

Incremental Heating		36Ar(a)	37Ar(ca)	38Ar(cl)	39Ar(k)	40Ar(r)	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
06C2984	0.01 W	0.020629	0.002851	0.000223	0.000927	0.211830	626.41 ± 215.81	3.36	0.20	0.1398 ± 0.0136
06C2986	0.06 W	0.011125	0.004033	0.000212	0.002131	0.158400	228.53 ± 63.38	4.60	0.45	0.2272 ± 0.0134
06C2987	0.12 W	0.007452	0.006588	0.000229	0.003690	0.107475	93.02 ± 28.94	4.65	0.78	0.2408 ± 0.0118
06C2988	0.18 W	0.003386	0.009707	0.000207	0.004876	0.071999	47.75 ± 10.12	6.71	1.03	0.2160 ± 0.0099
06C2990	0.21 W	0.001530	0.013904	0.000146	0.007305	0.020205	9.04 ± 5.14	4.28	1.54	0.2259 ± 0.0101
06C2991	0.24 W	0.000740	0.016793	0.000143	0.008675	0.011193	4.22 ± 3.27	4.87	1.83	0.2221 ± 0.0094
06C2992	0.27 W	0.000423	0.029250	0.000188	0.013778	0.008071	1.92 ± 1.67	6.06	2.91	0.2026 ± 0.0088
06C2994	0.35 W ✓	0.000281	0.042279	0.000178	0.018855	0.001313	0.23 ± 1.47	1.61	3.98	0.1918 ± 0.0082
06C2995	0.53 W ✓	0.000260	0.120291	0.000241	0.044368	0.005975	0.44 ± 0.50	7.20	9.36	0.1586 ± 0.0067
06C2997	0.78 W ✓	0.000266	0.251505	0.000376	0.077463	0.006587	0.28 ± 0.30	7.72	16.34	0.1324 ± 0.0055
06C2998	1.12 W ✓	0.000269	0.357816	0.000538	0.091744	0.005989	0.21 ± 0.23	7.00	19.36	0.1103 ± 0.0046
06C3000	1.68 W ✓	0.000279	0.473304	0.001105	0.093548	0.008741	0.31 ± 0.33	9.56	19.74	0.0850 ± 0.0036
06C3001	2.51 W ✓	0.000330	1.061462	0.001468	0.072392	0.005971	0.27 ± 0.39	5.76	15.27	0.0293 ± 0.0012
06C3003	3.59 W ✓	0.000169	1.084802	0.000650	0.027548	0.003886	0.46 ± 0.87	7.21	5.81	0.0109 ± 0.0005
06C3004	4.90 W	0.000033	0.610157	0.000149	0.006661	0.007265	3.57 ± 4.14	42.47	1.41	0.0047 ± 0.0002
Σ		0.047174	4.084741	0.006053	0.473959	0.632275				

Information on Analysis	Results	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%),n	K/Ca ± 2σ
Sample = OFU-1 2F18-06 Material = Groundmass 210-300μm Location = Ofu, Samoa Analyst = Anthony Koppers Project = SAMOA Mass Discrimination Law = LIN Irradiation = OSU2F06 J = 0.00181210 ± 0.00000761 FCT-3 = 28.030 ± 0.003 Ma	<b>Age Plateau</b> <b>Overestimate Errors</b>	0.0828 ± 0.0423 ± 51.12%	0.27 ± 0.14 ± 51.12%	0.24 96%	89.86 7	0.0168 ± 0.0169
		Minimal External Error ± 0.14		1.58	2σ Confidence Limit	
		Analytical Error ± 0.14		1.0000	Error Magnification	
	<b>Total Fusion Age</b>	1.3340 ± 0.2279 ± 17.08%	4.37 ± 0.75 ± 17.08%		15	0.0499 ± 0.0020
		Minimal External Error ± 0.75				
		Analytical Error ± 0.75				

Normal Isochron		39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
06C2984	0.01 W	0.0 ± 0.0	305.8 ± 4.3	0.2487
06C2986	0.06 W	0.2 ± 0.0	309.7 ± 4.4	0.6262
06C2987	0.12 W	0.5 ± 0.0	309.9 ± 4.8	0.7592
06C2988	0.18 W	1.4 ± 0.0	316.8 ± 4.9	0.8484
06C2990	0.21 W	4.8 ± 0.1	308.7 ± 7.8	0.9191
06C2991	0.24 W	11.7 ± 0.5	310.6 ± 12.3	0.9860
06C2992	0.27 W	32.5 ± 1.8	314.6 ± 17.7	0.9927
06C2994	0.35 W ✓	67.1 ± 6.8	290.8 ± 29.6	0.9954
06C2995	0.53 W ✓	170.5 ± 15.0	318.5 ± 28.0	0.9929
06C2997	0.78 W ✓	291.1 ± 26.5	320.3 ± 29.2	0.9961
06C2998	1.12 W ✓	341.4 ± 27.4	317.8 ± 25.6	0.9939
06C3000	1.68 W ✓	334.9 ± 37.8	326.8 ± 36.9	0.9971
06C3001	2.51 W ✓	219.2 ± 19.1	313.6 ± 27.3	0.9954
06C3003	3.59 W ✓	162.8 ± 23.6	318.5 ± 46.3	0.9964
06C3004	4.90 W	200.2 ± 171.3	513.9 ± 439.9	0.9991

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron Overestimate Errors	295.6115 ± 29.1684 ± 9.87%	0.0813 ± 0.1148 ± 141.13%	0.27 ± 0.38 ± 141.12%	0.28 92%
		Minimal External Error ± 0.38 Analytical Error ± 0.38		
Statistics	2σ Confidence Limit Error Magnification Number of Data Points	2.26 1.0000 7	Convergence Number of Iterations Calculated Line	0.0000000030 3 Weighted York-2

Inverse Isochron		$39(k)/40(a+r) \pm 2\sigma$	$36(a)/40(a+r) \pm 2\sigma$	r.i.
06C2984	0.01 W	0.000147 ± 0.000008	0.003270 ± 0.000046	0.0018
06C2986	0.06 W	0.000618 ± 0.000011	0.003229 ± 0.000046	0.0012
06C2987	0.12 W	0.001597 ± 0.000021	0.003227 ± 0.000050	0.0027
06C2988	0.18 W	0.004547 ± 0.000044	0.003157 ± 0.000049	0.0076
06C2990	0.21 W	0.015467 ± 0.000166	0.003239 ± 0.000082	0.0433
06C2991	0.24 W	0.037725 ± 0.000252	0.003219 ± 0.000128	0.0316
06C2992	0.27 W	0.103469 ± 0.000700	0.003179 ± 0.000179	0.0622
06C2994	0.35 W ✓	0.230681 ± 0.002255	0.003438 ± 0.000350	0.0514
06C2995	0.53 W ✓	0.535286 ± 0.005596	0.003140 ± 0.000277	0.0760
06C2997	0.78 W ✓	0.909095 ± 0.007316	0.003122 ± 0.000284	0.0648
06C2998	1.12 W ✓	1.074293 ± 0.009552	0.003147 ± 0.000253	0.0718
06C3000	1.68 W ✓	1.024949 ± 0.008774	0.003060 ± 0.000345	0.0454
06C3001	2.51 W ✓	0.698990 ± 0.005830	0.003189 ± 0.000278	0.0726
06C3003	3.59 W ✓	0.511245 ± 0.006304	0.003140 ± 0.000457	0.0682
06C3004	4.90 W	0.389658 ± 0.014124	0.001946 ± 0.001666	0.0392

Results	$40(a)/36(a) \pm 2\sigma$	$40(r)/39(k) \pm 2\sigma$	Age ± 2σ (Ma)	MSWD
Inverse Isochron Overestimate Errors	296.8177 ± 29.7360 ± 10.02%	0.0780 ± 0.0851 ± 109.09%	0.26 ± 0.28 ± 109.09%	0.28 92%
			Minimal External Error ± 0.28 Analytical Error ± 0.28	
Statistics	2σ Confidence Limit Error Magnification Number of Data Points	2.26 1.0000 7	Convergence Number of Iterations Calculated Line	0.0007740228 3 Weighted York-2

Relative Abundances		36Ar	%1σ	37Ar	%1σ	38Ar	%1σ	39Ar	%1σ	40Ar	%1σ	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
06C2984	0.01 W	0.0206301	0.699	0.0028514	3.525	0.0040902	0.715	0.0009293	2.708	6.3077809	0.058	626.41 ± 215.81	3.36	0.20	0.1398 ± 0.0136
06C2986	0.06 W	0.0111257	0.709	0.0040330	1.991	0.0023173	0.827	0.0021336	0.881	3.4457217	0.027	228.53 ± 63.38	4.60	0.45	0.2272 ± 0.0134
06C2987	0.12 W	0.0074543	0.777	0.0065878	1.261	0.0016663	1.032	0.0036943	0.664	2.3096873	0.037	93.02 ± 28.94	4.65	0.78	0.2408 ± 0.0118
06C2988	0.18 W	0.0033885	0.770	0.0097067	1.024	0.0008995	1.937	0.0048832	0.476	1.0725228	0.053	47.75 ± 10.12	6.71	1.03	0.2160 ± 0.0099
06C2990	0.21 W	0.0015336	1.256	0.0139044	0.861	0.0005207	3.811	0.0073145	0.507	0.4722819	0.172	9.04 ± 5.14	4.28	1.54	0.2259 ± 0.0101
06C2991	0.24 W	0.0007448	1.966	0.0167933	0.621	0.0003873	4.314	0.0086870	0.301	0.2299680	0.145	4.22 ± 3.27	4.87	1.83	0.2221 ± 0.0094
06C2992	0.27 W	0.0004312	2.747	0.0292495	0.801	0.0004352	4.439	0.0137986	0.235	0.1331830	0.243	1.92 ± 1.67	6.06	2.91	0.2026 ± 0.0088
06C2994	0.35 W ✓	0.0002924	4.886	0.0422785	0.669	0.0004604	4.216	0.0188846	0.333	0.0817658	0.357	0.23 ± 1.47	1.61	3.98	0.1918 ± 0.0082
06C2995	0.53 W ✓	0.0002927	3.897	0.1202908	0.552	0.0008307	1.919	0.0444533	0.313	0.0829597	0.417	0.44 ± 0.50	7.20	9.36	0.1586 ± 0.0067
06C2997	0.78 W ✓	0.0003338	3.618	0.2515053	0.565	0.0013718	1.414	0.0776409	0.207	0.0853362	0.342	0.28 ± 0.30	7.72	16.34	0.1324 ± 0.0055
06C2998	1.12 W ✓	0.0003651	2.942	0.3578161	0.601	0.0017107	1.183	0.0919973	0.262	0.0855505	0.355	0.21 ± 0.23	7.00	19.36	0.1103 ± 0.0046
06C3000	1.68 W ✓	0.0004068	3.860	0.4733035	0.700	0.0023052	0.761	0.0938832	0.270	0.0914249	0.328	0.31 ± 0.33	9.56	19.74	0.0850 ± 0.0036
06C3001	2.51 W ✓	0.0006160	2.308	1.0614615	0.565	0.0024400	0.866	0.0731445	0.201	0.1036859	0.362	0.27 ± 0.39	5.76	15.27	0.0293 ± 0.0012
06C3003	3.59 W ✓	0.0004611	2.619	1.0848019	0.645	0.0010497	1.848	0.0283170	0.260	0.0539293	0.552	0.46 ± 0.87	7.21	5.81	0.0109 ± 0.0005
06C3004	4.90 W	0.0001974	7.175	0.6101571	0.714	0.0002552	6.387	0.0070941	0.450	0.0171067	1.742	3.57 ± 4.14	42.47	1.41	0.0047 ± 0.0002
Σ		0.0482735	0.377	4.0847410	0.271	0.0207402	0.363	0.4768554	0.095	14.5729047	0.028				

Information on Analysis and Constants Used in Calculations
Sample = OFU-1 2F18-06
Material = Groundmass 210-300µm
Location = Ofu, Samoa
Analyst = Anthony Koppers
Project = SAMOA
Mass Discrimination Law = LIN
Irradiation = OSU2F06
J = 0.00181210 ± 0.00000761
FCT-3 = 28.030 ± 0.003 Ma
IGSN = KOP000031
Preferred Age = Plateau Age
Classification = Eruption Age
Experiment Type = Incremental Heating
Extraction Method = Bulk Laser Heating
Heating = 900 sec
Isolation = 15.00 min
Instrument = MAP215-50
Lithology = Basanite
Lat-Lon = 14°06.1'S - 169°54.3'E
Age Equations = Conventional
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 = 2.236 ± 0.045 E-06 1/a
Production Ratio 36/38 in CI = 316.0 ± 15.8

Results	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (% ,n)	K/Ca ± 2σ
<b>Age Plateau</b> <b>Overestimate Errors</b>	0.0828 ± 0.0423 ± 51.12%	0.27 ± 0.14 ± 51.12%	0.24	89.86 7	0.0168 ± 0.0169
	Minimal External Error ± 0.14	Analytical Error ± 0.14	1.58	2σ Confidence Limit	Error Magnification
			1.0000		
<b>Total Fusion Age</b>	1.3340 ± 0.2279 ± 17.08%	4.37 ± 0.75 ± 17.08%		15	0.0499 ± 0.0020
	Minimal External Error ± 0.75	Analytical Error ± 0.75			
<b>Normal Isochron</b> <b>Overestimate Errors</b>	0.0813 ± 0.1148 ± 141.13%	0.27 ± 0.38 ± 141.12%	0.28	89.86 7	
	Minimal External Error ± 0.38	Analytical Error ± 0.38	2.26	2σ Confidence Limit	Error Magnification
			1.0000		
<b>Inverse Isochron</b> <b>Overestimate Errors</b>	0.0780 ± 0.0851 ± 109.09%	0.26 ± 0.28 ± 109.09%	0.28	89.86 7	
	Minimal External Error ± 0.28	Analytical Error ± 0.28	2.26	2σ Confidence Limit	Error Magnification
			1.0000		

Institute of Geophysics and Planetary Physics  
Scripps Institution of Oceanography, La Jolla, USA

Degassing Patterns		36Ar(a)	%1σ	36Ar(c)	%1σ	36Ar(ca)	%1σ	36Ar(cl)	%1σ	37Ar(ca)	%1σ	38Ar(a)	%1σ	38Ar(c)	%1σ	38Ar(k)	%1σ	38Ar(ca)	%1σ	38Ar(cl)	%1σ	39Ar(k)	%1σ	39Ar(ca)	%1σ	40Ar(r)	%1σ	40Ar(a)	%1σ	40Ar(c)	%1σ	40Ar(k)	%1σ
06C2984	0.01 W	0.020629	0.70	0.000000	0.00	0.000001	3.54	0.000000	18.62	0.002851	3.52	0.003856	0.70	0.000000	0.00	0.000011	2.72	0.000000	22.18	0.000223	19.38	0.000927	2.71	0.000002	3.97	0.211830	20.20	6.095949	0.70	0.000000	0.00	0.000002	25.05
06C2986	0.06 W	0.011125	0.71	0.000000	0.00	0.000001	2.03	0.000000	12.61	0.004033	1.99	0.002079	0.71	0.000000	0.00	0.000026	0.89	0.000000	21.99	0.000212	13.71	0.002131	0.88	0.000003	2.70	0.158400	14.74	3.287319	0.71	0.000000	0.00	0.000004	24.92
06C2987	0.12 W	0.007452	0.78	0.000000	0.00	0.000002	1.31	0.000000	10.40	0.006588	1.26	0.001393	0.78	0.000000	0.00	0.000045	0.67	0.000000	21.94	0.000229	11.71	0.003690	0.66	0.000005	2.22	0.107475	15.94	2.202207	0.78	0.000000	0.00	0.000006	24.91
06C2988	0.18 W	0.003386	0.77	0.000000	0.00	0.000003	1.09	0.000000	10.25	0.009707	1.02	0.000633	0.77	0.000000	0.00	0.000059	0.49	0.000000	21.92	0.000207	11.58	0.004876	0.48	0.000007	2.10	0.071999	10.73	1.000516	0.77	0.000000	0.00	0.000008	24.90
06C2990	0.21 W	0.001530	1.26	0.000000	0.00	0.000004	0.94	0.000000	14.84	0.013904	0.86	0.000286	1.26	0.000000	0.00	0.000088	0.52	0.000000	21.92	0.000146	15.79	0.007305	0.51	0.000010	2.02	0.020205	28.47	0.452065	1.26	0.000000	0.00	0.000012	24.91
06C2991	0.24 W	0.000740	1.98	0.000000	0.00	0.000005	0.72	0.000000	12.98	0.016793	0.62	0.000138	1.98	0.000000	0.00	0.000105	0.32	0.000001	21.91	0.000143	14.05	0.008675	0.30	0.000012	1.93	0.011193	38.78	0.218761	1.98	0.000000	0.00	0.000014	24.90
06C2992	0.27 W	0.000423	2.80	0.000000	0.00	0.000008	0.88	0.000000	11.65	0.029250	0.80	0.000079	2.80	0.000000	0.00	0.000167	0.26	0.000001	21.91	0.000188	12.83	0.013778	0.24	0.000021	2.00	0.008071	43.56	0.125089	2.80	0.000000	0.00	0.000023	24.90
06C2994	0.35 W ✓	0.000281	5.08	0.000000	0.00	0.000011	0.76	0.000000	12.25	0.042279	0.67	0.000053	5.08	0.000000	0.00	0.000228	0.35	0.000001	21.91	0.000178	13.39	0.018855	0.33	0.000030	1.95	0.001313	322.42	0.083047	5.08	0.000000	0.00	0.000031	24.90
06C2995	0.53 W ✓	0.000260	4.38	0.000000	0.00	0.000032	0.66	0.000000	8.62	0.120291	0.55	0.000049	4.38	0.000000	0.00	0.000537	0.33	0.000004	21.91	0.000241	10.16	0.044368	0.31	0.000085	1.91	0.005975	56.71	0.076911	4.38	0.000000	0.00	0.000073	24.90
06C2997	0.78 W ✓	0.000266	4.54	0.000000	0.00	0.000068	0.68	0.000000	7.52	0.251505	0.56	0.000050	4.54	0.000000	0.00	0.000938	0.23	0.000008	21.91	0.000376	9.25	0.077463	0.21	0.000178	1.92	0.006587	54.40	0.078622	4.54	0.000000	0.00	0.000128	24.90
06C2998	1.12 W ✓	0.000269	4.00	0.000000	0.00	0.000096	0.71	0.000000	6.62	0.357816	0.60	0.000050	4.00	0.000000	0.00	0.001111	0.28	0.000011	21.91	0.000538	8.54	0.091744	0.26	0.000254	1.93	0.005989	53.34	0.079410	4.00	0.000000	0.00	0.000151	24.90
06C3000	1.68 W ✓	0.000279	5.63	0.000000	0.00	0.000127	0.79	0.000000	5.64	0.473304	0.70	0.000052	5.63	0.000000	0.00	0.001133	0.29	0.000015	21.91	0.001105	7.80	0.093548	0.27	0.000336	1.96	0.008741	53.31	0.082530	5.63	0.000000	0.00	0.000154	24.90
06C3001	2.51 W ✓	0.000330	4.35	0.000000	0.00	0.000286	0.68	0.000000	5.60	1.061462	0.56	0.000062	4.35	0.000000	0.00	0.000877	0.23	0.000034	21.91	0.001468	7.77	0.072392	0.20	0.000753	1.92	0.005971	71.30	0.097595	4.35	0.000000	0.00	0.000119	24.90
06C3003	3.59 W ✓	0.000169	7.25	0.000000	0.00	0.000292	0.74	0.000000	6.28	1.084802	0.64	0.000032	7.25	0.000000	0.00	0.000334	0.29	0.000035	21.91	0.000650	8.27	0.027548	0.27	0.000769	1.94	0.003886	93.61	0.049998	7.25	0.000000	0.00	0.000045	24.90
06C3004	4.90 W	0.000033	42.76	0.000000	0.00	0.000164	0.80	0.000000	12.67	0.610157	0.71	0.000006	42.76	0.000000	0.00	0.000081	0.51	0.000020	21.91	0.000149	13.77	0.006661	0.50	0.000433	1.96	0.007265	58.01	0.009831	42.76	0.000000	0.00	0.000011	24.90
Σ		0.047174	0.39	0.000000	0.00	0.001099	0.31	0.000001	2.36	4.084741	0.27	0.008817	0.39	0.000000	0.00	0.005740	0.10	0.000131	9.46	0.006053	3.04	0.473959	0.10	0.002896	0.83	0.632275	8.54	13.939848	0.39	0.000000	0.00	0.000782	9.38
Σ								0.048274	0.38	4.084741	0.27									0.020740	0.90			0.476855	0.10					14.572905	0.52		

Additional Parameters		40(r)/39(k)	1 $\sigma$	40(r+a)	1 $\sigma$	40Ar/39Ar	1 $\sigma$	37Ar/39Ar	1 $\sigma$	36Ar/39Ar	1 $\sigma$	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
06C2984	0.01 W	228.452047	46.56222	6.307779	0.00369	6787.935861	183.85810	3.068478	0.13640	22.200455	0.62090	83.206	5.18810740	1.00058831	6.383E-19
06C2986	0.06 W	74.338613	10.97350	3.445718	0.00093	1614.947078	14.23642	1.890201	0.04116	5.214421	0.05899	83.248	5.19237897	1.00058860	3.487E-19
06C2987	0.12 W	29.128480	4.64846	2.309681	0.00086	625.195871	4.15547	1.783221	0.02542	2.017757	0.02062	83.269	5.19458732	1.00058875	2.337E-19
06C2988	0.18 W	14.765041	1.58605	1.072515	0.00057	219.634596	1.05147	1.987778	0.02245	0.693904	0.00628	83.290	5.19672533	1.00058890	1.085E-19
06C2990	0.21 W	2.766057	0.78750	0.472270	0.00081	64.567894	0.34535	1.900943	0.01899	0.209665	0.00284	83.333	5.20107534	1.00058920	4.779E-20
06C2991	0.24 W	1.290240	0.50042	0.229954	0.00033	26.472644	0.08842	1.933153	0.01335	0.085743	0.00171	83.354	5.20328739	1.00058935	2.327E-20
06C2992	0.27 W	0.585811	0.25518	0.133160	0.00032	9.651899	0.03263	2.119742	0.01769	0.031250	0.00086	83.375	5.20542899	1.00058950	1.348E-20
06C2994	0.35 W ✓	0.069617	0.22446	0.081735	0.00029	4.329761	0.02114	2.238783	0.01672	0.015486	0.00076	83.417	5.20978628	1.00058980	8.275E-21
06C2995	0.53 W ✓	0.134680	0.07638	0.082887	0.00035	1.866222	0.00973	2.706003	0.01718	0.006584	0.00026	83.439	5.21200204	1.00058995	8.396E-21
06C2997	0.78 W ✓	0.085032	0.04626	0.085208	0.00029	1.099115	0.00440	3.239341	0.01948	0.004299	0.00016	83.481	5.21636483	1.00059025	8.636E-21
06C2998	1.12 W ✓	0.065285	0.03482	0.085399	0.00031	0.929924	0.00410	3.889419	0.02552	0.003968	0.00012	83.503	5.21858339	1.00059040	8.658E-21
06C3000	1.68 W ✓	0.093436	0.04981	0.091271	0.00030	0.973815	0.00414	5.041408	0.03782	0.004333	0.00017	83.546	5.22302333	1.00059070	9.252E-21
06C3001	2.51 W ✓	0.082487	0.05881	0.103566	0.00038	1.417549	0.00587	14.511852	0.08704	0.008422	0.00020	83.568	5.22531640	1.00059086	1.049E-20
06C3003	3.59 W ✓	0.141052	0.13204	0.053884	0.00030	1.904487	0.01162	38.309223	0.26628	0.016284	0.00043	83.610	5.22969034	1.00059116	5.458E-21
06C3004	4.90 W	1.090618	0.63267	0.017096	0.00030	2.411404	0.04339	86.009392	0.72610	0.027829	0.00200	83.631	5.23184280	1.00059131	1.731E-21

Procedure Blanks		36Ar	1σ	37Ar	1σ	38Ar	1σ	39Ar	1σ	40Ar	1σ
06C2984	0.01 W	0.000046	0.000008	0.000028	0.000010	0.000007	0.000012	0.000051	0.000011	0.011563	0.000293
06C2986	0.06 W	0.000037	0.000008	0.000024	0.000010	0.000013	0.000012	0.000020	0.000011	0.008294	0.000291
06C2987	0.12 W	0.000032	0.000008	0.000022	0.000010	0.000014	0.000012	0.000009	0.000011	0.007111	0.000290
06C2988	0.18 W	0.000029	0.000008	0.000021	0.000010	0.000015	0.000012	0.000001	0.000011	0.006253	0.000289
06C2990	0.21 W	0.000022	0.000008	0.000021	0.000010	0.000015	0.000012	0.000001	0.000011	0.005254	0.000288
06C2991	0.24 W	0.000020	0.000008	0.000021	0.000010	0.000014	0.000012	0.000001	0.000011	0.005065	0.000288
06C2992	0.27 W	0.000018	0.000008	0.000021	0.000010	0.000012	0.000012	0.000001	0.000011	0.005045	0.000287
06C2994	0.35 W	0.000015	0.000008	0.000024	0.000010	0.000009	0.000012	0.000001	0.000011	0.005372	0.000287
06C2995	0.53 W	0.000015	0.000009	0.000025	0.000012	0.000007	0.000012	0.000003	0.000011	0.005663	0.000287
06C2997	0.78 W	0.000015	0.000009	0.000030	0.000012	0.000004	0.000012	0.000014	0.000011	0.006321	0.000288
06C2998	1.12 W	0.000016	0.000009	0.000033	0.000012	0.000003	0.000012	0.000020	0.000011	0.006635	0.000288
06C3000	1.68 W	0.000018	0.000009	0.000040	0.000012	0.000003	0.000012	0.000031	0.000011	0.007054	0.000289
06C3001	2.51 W	0.000020	0.000009	0.000044	0.000012	0.000005	0.000012	0.000035	0.000011	0.007092	0.000290
06C3003	3.59 W	0.000025	0.000009	0.000053	0.000012	0.000010	0.000012	0.000041	0.000011	0.006666	0.000292
06C3004	4.90 W	0.000028	0.000009	0.000058	0.000012	0.000014	0.000012	0.000041	0.000011	0.006154	0.000293

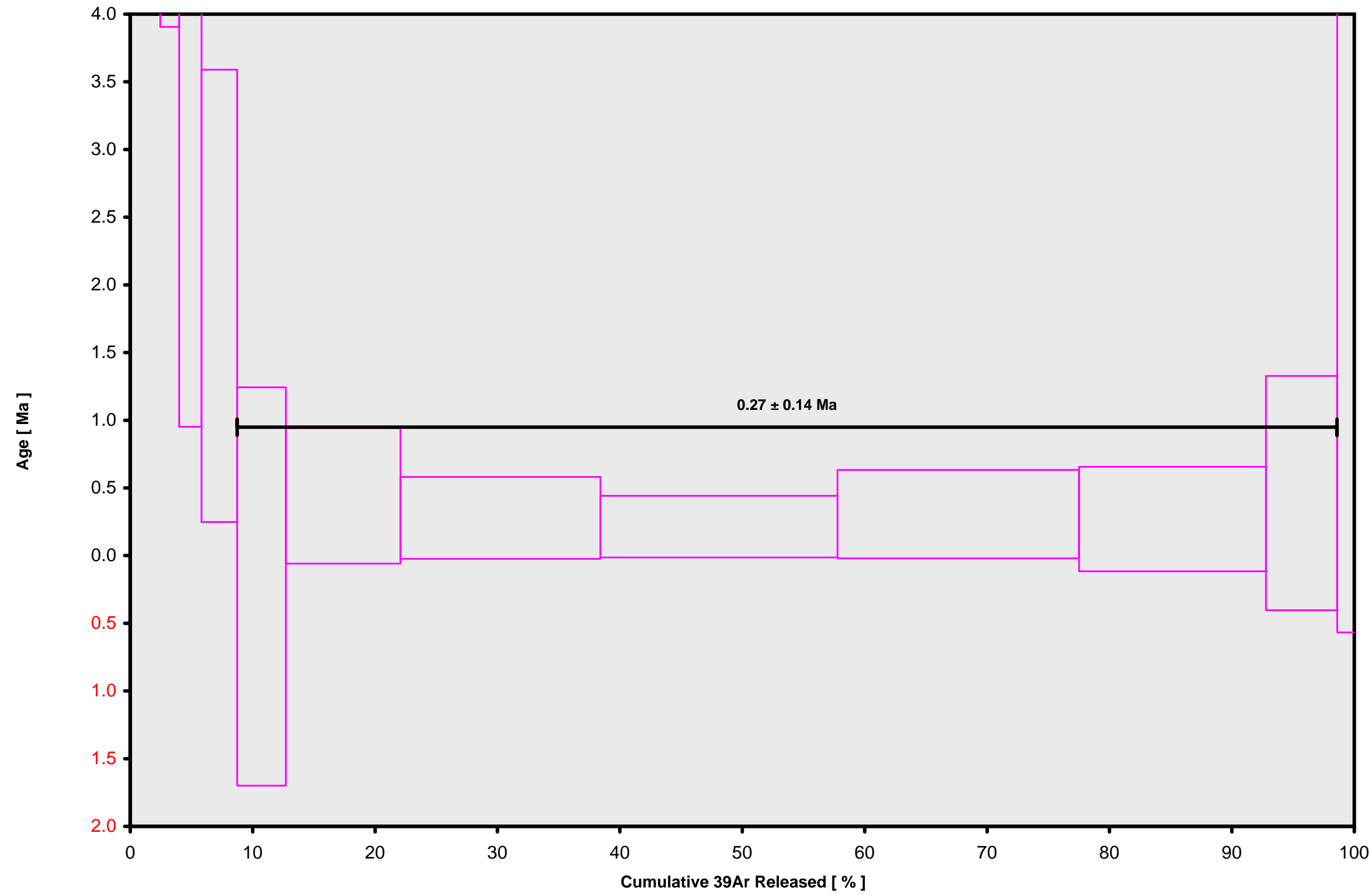
Intercept Values	36Ar			37Ar			38Ar			39Ar			40Ar								
	1σ	r2	EXP #	1σ	r2	EXP #	1σ	r2	EXP #	1σ	r2	EXP #	1σ	r2	EXP #						
06C2984	0.01 W	0.020625	0.000061	0.9743	LIN #	0.000573	0.000016	0.9966	EXP #	0.004056	0.000023	0.2476	LIN #	0.000966	0.000022	0.9999	EXP #	6.210047	0.003613	0.9982	EXP #
06C2986	0.06 W	0.011138	0.000035	0.9592	LIN #	0.000796	0.000011	0.9950	EXP #	0.002308	0.000013	0.0551	LIN #	0.002124	0.000015	0.9999	EXP #	3.395277	0.000866	0.9997	EXP #
06C2987	0.12 W	0.007471	0.000032	0.9323	LIN #	0.001283	0.000011	0.9911	LIN # 11	0.001665	0.000012	0.0259	LIN #	0.003652	0.000021	0.9997	EXP #	2.277623	0.000794	0.9993	EXP # 12
06C2988	0.18 W	0.003409	0.000012	0.9047	LIN #	0.001878	0.000013	0.9381	EXP #	0.000906	0.000013	0.0195	LIN #	0.004816	0.000019	0.9992	EXP #	1.060430	0.000482	0.9989	EXP # 6
06C2990	0.21 W	0.001553	0.000014	0.5792	LIN #	0.002678	0.000015	0.2488	EXP #	0.000530	0.000016	0.4158	LIN #	0.007215	0.000033	0.9898	EXP #	0.469461	0.000745	0.9721	LIN # 1 7
06C2991	0.24 W	0.000763	0.000011	0.1376	LIN #	0.003230	0.000004	0.9803	LIN # 8	0.000397	0.000012	0.0965	LIN #	0.008569	0.000019	0.9886	EXP #	0.231081	0.000164	0.0011	LIN # 10
06C2992	0.27 W	0.000448	0.000008	0.0014	LIN #	0.005608	0.000032	0.9008	EXP #	0.000443	0.000015	0.0683	LIN #	0.013609	0.000021	0.7266	EXP #	0.135890	0.000147	0.9714	LIN #
06C2994	0.35 W	0.000307	0.000011	0.0320	LIN #	0.008092	0.000031	0.9165	EXP #	0.000465	0.000015	0.0069	LIN #	0.018627	0.000053	0.8539	EXP #	0.085672	0.000053	0.9987	EXP #
06C2995	0.53 W	0.000307	0.000007	0.3111	LIN #	0.022969	0.000032	0.9942	EXP #	0.000830	0.000011	0.3654	LIN #	0.043839	0.000117	0.9703	LIN # 1	0.087115	0.000190	0.9838	EXP # 10
06C2997	0.78 W	0.000348	0.000008	0.0102	LIN #	0.047952	0.000090	0.9904	EXP #	0.001363	0.000015	0.5839	LIN #	0.076562	0.000100	0.9934	EXP #	0.090081	0.000048	0.9989	EXP # 5
06C2998	1.12 W	0.000380	0.000006	0.0862	LIN #	0.068183	0.000191	0.9774	EXP #	0.001697	0.000016	0.6899	LIN #	0.090723	0.000188	0.9841	EXP #	0.090600	0.000094	0.9960	EXP #
06C3000	1.68 W	0.000424	0.000013	0.0014	LIN #	0.090118	0.000410	0.9512	EXP #	0.002286	0.000011	0.8691	LIN #	0.092602	0.000201	0.9856	LIN # 1	0.096795	0.000078	0.9973	EXP # 1 9
06C3001	2.51 W	0.000635	0.000010	0.1494	LIN #	0.201971	0.000385	0.9935	EXP # 3 8	0.002421	0.000016	0.8072	LIN #	0.072157	0.000088	0.9952	LIN # 1 4 6	0.108883	0.000234	0.9850	LIN # 1 2 4
06C3003	3.59 W	0.000485	0.000007	0.0351	LIN #	0.206268	0.000751	0.9675	LIN #	0.001049	0.000015	0.2471	LIN #	0.027964	0.000056	0.9662	EXP # 5	0.059565	0.000057	0.9992	LIN #
06C3004	4.90 W	0.000224	0.000011	0.1645	LIN #	0.115986	0.000552	0.9567	EXP #	0.000267	0.000011	0.0034	LIN #	0.007035	0.000028	0.8620	LIN #	0.022862	0.000053	0.9993	LIN #

Institute of Geophysics and Planetary Physics  
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Sample Parameters	Sample	Material	Location	Analyst	Temp	Standard (in Ma)	%1σ	J	%1σ	MDF	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist	Irradiation	Project	Experiment	Nmb	Standard Name	
06C2984	0.01 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.01	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0176	1.012E-19	28	AUG	2006	20	00	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2986	0.06 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.06	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0173	1.012E-19	28	AUG	2006	21	00	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2987	0.12 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.12	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0172	1.012E-19	28	AUG	2006	21	31	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2988	0.18 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.18	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0173	1.012E-19	28	AUG	2006	22	01	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2990	0.21 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.21	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0172	1.012E-19	28	AUG	2006	23	02	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2991	0.24 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.24	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0171	1.012E-19	28	AUG	2006	23	33	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2992	0.27 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.27	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0172	1.012E-19	29	AUG	2006	00	03	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2994	0.35 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.35	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0171	1.012E-19	29	AUG	2006	01	04	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2995	0.53 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.53	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0173	1.012E-19	29	AUG	2006	01	35	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2997	0.78 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	0.78	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0175	1.012E-19	29	AUG	2006	02	36	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C2998	1.12 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	1.12	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0175	1.012E-19	29	AUG	2006	03	07	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C3000	1.68 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	1.68	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0174	1.012E-19	29	AUG	2006	04	09	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C3001	2.51 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	2.51	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0174	1.012E-19	29	AUG	2006	04	41	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C3003	3.59 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	3.59	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0173	1.012E-19	29	AUG	2006	05	42	001	OSU2F06	Samoa	06C2984	01	FCT-3
06C3004	4.90 W	OFU-1 2F18-06	Groundmass 210-300μm	Ofu, Samoa	Anthony Koppers	4.9	28.03	0.01	0.0018121	0.42	1.00378	0.16	1.0174	1.012E-19	29	AUG	2006	06	12	001	OSU2F06	Samoa	06C2984	01	FCT-3

Irradiation Constants	40/36(a)		40/36(c)		38/36(a)		38/36(c)		39/37(ca)		38/37(ca)		36/37(ca)		40/39(k)		38/39(k)		36/38(cl)		K/Ca		K/Cl		Ca/Cl		
		%1σ		%1σ		%1σ		%1σ		%1σ		%1σ		%1σ		%1σ		%1σ		%1σ		%1σ		%1σ		%1σ	
06C2984	0.01 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2986	0.06 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2987	0.12 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2988	0.18 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2990	0.21 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2991	0.24 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2992	0.27 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2994	0.35 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2995	0.53 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2997	0.78 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C2998	1.12 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C3000	1.68 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C3001	2.51 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C3003	3.59 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0
06C3004	4.90 W	295.5	0	0.018	35	0.1869	0	1.493	3	0.000709	1.83	0.000032	21.9	0.000269	0.37	0.00165	24.9	0.01211	0.1	0	0	0.43	2	0	0	0	0

06C2983.AGE >>> OFU-1 2F18-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

$0.27 \pm 0.14$

TOTAL FUSION

$4.37 \pm 0.75$

NORMAL ISOCHRON

$0.27 \pm 0.38$

INVERSE ISOCHRON

$0.26 \pm 0.28$

MSWD (PROBABILITY)

0.24 (96%)

Sample Info

Groundmass 210-300 $\mu$ m

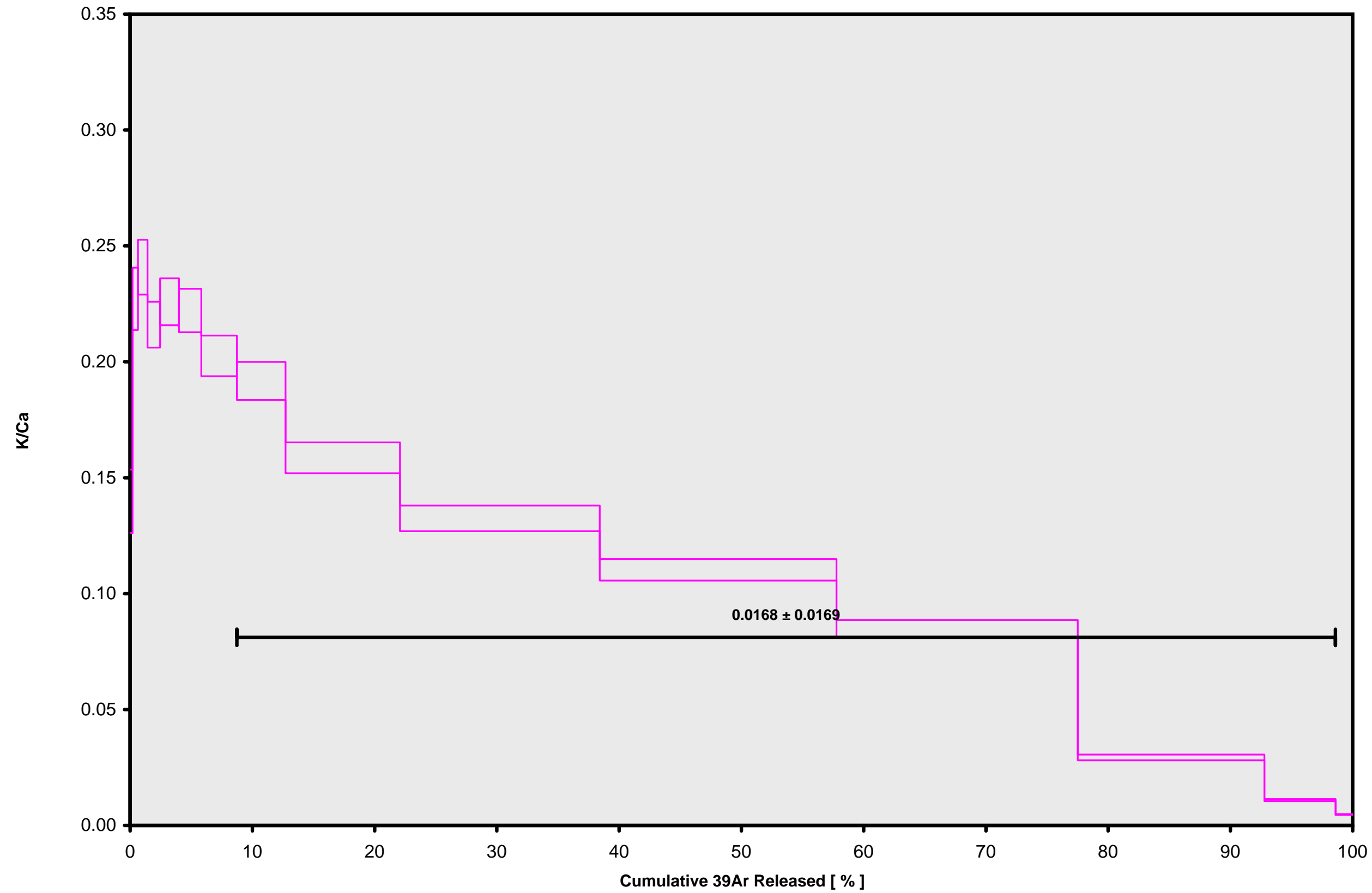
Ofu, Samoa

Anthony Koppers

IRR = OSU2F06

J =  $0.00181210 \pm 0.00000761$

06C2983.AGE >>> OFU-1 2F18-06 >>> SAMOA PROJECT



### Ar-Ages in Ma

WEIGHTED PLATEAU

$0.27 \pm 0.14$

TOTAL FUSION

$4.37 \pm 0.75$

NORMAL ISOCHRON

$0.27 \pm 0.38$

INVERSE ISOCHRON

$0.26 \pm 0.28$

### Sample Info

Groundmass 210-300 $\mu$ m

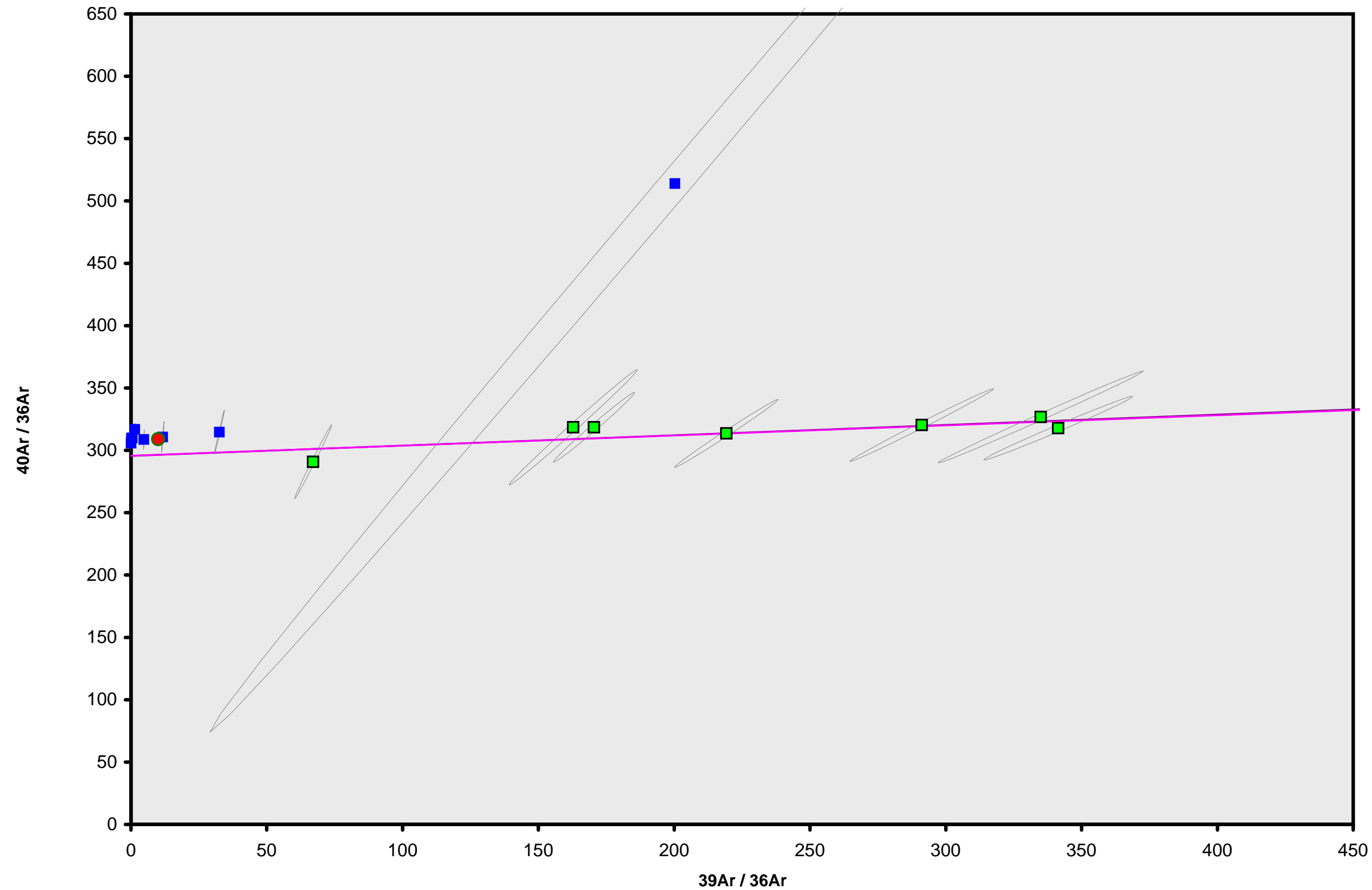
Ofu, Samoa

Anthony Koppers

IRR = OSU2F06

J =  $0.00181210 \pm 0.00000761$

06C2983.AGE >>> OFU-1 2F18-06 >>> SAMOA PROJECT



**Ar-Ages in Ma**

**WEIGHTED PLATEAU**

**0.27 ± 0.14**

**TOTAL FUSION**

**4.37 ± 0.75**

**NORMAL ISOCHRON**

**0.27 ± 0.38**

**INVERSE ISOCHRON**

**0.26 ± 0.28**

**MSWD (PROBABILITY)**

**0.28 (92%)**

**40AR/36AR INTERCEPT**

**295.6 ± 29.2**

**Sample Info**

**Groundmass 210-300µm**

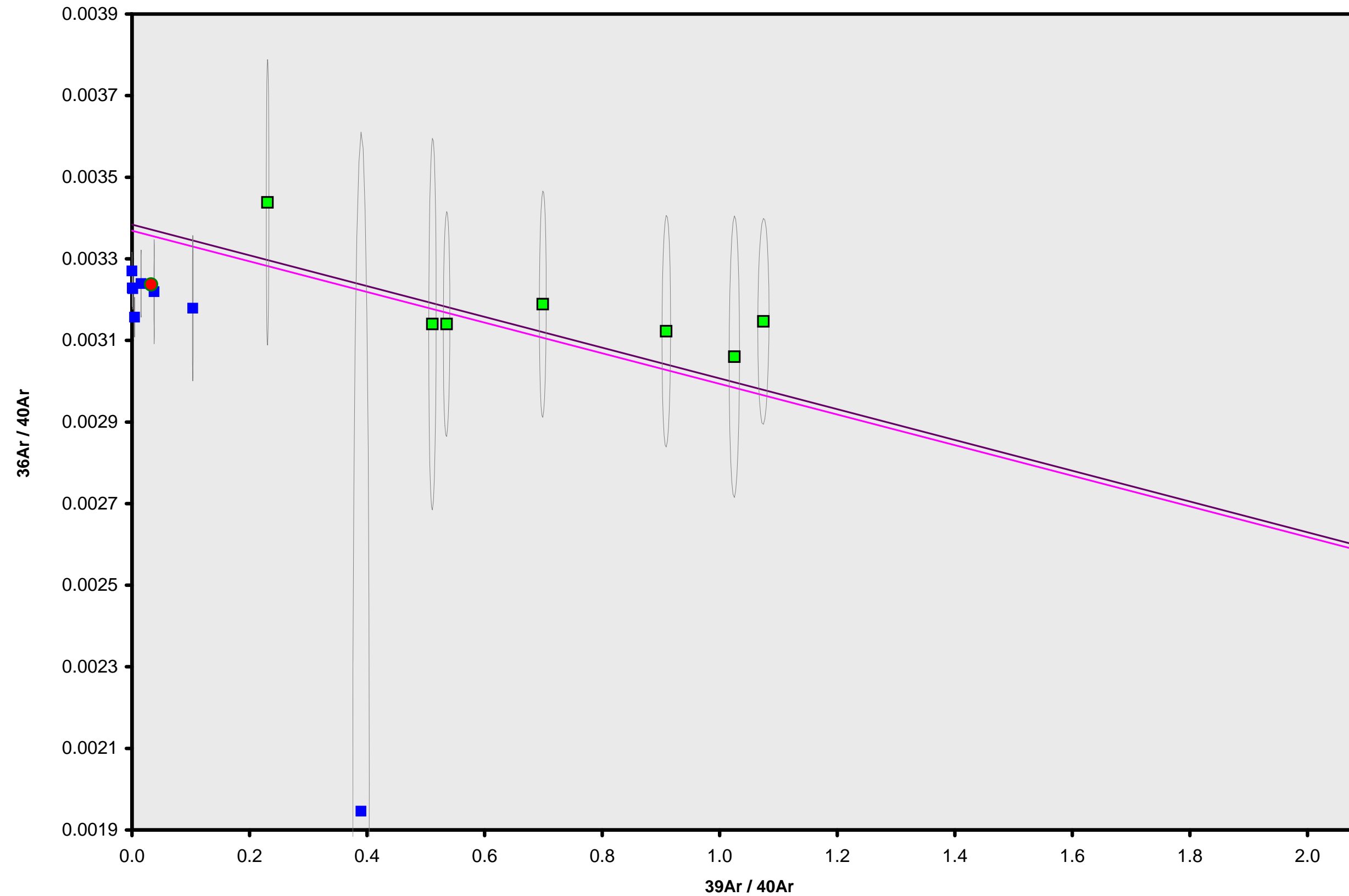
**Ofu, Samoa**

**Anthony Koppers**

**IRR = OSU2F06**

**J = 0.00181210 ± 0.00000761**

06C2983.AGE >>> OFU-1 2F18-06 >>> SAMOA PROJECT



**Ar-Ages in Ma**

**WEIGHTED PLATEAU**  
 $0.27 \pm 0.14$   
**TOTAL FUSION**  
 $4.37 \pm 0.75$   
**NORMAL ISOCHRON**  
 $0.27 \pm 0.38$   
**INVERSE ISOCHRON**  
 $0.26 \pm 0.28$

**MSWD (PROBABILITY)**  
 $0.28 (92\%)$

**40AR/36AR INTERCEPT**  
 $295.6 \pm 29.2$

**Sample Info**

**Groundmass 210-300µm**  
**Ofu, Samoa**  
**Anthony Koppers**

**IRR = OSU2F06**  
**J =  $0.00181210 \pm 0.00000761$**