8759	3.4595	0.9334	0.01855	1.36652	0.01634	99.23411	0.83674	1.71379	0.03408	0.02307	0.00091	3.11803	3.40666	0.54	0.59	109.26
53	0.5432	89.04692	1.03634	1.5604	0.04265	0.31048	0.00759	102.9207	2.22924	2.86628	0.07844	0.03031	0.00144	-2.60277	1.98646	-0.45	0.34	-75.56
54	0.5546	17.77561	0.15363	1.48428	0.02648	0.05564	0.00414	91.96134	6.85287	2.72631	0.04868	0.04285	0.00111	1.42803	1.21758	0.25	0.21	84.00
55	0.5605	75.56049	0.83551	0.91616	0.055	0.25663	0.00793	100.3001	2.91257	1.68212	0.10104	0.01953	0.00152	-0.2268	2.20128	-0.04	0.38	-950.00
56	0.5681	11.95832	0.17029	0.73641	0.03632	0.04536	0.00509	111.8619	12.52933	1.35191	0.06672	0.02457	0.00125	-1.4157	1.49521	-0.24	0.26	-108.33
57	0.5848	3.96966	0.03442	0.64756	0.01958	0.01106	0.00283	81.62459	21.23248	1.18872	0.03596	0.02263	0.00056	0.72432	0.83707	0.13	0.14	107.69
58	0.5862	1340.325	59.92251	20.44034	0.98856	1.23159	0.06076	27.02766	0.56788	38.05454	1.8674	0.00621	0.00445	992.3705	45.68612	163.78	7.21	4.40
59	0.601	77.24298	0.61436	1.04555	0.02847	0.25962	0.0057	99.24721	2.0548	1.91986	0.05231	0.0446	0.00116	0.58169	1.58788	0.1	0.27	270.00
60	0.6101	5.18165	0.06374	0.86418	0.03599	0.01878	0.00431	106.3225	24.69748	1.58662	0.06611	0.03914	0.00111	-0.32593	1.2731	-0.06	0.22	-366.67
61	0.616	41.95543	0.53952	1.27116	0.02732	0.14473	0.00614	101.7563	4.13435	2.3345	0.05021	0.02732	0.0017	-0.73698	1.73486	-0.13	0.3	-230.77
62	0.6183	44.76867	1.20469	2.22442	0.10664	0.12384	0.01047	81.38408	6.59511	4.08793	0.19628	0.03177	0.00412	8.34168	2.96784	1.44	0.51	35.42
63	0.643	191.7409	0.84359	0.91758	0.01205	0.65079	0.00673	100.2719	0.9502	1.68472	0.02213	0.02692	0.00068	-0.5215	1.82277	-0.09	0.31	-344.44
64	0.6532	3.10086	0.05447	0.97569	0.02169	0.0049	0.00373	44.52922	35.89467	1.7915	0.03985	0.01667	0.00087	1.70478	1.1041	0.29	0.19	65.52
65	0.6601	27.89555	0.40061	0.98898	0.02985	0.07628	0.00598	80.59869	6.24347	1.81591	0.05486	0.00511	0.00122	5.41012	1.74342	0.93	0.3	32.26
66	0.6654	2.86305	0.10949	1.44007	0.05941	-0.00116	0.00605	-16.2761	63.10597	2.64501	0.10923	0.00767	0.00138	3.29789	1.79336	0.57	0.31	54.39
67	0.6705	5.32433	0.08798	0.86147	0.0596	0.01914	0.00747	105.4859	41.7192	1.58164	0.10948	0.04341	0.0016	-0.29063	2.21011	-0.05	0.38	-760.00
68	0.6714	1116.866	33.75935	19.10004	0.66279	1.54108	0.0834	40.63394	1.83221	35.52514	1.24961	0.02285	0.00909	672.0878	29.25279	112.53	4.75	4.22
69	0.6828	12.3524	0.14034	0.97864	0.03702	0.04322	0.00425	102.9788	10.13313	1.79691	0.06802	0.03884	0.00072	-0.36732	1.24948	-0.06	0.22	-366.67
70	0.6927	3.23061	0.05452	0.71733	0.02928	0.01146	0.00428	103.9754	39.57016	1.31688	0.05379	0.02185	0.00087	-0.12731	1.26718	-0.02	0.22	-1100.00
71	0.6973	68.58607	1.88852	0.47042	0.05706	0.02367	0.01293	100.2331	4.85693	0.86345	0.10476	0.02659	0.00178	-0.15987	3.33082	-0.03	0.58	-1933.33
72	0.6982	1237.857	72.84992	18.32913	1.14259	1.54589	0.10876	36.78223	1.42622	30.07247	2.15185	0.11678	0.01115	792.7891	50.56625	132.02	8.12	6.15
73	0.7027	2.11156	0.08448	1.05733	0.04444	-0.00038	0.00566	-9.64613	80.3894	1.94151	0.08166	0.01149	0.00123	2.28441	1.67702	0.39	0.29	74.36
74	0.7074	1122.094	18.32865	58.04952	0.96395	1.19625	0.02638	31.07728	0.46819	111.0661	1.92316	0.00822	0.0018	806.4176	14.80037	134.21	2.37	1.77
75	0.7284	48.81674	0.26794	0.68696	0.01322	0.16142	0.00366	97.65418	2.1666	1.26109	0.02428	0.0135	0.00046	1.14501	1.05774	0.2	0.18	90.00
76	0.7325	57.81212	1.16275	0.86155	0.06992	0.18959	0.01117	96.83251	5.37455	1.58179	0.12845	0.02397	0.00183	1.83137	3.1078	0.32	0.54	168.75
77	0.7356	1981.392	37.29262	12.00582	0.24944	2.71893	0.05471	40.50012	0.89892	22.21741	0.46555	0.00831	0.00322	1188.99	23.30939	194.54	3.62	1.86
78	0.7383	363.8231	7.9562	1.14516	0.09002	1.23325	0.03479	100.1476	1.26109	1.510291	0.16543	0.02435	0.00274	-0.53735	6.58825	-0.09	1.14	-1266.67
79	0.7486	39.94247	0.26682	0.26436	0.02265	0.07238	0.00581	53.53413	4.29053	0.48516	0.04157	0.00138	0.00093	18.54928	1.71835	3.2	0.3	9.38
80	0.7491	1496.484	173.65431	31.68036	2.9858	1.86846	0.18275	36.72127	1.23083	59.45939	5.73216	0.0274	0.01385	968.6086	9.08991	160.03	14.72	9.20
81	0.7562	31.8216	0.34392	0.86809	0.03963	0.10471	0.00567	97.10369	5.20008	1.59381	0.07281	0.02634	0.00165	0.92136	1.6546	0.16	0.29	181.25
82	0.7571	1531.15	73.75634	14.46485	0.76327	1.15175	0.06404	22.1505	0.62045	26.81494	1.42956	0.04428	0.00931	1204.272	59.41895	196.91	9.2	4.67
83	0.7613	2194.814	34.33809	2.59081	0.08698	3.57719	0.06857	48.15266	0.5343	4.7625	0.16017	0.00674	0.00351	1140.023	21.39604	186.93	3.33	1.78
84	0.7783	16.27585	0.12938	0.96838	0.02012	0.05187	0.00237	93.86261	4.291	1.77806	0.03697	0.04271	0.00081	0.99777	0.69805	0.17	0.12	70.59
85	0.7803	71.70555	1.63272	3.5963	0.15196	0.25402	0.03164	104.3109	12.85428	6.61552	0.28024	0.02431	0.00283	-3.09775	9.2363	-0.54	1.6	-296.30
86	0.7858	155.094	2.04844	1.23632	0.05022	0.53961	0.01492	102.7658	2.52032	2.27046	0.09231	0.02685	0.00171	-4.29256	3.911	-0.74	0.68	-91.89
87	0.7904	-16.638	0.25882	0.55968	0.04486	-0.06995	0.01409	124.2834	24.93417	1.02735	0.08237	0.00236	0.00159	4.04907	4.15726	0.7	0.72	102.86
88	0.7908	1150.044	129.49454	0.86076	0.80043	1.6992	0.06021	43.65537	4.53015	1.58033	1.47047	0.0191	0.02341	648.3655	89.76869	108.68	14.6	13.43
89	0.7947	19.14404	0.37906	1.66335	0.07088	0.03919	0.01765	59.87603	27.28009	3.0556	0.13037	0.02723	0.00249	7.67847	5.22451	1.33	0.9	67.67
90	0.7949	3149.837	589.58821	48.86663	9.24077	7.59423	1.47084	71.11751	3.55651	92.86846	18.18932	0.00617	0.03183	942.261	216.50257	155.86	34.31	22.01
91	0.7962	222.3536	6.73367	0.17891	0.21583	0.61993	0.04	82.39145	4.71126	0.32831	0.39612	-0.00044	0.00747	39.15296	10.55026	6.75	1.82	26.96
92	0.8046	5.15956	0.0832	0.81495	0.03731	0.01606	0.00496	91.21782	28.58693	1.49618	0.06854	0.0269	0.00104	0.45077	1.46761	0.08	0.25	312.50
93	0.8101	19.35599	0.35369	1.2685	0.0566	0.06008	0.00709	91.31443	10.74874	2.32961	0.10403	0.02178	0.00154	1.68011	2.08009	0.29	0.36	124.14
94	0.8267	-1.78645	0.04292	0.53971	0.01529	-0.00999	0.00299	164.9293	48.70842	0.99067	0.02807	0.02489	0.00068	1.17966	0.88337	0.2	0.15	75.00
95	0.8397	21.98681	0.15608	1.13059	0.02409	0.07369	0.00301	98.74326	4.00973	2.07614	0.04426	0.02807	0.00065	0.27616	0.8812	0.05	0.15	300.00
96	0.8424	1377.325	27.47626	16.70583	0.35072	1.51199	0.05903	32.33992	1.08979	31.01885	0.65898	0.01411	0.00357	943.0046	24.37487	155.98	3.86	2.47
97	0.8663	6.60943	0.04636	0.28488	0.00847	0.01487	0.00146	66.42776	6.56986	0.52281	0.01555	0.00925	0.00036	2.20941	0.43291	0.38	0.07	18.42
98	0.8699	23.22624	0.56451	0.9761	0.05079	0.06072	0.00985	77.00527	12.41639	1.79225	0.09333	0.03469	0.00218	5.3				

5	0.0369	16.63057	0.19281	1.05278	0.04634	0.05977	0.00406	105.8613	7.13386	1.93314	0.08515	0.02727	0.00158	-0.97376	1.1851	-0.17	0.2	-117.65
6	0.0443	107.4284	1.68069	1.27327	0.07207	0.36095	0.00766	99.21374	1.46187	2.33837	0.13248	0.03047	0.00179	0.8452	1.57181	0.15	0.27	180.00
7	0.0462	5.07409	0.21892	2.1422	0.2226	0.00708	0.02336	37.98049	136.8324	3.93659	0.40968	0.02763	0.00462	3.13328	6.91505	0.54	1.19	220.37
8	0.0487	51.10773	1.32443	1.9427	0.17537	0.14191	0.01489	81.78496	8.36872	3.36949	0.32267	0.00981	0.00372	9.31667	4.28944	1.61	0.74	45.96
9	0.0567	1.83701	0.04304	0.85048	0.0374	0.00676	0.00371	106.5933	60.7385	1.56145	0.06871	0.02011	0.00117	-0.11923	1.09833	-0.02	0.19	-950.00
10	0.0633	54.5735	0.86357	6.6037	0.12474	0.16295	0.00995	87.28419	5.22521	12.17365	0.23103	0.01571	0.0015	6.9682	2.86703	1.2	0.5	41.67
11	0.0744	54.6346	0.34271	1.01657	0.02779	0.17895	0.00609	96.68563	3.25049	1.86661	0.05107	0.01714	0.00066	1.81111	1.77648	0.31	0.31	100.00
12	0.0807	44.34486	0.63208	6.3095	0.12005	0.10936	0.00564	71.75052	3.6372	11.62888	0.22225	0.00641	0.00172	12.57487	1.63283	2.17	0.28	12.90
13	0.0944	4.03058	0.04409	0.79142	0.032	-0.00246	0.00235	-19.8182	17.34419	1.45295	0.05878	0.00688	0.00057	4.79649	0.69595	0.83	0.12	14.46
14	0.1123	8.30724	0.06244	1.25965	0.02975	0.01592	0.00151	55.57457	5.3682	2.31335	0.05468	0.016	0.00066	3.68062	0.44595	0.64	0.08	12.50
15	0.1398	17.22459	0.07256	1.20411	0.0238	0.04632	0.00173	79.02666	2.96475	2.21125	0.04374	0.01014	0.00085	3.60942	0.51069	0.62	0.09	14.52
16	0.1398	156.718	44.21705	695.8339	196.089	1.08886	0.60462	168.727	98.28526	2510.381	1390.97	-0.21071	0.11732	-211.755	324.68361	-36.96	57.26	-154.92
17	0.1432	2.75903	0.13045	1.45686	0.11741	0.00527	0.0059	52.65747	63.93919	2.67589	0.21588	0.02542	0.00233	1.29348	1.75006	0.22	0.3	136.36
18	0.1499	31.71518	0.3903	1.09761	0.06834	0.10072	0.00473	93.64555	4.27724	2.01553	0.12559	0.02556	0.00102	2.015	1.35706	0.35	0.23	65.71
19	0.1764	8.92056	0.05258	0.88456	0.02045	0.02263	0.00232	74.37762	7.72047	1.62406	0.03756	0.01314	0.00046	2.27948	0.68733	0.39	0.12	30.77
20	0.1836	46.29738	0.66113	1.72426	0.06726	0.14535	0.00691	92.52135	4.22048	3.16763	0.12371	0.02845	0.00139	3.46442	1.95626	0.6	0.34	56.67
21	0.1961	3.91937	0.04963	1.05877	0.04142	0.0169	0.00391	126.144	29.71873	1.94415	0.07611	0.01781	0.0009	-1.01768	1.15639	-0.18	0.2	-111.11
22	0.2024	101.4263	1.75293	4.18015	0.09562	0.31213	0.00926	90.62345	2.20388	7.6927	0.17648	0.00794	0.00146	9.53567	2.24836	1.65	0.39	23.64
23	0.2227	57.9002	0.36162	0.85249	0.02531	0.18877	0.00387	96.27057	1.88728	1.56515	0.04649	0.02639	0.00059	2.15954	1.09307	0.37	0.19	51.35
24	0.2301	677.3242	8.66085	3.01153	0.06879	2.17988	0.04049	95.0691	1.28547	5.70338	0.12677	0.00546	0.00216	33.47	8.73755	5.77	1.5	26.00
25	0.2396	99.54478	1.00002	1.06882	0.04922	0.3472	0.00792	103.0078	2.14334	1.96263	0.09045	0.02653	0.00129	-2.99543	2.13386	-0.52	0.37	-71.15
26	0.2459	11.76162	0.12997	1.68374	0.09151	0.01808	0.00626	40.13427	15.76582	14.17552	0.16975	0.02471	0.00124	7.06182	1.86222	1.22	0.32	26.23
27	0.2509	107.8649	2.47845	4.39533	0.15212	0.34869	0.01422	95.21627	3.22929	8.08994	0.28085	0.01446	0.00215	5.17461	3.49572	0.89	0.6	67.42
28	0.2831	70.21665	0.35444	0.67749	0.01901	0.22511	0.00469	94.6938	1.92174	1.2437	0.03491	0.00379	0.00044	3.72604	1.34984	0.64	0.23	35.94
29	0.309	151.3562	0.88574	0.56298	0.01379	0.46033	0.00542	89.8602	0.93307	1.03341	0.02532	0.00234	0.00058	15.3503	1.41795	2.65	0.24	9.06
30	0.3511	160.5622	0.92931	0.54196	0.01024	0.51892	0.00522	95.49159	0.79296	0.99481	0.01881	0.00704	0.00056	7.24023	1.27463	1.25	0.22	17.60
31	0.3573	193.1912	1.7086	6.72186	0.09297	0.64194	0.0115	97.91771	1.53991	12.39251	0.17222	0.02115	0.00192	4.04137	2.98934	0.7	0.52	74.29
32	0.3616	82.6583	1.47827	11.52778	0.25608	0.25932	0.01197	91.58976	3.95739	21.32551	0.47761	0.025	0.00371	7.00633	3.30009	1.21	0.57	47.11
33	0.3702	54.43726	0.52919	1.1292	0.03309	0.17593	0.0041	95.38012	2.03888	2.07359	0.06082	0.01935	0.00107	2.51557	1.11089	0.43	0.19	44.19
34	0.387	229.8022	1.33742	1.14263	0.02377	0.78312	0.00679	100.6726	0.65849	2.09826	0.04369	0.02286	0.0007	-1.54657	1.51411	-0.27	0.26	-96.30
35	0.397	30.87846	0.32405	5.14018	0.09193	0.08433	0.00541	79.4061	5.11489	9.46588	0.1699	0.02851	0.00118	6.37613	1.58556	1.1	0.27	24.55
36	0.4083	3.66814	0.06712	1.389	0.02474	0.00419	0.00306	30.9143	24.88703	2.55112	0.04549	0.00802	0.0009	2.51613	0.90846	0.43	0.16	37.21
37	0.4249	240.9083	1.36443	0.49196	0.02297	0.83427	0.00889	102.3284	0.95227	0.90299	0.04218	0.02039	0.00096	-5.61048	2.29334	-0.97	0.4	-41.24
38	0.444	29.72109	0.22321	0.73221	0.0257	0.0926	0.00364	91.95614	3.56053	1.3442	0.0472	0.03004	0.00071	2.38957	1.05804	0.41	0.18	43.90
39	0.447	102.4133	2.85612	6.07937	0.26073	0.32535	0.02256	93.41176	5.96389	11.2029	0.48254	0.01471	0.00348	6.77437	6.13548	1.17	0.76	90.60
40	0.4515	49.22884	0.75403	6.32779	0.1741	0.13671	0.01428	81.0667	8.49035	11.49613	0.32229	0.01001	0.00183	9.35626	4.19854	1.62	0.72	44.44
41	0.4675	0.99475	0.02809	0.9568	0.04346	-0.0011	0.0035	-41.9485	107.3006	1.75678	0.07985	0.02588	0.00067	1.37083	1.03658	0.24	0.18	75.00
42	0.4806	315.2666	2.03349	0.97985	0.03207	1.06887	0.01247	100.1695	0.98692	1.79914	0.05892	0.02654	0.00113	-0.53454	3.11321	-0.09	0.54	-600.00
43	0.4892	14.60373	0.1422	1.289	0.04358	0.03088	0.00598	61.87601	12.11737	2.36728	0.08011	0.00762	0.00074	5.56127	1.7689	0.96	0.31	32.29
44	0.4951	24.39725	0.61331	6.04675	0.16163	0.05741	0.00715	67.5682	8.49651	11.14253	0.29912	0.00883	0.0011	7.93677	2.08955	1.37	0.36	26.28
45	0.4962	284.6989	12.67459	12.73139	0.63989	0.96758	0.06465	100.0705	5.00728	23.57228	1.19551	0.02778	0.00538	-0.20621	16.38353	-0.04	2.49	-6225.00
46	0.5119	7.66265	0.07904	0.70958	0.02577	0.01731	0.00227	66.24087	8.26257	1.30263	0.04734	0.02815	0.00065	2.57811	0.67163	0.45	0.12	26.67
47	0.5244	81.79484	0.66123	0.76178	0.03115	0.27278	0.00661	98.50571	7.26238	1.39851	0.05721	0.01218	0.00095	1.22247	1.85099	0.21	0.32	152.38
48	0.533	6.72184	0.06902	2.10661	0.06872	0.01373	0.0034	58.01194	15.02018	3.8711	0.12648	0.02318	0.00097	2.81411	1.00747	0.49	0.17	34.69
49	0.5404	3.42418	0.07423	0.92087	0.05793	0.00877	0.00623	74.13843	54.28192	1.69076	0.10644	0.03526	0.00187	0.87844	1.84428	0.15	0.32	213.33
50	0.5435	811.3771	20.04255	2.0528	0.11945	2.71905	0.07341	99.00953	1.08659	3.77207	0.21981	0.00589	0.0043	8.04777	8.83165	1.39	1.52	109.35
51	0.5457	9.79213	0.39547	3.27864	0.23557	-0.00305	0.0173	-12.0069	52.37083	6.02982	0.43425	0.02832	0.00583	10.96005	5.14279	1.89	0.89	47.09
52	0.5748	267.6293	1.02781	0.50706	0.01246	0.89008	0.00869	98.27229	0.8846	0.93073	0.02289	0.01306	0.00065	4.625	2.36822	0.8	0.41	51.25
53	0.5769	236.4379	8.44929	7.8332	0.34355	0.00343	0.9411737	2.65433	14.45279	0.6374	0.02197	0.00505	0.00505	13.9844	6.33134	2.41	1.09	45.23
54	0.5836	8.2958	0.13237	1.53387	0.05753	0.00771	0.00421	26.02061	15.06359	2.8175	0.10579	0.00693	0.0018	6.12187	1.251	1.06	0.22	20.75
55	0.5876	137.0967	2.20395	3.58266	0.10634	0.44569	0.01757	95.86951	3.46952	6.59036	0.19611	0.01538	0.00179	5.6759	4.76915	0.98	0.82	83.67
56	0.5919	9.00438	0.13354	2.30726	0.09197	0.01176	0.00719	36.61633	23.67923	4.24041	0.1693	0.01213	0.00178	5.6978	2.13102	0.98	0.37	37.76
57	0.5935	3.70056	0.23705	1.66105	0.21084	-0.00316	0.0222	-29.1853	178.7283	3.05137	0.38776	0.01496	0.00461	4.74783	6.57331	0.82	1.14	139.02
58	0.5983	14.81828	0.19435	4.64422	0.10778	0.02301	0.00605	43.79444	12.08114	8.54954	0.19906	0.00936	0.00137	8.39876	1.79706	1.45	0.31	21.38
59	0.6038	4.34737	0.0832	1.28668	0.08412	0.00613	0.00869	39.51554	59.49337	2.36303	0.15464	0.0254	0.00179	2.61391	2.57191	0.45	0.44	97.78
60	0.6071	66.90775	1.50056	3.6845	0.14363	0.19572	0.01083	86.02541	4.38347	6.77818	0.26492	0.0089	0.00264	9.37033	2.94759	1.62	0.51	31.48
61	0.6185	5.10348	0.05932	1.11682	0.03844	0.01191	0.00317	67.5217	18.47808</									

96	0.8006	33.33687	0.48861	1.13808	0.0997	0.1109	0.01167	98.1094	10.25446	2.08991	0.18323	0.03183	0.00192	0.63021	3.41828	0.11	0.59	536.36
97	0.8022	186.8882	5.70034	2.32162	0.2121	0.6084	0.028	96.11061	3.33271	4.26685	0.39045	0.00381	0.00327	7.27959	6.24292	1.26	1.08	85.71
98	0.804	8.67545	0.25621	1.98061	0.18216	0.00785	0.01971	24.95647	67.35733	3.63924	0.33518	0.01245	0.00324	6.49719	5.83621	1.12	1.01	90.18
99	0.8119	207.2517	2.10217	1.12502	0.04674	0.69896	0.01154	99.62679	1.31397	2.0659	0.0859	0.0273	0.00152	0.77398	2.72513	0.13	0.47	361.54
100	0.8131	21.79389	1.78732	9.20931	0.82351	-0.00495	0.03087	-10.2026	41.9063	17.00843	1.53088	0.009	0.00601	24.14193	9.3942	4.17	1.62	38.85
101	0.8213	530.2421	5.25731	0.71422	0.05421	1.7665	0.02943	98.44016	1.32712	1.31115	0.09956	0.03002	0.00166	8.27461	7.04134	1.43	1.22	85.31
102	0.824	17.5639	0.46797	2.48266	0.1507	0.0245	0.01341	40.11468	22.58329	4.56333	0.27749	0.01986	0.00186	10.51889	3.97755	1.82	0.69	37.91
103	0.8398	3.25994	0.03142	0.27484	0.01954	0.00394	0.00223	35.29634	20.39292	0.5044	0.03588	0.00038	0.00048	2.09049	0.65933	0.36	0.11	30.56
104	0.8485	590.1875	8.34453	1.8242	0.0474	1.96702	0.03391	98.4661	0.97632	3.35147	0.08719	0.04046	0.00149	9.06413	5.7711	1.57	1	63.69
105	0.8618	175.9842	1.6475	1.4053	0.03825	0.58491	0.01108	98.16441	1.62362	2.58109	0.07032	0.00477	0.00079	3.23301	2.86001	0.56	0.49	87.50
106	0.8642	58.2161	1.18038	1.76158	0.13548	0.19636	0.01526	99.47253	7.50233	3.23629	0.2492	0.01298	0.00339	0.3073	4.37086	0.05	0.76	1520.00
107	0.8658	46.86823	1.86317	4.36261	0.28593	0.15404	0.02518	96.41152	15.42325	8.02952	0.52789	0.02149	0.00527	1.68599	7.24693	0.29	1.25	431.03
108	0.8705	83.55934	1.58642	2.66124	0.12162	0.25112	0.00887	88.57633	2.6508	4.89221	0.224	0.02558	0.00269	9.56013	2.22641	1.65	0.38	23.03
109	0.8735	71.60414	1.24786	0.87803	0.13038	0.24166	0.01861	99.66984	7.48937	1.61206	0.23954	0.0173	0.00292	0.23646	5.36383	0.04	0.93	2325.00
110	0.8786	95.14333	1.44817	0.62125	0.07618	0.33003	0.01281	102.4799	3.68264	1.1404	0.1399	0.02469	0.00135	-2.35974	3.5039	-0.41	0.61	-148.78
111	0.8906	362.8716	4.47439	0.65424	0.04079	1.22503	0.02494	99.75243	1.62901	1.201	0.07491	0.0276	0.00133	0.89872	5.91358	0.16	1.02	637.50
112	0.8989	34.50019	0.38405	0.69027	0.04751	0.087	0.0058	74.41214	4.90374	1.26718	0.08276	0.00564	0.00135	8.82457	1.69469	1.52	0.29	19.08
113	0.9087	20.77002	0.33647	0.88937	0.04472	0.02795	0.00606	39.47296	8.60892	1.6329	0.08216	0.00204	0.00082	12.5614	1.7987	2.17	0.31	14.29
114	0.9273	2.90585	0.03219	0.54075	0.02363	0.00338	0.00331	33.21726	33.99628	0.99259	0.04339	0.00147	0.00043	1.92151	0.97856	0.33	0.17	51.52
115	0.9435	18.54658	0.13684	0.56277	0.03263	0.02066	0.00033	32.72484	4.7781	1.03301	0.05993	0.00089	0.00071	12.46222	0.89045	2.15	0.15	6.98
116	0.9457	49.46729	1.20843	11.37002	0.32592	0.14028	0.01811	81.95185	10.64495	21.0313	0.60775	0.01487	0.0051	8.99484	5.31127	1.55	0.92	59.35
117	0.9582	22.40694	0.31047	0.37657	0.03707	0.04882	0.00276	64.32717	3.5425	0.69113	0.06806	0.001	0.0007	7.98472	0.80136	1.38	0.14	10.14
118	0.9625	163.6034	2.78165	1.90199	0.08601	0.52319	0.01308	94.41974	1.74592	3.49458	0.15824	0.01026	0.00187	9.14012	2.86518	1.58	0.49	31.01
119	0.9708	2.04427	0.04516	1.35981	0.05739	0.00937	0.00369	131.8818	54.11136	2.49747	0.1055	0.01038	0.00156	-0.64291	1.09081	-0.11	0.19	-172.73
120	0.9974	25.97693	0.21222	0.69623	0.01956	0.07593	0.00177	86.24835	1.89492	1.27812	0.03593	0.0022	0.00037	3.56993	0.49302	0.62	0.09	14.52
121	1	808.905	10.90731	2.25061	0.12185	2.73229	0.05285	99.79353	1.39231	4.13613	0.22429	0.00437	0.00339	1.67272	11.28012	0.29	1.95	672.41

Integrated 94.10082 0.10045 1.69851 0.00511 0.30431 0.00087 95.44355 0.25402 3.12028 0.0094 0.01516 0.00012 4.29145 0.23935 0.74 0.04 5.41

CHETASLINA RIVER (500-1000 microns)

Weighted average of 1 from standards = 9.588e-05 +/- 4.822e-07

Grain #	Cumulative 40Ar/39Ar +/- 39Ar	meas.	37Ar/39Ar +/- 39Ar	meas.	36Ar/39Ar +/- 39Ar	meas.	% Atm. 40Ar +/-	Ca/K +/-	Cl/K +/-	40*/39K +/-	Age (Ma) +/-	%error						
1	0.0036	32.90616	0.49411	4.35409	0.13223	0.10007	0.01175	88.85689	10.48246	8.0138	0.24412	0.0207	0.00194	3.67477	3.45758	0.63	0.6	95.24
2	0.0103	244.3488	1.96842	0.94132	0.04651	0.82895	0.01384	100.2289	1.48982	1.72834	0.08546	0.02895	0.00137	-0.55955	3.64221	-0.1	0.63	-630.00
3	0.0119	151.7543	4.5559	1.95144	0.25211	0.50355	0.02692	97.96648	4.35227	3.58557	0.46386	0.0235	0.00538	3.0896	6.61374	0.53	1.14	215.09
4	0.0165	99.66256	1.34753	3.54816	0.10033	0.33002	0.0096	97.58641	2.54694	6.52674	0.18502	0.01657	0.00156	2.41077	2.54482	0.42	0.44	104.76
5	0.0316	336.6985	2.89872	0.507	0.02977	1.13478	0.01676	99.58891	1.20137	0.93061	0.05465	0.0223	0.0009	1.38452	4.04618	0.24	0.7	291.67
6	0.0333	868.1095	31.30265	4.69228	0.26627	2.82074	0.1049	95.97526	0.91125	8.63832	0.49183	0.05113	0.00421	35.05415	8.05062	6.05	1.39	22.98
7	0.0471	156.4486	0.63548	1.36087	0.04172	0.5197	0.00905	98.10748	1.66612	2.49941	0.0767	0.00813	0.00103	2.96311	2.60878	0.51	0.45	88.24
8	0.058	69.67116	0.67265	1.09845	0.04681	0.23557	0.00713	99.82617	2.88159	2.01706	0.08603	0.04081	0.00125	0.12115	2.00836	0.02	0.35	1750.00
9	0.0761	122.9938	0.15568	0.60199	0.02486	0.41892	0.00417	100.6312	0.53641	1.10505	0.04565	0.02309	0.00031	-0.77652	0.65969	-0.13	0.11	-84.62
10	0.102	177.3921	1.07397	0.87591	0.02999	0.59444	0.0067	98.99766	0.94852	1.60816	0.0551	0.03019	0.00076	1.77887	1.68354	0.31	0.29	93.55
11	0.1053	94.33246	1.15292	4.22344	0.12748	0.29935	0.01297	93.43322	3.90624	7.77262	0.23531	0.02614	0.00179	6.21119	3.69603	1.07	0.64	59.81
12	0.112	445.8906	4.16952	6.32171	0.08007	1.47075	0.02018	97.3592	0.98951	11.65148	0.14824	0.0329	0.00192	11.82711	4.43434	2.04	0.77	37.75
13	0.1217	15.99349	0.22111	1.25413	0.03851	0.0548	0.00434	100.7979	7.92194	2.3032	0.07079	0.02673	0.00076	-0.12748	1.26575	-0.02	0.22	-1100.00
14	0.1369	342.6902	3.76986	0.92882	0.03397	1.15742	0.01702	99.78995	0.98073	1.70537	0.0624	0.02974	0.00098	0.72023	3.36283	0.12	0.58	483.33
15	0.1475	16.67196	0.21358	1.90128	0.0399	0.03547	0.00412	62.03027	7.28013	3.49327	0.07341	0.01613	0.00079	6.32753	1.21633	1.09	0.21	19.27
16	0.1631	0.12561	0.02026	1.01455	0.03278	0.00396	0.00337	1132.139	1064.602	1.86289	0.06023	0.02042	0.0005	-0.99084	0.99621	-0.17	0.17	-100.00
17	0.1742	77.88549	0.88816	2.09303	0.03793	0.24751	0.00509	93.72002	1.61885	3.8461	0.0698	0.01401	0.00068	4.89657	1.26411	0.85	0.22	25.88
18	0.1911	52.83003	0.57381	1.02166	0.03104	0.17654	0.00424	98.64127	2.12432	1.87596	0.05704	0.03845	0.00064	0.71793	1.12257	0.12	0.19	158.33
19	0.1985	13.40144	0.16912	1.94144	0.08056	0.04812	0.00475	105.1321	10.44419	3.56717	0.14823	0.01489	0.00146	-0.68719	1.3983	-0.12	0.24	-200.00
20	0.2244	52.19354	0.27319	0.52179	0.01982	0.16713	0.00284	94.5967	1.54661	0.95776	0.03639	0.01021	0.00053	2.81961	0.80773	0.49	0.14	28.57
21	0.2416	2.36475	0.03358	0.87109	0.02408	0.00677	0.00203	82.59509	25.62882	1.59931	0.04423	0.00731	0.00054	0.40667	0.59896	0.07	0.1	142.86
22	0.2545	288.5778	3.11377	1.14116	0.03195	0.98177	0.01612	100.5098	1.25276	2.09556	0.05871	0.0261	0.00119	-1.47217	3.61764	-0.25	0.63	-252.00
23	0.2677	5.51612	0.06528	1.21544	0.0483	0.01678	0.00289	88.57631	15.55258	2.23208	0.08878	0.03102	0.00139	0.62729	0.85418	0.11	0.15	136.36
24	0.2736	208.2725	2.76955	1.40699	0.09264	0.67661	0.01218	95.95643	1.1821	2.5842	0.17033	0.02072	0.00182	8.42881	2.46824	1.46	0.43	29.45
25	0.2849	238.3495	1.91208	1.27344	0.04551	0.81227	0.01232	100.6721	1.305	2.33869	0.08366	0.02535	0.00092	-1.60314	3.11278	-0.28	0.54	-192.86
26	0.2971	10.62506	0.07527	0.963	0.0357	0.03588	0.00311	99.32733	8.64955	1.76817	0.0656	0.03278	0.00092	0.07132	0.91709	0.01	0.16	1600.00
27	0.3103	91.59397	0.85053	0.78407	0.02599	0.29541	0.00466	95.26428	1.24237	1.43946	0.04775	0.02189	0.00079	4.33863	1.14007	0.75	0.2	26.67
28	0.3206	39.38271	0.5239	0.34315	0.03138	0.13512	0.00397	101.387	2.67845	0.62978	0.05761	0.02484	0.00102	-0.54596	1.05423	-0.09	0.18	-200.00
29	0.3302	346.4168	4.05879	1.58112	0.05749	1.17053	0.02009	99.81895	1.26107	2.90438	0.10572	0.02751	0.00117	0.62783	4.37313	0.11	0.76	690.91
30	0.3377	1.15575	0.06451	0.08636	0.04512	0.01056	0.00479	269.0444	126.4898	1.99485	0.08291	0.03056	0.001	-1.90502	1.41653	-0.33	0.24	-72.73
31	0.3535	2.40819	0.03456	0.44621	0.02969	0.00366	0.00237	43.97105	29.47146	0.81899	0.05451	0.00644	0.00068	1.33307	0.70172	0.23	0.12	52.17
32	0.361	4.2378	0.06486	1.0855	0.05167	0.02351	0.00488	163.1758	34.25143	1.99327	0.09496	0.02556	0.00125	-2.66055	1.4413	-0.46	0.25	-54.35
33	0.3762	23.08388	0.20444	0.7979	0.02956	0.06054	0.00276	77.27048	3.4866	1.46382	0.0543	0.02154	0.00079	5.24306	0.80637	0.91	0.14	15.38
34	0.3868	27.24953	0.24395	1.10909	0.0363	0.09367	0.0057	101.354	6.12869	2.03662	0.06671	0.01769	0.001	-0.36886	1.66951	-0.06	0.29	-483.33
35	0.3918	26.47198	0.37768	0.87021	0.06757	0.07571	0.00783	84.33739	8.67959	1.5977	0.12413	0.01794	0.00195	4.1441	2.29765	0.72	0.4	55.56
36	0.403	165.8196	0.98341	0.80431	0.04745	0.56089	0.01058	99.93227	1.80091	1.47663	0.08716	0.02959	0.00126	0.11235	2.98744	0.02	0.52	2600.00
37	0.4059	22.15951	0.52054	3.05228	0.16403	0.02792	0.01584	36.14423	21.14047	5.61262	0.30227	0.01883	0.00276	14.16173	4.70135	2.45	0.81	33.06
38	0.4202	110.4933	0.78976	0.42396	0.01823	0.35883	0.00795	95.95899	2.02441	0.78114	0.03347	0.03062	0.0007	4.46418	2.23532	0.77	0.39	50.65
39	0.4228	3.64912	0.1412	1.54134	0.15229	0.01329	0.01462	104.9723	119.3762	2.83123	0.28005	0.02846	0.00332	-0.18017	4.32533	-0.03	0.75	-2500.00
40	0.4299	127.7167	1.84513	0.86245	0.04259	0.44737	0.01311	102.6496	2.65783	1.58345	0.07824	0.02918	0.0014	-3.3853	3.39576	-0.58	0.59	-101.72
41	0.4368	18.58986	0.32727	0.98822	0.04302	0.06049	0.00585	96.86252	9.15882	1.81451	0.07904	0.03224	0.00197	0.76846	1.70121	0.29	0.29	223.08
42	0.442	3.42219	0.08034	1.84312	0.06512	0.01615	0.00804	136.1869	69.98248	3.38628	0.1198	0.01548	0.0014	-1.22925	2.37707	-0.41	0.41	-195.24
43	0.4461	2.10931	0.09009	1.03559	0.09341	0.01592	0.0095	222.0474	135.2929	1.90155	0.17164	0.02683	0.00235	-2.54	2.81102	-0.24	0.49	-111.36
44	0.4518	19.18275	0.24011	1.4713	0.07253	0.04843	0.00718	74.08306	11.04164	2.70244	0.13336	0.00689	0.0015	4.96905	2.11814	0.86	0.37	43.02
45	0.4592	3.80968	0.05297	0.83348	0.06214	0.00622	0.00434	46.77318	33.95806	1.53022	0.11415	0.01998	0.00179	2.01316	1.28509	0.35	0.22	62.86
46	0.4605	412.2788	11.31107	1.48553	0.38916	1.39113	0.05105	99.66818	2.44026	2.72861	0.71556	0.04865	0.00962	1.29509	10.0782	0.22	1.74	790.91
47	0.4633	8.20854	0.15132	1.3458	0.12983	0.04154	0.01039	148.7159	37.50558	2.47171	0.23867	0.02993	0.00263	-3.98819	3.06946	-0.69	0.53	-76.81
48	0.4648	215.234	8.9508	4.30509	0.34127	0.72121	0.04482	98.86562	4.58056	7.92334	0.63001	0.00704	0.00506	2.44867	9.88839	0.42	0.71	407.14
49	0.4694	39.51794	0.71322	0.88601	0.06868	0.11932	0.00758	89.10456	5.44337	1.62672	0.12617	0.00438	0.00183	4.30511	2.15259	0.74	1.31	50.14
50	0.4759	130.7022	1.26707	0.45758	0.05524	0.42408	0.01022	95.87246	2.12428	0.83987	0.10142	0.02401	0.00145	5.3953	2.77775	0.93	0.48	51.61
51	0.4797	4.13474	0.1415	0.85017	0.08773	0.00772	0.00573	53.85611	41.27449	1.56089	0.16116	0.01702	0.00209	1.89537	1.69845	0.33	0.29	87.88
52	0.4878	0.74956	0.05006	0.87385	0.04227	0.00015	0.00348	-3.9053	143.0202	1.60439	0.07765	0.02281	0.00128	0.74845	1.03142	0.13	0.18	138.46
53	0.4918	49.47335	0.7448	1.25153	0.092	0.14366	0.01102	85.65134	6.46929	2.29842	0.16911	0.01863	0.00189	7.10078	3.20421	1.23	0.55	44.72
54	0.4966	247.5232	3.07573	1.33045	0.0659	0.83199	0.01415	99.2929	1.17238	2.44349	0.12115	0.02103	0.00205	1.75167	2.9047	0.3	0.5	166.67
55	0.501	113.6038	0.87812	0.91195	0.06184	0.3699	0.00924	96.17477	2.29547	1.67438	0.11361	0.02461	0.00221	4.34728	2.60944	0.75	0.45	60.00
56	0.5043	2.71429	0.1051	0.81957	0.14018	0.00334	0.00734	34.24714	80.85469	1.50466	0.25751	0.03302	0.00218	1.76623	2.17403	0.31		

58	0.5133	7.45352	0.14604	0.70768	0.08049	0.01706	0.00988	67.11325	39.29925	1.29915	0.14784	0.02914	0.00153	2.44268	2.91985	0.42	0.5	119.05
59	0.5155	18.73042	0.39451	1.79795	0.14578	0.05854	0.01456	91.70909	22.95534	3.30319	0.26816	0.01599	0.00303	1.55243	4.29884	0.27	0.74	274.07
60	0.5255	3.99574	0.05596	0.31816	0.03909	0.0071	0.00486	52.27568	36.17318	0.58392	0.07176	0.02254	0.00099	1.89319	1.43549	0.33	0.25	75.76
61	0.5277	19.25655	0.60414	1.1808	0.02984	0.01438	0.02984	45.34865	22.0629	2.16842	0.30315	0.01038	0.00263	10.51651	4.2606	1.82	0.74	40.66
62	0.5327	2.04257	0.0636	0.6494	0.07983	-0.0006	0.006	-11.4268	88.0391	1.19211	0.1466	0.03173	0.00206	2.24392	1.77412	0.39	0.31	79.49
63	0.5366	7.18357	0.13662	0.80027	0.14646	0.0119	0.01706	48.23867	70.47636	1.46922	0.26904	0.00448	0.00201	3.70504	5.04536	0.64	0.87	135.94
64	0.5398	57.4713	1.08425	1.05746	0.11878	0.14092	0.01163	72.34053	5.8275	1.94175	0.21826	0.00466	0.00231	15.89992	3.36391	2.75	0.58	21.09
65	0.5459	56.67684	0.83754	0.66475	0.06187	0.18876	0.00935	98.37213	4.66251	1.2203	0.11362	0.01871	0.0011	0.92257	2.64253	0.16	0.46	287.50
66	0.5533	10.85953	0.10199	0.42771	0.05967	0.01799	0.00504	48.77354	13.74303	0.78502	0.10955	0.02421	0.00122	5.54942	1.49014	0.96	0.26	27.05
67	0.5575	15.30513	0.3077	1.78406	0.12563	0.02514	0.01213	47.67897	23.44127	3.27763	0.23109	0.00676	0.00178	8.00237	3.58956	1.38	0.62	44.93
68	0.5663	10.32887	0.12353	0.68514	0.04586	0.02532	0.00382	72.11123	10.94831	1.25775	0.08423	0.0171	0.00091	2.87371	1.12929	0.5	0.2	40.00
69	0.5711	59.65426	0.58563	0.97831	0.09162	0.20559	0.00811	101.7547	3.9121	1.79631	0.16835	0.02898	0.00106	-1.04692	2.33405	-0.18	0.4	-222.22
70	0.5737	70.65781	1.3528	1.08505	0.16324	0.24267	0.00959	101.4055	3.53725	1.99245	0.29998	0.02341	0.00254	-0.99341	2.50005	-0.17	0.43	-252.94
71	0.5811	8.91559	0.08385	0.45009	0.05137	0.01759	0.00354	58.09271	11.76361	0.82611	0.09431	0.00572	0.0014	3.72503	1.04688	0.64	0.18	28.13
72	0.5846	196.1169	3.30873	0.98747	0.12515	0.64886	0.01555	97.74064	1.6759	1.81314	0.22996	0.03117	0.00201	4.43342	3.28995	0.77	0.57	74.03
73	0.5899	55.75598	0.95749	0.85104	0.0353	0.17664	0.00796	93.53999	3.91392	1.56248	0.06485	0.02144	0.00102	3.60209	2.18363	0.62	0.38	61.29
74	0.6127	14.07381	0.09702	0.24846	0.0131	0.03633	0.00176	76.28778	3.68186	0.45597	0.02405	0.02631	0.00034	0.33076	0.5182	0.58	0.09	15.52
75	0.6168	177.3891	3.49908	2.46051	0.08513	0.59037	0.02017	98.24846	2.76106	4.52256	0.15675	0.01575	0.0017	3.11194	4.90645	0.54	0.85	157.41
76	0.6249	61.56158	0.4419	0.30259	0.03874	0.2123	0.00905	101.9161	4.29001	0.55533	0.07112	0.0076	0.00119	-1.17925	2.64025	-0.2	0.46	-230.00
77	0.6282	30.36937	0.55114	2.06745	0.12151	0.08534	0.00967	82.55361	9.31897	3.79904	0.22361	0.00138	0.00151	5.30092	2.83488	0.92	0.49	53.26
78	0.6295	477.8684	16.50128	9.96957	0.40928	1.5983	0.0766	98.66815	3.29206	18.42249	0.76166	0.01519	0.00528	6.40921	15.84435	1.11	2.74	246.85
79	0.6429	5.13379	0.06844	0.45791	0.02765	0.01089	0.00384	62.30381	22.21237	0.84047	0.05076	0.01124	0.00066	1.92467	1.13466	0.33	0.2	60.61
80	0.648	110.9359	1.72557	1.28816	0.07502	0.36436	0.01376	96.98363	3.34604	2.36575	0.13791	0.03095	0.00278	3.34838	3.71494	0.58	0.64	110.34
81	0.6529	47.06815	1.00471	1.28374	0.09252	0.15987	0.00941	100.2084	5.5137	2.35763	0.17007	0.03306	0.00181	-0.09811	2.59592	-0.02	0.45	-2250.00
82	0.654	229.2258	9.56071	1.8993	0.50571	0.77102	0.06063	99.33882	6.63514	3.48964	0.93041	0.0275	0.00678	1.51744	15.22823	0.26	2.63	1011.54
83	0.6598	30.51194	0.42361	0.93344	0.08194	0.10067	0.00801	97.33526	7.65676	1.71387	0.15055	0.02998	0.00145	0.81281	2.33559	0.14	0.4	285.71
84	0.6676	307.9434	2.9516	0.64912	0.05676	1.04368	0.01704	100.1434	1.33239	1.1916	0.10424	0.02269	0.00128	-0.44187	4.10445	-0.08	0.71	-887.50
85	0.6713	2.59932	0.07005	1.07348	0.05926	0.00936	0.00714	104.1596	82.10052	1.97118	0.10889	0.03032	0.00234	-0.10697	2.11121	-0.02	0.36	-1800.00
86	0.6753	43.91416	0.36346	3.05123	0.11648	0.12936	0.00987	86.53286	6.60711	5.61067	0.21465	0.00769	0.00114	5.92275	2.90643	1.02	0.5	49.02
87	0.6808	44.55723	0.54762	0.98423	0.05464	0.139	0.0274	92.05997	4.69347	1.80718	0.1004	0.00897	0.00142	3.53796	2.09262	0.61	0.36	59.02
88	0.6828	282.2881	9.05503	0.76148	0.10792	0.96176	0.04643	100.6661	3.64957	1.39797	0.19824	0.0301	0.00454	-1.88124	10.30661	-0.33	1.78	-539.39
89	0.6928	36.03208	0.4266	0.91214	0.02995	0.11766	0.00347	96.36493	2.62932	1.67473	0.05502	0.02344	0.00102	1.30956	0.94766	0.23	0.16	69.57
90	0.6988	337.8144	3.86977	0.75772	0.05433	1.13232	0.01969	99.03863	1.30278	1.39106	0.09979	0.03302	0.00229	3.24912	4.40333	0.56	0.76	135.71
91	0.7265	59.02291	0.23997	0.83986	0.01626	0.19074	0.00362	95.42288	1.77673	1.54193	0.02987	0.00281	0.00047	2.70179	1.04901	0.47	0.18	38.30
92	0.7337	227.856	1.98324	0.94405	0.06649	0.75509	0.01505	97.9041	1.76046	1.73336	0.12216	0.00912	0.00195	4.7782	0.01388	0.83	0.69	83.13
93	0.7363	22.14917	0.42339	0.75937	0.10949	0.0288	0.03318	38.19071	44.32093	1.39409	0.20111	0.00114	0.0017	13.67923	9.81266	2.36	1.69	71.61
94	0.7421	17.64303	0.21635	0.85182	0.06092	0.03975	0.01414	66.29657	23.71835	1.56392	0.11914	0.00784	0.001	5.93988	4.18094	1.03	0.72	69.90
95	0.748	171.7739	1.892	0.67155	0.05431	0.55118	0.01694	94.80227	2.72852	1.23278	0.00974	0.02038	0.0018	8.93104	4.69008	1.54	0.81	52.60
96	0.7505	33.07486	0.87319	1.15207	0.12948	0.07988	0.03521	71.14156	31.43605	2.11561	0.23796	0.03172	0.00211	9.54409	10.40002	1.65	1.8	109.09
97	0.7566	22.13324	0.31298	0.53242	0.05868	0.07069	0.00564	94.302	7.43431	0.97729	0.10775	0.00547	0.00097	1.25993	1.64418	0.22	0.28	127.27
98	0.7576	36.09522	1.57342	1.2458	0.39807	0.10066	0.03821	82.19152	31.11437	2.28788	0.73169	0.02261	0.00402	6.28338	2.74612	1.11	1.94	174.77
99	0.7615	342.0806	7.05701	0.89377	0.09805	1.15007	0.02806	99.33355	1.31498	1.64099	0.18013	0.00832	0.00262	2.28104	4.50147	0.39	0.78	200.00
100	0.7706	76.61095	0.51369	0.83654	0.02615	0.26179	0.00608	100.9272	2.256	1.53585	0.04805	0.03104	0.00122	-0.71045	1.72864	-0.12	0.3	-250.00
101	0.7778	21.92532	0.22353	0.76646	0.03312	0.06452	0.00546	86.78223	7.32182	1.40711	0.06083	0.00702	0.0009	2.89568	1.60452	0.5	0.28	56.00
102	0.7842	4.40287	0.07648	1.22531	0.11542	0.018	0.00575	119.3404	38.83924	2.25023	0.21216	0.02585	0.00112	-0.84653	1.69964	-0.15	0.29	-193.33
103	0.7929	16.04694	0.17765	0.86953	0.05625	0.03139	0.00371	57.46486	5.68574	1.59644	0.10334	-0.00181	0.00109	6.81715	0.91502	1.18	0.16	13.56
104	0.8018	201.5736	2.37976	0.20713	0.07714	0.68189	0.0116	99.895	1.25119	3.72484	0.14195	0.00085	0.00146	0.21192	2.52537	0.04	0.44	1100.00
105	0.8032	35.67647	1.31501	3.1988	0.24329	0.08776	0.0216	72.0075	17.73437	5.88265	0.44842	-0.0117	0.00695	10.00103	6.35066	1.73	1.1	63.58
106	0.807	216.1477	3.5094	1.407	0.10936	0.69627	0.01442	95.14801	1.26488	2.58421	0.20106	0.0006	0.00345	10.49645	2.74612	1.81	0.47	25.97
107	0.8201	324.0396	2.74539	1.55704	0.0314	1.06895	0.01481	97.45002	1.07724	2.86011	0.05775	0.00518	0.0013	8.27128	3.49565	1.43	0.6	41.96
108	0.8255	18.56645	0.3044	1.42467	0.09824	0.01184	0.00491	18.23829	18.1899	2.61671	0.18062	-0.0025	0.00174	15.17126	14.7316	2.62	0.25	9.54
109	0.8373	69.23061	0.45222	0.83022	0.03209	0.23876	0.006	101.8575	2.48789	1.52423	0.05895	0.02517	0.00059	-1.28618	1.72248	-0.22	0.3	-136.36
110	0.8487	125.6143	0.77998	1.61667	0.03098	0.41463	0.00736	97.4572	1.64635	2.96976	0.05698	0.02308	0.001	3.19702	2.07084	0.55	0.36	65.45
111	0.8543	72.4711	0.70202	0.77452	0.04893	0.26169	0.00854	106.6591	3.33534	1.42192	0.08988	0.02154	0.00174	-4.82657	2.4175	-0.83	0.42	-50.60
112	0.8684	95.90279	0.67569	1.5266	0.02739	0.32137	0.00485	98.9202	1.33825	2.80413	0.05037	0.01139	0.00065	1.036				

20	0.1578	117.4796	0.76696	1.22072	0.0473	0.38799	0.00347	97.531	0.6334	2.24178	0.08694	0.00836	0.0007	2.90234	0.74593	0.7	0.18	25.71
21	0.1656	110.1227	0.70639	0.55437	0.0355	0.36549	0.00463	98.05851	1.09627	1.01758	0.06519	0.00927	0.00079	2.13828	1.208	0.52	0.29	55.77
22	0.177	44.09942	0.27418	0.62291	0.02482	0.14603	0.00233	97.80346	1.46274	1.14346	0.04558	0.02099	0.00053	0.96843	0.6452	0.24	0.16	66.67
23	0.1822	60.15122	0.57216	1.02346	0.05575	0.191	0.00657	93.73598	3.11163	1.87928	0.10245	0.0187	0.00123	3.76875	1.87287	0.91	0.45	49.45
24	0.189	9.62969	0.11995	0.77276	0.04085	0.02758	0.00307	84.24392	9.39509	1.41869	0.07503	0.026	0.00067	1.51341	0.90289	0.37	0.22	59.46
25	0.2017	1.25531	0.02254	0.59458	0.02123	0.00266	0.0016	60.05338	38.59385	1.09143	0.03899	0.00442	0.00034	0.4898	0.47353	0.12	0.11	91.67
26	0.2141	69.71164	0.38882	0.99704	0.01927	0.23562	0.00333	99.80156	1.31371	1.83072	0.0354	0.03427	0.00055	0.13838	0.91609	0.03	0.22	733.33
27	0.2212	41.76427	0.26337	1.98158	0.05434	0.13488	0.00335	95.1094	2.30616	3.64102	0.09998	0.02348	0.00059	2.04394	0.96415	0.5	0.23	46.00
28	0.2268	48.90059	0.3104	2.3714	0.05032	0.13708	0.00477	82.48622	2.84642	4.3585	0.09264	0.02605	0.00092	8.57351	1.39542	2.08	0.34	16.35
29	0.2371	87.6483	0.52618	0.83788	0.03532	0.28772	0.00351	96.95705	1.07374	1.5383	0.06489	0.00286	0.00041	2.66777	0.94267	0.65	0.23	35.38
30	0.2493	4.35018	0.03784	0.34143	0.02406	0.00773	0.00158	52.20792	10.78428	0.62664	0.04417	0.00461	0.00037	2.06535	0.46697	0.5	0.11	22.00
31	0.2536	99.60507	1.20308	0.30238	0.10924	0.33215	0.01169	98.54453	3.2792	0.55494	0.20053	0.01035	0.00169	1.4496	3.26633	0.35	0.79	225.71
32	0.268	155.5483	0.62726	0.75601	0.03828	0.52775	0.00427	100.2379	0.70695	1.38791	0.07031	0.01673	0.00069	-0.3702	1.10003	-0.09	0.27	-300.00
33	0.2699	341.7782	0.82091	3.89775	0.25515	1.12248	0.0368	96.96398	2.18963	7.17158	0.47076	0.0732	0.00425	10.40419	7.51026	2.52	1.82	72.22
34	0.2829	6.21704	0.03439	0.56878	0.04213	0.01535	0.00355	72.52819	16.96033	1.04404	0.07736	0.00446	0.00057	1.70046	1.04991	0.41	0.25	60.98
35	0.2872	42.51292	0.4084	0.63063	0.11945	0.12683	0.0126	88.0978	8.72786	1.15768	0.21938	0.00544	0.00176	5.05869	3.71006	1.23	0.9	73.17
36	0.3012	3.03663	0.02794	0.03649	0.00582	0.00328	55.76602	32.20333	0.96728	0.06701	0.00186	0.00058	0.133059	0.96886	0.32	0.24	75.00	
37	0.3131	92.05208	0.48656	0.60251	0.04054	0.30804	0.00516	98.86289	1.60905	1.106	0.07445	0.03086	0.00093	1.04684	1.4817	0.25	0.36	144.00
38	0.3211	5.79635	0.04337	0.68824	0.06066	0.01735	0.00575	87.90516	29.4647	1.26345	0.11141	0.02994	0.00121	0.69781	1.70001	0.17	0.41	241.18
39	0.3247	670.9147	10.06177	4.58986	0.1544	0.98805	0.02037	43.4637	0.61618	8.44914	0.28515	0.02228	0.00211	380.5271	7.0731	90.08	1.63	1.81
40	0.3343	250.841	2.13596	1.07386	0.05087	0.17375	0.00557	20.4356	0.63239	1.97189	0.09348	0.00868	0.00079	199.708	2.32822	47.84	0.55	1.15
41	0.3415	0.51561	0.05477	0.93567	0.04726	0.00176	0.00366	91.36074	222.5206	1.71796	0.08684	0.00408	0.00079	0.04021	1.08224	0.01	0.26	2600.00
42	0.3569	29.56911	0.1701	0.3505	0.02514	0.08794	0.00156	87.87406	1.49659	0.64327	0.04615	0.00275	0.00031	3.58282	0.44352	0.87	0.11	12.64
43	0.3575	991.9377	97.12711	9.16807	1.1059	1.44195	0.14947	42.88098	1.46554	16.93178	2.05571	0.01222	0.00921	570.2605	58.0913	133.37	13.1	9.82
44	0.3621	8.88376	0.13544	0.9911	0.08945	0.02259	0.00379	74.46638	12.63538	1.81981	0.16436	0.01413	0.00113	2.26235	1.12105	0.55	0.27	49.09
45	0.3685	3.02867	0.06545	0.36844	0.05207	0.00303	0.00313	28.8454	30.83071	0.67621	0.0956	0.01911	0.00091	2.13447	0.9268	0.52	0.22	42.31
46	0.3813	690.0512	4.35914	0.78524	0.03433	2.35378	0.01625	100.7906	0.28678	1.4416	0.06306	0.00919	0.00083	-5.45846	1.97988	-1.33	0.48	-36.09
47	0.3897	43.77184	0.31539	0.71008	0.04645	0.13134	0.00266	88.59605	1.68689	1.30355	0.08532	0.00125	0.0005	4.99084	0.73939	1.21	0.18	14.88
48	0.3958	45.37903	0.45296	1.18462	0.07399	0.16009	0.00585	104.0999	3.67957	2.17543	0.136	0.02113	0.00072	-1.86083	1.66996	-0.45	0.41	-91.11
49	0.4098	3.18594	0.02956	0.66196	0.03144	0.01041	0.00161	95.75815	15.0504	1.21517	0.05774	0.02403	0.00051	0.13395	0.47532	0.03	0.12	400.00
50	0.4203	27.85888	0.23365	1.9212	0.04721	0.08905	0.00169	93.98791	1.66678	3.52993	0.08686	0.00269	0.00043	1.67539	0.46576	0.41	0.11	26.83
51	0.4308	165.1397	0.99314	0.24216	0.03227	0.53606	0.00526	95.9272	0.7682	0.4444	0.05924	0.00095	0.00068	6.72575	1.27086	1.63	0.31	19.02
52	0.4354	57.25502	0.85808	1.48624	0.07709	0.17568	0.00686	90.50288	3.27478	2.7299	0.14176	0.03232	0.00141	5.44047	1.87813	1.32	0.46	34.85
53	0.4407	625.6199	8.64132	4.16933	0.10307	0.1068	0.00402	4.98984	0.17691	7.67274	0.19023	0.02984	0.00129	596.1296	8.33349	139.19	1.87	1.34
54	0.4433	123.5579	3.03109	2.36451	0.1703	0.35517	0.01491	84.8057	2.90341	4.34581	0.31353	0.00864	0.00217	18.80066	3.62449	4.56	0.88	19.30
55	0.4471	1007.062	16.39073	2.96374	0.1307	0.92334	0.01839	27.06989	0.31136	5.44946	0.24082	0.04356	0.00177	735.9701	12.41171	170.34	2.74	1.61
56	0.4552	42.78821	0.36024	1.01162	0.04913	0.14275	0.00315	98.45845	2.04593	1.85751	0.09028	0.03062	0.00086	0.65961	0.87566	0.16	0.21	131.25
57	0.4635	72.46002	0.60731	0.77037	0.04928	0.2468	0.00309	100.5996	1.37808	1.41429	0.09052	0.02741	0.00077	-0.43451	0.99859	-0.11	0.24	-218.18
58	0.4762	1.5533	0.028	0.69112	0.03302	0.00349	0.00151	63.99067	29.21073	1.26874	0.06064	0.00293	0.00039	0.54891	0.44576	0.13	0.11	84.62
59	0.4852	14.95966	0.15335	0.98285	0.0493	0.04991	0.00251	98.24111	4.88183	1.80465	0.09059	0.03439	0.00092	0.26278	0.72942	0.06	0.18	300.00
60	0.4964	72.65821	0.49596	0.85673	0.03099	0.24635	0.00379	100.132	1.39708	1.57294	0.05693	0.02815	0.0006	-0.09594	1.01528	-0.02	0.25	-1250.00
61	0.5036	21.39747	0.21846	1.12583	0.05503	0.03652	0.0033	50.07661	4.53999	2.06739	0.10114	0.00104	0.00066	10.67602	0.97771	2.59	0.24	9.27
62	0.5126	7.97559	0.06511	0.64952	0.05223	0.02594	0.00168	95.80957	6.20957	1.19233	0.09592	0.00073	0.00043	0.33312	0.49376	0.08	0.12	150.00
63	0.5241	763.2457	6.52985	1.14124	0.03596	0.29764	0.00457	11.51144	0.14715	2.09571	0.06608	0.00079	0.00054	675.9037	5.89751	157.03	1.31	0.83
64	0.5643	6.73035	0.02706	0.24598	0.01035	0.0138	0.00059	60.57055	2.57988	0.45142	0.019	0.00074	0.00009	2.64249	0.17353	0.64	0.04	6.25
65	0.5695	3.89143	0.08683	0.6246	0.08206	0.01063	0.00267	80.02808	20.45179	1.14657	0.1507	0.00528	0.00085	0.7716	0.79146	0.19	0.19	100.00
66	0.5764	793.0455	8.45396	0.68912	0.05832	2.66037	0.03325	99.12574	0.64987	1.26506	0.10712	0.00548	0.00099	6.93637	5.1568	1.68	1.25	74.40
67	0.5859	185.8642	1.32375	1.19498	0.0521	0.63416	0.00664	100.7866	0.81939	2.19447	0.09576	0.02656	0.00055	-1.46299	1.5234	-0.36	0.37	-102.78
68	0.5915	23.39225	0.25647	1.09954	0.07328	0.06424	0.00222	80.86903	2.9301	2.01906	0.13466	0.00535	0.0009	4.47296	0.63346	1.09	0.15	13.76
69	0.6039	29.26277	0.19423	0.87704	0.03001	0.09669	0.00153	97.49076	1.44548	1.61024	0.05513	0.03056	0.00043	0.73398	0.42313	0.18	0.1	55.56
70	0.6075	20.49264	0.42292	0.67199	0.10069	0.0719	0.00512	103.563	7.09252	1.2336	0.18493	0.03091	0.00182	-0.72945	1.45199	-0.18	0.35	-194.44
71	0.62	201.3146	1.17644	0.78512	0.03288	0.69229	0.0058	101.6003	0.61313	1.44139	0.0604	0.00627	0.00065	-3.22293	1.23486	-0.78	0.3	-38.46
72	0.6301	3.42761	0.04158	0.74159	0.03872	0.00885	0.00206	75.17158	17.95485	1.36143	0.07112	0.00407	0.00044	0.84409	0.61087	0.2	0.15	75.00
73	0.6385	67.26748	0.61478	0.45851	0.04677	0.21655	0.00474	95.1162	1.90741	0.84158	0.08587	0.00119	0.00054	3.28482	1.2838	0.8	0.31	38.75
74	0.6513	74.56271	0.44575	1.19905	0.03265	0.24167	0.00452	95.68315	1.71964	2.20195	0.06002	0.00547	0.0005	3.22021	1.28372	0.78	0.31	39.74
75	0.6586	2.83195	0.04775	0.84718	0.05807	0.00631	0.00262	64.02097	27.61048	1.55539	0.10667	0.01622	0.00087	1.00883	0.77472	0.24	0.19	79.17
76	0.6658	141.6993	1.4632	1.26224	0.07289	0.46296	0.00604	96.49259	0.86328	2.								

111	0.9235	-0.28186	0.08668	0.45306	0.17489	0.00059	0.01118	-43.5599	1060.035	0.83157	0.3211	0.00471	0.00322	-0.44741	3.3046	-0.11	0.8	-727.27
112	0.9277	28.98191	0.43785	0.81509	0.09717	0.10345	0.00555	105.3587	5.43769	1.49644	0.17849	0.0256	0.00202	-1.55236	1.57533	-0.38	0.38	-100.00
113	0.9326	143.6357	1.3237	0.65731	0.0882	0.4894	0.00826	100.6677	1.46221	1.20663	0.16198	0.04147	0.0015	-0.95932	2.10046	-0.23	0.51	-221.74
114	0.9425	95.6128	0.7362	0.68693	0.04705	0.32623	0.00439	100.7955	1.1506	1.26104	0.08641	0.01338	0.00074	-0.76068	1.10007	-0.18	0.27	-150.00
115	0.9497	1.43148	0.04497	0.74281	0.06975	0.00541	0.00405	109.647	85.42908	1.36367	0.12811	0.00375	0.00109	-0.1353	1.19804	-0.03	0.29	-966.67
116	0.9548	123.7978	1.26588	0.34342	0.07403	0.41324	0.00813	98.63917	1.69629	0.63029	0.1359	0.01385	0.00131	1.68468	2.10071	0.41	0.51	124.39
117	0.9654	690.5289	4.16813	1.18995	0.04137	0.2532	0.00431	10.82134	0.17247	2.18523	0.07604	0.00131	0.00064	616.2959	3.91165	143.72	0.88	0.61
118	0.9668	1099.353	54.67442	4.45835	0.36539	3.67092	0.18837	98.64146	1.25554	8.2063	0.67467	0.00232	0.00567	14.98188	13.86765	3.63	3.36	92.56
119	0.9712	12.49518	0.21738	0.94231	0.10073	0.03987	0.00494	93.88241	11.63076	1.73016	0.18506	0.0235	0.00164	0.7631	1.45122	0.19	0.35	184.21
120	0.9854	3.01053	0.02478	0.54131	0.03086	0.01046	0.00179	102.2263	17.68878	0.99361	0.05667	0.00413	0.00043	-0.06639	0.52747	-0.02	0.13	-650.00
121	1	25.94178	0.14786	0.39296	0.02598	0.0794	0.00134	90.41819	1.44607	0.72123	0.0477	0.00087	0.00045	2.48354	0.37546	0.6	0.09	15.00

Integrated 106.0046 0.08021 0.84918 0.00437 0.25732 0.00043 71.6836 0.10816 1.55907 0.00803 0.01254 0.00007 30.0263 0.11731 7.27 0.15 2.06

SANFORD RIVER

Weighted average of J from standards = 9.588e-05 +/- 4.822e-07

Grain #	Cumulative 40Ar/39Ar +/- 39Ar meas.	37Ar/39Ar +/- meas.	36Ar/39Ar +/- meas.	% Atm. 40Ar	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age (Ma)	+/- (Ma)	%error				
1	0.0015	63.71256	1.5814	3.45672	0.22155	0.21148	0.02815	97.68311	12.85207	6.35812	0.40851	0.02389	0.00438	1.47908	8.205	0.26	1.42	546.15
2	0.006	9.26269	0.1868	2.27537	0.07854	0.01617	0.00904	49.72707	28.91284	4.18171	0.14458	0.03699	0.00242	4.64919	2.67646	0.8	0.46	57.50
3	0.0194	92.82423	1.14806	0.88971	0.02259	0.30525	0.00652	97.12787	1.70282	1.63353	0.04151	0.0206	0.00056	2.66686	1.58171	0.46	0.27	58.70
4	0.0363	26.19671	0.21796	0.69833	0.02842	0.07895	0.0031	88.93523	3.43313	1.28198	0.05221	0.03233	0.00095	2.89675	0.89941	0.5	0.16	32.00
5	0.0494	578.1767	3.2776	2.16874	0.04189	1.90273	0.0198	97.22056	0.85146	3.98545	0.07709	0.0375	0.00165	16.09392	4.93155	2.78	0.85	30.58
6	0.066	140.0541	0.82724	1.95407	0.02988	0.4481	0.00752	94.45055	1.49843	3.59041	0.05499	0.03353	0.00079	7.78133	2.1026	1.34	0.36	26.87
7	0.0826	266.2562	1.46388	1.07341	0.02143	0.89757	0.00928	99.59307	0.88629	1.97105	0.03937	0.0205	0.00104	1.08417	2.3615	0.19	0.41	215.79
8	0.0934	3.35714	0.05741	0.60942	0.02354	-0.00546	0.00324	-50.0357	28.77994	1.11867	0.04323	0.00577	0.00041	4.99451	0.9602	0.86	0.17	19.77
9	0.1028	6.28649	0.07074	0.78906	0.02962	0.00705	0.00394	32.23517	18.59959	1.44862	0.05441	0.02662	0.00074	4.24228	1.16569	0.73	0.2	27.40
10	0.1191	44.35773	0.36586	0.75976	0.02107	0.12656	0.0037	84.22748	2.37031	1.39481	0.03871	0.00544	0.00049	6.99541	1.05333	1.21	0.18	14.88
11	0.127	136.1054	1.94637	2.04742	0.05306	0.43748	0.00824	94.87873	1.18371	3.76217	0.09764	0.03006	0.00132	6.9789	1.6176	1.21	0.28	23.14
12	0.1388	12.56349	0.07934	1.6242	0.04037	0.02376	0.00316	54.94339	7.43552	2.98361	0.07425	0.04238	0.00094	5.6538	0.934	0.98	0.16	16.33
13	0.1561	217.1586	2.55455	1.1229	0.02137	0.72122	0.01147	98.11125	1.06222	2.062	0.03928	0.03066	0.00076	4.10428	2.30923	0.71	0.4	56.34
14	0.1593	226.0716	5.38418	5.25473	0.18786	0.71913	0.02618	93.81905	2.59456	9.67761	0.34727	0.02553	0.0031	14.02358	5.89716	2.42	1.02	42.15
15	0.1662	152.1897	1.50805	2.90731	0.06591	0.4849	0.00863	94.0108	1.39629	5.34549	0.12143	0.01615	0.00207	9.13192	2.13129	1.58	0.37	23.42
16	0.1717	19.59695	0.28597	2.3893	0.05659	0.053	0.00802	79.03175	12.06959	4.39144	0.10419	0.02706	0.00191	4.10985	2.36714	0.71	0.41	57.75
17	0.1751	28.03479	0.50347	4.0368	0.14838	0.07152	0.01297	74.2724	13.62943	7.42814	0.27381	0.02784	0.00275	7.22566	3.8309	1.25	0.66	52.80
18	0.1863	49.36644	0.39184	0.81443	0.02174	0.14993	0.00604	89.66199	3.55426	1.49523	0.03994	0.03641	0.00111	5.10338	1.75564	0.88	0.3	34.09
19	0.1911	74.142	1.23785	2.90001	0.09595	0.24023	0.00966	95.46258	3.50973	5.33203	0.17677	0.03704	0.00208	3.36969	2.60731	0.58	0.45	77.59
20	0.1981	460.7467	6.39301	3.78028	0.0789	1.53355	0.02627	98.29265	0.9975	6.95487	0.14554	0.04409	0.00258	7.88711	4.61	1.36	0.8	58.82
21	0.2171	9.61442	0.05267	0.35672	0.01705	0.02079	0.00231	63.79919	7.11276	0.6547	0.03131	0.03213	0.00056	3.47062	0.68238	0.6	0.12	20.00
22	0.222	51.13321	0.66888	2.15288	0.07626	0.16437	0.00851	94.69677	4.76476	3.95626	0.14035	0.02963	0.00215	2.71426	2.43902	0.47	0.42	89.36
23	0.2312	4.76559	0.07177	1.49749	0.04999	0.00426	0.00559	23.96318	34.90868	2.7506	0.09192	0.00855	0.00079	3.60486	1.65606	0.62	0.29	46.77
24	0.2436	34.5203	0.44072	1.64473	0.0366	0.10376	0.00552	88.50386	4.60167	3.02136	0.06731	0.02647	0.00085	3.9697	1.59019	0.69	0.27	39.13
25	0.2516	131.4168	0.8034	1.13895	0.02533	0.45036	0.01026	101.2181	2.24208	2.0915	0.04654	0.02166	0.00077	-1.60172	2.94791	-0.28	0.51	-182.14
26	0.2568	416.636	6.13283	4.04892	0.09264	1.40154	0.0291	99.3315	1.46052	7.45052	0.17096	0.04554	0.00188	2.793	6.10234	0.48	1.05	218.75
27	0.2671	16.65171	0.15592	1.76654	0.04609	0.04326	0.00452	76.03854	8.01297	3.24541	0.08478	0.01412	0.00044	3.98786	1.33432	0.69	0.23	33.33
28	0.2718	28.14424	0.26561	1.98597	0.08166	0.07492	0.01035	78.16281	10.86353	3.6491	0.15026	0.0248	0.00116	6.14806	3.05979	1.06	0.53	50.00
29	0.2934	8.18277	0.03737	0.70318	0.01279	0.02022	0.00216	72.57292	7.81938	1.29088	0.02349	0.00663	0.00047	2.23726	0.63805	0.39	0.11	28.21
30	0.3038	27.93079	0.2343	1.40886	0.03403	0.07374	0.00534	77.68153	5.62267	2.58764	0.06256	0.0117	0.00082	6.2333	1.57199	1.08	0.27	25.00
31	0.3088	7.73054	0.10286	0.75844	0.06108	0.00732	0.00758	27.2859	29.09246	1.39238	0.1122	0.01329	0.00162	5.60261	2.24325	0.97	0.39	40.21
32	0.3131	135.252	1.61393	3.00118	0.09964	0.4362	0.01	95.13971	1.87735	5.51845	0.18361	0.03314	0.0021	6.58616	2.54599	1.14	0.44	38.60
33	0.3255	17.66265	0.09941	0.50386	0.02753	0.04625	0.00355	77.27742	5.93782	0.92483	0.05056	0.0235	0.00069	4.00809	1.04792	0.69	0.18	26.09
34	0.329	41.48137	0.5044	5.2507	0.13643	0.13216	0.01183	93.16839	8.36222	9.67016	0.25219	0.0558	0.00312	2.84237	3.47964	0.49	0.6	122.45
35	0.3315	388.2885	6.74345	4.34173	0.18553	1.29884	0.03886	98.76149	2.41681	7.99008	0.34252	0.02989	0.00423	4.83411	9.41317	0.83	1.63	196.39
36	0.3419	109.3259	0.51637	2.90395	0.03331	0.3517	0.00498	94.86812	1.28022	5.33931	0.06138	0.03156	0.00101	5.62047	1.40295	0.97	0.24	24.74
37	0.349	107.2128	1.03538	1.27995	0.06309	0.36034	0.01192	99.24687	3.1483	2.35065	0.11597	0.02858	0.00149	0.80796	3.37754	0.14	0.58	414.29
38	0.3567	39.32012	0.33228	1.4738	0.05598	0.11933	0.0072	89.44039	5.37012	2.70705	0.10294	0.0099	0.00092	4.15324	2.11275	0.72	0.36	50.00
39	0.37	9.448	0.07507	1.13276	0.0249	0.02247	0.00367	69.51065	11.49412	2.08013	0.04576	0.00982	0.00062	2.87389	1.08385	0.5	0.19	38.00
40	0.3789	36.13134	0.42353	1.60494	0.04021	0.12392	0.00738	101.0631	5.92861	2.94819	0.07395	0.03301	0.00113	-0.38423	2.14274	-0.07	0.37	-528.57
41	0.3912	3.38163	0.04373	0.57184	0.03304	0.00164	0.00383	13.02947	33.79119	1.04966	0.06067	0.03163	0.0006	2.91638	1.13388	0.5	0.2	40.00
42	0.3975	8.18581	0.12938	0.69268	0.0405	0.01505	0.00697	53.83094	25.23862	1.27159	0.07439	0.01287	0.00088	3.76745	2.0608	0.65	0.36	55.38
43	0.4048	13.86681	0.16803	1.33763	0.0428	0.03795	0.00572	80.23918	12.18539	2.45669	0.07868	0.02026	0.00129	2.73692	1.68852	0.47	0.29	61.70
44	0.4086	92.34285	1.69978	2.46077	0.09645	0.27594	0.01237	88.10983	3.61673	4.52303	0.1776	0.02906	0.00284	10.9953	3.3514	1.9	0.58	30.53
45	0.415	14.08504	0.15945	2.83201	0.07514	0.03099	0.00856	63.49491	17.98003	5.20677	0.13842	0.01304	0.00121	5.14122	2.53325	0.89	0.44	49.44
46	0.4183	46.44286	0.67693	3.75332	0.10105	0.15201	0.01442	96.14614	0.908471	6.57314	0.18636	0.03251	0.0025	1.79323	4.22753	0.31	0.73	235.48
47	0.4245	69.4167	0.81169	2.1949	0.06676	0.22141	0.00821	94.02971	3.32957	4.03359	0.12288	0.03554	0.0021	4.14904	2.31481	0.72	0.4	55.56
48	0.4301	14.90826	0.22906	1.30263	0.06328	0.04016	0.0069	79.1965	13.66495	1.89171	0.11627	0.03393	0.00224	3.09752	2.0356	0.54	0.35	64.81
49	0.4337	241.0923	3.6096	3.25863	0.08979	0.80313	0.02148	98.3378	2.19563	5.99293	0.16551	0.00153	0.00234	4.01619	5.30595	0.69	0.92	133.33
50	0.4415	11.7046	1.06867	2.14035	0.05163	0.36518	0.00808	95.61493	1.93348	3.93319	0.09503	0.03091	0.00083	4.94835	2.18337	0.85	0.38	44.71
51	0.4623	65.38998	0.33872	1.36658	0.02194	0.20986	0.00387	94.70685	1.6862	2.50991	0.40033	0.04043	0.00072	3.46296	1.10357	0.6	0.19	31.67
52	0.4708	162.5683	1.2974	3.15143	0.07679	0.51673	0.00945	93.7827	1.56032	5.79533	0.14152	0.01383	0.00106	10.12805	2.5446	1.75	0.44	25.14
53	0.4816	52.3938	0.57193	2.30022	0.04214	0.16488	0.00442	92.6815	2.2893	4.22745	0.07758	0.03524	0.00092	3.83659	1.20185	0.66	0.21	31.82
54	0.5052	27.76633	0.12599	0.36201	0.00905	0.07956	0.00182	84.65271	1.91357	0.6644	0.01661	0.01258	0.00056	4.25791	0.53174	0.74	0.09	12.16
55	0.522	7.77981	0.05428	0.96637	0.02314	0.01624	0.0027	60.87432	10.27271	1.77436	0.04252	0.00725	0.00038	3.03436	0.79723	0.52	0.14	26.92
56	0.5334	31.22996	0.26726	0.80755	0.02643	0.09269	0.00344	87.57836	3.17343	1.48259	0.04856	0.02783	0.00076	3.8778	0.99151	0.67	0.17	25.37
57	0.5409	130.1563	1															

73	0.7346	17.79465	0.41202	0.61612	0.11116	-0.00349	0.02026	-6.08974	33.70493	1.13098	0.20414	-0.00323	0.00286	18.85501	6.00607	3.25	1.04	32.00
74	0.7448	55.03049	0.63751	0.29645	0.0375	0.17715	0.00449	95.1345	2.15328	0.54407	0.06883	0.03081	0.00106	2.67662	1.18525	0.46	0.2	43.48
75	0.7494	23.08349	0.38229	1.97524	0.08993	0.06296	0.00672	79.99769	8.52293	3.62935	0.16547	0.03374	0.00221	4.61174	1.96993	0.8	0.34	42.50
76	0.7556	50.47729	0.72137	0.89843	0.06313	0.15089	0.00814	88.23756	4.61459	1.64954	0.11598	0.03113	0.00196	5.93764	2.33197	1.03	0.4	38.83
77	0.7572	60.97334	2.04751	4.40085	0.29311	0.18727	0.02138	90.20896	9.92713	8.10013	0.54117	0.05259	0.00642	5.98563	6.07343	1.03	1.05	101.94
78	0.7598	53.17956	1.25956	3.97908	0.17182	0.17516	0.01554	96.76554	8.34341	7.32164	0.31704	0.00511	0.00337	1.72396	4.44757	0.3	0.77	256.67
79	0.7689	154.085	1.82353	1.13246	0.03423	0.52236	0.01281	10.1355	2.16431	2.07957	0.0629	0.02476	0.00125	-0.20884	3.33687	-0.04	0.58	-1450.00
80	0.7715	32.66968	0.82838	4.70715	0.18177	0.11269	0.01329	100.8312	11.76399	8.66578	0.33575	0.01458	0.00329	-0.27221	3.85256	-0.05	0.67	-1340.00
81	0.777	265.1165	3.36781	2.27965	0.07184	0.89397	0.01919	99.58267	1.73666	4.1896	0.13224	0.02664	0.00158	1.10807	4.61125	0.19	0.8	421.05
82	0.783	14.08275	0.25081	2.22544	0.07394	0.04782	0.00545	99.24635	11.35415	4.0898	0.13609	0.02081	0.00169	0.10608	1.59817	0.02	0.28	1400.00
83	0.7937	8.0085	0.07419	1.32686	0.03991	0.02656	0.00424	97.00747	15.6844	2.43689	0.07336	0.01715	0.00093	0.23899	1.25264	0.04	0.22	550.00
84	0.8023	85.4425	0.93827	1.47361	0.0405	0.27976	0.0081	96.64674	2.60801	2.70668	0.07447	0.02308	0.00105	2.8671	2.23054	0.5	0.39	78.00
85	0.8138	17.88683	0.15459	0.85524	0.02294	0.0492	0.00362	81.01646	5.96265	1.57019	0.04214	0.02611	0.00094	3.39197	1.0662	0.59	0.18	30.51
86	0.8162	17.86407	0.41576	3.98351	0.14052	0.04607	0.01445	74.4908	23.90254	7.32982	0.25929	0.00093	0.00247	4.56226	4.27769	0.79	0.74	93.67
87	0.8206	8.47435	0.16961	2.27624	0.07633	0.00679	0.00746	21.5217	26.08532	4.18332	0.14051	0.03766	0.00174	6.63793	2.21113	1.15	0.38	33.04
88	0.8244	15.81658	0.34587	1.04167	0.09723	0.04334	0.00868	80.5869	16.16607	1.91273	0.17867	0.03355	0.00223	3.06698	2.5556	0.53	0.44	83.02
89	0.8272	39.54691	0.76286	3.05978	0.09959	0.10702	0.01205	79.3878	8.9034	5.62644	0.18353	0.03172	0.00334	8.16302	3.53197	1.41	0.61	43.26
90	0.8404	7.35408	0.04956	0.73762	0.03442	0.01523	0.00249	60.60461	10.0294	1.35414	0.06322	0.02913	0.00068	2.88698	0.73548	0.5	0.13	26.00
91	0.8414	40.61592	1.57024	3.94795	0.30997	0.1182	0.03669	85.25681	26.53506	7.26421	0.57194	0.03164	0.00524	6.00045	10.80431	1.04	1.87	179.81
92	0.8465	7.62942	0.14022	0.91971	0.06654	0.03228	0.00566	124.5291	22.00503	1.68864	0.12225	0.03663	0.00146	-1.86536	1.67225	-0.32	0.29	-90.63
93	0.8472	108.2211	0.8161	10.71532	0.96216	0.29321	0.05701	79.26613	14.4107	19.81105	1.79246	0.01588	0.00687	22.60335	15.80466	3.9	2.72	69.74
94	0.8534	112.1287	1.27953	1.56018	0.0484	0.36459	0.01236	95.99461	3.07359	2.86588	0.089	0.02566	0.00151	4.49495	3.44989	0.78	0.6	76.92
95	0.854	22.57867	1.54212	10.17391	0.9003	0.04007	0.05782	48.79694	75.70313	18.80281	1.67593	0.00881	0.00705	11.62943	17.21711	2.01	2.97	147.76
96	0.8634	6.63643	0.07118	0.52513	0.03304	0.01431	0.00395	63.3689	17.67728	0.9639	0.06066	0.03354	0.00069	2.42102	1.16903	0.42	0.2	47.62
97	0.8673	174.3347	2.56626	3.30958	0.08962	0.58327	0.01412	98.72488	1.91969	6.08686	0.16522	0.03403	0.00208	2.22781	3.35457	0.38	0.58	152.63
98	0.8694	94.92385	2.49559	1.54546	0.14941	0.31717	0.0196	98.63258	5.53072	2.83881	0.27474	0.00732	0.00321	1.29902	5.25429	0.22	0.91	413.64
99	0.8728	19.654	0.40136	1.13589	0.11675	0.04594	0.01193	68.69376	17.91414	2.08588	0.21457	0.02684	0.00218	6.14857	3.52125	1.06	0.61	57.55
100	0.8799	141.812	1.74551	0.9393	0.04726	0.4721	0.01211	98.34021	2.23116	1.72463	0.08683	0.00833	0.00127	2.35485	3.16601	0.41	0.55	134.15
101	0.885	10.63808	0.13354	0.80906	0.05532	-0.00404	0.0083	-11.8784	23.13015	1.48536	0.10162	0.01245	0.0056	11.87529	2.45944	2.05	0.42	20.49
102	0.8888	134.0299	1.81392	2.0553	0.0781	0.42675	0.01319	93.98044	2.63216	3.77667	0.14372	0.03341	0.0025	8.07795	3.53546	1.4	0.61	43.57
103	0.8922	41.03226	0.6689	2.10169	0.1359	0.13075	0.01015	93.80882	7.16844	3.86204	0.2501	0.02187	0.00176	2.54232	2.94447	0.44	0.51	115.91
104	0.8933	14.97402	0.45799	5.73365	0.3191	0.01581	0.02499	28.09924	49.40251	10.56322	0.59028	0.0266	0.00542	10.78885	7.42252	1.86	1.28	68.82
105	0.9013	3.09658	0.04224	4.2035	0.03551	-0.00182	0.0039	-18.6588	37.55003	0.7715	0.06519	0.03105	0.00121	3.64022	1.1528	0.63	0.2	31.75
106	0.906	189.1966	2.2809	1.64467	0.06576	0.62753	0.01546	97.95538	2.11684	3.02125	0.12094	0.03147	0.00151	3.87224	4.00972	0.67	0.69	102.99
107	0.911	17.78845	0.27953	2.23894	0.07868	0.0418	0.00677	68.51532	11.21103	4.11465	0.14482	0.03594	0.00193	5.60015	1.99656	0.97	0.34	35.05
108	0.9176	86.98134	1.27352	0.30219	0.03869	0.27614	0.00799	93.8174	2.34792	0.5546	0.07102	0.02719	0.00103	5.37702	2.04387	0.93	0.35	37.63
109	0.9275	4.56604	0.04575	0.67078	0.02354	0.00773	0.00459	14.958	29.90808	1.23137	0.04324	0.03171	0.0008	2.30802	1.35774	0.4	0.23	57.50
110	0.9455	67.60218	0.40807	0.35219	0.0128	0.21454	0.00303	93.77908	1.21485	0.64637	0.0235	0.03189	0.0007	4.20468	0.82226	0.73	0.14	19.18
111	0.9508	438.8605	5.34123	2.66484	0.0492	1.47717	0.02185	99.4199	0.84653	4.89884	0.09061	0.03915	0.0015	2.55047	3.72225	0.44	0.64	145.45
112	0.9527	11.25151	0.46639	5.30932	0.25166	0.0194	0.02181	47.19797	57.4034	9.77853	0.46524	0.03046	0.00342	5.9477	6.47215	1.03	1.12	108.74
113	0.9547	37.65721	1.25825	1.42725	0.1175	0.01843	91.96482	14.14851	2.62145	0.2617	0.0273	0.00346	0.00346	5.33038	3.30308	0.52	0.92	176.92
114	0.9605	10.41576	0.1071	0.14199	0.0474	0.02586	0.00894	73.45026	25.42375	0.26056	0.08699	0.00569	0.00097	2.75775	2.64109	0.48	0.46	95.83
115	0.9651	748.8779	13.78726	3.36184	0.1023	2.51566	0.04875	99.23242	0.62329	6.18319	0.1886	0.01731	0.00202	5.76172	4.68112	1	0.81	81.00
116	0.9704	3.85559	0.08776	1.14626	0.07303	0.01204	0.0092	90.51704	71.09839	2.10493	0.13422	0.03755	0.00147	0.3631	2.72253	0.06	0.47	783.33
117	0.9736	67.24776	0.97739	3.50215	0.17948	0.23841	0.01585	104.3806	6.80904	6.4419	0.33097	0.0443	0.00287	-2.95185	4.58825	-0.51	0.79	-154.90
118	0.9797	16.00814	0.19381	1.03464	0.06398	0.04161	0.00643	76.42306	11.85922	1.89982	0.11756	0.02976	0.00155	3.76999	1.8972	0.65	0.33	50.77
119	0.9852	20.56331	0.24381	1.93523	0.09217	0.05935	0.00745	84.63236	10.68744	3.55574	0.16958	0.02517	0.00118	3.15986	2.19818	0.55	0.38	69.09
120	0.9888	51.86223	0.91334	4.03113	0.12895	0.17538	0.01509	99.34349	8.42994	7.41769	0.23796	0.02901	0.00211	0.34126	4.38198	0.06	0.76	1266.67
121	1	13.37617	0.07726	0.46847	0.02868	0.03331	0.0038	73.54567	8.40812	0.85986	0.05265	0.00232	0.00052	3.54404	1.12299	0.61	0.19	31.15

Integrated 85.55911 0.08204 1.37241 0.00414 0.27619 0.00076 95.28901 0.24589 2.52062 0.0076 0.02516 0.00011 0.403319 0.2106 0.7 0.04 5.71

ROCK LAKE

Weighted average of J from standards = 1.347e-04 2.749e-06

Grain #	Cumulative 40Ar/39Ar 39Ar	40Ar/39Ar meas.	37Ar/39Ar meas.	36Ar/39Ar meas.	% Atm. 40Ar	Ca/K	Cl/K	40*/39K	Age (Ma)	%error								
1	0.0475	88.68211	0.58424	0.28438	0.05698	0.03094	0.00152	10.28769	0.50251	0.5219	0.10459	0.00148	0.00043	79.5481	0.69543	19.21	0.17	0.88
2	0.0662	98.14469	1.32208	1.74286	0.13974	0.17787	0.00526	53.42418	1.42175	3.20186	0.25704	0.00479	0.00109	45.75419	1.53499	11.07	0.37	3.34
3	0.0895	106.3865	1.39117	1.29825	0.11397	0.08684	0.00254	24.0265	0.63397	2.3843	0.20949	0.01383	0.00113	80.87714	1.25859	19.53	0.3	1.54
4	0.1088	100.8646	1.52259	0.5097	0.13967	0.0487	0.00577	14.23085	1.67894	0.93557	0.25646	0.00473	0.00107	86.51638	2.14185	20.88	0.51	2.44
5	0.1125	212.0325	11.68258	4.68205	0.72712	0.54191	0.03473	75.35162	2.47363	8.61941	1.34303	0.04498	0.00618	52.42863	6.00981	12.68	1.45	11.44
6	0.1539	135.3814	0.9061	0.29347	0.05708	0.14497	0.00175	31.63294	0.32892	0.53859	0.10477	0.00281	0.0005	92.55516	0.77973	22.33	0.19	0.85
7	0.1695	998.6948	17.15933	0.4011	0.10425	0.1367	0.00804	0.41518	0.22745	0.73618	0.19139	0.00867	0.0022	958.5748	16.6322	218.84	3.58	1.64
8	0.1741	1226.928	88.04339	3.73136	0.49172	0.37464	0.03865	9.00048	0.66923	6.20406	0.90656	0.02514	0.00816	1119.137	80.92677	253.04	17.07	6.75
9	0.2175	193.1712	1.55759	0.54788	0.04218	0.48181	0.00541	62.42724	0.68726	1.00657	0.07745	0.01552	0.00088	72.59669	1.48251	17.54	0.36	2.05
10	0.2256	293.8403	12.36927	1.56726	0.2509	0.64069	0.0314	64.3933	1.62811	2.8789	0.46139	0.01712	0.00352	104.7322	6.52653	25.25	1.56	6.18
11	0.2317	156.6604	7.80835	5.82549	0.48611	0.4312	0.03213	81.04317	4.50995	10.78308	0.89935	0.04241	0.00577	29.81547	7.25071	7.22	1.75	24.24
12	0.2643	94.79356	1.18081	0.66454	0.05778	0.04344	0.00388	13.48883	1.19952	1.21991	0.10612	0.00568	0.00106	82.01983	1.52123	19.8	0.37	1.87
13	0.2956	110.6558	1.46803	0.41567	0.09703	0.10198	0.00544	27.20914	1.41012	0.76291	0.17815	0.01876	0.00125	80.54933	1.89972	19.45	0.46	2.37
14	0.3031	77.4828	28.91618	5.97817	0.53724	0.86852	0.04083	32.90798	0.95296	11.01562	0.99414	0.03724	0.0057	524.4574	20.9532	123.01	4.75	3.86
15	0.3043	93.51793	26.74056	8.8088	3.5371	0.21363	0.01522	66.74917	43.7459	16.26412	6.5716	0.07032	0.04214	31.28026	42.13809	7.58	10.19	134.43
16	0.3148	96.92104	3.11375	0.34501	0.37793	0.12179	0.0197	36.77405	5.89363	7.99704	0.69773	0.04595	0.00403	61.44909	6.06768	16.85	1.46	9.83
17	0.3431	90.9963	1.19538	0.84806	0.1212	0.07272	0.00604	23.54481	1.93925	1.55701	0.22264	0.002754	0.00128	69.59037	1.99255	16.81	0.48	2.86
18	0.3699	101.2648	1.63092	0.76391	0.15502	0.0943	0.00708	27.46464	2.02082	1.40242	0.28475	0.02753	0.00152	73.47087	2.36748	17.75	0.57	3.21
19	0.4089	77.37205	1.01281	0.32066	0.07983	0.02832	0.00373	10.78695	1.42058	0.5885	0.14654	0.02196	0.00097	69.0151	1.42645	16.68	0.34	2.04
20	0.4359	85.74161	3.13256	0.22562	0.10251	0.0475	0.42906	1.66304	0.41404	0.22746	0.00059	0.00137	82.04713	1.8839	19.81	0.45	2.27	
21	0.4578	199.7259	6.05407	1.08221	0.16619	0.27498	0.01102	40.64479	1.07333	1.98723	0.3054	0.01223	0.00244	118.6208	4.20154	28.57	1	3.50
22	0.4704	268.1812	9.36247	3.86482	0.34749	0.80789	0.0323	88.93032	1.75095	7.11083	0.64108	0.0362	0.00411	29.75776	4.82667	7.21	1.17	16.23
23	0.5064	92.1938	1.00349	0.80565	0.13244	0.03875	0.00495	12.35132	1.5816	1.4791	0.24329	0.00781	0.00113	80.82662	1.70584	19.51	0.41	21.10
24	0.5202	82.27133	3.24272	1.84043	0.33091	0.06618	0.01097	23.59518	3.82267	3.38133	0.60876	0.02034	0.00308	62.91837	4.05118	15.21	0.98	6.44
25	0.5623	97.52875	0.88262	0.35009	0.07336	0.06278	0.00406	18.99637	1.21893	0.64252	0.13468	0.02235	0.00103	78.99731	1.39331	19.07	0.33	1.73
26	0.5936	98.1593	1.47224	0.44848	0.12136	0.03434	0.00418	10.30285	1.24947	0.82316	0.22282	0.00373	0.00137	88.04735	1.8056	21.25	0.43	2.02
27	0.6212	94.10336	1.64568	0.40498	0.13003	0.00951	0.00573	2.95135	1.79855	0.74329	0.23872	0.00155	0.00168	91.32334	2.32836	22.03	0.56	2.54
28	0.6516	162.2068	3.16472	0.78213	0.16566	0.16834	0.00605	30.63284	0.93127	1.43589	0.3043	0.00623	0.0017	112.5598	2.67817	27.12	0.64	2.36
29	0.6786	323.4766	7.11409	0.65219	0.17812	0.86929	0.02047	79.40128	0.70928	1.19723	0.32712	0.03464	0.00225	66.6566	2.75236	16.11	0.66	4.10
30	0.6846	389.2131	41.31375	3.61058	0.76838	1.1431	0.1264	86.71681	2.69664	6.64185	1.41709	0.02966	0.00992	51.82812	11.89706	12.54	2.87	22.89
31	0.7002	139.6995	4.68615	0.14751	0.32124	0.20732	0.02538	43.85482	5.16749	0.27068	0.58956	0.02318	0.00278	78.42547	6.76874	18.94	1.85	9.77
32	0.7096	118.8214	7.97608	0.10725	0.50686	0.02894	0.04106	7.19149	10.20287	0.19681	0.93016	-0.00381	0.00528	110.2571	14.2041	26.57	3.4	12.80
33	0.7155	125.8004	11.47965	2.6393	0.93304	0.06629	0.06508	15.40149	15.23931	4.8518	1.7184	0.01936	0.00988	106.5988	21.5198	25.69	5.15	20.05
34	0.7577	93.53233	1.72214	0.34201	0.12347	0.01515	0.00927	4.75708	2.92951	0.62769	0.22667	0.00409	0.0013	95.07615	3.19432	21.49	0.77	3.58

35	0.8112	84.99861	0.93208	0.41217	0.11321	0.02487	0.00716	8.6104	2.48918	0.75649	0.20784	0.00268	0.00103	77.67537	2.28197	18.76	0.55	2.93
36	0.9005	112.2672	0.8918	0.44455	0.05776	0.14996	0.00497	39.44808	1.28395	0.81595	0.10605	0.02061	0.00081	67.98333	1.56205	16.43	0.38	2.31
37	0.9064	115.1142	10.78211	0.35662	1.11601	-0.00024	0.02371	-0.08776	6.08747	0.05452	0.204876	0.00513	0.00893	115.2146	12.87298	27.75	3.08	11.10
38	0.9308	112.3871	2.94429	0.05134	0.29891	0.04839	0.00616	12.72241	1.58583	0.09421	0.54849	-0.00132	0.00261	98.06641	3.13121	23.65	0.75	3.17
39	0.9472	1094.619	83.56775	2.7148	0.66394	0.1105	0.01385	2.96253	0.29644	4.99085	1.22293	0.03364	0.00785	1064.202	81.47069	241.41	17.3	7.17
40	0.9707	8.18332	0.38184	1.70116	0.36854	0.05327	0.00922	191.3309	32.56272	3.12515	0.67784	0.1065	0.00662	-7.45577	2.66655	-1.81	0.65	-35.91
41	0.9776	65.57173	9.23886	8.49111	1.47351	0.21515	0.04492	96.39283	14.98509	8.92802	2.7223	0.06593	0.01566	2.73234	9.86271	0.58	2.39	412.07
42	1	132.1328	4.62898	1.35413	0.32796	0.12972	0.01008	28.93346	2.01899	2.48703	0.60292	0.01458	0.00337	93.97098	4.25662	22.67	1.02	4.50

Integrated 159.4871 0.56145 0.88579 0.0303 0.1497 0.00145 27.69617 0.25089 1.62633 0.05567 0.0163 0.00034 115.366 0.57186 27.79 0.58 2.09

FRANCIS CREEK

Weighted average of J from standards = 9.588e-05 +/- 4.822e-07

Grain #	Cumulative 40Ar/39Ar +/- 39Ar meas.		37Ar/39Ar +/- meas.		36Ar/39Ar +/- meas.		% Atm. 40Ar	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age (Ma)	+/- (Ma)	%error	
1	0.0108	195.1915	1.39241	0.55853	0.03189	0.20521	0.00935	31.04806	1.40182	1.02523	0.05856	0.00142	0.00093	134.6209	2.91365	23.11	0.5	2.16
2	0.012	102.8796	9.04354	3.9067	0.44179	-0.01893	0.06027	-5.75221	17.30991	7.18809	0.81511	0.11597	0.01402	109.067	20.27706	18.75	3.47	18.51
3	0.0162	121.7568	3.01038	2.37329	0.10132	0.00609	0.02029	1.3183	4.92539	4.36197	0.18653	0.02179	0.00324	120.324	6.70485	20.67	1.15	5.56
4	0.0524	1063.194	5.69497	0.82114	0.01356	3.12376	0.03057	86.81676	0.71341	1.50756	0.02492	0.05766	0.00184	140.2408	7.62981	24.07	1.3	5.40
5	0.0873	136.766	0.72097	1.02565	0.02013	0.01038	0.00201	2.18129	0.43434	1.88329	0.03699	0.0061	0.00059	133.8507	0.92336	22.98	0.16	0.70
6	0.0896	216.0355	8.34129	2.29416	0.19159	0.2515	0.04845	34.31819	6.49588	4.2163	0.35269	0.01002	0.00598	142.1068	15.09744	24.39	2.57	10.54
7	0.091	138.4597	7.96378	5.90693	0.46782	0.05455	0.06488	11.29343	13.83438	10.88381	0.8656	0.01828	0.00776	123.311	20.50985	21.18	3.5	16.53
8	0.0925	171.8341	10.15425	4.6722	0.43035	0.0663	0.04997	11.17946	8.56795	8.60122	0.79486	0.00001	0.00595	153.1028	17.33987	26.26	2.95	11.23
9	0.0987	173.3426	3.23019	1.12246	0.11095	0.1254	0.01175	21.32695	1.96288	2.0612	0.2039	0.02734	0.00178	136.4587	4.25279	23.42	0.73	3.12
10	0.1057	1787.979	22.9234	0.86913	0.08522	5.85719	0.09116	96.79957	0.85637	1.59572	0.15656	0.02424	0.00346	57.25712	15.33992	9.87	2.64	26.75
11	0.1108	232.9537	3.83924	1.47373	0.09627	0.36816	0.01724	46.65398	2.04876	2.70691	0.17701	0.01246	0.00161	124.3852	5.20299	21.36	0.89	4.17
12	0.1198	139.8364	3.0784	1.00645	0.0627	0.01319	0.01119	2.72937	2.36532	1.84801	0.11521	0.01189	0.00132	136.0876	4.46623	23.36	0.76	3.25
13	0.1287	119.5937	1.25247	2.74872	0.08331	0.00607	0.00938	1.31015	2.31892	5.05333	0.15347	0.01149	0.00116	118.2271	3.0429	20.31	0.52	2.56
14	0.1382	136.4764	1.6312	0.71964	0.05929	0.02262	0.00823	4.8559	1.78114	1.32111	0.10889	0.00466	0.00082	129.887	2.88632	22.3	0.49	2.20
15	0.1431	203.8352	5.27872	1.39037	0.12686	0.2267	0.01929	32.81367	2.66489	2.55364	0.23324	0.04671	0.00359	137.064	6.49683	23.53	1.11	4.72
16	0.1467	159.702	5.19887	1.84389	0.20598	0.18967	0.02506	35.00562	4.49806	3.3877	0.37894	0.02748	0.00271	103.9134	7.95694	17.86	1.36	7.61
17	0.1511	144.6168	3.33376	1.72393	0.08976	0.06194	0.01237	12.5601	2.51237	3.16703	0.1651	0.03801	0.00325	126.5809	4.66902	21.74	0.8	3.68
18	0.1586	125.7085	1.91656	0.45297	0.05982	0.01009	0.00799	2.3431	1.87928	0.8314	0.10984	0.02738	0.00169	122.7733	3.01548	21.09	0.51	2.42
19	0.1608	143.449	4.36706	2.82066	0.23864	0.1371	0.02961	28.80507	6.04251	5.18585	0.43962	0.0163	0.00454	103.3458	9.24697	17.77	1.58	8.89
20	0.1665	173.231	2.29806	0.60859	0.08416	0.10566	0.01443	17.99797	2.44427	1.11716	0.15456	0.00631	0.00223	142.0897	4.85971	24.38	0.83	3.40
21	0.1832	1059.676	12.64853	0.04016	0.01917	3.07516	0.04607	85.75566	0.77842	0.07369	0.03517	0.04107	0.00185	150.9439	8.44665	25.89	1.44	5.56
22	0.1908	273.8323	3.35209	0.58542	0.04694	0.27266	0.00923	29.40856	0.93035	1.07461	0.08621	0.00212	0.00186	193.3611	3.48841	33.1	0.59	1.78
23	0.197	175.8465	3.50889	0.87425	0.08747	0.15507	0.01436	26.02128	2.3581	1.60512	0.1607	0.00184	0.00322	130.1474	4.89828	22.35	0.84	3.76
24	0.2126	130.3315	1.80978	0.89139	0.04634	0.00759	0.00394	1.66567	0.89434	1.63661	0.08514	0.02278	0.00105	128.2122	2.12977	22.02	0.36	1.63
25	0.214	416.6178	23.93839	5.68687	0.41795	0.74914	0.07264	53.02667	4.15126	10.4767	0.07730	0.00766	0.011	196.4745	20.73818	33.63	3.52	10.47
26	0.2282	135.08	1.47948	0.36011	0.02598	0.00674	0.00494	1.4533	1.08057	0.66093	0.04769	0.01122	0.00125	133.1214	2.06391	22.85	0.35	1.53
27	0.2325	125.8339	1.936	0.96501	0.07911	0.02245	0.01222	5.20997	2.86987	1.77186	0.14536	0.01615	0.00329	119.3312	4.0537	20.5	0.69	3.37
28	0.2358	165.3781	4.4033	3.4656	0.14147	0.11624	0.01471	20.60014	2.57166	6.37451	0.26085	0.01954	0.00415	131.6086	5.52935	22.6	0.94	4.16
29	0.2366	172.6417	20.11383	6.17367	0.79897	0.25556	0.09346	43.45505	15.16876	11.37744	1.47887	0.02514	0.0168	98.03083	28.69824	16.86	4.91	29.12
30	0.2503	141.0092	1.23778	0.44682	0.04028	0.01761	0.00337	3.66584	0.70587	0.82012	0.07396	0.00342	0.0013	135.8542	1.55437	23.32	0.27	1.16
31	0.2673	131.3363	1.23527	0.0248	0.01676	0.00739	0.00404	1.66187	0.90861	0.0455	0.03075	0.00213	0.001	129.1267	1.70293	22.17	0.29	1.31
32	0.268	301.1817	29.86388	7.6609	0.96004	0.38575	0.10751	37.64105	9.86309	14.13316	1.78075	0.0026	0.0174	188.8169	35.31897	32.33	5.99	18.53
33	0.2713	135.0499	4.20553	0.86611	0.12604	0.01475	0.0135	3.17594	2.95282	1.59017	0.23154	0.01301	0.00594	130.8121	5.70474	22.46	0.97	4.32
34	0.2744	150.0995	4.46052	1.0648	0.13007	0.00779	0.02324	1.4747	4.57655	1.95523	0.23901	0.00968	0.00437	147.968	8.16198	25.39	1.39	5.47
35	0.2812	143.1548	3.58569	0.22584	0.04633	-0.01425	0.0097	-2.95484	2.0004	0.41444	0.08503	0.00631	0.00183	147.3777	4.67247	25.29	0.8	3.16
36	0.2854	134.0426	3.80307	0.80685	0.0817	-0.00487	0.01192	-1.12313	2.62737	1.4813	0.15009	0.0069	0.00303	135.5953	5.21859	23.28	0.89	3.82
37	0.2864	214.3661	20.90244	6.71895	0.73571	0.28543	0.06968	39.09304	8.80982	12.38712	1.36283	0.00912	0.01417	131.1682	22.92624	22.52	3.91	17.36
38	0.2896	172.1042	7.85165	1.59232	0.11454	0.1017	0.02333	17.38791	3.92619	2.92498	0.21064	0.00502	0.0047	142.3144	9.38322	24.42	1.6	6.55
39	0.2917	249.1301	12.82799	1.12577	0.15934	0.42506	0.03853	50.38686	3.76682	2.06728	0.29284	0.03167	0.00702	123.6849	11.36179	21.24	1.94	9.13
40	0.2984	118.389	2.26689	0.03234	0.0404	0.00649	0.0081	1.61752	2.02222	0.05934	0.07413	0.00126	0.00221	116.4475	3.27186	20.01	0.56	2.80
41	0.3056	135.2942	2.42386	1.05523	0.07695	0.00046	0.01073	0.03611	2.34489	1.93764	0.14141	-0.00018	0.00174	135.3166	3.99548	23.23	0.68	2.93
42	0.3128	121.2187	1.42596	0.17846	0.05206	0.02063	0.02666	5.0177	6.50104	0.3275	0.09554	0.02545	0.00291	115.1226	7.99558	19.78	1.37	6.93
43	0.3153	130.6438	3.0954	0.26455	0.12755	-0.00798	0.03499	-1.82284	7.91494	0.4855	0.23412	-0.00521	0.00569	133.0199	10.8095	22.84	1.84	8.06
44	0.3156	275.8823	66.83133	12.79631	3.58411	0.25585	0.43091	27.02519	45.68191	23.69359	6.69685	-0.09695	0.06102	203.1388	136.52793	34.76	23.14	66.57
45	0.317	181.8266	11.93696	7.86567	0.59181	0.1988	0.05736	31.95801	9.08021	14.49616	1.09804	-0.00386	0.0093	124.3885	18.52569	21.36	3.16	14.79
46	0.3178	145.3339	13.80268	11.41639	1.28486	0.05013	0.12399	9.54657	25.19758	21.11776	2.39602	-0.01538	0.0165	132.5011	39.03287	22.75	6.66	29.27
47	0.3309	130.0696	1.43565	0.45305	0.02471	0.034	0.00635	7.69469	1.44083	0.83155	0.04536	0.00182	0.00092	120.0971	2.29756	20.63	0.39	1.89
48	0.335	144.5727	2.32904	2.42488	0.10301	0.00675	0.02183	1.24175	4.46276	4.45695	0.18966	0.02364	0.0035	142.9931	6.86161	24.54	1.17	4.77
49	0.3374	222.9923	12.5053	2.33775	0.35462	0.28317	0.02503	37.33559	2.56585	9.64624	0.65511	0.0206	0.01054	140.237	7.76695	24.07	1.67	6.94
50	0.3417	441.2033	10.48473	0.47487	0.06216	0.14675	0.0132	9.8206	0.85257	0.87162	0.11414	0.00826	0.00335	397.9812	10.18443	67.48	1.69	2.50
51	0.352	142.0374	1.84928	0.72119	0.0411	0.00457	0.00628	0.9088	1.30743	1.32397	0.0755	0.00127	0.00133	140.7889	2.61085	24.16	0.45	1.86
52	0.3799	160.3359	1.09829	0.12451	0.01163	0.10735	0.00257	19.78181	0.45496	0.22848	0.02135	0.0566	0.00088	128.606	1.14737	22.08	0.2	0.91
53	0.4061	141.4723	1.24505	0.35288	0.01148	0.00557	0.00241	1.14362	0.50406	0.64765	0.02108	0.00447	0.00061	139.8599	1.4231	24	0.24	1.00
54	0.411	128.9748	4.35996	1.41585	0.07583	0.02101	0.01365	4.72473	3.12281	2.60049	0.13942	0.10267	0.00511	122.9758	5.7947	21.12	0.99	4.69
55	0.4179	157.7237	2.10218	0.40225	0.04218	0.15419	0.0143	28.87153	2.65385	0.73829	0.07744	0.05009	0.00249	112.1972	4.44959	19.28	0.76	3.94
56	0.4473																	

76	0.5746	205.0175	4.20686	0.49201	0.08174	0.26923	0.02407	38.79073	3.38011	0.90308	0.15009	0.00518	0.00356	125.5151	7.40151	21.56	1.26	5.84
77	0.581	139.0742	1.62186	0.17825	0.03719	0.03824	0.01214	8.11708	2.57788	0.32711	0.06826	0.00306	0.00251	127.7743	3.88335	21.94	0.66	3.01
78	0.5858	234.5665	5.55196	0.9189	0.05726	0.33887	0.01873	42.66258	2.13407	1.68716	0.1052	-0.00034	0.00236	134.5647	5.94027	23.1	1.01	4.37
79	0.5876	182.2634	7.89441	7.39009	0.38383	0.10018	0.0441	15.91007	7.11632	13.63094	0.71168	0.01892	0.00886	154.0443	14.66333	26.42	2.5	9.46
80	0.5911	141.9522	5.37417	0.91057	0.10557	-0.01896	0.02063	-4.00101	4.29199	1.67185	0.19395	0.00536	0.00534	147.6958	8.27386	25.34	1.41	5.56
81	0.5924	259.8064	14.32044	5.52207	0.39971	0.56607	0.08774	64.21607	9.33013	10.1719	0.73917	0.06962	0.00801	93.3223	24.87701	16.05	4.26	26.54
82	0.6104	131.4083	1.60571	0.1861	0.01898	0.01104	0.00531	2.47066	1.19443	0.34152	0.03484	0.00338	0.00086	128.1495	2.2178	22.01	0.38	1.73
83	0.6112	108.6931	7.84253	5.25166	0.51608	0.05443	0.11187	14.40317	30.40362	9.67195	0.954	0.04862	0.0157	93.35877	33.84479	16.06	5.8	36.11
84	0.6116	159.6878	30.5169	3.71707	1.95003	0.29362	0.27265	54.15266	49.39069	6.83826	3.5969	-0.01261	0.02958	73.39167	80.31718	12.64	13.78	109.02
85	0.616	1155.532	21.67007	0.12238	0.05602	3.51531	0.071	89.89713	0.68868	0.22457	0.10281	0.11633	0.00712	116.7491	8.27185	20.06	1.41	7.03
86	0.6256	136.3994	2.11838	0.40629	0.0353	0.01923	0.00924	4.14312	2.00106	0.7457	0.06481	0.00067	0.00117	130.7573	3.40344	22.45	0.58	2.58
87	0.635	142.4835	2.55397	0.02032	0.03779	0.02413	0.01102	5.00425	2.28514	0.03728	0.06934	0.03003	0.0026	135.327	4.06048	23.23	0.69	2.97
88	0.6365	137.5575	8.17614	1.37025	0.22547	0.12782	0.05798	27.38287	12.35122	2.51666	0.41451	0.01837	0.00792	99.96546	18.01829	17.19	3.08	17.92
89	0.6379	1095.385	58.71538	9.81899	0.60423	3.25023	0.18701	87.60944	1.83921	18.14229	0.12422	0.1508	0.01146	136.6685	21.59457	23.46	3.68	15.69
90	0.6431	150.5694	3.45952	0.67006	0.0639	0.03079	0.01263	6.00793	2.47483	1.23006	0.11735	0.00929	0.00199	141.5623	4.94935	24.29	0.84	3.46
91	0.659	142.3351	1.8536	0.07499	0.02382	0.06486	0.00453	13.46439	0.92507	0.1376	0.04371	0.03941	0.0013	123.1514	2.08042	21.15	0.36	1.70
92	0.6604	120.2114	5.64902	1.19584	0.13873	0.09187	0.04623	-22.6715	11.31755	2.19606	0.25499	0.02345	0.00817	147.5533	15.27562	25.31	2.6	10.27
93	0.672	135.5712	1.2479	0.00768	0.02823	0.00804	0.0051	1.75285	1.11171	0.0141	0.0518	0.00359	0.00089	133.1663	1.94295	22.86	0.33	1.44
94	0.6788	112.5179	2.09857	0.00446	0.05973	0.18762	0.01044	49.28721	2.58853	0.00819	0.10959	0.00148	0.0024	57.04606	3.10466	9.83	0.53	5.39
95	0.6839	130.9981	2.7631	0.00036	0.04643	-0.00949	0.00924	-2.14148	2.08394	0.00066	0.0852	0.00431	0.00201	133.7731	3.92537	22.97	0.67	2.92
96	0.6851	147.6375	9.95025	11.09485	0.87883	-0.00343	0.0423	-1.30703	8.46786	20.51829	1.6381	0.03609	0.00922	150.7183	16.23446	25.85	2.76	10.68
97	0.6917	140.7168	1.83323	0.48205	0.03331	0.04126	0.0078	6.63828	1.63425	0.88479	0.06116	0.02627	0.0021	128.578	2.84609	22.08	0.49	2.22
98	0.6955	107.5697	2.4962	0.99382	0.09346	0.0437	0.01917	11.93196	5.25996	1.82481	0.17173	0.02636	0.00272	94.77493	6.07414	16.3	1.04	6.38
99	0.6974	200.0273	7.26747	2.84553	0.24689	0.33204	0.02875	48.94186	3.86217	5.23166	0.45484	0.02677	0.00408	102.3207	8.60082	17.59	1.47	8.36
100	0.703	136.9695	3.12699	0.1711	0.03963	0.0094	0.01194	2.01826	2.57696	0.31398	0.07274	0.00931	0.00136	134.1922	4.67439	23.04	0.8	3.47
101	0.704	154.5916	12.06168	13.69576	1.1202	0.15988	0.0653	29.83562	12.25562	25.37526	2.09576	0.036	0.01308	109.5068	20.98776	18.82	3.59	19.08
102	0.7051	162.94	7.33379	4.51946	0.31421	0.27589	0.06364	49.81412	11.32947	8.31913	0.58023	0.03316	0.00878	82.01982	18.89415	14.12	3.24	22.95
103	0.7248	155.632	0.95108	0.33737	0.02429	0.53053	0.00795	100.7332	1.39899	0.61917	0.04458	0.11956	0.00131	-1.14117	2.17715	-0.2	0.38	-190.00
104	0.7283	154.7884	4.15531	0.42276	0.06007	0.08233	0.02262	15.69743	4.29875	0.77594	0.11029	0.00252	0.00248	130.5045	7.52347	22.41	1.28	5.71
105	0.7345	87.02673	2.12937	0.6882	0.06834	0.30268	0.01806	102.7466	5.60611	1.26337	0.12552	0.14157	0.0043	-2.39059	4.87961	-0.41	0.84	-204.88
106	0.7512	252.017	4.11283	0.6262	0.02736	0.3476	0.00757	40.74163	0.59422	1.1495	0.05025	0.00603	0.00096	149.3896	2.87442	25.63	0.49	1.91
107	0.7732	516.7679	4.42681	0.154	0.01911	1.33596	0.01714	76.3952	0.73138	0.2826	0.03507	0.08796	0.00188	121.9883	3.92424	20.95	0.67	3.20
108	0.7788	130.4505	2.37738	0.37435	0.07855	0.0228	0.01043	5.14327	2.36083	0.68706	0.1442	0.02722	0.00193	123.7456	3.82041	21.25	0.65	3.06
109	0.7831	213.0499	5.10379	2.64213	0.11622	0.22534	0.01436	31.15646	1.84716	4.85701	0.21404	0.02239	0.00244	146.9248	5.29225	25.21	0.9	3.57
110	0.8011	134.0166	1.51558	0.16891	0.0146	0.0061	0.00297	1.33494	0.65467	0.30997	0.0268	0.00597	0.00067	132.214	1.73422	22.7	0.3	1.32
111	0.8022	165.2311	15.59823	7.63573	0.76782	0.24002	0.05336	42.55205	8.64474	14.08647	1.42415	0.02134	0.00925	95.41943	16.98432	16.41	2.91	17.73
112	0.8289	355.9678	2.74611	0.72546	0.01963	0.76407	0.01213	63.41623	0.88352	1.3318	0.03605	0.00493	0.00117	130.2823	3.31021	22.37	0.56	2.50
113	0.8751	129.7868	0.91032	0.04688	0.00048	0.00517	0.1071	0.3564	0.08603	0.01655	0.00089	0.00028	128.4416	1.013	22.06	0.17	0.77	
114	0.8804	140.3755	2.31833	0.99628	0.06982	0.00936	0.01067	1.9125	2.246	1.82933	0.12828	0.01634	0.00166	137.7587	3.89082	23.65	0.66	2.79
115	0.8824	184.9792	7.28302	-0.13696	0.135	0.14805	0.02406	23.66029	3.7302	-0.25128	0.24766	0.00368	0.00441	141.1763	8.86161	24.23	1.51	6.23
116	0.8837	162.5979	10.7258	17.19261	1.16118	0.10902	0.04342	18.94513	7.78386	31.9338	2.1833	0.01267	0.01108	133.3893	15.60587	22.9	2.66	11.62
117	0.9095	150.6171	1.61406	0.04821	0.01012	0.07405	0.00428	14.52854	0.82482	0.08846	0.01857	0.0043	0.00042	128.7136	1.85724	22.1	0.32	1.45
118	0.9113	914.5775	38.1332	4.41725	0.28543	2.39041	0.10889	77.19689	1.43168	8.13041	0.52701	0.0391	0.00923	209.1979	15.81511	35.79	2.68	7.49
119	0.9229	184.9122	1.50619	0.54356	0.04112	0.19927	0.00902	31.82469	1.42134	0.99774	0.07551	0.02565	0.00132	126.0926	2.83225	21.66	0.48	2.22
120	0.9873	168.1098	0.93362	0.07199	0.00508	0.15267	0.00282	26.83661	0.47228	0.13209	0.00933	0.02062	0.00046	122.9793	1.04848	21.12	0.18	0.85
121	1	309.1085	2.08322	1.12998	0.03286	0.10378	0.11143	98.71083	0.89038	2.07501	0.06039	0.1006	0.0017	3.98775	2.75483	0.69	0.48	69.57

Integrated	235.3245	0.34039	0.77105	0.00468	0.37119	0.00156	46.58934	0.18362	1.41554	0.0086	0.02175	0.00019	125.741	0.46963	21.6	0.13	0.60
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PTARMIGAN CREEK

Weighted average of J from standards = 5.988e-05 +/- -4.822e-07

Grain #	Cumulative 39Ar meas.	40Ar/39Ar +/- meas.	37Ar/39Ar +/- meas.	36Ar/39Ar +/- meas.	% Atm. 40Ar	+/-	Ca/K	+/-	Cl/K	+/-	40*/39K	+/-	Age (Ma)	+/- (Ma)	%error			
1	0.0013	214.9031	9.08102	7.20604	0.56246	0.28596	0.139	39.04912	19.04396	13.28973	1.04263	0.03119	0.01448	131.6372	41.51177	22.6	7.08	31.33
2	0.0055	127.5796	2.76536	0.7528	0.13791	-0.00683	0.04385	-1.63011	10.1594	1.38202	0.25331	0.00808	0.00521	129.6981	13.26691	22.27	2.26	10.15
3	0.0126	147.9137	1.40595	0.56525	0.08331	0.04103	0.02569	8.16683	5.13336	1.03757	0.15298	0.01146	0.0026	135.8608	7.70397	23.32	1.31	5.62
4	0.0135	97.50844	8.50193	16.30191	1.5687	-0.06006	0.20797	-19.5863	63.02631	30.26014	2.94578	0.00898	0.0223	117.9293	63.01419	20.26	10.77	53.16
5	0.0182	132.4349	34.26731	3.77567	0.16527	3.9235	0.11231	87.52303	1.07781	6.94636	0.30487	0.04573	0.00482	165.6767	14.95443	28.4	2.54	8.94
6	0.0231	120.6019	2.52549	0.44303	0.12448	-0.02366	0.03822	-5.82806	9.36734	0.81316	0.22855	0.00365	0.00454	127.6392	11.60992	21.92	1.98	9.03
7	0.0237	34.96818	3.79137	7.74562	1.37827	-0.10563	0.30096	-91.1685	254.3749	14.29031	2.55683	0.07817	0.03476	67.15906	89.6507	11.57	15.39	133.02
8	0.0753	137.6737	0.81854	0.30522	0.01081	0.03298	0.00202	7.06305	0.43173	0.56015	0.01984	0.00037	0.00037	127.9498	0.967	21.97	0.17	0.77
9	0.083	131.1401	0.71853	0.67173	0.03565	0.02677	0.01166	5.9906	2.62721	1.23311	0.06547	0.0052	0.00112	123.3146	3.51245	21.18	0.6	2.83
10	0.0891	140.8024	1.74631	0.73335	0.05347	0.03781	0.01231	7.89411	2.58265	1.3463	0.0982	0.00078	0.00156	129.7272	3.97879	22.28	0.68	3.05
11	0.1008	343.0257	2.79859	0.71317	0.03249	0.68829	0.01329	59.28091	1.04038	1.30922	0.05967	0.00232	0.00104	139.7352	3.75409	23.98	0.64	2.67
12	0.109	137.0107	1.74675	1.72013	0.03992	0.0241	0.01001	5.09601	2.15855	3.16005	0.07343	0.00088	0.00189	130.1586	3.39594	22.35	0.58	2.60
13	0.1132	136.8963	3.03001	0.46724	0.06185	0.04239	0.01874	9.12443	4.04102	0.85761	0.11356	0.00878	0.00222	124.4194	6.18255	21.37	1.06	4.96
14	0.1261	130.8281	0.68044	0.0754	0.02675	0.01108	0.00488	2.49929	1.10271	0.13836	0.04909	0.00147	0.00061	127.5362	1.58821	21.9	0.27	1.23
15	0.1271	5158.437	572.68771	14.00732	1.57807	16.58243	1.85023	94.97023	1.06536	25.95828	2.95369	0.05743	0.01486	262.0482	62.81958	44.72	10.59	23.68
16	0.1351	166.9155	3.03404	2.50675	0.06483	0.01179	0.00838	1.9638	1.48335	4.60769	0.11938	0.00061	0.00141	163.8987	3.88097	28.1	0.66	2.35
17	0.1361	226.4115	13.52437	5.65394	0.43055	0.34334	0.06181	44.61089	7.61437	10.41579	0.79635	0.02921	0.01419	125.8936	18.88995	21.62	3.22	14.89
18	0.1411	664.2535	7.89855	-0.07467	0.05576	0.091	0.01301	4.04954	0.57676	-0.13699	0.1023	0.00393	0.00252	637.2922	8.49295	106.88	1.38	1.29
19	0.1462	129.4299	2.98682	3.15758	0.0988	0.05127	0.01317	11.50626	2.99488	5.80668	0.18209	0.03556	0.00225	114.7667	4.70697	19.72	0.8	4.06
20	0.1499	118.8024	2.13781	0.02644	0.04581	-0.0223	0.01901	-5.54964	4.77292	0.04852	0.08405	0.03579	0.00461	125.3665	6.05102	21.53	1.03	4.78
21	0.1557	122.9995	2.42181	0.56759	0.04247	0.00553	0.01149	1.29169	2.76021	1.04186	0.07798	0.00639	0.00202	121.4301	4.15398	20.86	0.71	3.40
22	0.1645	121.8817	2.3265	0.35635	0.04556	0.04602	0.01025	11.13697	2.47567	0.65402	0.08365	0.0016	0.00193	108.3086	3.65924	18.62	0.63	3.38
23	0.1772	127.8666	1.2752	0.06098	0.02427	0.00838	0.00679	1.93414	1.56944	0.11189	0.04453	0.00002	0.00065	125.3698	2.36494	21.53	0.4	1.86
24	0.1926	136.5967	2.06858	1.81539	0.04473	0.04045	0.00624	8.64369	1.34403	3.33527	0.08228	0.01493	0.00072	124.9228	2.6407	21.64	0.45	2.10
25	0.1965	147.2485	2.9298	0.56584	0.09674	0.12391	0.02126	24.83944	4.23837	1.03865	0.17766	0.02297	0.00223	110.6947	6.62138	19.02	1.13	5.94
26	0.2051	133.6619	1.16661	0.51088	0.04618	0.01786	0.01074	3.91771	2.37478	0.93774	0.0848	-0.00001	0.00131	128.4433	3.3674	22.06	0.57	2.58
27	0.2081	152.3628	5.58818	2.21291	0.15889	0.08512	0.02666	16.39117	1.53673	4.06674	0.29245	0.00715	0.00308	127.5634	9.13327	21.91	1.56	7.12
28	0.2134	179.5126	4.99238	0.91097	0.07269	0.04537	0.0174	7.42763	2.8569	1.67257	0.13354	0.02632	0.00267	166.2586	6.91177	28.5	1.18	4.14
29	0.2196	129.8789	2.18666	1.12972	0.06289	0.02545	0.01175	5.71939	2.67338	2.07453	0.11558	0.01416	0.00261	122.5204	4.04266	21.05	0.69	3.28
30	0.2245	186.7651	3.56572	2.96706	0.12194	0.21595	0.01679	34.04223	2.57699	5.45558	0.22469	0.01727	0.00386	123.4252	5.37335	21.2	0.92	4.34
31	0.2264	138.4185	6.66656	1.73938	0.20456	0.0283	0.02626	5.9402	6.60047	3.19546	0.37626	0.03625	0.00859	130.3283	9.98777	22.38	1.7	7.60
32	0.2294	126.3333	3.92066	0.62638	0.10737	-0.01678	0.01974	-3.96586	4.61419	1.14984	0.19718	0.00216	0.00572	131.4228	7.11756	22.56	1.21	5.36
33	0.2308	221.7966	9.37309	6.31695	0.33576	0.35624	0.0659	47.23296	8.55081	11.64268	0.62161	0.02069	0.01088	117.5443	19.69694	20.2	3.37	16.68
34	0.2323	175.5809	6.53887	5.41392	0.33445	0.20607	0.04743	34.43228	7.88122	9.97192	0.6184	0.01331	0.01052	115.5468	14.55175	19.85	2.49	12.54
35	0.2336	142.7494	5.28337	5.54362	0.29988	0.08357	0.04782	16.98323	9.88143	10.21177	0.55457	0.05621	0.01317	118.947	14.83586	20.43	2.53	12.38
36	0.2346	171.4539	15.48603	6.68654	0.67576	0.14864	0.06841	25.30132	11.56354	12.32709	1.25172	0.02266	0.00897	128.6593	23.09268	22.09	3.94	17.84
37	0.2376	125.4368	3.56372	0.34017	0.08704	-0.02815	0.01718	-6.6565	4.04414	0.62431	0.15979	0.01261	0.0044	133.687	6.38891	22.97	1.08	4.07

38	0.2402	192.8483	7.54059	7.24141	0.31864	0.21759	0.02221	33.03614	3.14491	13.3553	0.59069	0.0166	0.00509	129.7826	7.95297	22.28	1.36	6.10
39	0.2621	123.5447	1.2289	0.24432	0.01372	0.0023	0.00353	0.53374	0.84393	0.44837	0.02519	0.00349	0.00048	122.877	1.60699	21.11	0.27	1.28
40	0.2661	141.9603	3.85985	1.9557	0.0999	0.06118	0.02004	12.62427	4.15853	3.59341	0.18381	0.00837	0.00369	124.1845	6.81049	21.33	1.16	5.44
41	0.276	156.2149	2.83081	0.43507	0.03244	0.11274	0.00617	21.30633	1.10237	0.79854	0.05956	0.02503	0.00173	122.9456	2.82114	21.12	0.48	2.27
42	0.2804	154.9699	2.9306	1.87584	0.07841	0.01473	0.01376	2.71026	2.62327	3.44647	0.14425	0.0116	0.00222	150.9409	4.97385	25.89	0.85	3.28
43	0.286	152.5013	3.14275	1.64654	0.07222	0.09318	0.0148	17.96936	2.84416	3.02469	0.13283	0.0959	0.0031	125.2191	5.05484	21.51	0.86	4.00
44	0.2915	281.8509	4.09437	2.87112	0.08784	0.46823	0.02051	49.01136	2.03014	5.27882	0.16184	0.05487	0.00243	143.9888	6.10889	24.71	1.04	4.21
45	0.2916	228.4188	79.26433	10.77478	4.77843	-0.54213	0.46977	-70.5315	55.71835	19.92182	8.90273	0.04255	0.06686	392.4621	187.73874	66.56	31.26	46.97
46	0.2946	142.957	4.06455	0.40121	0.1171	0.04823	0.03422	9.94788	7.06962	0.73637	0.21498	0.04067	0.00596	128.7455	10.75133	22.11	1.83	8.28
47	0.2984	138.5348	2.5202	0.31845	0.09066	0.02319	0.01624	4.92923	3.46325	0.58444	0.16642	0.02365	0.00253	131.7075	5.3636	22.61	0.92	4.07
48	0.3	127.3493	7.4298	0.90052	0.21828	0.00435	0.04204	0.95136	9.7571	1.65339	0.40103	0.03328	0.01096	126.1886	14.45065	21.67	2.47	11.40
49	0.311	128.3216	1.96648	0.27924	0.04187	-0.00347	0.00537	-0.81669	1.23631	0.51246	0.07686	0.00488	0.00113	129.3652	2.53965	22.21	0.43	1.94
50	0.3165	165.7761	2.85443	1.67413	0.08616	0.16355	0.01297	29.07496	2.25812	3.07543	0.15846	0.02073	0.00252	117.6949	4.26289	20.22	0.73	3.61
51	0.3244	142.4128	3.12892	1.42398	0.05903	0.05127	0.00933	10.5575	1.92201	2.61543	0.10852	0.01713	0.0018	127.4792	3.92123	21.89	0.67	3.06
52	0.3325	148.0365	2.99357	0.95811	0.05158	0.03352	0.0079	6.63913	1.57244	1.7592	0.09477	0.00513	0.00172	138.274	3.64165	23.73	0.62	2.61
53	0.3342	185.9401	11.42529	3.12963	0.29097	0.20937	0.04831	33.14014	7.40201	5.75517	0.53626	0.01984	0.00932	124.5748	15.78561	21.4	2.7	12.62
54	0.3358	169.9951	11.37613	5.52127	0.44964	0.25939	0.05242	44.82925	8.60272	10.17043	0.8315	0.02611	0.00875	94.13832	15.98913	16.19	2.74	16.92
55	0.3562	128.8333	1.22131	0.78272	0.02103	0.02019	0.00365	4.58107	0.83533	1.43698	0.03863	0.00667	0.00094	122.971	1.58818	21.12	0.27	1.28
56	0.3572	122.8967	12.58766	10.04972	1.09311	0.07823	0.0949	18.14123	22.74308	18.57166	2.03448	0.02793	0.01384	101.2965	30.02373	17.42	5.14	29.51
57	0.3586	126.149	7.33646	4.69831	0.38086	-0.05242	0.08028	-12.5883	18.79722	8.64946	0.70348	0.03094	0.0082	142.4683	25.19544	24.45	4.29	17.55
58	0.3671	131.7711	1.85187	0.63204	0.05878	-0.0131	0.01182	-2.97877	2.65033	1.16023	0.10795	0.00543	0.00144	135.7262	3.98044	23.3	0.68	2.92
59	0.3783	130.9121	1.3696	0.12362	0.03329	-0.00359	0.00899	-0.81763	2.03062	0.22685	0.06109	0.00396	0.00124	131.964	2.99519	22.66	0.51	2.25
60	0.3843	960.2984	26.89521	1.61774	0.0795	3.11773	0.09492	95.92699	1.1529	2.97173	0.1462	0.01569	0.00324	39.15662	11.14107	6.75	1.92	28.44
61	0.3847	146.7591	29.54375	3.50395	1.00737	-0.00516	0.22099	-1.23651	44.50532	6.44522	1.85756	0.01816	0.02692	148.9123	72.03483	25.55	12.27	48.02
62	0.3908	137.7982	2.26117	0.43375	0.07177	-0.03326	0.01472	-7.15981	3.15534	0.79612	0.13176	0.00556	0.00221	147.6777	4.9772	25.34	0.85	3.35
63	0.3916	94.12622	7.64008	4.04287	0.63632	-0.18646	0.10177	-58.9095	31.61418	7.43935	1.17425	0.02776	0.01215	149.9566	32.2104	25.72	5.49	21.35
64	0.3939	162.3886	4.99324	4.90023	0.22961	0.14299	0.02147	25.77575	3.82492	9.02247	0.42423	0.01912	0.00476	120.9282	7.26698	20.77	1.24	5.97
65	0.3974	125.5199	7.16192	2.63041	0.13485	0.03776	0.01488	8.71876	3.50144	4.83541	0.24836	0.03318	0.00426	114.7623	4.66221	19.72	0.8	4.06
66	0.4041	169.6646	2.07039	0.38485	0.06252	0.13494	0.01359	23.48834	2.35043	0.70634	0.11478	0.00628	0.00158	129.8257	4.29326	22.29	0.73	3.28
67	0.4093	149.2171	2.53227	1.9651	0.08846	0.11451	0.00902	22.57351	1.74613	3.6107	0.16276	0.01001	0.00245	115.6712	3.27107	19.88	0.56	2.82
68	0.4278	117.6544	0.53624	0.84662	0.02859	0.01721	0.00223	4.26392	0.55928	1.55436	0.05252	0.02091	0.00066	112.6767	0.8376	19.36	0.14	0.72
69	0.4287	178.7452	7.4749	19.71044	0.98457	0.23985	0.0457	38.74853	7.37442	36.67647	1.85792	0.01375	0.01177	111.0114	14.17666	19.08	2.42	12.68
70	0.4431	123.7431	1.26024	0.02722	0.02475	0.00319	0.179891	7.06077	0.04994	0.04542	0.1763	0.0014	0.0121	124.4902	1.55535	20.87	0.27	1.29
71	0.4468	126.3293	2.88875	1.24102	0.06846	0.05408	0.01744	12.57199	4.07147	2.2791	0.12583	0.00948	0.00342	110.5181	5.73698	18.99	0.98	5.16
72	0.448	126.1687	7.13258	2.29369	0.23716	0.08475	0.05321	19.70388	12.41622	4.21543	0.43657	0.01879	0.00993	101.4491	16.70895	17.44	2.86	16.40
73	0.4497	194.8352	14.02655	4.24312	0.2605	0.62902	0.04665	62.93113	3.59003	7.80895	0.48086	0.03372	0.00847	109.6096	11.84005	18.84	2.02	10.72
74	0.4569	126.427	2.58602	4.20414	0.11101	0.03767	0.00889	8.53173	2.06975	7.73699	0.20491	0.01678	0.00221	115.9578	3.54274	19.92	0.61	3.06
75	0.4613	247.8836	5.10947	3.84934	0.12404	0.50597	0.01852	60.19494	1.82819	7.08227	0.22884	0.02437	0.00322	98.92738	4.98817	17.01	0.85	5.00
76	0.4643	213.9513	7.12515	6.08972	0.26875	0.33041	0.02421	45.4071	2.98149	11.22206	0.49739	0.02626	0.00452	117.2905	7.51652	20.15	1.28	6.35
77	0.4666	130.5236	4.1802	4.45864	0.20911	0.04581	0.02464	10.09143	5.5702	8.20683	0.38612	-0.00097	0.00482	117.6959	8.21587	20.22	1.4	6.92
78	0.488	128.092	0.87712	0.25103	0.00983	0.03043	0.25229	0.79157	0.46069	0.03573	0.0018	0.00076	0.00125	132.864	2.13264	21.5	0.23	1.07
79	0.5036	132.4004	1.57621	0.75253	0.02571	0.02643	0.00418	8.58247	0.93056	1.38153	0.04723	0.00446	0.00125	124.6901	1.93055	21.42	0.33	1.54
80	0.5184	21.10884	0.15453	0.80356	0.02765	0.06635	0.00366	92.7006	5.10657	1.47525	0.05079	0.12073	0.00236	1.53953	1.07733	0.27	0.19	70.37
81	0.5223	123.7895	3.85116	0.08098	0.08876	0.01197	0.01653	2.85332	3.9455	0.1486	0.16288	0.00649	0.00462	120.2355	6.15222	20.65	1.05	5.08
82	0.5257	220.9579	4.10719	2.73459	0.11064	0.33633	0.02522	44.88342	3.26924	5.0273	0.20379	0.01066	0.00502	122.0037	7.58927	20.96	1.3	6.20
83	0.53	129.4303	2.95001	2.61361	0.13112	0.03203	0.01469	7.14683	3.34982	4.80448	0.24148	0.01845	0.00445	120.3748	5.14045	20.68	0.88	4.26
84	0.5332	149.5934	3.73725	0.88004	0.11011	0.12852	0.02114	25.34387	4.12842	1.61576	0.20229	0.04758	0.00561	111.728	6.78439	19.2	1.16	6.04
85	0.5344	163.6852	5.37982	2.46624	0.22436	0.04029	0.04382	7.15134	7.90956	4.53311	0.4131	0.0183	0.00596	152.2171	13.90334	26.11	2.37	9.08
86	0.537	129.1691	3.97183	3.70144	0.19414	-0.00258	0.01352	-0.82569	3.09463	6.80943	0.35809	0.01511	0.0026	130.547	5.67969	22.42	0.97	4.33
87	0.5396	106.0406	3.69611	3.29138	0.18167	0.00673	0.01352	1.61908	3.76705	6.0533	0.3349	0.02821	0.00285	104.5375	5.41947	17.97	0.93	5.18
88	0.5421	1294.655	46.49517	13.49229	0.52813	3.96085	0.14826	90.32104	0.95796	24.99466	0.98777	0.16198	0.00971	126.5117	13.3411	21.73	2.28	10.49
89	0.5519	131.0138	1.62998	0.93841	0.04539	-0.00607	0.00394	-1.42866	0.88777	1.72299	0.0834	0.00528	0.00113	132.9435	2.02317	22.82	0.35	1.53
90	0.5772	318.3322	2.21683	1.52965	0.02329	0.65679	0.0093	60.93465	0.75604	2.80974	0.04283	0.01588	0.0007	124.4805	2.5697	21.38	0.44	2.06
91	0.5797	132.0838	3.60687	11.26976	0.01225	0.019	2.03668	4.25135	20.84436	0.67845	0.01756	0.0052	0.00340	120.4027	6.70125	22.39	1.14	5.09
92	0.5931	53.1672	0.85069	0.88463	0.04129	0.18067	0.00684	100.3325	3.45957	1.62419	0.07585	0.09599	0.0024	-0.17678	1.83947	-0.03	0.32	-1066.67
93	0.6425	223.2964	1.13513	0.06814	0.00677	0.23535	0.00374	31.14649	0.46916	0.12503	0.01243	0.00093	0.00036	153.7344	1.30851	26.37	0.22	

39Ar		meas.	meas.	meas.	40Ar												(Ma)	(Ma)		
1	0.0035	161.034	3.23825	1.26593	0.05475	0.05826	0.01201	10.62781	2.19378	2.32488	0.10064	0.01174	0.00133	144.0218	4.57599	24.71	0.78	3.16		
2	0.0046	286.43	11.30277	2.62709	0.14891	0.40136	0.03864	41.33598	3.63877	4.82932	0.27425	0.02468	0.00509	168.3263	12.39045	28.85	2.11	7.31		
3	0.0056	313.4268	10.03385	2.59654	0.17615	0.50906	0.0437	47.9306	3.82757	4.77304	0.3244	0.0265	0.00564	163.4838	13.12522	28.03	2.23	7.96		
4	0.1169	377.6067	0.93381	0.05146	0.00231	0.02261	0.00071	1.76847	0.05563	0.09442	0.00423	0.00103	0.00009	370.9132	0.94142	62.97	0.16	0.25		
5	0.1201	675.4121	17.61952	0.03478	0.05045	0.14283	0.01602	6.2488	0.68164	0.06382	0.09256	0.00506	0.00157	633.1946	17.15129	106.21	2.79	2.63		
6	0.1316	150.3167	1.54001	0.76314	0.01656	0.07402	0.00439	14.51149	0.85122	1.40101	0.03042	0.00589	0.00078	128.5474	1.84189	22.07	0.31	1.40		
7	0.1356	293.3836	4.10161	2.78952	0.06881	0.44363	0.01517	44.60949	1.39799	5.1285	0.12675	0.01778	0.00194	162.811	4.71225	27.91	0.8	2.87		
8	0.1371	127.3248	3.35456	2.30878	0.14013	0.02719	0.02492	6.16253	5.78315	4.24321	0.25796	0.0052	0.00119	119.6456	8.02268	20.55	1.37	6.67		
9	0.1615	268.2474	1.62035	0.18669	0.00646	0.06764	0.00195	7.4466	0.21012	0.34259	0.01186	0.00251	0.00042	248.2773	1.6029	42.39	0.27	0.64		
10	0.1632	822.3305	19.01846	5.73487	0.18996	2.21594	0.06421	79.57413	1.39666	10.56548	0.35138	0.04269	0.00717	168.6452	12.19203	28.9	2.07	7.16		
11	0.1668	1685.734	20.22208	0.62633	0.0475	0.67937	0.02456	11.90621	0.40611	1.14974	0.08723	0.00482	0.00225	1485.658	19.10242	239.97	2.89	1.20		
12	0.1668	1685533	964642455	-148.998	85323.2	3826.7	2190048	67.08871	12.76107	-247.362	128165.1	9.94797	5695.884	501916.7	259904192	7017.79	914153.1	13026.22		
13	0.1713	136.6619	1.78124	0.80077	0.03493	0.03172	0.00609	6.81182	1.31474	1.47014	0.06416	0.02418	0.0021	127.3971	2.4494	21.88	0.42	1.92		
14	0.1743	153.539	2.25229	1.6644	0.06678	0.06614	0.01274	12.64156	2.44534	3.05755	0.12283	0.02126	0.00217	134.2612	4.24653	23.05	0.72	3.12		
15	0.1836	186.8124	1.39432	2.00103	0.02414	0.11712	0.00491	18.44049	0.76703	3.67682	0.04441	0.0097	0.00091	152.5546	1.84727	26.17	0.31	1.18		
16	0.1855	157.2093	3.81764	0.9821	0.0864	0.02862	0.01904	5.32831	3.77796	1.80327	0.15875	0.01348	0.00464	148.9079	6.693	25.55	1.14	4.46		
17	0.1983	166.083	0.8781	4.06001	0.04507	0.03778	0.00278	6.52225	0.49391	7.47097	0.08316	0.01747	0.00077	155.6693	1.16923	26.7	0.2	0.75		
18	0.1995	180.803	5.60701	3.9162	0.1871	0.0882	0.03863	14.23841	6.29976	7.20561	0.34521	0.01507	0.00456	155.4641	12.40435	26.66	2.11	7.91		
19	0.2032	136.0328	2.68133	2.40373	0.0653	-0.00934	0.01188	-2.17602	2.57988	4.41801	0.12022	0.00416	0.00355	139.1989	4.46179	23.89	0.76	3.18		
20	0.2046	225.1212	65.6249	0.01296	0.08754	0.56894	0.04203	7.46813	0.50723	0.02379	0.16062	-0.00515	0.01119	2083.08	61.80262	328.13	8.9	2.71		
21	0.2086	2787.906	38.26107	1.36812	0.05342	8.6469	0.13346	91.64847	0.64896	2.51274	0.09821	0.01227	0.00529	233.0556	18.39473	39.82	3.11	7.81		
22	0.212	161.9771	2.41595	1.09993	0.05453	-0.01426	0.01411	-2.65792	2.57439	2.01979	0.10021	0.00074	0.00388	166.3811	4.85549	28.52	0.83	2.91		
23	0.2197	170.9929	2.27508	1.5554	0.03645	0.03943	0.00535	6.73986	0.91977	2.85709	0.06704	0.00321	0.00175	159.6159	2.64757	27.37	0.45	1.64		
24	0.221	186.5396	6.69392	9.65508	0.39876	0.1509	0.03426	23.4808	5.36043	17.83737	0.74176	-0.00669	0.00985	143.6958	11.33031	24.66	1.93	7.83		
25	0.2386	374.1197	2.64585	-0.012	0.00638	0.01701	0.00209	1.34386	0.16515	-0.02201	0.01171	0.00066	0.00045	369.0596	2.68246	62.66	0.45	0.72		
26	0.2427	172.7183	2.65262	0.34282	0.0231	0.10834	0.00694	18.52235	1.15494	0.62918	0.04241	0.00083	0.00162	140.7367	2.94812	24.15	0.5	2.07		
27	0.2436	1414.645	72.27472	-0.03684	0.09536	0.101	0.03325	2.1101	0.68614	-0.06759	0.17497	0.00233	0.00796	1384.729	71.41038	224.65	10.89	4.85		
28	0.244	603.5235	59.71328	6.34259	0.68706	1.17678	0.1551	57.53409	5.02099	11.69014	1.27202	0.02397	0.01739	257.4322	39.77754	43.94	6.71	15.27		
29	0.2446	210.6165	11.75214	6.90802	0.41084	-0.00358	0.04378	-0.77628	6.14297	12.73741	0.76125	0.02537	0.01096	213.2544	17.66372	36.47	2.99	8.20		
30	0.2709	198.0589	1.0789	1.00245	0.00872	0.09081	0.00221	13.50891	0.32185	1.84065	0.01603	0.0056	0.00026	171.3989	1.13676	29.37	0.19	0.65		
31	0.2732	161.4305	5.30173	3.50412	0.14258	0.06595	0.01862	11.89543	3.3856	6.44553	0.26292	0.01747	0.00288	142.5544	7.21598	24.46	1.23	5.03		
32	0.2743	214.6936	7.56735	5.8258	0.24932	0.12401	0.03516	16.84702	4.80328	10.73371	0.46125	0.02846	0.00557	179.237	12.14826	30.7	2.06	6.71		
33	0.2759	841.1856	27.1073	-0.09943	0.0588	0.14177	0.0285	4.9814	0.98855	-0.18242	0.10788	0.00183	0.00479	799.1985	27.06926	133.05	4.34	3.26		
34	0.2966	125.2644	0.91045	0.68999	0.01213	0.02642	0.0027	6.18831	0.635	1.26665	0.02227	0.02486	0.00034	117.5421	1.16876	20.19	0.2	0.99		
35	0.3006	139.1656	2.42138	3.05165	0.07401	0.01747	0.01053	3.52901	2.2352	5.61146	0.13639	0.00259	0.00181	134.5157	3.90147	23.09	0.67	2.90		
36	0.3018	170.0175	7.47286	3.12746	0.16317	0.22073	0.03375	38.21875	5.6217	5.75117	0.30072	0.01022	0.00364	105.2531	10.64736	18.09	1.82	10.06		
37	0.3284	200.4948	1.00535	0.91406	0.01129	0.12883	0.00203	18.95266	0.28564	1.67826	0.02075	0.00701	0.00049	162.5766	1.00801	27.87	0.17	0.61		
38	0.3409	370.6838	4.7499	0.26477	0.01315	0.051	0.00475	4.06015	0.37518	0.48591	0.02413	0.01591	0.00091	355.6715	4.76748	60.43	0.8	1.32		
39	0.3452	647.0386	9.41745	0.05066	0.03757	0.19473	0.01038	8.89306	0.45643	0.09296	0.06894	-0.00182	0.00214	589.4911	9.08042	99.08	1.48	1.49		
40	0.35	834.6833	12.65033	0.02561	0.03765	0.1736	0.00997	6.14589	0.34073	0.047	0.06909	0.00217	0.00205	783.3709	12.21694	130.51	1.96	1.50		
41	0.3529	907.0689	20.82598	0.01631	0.05671	1.05092	0.03155	34.25739	0.6658	0.09296	0.10406	-0.00091	0.00403	596.4996	14.99226	100.22	2.45	2.44		
42	0.3569	132.3019	2.30318	5.94652	0.13421	0.01287	0.01023	2.50309	2.28455	10.95706	0.24834	0.00053	0.00225	129.5027	3.78681	22.24	0.65	2.92		
43	0.3646	140.7986	1.11156	3.06809	0.04112	0.0197	0.00385	3.95555	0.80683	5.64174	0.07577	0.00512	0.00095	135.4944	1.56499	23.26	0.27	1.16		
44	0.3692	139.64	2.02032	1.20381	0.03869	0.06215	0.00564	13.08421	1.17919	2.21071	0.07112	0.01817	0.00185	121.4467	2.4134	20.86	0.41	1.97		
45	0.372	319.2705	7.34787	0.98005	0.05981	0.53226	0.02232	49.24215	1.72879	1.79951	0.1099	0.0114	0.00297	162.152	6.67047	27.8	1.13	4.06		
46	0.373	328.5543	16.17502	2.24486	0.2238	0.62876	0.04861	56.49899	3.37626	4.12555	0.41194	0.02742	0.00637	143.1384	13.17459	24.56	2.25	9.16		
47	0.3787	684.0314	9.73107	0.05631	0.02818	0.1587	0.00686	6.85523	0.27993	0.10333	0.05171	0.00008	0.00119	637.1371	9.26749	106.85	1.51	1.41		
48	0.3909	792.0516	6.42875	0.91556	0.01878	0.25533	0.00411	9.51661	0.13267	1.68102	0.03451	0.00304	0.00081	717.1119	5.91979	119.83	0.96	0.80		
49	0.3953	260.8876	3.34377	5.56597	0.10543	0.33217	0.01717	37.45287	1.88691	10.25309	0.19498	0.00166	0.00202	163.803	5.38322	28.08	0.92	3.28		
50	0.397	213.3152	6.21492	2.01067	0.09655	0.24331	0.02719	33.6322	3.63865	3.69454	0.17766	0.08538	0.00651	141.7542	8.81218	24.33	1.5	6.17		
51	0.4113	883.0353	4.40516	0.04875	0.01248	0.13032	0.00399	4.3609	0.13192	0.08945	0.0229	0.00136	0.00068	844.5277	4.37237	140.31	0.7	0.50		
52	0.4137	354.5152	5.79496	1.79087	0.06047	0.63459	0.0276	52.85818	2.13452	3.29016	0.11124	0.09678	0.00545	167.3226	8.06462	28.68	1.37	4.78		
53	0.4144	57368.98	7174.9106	0.24945	0.24596	11.67528	14.74435	60.60138	0.48505	0.45779	0.45146	0.19213	0.05317	22606.55	2841.5134	2077.64	155	7.46		
54	0.4236	1085.259	12.3415	0.15846	0.01856	0.18895														

91	0.6386	536.2181	7.34392	0.21019	0.02164	0.03584	0.00619	1.97193	0.34029	0.38573	0.03971	0.00555	0.00117	525.6932	7.42982	88.61	1.22	1.38
92	0.641	186.4141	5.14411	2.34202	0.09964	0.0414	0.0115	6.45987	1.81412	4.3044	0.18344	0.00848	0.00413	174.6331	5.89851	29.92	1	3.34
93	0.6415	471.5474	35.38714	8.48995	0.68486	0.51504	0.08887	32.1291	5.01712	15.67185	1.27184	0.06258	0.01475	321.9538	34.0313	54.78	5.7	10.41
94	0.6495	364.3814	2.29657	0.24286	0.01569	0.08627	0.00684	6.9911	0.55329	0.44569	0.02881	0.00644	0.00102	338.9376	2.9417	57.63	0.49	0.85
95	0.6499	142.005	11.28219	11.62741	0.98013	-0.03512	0.08392	-7.98427	17.45793	21.51134	1.82831	0.03342	0.02023	154.5805	27.88193	26.51	4.75	17.92
96	0.6577	175.8659	2.05029	1.48128	0.03045	0.06863	0.00439	11.46447	0.72625	2.72079	0.05599	0.00764	0.00093	155.8406	2.22864	26.73	0.38	1.42
97	0.6601	164.9976	3.49271	1.58632	0.05224	0.06719	0.01614	11.95627	2.88047	2.91395	0.09606	0.00233	0.00229	145.4068	5.67143	24.95	0.97	3.89
98	0.6621	155.9991	4.0127	0.29179	0.05856	0.1001	0.01365	18.95049	2.54171	0.5355	0.10749	0.00396	0.00331	126.4385	5.1348	21.71	0.88	4.05
99	0.663	140.4053	7.05033	4.19955	0.29643	0.10335	0.02824	21.50947	5.84416	7.72852	0.54716	0.01425	0.00806	110.5094	9.94196	18.99	1.7	8.95
100	0.6637	198.844	8.84074	5.78398	0.32921	0.15987	0.05671	23.52237	8.36346	10.65634	0.60901	0.03003	0.01149	152.6721	18.04051	26.19	3.07	11.72
101	0.6653	452.0906	19.41929	4.90725	0.23532	0.92664	0.04733	60.48219	1.68443	9.03543	0.43479	0.02157	0.00565	179.2659	10.88982	30.71	1.85	6.02
102	0.668	216.1083	6.58674	1.40715	0.0671	0.25551	0.0171	34.88847	2.08421	2.58449	0.12337	0.00262	0.00226	140.832	6.23542	24.17	1.06	4.39
103	0.6989	614.2294	3.29284	0.4494	0.00731	1.72165	0.01496	82.82517	0.56818	0.82485	0.01343	0.01142	0.00077	105.5213	3.53838	18.14	0.61	3.36
104	0.7375	345.8652	1.04294	0.45062	0.00608	0.00717	0.00129	0.60228	0.11006	0.82709	0.01117	0.00926	0.00034	343.862	1.10507	58.45	0.18	0.31
105	0.7394	255.8793	9.16492	1.55403	0.09633	0.32848	0.03562	37.88808	3.88485	2.85457	0.17715	0.00499	0.00392	159.0877	11.47645	27.28	1.95	7.15
106	0.7397	5218.063	581.28718	19.76856	2.24441	16.31807	1.82843	92.37887	1.13161	36.78616	4.23562	0.24556	0.03855	403.3038	75.31026	68.37	12.53	18.33
107	0.7871	392.0853	1.72452	0.12181	0.00429	0.0695	0.00101	5.23574	0.07273	0.22351	0.00788	0.00236	0.00022	371.5605	1.65978	63.08	0.28	0.44
108	0.7902	156.4015	2.43399	2.7239	0.06969	0.03393	0.01488	6.2681	2.81054	5.00762	0.12836	0.00107	0.00257	146.8528	4.96428	25.2	0.85	3.37
109	0.8446	152.2583	1.8866	0.03028	0.00201	0.05802	0.00135	11.26077	0.22274	0.05556	0.00369	0.00031	0.00014	135.0893	1.70844	23.19	0.29	1.25
110	0.8561	163.3699	1.41488	1.19822	0.02147	0.02161	0.00368	3.84978	0.66428	2.20044	0.03945	0.00032	0.00051	157.185	1.74372	26.96	0.3	1.11
111	0.8594	477.5519	6.2266	0.5642	0.03596	0.30421	0.017	18.81543	1.02409	1.03565	0.06603	-0.00024	0.00179	387.8288	7.05554	65.79	1.18	1.79
112	0.8635	200.5381	2.30048	0.39767	0.03108	0.1858	0.01434	27.36546	2.09047	0.72987	0.05706	0.00221	0.00181	145.6793	4.51847	25	0.77	3.08
113	0.8636	4052.418	4251.7585	6.65	7.87309	7.68148	8.19645	55.99977	10.89839	12.25942	14.58268	1.25053	1.33113	1791.474	1940.0193	285.64	286.06	100.15
114	0.8642	229.5777	19.38802	5.76062	0.5308	0.26075	0.09346	33.35943	11.69554	10.61312	0.98192	0.06307	0.01595	153.597	29.95006	26.34	5.1	19.36
115	0.8869	239.9594	1.80985	0.04267	0.00571	0.06081	0.002	7.48819	0.23945	0.0783	0.01048	0.00088	0.00036	221.97	1.77257	37.95	0.3	0.79
116	0.9222	165.958	1.19141	0.17073	0.00603	0.15344	0.00298	27.31808	0.49381	0.31331	0.01106	0.01328	0.0005	120.6144	1.19301	20.72	0.2	0.97
117	0.9284	163.6299	3.13873	1.36625	0.03936	0.02655	0.00491	4.72745	0.88231	2.50931	0.07235	0.00327	0.00087	156.0167	3.32713	26.76	0.57	2.13
118	0.943	161.9873	1.57325	0.89162	0.01984	0.01041	0.00286	1.85435	0.5209	1.63703	0.03645	0.00432	0.00039	159.0545	1.76199	27.27	0.3	1.10
119	0.9542	158.2385	1.48548	1.88436	0.03205	0.08746	0.00485	16.23808	0.89333	3.46215	0.05896	-0.00014	0.00072	132.6954	1.89201	22.78	0.32	1.40
120	0.9738	166.607	0.93065	1.50193	0.02338	0.04896	0.00207	8.61141	0.36396	2.75877	0.04299	0.00645	0.00051	152.3943	1.0496	26.14	0.18	0.69
121	1	152.1581	1.03343	0.05683	0.00626	0.01822	0.0021	3.53547	0.40722	0.10428	0.01148	0.00082	0.00026	146.7558	1.17448	25.18	0.2	0.79

Integrated	378.1977	0.44784	0.90396	0.00242	0.31927	0.00104	24.92768	0.07616	1.65971	0.00445	0.0075	0.00011	284.0809	0.44379	48.43	0.25	0.52
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Notes:

Parsed grains less than -2 Ma

Parsed grains between -2 Ma and zero not within one sigma of zero

Parsed grains that did not pass 50% error filter applied to ages between 2 Ma and 5 Ma

Parsed grains that did not pass 20% error filter applied to >5 Ma ages

Did not parse grains 2 Ma to zero