

Low-volume magmatism linked to flank spreading on Santa Cruz Island in the Galápagos Archipelago using cosmogenic $^3\text{He}/^4\text{He}$ exposure dating of fault scarps and $^{40}\text{Ar}/^{39}\text{Ar}$ ages of lavas

D. M. Schwartz¹, K. Harpp, M. D. Kurz, E. Wilson, R. Van Kirk

¹*Dept. of Geosciences, Boise State University, Boise, Idaho, USA, darinschwartz@boisestate.edu*

Online Resource 1 $^{40}\text{Ar}/^{39}\text{Ar}$ data and calculated ages for lavas collected on Santa Cruz Island. Plateau and inverse isochron ages for each sample in this resource are summarized in Table 1

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Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02132	1.8 %	7.27950	14.1170	0.3861060	6.29152	5.47510	2.66 ± 5.78	0.25	1.57	0.1916 ± 0.1747
14D02134	2.0 %	6.24070	7.3879	0.3097427	5.68705	8.43836	4.54 ± 5.65	0.46	1.42	0.3310 ± 0.5775
14D02135	2.2 %	5.84551	4.8069	0.2908509	5.70976	8.22469	4.41 ± 5.24	0.48	1.42	0.5108 ± 1.3573
14D02136	2.4 %	5.12602	9.2681	0.2641792	5.45156	9.95761	5.59 ± 4.89	0.66	1.36	0.2529 ± 0.3606
14D02138	2.7 %	6.28250	20.3889	0.2845014	8.05718	22.42228	8.53 ± 3.96	1.22	2.01	0.1699 ± 0.1131
14D02139	3.0 %	5.78032	36.3745	0.3435351	8.06678	20.26505	7.69 ± 3.72	1.20	2.01	0.0954 ± 0.0336
14D02140	3.3 %	6.01812	38.2025	0.3416870	9.14724	23.84822	7.99 ± 3.38	1.36	2.28	0.1030 ± 0.0368
14D02142	3.6 %	4.96575	34.2015	0.2724761	7.62827	12.02298	4.82 ± 3.44	0.83	1.90	0.0959 ± 0.0347
14D02143	3.9 %	5.88216	55.6960	0.3300088	10.26675	17.22807	5.14 ± 2.95	1.00	2.56	0.0793 ± 0.0191
14D02144	4.2 %	6.13512	51.2325	0.2919637	8.82703	17.43254	6.05 ± 3.57	0.97	2.20	0.0741 ± 0.0192
14D02146	4.5 % ✓	5.26691	63.0529	0.2912999	9.58118	15.80355	5.05 ± 2.89	1.03	2.39	0.0653 ± 0.0132
14D02147	4.8 % ✓	6.24033	94.4255	0.2731170	12.16284	20.15564	5.07 ± 2.66	1.11	3.03	0.0554 ± 0.0075
14D02148	5.1 % ✓	5.81293	106.1887	0.2636550	12.27906	20.71931	5.16 ± 2.46	1.22	3.06	0.0497 ± 0.0060
14D02150	5.4 % ✓	5.69436	123.8655	0.2780528	12.79944	15.30140	3.66 ± 2.33	0.92	3.19	0.0444 ± 0.0046
14D02151	5.7 % ✓	5.48917	131.5667	0.1759873	12.69809	20.62225	4.97 ± 2.27	1.29	3.17	0.0415 ± 0.0042
14D02152	6.1 % ✓	5.92888	178.0513	0.2177151	15.63972	10.39907	2.03 ± 1.94	0.60	3.90	0.0378 ± 0.0028
14D02154	6.5 % ✓	6.17443	222.4772	0.1993069	18.63140	14.46174	2.37 ± 1.71	0.80	4.65	0.0360 ± 0.0022
14D02155	6.9 % ✓	6.40081	213.5168	0.1555441	17.76946	17.67683	3.04 ± 1.86	0.94	4.43	0.0358 ± 0.0022
14D02156	7.3 % ✓	6.25005	216.2880	0.0912504	17.07562	15.38426	2.76 ± 1.88	0.84	4.26	0.0339 ± 0.0020
14D02158	7.8 % ✓	7.23772	283.7202	0.1505837	20.86532	20.99996	3.08 ± 1.78	0.99	5.20	0.0316 ± 0.0015
14D02159	8.3 % ✓	6.90331	241.2946	0.1465126	18.43120	18.05273	3.00 ± 1.93	0.89	4.60	0.0328 ± 0.0019
14D02160	8.8 % ✓	6.78963	213.8232	0.0891078	16.18262	20.47287	3.87 ± 2.15	1.03	4.04	0.0325 ± 0.0021
14D02162	9.3 % ✓	7.20428	202.3109	0.0466801	16.17695	21.41360	4.05 ± 2.27	1.02	4.04	0.0344 ± 0.0023
14D02163	9.9 % ✓	6.87786	178.4896	0.0454669	13.41364	19.64264	4.48 ± 2.62	0.98	3.35	0.0323 ± 0.0024
14D02164	10.5 % ✓	7.20073	162.6750	0.0540676	13.00117	25.13217	5.92 ± 2.80	1.20	3.24	0.0344 ± 0.0028
14D02166	11.2 % ✓	7.47994	150.9155	0.0732057	12.02079	30.38105	7.74 ± 3.14	1.39	3.00	0.0343 ± 0.0029
14D02167	11.9 %	7.28500	120.9451	0.0940957	10.71422	23.98997	6.86 ± 3.45	1.13	2.67	0.0381 ± 0.0043
14D02168	12.8 %	8.72686	138.1465	0.0966314	10.83143	29.76440	8.42 ± 4.04	1.17	2.70	0.0337 ± 0.0031
14D02170	13.9 %	8.08877	122.9689	0.1036814	10.70589	26.46113	7.57 ± 3.79	1.12	2.67	0.0374 ± 0.0039
14D02171	15.2 %	9.13412	130.6623	0.1094005	11.28199	17.36621	4.71 ± 4.01	0.65	2.81	0.0371 ± 0.0037
14D02172	16.7 %	9.68605	146.0179	0.1264481	12.14981	14.54358	3.66 ± 3.94	0.51	3.03	0.0358 ± 0.0033
14D02174	18.2 %	9.89145	144.0067	0.0977929	11.69366	12.17072	3.18 ± 4.17	0.42	2.92	0.0349 ± 0.0032
14D02175	19.7 %	9.85487	161.3857	0.1140988	10.47055	8.14274	2.38 ± 4.65	0.28	2.61	0.0279 ± 0.0022
14D02177	21.2 %	9.68404	132.5218	0.0476731	9.18575	1.10536	0.37 ± 5.20	0.04	2.29	0.0298 ± 0.0029
Σ		234.85817	4150.9923	6.4564259	400.89494	572.31717				

Information on Analysis	Results	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Sample = SC12-070	Age Plateau	1.21076 ± 0.21654 ± 17.88%	3.70 ± 0.66 ± 17.91%	1.48	59.55	0.0345 ± 0.0019
Material = Groundmass			Full External Error ± 0.67	10%	16	
Location = Galapagos St. Cruz Island			Analytical Error ± 0.66	1.73	2σ Confidence Limit	
Analyst = Dan Miggins				1.2147	Error Magnification	
Project = GALAPAGOS HARPP (13-07)	Total Fusion Age	1.42760 ± 0.16961 ± 11.88%	4.37 ± 0.52 ± 11.90%		34	0.0415 ± 0.0008
Mass Discrimination Law = LUN			Full External Error ± 0.53			
Irradiation = 13-OSU-03			Analytical Error ± 0.52			
J = 0.00169023 ± 0.14800000						
FCT-3 = 28.340 ± 0.564 Ma						

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Normal Isochron		39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02132	1.8 %	0.86 $\pm$ 0.01	296.25 $\pm$ 1.64	0.4134
14D02134	2.0 %	0.91 $\pm$ 0.01	294.15 $\pm$ 1.67	0.3853
14D02135	2.2 %	0.98 $\pm$ 0.01	294.09 $\pm$ 1.66	0.3924
14D02136	2.4 %	1.06 $\pm$ 0.02	293.56 $\pm$ 1.69	0.3735
14D02138	2.7 %	1.28 $\pm$ 0.01	291.93 $\pm$ 1.63	0.5039
14D02139	3.0 %	1.40 $\pm$ 0.01	291.99 $\pm$ 1.67	0.5205
14D02140	3.3 %	1.52 $\pm$ 0.01	291.54 $\pm$ 1.65	0.5667
14D02142	3.6 %	1.54 $\pm$ 0.02	293.08 $\pm$ 1.71	0.4898
14D02143	3.9 %	1.75 $\pm$ 0.02	292.57 $\pm$ 1.66	0.5991
14D02144	4.2 %	1.44 $\pm$ 0.01	292.66 $\pm$ 1.66	0.5424
14D02146	4.5 % ✓	1.82 $\pm$ 0.02	292.50 $\pm$ 1.70	0.5944
14D02147	4.8 % ✓	1.95 $\pm$ 0.02	292.27 $\pm$ 1.67	0.6373
14D02148	5.1 % ✓	2.11 $\pm$ 0.02	291.94 $\pm$ 1.68	0.6753
14D02150	5.4 % ✓	2.25 $\pm$ 0.02	292.81 $\pm$ 1.70	0.6867
14D02151	5.7 % ✓	2.31 $\pm$ 0.02	291.74 $\pm$ 1.69	0.6843
14D02152	6.1 % ✓	2.64 $\pm$ 0.02	293.75 $\pm$ 1.66	0.7366
14D02154	6.5 % ✓	3.02 $\pm$ 0.02	293.16 $\pm$ 1.67	0.7869
14D02155	6.9 % ✓	2.78 $\pm$ 0.02	292.74 $\pm$ 1.67	0.7852
14D02156	7.3 % ✓	2.73 $\pm$ 0.02	293.04 $\pm$ 1.67	0.7793
14D02158	7.8 % ✓	2.88 $\pm$ 0.02	292.60 $\pm$ 1.66	0.8065
14D02159	8.3 % ✓	2.67 $\pm$ 0.02	292.88 $\pm$ 1.67	0.7951
14D02160	8.8 % ✓	2.38 $\pm$ 0.02	292.48 $\pm$ 1.65	0.7563
14D02162	9.3 % ✓	2.25 $\pm$ 0.02	292.53 $\pm$ 1.64	0.7468
14D02163	9.9 % ✓	1.95 $\pm$ 0.02	292.64 $\pm$ 1.65	0.6828
14D02164	10.5 % ✓	1.81 $\pm$ 0.01	292.01 $\pm$ 1.63	0.6989
14D02166	11.2 % ✓	1.61 $\pm$ 0.01	291.44 $\pm$ 1.62	0.6469
14D02167	11.9 %	1.47 $\pm$ 0.01	292.21 $\pm$ 1.64	0.6271
14D02168	12.8 %	1.24 $\pm$ 0.01	292.09 $\pm$ 1.61	0.5981
14D02170	13.9 %	1.32 $\pm$ 0.01	292.23 $\pm$ 1.62	0.6068
14D02171	15.2 %	1.24 $\pm$ 0.01	293.60 $\pm$ 1.60	0.6237
14D02172	16.7 %	1.25 $\pm$ 0.01	294.00 $\pm$ 1.61	0.6652
14D02174	18.2 %	1.18 $\pm$ 0.01	294.27 $\pm$ 1.60	0.6419
14D02175	19.7 %	1.06 $\pm$ 0.01	294.67 $\pm$ 1.61	0.6114
14D02177	21.2 %	0.95 $\pm$ 0.01	295.61 $\pm$ 1.61	0.5766

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	290.42 $\pm$ 2.33	0.91115 $\pm$ 0.99032	2.78 $\pm$ 3.02	0.27
Overestimated Error	$\pm$ 0.80%	$\pm$ 108.69%	$\pm$ 108.61%	100%
			Full External Error $\pm$ 3.02	
			Analytical Error $\pm$ 3.02	
Statistics	2 σ Confidence Limit	1.76	Convergence	0.000006291649
	Error Magnification	1.0000	Number of Iterations	2
	Number of Data Points	16	Calculated Line	Weighted York-2

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Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02132	1.8 %	0.0029174 $\pm$ 0.0000350	0.00337550 $\pm$ 0.00001869	0.0077
14D02134	2.0 %	0.0030981 $\pm$ 0.0000413	0.00339965 $\pm$ 0.00001932	0.0092
14D02135	2.2 %	0.0033213 $\pm$ 0.0000429	0.00340029 $\pm$ 0.00001921	0.0110
14D02136	2.4 %	0.0036228 $\pm$ 0.0000500	0.00340649 $\pm$ 0.00001956	0.0131
14D02138	2.7 %	0.0043931 $\pm$ 0.0000412	0.00342547 $\pm$ 0.00001915	0.0134
14D02139	3.0 %	0.0047794 $\pm$ 0.0000437	0.00342473 $\pm$ 0.00001959	0.0158
14D02140	3.3 %	0.0052136 $\pm$ 0.0000419	0.00343009 $\pm$ 0.00001944	0.0168
14D02142	3.6 %	0.0052415 $\pm$ 0.0000526	0.00341205 $\pm$ 0.00001989	0.0190
14D02143	3.9 %	0.0059657 $\pm$ 0.0000443	0.00341797 $\pm$ 0.00001945	0.0189
14D02144	4.2 %	0.0049162 $\pm$ 0.0000422	0.00341695 $\pm$ 0.00001940	0.0150
14D02146	4.5 % ✓	0.0062192 $\pm$ 0.0000475	0.00341881 $\pm$ 0.00001986	0.0224
14D02147	4.8 % ✓	0.0066687 $\pm$ 0.0000452	0.00342149 $\pm$ 0.00001960	0.0183
14D02148	5.1 % ✓	0.0072357 $\pm$ 0.0000443	0.00342541 $\pm$ 0.00001966	0.0233
14D02150	5.4 % ✓	0.0076764 $\pm$ 0.0000459	0.00341515 $\pm$ 0.00001978	0.0245
14D02151	5.7 % ✓	0.0079292 $\pm$ 0.0000476	0.00342767 $\pm$ 0.00001985	0.0264
14D02152	6.1 % ✓	0.0089802 $\pm$ 0.0000455	0.00340430 $\pm$ 0.00001924	0.0272
14D02154	6.5 % ✓	0.0102931 $\pm$ 0.0000450	0.00341113 $\pm$ 0.00001946	0.0289
14D02155	6.9 % ✓	0.0094833 $\pm$ 0.0000419	0.00341602 $\pm$ 0.00001954	0.0267
14D02156	7.3 % ✓	0.0093233 $\pm$ 0.0000417	0.00341252 $\pm$ 0.00001941	0.0277
14D02158	7.8 % ✓	0.0098526 $\pm$ 0.0000402	0.00341765 $\pm$ 0.00001936	0.0229
14D02159	8.3 % ✓	0.0091159 $\pm$ 0.0000389	0.00341431 $\pm$ 0.00001945	0.0238
14D02160	8.8 % ✓	0.0081489 $\pm$ 0.0000391	0.00341898 $\pm$ 0.00001933	0.0222
14D02162	9.3 % ✓	0.0076761 $\pm$ 0.0000378	0.00341848 $\pm$ 0.00001922	0.0192
14D02163	9.9 % ✓	0.0066643 $\pm$ 0.0000395	0.00341712 $\pm$ 0.00001928	0.0175
14D02164	10.5 % ✓	0.0061831 $\pm$ 0.0000347	0.00342454 $\pm$ 0.00001909	0.0171
14D02166	11.2 % ✓	0.0055143 $\pm$ 0.0000356	0.00343126 $\pm$ 0.00001909	0.0139
14D02167	11.9 %	0.0050332 $\pm$ 0.0000344	0.00342223 $\pm$ 0.00001916	0.0136
14D02168	12.8 %	0.0042492 $\pm$ 0.0000311	0.00342361 $\pm$ 0.00001891	0.0091
14D02170	13.9 %	0.0045292 $\pm$ 0.0000324	0.00342198 $\pm$ 0.00001892	0.0108
14D02171	15.2 %	0.0042069 $\pm$ 0.0000285	0.00340601 $\pm$ 0.00001861	0.0089
14D02172	16.7 %	0.0042666 $\pm$ 0.0000259	0.00340138 $\pm$ 0.00001858	0.0089
14D02174	18.2 %	0.0040174 $\pm$ 0.0000259	0.00339824 $\pm$ 0.00001849	0.0081
14D02175	19.7 %	0.0036056 $\pm$ 0.0000253	0.00339358 $\pm$ 0.00001856	0.0074
14D02177	21.2 %	0.0032087 $\pm$ 0.0000246	0.00338279 $\pm$ 0.00001847	0.0070

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Inverse Isochron	290.42 $\pm$ 2.33	0.91135 $\pm$ 0.67661	2.78 $\pm$ 2.06	0.27
Overestimated Error	$\pm$ 0.80%	$\pm$ 74.24%	$\pm$ 74.19%	100%
			Full External Error $\pm$ 2.07	
			Analytical Error $\pm$ 2.06	
Statistics	2 σ Confidence Limit	1.76	Convergence	0.0000021103
	Error Magnification	1.0000	Number of Iterations	3
	Number of Data Points	16	Calculated Line	Weighted York-2
	Spreading Factor	0.4%		

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Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02132	1.8 %	7.28338	0.273	14.1170	45.578	1.820204	2.107	6.30102	0.594	2156.574	0.036	0.87024 ± 1.89284	2.66 ± 5.78	0.25	1.57	0.1916 ± 0.1747
14D02134	2.0 %	6.24277	0.280	7.3879	87.227	1.541875	2.496	5.69203	0.660	1835.694	0.042	1.48378 ± 1.84242	4.54 ± 5.65	0.46	1.42	0.3310 ± 0.5775
14D02135	2.2 %	5.84690	0.277	4.8069	132.868	1.449022	2.606	5.71300	0.639	1719.129	0.045	1.44046 ± 1.70909	4.41 ± 5.24	0.48	1.42	0.5108 ± 0.3573
14D02136	2.4 %	5.12858	0.280	9.2681	71.283	1.285560	2.942	5.45780	0.683	1504.788	0.051	1.82656 ± 1.59541	5.59 ± 4.89	0.66	1.36	0.2529 ± 0.3606
14D02138	2.7 %	6.28800	0.275	20.3889	33.284	1.553225	2.438	8.07090	0.462	1834.055	0.042	2.78290 ± 1.28791	8.53 ± 3.96	1.22	2.01	0.1699 ± 0.1131
14D02139	3.0 %	5.79006	0.280	36.3745	17.594	1.520723	2.589	8.09126	0.451	1687.828	0.045	2.51216 ± 1.21078	7.69 ± 3.72	1.20	2.01	0.0954 ± 0.0336
14D02140	3.3 %	6.02834	0.278	38.2025	17.863	1.575879	2.504	9.17295	0.396	1754.515	0.044	2.60715 ± 1.10193	7.99 ± 3.38	1.36	2.28	0.1030 ± 0.0368
14D02142	3.6 %	4.97489	0.284	34.2015	18.071	1.292139	3.155	7.65129	0.495	1455.364	0.053	1.57611 ± 1.12134	4.82 ± 3.44	0.83	1.90	0.0959 ± 0.0347
14D02143	3.9 %	5.89700	0.279	55.6960	12.025	1.553962	2.524	10.30423	0.364	1720.961	0.045	1.67805 ± 0.95322	5.14 ± 2.95	1.00	2.56	0.0793 ± 0.0191
14D02144	4.2 %	6.14876	0.278	51.2325	12.955	1.546191	2.529	8.86151	0.423	1795.504	0.043	1.97490 ± 1.16568	6.05 ± 3.57	0.97	2.20	0.0741 ± 0.0192
14D02146	4.5 %	5.28368	0.283	63.0529	10.088	1.393484	2.959	9.62361	0.374	1540.579	0.050	1.64944 ± 0.94335	5.05 ± 2.89	1.03	2.39	0.0653 ± 0.0132
14D02147	4.8 %	6.26537	0.281	94.4255	6.761	1.590973	2.393	12.22639	0.333	1823.875	0.042	1.65715 ± 0.86843	5.07 ± 2.66	1.11	3.03	0.0554 ± 0.0075
14D02148	5.1 %	5.84107	0.281	106.1887	6.028	1.504587	2.669	12.35052	0.299	1697.013	0.045	1.68737 ± 0.80286	5.16 ± 2.46	1.22	3.06	0.0497 ± 0.0060
14D02150	5.4 %	5.72718	0.283	123.8655	5.217	1.505204	2.677	12.88280	0.291	1667.395	0.046	1.19547 ± 0.76121	3.66 ± 2.33	0.92	3.19	0.0444 ± 0.0046
14D02151	5.7 %	5.52397	0.282	131.5667	4.993	1.364705	2.756	12.78663	0.292	1601.439	0.048	1.62404 ± 0.73962	4.97 ± 2.27	1.29	3.17	0.0415 ± 0.0042
14D02152	6.1 %	5.97597	0.275	178.0513	3.725	1.528551	2.633	15.75954	0.246	1741.600	0.044	0.66491 ± 0.63313	2.03 ± 1.71	0.60	3.90	0.0378 ± 0.0028
14D02154	6.5 %	6.23324	0.278	222.4772	2.983	1.596257	2.522	18.78113	0.212	1810.100	0.042	0.77620 ± 0.55867	2.37 ± 1.71	0.80	4.65	0.0360 ± 0.0022
14D02155	6.9 %	6.45725	0.279	213.5168	3.020	1.583751	2.436	17.91316	0.214	1873.781	0.041	0.99479 ± 0.60688	3.04 ± 1.86	0.94	4.43	0.0358 ± 0.0022
14D02156	7.3 %	6.30719	0.277	216.2880	2.982	1.483770	2.660	17.22118	0.217	1831.523	0.042	0.90095 ± 0.61520	2.76 ± 1.88	0.84	4.26	0.0339 ± 0.0020
14D02158	7.8 %	7.31269	0.277	283.7202	2.344	1.780199	2.110	21.05627	0.198	2117.768	0.036	1.00645 ± 0.58044	3.08 ± 1.78	0.99	5.20	0.0316 ± 0.0015
14D02159	8.3 %	6.96707	0.278	241.2946	2.873	1.680028	2.380	18.59360	0.207	2021.893	0.038	0.97947 ± 0.63037	3.00 ± 1.93	0.89	4.60	0.0328 ± 0.0019
14D02160	8.8 %	6.94612	0.276	213.8232	3.274	1.571970	2.551	16.32652	0.233	1985.880	0.039	1.26511 ± 0.70087	3.87 ± 2.15	1.03	4.94	0.0325 ± 0.0021
14D02162	9.3 %	7.25771	0.276	202.3109	3.311	1.605374	2.424	16.31310	0.240	2107.466	0.036	1.32371 ± 0.73988	4.05 ± 2.27	1.02	4.04	0.0344 ± 0.0023
14D02163	9.9 %	6.92500	0.276	178.4896	3.646	1.508396	2.583	13.53376	0.289	2012.779	0.038	1.46438 ± 0.85476	4.48 ± 2.62	0.98	3.35	0.0323 ± 0.0024
14D02164	10.5 %	7.24370	0.274	162.6750	4.020	1.570449	2.450	13.11065	0.274	2102.696	0.037	1.93307 ± 0.91225	5.92 ± 2.80	1.20	3.24	0.0344 ± 0.0028
14D02166	11.2 %	7.51981	0.274	150.9155	4.281	1.628679	2.435	12.12235	0.316	2179.952	0.035	2.52738 ± 1.02284	7.74 ± 3.14	1.39	3.00	0.0343 ± 0.0029
14D02167	11.9 %	7.31696	0.275	120.9451	5.590	1.594401	2.508	10.79562	0.335	2128.737	0.036	2.23908 ± 1.12495	6.86 ± 3.45	1.13	2.67	0.0381 ± 0.0043
14D02168	12.8 %	8.76337	0.273	138.1465	4.654	1.870145	2.151	10.92440	0.359	2549.032	0.030	2.74797 ± 1.31528	8.42 ± 4.04	1.17	2.70	0.0337 ± 0.0031
14D02170	13.9 %	8.12127	0.273	122.9689	5.211	1.754398	2.175	10.78865	0.351	2363.781	0.033	2.47164 ± 1.23466	7.57 ± 3.79	1.12	2.67	0.0374 ± 0.0038
14D02171	15.2 %	9.18686	0.270	130.6623	5.033	1.963118	2.021	11.36993	0.332	2681.777	0.029	1.53929 ± 1.30694	4.71 ± 4.01	0.65	2.81	0.0371 ± 0.0037
14D02172	16.7 %	9.72465	0.270	146.0179	4.591	2.095331	1.856	12.24808	0.298	2847.695	0.027	1.19702 ± 1.28687	3.66 ± 3.94	0.51	3.03	0.0358 ± 0.0033
14D02174	18.2 %	9.92950	0.269	144.0067	4.544	2.099595	1.911	11.79058	0.316	2910.763	0.027	1.04080 ± 1.36034	3.18 ± 4.17	0.42	2.92	0.0349 ± 0.0032
14D02175	19.7 %	9.89753	0.270	161.3857	3.973	2.097562	1.801	10.57916	0.344	2903.983	0.027	0.77768 ± 1.52097	2.38 ± 4.65	0.28	2.61	0.0279 ± 0.0022
14D02177	21.2 %	9.71904	0.270	132.5218	4.851	1.980574	2.034	9.27494	0.376	2862.748	0.027	0.12033 ± 1.70098	0.37 ± 5.20	0.04	2.29	0.0298 ± 0.0029
Σ		235.95667	0.048	4150.9923	0.921	55.490591	0.412	403.68856	0.054	68828.678	0.007					

Information on Analysis
and Constants Used In Calculations

Sample = SC12-070
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan Miggins
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00169023 ± 0.14800000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 27
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 77 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat/Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40Ar/36(a) = 295.50
Atmospheric Ratio 38Ar/36(a) = 0.1869
Production Ratio 39Ar/37(ca) = 0.000673
Production Ratio 38Ar/37(ca) = 0.000139
Production Ratio 40Ar/39(k) = 0.001010
Production Ratio 38Ar/39(k) = 0.011380
Production Ratio 36Ar/38(cl) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		1.21076 ± 0.21654 ± 17.88%	3.70 ± 0.66 Full External Error ± 0.67 Analytical Error ± 0.65	1.48 10%	59.55 16	0.0345 ± 0.0019
Total Fusion Age		1.42760 ± 0.16961 ± 11.88%	4.37 ± 0.52 Full External Error ± 0.53 Analytical Error ± 0.52		34	0.0415 ± 0.0008
Normal Isochron Overestimated Error	290.42 ± 2.33 ± 0.80%	0.91115 ± 0.99032 ± 108.69%	2.78 ± 3.02 ± 108.61%	0.27 100%	59.55 16	
Inverse Isochron Overestimated Error	290.42 ± 2.33 ± 0.80%	0.91135 ± 0.67661 ± 74.24%	2.78 ± 2.06 ± 74.19%	0.27 100%	59.55 16	

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02132	1.8 %	342.258076	2.035371	2.240426	1.021219	1.155906	0.007554	251.441	143.872871	1.00177663	1.035E-10
14D02134	2.0 %	322.502614	2.131218	1.297939	1.132180	1.096758	0.007856	251.458	143.922216	1.00177675	8.811E-11
14D02135	2.2 %	300.915376	1.928500	0.841393	1.117957	1.023438	0.007132	251.467	143.945907	1.00177681	8.252E-11
14D02136	2.4 %	275.713154	1.888856	1.698139	1.210546	0.939678	0.006939	251.476	143.971577	1.00177687	7.223E-11
14D02138	2.7 %	227.244145	1.054853	2.526228	0.840912	0.779095	0.004189	251.493	144.020956	1.00177699	8.804E-11
14D02139	3.0 %	208.598781	0.944519	4.495527	0.791183	0.715594	0.003797	251.501	144.044664	1.00177705	8.102E-11
14D02140	3.3 %	191.270614	0.761354	4.164688	0.744121	0.657187	0.003178	251.510	144.068376	1.00177711	8.422E-11
14D02142	3.6 %	190.211678	0.946427	4.470033	0.808100	0.650203	0.003710	251.527	144.117788	1.00177723	6.986E-11
14D02143	3.9 %	167.014943	0.613057	5.405156	0.650287	0.572289	0.002625	251.536	144.143488	1.00177730	8.251E-11
14D02144	4.2 %	202.618249	0.861106	5.781459	0.749381	0.693873	0.003513	251.544	144.167216	1.00177736	8.618E-11
14D02146	4.5 % ✓	160.083220	0.603879	6.551899	0.661397	0.549033	0.002576	251.562	144.216662	1.00177748	7.395E-11
14D02147	4.8 % ✓	149.175206	0.500280	7.723088	0.522810	0.512446	0.002231	251.570	144.240402	1.00177754	8.755E-11
14D02148	5.1 % ✓	137.404136	0.415052	8.597913	0.518880	0.472941	0.001938	251.579	144.266125	1.00177760	8.146E-11
14D02150	5.4 % ✓	129.428041	0.381841	9.614798	0.502365	0.444560	0.001805	251.597	144.315605	1.00177773	8.003E-11
14D02151	5.7 % ✓	125.243227	0.370960	10.289391	0.514591	0.432011	0.001755	251.605	144.339361	1.00177778	7.687E-11
14D02152	6.1 % ✓	110.510789	0.276054	11.297999	0.421748	0.379197	0.001400	251.613	144.363121	1.00177784	8.360E-11
14D02154	6.5 % ✓	96.378687	0.208031	11.845786	0.354203	0.331889	0.001160	251.631	144.412634	1.00177797	8.688E-11
14D02155	6.9 % ✓	104.603628	0.227945	11.919553	0.360888	0.360475	0.001268	251.640	144.438388	1.00177803	8.994E-11
14D02156	7.3 % ✓	106.352969	0.234598	12.559418	0.375489	0.366246	0.001289	251.648	144.462164	1.00177809	8.791E-11
14D02158	7.8 % ✓	100.576621	0.202492	13.474385	0.316955	0.347293	0.001182	251.665	144.511711	1.00177821	1.017E-10
14D02159	8.3 % ✓	108.741386	0.228510	12.977295	0.373745	0.374703	0.001299	251.674	144.535500	1.00177827	9.705E-11
14D02160	8.8 % ✓	121.635212	0.287267	13.096674	0.429815	0.419325	0.001516	251.683	144.561275	1.00177833	9.532E-11
14D02162	9.3 % ✓	129.188565	0.313407	12.401745	0.411649	0.444900	0.001626	251.700	144.610856	1.00177846	1.012E-10
14D02163	9.9 % ✓	148.722771	0.434249	13.188465	0.482387	0.511683	0.002048	251.708	144.634661	1.00177852	9.661E-11
14D02164	10.5 % ✓	160.380798	0.442749	12.407853	0.499924	0.552505	0.002138	251.717	144.658470	1.00177857	1.009E-10
14D02166	11.2 % ✓	179.829106	0.571815	12.449355	0.534466	0.620326	0.002593	251.734	144.708084	1.00177870	1.046E-10
14D02167	11.9 %	197.185282	0.664124	11.203161	0.627402	0.677772	0.002938	251.743	144.733890	1.00177876	1.022E-10
14D02168	12.8 %	233.333839	0.841006	12.645682	0.590270	0.802183	0.003618	251.751	144.757716	1.00177882	1.224E-10
14D02170	13.9 %	219.098855	0.771701	11.397993	0.595256	0.752761	0.003344	251.769	144.807364	1.00177894	1.135E-10
14D02171	15.2 %	235.865813	0.787094	11.491921	0.579622	0.806395	0.003453	251.777	144.831201	1.00177900	1.287E-10
14D02172	16.7 %	232.501336	0.694885	11.921696	0.548483	0.793973	0.003191	251.786	144.857029	1.00177907	1.367E-10
14D02174	18.2 %	246.872003	0.782997	12.213709	0.556304	0.842156	0.003496	251.803	144.906712	1.00177919	1.397E-10
14D02175	19.7 %	274.500345	0.945793	15.255058	0.608363	0.935568	0.004090	251.812	144.930565	1.00177925	1.394E-10
14D02177	21.2 %	308.654053	1.162050	14.288158	0.695153	1.047882	0.004847	251.829	144.980273	1.00177937	1.374E-10

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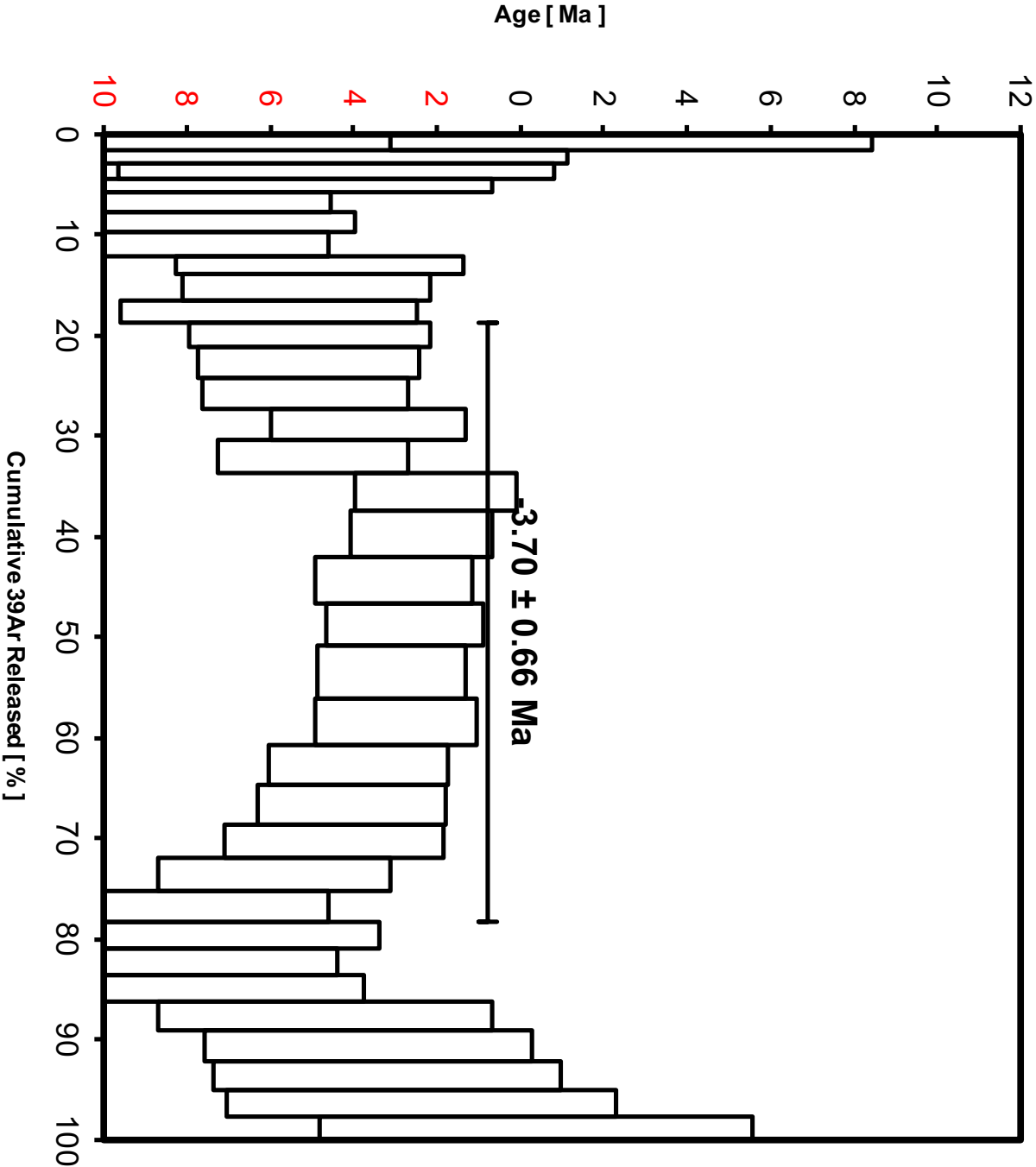
Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
14D02132	1.8 %	0.0258472	0.0023378	0.0417390	0.0312663	0.0170060	0.0276525	0.0825980	0.0253458	7.5926994	0.7633596
14D02134	2.0 %	0.0250782	0.0023378	0.0378494	0.0312663	0.0125044	0.0276525	0.0785362	0.0253458	7.3261136	0.7633596
14D02135	2.2 %	0.0247230	0.0023378	0.0360520	0.0312663	0.0104612	0.0276525	0.0767304	0.0253458	7.2038249	0.7633596
14D02136	2.4 %	0.0243485	0.0023378	0.0341559	0.0312663	0.0083338	0.0276525	0.0748794	0.0253458	7.0754978	0.7633596
14D02138	2.7 %	0.0236579	0.0023378	0.0306583	0.0312663	0.0044943	0.0276525	0.0716274	0.0253458	6.8408522	0.7633596
14D02139	3.0 %	0.0233404	0.0023378	0.0290491	0.0312663	0.0027690	0.0276525	0.0702103	0.0253458	6.7338949	0.7633596
14D02140	3.3 %	0.0230319	0.0023378	0.0274851	0.0312663	0.0011199	0.0276525	0.0688865	0.0253458	6.6306171	0.7633596
14D02142	3.6 %	0.0224182	0.0023378	0.0243717	0.0312663	0.0020707	0.0276525	0.0664282	0.0253458	6.4272729	0.7633596
14D02143	3.9 %	0.0221146	0.0023378	0.0228302	0.0312663	0.0035990	0.0276525	0.0653099	0.0253458	6.3278453	0.7633596
14D02144	4.2 %	0.0218438	0.0023378	0.0214544	0.0312663	0.0049302	0.0276525	0.0643748	0.0253458	6.2398988	0.7633596
14D02146	4.5 %	0.0213085	0.0023378	0.0187331	0.0312663	0.0074587	0.0276525	0.0627264	0.0253458	6.0684948	0.7633596
14D02147	4.8 %	0.0210656	0.0023378	0.0174965	0.0312663	0.0085547	0.0276525	0.0620789	0.0253458	5.9918935	0.7633596
14D02148	5.1 %	0.0208125	0.0023378	0.0162078	0.0312663	0.0096560	0.0276525	0.0614828	0.0253458	5.9130610	0.7633596
14D02150	5.4 %	0.0203558	0.0023378	0.0138785	0.0312663	0.0115223	0.0276525	0.0606442	0.0253458	5.7735972	0.7633596
14D02151	5.7 %	0.0201504	0.0023378	0.0128300	0.0312663	0.0123005	0.0276525	0.0603855	0.0253458	5.7123272	0.7633596
14D02152	6.1 %	0.0199541	0.0023378	0.0118268	0.0312663	0.0130025	0.0276525	0.0602201	0.0253458	5.6547367	0.7633596
14D02154	6.5 %	0.0195742	0.0023378	0.0098817	0.0312663	0.0142199	0.0276525	0.0601751	0.0253458	5.5465744	0.7633596
14D02155	6.9 %	0.0193922	0.0023378	0.0089477	0.0312663	0.0147221	0.0276525	0.0603117	0.0253458	5.4966414	0.7633596
14D02156	7.3 %	0.0192335	0.0023378	0.0081326	0.0312663	0.0151062	0.0276525	0.0605350	0.0253458	5.4543822	0.7633596
14D02158	7.8 %	0.0189321	0.0023378	0.0065796	0.0312663	0.0156614	0.0276525	0.0612998	0.0253458	5.3781601	0.7633596
14D02159	8.3 %	0.0188013	0.0023378	0.0059037	0.0312663	0.0158103	0.0276525	0.0618108	0.0253458	5.3472460	0.7633596
14D02160	8.8 %	0.0186698	0.0023378	0.0052225	0.0312663	0.0158856	0.0276525	0.0624696	0.0253458	5.3179081	0.7633596
14D02162	9.3 %	0.0184468	0.0023378	0.0040615	0.0312663	0.0157787	0.0276525	0.0640443	0.0253458	5.2736262	0.7633596
14D02163	9.9 %	0.0183537	0.0023378	0.0035739	0.0312663	0.0156097	0.0276525	0.0649440	0.0253458	5.2580435	0.7633596
14D02164	10.5 %	0.0182696	0.0023378	0.0031314	0.0312663	0.0153645	0.0276525	0.0659369	0.0253458	5.2461403	0.7633596
14D02166	11.2 %	0.0181235	0.0023378	0.0023545	0.0312663	0.0146087	0.0276525	0.0683052	0.0253458	5.2331599	0.7633596
14D02167	11.9 %	0.0180630	0.0023378	0.0020280	0.0312663	0.0140849	0.0276525	0.0696968	0.0253458	5.2327214	0.7633596
14D02168	12.8 %	0.0180165	0.0023378	0.0017737	0.0312663	0.0135218	0.0276525	0.0710785	0.0253458	5.2361495	0.7633596
14D02170	13.9 %	0.0179488	0.0023378	0.0013889	0.0312663	0.0121038	0.0276525	0.0742566	0.0253458	5.2551093	0.7633596
14D02171	15.2 %	0.0179303	0.0023378	0.0012739	0.0312663	0.0113056	0.0276525	0.0759260	0.0253458	5.2698826	0.7633596
14D02172	16.7 %	0.0179203	0.0023378	0.0012002	0.0312663	0.0103548	0.0276525	0.0778397	0.0253458	5.2900392	0.7633596
14D02174	18.2 %	0.0179311	0.0023378	0.0012074	0.0312663	0.0082747	0.0276525	0.0818277	0.0253458	5.3409392	0.7633596
14D02175	19.7 %	0.0179502	0.0023378	0.0012805	0.0312663	0.0071586	0.0276525	0.0838858	0.0253458	5.3710438	0.7633596
14D02177	21.2 %	0.0180190	0.0023378	0.0015779	0.0312663	0.0045885	0.0276525	0.0884730	0.0253458	5.4455796	0.7633596

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Intercept Values		36Ar [A]	1σ	r2		37Ar [A]	1σ	r2		38Ar [A]	1σ	r2		39Ar [A]	1σ	r2		40Ar [A]	1σ	r2
14D02132	1.8%	6.57866	0.00571	0.9867	EXP 150 of 150	0.1381	0.0306	0.0076	EXP 150 of 150	1.8153152	0.0258175	0.1132	EXP 150 of 150	6.33468	0.02383	0.5315	EXP 150 of 150	2168.69883	0.10883	0.9999
14D02134	2.0%	5.98280	0.00590	0.9815	EXP 150 of 150	0.0883	0.0309	0.0007	EXP 150 of 150	1.5358320	0.0280205	0.0286	EXP 150 of 150	5.72635	0.02707	0.4853	EXP 150 of 150	1846.87780	0.08935	0.9999
14D02135	2.2%	5.02454	0.00559	0.9843	EXP 150 of 150	0.0988	0.0303	0.0114	EXP 150 of 150	1.4420231	0.0248759	0.0340	EXP 150 of 150	5.74236	0.02556	0.5939	EXP 150 of 150	1728.94528	0.11191	0.9999
14D02136	2.4%	4.91975	0.00477	0.9817	EXP 149 of 150	0.0974	0.0324	0.0023	EXP 150 of 150	1.2784299	0.0250735	0.0579	EXP 150 of 150	5.49029	0.02674	0.4625	EXP 150 of 150	1515.02580	0.09168	0.9999
14D02138	2.7%	6.02454	0.00505	0.9865	EXP 150 of 150	0.1697	0.0341	0.0000	EXP 150 of 150	1.5303060	0.0251259	0.0204	EXP 150 of 150	8.07984	0.02852	0.7244	EXP 150 of 150	1844.76804	0.09624	0.9999
14D02139	3.0%	5.54902	0.00551	0.9816	EXP 150 of 150	0.2770	0.0304	0.0274	EXP 150 of 150	1.5032092	0.0280635	0.1480	EXP 150 of 150	8.09863	0.02531	0.7559	EXP 150 of 150	1698.10887	0.09564	0.9999
14D02140	3.3%	5.77912	0.00539	0.9834	EXP 150 of 150	0.2879	0.0344	0.0227	EXP 150 of 150	1.5580430	0.0274073	0.0932	EXP 150 of 150	9.17059	0.02494	0.7035	EXP 150 of 150	1794.82343	0.09354	0.9999
14D02142	3.6%	4.77015	0.00511	0.9780	EXP 150 of 150	0.2574	0.0282	0.0033	EXP 150 of 150	1.2746250	0.0232941	0.0334	EXP 150 of 150	7.65829	0.02731	0.7072	EXP 149 of 150	1464.88200	0.08475	0.9999
14D02143	3.9%	5.64985	0.00537	0.9826	EXP 150 of 150	0.4023	0.0331	0.0019	EXP 150 of 150	1.5316705	0.0297771	0.1081	EXP 150 of 150	10.28950	0.02054	0.8301	EXP 150 of 150	1730.90652	0.09554	0.9999
14D02144	4.2%	5.88985	0.00561	0.9822	EXP 150 of 150	0.3704	0.0326	0.0073	EXP 150 of 150	1.5226614	0.0289129	0.1590	EXP 150 of 150	8.85706	0.02664	0.7860	EXP 150 of 150	1805.51780	0.10003	0.9999
14D02146	4.5%	5.00373	0.00537	0.9777	EXP 150 of 150	0.4481	0.0298	0.0000	EXP 150 of 150	1.3692630	0.0286648	0.0584	EXP 150 of 150	9.61158	0.02443	0.8212	EXP 150 of 150	1549.88486	0.09489	0.9999
14D02147	4.8%	6.00035	0.00614	0.9796	EXP 150 of 150	0.6603	0.0296	0.0020	EXP 149 of 150	1.5632810	0.0254108	0.1288	EXP 150 of 150	12.19350	0.02948	0.8362	EXP 150 of 150	1833.69990	0.09944	0.9999
14D02148	5.1%	5.95517	0.00561	0.9801	EXP 150 of 150	0.7390	0.0299	0.0058	EXP 150 of 150	1.4768321	0.0283910	0.0632	EXP 150 of 150	12.31807	0.02527	0.8626	EXP 150 of 150	1706.45237	0.09623	0.9999
14D02150	5.4%	5.48602	0.00579	0.9786	EXP 150 of 150	0.8567	0.0303	0.0452	EXP 150 of 150	1.4755755	0.0285847	0.1428	EXP 150 of 150	12.84337	0.02810	0.8913	EXP 150 of 150	1676.67322	0.09991	0.9999
14D02151	5.7%	5.29189	0.00547	0.9794	EXP 150 of 150	0.9079	0.0312	0.0456	EXP 150 of 150	1.3359881	0.0247555	0.0394	EXP 150 of 150	12.74769	0.02588	0.8864	EXP 150 of 150	1610.51732	0.09308	0.9999
14D02152	6.1%	5.72236	0.00489	0.9854	EXP 149 of 150	1.2230	0.0313	0.0519	EXP 150 of 150	1.4971619	0.0285000	0.1523	EXP 150 of 150	15.69735	0.02720	0.9248	EXP 150 of 150	1750.91475	0.10101	0.9999
14D02154	6.5%	5.96820	0.00552	0.9826	EXP 150 of 150	1.5227	0.0306	0.0441	EXP 150 of 150	1.5526390	0.0285192	0.1029	EXP 150 of 150	18.69541	0.02788	0.9425	EXP 150 of 150	1819.45127	0.09930	0.9999
14D02155	6.9%	6.18179	0.00608	0.9812	EXP 149 of 150	1.4606	0.0288	0.0094	EXP 150 of 150	1.5499785	0.0285157	0.0763	EXP 150 of 150	17.83432	0.02809	0.9436	EXP 150 of 150	1883.21622	0.10305	0.9999
14D02156	7.3%	6.03843	0.00560	0.9828	EXP 150 of 150	1.4783	0.0288	0.0560	EXP 150 of 150	1.4508155	0.0273448	0.0409	EXP 150 of 150	17.14794	0.02475	0.9425	EXP 150 of 150	1840.82720	0.10118	0.9999
14D02158	7.8%	6.99771	0.00652	0.9835	EXP 150 of 150	1.9345	0.0294	0.1740	EXP 150 of 150	1.7431232	0.0246494	0.1362	EXP 150 of 150	20.95399	0.02997	0.9483	EXP 150 of 150	2127.59717	0.11449	0.9999
14D02159	8.3%	6.66775	0.00647	0.9820	EXP 150 of 150	1.8453	0.0331	0.0559	EXP 150 of 150	1.6440086	0.0281419	0.0984	EXP 150 of 150	18.51096	0.02684	0.9442	EXP 150 of 150	2031.48998	0.10427	0.9999
14D02160	8.8%	6.55219	0.00595	0.9840	EXP 150 of 150	1.4577	0.0342	0.0314	EXP 150 of 150	1.5371754	0.0283938	0.0531	EXP 150 of 150	16.26216	0.02006	0.9230	EXP 149 of 150	1995.37190	0.11603	0.9999
14D02162	9.3%	6.94476	0.00620	0.9846	EXP 150 of 150	1.3779	0.0314	0.0156	EXP 150 of 150	1.5702846	0.0286441	0.0507	EXP 150 of 150	16.25042	0.02781	0.9203	EXP 150 of 150	2117.16804	0.10309	0.9999
14D02163	9.9%	6.62715	0.00604	0.9843	EXP 150 of 150	1.2154	0.0299	0.0898	EXP 150 of 150	1.4749422	0.0280707	0.0465	EXP 149 of 150	13.49367	0.02625	0.8808	EXP 150 of 150	2022.26713	0.11240	0.9999
14D02164	10.5%	6.93121	0.00575	0.9872	EXP 150 of 150	1.1074	0.0304	0.0376	EXP 150 of 150	1.5381635	0.0280094	0.0902	EXP 150 of 150	13.07473	0.02363	0.9013	EXP 150 of 150	2112.36166	0.10775	0.9999
14D02166	11.2%	7.19457	0.00597	0.9870	EXP 149 of 150	1.0265	0.0298	0.0500	EXP 150 of 150	1.5947759	0.0277045	0.0505	EXP 149 of 150	12.09648	0.02731	0.8521	EXP 150 of 150	2189.76677	0.11447	0.9999
14D02167	11.9%	7.00063	0.00619	0.9854	EXP 150 of 150	0.8226	0.0303	0.0032	EXP 150 of 150	1.5611369	0.0281541	0.1033	EXP 149 of 150	10.78145	0.02448	0.8550	EXP 150 of 150	2138.44399	0.10512	0.9999
14D02168	12.8%	8.38124	0.00689	0.9871	EXP 150 of 150	0.9389	0.0296	0.0626	EXP 150 of 150	1.8341271	0.0284614	0.1550	EXP 150 of 150	10.91061	0.02876	0.7904	EXP 150 of 150	2559.62591	0.11748	0.9999
14D02170	13.9%	7.76940	0.00631	0.9877	EXP 150 of 150	0.8353	0.0295	0.0215	EXP 150 of 150	1.7211956	0.0252554	0.2201	EXP 150 of 150	10.77959	0.02697	0.8228	EXP 150 of 150	2274.00389	0.11212	0.9999
14D02171	15.2%	8.76794	0.00639	0.9859	EXP 150 of 150	0.8872	0.0311	0.0090	EXP 150 of 150	1.5281985	0.0278710	0.1477	EXP 149 of 150	11.35752	0.02673	0.8187	EXP 149 of 150	2525.85327	0.11404	0.9999
14D02172	16.7%	9.28653	0.00688	0.9895	EXP 150 of 150	0.9910	0.0322	0.0059	EXP 150 of 150	2.0597721	0.0285524	0.2676	EXP 147 of 150	12.23076	0.02466	0.8721	EXP 150 of 150	2858.97034	0.12059	0.9999
14D02174	18.2%	9.49404	0.00673	0.9904	EXP 150 of 150	0.9771	0.0306	0.0003	EXP 150 of 150	2.0606045	0.0282780	0.1180	EXP 150 of 150	11.78080	0.02591	0.8501	EXP 150 of 150	2922.22193	0.13236	0.9999
14D02175	19.7%	9.46354	0.00713	0.9892	EXP 150 of 150	1.0948	0.0291	0.1980	EXP 150 of 150	2.0651720	0.0286272	0.1929	EXP 150 of 150	10.58085	0.02479	0.8408	EXP 149 of 150	2915.45734	0.13581	0.9999
14D02177	21.2%	9.25028	0.00688	0.9892	EXP 150 of 150	0.8982	0.0296	0.0760	EXP 150 of 150	1.9521614	0.0285000	0.0756	EXP 150 of 150	9.29135	0.02278	0.8105	EXP 150 of 150	2874.23993	0.12383	0.9999

Irradiation Constants	40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(d)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
14D02132	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02134	2.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02135	2.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02136	2.4 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02138	2.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02139	3.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02140	3.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02142	3.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02143	3.9 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02144	4.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02146	4.5 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02147	4.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02148	5.1 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02150	5.4 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02151	5.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02152	6.1 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02154	6.5 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02155	6.9 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02156	7.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02158	7.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02159	8.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02160	8.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02162	9.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02163	9.9 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02164	10.5 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02166	11.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02167	11.9 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02168	12.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02170	13.9 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02171	15.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02172	16.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02174	18.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02175	19.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0
14D02177	21.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0

14D02131.AGE >>> SC12-070 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
 $-3.70 \pm 0.66 \text{ (NEG)}$
TOTAL FUSION
 $-4.37 \pm 0.52 \text{ (NEG)}$
NORMAL ISOCHRON
 2.78 ± 3.02
INVERSE ISOCHRON
 2.78 ± 2.06

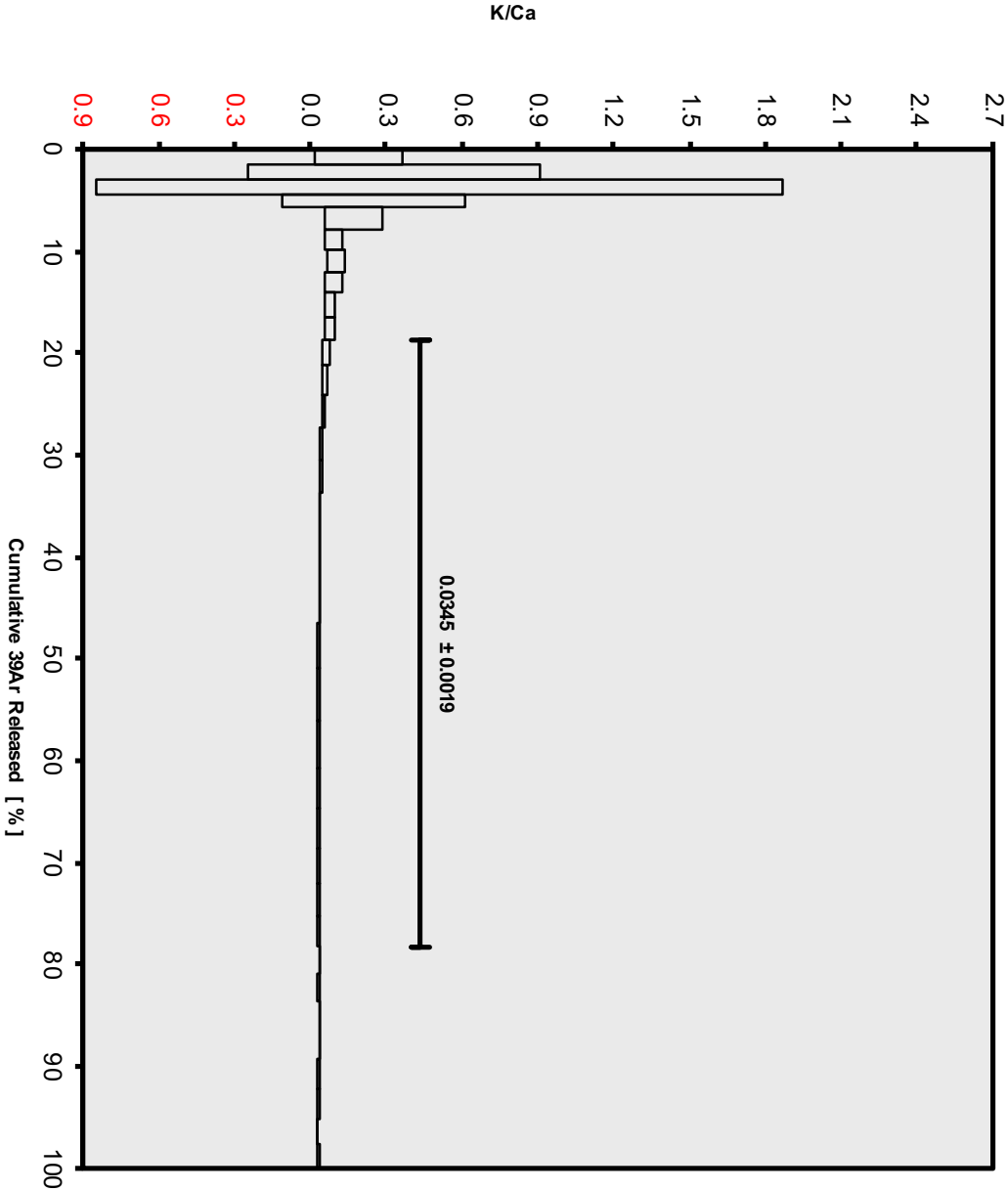
MSWD (PROBABILITY)
1.48 (10%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00169023 ±
0.14800000

14D02131.AGE >>> SC12-070 >>> GALAPAGOS | HARPP (13-07) PROJECT



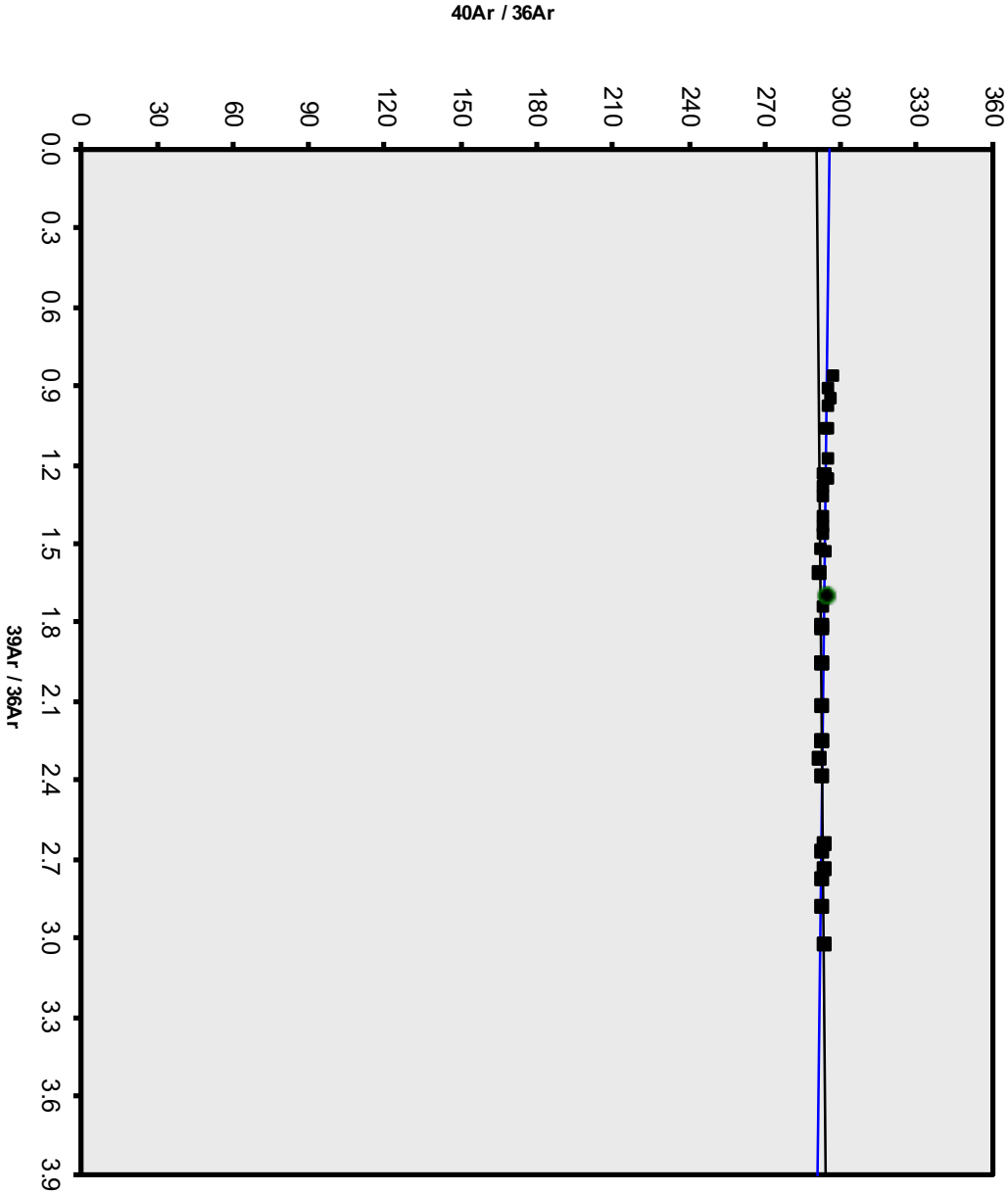
Ar-Ages in Ma

WEIGHTED
PLATEAU
-3.70 ± 0.66 (NEG)
TOTAL FUSION
-4.37 ± 0.52 (NEG)
NORMAL
ISOCHRON
2.78 ± 3.02
INVERSE
ISOCHRON
2.78 ± 2.06

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02131.AGE >>> SC12-070 >>> GALAPAGOS | HARPP (13-07) PROJECT



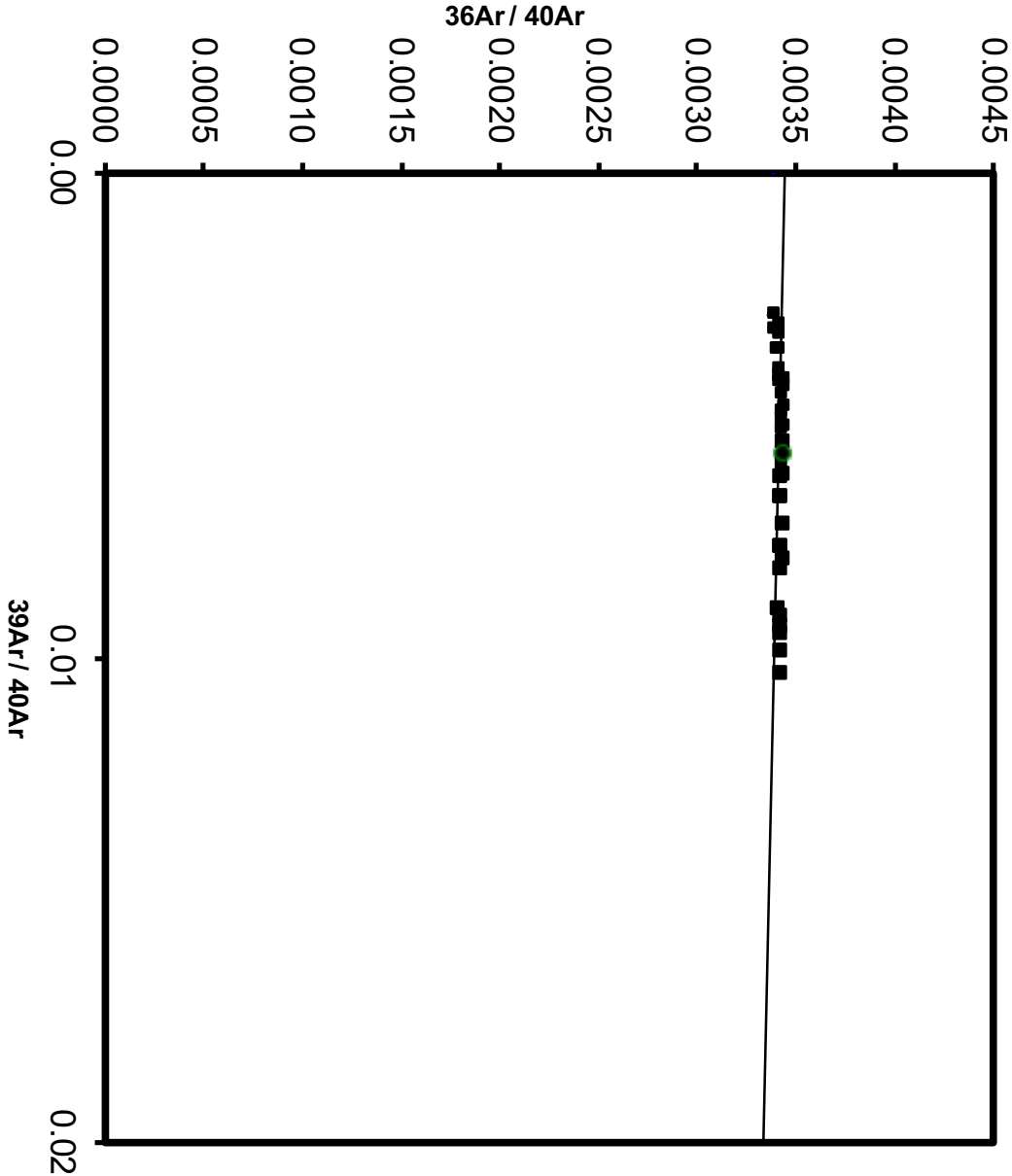
Ar-Ages in Ma

WEIGHTED
PLATEAU
-3.70 ± 0.66 (NEG)
TOTAL FUSION
-4.37 ± 0.52 (NEG)
NORMAL
ISOCHRON
2.78 ± 3.02
INVERSE
ISOCHRON
2.78 ± 2.06
MSWD
(PROBABILITY)
0.27 (100%)

Sample Info

Groundmass
Galapagos St.
Cruz Island
Dan Miggins
IRR = 13-OSU-03

14D02131.AGE >>> SC12-070 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
-3.70 ± 0.66 (NEG)
TOTAL FUSION
-4.37 ± 0.52 (NEG)
NORMAL
ISOCHRON
2.78 ± 3.02
INVERSE
ISOCHRON
2.78 ± 2.06
MSWD
(PROBABILITY)
0.27 (100%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D02189	1.7 %	1.2309030	25.6408	0.3362109	7.39462	18.607333	7629.2 $\pm$ 1180.5	4.87	1.18	0.1240 $\pm$ 0.0795
14D02191	1.8 %	0.6211307	11.3642	0.2495233	5.53518	8.332430	4567.9 $\pm$ 1110.0	4.34	0.88	0.2094 $\pm$ 0.3090
14D02192	1.9 %	0.3250865	9.6298	0.1200129	4.43376	4.395033	3009.2 $\pm$ 1174.7	4.37	0.70	0.1980 $\pm$ 0.3500
14D02193	2.1 %	0.4147497	15.6525	0.2620384	6.60635	2.909541	1337.6 $\pm$ 855.7	2.32	1.05	0.1815 $\pm$ 0.1957
14D02195	2.3 %	0.3554655	21.4071	0.3562364	8.00836	2.469734	936.7 $\pm$ 661.5	2.30	1.27	0.1609 $\pm$ 0.1240
14D02196	2.5 %	0.2839622	30.9888	0.2946475	8.89585	2.499393	853.4 $\pm$ 554.8	2.89	1.41	0.1234 $\pm$ 0.0637
14D02198	2.8 %	0.2723192	31.8417	0.3121579	10.55354	2.028804	584.0 $\pm$ 488.7	2.46	1.68	0.1425 $\pm$ 0.0728
14D02199	3.2 %	0.3028310	57.2409	0.4676087	17.81578	1.730279	295.1 $\pm$ 289.7	1.90	2.83	0.1338 $\pm$ 0.0388
14D02201	4.0 %	0.4567492	153.2494	1.0197245	40.31184	2.914911	219.7 $\pm$ 143.7	2.11	6.41	0.1131 $\pm$ 0.0123
14D02202	5.0 %	0.4179029	326.6669	1.2600682	65.92087	3.543024	163.3 $\pm$ 88.4	2.79	10.48	0.0868 $\pm$ 0.0046
14D02204	6.0 %	0.2872792	545.6399	1.1032574	81.63808	3.404533	126.7 $\pm$ 71.8	3.85	12.97	0.0643 $\pm$ 0.0022
14D02205	7.0 %	0.1632671	664.2873	0.7445235	76.55465	2.196645	87.2 $\pm$ 73.7	4.35	12.17	0.0496 $\pm$ 0.0015
14D02207	8.2 %	0.1385513	646.6792	0.5901554	69.51306	3.035433	132.7 $\pm$ 80.2	6.89	11.05	0.0462 $\pm$ 0.0014
14D02208	9.6 %	0.0980624	477.6376	0.4512736	56.30868	1.528209	82.5 $\pm$ 90.6	5.00	8.95	0.0507 $\pm$ 0.0019
14D02210	10.2 %	0.0618652	261.8521	0.2887089	31.42217	1.175022	113.6 $\pm$ 149.4	6.03	4.99	0.0516 $\pm$ 0.0034
14D02211	11.2 %	0.0593802	206.9803	0.1699070	26.07999	0.522632	60.9 $\pm$ 178.4	2.89	4.14	0.0542 $\pm$ 0.0044
14D02213	13.2 %	0.0826793	248.6955	0.2462087	30.70024	0.473101	46.8 $\pm$ 157.6	1.90	4.88	0.0531 $\pm$ 0.0037
14D02214	15.4 %	0.0863208	295.0243	0.2929664	30.17055	1.227629	123.6 $\pm$ 159.9	4.59	4.79	0.0440 $\pm$ 0.0026
14D02216	18.0 %	0.0972939	359.6616	0.2262319	28.18963	1.422532	153.3 $\pm$ 173.0	4.71	4.48	0.0337 $\pm$ 0.0016
14D02218	21.0 %	0.1030802	332.1932	0.2217830	23.19982	1.624196	212.7 $\pm$ 217.0	5.06	3.69	0.0300 $\pm$ 0.0016
Σ		5.8588797	4722.3332	9.0132446	629.25304	66.040413				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-038	Age Plateau	0.04111 $\pm$ 0.01012 $\pm$ 24.62%	124.9 $\pm$ 30.7 $\pm$ 24.62%	0.90	93.50	0.0459 $\pm$ 0.0064
Material = Groundmass			Full External Error $\pm$ 30.9	56%	14	
Location = Galapagos St. Cruz Island			Analytical Error $\pm$ 30.7	1.78	2 σ Confidence Limit	
Analyst = Dan Miggins				1.0000	Error Magnification	
Project = GALAPAGOS HARPP (13-07)	Total Fusion Age	0.10495 $\pm$ 0.01291 $\pm$ 12.30%	318.8 $\pm$ 39.2 $\pm$ 12.31%		20	0.0573 $\pm$ 0.0009
Mass Discrimination Law = LIN			Full External Error $\pm$ 40.1			
Irradiation = 13-OSU-03			Analytical Error $\pm$ 39.2			
J = 0.00168018 $\pm$ 0.14700000						
FCT-3 = 28.340 $\pm$ 0.564 Ma						

OSU Argon Geochronology Lab

Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02189	1.7 %		6.01 $\pm$ 0.08	310.62 $\pm$ 2.45	0.5514
14D02191	1.8 %		8.91 $\pm$ 0.17	308.91 $\pm$ 3.40	0.5750
14D02192	1.9 %		13.64 $\pm$ 0.35	309.02 $\pm$ 5.51	0.6701
14D02193	2.1 %		15.93 $\pm$ 0.32	302.52 $\pm$ 4.59	0.7400
14D02195	2.3 %		22.53 $\pm$ 0.43	302.45 $\pm$ 5.02	0.8274
14D02196	2.5 %		31.33 $\pm$ 0.66	304.30 $\pm$ 5.88	0.8722
14D02198	2.8 %	✓	38.75 $\pm$ 0.86	302.95 $\pm$ 6.39	0.9140
14D02199	3.2 %	✓	58.83 $\pm$ 1.13	301.21 $\pm$ 5.71	0.9471
14D02201	4.0 %	✓	88.26 $\pm$ 1.25	301.88 $\pm$ 4.26	0.9673
14D02202	5.0 %	✓	157.74 $\pm$ 2.43	303.98 $\pm$ 4.72	0.9766
14D02204	6.0 %	✓	284.18 $\pm$ 6.37	307.35 $\pm$ 6.98	0.9817
14D02205	7.0 %	✓	468.89 $\pm$ 17.75	308.95 $\pm$ 11.88	0.9826
14D02207	8.2 %	✓	501.71 $\pm$ 22.10	317.41 $\pm$ 14.19	0.9833
14D02208	9.6 %	✓	574.21 $\pm$ 32.58	311.08 $\pm$ 17.99	0.9799
14D02210	10.2 %	✓	507.91 $\pm$ 41.86	314.49 $\pm$ 26.50	0.9766
14D02211	11.2 %	✓	439.20 $\pm$ 37.35	304.30 $\pm$ 26.51	0.9744
14D02213	13.2 %	✓	371.32 $\pm$ 23.66	301.22 $\pm$ 19.62	0.9756
14D02214	15.4 %	✓	349.52 $\pm$ 21.26	309.72 $\pm$ 19.24	0.9763
14D02216	18.0 %	✓	289.74 $\pm$ 15.83	310.12 $\pm$ 17.28	0.9764
14D02218	21.0 %	✓	225.07 $\pm$ 12.01	311.26 $\pm$ 16.90	0.9771

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	300.54 $\pm$ 3.43	0.02248 $\pm$ 0.01619	68.3 $\pm$ 49.2	0.23
Overestimated Error	$\pm$ 1.14%	$\pm$ 72.01%	$\pm$ 72.01%	100%
			Full External Error $\pm$ 49.2	
			Analytical Error $\pm$ 49.2	
Statistics	2 σ Confidence Limit	1.82	Convergence	0.00000046640
	Error Magnification	1.0000	Number of Iterations	4
	Number of Data Points	14	Calculated Line	Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02189	1.7 %		0.0193405 $\pm$ 0.0002280	0.00321940 $\pm$ 0.00002544	0.0095
14D02191	1.8 %		0.0288476 $\pm$ 0.0004395	0.00323714 $\pm$ 0.00003564	0.0200
14D02192	1.9 %		0.0441354 $\pm$ 0.0008383	0.00323604 $\pm$ 0.00005767	0.0363
14D02193	2.1 %		0.0526537 $\pm$ 0.0007022	0.00330562 $\pm$ 0.00005017	0.0385
14D02195	2.3 %		0.0744896 $\pm$ 0.0008077	0.00330635 $\pm$ 0.00005486	0.0592
14D02196	2.5 %		0.1029490 $\pm$ 0.0010713	0.00328621 $\pm$ 0.00006355	0.0812
14D02198	2.8 %	✓	0.1279231 $\pm$ 0.0011532	0.00330087 $\pm$ 0.00006958	0.0949
14D02199	3.2 %	✓	0.1953124 $\pm$ 0.0012132	0.00331990 $\pm$ 0.00006299	0.1254
14D02201	4.0 %	✓	0.2923599 $\pm$ 0.0010549	0.00331255 $\pm$ 0.00004677	0.1275
14D02202	5.0 %	✓	0.5189258 $\pm$ 0.0017349	0.00328971 $\pm$ 0.00005107	0.1482
14D02204	6.0 %	✓	0.9246005 $\pm$ 0.0039966	0.00325361 $\pm$ 0.00007385	0.1598
14D02205	7.0 %	✓	1.5176748 $\pm$ 0.0108516	0.00323672 $\pm$ 0.00012446	0.1745
14D02207	8.2 %	✓	1.5806565 $\pm$ 0.0128489	0.00315052 $\pm$ 0.00014087	0.1726
14D02208	9.6 %	✓	1.8458439 $\pm$ 0.0213051	0.00321457 $\pm$ 0.00018588	0.1933
14D02210	10.2 %	✓	1.6150213 $\pm$ 0.0292949	0.00317972 $\pm$ 0.00026797	0.2092
14D02211	11.2 %	✓	1.4433166 $\pm$ 0.0282823	0.00328622 $\pm$ 0.00028633	0.2174
14D02213	13.2 %	✓	1.2327018 $\pm$ 0.0176328	0.00331981 $\pm$ 0.00021626	0.2091
14D02214	15.4 %	✓	1.1284855 $\pm$ 0.0151629	0.00322871 $\pm$ 0.00020059	0.2039
14D02216	18.0 %	✓	0.9342707 $\pm$ 0.0112339	0.00322455 $\pm$ 0.00017969	0.1987
14D02218	21.0 %	✓	0.7230873 $\pm$ 0.0083577	0.00321278 $\pm$ 0.00017441	0.1877

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron	300.52 $\pm$ 3.43	0.02282 $\pm$ 0.01388	69.3 $\pm$ 42.2	0.23
Overestimated Error	$\pm$ 1.14%	$\pm$ 60.83%	$\pm$ 60.83%	100%
			Full External Error $\pm$ 42.2	
			Analytical Error $\pm$ 42.2	
Statistics	2 σ Confidence Limit	1.82	Convergence	0.0074801765
	Error Magnification	1.0000	Number of Iterations	3
	Number of Data Points	14	Calculated Line	Weighted York-2
	Spreading Factor	3.9%		

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02189	1.7 %	1.2378097	0.349	25.6408	32.052	0.653981	6.012	7.41187	0.581	382.3466	0.047	2.51633 ± 0.39017	7629.2 ± 1180.5	4.87	1.18	0.1240 ± 0.0795
14D02191	1.8 %	0.6242329	0.408	11.3642	73.752	0.430183	9.199	5.54283	0.748	191.8821	0.092	1.50536 ± 0.36626	4567.9 ± 1110.0	4.34	0.88	0.2094 ± 0.3090
14D02192	1.9 %	0.3276779	0.530	9.6298	88.392	0.232566	16.415	4.44024	0.923	100.4626	0.175	0.99127 ± 0.38729	3009.2 ± 1174.7	4.37	0.70	0.1980 ± 0.3500
14D02193	2.1 %	0.4189892	0.512	15.6525	53.922	0.416911	9.252	6.61689	0.645	125.4748	0.140	0.44042 ± 0.28183	1337.6 ± 855.7	2.32	1.05	0.1815 ± 0.1957
14D02195	2.3 %	0.3612628	0.527	21.4071	38.525	0.516784	7.506	8.02277	0.511	107.5179	0.163	0.30639 ± 0.21785	936.7 ± 661.5	2.30	1.27	0.1609 ± 0.1240
14D02196	2.5 %	0.2922639	0.569	30.5898	25.780	0.453262	8.637	8.91670	0.475	86.4192	0.202	0.28999 ± 0.18267	853.4 ± 554.8	2.89	1.41	0.1234 ± 0.0837
14D02198	2.8 %	0.2808532	0.646	31.8417	25.551	0.487580	7.943	10.57497	0.393	82.5098	0.212	0.19224 ± 0.16090	584.0 ± 488.7	2.46	1.68	0.1425 ± 0.0728
14D02199	3.2 %	0.3181341	0.554	57.2409	14.598	0.734908	5.324	17.85431	0.241	91.2348	0.192	0.09712 ± 0.09537	295.1 ± 289.7	1.90	2.83	0.1338 ± 0.0388
14D02201	4.0 %	0.4976246	0.459	153.2494	5.441	1.585141	2.435	40.41497	0.127	137.9250	0.127	0.07231 ± 0.04731	219.7 ± 143.7	2.11	6.41	0.1131 ± 0.0123
14D02202	5.0 %	0.5046588	0.444	306.6669	2.638	2.133760	1.819	66.14072	0.093	127.0999	0.139	0.05375 ± 0.02911	163.3 ± 88.4	2.79	10.48	0.0868 ± 0.0046
14D02204	6.0 %	0.4317798	0.475	545.6399	1.714	2.161835	1.757	82.00530	0.086	88.3780	0.198	0.04170 ± 0.02363	126.7 ± 71.8	3.85	12.97	0.0643 ± 0.0022
14D02205	7.0 %	0.3389438	0.498	664.2873	1.474	1.738566	2.266	77.00172	0.088	50.5194	0.346	0.02869 ± 0.02427	87.2 ± 73.7	4.35	12.17	0.0496 ± 0.0015
14D02207	8.2 %	0.3095162	0.563	646.6792	1.465	1.496998	2.708	69.94828	0.090	44.0475	0.395	0.04367 ± 0.02640	132.7 ± 80.2	6.89	11.05	0.0462 ± 0.0014
14D02208	9.6 %	0.2243435	0.665	477.6376	1.860	1.176786	3.442	56.63013	0.102	30.5625	0.567	0.02714 ± 0.02982	82.5 ± 90.6	5.00	8.95	0.0507 ± 0.0019
14D02210	10.2 %	0.1311124	0.916	261.8521	3.250	0.694253	5.526	31.59840	0.150	19.4879	0.893	0.03739 ± 0.04918	113.6 ± 149.4	6.03	4.99	0.0516 ± 0.0034
14D02211	11.2 %	0.1140926	1.024	206.9803	4.092	0.506566	8.019	26.21929	0.177	18.0958	0.962	0.02004 ± 0.05871	60.9 ± 123.1	2.89	4.14	0.0542 ± 0.0044
14D02213	13.2 %	0.1484358	0.860	248.6955	3.502	0.645599	6.178	30.86761	0.154	24.9358	0.697	0.01541 ± 0.05189	46.8 ± 157.6	1.90	4.88	0.0531 ± 0.0037
14D02214	15.4 %	0.1643273	0.803	295.0243	2.909	0.693449	5.550	30.36910	0.159	26.7659	0.652	0.04069 ± 0.05264	123.6 ± 159.9	4.59	4.79	0.0440 ± 0.0026
14D02216	18.0 %	0.1923372	0.676	359.6616	2.435	0.615207	6.473	28.43168	0.166	30.2013	0.576	0.05046 ± 0.05696	153.3 ± 173.0	4.71	4.48	0.0337 ± 0.0016
14D02218	21.0 %	0.1908700	0.723	332.1932	2.701	0.551237	7.325	23.42338	0.195	32.1078	0.542	0.07001 ± 0.07143	212.7 ± 217.0	5.06	3.69	0.0300 ± 0.0016
Σ		7.1092657	0.124	4722.3332	0.819	17.925573	0.979	632.43117	0.036	1797.9749	0.044					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-038
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan Miggins
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00168018 ± 0.14700000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 27.3
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 0 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Is-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(c) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results

	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		0.04111 ± 0.01012 ± 24.62%	124.9 ± 30.7 ± 24.62%	0.90 96%	93.50 14	0.0459 ± 0.0064
			Full External Error ± 30.9 Analytical Error ± 30.7	1.78 1.0000	2σ Confidence Limit Error Magnification	
Total Fusion Age		0.10495 ± 0.01291 ± 12.30%	318.8 ± 39.2 ± 12.31%		20	0.0573 ± 0.0009
			Full External Error ± 40.1 Analytical Error ± 39.2			
Normal Isochron	300.54 ± 3.43 ± 1.14%	0.02248 ± 0.01619 ± 72.01%	68.3 ± 49.2 ± 72.01%	0.23 100%	93.50 14	0.0542 ± 0.0044
Ovenestimated Error			Full External Error ± 49.2 Analytical Error ± 49.2	1.0000 4	2σ Confidence Limit Error Magnification Number of Iterations	
				0.0000000466	Convergence	
Inverse Isochron	300.52 ± 3.43 ± 1.14%	0.02282 ± 0.01388 ± 60.83%	69.3 ± 42.2 ± 60.83%	0.23 100%	93.50 14	0.0542 ± 0.0044
Ovenestimated Error			Full External Error ± 42.2 Analytical Error ± 42.2	1.0000 3	2σ Confidence Limit Error Magnification Number of Iterations	
				0.0074801765	Convergence	
				4%	Spreading Factor	

Depositing Patterns	36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(ea) [A]	%1σ	36Ar(ed) [A]	%1σ	37Ar(ca) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(k) [A]	%1σ	38Ar(ea) [A]	%1σ	38Ar(ed) [A]	%1σ	39Ar(k) [A]	%1σ	39Ar(ea) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(a) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(k) [A]	%1σ		
14002185	1.7%	✓	1.020838	0.50	0.000000	0.00	0.002760	32.35	0.001070	11.74	25.6405	32.55	0.238855	0.50	0.0041507	0.50	0.000354	32.05	0.3502108	11.76	7.56482	0.50	0.0102582	32.05	15.02733	17.70	162.7016	0.50	0.000000	0.00	0.001688	0.50		
14002191	1.8%	✓	0.6211197	0.54	0.000000	0.00	0.003001	73.75	0.001021	15.90	11.3642	73.75	0.116983	0.54	0.000000	0.00	0.002904	0.76	0.0016736	73.75	0.249523	15.92	5.53518	0.76	0.0076481	73.75	8.33430	12.14	163.5441	0.54	0.000000	0.00	0.005595	0.76
14002192	1.9%	✓	0.522995	0.57	0.000000	0.00	0.002423	88.39	0.000491	31.65	9.6285	88.39	0.007587	0.57	0.000000	0.00	0.002462	0.93	0.0010385	88.39	0.1200129	31.65	4.43376	0.93	0.004808	88.39	4.35033	15.51	56.8251	0.57	0.000000	0.00	0.0041761	0.57
14002193	2.1%	✓	0.4147487	0.75	0.000000	0.00	0.004133	33.82	0.001072	14.76	15.6525	33.82	0.077947	0.75	0.000000	0.00	0.0751893	0.65	0.0021757	33.82	0.2620384	14.79	6.90335	0.65	0.006241	33.82	2.00541	31.89	152.3385	0.75	0.000000	0.00	0.0067024	0.65
14002195	2.3%	✓	0.3554855	0.81	0.000000	0.00	0.0059315	38.53	0.001458	10.93	21.4071	38.53	0.095435	0.81	0.000000	0.00	0.0011352	0.52	0.0020735	38.53	0.3520264	10.97	8.00836	0.52	0.0144070	38.53	2.469734	35.32	105.9001	0.81	0.000000	0.00	0.0030384	0.52
14002196	2.5%	✓	0.2006822	0.95	0.000000	0.00	0.0081810	25.78	0.001235	13.23	20.9993	25.78	0.020272	0.95	0.000000	0.00	0.0101247	0.48	0.0040074	25.78	0.2944475	13.26	8.89355	0.48	0.0039554	25.78	2.493353	20.51	63.9138	0.95	0.000000	0.00	0.0099945	0.48
14002198	2.8%	✓	0.2722192	1.03	0.000000	0.00	0.0084902	25.55	0.001278	12.45	31.8417	25.55	0.056985	1.03	0.000000	0.00	0.1200093	0.40	0.0040430	25.55	0.3121579	12.48	10.95354	0.40	0.0214294	25.55	2.038804	41.85	80.4703	1.03	0.000000	0.00	0.0106991	0.40
14002199	3.2%	✓	0.302810	0.93	0.000000	0.00	0.0051116	14.51	0.001914	8.62	57.2409	14.51	0.059891	0.93	0.000000	0.00	0.2027426	0.24	0.0075955	14.51	0.4767087	8.47	17.81578	0.24	0.038232	14.51	1.73079	49.10	89.4866	0.93	0.000000	0.00	0.0179959	0.24
14002201	4.0%	✓	0.4467432	0.89	0.000000	0.00	0.0040479	5.44	0.000475	3.90	152.2454	5.44	0.081364	0.89	0.000000	0.00	0.4467487	0.13	0.0217817	5.44	1.0707245	4.00	40.31184	0.13	0.031189	5.44	2.194511	32.71	154.9894	0.89	0.000000	0.00	0.0467760	0.13
14002202	5.0%	✓	0.4179029	0.76	0.000000	0.00	0.0062401	2.64	0.0006169	3.22	326.6669	2.64	0.0781061	0.76	0.000000	0.00	0.7907795	0.08	0.0454067	2.64	1.3000462	3.35	66.50287	0.08	0.2196668	2.64	3.145024	27.08	121.4003	0.76	0.000000	0.00	0.0660681	0.08
14002204	6.0%	✓	0.2872732	1.12	0.000000	0.00	0.1494869	1.71	0.0004617	3.67	545.6399	1.71	0.0209025	1.12	0.000000	0.00	0.0094914	0.09	0.0781409	1.71	1.632574	3.68	81.63898	0.09	0.2672157	1.71	3.446323	28.34	84.8910	1.12	0.000000	0.00	0.0824545	0.09
14002205	7.0%	✓	0.1632671	1.89	0.000000	0.00	0.1753718	1.47	0.0003048	5.38	664.2873	1.47	0.000146	1.89	0.000000	0.00	0.0711919	0.09	0.082339	1.47	0.7445255	5.45	76.54465	0.09	0.440063	1.47	2.196645	42.29	48.2454	1.89	0.000000	0.00	0.0773302	0.09
14002207	8.2%	✓	0.138913	2.20	0.000000	0.00	0.1707203	1.47	0.0004116	6.94	646.8792	1.47	0.000862	2.20	0.000000	0.00	0.0988884	1.47	0.0011654	7.00	69.91306	0.09	0.4302151	1.47	3.03843	30.23	40.9419	2.20	0.000000	0.00	0.0702862	0.09		
14002208	9.6%	✓	0.0988024	2.83	0.000000	0.00	0.1306063	1.86	0.0019468	9.03	477.6378	1.86	0.0183719	2.83	0.000000	0.00	0.0407928	0.10	0.0603916	1.86	0.4015738	9.08	65.30868	0.10	0.3214651	1.86	1.528209	54.84	29.9714	2.83	0.000000	0.00	0.0668718	0.10
14002210	10.2%	✓	0.0618652	4.12	0.000000	0.00	0.0691280	3.25	0.0011182	13.33	261.8521	3.25	0.0119526	4.12	0.000000	0.00	0.3075943	0.15	0.0363874	3.25	0.2867089	13.36	31.42217	0.15	0.176226	3.25	1.176022	65.75	18.2812	4.12	0.000000	0.00	0.0317364	0.15
14002211	11.2%	✓	0.0503882	4.25	0.000000	0.00	0.0565428	4.09	0.0000998	23.94	206.9903	4.09	0.0110862	4.25	0.000000	0.00	0.2267003	0.18	0.0287703	4.09	0.1699070	23.96	26.07999	0.18	0.1309378	4.09	0.528262	148.48	17.5469	4.25	0.000000	0.00	0.0263408	0.18
14002213	12.1%	✓	0.0362783	3.18	0.000000	0.00	0.0565556	3.50	0.0017008	16.24	244.6955	3.50	0.0114628	3.18	0.000000	0.00	0.3460387	0.16	0.0494687	3.50	0.2462907	16.26	30.79524	0.16	0.1627229	3.50	0.475101	168.35	24.4317	3.18	0.000000	0.00	0.03116072	0.16
14002214	15.4%	✓	0.0863208	3.04	0.000000	0.00	0.0778864	2.91	0.0012200	13.18	295.0243	2.91	0.0181334	3.04	0.000000	0.00	0.3434949	0.16	0.0410384	2.91	0.2502664	13.21	30.17055	0.16	0.1985214	2.91	1.272929	64.69	25.5078	3.04	0.000000	0.00	0.0204723	0.16
14002216	18.0%	✓	0.0373239	2.73	0.000000	0.00	0.0949027	2.43	0.0000217	17.64	359.6916	2.43	0.0181942	2.73	0.000000	0.00	0.3027079	0.17	0.0490800	2.43	0.2020219	17.65	28.19963	0.17	0.2426323	2.43	1.422532	56.43	28.7653	2.73	0.000000	0.00	0.0294715	0.17
14002218	21.0%	✓	0.1038952	2.66	0.000000	0.00	0.0876900	2.70	0.0000008	18.24	332.1932	2.70	0.0193657	2.66	0.000000	0.00	0.2640139	0.20	0.0461749	2.70	0.2217939	18.26	29.19982	0.20	0.2255660	2.70	1.694196	51.02	30.4602	2.66	0.000000	0.00	0.0234318	0.20
Σ	5.6588787	0.23	0.000000	0.00	1.2466980	0.82	0.0088891	1.97	4722.3332	0.82	1.085204	0.23	0.000000	0.00	7.169896	0.04	0.6588463	0.82	5.0152446	1.98	620.35364	0.04	3.1781393	0.82	66.06413	6.15	1751.3889	0.23	0.000000	0.00	0.6555468	0.04		
Σ							7.1828957	0.24	4722.3332	0.82									17325873	1.00			69243117	0.04							17973749	0.32		

OSU Argon Geochronology Lab
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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02189	1.7 %	51.585697	0.300915	3.459417	1.108979	0.167004	0.001132	251.986	145.430404	1.00178048	1.835E-11
14D02191	1.8 %	34.618080	0.260982	2.050248	1.512182	0.112620	0.000960	252.003	145.480283	1.00178060	9.210E-12
14D02192	1.9 %	22.625472	0.212562	2.168754	1.917104	0.073797	0.000785	252.012	145.504231	1.00178066	4.822E-12
14D02193	2.1 %	18.962806	0.125208	2.365540	1.275628	0.063321	0.000522	252.021	145.530179	1.00178072	6.023E-12
14D02195	2.3 %	13.401588	0.071948	2.668297	1.028060	0.045030	0.000331	252.037	145.578096	1.00178084	5.161E-12
14D02196	2.5 %	9.691835	0.049987	3.475361	0.896103	0.032777	0.000243	252.047	145.604057	1.00178091	4.148E-12
14D02198	2.8 % ✓	7.802365	0.034878	3.011040	0.769439	0.026558	0.000201	252.064	145.653996	1.00178103	3.960E-12
14D02199	3.2 % ✓	5.109963	0.015767	3.206002	0.465195	0.017818	0.000108	252.072	145.677972	1.00178109	4.379E-12
14D02201	4.0 % ✓	3.412721	0.006130	3.791898	0.206389	0.012313	0.000059	252.090	145.727936	1.00178121	6.620E-12
14D02202	5.0 % ✓	1.921659	0.003203	4.938969	0.130349	0.007630	0.000035	252.098	145.751925	1.00178127	6.101E-12
14D02204	6.0 % ✓	1.077711	0.002324	6.653715	0.114211	0.005265	0.000025	252.115	145.801915	1.00178139	4.242E-12
14D02205	7.0 % ✓	0.656081	0.002341	8.626915	0.127358	0.004402	0.000022	252.124	145.827916	1.00178146	2.425E-12
14D02207	8.2 % ✓	0.629716	0.002554	9.245106	0.135705	0.004425	0.000025	252.141	145.875930	1.00178157	2.114E-12
14D02208	9.6 % ✓	0.539687	0.003108	8.434337	0.157136	0.003962	0.000027	252.150	145.901945	1.00178164	1.467E-12
14D02210	10.2 % ✓	0.616738	0.005583	8.286881	0.269620	0.004149	0.000039	252.167	145.951985	1.00178176	9.354E-13
14D02211	11.2 % ✓	0.690172	0.006750	7.894200	0.323300	0.004351	0.000045	252.176	145.976011	1.00178182	8.686E-13
14D02213	13.2 % ✓	0.807832	0.005767	8.056841	0.282451	0.004809	0.000042	252.193	146.026077	1.00178194	1.197E-12
14D02214	15.4 % ✓	0.881353	0.005910	9.714621	0.283030	0.005411	0.000044	252.201	146.050115	1.00178200	1.285E-12
14D02216	18.0 % ✓	1.062243	0.006373	12.650031	0.308694	0.006765	0.000047	252.219	146.100207	1.00178212	1.450E-12
14D02218	21.0 % ✓	1.370759	0.007900	14.182118	0.384068	0.008149	0.000061	252.236	146.150316	1.00178225	1.541E-12

OSU Argon Geochronology Lab

Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
14D02189	1.7 %	0.0158846	0.0006031	0.0170448	0.0471223	0.0246727	0.0272435	0.0591323	0.0325742	4.3278877	0.1718071
14D02191	1.8 %	0.0158907	0.0006031	0.0163105	0.0471223	0.0188653	0.0272435	0.0610841	0.0325742	4.4665686	0.1718071
14D02192	1.9 %	0.0158937	0.0006031	0.0159580	0.0471223	0.0164350	0.0272435	0.0620210	0.0325742	4.5255967	0.1718071
14D02193	2.1 %	0.0158968	0.0006031	0.0155762	0.0471223	0.0140637	0.0272435	0.0630359	0.0325742	4.5840256	0.1718071
14D02195	2.3 %	0.0159027	0.0006031	0.0148712	0.0471223	0.0104005	0.0272435	0.0649096	0.0325742	4.6768168	0.1718071
14D02196	2.5 %	0.0159059	0.0006031	0.0144894	0.0471223	0.0088032	0.0272435	0.0659245	0.0325742	4.7189118	0.1718071
14D02198	2.8 %	0.0159120	0.0006031	0.0137551	0.0471223	0.0064960	0.0272435	0.0678763	0.0325742	4.7837335	0.1718071
14D02199	3.2 %	0.0159150	0.0006031	0.0134026	0.0471223	0.0057458	0.0272435	0.0688132	0.0325742	4.8073091	0.1718071
14D02201	4.0 %	0.0159211	0.0006031	0.0126683	0.0471223	0.0049272	0.0272435	0.0707649	0.0325742	4.8407194	0.1718071
14D02202	5.0 %	0.0159240	0.0006031	0.0123158	0.0471223	0.0048915	0.0272435	0.0717018	0.0325742	4.8492176	0.1718071
14D02204	6.0 %	0.0159302	0.0006031	0.0115815	0.0471223	0.0055615	0.0272435	0.0736536	0.0325742	4.8512165	0.1718071
14D02205	7.0 %	0.0159334	0.0006031	0.0111997	0.0471223	0.0063073	0.0272435	0.0746685	0.0325742	4.8438683	0.1718071
14D02207	8.2 %	0.0159392	0.0006031	0.0104947	0.0471223	0.0083989	0.0272435	0.0765422	0.0325742	4.8152248	0.1718071
14D02208	9.6 %	0.0159424	0.0006031	0.0101129	0.0471223	0.0099188	0.0272435	0.0775572	0.0325742	4.7915426	0.1718071
14D02210	10.2 %	0.0159485	0.0006031	0.0093785	0.0471223	0.0136062	0.0272435	0.0795089	0.0325742	4.7298697	0.1718071
14D02211	11.2 %	0.0159515	0.0006031	0.0090261	0.0471223	0.0157334	0.0272435	0.0804458	0.0325742	4.6927280	0.1718071
14D02213	13.2 %	0.0159576	0.0006031	0.0082918	0.0471223	0.0209093	0.0272435	0.0823976	0.0325742	4.5996438	0.1718071
14D02214	15.4 %	0.0159606	0.0006031	0.0079393	0.0471223	0.0237510	0.0272435	0.0833344	0.0325742	4.5474246	0.1718071
14D02216	18.0 %	0.0159667	0.0006031	0.0072050	0.0471223	0.0304156	0.0272435	0.0852862	0.0325742	4.4229290	0.1718071
14D02218	21.0 %	0.0159728	0.0006031	0.0064707	0.0471223	0.0380859	0.0272435	0.0872380	0.0325742	4.2772094	0.1718071

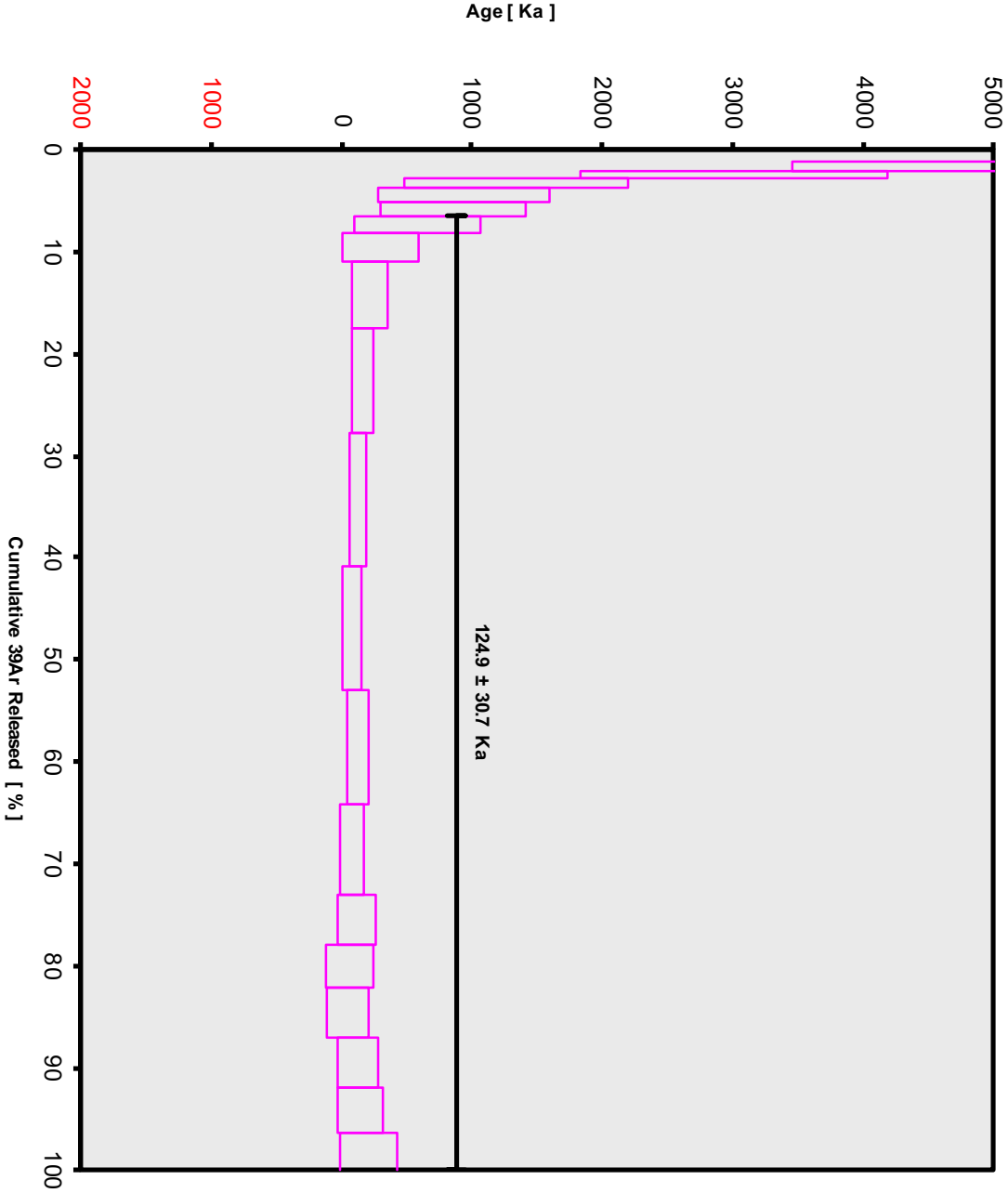
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CEOS Oregon State University, Corvallis, USA

Intercept Values	36Ar			37Ar			38Ar			39Ar			40Ar													
	[A]	1σ	r2	[A]	1σ	r2	[A]	1σ	r2	[A]	1σ	r2	[A]	1σ	r2											
14D02189	1.7 %	1.6717345	0.0026948	0.8851	EXP	150 of 150	0.1561	0.0293	0.0058	EXP	150 of 150	0.6214421	0.0276809	0.0010	EXP	150 of 150	7.41341	0.02732	0.7270	EXP	150 of 150	387.478105	0.053479	0.9984	EXP	150 of 150
14D02191	1.8 %	0.6116204	0.0017762	0.7672	EXP	149 of 150	0.0904	0.0313	0.0028	EXP	149 of 150	0.4061426	0.0280340	0.0136	EXP	149 of 150	5.55084	0.02482	0.6506	EXP	150 of 150	196.751983	0.039343	0.9852	EXP	150 of 150
14D02192	1.9 %	0.2289394	0.0013150	0.4494	EXP	150 of 150	0.0480	0.0329	0.0036	EXP	150 of 150	0.2133337	0.0260603	0.0144	EXP	149 of 150	4.46576	0.02419	0.4741	EXP	150 of 150	105.193310	0.040265	0.9476	EXP	150 of 150
14D02193	2.1 %	0.4157545	0.0016611	0.5770	EXP	150 of 150	0.0900	0.0320	0.0031	EXP	150 of 150	0.3978294	0.0265420	0.0555	EXP	149 of 150	6.62650	0.02676	0.6624	EXP	150 of 150	130.323493	0.039316	0.9916	EXP	150 of 150
14D02195	2.3 %	0.3606699	0.0014616	0.5478	EXP	150 of 150	0.1295	0.0295	0.0041	EXP	150 of 150	0.5001669	0.0269443	0.0776	EXP	150 of 150	8.02534	0.02391	0.8323	EXP	150 of 150	112.420673	0.037092	0.6268	EXP	150 of 150
14D02196	2.5 %	0.2048247	0.0012765	0.4340	EXP	150 of 150	0.1945	0.0261	0.0043	EXP	150 of 150	0.4300067	0.0274457	0.0189	EXP	149 of 150	8.91334	0.02590	0.8341	EXP	150 of 150	91.319759	0.033242	0.9464	EXP	150 of 150
14D02198	2.8 %	0.2839412	0.0014664	0.3566	EXP	150 of 150	0.2009	0.0280	0.0069	EXP	149 of 150	0.4762186	0.0268595	0.0015	EXP	150 of 150	10.56067	0.02449	0.8795	EXP	150 of 150	87.466941	0.036813	0.9224	EXP	150 of 150
14D02199	3.2 %	0.3195227	0.0013692	0.9060	EXP	150 of 150	0.3724	0.0301	0.0007	EXP	150 of 150	0.7203220	0.0274110	0.0029	EXP	150 of 150	17.78437	0.02539	0.9526	EXP	150 of 150	96.233603	0.036971	0.7227	EXP	150 of 150
14D02201	4.0 %	0.4906326	0.0016949	0.7269	EXP	150 of 150	1.0200	0.0296	0.0053	EXP	150 of 150	1.5611466	0.0266035	0.0422	EXP	150 of 150	40.17166	0.02980	0.9872	EXP	150 of 150	143.055625	0.038465	0.9735	EXP	150 of 150
14D02202	5.0 %	0.4975396	0.0016272	0.7475	EXP	150 of 150	2.1885	0.0268	0.0592	EXP	150 of 150	2.1030221	0.0268429	0.1232	EXP	149 of 150	66.69842	0.03084	0.9949	EXP	150 of 150	132.216254	0.040433	0.9458	EXP	150 of 150
14D02204	6.0 %	0.4279944	0.0015272	0.6549	EXP	150 of 150	3.6633	0.0318	0.2348	EXP	150 of 150	2.1300692	0.0266663	0.1609	EXP	150 of 150	81.44165	0.03610	0.9958	EXP	150 of 150	93.414941	0.034302	0.9300	EXP	150 of 150
14D02205	7.0 %	0.3394055	0.0012386	0.5771	EXP	150 of 150	4.4620	0.0322	0.3473	EXP	150 of 150	1.7113456	0.0277166	0.1022	EXP	150 of 150	76.47797	0.03397	0.9955	EXP	150 of 150	55.469432	0.032585	0.9826	EXP	150 of 150
14D02207	8.2 %	0.3113226	0.0013484	0.5330	EXP	150 of 150	4.3427	0.0265	0.4658	EXP	150 of 150	1.4705916	0.0265055	0.0570	EXP	150 of 150	69.48121	0.03138	0.9954	EXP	150 of 150	48.955344	0.030726	0.9860	EXP	150 of 150
14D02208	9.6 %	0.2300422	0.0011641	0.2792	EXP	150 of 150	3.2046	0.0282	0.2380	EXP	150 of 150	1.1527117	0.0262733	0.0159	EXP	150 of 150	56.26758	0.03097	0.9931	EXP	150 of 150	35.418305	0.024931	0.9940	EXP	150 of 150
14D02210	10.2 %	0.1410742	0.0009185	0.0541	EXP	150 of 150	1.7524	0.0298	0.1283	EXP	148 of 150	0.6722960	0.0263397	0.0252	EXP	150 of 150	31.43233	0.02792	0.9824	EXP	150 of 150	24.258759	0.029457	0.9932	EXP	150 of 150
14D02211	11.2 %	0.1248345	0.0008496	0.0332	EXP	149 of 150	1.3633	0.0303	0.0258	EXP	150 of 150	0.4847390	0.0264633	0.0022	EXP	150 of 150	26.03696	0.02799	0.9740	EXP	150 of 150	22.826590	0.030138	0.9929	EXP	150 of 150
14D02213	13.2 %	0.1576156	0.0009534	0.1298	EXP	150 of 150	1.6641	0.0325	0.0458	EXP	150 of 150	0.6168237	0.0264616	0.0173	EXP	150 of 150	30.71011	0.02841	0.9909	EXP	150 of 150	29.367000	0.028631	0.9913	EXP	150 of 150
14D02214	15.4 %	0.1727844	0.0010270	0.1815	EXP	150 of 150	1.9757	0.0299	0.2128	EXP	150 of 150	0.6613666	0.0265147	0.0664	EXP	150 of 150	30.21641	0.02942	0.9783	EXP	150 of 150	31.369699	0.030026	0.9879	EXP	150 of 150
14D02216	18.0 %	0.1995215	0.0009741	0.3793	EXP	150 of 150	2.4102	0.0304	0.2023	EXP	150 of 150	0.5773912	0.0263702	0.0210	EXP	150 of 150	28.29599	0.02876	0.9764	EXP	150 of 150	34.687741	0.030290	0.9859	EXP	150 of 150
14D02218	21.0 %	0.1981275	0.0010714	0.3218	EXP	150 of 150	2.2265	0.0338	0.1874	EXP	150 of 150	0.5065207	0.0291294	0.0679	EXP	150 of 150	23.32867	0.02864	0.9692	EXP	149 of 150	36.452514	0.030346	0.9832	EXP	150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%Li	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/39Ar	%Ar	MCF	%Ar	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes	
MS0100	1.7%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	1.7	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	13	8	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0101	1.8%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	1.8	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	13	11	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0102	1.9%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	1.9	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	13	45	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0103	2.1%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	2.1	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	13	55	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0104	2.3%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	2.3	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	14	22	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0105	2.5%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	2.5	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	14	30	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0106	2.8%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	2.8	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	15	0	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0107	3.2%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	3.2	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	15	12	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0201	4.0%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	4	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	15	37	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0202	5.6%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	5	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	16	14	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0204	6.6%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	6	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	16	27	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0205	7.9%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	7	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	16	51	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0207	8.2%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	8.2	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	16	58	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0208	9.8%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	9.8	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	17	4	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0209	10.2%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	10.2	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	17	26	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0211	11.2%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	11.2	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	17	41	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0213	13.2%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	13.2	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	18	6	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0214	16.4%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	16.4	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	18	38	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0216	18.6%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	18	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	18	43	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01
MS0218	21.0%	SC10-008	Groundmass	Gelapage St. Crater Island	Dir Maguire	21	FC1-3	28.38	0.064	Renne et al (1998)	0.40108	0.147	0.00100010	0.147	302.776	0.094	0.002094404	0.063	1	4.00E-14	28	JAN	2014	19	8	1	15-008J-02	0.00	0.00	38.40	Gelapage Henge (15-01)	1402108	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(cd)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D02189	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02191	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02192	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02193	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02195	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02196	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02198	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02199	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02201	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02202	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02204	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02205	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02207	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02208	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02210	10.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02211	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02213	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02214	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02216	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02218	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	

14D02188.AGE >>> SC12-038 >>> GALAPAGOS | HARPP (13-07) PROJECT



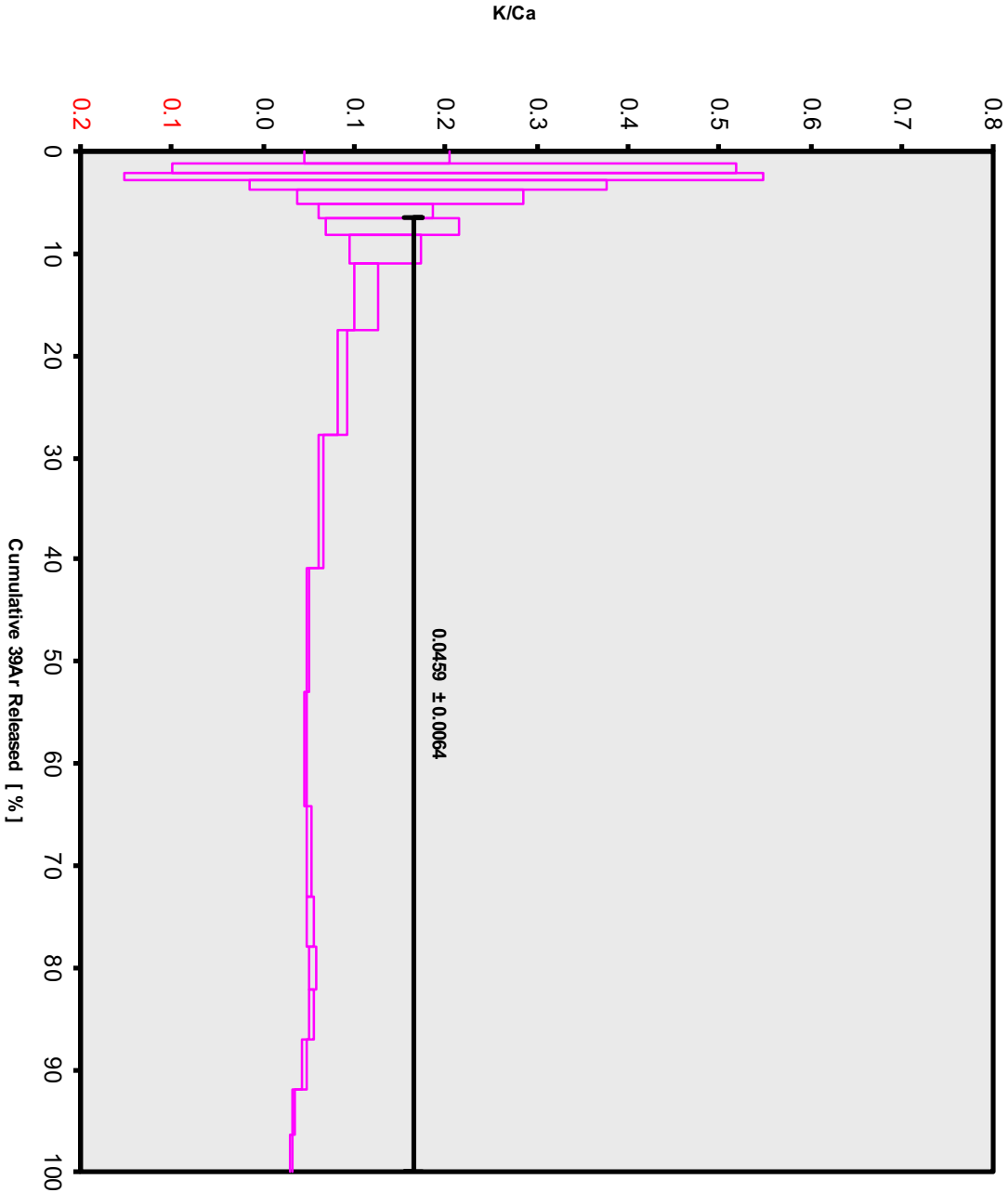
Ar-Ages in Ka

WEIGHTED
PLATEAU
 124.9 ± 30.7
TOTAL FUSION
 318.8 ± 39.2
NORMAL
ISOCHRON
 68.3 ± 49.2
INVERSE
ISOCHRON
 69.3 ± 42.2
MSWD
(PROBABILITY)
 $0.90 (56\%)$

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
J = 0.00168018 ±

14D02188.AGE >>> SC12-038 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

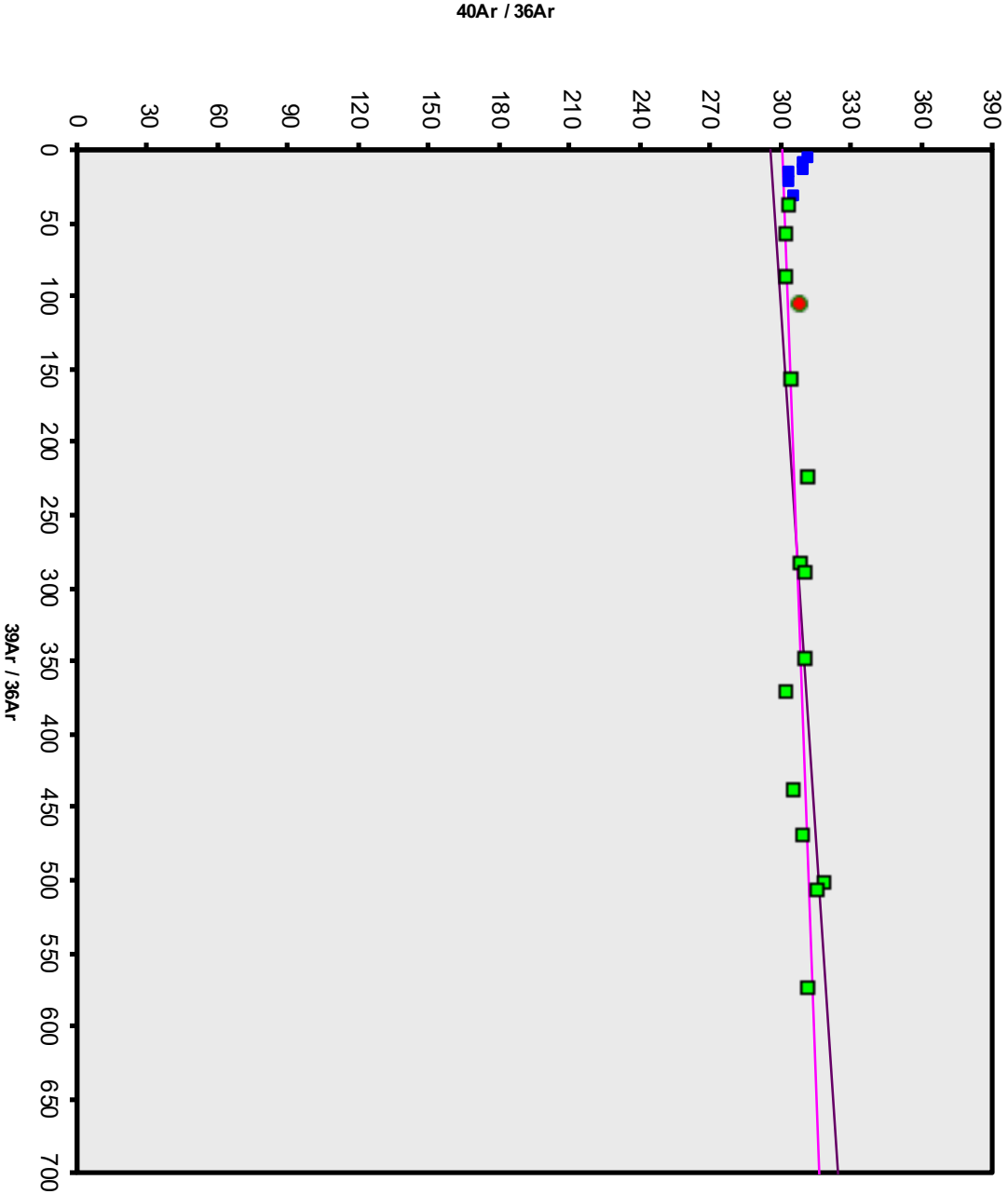
WEIGHTED
PLATEAU
 124.9 ± 30.7
TOTAL FUSION
 318.8 ± 39.2
NORMAL
ISOCHRON
 68.3 ± 49.2
INVERSE
ISOCHRON
 69.3 ± 42.2

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Ar-Ages in Ka

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PLATEAU
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NORMAL
ISOCHRON
68.3 ± 49.2
INVERSE
ISOCHRON
69.3 ± 42.2

MSWD
(PROBABILITY)
0.23 (100%)

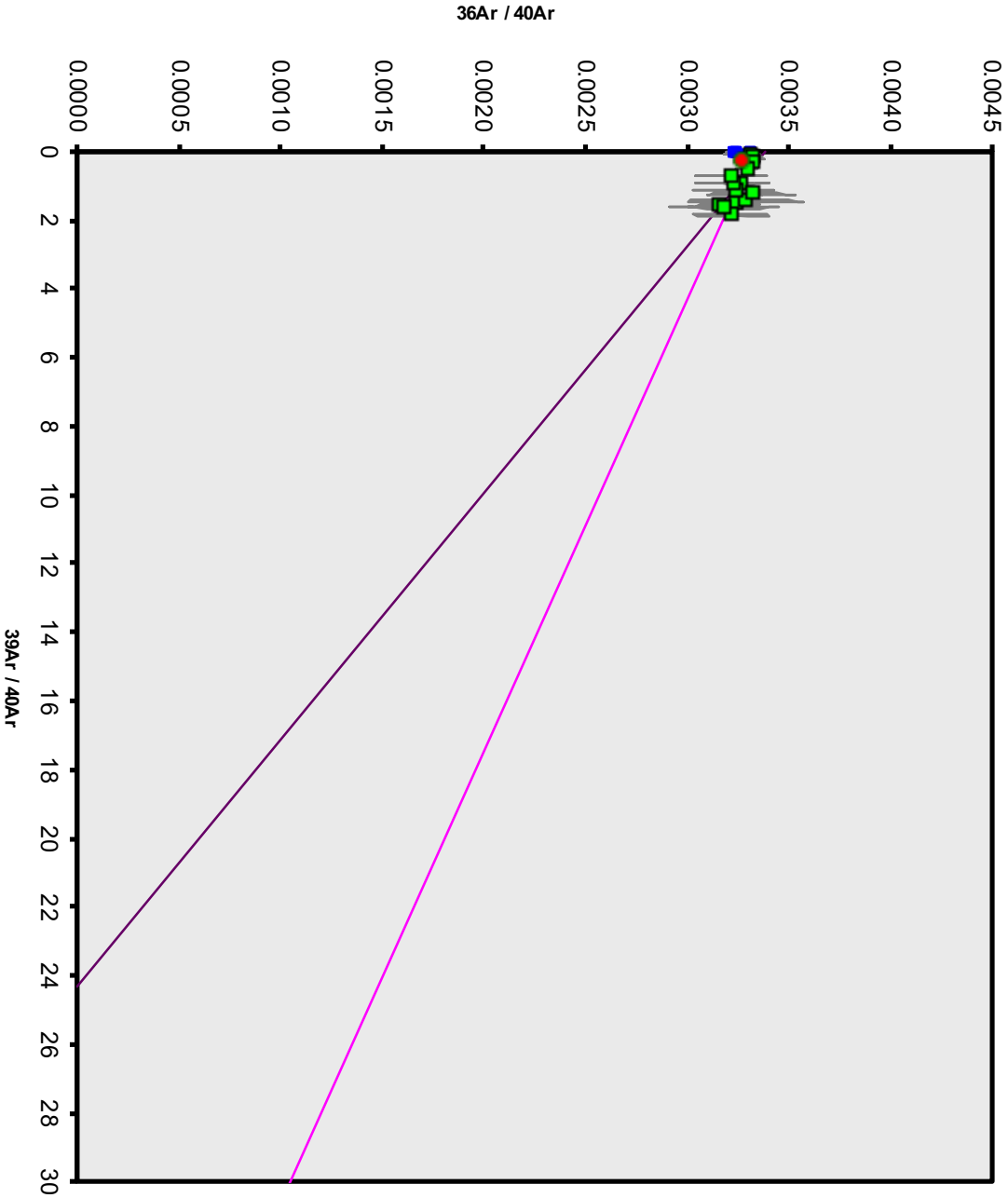
40AR/36AR

Sample Info

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14D02188.AGE >>> SC12-038 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
124.9 ± 30.7
TOTAL FUSION
318.8 ± 39.2
NORMAL
ISOCHRON
68.3 ± 49.2
INVERSE
ISOCHRON
69.3 ± 42.2

MSWD
(PROBABILITY)
0.23 (100%)

SPREADING

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00168018 ±

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
13D02996	1.8 %	1.533109	18.0309	0.1798481	3.53085	8.54517	6.96 ± 2.62	1.92	0.40	0.084 ± 0.010
13D02998	2.0 %	1.245512	12.1727	0.0688387	2.70168	1.96410	2.09 ± 2.94	0.54	0.30	0.095 ± 0.016
13D02999	2.3 %	1.193256	14.4307	0.0973999	2.87864	5.92672	5.92 ± 2.77	1.71	0.32	0.086 ± 0.012
13D03001	2.7 %	1.545494	23.5940	0.1333400	5.65797	1.01509	0.52 ± 1.62	0.22	0.64	0.103 ± 0.009
13D03002	3.2 %	2.055296	49.0736	0.1597376	12.06159	1.05111	0.25 ± 0.93	0.17	1.36	0.106 ± 0.004
13D03004	3.8 %	2.266873	86.5649	0.1634747	23.58796	2.79639	0.34 ± 0.53	0.42	2.65	0.117 ± 0.003
13D03005	4.6 %	2.440545	147.8314	0.1876509	45.85198	11.40526	0.71 ± 0.29	1.56	5.16	0.133 ± 0.002
13D03007	5.6 %	2.807448	233.9607	0.1584187	85.11224	29.12452	0.98 ± 0.18	3.39	9.57	0.156 ± 0.002
13D03008	6.6 %	2.527470	269.8820	0.1212827	101.19738	35.07441	0.99 ± 0.13	4.48	11.38	0.161 ± 0.002
13D03010	7.8 %	2.249013	294.0254	0.1586289	108.63974	44.11433	1.17 ± 0.11	6.22	12.22	0.159 ± 0.002
13D03011	9.2 %	1.841960	278.4748	0.1523357	96.12139	39.00153	1.16 ± 0.11	6.69	10.81	0.148 ± 0.002
13D03013	10.8 %	1.588043	261.6341	0.1342897	81.40079	33.23467	1.17 ± 0.12	6.61	9.16	0.134 ± 0.002
13D03014	12.8 %	1.909804	295.5504	0.2211460	79.96879	27.43675	0.98 ± 0.14	4.64	8.99	0.116 ± 0.001
13D03016	15.3 %	1.887580	377.9136	0.2230357	78.42145	33.81357	1.24 ± 0.14	5.71	8.82	0.089 ± 0.001
13D03017	18.0 %	1.386815	572.6694	0.2475255	73.94683	31.91445	1.24 ± 0.13	7.22	8.32	0.056 ± 0.001
13D03019	21.0 %	0.970968	531.3594	0.2166727	55.10949	28.15899	1.47 ± 0.13	8.94	6.20	0.045 ± 0.000
13D03020	23.0 %	0.605465	329.7597	0.1472965	32.93634	15.61883	1.36 ± 0.18	8.03	3.70	0.043 ± 0.001
Σ		30.054652	3796.9176	2.7709219	889.12511	313.19151				

Information on Analysis	Results	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Sample = SC12-060 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Anthony Koppers Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00158742 ± 0.13900000 FCT-3 = 28.340 ± 0.564 Ma	Age Plateau	0.40534 ± 0.02402 ± 5.93%	1.16 ± 0.07 ± 5.93% Full External Error ± 0.07 Analytical Error ± 0.07	1.89 9% 2.26 1.3754	58.32 6 2σ Confidence Limit Error Magnification	0.083 ± 0.031
	Total Fusion Age	0.35225 ± 0.01722 ± 4.89%	1.01 ± 0.05 ± 4.90% Full External Error ± 0.06 Analytical Error ± 0.05		17	0.101 ± 0.000

OSU Argon Geochronology Lab

Normal Isochron		39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
13D02996	1.8 %	2.30 $\pm$ 0.05	289.93 $\pm$ 2.05	0.3062
13D02998	2.0 %	2.17 $\pm$ 0.06	293.92 $\pm$ 2.21	0.2457
13D02999	2.3 %	2.41 $\pm$ 0.06	290.53 $\pm$ 2.28	0.2787
13D03001	2.7 %	3.66 $\pm$ 0.05	294.84 $\pm$ 2.06	0.4576
13D03002	3.2 %	5.87 $\pm$ 0.05	294.99 $\pm$ 1.90	0.6886
13D03004	3.8 %	10.41 $\pm$ 0.08	296.73 $\pm$ 1.92	0.8623
13D03005	4.6 %	18.79 $\pm$ 0.13	300.17 $\pm$ 1.92	0.9329
13D03007	5.6 %	30.32 $\pm$ 0.19	305.87 $\pm$ 1.93	0.9581
13D03008	6.6 %	40.04 $\pm$ 0.26	309.38 $\pm$ 1.96	0.9593
13D03010	7.8 % ✓	48.31 $\pm$ 0.32	315.11 $\pm$ 2.03	0.9580
13D03011	9.2 % ✓	52.18 $\pm$ 0.36	316.67 $\pm$ 2.16	0.9538
13D03013	10.8 % ✓	51.26 $\pm$ 0.37	316.43 $\pm$ 2.28	0.9504
13D03014	12.8 % ✓	41.87 $\pm$ 0.28	309.87 $\pm$ 2.09	0.9505
13D03016	15.3 % ✓	41.55 $\pm$ 0.28	313.41 $\pm$ 2.10	0.9496
13D03017	18.0 % ✓	53.32 $\pm$ 0.42	318.51 $\pm$ 2.51	0.9497
13D03019	21.0 %	56.76 $\pm$ 0.49	324.50 $\pm$ 2.86	0.9332
13D03020	23.0 %	54.40 $\pm$ 0.59	321.30 $\pm$ 3.63	0.9026

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	290.15 $\pm$ 11.82 $\pm$ 4.07%	0.51612 $\pm$ 0.24641 $\pm$ 47.74%	1.48 $\pm$ 0.71 $\pm$ 47.72%	1.99 9%
			Full External Error $\pm$ 0.71 Analytical Error $\pm$ 0.71	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	2.41 1.4120 6	Convergence Number of Iterations Calculated Line	0.000000604022 5 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
13D02996	1.8 %	0.0079436 $\pm$ 0.0001633	0.00344915 $\pm$ 0.00002442	0.0228
13D02998	2.0 %	0.0073799 $\pm$ 0.0002003	0.00340225 $\pm$ 0.00002558	0.0237
13D02999	2.3 %	0.0083034 $\pm$ 0.0002054	0.00344195 $\pm$ 0.00002707	0.0278
13D03001	2.7 %	0.0124166 $\pm$ 0.0001580	0.00339163 $\pm$ 0.00002373	0.0355
13D03002	3.2 %	0.0198941 $\pm$ 0.0001290	0.00338996 $\pm$ 0.00002180	0.0431
13D03004	3.8 %	0.0350668 $\pm$ 0.0001288	0.00337003 $\pm$ 0.00002180	0.0617
13D03005	4.6 %	0.0625892 $\pm$ 0.0001506	0.00333141 $\pm$ 0.00002135	0.0815
13D03007	5.6 %	0.0991146 $\pm$ 0.0001829	0.00326932 $\pm$ 0.00002059	0.0789
13D03008	6.6 %	0.1294180 $\pm$ 0.0002354	0.00323230 $\pm$ 0.00002044	0.0960
13D03010	7.8 % ✓	0.1532949 $\pm$ 0.0002884	0.00317344 $\pm$ 0.00002048	0.1091
13D03011	9.2 % ✓	0.1647888 $\pm$ 0.0003429	0.00315782 $\pm$ 0.00002155	0.1371
13D03013	10.8 % ✓	0.1619911 $\pm$ 0.0003675	0.00316028 $\pm$ 0.00002277	0.1594
13D03014	12.8 % ✓	0.1351318 $\pm$ 0.0002876	0.00322720 $\pm$ 0.00002174	0.1320
13D03016	15.3 % ✓	0.1325597 $\pm$ 0.0002829	0.00319067 $\pm$ 0.00002134	0.1324
13D03017	18.0 % ✓	0.1674073 $\pm$ 0.0004175	0.00313959 $\pm$ 0.00002474	0.1701
13D03019	21.0 %	0.1749064 $\pm$ 0.0005584	0.00308166 $\pm$ 0.00002713	0.2318
13D03020	23.0 %	0.1693090 $\pm$ 0.0008309	0.00311239 $\pm$ 0.00003517	0.3062

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Inverse Isochron	290.31 $\pm$ 11.82	0.51302 $\pm$ 0.21882	1.47 $\pm$ 0.63	1.99
Clustered Points	$\pm$ 4.07%	$\pm$ 42.65%	$\pm$ 42.64%	9%
			Full External Error $\pm$ 0.63	
			Analytical Error $\pm$ 0.63	
Statistics	2 σ Confidence Limit	2.41	Convergence	0.0022864269
	Error Magnification	1.4115	Number of Iterations	3
	Number of Data Points	6	Calculated Line	Weighted York-2
	Spreading Factor	1.8%		

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Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
13D02996	1.8 %	1.537915	0.341	18.0309	5.676	0.509074	7.514	3.54298	1.020	444.4923	0.091	2.42015 ± 0.90864	6.96 ± 2.62	1.92	0.40	0.084 ± 0.010
13D02998	2.0 %	1.248743	0.358	12.1727	8.155	0.334062	11.859	2.70988	1.348	366.0874	0.110	0.72699 ± 1.02411	2.09 ± 2.94	0.54	0.30	0.095 ± 0.016
13D02999	2.3 %	1.197090	0.374	14.4307	7.090	0.355184	10.793	2.88835	1.227	346.6833	0.116	2.05886 ± 0.96327	5.92 ± 2.77	1.71	0.32	0.086 ± 0.012
13D03001	2.7 %	1.551757	0.336	23.5940	4.301	0.489860	7.743	5.67385	0.628	455.6841	0.089	0.17941 ± 0.56458	0.52 ± 1.62	0.22	0.64	0.103 ± 0.009
13D03002	3.2 %	2.068292	0.312	49.0736	2.084	0.687954	5.779	12.09462	0.316	696.3010	0.067	0.08715 ± 0.32372	0.25 ± 0.93	0.17	1.36	0.106 ± 0.004
13D03004	3.8 %	2.289765	0.314	86.5549	1.226	0.867615	4.548	23.64622	0.173	672.6813	0.061	0.11855 ± 0.18375	0.34 ± 0.53	0.42	2.65	0.117 ± 0.003
13D03005	4.6 %	2.479620	0.310	147.8314	0.853	1.186133	3.391	45.95147	0.106	732.6327	0.056	0.24874 ± 0.10093	0.71 ± 0.29	1.56	5.16	0.133 ± 0.002
13D03007	5.6 %	2.868254	0.304	233.9607	0.652	1.684229	2.157	85.26969	0.079	858.8115	0.048	0.34219 ± 0.06143	0.98 ± 0.18	3.39	9.57	0.156 ± 0.002
13D03008	6.6 %	2.598750	0.303	269.8820	0.610	1.782807	2.214	101.37901	0.074	782.0441	0.053	0.34659 ± 0.04673	0.99 ± 0.13	4.48	11.38	0.161 ± 0.002
13D03010	7.8 %	2.326676	0.306	294.0254	0.596	1.856159	2.082	108.83762	0.074	708.8074	0.058	0.40606 ± 0.03958	1.17 ± 0.11	6.22	12.22	0.159 ± 0.002
13D03011	9.2 %	1.915516	0.320	278.4748	0.604	1.629167	2.340	96.30880	0.077	583.3978	0.070	0.40575 ± 0.03877	1.16 ± 0.11	6.69	10.81	0.148 ± 0.002
13D03013	10.8 %	1.657149	0.335	261.6341	0.623	1.393803	2.739	81.57687	0.080	502.5837	0.081	0.40828 ± 0.04169	1.17 ± 0.12	6.61	9.16	0.134 ± 0.002
13D03014	12.8 %	1.987885	0.316	295.5504	0.596	1.529215	2.581	80.16769	0.081	591.8645	0.069	0.34309 ± 0.04764	0.98 ± 0.14	4.64	8.99	0.116 ± 0.001
13D03016	15.3 %	1.987406	0.310	377.9136	0.549	1.520791	2.490	78.67579	0.081	591.6728	0.069	0.43118 ± 0.04770	1.24 ± 0.14	5.71	8.82	0.089 ± 0.001
13D03017	18.0 %	1.538062	0.342	572.6694	0.515	1.427837	2.700	74.33224	0.084	441.7929	0.091	0.43159 ± 0.04386	1.24 ± 0.13	7.22	8.32	0.056 ± 0.001
13D03019	21.0 %	1.111301	0.362	531.3594	0.518	1.099152	3.606	55.46709	0.095	315.1356	0.128	0.51096 ± 0.04625	1.47 ± 0.13	8.94	6.20	0.045 ± 0.000
13D03020	23.0 %	0.692559	0.454	329.7597	0.571	0.681110	5.713	33.15827	0.132	194.5671	0.206	0.47421 ± 0.06214	1.36 ± 0.18	8.03	3.70	0.043 ± 0.001
Σ		31.057740	0.081	3796.9176	0.184	19.034152	0.840	891.68043	0.026	9195.2393	0.018					

Information on Analysis
and Constants Used In Calculations

Sample = SC12-060
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Anthony Koppers
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00158742 ± 0.13900000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 40
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = Undefined
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lak-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 38/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 38/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(cj) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	0.40534 ± 5.93%	0.40534 ± 0.02402 ± 5.93%	1.16 ± 0.07 ± 5.93% Full External Error ± 0.07 Analytical Error ± 0.07	1.89 9%	58.32 6	0.083 ± 0.031
Total Fusion Age	0.35225 ± 4.89%	0.35225 ± 0.01722 ± 4.89%	1.01 ± 0.05 ± 4.90% Full External Error ± 0.06 Analytical Error ± 0.05		17	0.101 ± 0.000
Normal Isochron	290.15 ± 11.82 ± 4.07%	0.51612 ± 0.24641 ± 47.74%	1.48 ± 0.71 ± 47.72% Full External Error ± 0.71 Analytical Error ± 0.71	1.99 9%	58.32 6	2.41 2σ Confidence Limit Error Magnification
Inverse Isochron Clustered Points	290.31 ± 11.82 ± 4.07%	0.51302 ± 0.21882 ± 42.65%	1.47 ± 0.63 ± 42.64% Full External Error ± 0.63 Analytical Error ± 0.63	1.99 9%	58.32 6	2.41 2σ Confidence Limit Error Magnification
				0.00000006040	5 Number of Iterations Convergence	
				0.0022864269	3 Number of Iterations Convergence	
				2%	Spreading Factor	

Depositing Patterns	36Ar(a) [a]	%1σ	36Ar(c) [a]	%1σ	36Ar(ea) [a]	%1σ	36Ar(d) [a]	%1σ	37Ar(ca) [a]	%1σ	38Ar(a) [a]	%1σ	38Ar(c) [a]	%1σ	38Ar(b) [a]	%1σ	38Ar(ea) [a]	%1σ	38Ar(d) [a]	%1σ	39Ar(a) [a]	%1σ	39Ar(c) [a]	%1σ	40Ar(r) [a]	%1σ	40Ar(a) [a]	%1σ	40Ar(c) [a]	%1σ	40Ar(b) [a]	%1σ	
13C02986	1.5%	1.023139	0.34	0.0000000	0.00	0.0007602	5.58	0.0000452	21.30	15.0200	5.58	0.2802382	0.34	0.0000000	0.00	0.0007981	1.02	0.0002000	0.08	0.7795491	21.32	3.53385	1.02	0.0201545	0.08	6.96317	15.74	402.0239	0.34	0.0000000	0.00	0.0002000	1.10
13C02988	2.0%	1.245112	0.36	0.0000000	0.00	0.0002136	8.16	0.0000174	57.58	12.1727	8.16	0.2327852	0.36	0.0000000	0.00	0.0007945	1.35	0.0016920	8.16	0.688387	57.58	2.70168	1.35	0.0281922	8.16	1.96410	70.42	359.5488	0.36	0.0000000	0.00	0.0007287	1.35
13C02989	2.5%	1.192526	0.36	0.0000000	0.00	0.0000897	7.09	0.0000249	39.26	14.4307	7.09	0.2229195	0.36	0.0000000	0.00	0.0007259	1.23	0.0002000	7.09	0.6973599	39.26	2.81594	1.23	0.0307118	7.09	5.58572	23.26	352.8971	0.36	0.0000000	0.00	0.0002000	1.23
13C02991	2.7%	1.546494	0.34	0.0000000	0.00	0.0002238	4.30	0.0000327	28.47	23.5940	4.30	0.2889628	0.34	0.0000000	0.00	0.0004988	0.63	0.0002796	4.30	0.1333402	28.49	5.95797	0.63	0.0165788	4.30	5.98599	167.34	456.6635	0.34	0.0000000	0.00	0.0007145	0.63
13C03002	3.2%	2.352526	0.31	0.0000000	0.00	0.0029554	2.08	0.0000404	24.92	48.0736	2.08	0.3841348	0.31	0.0000000	0.00	0.137281	0.32	0.0086212	2.08	0.1597376	24.94	12.58159	0.32	0.0303005	2.08	1.05111	185.74	697.3309	0.31	0.0000000	0.00	0.0721822	0.32
13C03004	3.8%	2.298273	0.32	0.0000000	0.00	0.0000905	1.23	0.0000414	24.17	86.5549	1.23	0.4232786	0.32	0.0000000	0.00	0.288431	0.17	0.0002011	1.23	0.1634747	24.19	23.59795	0.17	0.0682515	1.23	2.79639	77.62	699.8610	0.32	0.0000000	0.00	0.0303238	0.17
13C03005	4.6%	2.445545	0.32	0.0000000	0.00	0.0002575	0.85	0.0000475	21.47	147.8314	0.85	0.4681379	0.32	0.0000000	0.00	0.521796	0.11	0.0005486	0.85	0.1876509	21.49	46.80198	0.11	0.0864606	0.85	11.45026	20.27	721.1912	0.32	0.0000000	0.00	0.0463105	0.11
13C03007	5.6%	2.807448	0.31	0.0000000	0.00	0.0017696	0.65	0.0000401	22.98	233.9807	0.65	0.5247121	0.31	0.0000000	0.00	0.966877	0.08	0.0002026	0.65	0.1681187	23.00	85.11224	0.08	0.1574935	0.65	29.12462	8.98	829.8910	0.31	0.0000000	0.00	0.0895924	0.08
13C03008	6.6%	2.627476	0.31	0.0000000	0.00	0.0012488	0.81	0.0000327	32.39	269.8520	0.81	0.4732942	0.31	0.0000000	0.00	1.161826	0.07	0.0071136	0.81	0.1512827	32.81	901.18738	0.07	0.1893496	0.81	36.07441	6.14	746.8676	0.31	0.0000000	0.00	0.1622394	0.07
13C03010	7.8%	✓ 2.249013	0.32	0.0000000	0.00	0.0776227	0.80	0.0000402	24.40	294.0254	0.80	0.4203405	0.32	0.0000000	0.00	1.238020	0.07	0.0408896	0.80	0.1898289	24.42	108.63874	0.07	0.1978791	0.80	44.11433	4.87	664.9834	0.32	0.0000000	0.00	0.1197781	0.07
13C03011	9.2%	✓ 1.841980	0.33	0.0000000	0.00	0.0736173	0.80	0.0000388	26.06	278.4746	0.80	0.3464923	0.33	0.0000000	0.00	1.008961	0.08	0.0387990	0.80	0.1623857	26.08	96.12139	0.08	0.1674136	0.80	29.30153	4.76	544.2981	0.33	0.0000000	0.00	0.0977605	0.08
13C03013	10.8%	✓ 1.588043	0.36	0.0000000	0.00	0.0660714	0.82	0.0000340	26.46	261.6341	0.82	0.3689683	0.36	0.0000000	0.00	0.930341	0.08	0.0383671	0.82	0.1342867	28.48	81.40079	0.08	0.1762797	0.82	33.23467	5.10	489.2668	0.36	0.0000000	0.00	0.0822148	0.08
13C03014	12.8%	✓ 1.809804	0.33	0.0000000	0.00	0.0678053	0.80	0.0000060	17.88	295.8504	0.80	0.3699423	0.33	0.0000000	0.00	0.919046	0.08	0.0410815	0.80	0.2211460	17.91	79.98879	0.08	0.1998054	0.80	27.43875	6.94	564.3470	0.33	0.0000000	0.00	0.0987085	0.08
13C03016	15.1%	✓ 1.887586	0.33	0.0000000	0.00	0.0697602	0.86	0.0000065	17.01	377.9136	0.86	0.3627988	0.33	0.0000000	0.00	0.848448	0.08	0.0203300	0.86	0.2203057	17.04	78.47145	0.08	0.2043168	0.86	33.81857	5.83	657.7809	0.33	0.0000000	0.00	0.0792657	0.08
13C03017	18.0%	✓ 1.388815	0.38	0.0000000	0.00	0.1011847	0.51	0.0000627	15.61	572.4694	0.51	0.2901957	0.38	0.0000000	0.00	0.841515	0.08	0.0798011	0.51	0.2475255	15.64	73.94883	0.08	0.3845485	0.51	31.91445	5.08	409.8037	0.38	0.0000000	0.00	0.0748683	0.08
13C03019	21.6%	0.970988	0.42	0.0000000	0.00	0.1820769	0.52	0.0000349	18.33	931.3594	0.52	0.1814738	0.42	0.0000000	0.00	0.627749	0.10	0.0018890	0.52	0.2196777	18.36	35.10949	0.10	0.2676949	0.52	28.10899	4.52	298.9339	0.42	0.0000000	0.00	0.0509899	0.10
13C03020	21.6%	0.856486	0.53	0.0000000	0.00	0.0977696	0.57	0.0000273	26.44	329.7597	0.57	0.1131815	0.53	0.0000000	0.00	0.371818	0.13	0.0465388	0.57	0.1472565	26.46	32.28234	0.13	0.2725883	0.57	15.61883	6.95	178.9192	0.53	0.0000000	0.00	0.0533857	0.13
Σ	30.54892	0.08	0.0000000	0.00	1.0023883	0.18	0.0870015	5.78	3796.9176	0.18	5.817248	0.08	0.0000000	0.00	10.118244	0.03	0.5277775	0.18	2.7709219	5.78	889.12511	0.03	2.5552256	0.18	313.19151	2.44	8881.1488	0.08	0.0000000	0.00	0.8880164	0.03	
Σ							31.057740	0.05	3796.9176	0.18									19.624162	0.04			891.65943	0.03							9195.2382	0.12	

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
13D02996	1.8 %	125.457049	1.284937	5.089179	0.293495	0.434073	0.004668	155.773	21.743060	1.00110062	2.134E-11
13D02998	2.0 %	135.093810	1.827083	4.491987	0.371312	0.460812	0.006427	155.790	21.750518	1.00110074	1.757E-11
13D02999	2.3 %	120.028245	1.479507	4.996171	0.359471	0.414455	0.005317	155.799	21.754098	1.00110080	1.664E-11
13D03001	2.7 %	80.313095	0.509459	4.158381	0.180759	0.273493	0.001949	155.816	21.761559	1.00110093	2.187E-11
13D03002	3.2 %	50.129822	0.162039	4.057474	0.085512	0.171009	0.000760	155.825	21.765440	1.00110099	2.910E-11
13D03004	3.8 %	28.447735	0.052123	3.660413	0.045316	0.096834	0.000347	155.842	21.772606	1.00110111	3.229E-11
13D03005	4.6 %	15.943618	0.019147	3.217121	0.027668	0.053962	0.000177	155.851	21.776489	1.00110117	3.517E-11
13D03007	5.6 %	10.071708	0.009278	2.743773	0.018018	0.033649	0.000106	155.868	21.783958	1.00110129	4.122E-11
13D03008	6.6 %	7.714063	0.007006	2.662109	0.016354	0.025634	0.000080	155.876	21.787544	1.00110135	3.754E-11
13D03010	7.8 % ✓	6.512522	0.006118	2.701505	0.016226	0.021377	0.000067	155.894	21.795016	1.00110147	3.402E-11
13D03011	9.2 % ✓	6.057575	0.006294	2.891478	0.017602	0.019889	0.000066	155.902	21.798604	1.00110153	2.800E-11
13D03013	10.8 % ✓	6.160860	0.006979	3.207209	0.020150	0.020314	0.000070	155.919	21.806080	1.00110166	2.412E-11
13D03014	12.8 % ✓	7.382831	0.007845	3.686652	0.022190	0.024797	0.000081	155.928	21.809969	1.00110172	2.841E-11
13D03016	15.3 % ✓	7.520392	0.008007	4.803429	0.026651	0.025261	0.000081	155.945	21.817150	1.00110184	2.840E-11
13D03017	18.0 % ✓	5.943490	0.007392	7.704187	0.040202	0.020692	0.000073	155.954	21.821041	1.00110190	2.121E-11
13D03019	21.0 %	5.681487	0.009044	9.579723	0.050500	0.020035	0.000075	155.972	21.828525	1.00110202	1.513E-11
13D03020	23.0 %	5.867832	0.014366	9.945023	0.058316	0.020886	0.000099	155.980	21.832118	1.00110208	9.339E-12

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Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
13D02996	1.8 %	0.0233834	0.0015932	0.0109337	0.0341974	0.0076320	0.0267405	0.0899080	0.0260166	7.0103285	0.3986788
13D02998	2.0 %	0.0243949	0.0015932	0.0256667	0.0341974	0.0059011	0.0267405	0.0871946	0.0260166	7.2362528	0.3986788
13D02999	2.3 %	0.0248077	0.0015932	0.0318222	0.0341974	0.0054343	0.0267405	0.0864376	0.0260166	7.3281539	0.3986788
13D03001	2.7 %	0.0255162	0.0015932	0.0427370	0.0341974	0.0052199	0.0267405	0.0859969	0.0260166	7.4851509	0.3986788
13D03002	3.2 %	0.0258038	0.0015932	0.0473932	0.0341974	0.0055134	0.0267405	0.0863746	0.0260166	7.5483838	0.3986788
13D03004	3.8 %	0.0261893	0.0015932	0.0541564	0.0341974	0.0067833	0.0267405	0.0881629	0.0260166	7.6320363	0.3986788
13D03005	4.6 %	0.0263193	0.0015932	0.0568271	0.0341974	0.0078654	0.0267405	0.0897225	0.0260166	7.6594270	0.3986788
13D03007	5.6 %	0.0264138	0.0015932	0.0600023	0.0341974	0.0107252	0.0267405	0.0938888	0.0260166	7.6767062	0.3986788
13D03008	6.6 %	0.0263865	0.0015932	0.0606101	0.0341974	0.0124619	0.0267405	0.0964341	0.0260166	7.6684576	0.3986788
13D03010	7.8 %	0.0261781	0.0015932	0.0599672	0.0341974	0.0168383	0.0267405	0.1028732	0.0260166	7.6168094	0.3986788
13D03011	9.2 %	0.0260054	0.0015932	0.0587422	0.0341974	0.0193029	0.0267405	0.1065094	0.0260166	7.5754757	0.3986788
13D03013	10.8 %	0.0254942	0.0015932	0.0542811	0.0341974	0.0251959	0.0267405	0.1152212	0.0260166	7.4549000	0.3986788
13D03014	12.8 %	0.0251474	0.0015932	0.0509418	0.0341974	0.0286652	0.0267405	0.1203583	0.0260166	7.3737952	0.3986788
13D03016	15.3 %	0.0243619	0.0015932	0.0429441	0.0341974	0.0357980	0.0267405	0.1309330	0.0260166	7.1909781	0.3986788
13D03017	18.0 %	0.0238576	0.0015932	0.0376193	0.0341974	0.0400559	0.0267405	0.1372519	0.0260166	7.0740310	0.3986788
13D03019	21.0 %	0.0227323	0.0015932	0.0254187	0.0341974	0.0490230	0.0267405	0.1505708	0.0260166	6.8137377	0.3986788
13D03020	23.0 %	0.0221195	0.0015932	0.0186460	0.0341974	0.0536912	0.0267405	0.1575093	0.0260166	6.6722543	0.3986788

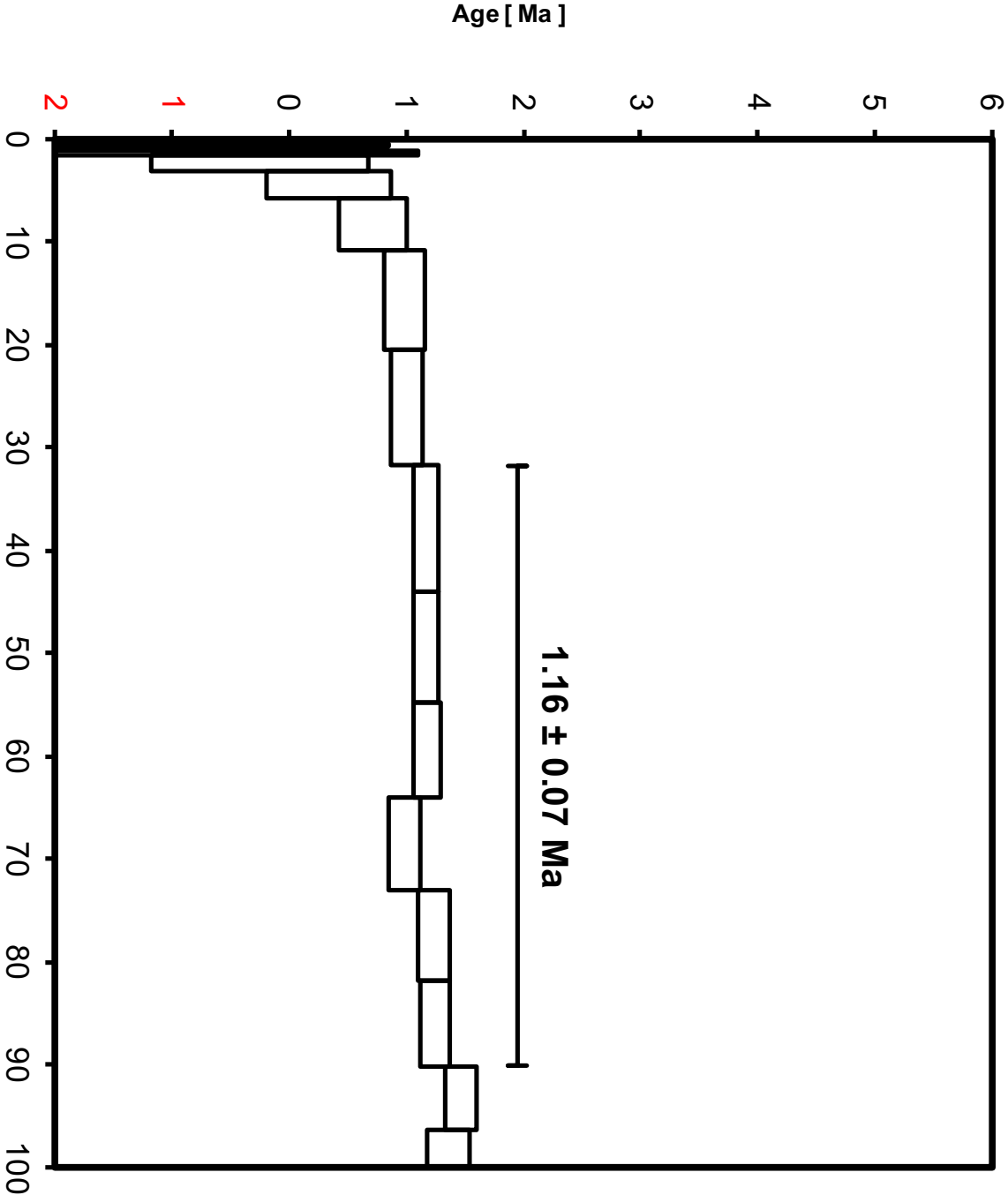
OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Intercept Values		36Ar [fA]			37Ar [fA]			38Ar [fA]			39Ar [fA]			40Ar [fA]							
		1σ	r2		1σ	r2		1σ	r2		1σ	r2		1σ	r2						
13D02996	1.8%	1.517159	0.002902	0.9257	EXP 150 of 150	0.8246	0.0308	0.0022	EXP 150 of 150	0.4950603	0.0286701	0.0088	EXP 150 of 150	3.60685	0.02461	0.6209	EXP 150 of 150	451.72350	0.05382	0.9995	EXP 150 of 150
13D02998	2.0%	1.237267	0.002545	0.9099	EXP 150 of 150	0.5748	0.0288	0.0016	EXP 150 of 150	0.3239734	0.0285502	0.0066	EXP 150 of 150	2.77715	0.02520	0.3154	EXP 150 of 150	373.50558	0.04981	0.9995	EXP 150 of 150
13D02999	2.3%	1.167540	0.002704	0.8971	EXP 149 of 150	0.6627	0.0306	0.1109	EXP 150 of 150	0.3462977	0.0297916	0.0013	EXP 150 of 150	2.95256	0.02362	0.4431	EXP 150 of 150	354.18376	0.05058	0.9994	EXP 150 of 150
13D03001	2.7%	1.532736	0.002828	0.9331	EXP 149 of 150	1.1066	0.0300	0.0201	EXP 150 of 150	0.4784997	0.0252198	0.0083	EXP 150 of 150	5.71814	0.02371	0.6791	EXP 150 of 150	463.35573	0.05981	0.9996	EXP 150 of 150
13D03002	3.2%	2.034733	0.003133	0.9499	EXP 150 of 150	2.2597	0.0290	0.1313	EXP 150 of 150	0.6738175	0.0287260	0.0046	EXP 150 of 150	12.09210	0.02661	0.9044	EXP 150 of 150	614.15068	0.05750	0.9998	EXP 150 of 150
13D03004	3.8%	2.259236	0.003644	0.9462	EXP 150 of 150	3.9549	0.0277	0.4230	EXP 150 of 150	0.8499566	0.0283246	0.0355	EXP 150 of 150	23.56059	0.02750	0.9741	EXP 150 of 150	680.64762	0.05857	0.9998	EXP 150 of 150
13D03005	4.6%	2.424772	0.003808	0.9650	EXP 150 of 150	6.7179	0.0323	0.5981	EXP 150 of 150	1.1633994	0.0293229	0.0676	EXP 150 of 150	45.70347	0.02932	0.9620	EXP 150 of 150	749.69629	0.07408	0.9998	EXP 150 of 150
13D03007	5.6%	2.813317	0.004174	0.9541	EXP 150 of 150	10.5984	0.0316	0.8950	EXP 150 of 150	1.6523916	0.0282715	0.1169	EXP 148 of 150	84.73987	0.03117	0.9873	EXP 150 of 150	886.91591	0.06956	0.9999	EXP 150 of 150
13D03008	6.6%	2.505549	0.003645	0.9597	EXP 150 of 150	12.2150	0.0304	0.8363	EXP 150 of 150	1.7479973	0.0282764	0.0468	EXP 150 of 150	100.73034	0.03061	0.9982	EXP 150 of 150	796.10123	0.07172	0.9998	EXP 150 of 150
13D03010	7.8%	2.286076	0.003354	0.9619	EXP 150 of 150	13.2971	0.0320	0.8343	EXP 150 of 150	1.8160540	0.0271269	0.1524	EXP 150 of 150	108.14055	0.03484	0.9979	EXP 150 of 150	716.77852	0.05885	0.9998	EXP 150 of 150
13D03011	9.2%	1.886944	0.003138	0.9441	EXP 150 of 150	12.9937	0.0307	0.8509	EXP 150 of 150	1.5894429	0.0284157	0.1333	EXP 150 of 150	95.70745	0.03443	0.9975	EXP 150 of 150	591.26319	0.06340	0.9997	EXP 150 of 150
13D03013	10.8%	1.633081	0.003046	0.9285	EXP 150 of 150	11.8272	0.0320	0.8207	EXP 150 of 150	1.3511359	0.0285213	0.0442	EXP 150 of 150	81.09249	0.03027	0.9972	EXP 150 of 150	510.28837	0.06000	0.9996	EXP 150 of 150
13D03014	12.8%	1.956978	0.003121	0.9453	EXP 150 of 150	13.3476	0.0324	0.8565	EXP 150 of 150	1.4813807	0.0283886	0.1512	EXP 150 of 150	79.69681	0.03182	0.9969	EXP 150 of 150	598.53245	0.06373	0.9997	EXP 150 of 150
13D03016	15.3%	1.954727	0.002875	0.9554	EXP 150 of 150	17.0395	0.0297	0.9168	EXP 150 of 150	1.4659294	0.0280663	0.0661	EXP 150 of 150	78.22843	0.03134	0.9968	EXP 150 of 150	599.15783	0.06054	0.9997	EXP 150 of 150
13D03017	18.0%	1.517776	0.002934	0.9183	EXP 150 of 150	25.7887	0.0338	0.9531	EXP 150 of 150	1.3698832	0.0270316	0.0767	EXP 149 of 150	73.92312	0.03280	0.9961	EXP 150 of 150	449.08648	0.05189	0.9996	EXP 150 of 150
13D03019	21.0%	1.160738	0.002226	0.9363	EXP 150 of 150	23.9167	0.0320	0.9469	EXP 150 of 150	1.0363306	0.0285527	0.0453	EXP 150 of 150	55.23596	0.02881	0.9841	EXP 150 of 150	322.10594	0.04596	0.9994	EXP 150 of 150
13D03020	23.0%	0.694892	0.001943	0.8199	EXP 150 of 150	14.8394	0.0305	0.8973	EXP 150 of 150	0.9188811	0.0273625	0.0218	EXP 150 of 150	33.07204	0.03024	0.9855	EXP 150 of 150	201.33910	0.03936	0.9987	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	$\pm 1\sigma$	Standard Reference	Standard 40Ar/39Ar	$\pm 1\sigma$	J	$\pm 1\sigma$	Ar 40Ar/36Ar	$\pm 1\sigma$	MCF	$\pm 1\sigma$	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes	
1300298	1.8%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.8	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	8	1	1	13-080-02	56.0			Colapage St. Crater Island	1300298	01
1300299	2.0%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	2	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	8	20	1	13-080-02	56.0			Colapage St. Crater Island	1300299	01
1300300	2.3%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.3	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	8	30	1	13-080-02	56.0			Colapage St. Crater Island	1300300	01
1300301	2.7%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.7	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	9	1	1	13-080-02	56.0			Colapage St. Crater Island	1300301	01
1300302	3.2%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.2	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	9	10	1	13-080-02	56.0			Colapage St. Crater Island	1300302	01
1300304	3.8%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.8	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	9	40	1	13-080-02	56.0			Colapage St. Crater Island	1300304	01
1300305	4.0%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	4.0	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	9	53	1	13-080-02	56.0			Colapage St. Crater Island	1300305	01
1300307	5.0%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	5.0	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	10	10	1	13-080-02	56.0			Colapage St. Crater Island	1300307	01
1300308	6.0%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	6.0	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	10	30	1	13-080-02	56.0			Colapage St. Crater Island	1300308	01
1300309	7.0%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	7.0	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	10	30	1	13-080-02	56.0			Colapage St. Crater Island	1300309	01
1300311	9.2%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	9.2	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	11	7	1	13-080-02	56.0			Colapage St. Crater Island	1300311	01
1300313	10.0%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.0	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	11	30	1	13-080-02	56.0			Colapage St. Crater Island	1300313	01
1300314	10.8%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.8	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	11	40	1	13-080-02	56.0			Colapage St. Crater Island	1300314	01
1300316	10.3%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.3	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	12	9	1	13-080-02	56.0			Colapage St. Crater Island	1300316	01
1300317	10.7%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	10	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	12	20	1	13-080-02	56.0			Colapage St. Crater Island	1300317	01
1300319	21.0%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	21	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	12	47	1	13-080-02	56.0			Colapage St. Crater Island	1300319	01
1300320	23.0%	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	23	FC1-3	28.38	0.084	Fluwell et al (1998)	0.00038	0.138	0.0018942	0.138	30339	0.000	0.007731302	0.003	1	4.00E-14	24	OCT	2013	12	50	1	13-080-02	56.0			Colapage St. Crater Island	1300320	01

Irradiation Constants	40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(d)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
13D02996	1.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02998	2.0	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02999	2.3	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03001	2.7	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03002	3.2	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03004	3.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03005	4.6	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03007	5.6	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03008	6.6	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03010	7.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03011	9.2	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03013	10.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03014	12.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03016	15.3	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03017	18.0	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03019	21.0	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D03020	25.0	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0

13D02995.AGE >>> SC12-060 >>> GALAPAGOS | HARPP (13-07) PROJECT



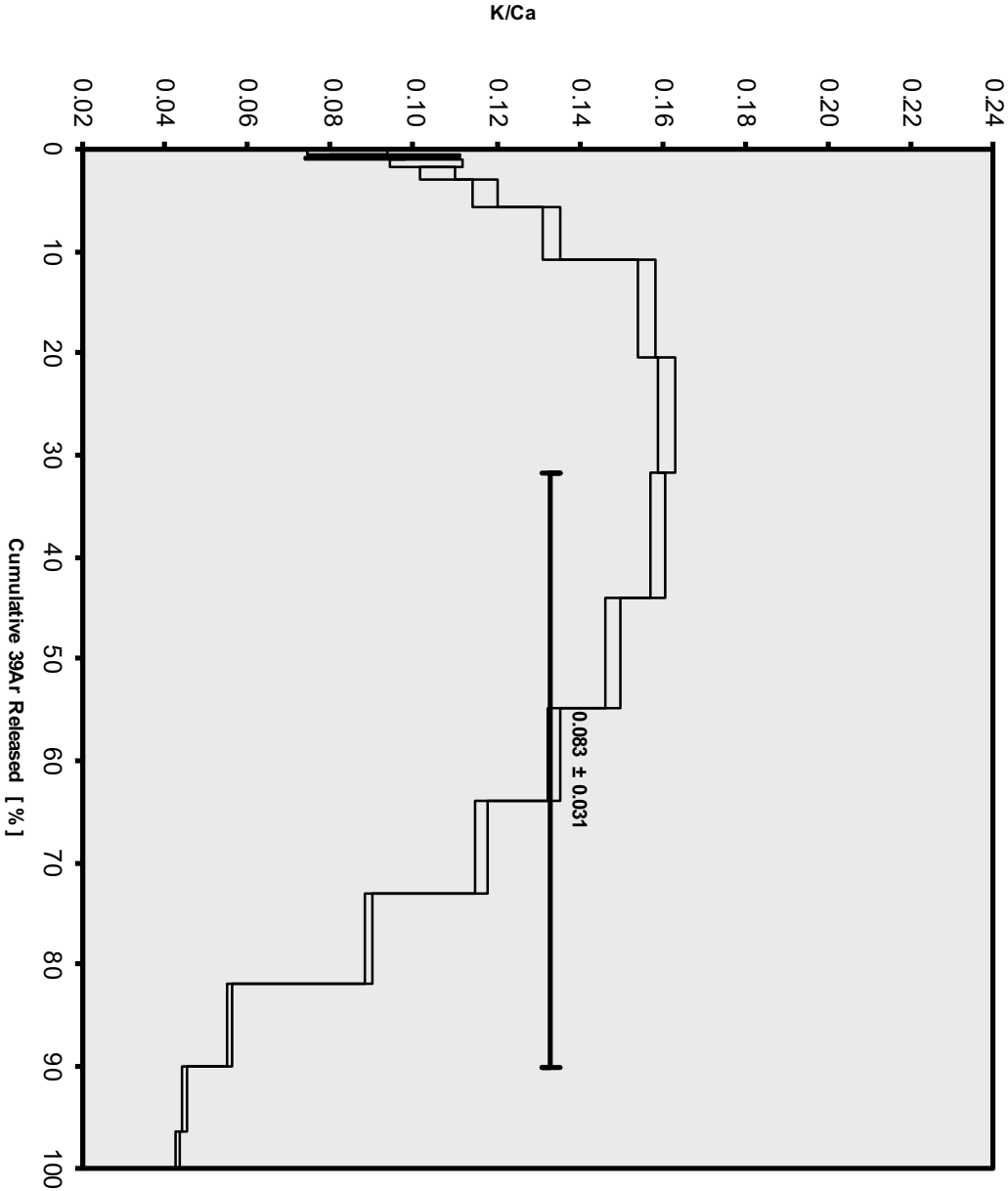
Ar-Ages in Ma

WEIGHTED PLATEAU
1.16 ± 0.07
TOTAL FUSION
1.01 ± 0.05
NORMAL ISOCHRON
1.48 ± 0.71
INVERSE ISOCHRON
1.47 ± 0.63
MSWD (PROBABILITY)
1.89 (9%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00158742 ±
0.13900000

13D02995.AGE >>> SC12-060 >>> GALAPAGOS | HARPP (13-07) PROJECT



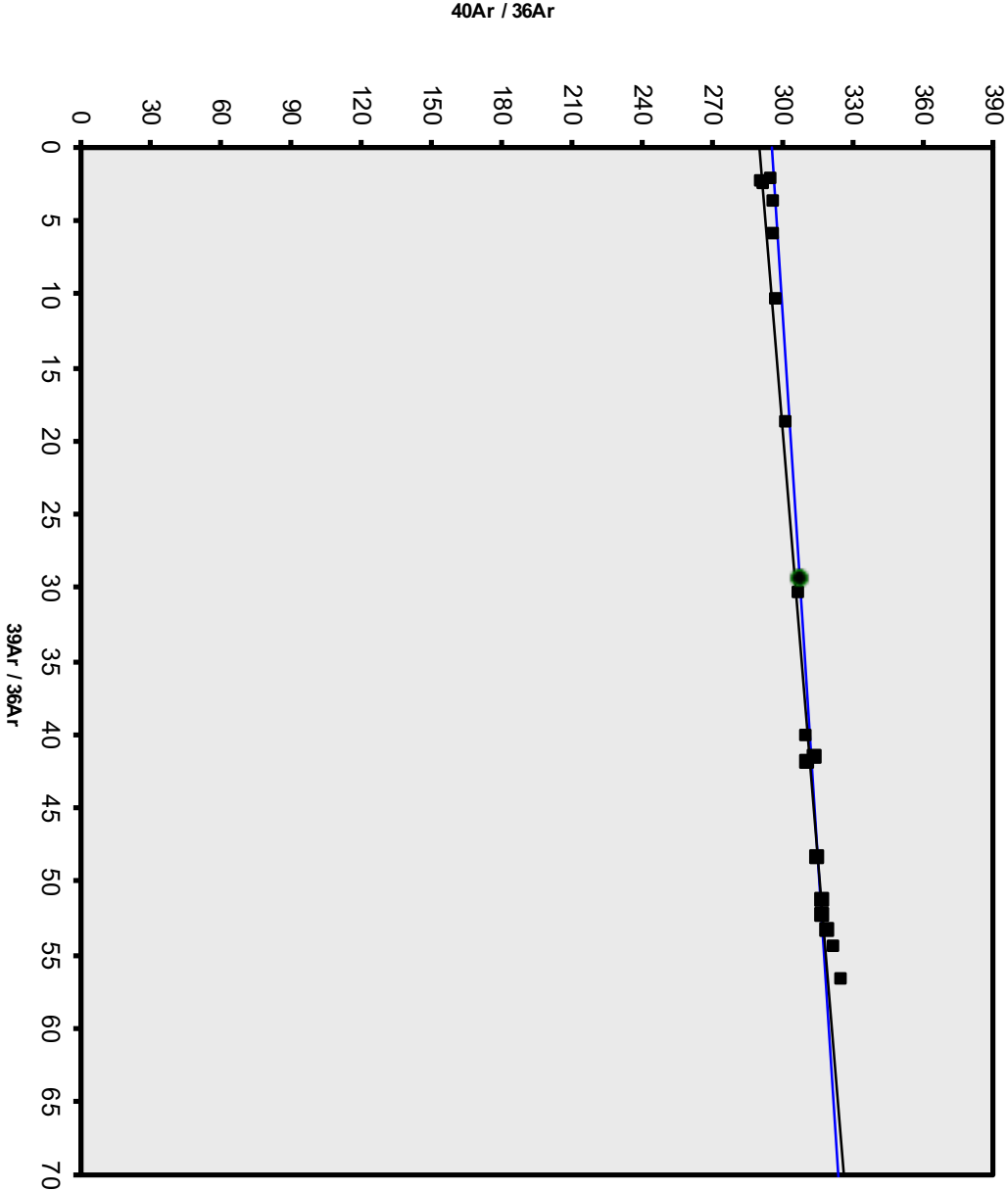
Ar-Ages in Ma

WEIGHTED
PLATEAU
 1.16 ± 0.07
TOTAL FUSION
 1.01 ± 0.05
NORMAL
ISOCHRON
 1.48 ± 0.71
INVERSE
ISOCHRON
 1.47 ± 0.63

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03

13D02995.AGE >>> SC12-060 >>> GALAPAGOS | HARPP (13-07) PROJECT



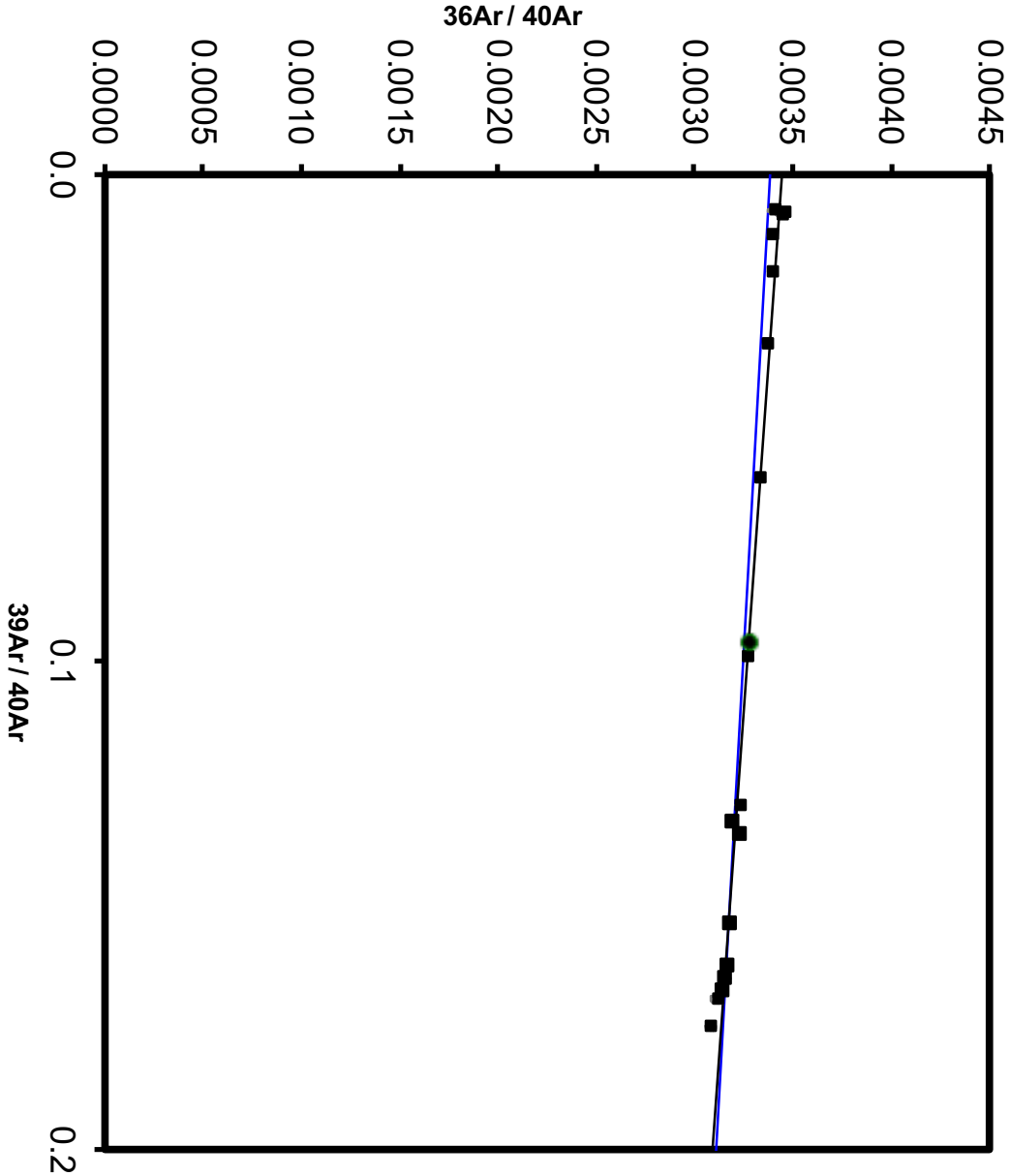
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.16 ± 0.07
TOTAL FUSION
1.01 ± 0.05
NORMAL
ISOCHRON
1.48 ± 0.71
INVERSE
ISOCHRON
1.47 ± 0.63
MSWD
(PROBABILITY)
1.99 (9%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03

13D02995.AGE >>> SC12-060 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
1.16 ± 0.07
TOTAL FUSION
1.01 ± 0.05
NORMAL
ISOCHRON
1.48 ± 0.71
INVERSE
ISOCHRON
1.47 ± 0.63
MSWD
(PROBABILITY)
1.99 (9%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
13D02960	1.8 %	0.571997	9.8535	0.0118581	3.6223	0.302848	237.6 $\pm$ 1152.7	0.18	0.21	0.158 $\pm$ 0.032
13D02962	2.0 %	0.534052	12.5502	0.0252446	5.6387	0.385105	194.1 $\pm$ 733.7	0.24	0.33	0.193 $\pm$ 0.030
13D02963	2.3 %	0.462404	15.4263	0.0245144	7.7604	0.955355	349.8 $\pm$ 451.4	0.69	0.46	0.216 $\pm$ 0.027
13D02965	2.7 %	0.456585	25.1518	0.0000000	14.3679	0.773228	152.9 $\pm$ 254.6	0.57	0.84	0.246 $\pm$ 0.020
13D02966	3.2 %	0.414867	38.0569	0.0000000	21.8318	0.040664	5.3 $\pm$ 165.8	0.03	1.28	0.247 $\pm$ 0.013
13D02968	3.8 %	0.489242	90.1818	0.0112507	49.5942	3.361072	192.6 $\pm$ 75.6	2.27	2.91	0.236 $\pm$ 0.006
13D02969	4.6 %	0.569154	189.3380	0.0085940	103.4917	6.987482	191.8 $\pm$ 40.9	3.99	6.08	0.235 $\pm$ 0.003
13D02971	5.6 %	0.686305	360.1174	0.0758758	192.2281	14.775237	218.4 $\pm$ 25.6	6.78	11.29	0.230 $\pm$ 0.003
13D02972	6.6 %	0.609499	425.0204	0.1404825	203.2350	14.444284	201.9 $\pm$ 24.0	7.42	11.93	0.206 $\pm$ 0.002
13D02974	7.8 %	0.609736	496.8763	0.1914092	203.9207	16.060465	223.8 $\pm$ 23.9	8.18	11.97	0.176 $\pm$ 0.002
13D02975	9.2 %	0.628119	514.3480	0.2499517	191.1085	15.067344	224.0 $\pm$ 26.2	7.50	11.22	0.160 $\pm$ 0.002
13D02977	10.8 %	0.631151	462.4575	0.3900326	162.0529	10.823459	189.8 $\pm$ 31.5	5.48	9.52	0.151 $\pm$ 0.002
13D02978	12.8 %	0.918381	429.6228	0.6195755	147.9633	8.229354	158.0 $\pm$ 42.1	2.94	8.69	0.148 $\pm$ 0.002
13D02980	15.3 %	1.580750	439.6829	0.9372710	136.2455	2.300957	48.0 $\pm$ 66.8	0.49	8.00	0.133 $\pm$ 0.001
13D02981	18.0 %	2.167952	510.1633	1.0060062	109.7606	0.100700	2.6 $\pm$ 106.6	0.02	6.45	0.093 $\pm$ 0.001
13D02983	21.0 %	2.439177	655.9595	0.9048491	88.2479	1.199888	38.6 $\pm$ 148.9	0.17	5.18	0.058 $\pm$ 0.001
13D02984	23.0 %	1.916015	577.1490	0.6857110	61.9497	1.533479	70.3 $\pm$ 174.4	0.27	3.64	0.046 $\pm$ 0.000
Σ		15.685384	5251.9555	5.2826265	1703.0192	90.821248				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-027 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Anthony Koppers Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00157134 $\pm$ 0.13800000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.07310 $\pm$ 0.00489 $\pm$ 6.69%	207.7 $\pm$ 13.9 $\pm$ 6.69% Full External Error $\pm$ 14.9 Analytical Error $\pm$ 13.9	1.70 10% 2.07 1.3039	73.61 8 2a Confidence Limit Error Magnification	0.174 $\pm$ 0.023
	Total Fusion Age	0.05333 $\pm$ 0.00576 $\pm$ 10.80%	151.5 $\pm$ 16.4 $\pm$ 10.80% Full External Error $\pm$ 16.8 Analytical Error $\pm$ 16.4		17	0.139 $\pm$ 0.000

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Normal Isochron		39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
13D02960	1.8 %	6.33 $\pm$ 0.19	296.03 $\pm$ 2.57	0.2803
13D02962	2.0 %	10.56 $\pm$ 0.21	294.78 $\pm$ 2.72	0.4438
13D02963	2.3 %	16.78 $\pm$ 0.27	297.57 $\pm$ 2.68	0.5376
13D02965	2.7 %	31.47 $\pm$ 0.38	297.19 $\pm$ 2.83	0.7674
13D02966	3.2 %	52.62 $\pm$ 0.60	295.40 $\pm$ 3.07	0.8847
13D02968	3.8 % ✓	101.37 $\pm$ 0.95	302.37 $\pm$ 2.76	0.9490
13D02969	4.6 % ✓	181.83 $\pm$ 1.62	307.78 $\pm$ 2.73	0.9713
13D02971	5.6 % ✓	280.09 $\pm$ 2.40	317.03 $\pm$ 2.70	0.9790
13D02972	6.6 % ✓	333.45 $\pm$ 3.18	319.20 $\pm$ 3.03	0.9813
13D02974	7.8 % ✓	334.44 $\pm$ 3.19	321.84 $\pm$ 3.06	0.9817
13D02975	9.2 % ✓	304.26 $\pm$ 2.89	319.49 $\pm$ 3.02	0.9815
13D02977	10.8 % ✓	256.76 $\pm$ 2.48	312.65 $\pm$ 3.01	0.9813
13D02978	12.8 % ✓	161.11 $\pm$ 1.32	304.46 $\pm$ 2.46	0.9781
13D02980	15.3 %	86.19 $\pm$ 0.60	296.96 $\pm$ 2.04	0.9724
13D02981	18.0 %	50.63 $\pm$ 0.33	295.45 $\pm$ 1.90	0.9674
13D02983	21.0 %	36.18 $\pm$ 0.24	295.01 $\pm$ 1.89	0.9613
13D02984	23.0 %	32.33 $\pm$ 0.23	294.70 $\pm$ 1.98	0.9484

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	292.25 $\pm$ 3.20 $\pm$ 1.09%	0.08525 $\pm$ 0.01269 $\pm$ 14.88%	242.2 $\pm$ 36.0 $\pm$ 14.88%	1.19 31%
			Full External Error $\pm$ 36.6 Analytical Error $\pm$ 36.0	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	2.15 1.0917 8	Convergence Number of Iterations Calculated Line	0.000000145459 4 Weighted York-2

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Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
13D02960	1.8 %	0.0213923 $\pm$ 0.0006209	0.00337804 $\pm$ 0.00002937	0.0075
13D02962	2.0 %	0.0358181 $\pm$ 0.0006500	0.00339237 $\pm$ 0.00003129	0.0131
13D02963	2.3 %	0.0564002 $\pm$ 0.0007703	0.00336060 $\pm$ 0.00003032	0.0231
13D02965	2.7 %	0.1058845 $\pm$ 0.0008177	0.00336481 $\pm$ 0.00003210	0.0393
13D02966	3.2 %	0.1781428 $\pm$ 0.0009458	0.00338522 $\pm$ 0.00003517	0.0634
13D02968	3.8 % ✓	0.3352499 $\pm$ 0.0009897	0.00330721 $\pm$ 0.00003016	0.0905
13D02969	4.6 % ✓	0.5907985 $\pm$ 0.0012590	0.00324911 $\pm$ 0.00002878	0.0941
13D02971	5.6 % ✓	0.8834891 $\pm$ 0.0015476	0.00315429 $\pm$ 0.00002691	0.0762
13D02972	6.6 % ✓	1.0446354 $\pm$ 0.0019241	0.00313285 $\pm$ 0.00002978	0.0842
13D02974	7.8 % ✓	1.0391531 $\pm$ 0.0018940	0.00310713 $\pm$ 0.00002958	0.0826
13D02975	9.2 % ✓	0.9523218 $\pm$ 0.0017349	0.00313001 $\pm$ 0.00002963	0.0800
13D02977	10.8 % ✓	0.8212338 $\pm$ 0.0015346	0.00319848 $\pm$ 0.00003082	0.0788
13D02978	12.8 % ✓	0.5291754 $\pm$ 0.0009004	0.00328450 $\pm$ 0.00002655	0.0537
13D02980	15.3 %	0.2902469 $\pm$ 0.0004749	0.00336751 $\pm$ 0.00002311	0.0268
13D02981	18.0 %	0.1713593 $\pm$ 0.0002870	0.00338463 $\pm$ 0.00002175	0.0176
13D02983	21.0 %	0.1226385 $\pm$ 0.0002245	0.00338974 $\pm$ 0.00002175	0.0141
13D02984	23.0 %	0.1097137 $\pm$ 0.0002451	0.00339329 $\pm$ 0.00002279	0.0145

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron	292.27 $\pm$ 3.19 $\pm$ 1.09%	0.08524 $\pm$ 0.01243 $\pm$ 14.58%	242.2 $\pm$ 35.3 $\pm$ 14.58% Full External Error $\pm$ 35.8 Analytical Error $\pm$ 35.3	1.19 31%
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	2.15 1.0906 8 6.0%	Convergence Number of Iterations Calculated Line	0.0001000395 3 Weighted York-2

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CEQAS Oregon State University, Corvallis, USA

Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
13D02960	1.8 %	46.661398	0.675834	2.715249	0.271544	0.158338	0.002388	155.314	21.546813	1.00109738	8.128E-12
13D02962	2.0 %	27.878101	0.252549	2.222372	0.171058	0.095157	0.000960	155.331	21.554203	1.00109750	7.557E-12
13D02963	2.3 %	17.707759	0.120751	1.985157	0.123227	0.060030	0.000483	155.340	21.558047	1.00109756	6.605E-12
13D02965	2.7 %	9.434146	0.036384	1.748498	0.069609	0.032202	0.000191	155.358	21.565441	1.00109769	6.514E-12
13D02966	3.2 %	5.607904	0.014871	1.741139	0.045196	0.019440	0.000108	155.366	21.568991	1.00109775	5.884E-12
13D02968	3.8 %	✓ 2.980213	0.004394	1.816173	0.021472	0.010332	0.000046	155.383	21.576388	1.00109787	7.103E-12
13D02969	4.6 %	✓ 1.691552	0.001801	1.827249	0.012557	0.005975	0.000024	155.392	21.579940	1.00109793	8.413E-12
13D02971	5.6 %	✓ 1.131459	0.000990	1.871026	0.010259	0.004060	0.000015	155.409	21.587341	1.00109805	1.045E-11
13D02972	6.6 %	✓ 0.956935	0.000880	2.088337	0.011205	0.003546	0.000014	155.417	21.590895	1.00109811	9.348E-12
13D02974	7.8 %	✓ 0.961755	0.000875	2.432626	0.012647	0.003628	0.000014	155.435	21.598300	1.00109823	9.429E-12
13D02975	9.2 %	✓ 1.049175	0.000954	2.686527	0.013997	0.003990	0.000015	155.444	21.602152	1.00109830	9.642E-12
13D02977	10.8 %	✓ 1.216354	0.001135	2.848275	0.015018	0.004640	0.000018	155.461	21.609561	1.00109842	9.480E-12
13D02978	12.8 %	✓ 1.887055	0.001603	2.897914	0.015528	0.006961	0.000025	155.469	21.613118	1.00109848	1.343E-11
13D02980	15.3 %	3.438884	0.002807	3.220143	0.017221	0.012429	0.000040	155.487	21.620531	1.00109860	2.254E-11
13D02981	18.0 %	5.818502	0.004858	4.633471	0.024319	0.020916	0.000065	155.495	21.624090	1.00109866	3.075E-11
13D02983	21.0 %	8.114461	0.007388	7.396149	0.037625	0.029458	0.000091	155.512	21.631506	1.00109878	3.454E-11
13D02984	23.0 %	9.058845	0.010054	9.258363	0.048361	0.033183	0.000108	155.522	21.635364	1.00109885	2.711E-11

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Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
13D02960	1.8 %	0.0275712	0.0005481	0.0769633	0.0301455	0.0168758	0.0279392	0.2481807	0.0450695	7.9213340	0.1084671
13D02962	2.0 %	0.0266378	0.0005481	0.0761674	0.0301455	0.0159995	0.0279392	0.1969595	0.0450695	7.6180629	0.1084671
13D02963	2.3 %	0.0262344	0.0005481	0.0751781	0.0301455	0.0157952	0.0279392	0.1737161	0.0450695	7.4873704	0.1084671
13D02965	2.7 %	0.0256163	0.0005481	0.0721691	0.0301455	0.0158860	0.0279392	0.1355399	0.0450695	7.2879779	0.1084671
13D02966	3.2 %	0.0253932	0.0005481	0.0702076	0.0301455	0.0161555	0.0279392	0.1202638	0.0450695	7.2165443	0.1084671
13D02968	3.8 %	0.0250820	0.0005481	0.0650439	0.0301455	0.0171879	0.0279392	0.0947894	0.0450695	7.1182967	0.1084671
13D02969	4.6 %	0.0250062	0.0005481	0.0620481	0.0301455	0.0179094	0.0279392	0.0856100	0.0450695	7.0954127	0.1084671
13D02971	5.6 %	0.0250019	0.0005481	0.0547295	0.0301455	0.0198834	0.0279392	0.0728373	0.0450695	7.0983102	0.1084671
13D02972	6.6 %	0.0250735	0.0005481	0.0506995	0.0301455	0.0210569	0.0279392	0.0697548	0.0450695	7.1239757	0.1084671
13D02974	7.8 %	0.0253761	0.0005481	0.0412261	0.0301455	0.0239725	0.0279392	0.0696839	0.0450695	7.2280181	0.1084671
13D02975	9.2 %	0.0256154	0.0005481	0.0357246	0.0301455	0.0257401	0.0279392	0.0730387	0.0450695	7.3091286	0.1084671
13D02977	10.8 %	0.0262332	0.0005481	0.0240382	0.0301455	0.0296227	0.0279392	0.0860127	0.0450695	7.5170497	0.1084671
13D02978	12.8 %	0.0266034	0.0005481	0.0179115	0.0301455	0.0317124	0.0279392	0.0952887	0.0450695	7.6411266	0.1084671
13D02980	15.3 %	0.0275281	0.0005481	0.0040703	0.0301455	0.0365367	0.0279392	0.1209645	0.0450695	7.9501926	0.1084671
13D02981	18.0 %	0.0280456	0.0005481	0.0030906	0.0301455	0.0390784	0.0279392	0.1363373	0.0450695	8.1228191	0.1084671
13D02983	21.0 %	0.0292772	0.0005481	0.0190866	0.0301455	0.0448443	0.0279392	0.1747148	0.0450695	8.5330300	0.1084671
13D02984	23.0 %	0.0299996	0.0005481	0.0279799	0.0301455	0.0480940	0.0279392	0.1980629	0.0450695	8.7733482	0.1084671

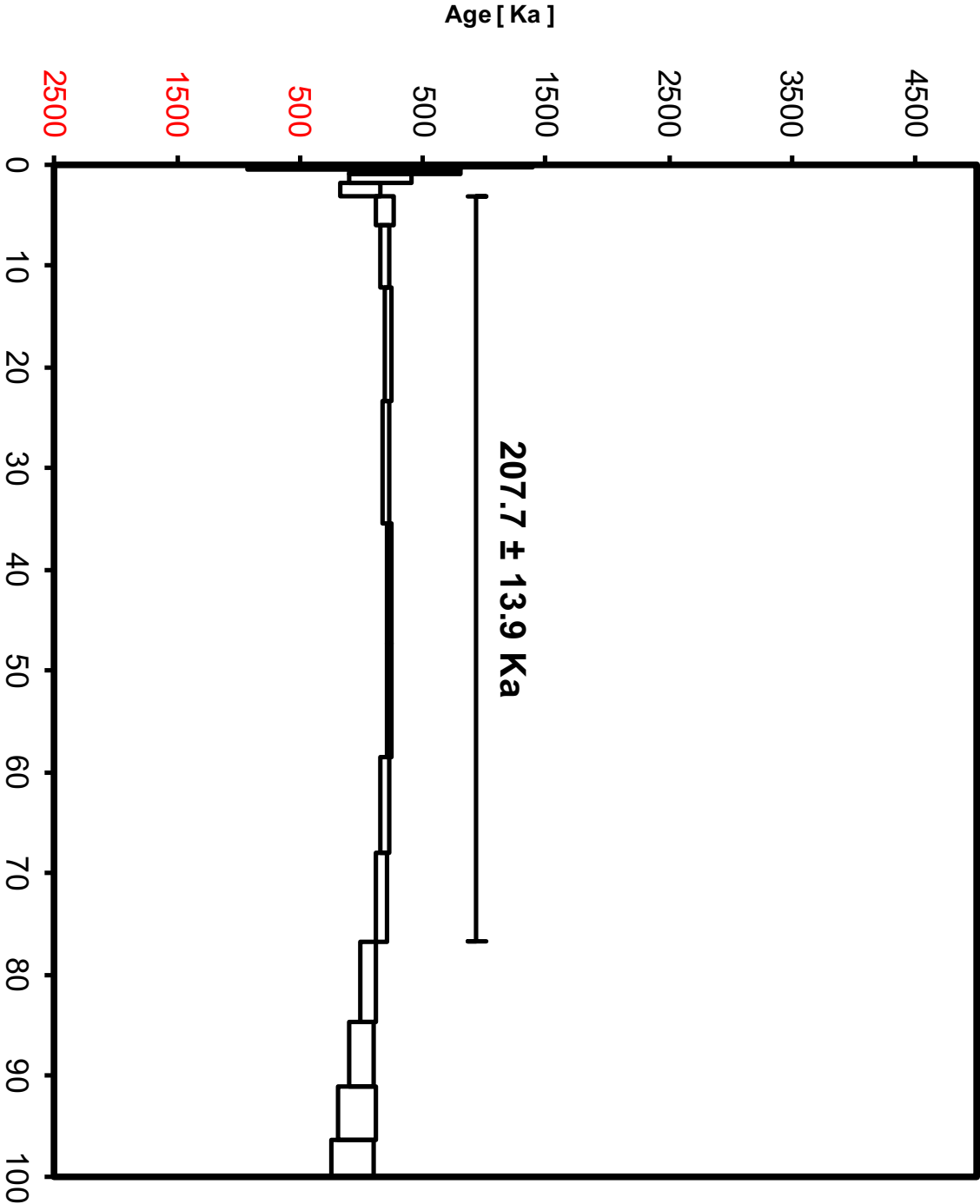
OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Intercept Values	36Ar [A]			37Ar [A]			38Ar [A]			39Ar [A]			40Ar [A]								
	1σ	r2		1σ	r2		1σ	r2		1σ	r2		1σ	r2							
13D02960	1.8%	0.58681	0.001799	0.8023	EXP 150 of 150	0.5257	0.0325	0.0095	EXP 150 of 150	0.1424574	0.0298747	0.0010	EXP 150 of 150	3.8505	0.0261	0.5325	EXP 150 of 150	177.337060	0.040000	0.9984	EXP 150 of 150
13D02962	2.0%	0.54868	0.001841	0.7645	EXP 150 of 150	0.6475	0.0315	0.0110	EXP 150 of 150	0.1725790	0.0280915	0.0057	EXP 150 of 150	5.8027	0.0228	0.7554	EXP 150 of 150	165.129259	0.040498	0.9980	EXP 150 of 150
13D02963	2.3%	0.47933	0.001491	0.7886	EXP 150 of 150	0.7773	0.0309	0.0126	EXP 150 of 150	0.1830758	0.0275221	0.0008	EXP 150 of 150	7.8674	0.0259	0.8311	EXP 150 of 150	145.155235	0.036513	0.9974	EXP 150 of 150
13D02965	2.7%	0.475546	0.001615	0.7457	EXP 150 of 150	1.2166	0.0334	0.0156	EXP 150 of 150	0.2226187	0.0275275	0.0026	EXP 150 of 150	14.4147	0.0278	0.9295	EXP 150 of 150	143.064011	0.037579	0.9976	EXP 150 of 150
13D02966	3.2%	0.438112	0.001654	0.7376	EXP 150 of 150	1.8015	0.0320	0.1001	EXP 150 of 150	0.3097435	0.0274538	0.0000	EXP 150 of 150	21.8172	0.0262	0.9715	EXP 149 of 150	126.852014	0.035245	0.9972	EXP 150 of 150
13D02968	3.8%	0.523409	0.001587	0.8105	EXP 150 of 150	4.1682	0.0321	0.3673	EXP 150 of 150	0.6539001	0.0276437	0.0006	EXP 150 of 150	49.3849	0.0287	0.9933	EXP 150 of 150	155.173884	0.037290	0.9981	EXP 150 of 150
13D02969	4.6%	0.526378	0.001739	0.8371	EXP 150 of 150	8.6711	0.0260	0.7178	EXP 150 of 150	1.2845789	0.0262963	0.0464	EXP 150 of 150	192.3435	0.0338	0.9679	EXP 150 of 150	162.459624	0.040219	0.9984	EXP 150 of 150
13D02971	5.6%	0.763070	0.001684	0.8538	EXP 150 of 150	16.4234	0.0297	0.9149	EXP 150 of 150	2.3912680	0.0289140	0.2020	EXP 149 of 150	191.1294	0.0362	0.9993	EXP 150 of 150	224.879701	0.036501	0.9992	EXP 150 of 150
13D02972	6.6%	0.726098	0.001966	0.8471	LIN 150 of 150	19.3662	0.0333	0.9218	EXP 150 of 150	2.5723120	0.0279688	0.2654	EXP 150 of 150	202.0956	0.0397	0.9992	EXP 150 of 150	201.977130	0.043441	0.9985	EXP 150 of 150
13D02974	7.8%	0.745099	0.001904	0.8558	EXP 149 of 150	22.6146	0.0309	0.9500	EXP 149 of 150	2.6372976	0.0268442	0.3079	EXP 150 of 150	202.8242	0.0360	0.9994	EXP 150 of 150	203.769058	0.041548	0.9986	EXP 150 of 150
13D02975	9.2%	0.767658	0.001939	0.8658	EXP 150 of 150	23.3986	0.0338	0.9415	EXP 150 of 150	2.5551538	0.0287990	0.2567	EXP 150 of 150	190.1211	0.0367	0.9993	EXP 150 of 150	208.278360	0.042330	0.9987	EXP 150 of 150
13D02977	10.8%	0.757650	0.002079	0.8490	LIN 150 of 150	21.0228	0.0319	0.9366	EXP 150 of 150	2.3565248	0.0275544	0.2262	EXP 150 of 150	161.2572	0.0355	0.9990	EXP 150 of 150	205.107409	0.041628	0.9987	EXP 150 of 150
13D02978	12.8%	1.028943	0.002343	0.8955	EXP 150 of 150	19.5225	0.0331	0.9281	EXP 150 of 150	2.4712747	0.0265994	0.1891	EXP 150 of 150	147.2585	0.0341	0.9989	EXP 150 of 150	287.540590	0.045128	0.9993	EXP 150 of 150
13D02980	15.3%	1.675883	0.002958	0.9345	EXP 150 of 150	19.9585	0.0334	0.9205	EXP 150 of 150	2.7721132	0.029366	0.1711	EXP 150 of 150	135.6592	0.0410	0.9982	EXP 150 of 150	477.733756	0.054836	0.9997	EXP 150 of 150
13D02981	18.0%	2.254839	0.003374	0.9547	EXP 150 of 150	23.1462	0.0350	0.9368	EXP 149 of 150	2.6576707	0.0275904	0.2103	EXP 150 of 150	109.4313	0.0328	0.9982	EXP 150 of 150	648.081067	0.065979	0.9998	EXP 150 of 150
13D02983	21.0%	2.569972	0.003670	0.9591	EXP 150 of 150	29.7357	0.0316	0.9658	EXP 150 of 150	2.3863379	0.0268926	0.2065	EXP 150 of 150	88.2124	0.0324	0.9873	EXP 150 of 150	726.555765	0.074572	0.9998	EXP 150 of 150
13D02984	23.0%	2.039195	0.003317	0.9469	EXP 150 of 150	26.1473	0.0355	0.9470	EXP 150 of 150	1.7580046	0.0288152	0.1244	EXP 150 of 150	82.0782	0.0314	0.9950	EXP 150 of 150	573.765464	0.054465	0.9998	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%He	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mvolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes		
1300980	1.8%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	1.8	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	21	0	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300982	2.0%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	2	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	21	20	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300983	2.3%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	2.3	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	21	30	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300985	2.7%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	2.7	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	22	0	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300986	3.2%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	3.2	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	22	10	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300988	3.8%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	3.8	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	22	40	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300989	4.6%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	4.6	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	22	52	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300991	5.6%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	5.6	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	23	11	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300992	6.6%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	6.6	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	23	20	1	15-08U-03	0.00	0.00	50.00		Galapagos/Harpis (15-05)	13002009	01
1300994	7.6%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	7.6	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	20	OCT	2013	23	30	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300995	9.2%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	9.2	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	24	OCT	2013	0	7	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300997	10.8%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	10.8	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	24	OCT	2013	0	32	1	15-08U-03	0.00	0.00	50.00		Galapagos/Harpis (15-05)	13002009	01
1300998	12.8%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	12.8	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	24	OCT	2013	0	44	1	15-08U-03	0.00	0.00	50.00		Galapagos/Harpis (15-05)	13002009	01
1300981	10.3%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	10.3	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	24	OCT	2013	1	3	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300981	10.3%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	10	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	24	OCT	2013	1	21	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300983	21.0%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	21	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	24	OCT	2013	1	40	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	
1300984	23.0%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	23	FC1-3	28.38	0.984	Flanagan et al (1998)	10.0021	0.138	0.00107138	0.138	30.039	0.000	0.001071382	0.003	1	4.00E-14	24	OCT	2013	1	50	1	15-08U-03		50.00		Galapagos/Harpis (15-05)	13002009	01	

Irradiation Constants	40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(d)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
13D02960	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02962	2.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02963	2.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02965	2.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02966	3.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02968	3.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02969	4.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02971	5.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02972	6.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02974	7.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02975	9.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02977	10.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02978	12.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02980	15.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02981	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02983	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02984	25.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0

13D02959.AGE >>> SC12-027 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

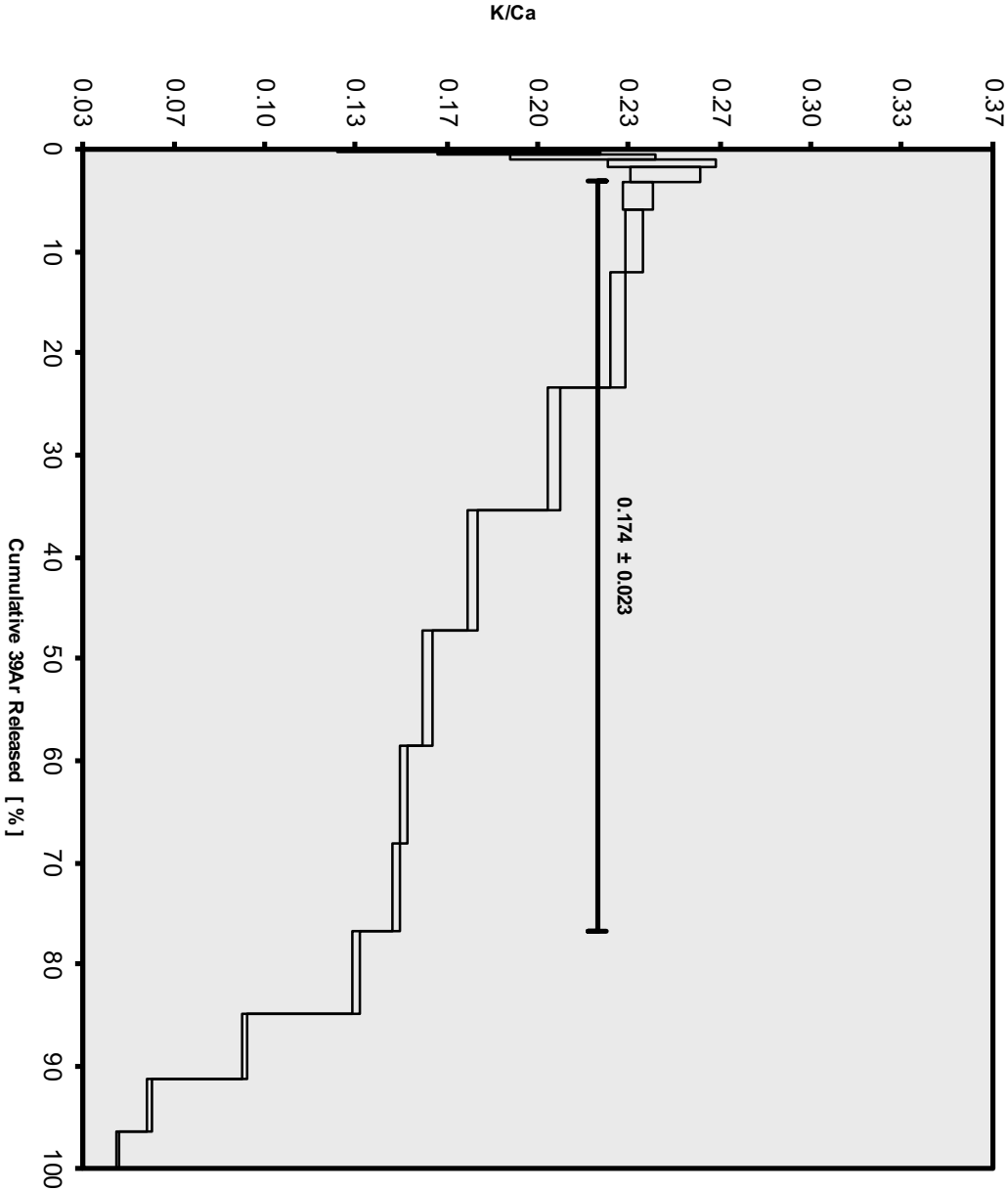
WEIGHTED PLATEAU
207.7 ± 13.9
TOTAL FUSION
151.5 ± 16.4
NORMAL ISOCHRON
242.2 ± 36.0
INVERSE ISOCHRON
242.2 ± 35.3

MSWD (PROBABILITY)
1.70 (10%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00157134 ±
0.13800000

13D02959.AGE >>> SC12-027 >>> GALAPAGOS | HARPP (13-07) PROJECT



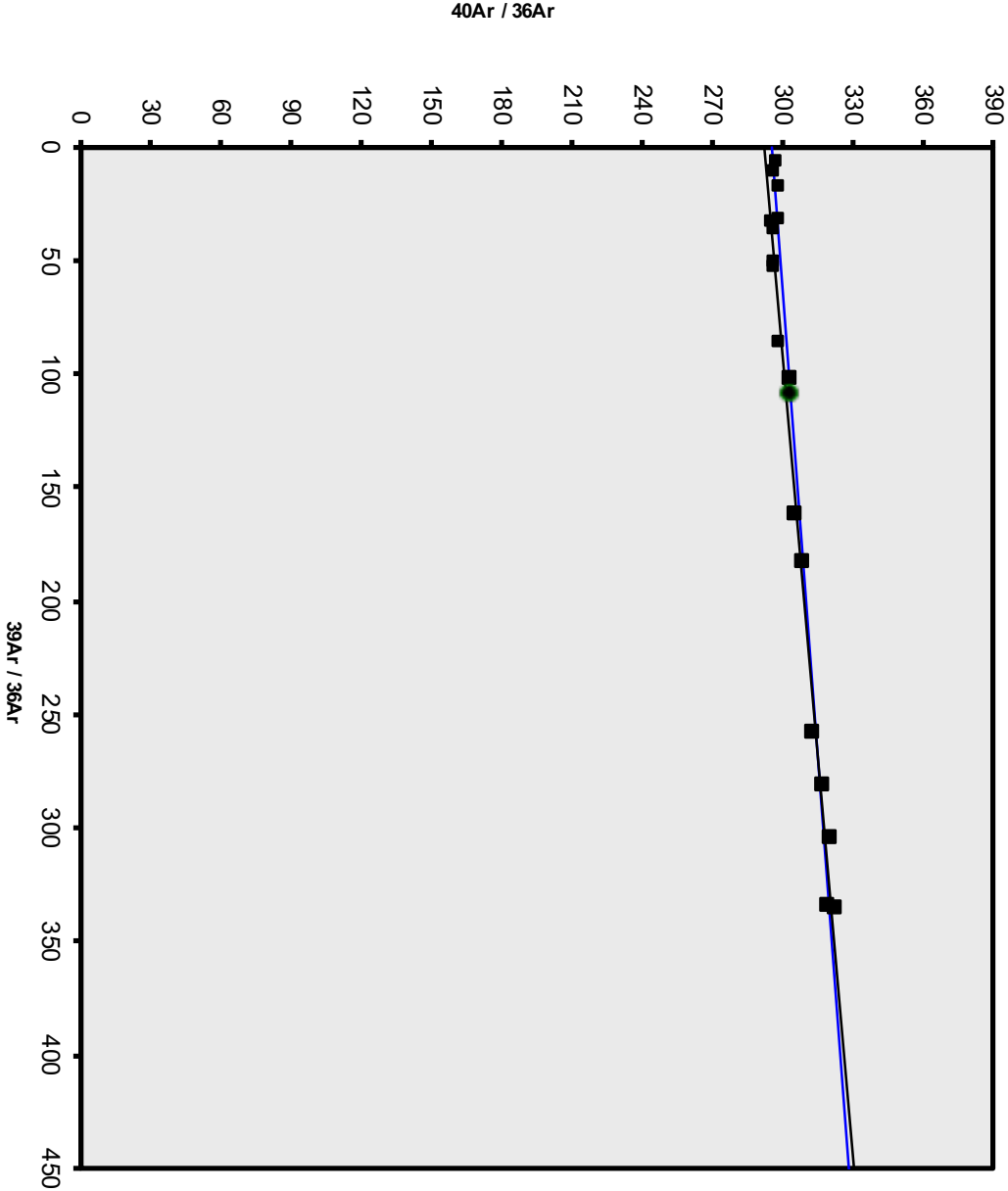
Ar-Ages in Ka

WEIGHTED
PLATEAU
207.7 ± 13.9
TOTAL FUSION
151.5 ± 16.4
NORMAL
ISOCHRON
242.2 ± 36.0
INVERSE
ISOCHRON
242.2 ± 35.3

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03

13D02959.AGE >>> SC12-027 >>> GALAPAGOS | HARPP (13-07) PROJECT



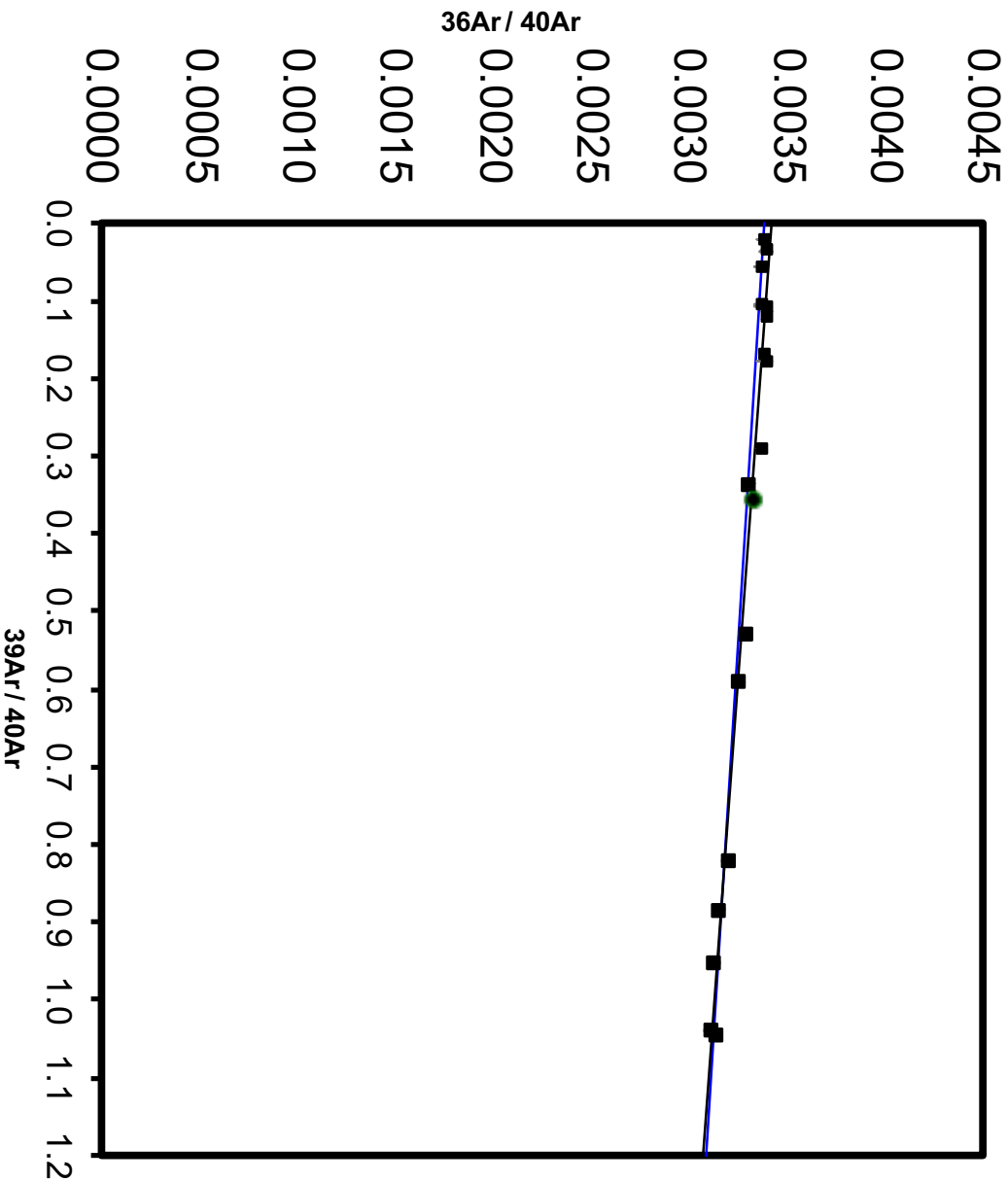
Ar-Ages in Ka

WEIGHTED
PLATEAU
207.7 ± 13.9
TOTAL FUSION
151.5 ± 16.4
NORMAL
ISOCHRON
242.2 ± 36.0
INVERSE
ISOCHRON
242.2 ± 35.3
MSWD
(PROBABILITY)
1.19 (31%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03

13D02959.AGE >>> SC12-027 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
207.7 ± 13.9
TOTAL FUSION
151.5 ± 16.4
NORMAL
ISOCHRON
242.2 ± 36.0
INVERSE
ISOCHRON
242.2 ± 35.3
MSWD
(PROBABILITY)
1.19 (31%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
13D02934	1.8 %	✓	1.510447	10.8278	0.1637625	2.90011	0.26986	0.27 $\pm$ 3.27	0.06	0.34	0.115 $\pm$ 0.021
13D02936	2.0 %	✓	1.357656	13.0518	0.1528577	3.98461	1.81306	1.32 $\pm$ 2.28	0.45	0.47	0.131 $\pm$ 0.019
13D02937	2.3 %	✓	1.100413	15.9422	0.1266619	4.95003	1.47533	0.86 $\pm$ 1.62	0.45	0.58	0.134 $\pm$ 0.015
13D02939	2.7 %	✓	1.008895	25.7446	0.1149615	7.82419	4.18601	1.55 $\pm$ 0.95	1.38	0.92	0.131 $\pm$ 0.009
13D02940	3.2 %	✓	0.884026	38.7023	0.1668657	11.67359	5.87193	1.46 $\pm$ 0.63	2.20	1.38	0.130 $\pm$ 0.006
13D02942	3.8 %	✓	0.918909	74.8066	0.1488291	22.63388	10.54421	1.36 $\pm$ 0.33	3.74	2.67	0.130 $\pm$ 0.004
13D02943	4.6 %	✓	0.845043	123.1074	0.1440260	38.14802	17.10774	1.30 $\pm$ 0.19	6.41	4.50	0.133 $\pm$ 0.002
13D02945	5.6 %	✓	0.928689	238.9257	0.1795793	80.54263	38.73064	1.39 $\pm$ 0.09	12.36	9.50	0.145 $\pm$ 0.002
13D02946	6.6 %	✓	0.694909	257.6215	0.1572573	91.36908	42.92218	1.36 $\pm$ 0.07	17.28	10.78	0.153 $\pm$ 0.002
13D02948	7.8 %	✓	0.648316	279.6565	0.2027657	96.60450	46.10626	1.38 $\pm$ 0.07	19.39	11.39	0.149 $\pm$ 0.002
13D02949	9.2 %	✓	0.615322	282.2505	0.1361013	92.81491	42.87794	1.34 $\pm$ 0.07	19.07	10.95	0.141 $\pm$ 0.002
13D02951	10.8 %	✓	0.475694	246.2649	0.1009794	74.75899	35.25686	1.37 $\pm$ 0.08	20.04	8.82	0.131 $\pm$ 0.002
13D02952	12.8 %	✓	0.490728	270.6189	0.1470824	71.46646	34.86662	1.41 $\pm$ 0.09	19.38	8.43	0.114 $\pm$ 0.001
13D02954	15.3 %	✓	0.617952	380.4806	0.2580669	75.06396	34.93535	1.35 $\pm$ 0.09	16.05	8.85	0.085 $\pm$ 0.001
13D02955	18.0 %	✓	0.763104	596.9270	0.3089511	75.05321	34.59912	1.34 $\pm$ 0.10	13.30	8.85	0.054 $\pm$ 0.001
13D02957	21.0 %	✓	0.720969	656.0899	0.2748024	63.58371	28.63564	1.30 $\pm$ 0.12	11.85	7.50	0.042 $\pm$ 0.000
13D02958	23.0 %	✓	0.384236	353.8036	0.1639985	34.44334	16.79605	1.41 $\pm$ 0.17	12.88	4.06	0.042 $\pm$ 0.000
Σ			13.965308	3864.8220	2.9475487	847.81523	396.99479				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-067 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Anthony Koppers Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00160212 $\pm$ 0.14100000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.47053 $\pm$ 0.00936 $\pm$ 1.99%	1.36 $\pm$ 0.03 $\pm$ 2.01% Full External Error $\pm$ 0.04 Analytical Error $\pm$ 0.03	0.37 99% 1.71 1.0000	100.00 17 2 σ Confidence Limit Error Magnification	0.061 $\pm$ 0.017
	Total Fusion Age	0.46826 $\pm$ 0.01229 $\pm$ 2.62%	1.36 $\pm$ 0.04 $\pm$ 2.64% Full External Error $\pm$ 0.05 Analytical Error $\pm$ 0.04		17	0.094 $\pm$ 0.000

OSU Argon Geochronology Lab

Normal Isochron			$39(k)/36(a) \pm 2\sigma$	$40(a+r)/36(a) \pm 2\sigma$	r.i.
13D02934	1.8 %	✓	1.92 ± 0.06	295.68 ± 2.17	0.2121
13D02936	2.0 %	✓	2.93 ± 0.07	296.84 ± 2.32	0.3041
13D02937	2.3 %	✓	4.50 ± 0.08	296.84 ± 2.53	0.3738
13D02939	2.7 %	✓	7.76 ± 0.10	299.65 ± 2.58	0.5223
13D02940	3.2 %	✓	13.21 ± 0.15	302.14 ± 2.92	0.6720
13D02942	3.8 %	✓	24.63 ± 0.23	306.97 ± 2.88	0.8110
13D02943	4.6 %	✓	45.14 ± 0.41	315.74 ± 3.08	0.8565
13D02945	5.6 %	✓	86.73 ± 0.75	337.20 ± 3.13	0.8987
13D02946	6.6 %	✓	131.48 ± 1.33	357.27 ± 3.92	0.8936
13D02948	7.8 %	✓	149.01 ± 1.60	366.62 ± 4.29	0.8995
13D02949	9.2 %	✓	150.84 ± 1.65	365.18 ± 4.37	0.8929
13D02951	10.8 %	✓	157.16 ± 2.00	369.62 ± 5.26	0.8779
13D02952	12.8 %	✓	145.63 ± 1.82	366.55 ± 5.10	0.8781
13D02954	15.3 %	✓	121.47 ± 1.31	352.03 ± 4.20	0.8832
13D02955	18.0 %	✓	98.35 ± 1.01	340.84 ± 3.76	0.9008
13D02957	21.0 %	✓	88.19 ± 0.96	335.22 ± 3.92	0.8980
13D02958	23.0 %	✓	89.64 ± 1.37	339.21 ± 5.91	0.8460

Results	$40(a)/36(a) \pm 2\sigma$	$40(r)/39(k) \pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	295.20 ± 1.04 $\pm 0.35\%$	0.47309 ± 0.01316 $\pm 2.78\%$	1.37 ± 0.04 $\pm 2.80\%$	0.37 99%
			Full External Error ± 0.05 Analytical Error ± 0.04	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.73 1.0000 17	Convergence Number of Iterations Calculated Line	0.000001416584 4 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			$39(k)/40(a+r) \pm 2\sigma$	$36(a)/40(a+r) \pm 2\sigma$	r.i.
13D02934	1.8 %	✓	0.0064937 ± 0.0001920	0.00338205 ± 0.00002480	0.0311
13D02936	2.0 %	✓	0.0098874 ± 0.0002092	0.00336887 ± 0.00002629	0.0501
13D02937	2.3 %	✓	0.0151541 ± 0.0002664	0.00336881 ± 0.00002875	0.0839
13D02939	2.7 %	✓	0.0258810 ± 0.0002957	0.00333724 ± 0.00002877	0.1488
13D02940	3.2 %	✓	0.0437047 ± 0.0003819	0.00330970 ± 0.00003201	0.2221
13D02942	3.8 %	✓	0.0802387 ± 0.0004628	0.00325760 ± 0.00003059	0.3109
13D02943	4.6 %	✓	0.1429740 ± 0.0007290	0.00316711 ± 0.00003091	0.3781
13D02945	5.6 %	✓	0.2571946 ± 0.0010499	0.00296556 ± 0.00002750	0.3614
13D02946	6.6 %	✓	0.3680263 ± 0.0018171	0.00279903 ± 0.00003074	0.4004
13D02948	7.8 %	✓	0.4064416 ± 0.0020794	0.00272764 ± 0.00003190	0.3955
13D02949	9.2 %	✓	0.4130513 ± 0.0022270	0.00273835 ± 0.00003275	0.4110
13D02951	10.8 %	✓	0.4251911 ± 0.0028981	0.00270551 ± 0.00003848	0.4461
13D02952	12.8 %	✓	0.3973078 ± 0.0026475	0.00272814 ± 0.00003797	0.4454
13D02954	15.3 %	✓	0.3450578 ± 0.0019322	0.00284063 ± 0.00003387	0.4231
13D02955	18.0 %	✓	0.2885593 ± 0.0013847	0.00293393 ± 0.00003236	0.3742
13D02957	21.0 %	✓	0.2630882 ± 0.0013569	0.00298313 ± 0.00003489	0.3802
13D02958	23.0 %	✓	0.2642619 ± 0.0024593	0.00294800 ± 0.00005138	0.4844

Results	$40(a)/36(a) \pm 2\sigma$	$40(r)/39(k) \pm 2\sigma$	Age ± 2σ (Ma)	MSWD
Inverse Isochron	295.20 ± 1.04 ± 0.35%	0.47318 ± 0.01315 ± 2.78%	1.37 ± 0.04 ± 2.79% Full External Error ± 0.05 Analytical Error ± 0.04	0.37 99%
Statistics	2σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	1.73 1.0000 17 19.8%	Convergence Number of Iterations Calculated Line	0.0009561380 3 Weighted York-2

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ	
13D02934	1.8 %	✓	1.513346	0.342	10.8278	9.092	0.480573	8.241	2.90740	1.468	446.6097	0.130	0.09305 ± 1.12881	0.27 ± 3.27	0.06	0.34	0.115 ± 0.021
13D02936	2.0 %	✓	1.361140	0.361	13.0518	7.263	0.453763	8.759	3.99340	1.046	403.0044	0.144	0.45501 ± 0.78631	1.32 ± 2.28	0.45	0.47	0.131 ± 0.019
13D02937	2.3 %	✓	1.104653	0.386	15.9422	5.484	0.390876	9.343	4.96076	0.859	326.6523	0.177	0.29804 ± 0.56108	0.86 ± 1.62	0.45	0.58	0.134 ± 0.015
13D02939	2.7 %	✓	1.015721	0.383	25.7446	3.589	0.396142	9.779	7.84152	0.537	302.3224	0.191	0.53501 ± 0.32949	1.55 ± 0.95	1.38	0.92	0.131 ± 0.009
13D02940	3.2 %	✓	0.894286	0.426	38.7023	2.435	0.470315	8.196	11.69964	0.378	267.1135	0.217	0.50301 ± 0.21745	1.46 ± 0.63	2.20	1.38	0.130 ± 0.006
13D02942	3.8 %	✓	0.938696	0.412	74.8066	1.365	0.588545	6.478	22.68422	0.202	282.1947	0.205	0.46586 ± 0.11352	1.35 ± 0.33	3.74	2.67	0.130 ± 0.004
13D02943	4.6 %	✓	0.877580	0.420	123.1074	0.915	0.753201	5.101	38.23087	0.134	266.8564	0.217	0.44846 ± 0.06479	1.30 ± 0.19	6.41	4.50	0.133 ± 0.002
13D02945	5.6 %	✓	0.991811	0.396	238.9257	0.626	1.302937	2.883	80.70343	0.086	313.2396	0.185	0.48067 ± 0.03236	1.39 ± 0.09	12.36	9.50	0.145 ± 0.002
13D02946	6.6 %	✓	0.762961	0.450	257.6215	0.601	1.362725	2.769	91.54246	0.081	248.3601	0.233	0.46977 ± 0.02570	1.36 ± 0.07	17.28	10.78	0.153 ± 0.002
13D02948	7.8 %	✓	0.722196	0.474	279.6665	0.584	1.462167	2.744	96.79270	0.079	237.7812	0.243	0.47727 ± 0.02426	1.38 ± 0.07	19.39	11.39	0.149 ± 0.002
13D02949	9.2 %	✓	0.688970	0.477	282.2505	0.591	1.346571	2.949	93.00486	0.080	224.7993	0.257	0.46197 ± 0.02456	1.34 ± 0.07	19.07	10.95	0.141 ± 0.002
13D02951	10.8 %	✓	0.540733	0.550	246.2649	0.617	1.074875	3.508	74.92473	0.089	175.8999	0.329	0.47161 ± 0.02833	1.37 ± 0.08	20.04	8.82	0.131 ± 0.002
13D02952	12.8 %	✓	0.562209	0.534	270.6189	0.581	1.089704	3.631	71.64858	0.088	179.9490	0.321	0.48787 ± 0.02983	1.41 ± 0.09	19.38	8.43	0.114 ± 0.001
13D02954	15.3 %	✓	0.718464	0.453	380.4806	0.534	1.280677	3.147	75.32003	0.088	217.6161	0.266	0.46541 ± 0.03020	1.35 ± 0.09	16.05	8.85	0.085 ± 0.001
13D02955	18.0 %	✓	0.920771	0.409	596.9270	0.508	1.388654	2.819	75.45495	0.089	260.1721	0.222	0.46099 ± 0.03403	1.34 ± 0.10	13.30	8.85	0.054 ± 0.001
13D02957	21.0 %	✓	0.894246	0.419	656.0899	0.500	1.224331	3.145	64.02526	0.095	241.7463	0.239	0.45036 ± 0.04012	1.30 ± 0.12	11.85	7.50	0.042 ± 0.000
13D02958	23.0 %	✓	0.477682	0.594	353.8036	0.548	0.676956	5.911	34.68145	0.141	130.3727	0.443	0.48764 ± 0.05978	1.41 ± 0.17	12.88	4.06	0.042 ± 0.000
Σ			14.986364	0.104	3864.8220	0.182	15.743012	1.017	850.41625	0.029	4524.5997	0.053					

Information on Analysis and Constants Used in Calculations		Results		40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Sample = SC12-067		Age Equations = Min et al. (2000)							
Material = Groundmass		Negative Intensities = Allowed			0.47053 ± 0.00936 ± 1.99%	1.36 ± 0.03 99% ± 2.01%	0.37 17	100.00	0.061 ± 0.017
Location = Galapagos St. Cruz Island		Decay Constant 40K = 5.530 ± 0.048 E-10 1/a				Full External Error ± 0.04	1.71	2σ Confidence Limit	
Analyst = Anthony Koppers		Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h				Analytical Error ± 0.03	1.0000	Error Magnification	
Project = GALAPAGOS HARPP (13-07)		Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h							
Mass Discrimination Law = LIN		Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a			0.46826 ± 0.01229 ± 2.62%	1.36 ± 0.04 99% ± 2.64%		17	0.094 ± 0.000
Irradiation = 13-OSU-03		Decay Constant 40K(EC,β ⁺) = 0.580 ± 0.009 E-10 1/a				Full External Error ± 0.05			
J = 0.00160212 ± 0.14100000		Decay Constant 40K(β ⁻) = 4.950 ± 0.043 E-10 1/a				Analytical Error ± 0.04			
FCT-3 = 28.340 ± 0.564 Ma		Atmospheric Ratio 40/36(a) = 295.50							
IGSN = Undefined		Atmospheric Ratio 38/36(a) = 0.1869							
Preferred Age = Undefined		Production Ratio 39/37(ca) = 0.000673		295.20 ± 1.04 ± 0.35%	0.47309 ± 0.01316 ± 2.78%	1.37 ± 0.04 99% ± 2.80%	0.37 17	100.00	
Classification = Undefined		Production Ratio 38/37(ca) = 0.000139				Full External Error ± 0.05	1.73	2σ Confidence Limit	
Experiment Type = 5.52		Production Ratio 36/37(ca) = 0.000264				Analytical Error ± 0.04	1.0000	Error Magnification	
Extraction Method = Undefined		Production Ratio 40/39(k) = 0.001010					4	Number of Iterations	
Heating = 59 sec		Production Ratio 38/39(k) = 0.011380					0.0000014166	Convergence	
Isolation = 6.00 min		Production Ratio 36/38(c1) = 262.80 ± 1.71							
Instrument = ARGUS-VI		Scaling Ratio K/Ca = 0.430							
Lithology = Undefined		Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04		295.20 ± 1.04 ± 0.35%	0.47318 ± 0.01315 ± 2.78%	1.37 ± 0.04 99% ± 2.79%	0.37 17	100.00	
Lat-Lon = Undefined - Undefined		Atomic Weight K = 39.0983 ± 0.0001 g				Full External Error ± 0.05	1.73	2σ Confidence Limit	
Collector Calibrations = 40Ar 36Ar						Analytical Error ± 0.04	1.0000	Error Magnification	
							3	Number of Iterations	
							0.0009561380	Convergence	
							20%	Spreading Factor	

Depositing Patterns	36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(ca) [A]	%1σ	36Ar(cd) [A]	%1σ	37Ar(ca) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(b) [A]	%1σ	38Ar(ca) [A]	%1σ	38Ar(cd) [A]	%1σ	39Ar(a) [A]	%1σ	39Ar(ca) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(a) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(b) [A]	%1σ		
1300204	1.6%	✓	1.519447	0.34	0.000000	0.00	0.002686	9.09	0.000412	24.21	10.8278	9.09	0.262325	0.36	0.000000	0.00	0.033003	1.47	0.001925	9.09	0.1637625	24.23	2.90011	1.47	0.002071	9.09	0.26986	695.54	446.370	0.34	0.000000	0.00	0.002629	1.47
1300206	2.0%	✓	1.357696	0.36	0.000000	0.00	0.000467	7.26	0.000385	26.03	13.0518	7.26	0.252749	0.36	0.000000	0.00	0.0463449	1.05	0.0018142	7.26	0.152877	26.04	3.98461	1.05	0.0067839	7.26	1.81306	86.40	401.1673	0.36	0.000000	0.00	0.004046	1.05
1300207	2.5%	✓	1.100410	0.39	0.000000	0.00	0.000297	5.46	0.000209	26.96	15.9422	5.46	0.209872	0.39	0.000000	0.00	0.0362314	0.86	0.0022760	5.46	0.126619	26.97	4.95833	0.86	0.0107291	5.46	1.47533	94.12	325.1750	0.39	0.000000	0.00	0.0009995	0.86
1300209	2.1%	✓	1.00886	0.39	0.000000	0.00	0.0067866	3.39	0.000220	33.72	29.1445	3.39	0.188925	0.39	0.000000	0.00	0.0680383	0.54	0.0023786	3.39	0.1166416	33.73	7.82419	0.54	0.0175261	3.39	4.49801	30.79	298.126	0.39	0.000000	0.00	0.0079624	0.54
1300240	3.2%	✓	0.884826	0.43	0.000000	0.00	0.0102174	2.43	0.0000420	23.13	38.7023	2.43	0.185246	0.43	0.000000	0.00	0.120864	0.38	0.0026796	2.43	0.1628657	23.14	11.6739	0.38	0.0205467	2.43	5.87193	21.61	261.2298	0.43	0.000000	0.00	0.0177933	0.38
1300242	3.8%	✓	0.91989	0.42	0.000000	0.00	0.0167480	1.36	0.000375	25.64	74.6966	1.36	0.1717441	0.42	0.000000	0.00	0.2023795	0.20	0.0101881	1.36	0.1488291	25.66	22.0388	0.20	0.0023449	1.36	10.54421	12.18	271.0276	0.42	0.000000	0.00	0.0228632	0.20
1300243	4.6%	✓	0.845043	0.44	0.000000	0.00	0.0252503	0.91	0.000363	26.70	123.1074	0.91	0.157988	0.44	0.000000	0.00	0.4341244	0.13	0.0171119	0.91	0.1446209	26.72	38.14802	0.13	0.036813	0.91	17.10774	7.22	249.7102	0.44	0.000000	0.00	0.036826	0.13
1300245	5.6%	✓	0.62889	0.43	0.000000	0.00	0.060704	0.63	0.000453	20.85	238.9257	0.63	0.1135720	0.43	0.000000	0.00	0.1918761	0.09	0.0335107	0.63	0.1795703	20.97	80.54263	0.09	0.1897970	0.63	38.73064	3.36	274.4276	0.43	0.000000	0.00	0.0813481	0.09
1300246	6.6%	✓	0.68489	0.60	0.000000	0.00	0.060721	0.60	0.000396	24.02	251.6215	0.60	0.1206781	0.60	0.000000	0.00	0.1030781	0.08	0.0366894	0.60	0.1572573	24.04	97.36908	0.08	0.1733793	0.60	40.92218	2.73	285.3467	0.60	0.000000	0.00	0.062626	0.08
1300248	7.8%	✓	0.648216	0.53	0.000000	0.00	0.0738293	0.58	0.000011	19.82	279.6665	0.58	0.1211792	0.53	0.000000	0.00	0.0909682	0.08	0.0388722	0.58	0.2027607	19.84	96.60400	0.08	0.1885288	0.58	46.19026	2.54	191.5773	0.53	0.000000	0.00	0.0975706	0.08
1300249	9.2%	✓	0.610322	0.54	0.000000	0.00	0.0761611	0.59	0.000043	29.21	282.2555	0.59	0.1193006	0.54	0.000000	0.00	0.0962386	0.08	0.0302328	0.59	0.1891813	29.22	80.91491	0.08	0.1899446	0.59	42.87794	2.66	191.8276	0.54	0.000000	0.00	0.0837431	0.08
1300261	10.8%	✓	0.479694	0.63	0.000000	0.00	0.0660139	0.62	0.0000265	37.36	246.2649	0.62	0.0888072	0.63	0.000000	0.00	0.0805793	0.09	0.0342308	0.62	0.1000794	37.38	74.7699	0.09	0.1867362	0.62	35.25686	3.00	140.3676	0.63	0.000000	0.00	0.0756066	0.09
1300262	12.8%	✓	0.490728	0.62	0.000000	0.00	0.0714424	0.58	0.0000371	26.83	270.8189	0.58	0.0917171	0.62	0.000000	0.00	0.8132783	0.09	0.0370760	0.58	0.1470624	26.95	71.46848	0.09	0.1821265	0.58	34.86662	3.06	145.0102	0.62	0.000000	0.00	0.0721811	0.09
1300264	15.1%	✓	0.617762	0.53	0.000000	0.00	0.1004469	0.53	0.000001	16.65	386.4806	0.53	0.1154603	0.53	0.000000	0.00	0.8542279	0.09	0.0203889	0.53	0.2865669	16.68	76.56396	0.09	0.206034	0.53	34.18035	3.24	162.8489	0.53	0.000000	0.00	0.0701846	0.09
1300265	18.0%	✓	0.763104	0.60	0.000000	0.00	0.1057887	0.51	0.0000779	12.71	696.9270	0.51	0.1426241	0.60	0.000000	0.00	0.8541056	0.09	0.0829729	0.51	0.3098611	12.74	76.00321	0.09	0.4017319	0.51	34.98912	3.89	225.4872	0.60	0.000000	0.00	0.0708807	0.09
1300267	21.0%	✓	0.720989	0.53	0.000000	0.00	0.1726077	0.50	0.0000003	14.05	696.8999	0.50	0.1347692	0.53	0.000000	0.00	0.7236826	0.10	0.0911785	0.50	0.2748624	14.08	63.98271	0.10	0.4454965	0.50	28.60364	4.40	213.1465	0.53	0.000000	0.00	0.0947196	0.10
1300268	21.0%	✓	0.396236	0.75	0.000000	0.00	0.0594562	0.55	0.0000414	24.42	353.8036	0.55	0.0718138	0.75	0.000000	0.00	0.3919662	0.14	0.0461787	0.55	0.6269865	24.44	34.44234	0.14	0.2381598	0.55	16.76905	6.13	113.5418	0.75	0.000000	0.00	0.0547079	0.14
Σ	13.96338	0.11	0.000000	0.00	1.020139	0.18	0.0827429	5.44	3884.8220	0.18	2.610162	0.11	0.000000	0.00	0.8468137	0.03	0.0372703	0.18	2.9475467	5.45	847.81523	0.03	2.610162	0.18	390.96479	1.31	4126.7487	0.11	0.000000	0.00	0.8562394	0.03		
Σ							14.986294	0.11	3894.8220	0.18									15.742012	1.02			850.41025	0.03							4294.2287	0.15		

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 GEOAS Oregon State University, Corvallis, USA

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
13D02934	1.8 %	✓	153.611357	2.264494	3.724235	0.343001	0.520515	0.007848	155.090	21.451856	1.00109580	2.144E-11
13D02936	2.0 %	✓	100.917685	1.065104	3.268357	0.239841	0.340848	0.003771	155.107	21.458919	1.00109592	1.934E-11
13D02937	2.3 %	✓	65.847219	0.577513	3.213666	0.178394	0.222678	0.002097	155.116	21.462746	1.00109598	1.568E-11
13D02939	2.7 %	✓	38.554053	0.219818	3.283114	0.119131	0.129531	0.000854	155.133	21.470107	1.00109610	1.451E-11
13D02940	3.2 %	✓	22.830925	0.099564	3.307993	0.081510	0.076437	0.000436	155.142	21.473641	1.00109616	1.282E-11
13D02942	3.8 %	✓	12.436160	0.035819	3.297739	0.045187	0.041381	0.000190	155.159	21.481006	1.00109628	1.354E-11
13D02943	4.6 %	✓	6.980130	0.017782	3.220104	0.029761	0.022955	0.000101	155.167	21.484542	1.00109634	1.281E-11
13D02945	5.6 %	✓	3.881367	0.007918	2.960539	0.018694	0.012290	0.000050	155.185	21.491911	1.00109647	1.504E-11
13D02946	6.6 %	✓	2.713059	0.006694	2.814230	0.017081	0.008335	0.000038	155.194	21.495743	1.00109653	1.192E-11
13D02948	7.8 %	✓	2.456602	0.006281	2.889231	0.017020	0.007461	0.000036	155.210	21.502821	1.00109665	1.141E-11
13D02949	9.2 %	✓	2.417070	0.006512	3.034794	0.018088	0.007418	0.000036	155.219	21.506656	1.00109671	1.079E-11
13D02951	10.8 %	✓	2.347689	0.007996	3.286830	0.020485	0.007217	0.000040	155.237	21.514032	1.00109683	8.443E-12
13D02952	12.8 %	✓	2.511550	0.008363	3.777031	0.022184	0.007847	0.000042	155.245	21.517573	1.00109689	8.638E-12
13D02954	15.3 %	✓	2.889219	0.008084	5.051519	0.027323	0.009539	0.000044	155.262	21.524953	1.00109702	1.045E-11
13D02955	18.0 %	✓	3.448046	0.008264	7.911039	0.040776	0.012203	0.000051	155.271	21.528497	1.00109707	1.249E-11
13D02957	21.0 %	✓	3.775796	0.009725	10.247360	0.052168	0.013967	0.000060	155.288	21.535880	1.00109720	1.160E-11
13D02958	23.0 %	✓	3.759147	0.017476	10.201523	0.057705	0.013773	0.000084	155.297	21.539721	1.00109726	6.258E-12

OSU Argon Geochronology Lab

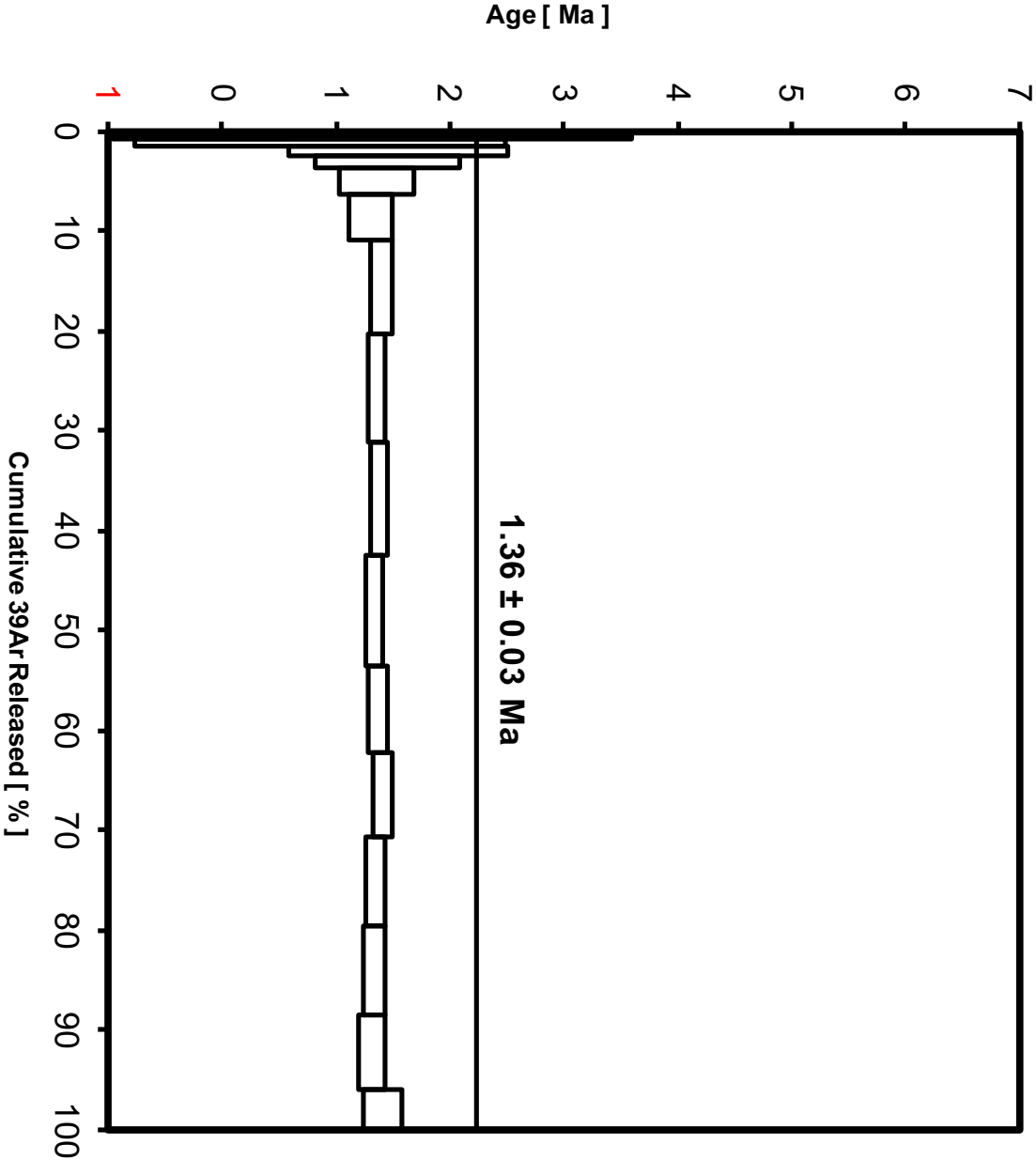
Procedure Blanks		36Ar		37Ar		38Ar		39Ar		40Ar	
		[fA]	1 σ	[fA]	1 σ	[fA]	1 σ	[fA]	1 σ	[fA]	1 σ
13D02934	1.8 %	0.0256757	0.0018747	0.0745258	0.0299491	0.0400430	0.0266566	0.0915390	0.0340851	7.4917129	0.5766909
13D02936	2.0 %	0.0260597	0.0018747	0.0634195	0.0299491	0.0331054	0.0266566	0.0670986	0.0340851	7.6099473	0.5766909
13D02937	2.3 %	0.0262677	0.0018747	0.0582091	0.0299491	0.0297015	0.0266566	0.0571585	0.0340851	7.6739910	0.5766909
13D02939	2.7 %	0.0266677	0.0018747	0.0497799	0.0299491	0.0238547	0.0266566	0.0445576	0.0340851	7.7971518	0.5766909
13D02940	3.2 %	0.0268597	0.0018747	0.0464774	0.0299491	0.0213749	0.0266566	0.0415540	0.0340851	7.8562691	0.5766909
13D02942	3.8 %	0.0272598	0.0018747	0.0411462	0.0299491	0.0168895	0.0266566	0.0416396	0.0340851	7.9794299	0.5766909
13D02943	4.6 %	0.0274518	0.0018747	0.0393307	0.0299491	0.0150633	0.0266566	0.0447255	0.0340851	8.0385472	0.5766909
13D02945	5.6 %	0.0278518	0.0018747	0.0370975	0.0299491	0.0119393	0.0266566	0.0574976	0.0340851	8.1617080	0.5766909
13D02946	6.6 %	0.0280598	0.0018747	0.0367634	0.0299491	0.0106784	0.0266566	0.0675268	0.0340851	8.2257517	0.5766909
13D02948	7.8 %	0.0284439	0.0018747	0.0376338	0.0299491	0.0090040	0.0266566	0.0921317	0.0340851	8.3439861	0.5766909
13D02949	9.2 %	0.0286519	0.0018747	0.0389107	0.0299491	0.0084510	0.0266566	0.1087578	0.0340851	8.4080298	0.5766909
13D02951	10.8 %	0.0290519	0.0018747	0.0429571	0.0299491	0.0080866	0.0266566	0.1472459	0.0340851	8.5311907	0.5766909
13D02952	12.8 %	0.0292439	0.0018747	0.0456429	0.0299491	0.0082385	0.0266566	0.1687649	0.0340851	8.5903079	0.5766909
13D02954	15.3 %	0.0296440	0.0018747	0.0527874	0.0299491	0.0092356	0.0266566	0.2199395	0.0340851	8.7134688	0.5766909
13D02955	18.0 %	0.0298360	0.0018747	0.0569602	0.0299491	0.0100409	0.0266566	0.2475480	0.0340851	8.7725860	0.5766909
13D02957	21.0 %	0.0302360	0.0018747	0.0672026	0.0299491	0.0123995	0.0266566	0.3114091	0.0340851	8.8957469	0.5766909
13D02958	23.0 %	0.0304440	0.0018747	0.0733559	0.0299491	0.0139894	0.0266566	0.3480045	0.0340851	8.9597905	0.5766909

Intercept Values	36Ar [fA]			37Ar [fA]			38Ar [fA]			39Ar [fA]			40Ar [fA]								
	1σ	r2		1σ	r2		1σ	r2		1σ	r2		1σ	r2							
13D02934	1.8%	1.495539	0.002883	0.9355	EXP 150 of 150	0.5698	0.0335	0.0026	EXP 150 of 150	0.4345009	0.0286112	0.0010	EXP 149 of 150	2.97757	0.02512	0.3841	EXP 150 of 150	454.26646	0.05180	0.9997	EXP 150 of 150
13D02936	2.0%	1.348090	0.002747	0.9181	EXP 150 of 150	0.6602	0.0312	0.0020	EXP 149 of 150	0.4149642	0.0287584	0.0027	EXP 150 of 150	4.03114	0.02345	0.6162	EXP 150 of 150	410.76325	0.04801	0.9996	EXP 150 of 150
13D02937	2.3%	1.099181	0.002427	0.8960	EXP 150 of 150	0.7670	0.0262	0.0002	EXP 150 of 150	0.3552739	0.0242892	0.0004	EXP 150 of 150	4.98146	0.02465	0.0256	EXP 150 of 150	334.44698	0.05101	0.9994	EXP 150 of 150
13D02939	2.7%	1.013203	0.002050	0.9131	EXP 150 of 150	1.2263	0.0292	0.0203	EXP 150 of 150	0.3673170	0.0274263	0.0015	EXP 150 of 150	7.82844	0.02371	0.8504	EXP 150 of 150	310.23214	0.04361	0.9994	EXP 150 of 150
13D02940	3.2%	0.895450	0.002265	0.8564	EXP 150 of 150	1.8149	0.0298	0.1113	EXP 150 of 150	0.4430097	0.0271622	0.0237	EXP 150 of 150	11.65520	0.02679	0.9039	EXP 150 of 150	275.06847	0.04327	0.9993	EXP 150 of 150
13D02942	3.8%	0.939883	0.002242	0.8861	EXP 150 of 150	3.4581	0.0313	0.2350	EXP 150 of 150	0.5642713	0.0265734	0.0327	EXP 148 of 150	22.55913	0.02670	0.9726	EXP 150 of 150	290.18831	0.04382	0.9994	EXP 150 of 150
13D02943	4.6%	0.879816	0.002094	0.8706	EXP 149 of 150	5.6617	0.0320	0.4969	EXP 150 of 150	0.7298977	0.0269622	0.0074	EXP 150 of 150	37.99458	0.02913	0.9682	EXP 150 of 150	274.99357	0.04529	0.9982	EXP 150 of 150
13D02945	5.6%	0.991165	0.002192	0.8953	LIN 149 of 150	10.9452	0.0322	0.8006	EXP 150 of 150	1.2746507	0.0257423	0.0270	EXP 149 of 150	80.16771	0.03313	0.9966	EXP 150 of 150	321.51735	0.04812	0.9994	EXP 150 of 150
13D02946	6.6%	0.769098	0.001972	0.8533	EXP 150 of 150	11.7963	0.0307	0.8368	EXP 150 of 150	1.3494499	0.0259794	0.0786	EXP 150 of 150	90.93709	0.03004	0.9974	EXP 150 of 150	256.67762	0.04181	0.9992	EXP 150 of 150
13D02948	7.8%	0.726899	0.002052	0.8144	EXP 150 of 150	12.7988	0.0305	0.8561	EXP 150 of 150	1.4348186	0.0250506	0.1113	EXP 150 of 150	96.17234	0.03169	0.9978	EXP 150 of 150	246.21301	0.03783	0.9993	EXP 150 of 150
13D02949	9.2%	0.696700	0.001920	0.8503	LIN 150 of 150	12.9161	0.0331	0.8303	EXP 150 of 150	1.3212260	0.0287181	0.0462	EXP 150 of 150	92.42896	0.03078	0.9978	EXP 150 of 150	233.25034	0.04296	0.9990	EXP 150 of 150
13D02951	10.8%	0.554248	0.001721	0.8036	EXP 150 of 150	11.2745	0.0319	0.8010	EXP 150 of 150	1.0533024	0.0255686	0.0206	EXP 150 of 150	74.52121	0.03304	0.9961	EXP 150 of 150	184.49612	0.04096	0.9983	EXP 150 of 150
13D02952	12.8%	0.575299	0.001722	0.7968	EXP 150 of 150	12.3859	0.0275	0.8720	EXP 150 of 150	1.0677935	0.0285094	0.0205	EXP 150 of 150	71.29066	0.02762	0.9970	EXP 150 of 150	186.60579	0.03852	0.9986	EXP 150 of 150
13D02954	15.3%	0.727464	0.001786	0.8708	EXP 150 of 150	17.3968	0.0281	0.9305	EXP 150 of 150	1.2553735	0.0295156	0.0881	EXP 150 of 150	74.98628	0.03108	0.9966	EXP 150 of 150	226.40993	0.03840	0.9991	EXP 150 of 150
13D02955	18.0%	0.804150	0.002117	0.8927	EXP 150 of 150	27.2631	0.0353	0.9516	EXP 150 of 150	1.3611903	0.0279316	0.0804	EXP 150 of 150	75.14781	0.03342	0.9961	EXP 150 of 150	269.04082	0.04527	0.9992	EXP 150 of 150
13D02957	21.0%	0.897878	0.002156	0.8762	EXP 150 of 150	29.9596	0.0318	0.9659	EXP 149 of 150	1.1965704	0.0273644	0.0653	EXP 150 of 150	63.86900	0.03017	0.9957	EXP 150 of 150	250.73137	0.04511	0.9991	EXP 150 of 150
13D02958	23.0%	0.494401	0.001620	0.7597	EXP 150 of 150	16.1903	0.0309	0.9006	EXP 150 of 150	0.6544735	0.0291516	0.0354	EXP 150 of 150	34.77450	0.02689	0.9981	EXP 150 of 150	130.38093	0.03457	0.9976	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	$\delta^{15}N$	Standard Reference	Standard 40Ar/39Ar	$\delta^{15}N$	J	$\delta^{15}N$	Ar 40Ar/36Ar	$\delta^{15}N$	MCP	$\delta^{15}N$	Volume Ratio	Sensitivity (mol/mol)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes		
1300204	1.8%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.8	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	15	38	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300206	2.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	2	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	16	2	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300207	2.3%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.3	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	16	10	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300209	2.7%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.7	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	16	40	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300240	3.2%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.2	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	16	52	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300242	3.8%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.8	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	17	11	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300243	4.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	4.0	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	17	20	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300245	5.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	5.0	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	17	54	1	15-08U-03	0.00	0.00		53.00	Colapage Henge (15-05)	13002003	01
1300246	6.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	6.0	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	18	7	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300248	7.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	7.0	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	18	31	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300249	9.2%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	9.2	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	18	44	1	15-08U-03	0.00	0.00		53.00	Colapage Henge (15-05)	13002003	01
1300291	10.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.0	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	19	5	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300292	10.8%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.8	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	19	21	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300294	10.3%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.3	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	19	46	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300295	10.7%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	10	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	19	50	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300297	21.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	21	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	20	23	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300298	23.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	23	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010212	0.141	303.087	0.094	0.0017275	0.063	1	4.00E-14	20	OCT	2013	20	30	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01

Irradiation Constants	40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(d)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
13D02934	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02936	2.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02937	2.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02939	2.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02940	3.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02942	3.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02943	4.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02945	5.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02946	6.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02948	7.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02949	9.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02951	10.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02952	12.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02954	15.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02955	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02957	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	
13D02958	23.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	

13D02933.AGE >>> SC12-067 >>> GALAPAGOS | HARPP (13-07) PROJECT



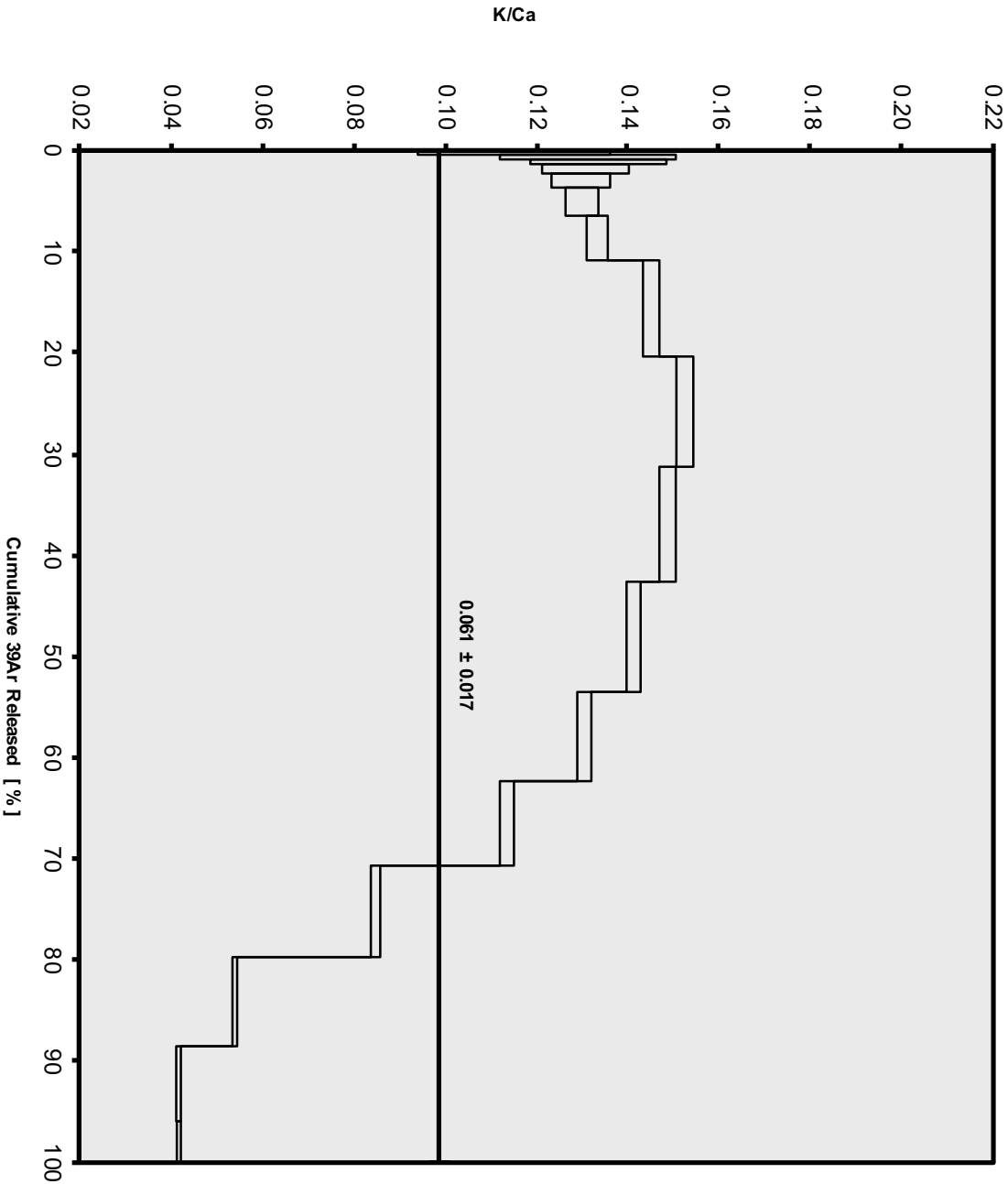
Ar-Ages in Ma

WEIGHTED
PLATEAU
 1.36 ± 0.03
TOTAL FUSION
 1.36 ± 0.04
NORMAL ISOCHRON
 1.37 ± 0.04
INVERSE ISOCHRON
 1.37 ± 0.04
MSWD
(PROBABILITY)
 0.37 (99%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00160212 ±

13D02933.AGE >>> SC12-067 >>> GALAPAGOS | HARPP (13-07) PROJECT



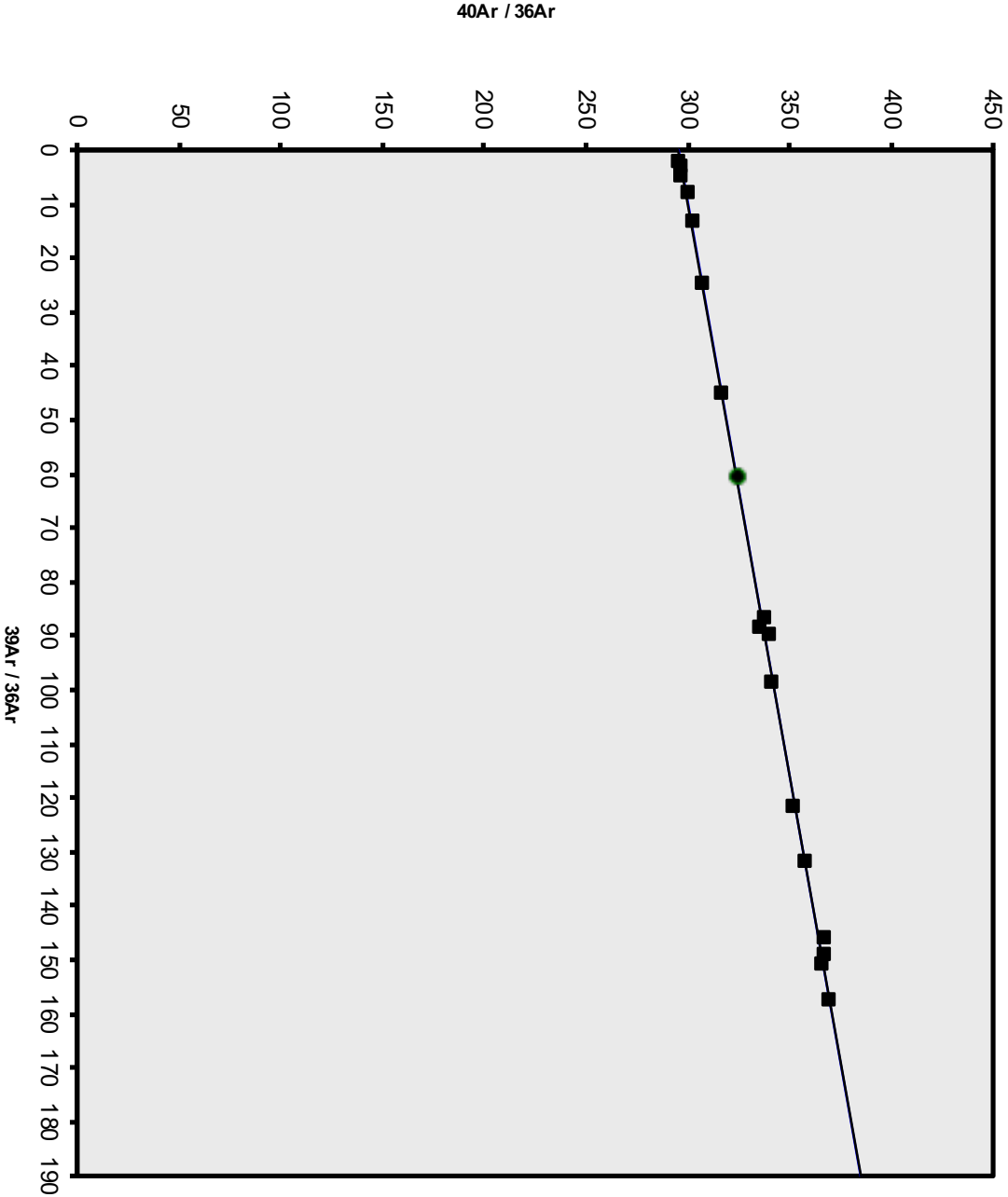
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.36 ± 0.03
TOTAL FUSION
1.36 ± 0.04
NORMAL
ISOCHRON
1.37 ± 0.04
INVERSE
ISOCHRON
1.37 ± 0.04

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00160212 ±

13D02933.AGE >>> SC12-067 >>> GALAPAGOS | HARPP (13-07) PROJECT



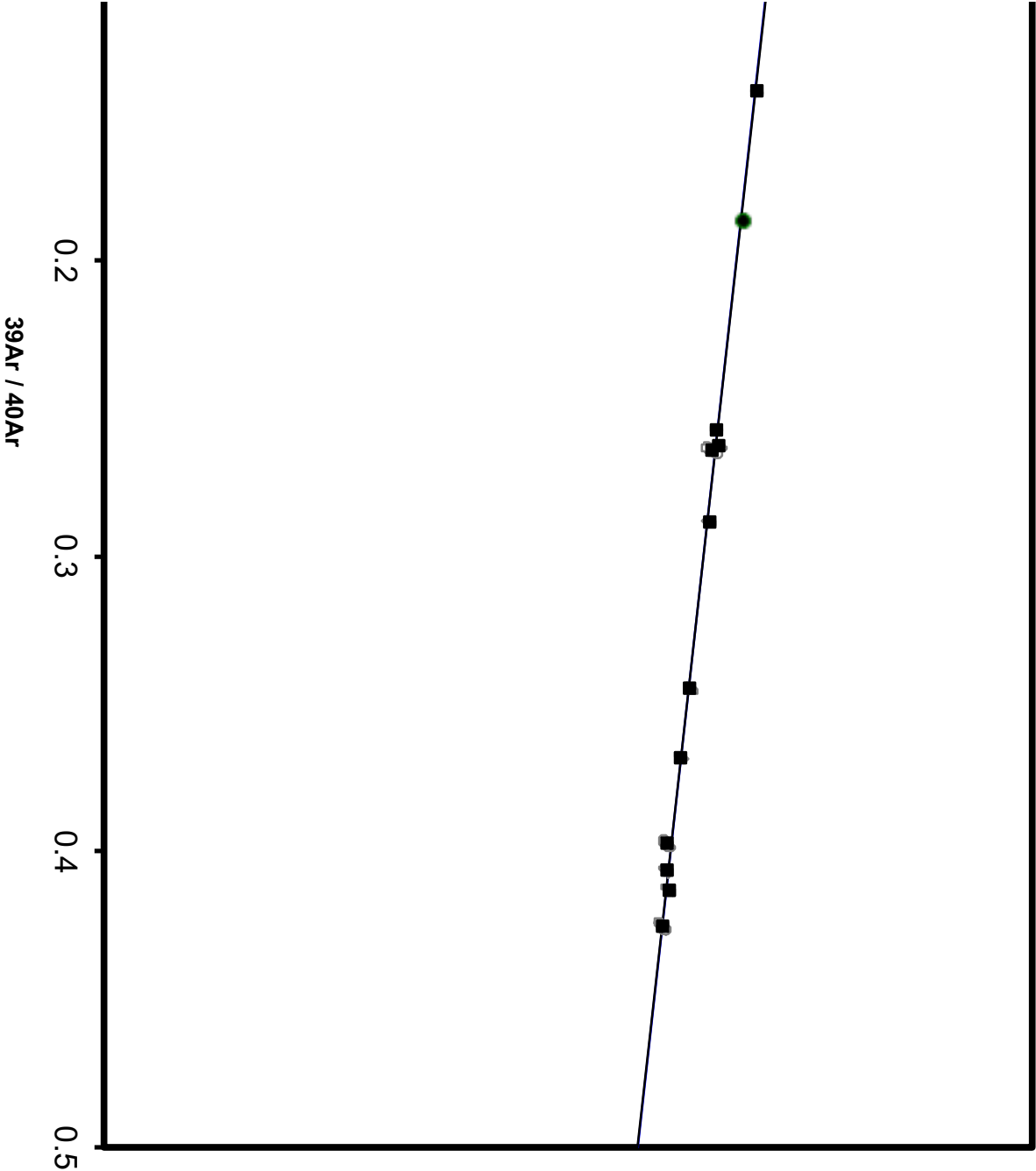
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.36 ± 0.03
TOTAL FUSION
1.36 ± 0.04
NORMAL
ISOCHRON
1.37 ± 0.04
INVERSE
ISOCHRON
1.37 ± 0.04
MSWD
(PROBABILITY)
0.37 (99%)
40AR/36AR

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00160212 ±

933.AGE >>> SC12-067 >>> GALAPAGOS | HARPP (13-07) PROJECT



13D02933.full.xls printed at 1/4/22 (3:31 PM)
ArArCALC v2.6.2 -- Beta Version

Ar-Ages in Ma

WEIGHTED PLATEAU

1.36 ± 0.03

TOTAL FUSION

1.36 ± 0.04

NORMAL ISOCHRON

1.37 ± 0.04

INVERSE ISOCHRON

1.37 ± 0.04

MSWD (PROBABILITY)

0.37 (99%)

SPREADING FACTOR

19.8%

40AR/36AR INTERCEPT

295.2 ± 1.0

Sample Info

Groundmass

Galapagos St. Cruz Island

Anthony Koppers

IRR = 13-OSU-03

J = 0.00160212 ± 0.14100000

RECALIBRATED AGE

Incremental Heating		36Ar(a)					37Ar(ca)					38Ar(cl)					39Ar(k)					40Ar(r)					Age ± 2σ					40Ar(r)					39Ar(k)					K/Ca ± 2σ				
		[fA]					[fA]					[fA]					[fA]					[fA]					(Ka)					(%)					(%)									
13D02906	1.7 %					0.2220742					31.8002					0.0718106					1.56960					1.4392791					2587.8 ± 1766.0				2.24			0.46					0.0212 ± 0.0017			
13D02908	1.8 %					0.1541722					20.1094					0.0347328					1.26058					1.0222199					2287 ± 1985.7				0.22			0.37					0.0270 ± 0.0032			
13D02909	1.9 %					0.0942231					12.6944					0.0143170					0.83000					0.0366550					124.5 ± 2660.7				0.13			0.24					0.0281 ± 0.0053			
13D02910	2.1 %					0.1474238					23.4763					0.0731783					1.63416					0.6246757					1078.3 ± 1532.3				1.45			0.48					0.0299 ± 0.0030			
13D02912	2.3 %					0.1276356					26.0225					0.0457408					1.85408					0.3742754					569.4 ± 1255.4				1.00			0.54					0.0306 ± 0.0029			
13D02913	2.5 %					0.1404761					29.0718					0.0469698					2.12960					0.5176467					685.6 ± 1138.0				1.26			0.62					0.0315 ± 0.0026			
13D02915	2.8 %					0.1572100					46.8153					0.0870213					3.51802					0.1322212					106.0 ± 714.5				0.28			1.02					0.0323 ± 0.0016			
13D02916	3.2 %					0.1952942					84.7293					0.0592922					6.24778					1.2361159					558.0 ± 448.8				2.19			1.82					0.0317 ± 0.0010			
13D02918	4.0 %	✓				0.2997177					241.6511					0.1337986					16.81378					1.0778408					29.8 ± 202.9				0.20			4.89					0.0299 ± 0.0004			
13D02919	5.0 %	✓				0.3395357					526.9687					0.1429154					29.94270					0.5774805					54.4 ± 138.1				0.57			8.71					0.0244 ± 0.0003			
13D02921	6.0 %	✓				0.3484306					871.6535					0.0562494					43.49681					1.6029615					103.9 ± 108.7				1.53			12.65					0.0215 ± 0.0002			
13D02922	7.0 %	✓				0.2723000					731.9373					0.0691938					39.94050					0.6837524					48.3 ± 97.9				0.84			11.61					0.0235 ± 0.0002			
13D02924	8.2 %	✓				0.2700198					678.7936					0.0336346					40.09626					0.4335805					30.5 ± 102.2				0.54			11.66					0.0254 ± 0.0003			
13D02925	9.6 %	✓				0.2379519					540.7057					0.1092692					32.96849					0.3850511					32.9 ± 106.2				0.54											

Information on Analysis	Results				
	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (% _n)	K/Ca ± 2σ
Sample = SC12-011					
Material = Groundmass					
Location = Galapagos St. Cruz Island					
Analyst = Anthony Koppers					
Project = GALAPAGOS HARPP (13-07)					
Mass Discrimination Law = LIN					
Irradiation = 13-OSU-03					
J = 0.00155952 ± 0.13700000					
FCT-3 = 28.340 ± 0.564 Ma					
Age Plateau	0.02611 ± 0.01357 ± 51.97%	73.6 ± 38.3 ± 51.97% Full External Error ± 38.3 Analytical Error ± 38.3	0.91 53% 1.89 1.0000	94.46 11 2σ Confidence Limit Error Magnification	0.0191 ± 0.0037
Total Fusion Age	0.01260 ± 0.01501 ± 119.20%	35.5 ± 42.3 ± 119.20% Full External Error ± 42.4 Analytical Error ± 42.3		19	0.0222 ± 0.0001

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Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
13D02906	1.7 %		7.07 $\pm$ 0.36	289.02 $\pm$ 4.33	0.2534
13D02908	1.8 %		8.18 $\pm$ 0.52	294.84 $\pm$ 5.75	0.2573
13D02909	1.9 %		8.81 $\pm$ 0.84	295.11 $\pm$ 8.30	0.2316
13D02910	2.1 %		11.08 $\pm$ 0.55	291.26 $\pm$ 5.94	0.3440
13D02912	2.3 %		14.53 $\pm$ 0.64	292.57 $\pm$ 6.41	0.3979
13D02913	2.5 %		15.16 $\pm$ 0.63	291.82 $\pm$ 6.05	0.4099
13D02915	2.8 %		22.38 $\pm$ 0.62	296.34 $\pm$ 5.68	0.5801
13D02916	3.2 %		31.99 $\pm$ 0.65	289.17 $\pm$ 4.99	0.7354
13D02918	4.0 %	✓	56.10 $\pm$ 0.78	294.91 $\pm$ 4.03	0.8932
13D02919	5.0 %	✓	88.19 $\pm$ 1.28	297.20 $\pm$ 4.34	0.9479
13D02921	6.0 %	✓	124.84 $\pm$ 2.01	300.10 $\pm$ 4.88	0.9667
13D02922	7.0 %	✓	146.68 $\pm$ 2.46	298.01 $\pm$ 5.13	0.9558
13D02924	8.2 %	✓	148.49 $\pm$ 2.65	297.11 $\pm$ 5.41	0.9592
13D02925	9.6 %	✓	138.55 $\pm$ 2.37	297.12 $\pm$ 5.24	0.9433
13D02927	11.2 %	✓	114.10 $\pm$ 1.87	299.30 $\pm$ 5.05	0.9393
13D02928	13.2 %	✓	114.48 $\pm$ 1.98	303.82 $\pm$ 5.38	0.9430
13D02930	15.4 %	✓	100.51 $\pm$ 1.67	299.08 $\pm$ 5.05	0.9443
13D02931	18.0 %	✓	86.29 $\pm$ 1.49	300.18 $\pm$ 5.24	0.9439
13D02932	21.0 %	✓	78.23 $\pm$ 1.58	294.88 $\pm$ 6.01	0.9216

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	295.07 $\pm$ 5.52 $\pm$ 1.87%	0.02949 $\pm$ 0.05017 $\pm$ 170.12%	83.2 $\pm$ 141.5 $\pm$ 170.11%	0.99 44%
			Full External Error $\pm$ 141.5 Analytical Error $\pm$ 141.5	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.94 1.0000 11	Convergence Number of Iterations Calculated Line	0.000000002764 4 Weighted York-2

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Inverse Isochron			39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
13D02906	1.7 %		0.0244548 $\pm$ 0.0011982	0.00345998 $\pm$ 0.00005178	0.0437
13D02908	1.8 %		0.0277321 $\pm$ 0.0016943	0.00339170 $\pm$ 0.00006610	0.0531
13D02909	1.9 %		0.0298495 $\pm$ 0.0027754	0.00338856 $\pm$ 0.00009532	0.0650
13D02910	2.1 %		0.0380576 $\pm$ 0.0017626	0.00343333 $\pm$ 0.00007007	0.0754
13D02912	2.3 %		0.0496512 $\pm$ 0.0020277	0.00341801 $\pm$ 0.00007491	0.1053
13D02913	2.5 %		0.0519503 $\pm$ 0.0019716	0.00342683 $\pm$ 0.00007106	0.0991
13D02915	2.8 %		0.0755138 $\pm$ 0.0017179	0.00337449 $\pm$ 0.00006472	0.1377
13D02916	3.2 %		0.1106325 $\pm$ 0.0015396	0.00345817 $\pm$ 0.00005973	0.1722
13D02918	4.0 %	✓	0.1902253 $\pm$ 0.0012129	0.00339090 $\pm$ 0.00004633	0.1940
13D02919	5.0 %	✓	0.2967260 $\pm$ 0.0013938	0.00336473 $\pm$ 0.00004917	0.1892
13D02921	6.0 %	✓	0.4159819 $\pm$ 0.0017383	0.00333222 $\pm$ 0.00005424	0.1791
13D02922	7.0 %	✓	0.4921908 $\pm$ 0.0024954	0.00335558 $\pm$ 0.00005776	0.2296
13D02924	8.2 %	✓	0.4998010 $\pm$ 0.0025801	0.00336581 $\pm$ 0.00006130	0.2185
13D02925	9.6 %	✓	0.4663162 $\pm$ 0.0027407	0.00336566 $\pm$ 0.00005941	0.2554
13D02927	11.2 %	✓	0.3812026 $\pm$ 0.0022155	0.00334109 $\pm$ 0.00005634	0.2515
13D02928	13.2 %	✓	0.3768021 $\pm$ 0.0022302	0.00329140 $\pm$ 0.00005825	0.2395
13D02930	15.4 %	✓	0.3360592 $\pm$ 0.0018811	0.00334359 $\pm$ 0.00005648	0.2134
13D02931	18.0 %	✓	0.2874736 $\pm$ 0.0016719	0.00333133 $\pm$ 0.00005811	0.1973
13D02932	21.0 %	✓	0.2652969 $\pm$ 0.0021295	0.00339125 $\pm$ 0.00006913	0.2273

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron				
Clustered Points	295.10 $\pm$ 5.56 $\pm$ 1.88%	0.02963 $\pm$ 0.01824 $\pm$ 61.58%	83.5 $\pm$ 51.4 $\pm$ 61.58%	1.01 43%
			Full External Error $\pm$ 51.5 Analytical Error $\pm$ 51.4	
Statistics	2 σ Confidence Limit	1.94	Convergence	0.0316105670
	Error Magnification	1.0028	Number of Iterations	3
	Number of Data Points	11	Calculated Line	Weighted York-2
	Spreading Factor	0.9%		

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Relative Abundances		³⁶ Ar [fA]	%1σ	³⁷ Ar [fA]	%1σ	³⁸ Ar [fA]	%1σ	³⁹ Ar [fA]	%1σ	⁴⁰ Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
13D02906	1.7 %	0.2304876	0.656	31.8002	3.317	0.1355985	33.948	1.59100	2.400	64.1852	0.283	0.91697 ± 0.62532	2587.8 ± 1766.0	2.24	0.46	0.0212 ± 0.0017
13D02908	1.8 %	0.1594898	0.843	20.1094	5.074	0.0806882	58.775	1.27412	2.996	45.4569	0.397	0.08109 ± 0.70404	228.7 ± 1985.7	0.22	0.37	0.0270 ± 0.0032
13D02909	1.9 %	0.0975780	1.170	12.6944	8.184	0.0431373	111.236	0.83855	4.555	27.8071	0.652	0.04416 ± 0.94342	124.5 ± 2660.7	0.13	0.24	0.0281 ± 0.0053
13D02910	2.1 %	0.1536400	0.873	23.4763	4.488	0.1225917	39.148	1.64996	2.255	42.9407	0.422	0.38226 ± 0.54301	1078.3 ± 1532.3	1.45	0.48	0.0299 ± 0.0030
13D02912	2.3 %	0.1345171	0.907	26.0225	4.225	0.0943124	51.323	1.87159	1.965	37.3439	0.485	0.20187 ± 0.44502	569.4 ± 1255.4	1.00	0.54	0.0306 ± 0.0029
13D02913	2.5 %	0.1481620	0.869	29.0718	3.626	0.1015007	46.573	2.14917	1.828	40.9562	0.442	0.24307 ± 0.40337	685.6 ± 1138.0	1.26	0.62	0.0315 ± 0.0026
13D02915	2.8 %	0.1696911	0.795	46.8153	2.317	0.1629463	28.015	3.54953	1.060	46.5913	0.388	0.03758 ± 0.25338	106.0 ± 714.5	0.28	1.02	0.0323 ± 0.0016
13D02916	3.2 %	0.2176776	0.705	84.7293	1.399	0.1786999	27.252	6.30481	0.611	56.4796	0.322	0.19785 ± 0.15909	558.0 ± 448.8	2.19	1.82	0.0317 ± 0.0010
13D02918	4.0 %	0.3635473	0.525	241.6511	0.652	0.4147461	11.248	16.97641	0.241	88.4057	0.206	0.01058 ± 0.07196	29.8 ± 202.9	0.20	4.89	0.0299 ± 0.0004
13D02919	5.0 %	0.4786914	0.479	526.9687	0.521	0.6203713	7.423	30.29735	0.149	100.9405	0.180	0.01929 ± 0.04898	54.4 ± 138.1	0.57	8.71	0.0244 ± 0.0003
13D02921	6.0 %	0.5785613	0.436	871.6535	0.495	0.7375247	6.308	44.08344	0.113	104.6081	0.174	0.03685 ± 0.03856	103.9 ± 108.7	1.53	12.65	0.0215 ± 0.0002
13D02922	7.0 %	0.4655489	0.439	731.9373	0.502	0.6763488	6.980	40.43309	0.117	81.1888	0.224	0.01712 ± 0.03470	48.3 ± 97.9	0.84	11.61	0.0235 ± 0.0002
13D02924	8.2 %	0.4492298	0.490	678.7936	0.505	0.6347491	7.637	40.55309	0.122	80.2649	0.226	0.01081 ± 0.03626	30.5 ± 102.2	0.54	11.66	0.0254 ± 0.0003
13D02925	9.6 %	0.3807258	0.490	540.7057	0.520	0.6040819	7.872	33.3238	0.140	70.7332	0.257	0.01168 ± 0.03766	32.9 ± 106.2	0.54	9.59	0.0262 ± 0.0003
13D02927	11.2 %	0.3634923	0.514	449.3139	0.534	0.4621910	9.947	28.24028	0.149	73.3171	0.248	0.03334 ± 0.04372	94.0 ± 123.3	1.27	8.12	0.0267 ± 0.0003
13D02928	13.2 %	0.3654017	0.523	480.4348	0.526	0.4567699	10.325	27.63370	0.156	72.5069	0.250	0.07270 ± 0.04578	205.0 ± 129.1	2.74	7.94	0.0244 ± 0.0003
13D02930	15.4 %	0.4288250	0.478	600.0124	0.510	0.5035165	9.626	27.58200	0.164	80.9007	0.225	0.03562 ± 0.04971	100.5 ± 140.2	1.20	7.90	0.0195 ± 0.0002
13D02931	18.0 %	0.4534012	0.461	691.8323	0.502	0.4184917	11.160	23.83019	0.182	81.2992	0.224	0.05424 ± 0.05979	152.9 ± 168.6	1.56	6.79	0.0145 ± 0.0002
13D02932	21.0 %	0.3567128	0.504	584.7298	0.516	0.2768747	16.356	16.22285	0.254	59.6825	0.305	0.00797 ± 0.07698	22.5 ± 217.1	0.21	4.60	0.0116 ± 0.0001
Σ		5.9952816	0.131	6672.7526	0.160	6.7251106	3.056	348.41349	0.053	1255.6476	0.063					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-011
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Anthony Koppers
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00155952 ± 0.13700000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 40
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = Undefined
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(cj) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%, n)	K/Ca ± 2σ
Age Plateau		0.02611 ± 0.01357 ± 51.97%	73.6 ± 38.3 ± 51.97%	0.91	94.46	0.0191 ± 0.0037
			Full External Error ± 38.3 Analytical Error ± 38.3	1.89	2σ Confidence Limit	
				1.0000	Error Magnification	
Total Fusion Age		0.01260 ± 0.01501 ± 119.20%	35.5 ± 42.3 ± 119.20%		19	0.0222 ± 0.0001
			Full External Error ± 42.4 Analytical Error ± 42.3			
Normal Isochron	295.07 ± 5.52 ± 1.87%	0.02949 ± 0.05017 ± 170.12%	83.2 ± 141.5 ± 170.11%	0.99	94.46	
			Full External Error ± 141.5 Analytical Error ± 141.5	1.94	2σ Confidence Limit	
				1.0000	Error Magnification	
				4	Number of Iterations	
				0.0000000028	Convergence	
Inverse Isochron	295.10 ± 5.56 ± 1.88%	0.02963 ± 0.01824 ± 61.58%	83.5 ± 51.4 ± 61.58%	1.01	94.46	
Clustered Points			Full External Error ± 51.5 Analytical Error ± 51.4	1.94	2σ Confidence Limit	
				1.0028	Error Magnification	
				3	Number of Iterations	
				0.0316105670	Convergence	
				1%	Spreading Factor	

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CEQAS Oregon State University, Corvallis, USA

Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
13D02906	1.7 %	40.342770	0.975009	19.987616	0.818412	0.144870	0.003605	154.849	21.349701	1.00109409	3.081E-12
13D02908	1.8 %	35.677245	1.078283	15.783030	0.930087	0.125177	0.003896	154.866	21.357024	1.00109421	2.182E-12
13D02909	1.9 %	33.161023	1.525994	15.138571	1.417927	0.116365	0.005473	154.874	21.360539	1.00109427	1.335E-12
13D02910	2.1 %	26.025383	0.596989	14.228468	0.714647	0.093118	0.002251	154.883	21.364056	1.00109433	2.061E-12
13D02912	2.3 %	19.953028	0.403764	13.903932	0.647857	0.071873	0.001555	154.900	21.371383	1.00109445	1.793E-12
13D02913	2.5 %	19.074939	0.358787	13.527009	0.549335	0.068940	0.001396	154.909	21.375194	1.00109452	1.968E-12
13D02915	2.8 %	13.126072	0.148112	13.189184	0.336033	0.047779	0.000633	154.926	21.382525	1.00109464	2.236E-12
13D02916	3.2 %	8.958183	0.061877	13.438844	0.205175	0.034526	0.000322	154.935	21.386045	1.00109470	2.711E-12
13D02918	4.0 %	✓ 5.207564	0.016505	14.234523	0.098921	0.021415	0.000124	154.952	21.393380	1.00109482	4.243E-12
13D02919	5.0 %	✓ 3.331662	0.007783	17.393226	0.094319	0.015800	0.000079	154.960	21.396902	1.00109488	4.845E-12
13D02921	6.0 %	✓ 2.372958	0.004934	19.772813	0.100401	0.013124	0.000059	154.978	21.404240	1.00109500	5.021E-12
13D02922	7.0 %	✓ 2.007978	0.005073	18.102431	0.093256	0.011514	0.000052	154.987	21.408057	1.00109507	3.897E-12
13D02924	8.2 %	✓ 1.979256	0.005092	16.738396	0.087026	0.011078	0.000056	155.003	21.415106	1.00109519	3.853E-12
13D02925	9.6 %	✓ 2.122055	0.006217	16.221636	0.087438	0.011422	0.000058	155.012	21.418925	1.00109525	3.395E-12
13D02927	11.2 %	✓ 2.596187	0.007519	15.910390	0.088175	0.012871	0.000069	155.030	21.426271	1.00109537	3.519E-12
13D02928	13.2 %	✓ 2.623858	0.007735	17.386829	0.095323	0.013223	0.000072	155.038	21.429798	1.00109543	3.480E-12
13D02930	15.4 %	✓ 2.933097	0.008162	21.753769	0.116647	0.015547	0.000079	155.056	21.437148	1.00109555	3.883E-12
13D02931	18.0 %	✓ 3.411604	0.009834	29.031758	0.154984	0.019026	0.000094	155.064	21.440677	1.00109561	3.902E-12
13D02932	21.0 %	✓ 3.678913	0.014605	36.043584	0.207373	0.021988	0.000124	155.073	21.444501	1.00109568	2.865E-12

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Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
13D02906	1.7 %	0.0245323	0.0007013	0.0295376	0.0374986	0.0170290	0.0375021	0.0279386	0.0282578	7.0401109	0.1784447
13D02908	1.8 %	0.0249409	0.0007013	0.0271104	0.0374986	0.0150406	0.0375021	0.0304433	0.0282578	7.1496887	0.1784447
13D02909	1.9 %	0.0251087	0.0007013	0.0264070	0.0374986	0.0140862	0.0375021	0.0316456	0.0282578	7.1951715	0.1784447
13D02910	2.1 %	0.0252582	0.0007013	0.0260033	0.0374986	0.0131317	0.0375021	0.0328478	0.0282578	7.2360396	0.1784447
13D02912	2.3 %	0.0255106	0.0007013	0.0261241	0.0374986	0.0111433	0.0375021	0.03353525	0.0282578	7.3063597	0.1784447
13D02913	2.5 %	0.0256103	0.0007013	0.0267007	0.0374986	0.0101093	0.0375021	0.0366550	0.0282578	7.3350105	0.1784447
13D02915	2.8 %	0.0257416	0.0007013	0.0287976	0.0374986	0.0081209	0.0375021	0.0391597	0.0282578	7.3748859	0.1784447
13D02916	3.2 %	0.0257763	0.0007013	0.0302659	0.0374986	0.0071665	0.0375021	0.0403619	0.0282578	7.3869117	0.1784447
13D02918	4.0 %	0.0257897	0.0007013	0.0342868	0.0374986	0.0051780	0.0375021	0.0428667	0.0282578	7.3971436	0.1784447
13D02919	5.0 %	0.0257678	0.0007013	0.0366787	0.0374986	0.0042236	0.0375021	0.0440689	0.0282578	7.3949404	0.1784447
13D02921	6.0 %	0.0256632	0.0007013	0.0426237	0.0374986	0.0022352	0.0375021	0.0465736	0.0282578	7.3755288	0.1784447
13D02922	7.0 %	0.0255773	0.0007013	0.0462290	0.0374986	0.0012012	0.0375021	0.0478761	0.0282578	7.3575191	0.1784447
13D02924	8.2 %	0.0253621	0.0007013	0.0538083	0.0374986	0.0007077	0.0375021	0.0502806	0.0282578	7.3100416	0.1784447
13D02925	9.6 %	0.0252149	0.0007013	0.0584140	0.0374986	0.0017416	0.0375021	0.0515830	0.0282578	7.2766173	0.1784447
13D02927	11.2 %	0.0248712	0.0007013	0.0682592	0.0374986	0.0037301	0.0375021	0.0540877	0.0282578	7.1971174	0.1784447
13D02928	13.2 %	0.0246780	0.0007013	0.0734467	0.0374986	0.0046845	0.0375021	0.0552900	0.0282578	7.1518431	0.1784447
13D02930	15.4 %	0.0242164	0.0007013	0.0852160	0.0374986	0.0066729	0.0375021	0.0577947	0.0282578	7.0426997	0.1784447
13D02931	18.0 %	0.0239665	0.0007013	0.0913270	0.0374986	0.0076274	0.0375021	0.0589970	0.0282578	6.9831964	0.1784447
13D02932	21.0 %	0.0236751	0.0007013	0.0982853	0.0374986	0.0086613	0.0375021	0.0602994	0.0282578	6.9135269	0.1784447

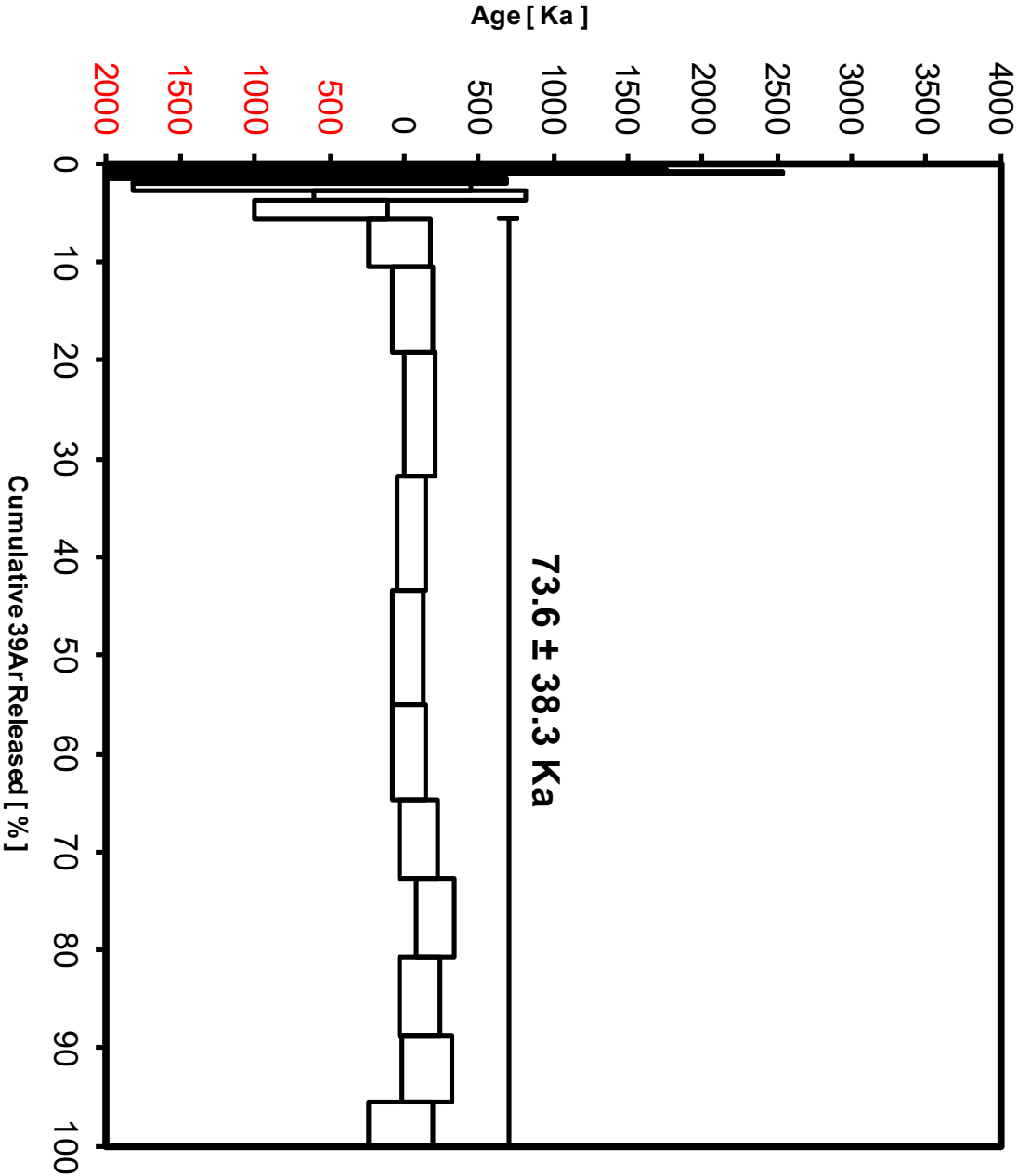
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Intercept Values		36Ar [A]	1σ	r2		37Ar [A]	1σ	r2		38Ar [A]	1σ	r2		39Ar [A]	1σ	r2		40Ar [A]	1σ	r2
13D02906	1.7%	0.2483873	0.0011522	0.4001	EXP 150 of 150	1.4910	0.0299	0.0729	EXP 150 of 150	0.1168882	0.0266860	0.0004	EXP 150 of 150	1.60725	0.02325	0.1489	EXP 150 of 150	71.2480708	0.0338204	0.8998
13D02908	1.8%	0.1759481	0.0010253	0.1904	EXP 150 of 150	0.9510	0.0278	0.0158	EXP 150 of 150	0.0646353	0.0280464	0.0005	EXP 150 of 150	1.29520	0.02523	0.0914	EXP 150 of 150	52.6234209	0.0280875	0.9677
13D02909	1.9%	0.1198930	0.0008224	0.0032	EXP 150 of 150	0.6095	0.0294	0.0158	EXP 150 of 150	0.0289399	0.0285994	0.0003	EXP 150 of 150	0.86463	0.02528	0.0267	EXP 150 of 150	35.0125225	0.0325561	0.9835
13D02910	2.1%	0.1144836	0.0010263	0.1932	EXP 150 of 150	1.1042	0.0302	0.0101	EXP 150 of 150	0.1079219	0.0289722	0.0003	EXP 150 of 150	1.67068	0.02375	0.2124	EXP 150 of 150	50.1529182	0.0316228	0.9382
13D02912	2.3%	0.1561625	0.0008918	0.1433	EXP 150 of 150	1.2209	0.0333	0.0489	EXP 149 of 150	0.0819858	0.0296331	0.0031	EXP 150 of 150	1.89319	0.02307	0.2743	EXP 150 of 150	44.6540776	0.0318877	0.9393
13D02913	2.5%	0.1695161	0.0000954	0.2308	EXP 150 of 150	1.3612	0.0299	0.0269	EXP 150 of 150	0.0901179	0.0277942	0.0000	EXP 150 of 150	2.17003	0.02985	0.2240	EXP 150 of 150	48.3463590	0.0306021	0.8908
13D02915	2.8%	0.1904398	0.0010189	0.2482	EXP 149 of 150	2.1771	0.0311	0.1081	EXP 150 of 150	0.1527810	0.0260097	0.0768	EXP 150 of 150	3.56260	0.02431	0.4774	EXP 150 of 150	53.9534232	0.0274762	0.3633
13D02916	3.2%	0.2371984	0.0011933	0.4992	EXP 150 of 150	3.9177	0.0347	0.2113	EXP 150 of 150	0.1962817	0.0306878	0.0003	EXP 150 of 150	6.29884	0.02549	0.7507	EXP 150 of 150	63.9873966	0.0349869	0.7531
13D02918	4.0%	0.3788911	0.0014490	0.6064	EXP 150 of 150	11.1176	0.0318	0.8063	EXP 150 of 150	0.4043645	0.0267448	0.0075	EXP 150 of 150	16.89452	0.02727	0.9499	EXP 150 of 150	95.8355347	0.0358864	0.9864
13D02919	5.0%	0.4907049	0.0017338	0.7045	EXP 150 of 150	24.2021	0.0341	0.9411	EXP 150 of 150	0.6083643	0.0257063	0.0574	EXP 150 of 150	30.11877	0.02915	0.9820	EXP 150 of 150	108.3727658	0.0338871	0.9918
13D02921	6.0%	0.5876006	0.0018420	0.7483	EXP 150 of 150	40.0006	0.0362	0.9756	EXP 150 of 150	0.7260363	0.0265223	0.0258	EXP 150 of 150	43.80604	0.03012	0.9907	EXP 150 of 150	112.0221599	0.0371495	0.9918
13D02922	7.0%	0.4777495	0.0014400	0.7656	EXP 150 of 150	33.5934	0.0353	0.9678	EXP 150 of 150	0.6666619	0.0271733	0.0479	EXP 150 of 150	40.18382	0.02814	0.9904	EXP 150 of 150	88.27626548	0.0335673	0.9831
13D02924	8.2%	0.4616841	0.0016736	0.7380	EXP 150 of 150	31.1590	0.0352	0.9637	EXP 150 of 150	0.6274930	0.0297369	0.0277	EXP 150 of 150	40.30533	0.03134	0.9880	EXP 150 of 150	87.6046335	0.0342360	0.9828
13D02925	9.6%	0.3950012	0.0013677	0.6809	EXP 150 of 150	24.8282	0.0349	0.9466	EXP 150 of 150	0.5982445	0.0282517	0.0811	EXP 150 of 150	33.13899	0.03043	0.9841	EXP 150 of 150	78.0359000	0.0323235	0.9713
13D02927	11.2%	0.3779192	0.0014003	0.7238	EXP 149 of 150	20.6444	0.0315	0.9300	EXP 150 of 150	0.4601223	0.0255789	0.0235	EXP 150 of 150	28.08882	0.02544	0.9843	EXP 150 of 150	80.5412814	0.0300590	0.9788
13D02928	13.2%	0.3795935	0.0014507	0.6205	EXP 150 of 150	22.0711	0.0304	0.9457	EXP 150 of 150	0.4557236	0.0276041	0.0213	EXP 150 of 150	27.46889	0.02706	0.9816	EXP 150 of 150	79.8555457	0.0329407	0.9801
13D02930	15.4%	0.4407199	0.0015146	0.7429	EXP 150 of 150	27.5485	0.0321	0.9636	EXP 150 of 150	0.5038722	0.0297025	0.0340	EXP 150 of 150	27.43708	0.03056	0.9765	EXP 150 of 150	87.9732671	0.0342414	0.9879
13D02931	18.0%	0.4643400	0.0015235	0.7556	EXP 150 of 150	31.7521	0.0311	0.9714	EXP 150 of 150	0.4286886	0.0268343	0.0017	EXP 150 of 150	23.71404	0.02888	0.9715	EXP 150 of 150	88.3124102	0.0342798	0.9875
13D02932	21.0%	0.3701384	0.0013238	0.6826	EXP 150 of 150	26.8529	0.0363	0.9476	EXP 150 of 150	0.2820623	0.0240518	0.0023	EXP 150 of 150	16.16392	0.02789	0.9449	EXP 150 of 150	66.6180490	0.0352949	0.9588

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%He	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mHe/pt)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes		
1300286	1.7%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.7	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	9	50	1	13-08U-40				61.60	Colapage Henge (13-05)	1300286	01
1300288	1.8%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.8	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	10	35	1	13-08U-40				61.60	Colapage Henge (13-05)	1300288	01
1300290	1.9%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.9	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	10	27	1	13-08U-40				61.60	Colapage Henge (13-05)	1300290	01
1300292	2.1%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.1	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	10	28	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01
1300292	2.3%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.3	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	11	4	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01
1300292	2.5%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.5	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	11	12	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01
1300292	2.8%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.8	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	11	42	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01
1300296	3.2%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.2	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	11	34	1	13-08U-40				61.60	Colapage Henge (13-05)	1300296	01
1300298	4.0%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	4	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	12	10	1	13-08U-40				61.60	Colapage Henge (13-05)	1300298	01
1300298	5.5%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	5	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	12	21	1	13-08U-40				61.60	Colapage Henge (13-05)	1300298	01
1300291	6.0%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	6	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	12	50	1	13-08U-40				61.60	Colapage Henge (13-05)	1300291	01
1300297	7.5%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	7	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	12	9	1	13-08U-40				61.60	Colapage Henge (13-05)	1300297	01
1300294	8.2%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	8.2	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	13	30	1	13-08U-40				61.60	Colapage Henge (13-05)	1300294	01
1300295	8.5%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	8.6	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	13	40	1	13-08U-40				61.60	Colapage Henge (13-05)	1300295	01
1300297	11.2%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	11.2	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	14	11	1	13-08U-40				61.60	Colapage Henge (13-05)	1300297	01
1300288	13.1%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	13.2	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	14	20	1	13-08U-40				61.60	Colapage Henge (13-05)	1300288	01
1300288	16.1%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	16.4	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	14	40	1	13-08U-40				61.60	Colapage Henge (13-05)	1300288	01
1300281	18.0%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	18	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	15	0	1	13-08U-40				61.60	Colapage Henge (13-05)	1300281	01
1300292	21.0%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	21	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	15	13	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
13D02906	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02908	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02909	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02910	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02912	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02913	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02915	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02916	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02918	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02919	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02921	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02922	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02924	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02925	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02927	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02928	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02930	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02931	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02932	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	

13D02905.AGE >>> SC12-011 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
73.6 ± 38.3
TOTAL FUSION
35.5 ± 42.3
NORMAL
ISOCHRON
83.2 ± 141.5
INVERSE
ISOCHRON
83.5 ± 51.4

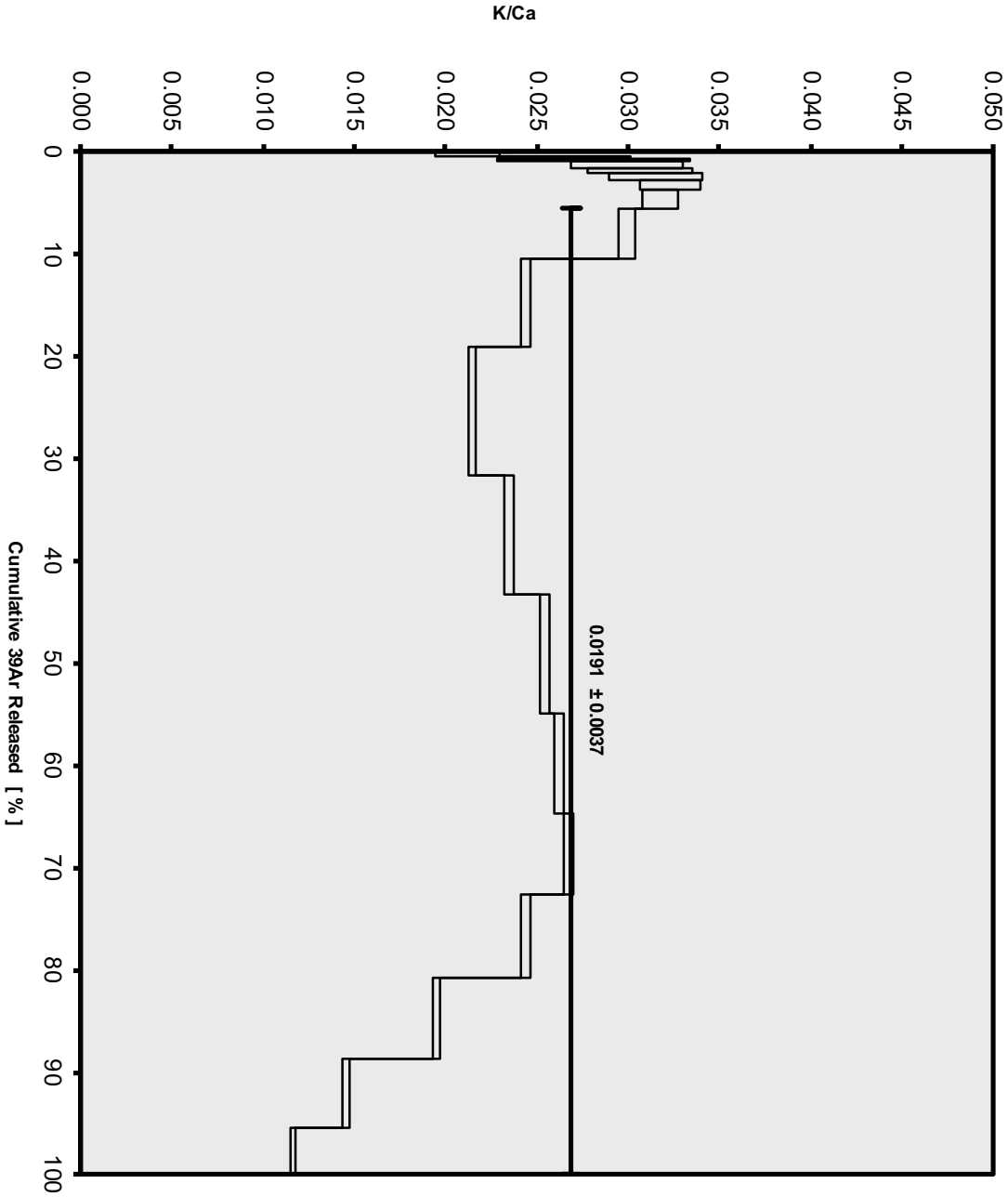
MSWD
(PROBABILITY)
0.91 (53%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers

IRR = 13-OSU-03
J = 0.00155952 ±

13D02905.AGE >>> SC12-011 >>> GALAPAGOS | HARPP (13-07) PROJECT



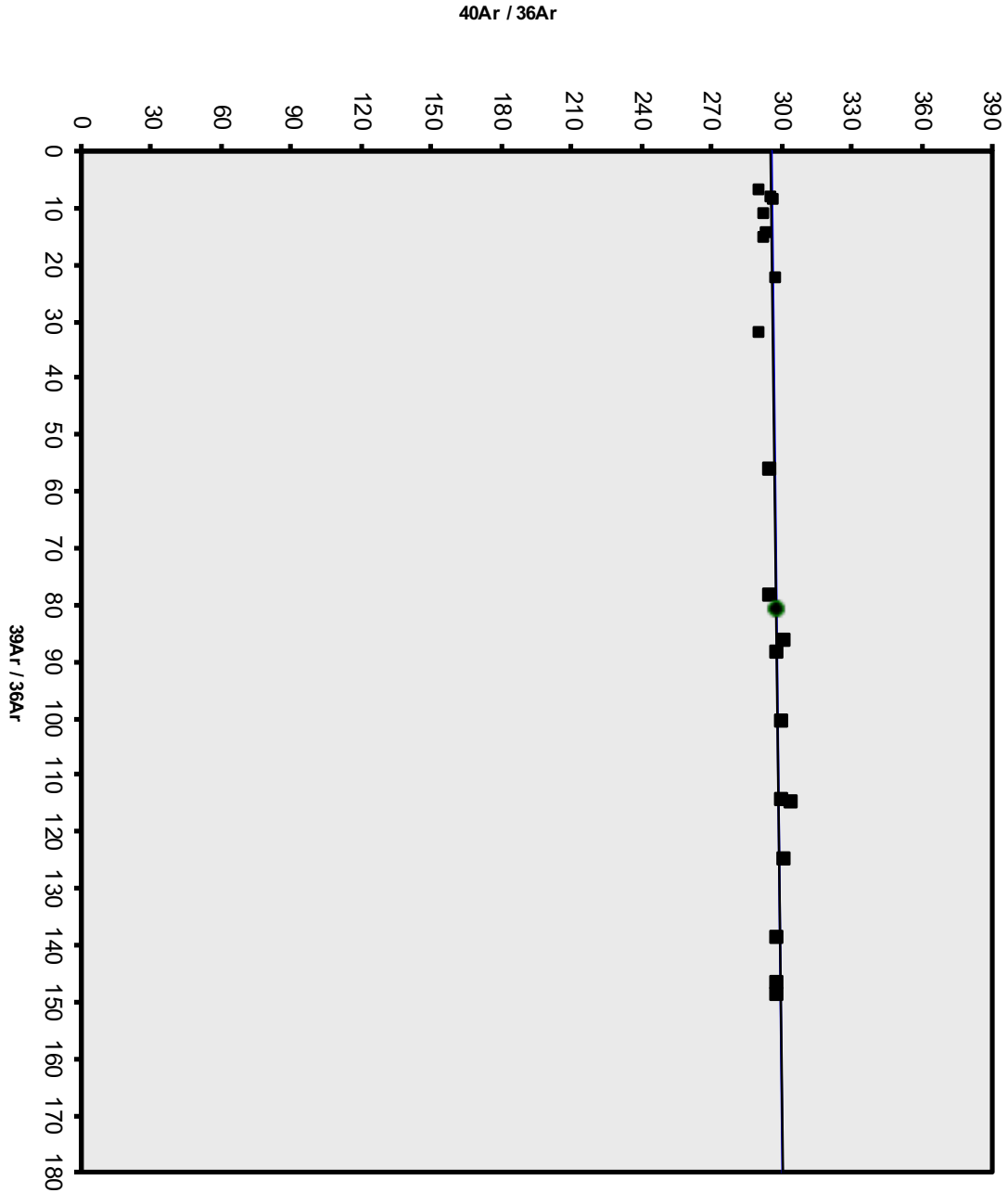
Ar-Ages in Ka

WEIGHTED
PLATEAU
73.6 ± 38.3
TOTAL FUSION
35.5 ± 42.3
NORMAL
ISOCHRON
83.2 ± 141.5
INVERSE
ISOCHRON
83.5 ± 51.4

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00155952 ±

13D02905.AGE >>> SC12-011 >>> GALAPAGOS | HARPP (13-07) PROJECT



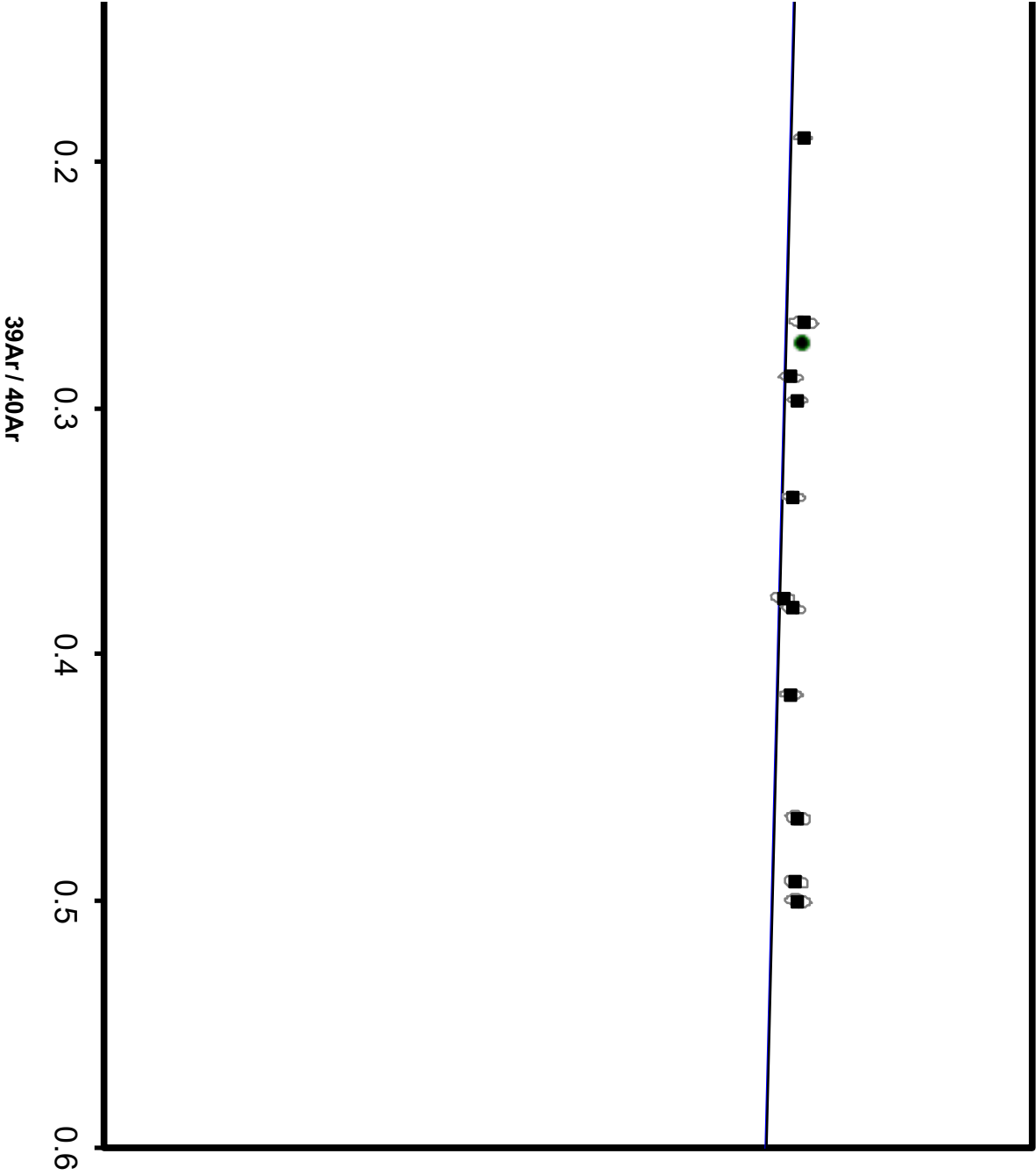
Ar-Ages in Ka

WEIGHTED
PLATEAU
73.6 ± 38.3
TOTAL FUSION
35.5 ± 42.3
NORMAL
ISOCHRON
83.2 ± 141.5
INVERSE
ISOCHRON
83.5 ± 51.4
MSWD
(PROBABILITY)
0.99 (44%)
40AR/36AR

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00155952 ±

905.AGE >>> SC12-011 >>> GALAPAGOS | HARPP (13-07) PROJECT



13D02905.full.xls printed at 1/4/22 (3:30 PM)
ArArCALC v2.6.2 -- Beta Version

Ar-Ages in Ka

WEIGHTED PLATEAU
73.6 ± 38.3
TOTAL FUSION
35.5 ± 42.3
NORMAL ISOCHRON
83.2 ± 141.5
INVERSE ISOCHRON
83.5 ± 51.4
MSWD (PROBABILITY)
1.01 (43%)
SPREADING FACTOR
0.9%
40AR/36AR INTERCEPT
295.1 ± 5.6

Sample Info

Groundmass
Galapagos St. Cruz Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00155952 ± 0.13700000
RECALIBRATED AGE

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
13D02996	1.8 %	1.533109	18.0309	0.1798481	3.53085	8.54517	6.96 $\pm$ 2.62	1.92	0.40	0.084 $\pm$ 0.010
13D02998	2.0 %	1.245512	12.1727	0.0688387	2.70168	1.96410	2.09 $\pm$ 2.94	0.54	0.30	0.095 $\pm$ 0.016
13D02999	2.3 %	1.193256	14.4307	0.0973999	2.87864	5.92672	5.92 $\pm$ 2.77	1.71	0.32	0.086 $\pm$ 0.012
13D03001	2.7 %	1.545494	23.5940	0.1333400	5.65797	1.01509	0.52 $\pm$ 1.62	0.22	0.64	0.103 $\pm$ 0.009
13D03002	3.2 %	2.055296	49.0736	0.1597376	12.06159	1.05111	0.25 $\pm$ 0.93	0.17	1.36	0.106 $\pm$ 0.004
13D03004	3.8 %	2.266873	86.5649	0.1634747	23.58796	2.79639	0.34 $\pm$ 0.53	0.42	2.65	0.117 $\pm$ 0.003
13D03005	4.6 %	2.440545	147.8314	0.1876509	45.85198	11.40526	0.71 $\pm$ 0.29	1.56	5.16	0.133 $\pm$ 0.002
13D03007	5.6 %	2.807448	233.9607	0.1584187	85.11224	29.12452	0.98 $\pm$ 0.18	3.39	9.57	0.156 $\pm$ 0.002
13D03008	6.6 %	2.527470	269.8820	0.1212827	101.19738	35.07441	0.99 $\pm$ 0.13	4.48	11.38	0.161 $\pm$ 0.002
13D03010	7.8 %	2.249013	294.0254	0.1586289	108.63974	44.11433	1.17 $\pm$ 0.11	6.22	12.22	0.159 $\pm$ 0.002
13D03011	9.2 %	1.841960	278.4748	0.1523357	96.12139	39.00153	1.16 $\pm$ 0.11	6.69	10.81	0.148 $\pm$ 0.002
13D03013	10.8 %	1.588043	261.6341	0.1342897	81.40079	33.23467	1.17 $\pm$ 0.12	6.61	9.16	0.134 $\pm$ 0.002
13D03014	12.8 %	1.909804	295.5504	0.2211460	79.96879	27.43675	0.98 $\pm$ 0.14	4.64	8.99	0.116 $\pm$ 0.001
13D03016	15.3 %	1.887580	377.9136	0.2230357	78.42145	33.81357	1.24 $\pm$ 0.14	5.71	8.82	0.089 $\pm$ 0.001
13D03017	18.0 %	1.386815	572.6694	0.2475255	73.94683	31.91445	1.24 $\pm$ 0.13	7.22	8.32	0.056 $\pm$ 0.001
13D03019	21.0 %	0.970968	531.3594	0.2166727	55.10949	28.15899	1.47 $\pm$ 0.13	8.94	6.20	0.045 $\pm$ 0.000
13D03020	23.0 %	0.605465	329.7597	0.1472965	32.93634	15.61883	1.36 $\pm$ 0.18	8.03	3.70	0.043 $\pm$ 0.001
Σ		30.054652	3796.9176	2.7709219	889.12511	313.19151				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-060 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Anthony Koppers Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00158742 $\pm$ 0.13900000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.40534 $\pm$ 0.02402 $\pm$ 5.93%	1.16 $\pm$ 0.07 $\pm$ 5.93% Full External Error $\pm$ 0.07 Analytical Error $\pm$ 0.07	1.89 9% 2.26 1.3754	58.32 6 2a Confidence Limit Error Magnification	0.083 $\pm$ 0.031
	Total Fusion Age	0.35225 $\pm$ 0.01722 $\pm$ 4.89%	1.01 $\pm$ 0.05 $\pm$ 4.90% Full External Error $\pm$ 0.06 Analytical Error $\pm$ 0.05		17	0.101 $\pm$ 0.000

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Normal Isochron		39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
13D02996	1.8 %	2.30 $\pm$ 0.05	289.93 $\pm$ 2.05	0.3062
13D02998	2.0 %	2.17 $\pm$ 0.06	293.92 $\pm$ 2.21	0.2457
13D02999	2.3 %	2.41 $\pm$ 0.06	290.53 $\pm$ 2.28	0.2787
13D03001	2.7 %	3.66 $\pm$ 0.05	294.84 $\pm$ 2.06	0.4576
13D03002	3.2 %	5.87 $\pm$ 0.05	294.99 $\pm$ 1.90	0.6886
13D03004	3.8 %	10.41 $\pm$ 0.08	296.73 $\pm$ 1.92	0.8623
13D03005	4.6 %	18.79 $\pm$ 0.13	300.17 $\pm$ 1.92	0.9329
13D03007	5.6 %	30.32 $\pm$ 0.19	305.87 $\pm$ 1.93	0.9581
13D03008	6.6 %	40.04 $\pm$ 0.26	309.38 $\pm$ 1.96	0.9593
13D03010	7.8 % ✓	48.31 $\pm$ 0.32	315.11 $\pm$ 2.03	0.9580
13D03011	9.2 % ✓	52.18 $\pm$ 0.36	316.67 $\pm$ 2.16	0.9538
13D03013	10.8 % ✓	51.26 $\pm$ 0.37	316.43 $\pm$ 2.28	0.9504
13D03014	12.8 % ✓	41.87 $\pm$ 0.28	309.87 $\pm$ 2.09	0.9505
13D03016	15.3 % ✓	41.55 $\pm$ 0.28	313.41 $\pm$ 2.10	0.9496
13D03017	18.0 % ✓	53.32 $\pm$ 0.42	318.51 $\pm$ 2.51	0.9497
13D03019	21.0 %	56.76 $\pm$ 0.49	324.50 $\pm$ 2.86	0.9332
13D03020	23.0 %	54.40 $\pm$ 0.59	321.30 $\pm$ 3.63	0.9026

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	290.15 $\pm$ 11.82 $\pm$ 4.07%	0.51612 $\pm$ 0.24641 $\pm$ 47.74%	1.48 $\pm$ 0.71 $\pm$ 47.72%	1.99 9%
			Full External Error $\pm$ 0.71 Analytical Error $\pm$ 0.71	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	2.41 1.4120 6	Convergence Number of Iterations Calculated Line	0.000000604022 5 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
13D02996	1.8 %	0.0079436 $\pm$ 0.0001633	0.00344915 $\pm$ 0.00002442	0.0228
13D02998	2.0 %	0.0073799 $\pm$ 0.0002003	0.00340225 $\pm$ 0.00002558	0.0237
13D02999	2.3 %	0.0083034 $\pm$ 0.0002054	0.00344195 $\pm$ 0.00002707	0.0278
13D03001	2.7 %	0.0124166 $\pm$ 0.0001580	0.00339163 $\pm$ 0.00002373	0.0355
13D03002	3.2 %	0.0198941 $\pm$ 0.0001290	0.00338996 $\pm$ 0.00002180	0.0431
13D03004	3.8 %	0.0350668 $\pm$ 0.0001288	0.00337003 $\pm$ 0.00002180	0.0617
13D03005	4.6 %	0.0625892 $\pm$ 0.0001506	0.00333141 $\pm$ 0.00002135	0.0815
13D03007	5.6 %	0.0991146 $\pm$ 0.0001829	0.00326932 $\pm$ 0.00002059	0.0789
13D03008	6.6 %	0.1294180 $\pm$ 0.0002354	0.00323230 $\pm$ 0.00002044	0.0960
13D03010	7.8 % ✓	0.1532949 $\pm$ 0.0002884	0.00317344 $\pm$ 0.00002048	0.1091
13D03011	9.2 % ✓	0.1647888 $\pm$ 0.0003429	0.00315782 $\pm$ 0.00002155	0.1371
13D03013	10.8 % ✓	0.1619911 $\pm$ 0.0003675	0.00316028 $\pm$ 0.00002277	0.1594
13D03014	12.8 % ✓	0.1351318 $\pm$ 0.0002876	0.00322720 $\pm$ 0.00002174	0.1320
13D03016	15.3 % ✓	0.1325597 $\pm$ 0.0002829	0.00319067 $\pm$ 0.00002134	0.1324
13D03017	18.0 % ✓	0.1674073 $\pm$ 0.0004175	0.00313959 $\pm$ 0.00002474	0.1701
13D03019	21.0 %	0.1749064 $\pm$ 0.0005584	0.00308166 $\pm$ 0.00002713	0.2318
13D03020	23.0 %	0.1693090 $\pm$ 0.0008309	0.00311239 $\pm$ 0.00003517	0.3062

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Inverse Isochron	290.31 $\pm$ 11.82	0.51302 $\pm$ 0.21882	1.47 $\pm$ 0.63	1.99
Clustered Points	$\pm$ 4.07%	$\pm$ 42.65%	$\pm$ 42.64%	9%
			Full External Error $\pm$ 0.63	
			Analytical Error $\pm$ 0.63	
Statistics	2 σ Confidence Limit	2.41	Convergence	0.0022864269
	Error Magnification	1.4115	Number of Iterations	3
	Number of Data Points	6	Calculated Line	Weighted York-2
	Spreading Factor	1.8%		

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Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
13D02996	1.8 %	1.537915	0.341	18.0309	5.676	0.509074	7.514	3.54298	1.020	444.4923	0.091	2.42015 ± 0.90864	6.96 ± 2.62	1.92	0.40	0.084 ± 0.010
13D02998	2.0 %	1.248743	0.358	12.1727	8.155	0.334062	11.859	2.70988	1.348	366.0874	0.110	0.72699 ± 1.02411	2.09 ± 2.94	0.54	0.30	0.095 ± 0.016
13D02999	2.3 %	1.197090	0.374	14.4307	7.090	0.355184	10.793	2.88835	1.227	346.6833	0.116	2.05886 ± 0.96327	5.92 ± 2.77	1.71	0.32	0.086 ± 0.012
13D03001	2.7 %	1.551757	0.336	23.5940	4.301	0.489860	7.743	5.67385	0.628	455.6841	0.089	0.17941 ± 0.56458	0.52 ± 1.62	0.22	0.64	0.103 ± 0.009
13D03002	3.2 %	2.068292	0.312	49.0736	2.084	0.687954	5.779	12.09462	0.316	696.3010	0.067	0.08715 ± 0.32372	0.25 ± 0.93	0.17	1.36	0.106 ± 0.004
13D03004	3.8 %	2.289765	0.314	86.5549	1.226	0.867615	4.548	23.64622	0.173	672.6813	0.061	0.11855 ± 0.18375	0.34 ± 0.53	0.42	2.65	0.117 ± 0.003
13D03005	4.6 %	2.479620	0.310	147.8314	0.853	1.186133	3.391	45.95147	0.106	732.6327	0.056	0.24874 ± 0.10093	0.71 ± 0.29	1.56	5.16	0.133 ± 0.002
13D03007	5.6 %	2.868254	0.304	233.9607	0.652	1.684229	2.157	85.26969	0.079	858.8115	0.048	0.34219 ± 0.06143	0.98 ± 0.18	3.39	9.57	0.156 ± 0.002
13D03008	6.6 %	2.598750	0.303	269.8820	0.610	1.782807	2.214	101.37901	0.074	782.0441	0.053	0.34659 ± 0.04673	0.99 ± 0.13	4.48	11.38	0.161 ± 0.002
13D03010	7.8 %	2.326676	0.306	294.0254	0.596	1.856159	2.082	108.83762	0.074	708.8074	0.058	0.40606 ± 0.03958	1.17 ± 0.11	6.22	12.22	0.159 ± 0.002
13D03011	9.2 %	1.915516	0.320	278.4748	0.604	1.629167	2.340	96.30880	0.077	583.3978	0.070	0.40575 ± 0.03877	1.16 ± 0.11	6.69	10.81	0.148 ± 0.002
13D03013	10.8 %	1.657149	0.335	261.6341	0.623	1.393803	2.739	81.57687	0.080	502.5837	0.081	0.40828 ± 0.04169	1.17 ± 0.12	6.61	9.16	0.134 ± 0.002
13D03014	12.8 %	1.987885	0.316	295.5504	0.596	1.529215	2.581	80.16769	0.081	591.8645	0.069	0.34309 ± 0.04764	0.98 ± 0.14	4.64	8.99	0.116 ± 0.001
13D03016	15.3 %	1.987406	0.310	377.9136	0.549	1.520791	2.490	78.67579	0.081	591.6728	0.069	0.43118 ± 0.04770	1.24 ± 0.14	5.71	8.82	0.089 ± 0.001
13D03017	18.0 %	1.538062	0.342	572.6694	0.515	1.427837	2.700	74.33224	0.084	441.7929	0.091	0.43159 ± 0.04386	1.24 ± 0.13	7.22	8.32	0.056 ± 0.001
13D03019	21.0 %	1.111301	0.362	531.3594	0.518	1.099152	3.606	55.46709	0.095	315.1356	0.128	0.51096 ± 0.04625	1.47 ± 0.13	8.94	6.20	0.045 ± 0.000
13D03020	23.0 %	0.692559	0.454	329.7597	0.571	0.681110	5.713	33.15827	0.132	194.5671	0.206	0.47421 ± 0.06214	1.36 ± 0.18	8.03	3.70	0.043 ± 0.001
Σ		31.057740	0.081	3796.9176	0.184	19.034152	0.840	891.68043	0.026	9195.2393	0.018					

Information on Analysis
and Constants Used In Calculations

Sample = SC12-060
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Anthony Koppers
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00158742 ± 0.13900000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 40
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = Undefined
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lak-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 38/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 38/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(cj) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	0.40534 ± 5.93%	0.40534 ± 0.02402 ± 5.93%	1.16 ± 0.07 ± 5.93% Full External Error ± 0.07 Analytical Error ± 0.07	1.89 9%	58.32 6	0.083 ± 0.031
Total Fusion Age	0.35225 ± 4.89%	0.35225 ± 0.01722 ± 4.89%	1.01 ± 0.05 ± 4.90% Full External Error ± 0.06 Analytical Error ± 0.05		17	0.101 ± 0.000
Normal Isochron	290.15 ± 11.82 ± 4.07%	0.51612 ± 0.24641 ± 47.74%	1.48 ± 0.71 ± 47.72% Full External Error ± 0.71 Analytical Error ± 0.71	1.99 9%	58.32 6	2.41 2σ Confidence Limit Error Magnification
Inverse Isochron Clustered Points	290.31 ± 11.82 ± 4.07%	0.51302 ± 0.21882 ± 42.65%	1.47 ± 0.63 ± 42.64% Full External Error ± 0.63 Analytical Error ± 0.63	1.99 9%	58.32 6	2.41 2σ Confidence Limit Error Magnification
				0.00000006040	5 Number of Iterations Convergence	
				0.0022864269	3 Number of Iterations Convergence	
				2%	Spreading Factor	

Depositing Patterns	36Ar(a) [a]	%1σ	36Ar(c) [a]	%1σ	36Ar(ea) [a]	%1σ	36Ar(ed) [a]	%1σ	37Ar(ca) [a]	%1σ	38Ar(a) [a]	%1σ	38Ar(c) [a]	%1σ	38Ar(h) [a]	%1σ	38Ar(ea) [a]	%1σ	38Ar(ed) [a]	%1σ	39Ar(a) [a]	%1σ	39Ar(c) [a]	%1σ	40Ar(r) [a]	%1σ	40Ar(a) [a]	%1σ	40Ar(c) [a]	%1σ	40Ar(h) [a]	%1σ	
13C02986	1.5%	1.023139	0.34	0.0000000	0.00	0.0007602	5.58	0.0000452	21.30	15.0200	5.58	0.2802385	0.30	0.0000000	0.00	0.0007981	1.02	0.0002000	0.08	0.7793491	21.32	3.53385	1.02	0.0201545	0.08	6.96317	15.74	402.0239	0.34	0.0000000	0.00	0.0002000	1.10
13C02988	2.0%	1.245112	0.36	0.0000000	0.00	0.0002136	8.16	0.0000174	57.58	12.1727	8.16	0.2327852	0.36	0.0000000	0.00	0.0007945	1.35	0.0016920	8.16	0.688387	57.58	2.70168	1.35	0.0281922	8.16	1.96410	70.42	369.5488	0.36	0.0000000	0.00	0.0007287	1.35
13C02989	2.5%	1.193256	0.36	0.0000000	0.00	0.0000007	7.09	0.0000249	39.26	14.4307	7.09	0.2220195	0.36	0.0000000	0.00	0.0007259	1.23	0.0002000	7.09	0.6973599	39.26	2.81594	1.23	0.0307118	7.09	5.58572	23.36	352.8971	0.36	0.0000000	0.00	0.0002000	1.23
13C02991	2.7%	1.164504	0.34	0.0000000	0.00	0.0002238	4.30	0.0000327	28.47	23.5940	4.30	0.2889628	0.34	0.0000000	0.00	0.0004988	0.63	0.0002796	4.30	0.1333400	28.49	5.65797	0.63	0.0165198	4.30	5.06509	167.34	456.6635	0.34	0.0000000	0.00	0.0007145	0.63
13C03002	3.2%	2.352326	0.31	0.0000000	0.00	0.0029554	2.08	0.0000404	24.92	48.0736	2.08	0.3841348	0.31	0.0000000	0.00	0.137281	0.32	0.0086212	2.08	0.1507376	24.94	12.58159	0.32	0.0303005	2.08	1.05111	185.74	607.3309	0.31	0.0000000	0.00	0.0721822	0.32
13C03004	3.8%	2.298073	0.32	0.0000000	0.00	0.0000005	1.23	0.0000414	24.17	86.5549	1.23	0.4232786	0.32	0.0000000	0.00	0.286431	0.17	0.0002011	1.23	0.1634747	24.19	23.58796	0.17	0.0682015	1.23	2.79639	77.62	698.8610	0.32	0.0000000	0.00	0.0303238	0.17
13C03005	4.6%	2.440546	0.32	0.0000000	0.00	0.0000275	0.85	0.0000475	21.47	147.8314	0.85	0.4681379	0.32	0.0000000	0.00	0.521796	0.11	0.0005486	0.85	0.1876509	21.49	46.80198	0.11	0.0684606	0.85	11.45026	20.27	721.1912	0.32	0.0000000	0.00	0.0463105	0.11
13C03007	5.6%	2.807448	0.31	0.0000000	0.00	0.0017606	0.65	0.0000401	22.98	233.9007	0.65	0.5247121	0.31	0.0000000	0.00	0.966077	0.08	0.0002000	0.65	0.1681187	22.00	85.11224	0.08	0.1574005	0.65	29.12462	8.98	829.8910	0.31	0.0000000	0.00	0.0905924	0.08
13C03008	6.6%	2.627476	0.31	0.0000000	0.00	0.0012488	0.81	0.0000007	32.39	269.8520	0.81	0.4732942	0.31	0.0000000	0.00	1.161826	0.07	0.0071136	0.81	0.1512827	32.81	901.18738	0.07	0.1893496	0.81	36.07441	6.14	746.8676	0.31	0.0000000	0.00	0.1622094	0.07
13C03010	7.8%	✓ 2.249013	0.32	0.0000000	0.00	0.0776227	0.80	0.0000402	24.40	294.0254	0.80	0.4203405	0.32	0.0000000	0.00	1.238020	0.07	0.0408886	0.80	0.1898289	24.42	108.63874	0.07	0.1978791	0.80	44.11433	4.87	664.9834	0.32	0.0000000	0.00	0.1197781	0.07
13C03011	9.2%	✓ 1.841980	0.33	0.0000000	0.00	0.0736173	0.80	0.0000088	26.06	278.4746	0.80	0.3464923	0.33	0.0000000	0.00	1.008961	0.08	0.0081990	0.80	0.1623857	26.08	96.12139	0.08	0.1674136	0.80	29.30153	4.76	544.2081	0.33	0.0000000	0.00	0.0977605	0.08
13C03013	10.8%	✓ 1.588043	0.36	0.0000000	0.00	0.0660714	0.82	0.0000340	26.46	261.6341	0.82	0.3689683	0.36	0.0000000	0.00	0.930341	0.08	0.0083671	0.82	0.1342867	28.48	81.40079	0.08	0.1762797	0.82	33.23467	5.10	489.2668	0.36	0.0000000	0.00	0.0822148	0.08
13C03014	12.8%	✓ 1.809804	0.33	0.0000000	0.00	0.0678053	0.80	0.0000060	17.88	295.8504	0.80	0.3699423	0.33	0.0000000	0.00	0.919046	0.08	0.0410815	0.80	0.2211460	17.91	79.98879	0.08	0.1998054	0.80	27.43875	6.94	564.3470	0.33	0.0000000	0.00	0.0907085	0.08
13C03016	15.1%	✓ 1.887068	0.33	0.0000000	0.00	0.0697602	0.86	0.0000065	17.01	377.9136	0.86	0.3627988	0.33	0.0000000	0.00	0.846448	0.08	0.0203300	0.86	0.2203007	17.04	78.47145	0.08	0.2043168	0.86	33.81857	5.63	657.7809	0.33	0.0000000	0.00	0.0700057	0.08
13C03017	18.0%	✓ 1.388815	0.38	0.0000000	0.00	0.1011847	0.51	0.0000627	15.61	572.4694	0.51	0.2901957	0.38	0.0000000	0.00	0.841515	0.08	0.0796011	0.51	0.2475255	15.64	73.94883	0.08	0.3845465	0.51	31.91445	5.08	409.8037	0.38	0.0000000	0.00	0.0748683	0.08
13C03019	21.6%	0.970988	0.42	0.0000000	0.00	0.1802769	0.52	0.0000049	18.53	931.3594	0.52	0.1814738	0.42	0.0000000	0.00	0.627749	0.10	0.0018690	0.52	0.2190777	18.36	35.10949	0.10	0.2676949	0.52	28.10899	4.52	298.9339	0.42	0.0000000	0.00	0.0000000	0.10
13C03020	21.6%	0.856486	0.53	0.0000000	0.00	0.0977686	0.57	0.0000073	26.44	329.7597	0.57	0.1131815	0.53	0.0000000	0.00	0.371818	0.13	0.0465388	0.57	0.1427055	26.46	32.28324	0.13	0.2703883	0.57	15.61883	6.55	178.9192	0.53	0.0000000	0.00	0.0000000	0.13
Σ	30.54892	0.08	0.0000000	0.00	1.0023883	0.18	0.0807015	5.78	3796.9176	0.18	5.817248	0.08	0.0000000	0.00	10.118244	0.03	0.0277775	0.18	2.7709219	5.78	889.12511	0.03	2.5552256	0.18	313.19151	2.44	8881.1488	0.08	0.0000000	0.00	0.8880164	0.03	
Σ							31.057740	0.05	3796.9176	0.18									19.024152	0.04			891.62043	0.03							9195.2382	0.12	

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CEQAS Oregon State University, Corvallis, USA

Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
13D02996	1.8 %	125.457049	1.284937	5.089179	0.293495	0.434073	0.004668	155.773	21.743060	1.00110062	2.134E-11
13D02998	2.0 %	135.093810	1.827083	4.491987	0.371312	0.460812	0.006427	155.790	21.750518	1.00110074	1.757E-11
13D02999	2.3 %	120.028245	1.479507	4.996171	0.359471	0.414455	0.005317	155.799	21.754098	1.00110080	1.664E-11
13D03001	2.7 %	80.313095	0.509459	4.158381	0.180759	0.273493	0.001949	155.816	21.761559	1.00110093	2.187E-11
13D03002	3.2 %	50.129822	0.162039	4.057474	0.085512	0.171009	0.000760	155.825	21.765440	1.00110099	2.910E-11
13D03004	3.8 %	28.447735	0.052123	3.660413	0.045316	0.096834	0.000347	155.842	21.772606	1.00110111	3.229E-11
13D03005	4.6 %	15.943618	0.019147	3.217121	0.027668	0.053962	0.000177	155.851	21.776489	1.00110117	3.517E-11
13D03007	5.6 %	10.071708	0.009278	2.743773	0.018018	0.033649	0.000106	155.868	21.783958	1.00110129	4.122E-11
13D03008	6.6 %	7.714063	0.007006	2.662109	0.016354	0.025634	0.000080	155.876	21.787544	1.00110135	3.754E-11
13D03010	7.8 % ✓	6.512522	0.006118	2.701505	0.016226	0.021377	0.000067	155.894	21.795016	1.00110147	3.402E-11
13D03011	9.2 % ✓	6.057575	0.006294	2.891478	0.017602	0.019889	0.000066	155.902	21.798604	1.00110153	2.800E-11
13D03013	10.8 % ✓	6.160860	0.006979	3.207209	0.020150	0.020314	0.000070	155.919	21.806080	1.00110166	2.412E-11
13D03014	12.8 % ✓	7.382831	0.007845	3.686652	0.022190	0.024797	0.000081	155.928	21.809969	1.00110172	2.841E-11
13D03016	15.3 % ✓	7.520392	0.008007	4.803429	0.026651	0.025261	0.000081	155.945	21.817150	1.00110184	2.840E-11
13D03017	18.0 % ✓	5.943490	0.007392	7.704187	0.040202	0.020692	0.000073	155.954	21.821041	1.00110190	2.121E-11
13D03019	21.0 %	5.681487	0.009044	9.579723	0.050500	0.020035	0.000075	155.972	21.828525	1.00110202	1.513E-11
13D03020	23.0 %	5.867832	0.014366	9.945023	0.058316	0.020886	0.000099	155.980	21.832118	1.00110208	9.339E-12

OSU Argon Geochronology Lab

Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
13D02996	1.8 %	0.0233834	0.0015932	0.0109337	0.0341974	0.0076320	0.0267405	0.0899080	0.0260166	7.0103285	0.3986788
13D02998	2.0 %	0.0243949	0.0015932	0.0256667	0.0341974	0.0059011	0.0267405	0.0871946	0.0260166	7.2362528	0.3986788
13D02999	2.3 %	0.0248077	0.0015932	0.0318222	0.0341974	0.0054343	0.0267405	0.0864376	0.0260166	7.3281539	0.3986788
13D03001	2.7 %	0.0255162	0.0015932	0.0427370	0.0341974	0.0052199	0.0267405	0.0859969	0.0260166	7.4851509	0.3986788
13D03002	3.2 %	0.0258038	0.0015932	0.0473932	0.0341974	0.0055134	0.0267405	0.0863746	0.0260166	7.5483838	0.3986788
13D03004	3.8 %	0.0261893	0.0015932	0.0541564	0.0341974	0.0067833	0.0267405	0.0881629	0.0260166	7.6320363	0.3986788
13D03005	4.6 %	0.0263193	0.0015932	0.0568271	0.0341974	0.0078654	0.0267405	0.0897225	0.0260166	7.6594270	0.3986788
13D03007	5.6 %	0.0264138	0.0015932	0.0600023	0.0341974	0.0107252	0.0267405	0.0938888	0.0260166	7.6767062	0.3986788
13D03008	6.6 %	0.0263865	0.0015932	0.0606101	0.0341974	0.0124619	0.0267405	0.0964341	0.0260166	7.6684576	0.3986788
13D03010	7.8 %	0.0261781	0.0015932	0.0599672	0.0341974	0.0168383	0.0267405	0.1028732	0.0260166	7.6168094	0.3986788
13D03011	9.2 %	0.0260054	0.0015932	0.0587422	0.0341974	0.0193029	0.0267405	0.1065094	0.0260166	7.5754757	0.3986788
13D03013	10.8 %	0.0254942	0.0015932	0.0542811	0.0341974	0.0251959	0.0267405	0.1152212	0.0260166	7.4549000	0.3986788
13D03014	12.8 %	0.0251474	0.0015932	0.0509418	0.0341974	0.0286652	0.0267405	0.1203583	0.0260166	7.3737952	0.3986788
13D03016	15.3 %	0.0243619	0.0015932	0.0429441	0.0341974	0.0357980	0.0267405	0.1309330	0.0260166	7.1909781	0.3986788
13D03017	18.0 %	0.0238576	0.0015932	0.0376193	0.0341974	0.0400559	0.0267405	0.1372519	0.0260166	7.0740310	0.3986788
13D03019	21.0 %	0.0227323	0.0015932	0.0254187	0.0341974	0.0490230	0.0267405	0.1505708	0.0260166	6.8137377	0.3986788
13D03020	23.0 %	0.0221195	0.0015932	0.0186460	0.0341974	0.0536912	0.0267405	0.1575093	0.0260166	6.6722543	0.3986788

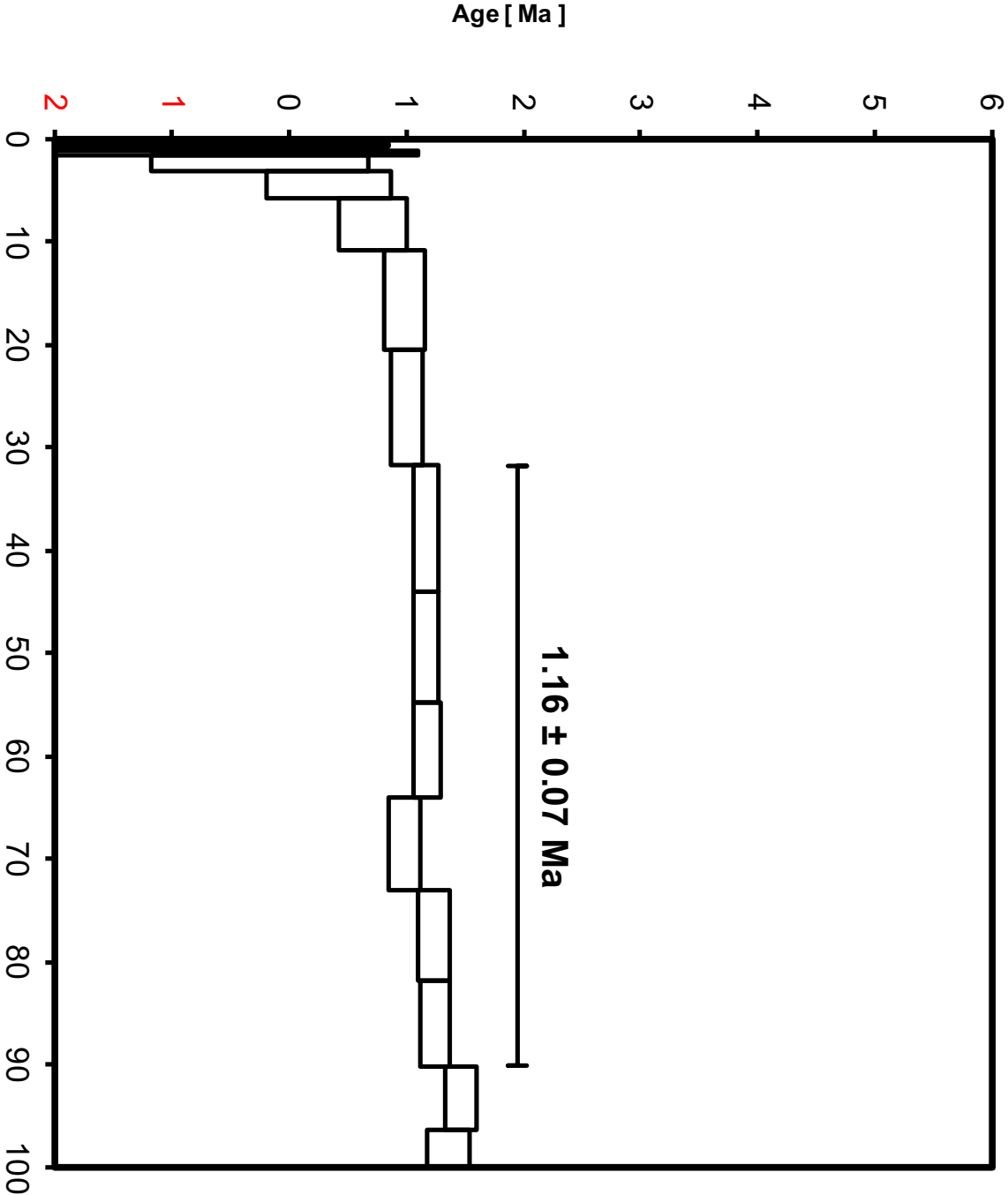
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Intercept Values	36Ar [fA]			37Ar [fA]			38Ar [fA]			39Ar [fA]			40Ar [fA]									
		1σ	r2		1σ	r2		1σ	r2		1σ	r2		1σ	r2							
13D02996	1.8%	1.517159	0.002902	0.9257	EXP 150 of 150		0.8246	0.0308	0.0022	EXP 150 of 150	0.4950603	0.026701	0.0088	EXP 150 of 150	3.60685	0.02461	0.6209	EXP 150 of 150	451.72350	0.05382	0.9995	EXP 150 of 150
13D02998	2.0%	1.237267	0.002545	0.9099	EXP 150 of 150		0.5748	0.0288	0.0016	EXP 150 of 150	0.3239734	0.0285502	0.0066	EXP 150 of 150	2.77715	0.02520	0.3154	EXP 150 of 150	373.50558	0.04981	0.9995	EXP 150 of 150
13D02999	2.3%	1.185450	0.002704	0.8971	EXP 149 of 150		0.6627	0.0306	0.1109	EXP 150 of 150	0.3462977	0.0297916	0.0013	EXP 150 of 150	2.95256	0.02362	0.4431	EXP 150 of 150	354.18376	0.05058	0.9994	EXP 150 of 150
13D03001	2.7%	1.532736	0.002828	0.9331	EXP 149 of 150		1.1066	0.0300	0.0201	EXP 150 of 150	0.4784997	0.0252198	0.0083	EXP 150 of 150	5.71814	0.02371	0.6791	EXP 150 of 150	463.35573	0.05981	0.9996	EXP 150 of 150
13D03002	3.2%	2.034733	0.003133	0.9499	EXP 150 of 150		2.2597	0.0290	0.1313	EXP 150 of 150	0.6738175	0.0287260	0.0046	EXP 150 of 150	12.09210	0.02661	0.9044	EXP 150 of 150	614.15068	0.05750	0.9998	EXP 150 of 150
13D03004	3.8%	2.259236	0.003644	0.9462	EXP 150 of 150		3.9549	0.0277	0.4230	EXP 150 of 150	0.8499566	0.0280346	0.0355	EXP 150 of 150	23.56059	0.02750	0.9741	EXP 150 of 150	680.64762	0.05857	0.9998	EXP 150 of 150
13D03005	4.6%	2.434772	0.003808	0.9650	EXP 150 of 150		6.7179	0.0323	0.5981	EXP 150 of 150	1.1633994	0.0293229	0.0676	EXP 150 of 150	45.70347	0.02932	0.9620	EXP 150 of 150	749.69629	0.07408	0.9998	EXP 150 of 150
13D03007	5.6%	2.813317	0.004174	0.9541	EXP 150 of 150		10.5984	0.0316	0.8950	EXP 150 of 150	1.6523916	0.0282615	0.1169	EXP 148 of 150	84.73987	0.03117	0.9873	EXP 150 of 150	886.91591	0.06956	0.9999	EXP 150 of 150
13D03008	6.6%	2.550549	0.003645	0.9597	EXP 150 of 150		12.2150	0.0304	0.8363	EXP 150 of 150	1.7479973	0.0282764	0.0468	EXP 150 of 150	100.73034	0.03061	0.9982	EXP 150 of 150	795.10123	0.07172	0.9998	EXP 150 of 150
13D03010	7.8%	2.286076	0.003354	0.9619	EXP 150 of 150		13.2971	0.0320	0.8343	EXP 150 of 150	1.8160540	0.0271269	0.1524	EXP 150 of 150	108.14055	0.03484	0.9979	EXP 150 of 150	716.77852	0.05885	0.9998	EXP 150 of 150
13D03011	9.2%	1.886944	0.003138	0.9441	EXP 150 of 150		12.9937	0.0307	0.8509	EXP 150 of 150	1.5894429	0.0284157	0.1333	EXP 150 of 150	95.70745	0.03443	0.9975	EXP 150 of 150	591.26319	0.06340	0.9997	EXP 150 of 150
13D03013	10.8%	1.630081	0.003046	0.9285	EXP 150 of 150		11.8272	0.0320	0.8207	EXP 150 of 150	1.3511359	0.0285213	0.0442	EXP 150 of 150	81.09249	0.03027	0.9972	EXP 150 of 150	510.28837	0.06000	0.9996	EXP 150 of 150
13D03014	12.8%	1.956978	0.003121	0.9453	EXP 150 of 150		13.3476	0.0324	0.8565	EXP 150 of 150	1.4813807	0.0283886	0.1512	EXP 150 of 150	79.69681	0.03182	0.9969	EXP 150 of 150	598.53245	0.06373	0.9997	EXP 150 of 150
13D03016	15.3%	1.954727	0.002875	0.9554	EXP 150 of 150		17.0395	0.0297	0.9168	EXP 150 of 150	1.4659294	0.0280663	0.0661	EXP 150 of 150	78.22843	0.03134	0.9968	EXP 150 of 150	599.15783	0.06054	0.9997	EXP 150 of 150
13D03017	18.0%	1.517776	0.002934	0.9183	EXP 150 of 150		25.7887	0.0338	0.9531	EXP 150 of 150	1.3698832	0.0270316	0.0767	EXP 149 of 150	73.92312	0.03280	0.9961	EXP 150 of 150	449.08648	0.05189	0.9996	EXP 150 of 150
13D03019	21.0%	1.160738	0.002226	0.9363	EXP 150 of 150		23.9167	0.0320	0.9469	EXP 150 of 150	1.0363306	0.0285527	0.0453	EXP 150 of 150	55.23596	0.02881	0.9841	EXP 150 of 150	322.10594	0.04596	0.9994	EXP 150 of 150
13D03020	23.0%	0.694892	0.001943	0.8199	EXP 150 of 150		14.8394	0.0305	0.8973	EXP 150 of 150	0.9188811	0.0273625	0.0218	EXP 150 of 150	33.07204	0.03024	0.9855	EXP 150 of 150	201.33910	0.03936	0.9987	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%He	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes	
1300298	1.8 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.8	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	8	1	1	13-080-02	56.0			Colapage St. Crater Island	1300298	01
1300299	2.0 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	2	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	8	20	1	13-080-02	56.0			Colapage St. Crater Island	1300299	01
1300300	2.3 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.3	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	8	30	1	13-080-02	56.0			Colapage St. Crater Island	1300300	01
1300301	2.7 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.7	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	9	1	1	13-080-02	56.0			Colapage St. Crater Island	1300301	01
1300302	3.2 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.2	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	9	10	1	13-080-02	56.0			Colapage St. Crater Island	1300302	01
1300304	3.8 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.8	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	9	40	1	13-080-02	56.0			Colapage St. Crater Island	1300304	01
1300305	4.0 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	4.0	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	9	53	1	13-080-02	56.0			Colapage St. Crater Island	1300305	01
1300307	5.0 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	5.0	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	10	10	1	13-080-02	56.0			Colapage St. Crater Island	1300307	01
1300308	6.0 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	6.0	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	10	30	1	13-080-02	56.0			Colapage St. Crater Island	1300308	01
1300309	7.0 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	7.0	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	10	30	1	13-080-02	56.0			Colapage St. Crater Island	1300309	01
1300311	9.2 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	9.2	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	11	7	1	13-080-02	56.0			Colapage St. Crater Island	1300311	01
1300313	10.0 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.0	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	11	30	1	13-080-02	56.0			Colapage St. Crater Island	1300313	01
1300314	10.8 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.8	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	11	40	1	13-080-02	56.0			Colapage St. Crater Island	1300314	01
1300316	10.3 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.3	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	12	9	1	13-080-02	56.0			Colapage St. Crater Island	1300316	01
1300317	10.7 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	10	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	12	20	1	13-080-02	56.0			Colapage St. Crater Island	1300317	01
1300319	21.0 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	21	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	12	47	1	13-080-02	56.0			Colapage St. Crater Island	1300319	01
1300320	23.0 %	SC10-080	Groundmass	Colapage St. Crater Island	Anthony Rogers	23	FC1-3	28.38	0.984	Flanagan et al (1998)	0.90038	0.139	0.0018942	0.139	30339	0.000	0.000731302	0.063	1	4.80E-14	24	OCT	2013	12	50	1	13-080-02	56.0			Colapage St. Crater Island	1300320	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
13D02996	1.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D02998	2.0	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D02999	2.3	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03001	2.7	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03002	3.2	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03004	3.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03005	4.6	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03007	5.6	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03008	6.6	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03010	7.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03011	9.2	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03013	10.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03014	12.8	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03016	15.3	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03017	18.0	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03019	21.0	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
13D03020	25.0	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	

13D02995.AGE >>> SC12-060 >>> GALAPAGOS | HARPP (13-07) PROJECT



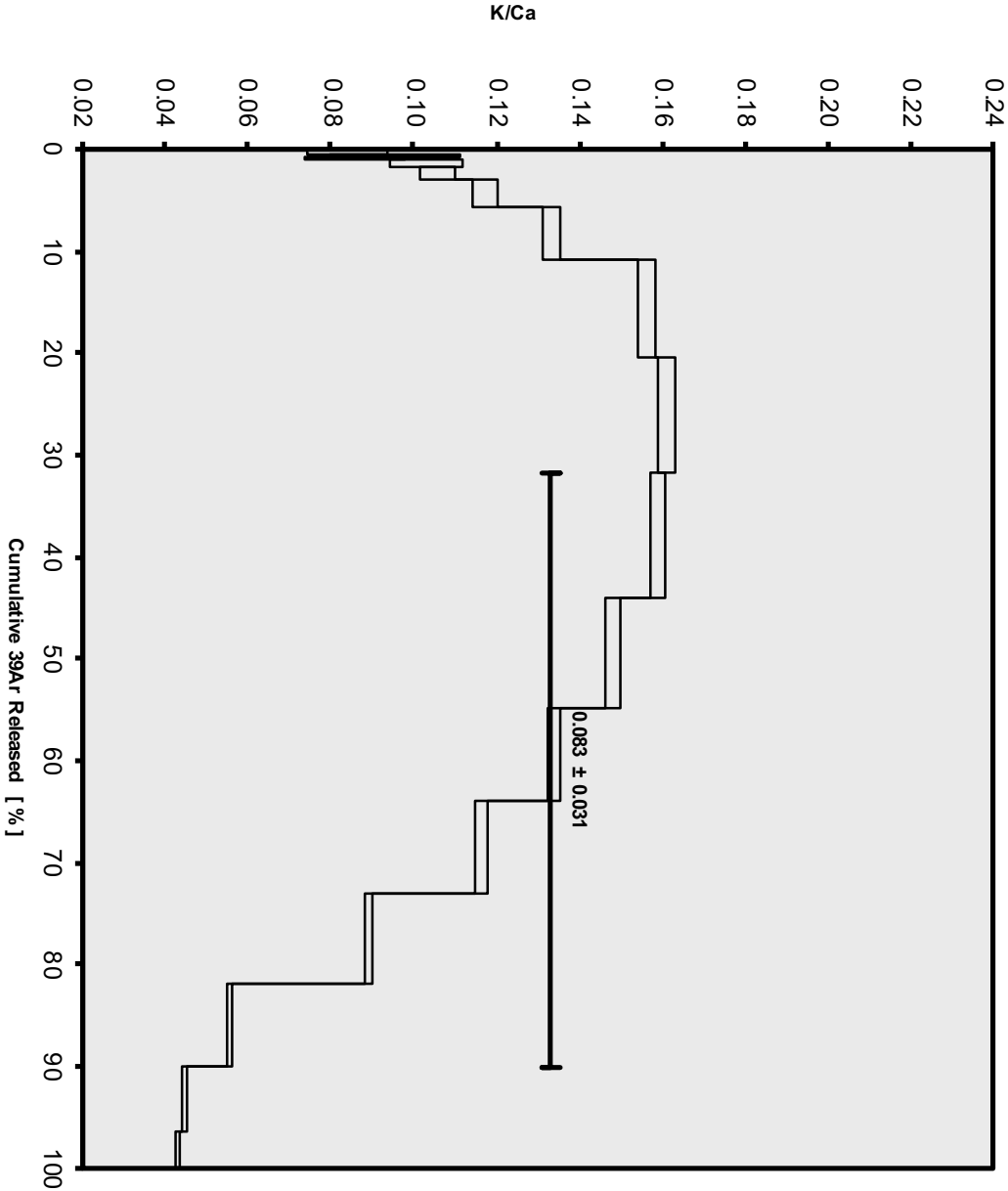
Ar-Ages in Ma

WEIGHTED PLATEAU
1.16 ± 0.07
TOTAL FUSION
1.01 ± 0.05
NORMAL ISOCHRON
1.48 ± 0.71
INVERSE ISOCHRON
1.47 ± 0.63
MSWD (PROBABILITY)
1.89 (9%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00158742 ±
0.13900000

13D02995.AGE >>> SC12-060 >>> GALAPAGOS | HARPP (13-07) PROJECT



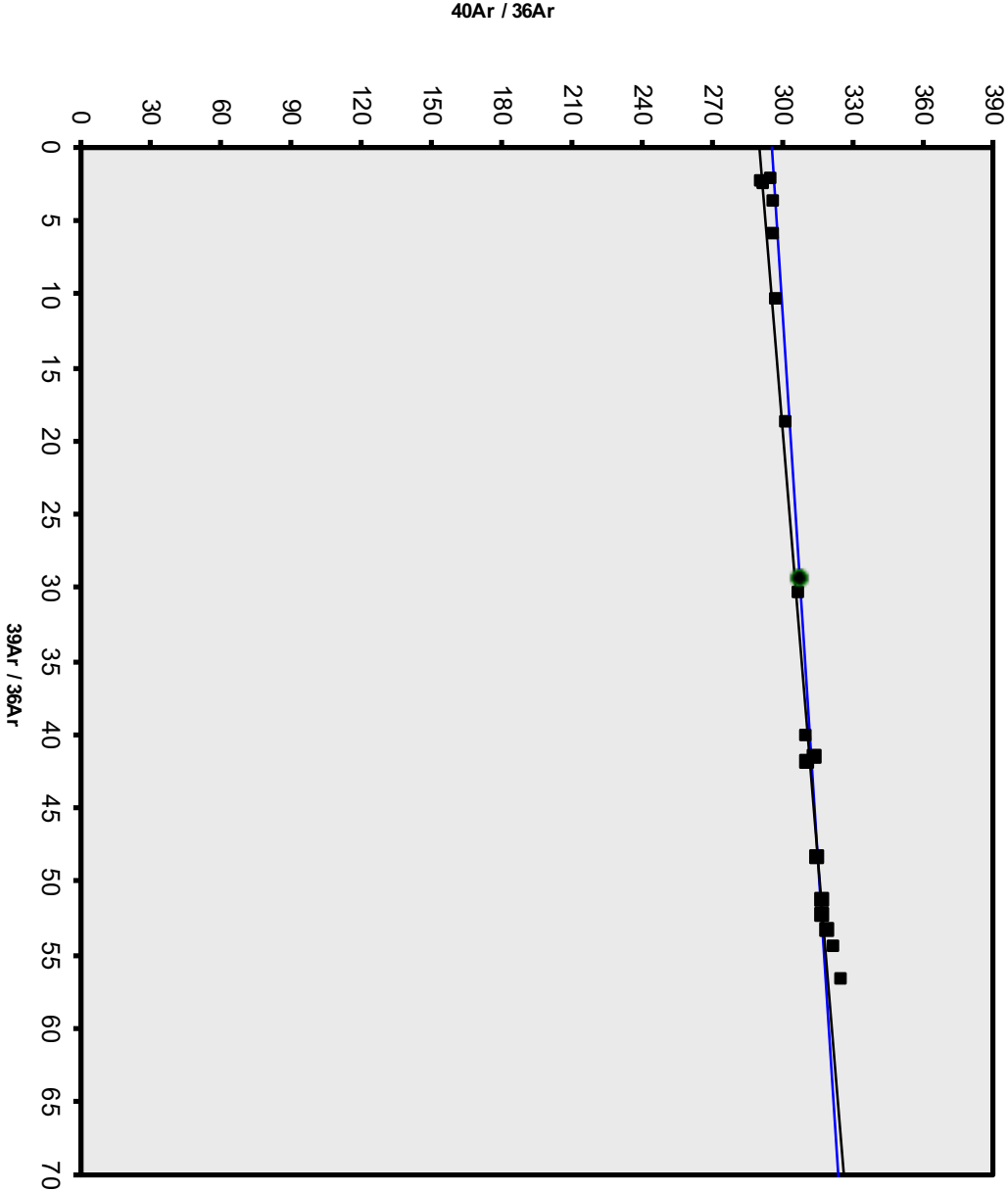
Ar-Ages in Ma

WEIGHTED
PLATEAU
 1.16 ± 0.07
TOTAL FUSION
 1.01 ± 0.05
NORMAL
ISOCHRON
 1.48 ± 0.71
INVERSE
ISOCHRON
 1.47 ± 0.63

Sample Info

Groundmass
Galapagos St. Cruz
Island
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IRR = 13-OSU-03

13D02995.AGE >>> SC12-060 >>> GALAPAGOS | HARPP (13-07) PROJECT



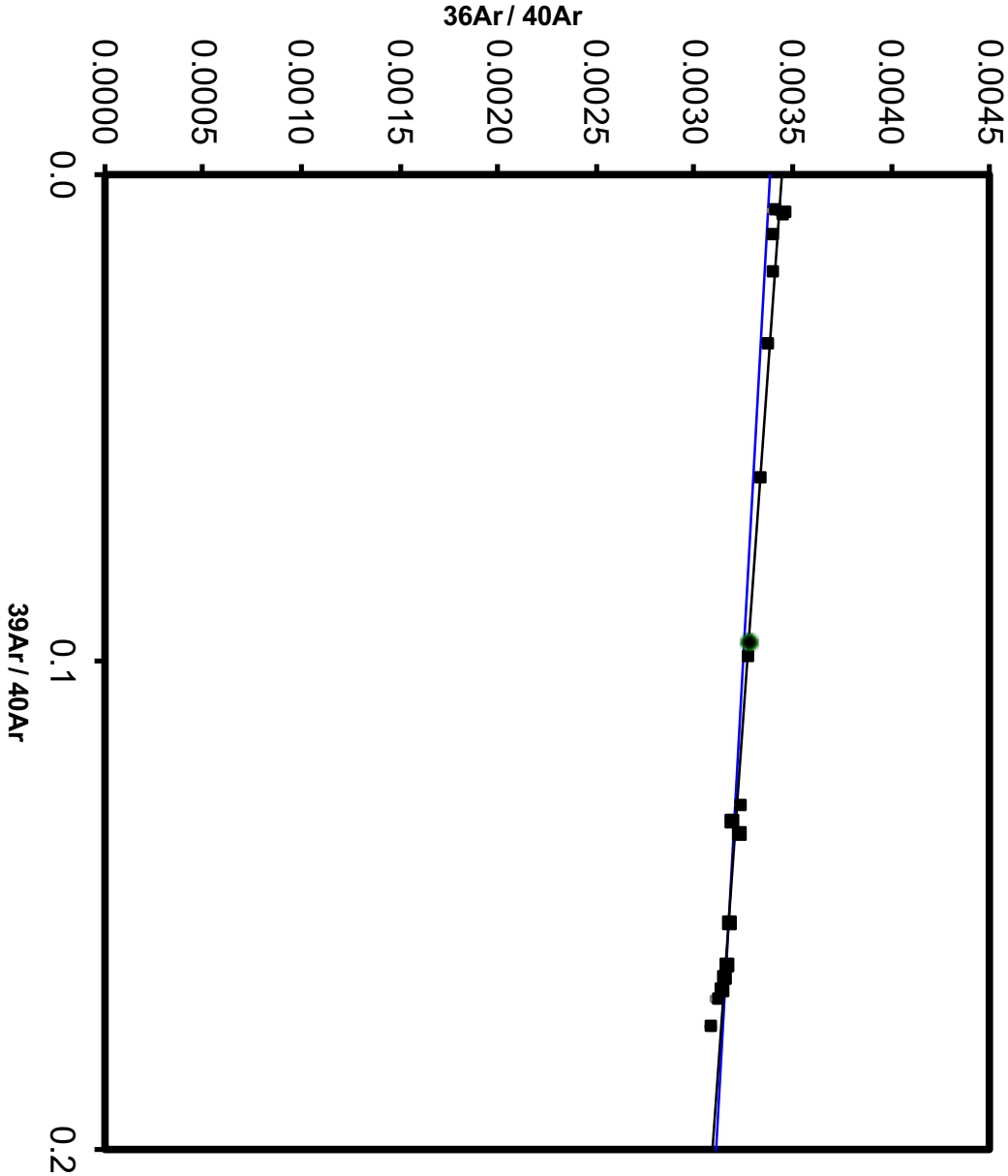
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.16 ± 0.07
TOTAL FUSION
1.01 ± 0.05
NORMAL
ISOCHRON
1.48 ± 0.71
INVERSE
ISOCHRON
1.47 ± 0.63
MSWD
(PROBABILITY)
1.99 (9%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03

13D02995.AGE >>> SC12-060 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
 1.16 ± 0.07
TOTAL FUSION
 1.01 ± 0.05
NORMAL
ISOCHRON
 1.48 ± 0.71
INVERSE
ISOCHRON
 1.47 ± 0.63
MSWD
(PROBABILITY)
1.99 (9%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
13D02960	1.8 %	0.571997	9.8535	0.0118581	3.6223	0.302848	237.6 $\pm$ 1152.7	0.18	0.21	0.158 $\pm$ 0.032
13D02962	2.0 %	0.534052	12.5502	0.0252446	5.6387	0.385105	194.1 $\pm$ 733.7	0.24	0.33	0.193 $\pm$ 0.030
13D02963	2.3 %	0.462404	15.4263	0.0245144	7.7604	0.955355	349.8 $\pm$ 451.4	0.69	0.46	0.216 $\pm$ 0.027
13D02965	2.7 %	0.456585	25.1518	0.0000000	14.3679	0.773228	152.9 $\pm$ 254.6	0.57	0.84	0.246 $\pm$ 0.020
13D02966	3.2 %	0.414867	38.0569	0.0000000	21.8318	0.040664	5.3 $\pm$ 165.8	0.03	1.28	0.247 $\pm$ 0.013
13D02968	3.8 %	0.489242	90.1818	0.0112507	49.5942	3.361072	192.6 $\pm$ 75.6	2.27	2.91	0.236 $\pm$ 0.006
13D02969	4.6 %	0.569154	189.3380	0.0085940	103.4917	6.987482	191.8 $\pm$ 40.9	3.99	6.08	0.235 $\pm$ 0.003
13D02971	5.6 %	0.686305	360.1174	0.0758758	192.2281	14.775237	218.4 $\pm$ 25.6	6.78	11.29	0.230 $\pm$ 0.003
13D02972	6.6 %	0.609499	425.0204	0.1404825	203.2350	14.444284	201.9 $\pm$ 24.0	7.42	11.93	0.206 $\pm$ 0.002
13D02974	7.8 %	0.609736	496.8763	0.1914092	203.9207	16.060465	223.8 $\pm$ 23.9	8.18	11.97	0.176 $\pm$ 0.002
13D02975	9.2 %	0.628119	514.3480	0.2499517	191.1085	15.067344	224.0 $\pm$ 26.2	7.50	11.22	0.160 $\pm$ 0.002
13D02977	10.8 %	0.631151	462.4575	0.3900326	162.0529	10.823459	189.8 $\pm$ 31.5	5.48	9.52	0.151 $\pm$ 0.002
13D02978	12.8 %	0.918381	429.6228	0.6195755	147.9633	8.229354	158.0 $\pm$ 42.1	2.94	8.69	0.148 $\pm$ 0.002
13D02980	15.3 %	1.580750	439.6829	0.9372710	136.2455	2.300957	48.0 $\pm$ 66.8	0.49	8.00	0.133 $\pm$ 0.001
13D02981	18.0 %	2.167952	510.1633	1.0060062	109.7606	0.100700	2.6 $\pm$ 106.6	0.02	6.45	0.093 $\pm$ 0.001
13D02983	21.0 %	2.439177	655.9595	0.9048491	88.2479	1.199888	38.6 $\pm$ 148.9	0.17	5.18	0.058 $\pm$ 0.001
13D02984	23.0 %	1.916015	577.1490	0.6857110	61.9497	1.533479	70.3 $\pm$ 174.4	0.27	3.64	0.046 $\pm$ 0.000
Σ		15.685384	5251.9555	5.2826265	1703.0192	90.821248				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-027 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Anthony Koppers Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00157134 $\pm$ 0.13800000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.07310 $\pm$ 0.00489 $\pm$ 6.69%	207.7 $\pm$ 13.9 $\pm$ 6.69% Full External Error $\pm$ 14.9 Analytical Error $\pm$ 13.9	1.70 10% 2.07 1.3039	73.61 8 2a Confidence Limit Error Magnification	0.174 $\pm$ 0.023
	Total Fusion Age	0.05333 $\pm$ 0.00576 $\pm$ 10.80%	151.5 $\pm$ 16.4 $\pm$ 10.80% Full External Error $\pm$ 16.8 Analytical Error $\pm$ 16.4		17	0.139 $\pm$ 0.000

OSU Argon Geochronology Lab

Normal Isochron		39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
13D02960	1.8 %	6.33 $\pm$ 0.19	296.03 $\pm$ 2.57	0.2803
13D02962	2.0 %	10.56 $\pm$ 0.21	294.78 $\pm$ 2.72	0.4438
13D02963	2.3 %	16.78 $\pm$ 0.27	297.57 $\pm$ 2.68	0.5376
13D02965	2.7 %	31.47 $\pm$ 0.38	297.19 $\pm$ 2.83	0.7674
13D02966	3.2 %	52.62 $\pm$ 0.60	295.40 $\pm$ 3.07	0.8847
13D02968	3.8 % ✓	101.37 $\pm$ 0.95	302.37 $\pm$ 2.76	0.9490
13D02969	4.6 % ✓	181.83 $\pm$ 1.62	307.78 $\pm$ 2.73	0.9713
13D02971	5.6 % ✓	280.09 $\pm$ 2.40	317.03 $\pm$ 2.70	0.9790
13D02972	6.6 % ✓	333.45 $\pm$ 3.18	319.20 $\pm$ 3.03	0.9813
13D02974	7.8 % ✓	334.44 $\pm$ 3.19	321.84 $\pm$ 3.06	0.9817
13D02975	9.2 % ✓	304.26 $\pm$ 2.89	319.49 $\pm$ 3.02	0.9815
13D02977	10.8 % ✓	256.76 $\pm$ 2.48	312.65 $\pm$ 3.01	0.9813
13D02978	12.8 % ✓	161.11 $\pm$ 1.32	304.46 $\pm$ 2.46	0.9781
13D02980	15.3 %	86.19 $\pm$ 0.60	296.96 $\pm$ 2.04	0.9724
13D02981	18.0 %	50.63 $\pm$ 0.33	295.45 $\pm$ 1.90	0.9674
13D02983	21.0 %	36.18 $\pm$ 0.24	295.01 $\pm$ 1.89	0.9613
13D02984	23.0 %	32.33 $\pm$ 0.23	294.70 $\pm$ 1.98	0.9484

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	292.25 $\pm$ 3.20 $\pm$ 1.09%	0.08525 $\pm$ 0.01269 $\pm$ 14.88%	242.2 $\pm$ 36.0 $\pm$ 14.88%	1.19 31%
			Full External Error $\pm$ 36.6 Analytical Error $\pm$ 36.0	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	2.15 1.0917 8	Convergence Number of Iterations Calculated Line	0.000000145459 4 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
13D02960	1.8 %	0.0213923 $\pm$ 0.0006209	0.00337804 $\pm$ 0.00002937	0.0075
13D02962	2.0 %	0.0358181 $\pm$ 0.0006500	0.00339237 $\pm$ 0.00003129	0.0131
13D02963	2.3 %	0.0564002 $\pm$ 0.0007703	0.00336060 $\pm$ 0.00003032	0.0231
13D02965	2.7 %	0.1058845 $\pm$ 0.0008177	0.00336481 $\pm$ 0.00003210	0.0393
13D02966	3.2 %	0.1781428 $\pm$ 0.0009458	0.00338522 $\pm$ 0.00003517	0.0634
13D02968	3.8 % ✓	0.3352499 $\pm$ 0.0009897	0.00330721 $\pm$ 0.00003016	0.0905
13D02969	4.6 % ✓	0.5907985 $\pm$ 0.0012590	0.00324911 $\pm$ 0.00002878	0.0941
13D02971	5.6 % ✓	0.8834891 $\pm$ 0.0015476	0.00315429 $\pm$ 0.00002691	0.0762
13D02972	6.6 % ✓	1.0446354 $\pm$ 0.0019241	0.00313285 $\pm$ 0.00002978	0.0842
13D02974	7.8 % ✓	1.0391531 $\pm$ 0.0018940	0.00310713 $\pm$ 0.00002958	0.0826
13D02975	9.2 % ✓	0.9523218 $\pm$ 0.0017349	0.00313001 $\pm$ 0.00002963	0.0800
13D02977	10.8 % ✓	0.8212338 $\pm$ 0.0015346	0.00319848 $\pm$ 0.00003082	0.0788
13D02978	12.8 % ✓	0.5291754 $\pm$ 0.0009004	0.00328450 $\pm$ 0.00002655	0.0537
13D02980	15.3 %	0.2902469 $\pm$ 0.0004749	0.00336751 $\pm$ 0.00002311	0.0268
13D02981	18.0 %	0.1713593 $\pm$ 0.0002870	0.00338463 $\pm$ 0.00002175	0.0176
13D02983	21.0 %	0.1226385 $\pm$ 0.0002245	0.00338974 $\pm$ 0.00002175	0.0141
13D02984	23.0 %	0.1097137 $\pm$ 0.0002451	0.00339329 $\pm$ 0.00002279	0.0145

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron	292.27 $\pm$ 3.19 $\pm$ 1.09%	0.08524 $\pm$ 0.01243 $\pm$ 14.58%	242.2 $\pm$ 35.3 $\pm$ 14.58%	1.19 31%
			Full External Error $\pm$ 35.8 Analytical Error $\pm$ 35.3	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	2.15 1.0906 8 6.0%	Convergence Number of Iterations Calculated Line	0.0001000395 3 Weighted York-2

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
13D02960	1.8 %	0.574601	0.425	9.8535	9.896	0.161356	25.672	3.6289	1.447	169.3316	0.069	0.08361 ± 0.40572	237.6 ± 1152.7	0.18	0.21	0.158 ± 0.032
13D02962	2.0 %	0.537372	0.450	12.5502	7.644	0.190972	20.272	5.6472	0.903	157.4330	0.074	0.06830 ± 0.25816	194.1 ± 733.7	0.24	0.33	0.193 ± 0.030
13D02963	2.3 %	0.466482	0.436	15.4263	6.170	0.201395	19.721	7.7708	0.677	137.6035	0.084	0.12311 ± 0.15889	349.8 ± 451.4	0.69	0.46	0.216 ± 0.027
13D02965	2.7 %	0.463225	0.459	25.1518	3.953	0.248621	15.977	14.3848	0.376	135.7086	0.085	0.05382 ± 0.08959	152.9 ± 254.6	0.57	0.84	0.246 ± 0.020
13D02966	3.2 %	0.424914	0.495	38.5959	2.584	0.330306	12.020	21.8575	0.248	122.5745	0.093	0.00186 ± 0.05834	5.3 ± 165.8	0.03	1.28	0.247 ± 0.013
13D02968	3.8 %	0.513052	0.425	90.1818	1.176	0.679607	5.858	49.6549	0.125	147.9820	0.078	0.06777 ± 0.02660	192.6 ± 75.6	2.27	2.91	0.236 ± 0.006
13D02969	4.6 %	0.619142	0.399	189.3380	0.682	1.319022	2.896	103.6191	0.083	175.2771	0.067	0.06752 ± 0.01441	191.8 ± 40.9	3.99	6.08	0.235 ± 0.003
13D02971	5.6 %	0.781395	0.366	360.1174	0.544	2.441759	1.614	192.4705	0.069	217.7726	0.053	0.07686 ± 0.00901	218.4 ± 25.6	6.78	11.29	0.230 ± 0.003
13D02972	6.6 %	0.721739	0.389	425.0204	0.532	2.626290	1.530	203.5210	0.069	194.7564	0.061	0.07107 ± 0.00844	201.9 ± 24.0	7.42	11.93	0.206 ± 0.002
13D02974	7.8 %	0.740960	0.378	496.8763	0.515	2.699053	1.461	204.2551	0.069	196.4434	0.060	0.07876 ± 0.00842	223.8 ± 23.9	8.18	11.97	0.176 ± 0.002
13D02975	9.2 %	0.763970	0.375	514.3480	0.516	2.613656	1.560	191.4547	0.070	200.8694	0.059	0.07884 ± 0.00921	224.0 ± 26.2	7.50	11.22	0.160 ± 0.002
13D02977	10.8 %	0.753338	0.391	462.4575	0.522	2.416438	1.649	162.3641	0.072	197.4922	0.060	0.06679 ± 0.01110	189.8 ± 31.5	5.48	9.52	0.151 ± 0.002
13D02978	12.8 %	1.031958	0.353	429.6228	0.531	2.534760	1.537	148.2524	0.073	279.7604	0.043	0.05562 ± 0.01483	158.0 ± 42.1	2.94	8.69	0.148 ± 0.002
13D02980	15.3 %	1.697063	0.316	439.6829	0.529	2.844303	1.463	136.5414	0.077	469.5502	0.027	0.01689 ± 0.02353	48.0 ± 66.8	0.49	8.00	0.133 ± 0.001
13D02981	18.0 %	2.302889	0.300	510.1633	0.519	2.731184	1.461	110.1039	0.081	640.6399	0.022	0.00092 ± 0.03751	2.6 ± 106.6	0.02	6.45	0.093 ± 0.001
13D02983	21.0 %	2.612579	0.297	655.9595	0.501	2.456170	1.606	88.6893	0.089	719.6661	0.020	0.01360 ± 0.05240	38.6 ± 148.9	0.17	5.18	0.058 ± 0.001
13D02984	23.0 %	2.068555	0.308	577.1490	0.511	1.829026	2.226	62.3381	0.109	564.7114	0.023	0.02475 ± 0.06137	70.3 ± 174.4	0.27	3.64	0.046 ± 0.000
Σ		17.073234	0.096	5251.9555	0.163	28.319649	0.580	1706.5538	0.023	4727.5722	0.011					

Information on Analysis and Constants Used In Calculations		Results					
		40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Sample = SC12-027		Age Plateau					
Material = Groundmass		0.07310 ± 0.00489					
Location = Galapagos St. Cruz Island		± 6.69%					
Analyst = Anthony Koppers		207.7 ± 13.9					
Project = GALAPAGOS HARPP (13-07)		Full External Error ± 14.9					
Mass Discrimination Law = LIN		Analytical Error ± 13.9					
Irradiation = 13-OSU-03		Total Fusion Age					
J = 0.00157134 ± 0.13800000		0.05333 ± 0.00576					
FCT-3 = 28.340 ± 0.564 Ma		± 10.80%					
IGSN = 40		151.5 ± 16.4					
Preferred Age = Undefined		Full External Error ± 16.8					
Classification = Undefined		Analytical Error ± 16.4					
Experiment Type = 5.52		Normal Isochron					
Extraction Method = Undefined		292.25 ± 3.20					
Heating = 59 sec		± 1.09%					
Isolation = 6.00 min		0.08525 ± 0.01269					
Instrument = ARGUS-VI		242.2 ± 36.0					
Lithology = Undefined		± 14.88%					
Lak-Lon = Undefined - Undefined		Full External Error ± 36.6					
Collector Calibrations = 40Ar 36Ar		Analytical Error ± 36.0					
		1.0917					
		4					
		0.0000001455					
		Inverse Isochron					
		292.27 ± 3.19					
		± 1.09%					
		0.08524 ± 0.01243					
		242.2 ± 35.3					
		± 14.58%					
		Full External Error ± 35.8					
		Analytical Error ± 35.3					
		1.0906					
		3					
		0.0001000395					
		6%					
		Spreading Factor					

Depositing Patterns	36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(ea) [A]	%1σ	36Ar(ed) [A]	%1σ	37Ar(ca) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(b) [A]	%1σ	38Ar(ea) [A]	%1σ	38Ar(ed) [A]	%1σ	39Ar(a) [A]	%1σ	39Ar(ca) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(a) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(b) [A]	%1σ
13002661	1.6%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002662	2.0%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002663	2.5%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002665	2.7%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002666	3.2%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002668	3.8%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002669	4.6%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002671	5.6%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002672	6.6%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002674	7.8%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002675	9.2%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002677	10.8%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002678	12.8%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002680	15.1%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002681	18.0%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002683	21.0%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
13002684	21.0%	✓	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
Σ	15.68334	0.11	0.000000	0.00	1.386162	0.16	0.000338	0.04	5251.6555	0.16	2.391582	0.11	0.000000	0.00	0.380359	0.02	0.7380218	0.16	5.265055	0.27	1703.0182	0.03	0.345680	0.16	90.82148	0.40	4635.0389	0.11	0.000000	0.00	1.720484	0.02
Σ							17.075204	0.10	5251.6555	0.16							26.324005	0.05			1706.5538	0.02									4727.5702	0.15

OSU Argon Geochronology Lab
CEQAS Oregon State University, Corvallis, USA

Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
13D02960	1.8 %	46.661398	0.675834	2.715249	0.271544	0.158338	0.002388	155.314	21.546813	1.00109738	8.128E-12
13D02962	2.0 %	27.878101	0.252549	2.222372	0.171058	0.095157	0.000960	155.331	21.554203	1.00109750	7.557E-12
13D02963	2.3 %	17.707759	0.120751	1.985157	0.123227	0.060030	0.000483	155.340	21.558047	1.00109756	6.605E-12
13D02965	2.7 %	9.434146	0.036384	1.748498	0.069609	0.032202	0.000191	155.358	21.565441	1.00109769	6.514E-12
13D02966	3.2 %	5.607904	0.014871	1.741139	0.045196	0.019440	0.000108	155.366	21.568991	1.00109775	5.884E-12
13D02968	3.8 %	✓ 2.980213	0.004394	1.816173	0.021472	0.010332	0.000046	155.383	21.576388	1.00109787	7.103E-12
13D02969	4.6 %	✓ 1.691552	0.001801	1.827249	0.012557	0.005975	0.000024	155.392	21.579940	1.00109793	8.413E-12
13D02971	5.6 %	✓ 1.131459	0.000990	1.871026	0.010259	0.004060	0.000015	155.409	21.587341	1.00109805	1.045E-11
13D02972	6.6 %	✓ 0.956935	0.000880	2.088337	0.011205	0.003546	0.000014	155.417	21.590895	1.00109811	9.348E-12
13D02974	7.8 %	✓ 0.961755	0.000875	2.432626	0.012647	0.003628	0.000014	155.435	21.598300	1.00109823	9.429E-12
13D02975	9.2 %	✓ 1.049175	0.000954	2.686527	0.013997	0.003990	0.000015	155.444	21.602152	1.00109830	9.642E-12
13D02977	10.8 %	✓ 1.216354	0.001135	2.848275	0.015018	0.004640	0.000018	155.461	21.609561	1.00109842	9.480E-12
13D02978	12.8 %	✓ 1.887055	0.001603	2.897914	0.015528	0.006961	0.000025	155.469	21.613118	1.00109848	1.343E-11
13D02980	15.3 %	3.438884	0.002807	3.220143	0.017221	0.012429	0.000040	155.487	21.620531	1.00109860	2.254E-11
13D02981	18.0 %	5.818502	0.004858	4.633471	0.024319	0.020916	0.000065	155.495	21.624090	1.00109866	3.075E-11
13D02983	21.0 %	8.114461	0.007388	7.396149	0.037625	0.029458	0.000091	155.512	21.631506	1.00109878	3.454E-11
13D02984	23.0 %	9.058845	0.010054	9.258363	0.048361	0.033183	0.000108	155.522	21.635364	1.00109885	2.711E-11

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Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
13D02960	1.8 %	0.0275712	0.0005481	0.0769633	0.0301455	0.0168758	0.0279392	0.2481807	0.0450695	7.9213340	0.1084671
13D02962	2.0 %	0.0266378	0.0005481	0.0761674	0.0301455	0.0159995	0.0279392	0.1969595	0.0450695	7.6180629	0.1084671
13D02963	2.3 %	0.0262344	0.0005481	0.0751781	0.0301455	0.0157952	0.0279392	0.1737161	0.0450695	7.4873704	0.1084671
13D02965	2.7 %	0.0256163	0.0005481	0.0721691	0.0301455	0.0158860	0.0279392	0.1355399	0.0450695	7.2879779	0.1084671
13D02966	3.2 %	0.0253932	0.0005481	0.0702076	0.0301455	0.0161555	0.0279392	0.1202638	0.0450695	7.2165443	0.1084671
13D02968	3.8 %	0.0250820	0.0005481	0.0650439	0.0301455	0.0171879	0.0279392	0.0947894	0.0450695	7.1182967	0.1084671
13D02969	4.6 %	0.0250062	0.0005481	0.0620481	0.0301455	0.0179094	0.0279392	0.0856100	0.0450695	7.0954127	0.1084671
13D02971	5.6 %	0.0250019	0.0005481	0.0547295	0.0301455	0.0198834	0.0279392	0.0728373	0.0450695	7.0983102	0.1084671
13D02972	6.6 %	0.0250735	0.0005481	0.0506995	0.0301455	0.0210569	0.0279392	0.0697548	0.0450695	7.1239757	0.1084671
13D02974	7.8 %	0.0253761	0.0005481	0.0412261	0.0301455	0.0239725	0.0279392	0.0696839	0.0450695	7.2280181	0.1084671
13D02975	9.2 %	0.0256154	0.0005481	0.0357246	0.0301455	0.0257401	0.0279392	0.0730387	0.0450695	7.3091286	0.1084671
13D02977	10.8 %	0.0262332	0.0005481	0.0240382	0.0301455	0.0296227	0.0279392	0.0860127	0.0450695	7.5170497	0.1084671
13D02978	12.8 %	0.0266034	0.0005481	0.0179115	0.0301455	0.0317124	0.0279392	0.0952887	0.0450695	7.6411266	0.1084671
13D02980	15.3 %	0.0275281	0.0005481	0.0040703	0.0301455	0.0365367	0.0279392	0.1209645	0.0450695	7.9501926	0.1084671
13D02981	18.0 %	0.0280456	0.0005481	0.0030906	0.0301455	0.0390784	0.0279392	0.1363373	0.0450695	8.1228191	0.1084671
13D02983	21.0 %	0.0292772	0.0005481	0.0190866	0.0301455	0.0448443	0.0279392	0.1747148	0.0450695	8.5330300	0.1084671
13D02984	23.0 %	0.0299996	0.0005481	0.0279799	0.0301455	0.0480940	0.0279392	0.1980629	0.0450695	8.7733482	0.1084671

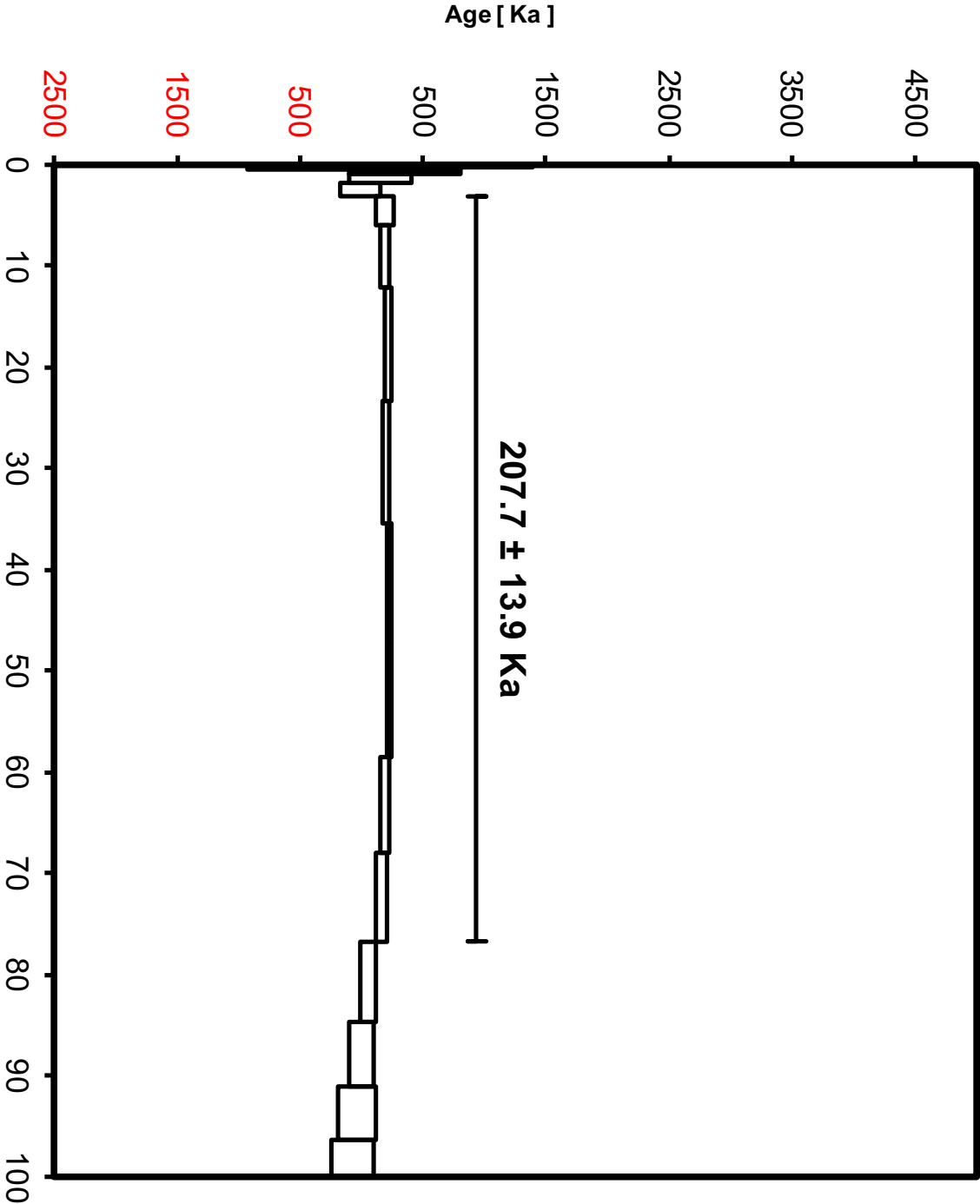
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CEOAS Oregon State University, Corvallis, USA

Intercept Values		36Ar [A]			37Ar [A]			38Ar [A]			39Ar [A]			40Ar [A]							
		1σ	r2		1σ	r2		1σ	r2		1σ	r2		1σ	r2						
13D02960	1.8%	0.58681	0.001799	0.8023	EXP 150 of 150	0.5257	0.0325	0.0095	EXP 150 of 150	0.1424574	0.0298747	0.0010	EXP 150 of 150	3.8505	0.0261	0.5325	EXP 150 of 150	177.337060	0.040000	0.9984	EXP 150 of 150
13D02962	2.0%	0.54868	0.001841	0.7645	EXP 150 of 150	0.6475	0.0315	0.0110	EXP 150 of 150	0.1725790	0.0280915	0.0057	EXP 150 of 150	5.8027	0.0228	0.7554	EXP 150 of 150	165.129259	0.040498	0.9980	EXP 150 of 150
13D02963	2.3%	0.47933	0.001491	0.7886	EXP 150 of 150	0.7773	0.0309	0.0126	EXP 150 of 150	0.1830758	0.0275221	0.0008	EXP 150 of 150	7.8674	0.0259	0.8311	EXP 150 of 150	145.155235	0.036513	0.9974	EXP 150 of 150
13D02965	2.7%	0.475546	0.001615	0.7457	EXP 150 of 150	1.2166	0.0334	0.0156	EXP 150 of 150	0.2226187	0.0275275	0.0026	EXP 150 of 150	14.4147	0.0278	0.9295	EXP 150 of 150	143.064011	0.037579	0.9976	EXP 150 of 150
13D02966	3.2%	0.438112	0.001654	0.7376	EXP 150 of 150	1.8015	0.0320	0.1001	EXP 150 of 150	0.3097435	0.0274538	0.0000	EXP 150 of 150	21.8172	0.0262	0.9715	EXP 149 of 150	126.852014	0.035245	0.9972	EXP 150 of 150
13D02968	3.8%	0.523409	0.001587	0.8105	EXP 150 of 150	4.1682	0.0321	0.3673	EXP 150 of 150	0.6539001	0.0276437	0.0006	EXP 150 of 150	49.3849	0.0287	0.9933	EXP 150 of 150	155.173884	0.037290	0.9981	EXP 150 of 150
13D02969	4.6%	0.526378	0.001739	0.8371	EXP 150 of 150	8.6711	0.0260	0.7178	EXP 150 of 150	1.2845789	0.0262963	0.0464	EXP 150 of 150	192.3435	0.0338	0.9679	EXP 150 of 150	162.459624	0.040219	0.9984	EXP 150 of 150
13D02971	5.6%	0.763070	0.001684	0.8538	EXP 150 of 150	16.4234	0.0297	0.9149	EXP 150 of 150	2.3912680	0.0289140	0.2020	EXP 149 of 150	191.1294	0.0362	0.9993	EXP 150 of 150	224.879701	0.036501	0.9992	EXP 150 of 150
13D02972	6.6%	0.726098	0.001966	0.8471	LIN 150 of 150	19.3662	0.0333	0.9218	EXP 150 of 150	2.5723120	0.0279688	0.2654	EXP 150 of 150	202.0956	0.0397	0.9992	EXP 150 of 150	201.977130	0.043441	0.9985	EXP 150 of 150
13D02974	7.8%	0.745099	0.001904	0.8558	EXP 149 of 150	22.6146	0.0309	0.9500	EXP 149 of 150	2.6372976	0.0268442	0.3079	EXP 150 of 150	202.8242	0.0360	0.9994	EXP 150 of 150	203.769058	0.041548	0.9986	EXP 150 of 150
13D02975	9.2%	0.767658	0.001939	0.8658	EXP 150 of 150	23.3986	0.0338	0.9415	EXP 150 of 150	2.5551538	0.0287990	0.2567	EXP 150 of 150	190.1211	0.0367	0.9993	EXP 150 of 150	208.278360	0.042330	0.9987	EXP 150 of 150
13D02977	10.8%	0.757650	0.002079	0.8490	LIN 150 of 150	21.0228	0.0319	0.9366	EXP 150 of 150	2.3565248	0.0275544	0.2262	EXP 150 of 150	161.2572	0.0355	0.9990	EXP 150 of 150	205.107409	0.041628	0.9987	EXP 150 of 150
13D02978	12.8%	1.028943	0.002343	0.8955	EXP 150 of 150	19.5225	0.0331	0.9281	EXP 150 of 150	2.4712747	0.0265994	0.1891	EXP 150 of 150	147.2585	0.0341	0.9989	EXP 150 of 150	287.540590	0.045128	0.9993	EXP 150 of 150
13D02980	15.3%	1.675883	0.002958	0.9345	EXP 150 of 150	19.9585	0.0334	0.9205	EXP 150 of 150	2.7721132	0.029366	0.1711	EXP 150 of 150	135.6592	0.0410	0.9982	EXP 150 of 150	477.733756	0.054836	0.9997	EXP 150 of 150
13D02981	18.0%	2.254839	0.003374	0.9547	EXP 150 of 150	23.1462	0.0350	0.9368	EXP 149 of 150	2.6576707	0.0275904	0.2103	EXP 150 of 150	109.4313	0.0328	0.9982	EXP 150 of 150	648.081067	0.065979	0.9998	EXP 150 of 150
13D02983	21.0%	2.569972	0.003670	0.9591	EXP 150 of 150	29.7357	0.0318	0.9658	EXP 150 of 150	2.3863379	0.0268926	0.2065	EXP 150 of 150	88.2124	0.0324	0.9873	EXP 150 of 150	726.555765	0.074572	0.9998	EXP 150 of 150
13D02984	23.0%	2.039195	0.003317	0.9469	EXP 150 of 150	26.1473	0.0355	0.9470	EXP 150 of 150	1.7580046	0.0288152	0.1244	EXP 150 of 150	82.0782	0.0314	0.9950	EXP 150 of 150	573.765464	0.054465	0.9998	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%In	Standard Reference	Standard 40Ar/39Ar	%In	J	%In	Ar 40Ar/36Ar	%In	MCP	%In	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes	
1300980	1.8%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	1.8	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	21	0	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300982	2.0%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	2	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	21	20	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300983	2.3%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	2.3	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	21	30	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300985	2.7%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	2.7	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	22	0	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300986	3.2%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	3.2	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	22	10	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300988	3.8%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	3.8	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	22	40	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300989	4.6%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	4.6	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	22	52	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300991	5.6%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	5.6	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	23	11	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300992	6.6%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	6.6	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	23	20	1	15-08U-03	0.00	0.00	50.00	Galapagos/Hespero (15-05)	1300098	01
1300994	7.6%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	7.6	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	20	OCT	2013	23	30	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300995	9.2%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	9.2	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	24	OCT	2013	0	7	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300997	10.8%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	10.8	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	24	OCT	2013	0	32	1	15-08U-03	0.00	0.00	50.00	Galapagos/Hespero (15-05)	1300098	01
1300998	12.8%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	12.8	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	24	OCT	2013	0	44	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300981	10.3%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	10.3	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	24	OCT	2013	1	3	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300983	10.7%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	10	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	24	OCT	2013	1	21	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300985	21.0%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	21	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	24	OCT	2013	1	40	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01
1300986	23.0%	SC10-027	Groundmass	Galapagos Is. Cruz Island	Anthony Rogers	23	FC1-3	28.38	0.984	Flanagan et al (1998)	10.00201	0.138	0.00107138	0.138	30.039	0.000	0.000701302	0.003	1	4.00E-14	24	OCT	2013	1	50	1	15-08U-03		50.00		Galapagos/Hespero (15-05)	1300098	01

Irradiation Constants	40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(d)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
13D02960	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02962	2.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02963	2.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02965	2.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02966	3.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02968	3.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02969	4.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02971	5.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02972	6.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02974	7.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02975	9.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02977	10.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02978	12.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02980	15.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02981	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02983	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
13D02984	25.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0

13D02959.AGE >>> SC12-027 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

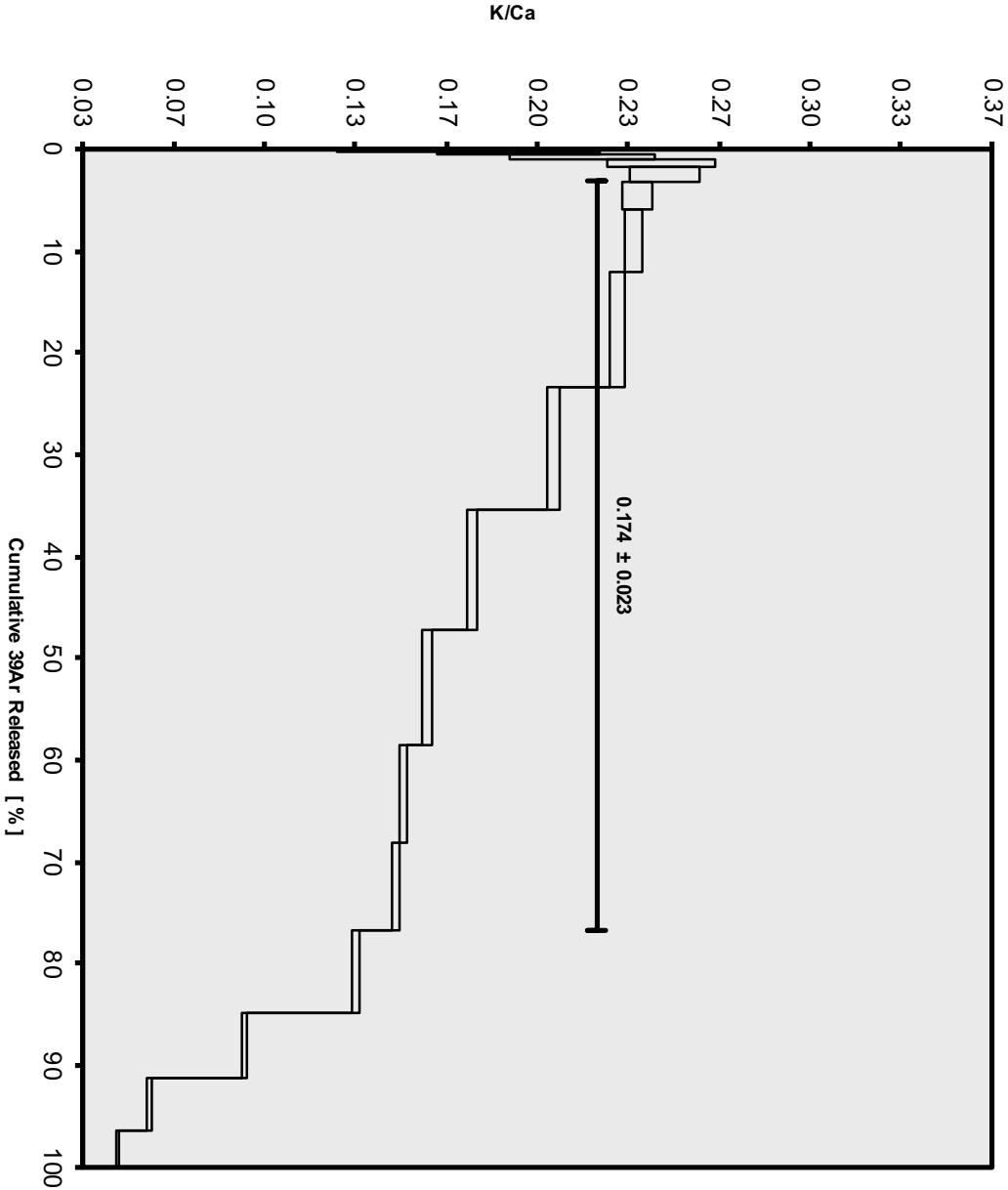
WEIGHTED PLATEAU
207.7 ± 13.9
TOTAL FUSION
151.5 ± 16.4
NORMAL ISOCHRON
242.2 ± 36.0
INVERSE ISOCHRON
242.2 ± 35.3

MSWD (PROBABILITY)
1.70 (10%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00157134 ±
0.13800000

13D02959.AGE >>> SC12-027 >>> GALAPAGOS | HARPP (13-07) PROJECT



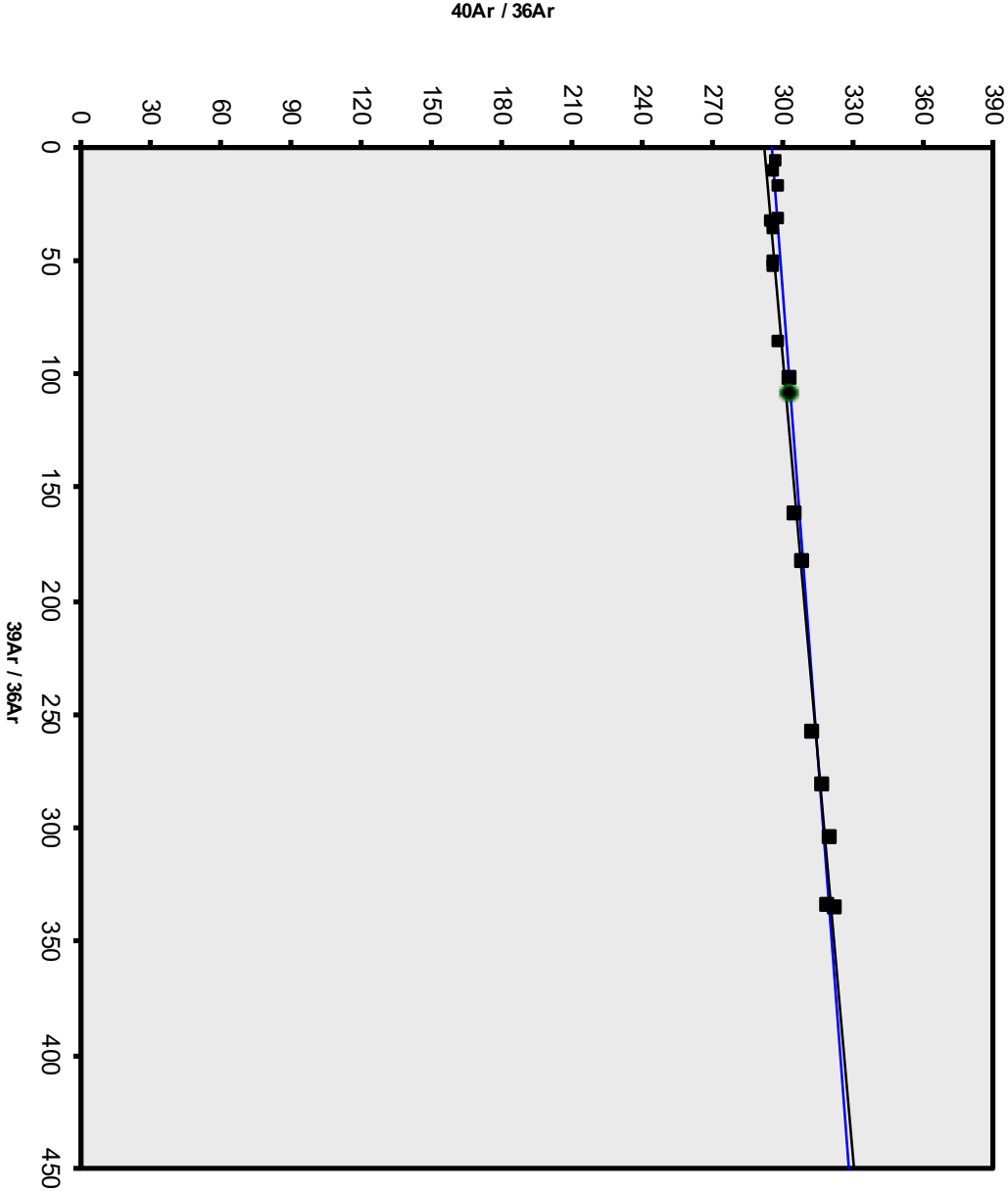
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13D02959.AGE >>> SC12-027 >>> GALAPAGOS | HARPP (13-07) PROJECT



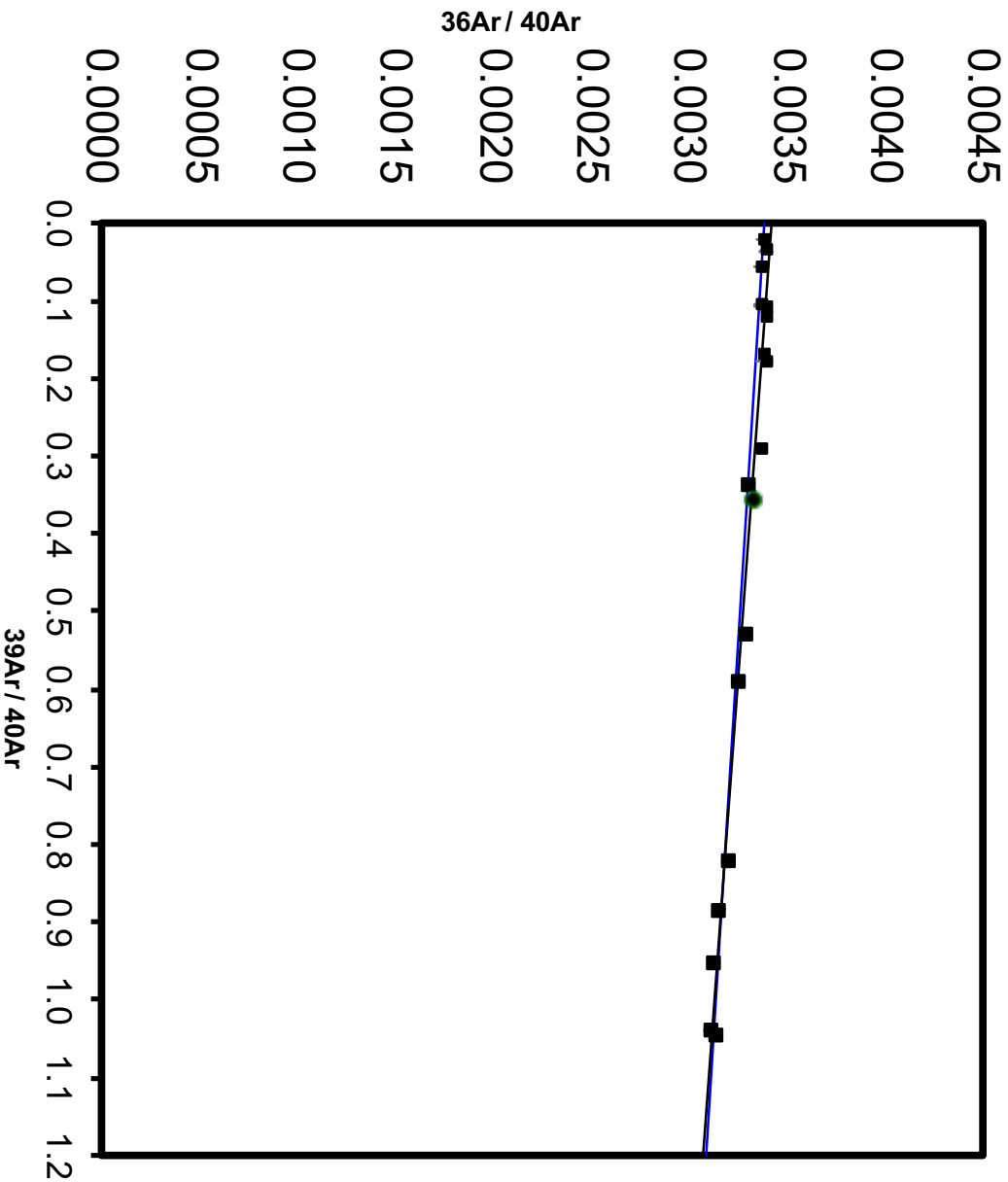
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1.19 (31%)

Sample Info

Groundmass
Galapagos St. Cruz
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Anthony Koppers
IRR = 13-OSU-03

13D02959.AGE >>> SC12-027 >>> GALAPAGOS | HARPP (13-07) PROJECT



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242.2 ± 35.3

MSWD
(PROBABILITY)
1.19 (31%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers

IRR = 13-OSU-03

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
13D02934	1.8 %	✓	1.510447	10.8278	0.1637625	2.90011	0.26986	0.27 $\pm$ 3.27	0.06	0.34	0.115 $\pm$ 0.021
13D02936	2.0 %	✓	1.357656	13.0518	0.1528577	3.98461	1.81306	1.32 $\pm$ 2.28	0.45	0.47	0.131 $\pm$ 0.019
13D02937	2.3 %	✓	1.100413	15.9422	0.1266619	4.95003	1.47533	0.86 $\pm$ 1.62	0.45	0.58	0.134 $\pm$ 0.015
13D02939	2.7 %	✓	1.008895	25.7446	0.1149615	7.82419	4.18601	1.55 $\pm$ 0.95	1.38	0.92	0.131 $\pm$ 0.009
13D02940	3.2 %	✓	0.884026	38.7023	0.1668657	11.67359	5.87193	1.46 $\pm$ 0.63	2.20	1.38	0.130 $\pm$ 0.006
13D02942	3.8 %	✓	0.918909	74.8066	0.1488291	22.63388	10.54421	1.36 $\pm$ 0.33	3.74	2.67	0.130 $\pm$ 0.004
13D02943	4.6 %	✓	0.845043	123.1074	0.1440260	38.14802	17.10774	1.30 $\pm$ 0.19	6.41	4.50	0.133 $\pm$ 0.002
13D02945	5.6 %	✓	0.928689	238.9257	0.1795793	80.54263	38.73064	1.39 $\pm$ 0.09	12.36	9.50	0.145 $\pm$ 0.002
13D02946	6.6 %	✓	0.694909	257.6215	0.1572573	91.36908	42.92218	1.36 $\pm$ 0.07	17.28	10.78	0.153 $\pm$ 0.002
13D02948	7.8 %	✓	0.648316	279.6565	0.2027657	96.60450	46.10626	1.38 $\pm$ 0.07	19.39	11.39	0.149 $\pm$ 0.002
13D02949	9.2 %	✓	0.615322	282.2505	0.1361013	92.81491	42.87794	1.34 $\pm$ 0.07	19.07	10.95	0.141 $\pm$ 0.002
13D02951	10.8 %	✓	0.475694	246.2649	0.1009794	74.75899	35.25686	1.37 $\pm$ 0.08	20.04	8.82	0.131 $\pm$ 0.002
13D02952	12.8 %	✓	0.490728	270.6189	0.1470824	71.46646	34.86662	1.41 $\pm$ 0.09	19.38	8.43	0.114 $\pm$ 0.001
13D02954	15.3 %	✓	0.617952	380.4806	0.2580669	75.06396	34.93535	1.35 $\pm$ 0.09	16.05	8.85	0.085 $\pm$ 0.001
13D02955	18.0 %	✓	0.763104	596.9270	0.3089511	75.05321	34.59912	1.34 $\pm$ 0.10	13.30	8.85	0.054 $\pm$ 0.001
13D02957	21.0 %	✓	0.720969	656.0899	0.2748024	63.58371	28.63564	1.30 $\pm$ 0.12	11.85	7.50	0.042 $\pm$ 0.000
13D02958	23.0 %	✓	0.384236	353.8036	0.1639985	34.44334	16.79605	1.41 $\pm$ 0.17	12.88	4.06	0.042 $\pm$ 0.000
Σ			13.965308	3864.8220	2.9475487	847.81523	396.99479				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-067 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Anthony Koppers Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00160212 $\pm$ 0.14100000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.47053 $\pm$ 0.00936 $\pm$ 1.99%	1.36 $\pm$ 0.03 $\pm$ 2.01% Full External Error $\pm$ 0.04 Analytical Error $\pm$ 0.03	0.37 99% 1.71 1.0000	100.00 17 2 σ Confidence Limit Error Magnification	0.061 $\pm$ 0.017
	Total Fusion Age	0.46826 $\pm$ 0.01229 $\pm$ 2.62%	1.36 $\pm$ 0.04 $\pm$ 2.64% Full External Error $\pm$ 0.05 Analytical Error $\pm$ 0.04		17	0.094 $\pm$ 0.000

OSU Argon Geochronology Lab

Normal Isochron			$39(k)/36(a) \pm 2\sigma$	$40(a+r)/36(a) \pm 2\sigma$	r.i.
13D02934	1.8 %	✓	1.92 ± 0.06	295.68 ± 2.17	0.2121
13D02936	2.0 %	✓	2.93 ± 0.07	296.84 ± 2.32	0.3041
13D02937	2.3 %	✓	4.50 ± 0.08	296.84 ± 2.53	0.3738
13D02939	2.7 %	✓	7.76 ± 0.10	299.65 ± 2.58	0.5223
13D02940	3.2 %	✓	13.21 ± 0.15	302.14 ± 2.92	0.6720
13D02942	3.8 %	✓	24.63 ± 0.23	306.97 ± 2.88	0.8110
13D02943	4.6 %	✓	45.14 ± 0.41	315.74 ± 3.08	0.8565
13D02945	5.6 %	✓	86.73 ± 0.75	337.20 ± 3.13	0.8987
13D02946	6.6 %	✓	131.48 ± 1.33	357.27 ± 3.92	0.8936
13D02948	7.8 %	✓	149.01 ± 1.60	366.62 ± 4.29	0.8995
13D02949	9.2 %	✓	150.84 ± 1.65	365.18 ± 4.37	0.8929
13D02951	10.8 %	✓	157.16 ± 2.00	369.62 ± 5.26	0.8779
13D02952	12.8 %	✓	145.63 ± 1.82	366.55 ± 5.10	0.8781
13D02954	15.3 %	✓	121.47 ± 1.31	352.03 ± 4.20	0.8832
13D02955	18.0 %	✓	98.35 ± 1.01	340.84 ± 3.76	0.9008
13D02957	21.0 %	✓	88.19 ± 0.96	335.22 ± 3.92	0.8980
13D02958	23.0 %	✓	89.64 ± 1.37	339.21 ± 5.91	0.8460

Results	$40(a)/36(a) \pm 2\sigma$	$40(r)/39(k) \pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	295.20 ± 1.04 $\pm 0.35\%$	0.47309 ± 0.01316 $\pm 2.78\%$	1.37 ± 0.04 $\pm 2.80\%$	0.37 99%
			Full External Error ± 0.05 Analytical Error ± 0.04	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.73 1.0000 17	Convergence Number of Iterations Calculated Line	0.000001416584 4 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			$39(k)/40(a+r) \pm 2\sigma$	$36(a)/40(a+r) \pm 2\sigma$	r.i.
13D02934	1.8 %	✓	0.0064937 ± 0.0001920	0.00338205 ± 0.00002480	0.0311
13D02936	2.0 %	✓	0.0098874 ± 0.0002092	0.00336887 ± 0.00002629	0.0501
13D02937	2.3 %	✓	0.0151541 ± 0.0002664	0.00336881 ± 0.00002875	0.0839
13D02939	2.7 %	✓	0.0258810 ± 0.0002957	0.00333724 ± 0.00002877	0.1488
13D02940	3.2 %	✓	0.0437047 ± 0.0003819	0.00330970 ± 0.00003201	0.2221
13D02942	3.8 %	✓	0.0802387 ± 0.0004628	0.00325760 ± 0.00003059	0.3109
13D02943	4.6 %	✓	0.1429740 ± 0.0007290	0.00316711 ± 0.00003091	0.3781
13D02945	5.6 %	✓	0.2571946 ± 0.0010499	0.00296556 ± 0.00002750	0.3614
13D02946	6.6 %	✓	0.3680263 ± 0.0018171	0.00279903 ± 0.00003074	0.4004
13D02948	7.8 %	✓	0.4064416 ± 0.0020794	0.00272764 ± 0.00003190	0.3955
13D02949	9.2 %	✓	0.4130513 ± 0.0022270	0.00273835 ± 0.00003275	0.4110
13D02951	10.8 %	✓	0.4251911 ± 0.0028981	0.00270551 ± 0.00003848	0.4461
13D02952	12.8 %	✓	0.3973078 ± 0.0026475	0.00272814 ± 0.00003797	0.4454
13D02954	15.3 %	✓	0.3450578 ± 0.0019322	0.00284063 ± 0.00003387	0.4231
13D02955	18.0 %	✓	0.2885593 ± 0.0013847	0.00293393 ± 0.00003236	0.3742
13D02957	21.0 %	✓	0.2630882 ± 0.0013569	0.00298313 ± 0.00003489	0.3802
13D02958	23.0 %	✓	0.2642619 ± 0.0024593	0.00294800 ± 0.00005138	0.4844

Results	$40(a)/36(a) \pm 2\sigma$	$40(r)/39(k) \pm 2\sigma$	Age ± 2σ (Ma)	MSWD
Inverse Isochron	295.20 ± 1.04 ± 0.35%	0.47318 ± 0.01315 ± 2.78%	1.37 ± 0.04 ± 2.79% Full External Error ± 0.05 Analytical Error ± 0.04	0.37 99%
Statistics	2σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	1.73 1.0000 17 19.8%	Convergence Number of Iterations Calculated Line	0.0009561380 3 Weighted York-2

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ	
13D02934	1.8 %	✓	1.513346	0.342	10.8278	9.092	0.480573	8.241	2.90740	1.468	446.6097	0.130	0.09305 ± 1.12881	0.27 ± 3.27	0.06	0.34	0.115 ± 0.021
13D02936	2.0 %	✓	1.361140	0.361	13.0518	7.263	0.453763	8.759	3.99340	1.046	403.0044	0.144	0.45501 ± 0.78631	1.32 ± 2.28	0.45	0.47	0.131 ± 0.019
13D02937	2.3 %	✓	1.104653	0.386	15.9422	5.484	0.390876	9.343	4.96076	0.859	326.6523	0.177	0.29804 ± 0.56108	0.86 ± 1.62	0.45	0.58	0.134 ± 0.015
13D02939	2.7 %	✓	1.015721	0.383	25.7446	3.589	0.396142	9.779	7.84152	0.537	302.3224	0.191	0.53501 ± 0.32949	1.55 ± 0.95	1.38	0.92	0.131 ± 0.009
13D02940	3.2 %	✓	0.894286	0.426	38.7023	2.435	0.470315	8.196	11.69964	0.378	267.1135	0.217	0.50301 ± 0.21745	1.46 ± 0.63	2.20	1.38	0.130 ± 0.006
13D02942	3.8 %	✓	0.938696	0.412	74.8066	1.365	0.588545	6.478	22.68422	0.202	282.1947	0.205	0.46586 ± 0.11352	1.35 ± 0.33	3.74	2.67	0.130 ± 0.004
13D02943	4.6 %	✓	0.877580	0.420	123.1074	0.915	0.753201	5.101	38.23067	0.134	266.8564	0.217	0.44846 ± 0.06479	1.30 ± 0.19	6.41	4.50	0.133 ± 0.002
13D02945	5.6 %	✓	0.991811	0.396	238.9257	0.626	1.302937	2.883	80.70343	0.086	313.2396	0.185	0.48067 ± 0.03236	1.39 ± 0.09	12.36	9.50	0.145 ± 0.002
13D02946	6.6 %	✓	0.762961	0.450	257.6215	0.601	1.362725	2.769	91.54246	0.081	248.3601	0.233	0.46977 ± 0.02570	1.36 ± 0.07	17.28	10.78	0.153 ± 0.002
13D02948	7.8 %	✓	0.722196	0.474	279.6665	0.584	1.462167	2.744	96.79270	0.079	237.7812	0.243	0.47727 ± 0.02426	1.38 ± 0.07	19.39	11.39	0.149 ± 0.002
13D02949	9.2 %	✓	0.688970	0.477	282.2505	0.591	1.346571	2.949	93.00486	0.080	224.7993	0.257	0.46197 ± 0.02456	1.34 ± 0.07	19.07	10.95	0.141 ± 0.002
13D02951	10.8 %	✓	0.540733	0.550	246.2649	0.617	1.074875	3.508	74.92473	0.089	175.8999	0.329	0.47161 ± 0.02833	1.37 ± 0.08	20.04	8.82	0.131 ± 0.002
13D02952	12.8 %	✓	0.562209	0.534	270.6189	0.581	1.089704	3.631	71.64858	0.088	179.9490	0.321	0.48787 ± 0.02983	1.41 ± 0.09	19.38	8.43	0.114 ± 0.001
13D02954	15.3 %	✓	0.718464	0.453	380.4806	0.534	1.280677	3.147	75.32003	0.088	217.6161	0.266	0.46541 ± 0.03020	1.35 ± 0.09	16.05	8.85	0.085 ± 0.001
13D02955	18.0 %	✓	0.920771	0.409	596.9270	0.508	1.388654	2.819	75.45495	0.089	260.1721	0.222	0.46099 ± 0.03403	1.34 ± 0.10	13.30	8.85	0.054 ± 0.001
13D02957	21.0 %	✓	0.894246	0.419	656.0899	0.500	1.224331	3.145	64.02526	0.095	241.7463	0.239	0.45036 ± 0.04012	1.30 ± 0.12	11.85	7.50	0.042 ± 0.000
13D02958	23.0 %	✓	0.477682	0.594	353.8036	0.548	0.676956	5.911	34.68145	0.141	130.3727	0.443	0.48764 ± 0.05978	1.41 ± 0.17	12.88	4.06	0.042 ± 0.000
Σ			14.986364	0.104	3864.8220	0.182	15.743012	1.017	850.41625	0.029	4524.5997	0.053					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-067
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Anthony Koppers
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00160212 ± 0.14100000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = Undefined
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 59 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lak-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 38/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 40/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(cj) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		0.47053 ± 0.00936 ± 1.99%	1.36 ± 0.03 99% ± 2.01% Full External Error ± 0.04 Analytical Error ± 0.03	0.37 99%	100.00 17	0.061 ± 0.017 2σ Confidence Limit Error Magnification
Total Fusion Age		0.46826 ± 0.01229 ± 2.62%	1.36 ± 0.04 99% ± 2.64% Full External Error ± 0.05 Analytical Error ± 0.04		17	0.094 ± 0.000
Normal Isochron	295.20 ± 1.04 ± 0.35%	0.47309 ± 0.01316 ± 2.78%	1.37 ± 0.04 99% ± 2.80% Full External Error ± 0.05 Analytical Error ± 0.04	0.37 99%	100.00 17	1.73 2σ Confidence Limit Error Magnification Number of Iterations Convergence
Inverse Isochron	295.20 ± 1.04 ± 0.35%	0.47318 ± 0.01315 ± 2.78%	1.37 ± 0.04 99% ± 2.79% Full External Error ± 0.05 Analytical Error ± 0.04	0.37 99%	100.00 17	1.73 2σ Confidence Limit Error Magnification Number of Iterations Convergence Spreading Factor

Depositing Patterns		36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(ca) [A]	%1σ	36Ar(cd) [A]	%1σ	37Ar(ca) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(b) [A]	%1σ	38Ar(ca) [A]	%1σ	38Ar(cd) [A]	%1σ	39Ar(a) [A]	%1σ	39Ar(ca) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(s) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(b) [A]	%1σ	
1300204	1.6%	✓	1.519447	0.34	0.000000	0.00	0.002686	9.09	0.000412	24.21	13.8278	9.09	0.262325	0.36	0.000000	0.00	0.033003	1.47	0.001925	9.09	0.1637625	24.23	2.93071	1.47	0.0020371	9.09	0.26986	695.54	446.370	0.34	0.000000	0.00	0.0026291	1.47
1300206	2.0%	✓	1.357696	0.36	0.000000	0.00	0.003467	7.26	0.000385	26.03	13.0518	7.26	0.2527459	0.36	0.000000	0.00	0.0463449	1.05	0.0018142	7.26	0.1528577	26.04	3.98461	1.05	0.0067839	7.26	1.81306	86.40	401.1873	0.36	0.000000	0.00	0.0040245	1.05
1300207	2.5%	✓	1.100410	0.39	0.000000	0.00	0.006287	5.48	0.000219	28.96	15.9422	5.48	0.2398672	0.39	0.000000	0.00	0.0362314	0.86	0.0022760	5.48	0.126619	28.97	4.95833	0.86	0.0107291	5.48	1.47533	94.12	325.1750	0.39	0.000000	0.00	0.0093995	0.86
1300209	2.7%	✓	1.03886	0.39	0.000000	0.00	0.0067866	3.39	0.000220	33.72	25.7445	3.39	0.188825	0.39	0.000000	0.00	0.0680383	0.54	0.0023786	3.39	0.1168415	33.73	7.82419	0.54	0.0175261	3.39	4.48601	30.79	298.126	0.39	0.000000	0.00	0.0079624	0.54
1300240	3.2%	✓	0.884826	0.43	0.000000	0.00	0.0102174	2.43	0.000240	23.13	38.7023	2.43	0.1852345	0.43	0.000000	0.00	0.1208464	0.38	0.0023796	2.43	0.1628657	23.14	11.67359	0.38	0.0205467	2.43	5.87193	21.61	261.2298	0.43	0.000000	0.00	0.0177933	0.38
1300242	3.8%	✓	0.91939	0.42	0.000000	0.00	0.0167430	1.36	0.000375	25.64	74.6966	1.36	0.1717341	0.42	0.000000	0.00	0.2257376	0.20	0.0103881	1.36	0.1488291	25.66	22.0338	0.20	0.0323443	1.36	10.54421	12.18	271.0276	0.42	0.000000	0.00	0.0226822	0.20
1300243	4.6%	✓	0.845043	0.44	0.000000	0.00	0.0252503	0.91	0.000363	26.70	123.1074	0.91	0.1579986	0.44	0.000000	0.00	0.4341244	0.13	0.0171119	0.91	0.1446200	26.72	38.14802	0.13	0.0368313	0.91	17.10774	7.22	249.7102	0.44	0.000000	0.00	0.0368265	0.13
1300245	5.6%	✓	0.62889	0.43	0.000000	0.00	0.060704	0.63	0.000453	20.85	238.9257	0.63	0.1135720	0.43	0.000000	0.00	0.9193761	0.09	0.0335107	0.63	0.1795793	20.97	80.54263	0.09	0.1897970	0.63	38.73064	3.36	274.4276	0.43	0.000000	0.00	0.0813481	0.09
1300246	6.6%	✓	0.68469	0.60	0.000000	0.00	0.060721	0.60	0.000396	24.02	251.6215	0.60	0.1206781	0.60	0.000000	0.00	0.1030781	0.08	0.0366294	0.60	0.1572573	24.04	97.36908	0.08	0.1733793	0.60	40.92218	2.73	265.3467	0.60	0.000000	0.00	0.0922628	0.08
1300248	7.8%	✓	0.648216	0.53	0.000000	0.00	0.0738293	0.58	0.000311	19.82	279.6565	0.58	0.1211792	0.53	0.000000	0.00	0.1099362	0.08	0.0388722	0.58	0.2027607	19.84	96.60400	0.08	0.1882588	0.58	46.19026	2.54	191.5773	0.53	0.000000	0.00	0.0937526	0.08
1300249	9.2%	✓	0.610322	0.54	0.000000	0.00	0.0761611	0.59	0.000343	29.21	282.2555	0.59	0.1193036	0.54	0.000000	0.00	0.1062336	0.08	0.0392328	0.59	0.1891813	29.22	80.91491	0.08	0.1899446	0.59	42.87794	2.66	191.8276	0.54	0.000000	0.00	0.0937431	0.08
1300261	10.8%	✓	0.479694	0.63	0.000000	0.00	0.0660139	0.62	0.000265	37.36	246.2649	0.62	0.0888072	0.63	0.000000	0.00	0.8057923	0.09	0.0342308	0.62	0.1005794	37.38	74.7699	0.09	0.1687362	0.62	35.25686	3.00	140.3676	0.63	0.000000	0.00	0.0755066	0.09
1300262	12.8%	✓	0.490728	0.62	0.000000	0.00	0.0714434	0.58	0.000371	26.83	270.8189	0.58	0.0917171	0.62	0.000000	0.00	0.8132783	0.09	0.0370760	0.58	0.1470624	26.95	71.46848	0.09	0.1621265	0.58	34.86662	3.06	145.0102	0.62	0.000000	0.00	0.0721811	0.09
1300264	15.1%	✓	0.617762	0.53	0.000000	0.00	0.104449	0.53	0.000361	15.65	386.4806	0.53	0.1154603	0.53	0.000000	0.00	0.8542279	0.09	0.0263888	0.53	0.2585669	15.68	75.56396	0.09	0.2605314	0.53	34.18035	3.24	162.8489	0.53	0.000000	0.00	0.0708146	0.09
1300265	18.0%	✓	0.763104	0.50	0.000000	0.00	0.1059887	0.51	0.0003779	12.71	696.9270	0.51	0.1426241	0.50	0.000000	0.00	0.8541056	0.09	0.0829729	0.51	0.3098611	12.74	75.0321	0.09	0.4017319	0.51	34.98912	3.89	225.4872	0.50	0.000000	0.00	0.0758827	0.09
1300267	21.0%	✓	0.72099	0.53	0.000000	0.00	0.1726077	0.50	0.0003993	14.05	696.8999	0.50	0.1347692	0.53	0.000000	0.00	0.7236826	0.10	0.0911785	0.50	0.2748624	14.08	63.98271	0.10	0.4454965	0.50	28.63064	4.45	213.1465	0.53	0.000000	0.00	0.0947195	0.10
1300268	21.0%	✓	0.396236	0.75	0.000000	0.00	0.0594562	0.55	0.000414	24.42	353.8036	0.55	0.0718138	0.75	0.000000	0.00	0.3919652	0.14	0.0461787	0.55	0.6269865	24.44	34.44234	0.14	0.2381598	0.55	16.79905	6.13	113.5418	0.75	0.000000	0.00	0.0547079	0.14
Σ	13.96338	0.11	0.000000	0.00	1.020130	0.18	0.0827428	5.44	3884.8220	0.18	2.8107162	0.11	0.000000	0.00	0.8468137	0.03	0.5372703	0.18	2.9475467	5.45	847.81523	0.03	2.610252	0.18	390.96479	1.31	4126.7487	0.11	0.000000	0.00	0.8552394	0.03		
Σ							14.986294	0.11	3894.8220	0.18										15.742012	1.02			850.41025	0.03							4294.2887	0.15	

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Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
13D02934	1.8 %	✓	153.611357	2.264494	3.724235	0.343001	0.520515	0.007848	155.090	21.451856	1.00109580	2.144E-11
13D02936	2.0 %	✓	100.917685	1.065104	3.268357	0.239841	0.340848	0.003771	155.107	21.458919	1.00109592	1.934E-11
13D02937	2.3 %	✓	65.847219	0.577513	3.213666	0.178394	0.222678	0.002097	155.116	21.462746	1.00109598	1.568E-11
13D02939	2.7 %	✓	38.554053	0.219818	3.283114	0.119131	0.129531	0.000854	155.133	21.470107	1.00109610	1.451E-11
13D02940	3.2 %	✓	22.830925	0.099564	3.307993	0.081510	0.076437	0.000436	155.142	21.473641	1.00109616	1.282E-11
13D02942	3.8 %	✓	12.436160	0.035819	3.297739	0.045187	0.041381	0.000190	155.159	21.481006	1.00109628	1.354E-11
13D02943	4.6 %	✓	6.980130	0.017782	3.220104	0.029761	0.022955	0.000101	155.167	21.484542	1.00109634	1.281E-11
13D02945	5.6 %	✓	3.881367	0.007918	2.960539	0.018694	0.012290	0.000050	155.185	21.491911	1.00109647	1.504E-11
13D02946	6.6 %	✓	2.713059	0.006694	2.814230	0.017081	0.008335	0.000038	155.194	21.495743	1.00109653	1.192E-11
13D02948	7.8 %	✓	2.456602	0.006281	2.889231	0.017020	0.007461	0.000036	155.210	21.502821	1.00109665	1.141E-11
13D02949	9.2 %	✓	2.417070	0.006512	3.034794	0.018088	0.007418	0.000036	155.219	21.506656	1.00109671	1.079E-11
13D02951	10.8 %	✓	2.347689	0.007996	3.286830	0.020485	0.007217	0.000040	155.237	21.514032	1.00109683	8.443E-12
13D02952	12.8 %	✓	2.511550	0.008363	3.777031	0.022184	0.007847	0.000042	155.245	21.517573	1.00109689	8.638E-12
13D02954	15.3 %	✓	2.889219	0.008084	5.051519	0.027323	0.009539	0.000044	155.262	21.524953	1.00109702	1.045E-11
13D02955	18.0 %	✓	3.448046	0.008264	7.911039	0.040776	0.012203	0.000051	155.271	21.528497	1.00109707	1.249E-11
13D02957	21.0 %	✓	3.775796	0.009725	10.247360	0.052168	0.013967	0.000060	155.288	21.535880	1.00109720	1.160E-11
13D02958	23.0 %	✓	3.759147	0.017476	10.201523	0.057705	0.013773	0.000084	155.297	21.539721	1.00109726	6.258E-12

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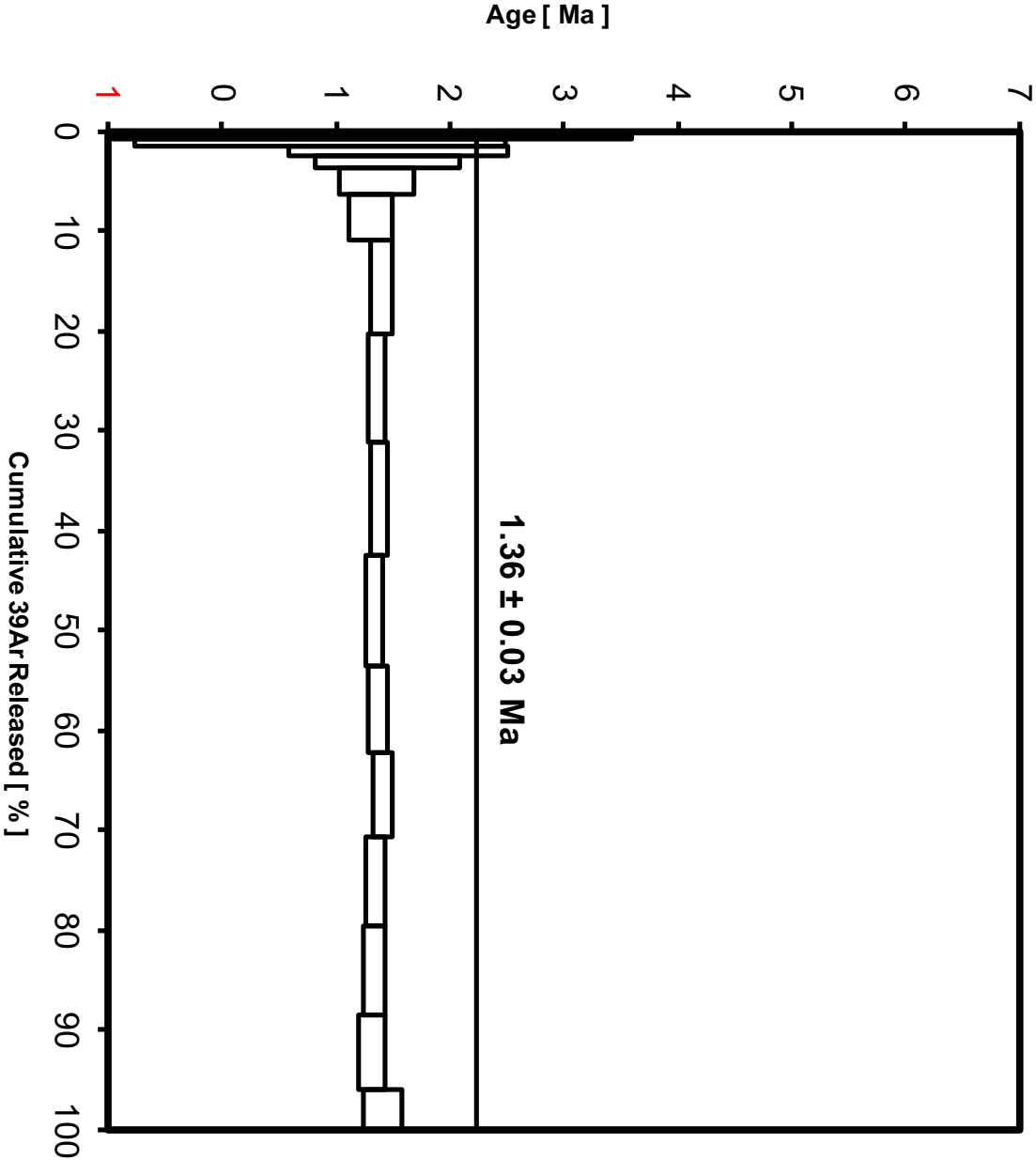
Procedure Blanks		36Ar		37Ar		38Ar		39Ar		40Ar	
		[fA]	1 σ	[fA]	1 σ	[fA]	1 σ	[fA]	1 σ	[fA]	1 σ
13D02934	1.8 %	0.0256757	0.0018747	0.0745258	0.0299491	0.0400430	0.0266566	0.0915390	0.0340851	7.4917129	0.5766909
13D02936	2.0 %	0.0260597	0.0018747	0.0634195	0.0299491	0.0331054	0.0266566	0.0670986	0.0340851	7.6099473	0.5766909
13D02937	2.3 %	0.0262677	0.0018747	0.0582091	0.0299491	0.0297015	0.0266566	0.0571585	0.0340851	7.6739910	0.5766909
13D02939	2.7 %	0.0266677	0.0018747	0.0497799	0.0299491	0.0238547	0.0266566	0.0445576	0.0340851	7.7971518	0.5766909
13D02940	3.2 %	0.0268597	0.0018747	0.0464774	0.0299491	0.0213749	0.0266566	0.0415540	0.0340851	7.8562691	0.5766909
13D02942	3.8 %	0.0272598	0.0018747	0.0411462	0.0299491	0.0168895	0.0266566	0.0416396	0.0340851	7.9794299	0.5766909
13D02943	4.6 %	0.0274518	0.0018747	0.0393307	0.0299491	0.0150633	0.0266566	0.0447255	0.0340851	8.0385472	0.5766909
13D02945	5.6 %	0.0278518	0.0018747	0.0370975	0.0299491	0.0119393	0.0266566	0.0574976	0.0340851	8.1617080	0.5766909
13D02946	6.6 %	0.0280598	0.0018747	0.0367634	0.0299491	0.0106784	0.0266566	0.0675268	0.0340851	8.2257517	0.5766909
13D02948	7.8 %	0.0284439	0.0018747	0.0376338	0.0299491	0.0090040	0.0266566	0.0921317	0.0340851	8.3439861	0.5766909
13D02949	9.2 %	0.0286519	0.0018747	0.0389107	0.0299491	0.0084510	0.0266566	0.1087578	0.0340851	8.4080298	0.5766909
13D02951	10.8 %	0.0290519	0.0018747	0.0429571	0.0299491	0.0080866	0.0266566	0.1472459	0.0340851	8.5311907	0.5766909
13D02952	12.8 %	0.0292439	0.0018747	0.0456429	0.0299491	0.0082385	0.0266566	0.1687649	0.0340851	8.5903079	0.5766909
13D02954	15.3 %	0.0296440	0.0018747	0.0527874	0.0299491	0.0092356	0.0266566	0.2199395	0.0340851	8.7134688	0.5766909
13D02955	18.0 %	0.0298360	0.0018747	0.0569602	0.0299491	0.0100409	0.0266566	0.2475480	0.0340851	8.7725860	0.5766909
13D02957	21.0 %	0.0302360	0.0018747	0.0672026	0.0299491	0.0123995	0.0266566	0.3114091	0.0340851	8.8957469	0.5766909
13D02958	23.0 %	0.0304440	0.0018747	0.0733559	0.0299491	0.0139894	0.0266566	0.3480045	0.0340851	8.9597905	0.5766909

Intercept Values	36Ar [fA]			37Ar [fA]			38Ar [fA]			39Ar [fA]			40Ar [fA]								
	1σ	r2		1σ	r2		1σ	r2		1σ	r2		1σ	r2							
13D02934	1.8%	1.495539	0.002883	0.9355	EXP 150 of 150	0.5698	0.0335	0.0026	EXP 150 of 150	0.4345009	0.0286112	0.0010	EXP 149 of 150	2.97757	0.02512	0.3841	EXP 150 of 150	454.26646	0.05180	0.9997	EXP 150 of 150
13D02936	2.0%	1.348090	0.002747	0.9181	EXP 150 of 150	0.6602	0.0312	0.0020	EXP 149 of 150	0.4149642	0.0287584	0.0027	EXP 150 of 150	4.03114	0.02345	0.6162	EXP 150 of 150	410.76325	0.04801	0.9996	EXP 150 of 150
13D02937	2.3%	1.099181	0.002427	0.8960	EXP 150 of 150	0.7670	0.0262	0.0002	EXP 150 of 150	0.3552739	0.0242892	0.0004	EXP 150 of 150	4.98146	0.02465	0.0256	EXP 150 of 150	334.44698	0.05101	0.9994	EXP 150 of 150
13D02939	2.7%	1.013203	0.002050	0.9131	EXP 150 of 150	1.2263	0.0292	0.0203	EXP 150 of 150	0.3673170	0.0274263	0.0015	EXP 150 of 150	7.82844	0.02371	0.8504	EXP 150 of 150	310.22124	0.04361	0.9994	EXP 150 of 150
13D02940	3.2%	0.895450	0.002265	0.8564	EXP 150 of 150	1.8149	0.0298	0.1113	EXP 150 of 150	0.4430097	0.0271622	0.0237	EXP 150 of 150	11.65520	0.02679	0.9039	EXP 150 of 150	275.06847	0.04327	0.9993	EXP 150 of 150
13D02942	3.8%	0.939883	0.002242	0.8861	EXP 150 of 150	3.4581	0.0313	0.2350	EXP 150 of 150	0.5642713	0.0265734	0.0327	EXP 148 of 150	22.55913	0.02670	0.9726	EXP 150 of 150	290.18831	0.04382	0.9994	EXP 150 of 150
13D02943	4.6%	0.879816	0.002094	0.8706	EXP 150 of 150	5.6617	0.0320	0.4969	EXP 150 of 150	0.7286877	0.0269622	0.0074	EXP 150 of 150	37.99458	0.02913	0.9682	EXP 150 of 150	274.99357	0.04529	0.9982	EXP 150 of 150
13D02945	5.6%	0.991165	0.002192	0.8953	LIN 149 of 150	10.9452	0.0322	0.8006	EXP 150 of 150	1.2746507	0.0257423	0.0270	EXP 149 of 150	80.16771	0.03313	0.9966	EXP 150 of 150	321.51735	0.04812	0.9994	EXP 150 of 150
13D02946	6.6%	0.769098	0.001972	0.8533	EXP 150 of 150	11.7963	0.0307	0.8368	EXP 150 of 150	1.3494499	0.0259794	0.0786	EXP 150 of 150	90.93709	0.03004	0.9974	EXP 150 of 150	256.67762	0.04181	0.9992	EXP 150 of 150
13D02948	7.8%	0.726889	0.002052	0.8144	EXP 150 of 150	12.7988	0.0305	0.8561	EXP 150 of 150	1.4348186	0.0250506	0.1113	EXP 150 of 150	96.17234	0.03169	0.9978	EXP 150 of 150	246.21301	0.03783	0.9993	EXP 150 of 150
13D02949	9.2%	0.696700	0.001920	0.8503	LIN 150 of 150	12.9161	0.0331	0.8303	EXP 150 of 150	1.3212260	0.0287181	0.0462	EXP 150 of 150	92.42896	0.03078	0.9978	EXP 150 of 150	233.25034	0.04296	0.9990	EXP 150 of 150
13D02951	10.8%	0.554248	0.001721	0.8036	EXP 150 of 150	11.2745	0.0319	0.8010	EXP 150 of 150	1.0533024	0.0255686	0.0206	EXP 150 of 150	74.52121	0.03304	0.9961	EXP 150 of 150	184.49612	0.04096	0.9983	EXP 150 of 150
13D02952	12.8%	0.575299	0.001722	0.7968	EXP 150 of 150	12.3859	0.0275	0.8720	EXP 150 of 150	1.0677935	0.0285094	0.0265	EXP 150 of 150	71.29066	0.02762	0.9970	EXP 150 of 150	186.60579	0.03852	0.9986	EXP 150 of 150
13D02954	15.3%	0.727464	0.001786	0.8708	EXP 150 of 150	17.3968	0.0281	0.9305	EXP 150 of 150	1.2553735	0.0295156	0.0881	EXP 150 of 150	74.98628	0.03108	0.9966	EXP 150 of 150	226.40993	0.03840	0.9991	EXP 150 of 150
13D02955	18.0%	0.804150	0.002117	0.8927	EXP 150 of 150	27.2631	0.0353	0.9516	EXP 150 of 150	1.3611903	0.0279316	0.0804	EXP 150 of 150	75.14781	0.03342	0.9961	EXP 150 of 150	269.04082	0.04527	0.9992	EXP 150 of 150
13D02957	21.0%	0.897878	0.002156	0.8762	EXP 150 of 150	29.9596	0.0318	0.9659	EXP 149 of 150	1.1965704	0.0273644	0.0653	EXP 150 of 150	63.86900	0.03017	0.9957	EXP 150 of 150	250.73137	0.04511	0.9991	EXP 150 of 150
13D02958	23.0%	0.494401	0.001620	0.7597	EXP 150 of 150	16.1903	0.0309	0.9006	EXP 150 of 150	0.6544735	0.0295155	0.0554	EXP 150 of 150	34.77450	0.02689	0.9981	EXP 150 of 150	130.38093	0.03457	0.9976	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	$\delta^{15}N$	Standard Reference	Standard 40Ar/39Ar	$\delta^{15}N$	J	$\delta^{15}N$	Ar 40Ar/36Ar	$\delta^{15}N$	MCP	$\delta^{15}N$	Volume Ratio	Sensitivity (mol/mol)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes		
1300204	1.8%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.8	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	15	38	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300206	2.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	2	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	16	2	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300207	2.3%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.3	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	16	10	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300209	0.7%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.7	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	16	40	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300240	3.2%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.2	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	16	52	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300242	3.8%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.8	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	17	11	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300243	4.6%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	4.6	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	17	20	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300245	5.6%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	5.6	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	17	34	1	15-08U-03	0.00	0.00		53.00	Colapage Henge (15-05)	13002003	01
1300246	6.6%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	6.6	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	18	7	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300248	7.6%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	7.6	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	18	21	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300249	9.2%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	9.2	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	18	44	1	15-08U-03	0.00	0.00		53.00	Colapage Henge (15-05)	13002003	01
1300291	10.6%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	10.6	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	19	5	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300292	12.8%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	12.8	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	19	21	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300294	10.3%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	15.3	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	19	46	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300295	16.7%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	16	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	19	56	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01
1300297	21.0%	SC10-087	Groundmass	Colapage St. Crater Island	Anthony Rogers	21	FC1-3	28.38	0.084	Flanagan et al (1998)	0.00011	0.341	0.0010012	0.141	303.087	0.094	0.0017075	0.003	1	4.00E-14	20	OCT	2013	20	23	1	15-08U-03				53.00	Colapage Henge (15-05)	13002003	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
13D02934	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02936	2.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02937	2.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02939	2.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02940	3.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02942	3.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02943	4.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02945	5.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02946	6.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02948	7.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02949	9.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02951	10.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02952	12.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02954	15.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02955	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02957	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	
13D02958	23.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	

13D02933.AGE >>> SC12-067 >>> GALAPAGOS | HARPP (13-07) PROJECT



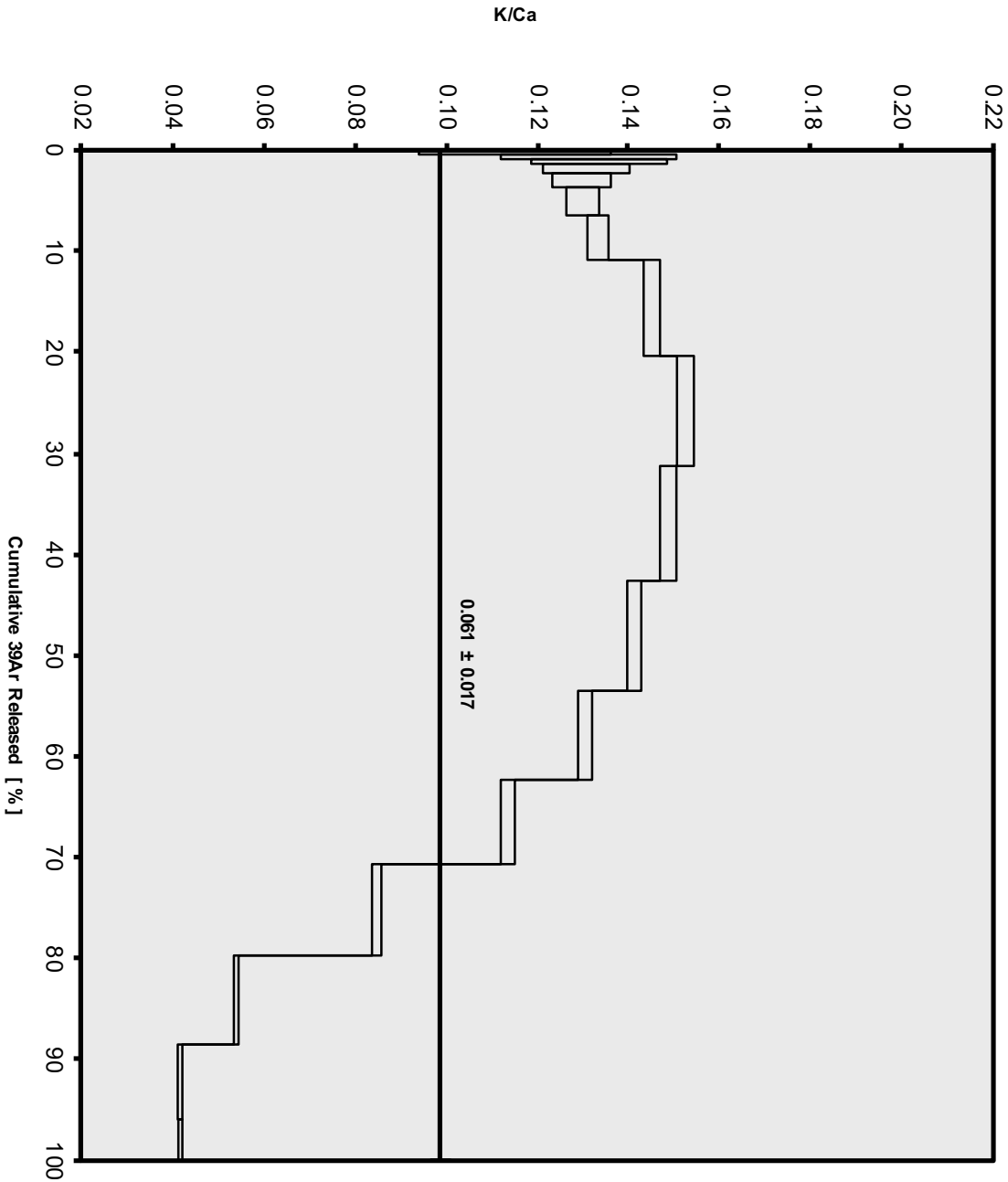
Ar-Ages in Ma

WEIGHTED
PLATEAU
 1.36 ± 0.03
TOTAL FUSION
 1.36 ± 0.04
NORMAL ISOCHRON
 1.37 ± 0.04
INVERSE ISOCHRON
 1.37 ± 0.04
MSWD
(PROBABILITY)
 0.37 (99%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00160212 ±

13D02933.AGE >>> SC12-067 >>> GALAPAGOS | HARPP (13-07) PROJECT



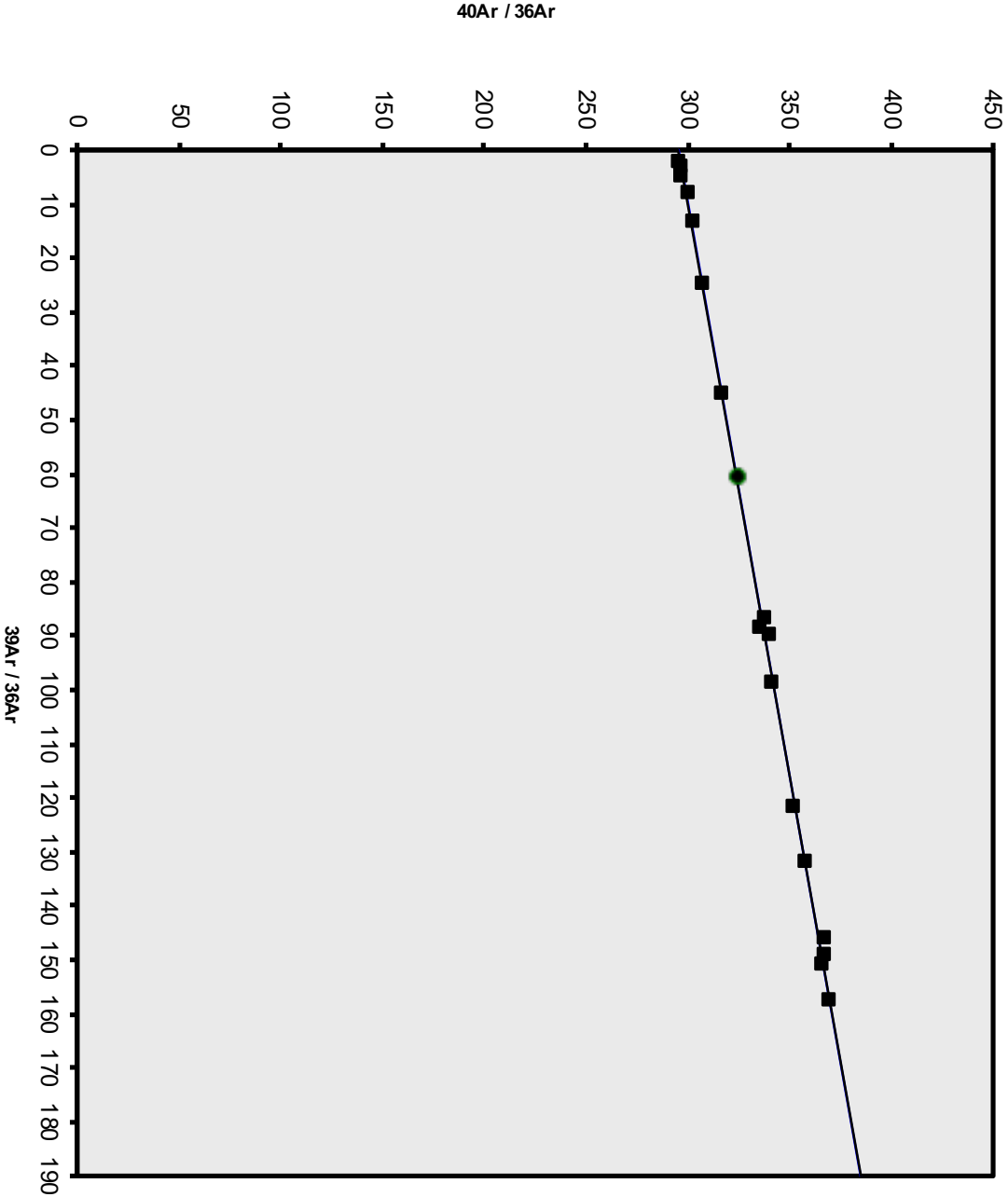
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.36 ± 0.03
TOTAL FUSION
1.36 ± 0.04
NORMAL
ISOCHRON
1.37 ± 0.04
INVERSE
ISOCHRON
1.37 ± 0.04

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
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13D02933.AGE >>> SC12-067 >>> GALAPAGOS | HARPP (13-07) PROJECT



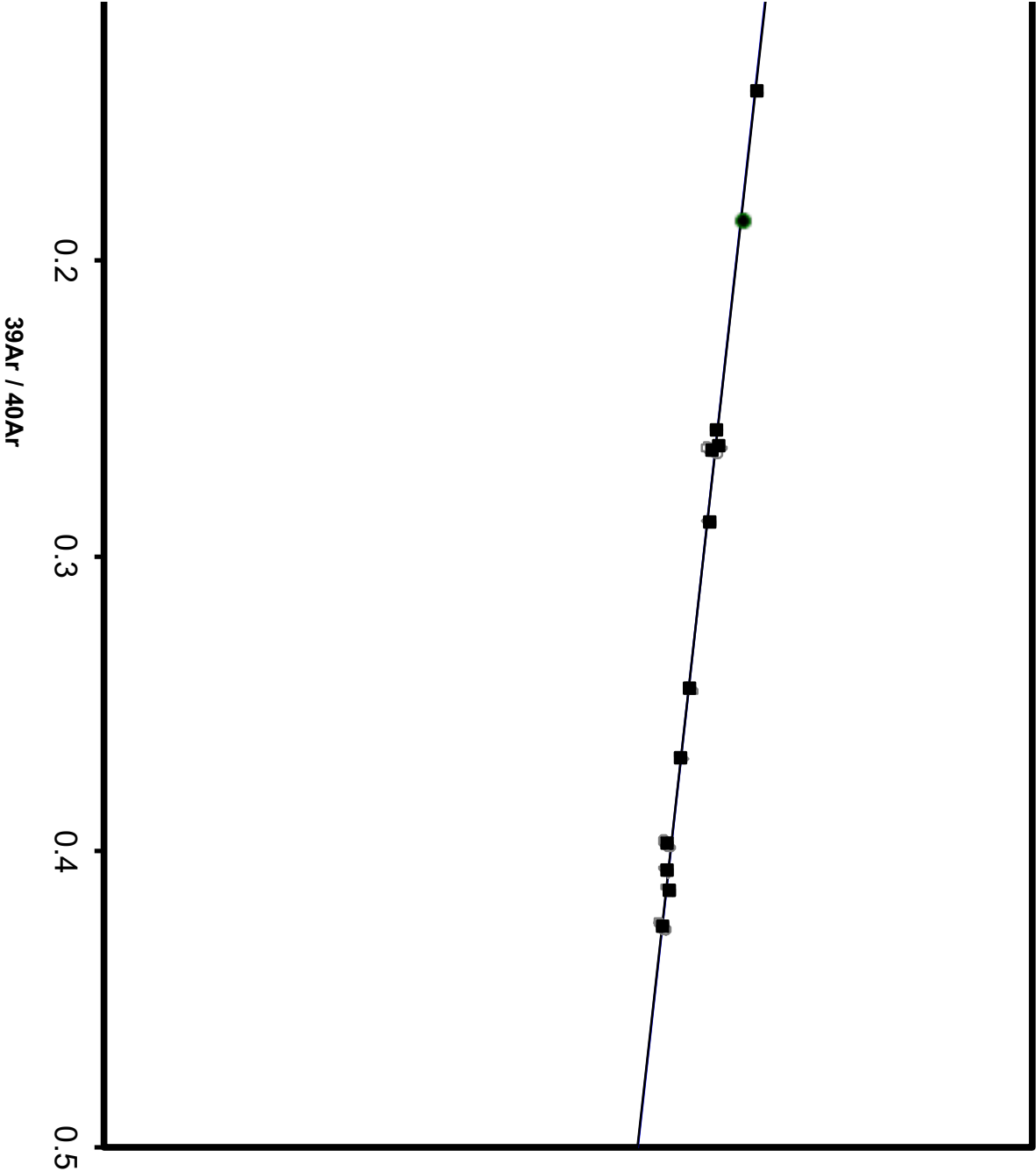
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.36 ± 0.03
TOTAL FUSION
1.36 ± 0.04
NORMAL
ISOCHRON
1.37 ± 0.04
INVERSE
ISOCHRON
1.37 ± 0.04
MSWD
(PROBABILITY)
0.37 (99%)
40AR/36AR

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00160212 ±

933.AGE >>> SC12-067 >>> GALAPAGOS | HARPP (13-07) PROJECT



13D02933.full.xls printed at 1/4/22 (3:31 PM)
ArArCALC v2.6.2 -- Beta Version

Ar-Ages in Ma

WEIGHTED PLATEAU

1.36 ± 0.03

TOTAL FUSION

1.36 ± 0.04

NORMAL ISOCHRON

1.37 ± 0.04

INVERSE ISOCHRON

1.37 ± 0.04

MSWD (PROBABILITY)

0.37 (99%)

SPREADING FACTOR

19.8%

40AR/36AR INTERCEPT

295.2 ± 1.0

Sample Info

Groundmass

Galapagos St. Cruz Island

Anthony Koppers

IRR = 13-OSU-03

J = 0.00160212 ± 0.14100000

RECALIBRATED AGE

Incremental Heating		36Ar(a)					37Ar(ca)					38Ar(cl)					39Ar(k)					40Ar(r)					Age ± 2σ					40Ar(r)					39Ar(k)					K/Ca ± 2σ					
		[fA]					[fA]					[fA]					[fA]					[fA]					(Ka)					(%)					(%)										
13D02906	1.7 %	0.2220742					31.8002					0.0718106					1.56960					1.4392791					2587.8 ± 1766.0					2.24					0.46					0.0212 ± 0.0017					
13D02908	1.8 %	0.1541722					20.1094					0.0347328					1.26058					1.1022199					2287 ± 1985.7					0.22					0.37					0.0270 ± 0.0032					
13D02909	1.9 %	0.0942231					12.6944					0.0143170					0.83000					0.0366550					124.5 ± 2660.7					0.13					0.24					0.0281 ± 0.0053					
13D02910	2.1 %	0.1474238					23.4763					0.0731783					1.63416					0.6246757					1078.3 ± 1532.3					1.45					0.48					0.0299 ± 0.0030					
13D02912	2.3 %	0.1276356					26.0225					0.0457408					1.85408					0.3742754					569.4 ± 1255.4					1.00					0.54					0.0306 ± 0.0029					
13D02913	2.5 %	0.1404761					29.0718					0.0469698					2.12960					0.5176467					685.6 ± 1138.0					1.26					0.62					0.0315 ± 0.0026					
13D02915	2.8 %	0.1572100					46.8153					0.0870213					3.51802					0.1322212					106.0 ± 714.5					0.28					1.02					0.0323 ± 0.0016					
13D02916	3.2 %	0.1952942					84.7293					0.0592922					6.24778					1.2361159					558.0 ± 448.8					2.19					1.82					0.0317 ± 0.0010					
13D02918	4.0 %	✓	0.2997177					241.6511					0.1337986					16.81378					1.0778408					29.8 ± 202.9					0.20					4.89					0.0299 ± 0.0004				
13D02919	5.0 %	✓	0.3395357					526.9687					0.1429154					29.94270					0.5774805					54.4 ± 138.1					0.57					8.71					0.0244 ± 0.0003				
13D02921	6.0 %	✓	0.3484306					871.6535					0.0562494					43.49681					1.6029615					103.9 ± 108.7					1.53					12.65					0.0215 ± 0.0002				
13D02922	7.0 %	✓	0.2723000					731.9373					0.0691938					39.94050					0.6837524					48.3 ± 97.9					0.84					11.61					0.0235 ± 0.0002				
13D02924	8.2 %	✓	0.2700198					678.7936					0.0336346					40.09626					0.4335805					30.5 ± 102.2					0.54					11.66					0.0254 ± 0.0003				
13D02925	9.6 %	✓	0.2379519					540.7057					0.1082692					32.96849					0.3850511					32.9 ± 106.2					0.54					9.59					0.0262 ± 0.0003				
13D02927	11.2 %	✓	0.2448643					449.3139					0.0360380					27.93790					0.9314264					94.0 ± 123.3					1.27					8.12					0.0267 ± 0.0003				
13D02928	13.2 %	✓	0.2385582					480.4348					0.064109					27.31037					1.9853791					205.0 ± 129.1					2.74					7.94					0.0244 ± 0.0003				
13D02930	15.4 %	✓	0.2704065					600.0124					0.0602880					27.17819					0.9680960					100.5 ± 140.2					1.20					7.90					0.0195 ± 0.0002				
13D02931	18.0 %	✓	0.2707560					691.8323					0.0585337					23.36459					1.2671865					152.9 ± 168.6					1.56					6.79					0.0145 ± 0.0002				
13D02932	21.0 %	✓	0.2023441					584.7298					0.0000000					15.82933					0.1262013					22.5 ± 217.1					0.21					4.60					0.0116 ± 0.0001				

Information on Analysis	Results				
	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (% _n)	K/Ca ± 2σ
Sample = SC12-011					
Material = Groundmass					
Location = Galapagos St. Cruz Island					
Analyst = Anthony Koppers					
Project = GALAPAGOS HARPP (13-07)					
Mass Discrimination Law = LIN					
Irradiation = 13-OSU-03					
J = 0.00155952 ± 0.13700000					
FCT-3 = 28.340 ± 0.564 Ma					
	Age Plateau	0.02611 ± 0.01357 ± 51.97%	73.6 ± 38.3 ± 51.97%	0.91 94.46 53% 11	0.0191 ± 0.0037
		Full External Error ± 38.3	1.89	2σ Confidence Limit	
		Analytical Error ± 38.3	1.0000	Error Magnification	
	Total Fusion Age	0.01260 ± 0.01501 ± 119.20%	35.5 ± 42.3 ± 119.20%	19	0.0222 ± 0.0001
		Full External Error ± 42.4			
		Analytical Error ± 42.3			

OSU Argon Geochronology Lab

Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
13D02906	1.7 %		7.07 $\pm$ 0.36	289.02 $\pm$ 4.33	0.2534
13D02908	1.8 %		8.18 $\pm$ 0.52	294.84 $\pm$ 5.75	0.2573
13D02909	1.9 %		8.81 $\pm$ 0.84	295.11 $\pm$ 8.30	0.2316
13D02910	2.1 %		11.08 $\pm$ 0.55	291.26 $\pm$ 5.94	0.3440
13D02912	2.3 %		14.53 $\pm$ 0.64	292.57 $\pm$ 6.41	0.3979
13D02913	2.5 %		15.16 $\pm$ 0.63	291.82 $\pm$ 6.05	0.4099
13D02915	2.8 %		22.38 $\pm$ 0.62	296.34 $\pm$ 5.68	0.5801
13D02916	3.2 %		31.99 $\pm$ 0.65	289.17 $\pm$ 4.99	0.7354
13D02918	4.0 %	✓	56.10 $\pm$ 0.78	294.91 $\pm$ 4.03	0.8932
13D02919	5.0 %	✓	88.19 $\pm$ 1.28	297.20 $\pm$ 4.34	0.9479
13D02921	6.0 %	✓	124.84 $\pm$ 2.01	300.10 $\pm$ 4.88	0.9667
13D02922	7.0 %	✓	146.68 $\pm$ 2.46	298.01 $\pm$ 5.13	0.9558
13D02924	8.2 %	✓	148.49 $\pm$ 2.65	297.11 $\pm$ 5.41	0.9592
13D02925	9.6 %	✓	138.55 $\pm$ 2.37	297.12 $\pm$ 5.24	0.9433
13D02927	11.2 %	✓	114.10 $\pm$ 1.87	299.30 $\pm$ 5.05	0.9393
13D02928	13.2 %	✓	114.48 $\pm$ 1.98	303.82 $\pm$ 5.38	0.9430
13D02930	15.4 %	✓	100.51 $\pm$ 1.67	299.08 $\pm$ 5.05	0.9443
13D02931	18.0 %	✓	86.29 $\pm$ 1.49	300.18 $\pm$ 5.24	0.9439
13D02932	21.0 %	✓	78.23 $\pm$ 1.58	294.88 $\pm$ 6.01	0.9216

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	295.07 $\pm$ 5.52 $\pm$ 1.87%	0.02949 $\pm$ 0.05017 $\pm$ 170.12%	83.2 $\pm$ 141.5 $\pm$ 170.11%	0.99 44%
			Full External Error $\pm$ 141.5 Analytical Error $\pm$ 141.5	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.94 1.0000 11	Convergence Number of Iterations Calculated Line	0.000000002764 4 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
13D02906	1.7 %	0.0244548 $\pm$ 0.0011982	0.00345998 $\pm$ 0.00005178	0.0437
13D02908	1.8 %	0.0277321 $\pm$ 0.0016943	0.00339170 $\pm$ 0.00006610	0.0531
13D02909	1.9 %	0.0298495 $\pm$ 0.0027754	0.00338856 $\pm$ 0.00009532	0.0650
13D02910	2.1 %	0.0380576 $\pm$ 0.0017626	0.00343333 $\pm$ 0.00007007	0.0754
13D02912	2.3 %	0.0496512 $\pm$ 0.0020277	0.00341801 $\pm$ 0.00007491	0.1053
13D02913	2.5 %	0.0519503 $\pm$ 0.0019716	0.00342683 $\pm$ 0.00007106	0.0991
13D02915	2.8 %	0.0755138 $\pm$ 0.0017179	0.00337449 $\pm$ 0.00006472	0.1377
13D02916	3.2 %	0.1106325 $\pm$ 0.0015396	0.00345817 $\pm$ 0.00005973	0.1722
13D02918	4.0 % ✓	0.1902253 $\pm$ 0.0012129	0.00339090 $\pm$ 0.00004633	0.1940
13D02919	5.0 % ✓	0.2967260 $\pm$ 0.0013938	0.00336473 $\pm$ 0.00004917	0.1892
13D02921	6.0 % ✓	0.4159819 $\pm$ 0.0017383	0.00333222 $\pm$ 0.00005424	0.1791
13D02922	7.0 % ✓	0.4921908 $\pm$ 0.0024954	0.00335558 $\pm$ 0.00005776	0.2296
13D02924	8.2 % ✓	0.4998010 $\pm$ 0.0025801	0.00336581 $\pm$ 0.00006130	0.2185
13D02925	9.6 % ✓	0.4663162 $\pm$ 0.0027407	0.00336566 $\pm$ 0.00005941	0.2554
13D02927	11.2 % ✓	0.3812026 $\pm$ 0.0022155	0.00334109 $\pm$ 0.00005634	0.2515
13D02928	13.2 % ✓	0.3768021 $\pm$ 0.0022302	0.00329140 $\pm$ 0.00005825	0.2395
13D02930	15.4 % ✓	0.3360592 $\pm$ 0.0018811	0.00334359 $\pm$ 0.00005648	0.2134
13D02931	18.0 % ✓	0.2874736 $\pm$ 0.0016719	0.00333133 $\pm$ 0.00005811	0.1973
13D02932	21.0 % ✓	0.2652969 $\pm$ 0.0021295	0.00339125 $\pm$ 0.00006913	0.2273

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron				
Clustered Points	295.10 $\pm$ 5.56 $\pm$ 1.88%	0.02963 $\pm$ 0.01824 $\pm$ 61.58%	83.5 $\pm$ 51.4 $\pm$ 61.58%	1.01 43%
			Full External Error $\pm$ 51.5 Analytical Error $\pm$ 51.4	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	1.94 1.0028 11 0.9%	Convergence Number of Iterations Calculated Line	0.0316105670 3 Weighted York-2

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Relative Abundances		³⁶ Ar [fA]	%1σ	³⁷ Ar [fA]	%1σ	³⁸ Ar [fA]	%1σ	³⁹ Ar [fA]	%1σ	⁴⁰ Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
13D02906	1.7 %	0.2304876	0.656	31.8002	3.317	0.1355985	33.948	1.59100	2.400	64.1852	0.283	0.91697 ± 0.62532	2587.8 ± 1766.0	2.24	0.46	0.0212 ± 0.0017
13D02908	1.8 %	0.1594898	0.843	20.1094	5.074	0.0806882	58.775	1.27412	2.996	45.4569	0.397	0.08109 ± 0.70404	228.7 ± 1985.7	0.22	0.37	0.0270 ± 0.0032
13D02909	1.9 %	0.0975780	1.170	12.6944	8.184	0.0431373	111.236	0.83855	4.555	27.8071	0.652	0.04416 ± 0.94342	124.5 ± 2660.7	0.13	0.24	0.0281 ± 0.0053
13D02910	2.1 %	0.1536400	0.873	23.4763	4.488	0.1225917	39.148	1.64996	2.255	42.9407	0.422	0.38226 ± 0.54301	1078.3 ± 1532.3	1.45	0.48	0.0299 ± 0.0030
13D02912	2.3 %	0.1345171	0.907	26.0225	4.225	0.0943124	51.323	1.87159	1.965	37.3439	0.485	0.20187 ± 0.44502	569.4 ± 1255.4	1.00	0.54	0.0306 ± 0.0029
13D02913	2.5 %	0.1481620	0.869	29.0718	3.626	0.1015007	46.573	2.14917	1.828	40.9562	0.442	0.24307 ± 0.40337	685.6 ± 1138.0	1.26	0.62	0.0315 ± 0.0026
13D02915	2.8 %	0.1696911	0.795	46.8153	2.317	0.1629463	28.015	3.54953	1.060	46.5913	0.388	0.03758 ± 0.25338	106.0 ± 714.5	0.28	1.02	0.0323 ± 0.0016
13D02916	3.2 %	0.2176776	0.705	84.7293	1.399	0.1786999	27.252	6.30481	0.611	56.4796	0.322	0.19785 ± 0.15909	558.0 ± 448.8	2.19	1.82	0.0317 ± 0.0010
13D02918	4.0 %	0.3635473	0.525	241.6511	0.652	0.4147461	11.248	16.97641	0.241	88.4057	0.206	0.01058 ± 0.07196	29.8 ± 202.9	0.20	4.89	0.0299 ± 0.0004
13D02919	5.0 %	0.4786914	0.479	526.9687	0.521	0.6203713	7.423	30.29735	0.149	100.9405	0.180	0.01929 ± 0.04898	54.4 ± 138.1	0.57	8.71	0.0244 ± 0.0003
13D02921	6.0 %	0.5785613	0.436	871.6535	0.495	0.7375247	6.308	44.08344	0.113	104.6081	0.174	0.03685 ± 0.03856	103.9 ± 108.7	1.53	12.65	0.0215 ± 0.0002
13D02922	7.0 %	0.4655489	0.439	731.9373	0.502	0.6763488	6.980	40.43309	0.117	81.1888	0.224	0.01712 ± 0.03470	48.3 ± 97.9	0.84	11.61	0.0235 ± 0.0002
13D02924	8.2 %	0.4492298	0.490	678.7936	0.505	0.6347491	7.637	40.55309	0.122	80.2649	0.226	0.01081 ± 0.03626	30.5 ± 102.2	0.54	11.66	0.0254 ± 0.0003
13D02925	9.6 %	0.3807258	0.490	540.7057	0.520	0.6040819	7.872	33.3238	0.140	70.7332	0.257	0.01168 ± 0.03766	32.9 ± 106.2	0.54	9.59	0.0262 ± 0.0003
13D02927	11.2 %	0.3634923	0.514	449.3139	0.534	0.4621910	9.947	28.24028	0.149	73.3171	0.248	0.03334 ± 0.04372	94.0 ± 123.3	1.27	8.12	0.0267 ± 0.0003
13D02928	13.2 %	0.3654017	0.523	480.4348	0.526	0.4567699	10.325	27.63370	0.156	72.5069	0.250	0.07270 ± 0.04578	205.0 ± 129.1	2.74	7.94	0.0244 ± 0.0003
13D02930	15.4 %	0.4288250	0.478	600.0124	0.510	0.5035165	9.626	27.58200	0.164	80.9007	0.225	0.03562 ± 0.04971	100.5 ± 140.2	1.20	7.90	0.0195 ± 0.0002
13D02931	18.0 %	0.4534012	0.461	691.8323	0.502	0.4184917	11.160	23.83019	0.182	81.2992	0.224	0.05424 ± 0.05979	152.9 ± 168.6	1.56	6.79	0.0145 ± 0.0002
13D02932	21.0 %	0.3567128	0.504	584.7298	0.516	0.2768747	16.356	16.22285	0.254	59.6825	0.305	0.00797 ± 0.07698	22.5 ± 217.1	0.21	4.60	0.0116 ± 0.0001
Σ		5.9952816	0.131	6672.7526	0.160	6.7251106	3.056	348.41349	0.053	1255.6476	0.063					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-011
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Anthony Koppers
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00155952 ± 0.13700000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 40
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = Undefined
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(cj) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%, n)	K/Ca ± 2σ
Age Plateau		0.02611 ± 0.01357 ± 51.97%	73.6 ± 38.3 ± 51.97%	0.91	94.46	0.0191 ± 0.0037
			Full External Error ± 38.3 Analytical Error ± 38.3	1.89	2σ Confidence Limit	
				1.0000	Error Magnification	
Total Fusion Age		0.01260 ± 0.01501 ± 119.20%	35.5 ± 42.3 ± 119.20%		19	0.0222 ± 0.0001
			Full External Error ± 42.4 Analytical Error ± 42.3			
Normal Isochron	295.07 ± 5.52 ± 1.87%	0.02949 ± 0.05017 ± 170.12%	83.2 ± 141.5 ± 170.11%	0.99	94.46	
			Full External Error ± 141.5 Analytical Error ± 141.5	1.94	2σ Confidence Limit	
				1.0000	Error Magnification	
				4	Number of Iterations	
				0.0000000028	Convergence	
Inverse Isochron	295.10 ± 5.56 ± 1.88%	0.02963 ± 0.01824 ± 61.58%	83.5 ± 51.4 ± 61.58%	1.01	94.46	
Clustered Points			Full External Error ± 51.5 Analytical Error ± 51.4	1.94	2σ Confidence Limit	
				1.0028	Error Magnification	
				3	Number of Iterations	
				0.0316105670	Convergence	
				1%	Spreading Factor	

Depositing Pattern	36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(ca) [A]	%1σ	36Ar(d) [A]	%1σ	37Ar(ca) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(b) [A]	%1σ	38Ar(ca) [A]	%1σ	38Ar(d) [A]	%1σ	39Ar(a) [A]	%1σ	39Ar(c) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(a) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(b) [A]	%1σ	
13002905	1.7%	0.0020794	0.89	0.0000000	0.00	0.0003953	3.32	0.0000000	84.10	-31.8002	3.32	0.0410267	0.59	0.0000000	0.00	0.0178020	2.43	0.0044026	3.32	0.0191036	54.10	1.60890	2.43	0.0044916	3.32	0.1436791	34.01	80.6230	0.89	0.0000000	0.00	0.0015853	2.43
13002908	1.8%	0.1641732	0.89	0.0000000	0.00	0.0003069	5.07	0.0000007	136.56	20.1004	5.07	0.0288148	0.89	0.0000000	0.00	0.0143464	3.03	0.0027952	5.07	0.0347328	136.56	1.20958	3.03	0.0150236	5.07	0.1002199	434.10	46.5679	0.89	0.0000000	0.00	0.0012702	3.03
13002909	1.9%	0.0042221	1.25	0.0000000	0.00	0.0003013	8.18	0.0000006	205.19	12.0044	8.18	0.0179102	1.25	0.0000000	0.00	0.0009465	4.00	0.0017046	8.18	0.0143170	305.19	0.60000	4.00	0.0009463	8.18	0.0389320	1005.12	27.9429	1.25	0.0000000	0.00	0.0003003	4.00
13002910	2.1%	0.1474238	0.83	0.0000000	0.00	0.0001078	4.40	0.0000184	66.60	22.4763	4.40	0.0277632	0.83	0.0000000	0.00	0.0100867	2.28	0.0002392	4.40	0.0271783	66.60	1.63416	2.28	0.0075766	4.40	0.0446757	70.89	43.9237	0.83	0.0000000	0.00	0.0001605	2.28
13002912	2.3%	0.1276356	0.98	0.0000000	0.00	0.0000869	4.23	0.0000116	105.84	26.0225	4.23	0.0238651	0.98	0.0000000	0.00	0.0201094	1.98	0.0003671	4.23	0.0437408	105.84	1.85408	1.98	0.0179131	4.23	0.0742754	110.21	37.7903	0.98	0.0000000	0.00	0.0001826	1.98
13002913	2.5%	0.1440261	0.94	0.0000000	0.00	0.0000700	3.63	0.0000116	100.66	20.0716	3.63	0.0202593	0.94	0.0000000	0.00	0.0204349	1.95	0.0044943	3.63	0.0460668	100.66	2.12062	1.95	0.0199663	3.63	0.0174647	80.95	41.9307	0.94	0.0000000	0.00	0.0001709	1.95
13002915	2.8%	0.1672190	0.88	0.0000000	0.00	0.0123593	2.32	0.0000219	52.47	46.8153	2.32	0.0203825	0.88	0.0000000	0.00	0.0400031	1.07	0.0000073	2.32	0.0870213	52.48	3.91802	1.07	0.0019067	2.32	0.1302312	337.08	46.4655	0.88	0.0000000	0.00	0.0003532	1.07
13002916	3.0%	0.1962942	0.80	0.0000000	0.00	0.0607969	0.80	0.0000037	34.88	241.6011	0.80	0.0606702	0.86	0.0000000	0.00	0.1913404	0.24	0.0000006	0.86	0.1337096	34.88	18.81378	0.24	0.1026212	0.86	0.1739408	340.15	88.9686	0.86	0.0000000	0.00	0.0106819	0.24
13002919	5.0%	✓ 0.0396367	0.71	0.0000000	0.00	0.1391197	0.62	0.0000000	32.24	526.9687	0.62	0.0604602	0.71	0.0000000	0.00	0.3407480	0.16	0.0720487	0.62	0.1420154	32.25	29.94270	0.16	0.0546499	0.62	0.0774805	126.98	100.3028	0.71	0.0000000	0.00	0.0000461	0.16
13002921	6.0%	✓ 0.0484036	0.79	0.0000000	0.00	0.2201166	0.49	0.0000142	82.14	871.6035	0.49	0.0601917	0.79	0.0000000	0.00	0.4449937	0.11	0.1211986	0.49	0.0660494	82.14	43.44881	0.11	0.0966238	0.49	1.0000616	52.31	100.3812	0.79	0.0000000	0.00	0.0430018	0.11
13002922	7.0%	✓ 0.0723000	0.83	0.0000000	0.00	0.1802314	0.60	0.0000174	68.24	731.8373	0.60	0.0606820	0.83	0.0000000	0.00	0.4646229	0.12	0.1917780	0.60	0.0691938	68.25	39.94960	0.12	0.4800038	0.60	0.6837024	101.34	80.4647	0.83	0.0000000	0.00	0.0400309	0.12
13002924	8.2%	✓ 0.2700198	0.88	0.0000000	0.00	0.1702915	0.61	0.0000006	144.16	676.7036	0.61	0.0604667	0.88	0.0000000	0.00	0.4606264	0.12	0.0943823	0.61	0.0300346	144.16	40.09626	0.12	0.4908281	0.61	0.4338005	167.84	79.7609	0.88	0.0000000	0.00	0.0404972	0.12
13002925	9.6%	✓ 0.2379619	0.84	0.0000000	0.00	0.1427463	0.62	0.0000275	43.14	540.7607	0.62	0.0447432	0.84	0.0000000	0.00	0.3751814	0.14	0.0797081	0.62	0.1900602	43.16	32.36449	0.14	0.3008449	0.62	0.3600511	161.23	70.3448	0.84	0.0000000	0.00	0.0302862	0.14
13002927	11.2%	✓ 0.2448843	0.81	0.0000000	0.00	0.1198199	0.63	0.0000001	127.60	440.3139	0.63	0.0467861	0.81	0.0000000	0.00	0.3170033	0.16	0.0626446	0.63	0.0900080	127.60	27.60790	0.16	0.3020883	0.63	0.0601404	66.67	72.3674	0.81	0.0000000	0.00	0.0026173	0.16
13002928	13.2%	✓ 0.2898962	0.85	0.0000000	0.00	0.1580248	0.63	0.0000007	186.29	486.4348	0.63	0.0469880	0.85	0.0000000	0.00	0.3197260	0.16	0.0861004	0.63	0.0940109	186.29	27.31837	0.16	0.3203338	0.63	1.0600791	31.40	76.4640	0.85	0.0000000	0.00	0.0077605	0.16
13002930	16.4%	✓ 0.2754606	0.81	0.0000000	0.00	0.1584633	0.61	0.0000152	86.42	600.0144	0.61	0.0500000	0.81	0.0000000	0.00	0.3000078	0.17	0.0824917	0.61	0.0600080	86.42	27.71819	0.17	0.4008084	0.61	0.0600000	66.78	79.9651	0.81	0.0000000	0.00	0.0027400	0.17
13002931	18.0%	✓ 0.2707580	0.84	0.0000000	0.00	0.1604437	0.60	0.0000015	800.72	691.8323	0.60	0.0508043	0.84	0.0000000	0.00	0.2608860	0.19	0.0981947	0.60	0.0508337	800.72	23.39469	0.19	0.4660031	0.60	1.2671865	55.12	80.0084	0.84	0.0000000	0.00	0.0023982	0.19
13002932	21.0%	✓ 0.0020441	0.67	0.0000000	0.00	0.1454867	0.52	0.0000000	0.00	584.7296	0.52	0.0071891	0.67	0.0000000	0.00	0.1901178	0.26	0.0812774	0.52	0.0000000	0.00	15.00003	0.26	0.3000532	0.52	0.1000013	462.81	90.7607	0.67	0.0000000	0.00	0.0104605	0.26
Σ	4.2302945	0.30	0.0000000	0.00	1.7616907	0.16	0.0000006	17.98	6672.7626	0.16	6.7910214	0.20	0.0000000	0.00	0.3139466	0.05	0.0071916	0.16	1.1148946	17.98	34530273	0.05	4.4607025	0.16	4.3002255	59.80	12863980	0.30	0.0000000	0.00	0.3017600	0.05	
						5.9862816	0.15		6672.7626	0.16									6.7447602	2.97			346.41349	0.05							1255.6476	0.28	

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
13D02906	1.7 %	40.342770	0.975009	19.987616	0.818412	0.144870	0.003605	154.849	21.349701	1.00109409	3.081E-12
13D02908	1.8 %	35.677245	1.078283	15.783030	0.930087	0.125177	0.003896	154.866	21.357024	1.00109421	2.182E-12
13D02909	1.9 %	33.161023	1.525994	15.138571	1.417927	0.116365	0.005473	154.874	21.360539	1.00109427	1.335E-12
13D02910	2.1 %	26.025383	0.596989	14.228468	0.714647	0.093118	0.002251	154.883	21.364056	1.00109433	2.061E-12
13D02912	2.3 %	19.953028	0.403764	13.903932	0.647857	0.071873	0.001555	154.900	21.371383	1.00109445	1.793E-12
13D02913	2.5 %	19.074939	0.358787	13.527009	0.549335	0.068940	0.001396	154.909	21.375194	1.00109452	1.968E-12
13D02915	2.8 %	13.126072	0.148112	13.189184	0.336033	0.047779	0.000633	154.926	21.382525	1.00109464	2.236E-12
13D02916	3.2 %	8.958183	0.061877	13.438844	0.205175	0.034526	0.000322	154.935	21.386045	1.00109470	2.711E-12
13D02918	4.0 %	✓ 5.207564	0.016505	14.234523	0.098921	0.021415	0.000124	154.952	21.393380	1.00109482	4.243E-12
13D02919	5.0 %	✓ 3.331662	0.007783	17.393226	0.094319	0.015800	0.000079	154.960	21.396902	1.00109488	4.845E-12
13D02921	6.0 %	✓ 2.372958	0.004934	19.772813	0.100401	0.013124	0.000059	154.978	21.404240	1.00109500	5.021E-12
13D02922	7.0 %	✓ 2.007978	0.005073	18.102431	0.093256	0.011514	0.000052	154.987	21.408057	1.00109507	3.897E-12
13D02924	8.2 %	✓ 1.979256	0.005092	16.738396	0.087026	0.011078	0.000056	155.003	21.415106	1.00109519	3.853E-12
13D02925	9.6 %	✓ 2.122055	0.006217	16.221636	0.087438	0.011422	0.000058	155.012	21.418925	1.00109525	3.395E-12
13D02927	11.2 %	✓ 2.596187	0.007519	15.910390	0.088175	0.012871	0.000069	155.030	21.426271	1.00109537	3.519E-12
13D02928	13.2 %	✓ 2.623858	0.007735	17.386829	0.095323	0.013223	0.000072	155.038	21.429798	1.00109543	3.480E-12
13D02930	15.4 %	✓ 2.933097	0.008162	21.753769	0.116647	0.015547	0.000079	155.056	21.437148	1.00109555	3.883E-12
13D02931	18.0 %	✓ 3.411604	0.009834	29.031758	0.154984	0.019026	0.000094	155.064	21.440677	1.00109561	3.902E-12
13D02932	21.0 %	✓ 3.678913	0.014605	36.043584	0.207373	0.021988	0.000124	155.073	21.444501	1.00109568	2.865E-12

OSU Argon Geochronology Lab

Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
13D02906	1.7 %	0.0245323	0.0007013	0.0295376	0.0374986	0.0170290	0.0375021	0.0279386	0.0282578	7.0401109	0.1784447
13D02908	1.8 %	0.0249409	0.0007013	0.0271104	0.0374986	0.0150406	0.0375021	0.0304433	0.0282578	7.1496887	0.1784447
13D02909	1.9 %	0.0251087	0.0007013	0.0264070	0.0374986	0.0140862	0.0375021	0.0316456	0.0282578	7.1951715	0.1784447
13D02910	2.1 %	0.0252582	0.0007013	0.0260033	0.0374986	0.0131317	0.0375021	0.0328478	0.0282578	7.2360396	0.1784447
13D02912	2.3 %	0.0255106	0.0007013	0.0261241	0.0374986	0.0111433	0.0375021	0.03353525	0.0282578	7.3063597	0.1784447
13D02913	2.5 %	0.0256103	0.0007013	0.0267007	0.0374986	0.0101093	0.0375021	0.0366550	0.0282578	7.3350105	0.1784447
13D02915	2.8 %	0.0257416	0.0007013	0.0287976	0.0374986	0.0081209	0.0375021	0.0391597	0.0282578	7.3748859	0.1784447
13D02916	3.2 %	0.0257763	0.0007013	0.0302659	0.0374986	0.0071665	0.0375021	0.0403619	0.0282578	7.3869117	0.1784447
13D02918	4.0 %	0.0257897	0.0007013	0.0342868	0.0374986	0.0051780	0.0375021	0.0428667	0.0282578	7.3971436	0.1784447
13D02919	5.0 %	0.0257678	0.0007013	0.0366787	0.0374986	0.0042236	0.0375021	0.0440689	0.0282578	7.3949404	0.1784447
13D02921	6.0 %	0.0256632	0.0007013	0.0426237	0.0374986	0.0022352	0.0375021	0.0465736	0.0282578	7.3755288	0.1784447
13D02922	7.0 %	0.0255773	0.0007013	0.0462290	0.0374986	0.0012012	0.0375021	0.0478761	0.0282578	7.3575191	0.1784447
13D02924	8.2 %	0.0253621	0.0007013	0.0538083	0.0374986	0.0007077	0.0375021	0.0502806	0.0282578	7.3100416	0.1784447
13D02925	9.6 %	0.0252149	0.0007013	0.0584140	0.0374986	0.0017416	0.0375021	0.0515830	0.0282578	7.2766173	0.1784447
13D02927	11.2 %	0.0248712	0.0007013	0.0682592	0.0374986	0.0037301	0.0375021	0.0540877	0.0282578	7.1971174	0.1784447
13D02928	13.2 %	0.0246780	0.0007013	0.0734467	0.0374986	0.0046845	0.0375021	0.0552900	0.0282578	7.1518431	0.1784447
13D02930	15.4 %	0.0242164	0.0007013	0.0852160	0.0374986	0.0066729	0.0375021	0.0577947	0.0282578	7.0426997	0.1784447
13D02931	18.0 %	0.0239665	0.0007013	0.0913270	0.0374986	0.0076274	0.0375021	0.0589970	0.0282578	6.9831964	0.1784447
13D02932	21.0 %	0.0236751	0.0007013	0.0982853	0.0374986	0.0086613	0.0375021	0.0602994	0.0282578	6.9135269	0.1784447

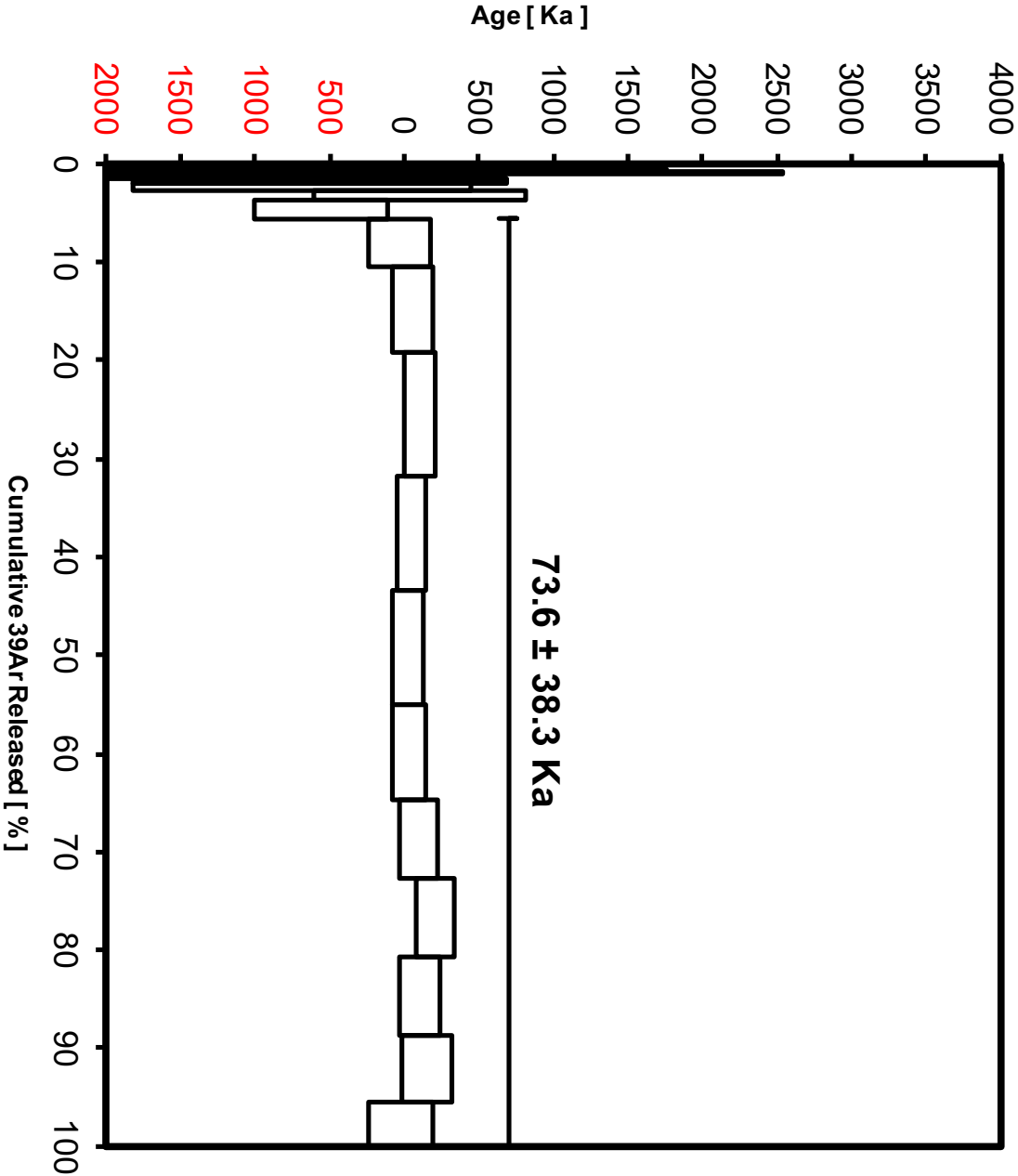
OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Intercept Values		36Ar [A]	1σ	r2		37Ar [A]	1σ	r2		38Ar [A]	1σ	r2		39Ar [A]	1σ	r2		40Ar [A]	1σ	r2
13D02906	1.7%	0.2483873	0.0011522	0.4001	EXP 150 of 150	1.4910	0.0299	0.0729	EXP 150 of 150	0.1168882	0.0266860	0.0004	EXP 150 of 150	1.60725	0.02325	0.1489	EXP 150 of 150	71.2480708	0.0338204	0.8998
13D02908	1.8%	0.1759481	0.0010253	0.1904	EXP 150 of 150	0.9510	0.0278	0.0158	EXP 150 of 150	0.0646353	0.0280464	0.0005	EXP 150 of 150	1.29520	0.02523	0.0914	EXP 150 of 150	52.6234209	0.0280875	0.9677
13D02909	1.9%	0.1198930	0.0008224	0.0032	EXP 150 of 150	0.6095	0.0294	0.0158	EXP 150 of 150	0.0289399	0.0285994	0.0003	EXP 150 of 150	0.86463	0.02528	0.0267	EXP 150 of 150	35.0125235	0.0325561	0.9835
13D02910	2.1%	0.1144836	0.0010263	0.1932	EXP 150 of 150	1.1042	0.0302	0.0101	EXP 150 of 150	0.1079219	0.0289722	0.0003	EXP 150 of 150	1.67068	0.02375	0.2124	EXP 150 of 150	50.1529182	0.0316228	0.9382
13D02912	2.3%	0.1561625	0.0008918	0.1433	EXP 150 of 150	1.2209	0.0333	0.0489	EXP 149 of 150	0.0819858	0.0296331	0.0031	EXP 150 of 150	1.89319	0.02307	0.2743	EXP 150 of 150	44.6540776	0.0318877	0.9393
13D02913	2.5%	0.1695161	0.0008654	0.2308	EXP 150 of 150	1.3612	0.0299	0.0269	EXP 150 of 150	0.0901179	0.0277942	0.0000	EXP 150 of 150	2.17003	0.02985	0.2240	EXP 150 of 150	48.3463590	0.0306021	0.8908
13D02915	2.8%	0.1904398	0.0010189	0.2482	EXP 149 of 150	2.1771	0.0311	0.1081	EXP 150 of 150	0.1527810	0.0260097	0.0168	EXP 150 of 150	3.56260	0.02431	0.4774	EXP 150 of 150	53.9534232	0.0274762	0.3633
13D02916	3.2%	0.2371864	0.0011933	0.4992	EXP 150 of 150	3.9177	0.0347	0.2113	EXP 150 of 150	0.1962817	0.0306878	0.0003	EXP 150 of 150	6.29884	0.02549	0.7507	EXP 150 of 150	63.9873966	0.0349869	0.7531
13D02918	4.0%	0.3788911	0.0014490	0.6064	EXP 150 of 150	11.1176	0.0318	0.8063	EXP 150 of 150	0.4043645	0.0267448	0.0075	EXP 150 of 150	16.89452	0.02727	0.9499	EXP 150 of 150	95.8355347	0.0358864	0.9864
13D02919	5.0%	0.4907049	0.0017338	0.7045	EXP 150 of 150	24.2021	0.0341	0.9411	EXP 150 of 150	0.6083643	0.0257063	0.0574	EXP 150 of 150	30.11877	0.02915	0.9820	EXP 150 of 150	108.3727658	0.0338871	0.9918
13D02921	6.0%	0.5876006	0.0018420	0.7483	EXP 150 of 150	40.0006	0.0362	0.9756	EXP 150 of 150	0.7260363	0.0265223	0.0258	EXP 150 of 150	43.80604	0.03012	0.9907	EXP 150 of 150	112.0221599	0.0371495	0.9918
13D02922	7.0%	0.4777495	0.0014400	0.7656	EXP 150 of 150	33.5934	0.0353	0.9678	EXP 150 of 150	0.6666619	0.0271733	0.0479	EXP 150 of 150	40.18382	0.02814	0.9904	EXP 150 of 150	88.27626548	0.0335673	0.9831
13D02924	8.2%	0.4616841	0.0016736	0.7380	EXP 150 of 150	31.1590	0.0352	0.9637	EXP 150 of 150	0.6274930	0.0297369	0.0277	EXP 150 of 150	40.30533	0.03134	0.9880	EXP 150 of 150	87.6046335	0.0342360	0.9828
13D02925	9.6%	0.3950012	0.0013677	0.6809	EXP 150 of 150	24.8282	0.0349	0.9466	EXP 150 of 150	0.5982445	0.0282517	0.0811	EXP 150 of 150	33.13899	0.03043	0.9841	EXP 150 of 150	78.0359000	0.0323235	0.9713
13D02927	11.2%	0.3779192	0.0014003	0.7238	EXP 149 of 150	20.6444	0.0315	0.9300	EXP 150 of 150	0.4601223	0.0255789	0.0235	EXP 150 of 150	28.08882	0.02544	0.9843	EXP 150 of 150	80.5412814	0.0300590	0.9788
13D02928	13.2%	0.3795955	0.0014507	0.6205	EXP 150 of 150	22.0711	0.0304	0.9457	EXP 150 of 150	0.4557236	0.0276041	0.0213	EXP 150 of 150	27.46889	0.02706	0.9816	EXP 150 of 150	79.8555457	0.0329407	0.9801
13D02930	15.4%	0.4407199	0.0015146	0.7429	EXP 150 of 150	27.5485	0.0321	0.9636	EXP 150 of 150	0.5038722	0.0297025	0.0340	EXP 150 of 150	27.43708	0.03056	0.9765	EXP 150 of 150	87.9732671	0.0334214	0.9879
13D02931	18.0%	0.4643400	0.0015235	0.7556	EXP 150 of 150	31.7521	0.0311	0.9714	EXP 150 of 150	0.4286886	0.0268343	0.0017	EXP 150 of 150	23.71404	0.02888	0.9715	EXP 150 of 150	88.3124102	0.0342798	0.9875
13D02932	21.0%	0.3701384	0.0013238	0.6826	EXP 150 of 150	26.8529	0.0363	0.9476	EXP 150 of 150	0.2820623	0.0240518	0.0023	EXP 150 of 150	16.16392	0.02789	0.9449	EXP 150 of 150	66.6180490	0.0352949	0.9588

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%He	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes		
1300286	1.7%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.7	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	9	50	1	13-08U-40				61.60	Colapage Henge (13-05)	1300286	01
1300288	1.8%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.8	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	10	35	1	13-08U-40				61.60	Colapage Henge (13-05)	1300288	01
1300290	1.9%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	1.9	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	10	27	1	13-08U-40				61.60	Colapage Henge (13-05)	1300290	01
1300292	2.1%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.1	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	10	28	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01
1300292	2.3%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.3	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	11	4	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01
1300292	2.5%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.5	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	11	12	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01
1300292	2.8%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	2.8	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	11	42	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01
1300296	3.2%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	3.2	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	11	34	1	13-08U-40				61.60	Colapage Henge (13-05)	1300296	01
1300298	4.0%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	4	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	12	10	1	13-08U-40				61.60	Colapage Henge (13-05)	1300298	01
1300298	5.5%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	5	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	12	21	1	13-08U-40				61.60	Colapage Henge (13-05)	1300298	01
1300291	6.0%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	6	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	12	50	1	13-08U-40				61.60	Colapage Henge (13-05)	1300291	01
1300297	7.5%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	7	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	12	9	1	13-08U-40				61.60	Colapage Henge (13-05)	1300297	01
1300294	8.2%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	8.2	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	13	30	1	13-08U-40				61.60	Colapage Henge (13-05)	1300294	01
1300295	8.5%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	8.6	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	13	40	1	13-08U-40				61.60	Colapage Henge (13-05)	1300295	01
1300297	11.2%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	11.2	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	14	11	1	13-08U-40				61.60	Colapage Henge (13-05)	1300297	01
1300288	13.2%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	13.2	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	14	20	1	13-08U-40				61.60	Colapage Henge (13-05)	1300288	01
1300288	16.4%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	16.4	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	14	40	1	13-08U-40				61.60	Colapage Henge (13-05)	1300288	01
1300281	18.0%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	18	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	15	0	1	13-08U-40				61.60	Colapage Henge (13-05)	1300281	01
1300292	21.0%	SC10-011	Groundmass	Colapage St. Crater Island	Anthony Rogers	21	FC1-3	28.38	0.064	Fluore et al (1998)	10.1268	0.137	0.00100502	0.137	303.087	0.094	0.00170725	0.063	1	4.00E-14	20	OCT	2013	15	13	1	13-08U-40				61.60	Colapage Henge (13-05)	1300292	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
13D02906	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02908	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02909	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02910	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02912	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02913	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02915	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02916	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02918	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02919	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02921	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02922	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02924	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02925	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02927	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02928	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02930	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02931	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0
13D02932	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0

13D02905.AGE >>> SC12-011 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
 73.6 ± 38.3
TOTAL FUSION
 35.5 ± 42.3
NORMAL
ISOCHRON
 83.2 ± 141.5
INVERSE
ISOCHRON
 83.5 ± 51.4

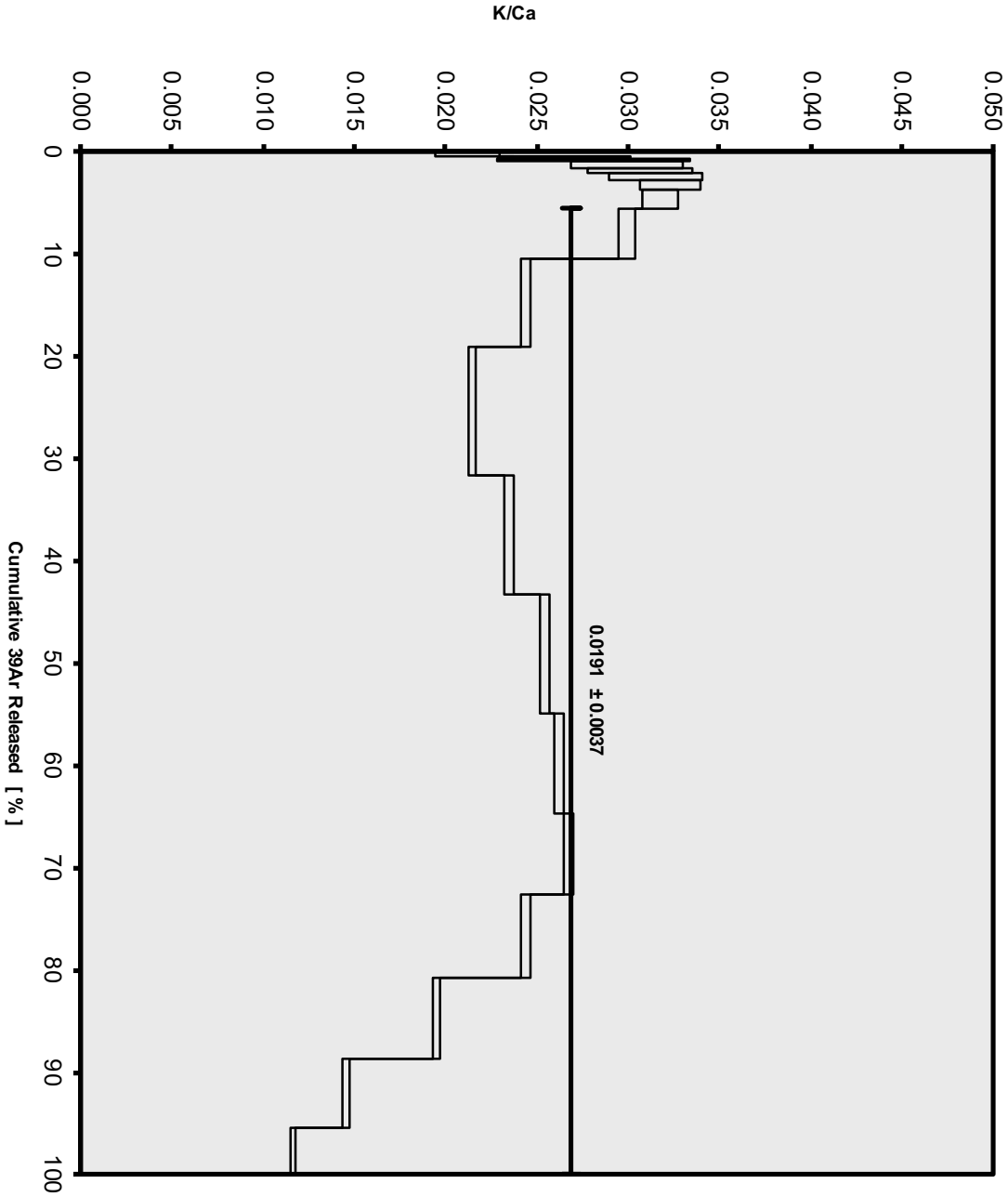
MSWD
(PROBABILITY)
0.91 (53%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers

IRR = 13-OSU-03
J = 0.00155952 ±

13D02905.AGE >>> SC12-011 >>> GALAPAGOS | HARPP (13-07) PROJECT



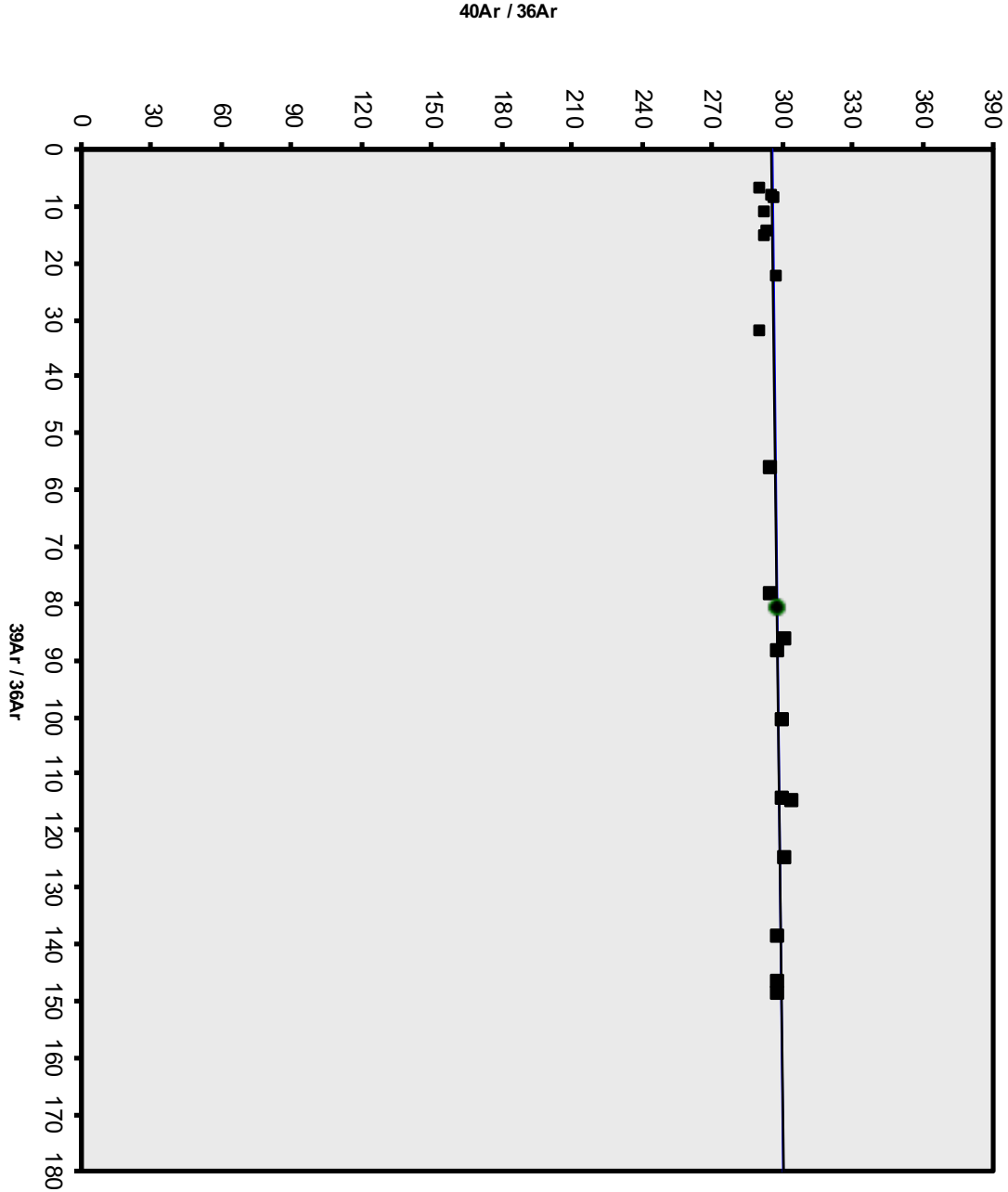
Ar-Ages in Ka

WEIGHTED
PLATEAU
73.6 ± 38.3
TOTAL FUSION
35.5 ± 42.3
NORMAL
ISOCHRON
83.2 ± 141.5
INVERSE
ISOCHRON
83.5 ± 51.4

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00155952 ±

13D02905.AGE >>> SC12-011 >>> GALAPAGOS | HARPP (13-07) PROJECT



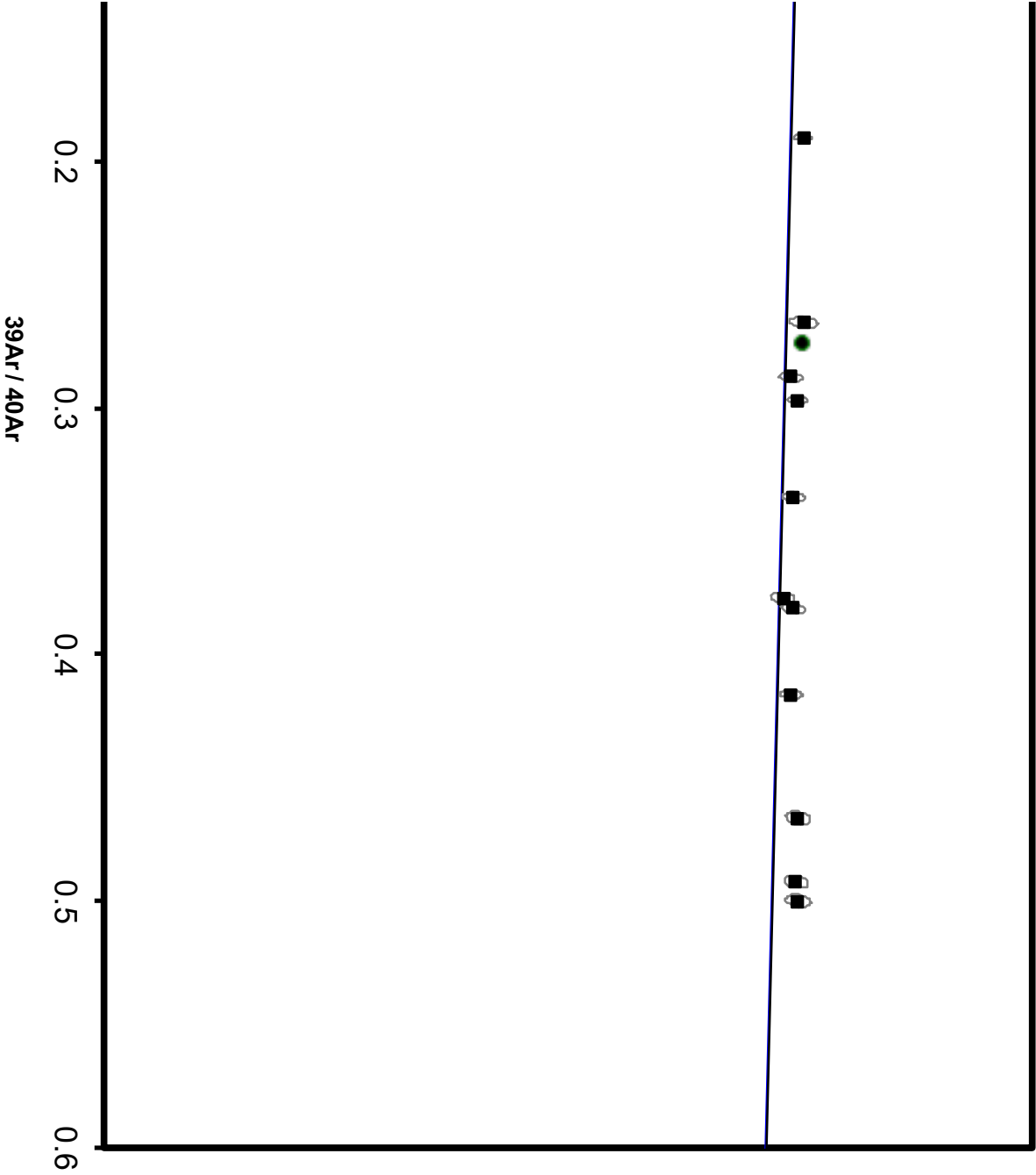
Ar-Ages in Ka

WEIGHTED
PLATEAU
73.6 ± 38.3
TOTAL FUSION
35.5 ± 42.3
NORMAL
ISOCHRON
83.2 ± 141.5
INVERSE
ISOCHRON
83.5 ± 51.4
MSWD
(PROBABILITY)
0.99 (44%)
40AR/36AR

Sample Info

Groundmass
Galapagos St. Cruz
Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00155952 ±

905.AGE >>> SC12-011 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED PLATEAU
73.6 ± 38.3
TOTAL FUSION
35.5 ± 42.3
NORMAL ISOCHRON
83.2 ± 141.5
INVERSE ISOCHRON
83.5 ± 51.4
MSWD (PROBABILITY)
1.01 (43%)
SPREADING FACTOR
0.9%
40AR/36AR INTERCEPT
295.1 ± 5.6

Sample Info

Groundmass
Galapagos St. Cruz Island
Anthony Koppers
IRR = 13-OSU-03
J = 0.00155952 ± 0.13700000
RECALIBRATED AGE

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D02365	1.7 %	✓	3.284309	28.2192	0.825577	23.57578	4.216568	523.9 $\pm$ 757.3	0.43	3.11	0.359 $\pm$ 0.164
14D02367	1.8 %	✓	2.272539	28.1867	0.643387	18.49627	2.334197	369.7 $\pm$ 718.7	0.35	2.44	0.282 $\pm$ 0.139
14D02368	1.9 %	✓	1.973681	27.2974	0.583338	20.12757	2.376291	345.9 $\pm$ 598.0	0.41	2.65	0.317 $\pm$ 0.161
14D02369	2.1 %	✓	1.797315	42.7470	0.609571	21.43982	0.561510	76.7 $\pm$ 534.3	0.11	2.83	0.216 $\pm$ 0.069
14D02371	2.3 %	✓	2.046780	65.2748	0.850857	30.44987	2.024917	194.8 $\pm$ 408.8	0.33	4.01	0.201 $\pm$ 0.042
14D02372	2.5 %	✓	1.420271	43.6815	0.536706	19.29197	3.355722	509.6 $\pm$ 509.9	0.79	2.54	0.190 $\pm$ 0.060
14D02374	2.8 %	✓	1.560091	60.0455	0.620137	25.70293	4.969985	566.6 $\pm$ 412.9	1.09	3.39	0.184 $\pm$ 0.043
14D02375	3.2 %	✓	1.876759	129.5127	0.887873	40.14766	0.659377	48.1 $\pm$ 292.1	0.12	5.29	0.133 $\pm$ 0.014
14D02377	4.0 %	✓	2.548348	341.4319	1.296685	69.79641	1.552442	65.2 $\pm$ 214.9	0.21	9.20	0.088 $\pm$ 0.004
14D02378	5.0 %	✓	3.300132	640.5041	1.603288	102.18665	0.742884	21.3 $\pm$ 178.5	0.08	13.47	0.069 $\pm$ 0.002
14D02380	6.0 %	✓	2.625360	394.2411	0.964817	61.33554	2.143327	102.4 $\pm$ 251.8	0.28	8.08	0.067 $\pm$ 0.003
14D02381	7.0 %	✓	2.539650	338.9902	0.790494	54.64553	1.605081	86.1 $\pm$ 269.9	0.21	7.20	0.069 $\pm$ 0.003
14D02383	8.2 %	✓	2.400367	256.3016	0.627200	42.74098	4.609811	316.0 $\pm$ 335.8	0.65	5.63	0.072 $\pm$ 0.004
14D02384	9.6 %	✓	2.481818	259.3053	0.634703	42.34341	3.548733	245.5 $\pm$ 340.4	0.48	5.58	0.070 $\pm$ 0.004
14D02386	10.2 %	✓	2.026532	154.4069	0.436153	24.64650	2.632007	312.9 $\pm$ 506.5	0.44	3.25	0.069 $\pm$ 0.007
14D02387	11.2 %	✓	1.702549	178.0249	0.379521	25.04713	4.909637	574.2 $\pm$ 446.6	0.97	3.30	0.060 $\pm$ 0.005
14D02389	13.2 %	✓	2.077341	326.7870	0.566108	36.41833	1.725206	138.8 $\pm$ 352.8	0.28	4.80	0.048 $\pm$ 0.002
14D02390	15.4 %	✓	2.453645	543.5434	0.691140	44.34559	2.184910	144.3 $\pm$ 335.5	0.30	5.84	0.035 $\pm$ 0.001
14D02392	18.0 %	✓	2.190845	532.9455	0.506923	35.58167	3.338712	274.9 $\pm$ 385.3	0.51	4.69	0.029 $\pm$ 0.001
14D02394	21.0 %		1.460802	293.7076	0.301697	20.58288	8.644534	1230.1 $\pm$ 510.8	1.96	2.71	0.030 $\pm$ 0.002
Σ			44.039135	4685.1544	14.356175	758.90248	27.251538				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-024 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Dan Miggins Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00162021 $\pm$ 0.14200000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau Error Mean	0.01368 $\pm$ 0.03624 $\pm$ 264.99%	40.1 $\pm$ 106.2 $\pm$ 264.99%	1.92 1%	97.29 19	0.042 $\pm$ 0.008
			Full External Error $\pm$ 106.2 Analytical Error $\pm$ 106.2	1.67 1.3843	2 σ Confidence Limit Error Magnification	
	Total Fusion Age	0.03591 $\pm$ 0.02724 $\pm$ 75.85%	105.2 $\pm$ 79.8 $\pm$ 75.85%		20	0.070 $\pm$ 0.001
			Full External Error $\pm$ 79.8 Analytical Error $\pm$ 79.8			

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Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02365	1.7 %	✓	7.18 $\pm$ 0.05	296.78 $\pm$ 1.86	0.8138
14D02367	1.8 %	✓	8.14 $\pm$ 0.07	296.53 $\pm$ 2.00	0.7528
14D02368	1.9 %	✓	10.20 $\pm$ 0.08	296.70 $\pm$ 2.09	0.7871
14D02369	2.1 %	✓	11.93 $\pm$ 0.10	295.19 $\pm$ 2.17	0.8012
14D02371	2.3 %	✓	14.88 $\pm$ 0.11	296.49 $\pm$ 2.08	0.8585
14D02372	2.5 %	✓	13.58 $\pm$ 0.12	297.86 $\pm$ 2.38	0.7754
14D02374	2.8 %	✓	16.48 $\pm$ 0.14	292.31 $\pm$ 2.30	0.8329
14D02375	3.2 %	✓	21.39 $\pm$ 0.16	295.85 $\pm$ 2.14	0.8878
14D02377	4.0 %	✓	27.39 $\pm$ 0.19	294.89 $\pm$ 2.00	0.9356
14D02378	5.0 %	✓	30.96 $\pm$ 0.20	295.73 $\pm$ 1.89	0.9499
14D02380	6.0 %	✓	23.36 $\pm$ 0.16	294.68 $\pm$ 2.00	0.9298
14D02381	7.0 %	✓	21.52 $\pm$ 0.15	294.87 $\pm$ 1.98	0.9213
14D02383	8.2 %	✓	17.81 $\pm$ 0.13	293.58 $\pm$ 2.03	0.9052
14D02384	9.6 %	✓	17.06 $\pm$ 0.12	296.93 $\pm$ 1.99	0.8996
14D02386	10.2 %	✓	12.16 $\pm$ 0.10	296.80 $\pm$ 2.11	0.8190
14D02387	11.2 %	✓	14.71 $\pm$ 0.12	298.38 $\pm$ 2.26	0.8352
14D02389	13.2 %	✓	17.53 $\pm$ 0.13	296.33 $\pm$ 2.12	0.8864
14D02390	15.4 %	✓	18.07 $\pm$ 0.13	296.39 $\pm$ 2.08	0.9115
14D02392	18.0 %	✓	16.24 $\pm$ 0.12	297.02 $\pm$ 2.15	0.8885
14D02394	21.0 %		14.09 $\pm$ 0.13	301.42 $\pm$ 2.50	0.8016

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	297.40 $\pm$ 1.74 $\pm$ 0.58%	0.08522 $\pm$ 0.09583 $\pm$ 112.45%	249.7 $\pm$ 280.8 $\pm$ 112.46% Full External Error $\pm$ 280.9 Analytical Error $\pm$ 280.8	1.58 6%
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.69 1.2589 19	Convergence Number of Iterations Calculated Line	0.00000014443 3 Weighted York-2

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Inverse Isochron			39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02365	1.7 %	✓	0.0241870 $\pm$ 0.0001042	0.00336946 $\pm$ 0.00002116	0.0603
14D02367	1.8 %	✓	0.0274479 $\pm$ 0.0001507	0.00337237 $\pm$ 0.00002278	0.0917
14D02368	1.9 %	✓	0.0343709 $\pm$ 0.0001739	0.00337036 $\pm$ 0.00002374	0.1261
14D02369	2.1 %	✓	0.0404109 $\pm$ 0.0002020	0.00338768 $\pm$ 0.00002494	0.1490
14D02371	2.3 %	✓	0.0501771 $\pm$ 0.0001949	0.00337280 $\pm$ 0.00002369	0.1539
14D02372	2.5 %	✓	0.0456026 $\pm$ 0.0002615	0.00335725 $\pm$ 0.00002684	0.1879
14D02374	2.8 %	✓	0.0563615 $\pm$ 0.0002646	0.00342098 $\pm$ 0.00002691	0.2007
14D02375	3.2 %	✓	0.0723066 $\pm$ 0.0002496	0.00338008 $\pm$ 0.00002439	0.2008
14D02377	4.0 %	✓	0.0928780 $\pm$ 0.0002273	0.00339109 $\pm$ 0.00002305	0.1644
14D02378	5.0 %	✓	0.1047067 $\pm$ 0.0002129	0.00338152 $\pm$ 0.00002159	0.1253
14D02380	6.0 %	✓	0.0792807 $\pm$ 0.0002036	0.00339347 $\pm$ 0.00002306	0.1481
14D02381	7.0 %	✓	0.0729715 $\pm$ 0.0001962	0.00339135 $\pm$ 0.00002275	0.1533
14D02383	8.2 %	✓	0.0606514 $\pm$ 0.0001859	0.00340623 $\pm$ 0.00002353	0.1468
14D02384	9.6 %	✓	0.0574595 $\pm$ 0.0001769	0.00336780 $\pm$ 0.00002259	0.1379
14D02386	10.2 %	✓	0.0409770 $\pm$ 0.0001886	0.00336929 $\pm$ 0.00002397	0.1304
14D02387	11.2 %	✓	0.0493041 $\pm$ 0.0002240	0.00335139 $\pm$ 0.00002541	0.1735
14D02389	13.2 %	✓	0.0591611 $\pm$ 0.0002059	0.00337461 $\pm$ 0.00002411	0.1639
14D02390	15.4 %	✓	0.0609782 $\pm$ 0.0001829	0.00337393 $\pm$ 0.00002362	0.1392
14D02392	18.0 %	✓	0.0546793 $\pm$ 0.0001918	0.00336673 $\pm$ 0.00002433	0.1443
14D02394	21.0 %		0.0467462 $\pm$ 0.0002598	0.00331766 $\pm$ 0.00002754	0.1722

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron				1.57
Clustered Points	297.42 $\pm$ 1.73 $\pm$ 0.58%	0.08526 $\pm$ 0.03808 $\pm$ 44.67%	249.8 $\pm$ 111.6 $\pm$ 44.67%	6%
			Full External Error $\pm$ 111.8 Analytical Error $\pm$ 111.6	
Statistics	2 σ Confidence Limit	1.69	Convergence	0.0040391511
	Error Magnification	1.2531	Number of Iterations	3
	Number of Data Points	19	Calculated Line	Weighted York-2
	Spreading Factor	0.7%		

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ	
14D02365	1.7 %	✓	3.292099	0.302	28.2192	22.865	1.711629	2.457	23.59477	0.205	974.754	0.064	0.17885 ± 0.25856	523.9 ± 757.3	0.43	3.11	0.359 ± 0.164
14D02366	1.8 %	✓	2.280245	0.314	28.1867	24.712	1.282530	3.105	18.51524	0.257	673.888	0.092	0.12620 ± 0.24536	369.7 ± 718.7	0.35	2.44	0.282 ± 0.139
14D02368	1.9 %	✓	1.981128	0.321	27.2974	25.447	1.185065	3.571	20.14594	0.228	585.619	0.106	0.11806 ± 0.20414	345.9 ± 598.0	0.41	2.65	0.317 ± 0.161
14D02369	2.1 %	✓	1.808851	0.332	42.7470	15.953	1.195416	3.438	21.46859	0.220	530.567	0.117	0.02619 ± 0.18236	76.7 ± 534.3	0.11	2.83	0.216 ± 0.089
14D02371	2.3 %	✓	2.043633	0.321	65.2748	10.573	1.588993	2.573	30.48380	0.164	606.879	0.102	0.06650 ± 0.13953	194.8 ± 408.8	0.33	4.01	0.201 ± 0.042
14D02372	2.5 %	✓	1.432004	0.346	43.6815	15.665	1.027769	4.057	19.32137	0.245	423.065	0.147	0.17394 ± 0.17410	509.6 ± 509.9	0.79	2.54	0.190 ± 0.060
14D02374	2.8 %	✓	1.576199	0.346	60.0455	11.596	1.212564	3.302	25.74334	0.190	456.063	0.136	0.19336 ± 0.14089	566.6 ± 412.9	1.09	3.39	0.184 ± 0.043
14D02375	3.2 %	✓	1.911316	0.324	129.5127	5.201	1.713522	2.384	40.23482	0.131	555.282	0.112	0.01642 ± 0.09971	48.1 ± 292.1	0.12	5.29	0.133 ± 0.014
14D02377	4.0 %	✓	2.639020	0.309	341.4319	2.245	2.614713	1.634	70.02619	0.090	751.555	0.083	0.02224 ± 0.07333	65.2 ± 214.9	0.21	9.20	0.088 ± 0.004
14D02378	5.0 %	✓	3.469885	0.290	640.5041	1.325	3.471997	1.165	102.61771	0.079	976.035	0.064	0.00727 ± 0.06094	21.3 ± 178.5	0.08	13.47	0.069 ± 0.002
14D02380	6.0 %	✓	2.729837	0.309	394.2411	1.968	2.208295	1.833	61.60086	0.099	773.712	0.080	0.03494 ± 0.08595	102.4 ± 251.8	0.28	8.08	0.067 ± 0.003
14D02381	7.0 %	✓	2.629469	0.305	338.9902	2.162	1.934140	2.037	54.87367	0.105	748.917	0.083	0.02937 ± 0.09210	86.1 ± 269.9	0.21	7.20	0.069 ± 0.003
14D02383	8.2 %	✓	2.468289	0.315	256.3016	2.905	1.597847	2.580	42.91347	0.124	704.742	0.088	0.10785 ± 0.11458	316.0 ± 335.8	0.65	5.63	0.072 ± 0.004
14D02384	9.6 %	✓	2.550536	0.307	259.3053	2.755	1.616467	2.500	42.51792	0.128	736.969	0.084	0.08381 ± 0.11621	245.5 ± 340.4	0.48	5.58	0.070 ± 0.004
14D02386	10.2 %	✓	2.067475	0.320	154.4069	4.782	1.116851	3.770	24.75042	0.204	601.497	0.103	0.10679 ± 0.17291	312.9 ± 506.5	0.44	3.25	0.069 ± 0.007
14D02387	11.2 %	✓	1.749704	0.334	178.0249	3.832	1.007509	4.013	25.16694	0.190	508.038	0.122	0.19602 ± 0.15247	574.2 ± 446.6	0.97	3.30	0.060 ± 0.005
14D02389	13.2 %	✓	2.163846	0.316	326.7870	2.258	1.414227	2.953	36.63826	0.140	615.616	0.101	0.04737 ± 0.12044	138.8 ± 352.8	0.28	4.80	0.048 ± 0.002
14D02390	15.4 %	✓	2.597425	0.310	543.5434	1.476	1.729932	2.296	44.71140	0.122	727.282	0.085	0.04927 ± 0.11451	144.3 ± 335.5	0.30	5.84	0.035 ± 0.001
14D02392	18.0 %	✓	2.331752	0.315	532.9455	1.464	1.395391	2.978	35.94034	0.145	650.769	0.096	0.09383 ± 0.13151	274.9 ± 385.3	0.51	4.69	0.029 ± 0.001
14D02394	21.0 %		1.538465	0.349	253.7076	2.497	0.849779	4.898	20.78054	0.236	440.332	0.141	0.41999 ± 0.17448	1230.1 ± 510.8	1.96	2.71	0.030 ± 0.002
Σ			45.281928	0.072	4685.1544	0.695	31.874636	0.576	762.05559	0.032	13041.582	0.021					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-024
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan Miggins
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00162021 ± 0.14200000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 23.5
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 0 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 39/37(ca) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(cl) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau						
Error Mean		0.01368 ± 0.03624 ± 264.99%	40.1 ± 106.2 ± 264.99%		1.92 97.29 1% 19	0.042 ± 0.008
					1.67 2σ Confidence Limit 1.3843 Error Magnification	
Total Fusion Age		0.03591 ± 0.02724 ± 75.85%	105.2 ± 79.8 ± 75.85%		20	0.070 ± 0.001
					Full External Error ± 79.8 Analytical Error ± 79.8	
Normal Isochron	297.40 ± 1.74 ± 0.58%	0.08522 ± 0.09583 ± 112.45%	249.7 ± 280.8 ± 112.46%		1.58 97.29 6% 19	
					1.69 2σ Confidence Limit 1.2589 Error Magnification	
					3 Number of Iterations 0.0000000144 Convergence	
Inverse Isochron	297.42 ± 1.73 ± 0.58%	0.08526 ± 0.03808 ± 44.67%	249.8 ± 111.6 ± 44.67%		1.57 97.29 6% 19	
Clustered Points					1.69 2σ Confidence Limit 1.2531 Error Magnification	
					3 Number of Iterations 0.0040391511 Convergence	
					1% Spreading Factor	

Depositing Patterns	36Ar(a) [a]	% σ	36Ar(c) [a]	% σ	36Ar(ca) [a]	% σ	36Ar(cd) [a]	% σ	37Ar(ca) [a]	% σ	38Ar(a) [a]	% σ	38Ar(c) [a]	% σ	38Ar(h) [a]	% σ	38Ar(ca) [a]	% σ	38Ar(cd) [a]	% σ	39Ar(a) [a]	% σ	39Ar(c) [a]	% σ	40Ar(r) [a]	% σ	40Ar(a) [a]	% σ	40Ar(c) [a]	% σ	40Ar(h) [a]	% σ		
14002365	1.7%	✓	1.384309	0.31	0.0000000	0.00	0.0074489	22.86	0.0003389	5.18	28.2192	22.86	0.6138074	0.31	0.0000000	0.00	0.2682804	0.21	0.0003025	22.86	0.825577	0.26	22.57576	0.21	0.0188915	22.86	4.276588	72.28	3765513	0.31	0.0000000	0.00	0.0038115	0.21
14002367	1.8%	✓	2.272539	0.32	0.0000000	0.00	0.0074413	24.71	0.0003549	6.26	28.1867	24.71	0.6147375	0.32	0.0000000	0.00	0.2104876	0.26	0.0028179	24.71	0.841387	6.33	18.48627	0.26	0.0186996	24.71	2.334197	97.21	671535	0.32	0.0000000	0.00	0.0188812	0.26
14002368	1.9%	✓	1.317691	0.34	0.0000000	0.00	0.0072265	25.45	0.0002452	7.32	27.2974	25.45	0.3688811	0.34	0.0000000	0.00	0.2228517	0.22	0.0027547	25.45	0.583338	7.38	20.12757	0.22	0.0185712	25.45	2.376291	86.45	582223	0.34	0.0000000	0.00	0.0003288	0.22
14002369	2.1%	✓	1.792135	0.35	0.0000000	0.00	0.0173852	15.36	0.0002510	6.81	42.7470	15.36	0.3339181	0.35	0.0000000	0.00	0.2454981	0.22	0.0025418	15.36	0.600571	6.87	21.42482	0.22	0.0027387	15.36	0.016110	346.15	331.136	0.35	0.0000000	0.00	0.0016562	0.22
14002371	2.3%	✓	2.042780	0.34	0.0000000	0.00	0.0172266	10.57	0.0003503	4.90	65.2748	10.57	0.3825420	0.34	0.0000000	0.00	0.3485765	0.16	0.0008732	10.57	0.850267	4.98	30.44887	0.16	0.0430000	10.57	2.024817	104.91	604404	0.34	0.0000000	0.00	0.0003754	0.16
14002372	2.5%	✓	1.420271	0.37	0.0000000	0.00	0.0116319	15.57	0.0002210	7.53	63.6815	15.57	0.2654467	0.37	0.0000000	0.00	0.2195426	0.25	0.0007717	15.57	0.5328705	7.88	19.29187	0.25	0.0000016	15.57	3.392322	50.04	419380	0.37	0.0000000	0.00	0.0194489	0.25
14002374	2.8%	✓	1.580091	0.37	0.0000000	0.00	0.0158200	11.80	0.0002554	6.53	60.0465	11.80	0.2919811	0.37	0.0000000	0.00	0.2360463	0.19	0.0005463	11.80	0.620137	6.59	25.70293	0.19	0.0404106	11.80	4.909895	36.43	461487	0.37	0.0000000	0.00	0.0209800	0.19
14002375	3.2%	✓	1.876759	0.34	0.0000000	0.00	0.0019144	5.20	0.0002668	4.70	120.9127	5.20	0.3507562	0.34	0.0000000	0.00	0.4508903	0.13	0.0186023	5.20	0.887873	4.78	40.14766	0.13	0.0871620	5.20	0.699777	303.54	554362	0.34	0.0000000	0.00	0.0045491	0.13
14002377	4.0%	✓	2.584348	0.33	0.0000000	0.00	0.0001380	2.24	0.0002640	3.63	341.4319	2.24	0.4752861	0.33	0.0000000	0.00	0.7940331	0.08	0.0474080	2.24	1.258466	3.95	89.79441	0.08	0.2207336	2.24	1.024142	164.85	703327	0.33	0.0000000	0.00	0.0194944	0.08
14002378	5.0%	✓	3.300132	0.31	0.0000000	0.00	0.1600031	1.33	0.0006603	2.69	640.5041	1.33	0.6167547	0.31	0.0000000	0.00	1.1628841	0.08	0.0898301	1.33	1.603288	2.84	102.18865	0.08	0.4310903	1.33	0.742884	419.11	975.189	0.31	0.0000000	0.00	0.0103285	0.08
14002380	6.0%	✓	2.620380	0.33	0.0000000	0.00	0.1907076	1.97	0.0003974	4.30	394.2411	1.97	0.4895797	0.33	0.0000000	0.00	0.6977994	0.10	0.0547996	1.97	0.994817	4.40	61.33554	0.10	0.2863342	1.97	2.143227	122.98	775.794	0.33	0.0000000	0.00	0.0019489	0.10
14002381	7.0%	✓	2.339600	0.32	0.0000000	0.00	0.0894034	2.16	0.0003256	5.07	338.9502	2.16	0.4748605	0.32	0.0000000	0.00	0.6219861	0.11	0.0471196	2.16	0.790494	5.16	54.64603	0.11	0.2281404	2.16	1.60081	156.78	760.466	0.32	0.0000000	0.00	0.0051820	0.11
14002383	8.2%	✓	2.403367	0.33	0.0000000	0.00	0.0897636	2.91	0.0002584	6.64	256.3016	2.91	0.4488267	0.33	0.0000000	0.00	0.4880324	0.13	0.0306028	2.91	0.627200	6.71	42.74098	0.13	0.1240910	2.91	4.630811	53.12	709.339	0.33	0.0000000	0.00	0.0041984	0.13
14002384	9.6%	✓	2.481818	0.32	0.0000000	0.00	0.0894646	2.78	0.0002415	6.44	259.3003	2.78	0.4488157	0.32	0.0000000	0.00	0.4811880	0.13	0.0306024	2.78	0.634703	6.61	42.34341	0.13	0.1181225	2.78	3.548733	66.33	733.377	0.32	0.0000000	0.00	0.0047368	0.13
14002386	10.2%	✓	2.026332	0.34	0.0000000	0.00	0.0407634	4.78	0.0001797	9.71	154.4069	4.78	0.3787588	0.34	0.0000000	0.00	0.2862772	0.21	0.0214026	4.78	0.430153	9.75	24.64690	0.21	0.1039159	4.78	2.630077	80.96	598.840	0.34	0.0000000	0.00	0.0248830	0.21
14002387	11.2%	✓	1.702549	0.36	0.0000000	0.00	0.0499598	3.83	0.0001894	10.70	176.0240	3.83	0.3132865	0.36	0.0000000	0.00	0.2882384	0.19	0.0247489	3.83	0.377621	10.74	25.04713	0.19	0.1188157	3.83	4.906637	36.89	503.163	0.36	0.0000000	0.00	0.0202076	0.19
14002389	12.1%	✓	2.077241	0.34	0.0000000	0.00	0.0867718	2.26	0.0003332	7.44	305.7870	2.26	0.3802520	0.34	0.0000000	0.00	0.4144468	0.14	0.0464234	2.26	0.666168	7.80	38.41833	0.14	0.2789276	2.26	1.752056	127.12	613.864	0.34	0.0000000	0.00	0.0067825	0.14
14002390	15.4%	✓	2.453945	0.34	0.0000000	0.00	0.1454955	1.48	0.0002848	5.83	543.5434	1.48	0.4088862	0.34	0.0000000	0.00	0.6504628	0.12	0.0785235	1.48	0.691140	5.90	44.34659	0.12	0.3636847	1.48	2.184910	116.20	725.052	0.34	0.0000000	0.00	0.0047889	0.12
14002392	18.0%	✓	2.183945	0.35	0.0000000	0.00	0.1482075	1.46	0.0002089	8.25	520.9455	1.46	0.4304689	0.35	0.0000000	0.00	0.4049154	0.15	0.0740764	1.46	0.628623	8.31	35.59167	0.15	0.1092723	1.46	3.138712	70.08	647.395	0.35	0.0000000	0.00	0.0002075	0.15
14002394	21.0%	✓	1.463932	0.39	0.0000000	0.00	0.0775388	2.50	0.0001243	13.84	293.7079	2.50	0.2773029	0.39	0.0000000	0.00	0.2342332	0.24	0.0408254	2.50	0.391697	13.87	20.59288	0.24	0.1676952	2.50	8.644534	20.77	421.687	0.39	0.0000000	0.00	0.0007887	0.24
Σ	44.039135	0.08	0.0000000	0.00	1.2368808	0.69	0.0059125	1.30	4685.1544	0.69	8.2399143	0.08	0.0000000	0.00	8.6363103	0.03	0.6512265	0.69	14.356175	1.32	758.30248	0.03	3.1931089	0.69	27.251538	37.92	13011354	0.08	0.0000000	0.00	0.7664915	0.03		
Σ							45.281928	0.08	4685.1544	0.69					31.874036	0.09				0.09												13041.182	0.11	

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Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02365	1.7 %	✓	41.312276	0.088581	1.195995	0.273471	0.139527	0.000509	253.492	149.820121	1.00179112	4.679E-11
14D02367	1.8 %	✓	36.396393	0.099411	1.522348	0.376216	0.123155	0.000499	253.509	149.871506	1.00179124	3.235E-11
14D02368	1.9 %	✓	29.068859	0.073176	1.354983	0.344822	0.098339	0.000388	253.518	149.898233	1.00179131	2.811E-11
14D02369	2.1 %	✓	24.713627	0.061481	1.991141	0.317676	0.084256	0.000335	253.526	149.922908	1.00179137	2.547E-11
14D02371	2.3 %	✓	19.901726	0.038491	2.140594	0.226355	0.067698	0.000244	253.544	149.974328	1.00179149	2.913E-11
14D02372	2.5 %	✓	21.896241	0.062495	2.260787	0.354202	0.074116	0.000314	253.552	149.999016	1.00179155	2.031E-11
14D02374	2.8 %	✓	17.715767	0.041417	2.332467	0.270507	0.061227	0.000242	253.569	150.050462	1.00179167	2.189E-11
14D02375	3.2 %	✓	13.801035	0.023741	3.218921	0.167460	0.047504	0.000166	253.578	150.077221	1.00179173	2.665E-11
14D02377	4.0 %	✓	10.732485	0.013084	4.875774	0.109544	0.037686	0.000121	253.596	150.128694	1.00179186	3.607E-11
14D02378	5.0 %	✓	9.511371	0.009632	6.241653	0.082855	0.033814	0.000102	253.604	150.153407	1.00179192	4.685E-11
14D02380	6.0 %	✓	12.560091	0.016049	6.399928	0.126122	0.044315	0.000144	253.622	150.204906	1.00179204	3.714E-11
14D02381	7.0 %	✓	13.648014	0.018261	6.177648	0.133703	0.047919	0.000155	253.630	150.229632	1.00179210	3.595E-11
14D02383	8.2 %	✓	16.422393	0.025022	5.972520	0.173671	0.057518	0.000195	253.647	150.281157	1.00179222	3.383E-11
14D02384	9.6 %	✓	17.333129	0.026540	6.098729	0.168221	0.059987	0.000200	253.656	150.305895	1.00179228	3.537E-11
14D02386	10.2 %	✓	24.302503	0.055535	6.238558	0.298617	0.083533	0.000317	253.673	150.357446	1.00179240	2.887E-11
14D02387	11.2 %	✓	20.186729	0.045558	7.073759	0.271410	0.069524	0.000267	253.682	150.384260	1.00179247	2.439E-11
14D02389	13.2 %	✓	16.802551	0.029034	8.919282	0.201761	0.059060	0.000204	253.699	150.435838	1.00179259	2.955E-11
14D02390	15.4 %	✓	16.266137	0.024182	12.156709	0.180093	0.058093	0.000194	253.708	150.460602	1.00179265	3.491E-11
14D02392	18.0 %	✓	18.106934	0.031416	14.828617	0.218181	0.064878	0.000225	253.725	150.512206	1.00179277	3.124E-11
14D02394	21.0 %		21.189640	0.058260	14.133779	0.354534	0.074034	0.000312	253.742	150.563828	1.00179289	2.114E-11

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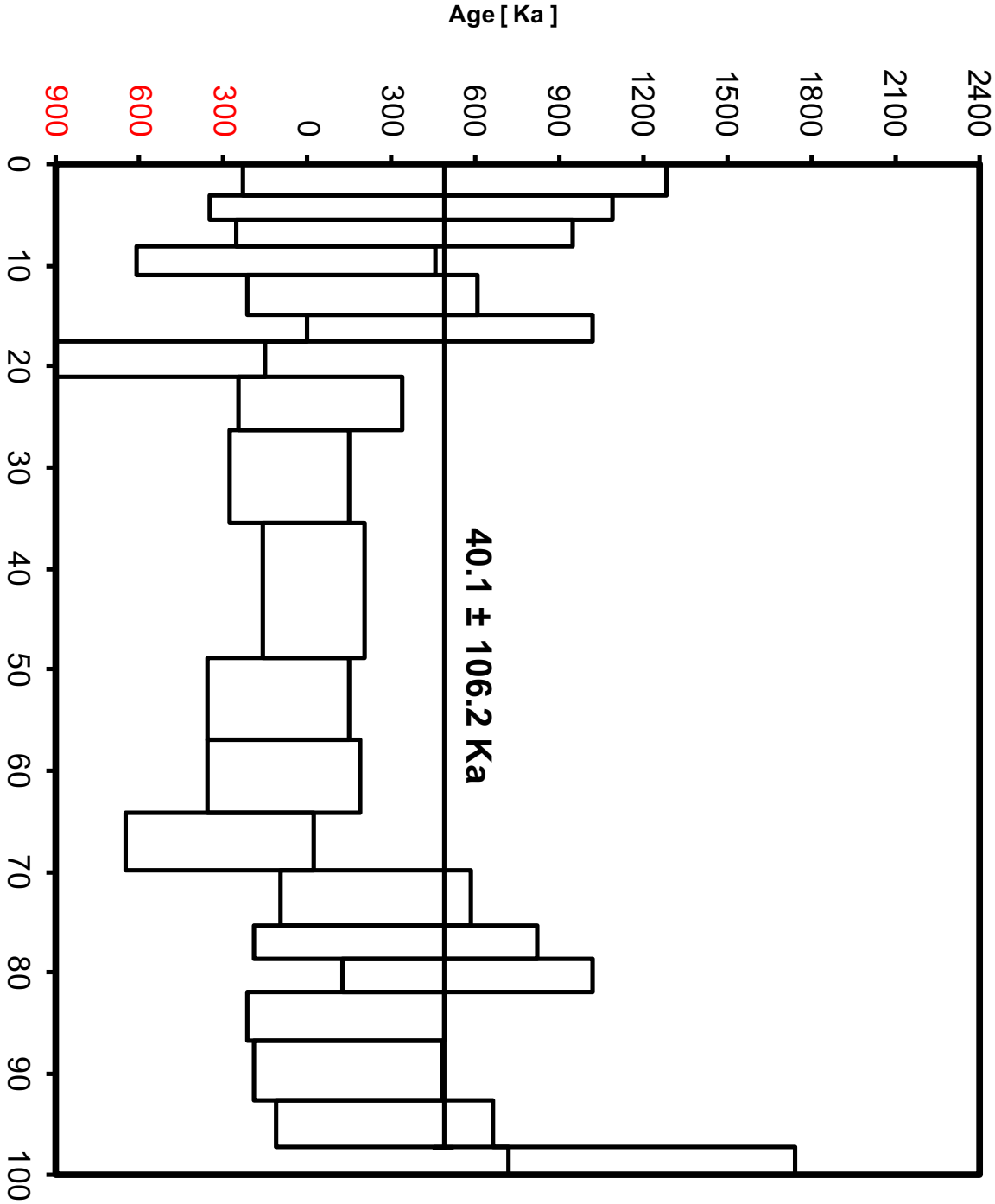
Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
14D02365	1.7 %	0.0162050	0.0019047	0.0233765	0.0322817	0.0183004	0.0296009	0.0776806	0.0362747	4.6129717	0.6195977
14D02367	1.8 %	0.0168473	0.0019047	0.0206197	0.0322817	0.0193011	0.0296009	0.0804363	0.0362747	4.8230786	0.6195977
14D02368	1.9 %	0.0171448	0.0019047	0.0191861	0.0322817	0.0198216	0.0296009	0.0818693	0.0362747	4.9212334	0.6195977
14D02369	2.1 %	0.0173974	0.0019047	0.0178629	0.0322817	0.0203019	0.0296009	0.0831921	0.0362747	5.0050963	0.6195977
14D02371	2.3 %	0.0178555	0.0019047	0.0151060	0.0322817	0.0213027	0.0296009	0.0859478	0.0362747	5.1590247	0.6195977
14D02372	2.5 %	0.0180427	0.0019047	0.0137828	0.0322817	0.0217831	0.0296009	0.0872706	0.0362747	5.2229330	0.6195977
14D02374	2.8 %	0.0183646	0.0019047	0.0110259	0.0322817	0.0227839	0.0296009	0.0900264	0.0362747	5.3352893	0.6195977
14D02375	3.2 %	0.0184955	0.0019047	0.0095924	0.0322817	0.0233043	0.0296009	0.0914593	0.0362747	5.3826137	0.6195977
14D02377	4.0 %	0.0186775	0.0019047	0.0068356	0.0322817	0.0243051	0.0296009	0.0942151	0.0362747	5.4522743	0.6195977
14D02378	5.0 %	0.0187321	0.0019047	0.0055123	0.0322817	0.0247854	0.0296009	0.0955379	0.0362747	5.4757341	0.6195977
14D02380	6.0 %	0.0187777	0.0019047	0.0027555	0.0322817	0.0257862	0.0296009	0.0982936	0.0362747	5.5038225	0.6195977
14D02381	7.0 %	0.0187670	0.0019047	0.0014322	0.0322817	0.0262666	0.0296009	0.0996164	0.0362747	5.5073277	0.6195977
14D02383	8.2 %	0.0186764	0.0019047	0.0013246	0.0322817	0.0272674	0.0296009	0.1023721	0.0362747	5.4938440	0.6195977
14D02384	9.6 %	0.0186002	0.0019047	0.0026479	0.0322817	0.0277478	0.0296009	0.1036949	0.0362747	5.4773946	0.6195977
14D02386	10.2 %	0.0183734	0.0019047	0.0054047	0.0322817	0.0287485	0.0296009	0.1064507	0.0362747	5.4223388	0.6195977
14D02387	11.2 %	0.0182190	0.0019047	0.0068383	0.0322817	0.0292690	0.0296009	0.1078837	0.0362747	5.3826089	0.6195977
14D02389	13.2 %	0.0178522	0.0019047	0.0095951	0.0322817	0.0302697	0.0296009	0.1106394	0.0362747	5.2848574	0.6195977
14D02390	15.4 %	0.0176435	0.0019047	0.0109184	0.0322817	0.0307501	0.0296009	0.1119622	0.0362747	5.2279594	0.6195977
14D02392	18.0 %	0.0171405	0.0019047	0.0136752	0.0322817	0.0317509	0.0296009	0.1147179	0.0362747	5.0886358	0.6195977
14D02394	21.0 %	0.0165454	0.0019047	0.0164321	0.0322817	0.0327517	0.0296009	0.1174737	0.0362747	4.9212229	0.6195977

Intercept Values		36Ar [A]				37Ar [A]				38Ar [A]				39Ar [A]				40Ar [A]			
		1σ	r2			1σ	r2			1σ	r2			1σ	r2			1σ	r2		
14D02365	1.7%	3.157402	0.004484	0.9602	EXP 150 of 150	0.1616	0.0273	0.0024	EXP 150 of 150	1.672809	0.029382	0.1248	EXP 150 of 150	23.48833	0.02766	0.9690	EXP 149 of 150	981.418039	0.070838	0.9998	EXP 150 of 150
14D02367	1.8%	2.192571	0.003327	0.9554	EXP 149 of 150	0.1641	0.0322	0.0024	EXP 150 of 150	1.247854	0.025878	0.1200	EXP 150 of 150	18.45198	0.02797	0.9477	EXP 149 of 150	680.129338	0.061701	0.9997	EXP 150 of 150
14D02368	1.9%	1.907463	0.003039	0.9476	EXP 150 of 150	0.1596	0.0321	0.0041	EXP 150 of 150	1.151037	0.029499	0.0277	EXP 150 of 150	20.07145	0.02470	0.9547	EXP 150 of 150	591.773121	0.052868	0.9997	EXP 150 of 150
14D02369	2.1%	1.743335	0.003030	0.9398	EXP 150 of 150	0.2621	0.0308	0.0054	EXP 149 of 150	1.160783	0.027761	0.0536	EXP 150 of 150	21.36516	0.02630	0.9540	EXP 150 of 150	536.686382	0.059108	0.9995	EXP 150 of 150
14D02371	2.3%	1.987593	0.003200	0.9483	EXP 150 of 150	0.4123	0.0315	0.0126	EXP 150 of 150	1.548641	0.027417	0.1707	EXP 150 of 150	30.34307	0.02807	0.9800	EXP 150 of 150	613.315365	0.063629	0.9996	EXP 150 of 150
14D02372	2.5%	1.384426	0.002492	0.9347	EXP 150 of 150	0.2722	0.0310	0.0005	EXP 150 of 150	0.993665	0.028619	0.0725	EXP 150 of 150	19.29868	0.02724	0.9558	EXP 150 of 150	429.178548	0.055143	0.9993	EXP 150 of 150
14D02374	2.8%	1.522314	0.002868	0.9322	EXP 150 of 150	0.3520	0.0320	0.0003	EXP 150 of 150	1.175243	0.026194	0.0841	EXP 150 of 150	25.63356	0.02601	0.9739	EXP 150 of 150	462.357968	0.055185	0.9994	EXP 150 of 150
14D02375	3.2%	1.842251	0.002973	0.9507	EXP 150 of 150	0.8379	0.0303	0.0043	EXP 150 of 150	1.669675	0.027353	0.1154	EXP 150 of 150	40.01399	0.02762	0.9885	EXP 150 of 150	581.833356	0.068013	0.9996	EXP 150 of 150
14D02377	4.0%	2.536731	0.003770	0.9564	EXP 150 of 150	2.2266	0.0346	0.1671	EXP 150 of 150	2.595061	0.025933	0.1849	EXP 150 of 150	69.57688	0.02566	0.9969	EXP 150 of 150	758.588894	0.061840	0.9998	EXP 150 of 150
14D02378	5.0%	3.326666	0.003876	0.9733	EXP 150 of 150	4.1835	0.0328	0.3953	EXP 150 of 150	3.405587	0.026511	0.3076	EXP 150 of 150	101.91675	0.03189	0.9978	EXP 150 of 150	983.564842	0.071617	0.9998	EXP 150 of 150
14D02380	6.0%	2.623485	0.003908	0.9591	EXP 150 of 150	2.5748	0.0341	0.1581	EXP 150 of 150	2.159034	0.026764	0.1676	EXP 150 of 150	61.22101	0.02998	0.9944	EXP 150 of 150	780.844454	0.067323	0.9997	EXP 150 of 150
14D02381	7.0%	2.327707	0.003544	0.9611	EXP 150 of 150	2.2145	0.0313	0.1848	EXP 150 of 150	1.884686	0.025155	0.0705	EXP 150 of 150	54.54736	0.02785	0.9940	EXP 150 of 150	755.999372	0.073223	0.9996	EXP 150 of 150
14D02383	8.2%	2.373825	0.003741	0.9511	EXP 149 of 150	1.6762	0.0342	0.0663	EXP 150 of 150	1.551423	0.027906	0.0521	EXP 150 of 150	42.68275	0.02777	0.9903	EXP 150 of 150	711.718881	0.058994	0.9997	EXP 150 of 150
14D02384	9.6%	2.452226	0.003511	0.9602	EXP 150 of 150	1.6968	0.0313	0.0600	EXP 150 of 150	1.569340	0.026711	0.0477	EXP 150 of 150	42.29159	0.02981	0.9882	EXP 150 of 150	743.999958	0.067173	0.9997	EXP 150 of 150
14D02386	10.2%	1.991080	0.003165	0.9518	EXP 150 of 150	1.0139	0.0350	0.0250	EXP 150 of 150	1.074713	0.029195	0.0687	EXP 150 of 150	24.66475	0.03086	0.9640	EXP 150 of 150	608.185313	0.061417	0.9996	EXP 150 of 150
14D02387	11.2%	1.887721	0.002939	0.9411	EXP 150 of 150	1.1684	0.0395	0.0786	EXP 150 of 150	0.966151	0.026793	0.0148	EXP 150 of 150	25.07847	0.02513	0.9754	EXP 150 of 150	514.490325	0.058392	0.9995	EXP 150 of 150
14D02389	13.2%	2.082513	0.003214	0.9539	EXP 149 of 150	2.1428	0.0320	0.1190	EXP 150 of 150	1.367003	0.028700	0.0780	EXP 150 of 150	36.46450	0.02764	0.9870	EXP 150 of 150	622.196630	0.061141	0.9996	EXP 150 of 150
14D02390	15.4%	2.496009	0.003755	0.9572	EXP 149 of 150	3.5986	0.0318	0.2639	EXP 150 of 150	1.678442	0.025666	0.2150	EXP 149 of 150	44.47629	0.02865	0.9905	EXP 150 of 150	734.040210	0.065132	0.9997	EXP 150 of 150
14D02392	18.0%	2.242010	0.003495	0.9517	EXP 150 of 150	3.4910	0.0297	0.3140	EXP 150 of 150	1.346911	0.028401	0.0554	EXP 150 of 150	35.77807	0.02915	0.9844	EXP 150 of 150	657.227513	0.068419	0.9996	EXP 150 of 150
14D02394	21.0%	1.489481	0.002830	0.9538	EXP 150 of 150	1.9321	0.0323	0.1989	EXP 150 of 150	0.803640	0.028524	0.0279	EXP 150 of 150	20.73670	0.02978	0.9532	EXP 150 of 150	446.180733	0.051841	0.9994	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	$\delta^{15}N$	Standard Reference	Standard 40Ar/39Ar	$\delta^{15}N$	J	$\delta^{15}N$	Ar 40Ar/39Ar	$\delta^{15}N$	MCP	$\delta^{15}N$	Volume Ratio	Sensitivity (mV/ps)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes	
HC0295	1.7%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	1.7	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	1	10	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0296	1.8%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	1.8	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	1	41	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0297	1.9%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	1.9	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	1	54	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0298	2.1%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	2.1	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	2	6	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0299	2.3%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	2.3	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	2	31	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0300	2.5%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	2.5	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	2	43	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0301	2.8%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	2.8	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	3	8	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0302	3.2%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	3.2	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	3	21	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0303	4.0%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	4	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	3	46	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0304	5.6%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	5	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	3	50	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0305	6.0%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	6	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	4	23	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0306	7.9%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	7	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	4	30	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0307	8.2%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	8.2	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	5	0	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0308	9.8%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	9.8	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	5	12	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0309	10.2%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	10.2	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	5	19	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0310	11.2%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	11.2	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	5	30	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0311	13.2%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	13.2	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	6	10	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0312	18.4%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	18.4	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	6	27	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0313	18.6%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	18	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	6	30	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01
HC0314	21.0%	SC10-GN	Groundmass	Colapage St. Crater Island	Dan Magrane	21	FC1-3	28.38	0.084	Penner et al (1998)	0.94603	0.142	0.00102021	0.142	302.701	0.008	0.00400000	0.003	1	4.00E-14	30	JAN	2014	7	13	1	15-08U-03	0.00	0.00	0.00	Colapage Heps (15-05)	14020294	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D02365	1.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02367	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02368	1.9 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02369	2.1 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02371	2.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02372	2.5 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02374	2.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02375	3.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02377	4.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02378	5.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02380	6.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02381	7.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02383	8.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02384	9.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02386	10.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02387	11.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02389	13.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02390	15.4 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02392	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02394	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	

14D02364.AGE >>> SC12-024 >>> GALAPAGOS | HARPP (13-07) PROJECT



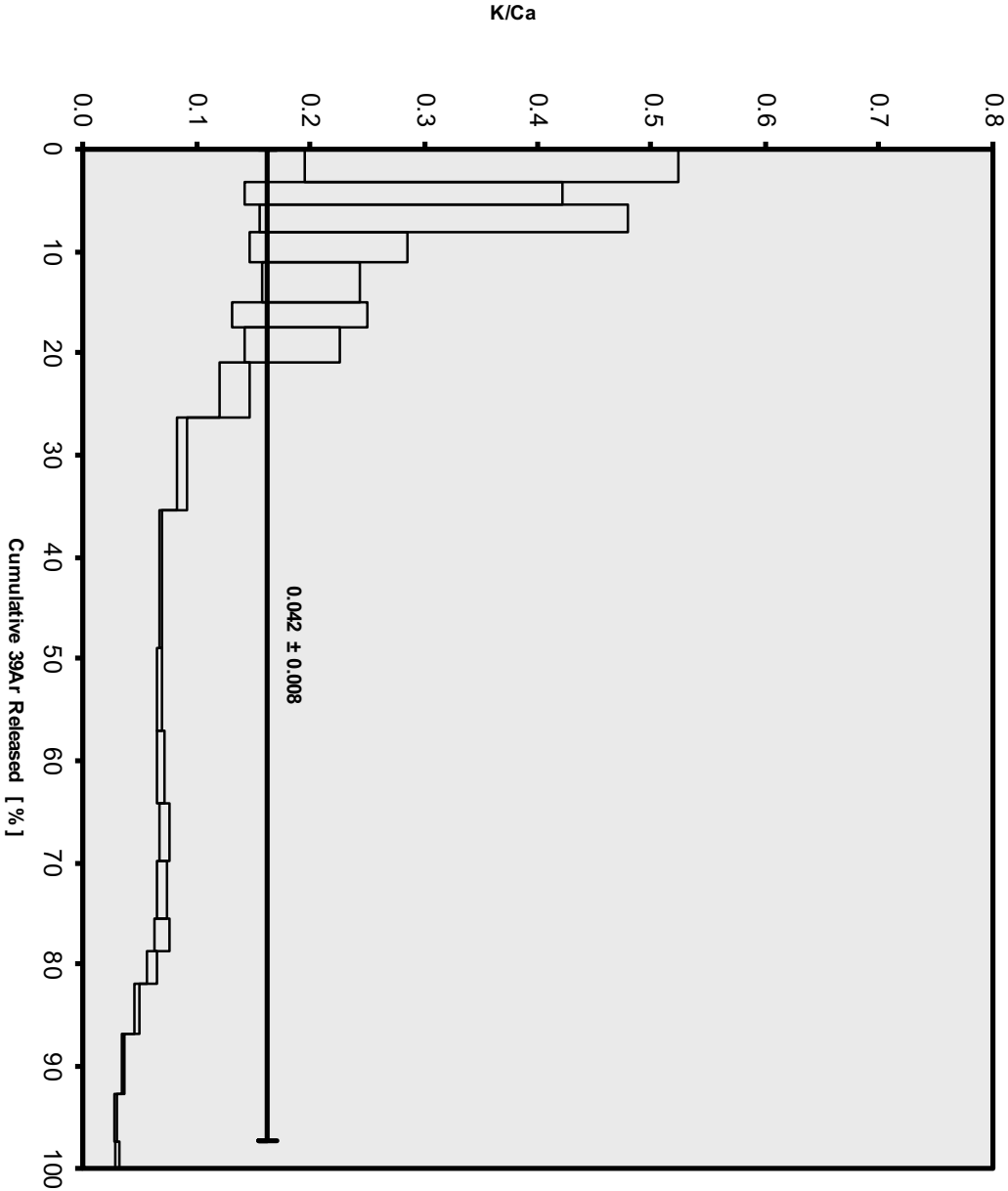
Ar-Ages in Ka

WEIGHTED PLATEAU
40.1 ± 106.2
TOTAL FUSION
105.2 ± 79.8
NORMAL ISOCHRON
-249.7 ± 280.8 (NEG)
INVERSE ISOCHRON
-249.8 ± 111.6 (NEG)
MSWD (PROBABILITY)
1.92 (1%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
J = 0.00162021 ±
0.14200000

14D02364.AGE >>> SC12-024 >>> GALAPAGOS | HARPP (13-07) PROJECT



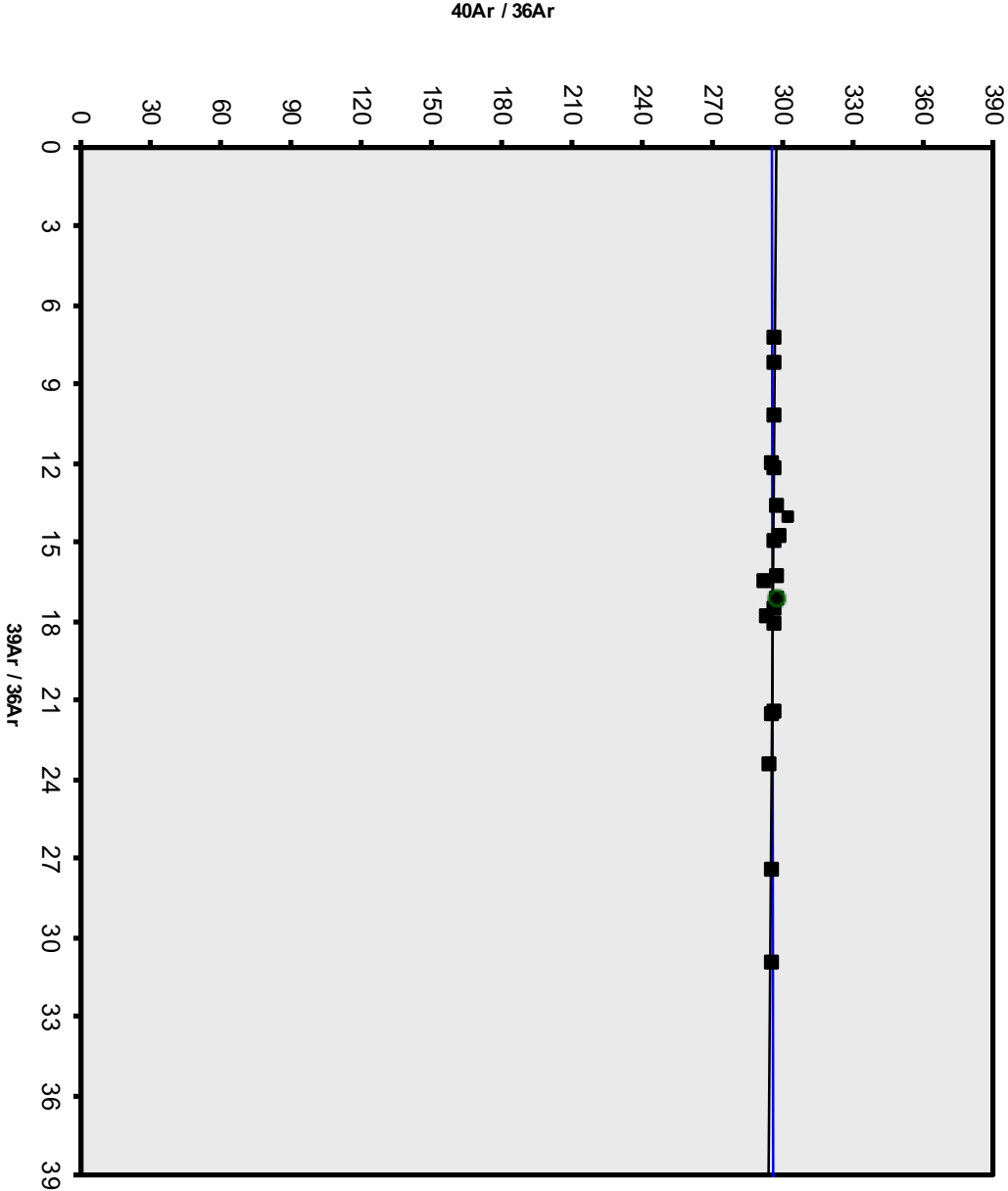
Ar-Ages in Ka

WEIGHTED
PLATEAU
 40.1 ± 106.2
TOTAL FUSION
 105.2 ± 79.8
NORMAL
ISOCHRON
 -249.7 ± 280.8
(NEG)
INVERSE
ISOCHRON
 -249.8 ± 111.6
(NEG)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02364.AGE >>> SC12-024 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

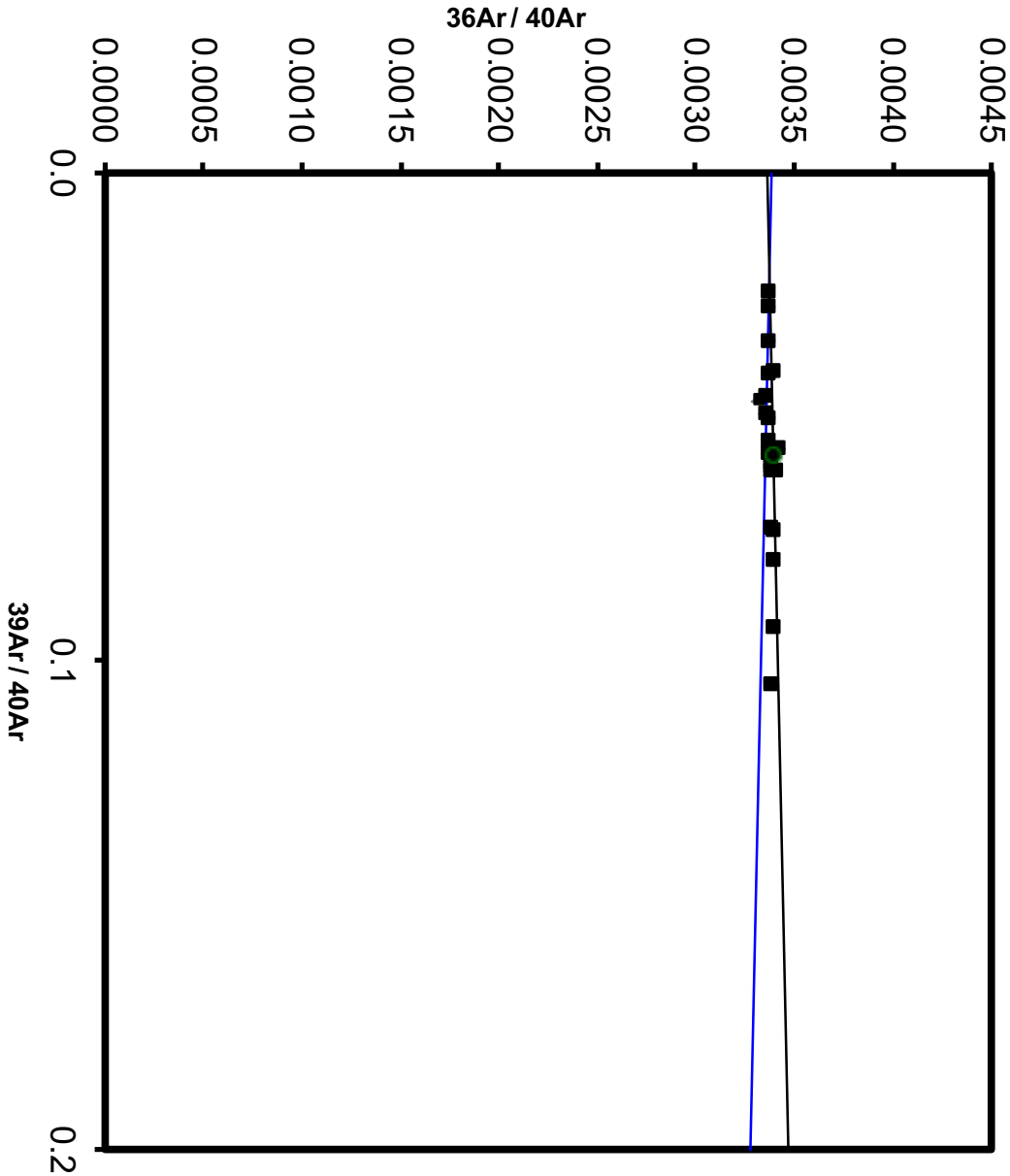
WEIGHTED
PLATEAU
40.1 ± 106.2
TOTAL FUSION
105.2 ± 79.8
NORMAL
ISOCHRON
-249.7 ± 280.8
(NEG)
INVERSE
ISOCHRON
-249.8 ± 111.6
(NEG)

MSWD
(PROBABILITY)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02364.AGE >>> SC12-024 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
40.1 ± 106.2
TOTAL FUSION
105.2 ± 79.8
NORMAL
ISOCHRON
-249.7 ± 280.8
(NEG)
INVERSE
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-249.8 ± 111.6
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MSWD

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D02303	1.7 %	5.502584	27.5960	0.1228299	2.03081	9.583748	14.17 $\pm$ 13.81	0.59	0.80	0.0316 $\pm$ 0.0146
14D02305	1.8 %	3.163638	20.9096	0.0710990	0.97512	8.114295	25.07 $\pm$ 17.91	0.88	0.38	0.0201 $\pm$ 0.0129
14D02306	1.9 %	3.659244	34.3011	0.1298491	1.66564	2.612785	4.70 $\pm$ 11.71	0.24	0.65	0.0209 $\pm$ 0.0085
14D02307	2.1 %	2.392268	13.6285	0.0635774	1.08568	0.696879	1.92 $\pm$ 12.90	0.10	0.43	0.0343 $\pm$ 0.0334
14D02309	2.3 %	3.329713	24.5230	0.0692048	2.31021	7.294334	9.47 $\pm$ 7.94	0.75	0.91	0.0405 $\pm$ 0.0223
14D02310	2.5 %	2.511625	28.4595	0.0000000	1.95613	3.810997	5.84 $\pm$ 7.43	0.52	0.77	0.0296 $\pm$ 0.0143
14D02312	2.8 %	2.858143	52.0168	0.0743119	2.92996	2.348592	2.40 $\pm$ 5.43	0.28	1.15	0.0242 $\pm$ 0.0065
14D02313	3.2 %	2.995736	57.3347	0.0326103	3.99584	4.821006	3.61 $\pm$ 4.18	0.55	1.57	0.0300 $\pm$ 0.0071
14D02315	4.0 %	3.297782	80.5720	0.0648430	5.41395	1.203842	0.67 $\pm$ 3.27	0.12	2.13	0.0289 $\pm$ 0.0048
14D02316	5.0 %	4.938658	197.0165	0.0635781	15.20901	5.442078	1.07 $\pm$ 1.65	0.37	5.98	0.0332 $\pm$ 0.0022
14D02318	6.0 %	5.709297	305.1517	0.0916646	24.70296	15.241158	1.85 $\pm$ 1.18	0.91	9.71	0.0348 $\pm$ 0.0017
14D02319	7.0 %	5.192867	267.4126	0.0758944	24.29476	8.624408	1.06 $\pm$ 1.09	0.57	9.55	0.0391 $\pm$ 0.0020
14D02321	8.2 %	6.144701	330.9212	0.1241353	30.94811	8.919726	0.86 $\pm$ 0.99	0.49	12.16	0.0402 $\pm$ 0.0018
14D02322	9.6 %	6.516120	305.5911	0.1606596	28.86344	7.928094	0.82 $\pm$ 1.13	0.41	11.34	0.0406 $\pm$ 0.0019
14D02324	10.2 %	4.049660	144.4594	0.1113488	14.12699	1.145663	0.24 $\pm$ 1.50	0.10	5.55	0.0421 $\pm$ 0.0039
14D02325	11.2 %	3.079859	137.3624	0.1217514	12.62298	3.500180	0.83 $\pm$ 1.33	0.38	4.96	0.0395 $\pm$ 0.0037
14D02327	13.2 %	3.154672	261.9425	0.1989922	18.95279	8.639554	1.36 $\pm$ 0.92	0.92	7.45	0.0311 $\pm$ 0.0016
14D02328	15.4 % ✓	2.642175	414.2132	0.2777554	22.57373	11.149166	1.48 $\pm$ 0.68	1.41	8.87	0.0234 $\pm$ 0.0009
14D02330	18.0 % ✓	2.337955	469.8838	0.2244425	21.67550	3.272047	0.45 $\pm$ 0.66	0.47	8.52	0.0198 $\pm$ 0.0006
14D02332	21.0 % ✓	1.730974	483.5647	0.1821380	18.10083	4.866700	0.80 $\pm$ 0.66	0.94	7.11	0.0161 $\pm$ 0.0005
Σ		75.207672	3656.8602	2.2606861	254.43443	54.966201				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-584B Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Dan Miggins Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00165434 $\pm$ 0.14500000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.30018 $\pm$ 0.19971 $\pm$ 66.53%	0.90 $\pm$ 0.60 $\pm$ 66.51%	2.39 9%	24.51 3	0.0187 $\pm$ 0.0040
			Full External Error $\pm$ 0.60 Analytical Error $\pm$ 0.60	3.00 1.5449	2 σ Confidence Limit Error Magnification	
	Total Fusion Age	0.21603 $\pm$ 0.12347 $\pm$ 57.15%	0.65 $\pm$ 0.37 $\pm$ 57.16%		20	0.0299 $\pm$ 0.0005
			Full External Error $\pm$ 0.37 Analytical Error $\pm$ 0.37			

OSU Argon Geochronology Lab

Normal Isochron		39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02303	1.7 %	0.37 $\pm$ 0.01	293.76 $\pm$ 1.68	0.1420
14D02305	1.8 %	0.31 $\pm$ 0.02	292.94 $\pm$ 1.79	0.0751
14D02306	1.9 %	0.46 $\pm$ 0.02	294.79 $\pm$ 1.77	0.1233
14D02307	2.1 %	0.45 $\pm$ 0.03	295.79 $\pm$ 1.96	0.0851
14D02309	2.3 %	0.69 $\pm$ 0.02	293.31 $\pm$ 1.82	0.1782
14D02310	2.5 %	0.78 $\pm$ 0.03	293.98 $\pm$ 1.92	0.1549
14D02312	2.8 %	1.03 $\pm$ 0.03	294.68 $\pm$ 1.85	0.2162
14D02313	3.2 %	1.33 $\pm$ 0.03	293.89 $\pm$ 1.85	0.2989
14D02315	4.0 %	1.64 $\pm$ 0.03	295.13 $\pm$ 1.79	0.3582
14D02316	5.0 %	3.08 $\pm$ 0.02	294.40 $\pm$ 1.70	0.7133
14D02318	6.0 %	4.33 $\pm$ 0.03	292.83 $\pm$ 1.69	0.8390
14D02319	7.0 %	4.68 $\pm$ 0.03	293.84 $\pm$ 1.69	0.8352
14D02321	8.2 %	5.04 $\pm$ 0.03	294.05 $\pm$ 1.67	0.8919
14D02322	9.6 %	4.43 $\pm$ 0.03	294.28 $\pm$ 1.66	0.8676
14D02324	10.2 %	3.49 $\pm$ 0.03	295.22 $\pm$ 1.74	0.6919
14D02325	11.2 %	4.10 $\pm$ 0.04	296.64 $\pm$ 1.84	0.6865
14D02327	13.2 %	6.01 $\pm$ 0.05	298.24 $\pm$ 1.87	0.8015
14D02328	15.4 % ✓	8.54 $\pm$ 0.07	299.72 $\pm$ 1.98	0.8326
14D02330	18.0 % ✓	9.27 $\pm$ 0.07	296.90 $\pm$ 2.06	0.8366
14D02332	21.0 % ✓	10.46 $\pm$ 0.09	298.31 $\pm$ 2.35	0.8224

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	305.21 $\pm$ 26.84 $\pm$ 8.80%	0.73682 $\pm$ 2.87267 $\pm$ 389.88%	2.21 $\pm$ 8.60 $\pm$ 390.11% Full External Error $\pm$ 8.60 Analytical Error $\pm$ 8.60	3.07 8%
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	3.83 1.7517 3	Convergence Number of Iterations Calculated Line	0.00000235636 4 Weighted York-2

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Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02303	1.7 %	0.0012564 $\pm$ 0.0000494	0.00340416 $\pm$ 0.00001945	0.0020
14D02305	1.8 %	0.0010522 $\pm$ 0.0000825	0.00341372 $\pm$ 0.00002090	0.0028
14D02306	1.9 %	0.0015441 $\pm$ 0.0000727	0.00339229 $\pm$ 0.00002041	0.0035
14D02307	2.1 %	0.0015343 $\pm$ 0.0001129	0.00338076 $\pm$ 0.00002242	0.0047
14D02309	2.3 %	0.0023655 $\pm$ 0.0000784	0.00340937 $\pm$ 0.00002113	0.0058
14D02310	2.5 %	0.0026492 $\pm$ 0.0001048	0.00340156 $\pm$ 0.00002219	0.0081
14D02312	2.8 %	0.0034788 $\pm$ 0.0000947	0.00339353 $\pm$ 0.00002133	0.0094
14D02313	3.2 %	0.0045386 $\pm$ 0.0000879	0.00340263 $\pm$ 0.00002143	0.0121
14D02315	4.0 %	0.0055625 $\pm$ 0.0000853	0.00338828 $\pm$ 0.00002060	0.0129
14D02316	5.0 %	0.0104606 $\pm$ 0.0000582	0.00339676 $\pm$ 0.00001957	0.0170
14D02318	6.0 %	0.0147758 $\pm$ 0.0000546	0.00341495 $\pm$ 0.00001969	0.0195
14D02319	7.0 %	0.0159219 $\pm$ 0.0000594	0.00340322 $\pm$ 0.00001956	0.0232
14D02321	8.2 %	0.0171283 $\pm$ 0.0000486	0.00340080 $\pm$ 0.00001926	0.0220
14D02322	9.6 %	0.0150520 $\pm$ 0.0000482	0.00339809 $\pm$ 0.00001918	0.0177
14D02324	10.2 %	0.0118165 $\pm$ 0.0000711	0.00338734 $\pm$ 0.00002000	0.0227
14D02325	11.2 %	0.0138168 $\pm$ 0.0000873	0.00337113 $\pm$ 0.00002086	0.0351
14D02327	13.2 %	0.0201444 $\pm$ 0.0000913	0.00335302 $\pm$ 0.00002104	0.0456
14D02328	15.4 % ✓	0.0285054 $\pm$ 0.0001204	0.00333645 $\pm$ 0.00002207	0.0649
14D02330	18.0 % ✓	0.0312265 $\pm$ 0.0001350	0.00336814 $\pm$ 0.00002331	0.0792
14D02332	21.0 % ✓	0.0350540 $\pm$ 0.0001786	0.00335220 $\pm$ 0.00002636	0.1062

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Inverse Isochron	305.22 $\pm$ 26.74	0.73680 $\pm$ 1.33272	2.21 $\pm$ 3.99	3.05
Clustered Points	$\pm$ 8.76%	$\pm$ 180.88%	$\pm$ 180.99%	8%
			Full External Error $\pm$ 3.99	
			Analytical Error $\pm$ 3.99	
Statistics	2 σ Confidence Limit	3.83	Convergence	0.0003503191
	Error Magnification	1.7478	Number of Iterations	3
	Number of Data Points	3	Calculated Line	Weighted York-2
	Spreading Factor	0.5%		

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02303	1.7 %	5.50920	0.282	27.5960	22.935	1.178209	3.519	2.04938	1.936	1616.432	0.033	4.71919 ± 4.57876	14.17 ± 13.81	0.59	0.80	0.0316 ± 0.0146
14D02305	1.8 %	3.169188	0.295	20.9096	31.915	0.676386	6.117	0.98919	3.838	926.742	0.058	8.32131 ± 5.90282	25.07 ± 17.91	0.88	0.38	0.0201 ± 0.0129
14D02306	1.9 %	3.668353	0.292	34.3011	20.278	0.837485	4.631	1.68872	2.305	1078.696	0.050	1.56864 ± 3.90582	4.70 ± 11.71	0.24	0.65	0.0209 ± 0.0085
14D02307	2.1 %	2.395892	0.314	13.6285	48.602	0.524942	7.236	1.09485	3.625	707.613	0.075	0.64188 ± 4.31814	1.92 ± 12.90	0.10	0.43	0.0343 ± 0.0334
14D02309	2.3 %	3.336216	0.300	24.5230	27.479	0.721227	5.039	2.32671	1.634	976.638	0.055	3.15744 ± 2.64160	9.47 ± 7.94	0.75	0.91	0.0405 ± 0.0223
14D02310	2.5 %	2.519138	0.309	28.4595	24.124	0.463681	8.734	1.97529	1.943	738.376	0.072	1.94823 ± 2.47561	5.84 ± 7.43	0.52	0.77	0.0296 ± 0.0143
14D02312	2.8 %	2.871906	0.300	52.0168	13.290	0.649072	6.116	2.96497	1.335	842.236	0.063	0.80158 ± 1.81210	2.40 ± 5.43	0.28	1.15	0.0242 ± 0.0085
14D02313	3.2 %	3.016886	0.302	57.3347	11.738	0.645956	6.235	4.03443	0.950	880.423	0.061	1.20651 ± 1.39497	3.61 ± 4.18	0.55	1.57	0.0300 ± 0.0071
14D02315	4.0 %	3.319080	0.292	80.5720	8.306	0.754009	4.968	5.46817	0.753	973.296	0.055	0.22236 ± 1.09429	0.67 ± 3.27	0.12	2.13	0.0289 ± 0.0048
14D02316	5.0 %	4.990696	0.281	197.0165	3.315	1.187077	3.073	15.34160	0.272	1453.947	0.037	0.35782 ± 0.55276	1.07 ± 1.65	0.37	5.98	0.0332 ± 0.0022
14D02318	6.0 %	5.788895	0.280	305.1517	2.451	1.482268	2.698	24.90833	0.179	1671.881	0.032	0.61698 ± 0.39378	1.85 ± 1.18	0.91	9.71	0.0348 ± 0.0017
14D02319	7.0 %	5.263495	0.279	267.4126	2.572	1.360086	2.846	24.47472	0.181	1525.892	0.035	0.35499 ± 0.36301	1.06 ± 1.09	0.57	9.55	0.0391 ± 0.0020
14D02321	8.2 %	6.232116	0.276	330.9212	2.190	1.670768	2.351	31.17082	0.137	1806.871	0.030	0.28822 ± 0.33220	0.86 ± 0.99	0.49	12.16	0.0402 ± 0.0018
14D02322	9.6 %	6.596862	0.276	305.5911	2.314	1.749466	2.065	29.06910	0.156	1917.615	0.028	0.27468 ± 0.37656	0.82 ± 1.13	0.41	11.34	0.0406 ± 0.0019
14D02324	10.2 %	4.087843	0.286	144.4594	4.671	1.049075	3.742	14.22421	0.294	1195.543	0.045	0.08110 ± 0.50022	0.24 ± 1.50	0.10	5.55	0.0421 ± 0.0039
14D02325	11.2 %	3.116173	0.295	137.3624	4.719	0.860120	4.507	12.71542	0.306	913.611	0.059	0.27729 ± 0.44618	0.83 ± 1.33	0.38	4.96	0.0395 ± 0.0037
14D02327	13.2 %	3.223907	0.297	261.9425	2.600	1.040693	3.554	19.12908	0.216	940.864	0.057	0.45585 ± 0.30871	1.36 ± 0.92	0.92	7.45	0.0311 ± 0.0016
14D02328	15.4 %	2.751642	0.302	414.2132	1.809	1.080643	3.576	22.85249	0.197	791.935	0.067	0.49390 ± 0.22889	1.48 ± 0.68	1.41	8.87	0.0234 ± 0.0009
14D02330	18.0 %	2.462096	0.310	469.8838	1.602	0.973387	3.936	21.99173	0.198	694.160	0.077	0.15096 ± 0.22067	0.45 ± 0.66	0.47	8.52	0.0198 ± 0.0006
14D02332	21.0 %	1.858710	0.335	483.5647	1.618	0.778860	4.847	18.42627	0.227	516.388	0.103	0.26887 ± 0.22238	0.80 ± 0.66	0.94	7.11	0.0161 ± 0.0005
Σ		76.174013	0.068	3656.8602	0.849	19.688809	0.880	256.89550	0.072	22169.158	0.011					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-584B
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan McGinnis
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00165434 ± 0.14500000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 27.3
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 0 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/a
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/a
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40Ar/36(a) = 295.50
Atmospheric Ratio 38Ar/36(a) = 0.1869
Production Ratio 39Ar/37(ca) = 0.000673
Production Ratio 38Ar/37(ca) = 0.000139
Production Ratio 36Ar/37(ca) = 0.000264
Production Ratio 40Ar/39(k) = 0.001010
Production Ratio 38Ar/39(k) = 0.011380
Production Ratio 36Ar/39(c) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		0.30018 ± 0.19971 ± 66.53%	0.90 ± 0.60 ± 66.51%	2.39 9%	24.51 3	0.0187 ± 0.0040
			Full External Error ± 0.60 Analytical Error ± 0.60	3.00 1.5449	2σ Confidence Limit Error Magnification	
Total Fusion Age		0.21603 ± 0.12347 ± 57.15%	0.65 ± 0.37 ± 57.16%		20	0.0299 ± 0.0005
			Full External Error ± 0.37 Analytical Error ± 0.37			
Normal Isochron	305.21 ± 26.84 ± 8.80%	0.73682 ± 2.87267 ± 389.88%	2.21 ± 8.60 ± 390.11%	3.07 8%	24.51 3	0.0391 ± 0.0020
			Full External Error ± 8.60 Analytical Error ± 8.60	1.7517 4	2σ Confidence Limit Error Magnification Number of Iterations	
				0.0000002356	Convergence	
Inverse Isochron	305.22 ± 26.74 ± 8.76%	0.73680 ± 1.33272 ± 180.88%	2.21 ± 3.99 ± 180.99%	3.05 8%	24.51 3	0.0391 ± 0.0020
Clustered Points			Full External Error ± 3.99 Analytical Error ± 3.99	1.7478 3	2σ Confidence Limit Error Magnification Number of Iterations	
				0.0003503191	Convergence	
				0%	Spreading Factor	

Depositing Patterns	36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(ea) [A]	%1σ	36Ar(d) [A]	%1σ	37Ar(aa) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(b) [A]	%1σ	38Ar(ea) [A]	%1σ	38Ar(d) [A]	%1σ	39Ar(a) [A]	%1σ	39Ar(c) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(a) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(b) [A]	%1σ	
14002303	1.7%	1.525234	0.28	0.0000000	0.00	0.0072853	22.94	0.0000252	35.95	27.5953	22.94	1.028431	0.28	0.0000000	0.00	0.0031106	1.96	0.0000000	22.94	0.0000000	33.97	2.03391	1.96	0.0165721	22.94	9.583746	45.47	1625.513	0.28	0.0000000	0.00	0.0002551	1.96
14002305	1.8%	3.163638	0.30	0.0000000	0.00	0.0055201	31.91	0.0000262	58.27	20.9096	31.91	0.591284	0.30	0.0000000	0.00	0.0110169	3.92	0.0029264	31.91	0.0710590	58.28	0.97512	3.92	0.0140722	31.91	8.114295	35.25	924.855	0.30	0.0000000	0.00	0.0000849	3.92
14002306	1.9%	3.655244	0.30	0.0000000	0.00	0.0062255	25.28	0.0000253	29.94	34.3011	25.28	0.623913	0.30	0.0000000	0.00	0.0185649	2.35	0.0047618	25.28	0.126491	29.95	1.65564	2.35	0.0203946	25.28	2.612785	124.47	1261.207	0.30	0.0000000	0.00	0.0016823	2.35
14002307	2.1%	2.382288	0.32	0.0000000	0.00	0.0059579	48.80	0.0000261	59.82	13.5285	48.80	0.471715	0.32	0.0000000	0.00	0.0122589	3.98	0.0019844	48.80	0.6325774	59.83	1.08888	3.98	0.0017120	48.80	0.656579	335.35	763.915	0.32	0.0000000	0.00	0.0016865	3.98
14002309	2.3%	3.329713	0.31	0.0000000	0.00	0.0064741	27.48	0.0000284	52.62	24.5230	27.48	0.622323	0.31	0.0000000	0.00	0.0062902	1.66	0.0034957	27.48	0.0600048	52.63	2.31821	1.66	0.0165940	27.48	7.294334	41.80	983.830	0.31	0.0000000	0.00	0.0003383	1.66
14002310	2.5%	2.511825	0.32	0.0000000	0.00	0.0075123	24.12	0.0000000	0.00	29.4595	24.12	0.494243	0.32	0.0000000	0.00	0.0222058	1.98	0.0000000	24.12	0.0000000	0.00	1.95913	1.98	0.0191933	24.12	3.819087	63.50	742.185	0.32	0.0000000	0.00	0.0019757	1.98
14002312	2.8%	2.658143	0.31	0.0000000	0.00	0.0137324	13.29	0.0000005	53.90	52.0168	13.29	0.534187	0.31	0.0000000	0.00	0.0033400	1.36	0.0072328	13.29	0.0743119	53.91	2.30366	1.36	0.0000003	13.29	2.345592	113.03	844.581	0.31	0.0000000	0.00	0.0025953	1.36
14002313	3.2%	2.955736	0.31	0.0000000	0.00	0.0151384	11.74	0.0000134	123.67	57.3347	11.74	0.590893	0.31	0.0000000	0.00	0.0461248	0.97	0.0077695	11.74	0.0300103	123.68	3.99984	0.97	0.0000003	11.74	4.82006	57.80	882.240	0.31	0.0000000	0.00	0.0040388	0.97
14002315	4.0%	3.037782	0.30	0.0000000	0.00	0.0212770	8.31	0.0000266	57.87	89.3759	8.31	0.818361	0.30	0.0000000	0.00	0.0618107	0.76	0.0111895	8.31	0.0648420	57.88	5.41395	0.76	0.0045249	8.31	1.20842	246.05	874.495	0.30	0.0000000	0.00	0.0004681	0.76
14002316	5.0%	4.938668	0.29	0.0000000	0.00	0.0020124	3.32	0.0000281	97.66	197.0165	3.32	0.923036	0.29	0.0000000	0.00	0.1730786	0.28	0.0272663	3.32	0.0603781	97.67	16.20801	0.28	0.1326571	3.32	1.442078	77.24	1469.273	0.29	0.0000000	0.00	0.0193611	0.28
14002318	6.0%	5.769287	0.29	0.0000000	0.00	0.0090460	2.46	0.0000377	43.79	305.1517	2.46	1.057968	0.29	0.0000000	0.00	0.2811197	0.18	0.0424181	2.46	0.0165646	43.80	24.70296	0.18	0.2361071	2.46	10.241168	31.91	1987.087	0.29	0.0000000	0.00	0.0049882	0.18
14002319	7.0%	5.162887	0.29	0.0000000	0.00	0.0076989	2.57	0.0000312	51.17	267.4126	2.57	0.979547	0.29	0.0000000	0.00	0.2754743	0.18	0.0371754	2.57	0.0756444	51.18	24.29476	0.18	0.1799887	2.57	8.634408	91.13	1934.482	0.29	0.0000000	0.00	0.0046377	0.18
14002321	8.2%	6.144701	0.28	0.0000000	0.00	0.0077632	2.19	0.0000310	31.78	330.5212	2.19	1.148445	0.28	0.0000000	0.00	0.3521885	0.14	0.0469880	2.19	0.1241363	31.80	30.94811	0.14	0.2227100	2.19	9.979736	57.63	1815.709	0.28	0.0000000	0.00	0.0012576	0.14
14002322	9.6%	6.618120	0.28	0.0000000	0.00	0.0062761	2.31	0.0000060	27.62	304.5911	2.31	1.217863	0.28	0.0000000	0.00	0.3288469	0.16	0.0424772	2.31	0.1030668	27.64	28.86344	0.16	0.2366628	2.31	7.62604	68.55	1935.514	0.28	0.0000000	0.00	0.0029121	0.16
14002324	10.2%	4.949680	0.29	0.0000000	0.00	0.0081173	4.67	0.0000468	35.34	144.4594	4.67	0.759881	0.29	0.0000000	0.00	0.1602762	0.30	0.0200789	4.67	0.1134488	35.35	14.18889	0.30	0.0072712	4.67	1.146663	308.41	1196.675	0.29	0.0000000	0.00	0.0142683	0.30
14002325	11.2%	3.078989	0.30	0.0000000	0.00	0.0062627	4.72	0.0000201	31.80	137.3624	4.72	0.579626	0.30	0.0000000	0.00	0.1435445	0.31	0.0189034	4.72	0.127514	31.91	12.62298	0.31	0.0304449	4.72	3.500160	80.45	910.098	0.30	0.0000000	0.00	0.0127462	0.31
14002327	13.1%	3.154672	0.31	0.0000000	0.00	0.0091628	2.80	0.0000818	18.84	261.8425	2.80	0.598868	0.31	0.0000000	0.00	0.2157027	0.27	0.0384100	2.80	0.1869222	18.86	18.92279	0.27	0.1762973	2.80	6.639564	33.88	832.238	0.31	0.0000000	0.00	0.0191423	0.27
14002328	15.4%	✓ 2.842175	0.32	0.0000000	0.00	0.1008323	1.81	0.0001142	14.03	414.2132	1.81	0.489823	0.32	0.0000000	0.00	0.2598860	0.20	0.0657596	1.81	0.2777554	14.06	22.57373	0.20	0.3787655	1.81	11.149166	23.17	780.763	0.32	0.0000000	0.00	0.0027985	0.20
14002330	18.0%	✓ 2.337355	0.34	0.0000000	0.00	0.1349483	1.60	0.0000223	17.12	469.8938	1.60	0.439564	0.34	0.0000000	0.00	0.2486872	0.20	0.0602138	1.60	0.2244425	17.14	21.67350	0.20	0.3162318	1.60	3.772047	73.09	668.886	0.34	0.0000000	0.00	0.0018823	0.20
14002332	21.0%	1.739574	0.38	0.0000000	0.00	0.1276611	1.62	0.0000749	20.77	483.5647	1.62	0.322519	0.38	0.0000000	0.00	0.2569875	0.23	0.0672165	1.62	0.1821380	20.79	18.10983	0.23	0.3545491	1.62	4.866700	41.35	511.583	0.38	0.0000000	0.00	0.0182818	0.23
Σ		75.207872	0.07	0.0000000	0.00	0.9654111	0.85	0.0000002	7.47	3656.8602	0.85	14.050314	0.07	0.0000000	0.00	2.8894638	0.07	0.5380038	0.85	2.260681	7.48	254.43943	0.07	2.4616869	0.85	54.963201	38.58	22223.887	0.07	0.0000000	0.00	0.2558788	0.07
Σ						76.179473	0.07	3656.8602	0.85							19.720767	0.85			19.720767	0.85			256.89950	0.07					22.189158	0.10		

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02303	1.7 %	788.742899	15.271137	13.465541	3.099334	2.688582	0.052595	252.953	148.235906	1.00178732	7.759E-11
14D02305	1.8 %	936.865370	35.961144	21.138058	6.794720	3.203807	0.123325	252.971	148.286748	1.00178744	4.448E-11
14D02306	1.9 %	638.764646	14.724624	20.311852	4.145325	2.172266	0.050462	252.980	148.313192	1.00178750	5.178E-11
14D02307	2.1 %	646.309072	23.433323	12.447779	6.066731	2.188324	0.079622	252.988	148.337606	1.00178756	3.397E-11
14D02309	2.3 %	419.750595	6.861482	10.539765	2.901329	1.433876	0.023817	253.006	148.388483	1.00178769	4.688E-11
14D02310	2.5 %	373.807256	7.269077	14.407796	3.486987	1.275329	0.025094	253.014	148.412909	1.00178774	3.544E-11
14D02312	2.8 %	284.061876	3.796026	17.543787	2.343387	0.968611	0.013251	253.031	148.463811	1.00178787	4.043E-11
14D02313	3.2 %	218.227623	2.077650	14.211369	1.673650	0.746299	0.007439	253.040	148.490287	1.00178793	4.226E-11
14D02315	4.0 %	177.992955	1.342991	14.734712	1.228870	0.606982	0.004900	253.057	148.539178	1.00178805	4.672E-11
14D02316	5.0 %	94.771523	0.260162	12.841979	0.427195	0.325305	0.001271	253.066	148.565668	1.00178811	6.979E-11
14D02318	6.0 %	67.121364	0.122221	12.250989	0.301015	0.232448	0.000774	253.083	148.616622	1.00178823	8.025E-11
14D02319	7.0 %	62.345636	0.114795	10.926073	0.281708	0.215058	0.000715	253.092	148.641086	1.00178829	7.324E-11
14D02321	8.2 %	57.966735	0.081249	10.616377	0.232949	0.199934	0.000616	253.112	148.702265	1.00178844	8.673E-11
14D02322	9.6 %	65.967461	0.104389	10.512577	0.243791	0.226937	0.000719	253.121	148.726743	1.00178850	9.205E-11
14D02324	10.2 %	84.049857	0.249905	10.155878	0.475340	0.287386	0.001178	253.138	148.777753	1.00178862	5.739E-11
14D02325	11.2 %	71.850631	0.224172	10.802817	0.510847	0.245070	0.001043	253.147	148.802244	1.00178868	4.385E-11
14D02327	13.2 %	49.185044	0.109846	13.693420	0.357203	0.168534	0.000618	253.164	148.853279	1.00178880	4.516E-11
14D02328	15.4 % ✓	34.654193	0.072006	18.125514	0.329851	0.120409	0.000434	253.173	148.879825	1.00178887	3.801E-11
14D02330	18.0 % ✓	31.564571	0.066971	21.366383	0.344910	0.111956	0.000412	253.190	148.930887	1.00178899	3.332E-11
14D02332	21.0 % ✓	28.024541	0.069880	26.243219	0.428887	0.100873	0.000409	253.207	148.979923	1.00178911	2.479E-11

OSU Argon Geochronology Lab

Procedure Blanks		36Ar		37Ar		38Ar		39Ar		40Ar	
		[fA]	1σ	[fA]	1σ	[fA]	1σ	[fA]	1σ	[fA]	1σ
14D02303	1.7 %	0.0157145	0.0015399	0.0206041	0.0311538	0.0618578	0.0267331	0.0767254	0.0291091	4.5542407	0.5308749
14D02305	1.8 %	0.0158605	0.0015399	0.0182955	0.0311538	0.0500631	0.0267331	0.0772303	0.0291091	4.5866804	0.5308749
14D02306	1.9 %	0.0159365	0.0015399	0.0170951	0.0311538	0.0445198	0.0267331	0.0774929	0.0291091	4.6035490	0.5308749
14D02307	2.1 %	0.0160066	0.0015399	0.0159870	0.0311538	0.0397611	0.0267331	0.0777353	0.0291091	4.6191200	0.5308749
14D02309	2.3 %	0.0161526	0.0015399	0.0136784	0.0311538	0.0309518	0.0267331	0.0782402	0.0291091	4.6515597	0.5308749
14D02310	2.5 %	0.0162227	0.0015399	0.0125703	0.0311538	0.0272536	0.0267331	0.0784825	0.0291091	4.6671308	0.5308749
14D02312	2.8 %	0.0163687	0.0015399	0.0102617	0.0311538	0.0206536	0.0267331	0.0789874	0.0291091	4.6995704	0.5308749
14D02313	3.2 %	0.0164447	0.0015399	0.0090612	0.0311538	0.0178115	0.0267331	0.0792500	0.0291091	4.7164391	0.5308749
14D02315	4.0 %	0.0165849	0.0015399	0.0068450	0.0311538	0.0136250	0.0267331	0.0797347	0.0291091	4.7475811	0.5308749
14D02316	5.0 %	0.0166608	0.0015399	0.0056446	0.0311538	0.0119317	0.0267331	0.0799973	0.0291091	4.7644498	0.5308749
14D02318	6.0 %	0.0168069	0.0015399	0.0033360	0.0311538	0.0098098	0.0267331	0.0805022	0.0291091	4.7968895	0.5308749
14D02319	7.0 %	0.0168770	0.0015399	0.0022279	0.0311538	0.0093215	0.0267331	0.0807445	0.0291091	4.8124605	0.5308749
14D02321	8.2 %	0.0170522	0.0015399	0.0005424	0.0311538	0.0096055	0.0267331	0.0813504	0.0291091	4.8513881	0.5308749
14D02322	9.6 %	0.0171223	0.0015399	0.0016505	0.0311538	0.0103209	0.0267331	0.0815928	0.0291091	4.8669591	0.5308749
14D02324	10.2 %	0.0172684	0.0015399	0.0039591	0.0311538	0.0129160	0.0267331	0.0820977	0.0291091	4.8993988	0.5308749
14D02325	11.2 %	0.0173385	0.0015399	0.0050672	0.0311538	0.0146919	0.0267331	0.0823401	0.0291091	4.9149699	0.5308749
14D02327	13.2 %	0.0174845	0.0015399	0.0073758	0.0311538	0.0194962	0.0267331	0.0828450	0.0291091	4.9474095	0.5308749
14D02328	15.4 %	0.0175605	0.0015399	0.0085763	0.0311538	0.0225844	0.0267331	0.0831075	0.0291091	4.9642782	0.5308749
14D02330	18.0 %	0.0177065	0.0015399	0.0108848	0.0311538	0.0296577	0.0267331	0.0836124	0.0291091	4.9967178	0.5308749
14D02332	21.0 %	0.0178467	0.0015399	0.0131011	0.0311538	0.0378523	0.0267331	0.0840972	0.0291091	5.0278599	0.5308749

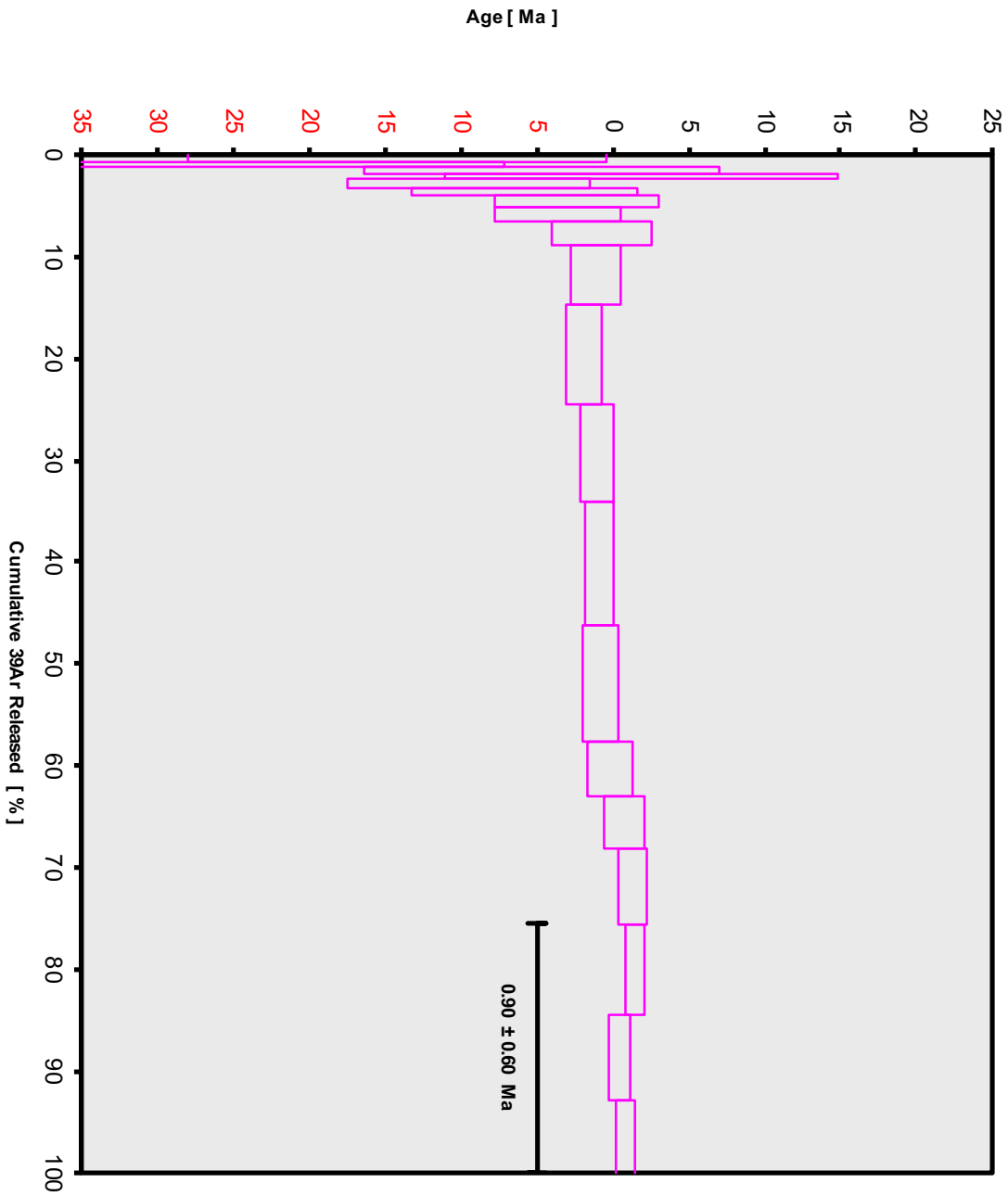
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CEOS Oregon State University, Corvallis, USA

Intercept Values		36Ar [A]	1σ	r2		37Ar [A]	1σ	r2		38Ar [A]	1σ	r2		39Ar [A]	1σ	r2		40Ar [A]	1σ	r2
14D02303	1.7 %	5.273260	0.005629	0.9780	EXP 150 of 150	0.1622	0.0280	0.0156	EXP 150 of 150	1.1022169	0.0309993	0.0363	EXP 149 of 150	2.11020	0.02647	0.0003	EXP 150 of 150	1624.377426	0.103037	0.9998
14D02305	1.8 %	3.038888	0.003973	0.9647	EXP 150 of 150	0.1202	0.0313	0.0035	EXP 150 of 150	0.6182089	0.0309993	0.0215	EXP 150 of 150	1.05875	0.02390	0.0155	EXP 149 of 150	933.272855	0.076752	0.9997
14D02306	1.8 %	3.516366	0.004436	0.9671	EXP 150 of 150	0.2100	0.0339	0.0033	EXP 150 of 150	0.7829179	0.0274267	0.0558	EXP 150 of 150	1.75311	0.02535	0.0047	EXP 150 of 150	1085.562339	0.081415	0.9997
14D02307	2.1 %	2.302158	0.003755	0.9433	EXP 150 of 150	0.0742	0.0339	0.0020	EXP 150 of 150	0.4788830	0.0265302	0.0773	EXP 150 of 150	1.16489	0.02651	0.0142	EXP 150 of 150	713.715766	0.063850	0.9995
14D02309	2.3 %	3.199558	0.004552	0.9597	EXP 150 of 150	0.1486	0.0319	0.0254	EXP 150 of 150	0.6816229	0.0239581	0.0178	EXP 150 of 150	2.38889	0.02394	0.1046	EXP 150 of 150	983.338911	0.071987	0.9998
14D02310	2.5 %	2.419975	0.003738	0.9507	EXP 150 of 150	0.1757	0.0330	0.0003	EXP 150 of 150	0.4308651	0.0297645	0.0151	EXP 150 of 150	2.03844	0.02463	0.0109	EXP 150 of 150	744.582399	0.068180	0.9996
14D02312	2.8 %	2.756731	0.003837	0.9593	EXP 150 of 150	0.3338	0.0334	0.0161	EXP 150 of 150	0.6206318	0.0280899	0.0225	EXP 150 of 150	3.02095	0.02629	0.1939	EXP 150 of 150	848.702171	0.095525	0.9997
14D02313	3.2 %	2.89421	0.004168	0.9577	EXP 150 of 150	0.3701	0.0317	0.0004	EXP 150 of 150	0.6203948	0.0294038	0.0235	EXP 150 of 150	4.08236	0.02435	0.3376	EXP 150 of 150	886.899875	0.075263	0.9997
14D02315	4.0 %	3.180309	0.004004	0.9672	EXP 150 of 150	0.5258	0.0312	0.0102	EXP 149 of 150	0.7313382	0.0250745	0.0315	EXP 150 of 150	5.50546	0.02943	0.5350	EXP 150 of 150	980.085862	0.095201	0.9998
14D02316	5.0 %	4.778766	0.004805	0.9794	EXP 150 of 150	1.2966	0.0283	0.0033	EXP 150 of 150	1.1090045	0.0241271	0.0253	EXP 150 of 150	15.30251	0.02786	0.9170	EXP 150 of 150	1481.761592	0.087564	0.9999
14D02318	6.0 %	5.541504	0.006746	0.9789	EXP 150 of 150	2.0130	0.0353	0.1188	EXP 150 of 150	1.4546761	0.0290435	0.0944	EXP 150 of 150	24.75949	0.02958	0.9648	EXP 150 of 150	1680.185726	0.098326	0.9999
14D02319	7.0 %	5.039285	0.005916	0.9800	EXP 150 of 150	1.7645	0.0304	0.0489	EXP 150 of 150	1.3344480	0.0273016	0.0746	EXP 150 of 150	26.30549	0.02911	0.9632	EXP 150 of 150	1533.906177	0.091865	0.9999
14D02321	8.2 %	5.963715	0.005446	0.9840	EXP 150 of 150	2.1959	0.0325	0.1939	EXP 150 of 150	1.6411185	0.0285632	0.1443	EXP 150 of 150	31.01021	0.02361	0.9851	EXP 150 of 150	1815.513052	0.095532	0.9999
14D02322	9.6 %	6.311825	0.005797	0.9832	EXP 150 of 150	2.0194	0.0314	0.2484	EXP 149 of 150	1.7181570	0.0235584	0.1659	EXP 150 of 150	28.92504	0.02993	0.9743	EXP 150 of 150	1926.504845	0.114350	0.9999
14D02324	10.2 %	3.917874	0.004456	0.9750	EXP 150 of 150	0.9575	0.0310	0.0282	EXP 150 of 150	1.0235739	0.0280673	0.0536	EXP 150 of 150	14.15990	0.02820	0.9019	EXP 150 of 150	1202.550876	0.088318	0.9998
14D02325	11.2 %	2.980190	0.004919	0.9658	EXP 150 of 150	0.9116	0.0285	0.0125	EXP 150 of 150	0.8510385	0.0274039	0.0363	EXP 150 of 150	12.69806	0.02419	0.9146	EXP 150 of 150	820.443363	0.075249	0.9997
14D02327	13.2 %	3.950225	0.004178	0.9543	EXP 150 of 150	1.7355	0.0297	0.1392	EXP 150 of 150	1.0387122	0.0268898	0.0543	EXP 150 of 150	19.60343	0.02829	0.9510	EXP 150 of 150	947.785554	0.078122	0.9997
14D02328	15.4 %	2.643167	0.003800	0.9576	EXP 150 of 150	2.7408	0.0326	0.1190	EXP 150 of 150	1.0594294	0.0274973	0.0846	EXP 150 of 150	22.75820	0.03062	0.9581	EXP 150 of 150	798.560656	0.060816	0.9998
14D02330	18.0 %	2.367030	0.003698	0.9514	EXP 150 of 150	3.1092	0.0311	0.2229	EXP 150 of 150	0.9330522	0.0267711	0.0403	EXP 150 of 150	21.90462	0.02876	0.9592	EXP 150 of 150	700.612675	0.067897	0.9996
14D02332	21.0 %	1.791421	0.003452	0.9594	EXP 150 of 150	3.2006	0.0337	0.1673	EXP 150 of 150	0.7316640	0.0259621	0.0121	EXP 150 of 150	18.36733	0.02728	0.9622	EXP 150 of 150	522.499119	0.054614	0.9995

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%Li	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Yon	Y-on	Zn-Pb	Project	Experiment	Num	
HC0200	1.7%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	1.7	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	12	21	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0201	1.8%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	1.8	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	12	45	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0202	1.9%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	1.9	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	12	59	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0203	2.1%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	2.1	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	12	11	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0204	2.3%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	2.3	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	12	30	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0205	2.5%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	2.5	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	12	40	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0212	2.8%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	2.8	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	14	13	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0213	3.2%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	3.2	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	14	20	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0215	4.0%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	4	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	14	50	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0216	5.8%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	6	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	16	3	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0218	6.0%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	6	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	16	28	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0219	7.0%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	7	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	16	40	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0221	8.2%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	8.2	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	16	50	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0232	9.8%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	9.8	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	16	22	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0234	10.2%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	10.2	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	16	47	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0235	11.2%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	11.2	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	16	39	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0237	13.2%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	13.2	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	17	24	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0238	14.4%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	14.4	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	17	37	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0239	16.6%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	16	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	18	2	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01
HC0239	21.0%	SC10-S986	Groundmass	Colapage St. Crater Island	Dan Magrane	21	FC1-3	26.38	0.064	Flanagan et al (1998)	0.54701	0.145	0.00100436	0.145	302.706	0.000	0.00000002	0.003	1	4.00E-14	29	JAN	2014	18	26	1	15-000-00	0.00	0.00	43.00	Colapage Hgpg (15-01)	1402002	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(cd)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D02303	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02305	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02306	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02307	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02309	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02310	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02312	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02313	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02315	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02316	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02318	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02319	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02321	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02322	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02324	10.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02325	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02327	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02328	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02330	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02332	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	

14D02302.AGE >>> SC12-584B >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
0.90 ± 0.60
TOTAL FUSION
-0.65 ± 0.37 (NEG)
NORMAL
ISOCHRON
-2.21 ± 8.60 (NEG)
INVERSE
ISOCHRON
-2.21 ± 3.99 (NEG)

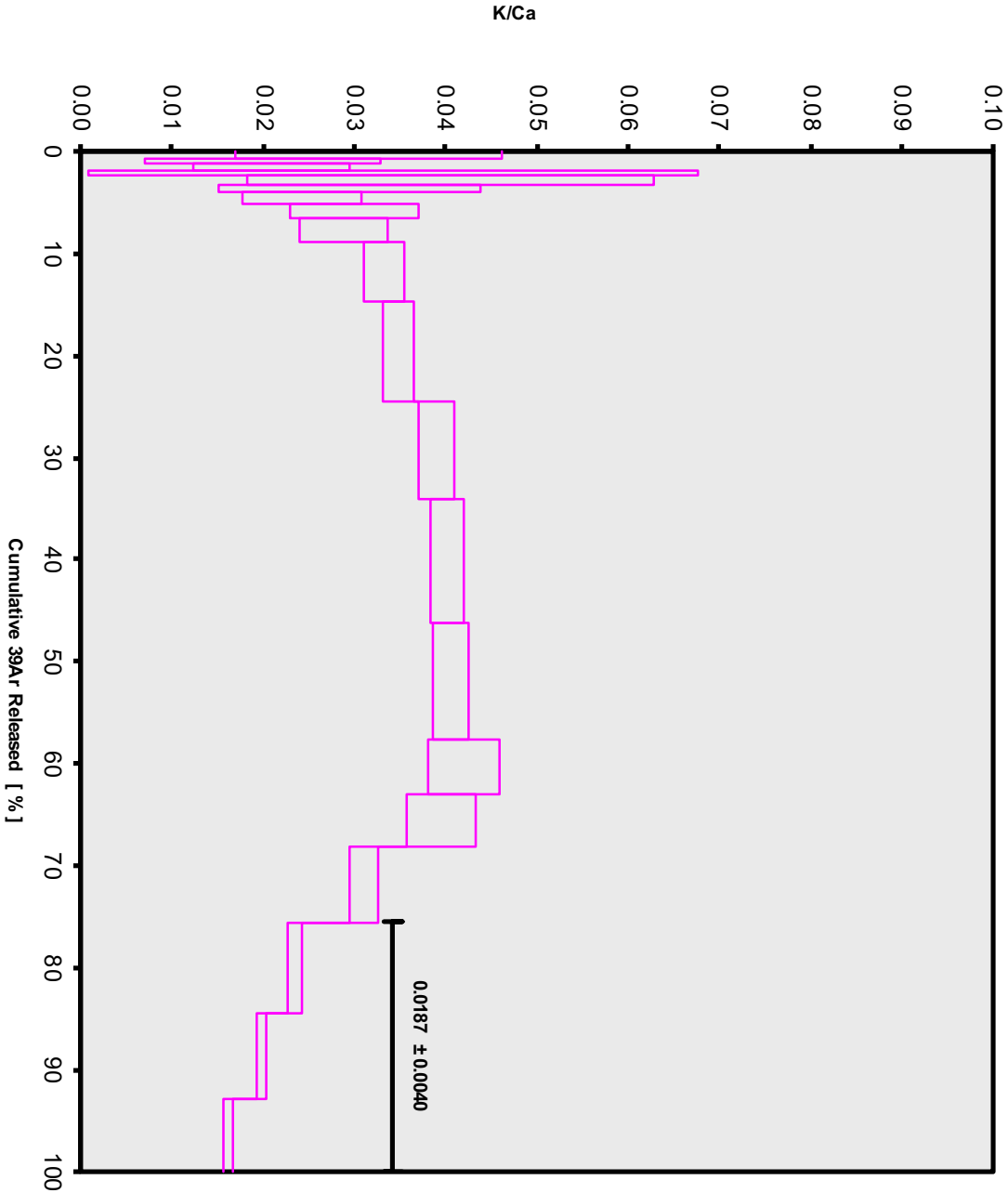
MSWD
(PROBABILITY)
2.39 (9%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00165434 ±

14D02302.AGE >>> SC12-584B >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

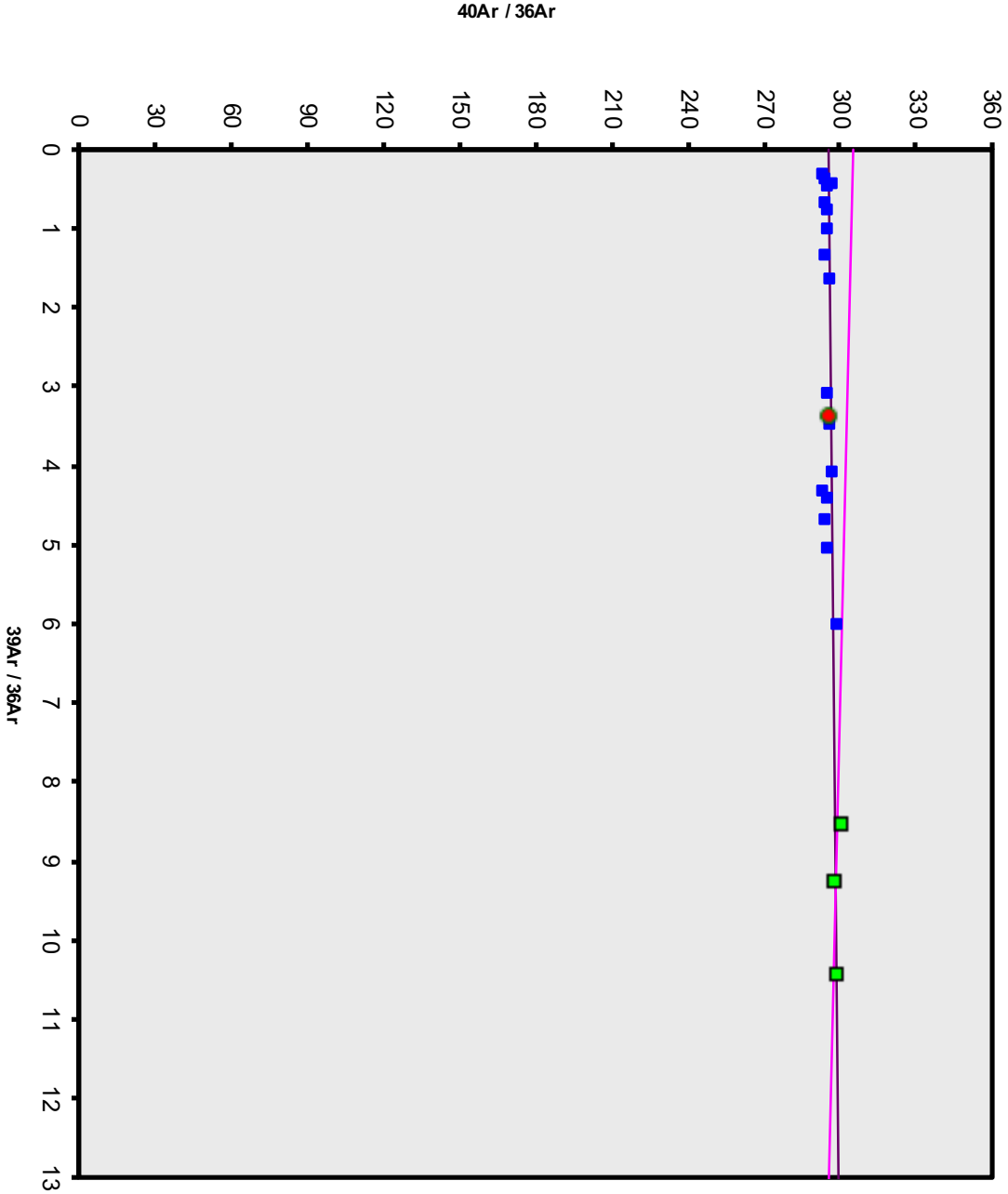
WEIGHTED
PLATEAU
0.90 $\pm$ 0.60
TOTAL FUSION
-0.65 $\pm$ 0.37 (NEG)
NORMAL
ISOCHRON
-2.21 $\pm$ 8.60 (NEG)
INVERSE
ISOCHRON
-2.21 $\pm$ 3.99 (NEG)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00165434 $\pm$

14D02302.AGE >>> SC12-584B >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
0.90 ± 0.60
TOTAL FUSION
-0.65 ± 0.37 (NEG)
NORMAL
ISOCHRON
-2.21 ± 8.60 (NEG)
INVERSE
ISOCHRON
-2.21 ± 3.99 (NEG)

MSWD
(PROBABILITY)
3.07 (8%)

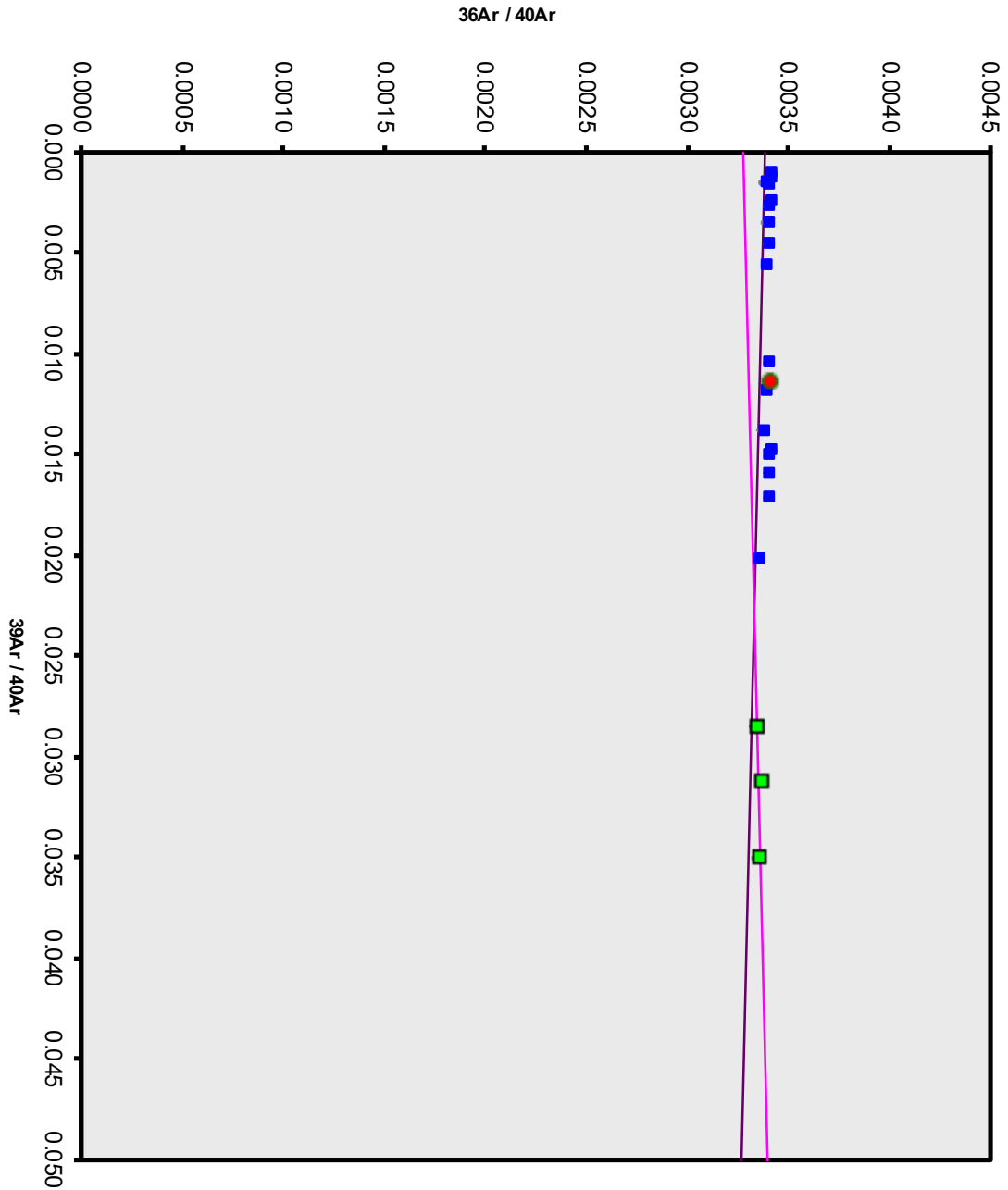
40AR/36AR

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00165434 ±

14D02302.AGE >>> SC12-584B >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
 0.90 ± 0.60
TOTAL FUSION
 -0.65 ± 0.37 (NEG)
NORMAL
ISOCHRON
 -2.21 ± 8.60 (NEG)
INVERSE
ISOCHRON
 -2.21 ± 3.99 (NEG)
MSWD
(PROBABILITY)
 3.05 (8%)
SPREADING

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
J = 0.00165434 ±

Incremental Heating		36Ar(a)					37Ar(fa)					38Ar(cl)					39Ar(k)					40Ar(r)					Age ± 2σ					40Ar(r)					39Ar(k)					K/Ca ± 2σ					
		[fA]					[fA]					[fA]					[fA]					[fA]					(Ka)					(%)					(%)										
14D 02248	1.7 %	0.3223156					7.8326					0.1469965					5.6329					0.41040					214.8 ± 787.9					0.43					0.47					0.309 ± 0.537					
14D 02250	1.8 %	0.2411493					16.5083					0.1814956					5.2940					1.45539					810.2 ± 786.0					2.00					0.44					0.138 ± 0.110					
14D 02251	1.9 %	0.2122328					12.8090					0.1549346					5.4044					0.16490					89.9 ± 740.7					0.26					0.45					0.181 ± 0.185					
14D 02252	2.1 %	0.1930371					19.6523					0.1519916					6.2707					0.91388					429.6 ± 622.1					1.58					0.52					0.137 ± 0.093					
14D 02254	2.3 %	0.1373842					16.2906					0.1556002					4.4383					1.10864					736.2 ± 832.3					2.66					0.37					0.117 ± 0.090					
14D 02255	2.5 %	0.2120089					25.7391					0.2369228					9.2005					0.89306					286.1 ± 421.3					1.41					0.76					0.154 ± 0.073					
14D 02257	2.8 %	0.2572999					31.5989					0.2366778					15.3009					2.64329					509.2 ± 265.8					3.36					1.27					0.208 ± 0.085					
14D 02258	3.2 %	0.1761543					19.3896					0.1715761					11.4629					1.66032					426.9 ± 329.1					3.09					0.95					0.254 ± 0.170					
14D 02260	4.0 %	✓	0.4476038					114.7115					0.4665694					50.3942					4.14195					242.3 ± 99.0					3.04					4.18					0.189 ± 0.022				
14D 02261	5.0 %	✓	0.4807936					242.2385					0.5467318					92.4176					8.05095					256.8 ± 57.0					5.36					7.66					0.164 ± 0.009				
14D 02263	6.0 %	✓	0.3537504					229.6132					0.4286620					86.7779					7.87298					267.4 ± 51.8					7.00					7.20					0.163 ± 0.009				
14D 02264	7.0 %	✓	0.3867605					341.0527					0.4206640					125.9568					12.89987					301.9 ± 38.9					8.90					10.45					0.159 ± 0.007				
14D 02266	8.2 %	✓	0.4233216					420.8525					0.5676973					151.5464					13.57560					264.0 ± 35.2					9.78					12.57					0.155 ± 0.005				
14D 02267	9.6 %	✓	0.4192467					384.7277					0.6275458					145.8756					14.31758					289.3 ± 36.7					10.35					12.10					0.163 ± 0.006				
14D 02269	11.2 %	✓	0.4433684					337.9366					0.6588402					126.8538					10.76691					250.2 ± 40.4					7.59					10.52					0.161 ± 0.007				
14D 02270	13.2 %	✓	0.5047316					301.8348					0.7685523					107.8957					8.28517					226.3 ± 50.8					5.26					8.85					0.154 ± 0.007				
14D 02272	15.4 %	✓	0.6051281					269.7441					0.8739890					92.4454					9.76359					311.3 ± 60.8					5.17					7.67					0.147 ± 0.007				
14D 02273	18.0 %		0.7908623					251.1345					0.9078369					84.2976					4.23665					148.1 ± 74.9					1.78					63.99					0.144 ± 0.007				
14D 02274	21.0 %		1.0215576					281.1260					0.8663542					78.2718					5.58881					210.5 ± 92.9					1.82					6.49					0.120 ± 0.006				

14D02247.full.xls printed at 1/21/22 (4:03 PM)
ArArCALC v2.6.2 -- Beta Version

OSU Argon Geochronology Lab

Normal Isochron		39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02248	1.7 %	17.48 $\pm$ 0.38	296.77 $\pm$ 4.69	0.6920
14D02250	1.8 %	21.95 $\pm$ 0.56	301.54 $\pm$ 5.97	0.7445
14D02251	1.9 %	25.46 $\pm$ 0.69	296.28 $\pm$ 6.42	0.7643
14D02252	2.1 %	32.48 $\pm$ 0.87	300.23 $\pm$ 6.96	0.8201
14D02254	2.3 %	32.31 $\pm$ 1.16	303.57 $\pm$ 9.36	0.8138
14D02255	2.5 %	43.40 $\pm$ 0.98	299.71 $\pm$ 6.29	0.8804
14D02257	2.8 %	59.47 $\pm$ 1.12	305.77 $\pm$ 5.54	0.9237
14D02258	3.2 %	65.07 $\pm$ 1.64	304.93 $\pm$ 7.49	0.9234
14D02260	4.0 % ✓	112.59 $\pm$ 1.44	304.75 $\pm$ 3.90	0.9689
14D02261	5.0 % ✓	192.22 $\pm$ 2.40	312.25 $\pm$ 3.92	0.9786
14D02263	6.0 % ✓	245.31 $\pm$ 3.53	317.76 $\pm$ 4.62	0.9763
14D02264	7.0 % ✓	317.46 $\pm$ 4.45	328.01 $\pm$ 4.63	0.9811
14D02266	8.2 % ✓	357.99 $\pm$ 5.13	327.57 $\pm$ 4.72	0.9836
14D02267	9.6 % ✓	347.95 $\pm$ 5.06	329.65 $\pm$ 4.82	0.9841
14D02269	11.2 % ✓	286.11 $\pm$ 3.77	319.78 $\pm$ 4.24	0.9807
14D02270	13.2 % ✓	213.77 $\pm$ 2.65	311.91 $\pm$ 3.89	0.9805
14D02272	15.4 % ✓	152.77 $\pm$ 1.63	311.63 $\pm$ 3.32	0.9771
14D02273	18.0 %	106.59 $\pm$ 0.98	300.86 $\pm$ 2.76	0.9726
14D02274	21.0 %	76.62 $\pm$ 0.64	300.97 $\pm$ 2.46	0.9698

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	294.54 $\pm$ 4.69 $\pm$ 1.59%	0.09546 $\pm$ 0.01890 $\pm$ 19.80%	281.4 $\pm$ 55.7 $\pm$ 19.80%	1.42 19%
			Full External Error $\pm$ 56.2 Analytical Error $\pm$ 55.7	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	2.07 1.1916 9	Convergence Number of Iterations Calculated Line	0.000000133369 5 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02248	1.7 %	0.0588876 $\pm$ 0.0009339	0.00336958 $\pm$ 0.00005326	0.0390
14D02250	1.8 %	0.0728049 $\pm$ 0.0012375	0.00331636 $\pm$ 0.00006565	0.0509
14D02251	1.9 %	0.0859485 $\pm$ 0.0014977	0.00337522 $\pm$ 0.00007308	0.0595
14D02252	2.1 %	0.1081963 $\pm$ 0.0016687	0.00333073 $\pm$ 0.00007723	0.0739
14D02254	2.3 %	0.1064186 $\pm$ 0.0022246	0.00329414 $\pm$ 0.00010156	0.0790
14D02255	2.5 %	0.1447954 $\pm$ 0.0015615	0.00333653 $\pm$ 0.00007000	0.0980
14D02257	2.8 %	0.1944819 $\pm$ 0.0014059	0.00327040 $\pm$ 0.00005927	0.1109
14D02258	3.2 %	0.2134058 $\pm$ 0.0020830	0.00327949 $\pm$ 0.00008052	0.1292
14D02260	4.0 % ✓	0.3694348 $\pm$ 0.0011778	0.00328134 $\pm$ 0.00004195	0.1205
14D02261	5.0 % ✓	0.6156025 $\pm$ 0.0015974	0.00320261 $\pm$ 0.00004020	0.1237
14D02263	6.0 % ✓	0.7720027 $\pm$ 0.0024340	0.00314707 $\pm$ 0.00004580	0.1556
14D02264	7.0 % ✓	0.9678369 $\pm$ 0.0026470	0.00304866 $\pm$ 0.00004307	0.1371
14D02266	8.2 % ✓	1.0928789 $\pm$ 0.0028489	0.00305279 $\pm$ 0.00004400	0.1261
14D02267	9.6 % ✓	1.0555021 $\pm$ 0.0027456	0.00303351 $\pm$ 0.00004440	0.1239
14D02269	11.2 % ✓	0.8947088 $\pm$ 0.0023255	0.00312711 $\pm$ 0.00004144	0.1329
14D02270	13.2 % ✓	0.6853423 $\pm$ 0.0016841	0.00320600 $\pm$ 0.00003994	0.1191
14D02272	15.4 % ✓	0.4902210 $\pm$ 0.0011173	0.00320888 $\pm$ 0.00003420	0.1072
14D02273	18.0 %	0.3542863 $\pm$ 0.0007639	0.00332384 $\pm$ 0.00003044	0.0822
14D02274	21.0 %	0.2545762 $\pm$ 0.0005165	0.00332258 $\pm$ 0.00002715	0.0606

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron	294.57 $\pm$ 4.69 $\pm$ 1.59%	0.09551 $\pm$ 0.01819 $\pm$ 19.04%	281.5 $\pm$ 53.6 $\pm$ 19.04%	1.42 19%
			Full External Error $\pm$ 54.1 Analytical Error $\pm$ 53.6	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	2.07 1.1929 9 6.9%	Convergence Number of Iterations Calculated Line	0.0012969770 3 Weighted York-2

Relative Abundances		³⁶ Ar [fA]	%1σ	³⁷ Ar [fA]	%1σ	³⁸ Ar [fA]	%1σ	³⁹ Ar [fA]	%1σ	⁴⁰ Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02248	1.7 %	0.3244437	0.535	7.8326	86.854	0.272428	17.196	5.6381	0.772	95.6604	0.156	0.07286 ± 0.26732	214.8 ± 787.9	0.43	0.47	0.309 ± 0.537
14D02250	1.8 %	0.2455819	0.632	16.5083	39.982	0.289107	16.005	5.3051	0.818	72.7204	0.207	0.27491 ± 0.26675	810.2 ± 786.0	2.00	0.44	0.138 ± 0.110
14D02251	1.9 %	0.2156779	0.663	12.8090	51.045	0.257884	17.647	5.4130	0.833	62.8852	0.237	0.03051 ± 0.25130	89.9 ± 740.7	0.26	0.45	0.181 ± 0.185
14D02252	2.1 %	0.1952676	0.655	19.6523	33.787	0.262162	17.778	6.2839	0.722	57.9627	0.257	0.14574 ± 0.21111	429.6 ± 622.1	1.58	0.52	0.137 ± 0.093
14D02254	2.3 %	0.1417487	0.868	16.2906	38.418	0.234049	20.551	4.4692	0.975	41.7101	0.357	0.24979 ± 0.28247	736.2 ± 832.3	2.66	0.37	0.117 ± 0.090
14D02255	2.5 %	0.2189012	0.656	25.7391	23.873	0.384827	11.810	9.2179	0.462	63.5510	0.235	0.09707 ± 0.14296	286.1 ± 421.3	1.41	0.76	0.154 ± 0.073
14D02257	2.8 %	0.2657391	0.571	31.5989	20.388	0.463284	9.833	15.3222	0.305	78.6909	0.191	0.17275 ± 0.09020	509.2 ± 265.8	3.36	1.27	0.208 ± 0.085
14D02258	3.2 %	0.1813435	0.674	19.3896	33.595	0.337642	13.820	11.4759	0.399	63.7255	0.278	0.14484 ± 0.11169	426.9 ± 329.1	3.09	0.95	0.254 ± 0.170
14D02260	4.0 %	✓ 0.4780790	0.463	114.7115	5.751	1.139657	4.103	50.4714	0.114	136.4598	0.111	0.08219 ± 0.03359	242.3 ± 99.0	3.04	4.18	0.189 ± 0.022
14D02261	5.0 %	✓ 0.5449688	0.435	242.2385	2.817	1.721976	2.660	92.5806	0.082	150.2188	0.100	0.08711 ± 0.01933	256.8 ± 57.0	5.36	7.66	0.164 ± 0.009
14D02263	6.0 %	✓ 0.4145441	0.451	229.6132	2.812	1.514227	3.244	86.9324	0.083	112.4939	0.133	0.09073 ± 0.01758	267.4 ± 51.8	7.00	7.20	0.163 ± 0.009
14D02264	7.0 %	✓ 0.4869710	0.423	341.0527	2.052	1.975613	2.419	126.1864	0.074	130.2698	0.115	0.10242 ± 0.01319	301.9 ± 38.9	9.90	10.45	0.159 ± 0.007
14D02266	8.2 %	✓ 0.5346595	0.444	420.8525	1.677	2.429912	1.885	151.8296	0.072	138.8202	0.109	0.08958 ± 0.01193	264.0 ± 35.2	9.78	12.57	0.155 ± 0.005
14D02267	9.6 %	✓ 0.5210723	0.445	384.7277	1.924	2.419445	2.005	146.1346	0.071	138.3523	0.108	0.09815 ± 0.01246	289.3 ± 36.7	10.35	12.10	0.163 ± 0.006
14D02269	11.2 %	✓ 0.5328540	0.419	337.9366	2.070	2.232276	2.052	127.0813	0.074	141.9104	0.107	0.08488 ± 0.01372	250.2 ± 40.4	7.59	10.52	0.161 ± 0.007
14D02270	13.2 %	✓ 0.5847314	0.423	301.8348	2.361	2.132695	2.233	108.0989	0.077	157.5423	0.095	0.07679 ± 0.01724	226.3 ± 50.8	5.26	8.95	0.154 ± 0.007
14D02272	15.4 %	✓ 0.6766992	0.391	269.7441	2.499	2.076610	2.255	92.6269	0.080	188.6723	0.081	0.10561 ± 0.02064	311.3 ± 60.8	5.17	7.67	0.147 ± 0.007
14D02273	18.0 %	0.8575344	0.368	251.1345	2.569	2.049864	2.373	84.4666	0.087	238.0216	0.064	0.05026 ± 0.02540	148.1 ± 74.9	1.78	6.99	0.144 ± 0.007
14D02274	21.0 %	1.0961304	0.338	281.1260	2.505	1.987093	2.487	78.4610	0.088	307.5381	0.050	0.07140 ± 0.03152	210.5 ± 92.9	1.82	6.49	0.120 ± 0.006
Σ		8.5199678	0.110	3324.7924	0.882	24.180751	0.848	1207.9750	0.025	2367.2055	0.028					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-040
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan Miggins
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00163010 ± 0.14300000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 27.1
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 0 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/39(k) = 0.001010
Production Ratio 39/38(k) = 0.011380
Production Ratio 39/38(cj) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%, n)	K/Ca ± 2σ
Age Plateau		0.09199 ± 0.00586 ± 6.37%	271.1 ± 17.3 ± 6.38% Full External Error ± 18.6 Analytical Error ± 17.3	1.27 25% 2.00 1.1281	81.29 9 2a Confidence Limit Error Magnification	0.158 ± 0.004
Total Fusion Age		0.09019 ± 0.00605 ± 6.71%	265.8 ± 17.8 ± 6.71% Full External Error ± 19.1 Analytical Error ± 17.8		19	0.156 ± 0.003
Normal Isochron	294.54 ± 4.69 ± 1.59%	0.09546 ± 0.01890 ± 19.80%	281.4 ± 55.7 ± 19.80% Full External Error ± 56.2 Analytical Error ± 55.7	1.42 19% 2.07 1.1916 5 0.0000001334	81.29 9 2a Confidence Limit Error Magnification Number of Iterations Convergence	
Inverse Isochron	294.57 ± 4.69 ± 1.59%	0.09551 ± 0.01819 ± 19.04%	281.5 ± 53.6 ± 19.04% Full External Error ± 54.1 Analytical Error ± 53.6	1.42 19% 2.07 1.1929 3 0.0012969770 7%	81.29 9 2a Confidence Limit Error Magnification Number of Iterations Convergence Spreading Factor	

Depositing Patterns	36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(a+c) [A]	%1σ	36Ar(d) [A]	%1σ	37Ar(a) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(b) [A]	%1σ	38Ar(a+c) [A]	%1σ	38Ar(d) [A]	%1σ	39Ar(a) [A]	%1σ	39Ar(c) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(a) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(b) [A]	%1σ
14C02244	1.7%	0.000000	0.77	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02250	1.8%	0.241483	0.97	0.000000	0.00	0.004562	39.98	0.000000	25.52	16.5083	39.98	0.0455708	0.97	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02251	1.9%	0.212228	1.06	0.000000	0.00	0.000000	39.98	0.000000	29.40	12.8000	39.98	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02252	2.1%	0.700271	1.13	0.000000	0.00	0.000000	39.98	0.000000	39.98	19.6521	39.98	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02254	2.3%	0.1373842	1.50	0.000000	0.00	0.000000	39.98	0.000000	39.98	16.2000	39.98	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02255	2.5%	0.210000	1.02	0.000000	0.00	0.000000	39.98	0.000000	39.98	25.7000	39.98	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02257	2.8%	0.2572989	0.89	0.000000	0.00	0.000000	39.98	0.000000	39.98	31.5889	39.98	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02258	3.2%	0.1761043	1.20	0.000000	0.00	0.000000	39.98	0.000000	39.98	10.0000	39.98	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02260	4.0%	0.4476008	0.83	0.000000	0.00	0.000000	5.75	0.000000	10.07	114.7115	5.75	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02261	5.0%	0.4867936	0.82	0.000000	0.00	0.000000	2.82	0.000000	8.43	242.2385	2.82	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02263	6.0%	0.2837004	0.72	0.000000	0.00	0.000000	2.81	0.000000	11.60	228.6132	2.81	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02264	7.0%	0.3967605	0.70	0.000000	0.00	0.000000	2.05	0.000000	11.41	341.0527	2.05	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02266	8.2%	0.4232016	0.71	0.000000	0.00	0.000000	0.00	0.000000	8.13	420.8525	1.68	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02267	9.6%	0.4184867	0.72	0.000000	0.00	0.000000	1.82	0.000000	7.79	364.7277	1.82	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02269	11.2%	0.4439884	0.85	0.000000	0.00	0.000000	2.07	0.000000	7.02	337.9366	2.07	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02270	13.2%	0.5047195	0.82	0.000000	0.00	0.000000	2.36	0.000000	6.27	361.8348	2.36	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02272	15.4%	0.6850281	0.53	0.000000	0.00	0.000000	2.50	0.000000	5.44	260.7441	2.50	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02273	18.0%	0.7098023	0.45	0.000000	0.00	0.000000	2.57	0.000000	5.44	251.1345	2.57	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
14C02274	21.0%	1.0070205	0.41	0.000000	0.00	0.000000	2.50	0.000000	5.75	281.1260	2.50	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
Σ		7.938705	0.16	0.000000	0.00	0.077452	0.88	0.000000	2.41	3204.7604	0.88	1.4278942	0.16	0.000000	0.00	0.721032	0.00	0.4821460	0.08	8.5890302	2.42	1085.7014	0.00	2.2375850	0.08	108.74894	0.16	0.000000	0.00	1.2177905	0.00	
Σ						8.5195678	0.17			3204.7604	0.88	1.4278942				0.721032	0.00	0.4821460	0.08	24.180751	0.86			10207.9750	0.03					2267.2655	0.22	

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02248	1.7 %	16.96634	0.133703	1.389223	1.206649	0.057544	0.000541	252.495	146.899983	1.00178408	4.592E-12
14D02250	1.8 %	13.707587	0.115704	3.111763	1.244400	0.046292	0.000479	252.512	146.950366	1.00178420	3.491E-12
14D02251	1.9 %	11.617351	0.100631	2.366323	1.208058	0.039844	0.000424	252.521	146.974556	1.00178426	3.018E-12
14D02252	2.1 %	9.224018	0.070694	3.127410	1.056888	0.031555	0.000308	252.529	146.998750	1.00178432	2.782E-12
14D02254	2.3 %	9.374708	0.097369	3.661452	1.407092	0.031859	0.000416	252.547	147.049167	1.00178444	2.002E-12
14D02255	2.5 %	6.894325	0.036988	2.792304	0.666746	0.023747	0.000193	252.556	147.075391	1.00178450	3.050E-12
14D02257	2.8 %	5.135739	0.018486	2.062295	0.420508	0.017343	0.000112	252.573	147.125834	1.00178463	3.777E-12
14D02258	3.2 %	4.681589	0.022759	1.689596	0.566143	0.015802	0.000124	252.581	147.150053	1.00178469	2.579E-12
14D02260	4.0 %	✓ 2.703706	0.004299	2.272802	0.130727	0.009472	0.000045	252.599	147.200522	1.00178481	6.550E-12
14D02261	5.0 %	✓ 1.622573	0.002101	2.616514	0.073743	0.005886	0.000026	252.607	147.224753	1.00178487	7.211E-12
14D02263	6.0 %	✓ 1.294038	0.002037	2.641283	0.074305	0.004769	0.000022	252.624	147.275247	1.00178499	5.400E-12
14D02264	7.0 %	✓ 1.032361	0.001410	2.702770	0.055498	0.003859	0.000017	252.633	147.301511	1.00178505	6.253E-12
14D02266	8.2 %	✓ 0.914316	0.001190	2.771874	0.046520	0.003521	0.000016	252.650	147.350011	1.00178517	6.663E-12
14D02267	9.6 %	✓ 0.946746	0.001229	2.632695	0.050675	0.003566	0.000016	252.659	147.376288	1.00178524	6.641E-12
14D02269	11.2 %	✓ 1.116690	0.001449	2.659216	0.055090	0.004193	0.000018	252.676	147.426835	1.00178536	6.812E-12
14D02270	13.2 %	✓ 1.457391	0.001787	2.792211	0.065965	0.005409	0.000023	252.685	147.451103	1.00178542	7.562E-12
14D02272	15.4 %	✓ 2.036906	0.002316	2.912157	0.072818	0.007306	0.000029	252.702	147.501675	1.00178554	9.056E-12
14D02273	18.0 %	2.817936	0.003030	2.973179	0.076410	0.010152	0.000038	252.710	147.525956	1.00178560	1.143E-11
14D02274	21.0 %	3.919632	0.003961	3.583005	0.089798	0.013970	0.000049	252.719	147.552265	1.00178566	1.476E-11

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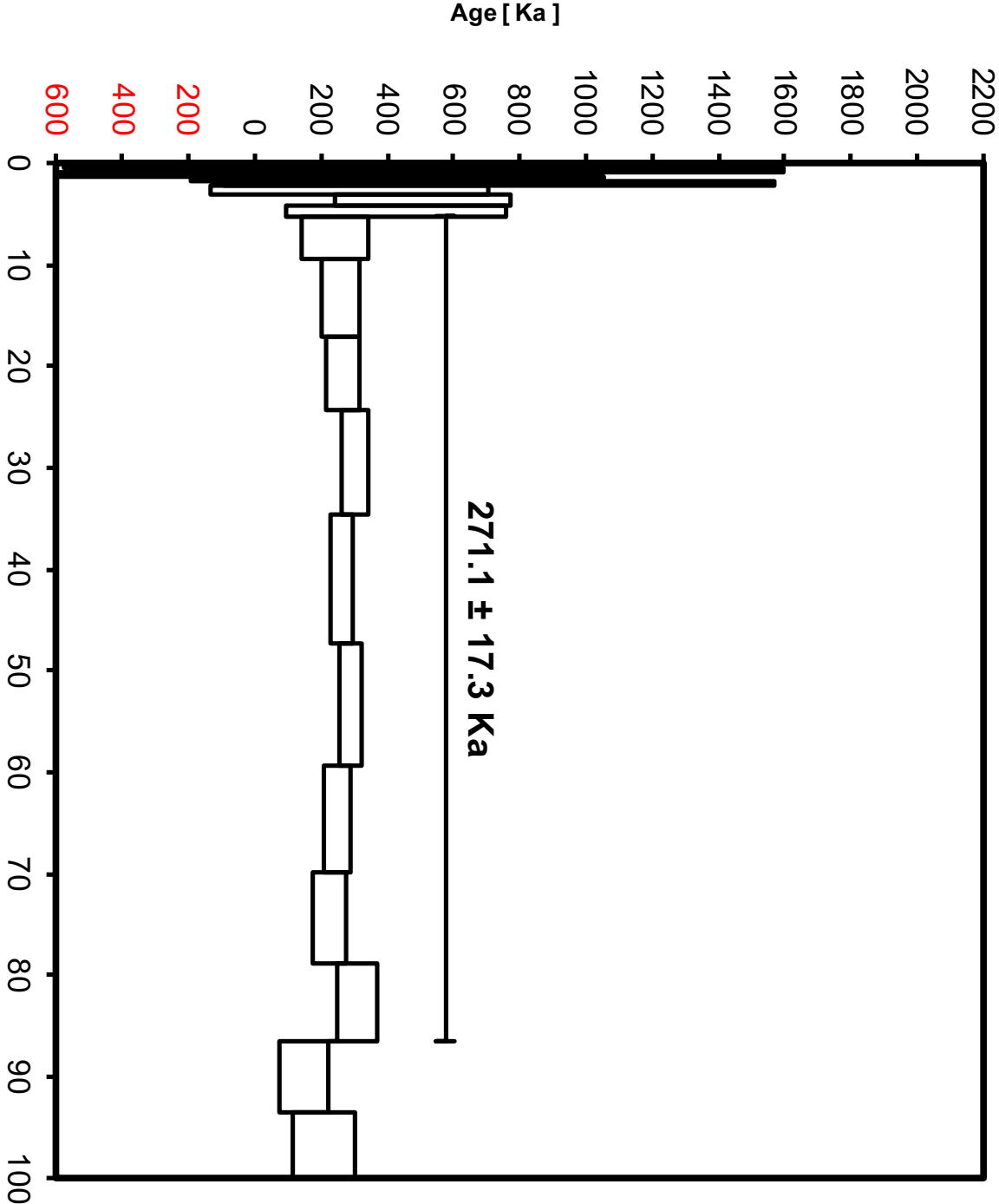
Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
14D02248	1.7 %	0.0168099	0.0005257	0.0101236	0.0307562	0.0347435	0.0368783	0.1316716	0.0346266	5.0585859	0.1458852
14D02250	1.8 %	0.0166966	0.0005257	0.0096593	0.0307562	0.0328034	0.0368783	0.1242969	0.0346266	4.9989989	0.1458852
14D02251	1.9 %	0.0166422	0.0005257	0.0094365	0.0307562	0.0319536	0.0368783	0.1207571	0.0346266	4.9715569	0.1458852
14D02252	2.1 %	0.0165878	0.0005257	0.0092136	0.0307562	0.0311567	0.0368783	0.1172173	0.0346266	4.9448673	0.1458852
14D02254	2.3 %	0.0164744	0.0005257	0.0087494	0.0307562	0.0296663	0.0368783	0.1098427	0.0346266	4.8916802	0.1458852
14D02255	2.5 %	0.0164155	0.0005257	0.0085080	0.0307562	0.0289820	0.0368783	0.1060079	0.0346266	4.8653133	0.1458852
14D02257	2.8 %	0.0163022	0.0005257	0.0080437	0.0307562	0.0278404	0.0368783	0.0986332	0.0346266	4.8170894	0.1458852
14D02258	3.2 %	0.0162478	0.0005257	0.0078209	0.0307562	0.0273739	0.0368783	0.0950934	0.0346266	4.7951017	0.1458852
14D02260	4.0 %	0.0161344	0.0005257	0.0073566	0.0307562	0.0265719	0.0368783	0.0877188	0.0346266	4.7517104	0.1458852
14D02261	5.0 %	0.0160800	0.0005257	0.0071338	0.0307562	0.0262685	0.0368783	0.0841790	0.0346266	4.7320424	0.1458852
14D02263	6.0 %	0.0159667	0.0005257	0.0066695	0.0307562	0.0258061	0.0368783	0.0768043	0.0346266	4.6934836	0.1458852
14D02264	7.0 %	0.0159078	0.0005257	0.0064281	0.0307562	0.0256563	0.0368783	0.0729695	0.0346266	4.6747235	0.1458852
14D02266	8.2 %	0.0157990	0.0005257	0.0059824	0.0307562	0.0255429	0.0368783	0.0658899	0.0346266	4.6424090	0.1458852
14D02267	9.6 %	0.0157400	0.0005257	0.0057410	0.0307562	0.0255697	0.0368783	0.0620551	0.0346266	4.6261618	0.1458852
14D02269	11.2 %	0.0156267	0.0005257	0.0052768	0.0307562	0.0257957	0.0368783	0.0546804	0.0346266	4.5973988	0.1458852
14D02270	13.2 %	0.0155723	0.0005257	0.0050539	0.0307562	0.0259857	0.0368783	0.0511406	0.0346266	4.5847524	0.1458852
14D02272	15.4 %	0.0154590	0.0005257	0.0045897	0.0307562	0.0265514	0.0368783	0.0437660	0.0346266	4.5608220	0.1458852
14D02273	18.0 %	0.0154046	0.0005257	0.0043668	0.0307562	0.0269044	0.0368783	0.0402262	0.0346266	4.5504952	0.1458852
14D02274	21.0 %	0.0153456	0.0005257	0.0041254	0.0307562	0.0273465	0.0368783	0.0363914	0.0346266	4.5401568	0.1458852

Intercept Values	36Ar [fA]				37Ar [fA]				38Ar [fA]				39Ar [fA]				40Ar [fA]				
		1σ	r ²			1σ	r ²			1σ	r ²			1σ	r ²			1σ	r ²		
14D02248	1.7%	0.3263725	0.0013484	0.5676	EXP 150 of 150	0.0422	0.0335	0.0073	EXP 150 of 150	0.2344076	0.0279626	0.0040	EXP 150 of 150	5.7260	0.0256	0.6193	EXP 150 of 150	100.91964	0.03402	0.9756	EXP 150 of 150
14D02250	1.8%	0.2510145	0.0012453	0.4464	EXP 150 of 150	0.1007	0.0316	0.0030	EXP 150 of 150	0.2528269	0.0270115	0.0001	EXP 149 of 150	5.3882	0.0254	0.6271	EXP 150 of 150	77.88192	0.03810	0.8579	EXP 150 of 150
14D02251	1.9%	0.2224277	0.0011412	0.4199	EXP 150 of 150	0.0761	0.0310	0.0004	EXP 150 of 150	0.2228280	0.0257162	0.0004	EXP 150 of 150	5.4917	0.0261	0.5980	EXP 150 of 150	67.98965	0.03176	0.8029	EXP 150 of 150
14D02252	2.1%	0.2657806	0.0010104	0.4175	EXP 150 of 150	0.1221	0.0319	0.0243	EXP 150 of 150	0.2278518	0.0275721	0.0003	EXP 150 of 150	6.3522	0.0265	0.6931	EXP 150 of 150	63.02914	0.03187	0.1206	EXP 150 of 150
14D02254	2.3%	0.1517216	0.0008986	0.1804	EXP 150 of 150	0.1000	0.0283	0.0097	EXP 149 of 150	0.2015674	0.0266701	0.0074	EXP 150 of 150	4.5045	0.0254	0.5973	EXP 150 of 150	46.68933	0.03101	0.8457	EXP 150 of 150
14D02255	2.5%	0.2252764	0.0011447	0.4527	EXP 150 of 150	0.1633	0.0271	0.0231	EXP 150 of 150	0.3512162	0.0266103	0.0421	EXP 149 of 150	9.2522	0.0267	0.8481	EXP 150 of 150	68.54962	0.03441	0.6305	EXP 150 of 150
14D02257	2.8%	0.2698927	0.0011780	0.4465	EXP 150 of 150	0.2329	0.0300	0.0000	EXP 149 of 150	0.4236709	0.0257697	0.0102	EXP 150 of 150	15.3017	0.0294	0.9178	EXP 150 of 150	83.67305	0.03605	0.9428	EXP 150 of 150
14D02258	3.2%	0.1982737	0.0009397	0.2705	EXP 149 of 150	0.1216	0.0305	0.0060	EXP 150 of 150	0.3362664	0.0276611	0.0032	EXP 150 of 150	11.4818	0.0285	0.8679	EXP 150 of 150	58.63330	0.03376	0.0111	EXP 150 of 150
14D02260	4.0%	0.4722856	0.0016725	0.7510	EXP 150 of 150	0.7579	0.0310	0.0333	EXP 149 of 150	1.0909795	0.0277806	0.0949	EXP 150 of 150	50.1667	0.0329	0.9904	EXP 150 of 150	141.49777	0.04074	0.9926	EXP 150 of 150
14D02261	5.0%	0.5360530	0.0017420	0.7611	EXP 150 of 150	1.6086	0.0314	0.1333	EXP 150 of 150	1.6749937	0.0261482	0.1123	EXP 150 of 150	91.9450	0.0341	0.9969	EXP 150 of 150	155.26601	0.03888	0.9945	EXP 150 of 150
14D02263	6.0%	0.4114971	0.0013634	0.7160	EXP 149 of 150	1.5243	0.0279	0.1505	EXP 150 of 150	1.4700062	0.0314989	0.0772	EXP 150 of 150	86.3333	0.0326	0.9968	EXP 150 of 150	117.42337	0.03684	0.9869	EXP 150 of 150
14D02264	7.0%	0.4854531	0.0014598	0.7886	EXP 149 of 150	2.2672	0.0306	0.1596	EXP 150 of 150	1.9261627	0.0269113	0.0715	EXP 150 of 150	125.2782	0.0341	0.9983	EXP 150 of 150	135.21786	0.03529	0.9823	EXP 150 of 150
14D02266	8.2%	0.5259355	0.0017606	0.7551	EXP 150 of 150	2.7987	0.0289	0.2319	EXP 150 of 150	2.3751403	0.0260633	0.2587	EXP 150 of 150	150.7150	0.0360	0.9985	EXP 150 of 150	143.75385	0.03967	0.9922	EXP 150 of 150
14D02267	9.6%	0.5129126	0.0017243	0.7320	EXP 150 of 150	2.5577	0.0336	0.1556	EXP 150 of 150	2.3647720	0.0304480	0.2536	EXP 150 of 150	145.0604	0.0360	0.9986	EXP 150 of 150	143.26875	0.03642	0.9934	EXP 150 of 150
14D02269	11.2%	0.5240405	0.0019333	0.7783	EXP 150 of 150	2.2456	0.0308	0.1647	EXP 150 of 150	2.1795281	0.0260884	0.2109	EXP 149 of 150	126.1479	0.0344	0.9983	EXP 150 of 150	146.80563	0.04264	0.9921	EXP 150 of 150
14D02270	13.2%	0.5734841	0.0017896	0.8127	EXP 150 of 150	2.0051	0.0330	0.0858	EXP 150 of 150	2.0816555	0.0291036	0.1554	EXP 150 of 150	107.3095	0.0337	0.9878	EXP 150 of 150	162.45761	0.03730	0.9658	EXP 150 of 150
14D02272	15.4%	0.6611203	0.0018155	0.8137	EXP 149 of 150	1.7912	0.0299	0.1907	EXP 150 of 150	2.0259793	0.0278014	0.1982	EXP 150 of 150	91.9504	0.0304	0.9976	EXP 150 of 150	193.62899	0.04436	0.9967	EXP 150 of 150
14D02273	18.0%	0.8336068	0.0020768	0.8637	EXP 150 of 150	1.6673	0.0273	0.0944	EXP 150 of 150	1.9383018	0.0306661	0.1567	EXP 150 of 150	83.8501	0.0364	0.9958	EXP 150 of 150	243.07149	0.04211	0.9984	EXP 150 of 150
14D02274	21.0%	1.0612004	0.0020280	0.9088	EXP 150 of 150	1.8698	0.0325	0.0853	EXP 149 of 150	1.9338435	0.0318954	0.0801	EXP 150 of 150	77.8873	0.0331	0.9959	EXP 150 of 150	312.72353	0.05059	0.9988	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%Fe	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Yon	Y-on	ZH-Yon	Project	Experiment	Num	
HQ0226	1.7%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	1.7	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	1	21	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022267	01
HQ0220	1.8%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	1.8	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	1	46	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0221	1.9%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	1.9	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	1	58	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0222	2.1%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	2.1	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	2	10	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0224	2.3%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	2.3	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	2	20	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0226	2.5%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	2.5	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	2	40	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0227	2.8%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	2.8	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	3	13	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0228	3.3%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	3.3	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	3	20	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0230	4.0%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	4	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	3	50	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0231	5.5%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	5	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	4	2	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0233	6.0%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	6	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	4	27	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0234	7.5%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	7	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	4	40	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0236	8.2%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	8.2	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	5	4	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0237	8.6%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	8.6	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	5	17	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0238	11.2%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	11.2	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	5	42	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0270	13.1%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	13.1	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	5	54	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0272	16.1%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	16.1	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	6	16	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0273	18.0%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	18	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	6	21	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01
HQ0274	21.4%	SC10-060	Groundmass	Colapage St. Crater Island	Dan Magrane	21	FC1-3	28.38	0.064	Renard et al (1998)	0.00000	0.143	0.0010020	0.143	302.776	0.004	0.00209404	0.003	1	4.00E-14	29	JAN	2014	6	44	1	15-08U-02	0.00	0.00	48.00	Colapage Pnapp (15-05)	14022207	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ	
14D02248	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02250	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02251	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02252	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02254	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02255	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02257	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02258	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02260	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02261	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02263	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02264	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02265	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02267	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02269	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02270	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02272	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02273	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02274	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0

14D02247.AGE >>> SC12-040 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED PLATEAU
271.1 ± 17.3
TOTAL FUSION
265.8 ± 17.8
NORMAL ISOCHRON
281.4 ± 55.7
INVERSE ISOCHRON
281.5 ± 53.6

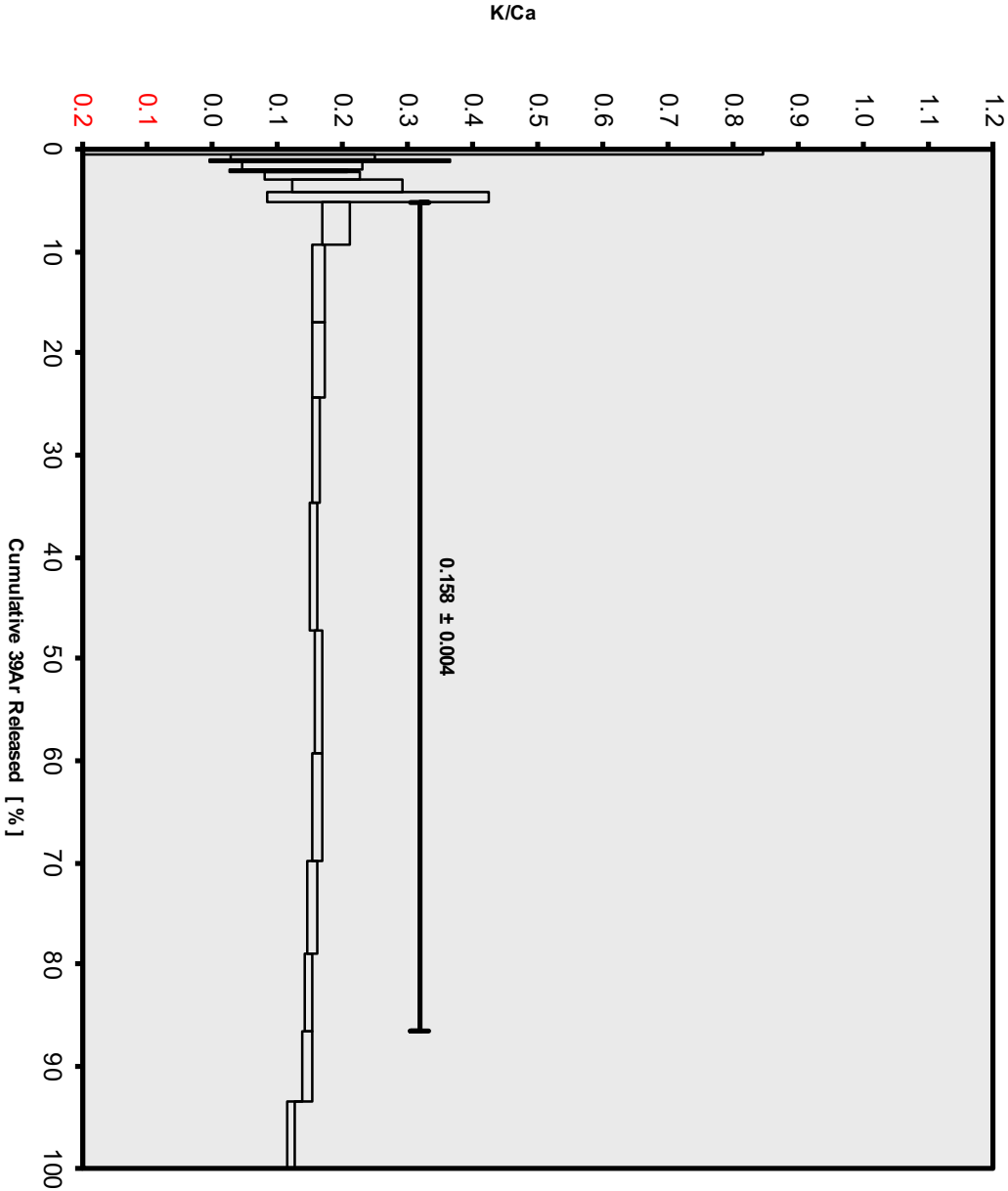
MSWD (PROBABILITY)
1.27 (25%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00163010 ±
0.14300000

14D02247.AGE >>> SC12-040 >>> GALAPAGOS | HARPP (13-07) PROJECT



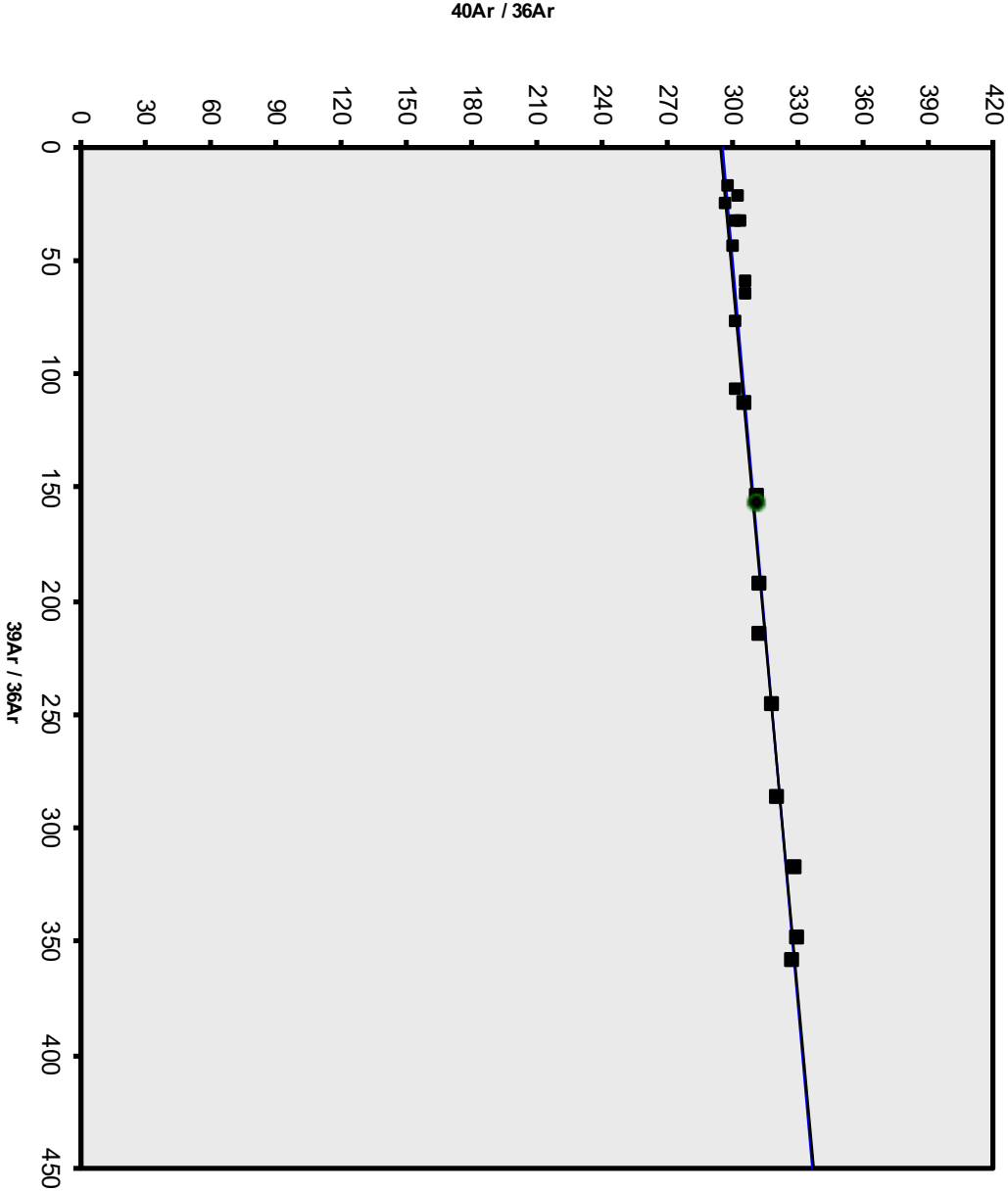
Ar-Ages in Ka

WEIGHTED
PLATEAU
271.1 ± 17.3
TOTAL FUSION
265.8 ± 17.8
NORMAL
ISOCHRON
281.4 ± 55.7
INVERSE
ISOCHRON
281.5 ± 53.6

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02247.AGE >>> SC12-040 >>> GALAPAGOS | HARPP (13-07) PROJECT



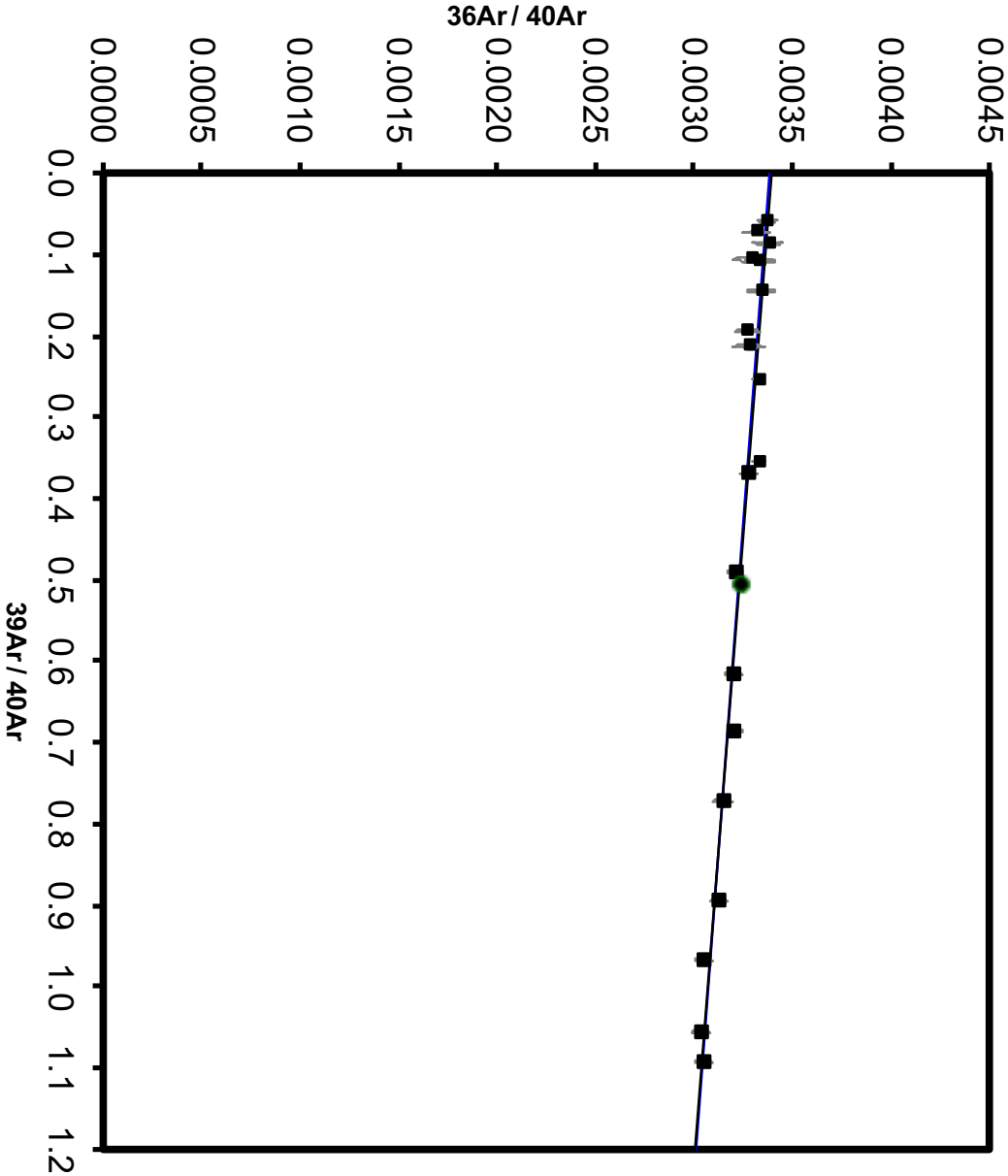
Ar-Ages in Ka

WEIGHTED
PLATEAU
271.1 ± 17.3
TOTAL FUSION
265.8 ± 17.8
NORMAL
ISOCHRON
281.4 ± 55.7
INVERSE
ISOCHRON
281.5 ± 53.6
MSWD
(PROBABILITY)
1.42 (19%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02247.AGE >>> SC12-040 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
271.1 ± 17.3
TOTAL FUSION
265.8 ± 17.8
NORMAL
ISOCHRON
281.4 ± 55.7
INVERSE
ISOCHRON
281.5 ± 53.6

MSWD
(PROBABILITY)
1.42 (19%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03

Incremental Heating			36Ar(a)	37Ar(ca)	38Ar(cl)	39Ar(k)	40Ar(r)	Age $\pm 2\sigma$	40Ar(r)	39Ar(k)	K/Ca $\pm 2\sigma$
			[fA]	[fA]	[fA]	[fA]	[fA]	(Ka)	(%)	(%)	
14D02220	1.7 %		1.005099	13.8391	0.1250060	2.12588	1.48436	2104.8 $\pm$ 3555.6	0.50	0.30	0.066 $\pm$ 0.065
14D02222	1.8 %		0.616275	10.5501	0.1045153	1.37993	0.53207	1162.6 $\pm$ 4142.0	0.29	0.19	0.056 $\pm$ 0.067
14D02223	1.9 %		0.404699	0.1107	0.0575458	1.02795	1.86713	5470.2 $\pm$ 4907.2	1.54	0.14	3.993 $\pm$ 448.022
14D02224	2.1 %		0.428704	12.0859	0.0630541	1.47699	1.45524	2969.3 $\pm$ 3620.9	1.14	0.21	0.053 $\pm$ 0.060
14D02226	2.3 %		0.484112	10.0482	0.0948074	2.33052	0.17859	231.1 $\pm$ 2319.2	0.12	0.33	0.100 $\pm$ 0.121
14D02227	2.5 %		0.354325	3.2194	0.0326546	2.03467	1.44185	2136.1 $\pm$ 2515.6	1.36	0.29	0.272 $\pm$ 1.128
14D02229	2.8 %		0.526791	15.4858	0.1257153	4.73119	2.91944	1860.2 $\pm$ 1190.6	1.84	0.66	0.131 $\pm$ 0.112
14D02230	3.2 %	✓	0.448814	21.1914	0.1516360	5.80195	0.93676	486.9 $\pm$ 935.3	0.70	0.81	0.118 $\pm$ 0.075
14D02232	4.0 %	✓	0.544322	33.0109	0.2054723	11.83919	3.05437	778.0 $\pm$ 480.8	1.86	1.66	0.154 $\pm$ 0.061
14D02233	5.0 %	✓	0.853411	95.4607	0.2572812	38.25168	5.90882	465.9 $\pm$ 182.0	2.29	5.37	0.172 $\pm$ 0.022
14D02235	6.0 %	✓	0.696486	115.3690	0.3592656	49.14141	6.42282	394.2 $\pm$ 128.1	2.03	6.90	0.183 $\pm$ 0.021
14D02236	7.0 %	✓	0.661007	132.4294	0.1536375	64.57982	9.82443	458.8 $\pm$ 95.6	4.79	9.07	0.210 $\pm$ 0.021
14D02238	8.2 %	✓	0.667352	166.5055	0.1749474	84.04016	8.68932	311.8 $\pm$ 76.4	4.22	11.80	0.217 $\pm$ 0.018
14D02239	9.6 %	✓	0.594488	193.1288	0.1552902	93.89297	14.07634	452.1 $\pm$ 65.6	7.41	13.19	0.209 $\pm$ 0.015
14D02241	11.2 %	✓	0.590744	197.5483	0.2084044	87.04623	11.02209	381.9 $\pm$ 68.2	5.94	12.22	0.189 $\pm$ 0.013
14D02242	13.2 %	✓	0.539726	216.8750	0.1478907	78.71014	12.75825	488.8 $\pm$ 74.4	5.44	11.05	0.156 $\pm$ 0.010
14D02244	15.4 %	✓	0.522362	197.6153	0.0917954	64.26358	8.07188	378.8 $\pm$ 88.2	4.97	9.02	0.140 $\pm$ 0.010
14D02245	18.0 %	✓	0.1010783	241.2329	0.1200092	62.41774	9.20730	444.9 $\pm$ 121.6	2.99	8.77	0.111 $\pm$ 0.006
14D02246	21.0 %	✓	0.634450	276.4783	0.1512987	57.02235	7.87245	416.4 $\pm$ 109.8	4.03	8.01	0.089 $\pm$ 0.004

Information on Analysis						
Sample = SC12-572B Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Dan Miggins Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00166793 ± 0.14600000 FCT-3 = 28.340 ± 0.564 Ma	Results	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
	Age Plateau	0.13796 ± 0.01181 ± 8.56%	416.1 ± 35.6 ± 8.57% Full External Error ± 37.2 Analytical Error ± 35.6	1.63 8% 1.85 1.2770	97.88 12 2σ Confidence Limit Error Magnification	0.123 ± 0.025
	Total Fusion Age	0.15077 ± 0.01229 ± 8.15%	454.7 ± 37.1 ± 8.15% Full External Error ± 38.8 Analytical Error ± 37.1		19	0.157 ± 0.005

OSU Argon Geochronology Lab

Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02220	1.7 %		2.12 $\pm$ 0.11	296.98 $\pm$ 2.51	0.1505
14D02222	1.8 %		2.24 $\pm$ 0.18	296.36 $\pm$ 3.08	0.1138
14D02223	1.9 %		2.54 $\pm$ 0.27	300.11 $\pm$ 4.17	0.1072
14D02224	2.1 %		3.45 $\pm$ 0.26	298.89 $\pm$ 4.18	0.1593
14D02226	2.3 %		4.81 $\pm$ 0.24	295.13 $\pm$ 3.70	0.2161
14D02227	2.5 %		5.74 $\pm$ 0.32	299.57 $\pm$ 4.85	0.2436
14D02229	2.8 %		8.98 $\pm$ 0.23	301.04 $\pm$ 3.60	0.4005
14D02230	3.2 %	✓	12.93 $\pm$ 0.30	297.59 $\pm$ 4.03	0.5070
14D02232	4.0 %	✓	21.75 $\pm$ 0.31	301.11 $\pm$ 3.53	0.7133
14D02233	5.0 %	✓	44.82 $\pm$ 0.42	302.42 $\pm$ 2.76	0.8938
14D02235	6.0 %	✓	70.56 $\pm$ 0.70	304.72 $\pm$ 3.08	0.9131
14D02236	7.0 %	✓	97.70 $\pm$ 0.99	310.36 $\pm$ 3.23	0.9242
14D02238	8.2 %	✓	125.93 $\pm$ 1.31	308.52 $\pm$ 3.32	0.9346
14D02239	9.6 %	✓	157.94 $\pm$ 1.75	319.18 $\pm$ 3.68	0.9368
14D02241	11.2 %	✓	147.35 $\pm$ 1.58	314.16 $\pm$ 3.52	0.9288
14D02242	13.2 %	✓	145.83 $\pm$ 1.68	319.14 $\pm$ 3.85	0.9300
14D02244	15.4 %	✓	123.02 $\pm$ 1.42	310.95 $\pm$ 3.76	0.9193
14D02245	18.0 %	✓	61.75 $\pm$ 0.52	304.61 $\pm$ 2.56	0.9297
14D02246	21.0 %	✓	89.88 $\pm$ 0.96	307.91 $\pm$ 3.39	0.9244

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	296.66 $\pm$ 2.67 $\pm$ 0.90%	0.12716 $\pm$ 0.02683 $\pm$ 21.10%	383.5 $\pm$ 80.9 $\pm$ 21.10% Full External Error $\pm$ 81.5 Analytical Error $\pm$ 80.9	1.68 8%
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.89 1.2944 12	Convergence Number of Iterations Calculated Line	0.000000180312 4 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02220	1.7 %		0.0071221 $\pm$ 0.0003651	0.00336727 $\pm$ 0.00002842	0.0124
14D02222	1.8 %		0.0075554 $\pm$ 0.0005957	0.00337424 $\pm$ 0.00003511	0.0174
14D02223	1.9 %		0.0084636 $\pm$ 0.0009083	0.00333207 $\pm$ 0.00004629	0.0216
14D02224	2.1 %		0.0115266 $\pm$ 0.0008496	0.00334566 $\pm$ 0.00004674	0.0282
14D02226	2.3 %		0.0163114 $\pm$ 0.0007865	0.00338832 $\pm$ 0.00004245	0.0386
14D02227	2.5 %		0.0191688 $\pm$ 0.0010363	0.00333813 $\pm$ 0.00005399	0.0483
14D02229	2.8 %		0.0298336 $\pm$ 0.0007107	0.00332180 $\pm$ 0.00003977	0.0664
14D02230	3.2 %	✓	0.0434404 $\pm$ 0.0008596	0.00336036 $\pm$ 0.00004555	0.0997
14D02232	4.0 %	✓	0.0722336 $\pm$ 0.0007316	0.00332103 $\pm$ 0.00003889	0.1496
14D02233	5.0 %	✓	0.1482095 $\pm$ 0.0006315	0.00330662 $\pm$ 0.00003021	0.1849
14D02235	6.0 %	✓	0.2315429 $\pm$ 0.0009678	0.00328168 $\pm$ 0.00003318	0.2517
14D02236	7.0 %	✓	0.3147902 $\pm$ 0.0012614	0.00322204 $\pm$ 0.00003358	0.2720
14D02238	8.2 %	✓	0.4081763 $\pm$ 0.0015658	0.00324127 $\pm$ 0.00003483	0.2736
14D02239	9.6 %	✓	0.4948314 $\pm$ 0.0020000	0.00313305 $\pm$ 0.00003610	0.2849
14D02241	11.2 %	✓	0.4690321 $\pm$ 0.0019519	0.00318311 $\pm$ 0.00003563	0.2985
14D02242	13.2 %	✓	0.4569601 $\pm$ 0.0020315	0.00313344 $\pm$ 0.00003780	0.3002
14D02244	15.4 %	✓	0.3956390 $\pm$ 0.0018909	0.00321592 $\pm$ 0.00003891	0.3125
14D02245	18.0 %	✓	0.2027249 $\pm$ 0.0006384	0.00328290 $\pm$ 0.00002760	0.1915
14D02246	21.0 %	✓	0.2918946 $\pm$ 0.0012364	0.00324772 $\pm$ 0.00003580	0.2677

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron	296.63 $\pm$ 2.66 $\pm$ 0.90%	0.12784 $\pm$ 0.02531 $\pm$ 19.80%	385.6 $\pm$ 76.3 $\pm$ 19.80%	1.67 8%
			Full External Error $\pm$ 77.0 Analytical Error $\pm$ 76.3	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	1.89 1.2928 12 5.8%	Convergence Number of Iterations Calculated Line	0.0060043636 3 Weighted York-2

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Relative Abundances		³⁶ Ar [fA]	%1σ	³⁷ Ar [fA]	%1σ	³⁸ Ar [fA]	%1σ	³⁹ Ar [fA]	%1σ	⁴⁰ Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02220	1.7 %	1.008804	0.363	13.8391	49.220	0.338975	13.069	2.13519	2.540	298.4934	0.116	0.69823 ± 1.18024	2104.8 ± 3555.6	0.50	0.30	0.066 ± 0.065
14D02222	1.8 %	0.619103	0.402	10.5501	59.428	0.236887	17.970	1.38703	3.906	182.6428	0.189	0.38558 ± 1.37416	1162.6 ± 4142.0	0.29	0.19	0.056 ± 0.067
14D02223	1.9 %	0.404752	0.487	0.1107	5610.296	0.144898	30.412	1.02802	5.343	121.4567	0.284	1.81636 ± 1.63191	5470.2 ± 4907.2	1.54	0.14	3.993 ± 448.022
14D02224	2.1 %	0.431921	0.484	12.0659	56.558	0.161667	27.991	1.48513	3.642	128.1388	0.269	0.98527 ± 1.20247	2969.3 ± 3620.9	1.14	0.21	0.053 ± 0.060
14D02225	2.3 %	0.488803	0.470	10.0462	60.799	0.213206	20.724	2.33728	2.385	142.8788	0.242	0.07663 ± 0.76883	231.1 ± 2318.2	0.12	0.33	0.100 ± 0.121
14D02227	2.5 %	0.355188	0.547	3.2194	207.498	0.122480	34.258	2.03884	2.671	106.1469	0.325	0.70864 ± 0.83501	2136.1 ± 2515.6	1.36	0.29	0.272 ± 1.128
14D02229	2.8 %	0.530930	0.445	15.4858	42.672	0.280166	14.661	4.74161	1.165	158.5908	0.218	0.61706 ± 0.39516	1860.2 ± 1190.6	1.84	0.66	0.131 ± 0.112
14D02230	3.2 %	✓ 0.454471	0.481	21.1914	31.653	0.304491	13.807	5.81621	0.950	133.5672	0.259	0.16146 ± 0.31018	486.9 ± 935.3	0.70	0.81	0.118 ± 0.075
14D02232	4.0 %	✓ 0.553121	0.440	33.0109	19.626	0.446525	9.725	11.86141	0.458	163.9135	0.211	0.25799 ± 0.15949	778.0 ± 480.8	1.86	1.66	0.154 ± 0.061
14D02233	5.0 %	✓ 0.878718	0.381	95.4607	6.473	0.865357	5.072	38.31593	0.165	258.1305	0.134	0.15447 ± 0.09035	465.9 ± 182.0	2.29	5.37	0.172 ± 0.022
14D02235	6.0 %	✓ 0.727091	0.392	115.3690	5.674	1.064704	4.155	49.21905	0.130	212.2842	0.163	0.13070 ± 0.04249	394.2 ± 128.1	3.03	6.90	0.183 ± 0.021
14D02236	7.0 %	✓ 0.696031	0.398	132.4294	4.908	1.030506	4.226	64.66895	0.108	205.2172	0.168	0.15213 ± 0.03170	458.8 ± 95.6	4.79	9.07	0.210 ± 0.021
14D02238	8.2 %	✓ 0.711381	0.409	166.5055	4.038	1.279197	3.277	84.15222	0.092	205.9767	0.168	0.10339 ± 0.02533	311.8 ± 76.4	4.22	11.80	0.217 ± 0.018
14D02239	9.6 %	✓ 0.645537	0.418	193.1288	3.554	1.361747	3.097	94.02294	0.087	189.8422	0.182	0.14992 ± 0.02174	452.1 ± 65.6	7.41	13.19	0.209 ± 0.015
14D02241	11.2 %	✓ 0.642982	0.399	197.5483	3.396	1.336860	3.379	87.17918	0.092	185.6749	0.186	0.12662 ± 0.02261	381.9 ± 68.2	5.94	12.22	0.189 ± 0.013
14D02242	13.2 %	✓ 0.597042	0.421	216.8750	3.079	1.174632	3.685	78.85609	0.095	172.3268	0.201	0.16209 ± 0.02467	488.8 ± 74.4	7.40	11.05	0.156 ± 0.010
14D02244	15.4 %	✓ 0.574570	0.411	197.6153	3.418	0.948213	4.563	64.39658	0.109	162.4948	0.212	0.12561 ± 0.02935	378.8 ± 88.2	4.97	9.02	0.140 ± 0.010
14D02245	18.0 %	✓ 1.074518	0.343	241.2329	2.811	1.052770	4.257	62.58009	0.110	307.9568	0.113	0.14751 ± 0.04032	444.9 ± 121.6	2.99	8.77	0.111 ± 0.006
14D02246	21.0 %	✓ 0.707503	0.395	276.4783	2.435	0.957222	4.385	57.20842	0.116	195.4101	0.177	0.13806 ± 0.03640	416.4 ± 109.8	4.03	8.01	0.089 ± 0.004
Σ		12.100467	0.096	1952.1848	1.472	13.320482	1.418	713.42817	0.039	3531.1430	0.043					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-572B
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan Miggins
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00166753 ± 0.14600000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 27.8
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 0.6sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(cj) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		0.13796 ± 0.01181 ± 8.56%	416.1 ± 35.6 ± 8.57% Full External Error ± 37.2 Analytical Error ± 35.6	1.63 8% 1.85 1.2770	97.88 12 2a Confidence Limit Error Magnification	0.123 ± 0.025
Total Fusion Age		0.15077 ± 0.01229 ± 8.15%	454.7 ± 37.1 ± 8.15% Full External Error ± 38.8 Analytical Error ± 37.1		19	0.157 ± 0.005
Normal Isochron	296.66 ± 2.67 ± 0.90%	0.12716 ± 0.02683 ± 21.10%	383.5 ± 80.9 ± 21.10% Full External Error ± 81.5 Analytical Error ± 80.9	1.68 8% 1.89 1.2944	97.88 12 2a Confidence Limit Error Magnification	
				0.0000001803	4 Convergence	
Inverse Isochron	296.63 ± 2.66 ± 0.90%	0.12784 ± 0.02531 ± 19.80%	385.6 ± 76.3 ± 19.80% Full External Error ± 77.0 Analytical Error ± 76.3	1.67 8% 1.89 1.2928	97.88 12 2a Confidence Limit Error Magnification	
				0.0060043636	3 Convergence 6% Spreading Factor	

Depositing Patterns	36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(ea) [A]	%1σ	36Ar(ed) [A]	%1σ	37Ar(ca) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(h) [A]	%1σ	38Ar(ea) [A]	%1σ	38Ar(ed) [A]	%1σ	39Ar(h) [A]	%1σ	39Ar(ea) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(a) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(h) [A]	%1σ		
14C02220	1.7%	✓	1.000000	0.41	0.000000	0.00	0.000000	46.32	0.000000	35.57	13.831	46.32	0.107021	0.41	0.000000	0.00	0.0041025	40.22	0.100000	35.46	2.15286	0.36	0.000000	45.22	1.46436	64.46	107.0000	0.41	0.000000	0.00	0.002471	2.36		
14C02222	1.8%	✓	0.616275	0.48	0.000000	0.00	0.002762	59.43	0.0000428	40.76	10.5501	59.43	0.1151818	0.48	0.000000	0.00	0.0167036	3.94	0.0014665	59.43	0.1045153	40.77	1.57993	3.94	0.0071002	59.43	0.55007	178.15	162.1003	0.48	0.000000	0.00	0.001387	3.94
14C02222	1.9%	✓	0.404691	0.63	0.000000	0.00	0.000000	59.6130	0.000000	76.62	0.1107	59.6130	0.010000	0.00	0.0116881	5.26	0.0001054	59.6130	0.0070458	76.62	1.02795	5.26	0.0001046	59.6130	1.86713	44.60	178.9886	0.63	0.000000	0.00	0.0010062	5.26		
14C02224	2.1%	✓	0.426754	0.64	0.000000	0.00	0.001907	86.36	0.000000	71.91	12.8659	86.36	0.0801948	0.64	0.000000	0.00	0.0168862	3.98	0.0001789	86.36	0.0035441	71.81	1.47399	3.98	0.0001008	86.36	1.46524	65.91	159.6821	0.64	0.000000	0.00	0.0014616	3.98
14C02226	2.3%	✓	0.484112	0.58	0.000000	0.00	0.000000	60.80	0.000000	46.64	10.0482	60.80	0.0904805	0.58	0.000000	0.00	0.0085213	2.40	0.0010367	60.80	0.0048074	46.64	2.33952	2.40	0.0007625	60.80	0.17859	501.65	143.9500	0.58	0.000000	0.00	0.0002358	2.40
14C02227	2.5%	✓	0.564325	0.74	0.000000	0.00	0.000000	207.50	0.000000	126.56	12.7194	207.50	0.0600000	0.74	0.000000	0.00	0.0021545	2.68	0.0004475	207.50	0.000000	126.57	2.03467	2.68	0.0001067	207.50	1.44166	59.86	159.7000	0.74	0.000000	0.00	0.000000	2.68
14C02229	2.6%	✓	0.536791	0.66	0.000000	0.00	0.000000	42.67	0.000000	32.70	15.4658	42.67	0.0984671	0.66	0.000000	0.00	0.0063409	1.17	0.0001026	42.67	0.1057163	32.72	4.73119	1.17	0.0104219	42.67	2.91944	32.00	155.8686	0.66	0.000000	0.00	0.0047785	1.17
14C02230	3.2%	✓	0.448814	0.63	0.000000	0.00	0.000000	31.65	0.000000	27.75	21.1914	31.65	0.0608004	0.63	0.000000	0.00	0.0060062	0.96	0.000000	31.65	0.191900	27.77	5.80195	0.96	0.0104218	31.65	0.00076	96.05	132.6246	0.63	0.000000	0.00	0.000000	0.96
14C02232	4.0%	✓	0.544232	0.85	0.000000	0.00	0.000749	19.63	0.000000	21.16	30.0100	19.63	0.1071008	0.85	0.000000	0.00	0.1347300	0.46	0.0040085	19.63	0.264723	21.16	11.83919	0.46	0.0001063	19.63	3.06437	30.91	96.9471	0.85	0.000000	0.00	0.0119076	0.46
14C02233	5.0%	✓	0.863411	0.44	0.000000	0.00	0.000000	6.47	0.001054	17.09	96.4607	6.47	0.1996026	0.44	0.000000	0.00	0.4300041	0.17	0.0100000	6.47	0.2572812	17.12	38.20188	0.17	0.0040461	6.47	5.90862	19.63	262.1631	0.44	0.000000	0.00	0.000000	0.17
14C02235	6.0%	✓	0.696486	0.48	0.000000	0.00	0.000000	5.67	0.000472	12.26	116.9090	5.67	0.1807100	0.48	0.000000	0.00	0.000000	0.13	0.0160000	5.67	0.3600000	12.26	46.14141	0.13	0.0179433	5.67	4.42062	16.26	205.8117	0.48	0.000000	0.00	0.000000	0.13
14C02236	7.0%	✓	0.661007	0.40	0.000000	0.00	0.000000	4.91	0.000000	26.37	132.4294	4.91	0.1236422	0.40	0.000000	0.00	0.7349184	0.11	0.0184077	4.91	0.1636375	26.39	64.57962	0.11	0.0801290	4.91	8.82443	16.42	196.3275	0.40	0.000000	0.00	0.000000	0.11
14C02238	8.2%	✓	0.667762	0.51	0.000000	0.00	0.000000	4.04	0.000000	23.69	166.5005	4.04	0.1247281	0.51	0.000000	0.00	0.000000	0.09	0.000000	4.04	0.1748474	24.01	64.94016	0.09	0.100000	4.04	8.88932	12.25	197.2025	0.51	0.000000	0.00	0.000000	0.09
14C02239	9.6%	✓	0.694488	0.65	0.000000	0.00	0.000000	3.95	0.000000	27.19	193.1288	3.95	0.1111007	0.65	0.000000	0.00	0.000000	0.08	0.000000	3.95	0.1650000	27.20	63.86007	0.08	0.100000	3.95	14.07034	7.25	175.6711	0.65	0.000000	0.00	0.000000	0.08
14C02241	11.2%	✓	0.696744	0.63	0.000000	0.00	0.001628	3.40	0.000000	21.71	197.5483	3.40	0.1104001	0.63	0.000000	0.00	0.000000	0.08	0.0274692	3.40	0.2604044	21.73	67.04623	0.08	0.100000	3.40	11.02209	8.83	174.5649	0.63	0.000000	0.00	0.000000	0.08
14C02242	13.2%	✓	0.639126	0.57	0.000000	0.00	0.000000	3.08	0.000000	29.80	216.8790	3.08	0.1030146	0.57	0.000000	0.00	0.000000	0.10	0.000000	3.08	0.1678607	29.31	78.71014	0.10	0.100000	3.08	12.76625	7.81	193.4680	0.57	0.000000	0.00	0.000000	0.10
14C02244	16.4%	✓	0.522282	0.67	0.000000	0.00	0.0007104	3.42	0.000000	47.17	197.6153	3.42	0.0870005	0.67	0.000000	0.00	0.7131186	0.11	0.0274692	3.42	0.0071564	47.18	46.46038	0.11	0.100000	3.42	8.07188	11.64	154.5800	0.67	0.000000	0.00	0.000000	0.11
14C02245	18.0%	✓	1.010783	0.40	0.000000	0.00	0.000000	2.81	0.000000	37.38	241.2329	2.81	0.1889154	0.40	0.000000	0.00	0.7100139	0.11	0.000000	2.81	0.100000	37.39	62.41774	0.11	0.100000	2.81	9.26700	13.67	298.8884	0.40	0.000000	0.00	0.000000	0.11
14C02246	21.0%	✓	0.634460	0.52	0.000000	0.00	0.000000	2.44	0.000000	27.77	276.4761	2.44	0.1160000	0.52	0.000000	0.00	0.6460143	0.10	0.000000	2.44	0.100000	27.78	57.00000	0.10	0.100000	2.44	7.87245	13.18	167.4601	0.52	0.000000	0.00	0.000000	0.10
Σ	1150000	0.12	0.000000	0.00	0.000000	0.00	0.000000	1.47	0.001000	6.50	1952.1845	1.47	2.100000	0.12	0.000000	0.00	8.100000	0.04	0.271000	1.47	2.760000	6.61	712.1405	0.04	1.310000	1.47	107.3600	4.08	3403.0574	0.12	0.000000	0.00	0.719000	0.04
Σ	1020000	0.13	0.000000	0.00	0.000000	0.00	0.000000	1.47	0.001000	6.50	1952.1845	1.47	2.100000	0.12	0.000000	0.00	8.100000	0.04	0.271000	1.47	2.760000	6.61	712.1405	0.04	1.310000	1.47	107.3600	4.08	3403.0574	0.12	0.000000	0.00	0.719000	0.04

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02220	1.7 %	139.796955	3.554686	6.481418	3.194411	0.472465	0.012123	252.253	146.200442	1.00178237	1.433E-11
14D02222	1.8 %	131.679026	5.149109	7.606227	4.529991	0.446352	0.017525	252.271	146.250585	1.00178249	8.767E-12
14D02223	1.9 %	118.145790	6.321033	0.107685	6.041424	0.393718	0.021122	252.279	146.274660	1.00178255	5.830E-12
14D02224	2.1 %	86.281473	3.151218	8.137994	4.612191	0.290831	0.010686	252.288	146.300745	1.00178261	6.151E-12
14D02226	2.3 %	61.130365	1.465647	4.299111	2.615828	0.208278	0.005064	252.305	146.348915	1.00178273	6.858E-12
14D02227	2.5 %	52.113587	1.402463	1.580604	3.279997	0.174382	0.004755	252.314	146.375014	1.00178280	5.095E-12
14D02229	2.8 %	33.446637	0.396315	3.265936	1.394152	0.111973	0.001396	252.331	146.425217	1.00178292	7.612E-12
14D02230	3.2 % ✓	22.964625	0.225996	3.643510	1.153790	0.078139	0.000832	252.340	146.449321	1.00178298	6.411E-12
14D02232	4.0 % ✓	13.819057	0.069688	2.783047	0.546350	0.046632	0.000296	252.357	146.499549	1.00178310	7.868E-12
14D02233	5.0 % ✓	6.736899	0.014318	2.491412	0.161330	0.022934	0.000095	252.365	146.523665	1.00178316	1.239E-11
14D02235	6.0 % ✓	4.313049	0.008999	2.343991	0.133044	0.014773	0.000061	252.383	146.573919	1.00178328	1.019E-11
14D02236	7.0 % ✓	3.173349	0.006351	2.047806	0.100526	0.010763	0.000044	252.392	146.600058	1.00178335	9.850E-12
14D02238	8.2 % ✓	2.447668	0.004690	1.978623	0.079924	0.008454	0.000035	252.409	146.650338	1.00178347	9.887E-12
14D02239	9.6 % ✓	2.019105	0.004076	2.054060	0.073022	0.006866	0.000029	252.417	146.674479	1.00178353	9.112E-12
14D02241	11.2 % ✓	2.129807	0.004427	2.266003	0.076971	0.007375	0.000030	252.435	146.724784	1.00178365	8.912E-12
14D02242	13.2 % ✓	2.185333	0.004853	2.750263	0.084721	0.007571	0.000033	252.443	146.748937	1.00178371	8.272E-12
14D02244	15.4 % ✓	2.523345	0.006023	3.068723	0.104940	0.008922	0.000038	252.460	146.799269	1.00178383	7.800E-12
14D02245	18.0 % ✓	4.921003	0.007730	3.854786	0.108445	0.017170	0.000062	252.469	146.823434	1.00178389	1.478E-11
14D02246	21.0 % ✓	3.415758	0.007220	4.832825	0.117820	0.012367	0.000051	252.478	146.849617	1.00178395	9.380E-12

OSU Argon Geochronology Lab

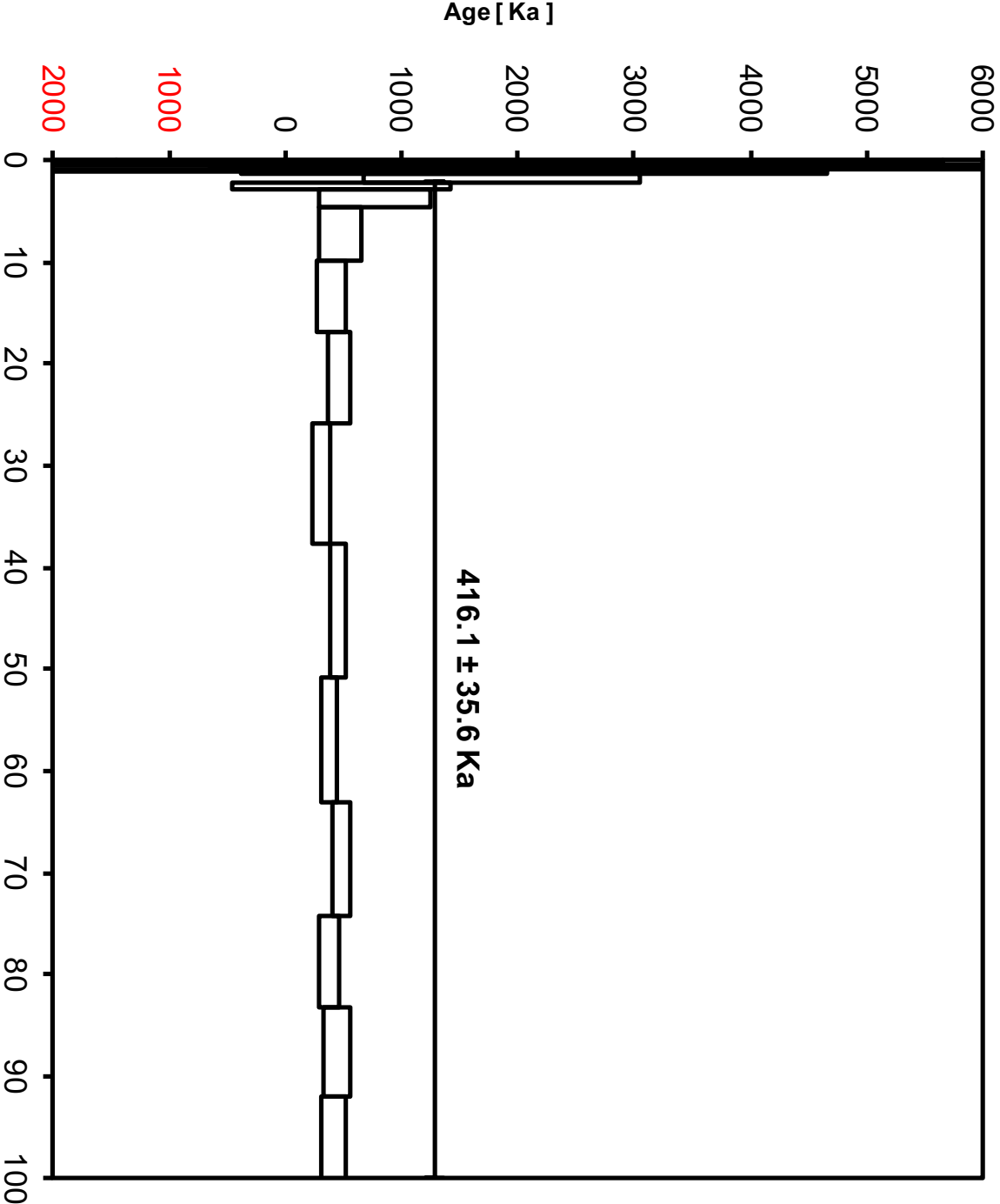
Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
14D02220	1.7 %	0.0160731	0.0008024	0.0019742	0.0307100	0.0045470	0.0325671	0.0482848	0.0475220	4.7428189	0.3438571
14D02222	1.8 %	0.0160095	0.0008024	0.0029530	0.0307100	0.0073790	0.0325671	0.0517829	0.0475220	4.6546477	0.3438571
14D02223	1.9 %	0.0160022	0.0008024	0.0034229	0.0307100	0.0122923	0.0325671	0.0534620	0.0475220	4.6243491	0.3438571
14D02224	2.1 %	0.0160114	0.0008024	0.0039319	0.0307100	0.0170212	0.0325671	0.0552809	0.0475220	4.6003268	0.3438571
14D02226	2.3 %	0.0160747	0.0008024	0.0048716	0.0307100	0.0241293	0.0325671	0.0586391	0.0475220	4.5800253	0.3438571
14D02227	2.5 %	0.0161342	0.0008024	0.0053807	0.0307100	0.0271007	0.0325671	0.0604581	0.0475220	4.5820543	0.3438571
14D02229	2.8 %	0.0162983	0.0008024	0.0063595	0.0307100	0.0310794	0.0325671	0.0639561	0.0475220	4.6116824	0.3438571
14D02230	3.2 %	0.0164003	0.0008024	0.0068294	0.0307100	0.0321780	0.0325671	0.0656352	0.0475220	4.6379276	0.3438571
14D02232	4.0 %	0.0166612	0.0008024	0.0078083	0.0307100	0.0327769	0.0325671	0.0691333	0.0475220	4.7176544	0.3438571
14D02233	5.0 %	0.0168097	0.0008024	0.0082781	0.0307100	0.0322531	0.0325671	0.0708123	0.0475220	4.7679469	0.3438571
14D02235	6.0 %	0.0171675	0.0008024	0.0092570	0.0307100	0.0294721	0.0325671	0.0743104	0.0475220	4.8977722	0.3438571
14D02236	7.0 %	0.0173794	0.0008024	0.0097660	0.0307100	0.0271235	0.0325671	0.0761294	0.0475220	4.9786591	0.3438571
14D02238	8.2 %	0.0178366	0.0008024	0.0107449	0.0307100	0.0208712	0.0325671	0.0796274	0.0475220	5.1599370	0.3438571
14D02239	9.6 %	0.0180793	0.0008024	0.0112148	0.0307100	0.0170590	0.0325671	0.0813065	0.0475220	5.2589741	0.3438571
14D02241	11.2 %	0.0186334	0.0008024	0.0121936	0.0307100	0.0074269	0.0325671	0.0848045	0.0475220	5.4903507	0.3438571
14D02242	13.2 %	0.0189226	0.0008024	0.0126635	0.0307100	0.0019923	0.0325671	0.0864836	0.0475220	5.6134351	0.3438571
14D02244	15.4 %	0.0195735	0.0008024	0.0136424	0.0307100	0.0110196	0.0325671	0.0899817	0.0475220	5.8949102	0.3438571
14D02245	18.0 %	0.0199091	0.0008024	0.0141122	0.0307100	0.0180765	0.0325671	0.0916607	0.0475220	6.0420419	0.3438571
14D02246	21.0 %	0.0202898	0.0008024	0.0146212	0.0307100	0.0263152	0.0325671	0.0934797	0.0475220	6.2102358	0.3438571

Intercept Values		36Ar [A]			37Ar [A]			38Ar [A]			39Ar [A]			40Ar [A]							
		1σ	r2		1σ	r2		1σ	r2		1σ	r2		1σ	r2						
14D02220	1.7%	0.978807	0.002314	0.8885	EXP 150 of 150	0.0910	0.0338	0.0177	EXP 150 of 150	0.3394447	0.0292366	0.0289	EXP 150 of 150	2.16888	0.02522	0.0700	EXP 150 of 150	303.86245	0.04415	0.9989	EXP 150 of 150
14D02222	1.8%	0.606717	0.001628	0.8430	EXP 150 of 150	0.0679	0.0288	0.0106	EXP 150 of 150	0.2266390	0.0286054	0.0428	EXP 150 of 150	1.42803	0.02511	0.0325	EXP 150 of 150	187.68865	0.03713	0.9959	EXP 150 of 150
14D02223	1.9%	0.402190	0.001376	0.7353	EXP 150 of 150	0.0027	0.0262	0.0204	EXP 150 of 150	0.1336623	0.0286926	0.0062	EXP 150 of 150	1.07250	0.02697	0.0446	EXP 150 of 150	126.33582	0.03306	0.9989	EXP 150 of 150
14D02224	2.1%	0.426121	0.001484	0.7285	EXP 150 of 150	0.0772	0.0341	0.0206	EXP 150 of 150	0.1427011	0.0306293	0.0059	EXP 150 of 150	1.52886	0.03483	0.0659	EXP 150 of 150	133.00799	0.03763	0.9987	EXP 150 of 150
14D02226	2.3%	0.480560	0.001633	0.7728	EXP 150 of 150	0.0626	0.0271	0.0003	EXP 150 of 150	0.1865119	0.0295689	0.0148	EXP 150 of 150	2.37775	0.03828	0.2661	EXP 150 of 150	147.75857	0.03708	0.9932	EXP 150 of 150
14D02227	2.5%	0.355031	0.001422	0.6386	EXP 150 of 150	0.0162	0.0326	0.0010	EXP 150 of 150	0.0039059	0.0295486	0.0033	EXP 150 of 150	2.08146	0.02559	0.1588	EXP 150 of 150	110.95163	0.03493	0.9775	EXP 150 of 150
14D02229	2.8%	0.522877	0.001690	0.7731	EXP 150 of 150	0.0979	0.0319	0.0051	EXP 150 of 150	0.2457163	0.0347104	0.0189	EXP 150 of 150	4.76871	0.02713	0.3583	EXP 150 of 150	163.53523	0.03933	0.9959	EXP 150 of 150
14D02230	3.2%	0.459226	0.001962	0.7403	EXP 150 of 150	0.1353	0.0328	0.0560	EXP 150 of 150	0.2686506	0.0257793	0.0474	EXP 150 of 150	5.83664	0.02765	0.6156	EXP 150 of 150	138.48536	0.03864	0.9903	EXP 150 of 150
14D02232	4.0%	0.544412	0.001696	0.7839	EXP 150 of 150	0.2135	0.0307	0.0025	EXP 150 of 150	0.4083795	0.0279229	0.0724	EXP 149 of 150	11.83634	0.03440	0.9097	EXP 150 of 150	168.97903	0.03794	0.9958	EXP 150 of 150
14D02233	5.0%	0.855224	0.002206	0.8701	EXP 150 of 150	0.6315	0.0274	0.0139	EXP 150 of 150	0.8226946	0.0286167	0.0429	EXP 150 of 150	38.08890	0.03326	0.9829	EXP 149 of 150	263.44004	0.04564	0.9983	EXP 150 of 150
14D02235	6.0%	0.719069	0.001878	0.8456	EXP 150 of 150	0.7637	0.0308	0.0477	EXP 150 of 150	1.0224250	0.0291137	0.2059	EXP 150 of 150	48.91077	0.02918	0.9919	EXP 150 of 150	217.62733	0.04502	0.9972	EXP 150 of 150
14D02236	7.0%	0.881486	0.001843	0.8317	EXP 150 of 150	0.8773	0.0302	0.0462	EXP 150 of 150	0.9399863	0.0286826	0.0181	EXP 149 of 150	64.24238	0.03533	0.9950	EXP 150 of 150	210.62637	0.04254	0.9972	EXP 150 of 150
14D02238	8.2%	0.696589	0.001991	0.8191	EXP 150 of 150	1.1042	0.0319	0.0084	EXP 150 of 150	1.2429382	0.0259270	0.0206	EXP 150 of 150	83.57769	0.03120	0.9958	EXP 150 of 150	211.56862	0.04201	0.9973	EXP 150 of 150
14D02239	9.6%	0.634008	0.001854	0.8194	EXP 150 of 150	1.2818	0.0328	0.0222	EXP 150 of 150	1.3283075	0.0258249	0.0514	EXP 150 of 150	93.37336	0.03109	0.9975	EXP 150 of 150	195.49561	0.04130	0.9967	EXP 150 of 150
14D02241	11.2%	0.632124	0.001682	0.8245	EXP 150 of 150	1.3089	0.0313	0.0376	EXP 149 of 150	1.3133519	0.0304691	0.1328	EXP 150 of 150	86.58628	0.03400	0.9966	EXP 150 of 150	191.55477	0.04486	0.9959	EXP 149 of 150
14D02242	13.2%	0.586580	0.001712	0.7993	EXP 150 of 150	1.4386	0.0306	0.1174	EXP 150 of 150	1.1585106	0.0278754	0.1059	EXP 150 of 150	78.32857	0.03025	0.9966	EXP 150 of 150	178.30177	0.04082	0.9957	EXP 150 of 150
14D02244	15.4%	0.567790	0.001554	0.8296	EXP 150 of 150	1.3083	0.0317	0.0065	EXP 150 of 150	0.9476266	0.0278524	0.0205	EXP 150 of 150	63.98595	0.03127	0.9947	EXP 149 of 150	168.73060	0.03776	0.9958	EXP 150 of 150
14D02245	18.0%	1.045143	0.002157	0.9148	EXP 150 of 150	1.5993	0.0312	0.1138	EXP 150 of 150	1.0581826	0.0295752	0.0829	EXP 150 of 150	62.18526	0.02936	0.9950	EXP 150 of 150	314.64494	0.04903	0.9988	EXP 150 of 150
14D02246	21.0%	0.695342	0.001848	0.8382	EXP 150 of 150	1.8342	0.0300	0.1444	EXP 150 of 150	0.9720232	0.0256419	0.0581	EXP 149 of 150	56.85716	0.02856	0.9943	EXP 150 of 150	202.03033	0.03881	0.9974	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%He	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Yon	Y-Zon	Z(X-Yon)	Project	Experiment	Num	
H00220	1.7%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	1.7	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	19	33	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00222	1.8%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	1.8	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	19	38	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00223	1.9%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	1.9	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	20	10	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00224	2.1%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	2.1	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	20	23	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00225	2.3%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	2.3	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	20	47	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00227	2.5%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	2.5	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	21	5	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00229	2.8%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	2.8	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	21	25	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00230	3.3%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	3.3	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	21	37	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00232	4.0%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	4	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	22	2	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00233	5.5%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	5	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	22	14	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00235	6.0%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	6	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	22	30	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00236	7.9%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	7	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	22	50	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00238	8.2%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	8.2	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	23	17	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00239	8.6%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	8.6	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	23	20	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00241	11.2%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	11.2	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	23	54	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00242	13.1%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	13.2	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	0	5	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00244	16.4%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	16.4	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	0	31	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00246	18.0%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	18	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	0	40	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01
H00248	21.0%	SC10-5536	Groundmass	Colapage St. Crater Island	Dan Magrane	21	FC1-3	28.38	0.564	Fluore et al (1998)	0.47008	0.146	0.00180703	0.146	302.776	0.094	0.00269404	0.063	1	4.80E-14	28	JAN	2014	0	50	1	15-08U-03	0.00	0.00	41.00	Colapage/Henry (15-05)	14002719	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D02220	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02222	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02223	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02224	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02226	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02227	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02229	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02230	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02232	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02233	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02235	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02236	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02238	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02239	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02241	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02242	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02244	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02245	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02246	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	

14D02219.AGE >>> SC12-572B >>> GALAPAGOS | HARPP (13-07) PROJECT



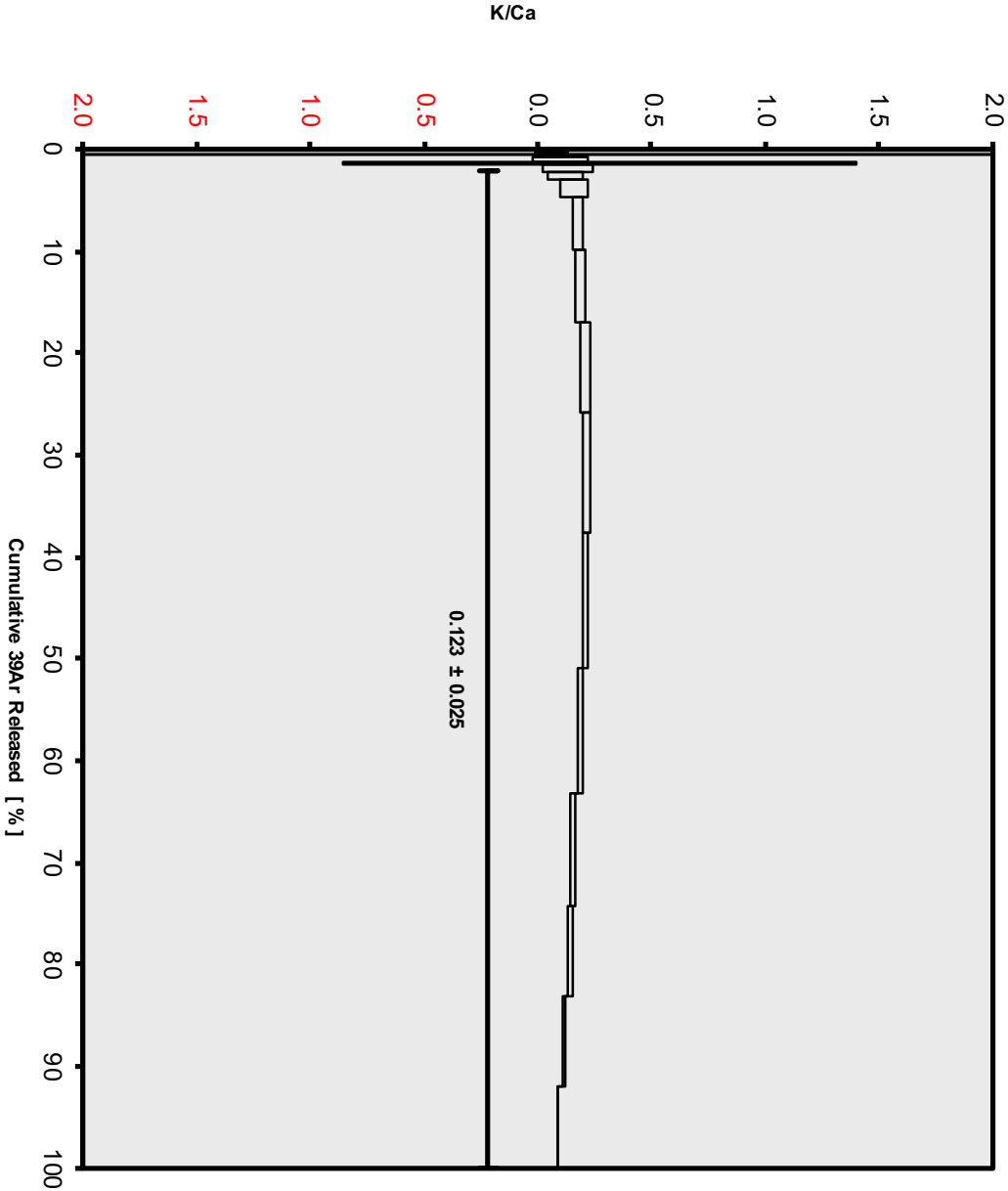
Ar-Ages in Ka

WEIGHTED PLATEAU
416.1 ± 35.6
TOTAL FUSION
454.7 ± 37.1
NORMAL ISOCHRON
383.5 ± 80.9
INVERSE ISOCHRON
385.6 ± 76.3
MSWD (PROBABILITY)
1.63 (8%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
J = 0.00166793 ±
0.14600000

14D02219.AGE >>> SC12-572B >>> GALAPAGOS | HARPP (13-07) PROJECT



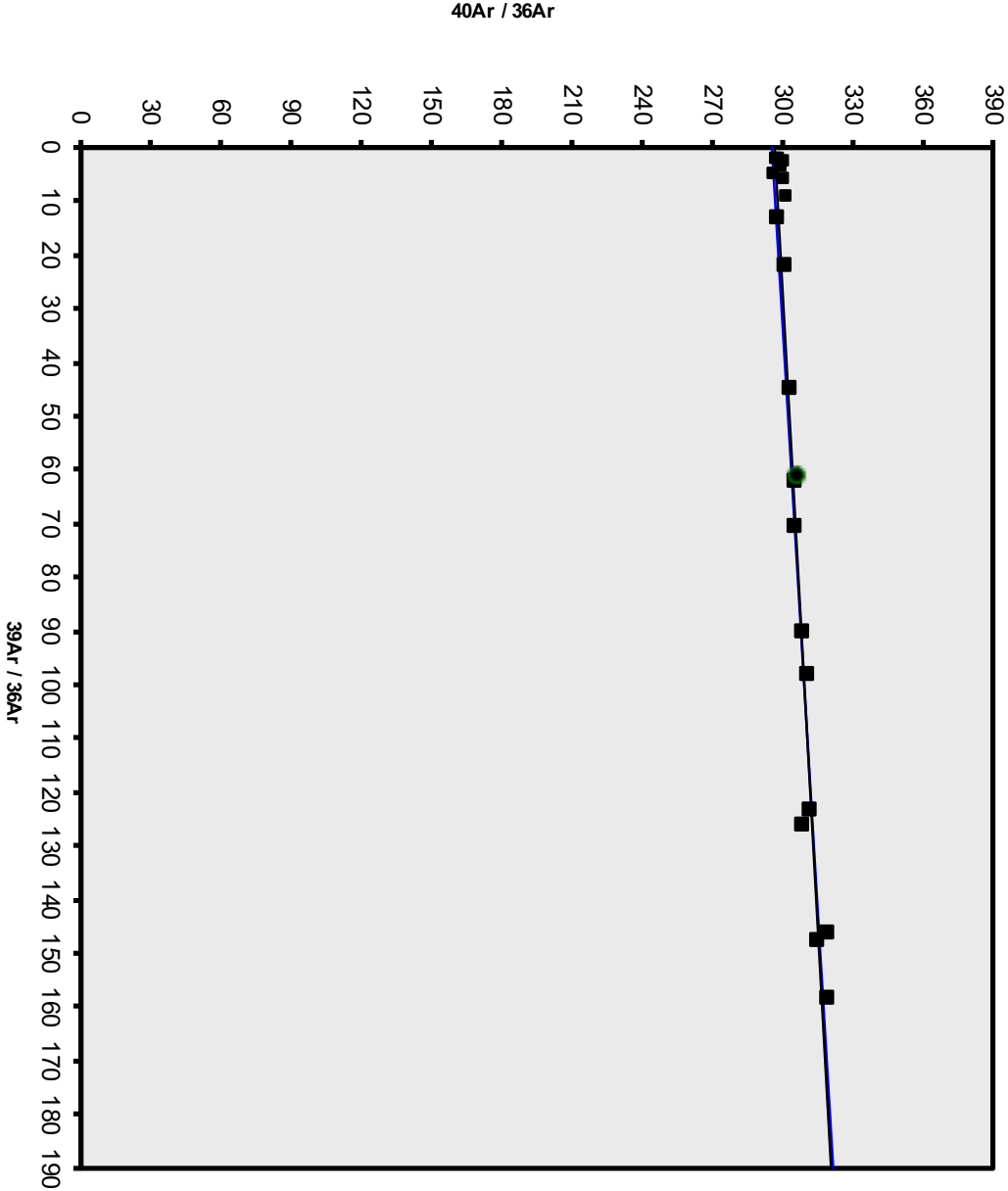
Ar-Ages in Ka

WEIGHTED
PLATEAU
416.1 $\pm$ 35.6
TOTAL FUSION
454.7 $\pm$ 37.1
NORMAL
ISOCHRON
383.5 $\pm$ 80.9
INVERSE
ISOCHRON
385.6 $\pm$ 76.3

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02219.AGE >>> SC12-572B >>> GALAPAGOS | HARPP (13-07) PROJECT



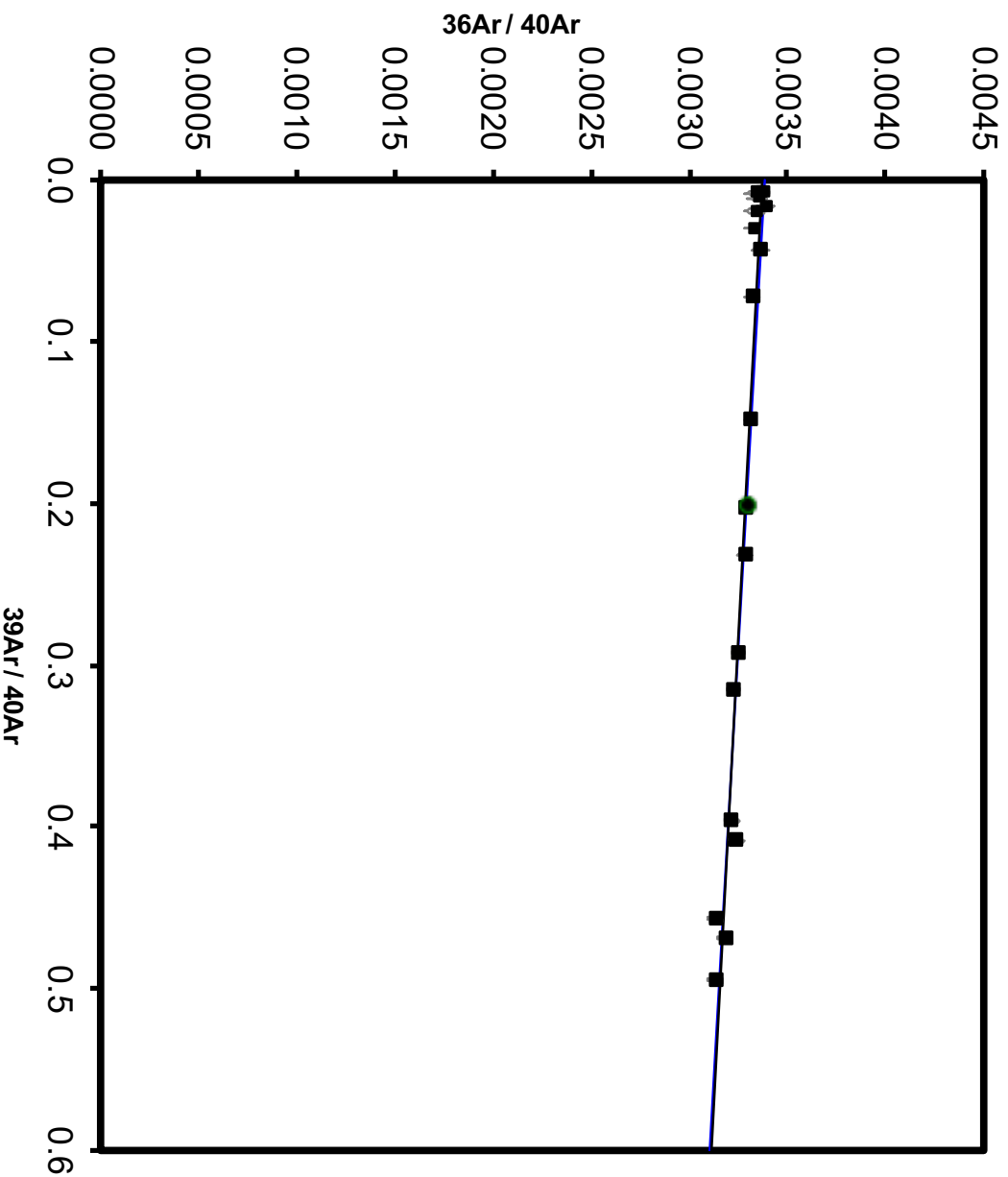
Ar-Ages in Ka

WEIGHTED
PLATEAU
416.1 ± 35.6
TOTAL FUSION
454.7 ± 37.1
NORMAL
ISOCHRON
383.5 ± 80.9
INVERSE
ISOCHRON
385.6 ± 76.3
MSWD
(PROBABILITY)
1.68 (8%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02219.AGE >>> SC12-572B >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
416.1 ± 35.6
TOTAL FUSION
454.7 ± 37.1
NORMAL
ISOCHRON
383.5 ± 80.9
INVERSE
ISOCHRON
385.6 ± 76.3
MSWD
(PROBABILITY)
1.67 (8%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

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CEOAS Oregon State University, Corvallis, USA

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D02189	1.7 %	1.2309030	25.6408	0.3362109	7.39462	18.607333	7629.2 $\pm$ 1180.5	4.87	1.18	0.1240 $\pm$ 0.0795
14D02191	1.8 %	0.6211307	11.3642	0.2495233	5.53518	8.332430	4567.9 $\pm$ 1110.0	4.34	0.88	0.2094 $\pm$ 0.3090
14D02192	1.9 %	0.3250865	9.6298	0.1200129	4.43376	4.395033	3009.2 $\pm$ 1174.7	4.37	0.70	0.1980 $\pm$ 0.3500
14D02193	2.1 %	0.4147497	15.6525	0.2620384	6.60635	2.909541	1337.6 $\pm$ 855.7	2.32	1.05	0.1815 $\pm$ 0.1957
14D02195	2.3 %	0.3554655	21.4071	0.3562364	8.00836	2.469734	936.7 $\pm$ 661.5	2.30	1.27	0.1609 $\pm$ 0.1240
14D02196	2.5 %	0.2839622	30.9888	0.2946475	8.89585	2.499393	853.4 $\pm$ 554.8	2.89	1.41	0.1234 $\pm$ 0.0637
14D02198	2.8 %	0.2723192	31.8417	0.3121579	10.55354	2.028804	584.0 $\pm$ 488.7	2.46	1.68	0.1425 $\pm$ 0.0728
14D02199	3.2 %	0.3028310	57.2409	0.4676087	17.81578	1.730279	295.1 $\pm$ 289.7	1.90	2.83	0.1338 $\pm$ 0.0388
14D02201	4.0 %	0.4567492	153.2494	1.0197245	40.31184	2.914911	219.7 $\pm$ 143.7	2.11	6.41	0.1131 $\pm$ 0.0123
14D02202	5.0 %	0.4179029	326.6669	1.2600682	65.92087	3.543024	163.3 $\pm$ 88.4	2.79	10.48	0.0868 $\pm$ 0.0046
14D02204	6.0 %	0.2872792	545.6399	1.1032574	81.63808	3.404533	126.7 $\pm$ 71.8	3.85	12.97	0.0643 $\pm$ 0.0022
14D02205	7.0 %	0.1632671	664.2873	0.7445235	76.55465	2.196645	87.2 $\pm$ 73.7	4.35	12.17	0.0496 $\pm$ 0.0015
14D02207	8.2 %	0.1385513	646.6792	0.5901554	69.51306	3.035433	132.7 $\pm$ 80.2	6.89	11.05	0.0462 $\pm$ 0.0014
14D02208	9.6 %	0.0980624	477.6376	0.4512736	56.30868	1.528209	82.5 $\pm$ 90.6	5.00	8.95	0.0507 $\pm$ 0.0019
14D02210	10.2 %	0.0618652	261.8521	0.2887089	31.42217	1.175022	113.6 $\pm$ 149.4	6.03	4.99	0.0516 $\pm$ 0.0034
14D02211	11.2 %	0.0593802	206.9803	0.1699070	26.07999	0.522632	60.9 $\pm$ 178.4	2.89	4.14	0.0542 $\pm$ 0.0044
14D02213	13.2 %	0.0826793	248.6955	0.2462087	30.70024	0.473101	46.8 $\pm$ 157.6	1.90	4.88	0.0531 $\pm$ 0.0037
14D02214	15.4 %	0.0863208	295.0243	0.2929664	30.17055	1.227629	123.6 $\pm$ 159.9	4.59	4.79	0.0440 $\pm$ 0.0026
14D02216	18.0 %	0.0972939	359.6616	0.2262319	28.18963	1.422532	153.3 $\pm$ 173.0	4.71	4.48	0.0337 $\pm$ 0.0016
14D02218	21.0 %	0.1030802	332.1932	0.2217830	23.19982	1.624196	212.7 $\pm$ 217.0	5.06	3.69	0.0300 $\pm$ 0.0016
Σ		5.8588797	4722.3332	9.0132446	629.25304	66.040413				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-038 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Dan Miggins Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00168018 $\pm$ 0.14700000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.04111 $\pm$ 0.01012 $\pm$ 24.62%	124.9 $\pm$ 30.7 $\pm$ 24.62% Full External Error $\pm$ 30.9 Analytical Error $\pm$ 30.7	0.90 56% 1.78 1.0000	93.50 14 2a Confidence Limit Error Magnification	0.0459 $\pm$ 0.0064
	Total Fusion Age	0.10495 $\pm$ 0.01291 $\pm$ 12.30%	318.8 $\pm$ 39.2 $\pm$ 12.31% Full External Error $\pm$ 40.1 Analytical Error $\pm$ 39.2		20	0.0573 $\pm$ 0.0009

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Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02189	1.7 %		6.01 $\pm$ 0.08	310.62 $\pm$ 2.45	0.5514
14D02191	1.8 %		8.91 $\pm$ 0.17	308.91 $\pm$ 3.40	0.5750
14D02192	1.9 %		13.64 $\pm$ 0.35	309.02 $\pm$ 5.51	0.6701
14D02193	2.1 %		15.93 $\pm$ 0.32	302.52 $\pm$ 4.59	0.7400
14D02195	2.3 %		22.53 $\pm$ 0.43	302.45 $\pm$ 5.02	0.8274
14D02196	2.5 %		31.33 $\pm$ 0.66	304.30 $\pm$ 5.88	0.8722
14D02198	2.8 %	✓	38.75 $\pm$ 0.86	302.95 $\pm$ 6.39	0.9140
14D02199	3.2 %	✓	58.83 $\pm$ 1.13	301.21 $\pm$ 5.71	0.9471
14D02201	4.0 %	✓	88.26 $\pm$ 1.25	301.88 $\pm$ 4.26	0.9673
14D02202	5.0 %	✓	157.74 $\pm$ 2.43	303.98 $\pm$ 4.72	0.9766
14D02204	6.0 %	✓	284.18 $\pm$ 6.37	307.35 $\pm$ 6.98	0.9817
14D02205	7.0 %	✓	468.89 $\pm$ 17.75	308.95 $\pm$ 11.88	0.9826
14D02207	8.2 %	✓	501.71 $\pm$ 22.10	317.41 $\pm$ 14.19	0.9833
14D02208	9.6 %	✓	574.21 $\pm$ 32.58	311.08 $\pm$ 17.99	0.9799
14D02210	10.2 %	✓	507.91 $\pm$ 41.86	314.49 $\pm$ 26.50	0.9766
14D02211	11.2 %	✓	439.20 $\pm$ 37.35	304.30 $\pm$ 26.51	0.9744
14D02213	13.2 %	✓	371.32 $\pm$ 23.66	301.22 $\pm$ 19.62	0.9756
14D02214	15.4 %	✓	349.52 $\pm$ 21.26	309.72 $\pm$ 19.24	0.9763
14D02216	18.0 %	✓	289.74 $\pm$ 15.83	310.12 $\pm$ 17.28	0.9764
14D02218	21.0 %	✓	225.07 $\pm$ 12.01	311.26 $\pm$ 16.90	0.9771

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	300.54 $\pm$ 3.43	0.02248 $\pm$ 0.01619	68.3 $\pm$ 49.2	0.23
Overestimated Error	$\pm$ 1.14%	$\pm$ 72.01%	$\pm$ 72.01%	100%
			Full External Error $\pm$ 49.2	
			Analytical Error $\pm$ 49.2	
Statistics	2 σ Confidence Limit	1.82	Convergence	0.00000046640
	Error Magnification	1.0000	Number of Iterations	4
	Number of Data Points	14	Calculated Line	Weighted York-2

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Inverse Isochron		39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02189	1.7 %	0.0193405 $\pm$ 0.0002280	0.00321940 $\pm$ 0.00002544	0.0095
14D02191	1.8 %	0.0288476 $\pm$ 0.0004395	0.00323714 $\pm$ 0.00003564	0.0200
14D02192	1.9 %	0.0441354 $\pm$ 0.0008383	0.00323604 $\pm$ 0.00005767	0.0363
14D02193	2.1 %	0.0526537 $\pm$ 0.0007022	0.00330562 $\pm$ 0.00005017	0.0385
14D02195	2.3 %	0.0744896 $\pm$ 0.0008077	0.00330635 $\pm$ 0.00005486	0.0592
14D02196	2.5 %	0.1029490 $\pm$ 0.0010713	0.00328621 $\pm$ 0.00006355	0.0812
14D02198	2.8 % ✓	0.1279231 $\pm$ 0.0011532	0.00330087 $\pm$ 0.00006958	0.0949
14D02199	3.2 % ✓	0.1953124 $\pm$ 0.0012132	0.00331990 $\pm$ 0.00006299	0.1254
14D02201	4.0 % ✓	0.2923599 $\pm$ 0.0010549	0.00331255 $\pm$ 0.00004677	0.1275
14D02202	5.0 % ✓	0.5189258 $\pm$ 0.0017349	0.00328971 $\pm$ 0.00005107	0.1482
14D02204	6.0 % ✓	0.9246005 $\pm$ 0.0039966	0.00325361 $\pm$ 0.00007385	0.1598
14D02205	7.0 % ✓	1.5176748 $\pm$ 0.0108516	0.00323672 $\pm$ 0.00012446	0.1745
14D02207	8.2 % ✓	1.5806565 $\pm$ 0.0128489	0.00315052 $\pm$ 0.00014087	0.1726
14D02208	9.6 % ✓	1.8458439 $\pm$ 0.0213051	0.00321457 $\pm$ 0.00018588	0.1933
14D02210	10.2 % ✓	1.6150213 $\pm$ 0.0292949	0.00317972 $\pm$ 0.00026797	0.2092
14D02211	11.2 % ✓	1.4433166 $\pm$ 0.0282823	0.00328622 $\pm$ 0.00028633	0.2174
14D02213	13.2 % ✓	1.2327018 $\pm$ 0.0176328	0.00331981 $\pm$ 0.00021626	0.2091
14D02214	15.4 % ✓	1.1284855 $\pm$ 0.0151629	0.00322871 $\pm$ 0.00020059	0.2039
14D02216	18.0 % ✓	0.9342707 $\pm$ 0.0112339	0.00322455 $\pm$ 0.00017969	0.1987
14D02218	21.0 % ✓	0.7230873 $\pm$ 0.0083577	0.00321278 $\pm$ 0.00017441	0.1877

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron	300.52 $\pm$ 3.43	0.02282 $\pm$ 0.01388	69.3 $\pm$ 42.2	0.23
Overestimated Error	$\pm$ 1.14%	$\pm$ 60.83%	$\pm$ 60.83%	100%
			Full External Error $\pm$ 42.2	
			Analytical Error $\pm$ 42.2	
Statistics	2 σ Confidence Limit	1.82	Convergence	0.0074801765
	Error Magnification	1.0000	Number of Iterations	3
	Number of Data Points	14	Calculated Line	Weighted York-2
	Spreading Factor	3.9%		

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CEOAS Oregon State University, Corvallis, USA

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02189	1.7 %	1.2378097	0.349	25.6408	32.052	0.653981	6.012	7.41187	0.581	382.3466	0.047	2.51633 ± 0.39017	7629.2 ± 1180.5	4.87	1.18	0.1240 ± 0.0795
14D02191	1.8 %	0.6242329	0.408	11.3642	73.752	0.430183	9.199	5.54283	0.748	191.8821	0.092	1.50536 ± 0.36626	4567.9 ± 1110.0	4.34	0.88	0.2094 ± 0.3090
14D02192	1.9 %	0.3276779	0.530	9.6298	88.392	0.232566	16.415	4.44024	0.923	100.4626	0.175	0.99127 ± 0.38729	3009.2 ± 1174.7	4.37	0.70	0.1980 ± 0.3500
14D02193	2.1 %	0.4189892	0.512	15.6525	53.922	0.416911	9.252	6.61689	0.645	125.4748	0.140	0.44042 ± 0.28183	1337.6 ± 855.7	2.32	1.05	0.1815 ± 0.1957
14D02195	2.3 %	0.3612628	0.527	21.4071	38.525	0.516784	7.506	8.02277	0.511	107.5179	0.163	0.30639 ± 0.21785	936.7 ± 661.5	2.30	1.27	0.1609 ± 0.1240
14D02196	2.5 %	0.2922639	0.569	30.5898	25.780	0.453262	8.637	8.91670	0.475	86.4192	0.202	0.28999 ± 0.18267	853.4 ± 554.8	2.89	1.41	0.1234 ± 0.0837
14D02198	2.8 %	0.2808532	0.646	31.8417	25.551	0.487580	7.943	10.57497	0.393	82.5098	0.212	0.19224 ± 0.16090	584.0 ± 488.7	2.46	1.68	0.1425 ± 0.0728
14D02199	3.2 %	0.3181341	0.554	57.2409	14.598	0.734908	5.324	17.85431	0.241	91.2348	0.192	0.09712 ± 0.09537	295.1 ± 289.7	1.90	2.83	0.1338 ± 0.0388
14D02201	4.0 %	0.4976246	0.459	153.2494	5.441	1.585141	2.435	40.41497	0.127	137.9250	0.127	0.07231 ± 0.04731	219.7 ± 143.7	2.11	6.41	0.1131 ± 0.0123
14D02202	5.0 %	0.5046588	0.444	306.6669	2.638	2.133760	1.819	66.14072	0.093	127.0999	0.139	0.05375 ± 0.02911	163.3 ± 88.4	2.79	10.48	0.0868 ± 0.0046
14D02204	6.0 %	0.4317798	0.475	545.6399	1.714	2.161835	1.757	82.00530	0.086	88.3780	0.198	0.04170 ± 0.02363	126.7 ± 71.8	3.85	12.97	0.0643 ± 0.0022
14D02205	7.0 %	0.3389438	0.498	664.2873	1.474	1.738566	2.266	77.00172	0.088	50.5194	0.346	0.02869 ± 0.02427	87.2 ± 73.7	4.35	12.17	0.0496 ± 0.0015
14D02207	8.2 %	0.3095162	0.563	646.6792	1.465	1.496998	2.708	69.94828	0.090	44.0475	0.395	0.04367 ± 0.02640	132.7 ± 80.2	6.89	11.05	0.0462 ± 0.0014
14D02208	9.6 %	0.2243435	0.665	477.6376	1.860	1.176786	3.442	56.63013	0.102	30.5625	0.567	0.02714 ± 0.02982	82.5 ± 90.6	5.00	8.95	0.0507 ± 0.0019
14D02210	10.2 %	0.1311124	0.916	261.8521	3.250	0.694253	5.526	31.59840	0.150	19.4879	0.893	0.03739 ± 0.04918	113.6 ± 149.4	6.03	4.99	0.0516 ± 0.0034
14D02211	11.2 %	0.1140926	1.024	206.9803	4.092	0.506566	8.019	26.21929	0.177	18.0958	0.962	0.02004 ± 0.05871	60.9 ± 123.1	2.89	4.14	0.0542 ± 0.0044
14D02213	13.2 %	0.1484358	0.860	248.6955	3.502	0.645599	6.178	30.86761	0.154	24.9358	0.697	0.01541 ± 0.05189	46.8 ± 157.6	1.90	4.88	0.0531 ± 0.0037
14D02214	15.4 %	0.1643273	0.803	295.0243	2.909	0.693449	5.550	30.36910	0.159	26.7659	0.652	0.04069 ± 0.05264	123.6 ± 159.9	4.59	4.79	0.0440 ± 0.0026
14D02216	18.0 %	0.1923372	0.676	359.6616	2.435	0.615207	6.473	28.43168	0.166	30.2013	0.576	0.05046 ± 0.05696	153.3 ± 173.0	4.71	4.48	0.0337 ± 0.0016
14D02218	21.0 %	0.1908700	0.723	332.1932	2.701	0.551237	7.325	23.42338	0.195	32.1078	0.542	0.07001 ± 0.07143	212.7 ± 217.0	5.06	3.69	0.0300 ± 0.0016
Σ		7.1092657	0.124	4722.3332	0.819	17.925573	0.979	632.43117	0.036	1797.9749	0.044					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-038
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan Miggins
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00168018 ± 0.14700000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 27.3
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 0 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Is-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/39(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(c) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results

	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		0.04111 ± 0.01012 ± 24.62%	124.9 ± 30.7 ± 24.62%	0.90 96%	93.50 14	0.0459 ± 0.0064
			Full External Error ± 30.9 Analytical Error ± 30.7	1.78 1.0000	2σ Confidence Limit Error Magnification	
Total Fusion Age		0.10495 ± 0.01291 ± 12.30%	318.8 ± 39.2 ± 12.31%		20	0.0573 ± 0.0009
			Full External Error ± 40.1 Analytical Error ± 39.2			
Normal Isochron	300.54 ± 3.43 ± 1.14%	0.02248 ± 0.01619 ± 72.01%	68.3 ± 49.2 ± 72.01%	0.23 100%	93.50 14	0.0542 ± 0.0044
Ovenestimated Error			Full External Error ± 49.2 Analytical Error ± 49.2	1.0000 4	2σ Confidence Limit Error Magnification Number of Iterations	
				0.0000000466	Convergence	
Inverse Isochron	300.52 ± 3.43 ± 1.14%	0.02282 ± 0.01388 ± 60.83%	69.3 ± 42.2 ± 60.83%	0.23 100%	93.50 14	0.0542 ± 0.0044
Ovenestimated Error			Full External Error ± 42.2 Analytical Error ± 42.2	1.0000 3	2σ Confidence Limit Error Magnification Number of Iterations	
				0.0074801765	Convergence	
				4%	Spreading Factor	

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02189	1.7 %	51.585697	0.300915	3.459417	1.108979	0.167004	0.001132	251.986	145.430404	1.00178048	1.835E-11
14D02191	1.8 %	34.618080	0.260982	2.050248	1.512182	0.112620	0.000960	252.003	145.480283	1.00178060	9.210E-12
14D02192	1.9 %	22.625472	0.212562	2.168754	1.917104	0.073797	0.000785	252.012	145.504231	1.00178066	4.822E-12
14D02193	2.1 %	18.962806	0.125208	2.365540	1.275628	0.063321	0.000522	252.021	145.530179	1.00178072	6.023E-12
14D02195	2.3 %	13.401588	0.071948	2.668297	1.028060	0.045030	0.000331	252.037	145.578096	1.00178084	5.161E-12
14D02196	2.5 %	9.691835	0.049987	3.475361	0.896103	0.032777	0.000243	252.047	145.604057	1.00178091	4.148E-12
14D02198	2.8 % ✓	7.802365	0.034878	3.011040	0.769439	0.026558	0.000201	252.064	145.653996	1.00178103	3.960E-12
14D02199	3.2 % ✓	5.109963	0.015767	3.206002	0.465195	0.017818	0.000108	252.072	145.677972	1.00178109	4.379E-12
14D02201	4.0 % ✓	3.412721	0.006130	3.791898	0.206389	0.012313	0.000059	252.090	145.727936	1.00178121	6.620E-12
14D02202	5.0 % ✓	1.921659	0.003203	4.938969	0.130349	0.007630	0.000035	252.098	145.751925	1.00178127	6.101E-12
14D02204	6.0 % ✓	1.077711	0.002324	6.653715	0.114211	0.005265	0.000025	252.115	145.801915	1.00178139	4.242E-12
14D02205	7.0 % ✓	0.656081	0.002341	8.626915	0.127358	0.004402	0.000022	252.124	145.827916	1.00178146	2.425E-12
14D02207	8.2 % ✓	0.629716	0.002554	9.245106	0.135705	0.004425	0.000025	252.141	145.875930	1.00178157	2.114E-12
14D02208	9.6 % ✓	0.539687	0.003108	8.434337	0.157136	0.003962	0.000027	252.150	145.901945	1.00178164	1.467E-12
14D02210	10.2 % ✓	0.616738	0.005583	8.286881	0.269620	0.004149	0.000039	252.167	145.951985	1.00178176	9.354E-13
14D02211	11.2 % ✓	0.690172	0.006750	7.894200	0.323300	0.004351	0.000045	252.176	145.976011	1.00178182	8.686E-13
14D02213	13.2 % ✓	0.807832	0.005767	8.056841	0.282451	0.004809	0.000042	252.193	146.026077	1.00178194	1.197E-12
14D02214	15.4 % ✓	0.881353	0.005910	9.714621	0.283030	0.005411	0.000044	252.201	146.050115	1.00178200	1.285E-12
14D02216	18.0 % ✓	1.062243	0.006373	12.650031	0.308694	0.006765	0.000047	252.219	146.100207	1.00178212	1.450E-12
14D02218	21.0 % ✓	1.370759	0.007900	14.182118	0.384068	0.008149	0.000061	252.236	146.150316	1.00178225	1.541E-12

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Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
14D02189	1.7 %	0.0158846	0.0006031	0.0170448	0.0471223	0.0246727	0.0272435	0.0591323	0.0325742	4.3278877	0.1718071
14D02191	1.8 %	0.0158907	0.0006031	0.0163105	0.0471223	0.0188653	0.0272435	0.0610841	0.0325742	4.4665686	0.1718071
14D02192	1.9 %	0.0158937	0.0006031	0.0159580	0.0471223	0.0164350	0.0272435	0.0620210	0.0325742	4.5255967	0.1718071
14D02193	2.1 %	0.0158968	0.0006031	0.0155762	0.0471223	0.0140637	0.0272435	0.0630359	0.0325742	4.5840256	0.1718071
14D02195	2.3 %	0.0159027	0.0006031	0.0148712	0.0471223	0.0104005	0.0272435	0.0649096	0.0325742	4.6768168	0.1718071
14D02196	2.5 %	0.0159059	0.0006031	0.0144894	0.0471223	0.0088032	0.0272435	0.0659245	0.0325742	4.7189118	0.1718071
14D02198	2.8 %	0.0159120	0.0006031	0.0137551	0.0471223	0.0064960	0.0272435	0.0678763	0.0325742	4.7837335	0.1718071
14D02199	3.2 %	0.0159150	0.0006031	0.0134026	0.0471223	0.0057458	0.0272435	0.0688132	0.0325742	4.8073091	0.1718071
14D02201	4.0 %	0.0159211	0.0006031	0.0126683	0.0471223	0.0049272	0.0272435	0.0707649	0.0325742	4.8407194	0.1718071
14D02202	5.0 %	0.0159240	0.0006031	0.0123158	0.0471223	0.0048915	0.0272435	0.0717018	0.0325742	4.8492176	0.1718071
14D02204	6.0 %	0.0159302	0.0006031	0.0115815	0.0471223	0.0055615	0.0272435	0.0736536	0.0325742	4.8512165	0.1718071
14D02205	7.0 %	0.0159334	0.0006031	0.0111997	0.0471223	0.0063073	0.0272435	0.0746685	0.0325742	4.8438683	0.1718071
14D02207	8.2 %	0.0159392	0.0006031	0.0104947	0.0471223	0.0083989	0.0272435	0.0765422	0.0325742	4.8152248	0.1718071
14D02208	9.6 %	0.0159424	0.0006031	0.0101129	0.0471223	0.0099188	0.0272435	0.0775572	0.0325742	4.7915426	0.1718071
14D02210	10.2 %	0.0159485	0.0006031	0.0093785	0.0471223	0.0136062	0.0272435	0.0795089	0.0325742	4.7298697	0.1718071
14D02211	11.2 %	0.0159515	0.0006031	0.0090261	0.0471223	0.0157334	0.0272435	0.0804458	0.0325742	4.6927280	0.1718071
14D02213	13.2 %	0.0159576	0.0006031	0.0082918	0.0471223	0.0209093	0.0272435	0.0823976	0.0325742	4.5996438	0.1718071
14D02214	15.4 %	0.0159606	0.0006031	0.0079393	0.0471223	0.0237510	0.0272435	0.0833344	0.0325742	4.5474246	0.1718071
14D02216	18.0 %	0.0159667	0.0006031	0.0072050	0.0471223	0.0304156	0.0272435	0.0852862	0.0325742	4.4229290	0.1718071
14D02218	21.0 %	0.0159728	0.0006031	0.0064707	0.0471223	0.0380859	0.0272435	0.0872380	0.0325742	4.2772094	0.1718071

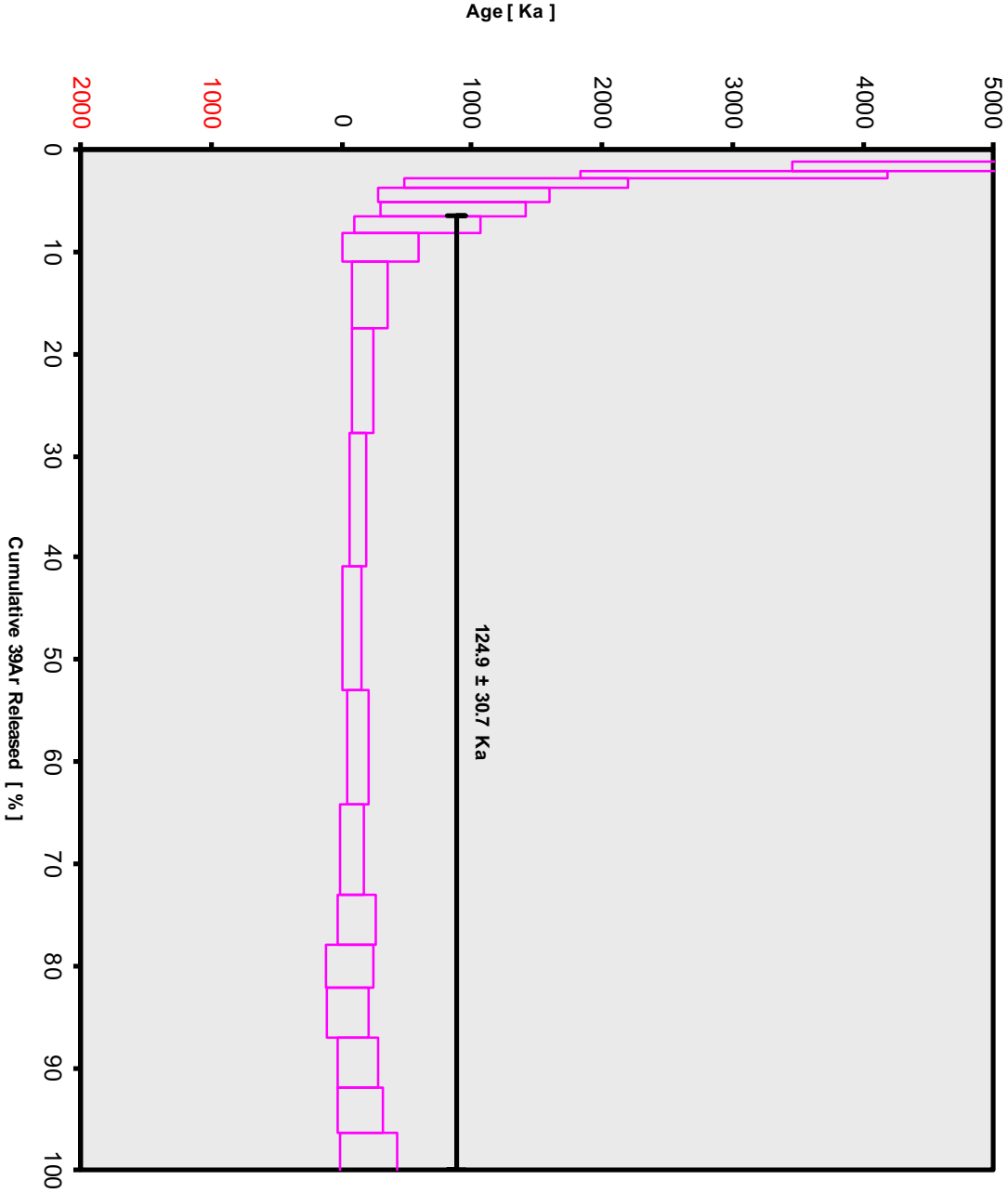
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Intercept Values	36Ar			37Ar			38Ar			39Ar			40Ar													
	[A]	1σ	r2	[A]	1σ	r2	[A]	1σ	r2	[A]	1σ	r2	[A]	1σ	r2											
14D02189	1.7 %	1.6717345	0.0026948	0.8851	EXP	150 of 150	0.1561	0.0293	0.0058	EXP	150 of 150	0.6214421	0.0276809	0.0010	EXP	150 of 150	7.41341	0.02732	0.7270	EXP	150 of 150	387.478105	0.053479	0.9984	EXP	150 of 150
14D02191	1.8 %	0.6116204	0.0017762	0.7672	EXP	149 of 150	0.0904	0.0313	0.0028	EXP	149 of 150	0.4061426	0.0280340	0.0136	EXP	149 of 150	5.56084	0.02462	0.6506	EXP	150 of 150	196.751983	0.039343	0.9852	EXP	150 of 150
14D02192	1.9 %	0.2289394	0.0013150	0.4494	EXP	150 of 150	0.0480	0.0329	0.0036	EXP	150 of 150	0.2133337	0.0260603	0.0144	EXP	149 of 150	4.46576	0.02419	0.4741	EXP	150 of 150	105.193310	0.040265	0.9476	EXP	150 of 150
14D02193	2.1 %	0.4157545	0.0016611	0.5770	EXP	150 of 150	0.0900	0.0320	0.0031	EXP	150 of 150	0.3978294	0.0265420	0.0555	EXP	149 of 150	6.62660	0.02676	0.6624	EXP	150 of 150	130.323463	0.039316	0.9916	EXP	150 of 150
14D02195	2.3 %	0.3606699	0.0014616	0.5478	EXP	150 of 150	0.1295	0.0295	0.0041	EXP	150 of 150	0.5001669	0.0269443	0.0776	EXP	150 of 150	8.02534	0.02391	0.8323	EXP	150 of 150	112.420673	0.037092	0.6268	EXP	150 of 150
14D02196	2.5 %	0.2048247	0.0012765	0.4340	EXP	150 of 150	0.1945	0.0261	0.0043	EXP	150 of 150	0.4300067	0.0274457	0.0189	EXP	149 of 150	8.91334	0.02590	0.8341	EXP	150 of 150	91.319759	0.033242	0.9464	EXP	150 of 150
14D02198	2.8 %	0.2839412	0.0014664	0.3566	EXP	150 of 150	0.2009	0.0280	0.0069	EXP	149 of 150	0.4762186	0.0268595	0.0015	EXP	150 of 150	10.56067	0.02449	0.8795	EXP	150 of 150	87.466941	0.036813	0.9224	EXP	150 of 150
14D02199	3.2 %	0.3196227	0.0013602	0.9060	EXP	150 of 150	0.3724	0.0301	0.0007	EXP	150 of 150	0.7303220	0.0274110	0.0029	EXP	150 of 150	17.78437	0.02639	0.9526	EXP	150 of 150	96.233603	0.036971	0.7227	EXP	150 of 150
14D02201	4.0 %	0.4606235	0.0016949	0.7269	EXP	150 of 150	1.0200	0.0296	0.0053	EXP	150 of 150	1.5611466	0.0266035	0.0422	EXP	150 of 150	40.17166	0.02690	0.9872	EXP	150 of 150	143.055625	0.036465	0.9735	EXP	150 of 150
14D02202	5.0 %	0.4975396	0.0016272	0.7475	EXP	150 of 150	2.1885	0.0268	0.0592	EXP	150 of 150	2.1030221	0.0268429	0.1232	EXP	149 of 150	66.69842	0.03064	0.9949	EXP	150 of 150	132.216254	0.040433	0.9458	EXP	150 of 150
14D02204	6.0 %	0.4279944	0.0015272	0.6549	EXP	150 of 150	3.6633	0.0318	0.2348	EXP	150 of 150	2.1300692	0.0266663	0.1609	EXP	150 of 150	81.44165	0.03610	0.9958	EXP	150 of 150	93.414941	0.034302	0.9320	EXP	150 of 150
14D02205	7.0 %	0.3394055	0.0012386	0.5771	EXP	150 of 150	4.4620	0.0322	0.3473	EXP	150 of 150	1.7113456	0.0277166	0.1022	EXP	150 of 150	76.47797	0.03397	0.9955	EXP	150 of 150	55.469432	0.032685	0.9826	EXP	150 of 150
14D02207	8.2 %	0.3113226	0.0013484	0.5330	EXP	150 of 150	4.3427	0.0265	0.4658	EXP	150 of 150	1.4705916	0.0265055	0.0570	EXP	150 of 150	69.48121	0.03138	0.9954	EXP	150 of 150	48.955344	0.030726	0.9860	EXP	150 of 150
14D02208	9.6 %	0.2300422	0.0011641	0.2792	EXP	150 of 150	3.2046	0.0282	0.2380	EXP	150 of 150	1.1527117	0.0262733	0.0159	EXP	150 of 150	56.26758	0.03097	0.9931	EXP	150 of 150	35.418305	0.024931	0.9940	EXP	150 of 150
14D02210	10.2 %	0.1410742	0.0009185	0.0541	EXP	150 of 150	1.7524	0.0298	0.1283	EXP	148 of 150	0.6722960	0.0263397	0.0252	EXP	150 of 150	31.43233	0.02792	0.9824	EXP	150 of 150	24.258759	0.029457	0.9932	EXP	150 of 150
14D02211	11.2 %	0.1248345	0.0008496	0.0332	EXP	149 of 150	1.3633	0.0303	0.0258	EXP	150 of 150	0.4847390	0.0264633	0.0022	EXP	150 of 150	26.03696	0.02799	0.9740	EXP	150 of 150	22.826590	0.030138	0.9929	EXP	150 of 150
14D02213	13.2 %	0.1576156	0.0009534	0.1298	EXP	150 of 150	1.6641	0.0325	0.0458	EXP	150 of 150	0.6168237	0.0264616	0.0173	EXP	150 of 150	30.71011	0.02841	0.9909	EXP	150 of 150	29.367000	0.028631	0.9913	EXP	150 of 150
14D02214	15.4 %	0.1727844	0.0010270	0.1815	EXP	150 of 150	1.9757	0.0299	0.2128	EXP	150 of 150	0.6613666	0.0265147	0.0664	EXP	150 of 150	30.21641	0.02942	0.9783	EXP	150 of 150	31.369699	0.030206	0.9879	EXP	150 of 150
14D02216	18.0 %	0.1995215	0.0009741	0.3793	EXP	150 of 150	2.4102	0.0304	0.2023	EXP	150 of 150	0.5773912	0.0263702	0.0210	EXP	150 of 150	28.29599	0.02876	0.9764	EXP	150 of 150	34.687741	0.030290	0.9859	EXP	150 of 150
14D02218	21.0 %	0.1981275	0.0010714	0.3218	EXP	150 of 150	2.2265	0.0338	0.1874	EXP	150 of 150	0.5065207	0.0291294	0.0679	EXP	150 of 150	23.32867	0.02864	0.9692	EXP	149 of 150	36.452514	0.030346	0.9832	EXP	150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%Li	Standard Reference	Standard 40Ar/39Ar	%Li	J	%He	Ar 40Ar/39Ar	%Ar	MCF	%He	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes	
MS0100	1.7%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	1.7	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	13	8	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021008	01
MS0101	1.8%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	1.8	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	13	11	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021009	01
MS0102	1.9%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	1.9	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	13	45	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021010	01
MS0103	2.1%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	2.1	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	13	28	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021011	01
MS0104	2.3%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	2.3	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	14	22	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021012	01
MS0105	2.5%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	2.5	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	14	30	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021013	01
MS0106	2.8%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	2.8	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	15	0	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021014	01
MS0107	3.2%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	3.2	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	15	12	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021015	01
MS0201	4.0%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	4	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	15	37	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021016	01
MS0202	5.8%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	5	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	15	40	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021017	01
MS0204	6.6%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	6	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	16	14	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021018	01
MS0205	7.7%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	7	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	16	27	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021019	01
MS0207	8.2%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	8.2	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	16	51	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021020	01
MS0208	9.8%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	9.8	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	17	4	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021021	01
MS0209	10.2%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	10.2	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	17	26	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021022	01
MS0211	11.2%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	11.2	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	17	41	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021023	01
MS0213	13.2%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	13.2	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	18	6	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021024	01
MS0214	16.4%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	16.4	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	18	38	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021025	01
MS0216	18.6%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	18	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	18	43	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021026	01
MS0218	21.0%	SC10-038	Groundmass	Gelapage St. Crater Island	Dir Maguire	21	FC1-3	28.38	0.364	Renne et al (1998)	0.40108	0.347	0.00100010	0.147	322.776	0.094	0.002994404	0.063	1	4.80E-14	28	JAN	2014	19	8	1	15-0501-02	0.00	0.00	38.40	Gelapage Henge (15-01)	14021027	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(cd)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D02189	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02191	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02192	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02193	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02195	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02196	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02198	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02199	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02201	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02202	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02204	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02205	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02207	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02208	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02210	10.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02211	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02213	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02214	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02216	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02218	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0

14D02188.AGE >>> SC12-038 >>> GALAPAGOS | HARPP (13-07) PROJECT



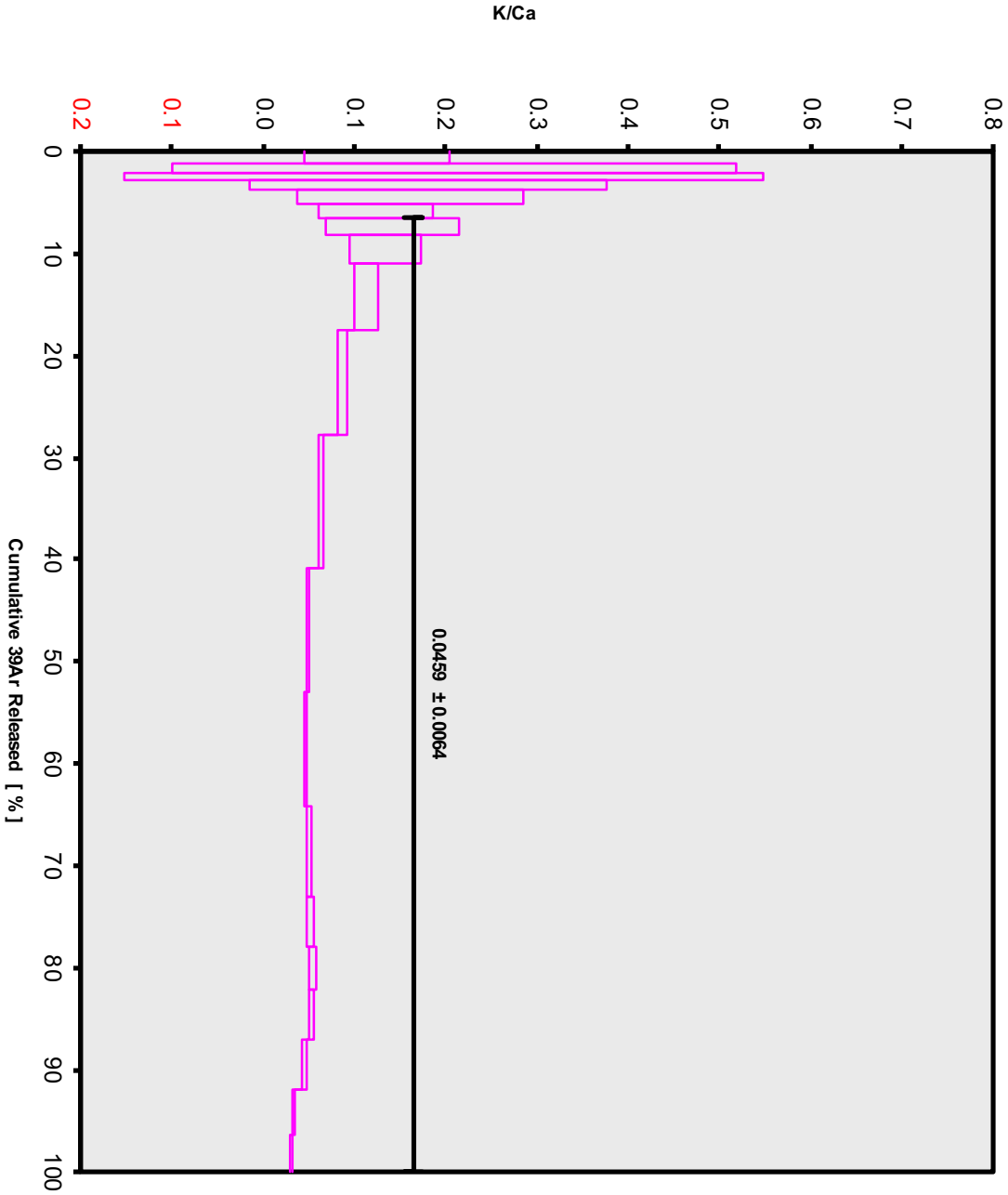
Ar-Ages in Ka

WEIGHTED
PLATEAU
 124.9 ± 30.7
TOTAL FUSION
 318.8 ± 39.2
NORMAL
ISOCHRON
 68.3 ± 49.2
INVERSE
ISOCHRON
 69.3 ± 42.2
MSWD
(PROBABILITY)
 $0.90 (56\%)$

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
J = 0.00168018 ±

14D02188.AGE >>> SC12-038 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

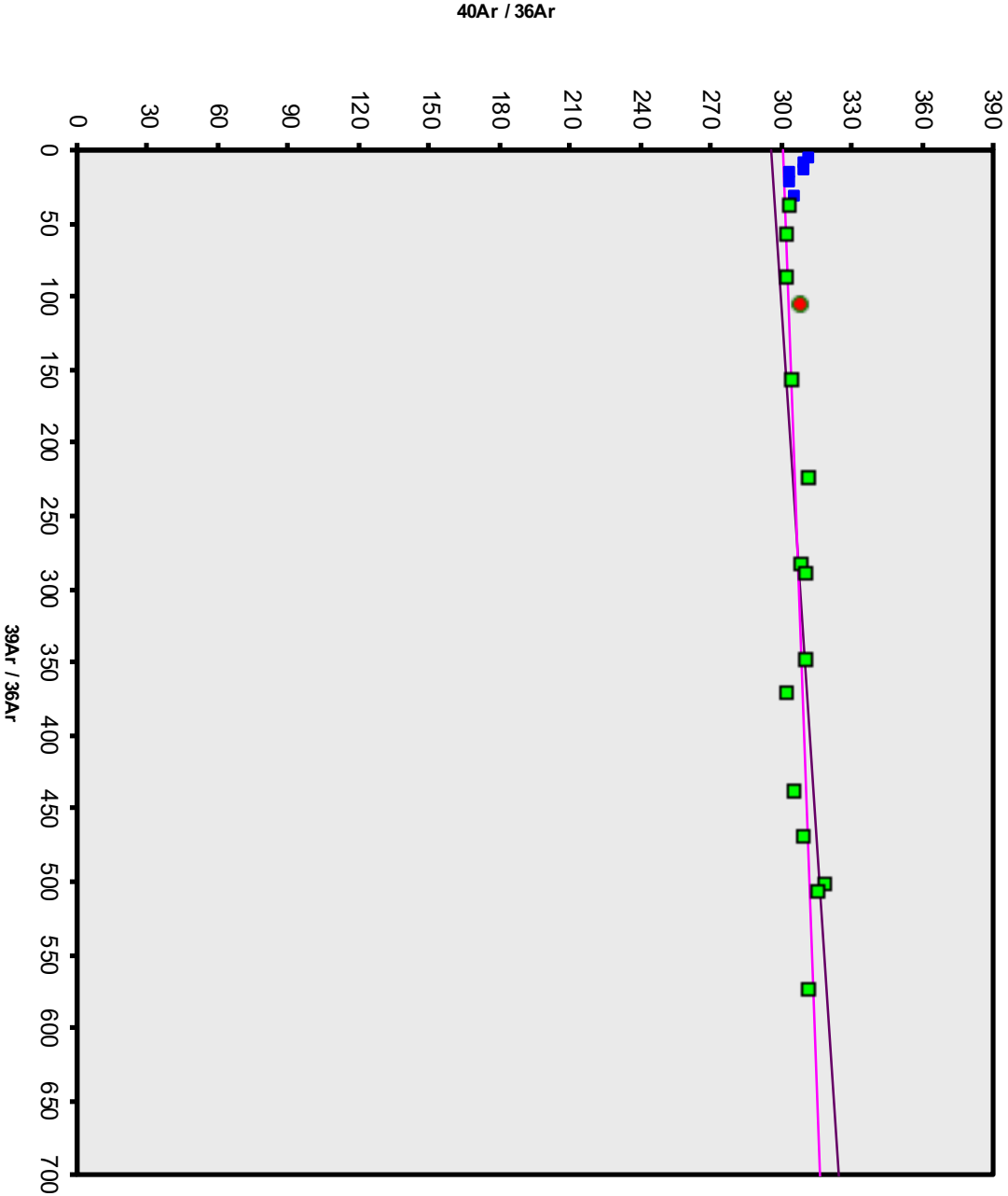
WEIGHTED
PLATEAU
 124.9 ± 30.7
TOTAL FUSION
 318.8 ± 39.2
NORMAL
ISOCHRON
 68.3 ± 49.2
INVERSE
ISOCHRON
 69.3 ± 42.2

Sample Info

Groundmass
Galapagos St. Cruz
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14D02188.AGE >>> SC12-038 >>> GALAPAGOS | HARPP (13-07) PROJECT



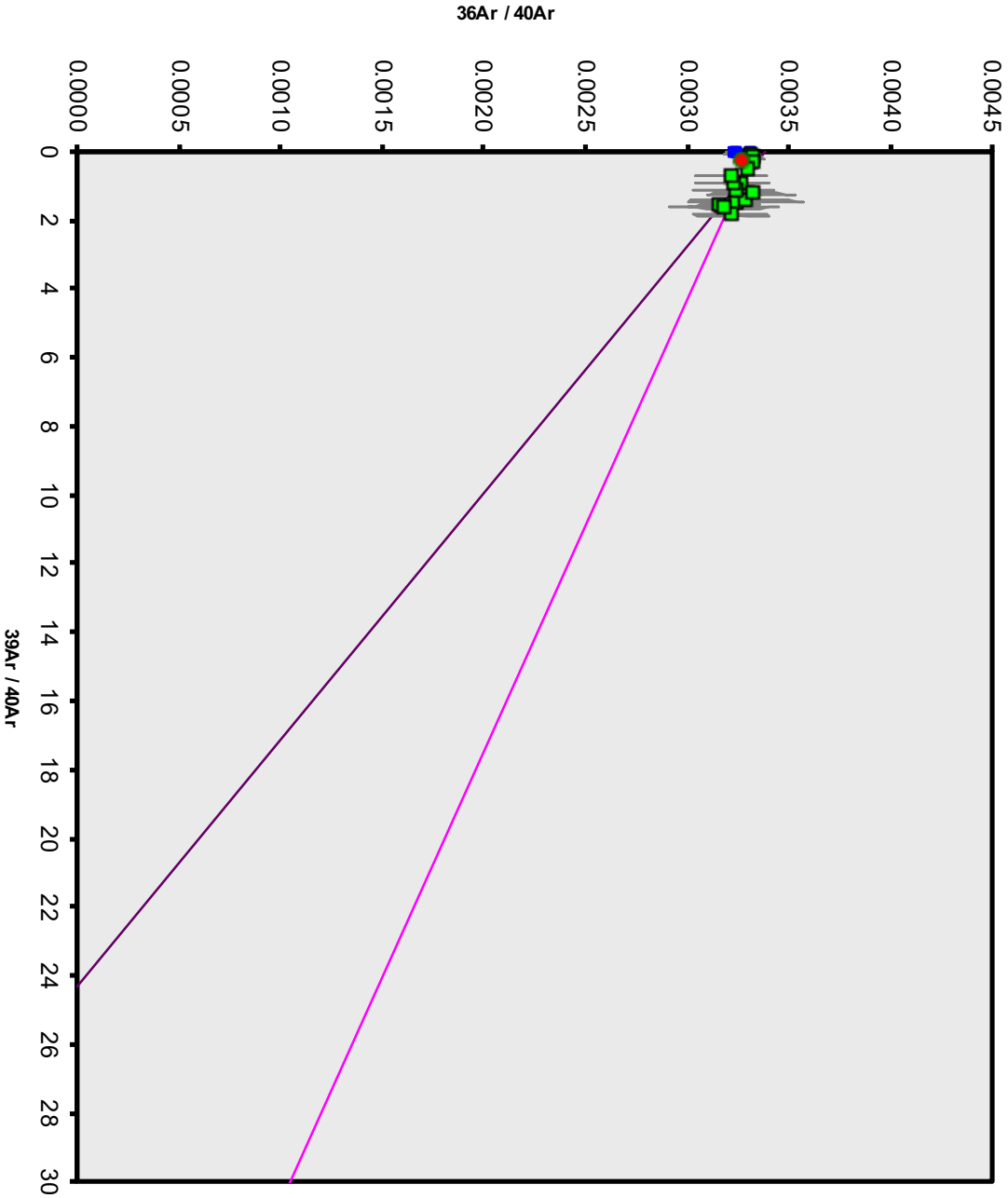
Ar-Ages in Ka

WEIGHTED
PLATEAU
124.9 ± 30.7
TOTAL FUSION
318.8 ± 39.2
NORMAL
ISOCHRON
68.3 ± 49.2
INVERSE
ISOCHRON
69.3 ± 42.2
MSWD
(PROBABILITY)
0.23 (100%)
40AR/36AR

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
J = 0.00168018 ±

14D02188.AGE >>> SC12-038 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
124.9 ± 30.7
TOTAL FUSION
318.8 ± 39.2
NORMAL
ISOCHRON
68.3 ± 49.2
INVERSE
ISOCHRON
69.3 ± 42.2

MSWD
(PROBABILITY)
0.23 (100%)

SPREADING

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00168018 ±

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D03160	1.7 %	✓	0.9249568	11.2312	0.0790579	3.46874	7.50708	6.12 $\pm$ 1.98	2.67	0.76	0.133 $\pm$ 0.194
14D03162	1.8 %	✓	0.2833020	3.4155	0.0890525	1.47509	1.02701	1.97 $\pm$ 4.80	1.21	0.32	0.186 $\pm$ 0.956
14D03163	1.9 %	✓	0.3192053	8.9336	0.0755775	2.03226	1.19420	1.66 $\pm$ 3.52	1.25	0.44	0.098 $\pm$ 0.189
14D03164	2.1 %	✓	0.2322423	0.7551	0.0520980	1.38206	0.37934	0.78 $\pm$ 4.97	0.55	0.30	0.787 $\pm$ 17.019
14D03166	2.3 %	✓	0.1479847	2.8070	0.0275918	0.86950	0.12285	0.40 $\pm$ 7.84	0.28	0.19	0.133 $\pm$ 0.806
14D03167	2.5 %	✓	0.2158397	9.3953	0.0196098	1.98076	1.50902	2.16 $\pm$ 3.47	2.31	0.43	0.091 $\pm$ 0.158
14D03169	2.8 %	✓	0.1227074	11.2070	0.0322114	1.13874	0.77966	1.94 $\pm$ 5.98	2.20	0.25	0.044 $\pm$ 0.066
14D03170	3.2 %	✓	0.2373682	19.7653	0.0575059	3.76773	2.72146	2.05 $\pm$ 1.84	3.73	0.82	0.082 $\pm$ 0.070
14D03172	4.0 %	✓	0.2880227	42.8270	0.1029007	10.71147	5.83771	1.54 $\pm$ 0.65	6.42	2.33	0.108 $\pm$ 0.041
14D03173	5.0 %	✓	0.2702918	65.4334	0.0505475	14.94565	7.63332	1.45 $\pm$ 0.48	8.72	3.26	0.098 $\pm$ 0.027
14D03175	6.0 %	✓	0.2767927	142.9297	0.1330642	33.98657	17.77637	1.48 $\pm$ 0.22	17.85	7.41	0.102 $\pm$ 0.013
14D03176	7.0 %	✓	0.2385605	126.0831	0.0635928	40.21113	19.15695	1.35 $\pm$ 0.18	21.36	8.76	0.137 $\pm$ 0.019
14D03178	8.2 %	✓	0.1947047	164.3904	0.0989760	49.38490	23.50480	1.35 $\pm$ 0.14	28.99	10.76	0.129 $\pm$ 0.014
14D03179	9.6 %	✓	0.2275025	175.8230	0.0376135	59.06608	27.51742	1.32 $\pm$ 0.12	29.03	12.87	0.144 $\pm$ 0.014
14D03181	10.2 %	✓	0.1908921	126.0112	0.0241244	42.07094	19.49155	1.31 $\pm$ 0.16	25.67	9.17	0.144 $\pm$ 0.019
14D03182	11.2 %	✓	0.1767645	115.6716	0.0372802	37.57549	16.86551	1.27 $\pm$ 0.19	24.39	8.19	0.140 $\pm$ 0.021
14D03184	13.2 %	✓	0.2630023	160.2972	0.0548858	46.40967	20.90868	1.28 $\pm$ 0.16	21.19	10.11	0.124 $\pm$ 0.015
14D03185	15.4 %	✓	0.2816108	154.5850	0.0506717	39.58739	19.01555	1.36 $\pm$ 0.18	18.59	8.63	0.110 $\pm$ 0.012
14D03187	18.0 %	✓	0.2850626	147.8727	0.0423932	34.61695	18.83577	1.54 $\pm$ 0.21	18.27	7.54	0.101 $\pm$ 0.011
14D03189	21.0 %	✓	0.2865191	194.6514	0.0555386	34.18748	15.63476	1.30 $\pm$ 0.21	15.58	7.45	0.076 $\pm$ 0.007
Σ			5.4633325	1656.0575	1.1842934	458.86860	225.85968				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-059	Age Plateau	0.47648 $\pm$ 0.02450	1.35 $\pm$ 0.07	1.75	100.00	0.105 $\pm$ 0.012
Material = Groundmass	Error Mean	$\pm$ 5.14%	$\pm$ 5.15%	2%	20	
Location = Galapagos St. Cruz Island			Full External Error $\pm$ 0.08	1.65	2 σ Confidence Limit	
Analyst = Dan Miggins			Analytical Error $\pm$ 0.07	1.3239	Error Magnification	
Project = GALAPAGOS HARPP (13-07)						
Mass Discrimination Law = LIN						
Irradiation = 13-OSU-03	Total Fusion Age	0.49221 $\pm$ 0.02420	1.39 $\pm$ 0.07		20	0.119 $\pm$ 0.006
J = 0.00156742 $\pm$ 0.13700000		$\pm$ 4.92%	$\pm$ 4.92%			
FCT-3 = 28.340 $\pm$ 0.564 Ma			Full External Error $\pm$ 0.08			
			Analytical Error $\pm$ 0.07			

OSU Argon Geochronology Lab

Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D03160	1.7 %	✓	3.75 $\pm$ 0.08	303.62 $\pm$ 2.69	0.4106
14D03162	1.8 %	✓	5.21 $\pm$ 0.30	299.13 $\pm$ 8.90	0.3745
14D03163	1.9 %	✓	6.37 $\pm$ 0.28	299.24 $\pm$ 7.99	0.4390
14D03164	2.1 %	✓	5.95 $\pm$ 0.38	297.13 $\pm$ 10.49	0.3825
14D03166	2.3 %	✓	5.88 $\pm$ 0.57	296.33 $\pm$ 16.28	0.3947
14D03167	2.5 %	✓	9.18 $\pm$ 0.44	302.49 $\pm$ 11.44	0.5521
14D03169	2.8 %	✓	9.28 $\pm$ 0.82	289.15 $\pm$ 19.25	0.5122
14D03170	3.2 %	✓	15.87 $\pm$ 0.57	306.97 $\pm$ 10.61	0.6922
14D03172	4.0 %	✓	37.19 $\pm$ 0.94	315.77 $\pm$ 8.92	0.8163
14D03173	5.0 %	✓	55.29 $\pm$ 1.51	323.74 $\pm$ 9.99	0.8513
14D03175	6.0 %	✓	122.79 $\pm$ 3.36	359.72 $\pm$ 10.93	0.8930
14D03176	7.0 %	✓	168.56 $\pm$ 5.04	375.80 $\pm$ 12.53	0.8917
14D03178	8.2 %	✓	253.64 $\pm$ 9.23	416.22 $\pm$ 16.61	0.9091
14D03179	9.6 %	✓	259.63 $\pm$ 8.16	416.45 $\pm$ 14.33	0.9102
14D03181	10.2 %	✓	220.39 $\pm$ 7.91	397.61 $\pm$ 15.86	0.8954
14D03182	11.2 %	✓	212.57 $\pm$ 8.53	390.91 $\pm$ 17.39	0.8986
14D03184	13.2 %	✓	176.46 $\pm$ 5.04	375.00 $\pm$ 11.83	0.9002
14D03185	15.4 %	✓	140.57 $\pm$ 3.62	363.02 $\pm$ 10.44	0.8871
14D03187	18.0 %	✓	121.44 $\pm$ 3.07	361.58 $\pm$ 10.24	0.8843
14D03189	21.0 %	✓	119.32 $\pm$ 3.05	350.07 $\pm$ 10.05	0.8805

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	300.27 $\pm$ 2.18 $\pm$ 0.73%	0.44661 $\pm$ 0.02302 $\pm$ 5.15%	1.27 $\pm$ 0.07 $\pm$ 5.16%	0.73 79%
			Full External Error $\pm$ 0.07 Analytical Error $\pm$ 0.07	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.67 1.0000 20	Convergence Number of Iterations Calculated Line	0.000002798209 6 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D03160	1.7 %	✓	0.0123517 $\pm$ 0.0002424	0.00329363 $\pm$ 0.00002918	0.0010
14D03162	1.8 %	✓	0.0174067 $\pm$ 0.0009327	0.00334308 $\pm$ 0.00009945	0.1562
14D03163	1.9 %	✓	0.0212758 $\pm$ 0.0008583	0.00334179 $\pm$ 0.00008928	0.1818
14D03164	2.1 %	✓	0.0200279 $\pm$ 0.0012118	0.00336549 $\pm$ 0.00011879	0.1758
14D03166	2.3 %	✓	0.0198279 $\pm$ 0.0017863	0.00337461 $\pm$ 0.00018536	0.1878
14D03167	2.5 %	✓	0.0303381 $\pm$ 0.0012697	0.00330588 $\pm$ 0.00012501	0.2650
14D03169	2.8 %	✓	0.0320949 $\pm$ 0.0025310	0.00345846 $\pm$ 0.00023031	0.2702
14D03170	3.2 %	✓	0.0517093 $\pm$ 0.0014304	0.00325770 $\pm$ 0.00011262	0.3521
14D03172	4.0 %	✓	0.1177752 $\pm$ 0.0019383	0.00316688 $\pm$ 0.00008945	0.4651
14D03173	5.0 %	✓	0.1707986 $\pm$ 0.0027711	0.00308889 $\pm$ 0.00009529	0.4664
14D03175	6.0 %	✓	0.3413382 $\pm$ 0.0046671	0.00277992 $\pm$ 0.00008444	0.4346
14D03176	7.0 %	✓	0.4485266 $\pm$ 0.0067684	0.00266097 $\pm$ 0.00008872	0.4422
14D03178	8.2 %	✓	0.6093890 $\pm$ 0.0101305	0.00240257 $\pm$ 0.00009590	0.4104
14D03179	9.6 %	✓	0.6234255 $\pm$ 0.0088831	0.00240122 $\pm$ 0.00008261	0.4062
14D03181	10.2 %	✓	0.5542932 $\pm$ 0.0098458	0.00251504 $\pm$ 0.00010035	0.4381
14D03182	11.2 %	✓	0.5437889 $\pm$ 0.0106153	0.00255812 $\pm$ 0.00011380	0.4314
14D03184	13.2 %	✓	0.4705630 $\pm$ 0.0064632	0.00266667 $\pm$ 0.00008410	0.4244
14D03185	15.4 %	✓	0.3872326 $\pm$ 0.0051417	0.00275464 $\pm$ 0.00007923	0.4480
14D03187	18.0 %	✓	0.3358529 $\pm$ 0.0044419	0.00276567 $\pm$ 0.00007834	0.4492
14D03189	21.0 %	✓	0.3408483 $\pm$ 0.0046390	0.00285659 $\pm$ 0.00008199	0.4549

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Inverse Isochron	300.37 $\pm$ 2.18 $\pm$ 0.73%	0.44668 $\pm$ 0.02292 $\pm$ 5.13%	1.27 $\pm$ 0.07 $\pm$ 5.14%	0.71 80%
			Full External Error $\pm$ 0.07 Analytical Error $\pm$ 0.06	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	1.67 1.0000 20 27.3%	Convergence Number of Iterations Calculated Line	0.0019324539 4 Weighted York-2

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D03160	1.7 %	✓	0.9279557	0.375	11.2312	72.866	0.2929677	13.304	3.47630	0.966	280.8353	0.021	2.16421 ± 0.69950	6.12 ± 1.98	2.67	0.76	0.133 ± 0.194
14D03162	1.8 %	✓	0.2842419	0.955	3.4155	257.385	0.1592629	24.711	1.47739	2.525	84.7442	0.789	0.69624 ± 1.69459	1.97 ± 4.80	1.21	0.32	0.186 ± 0.956
14D03163	1.9 %	✓	0.3215962	0.878	8.9336	96.806	0.1590058	23.759	2.03827	1.864	95.5214	0.700	0.58762 ± 1.24455	1.66 ± 3.52	1.25	0.44	0.098 ± 0.189
14D03164	2.1 %	✓	0.2324640	1.145	0.7551	1081.198	0.1113369	34.147	1.38257	2.837	69.0083	0.969	0.27447 ± 1.75561	0.78 ± 4.97	0.55	0.30	0.787 ± 17.019
14D03166	2.3 %	✓	0.1472555	1.719	2.8070	302.359	0.0647549	58.618	0.86761	4.197	43.8532	1.524	0.14128 ± 2.76491	0.40 ± 7.84	0.28	0.19	0.133 ± 0.806
14D03167	2.5 %	✓	0.2183285	1.223	9.3953	86.878	0.0837972	48.091	1.98709	1.788	65.2916	1.024	0.76184 ± 1.22545	2.16 ± 3.47	2.31	0.43	0.091 ± 0.158
14D03169	2.8 %	✓	0.1197626	2.095	11.2070	75.983	0.0665465	62.787	1.13120	3.450	35.4815	1.883	0.68467 ± 2.10649	1.94 ± 5.98	2.20	0.25	0.044 ± 0.066
14D03170	3.2 %	✓	0.2426109	1.099	19.7653	42.805	0.1474942	28.032	3.78104	1.020	72.8676	0.917	0.72231 ± 0.65091	2.05 ± 1.84	3.73	0.82	0.082 ± 0.070
14D03172	4.0 %	✓	0.2993731	0.913	42.8270	18.943	0.2845816	13.485	10.74029	0.365	90.9592	0.735	0.54500 ± 0.22874	1.54 ± 0.65	6.42	2.33	0.108 ± 0.041
14D03173	5.0 %	✓	0.2875879	0.962	65.4334	13.533	0.2802418	13.349	14.98969	0.269	87.5196	0.764	0.51074 ± 0.16889	1.45 ± 0.48	8.72	3.26	0.098 ± 0.027
14D03175	6.0 %	✓	0.3145832	0.915	142.9297	6.448	0.5914312	6.691	34.08276	0.125	99.6029	0.672	0.52304 ± 0.07648	1.48 ± 0.22	17.85	7.41	0.102 ± 0.013
14D03176	7.0 %	✓	0.2718738	1.010	126.0831	6.796	0.5833079	6.870	40.29598	0.113	89.6922	0.745	0.47641 ± 0.06197	1.35 ± 0.18	21.36	8.76	0.137 ± 0.019
14D03178	8.2 %	✓	0.2381462	1.119	164.3904	5.363	0.7202167	5.276	49.49553	0.100	81.0899	0.825	0.47595 ± 0.05027	1.35 ± 0.14	28.99	10.76	0.129 ± 0.014
14D03179	9.6 %	✓	0.2739359	0.999	175.8230	4.938	0.7767451	4.983	59.18441	0.098	94.8041	0.705	0.46588 ± 0.04229	1.32 ± 0.12	29.03	12.87	0.144 ± 0.014
14D03181	10.2 %	✓	0.2241694	1.169	126.0112	6.589	0.5560851	7.071	42.15575	0.111	75.9426	0.881	0.46330 ± 0.05758	1.31 ± 0.16	25.67	9.17	0.144 ± 0.019
14D03182	11.2 %	✓	0.2073178	1.291	115.6716	7.589	0.5140050	7.699	37.65334	0.126	69.1374	0.967	0.44884 ± 0.06610	1.27 ± 0.19	24.39	8.19	0.140 ± 0.021
14D03184	13.2 %	✓	0.3053443	0.919	160.2972	5.862	0.6544643	6.101	46.51755	0.108	98.6727	0.678	0.45052 ± 0.05572	1.28 ± 0.16	21.19	10.11	0.124 ± 0.015
14D03185	15.4 %	✓	0.3224430	0.863	154.5850	5.624	0.5752966	6.662	39.69143	0.113	102.2715	0.654	0.48034 ± 0.06357	1.36 ± 0.18	18.59	8.63	0.110 ± 0.012
14D03187	18.0 %	✓	0.3241192	0.873	147.8727	5.658	0.5101666	7.839	34.71647	0.127	103.1067	0.648	0.54412 ± 0.07245	1.54 ± 0.21	18.27	7.54	0.101 ± 0.011
14D03189	21.0 %	✓	0.3379309	0.830	194.6514	4.521	0.5251990	7.321	34.31848	0.135	100.3357	0.666	0.45732 ± 0.07412	1.30 ± 0.21	15.58	7.45	0.076 ± 0.007
Σ			5.9010398	0.209	1656.0575	2.324	7.6575069	2.289	459.98313	0.042	1840.7379	0.158					

Information on Analysis and Constants Used in Calculations	Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Sample = SC12-059	Age Plateau		0.47648 ± 0.02450	± 0.07	1.75	100.00	0.105 ± 0.012
Material = Groundmass	Error Mean		± 5.14%	1.35 ± 5.15%	2%	20	
Location = Galapagos St. Cruz Island				Full External Error ± 0.08	1.65	20	2σ Confidence Limit
Analyst = Dan Miggins				Analytical Error ± 0.07	1.3239		Error Magnification
Project = GALAPAGOS HARPP (13-07)							
Mass Discrimination Law = LIN	Total Fusion Age	0.49221 ± 0.02420	± 4.92%	1.39 ± 0.07 ± 4.92%		20	0.119 ± 0.006
Irradiation = 13-OSU-03				Full External Error ± 0.08			
J = 0.00156742 ± 0.13700000				Analytical Error ± 0.07			
FCT-3 = 28.340 ± 0.564 Ma							
IGSN = 27							
Preferred Age = Undefined							
Classification = Undefined	Normal Isochron	300.27 ± 2.18 ± 0.73%	0.44661 ± 0.02302 ± 5.15%	1.27 ± 0.07 ± 5.16%	0.73	100.00	79%
Experiment Type = 5.52				Full External Error ± 0.07	1.67	20	2σ Confidence Limit
Extraction Method = Undefined				Analytical Error ± 0.07	1.0000		Error Magnification
Heating = 0 sec					6		Number of Iterations
Isolation = 6.00 min					0.0000027982		Convergence
Instrument = ARGUS-VI							
Lithology = Undefined							
Lat-Lon = Undefined - Undefined	Inverse Isochron	300.37 ± 2.18 ± 0.73%	0.44668 ± 0.02292 ± 5.13%	1.27 ± 0.07 ± 5.14%	0.71	100.00	80%
Collector Calibrations = 40Ar 36Ar				Full External Error ± 0.07	1.67	20	2σ Confidence Limit
				Analytical Error ± 0.06	1.0000		Error Magnification
					4		Number of Iterations
					0.0019324539		Convergence
					27%		Spreading Factor

Depositing Patterns	36Ar(a) [A]	% σ	36Ar(c) [A]	% σ	36Ar(ea) [A]	% σ	36Ar(ed) [A]	% σ	37Ar(ca) [A]	% σ	38Ar(a) [A]	% σ	38Ar(c) [A]	% σ	38Ar(h) [A]	% σ	38Ar(ea) [A]	% σ	38Ar(ed) [A]	% σ	39Ar(h) [A]	% σ	39Ar(ea) [A]	% σ	40Ar(r) [A]	% σ	40Ar(a) [A]	% σ	40Ar(c) [A]	% σ	40Ar(h) [A]	% σ		
14C03160	1.7%	✓	0.004688	0.44	0.000000	0.00	0.002660	72.87	0.0000339	49.35	11.2312	72.87	0.173874	0.44	0.0000000	0.00	0.0387463	0.38	0.0015811	72.87	0.0700679	49.35	3.48874	0.38	0.0050386	72.87	7.67058	15.13	272.3247	0.44	0.0000000	0.00	0.0032624	0.38
14C03162	1.8%	✓	0.2833020	1.26	0.0000000	0.00	0.0003617	257.38	0.0000382	44.24	3.4165	257.38	0.0029491	1.26	0.0000000	0.00	0.0167865	2.56	0.0004748	257.38	0.0800525	44.25	1.47590	2.56	0.0022086	257.38	1.02701	121.67	83.7637	1.26	0.0000000	0.00	0.0014888	2.56
14C03163	1.9%	✓	0.2192023	1.14	0.0000000	0.00	0.0002385	96.81	0.0000254	50.22	6.8365	96.81	0.0000335	1.14	0.0000000	0.00	0.0021271	1.89	0.0010418	96.81	0.0700775	50.22	2.02226	1.89	0.0000123	96.81	1.94020	165.86	94.2552	1.14	0.0000000	0.00	0.0001026	1.89
14C03164	2.1%	✓	0.2324243	1.46	0.0000000	0.00	0.0001683	1081.20	0.0000223	73.03	0.7561	1081.20	0.0454961	1.46	0.0000000	0.00	0.0157273	2.87	0.00001992	1081.20	0.0020080	73.04	1.30036	2.87	0.0000282	1081.20	0.37054	319.80	68.6276	1.46	0.0000000	0.00	0.0011863	2.87
14C03165	2.3%	✓	0.1473947	2.28	0.0000000	0.00	0.0007411	302.36	0.0000118	137.68	2.6707	302.36	0.0276883	2.28	0.0000000	0.00	0.0008949	4.24	0.0000392	302.36	0.0775918	137.68	0.88850	4.24	0.001891	302.36	0.12285	978.48	43.7295	2.28	0.0000000	0.00	0.0008782	4.24
14C03167	2.5%	✓	0.2192037	1.59	0.0000000	0.00	0.0004054	86.86	0.0000004	205.64	0.3063	86.86	0.0402944	1.59	0.0000000	0.00	0.0225411	1.53	0.0010359	86.86	0.0196068	205.64	1.98376	1.53	0.0000320	86.86	1.92002	85.47	63.7895	1.59	0.0000000	0.00	0.0000005	1.53
14C03169	2.8%	✓	0.1227034	2.75	0.0000000	0.00	0.0005966	75.98	0.0000138	129.80	11.2070	75.98	0.0020940	2.75	0.0000000	0.00	0.0129689	3.46	0.0016378	75.98	0.0021114	129.80	1.13874	3.46	0.0057423	75.98	0.77966	153.79	36.2600	2.75	0.0000000	0.00	0.0011801	3.46
14C03170	3.2%	✓	0.2373882	1.46	0.0000000	0.00	0.0002180	42.80	0.0000247	71.95	19.7653	42.80	0.0404341	1.46	0.0000000	0.00	0.0428768	1.04	0.0021214	42.80	0.0076059	71.95	3.76773	1.04	0.0133020	42.80	2.72146	45.05	76.1423	1.46	0.0000000	0.00	0.0000854	1.04
14C03172	4.0%	✓	0.2880227	1.21	0.0000000	0.00	0.0113603	18.94	0.0000441	37.33	42.8270	18.94	0.0000014	1.21	0.0000000	0.00	0.1218895	0.37	0.00000026	18.94	0.1020007	37.34	10.71147	0.37	0.0000206	18.94	0.82771	29.98	46.1107	1.21	0.0000000	0.00	0.0100886	0.37
14C03173	5.0%	✓	0.2750218	1.34	0.0000000	0.00	0.0172744	13.53	0.0000217	74.08	66.4334	13.53	0.0000175	1.34	0.0000000	0.00	0.1700815	0.27	0.0000062	13.53	0.0000475	74.09	14.94666	0.27	0.0440367	13.53	7.68332	16.53	79.8712	1.34	0.0000000	0.00	0.0150061	0.27
14C03175	6.0%	✓	0.2767827	1.36	0.0000000	0.00	0.0077334	6.45	0.0000071	29.78	142.5007	6.45	0.0017026	1.36	0.0000000	0.00	0.3867672	0.13	0.0191872	6.45	0.1336442	29.79	20.98857	0.13	0.0061917	6.45	17.77637	7.31	81.7822	1.36	0.0000000	0.00	0.0043284	0.13
14C03176	7.0%	✓	0.2886026	1.40	0.0000000	0.00	0.0032689	6.80	0.0000273	63.07	126.0811	6.80	0.0446870	1.40	0.0000000	0.00	0.4057626	0.11	0.0175206	6.80	0.0630528	63.07	40.21113	0.11	0.0846539	6.80	15.95695	6.50	70.4646	1.40	0.0000000	0.00	0.0406102	0.11
14C03178	8.2%	✓	0.1947047	1.82	0.0000000	0.00	0.0463991	5.36	0.0000425	38.44	164.3054	5.36	0.0000303	1.82	0.0000000	0.00	0.6020001	0.10	0.0020603	5.36	0.0800760	38.45	49.38460	0.10	0.1100347	5.36	23.03440	5.28	57.5302	1.82	0.0000000	0.00	0.0666787	0.10
14C03179	9.6%	✓	0.2575205	1.57	0.0000000	0.00	0.0464173	4.94	0.0000161	102.99	175.8230	4.94	0.0403203	1.57	0.0000000	0.00	0.6721720	0.10	0.0244384	4.94	0.0707135	102.99	50.94608	0.10	0.1183289	4.94	27.83742	4.54	67.2270	1.57	0.0000000	0.00	0.0066667	0.10
14C03181	10.2%	✓	0.1908021	1.79	0.0000000	0.00	0.0032670	6.59	0.0000104	163.11	128.0112	6.59	0.0006777	1.79	0.0000000	0.00	0.4787673	0.11	0.0170196	6.59	0.0241244	163.11	42.67094	0.11	0.0846055	6.59	19.49155	6.21	56.4086	1.79	0.0000000	0.00	0.0404917	0.11
14C03182	11.2%	✓	0.1767945	2.00	0.0000000	0.00	0.0003753	7.59	0.0000169	195.24	116.8716	7.59	0.0000373	2.00	0.0000000	0.00	0.4247401	0.13	0.0160384	7.59	0.0372682	195.24	21.57549	0.13	0.0778470	7.59	16.88051	7.36	52.2359	2.00	0.0000000	0.00	0.0073902	0.13
14C03184	12.1%	✓	0.2600023	1.42	0.0000000	0.00	0.0002185	5.86	0.0000026	72.52	166.2972	5.86	0.0491651	1.42	0.0000000	0.00	0.5281420	0.11	0.0022813	5.86	0.0464658	72.83	46.40687	0.11	0.1078800	5.86	20.56868	6.18	77.7172	1.42	0.0000000	0.00	0.0466728	0.11
14C03185	15.4%	✓	0.2819108	1.28	0.0000000	0.00	0.0408104	5.62	0.0000217	75.71	154.5850	5.62	0.0000331	1.28	0.0000000	0.00	0.4500045	0.11	0.0214873	5.62	0.0500717	75.71	39.58739	0.11	0.1040057	5.62	19.01555	6.62	82.2980	1.28	0.0000000	0.00	0.0009833	0.11
14C03187	19.0%	✓	0.2682626	1.25	0.0000000	0.00	0.0160384	5.66	0.0000162	84.40	147.9727	5.66	0.0002782	1.25	0.0000000	0.00	0.3031409	0.13	0.0205453	5.66	0.0421802	84.41	34.51985	0.13	0.0000163	5.66	14.85777	6.65	84.2380	1.25	0.0000000	0.00	0.0014921	0.13
14C03189	21.0%	✓	0.2865191	1.27	0.0000000	0.00	0.0513880	4.52	0.0000238	69.29	194.6514	4.52	0.0002504	1.27	0.0000000	0.00	0.3890235	0.14	0.0070565	4.52	0.0555386	69.30	34.18748	0.14	0.0100004	4.52	15.63476	8.10	84.6854	1.27	0.0000000	0.00	0.0034524	0.14
Σ	5.4633025	0.29	0.0000000	0.00	0.4371992	2.32	0.0000381	14.81	1656.0575	2.32	1.0210989	0.29	0.0000000	0.00	5.2210947	0.04	0.2201020	2.32	1.7677069	2.39	458.80980	0.04	1.1145037	2.32	225.85968	2.46	1614.4148	0.29	0.0000000	0.00	1463.4573	0.04		
Σ							5.9000388	0.32	1656.0575	2.32																						1843.7339	0.40	

OSU Argon Geochronology Lab
CEQAS Oregon State University, Corvallis, USA

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D03160	1.7 %	✓	80.785744	0.780716	3.230789	2.354340	0.266938	0.002766	264.061	184.602165	1.00186584	1.348E-11
14D03162	1.8 %	✓	57.360880	1.517333	2.311858	5.950653	0.192395	0.005194	264.078	184.665479	1.00186596	4.068E-12
14D03163	1.9 %	✓	46.864018	0.933281	4.382947	4.243729	0.157779	0.003252	264.087	184.695878	1.00186602	4.585E-12
14D03164	2.1 %	✓	49.913008	1.496480	0.546155	5.905040	0.168139	0.005145	264.096	184.728815	1.00186608	3.312E-12
14D03166	2.3 %	✓	50.544768	2.256720	3.235336	9.783277	0.169725	0.007697	264.113	184.792172	1.00186620	2.105E-12
14D03167	2.5 %	✓	32.857973	0.679885	4.728173	4.108633	0.109874	0.002389	264.122	184.822592	1.00186626	3.134E-12
14D03169	2.8 %	✓	31.366317	1.232947	9.907167	7.535568	0.105872	0.004274	264.139	184.885981	1.00186639	1.703E-12
14D03170	3.2 %	✓	19.271856	0.264439	5.227479	2.238240	0.064165	0.000962	264.147	184.916416	1.00186644	3.498E-12
14D03172	4.0 %	✓	8.468970	0.069513	3.987505	0.755501	0.027874	0.000274	264.165	184.979838	1.00186657	4.366E-12
14D03173	5.0 %	✓	5.838657	0.047284	4.365227	0.590858	0.019186	0.000192	264.174	185.012826	1.00186663	4.201E-12
14D03175	6.0 %	✓	2.922384	0.019963	4.193607	0.270471	0.009230	0.000085	264.190	185.073742	1.00186675	4.781E-12
14D03176	7.0 %	✓	2.225835	0.016783	3.128925	0.212686	0.006747	0.000069	264.199	185.106747	1.00186681	4.305E-12
14D03178	8.2 %	✓	1.638328	0.013608	3.321318	0.178148	0.004811	0.000054	264.217	185.170234	1.00186694	3.892E-12
14D03179	9.6 %	✓	1.601842	0.011404	2.970765	0.146727	0.004629	0.000046	264.225	185.200715	1.00186699	4.551E-12
14D03181	10.2 %	✓	1.801478	0.015989	2.989182	0.196988	0.005318	0.000062	264.242	185.264235	1.00186712	3.645E-12
14D03182	11.2 %	✓	1.836155	0.017909	3.072014	0.233160	0.005506	0.000071	264.251	185.294732	1.00186718	3.319E-12
14D03184	13.2 %	✓	2.121193	0.014557	3.445951	0.202025	0.006564	0.000061	264.268	185.358283	1.00186730	4.736E-12
14D03185	15.4 %	✓	2.576665	0.017094	3.894670	0.219093	0.008124	0.000071	264.277	185.391338	1.00186736	4.909E-12
14D03187	18.0 %	✓	2.969966	0.019626	4.259438	0.241059	0.009336	0.000082	264.294	185.454923	1.00186749	4.949E-12
14D03189	21.0 %	✓	2.923664	0.019880	5.671913	0.256569	0.009847	0.000083	264.311	185.515985	1.00186760	4.816E-12

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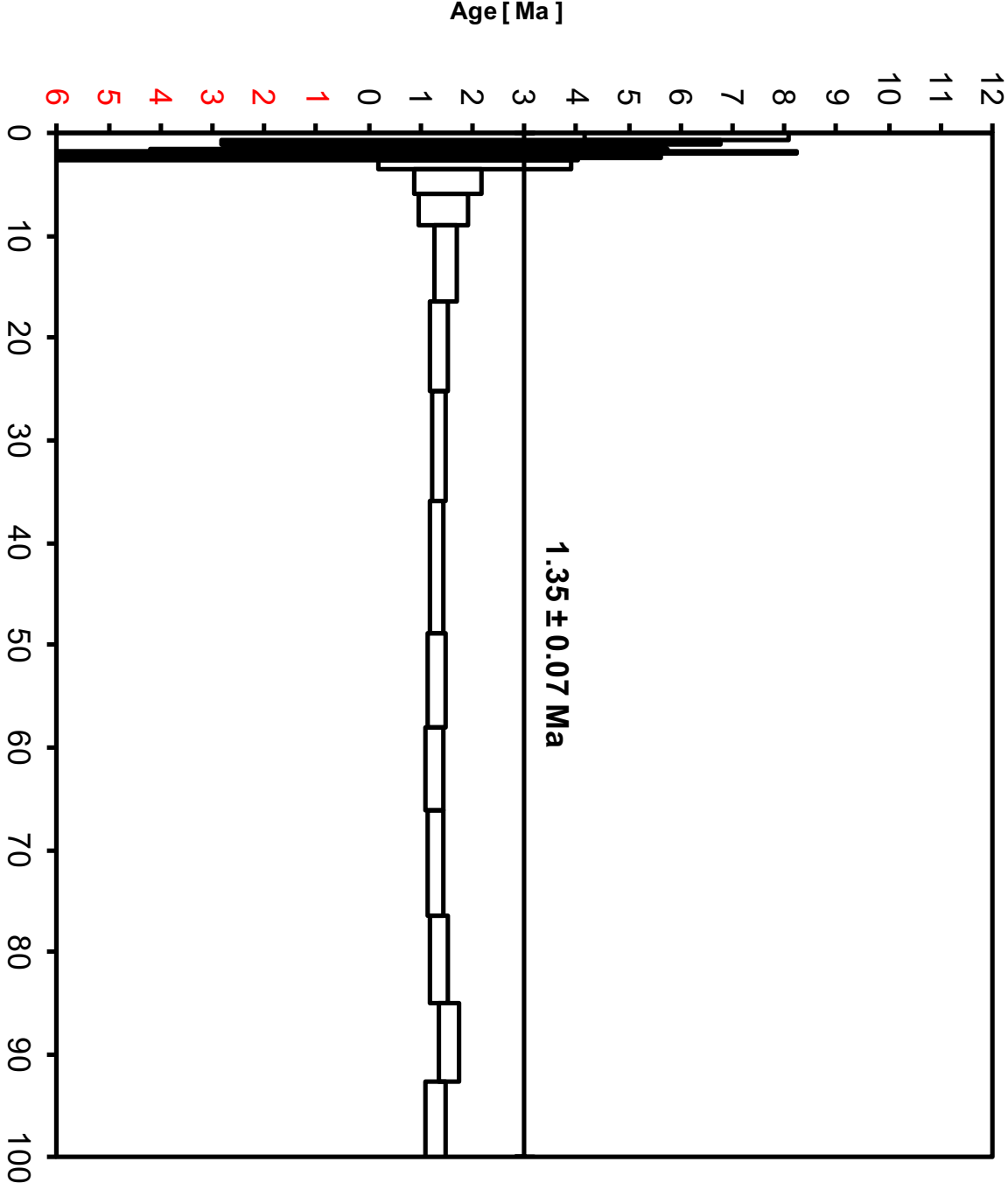
Procedure Blanks		36Ar		37Ar		38Ar		39Ar		40Ar	
		[fA]	1σ	[fA]	1σ	[fA]	1σ	[fA]	1σ	[fA]	1σ
14D03160	1.7 %	0.0108797	0.0004573	0.0666890	0.0300542	0.0391363	0.0267983	0.0765278	0.0245589	2.7065567	0.0298206
14D03162	1.8 %	0.0392124	0.0021572	0.0567434	0.0338216	0.0044803	0.0271162	0.3426881	0.0267413	12.0032016	0.6690101
14D03163	1.9 %	0.0398120	0.0021572	0.0564332	0.0338216	0.0042971	0.0271162	0.3339882	0.0267413	12.2997540	0.6690101
14D03164	2.1 %	0.0408848	0.0021572	0.0560970	0.0338216	0.0040986	0.0271162	0.3245633	0.0267413	12.7152104	0.6690101
14D03166	2.3 %	0.0435437	0.0021572	0.0554507	0.0338216	0.0037168	0.0271162	0.3064384	0.0267413	13.6103413	0.6690101
14D03167	2.5 %	0.0448402	0.0021572	0.0551404	0.0338216	0.0035336	0.0271162	0.2977385	0.0267413	14.0133591	0.6690101
14D03169	2.8 %	0.0470449	0.0021572	0.0544940	0.0338216	0.0031518	0.0271162	0.2796137	0.0267413	14.6504387	0.6690101
14D03170	3.2 %	0.0477087	0.0021572	0.0541837	0.0338216	0.0029686	0.0271162	0.2709138	0.0267413	14.8174352	0.6690101
14D03172	4.0 %	0.0479860	0.0021572	0.0535373	0.0338216	0.0025868	0.0271162	0.2527889	0.0267413	14.8039789	0.6690101
14D03173	5.0 %	0.0474726	0.0021572	0.0532012	0.0338216	0.0023883	0.0271162	0.2433640	0.0267413	14.5892321	0.6690101
14D03175	6.0 %	0.0453154	0.0021572	0.0525807	0.0338216	0.0020218	0.0271162	0.2259641	0.0267413	13.8223512	0.6690101
14D03176	7.0 %	0.0435340	0.0021572	0.0522446	0.0338216	0.0018233	0.0271162	0.2165392	0.0267413	13.2235324	0.6690101
14D03178	8.2 %	0.0391331	0.0021572	0.0515982	0.0338216	0.0014415	0.0271162	0.1984144	0.0267413	11.7908100	0.6690101
14D03179	9.6 %	0.0367028	0.0021572	0.0512879	0.0338216	0.0012582	0.0271162	0.1897144	0.0267413	11.0167650	0.6690101
14D03181	10.2 %	0.0314626	0.0021572	0.0506415	0.0338216	0.0008765	0.0271162	0.1715896	0.0267413	9.3786312	0.6690101
14D03182	11.2 %	0.0290945	0.0021572	0.0503312	0.0338216	0.0006932	0.0271162	0.1628897	0.0267413	8.6528088	0.6690101
14D03184	13.2 %	0.0252072	0.0021572	0.0496848	0.0338216	0.0003115	0.0271162	0.1447648	0.0267413	7.4958484	0.6690101
14D03185	15.4 %	0.0241183	0.0021572	0.0493487	0.0338216	0.0001130	0.0271162	0.1353399	0.0267413	7.1989412	0.6690101
14D03187	18.0 %	0.0248580	0.0021572	0.0487023	0.0338216	0.0002688	0.0271162	0.1172151	0.0267413	7.5322594	0.6690101
14D03189	21.0 %	0.0305334	0.0021572	0.0480818	0.0338216	0.0006353	0.0271162	0.0998152	0.0267413	9.4153706	0.6690101

Intercept Values	36Ar [fA]				37Ar [fA]				38Ar [fA]				39Ar [fA]				40Ar [fA]				
	1σ	r2			1σ	r2			1σ	r2			1σ	r2			1σ	r2			
14D03160	1.7%	0.8936154	0.0023311	0.7973	EXP 150 of 150	0.1264	0.0315	0.0010	EXP 150 of 150	0.3285799	0.027616	0.0084	EXP 150 of 150	3.52552	0.02242	0.4388	EXP 150 of 150	284.13045	0.05181	0.5526	EXP 150 of 150
14D03162	1.8%	0.3099029	0.0012320	0.3765	EXP 150 of 150	0.0749	0.0323	0.0025	EXP 150 of 150	0.1618275	0.0278649	0.0271	EXP 150 of 150	1.80847	0.02557	0.0693	EXP 150 of 150	96.92564	0.03771	0.9597	EXP 150 of 150
14D03163	1.9%	0.3457395	0.0013876	0.5204	EXP 150 of 150	0.1039	0.0311	0.0099	EXP 150 of 150	0.1619830	0.0258514	0.0088	EXP 150 of 150	2.35255	0.02555	0.2440	EXP 150 of 150	108.02205	0.03359	0.9823	EXP 150 of 150
14D03164	2.1%	0.2620026	0.0011939	0.3920	EXP 150 of 150	0.0901	0.0272	0.0000	EXP 150 of 150	0.1140962	0.0259901	0.0019	EXP 150 of 150	1.69627	0.03827	0.0751	EXP 150 of 150	81.86987	0.03519	0.9506	EXP 150 of 150
14D03166	2.3%	0.1836233	0.0010044	0.1292	EXP 150 of 150	0.0405	0.0298	0.0002	EXP 150 of 150	0.0676928	0.0259592	0.0019	EXP 150 of 150	1.16723	0.03428	0.0306	EXP 150 of 150	57.55577	0.03412	0.9942	EXP 150 of 150
14D03167	2.5%	0.2525293	0.0012235	0.2854	EXP 150 of 150	0.1051	0.0271	0.0051	EXP 150 of 150	0.0863228	0.0291523	0.0025	EXP 150 of 150	2.26922	0.02324	0.1778	EXP 149 of 150	79.44231	0.03431	0.9848	EXP 150 of 150
14D03169	2.8%	0.1609713	0.0009765	0.1164	EXP 150 of 150	0.0550	0.0300	0.0389	EXP 150 of 150	0.0689978	0.0311244	0.0016	EXP 150 of 150	1.40193	0.02800	0.0141	EXP 150 of 150	55.20658	0.02891	0.9638	EXP 150 of 150
14D03170	3.2%	0.2784070	0.0011861	0.5096	EXP 150 of 150	0.1591	0.0296	0.0015	EXP 150 of 150	0.1486885	0.0305491	0.0020	EXP 150 of 150	4.02225	0.02728	0.4438	EXP 150 of 150	87.83824	0.03000	0.9980	EXP 150 of 150
14D03172	4.0%	0.3327704	0.0010459	0.5893	EXP 150 of 150	0.2809	0.0266	0.0051	EXP 150 of 150	0.2837452	0.0264952	0.0057	EXP 150 of 150	10.90871	0.02747	0.8744	EXP 150 of 150	105.95448	0.03695	0.9499	EXP 150 of 150
14D03173	5.0%	0.3210460	0.0012598	0.5879	EXP 150 of 150	0.4005	0.0325	0.0162	EXP 149 of 150	0.2762590	0.0251127	0.0019	EXP 150 of 150	15.11529	0.02830	0.9248	EXP 150 of 150	102.25291	0.03381	0.9336	EXP 150 of 150
14D03175	6.0%	0.3445688	0.0014957	0.5461	EXP 150 of 150	0.8109	0.0348	0.0376	EXP 149 of 150	0.5963387	0.0281577	0.0805	EXP 150 of 150	34.04097	0.02500	0.9880	EXP 150 of 150	113.63475	0.04143	0.8592	EXP 150 of 150
14D03176	7.0%	0.3210592	0.0013050	0.4890	EXP 150 of 150	0.7211	0.0299	0.0051	EXP 150 of 150	0.5781146	0.0288357	0.0315	EXP 150 of 150	40.19595	0.02667	0.9901	EXP 150 of 150	103.15436	0.03621	0.8513	EXP 149 of 150
14D03178	8.2%	0.2656742	0.0011913	0.4697	EXP 150 of 150	0.9234	0.0316	0.0419	EXP 150 of 150	0.7125948	0.0259498	0.0468	EXP 150 of 150	49.30510	0.03052	0.9935	EXP 150 of 150	93.05124	0.03766	0.1301	EXP 150 of 150
14D03179	9.6%	0.2972896	0.0012858	0.5321	EXP 150 of 150	0.9835	0.0304	0.0000	EXP 150 of 150	0.7686599	0.0289420	0.0144	EXP 150 of 150	58.90916	0.03545	0.9918	EXP 150 of 150	106.02020	0.03354	0.8884	EXP 150 of 150
14D03181	10.2%	0.2447080	0.0011184	0.4849	EXP 150 of 150	0.7186	0.0277	0.0053	EXP 150 of 150	0.5502724	0.0278039	0.0074	EXP 150 of 150	41.99915	0.02730	0.9908	EXP 150 of 150	85.48098	0.03878	0.0370	EXP 150 of 150
14D03182	11.2%	0.2203295	0.0010493	0.3508	EXP 150 of 150	0.6533	0.0316	0.0078	EXP 150 of 150	0.5395153	0.0281590	0.0014	EXP 150 of 150	37.52041	0.03001	0.9851	EXP 150 of 150	77.33525	0.03868	0.4945	EXP 150 of 150
14D03184	13.2%	0.3159718	0.0013746	0.5708	EXP 150 of 150	0.8989	0.0359	0.0041	EXP 150 of 150	0.6469032	0.0286411	0.0143	EXP 150 of 150	45.25985	0.03075	0.9901	EXP 150 of 150	106.37907	0.03759	0.9430	EXP 150 of 150
14D03185	15.4%	0.3308484	0.0013075	0.6001	EXP 150 of 150	0.8682	0.0306	0.0109	EXP 150 of 150	0.5684894	0.0264225	0.0011	EXP 150 of 150	39.51493	0.02560	0.9904	EXP 150 of 150	109.88554	0.03608	0.9576	EXP 150 of 150
14D03187	18.0%	0.3331826	0.0013242	0.6015	EXP 150 of 150	0.8317	0.0280	0.0012	EXP 150 of 150	0.5037611	0.0287280	0.0046	EXP 150 of 150	34.56093	0.02716	0.9858	EXP 150 of 150	110.85592	0.03614	0.9680	EXP 150 of 150
14D03189	21.0%	0.3519967	0.0013267	0.7070	EXP 150 of 150	1.0784	0.0310	0.0548	EXP 150 of 150	0.5182461	0.0265939	0.0003	EXP 150 of 150	34.14886	0.03009	0.9818	EXP 150 of 150	109.96205	0.03598	0.9707	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%In	Standard Reference	Standard 40Ar/39Ar	%In	J	%In	Ar 40Ar/36Ar	%In	MCF	%In	Volume Ratio	Sensitivity (mol/mol)	Day	Month	Year	Hour	Min	Max	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes
HC00180	1.7%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	1.7	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	14	56	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00182	1.8%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	1.8	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	15	21	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00183	1.9%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	1.9	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	15	33	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00184	2.1%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	2.1	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	15	40	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00186	2.3%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	2.3	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	16	11	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00187	2.5%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	2.5	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	16	23	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00189	2.8%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	2.8	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	16	44	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00179	3.3%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	3.3	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	17	5	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00172	4.0%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	4	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	17	25	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00173	5.5%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	5	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	17	30	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00175	6.0%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	6	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	18	2	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00176	7.9%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	7	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	18	10	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00178	8.2%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	8.2	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	18	40	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00179	9.8%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	9.8	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	18	57	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00181	10.3%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	10.3	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	19	17	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00182	11.2%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	11.2	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	19	29	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00184	13.3%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	13.2	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	19	54	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00185	18.4%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	15.4	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	20	7	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01
HC00187	18.6%	SC10-008	Groundmass	Galapagos St. Clair Island	Dan Magrane	18	FC1-3	28.36	0.064	Renne et al (1998)	100778	0.137	0.00180742	0.137	302.776	0.007	0.00269464	0.063	1	4.80E-14	9	FEB	2014	20	32	1	15-081-03	0.00	0.00	00.20	Galapagos Hergo (15-05)	14020109	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D03160	1.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03162	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03163	1.9 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03164	2.1 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03166	2.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03167	2.5 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03169	2.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03170	3.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03172	4.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03173	5.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03175	6.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03176	7.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03178	8.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03179	9.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03181	10.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03182	11.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03184	13.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03185	15.4 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03187	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D03189	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	

14D03159.AGE >>> SC12-059 >>> GALAPAGOS | HARPP (13-07) PROJECT



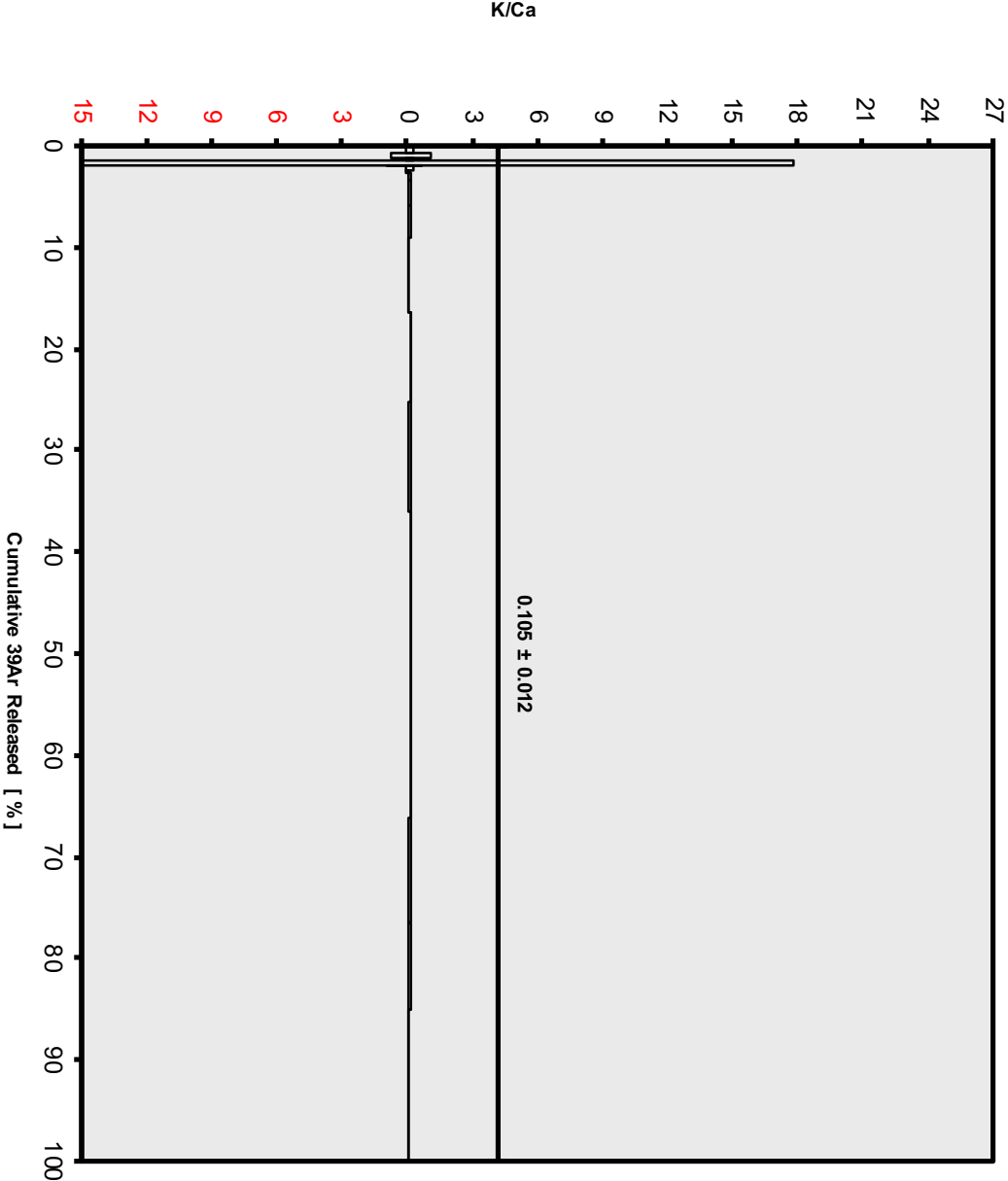
Ar-Ages in Ma

WEIGHTED PLATEAU
 1.35 ± 0.07
TOTAL FUSION
 1.39 ± 0.07
NORMAL ISOCHRON
 1.27 ± 0.07
INVERSE ISOCHRON
 1.27 ± 0.07
MSWD (PROBABILITY)
 $1.75 (2\%)$

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
J = 0.00156742 ±
0.13700000

14D03159.AGE >>> SC12-059 >>> GALAPAGOS | HARPP (13-07) PROJECT



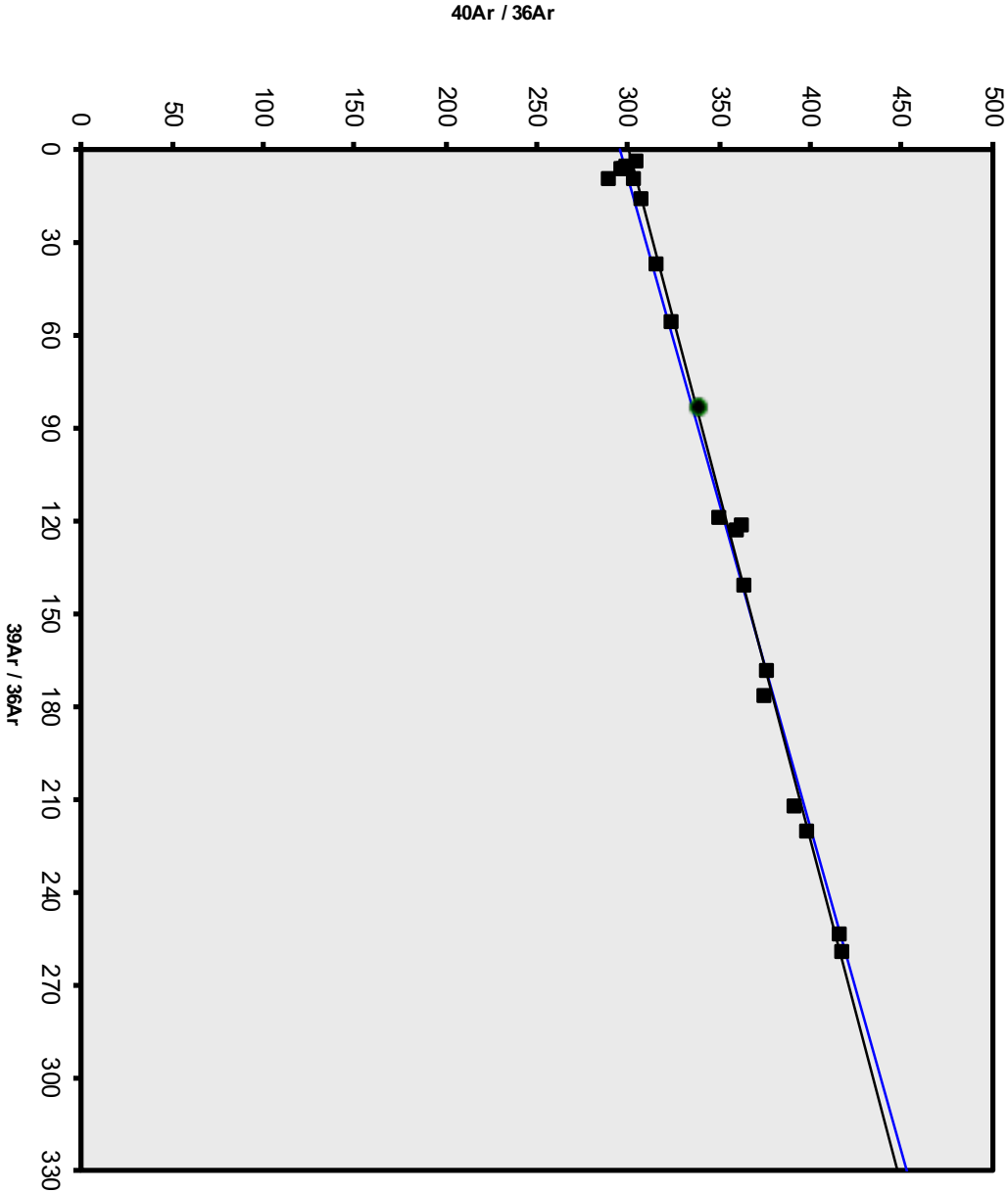
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.35 ± 0.07
TOTAL FUSION
1.39 ± 0.07
NORMAL
ISOCHRON
1.27 ± 0.07
INVERSE
ISOCHRON
1.27 ± 0.07

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D03159.AGE >>> SC12-059 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
1.35 ± 0.07
TOTAL FUSION
1.39 ± 0.07
NORMAL
ISOCHRON
1.27 ± 0.07
INVERSE
ISOCHRON
1.27 ± 0.07

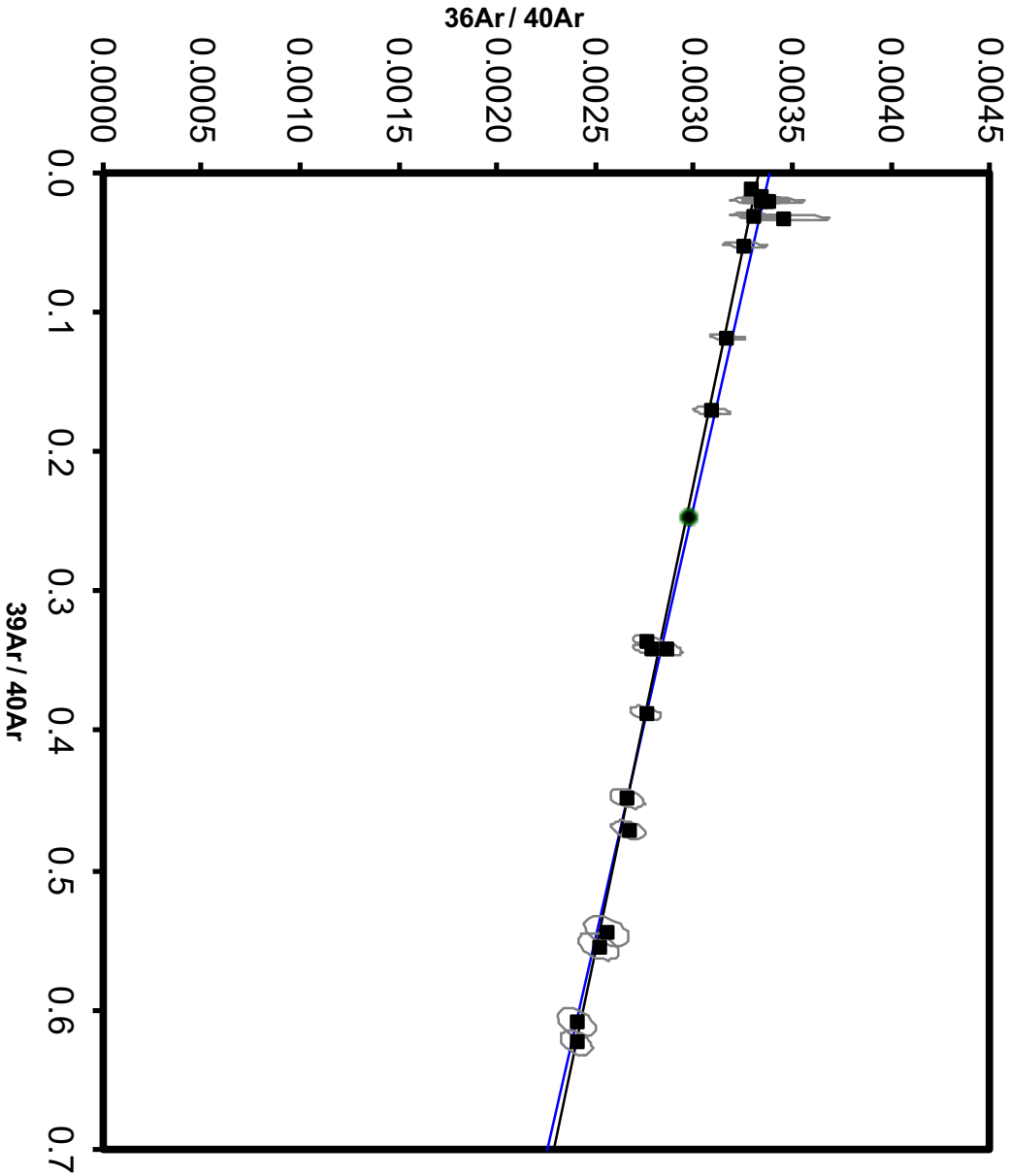
MSWD
(PROBABILITY)
0.73 (79%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03

14D03159.AGE >>> SC12-059 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
1.35 ± 0.07
TOTAL FUSION
1.39 ± 0.07
NORMAL
ISOCHRON
1.27 ± 0.07
INVERSE
ISOCHRON
1.27 ± 0.07

MSWD
(PROBABILITY)
0.71 (80%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D02515	1.8 %	0.0826612	14.71860	0.0449296	6.17059	3.052661	1.40 $\pm$ 0.64	11.11	5.65	0.1803 $\pm$ 0.1714
14D02517	2.5 %	0.2613156	26.15244	0.0257582	9.33941	4.070026	1.23 $\pm$ 0.46	5.01	8.55	0.1536 $\pm$ 0.0803
14D02518	3.0 %	0.2245417	33.16230	0.0604602	9.86847	6.967791	2.00 $\pm$ 0.43	9.50	9.03	0.1280 $\pm$ 0.0547
14D02519	3.7 %	✓ 0.1788767	27.48148	0.0070915	9.14269	4.306385	1.33 $\pm$ 0.45	7.53	8.37	0.1431 $\pm$ 0.0753
14D02521	4.0 %	✓ 0.0853862	11.95068	0.0193379	3.76562	2.116017	1.59 $\pm$ 1.02	7.74	3.45	0.1355 $\pm$ 0.1556
14D02522	4.7 %	✓ 0.1022640	27.90189	0.0613694	5.48050	4.148265	2.14 $\pm$ 0.70	12.07	5.02	0.0845 $\pm$ 0.0403
14D02523	5.4 %	✓ 0.1297253	14.04056	0.0527448	6.10932	2.509451	1.16 $\pm$ 0.66	6.14	5.59	0.1871 $\pm$ 0.1868
14D02525	6.3 %	✓ 0.1461922	46.95574	0.0112432	7.32262	4.190756	1.62 $\pm$ 0.56	8.84	6.70	0.0671 $\pm$ 0.0206
14D02526	7.0 %	✓ 0.0882476	30.71250	0.0073093	4.93424	1.767417	1.01 $\pm$ 0.81	6.35	4.52	0.0691 $\pm$ 0.0323
14D02527	8.0 %	✓ 0.0695618	52.52676	0.0164632	5.10613	2.503042	1.39 $\pm$ 0.76	10.85	4.67	0.0418 $\pm$ 0.0112
14D02529	9.0 %	✓ 0.0650939	56.20572	0.0074330	5.13211	1.870392	1.03 $\pm$ 0.77	8.86	4.70	0.0393 $\pm$ 0.0099
14D02530	10.0 %	✓ 0.0424824	60.58220	0.0000000	4.61083	1.633378	1.00 $\pm$ 0.82	11.51	4.22	0.0327 $\pm$ 0.0073
14D02531	12.7 %	✓ 0.1780451	194.06029	0.0014341	10.44758	3.939285	1.07 $\pm$ 0.42	6.96	9.56	0.0231 $\pm$ 0.0017
14D02533	13.7 %	✓ 0.0981391	58.92132	0.0000000	5.14985	1.546434	0.85 $\pm$ 0.80	5.06	4.71	0.0376 $\pm$ 0.0095
14D02534	15.8 %	✓ 0.0466050	37.71818	0.0036410	4.70227	1.287596	0.78 $\pm$ 0.79	8.55	4.30	0.0536 $\pm$ 0.0192
14D02535	18.0 %	0.0781948	57.53731	0.0000000	5.91025	0.474793	0.23 $\pm$ 0.65	2.10	5.41	0.0442 $\pm$ 0.0104
14D02537	20.0 %	0.0901474	68.30826	0.0000000	6.08159	0.946150	0.44 $\pm$ 0.66	3.43	5.57	0.0383 $\pm$ 0.0081
Σ		1.9674799	818.93621	0.3192155	109.27407	46.380253				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-059	Age Plateau	0.44481 $\pm$ 0.07263 $\pm$ 16.33%	1.26 $\pm$ 0.21 $\pm$ 16.32%	1.21 27%	65.80 12	0.0255 $\pm$ 0.0045
Material = Groundmass						
Location = Galapagos St. Cruz Island						
Analyst = Dan Miggins			Full External Error $\pm$ 0.21		1.85	2 σ Confidence Limit
Project = GALAPAGOS HARPP (13-07)			Analytical Error $\pm$ 0.21		1.1001	Error Magnification
Mass Discrimination Law = LIN	Total Fusion Age	0.42444 $\pm$ 0.05352 $\pm$ 12.61%	1.20 $\pm$ 0.15 $\pm$ 12.61%		17	0.0574 $\pm$ 0.0040
Irradiation = 13-OSU-03						
J = 0.00156742 $\pm$ 0.13700000						
FCT-3 = 28.340 $\pm$ 0.564 Ma			Full External Error $\pm$ 0.15			
			Analytical Error $\pm$ 0.15			

OSU Argon Geochronology Lab

Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02515	1.8 %		74.65 $\pm$ 4.23	332.43 $\pm$ 18.84	0.9588
14D02517	2.5 %		35.74 $\pm$ 0.74	311.08 $\pm$ 6.09	0.9117
14D02518	3.0 %		43.95 $\pm$ 1.03	326.53 $\pm$ 7.39	0.9331
14D02519	3.7 %	✓	51.11 $\pm$ 1.44	319.57 $\pm$ 8.82	0.9390
14D02521	4.0 %	✓	44.10 $\pm$ 2.45	320.28 $\pm$ 17.10	0.9164
14D02522	4.7 %	✓	53.59 $\pm$ 2.43	336.06 $\pm$ 14.87	0.9322
14D02523	5.4 %	✓	47.09 $\pm$ 1.81	314.84 $\pm$ 11.69	0.9225
14D02525	6.3 %	✓	50.09 $\pm$ 1.73	324.17 $\pm$ 10.86	0.9328
14D02526	7.0 %	✓	55.91 $\pm$ 3.06	315.53 $\pm$ 17.05	0.9429
14D02527	8.0 %	✓	73.40 $\pm$ 4.90	331.48 $\pm$ 22.10	0.9554
14D02529	9.0 %	✓	78.84 $\pm$ 5.66	324.23 $\pm$ 23.36	0.9591
14D02530	10.0 %	✓	108.54 $\pm$ 11.29	333.95 $\pm$ 35.21	0.9667
14D02531	12.7 %	✓	58.68 $\pm$ 1.74	317.63 $\pm$ 9.30	0.9526
14D02533	13.7 %	✓	52.47 $\pm$ 2.68	311.26 $\pm$ 15.57	0.9356
14D02534	15.8 %	✓	100.90 $\pm$ 9.49	323.13 $\pm$ 30.73	0.9609
14D02535	18.0 %		75.58 $\pm$ 4.45	289.43 $\pm$ 17.12	0.9467
14D02537	20.0 %		67.46 $\pm$ 3.60	306.00 $\pm$ 16.35	0.9521

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	313.24 $\pm$ 19.64 $\pm$ 6.27%	0.13202 $\pm$ 0.34759 $\pm$ 263.29%	0.37 $\pm$ 0.99 $\pm$ 263.27%	0.91 52%
			Full External Error $\pm$ 0.99 Analytical Error $\pm$ 0.99	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.89 1.0000 12	Convergence Number of Iterations Calculated Line	0.000000612292 5 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			$39(k)/40(a+r) \pm 2\sigma$	$36(a)/40(a+r) \pm 2\sigma$	r.i.
14D02515	1.8 %		0.2245562 $\pm$ 0.0036492	0.00300815 $\pm$ 0.00017050	0.1478
14D02517	2.5 %		0.1148917 $\pm$ 0.0009767	0.00321466 $\pm$ 0.00006295	0.0945
14D02518	3.0 %		0.1345948 $\pm$ 0.0011349	0.00306249 $\pm$ 0.00006927	0.1005
14D02519	3.7 %	✓	0.1599366 $\pm$ 0.0015602	0.00312916 $\pm$ 0.00008633	0.1170
14D02521	4.0 %	✓	0.1376946 $\pm$ 0.0030779	0.00312225 $\pm$ 0.00016671	0.1151
14D02522	4.7 %	✓	0.1594685 $\pm$ 0.0026357	0.00297562 $\pm$ 0.00013171	0.1200
14D02523	5.4 %	✓	0.1495795 $\pm$ 0.0022339	0.00317617 $\pm$ 0.00011795	0.1107
14D02525	6.3 %	✓	0.1545164 $\pm$ 0.0019307	0.00308484 $\pm$ 0.00010337	0.1096
14D02526	7.0 %	✓	0.1772066 $\pm$ 0.0032581	0.00316929 $\pm$ 0.00017130	0.1337
14D02527	8.0 %	✓	0.2214419 $\pm$ 0.0044118	0.00301675 $\pm$ 0.00020116	0.1471
14D02529	9.0 %	✓	0.2431630 $\pm$ 0.0050019	0.00308419 $\pm$ 0.00022225	0.1555
14D02530	10.0 %	✓	0.3250055 $\pm$ 0.0087990	0.00299448 $\pm$ 0.00031575	0.1800
14D02531	12.7 %	✓	0.1847442 $\pm$ 0.0016752	0.00314836 $\pm$ 0.00009215	0.1207
14D02533	13.7 %	✓	0.1685902 $\pm$ 0.0030638	0.00321277 $\pm$ 0.00016070	0.1219
14D02534	15.8 %	✓	0.3122488 $\pm$ 0.0082679	0.00309475 $\pm$ 0.00029435	0.1803
14D02535	18.0 %		0.2611483 $\pm$ 0.0050340	0.00345509 $\pm$ 0.00020443	0.1768
14D02537	20.0 %		0.2204697 $\pm$ 0.0036442	0.00326802 $\pm$ 0.00017457	0.1536

Results	$40(a)/36(a) \pm 2\sigma$	$40(r)/39(k) \pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Inverse Isochron	313.72 $\pm$ 19.67	0.12962 $\pm$ 0.08006	0.37 $\pm$ 0.23	0.95
Clustered Points	$\pm$ 6.27%	$\pm$ 61.76%	$\pm$ 61.76%	48%
			Full External Error $\pm$ 0.23	
			Analytical Error $\pm$ 0.23	
Statistics	2 σ Confidence Limit	1.89	Convergence	0.0000370836
	Error Magnification	1.0000	Number of Iterations	4
	Number of Data Points	12	Calculated Line	Weighted York-2
	Spreading Factor	2.4%		

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02515	1.8 %	0.0865655	1.568	14.71860	47.539	0.1326462	32.411	6.18049	0.559	27.48527	0.583	0.49471 ± 0.22569	1.40 ± 0.64	11.11	5.65	0.1803 ± 0.1714
14D02517	2.5 %	0.2682305	0.648	26.15244	26.128	0.1845158	23.315	9.35701	0.372	81.29822	0.198	0.43579 ± 0.16229	1.23 ± 0.46	5.01	8.55	0.1536 ± 0.0803
14D02518	3.0 %	0.2333215	0.706	33.16230	21.353	0.2193398	19.654	9.89079	0.356	73.32982	0.219	0.70607 ± 0.15279	2.00 ± 0.43	9.50	9.03	0.1280 ± 0.0547
14D02519	3.7 %	✓ 0.1861347	0.795	27.48148	26.324	0.1483872	29.440	9.16118	0.395	57.17367	0.281	0.47102 ± 0.16011	1.33 ± 0.45	7.53	8.37	0.1431 ± 0.0763
14D02521	4.0 %	✓ 0.0885492	1.458	11.95008	57.402	0.0798105	55.498	3.77367	0.942	27.35145	0.586	0.56193 ± 0.35943	1.59 ± 1.02	7.74	3.45	0.1365 ± 0.1556
14D02522	4.7 %	✓ 0.1096555	1.225	27.90180	23.851	0.1467290	29.659	5.48928	0.674	34.37281	0.468	0.79691 ± 0.24567	2.14 ± 0.70	12.07	5.02	0.0845 ± 0.0403
14D02523	5.4 %	✓ 0.1334530	1.091	14.04056	49.917	0.1484662	29.512	6.11877	0.630	40.84946	0.302	0.41076 ± 0.23378	1.16 ± 0.66	6.14	5.99	0.1871 ± 0.1868
14D02525	6.3 %	✓ 0.1586931	0.919	46.95674	15.373	0.1284247	35.227	7.35422	0.519	47.39794	0.339	0.57230 ± 0.19859	1.62 ± 0.56	8.84	6.70	0.0671 ± 0.0206
14D02526	7.0 %	✓ 0.0963587	1.409	30.71250	23.349	0.0842235	51.131	4.95491	0.707	27.84956	0.576	0.35819 ± 0.28660	1.01 ± 0.81	6.35	4.52	0.0691 ± 0.0323
14D02527	8.0 %	✓ 0.0834357	1.574	52.52676	13.330	0.0948733	46.570	5.14148	0.699	23.06371	0.699	0.49020 ± 0.27004	1.39 ± 0.76	10.85	4.67	0.0418 ± 0.0112
14D02529	9.0 %	✓ 0.0798353	1.679	56.20572	12.526	0.0858151	50.086	5.16994	0.683	21.11083	0.759	0.36445 ± 0.27135	1.03 ± 0.77	8.86	4.70	0.0393 ± 0.0099
14D02530	10.0 %	✓ 0.0584761	2.156	60.58220	11.176	0.0602789	68.829	4.65160	0.727	14.19159	1.133	0.35425 ± 0.28896	1.00 ± 0.82	11.51	4.22	0.0327 ± 0.0073
14D02531	12.7 %	✓ 0.2292776	0.772	194.06029	3.599	0.1805787	24.082	10.57819	0.347	56.56216	0.283	0.37705 ± 0.14784	1.07 ± 0.42	6.96	9.56	0.0231 ± 0.0017
14D02533	13.7 %	✓ 0.1136943	1.212	58.92132	12.626	0.0802057	54.250	5.18950	0.729	30.55174	0.526	0.30029 ± 0.28238	0.85 ± 0.80	5.06	4.71	0.0376 ± 0.0095
14D02534	15.8 %	✓ 0.0565641	2.149	37.71818	17.930	0.0711061	63.817	4.72766	0.776	15.06412	1.065	0.27382 ± 0.27996	0.78 ± 0.79	8.55	4.30	0.0536 ± 0.0192
14D02535	18.0 %	0.0933846	1.448	57.53731	11.805	0.0486728	91.733	5.94897	0.643	22.63773	0.710	0.08033 ± 0.23105	0.23 ± 0.65	2.10	5.41	0.0442 ± 0.0104
14D02537	20.0 %	0.1081808	1.285	68.30826	10.506	0.0918179	47.169	6.12756	0.577	27.59084	0.582	0.15558 ± 0.23439	0.44 ± 0.66	3.43	5.57	0.0383 ± 0.0081
Σ		2.1838112	0.270	818.93621	3.527	1.9858914	9.061	109.82522	0.136	627.88094	0.105					

Information on Analysis and Constants Used in Calculations		Results		40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%.n)	K/Ca ± 2σ
Sample = SC12-059		Age Equations = Min et al. (2000)		Age Plateau		0.44481 ± 0.07263 ± 16.33%	1.26 ± 0.21 ± 16.32%	1.21	65.80
Material = Groundmass		Negative Intensities = Allowed				Full External Error ± 0.21		27%	12
Location = Galapagos St. Cruz Island		Decay Constant 40K = 5.530 ± 0.048 E-10 1/a				Analytical Error ± 0.21		1.85	2σ Confidence Limit
Analyst = Dan Miggins		Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h						1.001	Error Magnification
Project = GALAPAGOS HARPP (13-07)		Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h		Total Fusion Age		0.42444 ± 0.05352 ± 12.61%	1.20 ± 0.15 ± 12.61%	17	0.0574 ± 0.0040
Mass Discrimination Law = LIN		Decay Constant 36Cl = 2.257 ± 0.015 E-08 1/a				Full External Error ± 0.15			
Irradiation = 13-OSU-03		Decay Constant 40K(FC-β ⁺) = 0.580 ± 0.009 E-10 1/a				Analytical Error ± 0.15			
J = 0.00156742 ± 0.13700000		Decay Constant 40K(β ⁻) = 4.950 ± 0.043 E-10 1/a		Normal Isochron		313.24 ± 19.64 ± 6.27%	0.13202 ± 0.34759 ± 263.29%	0.91	65.80
FCT-3 = 28.340 ± 0.564 Ma		Atmospheric Ratio 40/36(a) = 295.50						52%	12
IGSN = 5.3		Atmospheric Ratio 38/36(a) = 0.1869				Full External Error ± 0.99		1.89	2σ Confidence Limit
Preferred Age = Undefined		Production Ratio 39/37(ca) = 0.000673				Analytical Error ± 0.99		1.0000	Error Magnification
Classification = Undefined		Production Ratio 38/37(ca) = 0.000139						5	Number of Iterations
Experiment Type = 5.52		Production Ratio 40/39(k) = 0.001010		Inverse Isochron		313.72 ± 19.67 ± 6.27%	0.12962 ± 0.08006 ± 61.76%	0.95	65.80
Extraction Method = Undefined		Production Ratio 38/38(cl) = 0.011380				Full External Error ± 0.23		48%	12
Heating = 77 sec		Production Ratio 36/38(cl) = 262.80 ± 1.71				Analytical Error ± 0.23		1.89	2σ Confidence Limit
Isolation = 6.00 min		Scaling Ratio K/Ca = 0.430						1.0000	Error Magnification
Instrument = ARGUS-VI		Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04						4	Number of Iterations
Lithology = Undefined		Atomic Weight K = 39.0983 ± 0.0001 g						0.0000370536	Convergence
Lat-Lon = Undefined - Undefined								2%	Spreading Factor
Collector Calibrations = 40Ar 36Ar									

Depositing Patterns	36Ar(a) [a]	%1σ	36Ar(c) [a]	%1σ	36Ar(ea) [a]	%1σ	36Ar(d) [a]	%1σ	37Ar(ca) [a]	%1σ	38Ar(a) [a]	%1σ	38Ar(c) [a]	%1σ	38Ar(b) [a]	%1σ	38Ar(ea) [a]	%1σ	38Ar(d) [a]	%1σ	39Ar(a) [a]	%1σ	39Ar(c) [a]	%1σ	40Ar(r) [a]	%1σ	40Ar(a) [a]	%1σ	40Ar(c) [a]	%1σ	40Ar(b) [a]	%1σ	
14D02515	1.6%	0.002602	2.77	0.000000	0.00	0.000002	42.54	0.000100	95.75	14.71953	47.54	0.004494	2.77	0.000000	0.00	0.070229	0.57	0.000000	47.54	0.044526	55.74	0.110261	0.57	0.000000	47.54	3.02001	22.90	34.4338	2.77	0.000000	0.00	0.002253	0.57
14D02517	2.5%	0.261319	0.96	0.000000	0.00	0.000042	26.13	0.000107	167.09	26.1244	26.13	0.048839	0.96	0.000000	0.00	0.106265	0.38	0.000000	26.13	0.057582	167.09	9.33941	0.38	0.017006	26.13	4.070026	16.62	77.21676	0.96	0.000000	0.00	0.009438	0.96
14D02518	3.0%	0.244547	1.11	0.000000	0.00	0.007548	21.35	0.000120	71.34	33.1624	21.35	0.041900	1.11	0.000000	0.00	0.112032	0.38	0.004006	21.35	0.050602	71.34	9.6947	0.38	0.022162	21.35	6.90791	15.61	62.3206	1.11	0.000000	0.00	0.000622	0.96
14D02519	3.7%	✓ 0.178057	1.36	0.000000	0.00	0.007251	26.32	0.000029	616.29	27.48145	26.32	0.003420	1.36	0.000000	0.00	0.104048	0.40	0.000199	26.32	0.007916	616.29	9.14089	0.40	0.018460	26.32	4.30385	16.99	52.6696	1.36	0.000000	0.00	0.000241	0.40
14D02521	4.0%	✓ 0.063860	2.60	0.000000	0.00	0.001150	57.40	0.000080	229.14	11.6068	57.40	0.019867	2.60	0.000000	0.00	0.042628	0.95	0.001911	57.40	0.010379	229.14	3.78562	0.95	0.000428	57.40	2.119017	31.97	25.2393	2.60	0.000000	0.00	0.000383	0.95
14D02522	4.7%	✓ 0.102540	2.16	0.000000	0.00	0.007361	23.85	0.000024	70.95	27.9188	23.85	0.019131	2.16	0.000000	0.00	0.002361	0.68	0.000179	23.85	0.011694	70.95	5.46950	0.68	0.018770	23.85	4.14026	16.23	30.71901	2.16	0.000000	0.00	0.000323	0.68
14D02523	5.4%	✓ 0.129723	1.82	0.000000	0.00	0.007367	49.92	0.000018	81.11	14.0656	49.92	0.004267	1.82	0.000000	0.00	0.006241	0.64	0.0019516	49.92	0.027448	81.12	6.10932	0.64	0.000493	49.92	2.00451	26.45	38.33394	1.82	0.000000	0.00	0.006154	0.64
14D02525	6.3%	✓ 0.146102	1.64	0.000000	0.00	0.007363	15.37	0.000047	402.85	46.9574	15.37	0.007323	1.64	0.000000	0.00	0.000104	0.53	0.000008	15.37	0.011242	402.85	7.32262	0.53	0.019912	15.37	4.190756	17.34	43.19879	1.64	0.000000	0.00	0.007368	0.53
14D02526	7.0%	✓ 0.080436	2.64	0.000000	0.00	0.001191	23.35	0.000030	696.43	30.7129	23.35	0.014606	2.64	0.000000	0.00	0.004167	0.72	0.004000	23.35	0.007303	696.43	4.90424	0.72	0.020466	23.35	1.76517	45.00	26.07716	2.64	0.000000	0.00	0.004806	0.72
14D02527	8.0%	✓ 0.069616	3.26	0.000000	0.00	0.010871	13.33	0.000008	268.48	52.5076	13.33	0.010011	3.26	0.000000	0.00	0.008077	0.71	0.007912	13.33	0.0164032	268.49	5.10813	0.71	0.006305	13.33	2.60042	27.63	26.59601	3.26	0.000000	0.00	0.005152	0.71
14D02529	9.0%	✓ 0.099839	3.52	0.000000	0.00	0.014083	12.83	0.000011	576.61	56.2672	12.83	0.0101961	3.52	0.000000	0.00	0.008409	0.69	0.007136	12.83	0.010130	576.61	5.12111	0.69	0.017604	12.83	1.87032	37.22	19.2306	3.52	0.000000	0.00	0.005184	0.69
14D02530	10.0%	✓ 0.044024	6.16	0.000000	0.00	0.019907	11.18	0.000000	0.00	60.6620	11.18	0.007940	6.16	0.000000	0.00	0.002473	0.74	0.008420	11.18	0.000000	0.00	4.61983	0.74	0.040718	11.18	1.63378	40.78	12.5656	6.16	0.000000	0.00	0.004669	0.74
14D02531	12.7%	✓ 0.178061	1.44	0.000000	0.00	0.001219	3.80	0.000006	303.57	194.0629	3.80	0.003279	1.44	0.000000	0.00	0.118995	0.36	0.000194	3.80	0.014041	303.57	10.44758	0.36	0.100026	3.80	3.93026	19.60	52.81233	1.44	0.000000	0.00	0.010521	0.36
14D02533	13.7%	✓ 0.081391	2.44	0.000000	0.00	0.006602	12.63	0.000000	0.00	58.6132	12.63	0.010421	2.44	0.000000	0.00	0.006003	0.74	0.009181	12.63	0.000000	0.00	5.14486	0.74	0.036443	12.63	1.64614	41.01	20.00010	2.44	0.000000	0.00	0.002073	0.74
14D02534	15.8%	✓ 0.046020	4.63	0.000000	0.00	0.000676	17.93	0.000015	1246.76	37.71818	17.93	0.008705	4.63	0.000000	0.00	0.003618	0.79	0.005428	17.93	0.003610	1246.76	4.70227	0.79	0.0053843	17.93	1.267596	51.11	13.77177	4.63	0.000000	0.00	0.004740	0.79
14D02535	18.0%	0.0191948	2.87	0.000000	0.00	0.010186	11.80	0.000000	0.00	67.01731	11.80	0.0140146	2.87	0.000000	0.00	0.007286	0.65	0.0079177	11.80	0.000000	0.00	5.91025	0.65	0.008728	11.80	0.474793	143.81	23.10056	2.87	0.000000	0.00	0.001693	0.65
14D02537	20.0%	0.001474	2.61	0.000000	0.00	0.010024	10.51	0.000000	0.00	68.3025	10.51	0.010486	2.61	0.000000	0.00	0.000285	0.59	0.0004848	10.51	0.000000	0.00	6.08159	0.59	0.0461715	10.51	0.161162	75.33	26.0385	2.61	0.000000	0.00	0.001424	0.59
Σ	1.9624709	0.40	0.000000	0.00	0.2761992	3.53	0.0001207	49.45	818.0921	3.53	0.3677220	0.40	0.0000000	0.00	1.245390	0.14	0.1138527	3.53	0.0195165	49.45	199.27407	0.14	0.0011441	3.53	46.38023	6.30	591.38032	0.40	0.0000000	0.00	0.1103992	0.14	
Σ							2.1828112	0.56	818.0921	3.53									2.044306	7.72					109.62922	0.14					627.8894	0.65	

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02515	1.8 %	4.447099	0.035942	2.381460	1.132192	0.014006	0.000233	254.813	153.782336	1.00180046	1.319E-12
14D02517	2.5 %	8.688483	0.036628	2.794957	0.730346	0.028666	0.000214	254.831	153.835080	1.00180059	3.902E-12
14D02518	3.0 %	7.413948	0.030998	3.352845	0.716037	0.023590	0.000186	254.839	153.860403	1.00180064	3.520E-12
14D02519	3.7 % ✓	6.240862	0.030217	2.999775	0.789746	0.020318	0.000180	254.847	153.885731	1.00180070	2.744E-12
14D02521	4.0 % ✓	7.247980	0.080391	3.166864	1.818083	0.023465	0.000407	254.865	153.938510	1.00180083	1.313E-12
14D02522	4.7 % ✓	6.250425	0.051280	5.073739	1.210604	0.019940	0.000279	254.874	153.965962	1.00180089	1.650E-12
14D02523	5.4 % ✓	6.676090	0.049528	2.294670	1.145527	0.021811	0.000275	254.882	153.991307	1.00180095	1.961E-12
14D02525	6.3 % ✓	6.445001	0.039916	6.384871	0.982082	0.021565	0.000227	254.899	154.044122	1.00180107	2.275E-12
14D02526	7.0 % ✓	5.620596	0.051243	6.198394	1.447940	0.019447	0.000307	254.908	154.069480	1.00180113	1.337E-12
14D02527	8.0 % ✓	4.485812	0.044334	10.216274	1.363734	0.016228	0.000279	254.917	154.096955	1.00180119	1.107E-12
14D02529	9.0 % ✓	4.083380	0.041685	10.871637	1.363760	0.015462	0.000280	254.934	154.149807	1.00180132	1.013E-12
14D02530	10.0 % ✓	3.050903	0.041073	13.023936	1.458607	0.012571	0.000286	254.942	154.175182	1.00180138	6.812E-13
14D02531	12.7 % ✓	5.347057	0.023941	18.345328	0.663247	0.021675	0.000184	254.951	154.202676	1.00180144	2.715E-12
14D02533	13.7 % ✓	5.887220	0.052917	11.353945	1.435967	0.021909	0.000310	254.968	154.253448	1.00180156	1.466E-12
14D02534	15.8 % ✓	3.186383	0.041985	7.978200	1.431859	0.011965	0.000273	254.977	154.280957	1.00180162	7.231E-13
14D02535	18.0 %	3.805320	0.036445	9.671811	1.143417	0.015698	0.000249	254.985	154.306353	1.00180168	1.087E-12
14D02537	20.0 %	4.502744	0.036899	11.147706	1.172973	0.017655	0.000249	255.003	154.359277	1.00180180	1.324E-12

OSU Argon Geochronology Lab

Procedure Blanks		36Ar [fA]	1 σ	37Ar [fA]	1 σ	38Ar [fA]	1 σ	39Ar [fA]	1 σ	40Ar [fA]	1 σ
14D02515	1.8 %	0.0125388	0.0009957	0.0290406	0.0319097	0.0368525	0.0335866	0.0259772	0.0249828	3.6201565	0.1579604
14D02517	2.5 %	0.0125106	0.0009957	0.0185959	0.0319097	0.0331159	0.0335866	0.0287252	0.0249828	3.6174687	0.1579604
14D02518	3.0 %	0.0124970	0.0009957	0.0134956	0.0319097	0.0313223	0.0335866	0.0300442	0.0249828	3.6161785	0.1579604
14D02519	3.7 %	0.0124835	0.0009957	0.0083389	0.0319097	0.0295288	0.0335866	0.0313632	0.0249828	3.6148884	0.1579604
14D02521	4.0 %	0.0124553	0.0009957	0.0025851	0.0319097	0.0257921	0.0335866	0.0341112	0.0249828	3.6122006	0.1579604
14D02522	4.7 %	0.0124407	0.0009957	0.0083622	0.0319097	0.0238491	0.0335866	0.0355401	0.0249828	3.6108029	0.1579604
14D02523	5.4 %	0.0124271	0.0009957	0.0137536	0.0319097	0.0220555	0.0335866	0.0368592	0.0249828	3.6095128	0.1579604
14D02525	6.3 %	0.0123989	0.0009957	0.0251666	0.0319097	0.0183189	0.0335866	0.0396072	0.0249828	3.6068249	0.1579604
14D02526	7.0 %	0.0123854	0.0009957	0.0307317	0.0319097	0.0165253	0.0335866	0.0409262	0.0249828	3.6055348	0.1579604
14D02527	8.0 %	0.0123708	0.0009957	0.0368242	0.0319097	0.0145823	0.0335866	0.0423551	0.0249828	3.6041371	0.1579604
14D02529	9.0 %	0.0123426	0.0009957	0.0487263	0.0319097	0.0108457	0.0335866	0.0451031	0.0249828	3.6014493	0.1579604
14D02530	10.0 %	0.0123290	0.0009957	0.0545262	0.0319097	0.0090521	0.0335866	0.0464221	0.0249828	3.6001592	0.1579604
14D02531	12.7 %	0.0123144	0.0009957	0.0608729	0.0319097	0.0071090	0.0335866	0.0478511	0.0249828	3.5987615	0.1579604
14D02533	13.7 %	0.0122873	0.0009957	0.0727638	0.0319097	0.0035219	0.0335866	0.0504891	0.0249828	3.5961812	0.1579604
14D02534	15.8 %	0.0122727	0.0009957	0.0792987	0.0319097	0.0015789	0.0335866	0.0519181	0.0249828	3.5947836	0.1579604
14D02535	18.0 %	0.0122591	0.0009957	0.0853897	0.0319097	0.0002147	0.0335866	0.0532371	0.0249828	3.5934934	0.1579604
14D02537	20.0 %	0.0122309	0.0009957	0.0982602	0.0319097	0.0039513	0.0335866	0.0559851	0.0249828	3.5908056	0.1579604

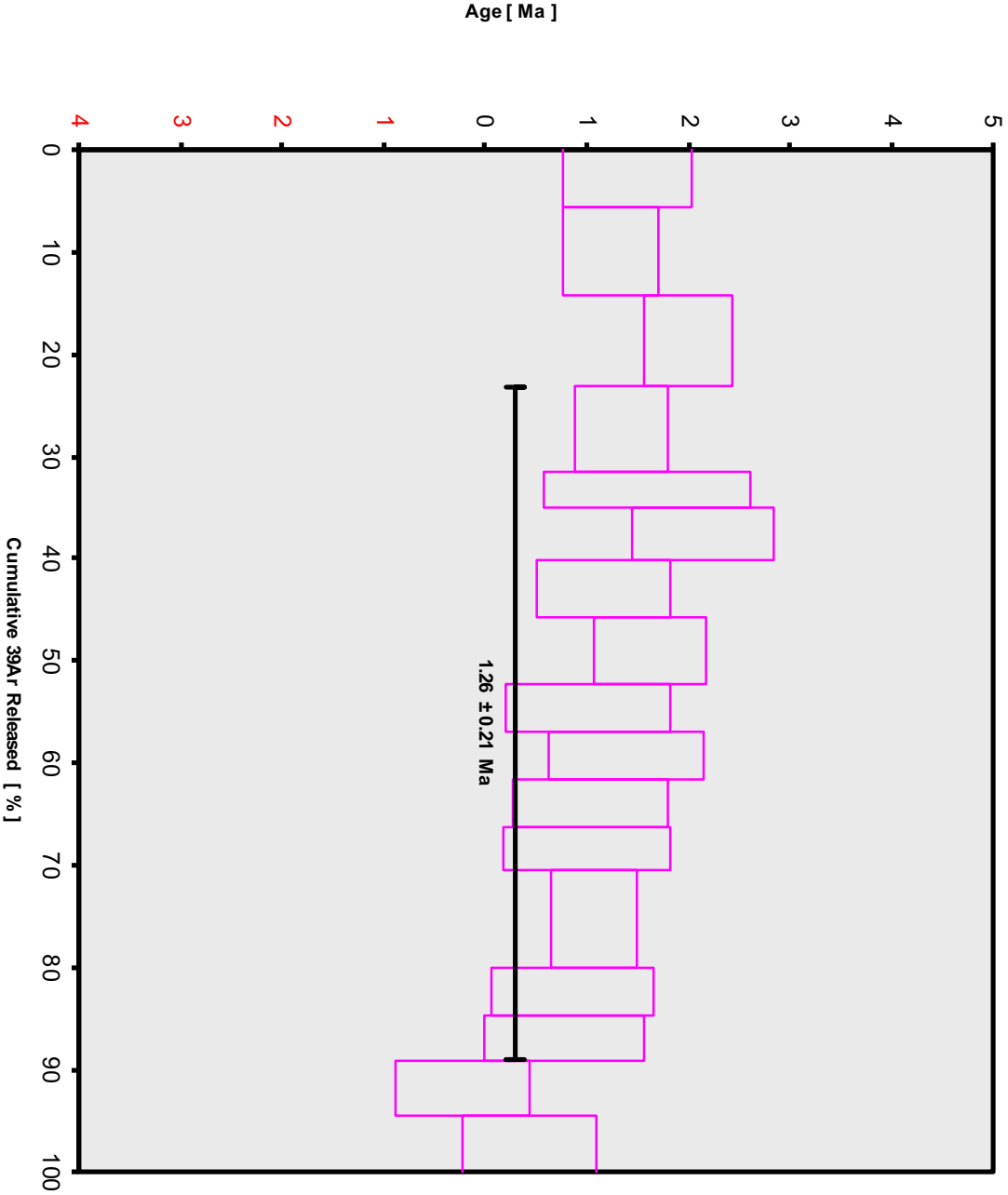
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CEOAS Oregon State University, Corvallis, USA

Intercept Values	36Ar [A]	1σ	r2		37Ar [A]	1σ	r2		38Ar [A]	1σ	r2		39Ar [A]	1σ	r2		40Ar [A]	1σ	r2		
14D02515	1.8 %	0.0551291	0.0007997	0.0139	EXP 150 of 150	0.06495	0.03127	0.0031	EXP 149 of 150	0.0942024	0.0260026	0.0017	EXP 150 of 150	6.15842	0.02320	0.7336	EXP 150 of 150	31.163190	0.029244	0.9451	EXP 149 of 150
14D02517	2.5 %	0.2684238	0.0011481	0.6350	EXP 150 of 150	0.14835	0.02971	0.0022	EXP 149 of 150	0.1491863	0.0260479	0.0005	EXP 150 of 150	9.31299	0.02313	0.8751	EXP 150 of 150	85.089539	0.033855	0.9711	EXP 150 of 150
14D02518	3.0 %	0.2251943	0.0016930	0.4368	EXP 150 of 150	0.19817	0.03197	0.0018	EXP 150 of 150	0.1863861	0.0261891	0.0147	EXP 150 of 150	9.84384	0.02367	0.8897	EXP 150 of 150	77.100268	0.033364	0.9577	EXP 150 of 150
14D02519	3.7 %	0.1900708	0.0008877	0.5535	EXP 150 of 150	0.16704	0.03334	0.0017	EXP 150 of 150	0.1170783	0.0270309	0.0018	EXP 150 of 150	9.12132	0.02510	0.8903	EXP 150 of 150	60.908707	0.029758	0.7337	EXP 150 of 150
14D02521	4.0 %	0.0969383	0.0006903	0.0285	EXP 150 of 150	0.07882	0.02994	0.0000	EXP 149 of 150	0.0530609	0.0268536	0.0028	EXP 150 of 150	3.77844	0.02477	0.4762	EXP 150 of 150	31.021133	0.029020	0.9390	EXP 149 of 150
14D02522	4.7 %	0.1170607	0.0007603	0.0333	EXP 150 of 150	0.18633	0.02796	0.0354	EXP 150 of 150	0.1211196	0.0268426	0.0131	EXP 150 of 150	5.49206	0.02674	0.6354	EXP 150 of 150	38.055848	0.032702	0.8554	EXP 150 of 150
14D02523	5.4 %	0.1367527	0.0009105	0.1819	EXP 150 of 150	0.10329	0.03129	0.0083	EXP 150 of 150	0.1246236	0.0273116	0.0252	EXP 149 of 150	6.10806	0.02871	0.6746	EXP 150 of 150	44.544815	0.027517	0.6992	EXP 150 of 150
14D02525	6.3 %	0.1637094	0.0008863	0.3170	EXP 149 of 150	0.32461	0.03308	0.0252	EXP 150 of 150	0.1066452	0.0264627	0.0010	EXP 150 of 150	7.33865	0.02865	0.7241	EXP 150 of 150	51.154349	0.032260	0.0151	EXP 150 of 150
14D02526	7.0 %	0.1043193	0.0007938	0.0906	EXP 150 of 150	0.22649	0.03269	0.0034	EXP 150 of 150	0.0666678	0.0261195	0.0007	EXP 150 of 150	4.95731	0.02394	0.6154	EXP 150 of 150	31.513619	0.030104	0.9292	EXP 150 of 150
14D02527	8.0 %	0.0919750	0.0007319	0.0112	EXP 150 of 150	0.37157	0.03109	0.0119	EXP 150 of 150	0.0791528	0.0278834	0.0040	EXP 149 of 150	5.14386	0.02523	0.6465	EXP 150 of 150	26.716313	0.033774	0.9408	EXP 149 of 150
14D02529	9.0 %	0.0889072	0.0007806	0.0178	EXP 150 of 150	0.40679	0.03140	0.0001	EXP 150 of 150	0.0739099	0.0296862	0.0001	EXP 150 of 150	5.17485	0.02433	0.6183	EXP 150 of 150	24.756647	0.028749	0.9620	EXP 150 of 150
14D02530	10.0 %	0.0881199	0.0005991	0.0058	EXP 150 of 150	0.44041	0.02887	0.0047	EXP 149 of 150	0.0595037	0.0235001	0.0006	EXP 150 of 150	4.66186	0.02222	0.6559	EXP 150 of 150	17.821576	0.031772	0.9701	EXP 150 of 150
14D02531	12.7 %	0.2319035	0.0012408	0.4786	EXP 150 of 150	1.26573	0.02956	0.0374	EXP 150 of 150	0.1713033	0.0267937	0.0044	EXP 150 of 150	10.54379	0.02567	0.8991	EXP 150 of 150	60.279789	0.027753	0.8596	EXP 150 of 150
14D02533	13.7 %	0.1207607	0.0008111	0.0727	EXP 150 of 150	0.44788	0.03489	0.0019	EXP 150 of 150	0.0757216	0.0268338	0.0000	EXP 150 of 150	5.19964	0.02780	0.6298	EXP 150 of 150	34.212124	0.031848	0.8696	EXP 150 of 150
14D02534	15.8 %	0.0662393	0.0005775	0.0651	EXP 150 of 150	0.31938	0.02884	0.0012	EXP 150 of 150	0.0686742	0.0296976	0.0017	EXP 150 of 150	4.74281	0.02628	0.5251	EXP 150 of 150	18.695959	0.030102	0.9704	EXP 150 of 150
14D02535	18.0 %	0.1013255	0.0007665	0.1312	EXP 150 of 150	0.45157	0.02263	0.0069	EXP 150 of 150	0.0483036	0.0265995	0.0032	EXP 150 of 150	5.95595	0.02633	0.6450	EXP 150 of 150	26.278799	0.031241	0.9397	EXP 150 of 150
14D02537	20.0 %	0.1154440	0.0006336	0.1031	EXP 150 of 150	0.53263	0.03249	0.0007	EXP 150 of 150	0.0546678	0.0265121	0.0006	EXP 150 of 150	6.13980	0.02451	0.7088	EXP 150 of 150	31.239625	0.030992	0.9041	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%He	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mvolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes	
HC02015	1.8%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	1.8	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	8	59	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02017	2.5%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	2.5	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	9	24	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02018	3.0%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	3	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	9	35	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02019	3.7%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	3.7	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	9	45	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02021	4.0%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	4	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	10	13	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02023	4.7%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	4.7	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	10	20	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02025	5.4%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	5.4	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	10	30	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02026	6.3%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	6.3	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	11	3	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02028	7.0%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	7	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	11	10	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02027	8.6%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	8	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	11	20	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02029	9.0%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	9	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	11	53	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02030	9.0%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	10	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	12	5	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02031	12.7%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	12.7	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	12	16	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02033	13.7%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	13.7	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	12	40	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02034	16.8%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	16.8	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	12	56	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01
HC02035	18.0%	SC10-059	Groundmass	Galapagos St. Cruz Island	Dan Miggins	18	FC1-3	28.38	0.984	Renne et al (1998)	10.0778	0.137	0.0018042	0.137	302.766	0.006	0.99400032	0.063	1	4.80E-14	31	JAN	2014	13	7	1	15-0501-05	0.00	0.00	60.20	Galapagos/Fargo (15-05)	14C02014	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(d)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D02515	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02517	2.5 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02518	3.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02519	3.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02521	4.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02522	4.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02523	5.4 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02525	6.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02526	7.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02527	8.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02529	9.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02530	10.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02531	12.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02533	13.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02534	15.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02535	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14D02537	20.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

14D02514.AGE >>> SC12-059 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED

PLATEAU

1.26 ± 0.21

TOTAL FUSION

1.20 ± 0.15

NORMAL

ISOCHRON

0.37 ± 0.99

INVERSE

ISOCHRON

0.37 ± 0.23

MSWD

(PROBABILITY)

$1.21 (27\%)$

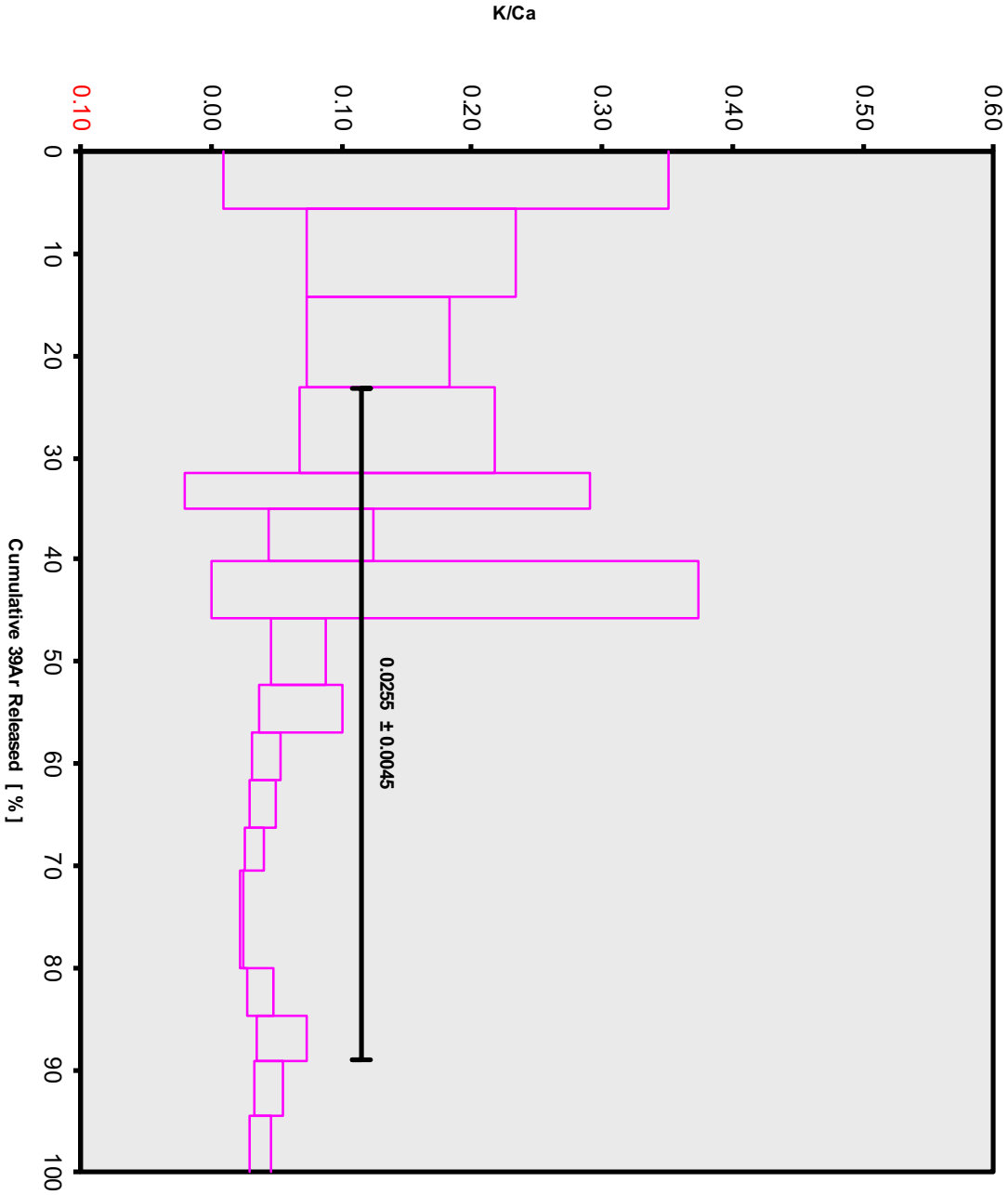
Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03

J = 0.00156742 ±

14D02514.AGE >>> SC12-059 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

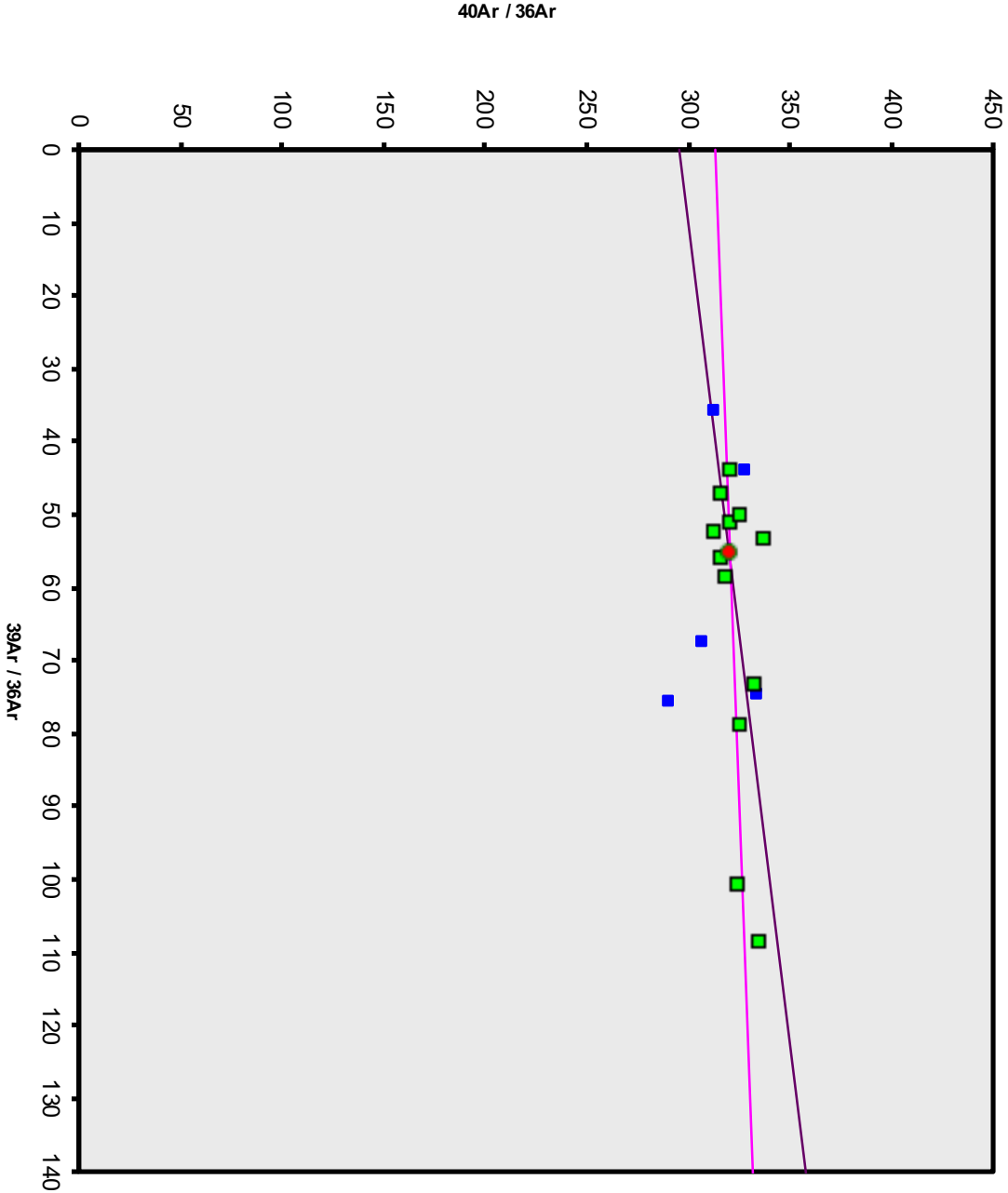
WEIGHTED
PLATEAU
 1.26 ± 0.21
TOTAL FUSION
 1.20 ± 0.15
NORMAL
ISOCHRON
 0.37 ± 0.99
INVERSE
ISOCHRON
 0.37 ± 0.23

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
 $J = 0.00156742 \pm$

14D02514.AGE >>> SC12-059 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED

PLATEAU

1.26 ± 0.21

TOTAL FUSION

1.20 ± 0.15

NORMAL

ISOCHRON

0.37 ± 0.99

INVERSE

ISOCHRON

0.37 ± 0.23

MSWD

(PROBABILITY)

0.91 (52%)

40AR/36AR

Sample Info

Groundmass

Galapagos St. Cruz

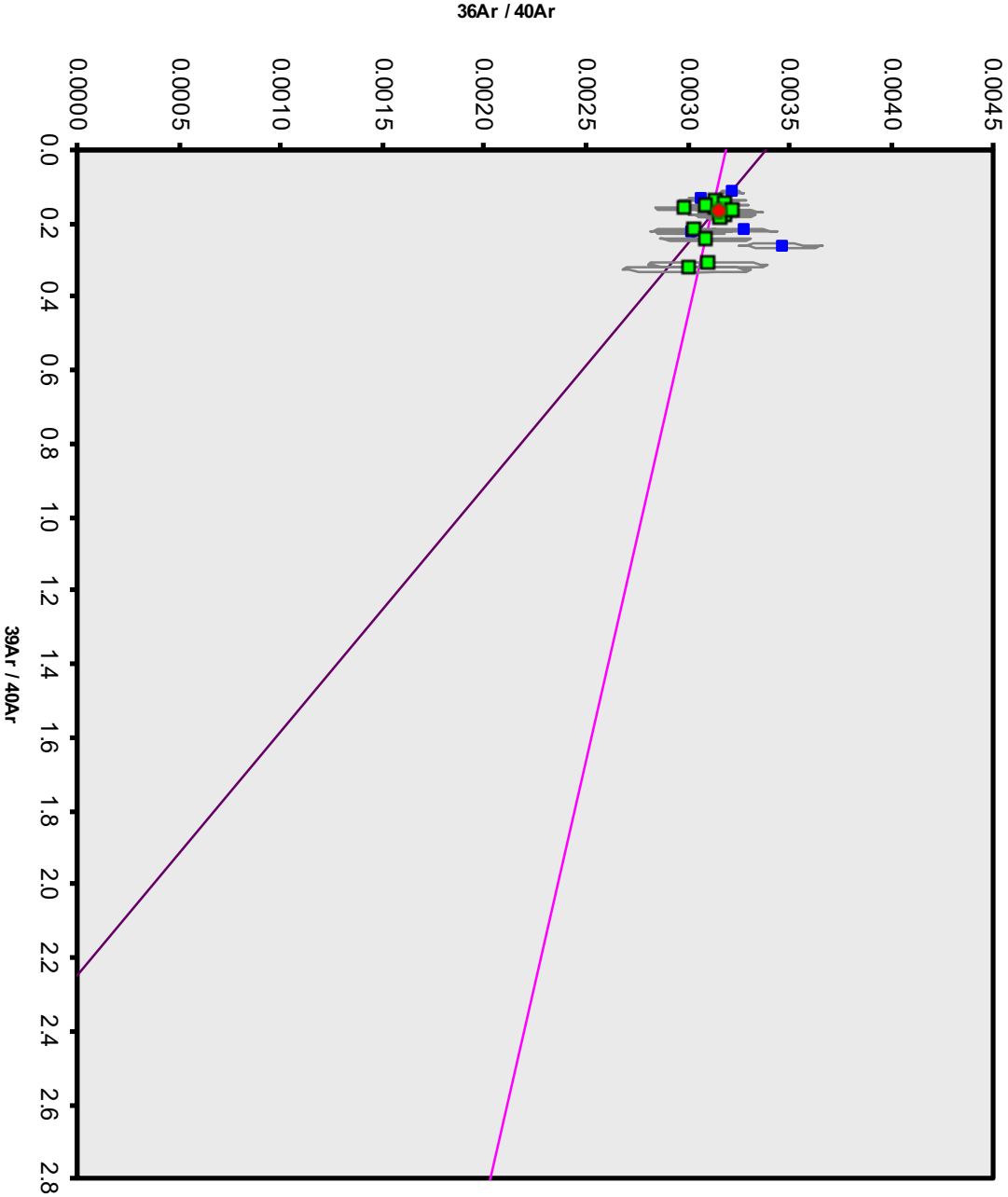
Island

Dan Miggins

IRR = 13-OSU-03

J = 0.00156742 ±

14D02514.AGE >>> SC12-059 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED
PLATEAU
 1.26 ± 0.21
TOTAL FUSION
 1.20 ± 0.15
NORMAL
ISOCHRON
 0.37 ± 0.99
INVERSE
ISOCHRON
 0.37 ± 0.23

MSWD
(PROBABILITY)
 0.95 (48%)

SPREADING

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00156742 ±

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D02484	1.7 %	0.0927673	16.2156	0.0820731	2.94361	0.711730	691.3 $\pm$ 1153.2	2.53	0.34	0.078 $\pm$ 0.065
14D02486	1.8 %	0.0403388	14.4186	0.0237479	2.14158	0.818521	1092.6 $\pm$ 1539.2	6.42	0.24	0.064 $\pm$ 0.060
14D02487	1.9 %	0.0402904	7.9974	0.0175520	2.62753	0.028242	30.7 $\pm$ 1280.3	0.24	0.30	0.141 $\pm$ 0.243
14D02488	2.1 %	0.0439601	12.9870	0.0350065	3.69199	0.471805	365.4 $\pm$ 915.4	3.50	0.42	0.122 $\pm$ 0.130
14D02490	2.3 %	0.0639942	21.4737	0.0000000	5.33793	0.454256	243.3 $\pm$ 661.9	2.35	0.61	0.107 $\pm$ 0.070
14D02491	2.5 %	0.0307610	15.0729	0.0000000	3.66453	0.090407	70.6 $\pm$ 905.9	1.00	0.42	0.105 $\pm$ 0.095
14D02493	2.8 %	0.0645159	37.3046	0.0420712	10.08403	0.083852	23.8 $\pm$ 338.0	0.44	1.15	0.116 $\pm$ 0.043
14D02494	3.2 %	0.0485481	53.9053	0.0906462	10.59575	1.501381	405.1 $\pm$ 320.7	9.47	1.21	0.085 $\pm$ 0.021
14D02496	4.0 %	0.1025958	101.1494	0.0000000	28.97576	0.206054	20.3 $\pm$ 123.1	0.67	3.31	0.123 $\pm$ 0.016
14D02497	5.0 %	0.1530312	249.4202	0.0088867	72.06130	3.095902	122.9 $\pm$ 54.1	6.40	8.24	0.124 $\pm$ 0.007
14D02499	6.0 %	0.1369439	301.3729	0.0572790	96.84819	4.744468	140.1 $\pm$ 41.5	10.47	11.08	0.138 $\pm$ 0.007
14D02500	7.0 %	0.1385164	331.7930	0.0116782	109.54089	5.971973	155.9 $\pm$ 36.2	12.70	12.53	0.142 $\pm$ 0.006
14D02502	8.2 %	0.1432835	358.2627	0.0162546	113.07162	6.987374	176.7 $\pm$ 34.3	14.13	12.93	0.136 $\pm$ 0.005
14D02503	9.6 %	0.1583317	335.8146	0.0432555	104.15296	5.057271	138.8 $\pm$ 40.1	9.73	11.91	0.133 $\pm$ 0.006
14D02505	10.2 %	0.0878697	188.6797	0.0181565	54.21366	3.338060	176.1 $\pm$ 68.4	11.37	6.20	0.124 $\pm$ 0.009
14D02506	11.2 %	0.0911002	179.3562	0.0288876	48.15009	2.744716	163.0 $\pm$ 74.6	9.24	5.51	0.115 $\pm$ 0.009
14D02508	13.2 %	0.1306310	208.9223	0.0317901	55.90492	1.983431	101.5 $\pm$ 67.7	4.88	6.39	0.115 $\pm$ 0.008
14D02509	15.4 %	0.1349801	236.1039	0.0310006	55.29933	3.712933	192.0 $\pm$ 67.8	8.51	6.33	0.101 $\pm$ 0.006
14D02511	18.0 %	0.1428720	265.4504	0.1170276	51.20015	3.169583	177.0 $\pm$ 78.5	6.98	5.86	0.083 $\pm$ 0.005
14D02513	21.0 %	0.1514032	292.8353	0.1004374	43.77076	1.997792	130.5 $\pm$ 90.7	4.27	5.01	0.064 $\pm$ 0.003
Σ		1.9967344	3228.5359	0.7557510	874.27655	46.932451				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-046 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Dan Miggins Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00158136 $\pm$ 0.13900000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.05287 $\pm$ 0.00587 $\pm$ 11.11%	151.2 $\pm$ 16.8 $\pm$ 11.11%	1.22 27%	95.30 12	0.103 $\pm$ 0.018
			Full External Error $\pm$ 17.2 Analytical Error $\pm$ 16.8	1.85 1.1053	2 σ Confidence Limit Error Magnification	
	Total Fusion Age	0.05368 $\pm$ 0.00659 $\pm$ 12.27%	153.5 $\pm$ 18.8 $\pm$ 12.27%		20	0.116 $\pm$ 0.002
			Full External Error $\pm$ 19.2 Analytical Error $\pm$ 18.8			

OSU Argon Geochronology Lab

Normal Isochron		39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02484	1.7 %	31.73 $\pm$ 1.57	303.17 $\pm$ 13.12	0.8538
14D02486	1.8 %	53.09 $\pm$ 5.38	315.79 $\pm$ 30.50	0.9303
14D02487	1.9 %	65.21 $\pm$ 6.60	294.80 $\pm$ 29.13	0.9507
14D02488	2.1 %	83.98 $\pm$ 7.74	306.23 $\pm$ 27.84	0.9630
14D02490	2.3 %	83.41 $\pm$ 5.51	302.60 $\pm$ 19.76	0.9674
14D02491	2.5 %	119.13 $\pm$ 15.20	292.56 $\pm$ 37.37	0.9739
14D02493	2.8 %	156.30 $\pm$ 9.71	296.80 $\pm$ 18.55	0.9809
14D02494	3.2 %	218.25 $\pm$ 17.92	326.43 $\pm$ 26.98	0.9856
14D02496	4.0 % ✓	282.43 $\pm$ 11.52	297.51 $\pm$ 12.24	0.9857
14D02497	5.0 % ✓	470.89 $\pm$ 14.08	315.73 $\pm$ 9.51	0.9898
14D02499	6.0 % ✓	707.21 $\pm$ 24.35	330.15 $\pm$ 11.44	0.9917
14D02500	7.0 % ✓	790.82 $\pm$ 26.60	338.61 $\pm$ 11.46	0.9918
14D02502	8.2 % ✓	789.15 $\pm$ 25.04	344.27 $\pm$ 11.00	0.9914
14D02503	9.6 % ✓	657.82 $\pm$ 20.40	327.44 $\pm$ 10.21	0.9918
14D02505	10.2 % ✓	616.98 $\pm$ 30.52	333.49 $\pm$ 16.63	0.9907
14D02506	11.2 % ✓	528.54 $\pm$ 24.41	325.63 $\pm$ 15.17	0.9894
14D02508	13.2 % ✓	427.96 $\pm$ 14.54	310.68 $\pm$ 10.64	0.9890
14D02509	15.4 % ✓	409.69 $\pm$ 13.35	323.01 $\pm$ 10.60	0.9893
14D02511	18.0 % ✓	358.36 $\pm$ 11.85	317.68 $\pm$ 10.57	0.9900
14D02513	21.0 % ✓	289.10 $\pm$ 8.91	308.70 $\pm$ 9.57	0.9890

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	288.98 $\pm$ 9.79 $\pm$ 3.39%	0.06358 $\pm$ 0.01757 $\pm$ 27.64%	181.8 $\pm$ 50.2 $\pm$ 27.64%	1.18 30%
			Full External Error $\pm$ 50.5 Analytical Error $\pm$ 50.2	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.89 1.0857 12	Convergence Number of Iterations Calculated Line	0.00000096851 6 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02484	1.7 %		0.1046637 $\pm$ 0.0026976	0.00329846 $\pm$ 0.00014278	0.0406
14D02486	1.8 %		0.1681165 $\pm$ 0.0062630	0.00316665 $\pm$ 0.00030581	0.0611
14D02487	1.9 %		0.2212182 $\pm$ 0.0069669	0.00339214 $\pm$ 0.00033518	0.0818
14D02488	2.1 %		0.2742523 $\pm$ 0.0068314	0.00326549 $\pm$ 0.00029688	0.0884
14D02490	2.3 %		0.2756551 $\pm$ 0.0046281	0.00330471 $\pm$ 0.00021584	0.0874
14D02491	2.5 %		0.4071939 $\pm$ 0.0118698	0.00341809 $\pm$ 0.00043663	0.1191
14D02493	2.8 %		0.5266280 $\pm$ 0.0064160	0.00336928 $\pm$ 0.00021062	0.1289
14D02494	3.2 %		0.6686134 $\pm$ 0.0093391	0.00306348 $\pm$ 0.00025318	0.1232
14D02496	4.0 %	✓	0.9493052 $\pm$ 0.0065880	0.00336125 $\pm$ 0.00013833	0.1369
14D02497	5.0 %	✓	1.4914396 $\pm$ 0.0063899	0.00316726 $\pm$ 0.00009535	0.1209
14D02499	6.0 %	✓	2.1421195 $\pm$ 0.0095670	0.00302897 $\pm$ 0.00010499	0.1143
14D02500	7.0 %	✓	2.3354483 $\pm$ 0.0101159	0.00295322 $\pm$ 0.00009994	0.1125
14D02502	8.2 %	✓	2.2922564 $\pm$ 0.0095835	0.00290473 $\pm$ 0.00009278	0.1153
14D02503	9.6 %	✓	2.0089578 $\pm$ 0.0080051	0.00305399 $\pm$ 0.00009527	0.1102
14D02505	10.2 %	✓	1.8500716 $\pm$ 0.0125333	0.00299860 $\pm$ 0.00014952	0.1254
14D02506	11.2 %	✓	1.6231372 $\pm$ 0.0109765	0.00307098 $\pm$ 0.00014306	0.1318
14D02508	13.2 %	✓	1.3774806 $\pm$ 0.0069931	0.00321871 $\pm$ 0.00011026	0.1286
14D02509	15.4 %	✓	1.2683462 $\pm$ 0.0060652	0.00309591 $\pm$ 0.00010158	0.1219
14D02511	18.0 %	✓	1.1280486 $\pm$ 0.0052853	0.00314777 $\pm$ 0.00010471	0.1148
14D02513	21.0 %	✓	0.9365243 $\pm$ 0.0043056	0.00323944 $\pm$ 0.00010043	0.1172

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron	289.55 $\pm$ 9.81 $\pm$ 3.39%	0.06299 $\pm$ 0.01580 $\pm$ 25.08%	180.1 $\pm$ 45.2 $\pm$ 25.08%	1.18 30%
			Full External Error $\pm$ 45.4 Analytical Error $\pm$ 45.2	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	1.89 1.0847 12 8.8%	Convergence Number of Iterations Calculated Line	0.0063413340 3 Weighted York-2

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02484	1.7 %	0.0970821	0.898	16.2156	41.619	0.135164	28.672	2.95452	1.230	28.12744	0.336	0.24179 ± 0.40343	691.3 ± 1153.2	2.53	0.34	0.078 ± 0.065
14D02486	1.8 %	0.0441552	1.641	14.4186	46.841	0.057653	72.016	2.15128	1.688	12.74080	0.741	0.38220 ± 0.53859	1092.6 ± 1539.2	6.42	0.24	0.064 ± 0.060
14D02487	1.9 %	0.0424089	1.786	7.9974	85.848	0.050095	68.060	2.63291	1.343	11.88021	0.798	0.01075 ± 0.44770	30.7 ± 1280.3	0.24	0.30	0.141 ± 0.243
14D02488	2.1 %	0.0474032	1.613	12.9870	53.073	0.087043	46.513	3.70073	1.015	13.46576	0.707	0.12779 ± 0.32017	365.4 ± 915.4	3.50	0.42	0.122 ± 0.130
14D02490	2.3 %	0.0698632	1.270	21.4737	32.939	0.074198	51.155	5.35238	0.674	19.30993	0.489	0.08510 ± 0.22150	243.3 ± 661.9	2.35	0.61	0.107 ± 0.070
14D02491	2.5 %	0.0347402	2.077	15.0729	45.196	0.037104	101.281	3.67467	0.997	9.00316	1.053	0.02467 ± 0.31678	70.6 ± 905.9	1.00	0.42	0.105 ± 0.095
14D02493	2.8 %	0.0743817	1.118	37.3046	18.367	0.174071	21.805	10.10914	0.351	19.15848	0.495	0.00632 ± 0.11819	23.8 ± 338.0	0.44	1.15	0.116 ± 0.043
14D02494	3.2 %	0.0628166	1.307	53.9053	12.700	0.227792	16.810	10.63203	0.360	15.85805	0.596	0.14170 ± 0.11216	405.1 ± 320.7	9.47	1.21	0.085 ± 0.021
14D02496	4.0 %	✓ 0.1292993	0.855	101.1494	6.628	0.352542	10.526	29.04383	0.149	30.55238	0.312	0.00711 ± 0.04307	20.3 ± 123.1	0.67	3.31	0.123 ± 0.016
14D02497	5.0 %	✓ 0.2188818	0.630	249.4202	2.763	0.892215	4.338	72.22916	0.083	48.38939	0.197	0.04296 ± 0.01892	122.9 ± 54.1	6.40	8.24	0.124 ± 0.007
14D02499	6.0 %	✓ 0.2165300	0.607	301.3729	2.458	1.226897	3.303	97.05101	0.075	45.30920	0.210	0.04899 ± 0.01451	140.1 ± 41.5	10.47	11.08	0.138 ± 0.007
14D02500	7.0 %	✓ 0.2261146	0.593	331.7930	2.171	1.330262	3.070	109.76419	0.075	47.01422	0.203	0.05452 ± 0.01267	155.9 ± 36.2	12.70	12.53	0.142 ± 0.006
14D02502	8.2 %	✓ 0.2378716	0.527	358.2627	2.002	1.379588	2.750	113.31273	0.072	49.44185	0.196	0.06180 ± 0.01199	176.7 ± 34.3	14.13	12.93	0.136 ± 0.005
14D02503	9.6 %	✓ 0.2470046	0.593	335.8146	2.218	1.304787	3.106	104.37896	0.073	51.94947	0.185	0.04856 ± 0.01404	138.8 ± 40.1	9.73	11.91	0.133 ± 0.006
14D02505	10.2 %	✓ 0.1376886	0.816	188.6797	3.731	0.677757	5.651	54.34064	0.093	29.35830	0.325	0.06157 ± 0.02394	176.1 ± 68.4	11.37	6.20	0.124 ± 0.009
14D02506	11.2 %	✓ 0.1384622	0.787	179.3562	3.795	0.618793	6.777	48.27079	0.102	29.71346	0.322	0.05700 ± 0.02610	163.0 ± 74.6	9.24	5.51	0.115 ± 0.009
14D02508	13.2 %	✓ 0.1857997	0.659	208.9223	3.348	0.721443	5.363	56.04552	0.092	40.64137	0.236	0.03548 ± 0.02368	101.5 ± 67.7	4.88	6.39	0.115 ± 0.008
14D02509	15.4 %	✓ 0.1973244	0.632	236.1039	2.897	0.718353	5.391	55.45823	0.096	43.65541	0.218	0.06714 ± 0.02371	192.0 ± 67.8	8.51	6.33	0.101 ± 0.006
14D02511	18.0 %	✓ 0.2129993	0.632	265.4504	2.760	0.763286	5.383	51.37879	0.100	45.43996	0.211	0.06191 ± 0.02747	177.0 ± 78.5	6.98	5.86	0.083 ± 0.005
14D02513	21.0 %	✓ 0.2287533	0.576	292.8353	2.480	0.667550	5.997	43.96784	0.104	46.78166	0.204	0.04564 ± 0.03171	130.5 ± 90.7	4.27	5.01	0.064 ± 0.003
Σ		2.8493805	0.174	3228.9359	0.970	11.502601	1.527	876.44935	0.027	637.85050	0.067					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-046
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan Miggins
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00158136 ± 0.13900000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 27.3
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 0 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.012 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 39/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/39(k) = 0.001010
Production Ratio 36/39(k) = 0.011380
Production Ratio 36/38(cl) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau		0.05287 ± 0.00587 ± 11.11%	151.2 ± 16.8 ± 11.11%		1.22 95.30 27% 12	0.103 ± 0.018
			Full External Error ± 17.2 Analytical Error ± 16.8		1.85 2σ Confidence Limit 1.1053 Error Magnification	
Total Fusion Age		0.05368 ± 0.00659 ± 12.27%	153.5 ± 18.8 ± 12.27%		20	0.116 ± 0.002
			Full External Error ± 19.2 Analytical Error ± 18.8			
Normal Isochron	288.98 ± 9.79 ± 3.39%	0.06358 ± 0.01757 ± 27.64%	181.8 ± 50.2 ± 27.64%		1.18 95.30 30% 12	
			Full External Error ± 50.5 Analytical Error ± 50.2		1.89 2σ Confidence Limit 1.0857 Error Magnification	
				0.0000000969	6 Number of Iterations Convergence	
Inverse Isochron	289.55 ± 9.81 ± 3.39%	0.06299 ± 0.01580 ± 25.08%	180.1 ± 45.2 ± 25.08%		1.18 95.30 30% 12	
			Full External Error ± 45.4 Analytical Error ± 45.2		1.89 2σ Confidence Limit 1.0847 Error Magnification	
				3 Number of Iterations 0.0063413340 Convergence		
				9% Spreading Factor		

Depositing Patterns	36Ar(a) [a]	%1σ	36Ar(c) [a]	%1σ	36Ar(a+c) [a]	%1σ	36Ar(d) [a]	%1σ	37Ar(a) [a]	%1σ	38Ar(a) [a]	%1σ	38Ar(c) [a]	%1σ	38Ar(b) [a]	%1σ	38Ar(a+c) [a]	%1σ	38Ar(d) [a]	%1σ	39Ar(a) [a]	%1σ	39Ar(c) [a]	%1σ	40Ar(r) [a]	%1σ	40Ar(a) [a]	%1σ	40Ar(c) [a]	%1σ	40Ar(b) [a]	%1σ			
14C02484	1.7%	0.002703	3.14	0.000000	0.00	0.000000	41.62	0.000000	47.25	15.2155	41.62	0.017285	2.19	0.000000	0.00	0.000000	0.00	0.000000	41.62	0.000000	1.34	0.000000	41.62	0.000000	41.62	0.000000	83.42	11.4124	3.14	0.000000	0.00	0.000000	1.34		
14C02485	1.8%	0.040208	4.77	0.000000	0.00	0.000000	46.84	0.000000	174.94	14.4185	46.84	0.007580	4.77	0.000000	0.00	0.000000	0.00	0.000000	46.84	0.000000	2.14158	1.71	0.000000	46.84	0.000000	8.18521	70.44	11.5212	4.77	0.000000	0.00	0.000000	1.71		
14C02487	1.9%	0.042504	4.85	0.000000	0.00	0.000000	46.85	0.000000	217.63	7.8974	85.85	0.007580	4.85	0.000000	0.00	0.000000	0.00	0.000000	46.85	0.000000	2.62753	1.35	0.000000	85.85	0.000000	0.00042	205.27	11.3555	4.85	0.000000	0.00	0.000000	1.35		
14C02488	2.1%	0.000001	4.40	0.000000	0.00	0.000000	53.37	0.000000	115.71	12.8871	53.37	0.000000	4.40	0.000000	0.00	0.000000	0.00	0.000000	53.37	0.000000	3.88789	1.02	0.000000	53.37	0.000000	0.471855	125.27	12.8872	4.40	0.000000	0.00	0.000000	1.02		
14C02490	2.3%	0.000000	3.23	0.000000	0.00	0.000000	30.34	0.000000	0.00	21.4737	32.94	0.0119625	3.23	0.000000	0.00	0.000000	0.00	0.000000	32.94	0.000000	5.33793	0.68	0.000000	32.94	0.000000	0.000000	130.02	18.9128	3.23	0.000000	0.00	0.000000	0.68		
14C02491	2.5%	0.000000	6.35	0.000000	0.00	0.000000	45.20	0.000000	0.00	15.0729	45.20	0.000000	6.35	0.000000	0.00	0.000000	0.00	0.000000	45.20	0.000000	3.59453	1.01	0.000000	45.20	0.000000	0.000000	645.01	9.38587	6.35	0.000000	0.00	0.000000	1.01		
14C02493	2.8%	0.000000	3.09	0.000000	0.00	0.000000	18.37	0.000000	90.27	37.3045	18.37	0.0102860	3.09	0.000000	0.00	0.000000	0.00	0.000000	18.37	0.000000	10.09403	0.35	0.000000	18.37	0.000000	0.000000	710.70	10.0945	3.09	0.000000	0.00	0.000000	0.35		
14C02494	3.2%	0.000000	4.05	0.000000	0.00	0.000000	12.75	0.000000	42.28	51.9351	12.75	0.000000	4.05	0.000000	0.00	0.000000	0.00	0.000000	12.75	0.000000	10.0875	0.36	0.000000	12.75	0.000000	1.00361	38.57	54.3455	4.05	0.000000	0.00	0.000000	0.36		
14C02496	4.0%	0.000000	2.03	0.000000	0.00	0.000000	6.63	0.000000	0.00	101.1464	6.63	0.000000	2.03	0.000000	0.00	0.000000	0.00	0.000000	6.63	0.000000	0.000000	6.63	0.000000	6.63	0.000000	0.000000	302.79	38.3175	2.03	0.000000	0.00	0.000000	6.63		
14C02497	5.0%	0.000000	1.49	0.000000	0.00	0.000000	435.80	0.000000	244.4302	2.76	0.000000	1.49	0.000000	0.00	0.000000	0.00	0.000000	0.00	435.80	0.000000	72.00130	0.08	0.000000	435.80	0.000000	2.2201	45.22871	1.49	0.000000	0.00	0.000000	0.08			
14C02499	6.0%	0.000000	1.72	0.000000	0.00	0.000000	2.46	0.000000	70.81	301.3729	2.46	0.000000	1.72	0.000000	0.00	0.000000	0.00	0.000000	2.46	0.000000	96.94819	0.08	0.000000	2.46	0.000000	4.74448	14.81	42.4882	1.72	0.000000	0.00	0.000000	0.08		
14C02500	7.0%	0.000000	1.68	0.000000	0.00	0.000000	2.17	0.000000	349.91	331.7930	2.17	0.000000	1.68	0.000000	0.00	0.000000	0.00	0.000000	2.17	0.000000	109.54889	0.08	0.000000	2.17	0.000000	5.71973	11.62	40.80181	1.68	0.000000	0.00	0.000000	0.08		
14C02502	8.2%	0.000000	1.58	0.000000	0.00	0.000000	233.15	0.000000	358.2627	2.00	0.000000	1.58	0.000000	0.00	0.000000	0.00	0.000000	0.00	233.15	0.000000	113.07182	0.07	0.000000	233.15	0.000000	0.000000	9.70	42.3427	1.58	0.000000	0.00	0.000000	0.07		
14C02503	9.6%	0.000000	1.05	0.000000	0.00	0.000000	2.22	0.000000	93.75	338.8146	2.22	0.000000	1.05	0.000000	0.00	0.000000	0.00	0.000000	2.22	0.000000	94.16396	0.07	0.000000	2.22	0.000000	5.02032	2.22	5.02071	1.05	0.000000	0.00	0.000000	0.07		
14C02505	10.2%	0.000000	2.47	0.000000	0.00	0.000000	211.05	0.000000	188.4797	3.73	0.000000	2.47	0.000000	0.00	0.000000	0.00	0.000000	0.00	211.05	0.000000	54.21366	0.09	0.000000	211.05	0.000000	3.73	3.33600	19.44	25.95649	2.47	0.000000	0.00	0.000000	0.09	
14C02506	11.2%	0.000000	2.31	0.000000	0.00	0.000000	3.80	0.000000	179.2552	3.80	0.000000	2.31	0.000000	0.00	0.000000	0.00	0.000000	0.00	3.80	0.000000	45.10289	0.10	0.000000	3.80	0.000000	2.80	2.744716	22.80	26.52011	2.31	0.000000	0.00	0.000000	0.10	
14C02508	12.1%	0.000000	1.70	0.000000	0.00	0.000000	3.35	0.000000	121.18	268.9221	3.35	0.000000	1.70	0.000000	0.00	0.000000	0.00	0.000000	3.35	0.000000	55.95452	0.09	0.000000	3.35	0.000000	1.88431	33.37	38.6047	1.70	0.000000	0.00	0.000000	0.09		
14C02509	15.4%	0.000000	1.63	0.000000	0.00	0.000000	236.1039	0.000000	236.1039	2.90	0.000000	1.63	0.000000	0.00	0.000000	0.00	0.000000	0.00	236.1039	0.000000	65.29833	0.10	0.000000	236.1039	0.000000	3.712933	17.85	39.88882	1.63	0.000000	0.00	0.000000	0.10		
14C02511	19.0%	0.000000	1.65	0.000000	0.00	0.000000	35.14	0.000000	265.4504	2.75	0.000000	1.65	0.000000	0.00	0.000000	0.00	0.000000	0.00	35.14	0.000000	51.20915	0.10	0.000000	35.14	0.000000	0.1784451	2.75	3.165553	22.15	42.21866	1.65	0.000000	0.00	0.000000	0.10
14C02513	21.0%	0.000000	1.54	0.000000	0.00	0.000000	39.89	0.000000	292.8553	2.48	0.000000	1.54	0.000000	0.00	0.000000	0.00	0.000000	0.00	39.89	0.000000	43.77076	0.11	0.000000	39.89	0.000000	1.997792	34.74	44.73966	1.54	0.000000	0.00	0.000000	0.11		
Σ	1.966794	0.48	0.000000	0.00	0.852335	0.97	0.000000	21.61	3228.5359	0.97	0.3731887	0.48	0.000000	0.00	0.9460291	0.03	0.4487665	0.97	0.7557510	21.61	874.27655	0.03	2.1728047	0.97	46.93451	6.13	590.0303	0.48	0.000000	0.00	0.000000	0.03			
Σ							2.848385	0.45	3228.5359	0.97									1.528074	1.42			874.4835	0.03							637.8559	0.03			

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02484	1.7 %	9.520129	0.121385	5.488408	2.285232	0.032859	0.000500	254.546	152.972365	1.00179857	1.350E-12
14D02486	1.8 %	5.922432	0.109181	6.702353	3.141502	0.020525	0.000483	254.563	153.022732	1.00179869	6.116E-13
14D02487	1.9 %	4.512192	0.070496	3.037473	2.607928	0.016107	0.000360	254.572	153.050021	1.00179875	5.703E-13
14D02488	2.1 %	3.638674	0.045011	3.509307	1.862845	0.012809	0.000244	254.580	153.075215	1.00179881	6.464E-13
14D02490	2.3 %	3.618934	0.030152	4.011997	1.321773	0.013015	0.000187	254.597	153.127716	1.00179894	9.298E-13
14D02491	2.5 %	2.450060	0.035524	4.101838	1.854324	0.009454	0.000218	254.606	153.155024	1.00179900	4.322E-13
14D02493	2.8 %	1.895165	0.011498	3.690187	0.677885	0.007358	0.000086	254.623	153.205450	1.00179912	9.196E-13
14D02494	3.2 %	1.491536	0.010382	5.070083	0.644183	0.005908	0.000080	254.632	153.232772	1.00179918	7.612E-13
14D02496	4.0 %	✓ 1.051941	0.003642	3.482647	0.230885	0.004452	0.000039	254.649	153.285327	1.00179930	1.467E-12
14D02497	5.0 %	✓ 0.669943	0.001432	3.453178	0.095465	0.003030	0.000019	254.658	153.310560	1.00179936	2.323E-12
14D02499	6.0 %	✓ 0.466860	0.001040	3.105305	0.076361	0.002231	0.000014	254.675	153.363142	1.00179949	2.175E-12
14D02500	7.0 %	✓ 0.428320	0.000925	3.022780	0.065665	0.002060	0.000012	254.683	153.388387	1.00179954	2.257E-12
14D02502	8.2 %	✓ 0.436331	0.000910	3.161717	0.063348	0.002099	0.000011	254.701	153.440996	1.00179967	2.373E-12
14D02503	9.6 %	✓ 0.497701	0.000989	3.217263	0.071406	0.002366	0.000014	254.710	153.468359	1.00179973	2.494E-12
14D02505	10.2 %	✓ 0.540264	0.001826	3.472166	0.129579	0.002534	0.000021	254.727	153.520995	1.00179985	1.409E-12
14D02506	11.2 %	✓ 0.615558	0.002077	3.715626	0.141065	0.002868	0.000023	254.735	153.546267	1.00179991	1.426E-12
14D02508	13.2 %	✓ 0.725149	0.001837	3.727725	0.124866	0.003315	0.000022	254.753	153.598929	1.00180004	1.951E-12
14D02509	15.4 %	✓ 0.787176	0.001878	4.257329	0.123410	0.003558	0.000023	254.761	153.624214	1.00180009	2.095E-12
14D02511	18.0 %	✓ 0.884411	0.002067	5.166535	0.142688	0.004146	0.000027	254.778	153.676903	1.00180022	2.181E-12
14D02513	21.0 %	✓ 1.063997	0.002439	6.660217	0.165351	0.005203	0.000030	254.796	153.729611	1.00180034	2.246E-12

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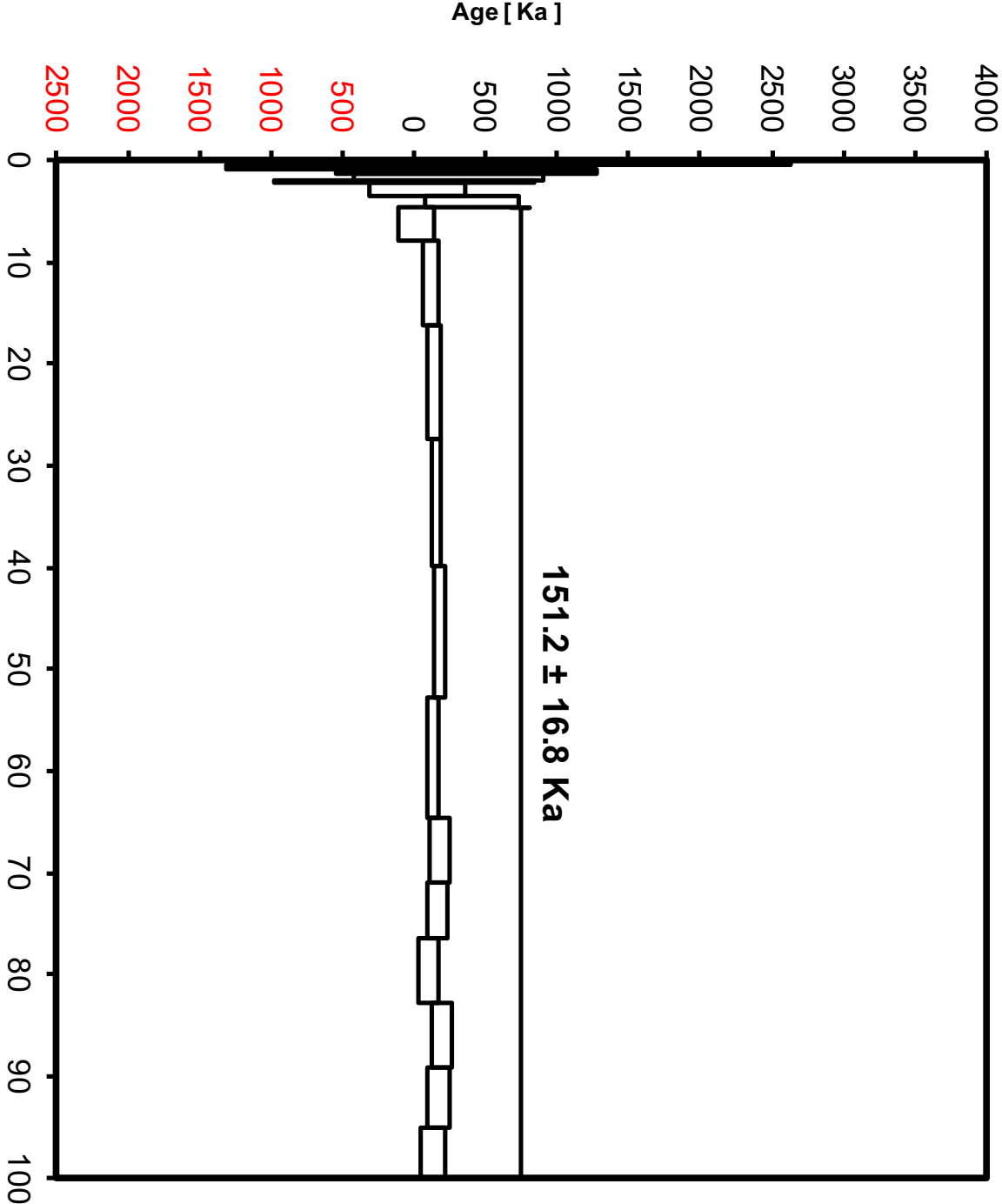
Procedure Blanks		36Ar [fA]	1σ	37Ar [fA]	1σ	38Ar [fA]	1σ	39Ar [fA]	1σ	40Ar [fA]	1σ
14D02484	1.7 %	0.0133843	0.0003744	0.0226687	0.0310588	0.0313937	0.0275890	0.0624562	0.0252352	3.7390029	0.0905759
14D02486	1.8 %	0.0132952	0.0003744	0.0169728	0.0310588	0.0291658	0.0275890	0.0642901	0.0252352	3.7978397	0.0905759
14D02487	1.9 %	0.0132470	0.0003744	0.0140621	0.0310588	0.0279591	0.0275890	0.0652835	0.0252352	3.8240099	0.0905759
14D02488	2.1 %	0.0132024	0.0003744	0.0114842	0.0310588	0.0268451	0.0275890	0.0662005	0.0252352	3.8446122	0.0905759
14D02490	2.3 %	0.0131097	0.0003744	0.0064494	0.0310588	0.0245245	0.0275890	0.0681108	0.0252352	3.8765725	0.0905759
14D02491	2.5 %	0.0130614	0.0003744	0.0040106	0.0310588	0.0233177	0.0275890	0.0691042	0.0252352	3.8873382	0.0905759
14D02493	2.8 %	0.0129724	0.0003744	0.0001695	0.0310588	0.0210898	0.0275890	0.0709381	0.0252352	3.8966907	0.0905759
14D02494	3.2 %	0.0129241	0.0003744	0.0022591	0.0310588	0.0198831	0.0275890	0.0719315	0.0252352	3.8960569	0.0905759
14D02496	4.0 %	0.0128314	0.0003744	0.0059328	0.0310588	0.0175624	0.0275890	0.0738418	0.0252352	3.8835809	0.0905759
14D02497	5.0 %	0.0127868	0.0003744	0.0075350	0.0310588	0.0164485	0.0275890	0.0747588	0.0252352	3.8723312	0.0905759
14D02499	6.0 %	0.0126941	0.0003744	0.0105371	0.0310588	0.0141278	0.0275890	0.0766691	0.0252352	3.8379333	0.0905759
14D02500	7.0 %	0.0126495	0.0003744	0.0118170	0.0310588	0.0130139	0.0275890	0.0775861	0.0252352	3.8161610	0.0905759
14D02502	8.2 %	0.0125568	0.0003744	0.0141477	0.0310588	0.0106932	0.0275890	0.0794964	0.0252352	3.7598412	0.0905759
14D02503	9.6 %	0.0125085	0.0003744	0.0151803	0.0310588	0.0094865	0.0275890	0.0804898	0.0252352	3.7247011	0.0905759
14D02505	10.2 %	0.0124158	0.0003744	0.0168213	0.0310588	0.0071658	0.0275890	0.0824001	0.0252352	3.6458669	0.0905759
14D02506	11.2 %	0.0123712	0.0003744	0.0174478	0.0310588	0.0060519	0.0275890	0.0833171	0.0252352	3.6027652	0.0905759
14D02508	13.2 %	0.0122785	0.0003744	0.0184173	0.0310588	0.0037312	0.0275890	0.0852274	0.0252352	3.5020090	0.0905759
14D02509	15.4 %	0.0122339	0.0003744	0.0187214	0.0310588	0.0026173	0.0275890	0.0861444	0.0252352	3.4483848	0.0905759
14D02511	18.0 %	0.0121412	0.0003744	0.0190194	0.0310588	0.0002966	0.0275890	0.0880547	0.0252352	3.3257067	0.0905759
14D02513	21.0 %	0.0120484	0.0003744	0.0188636	0.0310588	0.0020241	0.0275890	0.0899651	0.0252352	3.1882165	0.0905759

Intercept Values	36Ar [fA]				37Ar [fA]				38Ar [fA]				39Ar [fA]				40Ar [fA]				
	1σ	r2			1σ	r2			1σ	r2			1σ	r2			1σ	r2			
14D02484	1.7%	0.105958	0.0007020	0.0323	EXP 150 of 150	0.0814	0.0302	0.0004	EXP 150 of 150	0.1021487	0.0265503	0.0239	EXP 150 of 150	2.994002	0.02568	0.2537	EXP 150 of 150	31.925551	0.028392	0.9762	EXP 149 of 150
14D02486	1.8%	0.0554229	0.0005707	0.1782	EXP 150 of 150	0.0756	0.0302	0.0239	EXP 150 of 150	0.0278051	0.0303671	0.0047	EXP 150 of 150	2.19885	0.02568	0.2177	EXP 150 of 150	16.565417	0.027353	0.9890	EXP 150 of 150
14D02487	1.9%	0.0537086	0.0005907	0.1168	EXP 150 of 150	0.0373	0.0312	0.0006	EXP 150 of 150	0.0274633	0.0257235	0.0018	EXP 150 of 150	2.67774	0.02433	0.3561	EXP 150 of 150	15.729190	0.025547	0.9877	EXP 150 of 150
14D02488	2.1%	0.0584290	0.0006150	0.1721	EXP 150 of 150	0.0718	0.0315	0.0002	EXP 150 of 150	0.0591535	0.0289636	0.0008	EXP 150 of 150	3.73817	0.02732	0.3076	EXP 150 of 150	17.336697	0.030091	0.9860	EXP 150 of 150
14D02490	2.3%	0.0795742	0.0007360	0.0105	EXP 150 of 150	0.1313	0.0330	0.0004	EXP 150 of 150	0.0487831	0.0253997	0.0006	EXP 150 of 150	5.37890	0.02519	0.6562	EXP 149 of 150	23.287204	0.028591	0.9819	EXP 150 of 150
14D02491	2.5%	0.0462065	0.0005712	0.1705	EXP 150 of 150	0.0926	0.0307	0.0031	EXP 150 of 150	0.0133412	0.0248471	0.0020	EXP 147 of 150	3.71521	0.02607	0.4924	EXP 149 of 150	12.904419	0.028561	0.9890	EXP 150 of 150
14D02493	2.8%	0.0639387	0.0006748	0.0001	EXP 150 of 150	0.2393	0.0310	0.0018	EXP 150 of 150	0.1508930	0.0253997	0.0003	EXP 150 of 150	10.10151	0.02367	0.8870	EXP 150 of 150	23.195437	0.028897	0.9807	EXP 150 of 150
14D02494	3.2%	0.0728963	0.0006698	0.0436	EXP 150 of 150	0.3477	0.0309	0.0712	EXP 150 of 150	0.2951788	0.0258899	0.0011	EXP 149 of 150	10.62132	0.02767	0.8666	EXP 150 of 150	19.787438	0.027699	0.9866	EXP 150 of 150
14D02496	4.0%	0.1361935	0.0009319	0.1376	EXP 150 of 150	0.6540	0.0293	0.0030	EXP 150 of 150	0.3307506	0.0241443	0.0011	EXP 150 of 150	26.89193	0.02982	0.9766	EXP 150 of 150	34.500170	0.030981	0.9588	EXP 150 of 150
14D02497	5.0%	0.2216181	0.0011395	0.3839	EXP 150 of 150	1.6052	0.0290	0.0467	EXP 150 of 150	0.8650646	0.0264564	0.0079	EXP 150 of 150	71.74253	0.02933	0.9963	EXP 150 of 150	52.363412	0.030549	0.7769	EXP 149 of 150
14D02499	6.0%	0.2162816	0.0010686	0.4165	EXP 149 of 150	1.9403	0.0328	0.0407	EXP 150 of 150	1.1880525	0.0288818	0.0016	EXP 150 of 150	96.37335	0.03007	0.9978	EXP 150 of 150	49.242350	0.029574	0.8902	EXP 149 of 150
14D02500	7.0%	0.2263816	0.0010873	0.3906	EXP 149 of 150	2.1360	0.0302	0.1130	EXP 150 of 150	1.3012911	0.0283907	0.0034	EXP 150 of 150	108.98863	0.03711	0.9974	EXP 150 of 150	50.329179	0.030101	0.8693	EXP 150 of 150
14D02502	8.2%	0.2369559	0.0009707	0.4970	EXP 150 of 150	2.3070	0.0292	0.2388	EXP 150 of 150	1.3523464	0.0253065	0.0070	EXP 150 of 150	112.51148	0.03095	0.9984	EXP 150 of 150	53.305592	0.034636	0.7207	EXP 150 of 150
14D02503	9.6%	0.2481713	0.0011991	0.4664	EXP 150 of 150	2.1640	0.0324	0.1153	EXP 150 of 150	1.2796492	0.0288658	0.0526	EXP 150 of 150	103.64814	0.03071	0.9981	EXP 150 of 150	55.783341	0.032254	0.6423	EXP 150 of 150
14D02505	10.2%	0.1437821	0.0009452	0.1072	EXP 150 of 150	1.2238	0.0313	0.0637	EXP 150 of 150	0.6624617	0.0258806	0.0189	EXP 150 of 150	54.00066	0.02748	0.9841	EXP 150 of 150	33.055863	0.030484	0.9592	EXP 150 of 150
14D02506	11.2%	0.1444556	0.0008968	0.2037	EXP 150 of 150	1.1645	0.0293	0.0981	EXP 150 of 150	0.6053184	0.0309349	0.0166	EXP 150 of 150	47.97891	0.02696	0.9818	EXP 150 of 150	33.376699	0.031130	0.9543	EXP 150 of 150
14D02508	13.2%	0.1895467	0.0010065	0.3948	EXP 150 of 150	1.3542	0.0306	0.0130	EXP 150 of 150	0.7099583	0.0264447	0.0057	EXP 150 of 150	55.65610	0.02735	0.9545	EXP 150 of 150	44.228782	0.032327	0.8671	EXP 150 of 150
14D02509	15.4%	0.2004977	0.0010180	0.3989	EXP 150 of 150	1.5280	0.0287	0.1331	EXP 150 of 150	0.7077193	0.0264973	0.0006	EXP 150 of 150	55.11329	0.03122	0.9928	EXP 150 of 150	47.195532	0.030330	0.8247	EXP 150 of 150
14D02511	18.0%	0.2153801	0.0011103	0.4597	EXP 150 of 150	1.7153	0.0327	0.1721	EXP 150 of 150	0.7538334	0.0297671	0.0357	EXP 150 of 150	51.06747	0.03068	0.9920	EXP 150 of 150	48.861155	0.032369	0.6997	EXP 150 of 150
14D02513	21.0%	0.2302980	0.0010571	0.5951	EXP 150 of 150	1.8895	0.0315	0.1386	EXP 150 of 150	0.6615069	0.0283279	0.0090	EXP 149 of 150	43.71602	0.02612	0.9920	EXP 150 of 150	50.368187	0.030927	0.5800	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%He	Standard Reference	Standard 40Ar/39Ar	%He	J	%Ar	Ar 40Ar/36Ar	%Ar	MCP	%Ar	Volume Ratio	Sensitivity (mVolts)	Day	Month	Year	Hour	Min	Reset	Insulation	X-Yon	Y-Zon	2He/3He	Project	Experiment	Num	
HC02484	1.7%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	1.7	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	2	34	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02485	1.8%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	1.8	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	2	35	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02487	1.9%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	1.9	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	3	11	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02488	2.1%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	2.1	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	3	23	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02490	2.3%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	2.3	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	3	49	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02491	2.5%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	2.5	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	4	11	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02492	2.8%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	2.8	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	4	20	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02494	3.3%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	3.3	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	4	30	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02495	4.0%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	4	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	5	3	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02497	5.5%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	5	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	5	10	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02499	6.0%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	6	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	5	40	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02500	7.5%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	7	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	5	50	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02502	8.2%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	8.2	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	6	17	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02503	9.5%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	9.6	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	6	30	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02506	10.3%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	10.2	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	6	30	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02508	11.2%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	11.2	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	7	7	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02508	13.3%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	13.2	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	7	30	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02509	16.4%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	16.4	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	7	44	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02511	18.5%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	18	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	8	5	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01
HC02513	21.0%	SC10-095	Groundmass	Calapogus St. Crater Island	Dan Magrane	21	FC1-3	28.38	0.064	Penne et al (1998)	0.98025	0.139	0.00180136	0.139	302.705	0.005	0.980001420	0.063	1	4.80E-14	30	JAN	2014	8	34	1	15-08U-02	0.00	0.00	57.70	Calapogus Hergo (15-05)	14020403	01

Irradiation Constants	40/36(a)	%1σ	40/36(c)	%1σ	38/36(a)	%1σ	38/36(c)	%1σ	39/37(ca)	%1σ	38/37(ca)	%1σ	36/37(ca)	%1σ	40/39(k)	%1σ	38/39(k)	%1σ	36/38(d)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
14D02484	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02486	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02487	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02488	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02490	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02491	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02493	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02494	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02496	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02497	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02499	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02500	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02502	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02503	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02505	10.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02506	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02508	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02509	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02511	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0
14D02513	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0.43	0	0	0	0	0

14D02483.AGE >>> SC12-046 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED PLATEAU
151.2 ± 16.8
TOTAL FUSION
153.5 ± 18.8
NORMAL ISOCHRON
181.8 ± 50.2
INVERSE ISOCHRON
180.1 ± 45.2

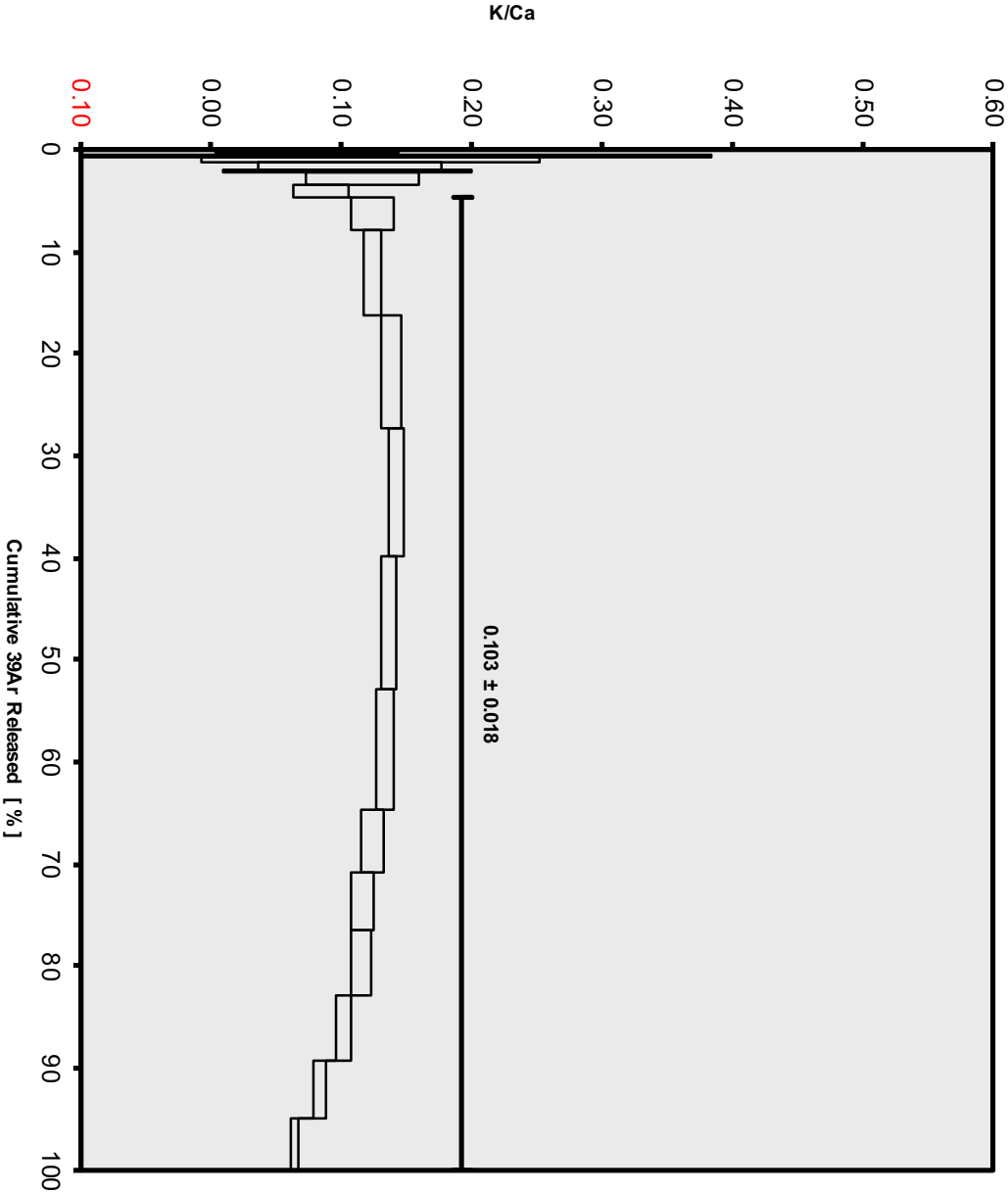
MSWD (PROBABILITY)
1.22 (27%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00158136 ±
0.13900000

14D02483.AGE >>> SC12-046 >>> GALAPAGOS | HARPP (13-07) PROJECT



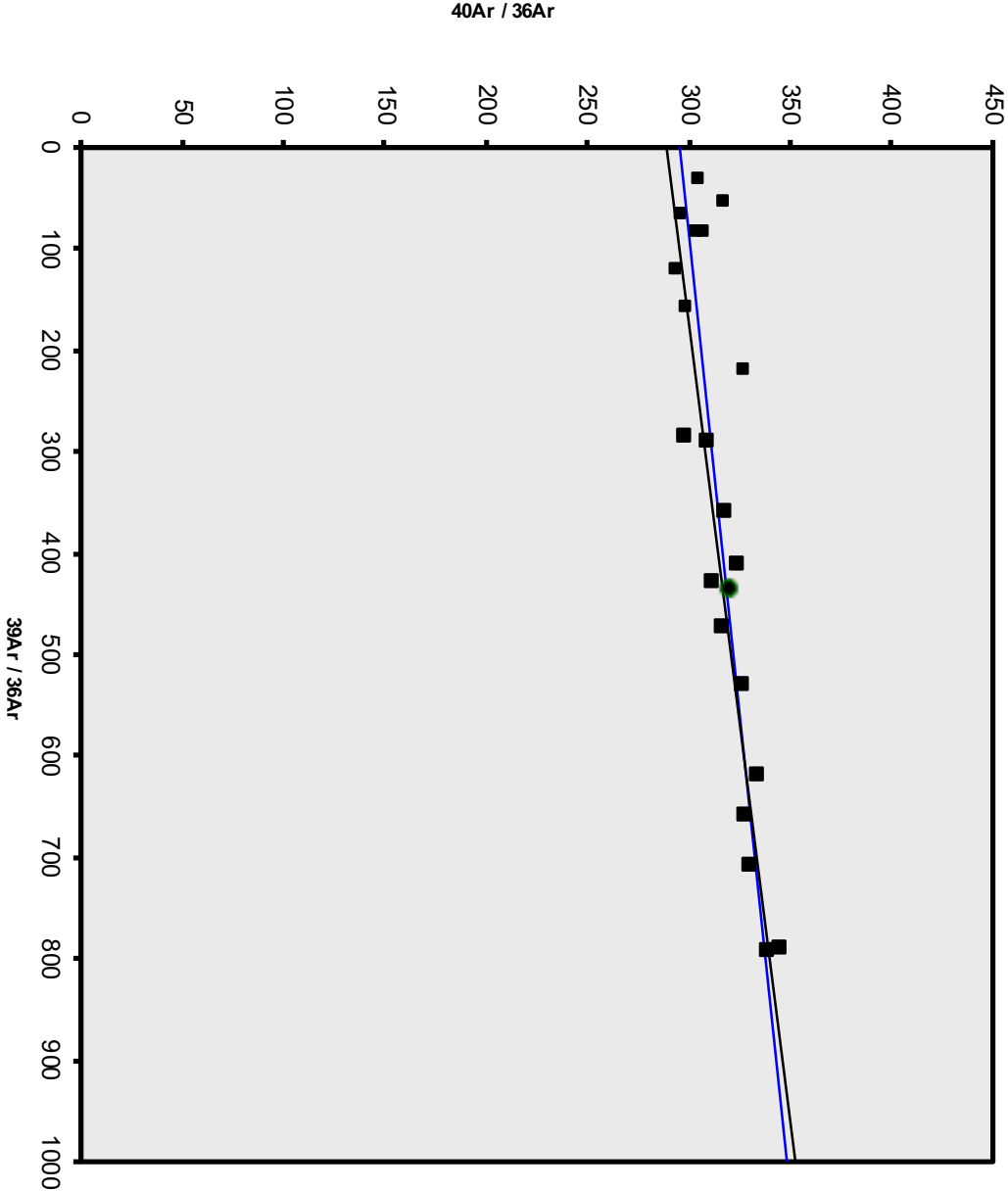
Ar-Ages in Ka

WEIGHTED
PLATEAU
151.2 ± 16.8
TOTAL FUSION
153.5 ± 18.8
NORMAL
ISOCHRON
181.8 ± 50.2
INVERSE
ISOCHRON
180.1 ± 45.2

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02483.AGE >>> SC12-046 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
151.2 ± 16.8
TOTAL FUSION
153.5 ± 18.8
NORMAL
ISOCHRON
181.8 ± 50.2
INVERSE
ISOCHRON
180.1 ± 45.2

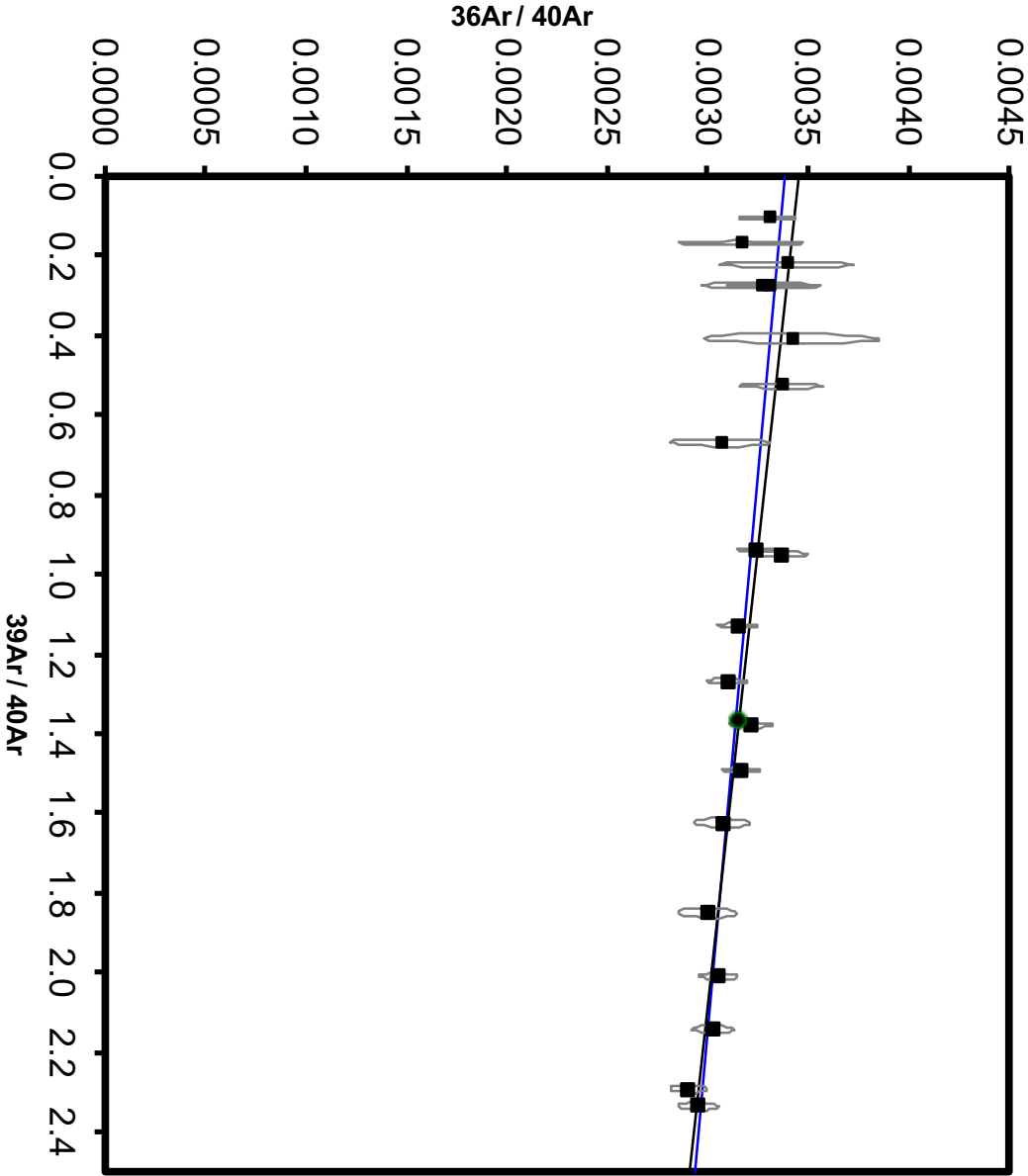
MSWD
(PROBABILITY)
1.18 (30%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03

14D02483.AGE >>> SC12-046 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
151.2 ± 16.8
TOTAL FUSION
153.5 ± 18.8
NORMAL
ISOCHRON
181.8 ± 50.2
INVERSE
ISOCHRON
180.1 ± 45.2
MSWD
(PROBABILITY)
1.18 (30%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Incremental Heating			36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D02453	1.7 %	✓	0.3973605	39.2631	0.0804611	3.99965	1.54153	1.11 $\pm$ 1.23	1.30	0.66	0.044 $\pm$ 0.014
14D02455	1.8 %	✓	0.1904641	21.8472	0.0468569	2.33059	1.88194	2.33 $\pm$ 1.86	3.24	0.38	0.046 $\pm$ 0.027
14D02456	1.9 %	✓	0.2268881	21.5871	0.0000505	4.21287	2.58692	1.77 $\pm$ 1.10	3.71	0.69	0.084 $\pm$ 0.054
14D02457	2.1 %	✓	0.1147709	20.7156	0.0000000	2.75209	2.04234	2.14 $\pm$ 1.53	5.68	0.45	0.057 $\pm$ 0.038
14D02459	2.3 %	✓	0.1718274	36.8065	0.0265507	6.61598	4.16940	1.82 $\pm$ 0.65	7.59	1.09	0.077 $\pm$ 0.028
14D02460	2.5 %	✓	0.0885199	25.7145	0.0294908	4.71262	3.13684	1.92 $\pm$ 0.86	10.71	0.78	0.079 $\pm$ 0.040
14D02462	2.8 %	✓	0.1351598	41.1481	0.0751800	9.13600	5.93523	1.87 $\pm$ 0.48	12.94	1.51	0.095 $\pm$ 0.032
14D02463	3.2 %	✓	0.1206051	57.1791	0.0277765	11.29030	7.06019	1.80 $\pm$ 0.37	16.53	1.86	0.085 $\pm$ 0.020
14D02465	4.0 %	✓	0.2292617	128.8385	0.0674891	31.80435	18.55520	1.68 $\pm$ 0.14	21.49	5.24	0.106 $\pm$ 0.011
14D02466	5.0 %	✓	0.2747373	286.0413	0.1003951	71.44787	40.05167	1.62 $\pm$ 0.07	33.02	11.78	0.107 $\pm$ 0.005
14D02468	6.0 %	✓	0.1624152	275.9605	0.0644036	68.73488	38.59986	1.62 $\pm$ 0.07	44.54	11.33	0.107 $\pm$ 0.005
14D02469	7.0 %	✓	0.1643150	298.8334	0.0000000	70.44011	40.18847	1.64 $\pm$ 0.06	45.25	11.61	0.101 $\pm$ 0.005
14D02471	8.2 %	✓	0.1470118	289.2969	0.0495181	68.30545	38.50604	1.63 $\pm$ 0.07	46.95	11.26	0.102 $\pm$ 0.005
14D02472	9.6 %	✓	0.0998053	264.1155	0.0535868	58.96202	33.46733	1.64 $\pm$ 0.08	53.11	9.72	0.096 $\pm$ 0.005
14D02474	10.2 %	✓	0.0756198	142.3819	0.0000000	34.34186	19.12435	1.61 $\pm$ 0.12	46.08	5.66	0.104 $\pm$ 0.009
14D02475	11.2 %	✓	0.0808528	137.5889	0.0000000	30.19979	17.08565	1.63 $\pm$ 0.14	41.66	4.98	0.094 $\pm$ 0.009
14D02477	13.2 %	✓	0.1229788	196.9180	0.0377253	37.71293	20.33629	1.55 $\pm$ 0.12	35.86	6.22	0.082 $\pm$ 0.006
14D02478	15.4 %	✓	0.1366798	268.7700	0.0000000	36.83371	19.59922	1.53 $\pm$ 0.12	32.65	6.07	0.059 $\pm$ 0.003
14D02480	18.0 %	✓	0.1035957	224.5305	0.0191520	29.83517	16.68664	1.61 $\pm$ 0.15	35.26	4.92	0.057 $\pm$ 0.004
14D02482	21.0 %	✓	0.0958961	246.5888	0.0410206	23.06051	13.10417	1.64 $\pm$ 0.19	31.60	3.80	0.040 $\pm$ 0.002
Σ			3.1387651	3024.1252	0.7196573	606.72875	343.65929				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-020 Material = Groundmass Location = Galapagos St. Cruz Island Analyst = Dan Miggins Project = GALAPAGOS HARPP (13-07) Mass Discrimination Law = LIN Irradiation = 13-OSU-03 J = 0.00159508 $\pm$ 0.14000000 FCT-3 = 28.340 $\pm$ 0.564 Ma	Age Plateau	0.56307 $\pm$ 0.00908 $\pm$ 1.61%	1.62 $\pm$ 0.03 $\pm$ 1.64% Full External Error $\pm$ 0.05 Analytical Error $\pm$ 0.03	0.50 96% 1.65 1.0000	100.00 20 2 σ Confidence Limit Error Magnification	0.069 $\pm$ 0.012
	Total Fusion Age	0.56641 $\pm$ 0.01140 $\pm$ 2.01%	1.63 $\pm$ 0.03 $\pm$ 2.03% Full External Error $\pm$ 0.05 Analytical Error $\pm$ 0.03		20	0.086 $\pm$ 0.002

OSU Argon Geochronology Lab

Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02453	1.7 %	✓	10.07 $\pm$ 0.26	299.38 $\pm$ 4.36	0.4983
14D02455	1.8 %	✓	12.24 $\pm$ 0.56	305.38 $\pm$ 8.13	0.4946
14D02456	1.9 %	✓	18.57 $\pm$ 0.56	306.90 $\pm$ 7.33	0.6898
14D02457	2.1 %	✓	23.98 $\pm$ 1.20	313.29 $\pm$ 13.40	0.7222
14D02459	2.3 %	✓	38.50 $\pm$ 1.15	319.77 $\pm$ 9.29	0.8319
14D02460	2.5 %	✓	53.24 $\pm$ 2.77	330.94 $\pm$ 17.51	0.8615
14D02462	2.8 %	✓	67.59 $\pm$ 2.44	339.41 $\pm$ 12.64	0.9005
14D02463	3.2 %	✓	93.61 $\pm$ 3.56	354.04 $\pm$ 14.11	0.9141
14D02465	4.0 %	✓	138.73 $\pm$ 3.04	376.43 $\pm$ 8.59	0.9417
14D02466	5.0 %	✓	260.06 $\pm$ 5.16	441.28 $\pm$ 8.99	0.9652
14D02468	6.0 %	✓	423.20 $\pm$ 13.04	533.16 $\pm$ 16.82	0.9732
14D02469	7.0 %	✓	428.69 $\pm$ 12.79	540.08 $\pm$ 16.51	0.9729
14D02471	8.2 %	✓	464.63 $\pm$ 16.07	557.42 $\pm$ 19.69	0.9765
14D02472	9.6 %	✓	590.77 $\pm$ 28.25	630.83 $\pm$ 30.75	0.9794
14D02474	10.2 %	✓	454.14 $\pm$ 26.31	548.40 $\pm$ 32.73	0.9684
14D02475	11.2 %	✓	373.52 $\pm$ 20.81	506.82 $\pm$ 29.17	0.9649
14D02477	13.2 %	✓	306.66 $\pm$ 12.01	460.86 $\pm$ 18.67	0.9622
14D02478	15.4 %	✓	269.49 $\pm$ 9.67	438.90 $\pm$ 16.32	0.9596
14D02480	18.0 %	✓	288.00 $\pm$ 13.77	456.57 $\pm$ 22.55	0.9637
14D02482	21.0 %	✓	240.47 $\pm$ 11.59	432.15 $\pm$ 21.70	0.9532

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Normal Isochron	296.35 $\pm$ 2.84 $\pm$ 0.96%	0.56019 $\pm$ 0.01251 $\pm$ 2.23%	1.62 $\pm$ 0.04 $\pm$ 2.25%	0.51 95%
			Full External Error $\pm$ 0.05 Analytical Error $\pm$ 0.04	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.67 1.0000 20	Convergence Number of Iterations Calculated Line	0.000005079001 9 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02453	1.7 %	✓	0.0336214 $\pm$ 0.0007490	0.00334024 $\pm$ 0.00004860	0.0803
14D02455	1.8 %	✓	0.0400693 $\pm$ 0.0015954	0.00327460 $\pm$ 0.00008716	0.1023
14D02456	1.9 %	✓	0.0605016 $\pm$ 0.0013298	0.00325837 $\pm$ 0.00007784	0.1441
14D02457	2.1 %	✓	0.0765381 $\pm$ 0.0026962	0.00319188 $\pm$ 0.00013647	0.1884
14D02459	2.3 %	✓	0.1204122 $\pm$ 0.0020604	0.00312730 $\pm$ 0.00009088	0.2446
14D02460	2.5 %	✓	0.1608707 $\pm$ 0.0044446	0.00302173 $\pm$ 0.00015987	0.2925
14D02462	2.8 %	✓	0.1991501 $\pm$ 0.0032686	0.00294627 $\pm$ 0.00010975	0.2852
14D02463	3.2 %	✓	0.2644160 $\pm$ 0.0042930	0.00282454 $\pm$ 0.00011256	0.3120
14D02465	4.0 %	✓	0.3685238 $\pm$ 0.0028352	0.00265650 $\pm$ 0.00006063	0.2816
14D02466	5.0 %	✓	0.5893261 $\pm$ 0.0031409	0.00226613 $\pm$ 0.00004618	0.2305
14D02468	6.0 %	✓	0.7937644 $\pm$ 0.0057566	0.00187560 $\pm$ 0.00005916	0.2143
14D02469	7.0 %	✓	0.7937490 $\pm$ 0.0056082	0.00185157 $\pm$ 0.00005659	0.2166
14D02471	8.2 %	✓	0.8335215 $\pm$ 0.0063435	0.00179396 $\pm$ 0.00006336	0.2032
14D02472	9.6 %	✓	0.9365024 $\pm$ 0.0092119	0.00158522 $\pm$ 0.00007726	0.1931
14D02474	10.2 %	✓	0.8281134 $\pm$ 0.0123288	0.00182348 $\pm$ 0.00010883	0.2407
14D02475	11.2 %	✓	0.7369821 $\pm$ 0.0111338	0.00197309 $\pm$ 0.00011355	0.2509
14D02477	13.2 %	✓	0.6654065 $\pm$ 0.0073437	0.00216984 $\pm$ 0.00008791	0.2556
14D02478	15.4 %	✓	0.6140168 $\pm$ 0.0064236	0.00227845 $\pm$ 0.00008470	0.2631
14D02480	18.0 %	✓	0.6307759 $\pm$ 0.0083238	0.00219022 $\pm$ 0.00010819	0.2519
14D02482	21.0 %	✓	0.5564597 $\pm$ 0.0084482	0.00231401 $\pm$ 0.00011620	0.2807

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ma)	MSWD
Inverse Isochron	296.43 $\pm$ 2.84 $\pm$ 0.96%	0.56028 $\pm$ 0.01249 $\pm$ 2.23%	1.62 $\pm$ 0.04 $\pm$ 2.25%	0.51 96%
			Full External Error $\pm$ 0.05 Analytical Error $\pm$ 0.04	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	1.67 1.0000 20 50.6%	Convergence Number of Iterations Calculated Line	0.0031667656 3 Weighted York-2

OSU Argon Geochronology Lab
CEOAS Oregon State University, Corvallis, USA

Relative Abundances			36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02453	1.7 %	✓	0.4077592	0.516	39.2631	16.444	0.2057014	20.941	4.02608	1.072	118.9656	0.255	0.38542 ± 0.42796	1.11 ± 1.23	1.30	0.66	0.044 ± 0.014
14D02455	1.8 %	✓	0.1962511	0.816	21.8472	29.400	0.1120136	36.993	2.34530	1.901	58.1664	0.521	0.80750 ± 0.64684	2.33 ± 1.86	3.24	0.38	0.046 ± 0.027
14D02456	1.9 %	✓	0.2325872	0.749	21.5871	32.049	0.0933990	43.240	4.22740	1.000	69.6366	0.435	0.61405 ± 0.38238	1.77 ± 1.10	3.71	0.69	0.084 ± 0.054
14D02457	2.1 %	✓	0.1202398	1.102	20.7156	33.373	0.0175585	227.284	2.76603	1.530	35.9599	0.842	0.74211 ± 0.53243	2.14 ± 1.53	5.68	0.45	0.057 ± 0.038
14D02459	2.3 %	✓	0.1815553	0.806	36.8065	18.390	0.1390712	30.969	6.64075	0.648	54.9511	0.551	0.63020 ± 0.22590	1.82 ± 0.65	7.59	1.09	0.077 ± 0.028
14D02460	2.5 %	✓	0.0853207	1.345	25.7145	25.522	0.1032390	41.615	4.72993	0.908	29.2992	1.034	0.66563 ± 0.29956	1.92 ± 0.86	10.71	0.78	0.079 ± 0.040
14D02462	2.8 %	✓	0.1460540	0.999	41.1481	17.005	0.2101287	19.172	9.16370	0.483	45.8842	0.660	0.64965 ± 0.16621	1.87 ± 0.48	12.94	1.51	0.095 ± 0.032
14D02463	3.2 %	✓	0.1357118	1.020	57.1791	11.711	0.1867490	21.811	11.32878	0.390	42.7104	0.710	0.62533 ± 0.12932	1.80 ± 0.37	15.53	1.86	0.085 ± 0.020
14D02465	4.0 %	✓	0.2633029	0.657	128.8385	5.264	0.4901801	8.371	31.89106	0.155	86.3341	0.351	0.58342 ± 0.05007	1.68 ± 0.14	21.49	5.24	0.106 ± 0.011
14D02466	5.0 %	✓	0.3502937	0.568	286.0413	2.443	1.0045800	4.208	71.64038	0.091	121.3087	0.250	0.56057 ± 0.02402	1.62 ± 0.07	33.02	11.78	0.107 ± 0.005
14D02468	6.0 %	✓	0.2352954	0.706	275.9605	2.560	0.9153205	4.557	68.92060	0.094	86.6630	0.350	0.56158 ± 0.02334	1.62 ± 0.07	44.54	11.33	0.107 ± 0.005
14D02469	7.0 %	✓	0.2432070	0.671	298.8334	2.313	0.8610871	4.642	70.64122	0.088	88.8147	0.342	0.57053 ± 0.02229	1.64 ± 0.06	45.25	11.61	0.101 ± 0.005
14D02471	8.2 %	✓	0.2234067	0.741	289.2969	2.521	0.8945229	4.717	68.50015	0.090	82.0170	0.369	0.56373 ± 0.02371	1.63 ± 0.07	46.95	11.26	0.102 ± 0.005
14D02472	9.6 %	✓	0.1695540	0.843	264.1155	2.736	0.7799403	5.291	59.13976	0.102	63.0194	0.481	0.56761 ± 0.02604	1.64 ± 0.08	53.11	9.72	0.096 ± 0.005
14D02474	10.2 %	✓	0.1132086	1.203	142.3819	4.555	0.3945870	10.254	34.43768	0.138	41.5047	0.731	0.55688 ± 0.04161	1.61 ± 0.12	46.08	5.66	0.104 ± 0.009
14D02475	11.2 %	✓	0.1171762	1.162	137.5889	4.925	0.3775742	10.849	30.29238	0.158	41.0081	0.738	0.56575 ± 0.04839	1.63 ± 0.14	41.66	4.98	0.094 ± 0.009
14D02477	13.2 %	✓	0.1749807	0.878	196.9180	3.555	0.5172548	8.307	37.84546	0.136	56.7146	0.534	0.53924 ± 0.04097	1.55 ± 0.12	35.86	6.22	0.082 ± 0.006
14D02478	15.4 %	✓	0.2076351	0.768	268.7700	2.611	0.4651030	8.826	37.01459	0.132	60.0253	0.505	0.53210 ± 0.04257	1.53 ± 0.12	32.65	6.07	0.059 ± 0.003
14D02480	18.0 %	✓	0.1628797	0.939	224.5305	3.273	0.4092481	10.305	29.98628	0.156	47.3293	0.640	0.55929 ± 0.05303	1.61 ± 0.15	35.26	4.92	0.057 ± 0.004
14D02482	21.0 %	✓	0.1610125	0.852	246.5888	2.823	0.3556481	11.445	23.22646	0.201	41.4648	0.731	0.56825 ± 0.06466	1.64 ± 0.19	31.60	3.80	0.040 ± 0.002
Σ			3.9374315	0.179	3024.1252	1.018	8.5329065	2.172	608.76398	0.037	1271.7772	0.107					

Information on Analysis
and Constants Used in Calculations

Sample = SC12-020
Material = Groundmass
Location = Galapagos St. Cruz Island
Analyst = Dan Miggins
Project = GALAPAGOS | HARPP (13-07)
Mass Discrimination Law = LIN
Irradiation = 13-OSU-03
J = 0.00159508 ± 0.14000000
FCT-3 = 28.340 ± 0.564 Ma
IGSN = 23.8
Preferred Age = Undefined
Classification = Undefined
Experiment Type = 5.52
Extraction Method = Undefined
Heating = 0 sec
Isolation = 6.00 min
Instrument = ARGUS-VI
Lithology = Undefined
Lat-Lon = Undefined - Undefined
Collector Calibrations = 40Ar 36Ar

Age Equations = Min et al. (2000)
Negative Intensities = Allowed
Decay Constant 40K = 5.530 ± 0.048 E-10 1/a
Decay Constant 39Ar = 2.940 ± 0.012 E-07 1/h
Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/h
Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a
Decay Constant 40K(EC,β⁺) = 0.580 ± 0.009 E-10 1/a
Decay Constant 40K(β⁻) = 4.950 ± 0.043 E-10 1/a
Atmospheric Ratio 40/36(a) = 295.50
Atmospheric Ratio 38/36(a) = 0.1869
Production Ratio 39/37(ca) = 0.000673
Production Ratio 38/37(ca) = 0.000139
Production Ratio 36/37(ca) = 0.000264
Production Ratio 40/38(k) = 0.001010
Production Ratio 38/39(k) = 0.011380
Production Ratio 36/38(cl) = 262.80 ± 1.71
Scaling Ratio K/Ca = 0.430
Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04
Atomic Weight K = 39.0983 ± 0.0001 g

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%, n)	K/Ca ± 2σ
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Age Plateau	0.56307 ± 0.00908 ± 1.61%	0.56307 ± 0.00908 ± 1.61%	1.62 ± 0.03 ± 1.64%	0.50 96%	100.00 20	0.069 ± 0.012
			Full External Error ± 0.05 Analytical Error ± 0.03		1.67 10.000	2σ Confidence Limit Error Magnification
Total Fusion Age	0.56641 ± 0.01140 ± 2.01%	0.56641 ± 0.01140 ± 2.01%	1.63 ± 0.03 ± 2.03%		20	0.086 ± 0.002
			Full External Error ± 0.05 Analytical Error ± 0.03			
Normal Isochron	296.35 ± 2.84 ± 0.96%	0.56019 ± 0.01251 ± 2.23%	1.62 ± 0.04 ± 2.25%	0.51 96%	100.00 20	0.094 ± 0.009
			Full External Error ± 0.05 Analytical Error ± 0.04		1.67 10.000	2σ Confidence Limit Error Magnification
				0.0000050790	9 0.0000050790	Number of Iterations Convergence
Inverse Isochron	296.43 ± 2.84 ± 0.96%	0.56028 ± 0.01249 ± 2.23%	1.62 ± 0.04 ± 2.25%	0.51 96%	100.00 20	0.094 ± 0.009
			Full External Error ± 0.05 Analytical Error ± 0.04		1.67 10.000	2σ Confidence Limit Error Magnification
					3 0.0031667656	Number of Iterations Convergence
					51%	Spreading Factor

Depositing Patterns	36Ar(a) [A]	%1σ	36Ar(c) [A]	%1σ	36Ar(ea) [A]	%1σ	36Ar(ed) [A]	%1σ	37Ar(ca) [A]	%1σ	38Ar(a) [A]	%1σ	38Ar(c) [A]	%1σ	38Ar(h) [A]	%1σ	38Ar(ea) [A]	%1σ	38Ar(ed) [A]	%1σ	39Ar(h) [A]	%1σ	39Ar(ea) [A]	%1σ	40Ar(r) [A]	%1σ	40Ar(a) [A]	%1σ	40Ar(c) [A]	%1σ	40Ar(h) [A]	%1σ		
14D02463	1.7%	✓	0.007365	0.08	0.0000000	0.00	0.010354	16.44	0.0000332	33.57	39.261	16.44	0.014267	0.08	0.0000000	0.00	0.0445361	1.08	0.0054576	16.44	0.0848611	53.57	3.99855	1.08	0.0264340	16.44	1.54153	55.51	117.42003	0.08	0.0000000	0.00	0.0040287	1.08
14D02465	1.8%	✓	0.190461	1.22	0.0000000	0.00	0.0057077	29.40	0.0000194	88.48	21.8472	29.40	0.0058077	1.22	0.0000000	0.00	0.0265221	1.52	0.0020388	29.40	0.0488569	88.48	2.33959	1.52	0.0147031	29.40	1.88194	40.01	55.26213	1.22	0.0000000	0.00	0.0023539	1.52
14D02466	1.9%	✓	0.220981	1.11	0.0000000	0.00	0.0059590	32.35	0.0000000	789748	21.5971	32.35	0.0049424	1.11	0.0000000	0.00	0.0147462	1.01	0.0020388	32.35	0.0000565	789748	4.21287	1.01	0.0145281	32.35	2.98882	31.12	67.04844	1.11	0.0000000	0.00	0.0042590	1.01
14D02467	2.1%	✓	0.114770	1.86	0.0000000	0.00	0.0054689	33.37	0.0000000	0.00	20.7155	33.37	0.0214607	1.86	0.0000000	0.00	0.0311188	1.55	0.0020795	33.37	0.0000000	0.00	2.75039	1.55	0.010416	33.37	2.04234	35.84	33.91479	1.86	0.0000000	0.00	0.0057796	1.55
14D02469	2.3%	✓	0.1718274	1.34	0.0000000	0.00	0.0087169	18.39	0.0000110	182.29	36.8065	18.39	0.0021145	1.34	0.0000000	0.00	0.0752988	0.65	0.0026181	18.39	0.0265507	182.29	6.61938	0.65	0.0247708	18.39	4.16940	17.91	50.77501	1.34	0.0000000	0.00	0.0068261	0.65
14D02490	2.5%	✓	0.0880339	2.43	0.0000000	0.00	0.0067886	25.52	0.0000122	145.75	25.7145	25.52	0.0165444	2.43	0.0000000	0.00	0.0053295	0.50	0.0033343	25.52	0.0294498	145.75	4.71382	0.50	0.0173568	25.52	3.13884	22.48	26.12052	2.43	0.0000000	0.00	0.0047857	0.50
14D02482	2.8%	✓	0.181938	1.24	0.0000000	0.00	0.0108311	17.01	0.0000311	53.62	41.1481	17.01	0.0026364	1.24	0.0000000	0.00	0.0039677	0.49	0.0057196	17.01	0.0518040	53.63	5.13800	0.49	0.0276927	17.01	5.83923	12.78	38.93873	1.24	0.0000000	0.00	0.0092274	0.49
14D02483	3.2%	✓	0.226051	1.86	0.0000000	0.00	0.0150503	11.71	0.0000115	140.71	57.1791	11.71	0.0225411	1.86	0.0000000	0.00	0.1288268	0.39	0.0079479	11.71	0.0777765	140.71	11.29200	0.39	0.0384815	11.71	7.00019	10.33	35.63880	1.86	0.0000000	0.00	0.0114032	0.39
14D02486	4.0%	✓	0.2226117	1.09	0.0000000	0.00	0.0049174	5.26	0.0000279	89.84	128.8345	5.26	0.0429460	1.09	0.0000000	0.00	0.3611035	0.16	0.0171085	5.26	0.0674891	89.85	31.80435	0.16	0.0887083	5.26	18.55020	4.29	67.74883	1.09	0.0000000	0.00	0.0021224	0.16
14D02488	5.0%	✓	0.2747373	0.89	0.0000000	0.00	0.0705149	2.44	0.0000415	42.14	288.0413	2.44	0.0013084	0.89	0.0000000	0.00	0.8130768	0.09	0.0307587	2.44	0.1003651	42.15	71.44787	0.09	0.1820508	2.44	40.05167	2.14	81.19889	0.89	0.0000000	0.00	0.0727404	0.09
14D02488	6.0%	✓	0.1624152	1.54	0.0000000	0.00	0.0739536	2.58	0.0000286	64.81	275.9051	2.58	0.0020564	1.54	0.0000000	0.00	0.7820230	0.09	0.0382595	2.58	0.0644206	64.81	88.73488	0.09	0.1802114	2.58	38.38988	2.07	47.95989	1.54	0.0000000	0.00	0.0094222	0.09
14D02489	7.0%	✓	0.1643100	1.49	0.0000000	0.00	0.0788820	2.31	0.0000000	0.00	268.8334	2.31	0.0037055	1.49	0.0000000	0.00	0.8019084	0.09	0.0416328	2.31	0.0000000	0.00	70.44011	0.09	0.2011149	2.31	40.18847	1.96	48.59508	1.49	0.0000000	0.00	0.0711446	0.09
14D02471	8.2%	✓	0.1429118	1.73	0.0000000	0.00	0.0678744	2.52	0.0000205	85.26	289.2969	2.52	0.0214261	1.73	0.0000000	0.00	0.7771803	0.09	0.0405123	2.52	0.0490181	85.26	68.30545	0.09	0.1948888	2.52	38.00004	2.10	40.44200	1.73	0.0000000	0.00	0.0686885	0.09
14D02472	9.6%	✓	0.0888033	2.39	0.0000000	0.00	0.0607285	2.74	0.0000221	77.05	264.1155	2.74	0.0188036	2.39	0.0000000	0.00	0.6107877	0.10	0.0387121	2.74	0.0303668	77.06	58.96022	0.10	0.1774857	2.74	31.80733	2.29	29.46848	2.39	0.0000000	0.00	0.0666116	0.10
14D02474	10.2%	✓	0.0756196	2.89	0.0000000	0.00	0.0375888	4.55	0.0000000	0.00	142.3819	4.55	0.0141333	2.89	0.0000000	0.00	0.3908104	0.14	0.0191911	4.55	0.0000000	0.00	34.34186	0.14	0.0666230	4.55	19.12435	3.73	22.34655	2.89	0.0000000	0.00	0.0348603	0.14
14D02475	11.2%	✓	0.0859328	2.78	0.0000000	0.00	0.0363235	4.93	0.0000000	0.00	137.5889	4.93	0.0101114	2.78	0.0000000	0.00	0.3487278	0.16	0.0191249	4.93	0.0000000	0.00	35.18919	0.16	0.0620573	4.93	17.08865	4.27	22.89199	2.78	0.0000000	0.00	0.0326019	0.16
14D02477	12.1%	✓	0.122978	1.85	0.0000000	0.00	0.0519863	3.56	0.0000155	113.86	168.8161	3.56	0.0229847	1.85	0.0000000	0.00	0.4249172	0.14	0.0277786	3.56	0.0377253	113.86	37.71303	0.14	0.1352558	3.56	20.33629	3.80	36.34524	1.85	0.0000000	0.00	0.0308061	0.14
14D02478	15.4%	✓	0.136278	1.79	0.0000000	0.00	0.0705953	2.81	0.0000000	0.00	268.7700	2.81	0.0205455	1.79	0.0000000	0.00	0.4191676	0.13	0.0370380	2.81	0.0000000	0.00	36.83371	0.13	0.183852	2.81	19.59922	4.00	40.30889	1.79	0.0000000	0.00	0.0272320	0.13
14D02480	19.0%	✓	0.1032857	2.38	0.0000000	0.00	0.0602761	3.27	0.0000079	220.32	224.4305	3.27	0.0101820	2.38	0.0000000	0.00	0.3305243	0.16	0.0310287	3.27	0.0101520	220.32	26.83517	0.16	0.1511691	3.27	16.68564	4.14	35.41252	2.38	0.0000000	0.00	0.0301335	0.16
14D02482	21.0%	✓	0.0656881	2.40	0.0000000	0.00	0.0602994	2.82	0.0000170	99.28	245.5888	2.82	0.0179200	2.40	0.0000000	0.00	0.2624268	0.20	0.0342758	2.82	0.0140206	99.29	23.98951	0.20	0.1659542	2.82	13.10417	5.69	28.33700	2.40	0.0000000	0.00	0.0232911	0.20
Σ	3.1387651	0.34	0.0000000	0.00	0.7983591	1.02	0.00002073	22.49	3004.1252	1.02	0.5989552	0.34	0.0000000	0.00	0.6046731	0.04	0.4200534	1.02	0.7195573	22.49	605.72875	0.04	2.0362363	1.02	343.65929	1.01	927.52510	0.34	0.0000000	0.00	0.6127969	0.04		
Σ							3.8074315	0.34	3004.1252	1.02									6.6101300	1.88			608.76398	0.04							0.717772	0.37		

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Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02453	1.7 %	✓	29.548759	0.325533	9.752185	1.607029	0.101280	0.001205	254.278	152.164573	1.00179668	5.710E-12
14D02455	1.8 %	✓	24.801321	0.488729	9.315315	2.744391	0.083679	0.001731	254.295	152.216761	1.00179680	2.792E-12
14D02456	1.9 %	✓	16.472693	0.179587	5.106482	1.637370	0.055019	0.000687	254.304	152.243907	1.00179686	3.343E-12
14D02457	2.1 %	✓	13.000532	0.227043	7.489284	2.502007	0.043470	0.000820	254.313	152.268968	1.00179692	1.726E-12
14D02459	2.3 %	✓	8.274835	0.070409	5.542528	1.019908	0.027340	0.000283	254.330	152.321193	1.00179705	2.638E-12
14D02460	2.5 %	✓	6.194436	0.085230	5.436545	1.388413	0.020153	0.000327	254.338	152.346267	1.00179711	1.406E-12
14D02462	2.8 %	✓	5.007170	0.040961	4.490339	0.763902	0.015938	0.000177	254.356	152.398518	1.00179723	2.202E-12
14D02463	3.2 %	✓	3.770080	0.030538	5.047244	0.591389	0.011979	0.000131	254.365	152.425695	1.00179729	2.050E-12
14D02465	4.0 %	✓	2.707159	0.010399	4.039956	0.212761	0.008256	0.000056	254.381	152.475882	1.00179741	4.144E-12
14D02466	5.0 %	✓	1.693301	0.004507	3.992738	0.097618	0.004890	0.000028	254.390	152.503074	1.00179747	5.823E-12
14D02468	6.0 %	✓	1.257432	0.004555	4.004035	0.102561	0.003414	0.000024	254.408	152.555378	1.00179760	4.160E-12
14D02469	7.0 %	✓	1.257264	0.004437	4.230298	0.097900	0.003443	0.000023	254.416	152.580491	1.00179765	4.263E-12
14D02471	8.2 %	✓	1.197326	0.004551	4.223303	0.106522	0.003261	0.000024	254.433	152.632822	1.00179778	3.937E-12
14D02472	9.6 %	✓	1.065600	0.005235	4.465955	0.122283	0.002867	0.000024	254.442	152.657948	1.00179784	3.025E-12
14D02474	10.2 %	✓	1.205211	0.008962	4.134480	0.188396	0.003287	0.000040	254.459	152.710306	1.00179796	1.992E-12
14D02475	11.2 %	✓	1.353744	0.010215	4.542029	0.223829	0.003868	0.000045	254.468	152.737539	1.00179802	1.968E-12
14D02477	13.2 %	✓	1.498585	0.008260	5.203213	0.185131	0.004624	0.000041	254.485	152.789924	1.00179815	2.722E-12
14D02478	15.4 %	✓	1.621666	0.008472	7.261190	0.189818	0.005610	0.000044	254.494	152.815076	1.00179820	2.881E-12
14D02480	18.0 %	✓	1.578365	0.010402	7.487775	0.245365	0.005432	0.000052	254.511	152.867487	1.00179833	2.272E-12
14D02482	21.0 %	✓	1.785238	0.013533	10.616716	0.300431	0.006932	0.000061	254.528	152.919917	1.00179845	1.990E-12

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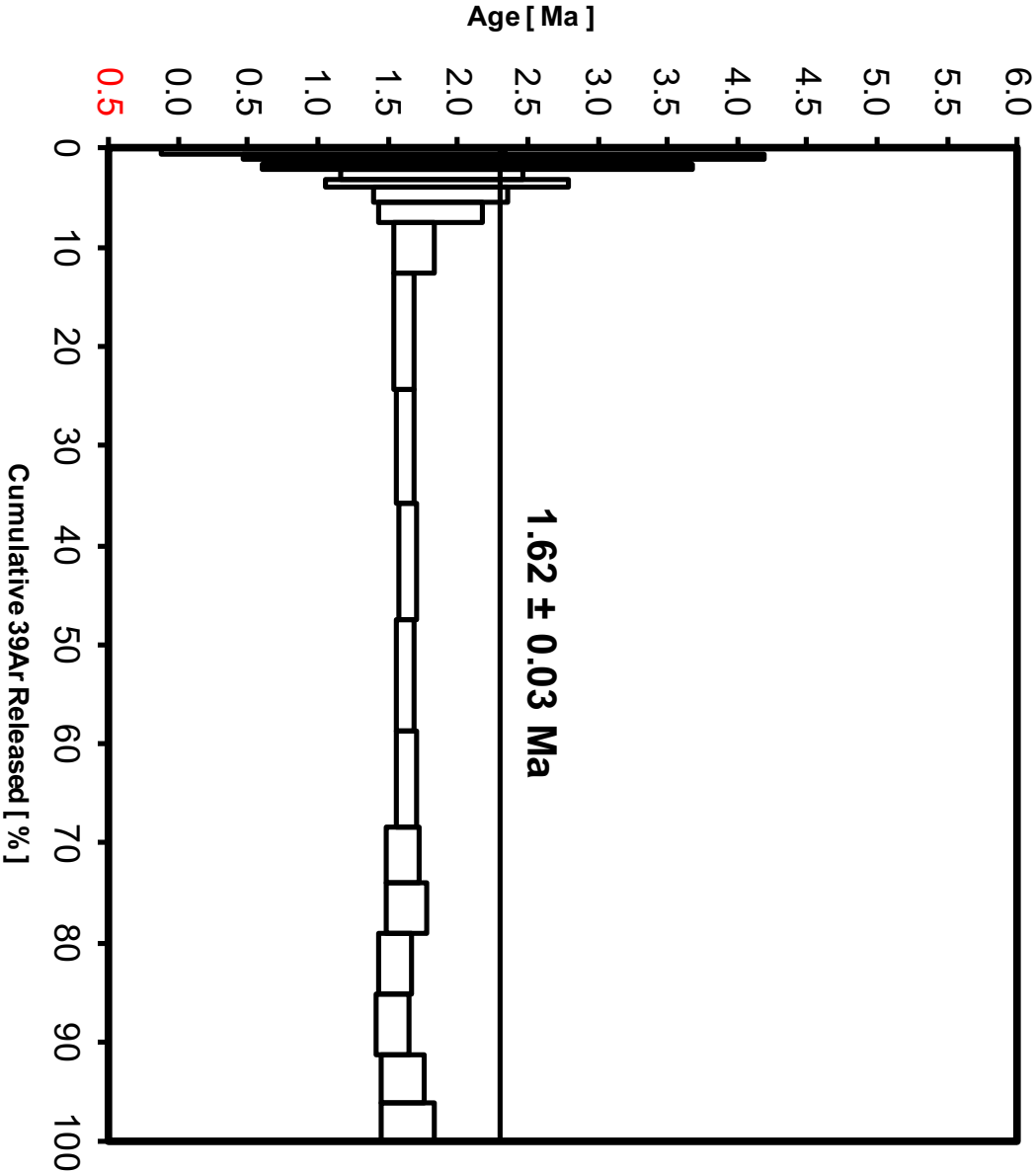
Procedure Blanks		36Ar [fA]	1 σ	37Ar [fA]	1 σ	38Ar [fA]	1 σ	39Ar [fA]	1 σ	40Ar [fA]	1 σ
14D02453	1.7 %	0.0135695	0.0009226	0.0312689	0.0309553	0.0293445	0.0309261	0.0916865	0.0338933	3.8236287	0.3019190
14D02455	1.8 %	0.0135037	0.0009226	0.0290168	0.0309553	0.0268084	0.0309261	0.0913135	0.0338933	3.8120227	0.3019190
14D02456	1.9 %	0.0134696	0.0009226	0.0278458	0.0309553	0.0254896	0.0309261	0.0911195	0.0338933	3.8059875	0.3019190
14D02457	2.1 %	0.0134380	0.0009226	0.0267648	0.0309553	0.0242723	0.0309261	0.0909405	0.0338933	3.8004166	0.3019190
14D02459	2.3 %	0.0133723	0.0009226	0.0245127	0.0309553	0.0217362	0.0309261	0.0905674	0.0338933	3.7888106	0.3019190
14D02460	2.5 %	0.0133407	0.0009226	0.0234317	0.0309553	0.0205188	0.0309261	0.0903884	0.0338933	3.7832397	0.3019190
14D02462	2.8 %	0.0132750	0.0009226	0.0211797	0.0309553	0.0179827	0.0309261	0.0900154	0.0338933	3.7716337	0.3019190
14D02463	3.2 %	0.0132408	0.0009226	0.0200086	0.0309553	0.0166639	0.0309261	0.0898214	0.0338933	3.7655986	0.3019190
14D02465	4.0 %	0.0131777	0.0009226	0.0178466	0.0309553	0.0142293	0.0309261	0.0894633	0.0338933	3.7544568	0.3019190
14D02466	5.0 %	0.0131435	0.0009226	0.0166755	0.0309553	0.0129105	0.0309261	0.0892693	0.0338933	3.7484217	0.3019190
14D02468	6.0 %	0.0130778	0.0009226	0.0144235	0.0309553	0.0103744	0.0309261	0.0888963	0.0338933	3.7368157	0.3019190
14D02469	7.0 %	0.0130462	0.0009226	0.0133425	0.0309553	0.0091570	0.0309261	0.0887172	0.0338933	3.7312448	0.3019190
14D02471	8.2 %	0.0129805	0.0009226	0.0110904	0.0309553	0.0066209	0.0309261	0.0883442	0.0338933	3.7196388	0.3019190
14D02472	9.6 %	0.0129490	0.0009226	0.0100094	0.0309553	0.0054036	0.0309261	0.0881651	0.0338933	3.7140679	0.3019190
14D02474	10.2 %	0.0128832	0.0009226	0.0077573	0.0309553	0.0028675	0.0309261	0.0877921	0.0338933	3.7024619	0.3019190
14D02475	11.2 %	0.0128490	0.0009226	0.0065863	0.0309553	0.0015487	0.0309261	0.0875981	0.0338933	3.6964268	0.3019190
14D02477	13.2 %	0.0127833	0.0009226	0.0043342	0.0309553	0.0009874	0.0309261	0.0872251	0.0338933	3.6848208	0.3019190
14D02478	15.4 %	0.0127518	0.0009226	0.0032532	0.0309553	0.0022047	0.0309261	0.0870461	0.0338933	3.6792499	0.3019190
14D02480	18.0 %	0.0126860	0.0009226	0.0010011	0.0309553	0.0047408	0.0309261	0.0866730	0.0338933	3.6676439	0.3019190
14D02482	21.0 %	0.0126203	0.0009226	0.0012509	0.0309553	0.0072770	0.0309261	0.0863000	0.0338933	3.6560379	0.3019190

Intercept Values	36Ar [A]	1σ	r2		37Ar [A]	1σ	r2		38Ar [A]	1σ	r2		39Ar [A]	1σ	r2		40Ar [A]	1σ	r2		
14D02453	1.7%	0.4026080	0.0014676	0.6978	EXP 150 of 150	0.2221	0.0278	0.0126	EXP 150 of 150	0.1738902	0.0292363	0.0049	EXP 150 of 150	4.08649	0.02604	0.4521	EXP 150 of 150	123.03923	0.03644	0.9744	EXP 150 of 150
14D02455	1.8%	0.2007447	0.0011166	0.3277	EXP 150 of 150	0.1119	0.0275	0.0004	EXP 150 of 150	0.0838820	0.0286273	0.0071	EXP 150 of 150	2.41839	0.02837	0.1502	EXP 150 of 150	62.10068	0.03099	0.9221	EXP 150 of 150
14D02456	1.9%	0.2353794	0.0012503	0.3528	EXP 150 of 150	0.1114	0.0321	0.0009	EXP 150 of 150	0.0967894	0.0252133	0.0075	EXP 150 of 150	4.28568	0.02455	0.5908	EXP 150 of 150	73.58895	0.03096	0.9681	EXP 150 of 150
14D02457	2.1%	0.1281575	0.0008102	0.0899	EXP 150 of 150	0.1068	0.0321	0.0019	EXP 150 of 150	0.0905543	0.0246589	0.0315	EXP 150 of 150	2.83549	0.02473	0.2547	EXP 150 of 150	39.83590	0.03074	0.9921	EXP 150 of 150
14D02459	2.3%	0.1869922	0.0009463	0.3380	EXP 150 of 150	0.2128	0.0307	0.0008	EXP 150 of 150	0.1156673	0.0292276	0.0014	EXP 150 of 150	6.67973	0.02965	0.7486	EXP 150 of 150	58.85538	0.03175	0.9231	EXP 150 of 150
14D02460	2.5%	0.1042851	0.0007672	0.0015	EXP 150 of 150	0.1423	0.0288	0.0024	EXP 150 of 150	0.0814822	0.0290751	0.0001	EXP 150 of 150	4.78357	0.02967	0.5678	EXP 150 of 150	33.14403	0.03087	0.9850	EXP 149 of 150
14D02462	2.8%	0.1526205	0.0009770	0.0713	EXP 150 of 150	0.2440	0.0327	0.0000	EXP 150 of 150	0.1896261	0.0292957	0.0509	EXP 150 of 150	9.18252	0.02737	0.8393	EXP 150 of 150	49.75224	0.03105	0.9553	EXP 150 of 150
14D02463	3.2%	0.1427220	0.0008024	0.0917	EXP 150 of 150	0.3484	0.0299	0.0398	EXP 150 of 150	0.1678456	0.0251603	0.0558	EXP 149 of 150	11.33059	0.02682	0.8808	EXP 150 of 150	48.96575	0.03012	0.9548	EXP 150 of 150
14D02465	4.0%	0.2643621	0.0012012	0.4527	EXP 150 of 150	0.8119	0.0302	0.0127	EXP 150 of 150	0.4700727	0.0262100	0.0252	EXP 150 of 150	31.73276	0.02907	0.9804	EXP 150 of 150	90.27003	0.03608	0.8535	EXP 150 of 150
14D02466	5.0%	0.3473549	0.0014136	0.5544	EXP 150 of 150	1.8253	0.0297	0.1134	EXP 150 of 150	0.9796228	0.0280494	0.0880	EXP 150 of 150	71.17308	0.03289	0.9952	EXP 150 of 150	125.31207	0.03470	0.9839	EXP 150 of 150
14D02468	6.0%	0.2375705	0.0011488	0.3421	EXP 150 of 150	1.7620	0.0306	0.0439	EXP 150 of 150	0.8939697	0.0272122	0.0714	EXP 150 of 150	68.47405	0.03387	0.9945	EXP 150 of 150	90.58191	0.03348	0.8558	EXP 150 of 150
14D02469	7.0%	0.2450274	0.0010985	0.4564	EXP 149 of 150	1.9100	0.0285	0.1851	EXP 150 of 150	0.8418040	0.0246333	0.0909	EXP 150 of 150	70.18112	0.02738	0.9966	EXP 150 of 150	92.73258	0.03614	0.8762	EXP 150 of 150
14D02471	8.2%	0.2261304	0.0011551	0.3749	EXP 150 of 150	1.8502	0.0324	0.0674	EXP 150 of 150	0.8771751	0.0279273	0.0379	EXP 150 of 150	68.05630	0.03091	0.9992	EXP 150 of 150	85.95903	0.03081	0.8422	EXP 150 of 150
14D02472	9.6%	0.1747185	0.0009127	0.3017	EXP 150 of 150	1.6890	0.0323	0.1219	EXP 150 of 150	0.7651838	0.0265454	0.0757	EXP 150 of 150	58.76846	0.03254	0.9931	EXP 150 of 150	66.85586	0.03101	0.5691	EXP 150 of 150
14D02474	10.2%	0.1208943	0.0006708	0.0129	EXP 150 of 150	0.9079	0.0271	0.0018	EXP 150 of 150	0.3869877	0.0263237	0.0007	EXP 150 of 150	34.25792	0.02513	0.9877	EXP 150 of 150	45.29436	0.03438	0.9434	EXP 150 of 150
14D02475	11.2%	0.1246456	0.0008676	0.0452	EXP 150 of 150	0.6780	0.0299	0.0167	EXP 150 of 150	0.3714977	0.0261022	0.0000	EXP 150 of 150	30.14463	0.02725	0.9830	EXP 150 of 150	44.79575	0.03268	0.9521	EXP 150 of 150
14D02477	13.2%	0.1797305	0.0010519	0.3183	EXP 150 of 150	1.2613	0.0313	0.0312	EXP 150 of 150	0.5120394	0.0260762	0.0248	EXP 150 of 150	37.63864	0.02967	0.9892	EXP 150 of 150	60.51963	0.03205	0.6435	EXP 150 of 150
14D02478	15.4%	0.2108541	0.0010952	0.3570	EXP 149 of 150	1.7239	0.0302	0.0445	EXP 150 of 150	0.4617303	0.0262358	0.0007	EXP 150 of 150	36.81405	0.02811	0.9886	EXP 150 of 150	63.83070	0.03568	0.3003	EXP 150 of 150
14D02480	18.0%	0.1688877	0.0010568	0.1200	EXP 150 of 150	1.4414	0.0340	0.0325	EXP 149 of 150	0.4090813	0.0279201	0.0040	EXP 150 of 150	29.83997	0.02568	0.9831	EXP 150 of 150	51.09640	0.03254	0.8824	EXP 150 of 150
14D02482	21.0%	0.1662465	0.0008626	0.3124	EXP 150 of 150	1.5848	0.0300	0.1201	EXP 150 of 150	0.3586602	0.0251043	0.0268	EXP 150 of 150	23.13230	0.02802	0.9673	EXP 150 of 150	45.20794	0.03308	0.9230	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%Li	Standard Reference	Standard 40Ar/39Ar	%Li	J	%Li	Ar 40Ar/39Ar	%Li	MCP	%Li	Volume Ratio	Sensitivity (mol/mol)	Day	Month	Year	File	Min	Reset	Insulation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Notes	
HC00403	1.7%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	1.7	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	20	8	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00404	1.8%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	1.8	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	20	35	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00405	1.9%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	1.9	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	20	46	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00406	2.1%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	2.1	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	20	58	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00407	2.3%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	2.3	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	21	23	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00408	2.5%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	2.5	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	21	35	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00409	2.8%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	2.8	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	22	0	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00410	3.3%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	3.3	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	22	13	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00411	4.0%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	4	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	22	37	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00412	5.5%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	5	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	22	50	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00413	6.0%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	6	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	23	10	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00414	7.9%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	7	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	23	27	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00415	8.2%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	8.2	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	23	50	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00416	9.8%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	9.8	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	0	4	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00417	10.2%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	10.2	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	0	26	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00418	11.2%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	11.2	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	0	42	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00419	13.2%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	13.2	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	1	7	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00420	16.4%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	16.4	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	1	30	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00421	18.0%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	18	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	1	44	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01
HC00422	21.0%	SC10-020	Groundmass	Galapagos St. Clair Island	Dan Magrane	21	FC1-3	28.34	0.564	Pennell et al (1998)	0.90003	0.14	0.00100008	0.140	302.703	0.008	0.994000003	0.003	1	4.80E-14	30	JAN	2014	2	9	1	15-0001-020	0.00	0.00	50.20	Galapagos Hergo (15-01)	14020402	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(cd)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D02453	1.7 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02455	1.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02456	1.9 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02457	2.1 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02459	2.3 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02460	2.5 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02462	2.8 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02463	3.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02465	4.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02466	5.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02468	6.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02469	7.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02471	8.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02472	9.6 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02474	10.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02475	11.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02477	13.2 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02478	15.4 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02480	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02482	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	

14D02452.AGE >>> SC12-020 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

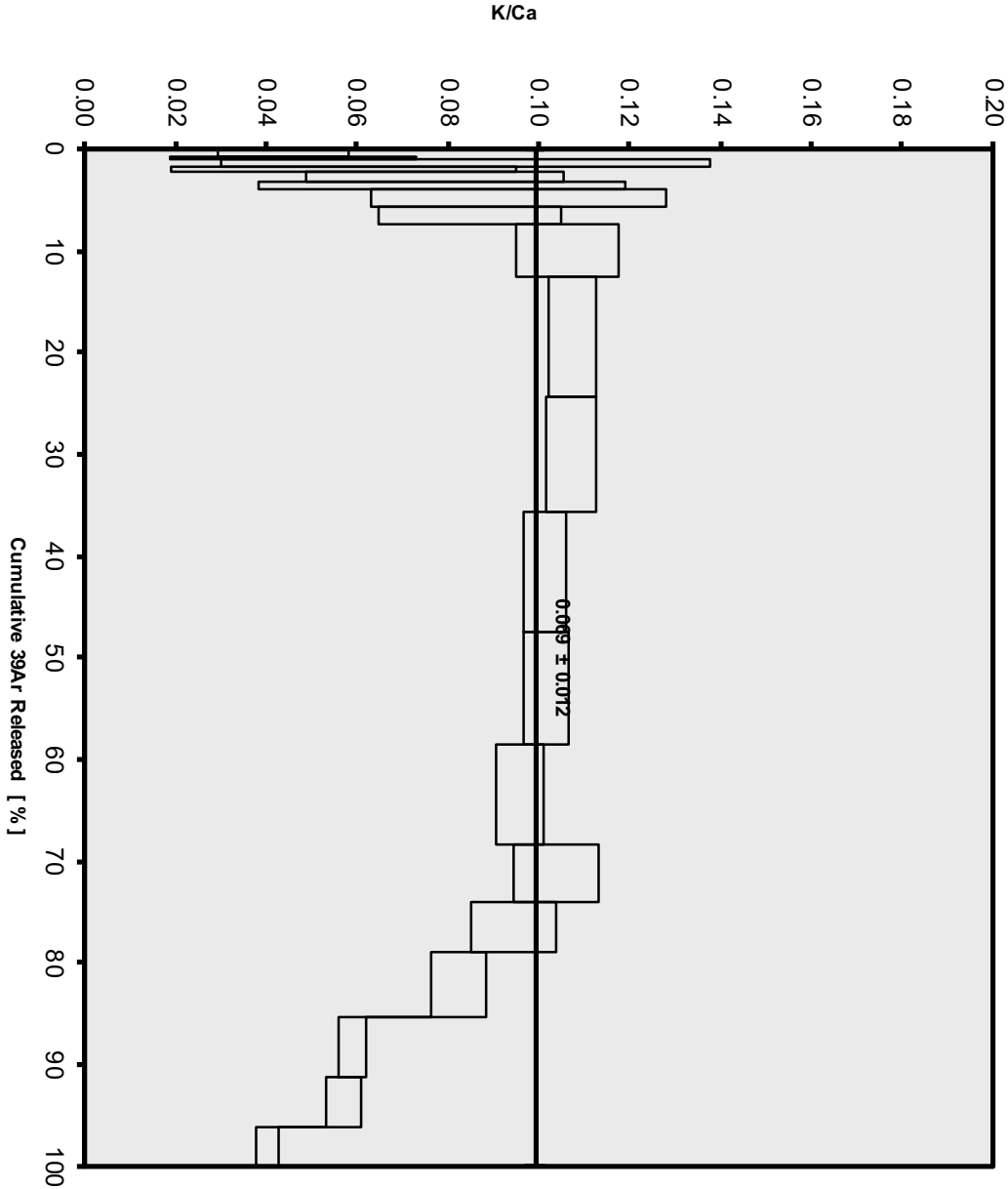
WEIGHTED
PLATEAU
1.62 ± 0.03
TOTAL FUSION
1.63 ± 0.03
NORMAL
ISOCHRON
1.62 ± 0.04
INVERSE
ISOCHRON
1.62 ± 0.04

MSWD
(PROBABILITY)
0.50 (96%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02452.AGE >>> SC12-020 >>> GALAPAGOS | HARPP (13-07) PROJECT



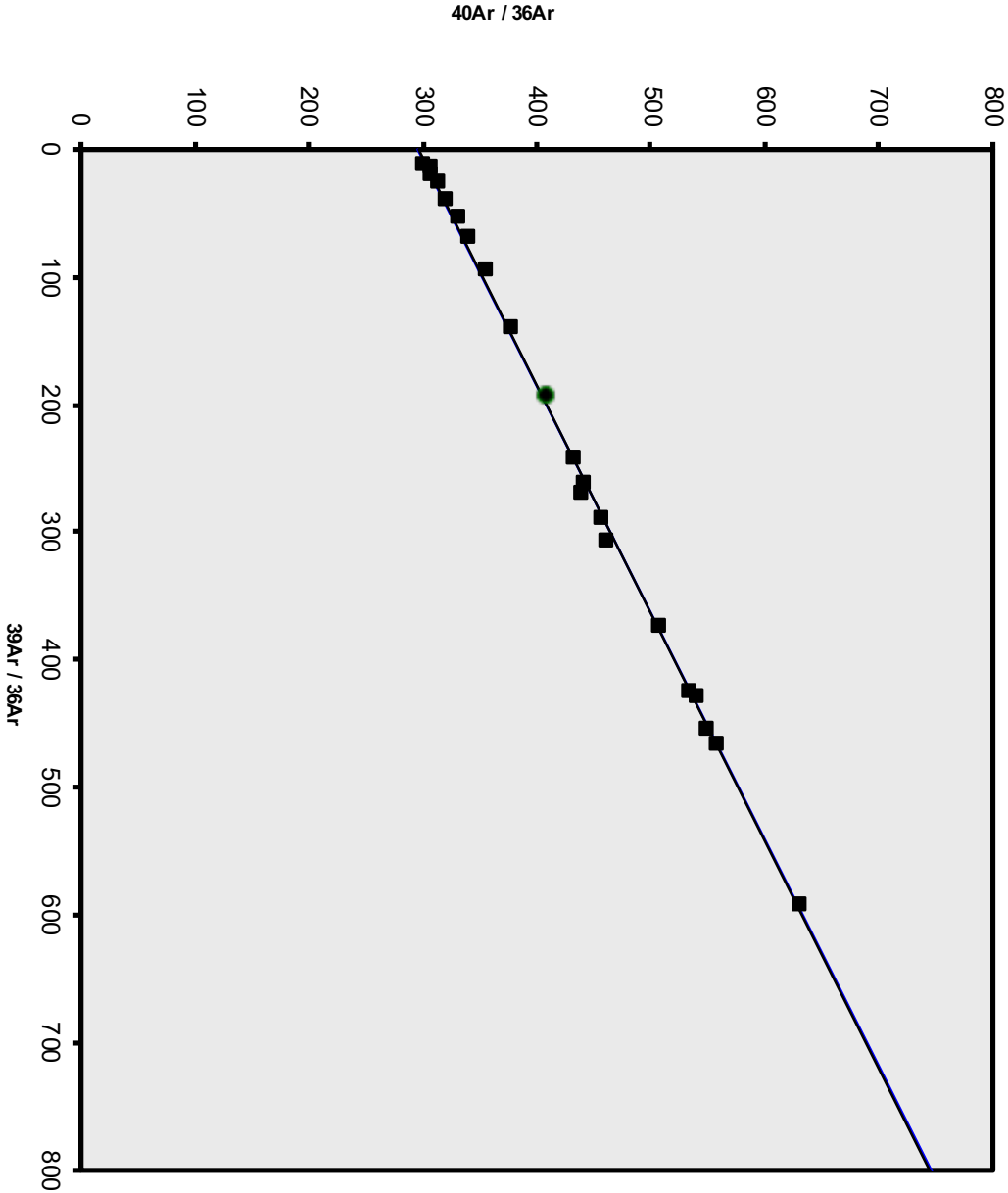
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.62 ± 0.03
TOTAL FUSION
1.63 ± 0.03
NORMAL
ISOCHRON
1.62 ± 0.04
INVERSE
ISOCHRON
1.62 ± 0.04

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02452.AGE >>> SC12-020 >>> GALAPAGOS | HARPP (13-07) PROJECT



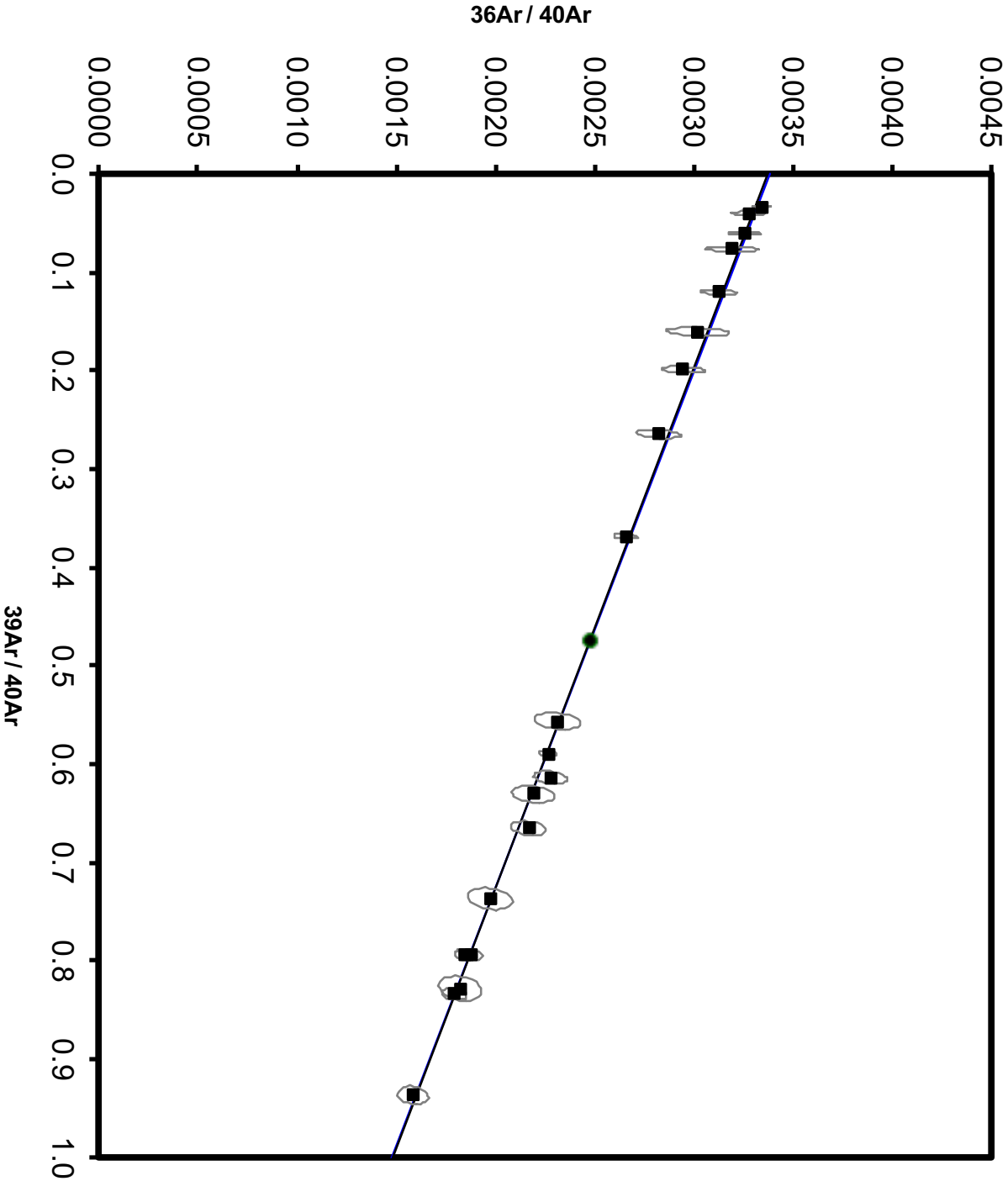
Ar-Ages in Ma

WEIGHTED
PLATEAU
1.62 ± 0.03
TOTAL FUSION
1.63 ± 0.03
NORMAL
ISOCHRON
1.62 ± 0.04
INVERSE
ISOCHRON
1.62 ± 0.04
MSWD
(PROBABILITY)
0.51 (95%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03

14D02452.AGE >>> SC12-020 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
1.62 ± 0.03
TOTAL FUSION
1.63 ± 0.03
NORMAL ISOCHRON
1.62 ± 0.04
INVERSE ISOCHRON
1.62 ± 0.04

MSWD (PROBABILITY)
0.51 (96%)

SPREADING FACTOR
50.6%

40Ar/36Ar
INTERCEPT
296.4 ± 2.8

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00159508 ±
0.14000000

Incremental Heating		36Ar(a) [fA]	37Ar(ca) [fA]	38Ar(cl) [fA]	39Ar(k) [fA]	40Ar(r) [fA]	Age $\pm 2\sigma$ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca $\pm 2\sigma$
14D02422	1.7 %	1.325189	40.3899	0.0282645	2.59524	0.952869	1068.3 $\pm$ 3773.3	0.24	1.08	0.0276 $\pm$ 0.0111
14D02424	1.8 %	0.6250035	17.3768	0.0000000	1.11760	0.306233	797.2 $\pm$ 6723.6	0.17	0.47	0.0277 $\pm$ 0.0256
14D02425	1.9 %	0.6021751	22.5418	0.0000000	1.82944	0.333582	530.5 $\pm$ 4114.7	0.19	0.76	0.0349 $\pm$ 0.0255
14D02426	2.1 %	0.4415240	35.5891	0.0255081	1.87537	1.832250	2839.7 $\pm$ 3762.9	1.38	0.78	0.0227 $\pm$ 0.0105
14D02428	2.3 %	0.6493950	61.3874	0.0270252	4.48237	1.078390	699.9 $\pm$ 1757.9	0.57	1.87	0.0314 $\pm$ 0.0084
14D02429	2.5 %	0.3371486	38.6419	0.0372079	2.19507	0.604696	801.1 $\pm$ 3062.8	0.60	0.92	0.0244 $\pm$ 0.0100
14D02431	2.8 %	0.4079449	73.6238	0.0043611	4.61494	1.253322	789.8 $\pm$ 1535.4	1.03	1.93	0.0270 $\pm$ 0.0060
14D02432	3.2 %	0.5709906	118.4783	0.0000000	8.29568	1.283499	450.1 $\pm$ 892.5	0.77	3.47	0.0301 $\pm$ 0.0041
14D02434	4.0 %	0.7951346	303.2219	0.0000000	22.88228	0.879640	111.8 $\pm$ 362.0	0.37	9.56	0.0324 $\pm$ 0.0018
14D02435	5.0 %	0.7053303	366.7511	0.0000000	28.04729	2.628085	272.5 $\pm$ 290.7	1.25	11.72	0.0329 $\pm$ 0.0016
14D02437	6.0 %	0.4451369	312.5901	0.0000000	23.29325	3.516969	439.1 $\pm$ 314.6	2.60	9.74	0.0320 $\pm$ 0.0017
14D02438	7.0 %	0.3228101	265.1415	0.0069630	20.77473	2.342770	328.0 $\pm$ 339.8	2.40	8.68	0.0337 $\pm$ 0.0021
14D02440	8.2 %	0.2641506	243.8621	0.0000000	19.14072	1.786383	271.5 $\pm$ 359.5	2.24	8.00	0.0338 $\pm$ 0.0022
14D02441	9.6 %	0.3274263	236.9983	0.0000000	18.79355	2.260980	349.9 $\pm$ 365.8	2.28	7.86	0.0341 $\pm$ 0.0023
14D02443	10.2 %	0.1202658	153.2278	0.0275017	11.37741	1.285126	328.5 $\pm$ 572.0	3.49	4.76	0.0319 $\pm$ 0.0034
14D02444	11.2 %	0.1339249	144.2641	0.0306869	10.55699	0.234199	64.5 $\pm$ 613.1	0.59	4.41	0.0315 $\pm$ 0.0036
14D02446	13.2 %	0.2213751	258.2689	0.0000000	16.98154	1.111196	190.3 $\pm$ 400.1	1.67	7.10	0.0283 $\pm$ 0.0019
14D02447	15.4 %	0.1968628	256.3216	0.0142252	14.94566	0.980940	190.9 $\pm$ 449.7	1.66	6.25	0.0251 $\pm$ 0.0016
14D02449	18.0 %	0.2361434	286.9987	0.0000000	14.48897	0.718928	144.3 $\pm$ 471.7	1.02	6.06	0.0217 $\pm$ 0.0013
14D02451	21.0 %	0.2099905	268.5956	0.0192322	10.96127	0.737738	195.8 $\pm$ 615.9	1.17	4.58	0.0175 $\pm$ 0.0011
Σ		8.9382519	3504.2708	0.2209758	239.24938	18.218648				

Information on Analysis	Results	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca $\pm 2\sigma$
Sample = SC12-015	Age Plateau	0.08848 $\pm$ 0.03862 $\pm$ 43.65%	257.4 $\pm$ 112.3 $\pm$ 43.64%	0.46	95.03	0.0267 $\pm$ 0.0034
Material = Groundmass			Full External Error $\pm$ 112.5	95%	15	
Location = Galapagos St. Cruz Island			Analytical Error $\pm$ 112.3	1.76	2 σ Confidence Limit	
Analyst = Dan Miggins				1.0000	Error Magnification	
Project = GALAPAGOS HARPP (13-07)	Total Fusion Age	0.07615 $\pm$ 0.04705 $\pm$ 61.79%	221.5 $\pm$ 136.9 $\pm$ 61.79%		20	0.0294 $\pm$ 0.0006
Mass Discrimination Law = LIN			Full External Error $\pm$ 137.0			
Irradiation = 13-OSU-03			Analytical Error $\pm$ 136.9			
J = 0.00160856 $\pm$ 0.14100000						
FCT-3 = 28.340 $\pm$ 0.564 Ma						

OSU Argon Geochronology Lab

Normal Isochron			39(k)/36(a) $\pm 2\sigma$	40(a+r)/36(a) $\pm 2\sigma$	r.i.
14D02422	1.7 %		1.96 $\pm$ 0.06	294.78 $\pm$ 2.53	0.2505
14D02424	1.8 %		1.79 $\pm$ 0.12	295.01 $\pm$ 4.13	0.1567
14D02425	1.9 %		3.04 $\pm$ 0.13	294.95 $\pm$ 4.29	0.2564
14D02426	2.1 %		4.25 $\pm$ 0.18	299.65 $\pm$ 5.56	0.3128
14D02428	2.3 %		6.90 $\pm$ 0.14	293.84 $\pm$ 4.15	0.5335
14D02429	2.5 %	✓	6.51 $\pm$ 0.25	297.29 $\pm$ 6.89	0.4171
14D02431	2.8 %	✓	11.31 $\pm$ 0.26	298.57 $\pm$ 6.02	0.6419
14D02432	3.2 %	✓	14.53 $\pm$ 0.23	293.25 $\pm$ 4.43	0.7085
14D02434	4.0 %	✓	28.78 $\pm$ 0.33	296.61 $\pm$ 3.59	0.8493
14D02435	5.0 %	✓	39.76 $\pm$ 0.49	299.23 $\pm$ 4.01	0.8625
14D02437	6.0 %	✓	52.33 $\pm$ 0.88	303.40 $\pm$ 5.77	0.8470
14D02438	7.0 %	✓	64.36 $\pm$ 1.41	302.76 $\pm$ 7.65	0.8400
14D02440	8.2 %	✓	72.46 $\pm$ 1.87	302.26 $\pm$ 9.10	0.8320
14D02441	9.6 %	✓	57.40 $\pm$ 1.20	302.41 $\pm$ 7.34	0.8264
14D02443	10.2 %	✓	94.60 $\pm$ 4.90	306.19 $\pm$ 19.06	0.8201
14D02444	11.2 %	✓	78.83 $\pm$ 3.65	297.25 $\pm$ 16.68	0.8071
14D02446	13.2 %	✓	76.71 $\pm$ 2.31	300.52 $\pm$ 10.68	0.8292
14D02447	15.4 %	✓	75.92 $\pm$ 2.53	300.48 $\pm$ 11.88	0.8232
14D02449	18.0 %	✓	61.36 $\pm$ 1.76	298.54 $\pm$ 10.02	0.8221
14D02451	21.0 %	✓	52.20 $\pm$ 1.66	299.01 $\pm$ 11.14	0.8147

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Normal Isochron	294.39 $\pm$ 3.36 $\pm$ 1.14%	0.11025 $\pm$ 0.07820 $\pm$ 70.93%	320.7 $\pm$ 227.4 $\pm$ 70.92%	0.47 94%
			Full External Error $\pm$ 227.6 Analytical Error $\pm$ 227.4	
Statistics	2 σ Confidence Limit Error Magnification Number of Data Points	1.78 1.0000 15	Convergence Number of Iterations Calculated Line	0.00000040403 4 Weighted York-2

OSU Argon Geochronology Lab

Inverse Isochron			39(k)/40(a+r) $\pm 2\sigma$	36(a)/40(a+r) $\pm 2\sigma$	r.i.
14D02422	1.7 %		0.0066419 $\pm$ 0.0001880	0.00339235 $\pm$ 0.00002915	0.0451
14D02424	1.8 %		0.0060613 $\pm$ 0.0004007	0.00338972 $\pm$ 0.00004741	0.0531
14D02425	1.9 %		0.0103004 $\pm$ 0.0004252	0.00339045 $\pm$ 0.00004932	0.0881
14D02426	2.1 %		0.0141749 $\pm$ 0.0005815	0.00333723 $\pm$ 0.00006188	0.1252
14D02428	2.3 %		0.0234903 $\pm$ 0.0004125	0.00340322 $\pm$ 0.00004808	0.1847
14D02429	2.5 %	✓	0.0218999 $\pm$ 0.0007796	0.00336368 $\pm$ 0.00007792	0.2012
14D02431	2.8 %	✓	0.0378891 $\pm$ 0.0006930	0.00334927 $\pm$ 0.00006751	0.3048
14D02432	3.2 %	✓	0.0495429 $\pm$ 0.0005850	0.00341003 $\pm$ 0.00005153	0.3333
14D02434	4.0 %	✓	0.0970238 $\pm$ 0.0006288	0.00337147 $\pm$ 0.00004084	0.3825
14D02435	5.0 %	✓	0.1328921 $\pm$ 0.0009075	0.00334196 $\pm$ 0.00004483	0.4094
14D02437	6.0 %	✓	0.1724724 $\pm$ 0.0017483	0.00329597 $\pm$ 0.00006271	0.4741
14D02438	7.0 %	✓	0.2125659 $\pm$ 0.0029182	0.00330297 $\pm$ 0.00008349	0.5030
14D02440	8.2 %	✓	0.2397297 $\pm$ 0.0040090	0.00330838 $\pm$ 0.00009963	0.5195
14D02441	9.6 %	✓	0.1898042 $\pm$ 0.0025981	0.00330682 $\pm$ 0.00008024	0.5120
14D02443	10.2 %	✓	0.3089702 $\pm$ 0.0110090	0.00326599 $\pm$ 0.00020330	0.5540
14D02444	11.2 %	✓	0.2651910 $\pm$ 0.0087902	0.00336419 $\pm$ 0.00018879	0.5649
14D02446	13.2 %	✓	0.2552558 $\pm$ 0.0050704	0.00332757 $\pm$ 0.00011821	0.5334
14D02447	15.4 %	✓	0.2526572 $\pm$ 0.0056727	0.00332798 $\pm$ 0.00013152	0.5366
14D02449	18.0 %	✓	0.2055194 $\pm$ 0.0039349	0.00334958 $\pm$ 0.00011246	0.5218
14D02451	21.0 %	✓	0.1745706 $\pm$ 0.0037822	0.00334433 $\pm$ 0.00012465	0.5234

Results	40(a)/36(a) $\pm 2\sigma$	40(r)/39(k) $\pm 2\sigma$	Age $\pm 2\sigma$ (Ka)	MSWD
Inverse Isochron	294.44 $\pm$ 3.37	0.11016 $\pm$ 0.05863	320.4 $\pm$ 170.5	0.47
Clustered Points	$\pm$ 1.14%	$\pm$ 53.23%	$\pm$ 53.22%	94%
			Full External Error $\pm$ 170.7	
			Analytical Error $\pm$ 170.5	
Statistics	2 σ Confidence Limit	1.78	Convergence	0.0171536061
	Error Magnification	1.0000	Number of Iterations	3
	Number of Data Points	15	Calculated Line	Weighted York-2
	Spreading Factor	3.2%		

Relative Abundances		36Ar [fA]	%1σ	37Ar [fA]	%1σ	38Ar [fA]	%1σ	39Ar [fA]	%1σ	40Ar [fA]	%1σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
14D02422	1.7 %	1.3361935	0.359	40.3899	20.006	0.3111519	14.700	2.62242	1.375	390.7406	0.166	0.36716 ± 1.29643	1068.3 ± 3773.3	0.24	1.08	0.0276 ± 0.0111
14D02424	1.8 %	0.6295910	0.498	17.3768	46.079	0.1281914	35.149	1.12929	3.218	184.3834	0.350	0.27401 ± 2.31048	797.2 ± 6723.6	0.17	0.47	0.0277 ± 0.0256
14D02425	1.9 %	0.6081261	0.511	22.5418	36.516	0.1149610	41.140	1.84461	1.992	177.6110	0.364	0.18234 ± 1.41417	530.5 ± 4114.7	0.19	0.76	0.0349 ± 0.0255
14D02426	2.1 %	0.4509300	0.602	35.5891	23.190	0.1343175	31.817	1.89932	1.945	132.3045	0.488	0.97701 ± 1.29565	2839.7 ± 3762.9	1.38	0.78	0.0227 ± 0.0105
14D02428	2.3 %	0.6959124	0.510	61.3674	13.350	0.2079394	21.500	4.52369	0.793	190.8224	0.338	0.24058 ± 0.60412	699.9 ± 1757.9	0.57	1.87	0.0314 ± 0.0084
14D02429	2.5 %	0.3473654	0.717	38.6419	20.406	0.1308721	34.245	2.22108	1.622	100.2943	0.644	0.27548 ± 1.05341	801.1 ± 3562.8	0.60	0.92	0.0244 ± 0.0100
14D02431	2.8 %	0.4273834	0.647	73.6238	11.015	0.1433577	33.013	4.66449	0.728	121.8057	0.530	0.27158 ± 0.52809	789.8 ± 1535.4	1.03	1.93	0.0270 ± 0.0090
14D02432	3.2 %	0.6022689	0.505	118.4783	6.796	0.1937137	24.034	8.37541	0.438	167.4526	0.386	0.15472 ± 0.30675	450.1 ± 892.5	0.77	3.47	0.0301 ± 0.0041
14D02434	4.0 %	0.8751852	0.421	303.2219	2.757	0.3748292	12.098	23.08635	0.170	235.8650	0.274	0.03844 ± 0.12447	111.8 ± 362.0	0.37	9.56	0.0324 ± 0.0018
14D02435	5.0 %	0.8021526	0.438	366.7511	2.388	0.4949570	9.351	28.29412	0.148	211.0815	0.306	0.09370 ± 0.09994	272.5 ± 290.7	1.25	11.72	0.0329 ± 0.0016
14D02437	6.0 %	0.5276607	0.550	312.5901	2.701	0.3858633	12.146	23.50362	0.165	135.0785	0.478	0.15099 ± 0.10817	439.1 ± 314.6	2.60	9.74	0.0320 ± 0.0017
14D02438	7.0 %	0.3928103	0.696	265.1415	3.075	0.3406673	13.289	20.95317	0.183	97.7541	0.660	0.11277 ± 0.11685	328.0 ± 339.8	2.40	8.68	0.0337 ± 0.0021
14D02440	8.2 %	0.3285302	0.789	243.8621	3.306	0.2945214	15.734	19.30484	0.209	79.8622	0.808	0.09333 ± 0.12362	271.5 ± 359.5	2.24	8.00	0.0338 ± 0.0022
14D02441	9.6 %	0.3899938	0.659	236.9983	3.431	0.3001293	15.702	18.95305	0.204	99.0344	0.652	0.12031 ± 0.12577	349.9 ± 365.8	2.28	7.86	0.0341 ± 0.0023
14D02443	10.2 %	0.1607293	1.374	153.2278	5.355	0.2007530	22.836	11.48053	0.313	36.8351	1.752	0.11295 ± 0.19670	328.5 ± 572.0	3.49	4.76	0.0319 ± 0.0034
14D02444	11.2 %	0.1720233	1.274	144.2641	5.636	0.1959088	23.543	10.65408	0.339	39.8197	1.620	0.02218 ± 0.21078	64.5 ± 613.1	0.59	4.41	0.0315 ± 0.0036
14D02446	13.2 %	0.2895581	0.835	258.2689	3.283	0.2569103	17.565	17.15536	0.208	66.5447	0.970	0.06544 ± 0.13755	190.3 ± 400.1	1.67	7.10	0.0283 ± 0.0019
14D02447	15.4 %	0.2645376	0.901	256.3216	3.250	0.2567292	18.126	15.11817	0.259	59.1690	1.091	0.06563 ± 0.15462	190.9 ± 449.7	1.66	6.25	0.0251 ± 0.0016
14D02449	18.0 %	0.3119110	0.796	286.9987	2.912	0.2200718	21.463	14.68212	0.273	70.5139	0.915	0.04962 ± 0.16219	144.3 ± 471.7	1.02	6.06	0.0217 ± 0.0013
14D02451	21.0 %	0.2809077	0.876	268.5956	3.026	0.2205535	21.081	11.14204	0.333	62.8010	1.028	0.06730 ± 0.21177	195.8 ± 615.9	1.17	4.58	0.0175 ± 0.0011
Σ		9.8634706	0.133	3594.2708	1.049	4.9059989	4.189	241.60775	0.070	2659.7137	0.109					

Information on Analysis and Constants Used In Calculations		Results		40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ka)	MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Sample = SC12-015		Age Equations = Min et al. (2000)							
Material = Groundmass		Negative Intensities = Allowed			0.08848 ± 43.65%	257.4 ± 112.3 ± 43.64%	0.46	95.03	0.0267 ± 0.0034
Location = Galapagos St. Cruz Island		Decay Constant 40K = 5.530 ± 0.048 E-10 1/a				Full External Error ± 112.5	1.76	20 Confidence Limit	
Analyst = Dan McGinnis		Decay Constant 39Ar = 2.940 ± 0.016 E-07 1/h				Analytical Error ± 112.3	1.0000	Error Magnification	
Project = GALAPAGOS (HARPP (13-07)		Decay Constant 37Ar = 8.230 ± 0.012 E-04 1/a							
Mass Discrimination Law = LIN		Decay Constant 36Cl = 2.257 ± 0.015 E-06 1/a							
Irradiation = 13-OSU-03		Decay Constant 40K(EC,β ⁺) = 0.580 ± 0.009 E-10 1/a							
J = 0.00160856 ± 0.14100000		Decay Constant 40K(β ⁻) = 4.950 ± 0.043 E-10 1/a			0.07615 ± 61.79%	221.5 ± 136.9 ± 61.79%		20	0.0294 ± 0.0006
FCT-3 = 28.340 ± 0.564 Ma		Atmospheric Ratio 40/36(a) = 295.50				Full External Error ± 137.0			
IGSN = 23.3		Atmospheric Ratio 38/36(a) = 0.1869				Analytical Error ± 136.9			
Preferred Age = Undefined		Production Ratio 39/37(ca) = 0.000673							
Classification = Undefined		Production Ratio 38/37(ca) = 0.000139		294.39 ± 3.36 ± 1.14%	0.11025 ± 70.93%	320.7 ± 227.4 ± 70.92%	0.47	95.03	
Experiment Type = 5.52		Production Ratio 36/37(ca) = 0.000264				Full External Error ± 227.6	1.78	20 Confidence Limit	
Extraction Method = Undefined		Production Ratio 40/39(k) = 0.001010				Analytical Error ± 227.4	1.0000	Error Magnification	
Heating = 0 sec		Production Ratio 38/39(k) = 0.011380					4	Number of Iterations	
Isolation = 6.00 min		Production Ratio 36/38(c) = 262.80 ± 1.71					0.0000000404	Convergence	
Instrument = ARGUS-VI		Scaling Ratio K/Ca = 0.430							
Lithology = Undefined		Abundance Ratio 40K/K = 1.1700 ± 0.0100 E-04					0.47	95.03	
Is-Lon = Undefined - Undefined		Atomic Weight K = 39.0983 ± 0.0001 g		294.44 ± 3.37 ± 1.14%	0.11016 ± 53.23%	320.4 ± 170.5 ± 53.22%	0.47	94%	15
Collector Calibrations = 40Ar 36Ar						Full External Error ± 170.7	1.78	20 Confidence Limit	
						Analytical Error ± 170.5	1.0000	Error Magnification	
							3	Number of Iterations	
							0.0171536061	Convergence	
							3%	Spreading Factor	

Depositing Patterns	36Ar(a) [a]	%1σ	36Ar(c) [a]	%1σ	36Ar(ea) [a]	%1σ	36Ar(d) [a]	%1σ	37Ar(ca) [a]	%1σ	38Ar(a) [a]	%1σ	38Ar(c) [a]	%1σ	38Ar(b) [a]	%1σ	38Ar(ea) [a]	%1σ	38Ar(d) [a]	%1σ	39Ar(a) [a]	%1σ	39Ar(c) [a]	%1σ	40Ar(r) [a]	%1σ	40Ar(a) [a]	%1σ	40Ar(c) [a]	%1σ	40Ar(b) [a]	%1σ		
14DQ423	1.7%	✓	1.025039	0.40	0.000000	0.00	0.019329	20.01	0.000017	161.55	40.389	20.01	0.240770	0.40	0.000000	0.00	0.000000	1.41	0.000040	20.01	0.000045	161.55	2.5824	1.41	0.007524	20.01	0.92889	175.54	591.888	0.40	0.000000	0.00	0.000000	1.41
14DQ424	1.8%	✓	0.625035	0.61	0.000000	0.00	0.0045875	46.08	0.000000	0.00	17.3768	46.08	0.118913	0.61	0.000000	0.00	0.0107182	3.29	0.0004154	46.08	0.000000	0.00	1.11760	3.29	0.016946	46.08	0.36033	421.59	194.885	0.61	0.000000	0.00	0.0011288	3.29
14DQ425	1.9%	✓	0.6021751	0.63	0.000000	0.00	0.000000	36.52	0.000000	0.00	22.5415	36.52	0.112545	0.63	0.000000	0.00	0.000000	2.03	0.0001333	36.52	0.000000	0.00	1.82544	2.03	0.0161706	36.52	0.33582	387.78	177.947	0.63	0.000000	0.00	0.0018477	2.03
14DQ426	2.1%	✓	0.4416240	0.79	0.000000	0.00	0.000000	23.19	0.000000	167.64	35.8891	23.19	0.000000	0.79	0.000000	0.00	0.000000	1.99	0.000000	167.65	1.87337	1.99	0.000000	23.19	1.83225	66.28	124.473	0.79	0.000000	0.00	0.0018841	1.99		
14DQ428	2.3%	✓	0.6493939	0.62	0.000000	0.00	0.000000	13.35	0.000000	165.53	61.3974	13.35	0.121379	0.62	0.000000	0.00	0.000000	0.81	0.000000	13.35	0.000000	0.00	4.48237	0.81	0.0401337	13.35	0.07890	125.55	191.892	0.62	0.000000	0.00	0.0004572	0.81
14DQ429	2.5%	✓	0.0374486	0.96	0.000000	0.00	0.000000	20.41	0.000000	139.24	38.6419	20.41	0.000000	0.96	0.000000	0.00	0.000000	1.66	0.000000	139.24	2.19857	1.66	0.000000	20.41	0.000000	191.19	69.6274	0.96	0.000000	0.00	0.000000	1.66		
14DQ431	2.8%	✓	0.4079449	0.86	0.000000	0.00	0.0194367	11.01	0.000000	1085.73	73.6238	11.01	0.000000	0.86	0.000000	0.00	0.000000	0.75	0.000000	1085.73	4.61494	0.75	0.000000	11.01	1.26322	97.22	120.5477	0.86	0.000000	0.00	0.0004611	0.75		
14DQ432	3.2%	✓	0.0709986	0.65	0.000000	0.00	0.0012783	6.80	0.000000	0.00	118.4783	6.80	0.1087181	0.65	0.000000	0.00	0.000000	0.45	0.000000	6.80	0.000000	0.00	8.29568	0.45	0.000000	6.80	1.23459	98.13	168.7277	0.65	0.000000	0.00	0.0003786	0.45
14DQ434	4.0%	✓	0.7981346	0.64	0.000000	0.00	0.000000	2.76	0.000000	0.00	303.2219	2.76	0.1480107	0.64	0.000000	0.00	0.000000	0.17	0.000000	2.76	0.000000	0.00	22.86238	0.17	0.000000	2.76	0.000000	161.88	234.9633	0.64	0.000000	0.00	0.000000	0.17
14DQ435	5.0%	✓	0.7083393	0.60	0.000000	0.00	0.000000	0.00	0.000000	0.00	366.7511	2.39	0.1316562	0.60	0.000000	0.00	0.000000	0.15	0.000000	0.00	0.000000	0.00	26.94729	0.15	0.000000	2.39	2.62685	53.33	296.4261	0.60	0.000000	0.00	0.000000	0.15
14DQ437	6.0%	✓	0.4401389	0.82	0.000000	0.00	0.000000	2.70	0.000000	0.00	312.5991	2.70	0.000000	0.82	0.000000	0.00	0.000000	0.17	0.000000	2.70	0.000000	0.00	23.3926	0.17	0.000000	2.70	0.000000	35.82	101.5880	0.82	0.000000	0.00	0.000000	0.17
14DQ438	7.0%	✓	0.0328101	1.08	0.000000	0.00	0.000000	3.07	0.000000	660.31	266.1415	3.07	0.000000	1.08	0.000000	0.00	0.000000	0.19	0.000000	660.32	20.77473	0.19	0.000000	3.07	0.000000	3.07	2.342770	91.81	86.3604	1.08	0.000000	0.00	0.000000	0.19
14DQ440	8.2%	✓	0.2641008	1.27	0.000000	0.00	0.000000	3.31	0.000000	0.00	243.8621	3.31	0.000000	1.27	0.000000	0.00	0.000000	0.21	0.000000	0.00	0.000000	0.00	19.14072	0.21	0.000000	3.31	1.786383	66.23	78.9866	1.27	0.000000	0.00	0.000000	0.21
14DQ441	9.6%	✓	0.0374263	1.62	0.000000	0.00	0.000000	3.43	0.000000	0.00	238.9983	3.43	0.000000	1.62	0.000000	0.00	0.000000	0.21	0.000000	0.00	0.000000	0.00	18.70365	0.21	0.000000	3.43	2.300803	52.27	86.7545	1.62	0.000000	0.00	0.000000	0.21
14DQ443	10.2%	✓	0.1202658	2.57	0.000000	0.00	0.000000	5.36	0.000000	166.78	153.2278	5.36	0.000000	2.57	0.000000	0.00	0.000000	0.32	0.000000	166.78	11.37741	0.32	0.000000	5.36	1.285106	87.07	35.5385	2.57	0.000000	0.00	0.000000	0.32		
14DQ444	11.2%	✓	0.1330049	2.29	0.000000	0.00	0.000000	5.64	0.000000	150.38	144.2841	5.64	0.000000	2.29	0.000000	0.00	0.000000	0.35	0.000000	150.38	10.55999	0.35	0.000000	5.64	0.234199	475.08	36.3748	2.29	0.000000	0.00	0.000000	0.35		
14DQ446	12.1%	✓	0.2112151	1.49	0.000000	0.00	0.000000	3.28	0.000000	0.00	256.268	3.28	0.000000	1.49	0.000000	0.00	0.000000	0.21	0.000000	0.00	16.96154	0.21	0.000000	3.28	1.111196	105.15	45.4164	1.49	0.000000	0.00	0.000000	0.21		
14DQ447	15.4%	✓	0.1988828	1.85	0.000000	0.00	0.000000	3.25	0.000000	327.30	256.3216	3.25	0.000000	1.85	0.000000	0.00	0.000000	0.26	0.000000	327.31	14.94686	0.26	0.000000	3.25	0.172945	117.79	98.1730	1.85	0.000000	0.00	0.000000	0.26		
14DQ449	18.0%	✓	0.2354134	1.41	0.000000	0.00	0.000000	2.91	0.000000	0.00	285.9957	2.91	0.000000	1.41	0.000000	0.00	0.000000	0.26	0.000000	0.00	14.48857	0.26	0.000000	2.91	0.1691051	2.91	0.789228	163.43	69.7804	1.41	0.000000	0.00	0.000000	0.26
14DQ461	21.0%	✓	0.2099935	1.55	0.000000	0.00	0.000000	3.83	0.000000	241.88	268.5555	3.83	0.000000	1.55	0.000000	0.00	0.000000	0.34	0.000000	241.88	10.96127	0.34	0.000000	3.83	0.737738	157.32	62.8222	1.55	0.000000	0.00	0.000000	0.34		
Σ			8.808259	0.18	0.000000	0.00	0.925175	1.85	0.000000	65.24	3504.2708	1.85	1.678933	0.18	0.000000	0.00	2.722579	0.07	0.487938	1.85	0.2209758	65.24	230.3488	0.07	2.385743	1.05	18.218948	30.80	3641.3534	0.18	0.000000	0.00	0.2416419	0.07
Δ											9.884706	0.19	3504.2708	1.85																		2650.7137	0.28	

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Additional Parameters		40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D02422	1.7 %	149.000020	2.063897	15.401766	3.088582	0.509527	0.007242	254.005	151.346514	1.00179475	1.876E-11
14D02424	1.8 %	163.273598	5.284774	15.387356	7.107586	0.557510	0.018153	254.022	151.398422	1.00179487	8.850E-12
14D02425	1.9 %	96.286345	1.950139	12.220329	4.468986	0.329677	0.006781	254.031	151.423344	1.00179493	8.525E-12
14D02426	2.1 %	69.658761	1.397121	18.737785	4.360510	0.237416	0.004835	254.039	151.448270	1.00179499	6.351E-12
14D02428	2.3 %	42.182935	0.363897	13.570223	1.814764	0.147139	0.001388	254.056	151.500213	1.00179511	9.159E-12
14D02429	2.5 %	✓ 45.128680	0.787699	17.397805	3.561317	0.156395	0.002774	254.065	151.527231	1.00179518	4.811E-12
14D02431	2.8 %	✓ 26.113429	0.235153	15.783897	1.742332	0.091625	0.000892	254.083	151.579201	1.00179530	5.847E-12
14D02432	3.2 %	✓ 19.993351	0.116676	14.145964	0.963362	0.071909	0.000481	254.091	151.604153	1.00179536	8.038E-12
14D02434	4.0 %	✓ 10.216643	0.032926	13.134248	0.362801	0.037909	0.000172	254.108	151.656150	1.00179548	1.132E-11
14D02435	5.0 %	✓ 7.460262	0.025379	12.962099	0.310139	0.028351	0.000131	254.117	151.681114	1.00179554	1.013E-11
14D02437	6.0 %	✓ 5.747134	0.029062	13.299658	0.359875	0.022450	0.000129	254.134	151.733137	1.00179566	6.484E-12
14D02438	7.0 %	✓ 4.665362	0.031975	12.654003	0.389750	0.018747	0.000135	254.149	151.776850	1.00179577	4.692E-12
14D02440	8.2 %	✓ 4.136903	0.034544	12.632180	0.418423	0.017018	0.000139	254.166	151.828906	1.00179589	3.833E-12
14D02441	9.6 %	✓ 5.225250	0.035696	12.504496	0.429776	0.020577	0.000142	254.174	151.853899	1.00179595	4.754E-12
14D02443	10.2 %	✓ 3.208488	0.057107	13.346751	0.715960	0.014000	0.000197	254.192	151.905981	1.00179607	1.768E-12
14D02444	11.2 %	✓ 3.737504	0.061873	13.540739	0.764584	0.016146	0.000213	254.201	151.933071	1.00179613	1.911E-12
14D02446	13.2 %	✓ 3.878945	0.038477	15.054705	0.495271	0.016879	0.000145	254.217	151.983095	1.00179625	3.194E-12
14D02447	15.4 %	✓ 3.913768	0.043874	16.954546	0.552711	0.017498	0.000164	254.226	152.010199	1.00179631	2.840E-12
14D02449	18.0 %	✓ 4.802708	0.045880	19.547495	0.571627	0.021244	0.000179	254.244	152.062335	1.00179644	3.385E-12
14D02451	21.0 %	✓ 5.636402	0.060888	24.106513	0.733883	0.025212	0.000236	254.261	152.114488	1.00179656	3.014E-12

OSU Argon Geochronology Lab

Procedure Blanks		36Ar		37Ar		38Ar		39Ar		40Ar	
		[fA]	1σ	[fA]	1σ	[fA]	1σ	[fA]	1σ	[fA]	1σ
14D02422	1.7 %	0.0140865	0.0018131	0.0039173	0.0426072	0.0258308	0.0361774	0.0757440	0.0249256	3.9837517	0.6459852
14D02424	1.8 %	0.0140370	0.0018131	0.0034527	0.0426072	0.0245764	0.0361774	0.0757574	0.0249256	3.9762520	0.6459852
14D02425	1.9 %	0.0140133	0.0018131	0.0032297	0.0426072	0.0239743	0.0361774	0.0757638	0.0249256	3.9726521	0.6459852
14D02426	2.1 %	0.0139896	0.0018131	0.0030067	0.0426072	0.0233722	0.0361774	0.0757702	0.0249256	3.9690523	0.6459852
14D02428	2.3 %	0.0139402	0.0018131	0.0025422	0.0426072	0.0221178	0.0361774	0.0757837	0.0249256	3.9615526	0.6459852
14D02429	2.5 %	0.0139145	0.0018131	0.0023006	0.0426072	0.0214656	0.0361774	0.0757906	0.0249256	3.9576527	0.6459852
14D02431	2.8 %	0.0138650	0.0018131	0.0018361	0.0426072	0.0202112	0.0361774	0.0758040	0.0249256	3.9501530	0.6459852
14D02432	3.2 %	0.0138413	0.0018131	0.0016131	0.0426072	0.0196091	0.0361774	0.0758105	0.0249256	3.9465532	0.6459852
14D02434	4.0 %	0.0137919	0.0018131	0.0011485	0.0426072	0.0183547	0.0361774	0.0758239	0.0249256	3.9390535	0.6459852
14D02435	5.0 %	0.0137681	0.0018131	0.0009256	0.0426072	0.0177526	0.0361774	0.0758303	0.0249256	3.9354536	0.6459852
14D02437	6.0 %	0.0137187	0.0018131	0.0004610	0.0426072	0.0164983	0.0361774	0.0758437	0.0249256	3.9279539	0.6459852
14D02438	7.0 %	0.0136772	0.0018131	0.0000708	0.0426072	0.0154446	0.0361774	0.0758550	0.0249256	3.9216542	0.6459852
14D02440	8.2 %	0.0136277	0.0018131	0.0003938	0.0426072	0.0141902	0.0361774	0.0758684	0.0249256	3.9141545	0.6459852
14D02441	9.6 %	0.0136040	0.0018131	0.0006168	0.0426072	0.0135881	0.0361774	0.0758749	0.0249256	3.9105546	0.6459852
14D02443	10.2 %	0.0135546	0.0018131	0.0010813	0.0426072	0.0123338	0.0361774	0.0758883	0.0249256	3.9030549	0.6459852
14D02444	11.2 %	0.0135289	0.0018131	0.0013229	0.0426072	0.0116815	0.0361774	0.0758952	0.0249256	3.8991551	0.6459852
14D02446	13.2 %	0.0134814	0.0018131	0.0017689	0.0426072	0.0104773	0.0361774	0.0759081	0.0249256	3.8919554	0.6459852
14D02447	15.4 %	0.0134557	0.0018131	0.0020104	0.0426072	0.0098250	0.0361774	0.0759151	0.0249256	3.8880555	0.6459852
14D02449	18.0 %	0.0134063	0.0018131	0.0024750	0.0426072	0.0085706	0.0361774	0.0759285	0.0249256	3.8805558	0.6459852
14D02451	21.0 %	0.0133569	0.0018131	0.0029395	0.0426072	0.0073163	0.0361774	0.0759419	0.0249256	3.8730561	0.6459852

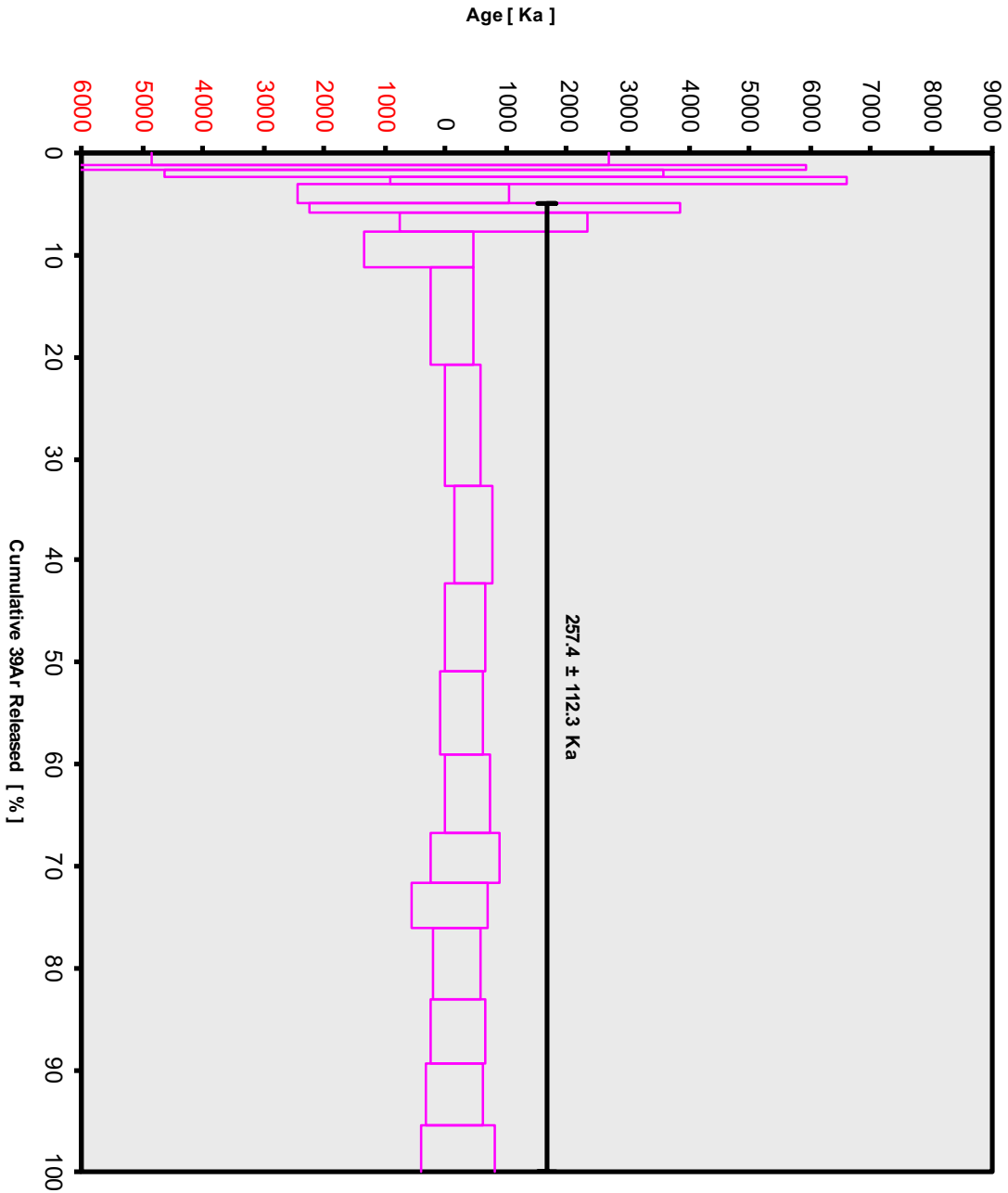
OSU Argon Geochronology Lab
CEOS Oregon State University, Corvallis, USA

Intercept Values	36Ar [A]			37Ar [A]			38Ar [A]			39Ar [A]			40Ar [A]								
	1σ	r2		1σ	r2		1σ	r2		1σ	r2		1σ	r2							
14D02422	1.7 %	1.289236	0.002596	0.9081	EXP 149 of 150	0.2582	0.0305	0.0055	EXP 150 of 150	0.2815899	0.0270771	0.0028	EXP 150 of 150	2.67780	0.02562	0.1998	EXP 150 of 150	395.546639	0.057504	0.9977	EXP 150 of 150
14D02424	1.8 %	0.6147651	0.0017990	0.7878	EXP 150 of 150	0.1093	0.0297	0.0025	EXP 149 of 150	0.1020778	0.0259427	0.0084	EXP 150 of 150	1.19628	0.02604	0.0399	EXP 150 of 150	188.747703	0.045980	0.8907	EXP 149 of 150
14D02425	1.9 %	0.5945006	0.0019003	0.7702	EXP 150 of 150	0.1430	0.0321	0.0005	EXP 150 of 150	0.0899381	0.0265754	0.0027	EXP 150 of 150	1.90605	0.02659	0.0778	EXP 150 of 150	181.857437	0.036845	0.9045	EXP 149 of 150
14D02426	2.1 %	0.4442072	0.0014734	0.6916	EXP 149 of 150	0.2278	0.0303	0.0123	EXP 150 of 150	0.1093346	0.0277722	0.0065	EXP 149 of 150	1.96034	0.02698	0.0798	EXP 150 of 150	136.551959	0.035329	0.8929	EXP 150 of 150
14D02428	2.3 %	0.6490383	0.0021203	0.7575	EXP 150 of 150	0.3954	0.0316	0.0021	EXP 150 of 150	0.1833280	0.0253415	0.0053	EXP 149 of 150	4.56434	0.02528	0.5547	EXP 150 of 150	195.185490	0.040111	0.9823	EXP 150 of 150
14D02429	2.5 %	0.3453652	0.0012712	0.6012	EXP 150 of 150	0.2481	0.0282	0.0189	EXP 149 of 150	0.1075408	0.0253547	0.0164	EXP 150 of 150	2.27962	0.02559	0.1951	EXP 150 of 150	104.402909	0.035402	0.9678	EXP 150 of 150
14D02431	2.8 %	0.4216955	0.0015976	0.5962	EXP 150 of 150	0.4761	0.0305	0.0252	EXP 150 of 150	0.1214274	0.0296237	0.0000	EXP 150 of 150	4.70406	0.02348	0.6036	EXP 149 of 150	126.012190	0.036910	0.1800	EXP 149 of 150
14D02432	3.2 %	0.9884998	0.0017041	0.8147	EXP 150 of 150	0.7898	0.0295	0.0336	EXP 150 of 150	0.1717816	0.0284094	0.0012	EXP 150 of 150	8.38617	0.02601	0.7905	EXP 150 of 150	171.751851	0.036785	0.9805	EXP 150 of 150
14D02434	4.0 %	0.8488651	0.0020906	0.8759	EXP 150 of 150	1.9623	0.0300	0.0359	EXP 150 of 150	0.3519796	0.0284231	0.0084	EXP 150 of 150	22.98287	0.02616	0.9708	EXP 149 of 150	240.300446	0.044401	0.9958	EXP 150 of 150
14D02435	5.0 %	0.7791469	0.0020062	0.8518	EXP 149 of 150	2.3735	0.0330	0.0895	EXP 150 of 150	0.4712690	0.0279615	0.0108	EXP 150 of 150	28.15019	0.02833	0.9785	EXP 149 of 150	215.461188	0.045427	0.9931	EXP 150 of 150
14D02437	6.0 %	0.5171894	0.0016375	0.7338	EXP 150 of 150	2.0227	0.0307	0.1373	EXP 150 of 150	0.3647378	0.0289011	0.0091	EXP 150 of 150	23.39691	0.02538	0.9740	EXP 150 of 150	139.290682	0.037621	0.9401	EXP 150 of 150
14D02438	7.0 %	0.3884795	0.0016006	0.5274	EXP 150 of 150	1.7155	0.0284	0.1161	EXP 150 of 150	0.3210387	0.0282751	0.0016	EXP 150 of 150	20.66628	0.02567	0.9676	EXP 150 of 150	101.861496	0.035485	0.4770	EXP 150 of 150
14D02440	8.2 %	0.3270569	0.0014742	0.5866	EXP 150 of 150	1.5777	0.0277	0.1144	EXP 150 of 150	0.2767993	0.0285572	0.0041	EXP 150 of 150	19.23076	0.02683	0.9493	EXP 150 of 150	83.944446	0.036959	0.8982	EXP 150 of 150
14D02441	9.6 %	0.3857190	0.0013420	0.6726	EXP 150 of 150	1.5333	0.0286	0.0614	EXP 150 of 150	0.2829421	0.0293110	0.0018	EXP 150 of 150	18.88171	0.02676	0.9543	EXP 150 of 150	103.153397	0.036210	0.0301	EXP 150 of 150
14D02443	10.2 %	0.1069154	0.0009959	0.0906	EXP 150 of 150	0.9917	0.0307	0.0494	EXP 150 of 150	0.1860118	0.0277521	0.0104	EXP 150 of 150	11.46725	0.02452	0.8942	EXP 150 of 150	40.815721	0.031249	0.9908	EXP 150 of 150
14D02444	11.2 %	0.1776659	0.0009491	0.2319	EXP 150 of 150	0.9338	0.0300	0.0130	EXP 149 of 150	0.1816780	0.0277078	0.0068	EXP 150 of 150	10.64722	0.02485	0.8853	EXP 150 of 150	43.802619	0.026251	0.9949	EXP 150 of 150
14D02445	13.2 %	0.2667051	0.0012304	0.5451	EXP 150 of 150	1.6706	0.0321	0.0779	EXP 150 of 150	0.2433522	0.0285545	0.0037	EXP 150 of 150	17.09611	0.02293	0.9526	EXP 150 of 150	70.576694	0.030355	0.9478	EXP 149 of 150
14D02447	15.4 %	0.2658659	0.0010367	0.4202	EXP 150 of 150	1.6579	0.0305	0.0905	EXP 150 of 150	0.2438256	0.0283728	0.0143	EXP 150 of 150	15.07665	0.02820	0.9287	EXP 150 of 150	63.181574	0.031618	0.9649	EXP 150 of 150
14D02449	18.0 %	0.3110181	0.0013166	0.5748	EXP 150 of 150	1.8559	0.0301	0.0989	EXP 150 of 150	0.2088621	0.0294797	0.0037	EXP 150 of 150	14.64400	0.02960	0.9057	EXP 150 of 150	74.542883	0.034444	0.8477	EXP 150 of 150
14D02451	21.0 %	0.2813866	0.0013176	0.4835	EXP 150 of 150	1.7370	0.0278	0.1630	EXP 149 of 150	0.2105924	0.0283073	0.0078	EXP 150 of 150	11.13143	0.02614	0.8773	EXP 150 of 150	66.806210	0.032651	0.9195	EXP 150 of 150

Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard Name	Standard (in Ma)	%Lo	Standard Reference	Standard 40Ar/39Ar	%Lo	J	%Lo	Ar 40Ar/39Ar	%Hi	MCF	%Lo	Volume Ratio	Sensitivity (mVol/hr)	Day	Month	Year	Hour	Min	Reset	Isolation	X-Peak	Y-Peak	Z-Peak	Project	Experiment	Num	
HC0042	1.7%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	1.7	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	13	20	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0043	1.8%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	1.8	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	14	01	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0045	1.9%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	1.9	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	14	12	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0046	2.1%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	2.1	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	14	24	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0048	2.3%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	2.3	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	14	49	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0049	2.5%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	2.5	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	15	2	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0041	2.8%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	2.8	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	15	27	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0042	3.2%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	3.2	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	15	30	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0044	4.0%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	4	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	16	4	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0045	5.6%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	5	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	16	16	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0047	6.6%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	6	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	16	41	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0048	7.7%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	7	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	17	2	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0049	8.2%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	8.2	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	17	27	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0041	9.8%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	9.8	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	17	30	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0043	10.3%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	10.2	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	18	4	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0044	11.2%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	11.2	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	18	17	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0046	13.1%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	13.2	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	18	41	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0047	16.4%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	16.4	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	18	54	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0048	18.6%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	18	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	19	10	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01
HC0049	21.0%	SC10-015	Groundmass	Gelapage St. Crater Island	Dan Maginn	21	FC1-3	28.38	0.064	Renne et al (1998)	0.01058	0.341	0.0010000	0.141	322.723	0.008	0.0040000	0.003	1	4.00E-14	30	JAN	2014	19	44	1	15-000-02	0.00	0.00	0.00	Gelapage/Harry (15-01)	1402001	01

Irradiation Constants	40/36(a)		%1σ	40/36(c)		%1σ	38/36(a)		%1σ	38/36(c)		%1σ	39/37(ca)		%1σ	38/37(ca)		%1σ	36/37(ca)		%1σ	40/39(k)		%1σ	38/39(k)		%1σ	36/38(cd)		%1σ	K/Ca		%1σ	K/Cl		%1σ	Ca/Cl		%1σ
14D02422	1.7%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	0
14D02424	1.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02425	1.9%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02426	2.1%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02428	2.3%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02429	2.5%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02431	2.8%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02432	3.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02434	4.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02435	5.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02437	6.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02438	7.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02440	8.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02441	9.6%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02443	10.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02444	11.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02446	13.2%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02447	15.4%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02449	18.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	
14D02451	21.0%	295.5	0	0.018	35	0.1869	0	1.493	3	0.000673	0	0.000139	0	0.000264	0	0.00101	0	0.01138	0	0	0	0	0.43	0	0	0	0	0	0.43	0	0	0	0	0	0	0	0	0	

14D02421.AGE >>> SC12-015 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
257.4 ± 112.3
TOTAL FUSION
221.5 ± 136.9
NORMAL
ISOCHRON
320.7 ± 227.4
INVERSE
ISOCHRON
320.4 ± 170.5

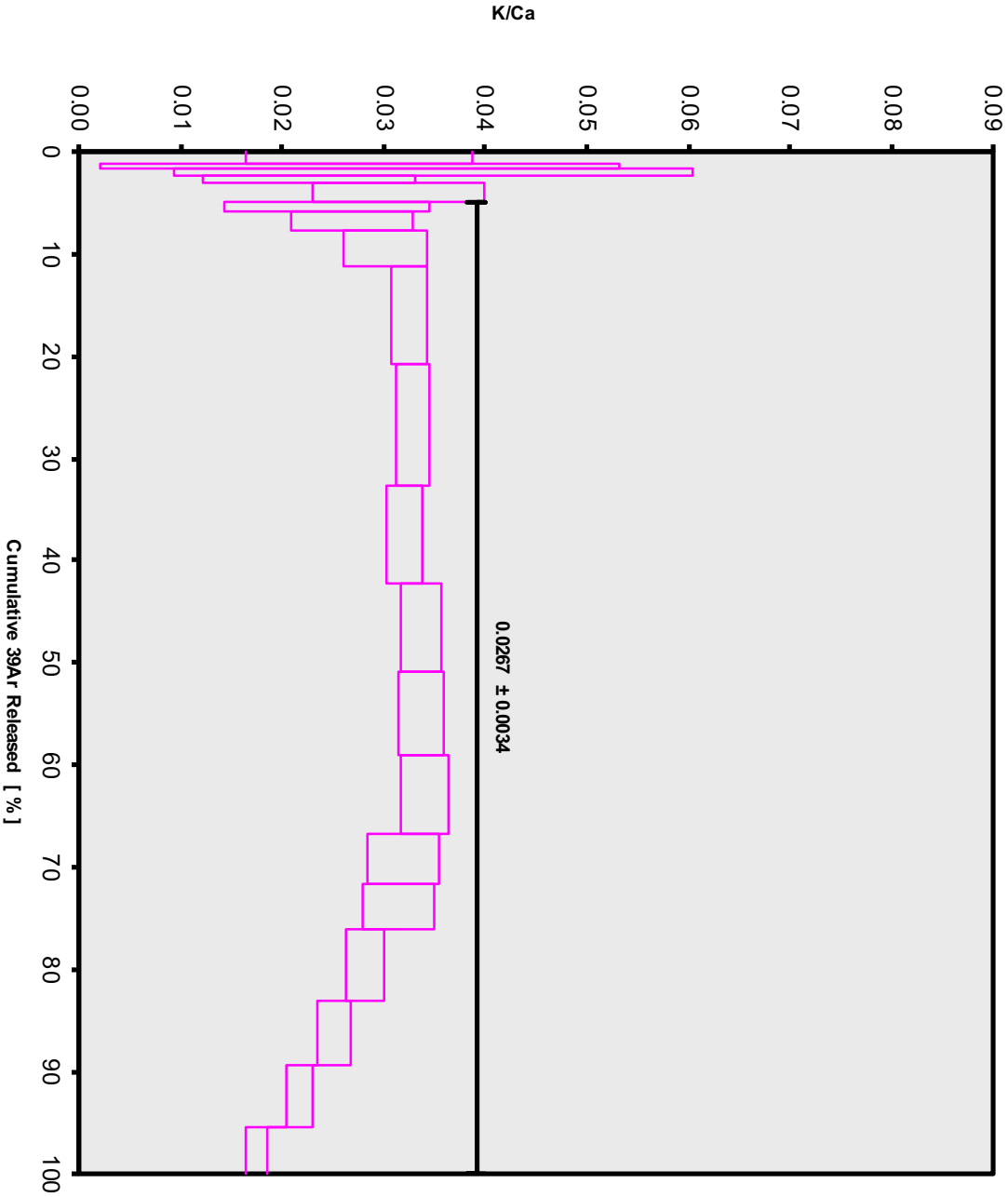
MSWD
(PROBABILITY)
0.46 (95%)

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins

IRR = 13-OSU-03
J = 0.00160856 ±

14D02421.AGE >>> SC12-015 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

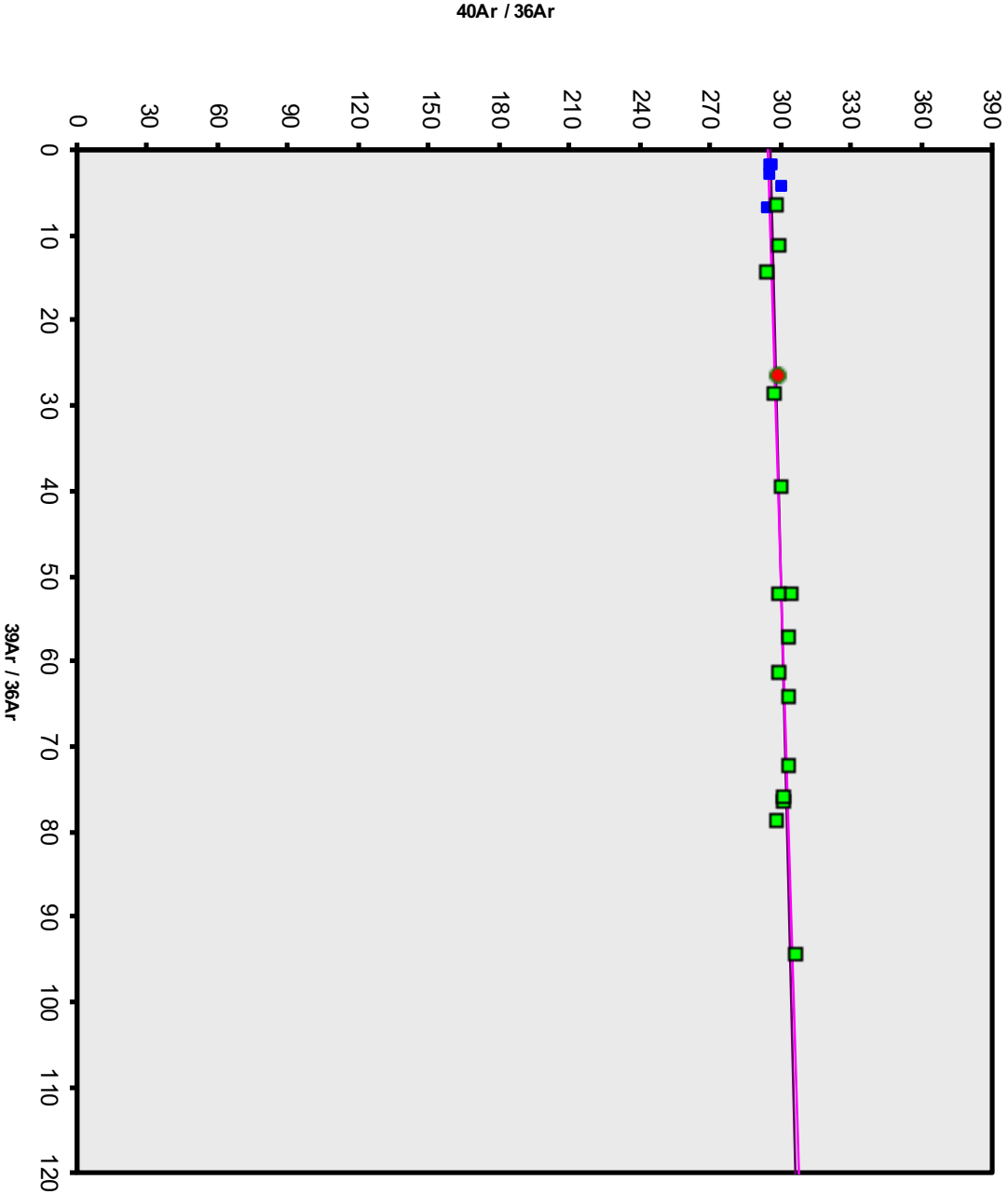
WEIGHTED
PLATEAU
257.4 $\pm$ 112.3
TOTAL FUSION
221.5 $\pm$ 136.9
NORMAL
ISOCHRON
320.7 $\pm$ 227.4
INVERSE
ISOCHRON
320.4 $\pm$ 170.5

Sample Info

Groundmass
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14D02421.AGE >>> SC12-015 >>> GALAPAGOS | HARPP (13-07) PROJECT



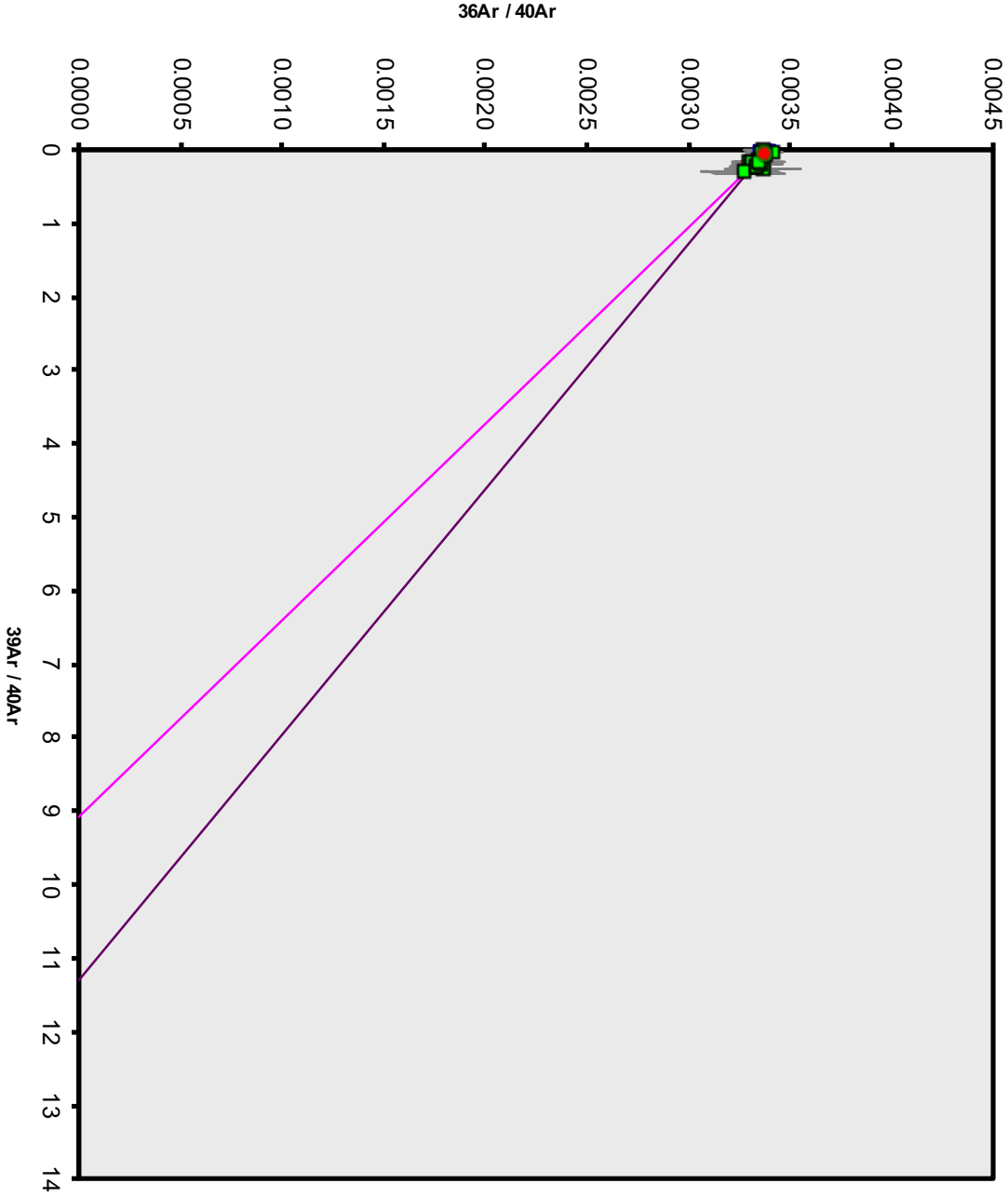
Ar-Ages in Ka

WEIGHTED
PLATEAU
257.4 ± 112.3
TOTAL FUSION
221.5 ± 136.9
NORMAL
ISOCHRON
320.7 ± 227.4
INVERSE
ISOCHRON
320.4 ± 170.5
MSWD
(PROBABILITY)
0.47 (94%)
40AR/36AR

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
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14D02421.AGE >>> SC12-015 >>> GALAPAGOS | HARPP (13-07) PROJECT



Ar-Ages in Ka

WEIGHTED
PLATEAU
257.4 ± 112.3
TOTAL FUSION
221.5 ± 136.9
NORMAL
ISOCHRON
320.7 ± 227.4
INVERSE
ISOCHRON
320.4 ± 170.5
MSWD
(PROBABILITY)
0.47 (94%)
SPREADING

Sample Info

Groundmass
Galapagos St. Cruz
Island
Dan Miggins
IRR = 13-OSU-03
J = 0.00160856 ±