

Incremental Heating		36Ar(a)	37Ar(ca)	38Ar(cl)	39Ar(k)	40Ar(r)	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
07C1112	0.00 W	0.001810	0.000786	0.000280	0.000741	0.033962	136.58 ± 73.63	5.97	0.38	0.4057 ± 0.2598
07C1113	0.01 W	0.001848	0.002702	0.000731	0.002233	0.002864	3.97 ± 12.72	0.52	1.15	0.3554 ± 0.0753
07C1115	0.02 W	0.001584	0.003819	0.001420	0.003706	0.010962	9.14 ± 10.99	2.29	1.91	0.4173 ± 0.0536
07C1116	0.06 W	0.001659	0.006955	0.002490	0.005775	0.015423	8.25 ± 6.19	3.05	2.97	0.3571 ± 0.0357
07C1117	0.09 W	0.001992	0.011873	0.004034	0.009039	0.024377	8.33 ± 4.64	3.98	4.65	0.3274 ± 0.0208
07C1119	0.18 W	0.002014	0.016565	0.005209	0.010961	0.027313	7.70 ± 5.24	4.39	5.64	0.2845 ± 0.0169
07C1120	0.27 W	0.002578	0.039408	0.009233	0.018519	0.045089	7.52 ± 3.51	5.59	9.52	0.2021 ± 0.0096
07C1121	0.35 W ✓	0.002162	0.057478	0.010570	0.020241	0.025936	3.96 ± 3.84	3.90	10.41	0.1514 ± 0.0070
07C1123	0.53 W ✓	0.001852	0.115552	0.012548	0.023594	0.028828	3.78 ± 1.46	5.00	12.13	0.0878 ± 0.0039
07C1124	0.74 W ✓	0.001331	0.218801	0.012920	0.024322	0.032368	4.12 ± 2.03	7.60	12.51	0.0478 ± 0.0021
07C1125	0.97 W ✓	0.000910	0.388702	0.011809	0.022049	0.031704	4.45 ± 1.19	10.54	11.34	0.0244 ± 0.0011
07C1127	1.50 W ✓	0.000767	0.602000	0.010111	0.020055	0.030782	4.75 ± 1.91	11.95	10.31	0.0143 ± 0.0006
07C1128	2.03 W ✓	0.000895	0.711449	0.008104	0.015573	0.020045	3.98 ± 1.80	7.04	8.01	0.0094 ± 0.0004
07C1129	2.74 W ✓	0.001076	0.552314	0.005124	0.009320	0.011228	3.73 ± 3.81	3.41	4.79	0.0073 ± 0.0003
07C1131	3.39 W	0.001378	0.311416	0.002396	0.004230	0.014888	10.86 ± 11.43	3.53	2.18	0.0058 ± 0.0003
07C1132	4.13 W	0.002654	0.201526	0.001224	0.002329	0.020176	26.63 ± 28.75	2.51	1.20	0.0050 ± 0.0002
07C1133	4.63 W	0.004441	0.176937	0.000893	0.001761	0.040726	70.24 ± 52.67	3.01	0.91	0.0043 ± 0.0002
	Σ	0.030952	3.418282	0.099096	0.194448	0.416669				

Information on Analysis	Results	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (% ,n)	K/Ca ± 2σ
Sample = MAN-1 3E5-06	Age Plateau	1.3562 ± 0.2215	4.19 ± 0.68	0.16	69.51	0.0104 ± 0.0069
Material = Groundmass 125-300μm	Overestimate Errors	± 16.33%	± 16.32%	99%	7	
Location = Manatu		Minimal External Error ± 0.69		1.58	2σ Confidence Limit	
Analyst = Anthony Koppers		Analytical Error ± 0.68		1.0000	Error Magnification	
Project = SAMOA						
Mass Discrimination Law = LIN	Total Fusion Age	2.1428 ± 0.3593	6.62 ± 1.11		17	0.0245 ± 0.0010
Irradiation = OSU3E06		± 16.77%	± 16.75%			
J = 0.00171230 ± 0.00000428		Minimal External Error ± 1.12				
FCT-3 = 28.030 ± 0.003 Ma		Analytical Error ± 1.11				

Normal Isochron		39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
07C1112	0.00 W	0.4 ± 0.0	314.3 ± 11.1	0.6495
07C1113	0.01 W	1.2 ± 0.0	297.0 ± 5.0	0.7037
07C1115	0.02 W	2.3 ± 0.1	302.4 ± 8.5	0.9194
07C1116	0.06 W	3.5 ± 0.1	304.8 ± 7.2	0.8731
07C1117	0.09 W	4.5 ± 0.1	307.7 ± 7.1	0.9431
07C1119	0.18 W	5.4 ± 0.2	309.1 ± 9.7	0.9587
07C1120	0.27 W	7.2 ± 0.2	313.0 ± 8.7	0.9604
07C1121	0.35 W ✓	9.4 ± 0.4	307.5 ± 12.1	0.9880
07C1123	0.53 W ✓	12.7 ± 0.3	311.1 ± 6.3	0.9302
07C1124	0.74 W ✓	18.3 ± 0.7	319.8 ± 13.0	0.9808
07C1125	0.97 W ✓	24.2 ± 0.8	330.3 ± 10.4	0.9104
07C1127	1.50 W ✓	26.1 ± 1.4	335.6 ± 18.3	0.9831
07C1128	2.03 W ✓	17.4 ± 0.6	317.9 ± 10.9	0.9580
07C1129	2.74 W ✓	8.7 ± 0.3	305.9 ± 11.0	0.9681
07C1131	3.39 W	3.1 ± 0.1	306.3 ± 11.8	0.9363
07C1132	4.13 W	0.9 ± 0.0	303.1 ± 8.4	0.8196
07C1133	4.63 W	0.4 ± 0.0	304.7 ± 7.2	0.6760

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron Overestimate Errors	290.9959 ± 10.7078 ± 3.68%	1.6144 ± 0.6533 ± 40.46%	4.99 ± 2.02 ± 40.41%	0.06 100%
			Minimal External Error ± 2.02 Analytical Error ± 2.02	
Statistics	2σ Confidence Limit Error Magnification Number of Data Points	2.26 1.0000 7	Convergence Number of Iterations Calculated Line	0.0000031147 5 Weighted York-2

Inverse Isochron		39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
07C1112	0.00 W	0.001303 ± 0.000053	0.003182 ± 0.000113	0.0116
07C1113	0.01 W	0.004067 ± 0.000066	0.003366 ± 0.000057	0.0551
07C1115	0.02 W	0.007735 ± 0.000091	0.003307 ± 0.000093	0.0784
07C1116	0.06 W	0.011421 ± 0.000147	0.003281 ± 0.000078	0.0446
07C1117	0.09 W	0.014745 ± 0.000117	0.003250 ± 0.000075	0.0968
07C1119	0.18 W	0.017608 ± 0.000162	0.003236 ± 0.000101	0.0358
07C1120	0.27 W	0.022954 ± 0.000183	0.003195 ± 0.000088	0.0299
07C1121	0.35 W ✓	0.030450 ± 0.000187	0.003252 ± 0.000128	0.0308
07C1123	0.53 W ✓	0.040950 ± 0.000319	0.003215 ± 0.000065	0.0827
07C1124	0.74 W ✓	0.057150 ± 0.000456	0.003127 ± 0.000127	0.0825
07C1125	0.97 W ✓	0.073319 ± 0.000998	0.003027 ± 0.000095	0.1281
07C1127	1.50 W ✓	0.077865 ± 0.000782	0.002980 ± 0.000162	0.0914
07C1128	2.03 W ✓	0.054715 ± 0.000542	0.003146 ± 0.000107	0.1372
07C1129	2.74 W ✓	0.028314 ± 0.000259	0.003269 ± 0.000118	0.1111
07C1131	3.39 W	0.010024 ± 0.000141	0.003265 ± 0.000126	0.0771
07C1132	4.13 W	0.002895 ± 0.000050	0.003299 ± 0.000092	0.2271
07C1133	4.63 W	0.001301 ± 0.000031	0.003282 ± 0.000078	0.0709

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron Overestimate Errors	290.9972 ± 10.6825 ± 3.67%	1.6149 ± 0.6471 ± 40.07%	4.99 ± 2.00 ± 40.02%	0.06 100%
		Minimal External Error ± 2.00 Analytical Error ± 2.00		
Statistics	2σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	2.26 1.0000 7 8.0%	Convergence Number of Iterations Calculated Line	0.0000726556 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
07C1112	0.00 W	0.0018100	1.759	0.0007857	31.899	0.0006268	1.681	0.0007418	2.034	0.5687465	0.205	136.58 ± 73.63	5.97	0.38	0.4057 ± 0.2598
07C1113	0.01 W	0.0018487	0.819	0.0027015	10.372	0.0011040	0.950	0.0022347	0.782	0.5489506	0.193	3.97 ± 12.72	0.52	1.15	0.3554 ± 0.0753
07C1115	0.02 W	0.0015855	1.387	0.0038188	6.080	0.0017610	1.010	0.0037090	0.527	0.4791775	0.255	9.14 ± 10.99	2.29	1.91	0.4173 ± 0.0536
07C1116	0.06 W	0.0016610	1.166	0.0069547	4.540	0.0028698	0.663	0.0057804	0.617	0.5056923	0.184	8.25 ± 6.19	3.05	2.97	0.3571 ± 0.0357
07C1117	0.09 W	0.0019953	1.133	0.0118735	2.440	0.0045160	0.728	0.0090476	0.335	0.6130545	0.210	8.33 ± 4.64	3.98	4.65	0.3274 ± 0.0208
07C1119	0.18 W	0.0020188	1.552	0.0165650	2.159	0.0057185	0.634	0.0109731	0.430	0.6225591	0.160	7.70 ± 5.24	4.39	5.64	0.2845 ± 0.0169
07C1120	0.27 W	0.0025882	1.372	0.0394079	1.217	0.0099407	0.598	0.0185468	0.377	0.8068100	0.128	7.52 ± 3.51	5.59	9.52	0.2021 ± 0.0096
07C1121	0.35 W ✓	0.0021772	1.952	0.0574783	1.128	0.0112207	0.473	0.0202819	0.274	0.6647606	0.136	3.96 ± 3.84	3.90	10.41	0.1514 ± 0.0070
07C1123	0.53 W ✓	0.0018833	0.982	0.1155520	0.890	0.0131834	0.541	0.0236759	0.343	0.5762050	0.181	3.78 ± 1.46	5.00	12.13	0.0878 ± 0.0039
07C1124	0.74 W ✓	0.0013895	1.930	0.2188008	0.852	0.0134707	0.597	0.0244770	0.302	0.4256186	0.259	4.12 ± 2.03	7.60	12.51	0.0478 ± 0.0021
07C1125	0.97 W ✓	0.0010149	1.367	0.3887022	0.750	0.0122586	0.441	0.0223242	0.563	0.3007577	0.370	4.45 ± 1.19	10.54	11.34	0.0244 ± 0.0011
07C1127	1.50 W ✓	0.0009294	2.227	0.6020004	0.730	0.0105167	0.472	0.0204816	0.346	0.2575918	0.354	4.75 ± 1.91	11.95	10.31	0.0143 ± 0.0006
07C1128	2.03 W ✓	0.0010867	1.370	0.7114489	0.747	0.0084825	0.545	0.0160770	0.343	0.2846395	0.341	3.98 ± 1.80	7.04	8.01	0.0094 ± 0.0004
07C1129	2.74 W ✓	0.0012245	1.561	0.5523139	0.716	0.0054558	0.520	0.0097117	0.319	0.3291824	0.303	3.73 ± 3.81	3.41	4.79	0.0073 ± 0.0003
07C1131	3.39 W	0.0014615	1.791	0.3114156	0.740	0.0027152	0.741	0.0044512	0.587	0.4220287	0.324	10.86 ± 11.43	3.53	2.18	0.0058 ± 0.0003
07C1132	4.13 W	0.0027082	1.266	0.2015257	0.760	0.0017545	0.969	0.0024714	0.634	0.8044256	0.522	26.63 ± 28.75	2.51	1.20	0.0050 ± 0.0002
07C1133	4.63 W	0.0044885	1.128	0.1769367	0.742	0.0017502	0.669	0.0018861	1.072	1.3530160	0.317	70.24 ± 52.67	3.01	0.91	0.0043 ± 0.0002
Σ		0.0318712	0.363	3.4182817	0.273	0.1073450	0.162	0.1968716	0.115	9.5632165	0.077				

Information on Analysis and Constants Used in Calculations

Sample = MAN-1 3E5-06
 Material = Groundmass 125-300µm
 Location = Manatu
 Analyst = Anthony Koppers
 Project = SAMOA
 Mass Discrimination Law = LIN
 Irradiation = OSU3E06
 J = 0.00171230 ± 0.00000428
 FCT-3 = 28.030 ± 0.003 Ma
 IGSN = KOP000053
 Preferred Age = Plateau Age
 Classification = Eruption Age
 Experiment Type = Incremental Heating
 Extraction Method = Bulk Laser Heating
 Heating = 600 sec
 Isolation = 15.00 min
 Instrument = MAP215-50
 Lithology = Basalt
 Lat-Lon = 13°18.0'S - 179°18.0'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
 No 36Cl Correction

Results

	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%n)	K/Ca ± 2σ
Age Plateau Overestimate Errors	1.3562 ± 0.2215 ± 16.33%	4.19 ± 0.68 ± 16.32%	0.16 99%	69.51 7	0.0104 ± 0.0069
	Minimal External Error ± 0.69 Analytical Error ± 0.68		1.58 1.0000	2σ Confidence Limit Error Magnification	
Total Fusion Age	2.1428 ± 0.3593 ± 16.77%	6.62 ± 1.11 ± 16.75%		17	0.0245 ± 0.0010
	Minimal External Error ± 1.12 Analytical Error ± 1.11				
Normal Isochron Overestimate Errors	1.6144 ± 0.6533 ± 40.46%	4.99 ± 2.02 ± 40.41%	0.06 100%	69.51 7	
	Minimal External Error ± 2.02 Analytical Error ± 2.02		2.26 1.0000	2σ Confidence Limit Error Magnification	
Inverse Isochron Overestimate Errors	1.6149 ± 0.6471 ± 40.07%	4.99 ± 2.00 ± 40.02%	0.06 100%	69.51 7	
	Minimal External Error ± 2.00 Analytical Error ± 2.00		2.26 1.0000	2σ Confidence Limit Error Magnification	

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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
07C1112	0.00 W	0.001810	1.76	0.000000	0.00	0.000000	31.90	0.000000	0.00	0.000786	31.90	0.000338	1.76	0.000000	0.00	0.000009	2.04	0.000000	38.69	0.000280	4.33	0.000741	2.04	0.000001	31.95	0.033962	27.91	0.534784	1.76	0.000000	0.00	0.000001	24.98
07C1113	0.01 W	0.001848	0.82	0.000000	0.00	0.000001	10.38	0.000000	0.00	0.002702	10.37	0.000345	0.82	0.000000	0.00	0.000027	0.79	0.000000	24.23	0.000731	1.48	0.002233	0.78	0.000002	10.53	0.002864	160.56	0.546083	0.82	0.000000	0.00	0.000004	24.91
07C1115	0.02 W	0.001584	1.39	0.000000	0.00	0.000001	6.09	0.000000	0.00	0.003819	6.08	0.000296	1.39	0.000000	0.00	0.000045	0.54	0.000000	22.73	0.001420	1.29	0.003706	0.53	0.000003	6.35	0.010962	60.31	0.468209	1.39	0.000000	0.00	0.000006	24.91
07C1116	0.06 W	0.001659	1.17	0.000000	0.00	0.000002	4.56	0.000000	0.00	0.006955	4.54	0.000310	1.17	0.000000	0.00	0.000070	0.63	0.000000	22.37	0.002490	0.78	0.005775	0.62	0.000005	4.90	0.015423	37.58	0.490260	1.17	0.000000	0.00	0.000010	24.91
07C1117	0.09 W	0.001992	1.13	0.000000	0.00	0.000003	2.47	0.000000	0.00	0.011873	2.44	0.000372	1.13	0.000000	0.00	0.000109	0.35	0.000000	22.04	0.004034	0.82	0.009039	0.33	0.000008	3.05	0.024377	27.91	0.588663	1.13	0.000000	0.00	0.000015	24.90
07C1119	0.18 W	0.002014	1.56	0.000000	0.00	0.000004	2.19	0.000000	0.00	0.016565	2.16	0.000376	1.56	0.000000	0.00	0.000133	0.44	0.000001	22.01	0.005209	0.71	0.010961	0.43	0.000012	2.83	0.027313	34.09	0.595228	1.56	0.000000	0.00	0.000018	24.90
07C1120	0.27 W	0.002578	1.38	0.000000	0.00	0.000011	1.27	0.000000	0.00	0.039408	1.22	0.000482	1.38	0.000000	0.00	0.000224	0.39	0.000001	21.93	0.009233	0.65	0.018519	0.38	0.000028	2.20	0.045089	23.39	0.761690	1.38	0.000000	0.00	0.000031	24.90
07C1121	0.35 W ✓	0.002162	1.97	0.000000	0.00	0.000015	1.19	0.000000	0.00	0.057478	1.13	0.000404	1.97	0.000000	0.00	0.000245	0.29	0.000002	21.93	0.010570	0.51	0.020241	0.27	0.000041	2.15	0.025936	48.54	0.638791	1.97	0.000000	0.00	0.000033	24.90
07C1123	0.53 W ✓	0.001852	1.00	0.000000	0.00	0.000031	0.96	0.000000	0.00	0.115552	0.89	0.000346	1.00	0.000000	0.00	0.000286	0.36	0.000004	21.92	0.012548	0.57	0.023594	0.34	0.000082	2.03	0.028828	19.29	0.547338	1.00	0.000000	0.00	0.000039	24.90
07C1124	0.74 W ✓	0.001331	2.02	0.000000	0.00	0.000059	0.93	0.000000	0.00	0.218801	0.85	0.000249	2.02	0.000000	0.00	0.000295	0.32	0.000007	21.92	0.012920	0.62	0.024322	0.30	0.000155	2.02	0.032368	24.73	0.393210	2.02	0.000000	0.00	0.000040	24.90
07C1125	0.97 W ✓	0.000910	1.53	0.000000	0.00	0.000105	0.84	0.000000	0.00	0.388702	0.75	0.000170	1.53	0.000000	0.00	0.000267	0.58	0.000012	21.91	0.011809	0.46	0.022049	0.57	0.000276	1.98	0.031704	13.42	0.269018	1.53	0.000000	0.00	0.000036	24.91
07C1127	1.50 W ✓	0.000767	2.70	0.000000	0.00	0.000162	0.82	0.000000	0.00	0.602000	0.73	0.000143	2.70	0.000000	0.00	0.000243	0.37	0.000019	21.91	0.010111	0.49	0.020055	0.36	0.000427	1.97	0.030782	20.13	0.226777	2.70	0.000000	0.00	0.000033	24.90
07C1128	2.03 W ✓	0.000895	1.67	0.000000	0.00	0.000191	0.83	0.000000	0.00	0.711449	0.75	0.000167	1.67	0.000000	0.00	0.000189	0.37	0.000023	21.91	0.008104	0.57	0.015573	0.36	0.000504	1.98	0.020045	22.60	0.264569	1.67	0.000000	0.00	0.000026	24.90
07C1129	2.74 W ✓	0.001076	1.78	0.000000	0.00	0.000149	0.81	0.000000	0.00	0.552314	0.72	0.000201	1.78	0.000000	0.00	0.000113	0.36	0.000018	21.91	0.005124	0.56	0.009320	0.34	0.000392	1.97	0.011228	51.18	0.317939	1.78	0.000000	0.00	0.000015	24.90
07C1131	3.39 W	0.001378	1.90	0.000000	0.00	0.000084	0.83	0.000000	0.00	0.311416	0.74	0.000258	1.90	0.000000	0.00	0.000051	0.63	0.000010	21.91	0.002396	0.87	0.004230	0.63	0.000221	1.97	0.014888	52.78	0.407134	1.90	0.000000	0.00	0.000007	24.91
07C1132	4.13 W	0.002654	1.29	0.000000	0.00	0.000054	0.85	0.000000	0.00	0.201526	0.76	0.000496	1.29	0.000000	0.00	0.000028	0.69	0.000006	21.91	0.001224	1.49	0.002329	0.68	0.000143	1.98	0.020176	54.37	0.784246	1.29	0.000000	0.00	0.000004	24.91
07C1133	4.63 W	0.004441	1.14	0.000000	0.00	0.000048	0.83	0.000000	0.00	0.176937	0.74	0.000830	1.14	0.000000	0.00	0.000021	1.16	0.000006	21.91	0.000893	1.69	0.001761	1.16	0.000125	1.97	0.040726	38.21	1.312287	1.14	0.000000	0.00	0.000003	24.93
	Σ	0.030952	0.37	0.000000	0.00	0.000920	0.30	0.000000	0.00	3.418282	0.27	0.005785	0.37	0.000000	0.00	0.002355	0.12	0.000109	8.01	0.099096	0.18	0.194448	0.12	0.002424	0.72	0.416669	8.38	9.146227	0.37	0.000000	0.00	0.000321	7.47
	Σ							0.031871	0.36	3.418282	0.27									0.107345	0.17			0.196872	0.12							9.563217	0.51

Additional Parameters		40(r)/39(k)	1 σ	40(r+a)	1 σ	40Ar/39Ar	1 σ	37Ar/39Ar	1 σ	36Ar/39Ar	1 σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
07C1112	0.00 W	45.816309	12.82213	0.568745	0.00117	766.695374	15.67245	1.059170	0.33855	2.439919	0.06561	174.738	31.62294877	1.00123459	5.756E-20
07C1113	0.01 W	1.282556	2.05927	0.548947	0.00106	245.648531	1.97879	1.208907	0.12575	0.827281	0.00937	174.758	31.63553036	1.00123473	5.555E-20
07C1115	0.02 W	2.957741	1.78396	0.479171	0.00122	129.193239	0.75653	1.029596	0.06284	0.427472	0.00634	174.796	31.65940573	1.00123500	4.849E-20
07C1116	0.06 W	2.670434	1.00377	0.505683	0.00093	87.484154	0.56317	1.203160	0.05513	0.287343	0.00379	174.815	31.67156739	1.00123514	5.118E-20
07C1117	0.09 W	2.696793	0.75278	0.613040	0.00129	67.758855	0.26770	1.312338	0.03232	0.220532	0.00261	174.835	31.68373372	1.00123528	6.204E-20
07C1119	0.18 W	2.491716	0.84938	0.622541	0.00100	56.734776	0.26024	1.509594	0.03323	0.183973	0.00296	174.872	31.70721056	1.00123554	6.300E-20
07C1120	0.27 W	2.434764	0.56958	0.806779	0.00104	43.501194	0.17305	2.124778	0.02707	0.139551	0.00199	174.892	31.71939058	1.00123568	8.165E-20
07C1121	0.35 W ✓	1.281368	0.62199	0.664727	0.00091	32.775971	0.10026	2.833964	0.03290	0.107346	0.00212	174.915	31.73375161	1.00123584	6.727E-20
07C1123	0.53 W ✓	1.221832	0.23577	0.576166	0.00104	24.337235	0.09438	4.880581	0.04656	0.079546	0.00083	174.953	31.75770111	1.00123611	5.831E-20
07C1124	0.74 W ✓	1.330821	0.32908	0.425579	0.00110	17.388507	0.06914	8.939032	0.08080	0.056768	0.00111	174.972	31.76990053	1.00123625	4.307E-20
07C1125	0.97 W ✓	1.437891	0.19321	0.300721	0.00111	13.472246	0.09079	17.411661	0.16336	0.045464	0.00067	174.994	31.78341249	1.00123640	3.044E-20
07C1127	1.50 W ✓	1.534875	0.30906	0.257559	0.00091	12.576758	0.06224	29.392287	0.23758	0.045376	0.00102	175.032	31.80739948	1.00123667	2.607E-20
07C1128	2.03 W ✓	1.287201	0.29096	0.284614	0.00097	17.704718	0.08554	44.252468	0.36375	0.067594	0.00095	175.051	31.81918153	1.00123680	2.881E-20
07C1129	2.74 W ✓	1.204702	0.61659	0.329167	0.00100	33.895522	0.14903	56.871112	0.44587	0.126086	0.00201	175.070	31.83140456	1.00123694	3.331E-20
07C1131	3.39 W	3.519291	1.85753	0.422022	0.00137	94.812472	0.63548	69.962256	0.66092	0.328350	0.00619	175.109	31.85586472	1.00123722	4.271E-20
07C1132	4.13 W	8.664548	4.71140	0.804422	0.00420	325.494064	2.67247	81.543187	0.80723	1.095806	0.01552	175.128	31.86810184	1.00123735	8.141E-20
07C1133	4.63 W	23.130648	8.84197	1.353013	0.00429	717.348359	8.02160	93.809154	1.22303	2.379734	0.03703	175.148	31.88034367	1.00123749	1.369E-19

Procedure Blanks		36Ar	1σ	37Ar	1σ	38Ar	1σ	39Ar	1σ	40Ar	1σ
07C1112	0.00 W	0.000054	0.000006	0.000022	0.000006	0.000009	0.000005	0.000040	0.000009	0.013424	0.000908
07C1113	0.01 W	0.000050	0.000006	0.000019	0.000006	0.000008	0.000005	0.000055	0.000009	0.014847	0.000899
07C1115	0.02 W	0.000047	0.000006	0.000019	0.000006	0.000007	0.000005	0.000073	0.000009	0.016262	0.000884
07C1116	0.06 W	0.000047	0.000006	0.000020	0.000006	0.000007	0.000005	0.000078	0.000009	0.016503	0.000878
07C1117	0.09 W	0.000047	0.000006	0.000020	0.000006	0.000008	0.000005	0.000080	0.000009	0.016529	0.000874
07C1119	0.18 W	0.000048	0.000006	0.000022	0.000006	0.000010	0.000005	0.000080	0.000009	0.016249	0.000869
07C1120	0.27 W	0.000049	0.000006	0.000021	0.000006	0.000011	0.000005	0.000079	0.000009	0.016073	0.000868
07C1121	0.35 W	0.000051	0.000006	0.000021	0.000006	0.000012	0.000005	0.000076	0.000009	0.015959	0.000868
07C1123	0.53 W	0.000053	0.000006	0.000018	0.000006	0.000014	0.000005	0.000070	0.000009	0.016264	0.000873
07C1124	0.74 W	0.000055	0.000006	0.000016	0.000006	0.000015	0.000005	0.000068	0.000009	0.016779	0.000877
07C1125	0.97 W	0.000057	0.000006	0.000014	0.000006	0.000015	0.000005	0.000066	0.000009	0.017721	0.000883
07C1127	1.50 W	0.000065	0.000006	0.000011	0.000006	0.000018	0.000005	0.000065	0.000009	0.020561	0.000897
07C1128	2.03 W	0.000071	0.000006	0.000012	0.000006	0.000019	0.000005	0.000066	0.000009	0.022592	0.000905
07C1129	2.74 W	0.000080	0.000006	0.000014	0.000006	0.000021	0.000005	0.000068	0.000009	0.025196	0.000915
07C1131	3.39 W	0.000107	0.000006	0.000027	0.000006	0.000028	0.000005	0.000077	0.000009	0.032076	0.000938
07C1132	4.13 W	0.000171	0.000010	0.000024	0.000006	0.000048	0.000005	0.000102	0.000009	0.054114	0.004174
07C1133	4.63 W	0.000228	0.000010	0.000030	0.000006	0.000061	0.000005	0.000107	0.000009	0.071963	0.004221

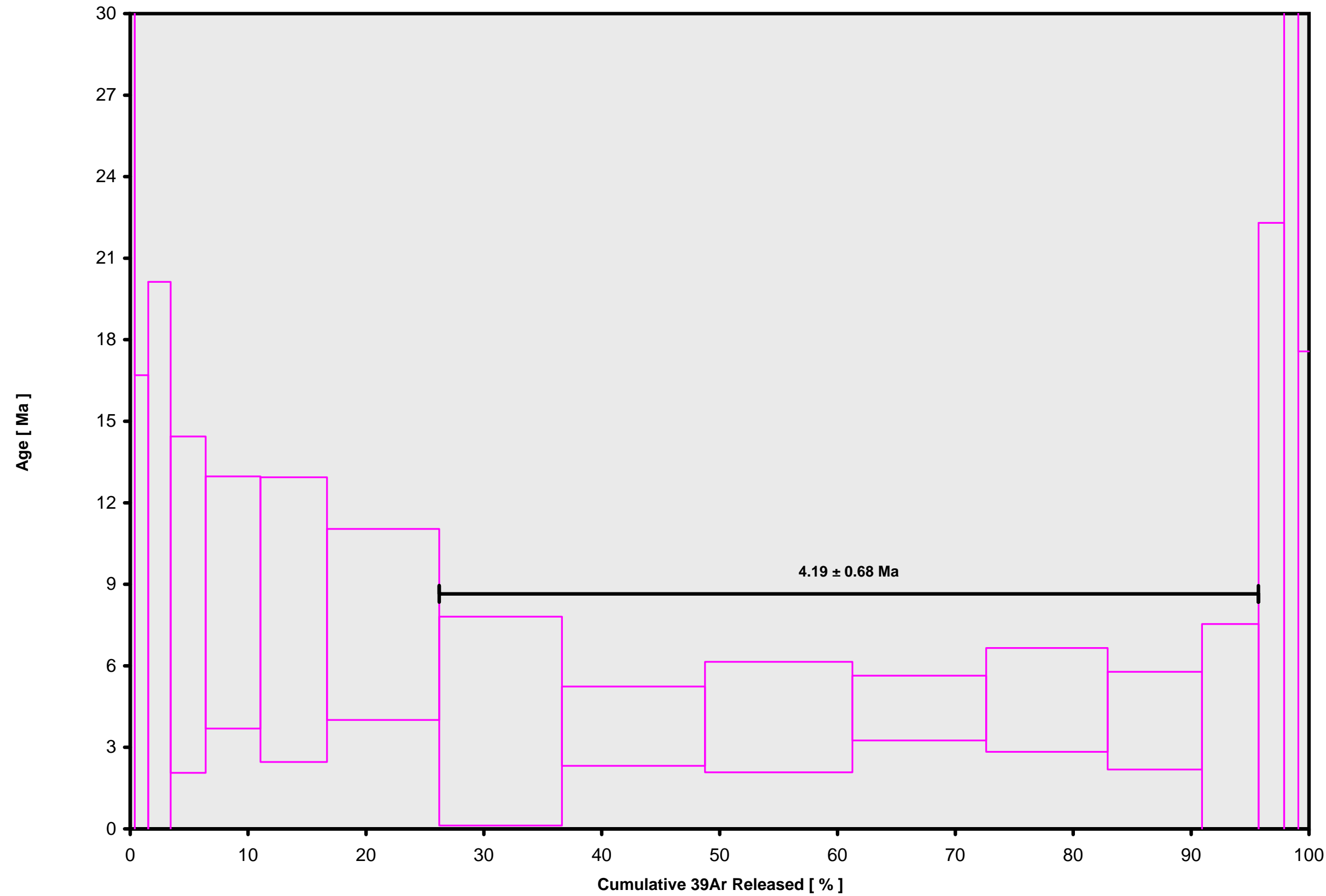
Intercept Values		36Ar	1σ	r2		37Ar	1σ	r2		38Ar	1σ	r2		39Ar	1σ	r2		40Ar	1σ	r2	
07C1112	0.00 W	0.001865	0.000029	0.2777	LIN #	0.000046	0.000005	0.9679	LIN #	0.000632	0.000009	0.0031	LIN #	0.000773	0.000012	0.9989	EXP #	0.574019	0.000723	0.9913	EXP # 9
07C1113	0.01 W	0.001899	0.000008	0.9645	LIN #	0.000104	0.000006	0.9071	LIN #	0.001104	0.000008	0.5365	LIN #	0.002263	0.000014	0.9976	LIN #	0.555794	0.000558	0.9937	EXP # 1
07C1115	0.02 W	0.001633	0.000019	0.5488	LIN #	0.000139	0.000004	0.9688	LIN #	0.001756	0.000016	0.7097	LIN # 2	0.003739	0.000016	0.9959	LIN #	0.488551	0.000829	0.9803	EXP # 1
07C1116	0.06 W	0.001709	0.000015	0.5582	LIN #	0.000238	0.000008	0.8536	LIN #	0.002858	0.000016	0.9155	LIN #	0.005791	0.000033	0.9813	LIN #	0.514935	0.000306	0.9973	EXP #
07C1117	0.09 W	0.002044	0.000018	0.5473	LIN #	0.000394	0.000006	0.8912	LIN #	0.004495	0.000029	0.8817	LIN #	0.009024	0.000025	0.9855	LIN #	0.620829	0.000933	0.9880	EXP #
07C1119	0.18 W	0.002068	0.000028	0.3971	LIN #	0.000542	0.000009	0.7517	LIN #	0.005691	0.000031	0.8956	LIN # 3	0.010926	0.000042	0.9713	EXP # 3	0.629864	0.000484	0.9968	EXP # 3
07C1120	0.27 W	0.002639	0.000031	0.4360	LIN #	0.001260	0.000011	0.0423	LIN #	0.009886	0.000050	0.9332	LIN # 1	0.018411	0.000062	0.8920	LIN #	0.811362	0.000557	0.9965	EXP #
07C1121	0.35 W	0.002229	0.000040	0.5463	LIN # 1 4 9	0.001827	0.000015	0.0074	LIN #	0.011159	0.000039	0.9625	LIN # 1 9	0.020123	0.000044	0.7806	LIN # 1 4	0.671188	0.000256	0.9986	EXP #
07C1123	0.53 W	0.001937	0.000013	0.7317	LIN #	0.003645	0.000020	0.8513	LIN # 4	0.013108	0.000057	0.9281	LIN #	0.023468	0.000070	0.0958	LIN #	0.584058	0.000559	0.9937	EXP # 1
07C1124	0.74 W	0.001444	0.000025	0.2408	LIN #	0.006883	0.000034	0.8759	LIN #	0.013396	0.000067	0.9031	LIN #	0.024260	0.000061	0.6962	LIN # 1	0.436161	0.000656	0.9764	EXP #
07C1125	0.97 W	0.001072	0.000011	0.1579	LIN #	0.012204	0.000036	0.9467	LIN #	0.012189	0.000037	0.9654	LIN # 1	0.022124	0.000119	0.1377	LIN # 1	0.313896	0.000668	0.9076	LIN # 1
07C1127	1.50 W	0.000994	0.000019	0.0044	LIN #	0.018882	0.000046	0.9749	LIN #	0.010464	0.000036	0.9197	LIN #	0.020308	0.000062	0.4165	LIN # 1	0.274232	0.000156	0.9915	LIN # 1
07C1128	2.03 W	0.001158	0.000012	0.6015	LIN # 1	0.022305	0.000065	0.9648	LIN #	0.008445	0.000037	0.9394	LIN # 1 9	0.015956	0.000047	0.4515	LIN # 9	0.302900	0.000342	0.9706	LIN # 1 9
07C1129	2.74 W	0.001304	0.000017	0.6300	LIN # 1	0.017314	0.000035	0.9832	LIN #	0.005440	0.000022	0.9338	LIN # 1	0.009666	0.000025	0.9686	LIN # 1	0.349382	0.000389	0.9859	LIN # 1 3
07C1131	3.39 W	0.001568	0.000024	0.6019	LIN # 1	0.009773	0.000026	0.9576	LIN # 9	0.002724	0.000017	0.7401	LIN #	0.004475	0.000023	0.9912	LIN #	0.447659	0.000979	0.9374	LIN #
07C1132	4.13 W	0.002878	0.000028	0.8440	LIN # 1	0.006328	0.000020	0.9661	LIN #	0.001790	0.000015	0.3000	LIN # 7	0.002542	0.000012	0.9993	LIN #	0.846269	0.000433	0.9984	EXP #
07C1133	4.63 W	0.004716	0.000041	0.7827	LIN # 1	0.005563	0.000014	0.9341	LIN # 8	0.001798	0.000009	0.2106	LIN # 10	0.001970	0.000017	0.9994	LIN #	1.404613	0.000779	0.9976	LIN #

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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	
07C1112	0.00 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0142	1.012E-19	20	MAR	2007	08	10	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1113	0.01 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.01	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0144	1.012E-19	20	MAR	2007	08	39	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1115	0.02 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.02	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0141	1.012E-19	20	MAR	2007	09	34	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1116	0.06 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.06	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0141	1.012E-19	20	MAR	2007	10	02	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1117	0.09 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.09	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0141	1.012E-19	20	MAR	2007	10	30	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1119	0.18 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.18	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0142	1.012E-19	20	MAR	2007	11	24	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1120	0.27 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.27	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0142	1.012E-19	20	MAR	2007	11	52	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1121	0.35 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.35	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0142	1.012E-19	20	MAR	2007	12	25	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1123	0.53 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.53	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0144	1.012E-19	20	MAR	2007	13	20	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1124	0.74 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.74	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0143	1.012E-19	20	MAR	2007	13	48	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1125	0.97 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	0.97	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0146	1.012E-19	20	MAR	2007	14	19	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1127	1.50 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	1.5	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0143	1.012E-19	20	MAR	2007	15	14	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1128	2.03 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	2.03	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0143	1.012E-19	20	MAR	2007	15	41	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1129	2.74 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	2.74	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0143	1.012E-19	20	MAR	2007	16	09	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1131	3.39 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	3.39	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0144	1.012E-19	20	MAR	2007	17	05	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1132	4.13 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	4.13	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0145	1.012E-19	20	MAR	2007	17	33	001	OSU3E06	Samoa	07C1112	01	FCT-3
07C1133	4.63 W	MAN-1 3E5-06	Groundmass 125-300μm	Manatu	Anthony Koppers	4.63	28.03	0.01	0.0017123	0.25	1.00378	0.16	1.0145	1.012E-19	20	MAR	2007	18	01	001	OSU3E06	Samoa	07C1112	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		
	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	W	%1σ	
07C1112	0.00	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
07C1113	0.01	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
07C1115	0.02	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
07C1116	0.06	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
07C1117	0.09	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
07C1119	0.18	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
07C1120	0.27	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
07C1121	0.35	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
07C1123	0.53	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
07C1124	0.74	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
07C1125	0.97	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
07C1127	1.50	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
07C1128	2.03	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
07C1129	2.74	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
07C1131	3.39	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
07C1132	4.13	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
07C1133	4.63	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

07C1112.AGE >>> MAN-1 3E5-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

4.19 ± 0.68

TOTAL FUSION

6.62 ± 1.11

NORMAL ISOCHRON

4.99 ± 2.02

INVERSE ISOCHRON

4.99 ± 2.00

MSWD (PROBABILITY)

0.16 (99%)

Sample Info

Groundmass 125-300µm

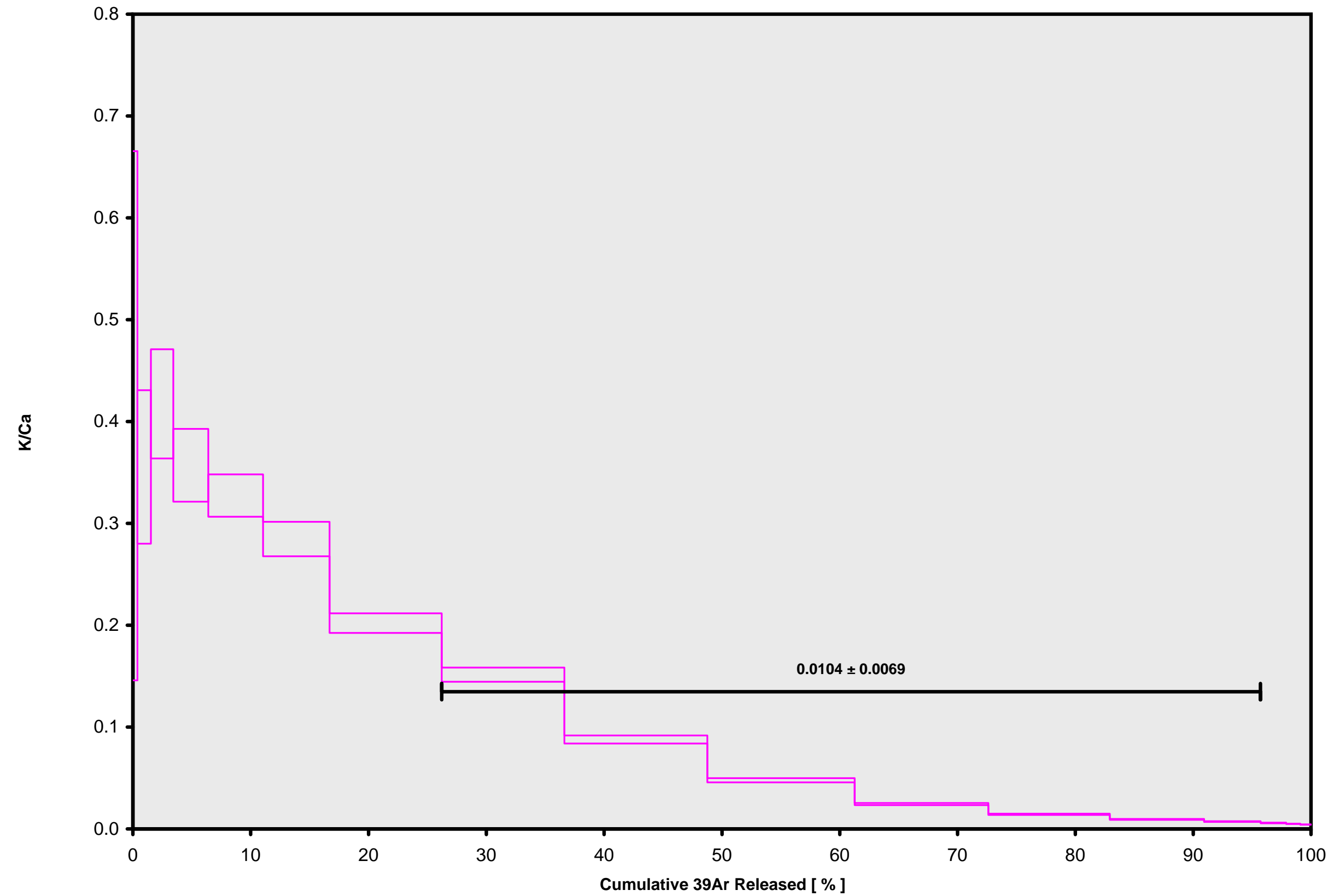
Manatu

Anthony Koppers

IRR = OSU3E06

J = 0.00171230 ± 0.00000428

07C1112.AGE >>> MAN-1 3E5-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

4.19 ± 0.68

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6.62 ± 1.11

NORMAL ISOCHRON

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4.99 ± 2.00

Sample Info

Groundmass 125-300µm

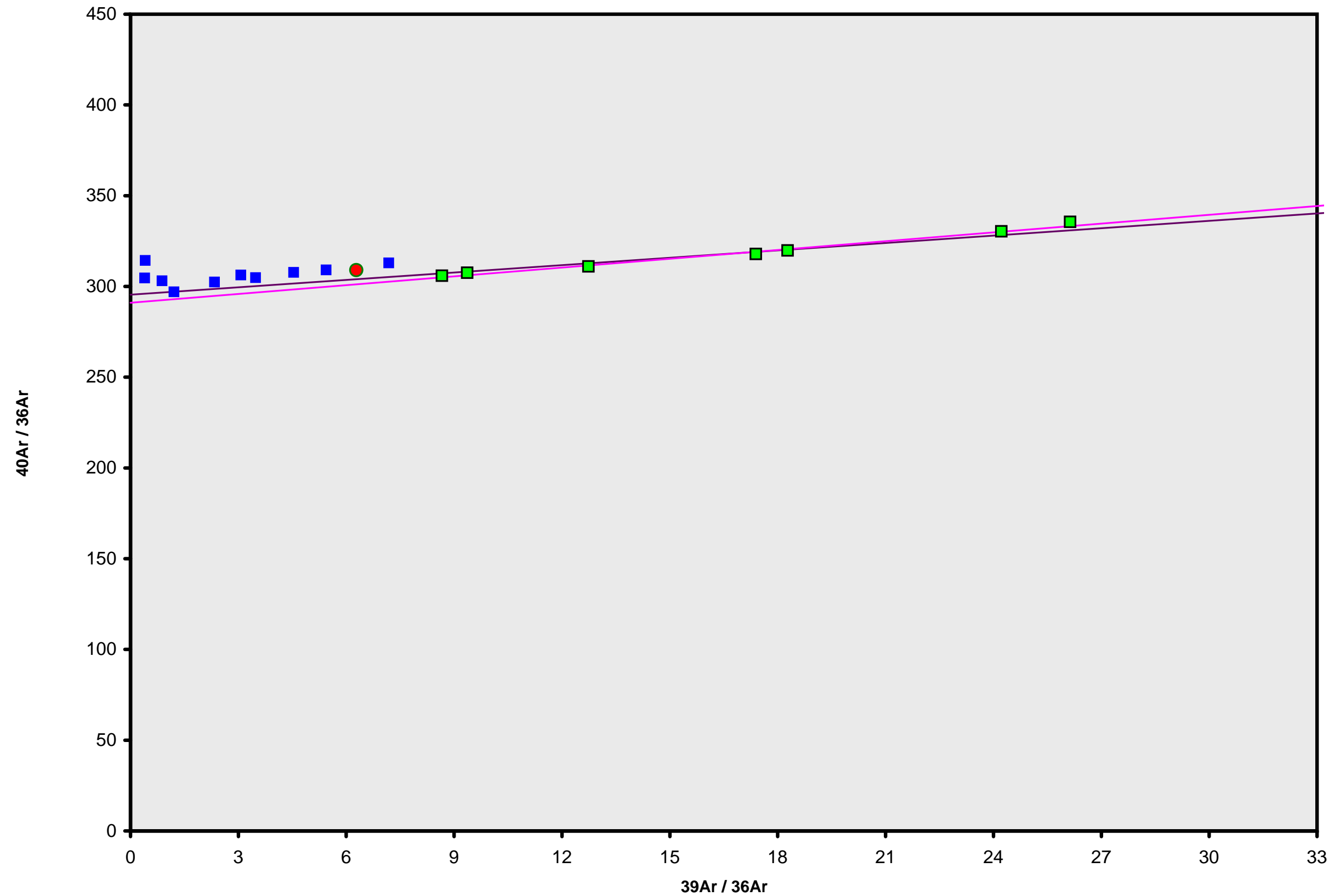
Manatu

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07C1112.AGE >>> MAN-1 3E5-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

4.19 ± 0.68

TOTAL FUSION

6.62 ± 1.11

NORMAL ISOCHRON

4.99 ± 2.02

INVERSE ISOCHRON

4.99 ± 2.00

MSWD (PROBABILITY)

0.06 (100%)

40AR/36AR INTERCEPT

291.0 ± 10.7

Sample Info

Groundmass 125-300µm

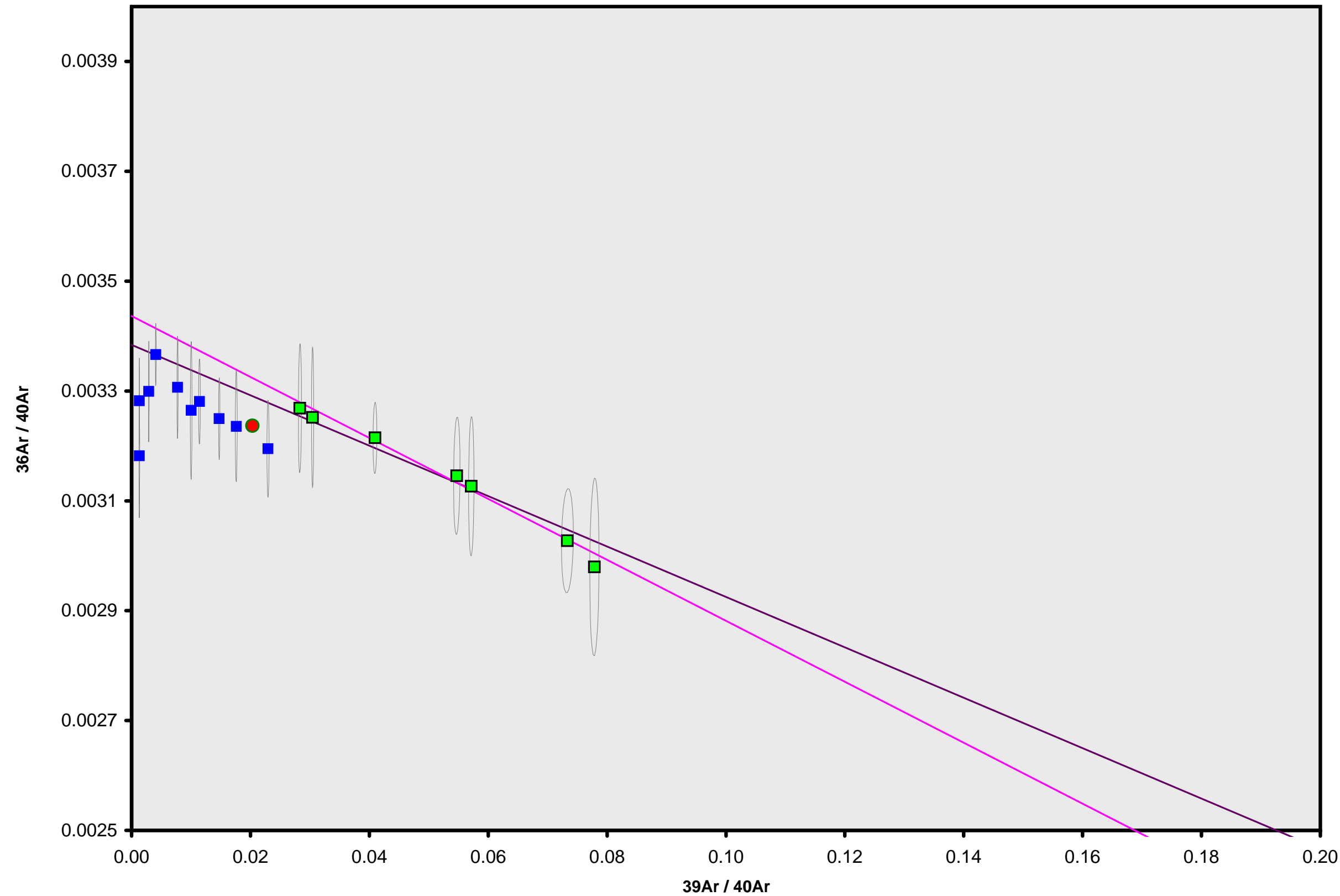
Manatu

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IRR = OSU3E06

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07C1112.AGE >>> MAN-1 3E5-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

4.19 ± 0.68

TOTAL FUSION

6.62 ± 1.11

NORMAL ISOCHRON

4.99 ± 2.02

INVERSE ISOCHRON

4.99 ± 2.00

MSWD (PROBABILITY)

0.06 (100%)

SPREADING FACTOR

8.0%

40AR/36AR INTERCEPT

291.0 ± 10.7

Sample Info

Groundmass 125-300 μm

Manatu

Anthony Koppers

IRR = OSU3E06

J = $0.00171230 \pm 0.00000428$