

Incremental Heating		36Ar(a)	37Ar(ca)	38Ar(cl)	39Ar(k)	40Ar(r)	Age ± 2σ (Ma)	40Ar(r) (%)	39Ar(k) (%)	K/Ca ± 2σ
06C2959	0.09 W	0.091406	0.007114	0.000764	0.006334	0.092702	47.81 ± 194.21	0.34	0.74	0.383 ± 0.079
06C2961	0.12 W	0.084088	0.010180	0.001141	0.010169	0.327495	103.58 ± 105.72	1.30	1.20	0.430 ± 0.045
06C2962	0.18 W	0.068787	0.013716	0.001412	0.013493	0.254059	61.27 ± 89.35	1.23	1.59	0.423 ± 0.044
06C2963	0.21 W	0.047220	0.018812	0.001584	0.019733	0.385708	63.57 ± 33.77	2.69	2.32	0.451 ± 0.034
06C2965	0.24 W	0.023711	0.021559	0.001707	0.023013	0.242771	34.59 ± 13.92	3.35	2.70	0.459 ± 0.021
06C2966	0.29 W	0.010060	0.026286	0.001816	0.028036	0.121706	14.31 ± 4.96	3.93	3.30	0.459 ± 0.020
06C2967	0.32 W	0.004266	0.033331	0.002005	0.034587	0.069094	6.60 ± 1.97	5.20	4.06	0.446 ± 0.019
06C2969	0.44 W	0.001300	0.042938	0.002234	0.044249	0.027886	2.08 ± 0.78	6.76	5.20	0.443 ± 0.019
06C2970	0.53 W ✓	0.000452	0.061217	0.002904	0.060563	0.025732	1.41 ± 0.64	16.15	7.12	0.425 ± 0.018
06C2971	0.65 W ✓	0.000234	0.080545	0.003322	0.075612	0.024155	1.06 ± 0.32	25.86	8.89	0.404 ± 0.017
06C2973	0.85 W ✓	0.000162	0.095196	0.003562	0.083445	0.021549	0.85 ± 0.27	30.96	9.81	0.377 ± 0.016
06C2974	1.12 W ✓	0.000160	0.129358	0.004126	0.099396	0.030683	1.02 ± 0.23	39.23	11.68	0.330 ± 0.014
06C2975	1.44 W ✓	0.000158	0.149378	0.003841	0.090329	0.028217	1.03 ± 0.32	37.58	10.62	0.260 ± 0.011
06C2977	1.95 W ✓	0.000185	0.281338	0.003973	0.088627	0.025193	0.94 ± 0.34	31.50	10.42	0.135 ± 0.006
06C2978	3.18 W ✓	0.000506	1.299390	0.005436	0.112872	0.029239	0.86 ± 0.24	16.35	13.27	0.037 ± 0.002
06C2979	3.63 W ✓	0.000472	0.763908	0.001330	0.029328	0.011084	1.25 ± 0.98	7.36	3.45	0.017 ± 0.001
06C2981	4.80 W ✓	0.000852	1.770177	0.001418	0.031071	0.008107	0.86 ± 1.03	3.12	3.65	0.008 ± 0.000
Σ		0.334019	4.804443	0.042577	0.850855	1.725380				

Information on Analysis

Sample = MUL-1 2F17-06
Material = Groundmass 210-300µm
Location = Muli, Samoa
Analyst = Jamie Russell
Project = SAMOA
Mass Discrimination Law = LIN
Irradiation = OSU2F06
J = 0.00183040 ± 0.00000732
FCT-3 = 28.030 ± 0.003 Ma

Results	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (% ,n)	K/Ca ± 2σ
Age Plateau	0.2930 ± 0.0330 ± 11.27%	0.97 ± 0.11 ± 11.30%	0.57 81%	78.89 9	0.011 ± 0.012
		Minimal External Error ± 0.11 Analytical Error ± 0.11	1.50 1.0000	2σ Confidence Limit Error Magnification	
Total Fusion Age	2.0278 ± 0.7988 ± 39.39%	6.70 ± 2.63 ± 39.33%		17	0.076 ± 0.003
		Minimal External Error ± 2.64 Analytical Error ± 2.63			

Normal Isochron		39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
06C2959	0.09 W	0.1 ± 0.0	296.5 ± 4.2	0.3643
06C2961	0.12 W	0.1 ± 0.0	299.4 ± 4.1	0.4770
06C2962	0.18 W	0.2 ± 0.0	299.2 ± 5.5	0.6766
06C2963	0.21 W	0.4 ± 0.0	303.7 ± 4.5	0.8085
06C2965	0.24 W	1.0 ± 0.0	305.7 ± 4.3	0.8797
06C2966	0.29 W	2.8 ± 0.0	307.6 ± 4.4	0.8146
06C2967	0.32 W	8.1 ± 0.1	311.7 ± 5.1	0.9057
06C2969	0.44 W	34.0 ± 0.9	316.9 ± 8.6	0.9741
06C2970	0.53 W ✓	134.0 ± 11.8	352.4 ± 31.1	0.9963
06C2971	0.65 W ✓	323.2 ± 33.6	398.8 ± 41.5	0.9964
06C2973	0.85 W ✓	514.6 ± 71.9	428.4 ± 60.0	0.9965
06C2974	1.12 W ✓	620.0 ± 88.3	486.9 ± 69.5	0.9978
06C2975	1.44 W ✓	571.4 ± 106.6	474.0 ± 88.5	0.9984
06C2977	1.95 W ✓	479.4 ± 78.6	431.8 ± 70.9	0.9983
06C2978	3.18 W ✓	223.2 ± 12.4	353.3 ± 19.5	0.9903
06C2979	3.63 W ✓	62.2 ± 3.9	319.0 ± 19.9	0.9927
06C2981	4.80 W ✓	36.5 ± 1.4	305.0 ± 11.7	0.9876

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	296.7345 ± 10.1047 ± 3.41%	0.2858 ± 0.0461 ± 16.13%	0.95 ± 0.15 ± 16.15%	0.62 74%
			Minimal External Error ± 0.15 Analytical Error ± 0.15	
Statistics	2σ Confidence Limit Error Magnification Number of Data Points	2.07 1.0000 9	Convergence Number of Iterations Calculated Line	0.0000026972 7 Weighted York-2

Inverse Isochron		39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
06C2959	0.09 W	0.000234 ± 0.000008	0.003373 ± 0.000048	0.0026
06C2961	0.12 W	0.000404 ± 0.000010	0.003340 ± 0.000046	0.0153
06C2962	0.18 W	0.000656 ± 0.000013	0.003342 ± 0.000062	0.0052
06C2963	0.21 W	0.001376 ± 0.000015	0.003293 ± 0.000049	0.0205
06C2965	0.24 W	0.003174 ± 0.000024	0.003271 ± 0.000046	0.0108
06C2966	0.29 W	0.009060 ± 0.000089	0.003251 ± 0.000046	0.0450
06C2967	0.32 W	0.026014 ± 0.000198	0.003208 ± 0.000052	0.0104
06C2969	0.44 W	0.107358 ± 0.000662	0.003155 ± 0.000085	0.1075
06C2970	0.53 W ✓	0.380230 ± 0.002896	0.002837 ± 0.000250	0.0354
06C2971	0.65 W ✓	0.810615 ± 0.007146	0.002508 ± 0.000261	0.0576
06C2973	0.85 W ✓	1.201167 ± 0.014007	0.002334 ± 0.000327	0.0649
06C2974	1.12 W ✓	1.273433 ± 0.012134	0.002054 ± 0.000293	0.0550
06C2975	1.44 W ✓	1.205535 ± 0.012592	0.002110 ± 0.000394	0.0422
06C2977	1.95 W ✓	1.110280 ± 0.010622	0.002316 ± 0.000380	0.0442
06C2978	3.18 W ✓	0.631839 ± 0.004868	0.002830 ± 0.000156	0.0469
06C2979	3.63 W ✓	0.194883 ± 0.001468	0.003135 ± 0.000195	0.0607
06C2981	4.80 W ✓	0.119573 ± 0.000727	0.003279 ± 0.000125	0.0162

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	296.9034 ± 10.0983 ± 3.40%	0.2886 ± 0.0450 ± 15.61%	0.95 ± 0.15 ± 15.62%	0.63 73%
			Minimal External Error ± 0.15 Analytical Error ± 0.15	
Statistics	2σ Confidence Limit Error Magnification Number of Data Points Spreading Factor	2.07 1.0000 9 33.3%	Convergence Number of Iterations Calculated Line	0.0000185118 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
06C2959	0.09 W	0.0914084	0.704	0.0071144	9.988	0.0179247	0.943	0.0063389	1.791	27.1032871	0.058	47.81 ± 194.21	0.34	0.74	0.383 ± 0.079
06C2961	0.12 W	0.0840912	0.682	0.0101797	4.630	0.0169810	0.660	0.0101759	1.234	25.1756098	0.114	103.58 ± 105.72	1.30	1.20	0.430 ± 0.045
06C2962	0.18 W	0.0687911	0.924	0.0137157	4.712	0.0144320	0.971	0.0135029	1.000	20.5806934	0.070	61.27 ± 89.35	1.23	1.59	0.423 ± 0.044
06C2963	0.21 W	0.0472256	0.741	0.0188120	3.120	0.0106494	1.491	0.0197460	0.528	14.3393354	0.091	63.57 ± 33.77	2.69	2.32	0.451 ± 0.034
06C2965	0.24 W	0.0237171	0.702	0.0215586	0.950	0.0064184	0.551	0.0230278	0.374	7.2494110	0.054	34.59 ± 13.92	3.35	2.70	0.459 ± 0.021
06C2966	0.29 W	0.0100670	0.700	0.0262861	0.813	0.0040363	0.531	0.0280543	0.475	3.0943885	0.125	14.31 ± 4.96	3.93	3.30	0.459 ± 0.020
06C2967	0.32 W	0.0042749	0.813	0.0333315	0.745	0.0032221	0.786	0.0346108	0.376	1.3296322	0.057	6.60 ± 1.97	5.20	4.06	0.446 ± 0.019
06C2969	0.44 W	0.0013123	1.324	0.0429383	0.745	0.0030147	0.810	0.0442799	0.224	0.4122396	0.212	2.08 ± 0.78	6.76	5.20	0.443 ± 0.019
06C2970	0.53 W ✓	0.0004689	4.243	0.0612172	0.649	0.0037242	0.901	0.0606061	0.292	0.1593790	0.243	1.41 ± 0.64	16.15	7.12	0.425 ± 0.018
06C2971	0.65 W ✓	0.0002561	4.735	0.0805449	0.649	0.0042842	0.678	0.0756688	0.249	0.0934017	0.361	1.06 ± 0.32	25.86	8.89	0.404 ± 0.017
06C2973	0.85 W ✓	0.0001883	6.008	0.0951962	0.580	0.0046059	0.604	0.0835121	0.274	0.0696073	0.511	0.85 ± 0.27	30.96	9.81	0.377 ± 0.016
06C2974	1.12 W ✓	0.0001958	5.830	0.1293581	0.594	0.0053636	0.568	0.0994880	0.200	0.0782178	0.428	1.02 ± 0.23	39.23	11.68	0.330 ± 0.014
06C2975	1.44 W ✓	0.0001989	7.412	0.1493778	0.612	0.0049693	0.572	0.0904352	0.259	0.0750779	0.450	1.03 ± 0.32	37.58	10.62	0.260 ± 0.011
06C2977	1.95 W ✓	0.0002612	5.799	0.2813382	0.636	0.0050901	0.820	0.0888268	0.234	0.0799705	0.413	0.94 ± 0.34	31.50	10.42	0.135 ± 0.006
06C2978	3.18 W ✓	0.0008560	1.591	1.2993899	0.755	0.0069388	0.691	0.1137930	0.311	0.1788264	0.222	0.86 ± 0.24	16.35	13.27	0.037 ± 0.002
06C2979	3.63 W ✓	0.0006775	2.142	0.7639076	0.860	0.0017981	1.165	0.0298693	0.258	0.1505368	0.267	1.25 ± 0.98	7.36	3.45	0.017 ± 0.001
06C2981	4.80 W ✓	0.0013283	1.199	1.7701771	0.588	0.0020100	1.299	0.0323257	0.267	0.2598993	0.097	0.86 ± 1.03	3.12	3.65	0.008 ± 0.000
Σ		0.3353186	0.341	4.8044432	0.332	0.1154629	0.272	0.8542617	0.083	100.4295136	0.038				

Information on Analysis and Constants Used in Calculations
Sample = MUL-1 2F17-06
Material = Groundmass 210-300µm
Location = Muli, Samoa
Analyst = Jamie Russell
Project = SAMOA
Mass Discrimination Law = LIN
Irradiation = OSU2F06
J = 0.00183040 ± 0.00000732
FCT-3 = 28.030 ± 0.003 Ma
IGSN = KOP000034
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 = 14°01.1'S - 170°11.3'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 Cl = 316.0 ± 15.8

Results	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD	39Ar(k) (%n)	K/Ca ± 2σ
Age Plateau	0.2930 ± 0.0330 ± 11.27%	0.97 ± 0.11 ± 11.30%	0.57 81%	78.89 9	0.011 ± 0.012
	Minimal External Error ± 0.11		1.50	2σ Confidence Limit	
	Analytical Error ± 0.11		1.0000	Error Magnification	
Total Fusion Age	2.0278 ± 0.7988 ± 39.39%	6.70 ± 2.63 ± 39.33%		17	0.076 ± 0.003
	Minimal External Error ± 2.64				
	Analytical Error ± 2.63				
Normal Isochron	0.2858 ± 0.0461 ± 16.13%	0.95 ± 0.15 ± 16.15%	0.62 74%	78.89 9	
	Minimal External Error ± 0.15		2.07	2σ Confidence Limit	
	Analytical Error ± 0.15		1.0000	Error Magnification	
Inverse Isochron	0.2886 ± 0.0450 ± 15.61%	0.95 ± 0.15 ± 15.62%	0.63 73%	78.89 9	
	Minimal External Error ± 0.15		2.07	2σ Confidence Limit	
	Analytical Error ± 0.15		1.0000	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
06C2959	0.09 W	0.091406	0.70	0.000000	0.00	0.000002	9.99	0.000000	27.69	0.007114	9.99	0.017084	0.70	0.000000	0.00	0.000077	1.80	0.000000	24.07	0.000764	28.21	0.006334	1.79	0.000005	10.15	0.092702	205.81	27.010575	0.70	0.000000	0.00	0.000010	24.96
06C2961	0.12 W	0.084088	0.68	0.000000	0.00	0.000003	4.65	0.000000	14.62	0.010180	4.63	0.015716	0.68	0.000000	0.00	0.000123	1.24	0.000000	22.38	0.001141	15.58	0.010169	1.23	0.000007	4.98	0.327495	52.49	24.848098	0.68	0.000000	0.00	0.000017	24.93
06C2962	0.18 W	0.068787	0.92	0.000000	0.00	0.000004	4.73	0.000000	14.08	0.013716	4.71	0.012856	0.92	0.000000	0.00	0.000163	1.01	0.000000	22.40	0.001412	15.08	0.013493	1.00	0.000010	5.06	0.254059	74.14	20.326612	0.92	0.000000	0.00	0.000022	24.92
06C2963	0.21 W	0.047220	0.74	0.000000	0.00	0.000005	3.14	0.000000	12.10	0.018812	3.12	0.008825	0.74	0.000000	0.00	0.000239	0.54	0.000001	22.12	0.001584	13.25	0.019733	0.53	0.000013	3.62	0.385708	27.03	13.953595	0.74	0.000000	0.00	0.000033	24.91
06C2965	0.24 W	0.023711	0.70	0.000000	0.00	0.000006	1.02	0.000000	6.05	0.021559	0.95	0.004432	0.70	0.000000	0.00	0.000279	0.39	0.000001	21.92	0.001707	8.10	0.023013	0.37	0.000015	2.06	0.242771	20.32	7.006602	0.70	0.000000	0.00	0.000038	24.90
06C2966	0.29 W	0.010060	0.70	0.000000	0.00	0.000007	0.89	0.000000	5.56	0.026286	0.81	0.001880	0.70	0.000000	0.00	0.000340	0.49	0.000001	21.92	0.001816	7.74	0.028036	0.48	0.000019	2.00	0.121706	17.41	2.972637	0.70	0.000000	0.00	0.000046	24.90
06C2967	0.32 W	0.004266	0.82	0.000000	0.00	0.000009	0.83	0.000000	5.54	0.033331	0.74	0.000797	0.82	0.000000	0.00	0.000419	0.39	0.000001	21.91	0.002005	7.73	0.034587	0.38	0.000024	1.98	0.069094	14.91	1.260482	0.82	0.000000	0.00	0.000057	24.90
06C2969	0.44 W	0.001300	1.34	0.000000	0.00	0.000012	0.83	0.000000	5.50	0.042938	0.74	0.000243	1.34	0.000000	0.00	0.000536	0.25	0.000001	21.91	0.002234	7.70	0.044249	0.22	0.000030	1.98	0.027886	18.68	0.384280	1.34	0.000000	0.00	0.000073	24.90
06C2970	0.53 W ✓	0.000452	4.40	0.000000	0.00	0.000016	0.75	0.000000	5.51	0.061217	0.65	0.000084	4.40	0.000000	0.00	0.000733	0.31	0.000002	21.91	0.002904	7.70	0.060563	0.29	0.000043	1.94	0.025732	22.89	0.133547	4.40	0.000000	0.00	0.000100	24.90
06C2971	0.65 W ✓	0.000234	5.19	0.000000	0.00	0.000022	0.75	0.000001	5.46	0.080545	0.65	0.000044	5.19	0.000000	0.00	0.000916	0.27	0.000003	21.91	0.003322	7.67	0.075612	0.25	0.000057	1.94	0.024155	14.90	0.069122	5.19	0.000000	0.00	0.000125	24.90
06C2973	0.85 W ✓	0.000162	6.98	0.000000	0.00	0.000026	0.69	0.000001	5.44	0.095196	0.58	0.000030	6.98	0.000000	0.00	0.001011	0.29	0.000003	21.91	0.003562	7.66	0.083445	0.27	0.000067	1.92	0.021549	15.61	0.047921	6.98	0.000000	0.00	0.000138	24.90
06C2974	1.12 W ✓	0.000160	7.12	0.000000	0.00	0.000035	0.70	0.000001	5.44	0.129358	0.59	0.000030	7.12	0.000000	0.00	0.001204	0.22	0.000004	21.91	0.004126	7.65	0.099396	0.20	0.000092	1.92	0.030683	11.05	0.047371	7.12	0.000000	0.00	0.000164	24.90
06C2975	1.44 W ✓	0.000158	9.33	0.000000	0.00	0.000040	0.72	0.000001	5.44	0.149378	0.61	0.000030	9.33	0.000000	0.00	0.001094	0.28	0.000005	21.91	0.003841	7.65	0.090329	0.26	0.000106	1.93	0.028217	15.49	0.046712	9.33	0.000000	0.00	0.000149	24.90
06C2977	1.95 W ✓	0.000185	8.20	0.000000	0.00	0.000076	0.74	0.000001	5.49	0.281338	0.64	0.000035	8.20	0.000000	0.00	0.001073	0.26	0.000009	21.91	0.003973	7.69	0.088627	0.24	0.000199	1.94	0.025193	17.83	0.054632	8.20	0.000000	0.00	0.000146	24.90
06C2978	3.18 W ✓	0.000506	2.76	0.000000	0.00	0.000350	0.84	0.000001	5.46	1.299390	0.75	0.000094	2.76	0.000000	0.00	0.001367	0.33	0.000042	21.91	0.005436	7.67	0.112872	0.31	0.000921	1.98	0.029239	14.14	0.149401	2.76	0.000000	0.00	0.000186	24.90
06C2979	3.63 W ✓	0.000472	3.10	0.000000	0.00	0.000205	0.94	0.000000	5.63	0.763908	0.86	0.000088	3.10	0.000000	0.00	0.000355	0.28	0.000024	21.92	0.001330	7.79	0.029328	0.27	0.000542	2.02	0.011084	39.19	0.139404	3.10	0.000000	0.00	0.000048	24.90
06C2981	4.80 W ✓	0.000852	1.91	0.000000	0.00	0.000476	0.69	0.000000	5.76	1.770177	0.59	0.000159	1.91	0.000000	0.00	0.000376	0.30	0.000057	21.91	0.001418	7.89	0.031071	0.29	0.001255	1.92	0.008107	59.38	0.251741	1.91	0.000000	0.00	0.000051	24.90
	Σ	0.334019	0.34	0.000000	0.00	0.001292	0.38	0.000007	1.72	4.804443	0.33	0.062428	0.34	0.000000	0.00	0.010304	0.09	0.000154	10.74	0.042577	2.26	0.850855	0.08	0.003406	0.96	1.725380	19.70	98.702730	0.34	0.000000	0.00	0.001404	7.29
	Σ							0.335319	0.34	4.804443	0.33									0.115463	0.85			0.854262	0.08					100.429514	0.48		

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)
06C2959	0.09 W	14.635913	30.12285	27.103277	0.01568	4275.697123	76.63475	1.122336	0.11389	14.420190	0.27755	82.644	5.13078396	1.00058433	2.743E-18
06C2961	0.12 W	32.206180	16.91106	25.175593	0.02879	2474.040209	30.65142	1.000373	0.04794	8.263756	0.11649	82.685	5.13500834	1.00058463	2.548E-18
06C2962	0.18 W	18.828726	13.96179	20.580671	0.01435	1524.168482	15.27302	1.015756	0.04893	5.094543	0.06935	82.707	5.13719229	1.00058478	2.083E-18
06C2963	0.21 W	19.546644	5.28382	14.339303	0.01298	726.188499	3.88721	0.952698	0.03014	2.391651	0.02176	82.728	5.13930668	1.00058493	1.451E-18
06C2965	0.24 W	10.549482	2.14377	7.249373	0.00389	314.810705	1.18977	0.936197	0.00956	1.029931	0.00819	82.770	5.14360863	1.00058523	7.336E-19
06C2966	0.29 W	4.341094	0.75594	3.094342	0.00388	110.299816	0.54178	0.936972	0.00882	0.358841	0.00304	82.792	5.14579624	1.00058538	3.132E-19
06C2967	0.32 W	1.997664	0.29793	1.329575	0.00076	38.416682	0.14613	0.963036	0.00803	0.123513	0.00111	82.813	5.14791417	1.00058553	1.346E-19
06C2969	0.44 W	0.630204	0.11772	0.412167	0.00087	9.309867	0.02869	0.969702	0.00754	0.029638	0.00040	82.855	5.15222332	1.00058582	4.172E-20
06C2970	0.53 W ✓	0.424889	0.09728	0.159279	0.00039	2.629753	0.01000	1.010083	0.00719	0.007736	0.00033	82.876	5.15434389	1.00058597	1.613E-20
06C2971	0.65 W ✓	0.319465	0.04762	0.093277	0.00034	1.234349	0.00542	1.064440	0.00740	0.003385	0.00016	82.897	5.15653607	1.00058612	9.452E-21
06C2973	0.85 W ✓	0.258238	0.04032	0.069470	0.00036	0.833499	0.00483	1.139909	0.00731	0.002255	0.00014	82.940	5.16085244	1.00058642	7.044E-21
06C2974	1.12 W ✓	0.308694	0.03412	0.078054	0.00034	0.786203	0.00372	1.300238	0.00815	0.001968	0.00011	82.966	5.16354315	1.00058661	7.916E-21
06C2975	1.44 W ✓	0.312375	0.04838	0.074929	0.00034	0.830184	0.00431	1.651765	0.01098	0.002199	0.00016	82.988	5.16581010	1.00058677	7.598E-21
06C2977	1.95 W ✓	0.284254	0.05068	0.079824	0.00033	0.900297	0.00428	3.167269	0.02148	0.002941	0.00017	83.031	5.17013422	1.00058706	8.093E-21
06C2978	3.18 W ✓	0.259051	0.03665	0.178640	0.00040	1.571505	0.00600	11.418887	0.09321	0.007522	0.00012	83.052	5.17233312	1.00058722	1.810E-20
06C2979	3.63 W ✓	0.377951	0.14811	0.150488	0.00040	5.039849	0.01872	25.574995	0.22965	0.022681	0.00049	83.074	5.17453295	1.00058737	1.523E-20
06C2981	4.80 W ✓	0.260936	0.15494	0.259848	0.00025	8.040009	0.02280	54.760594	0.35360	0.041092	0.00050	83.116	5.17886438	1.00058767	2.630E-20

Procedure Blanks		36Ar	1σ	37Ar	1σ	38Ar	1σ	39Ar	1σ	40Ar	1σ
06C2959	0.09 W	0.000137	0.000008	0.000069	0.000020	0.000028	0.000012	0.000020	0.000007	0.044534	0.003166
06C2961	0.12 W	0.000102	0.000008	0.000057	0.000019	0.000020	0.000012	0.000027	0.000013	0.031878	0.003080
06C2962	0.18 W	0.000089	0.000008	0.000052	0.000019	0.000017	0.000011	0.000038	0.000013	0.026815	0.003041
06C2963	0.21 W	0.000078	0.000008	0.000047	0.000019	0.000014	0.000011	0.000046	0.000013	0.022786	0.003007
06C2965	0.24 W	0.000064	0.000009	0.000042	0.000009	0.000009	0.000011	0.000056	0.000021	0.016460	0.000323
06C2966	0.29 W	0.000057	0.000009	0.000031	0.000009	0.000013	0.000011	0.000056	0.000021	0.015883	0.000320
06C2967	0.32 W	0.000052	0.000009	0.000024	0.000009	0.000016	0.000011	0.000055	0.000021	0.015443	0.000318
06C2969	0.44 W	0.000050	0.000009	0.000019	0.000009	0.000017	0.000011	0.000050	0.000020	0.014929	0.000314
06C2970	0.53 W	0.000051	0.000009	0.000021	0.000009	0.000017	0.000011	0.000047	0.000020	0.014877	0.000313
06C2971	0.65 W	0.000054	0.000009	0.000024	0.000009	0.000016	0.000011	0.000044	0.000020	0.014969	0.000313
06C2973	0.85 W	0.000061	0.000009	0.000036	0.000009	0.000014	0.000011	0.000035	0.000020	0.015612	0.000312
06C2974	1.12 W	0.000067	0.000009	0.000046	0.000009	0.000012	0.000011	0.000029	0.000020	0.016340	0.000313
06C2975	1.44 W	0.000071	0.000009	0.000055	0.000009	0.000011	0.000011	0.000024	0.000020	0.017159	0.000314
06C2977	1.95 W	0.000078	0.000009	0.000071	0.000009	0.000011	0.000011	0.000013	0.000021	0.019269	0.000318
06C2978	3.18 W	0.000079	0.000009	0.000079	0.000009	0.000013	0.000011	0.000007	0.000021	0.020631	0.000321
06C2979	3.63 W	0.000079	0.000009	0.000086	0.000009	0.000016	0.000011	0.000001	0.000021	0.022196	0.000324
06C2981	4.80 W	0.000078	0.000008	0.000091	0.000008	0.000020	0.000012	0.000001	0.000010	0.023938	0.000038

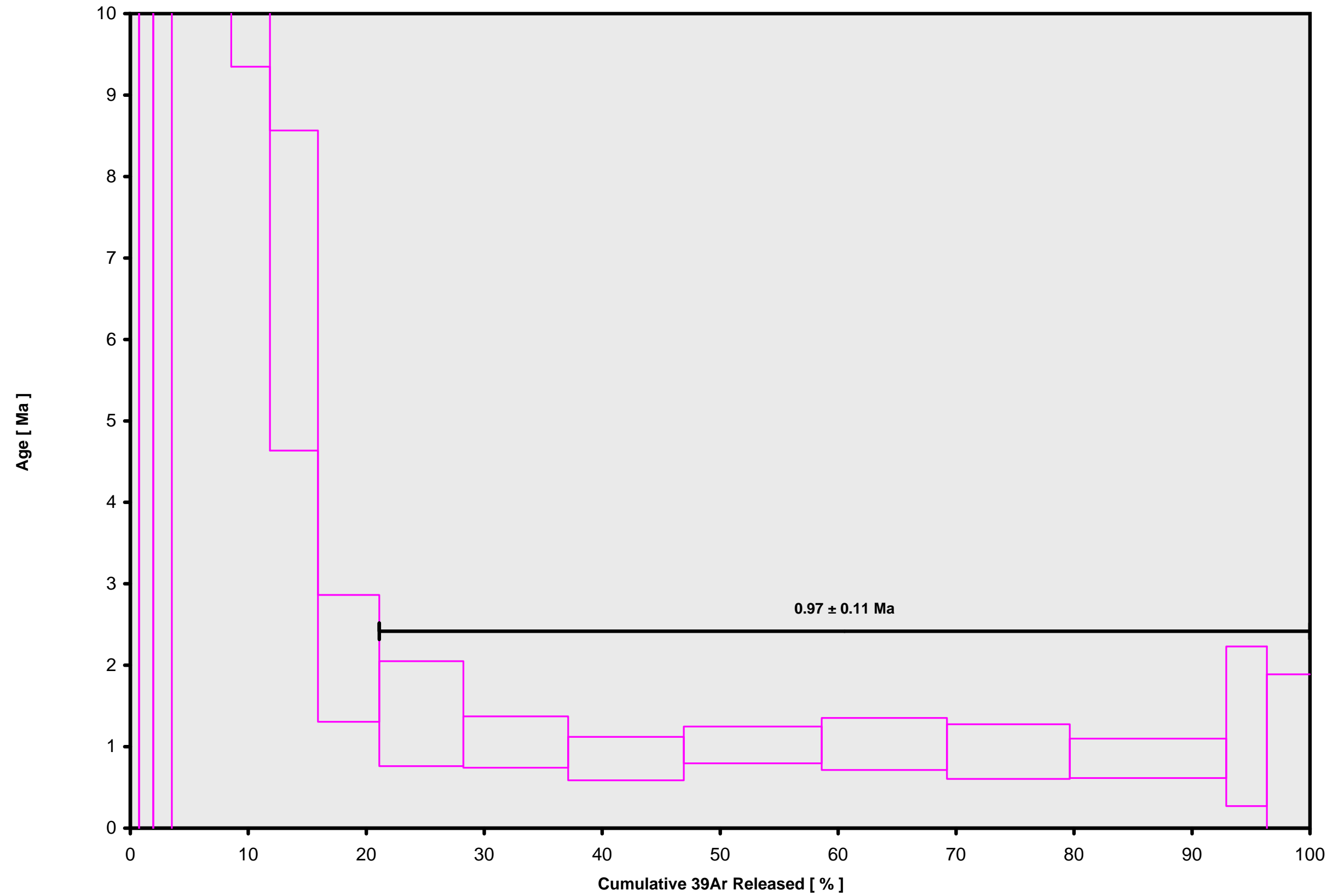
Intercept Values	36Ar				37Ar				38Ar				39Ar				40Ar				
	1σ	r2			1σ	r2			1σ	r2			1σ	r2			1σ	r2			
06C2959	0.09 W	0.009293	0.000029	0.9645	LIN #	0.000147	0.000014	0.9893	EXP #	0.001809	0.000016	0.1652	LIN #	0.000638	0.000011	0.9999	EXP #	2.714782	0.001536	0.9982	LIN #
06C2961	0.12 W	0.008547	0.000022	0.9611	LIN #	0.000206	0.000009	0.9953	EXP #	0.001713	0.000010	0.0330	LIN #	0.001024	0.000012	0.9999	EXP #	2.520749	0.002863	0.9927	EXP #
06C2962	0.18 W	0.006992	0.000047	0.8391	LIN #	0.000275	0.000012	0.9877	LIN #	0.001456	0.000013	0.0127	LIN #	0.001358	0.000013	0.9998	EXP #	2.060751	0.001403	0.9977	EXP # 9
06C2963	0.21 W	0.004802	0.000018	0.9295	LIN #	0.000375	0.000011	0.9827	LIN #	0.001074	0.000016	0.1703	LIN #	0.001985	0.000010	0.9998	EXP #	1.436212	0.001263	0.9959	EXP #
06C2965	0.24 W	0.023715	0.000071	0.9700	LIN #	0.004206	0.000031	0.9831	LIN #	0.006362	0.000026	0.5115	LIN #	0.022750	0.000074	0.9993	EXP #	7.138099	0.003809	0.9986	EXP #
06C2966	0.29 W	0.010095	0.000029	0.9713	LIN #	0.005106	0.000030	0.8782	EXP #	0.004008	0.000013	0.8797	LIN #	0.027704	0.000122	0.9872	EXP #	3.055577	0.003802	0.9922	EXP #
06C2967	0.32 W	0.004315	0.000020	0.9011	LIN #	0.006457	0.000032	0.3626	EXP #	0.003205	0.000020	0.8017	LIN #	0.034164	0.000114	0.8620	EXP #	1.321422	0.000675	0.9983	EXP #
06C2969	0.44 W	0.001358	0.000013	0.5418	LIN #	0.008299	0.000042	0.8279	LIN #	0.003001	0.000019	0.7306	LIN #	0.043689	0.000065	0.9488	EXP # 1	0.419657	0.000800	0.9157	EXP # 1
06C2970	0.53 W	0.000518	0.000018	0.1440	LIN #	0.011821	0.000043	0.9336	LIN #	0.003703	0.000029	0.8394	LIN #	0.059777	0.000145	0.9674	EXP #	0.171191	0.000224	0.9642	EXP #
06C2971	0.65 W	0.000308	0.000009	0.2156	LIN #	0.015543	0.000057	0.9670	EXP #	0.004257	0.000023	0.9096	LIN #	0.074618	0.000141	0.9865	EXP #	0.106465	0.000125	0.9933	LIN #
06C2973	0.85 W	0.000248	0.000007	0.3440	LIN #	0.018363	0.000042	0.9857	EXP #	0.004572	0.000020	0.9468	LIN #	0.082340	0.000182	0.9865	EXP # 2	0.083721	0.000167	0.9903	LIN #
06C2974	1.12 W	0.000261	0.000008	0.4267	LIN #	0.024936	0.000066	0.9800	EXP #	0.005321	0.000022	0.9530	LIN #	0.098079	0.000116	0.9952	EXP #	0.092895	0.000117	0.9936	LIN #
06C2975	1.44 W	0.000268	0.000012	0.1927	LIN #	0.028784	0.000087	0.9789	EXP #	0.004930	0.000020	0.9578	LIN #	0.089152	0.000180	0.9873	EXP #	0.090615	0.000121	0.9921	EXP # 6
06C2977	1.95 W	0.000337	0.000012	0.0044	LIN #	0.054136	0.000189	0.9751	EXP #	0.005050	0.000036	0.8676	LIN #	0.087556	0.000149	0.9918	EXP #	0.097495	0.000088	0.9928	EXP #
06C2978	3.18 W	0.000931	0.000009	0.5422	LIN #	0.249678	0.001338	0.9467	EXP # 4	0.006881	0.000041	0.8395	LIN #	0.112156	0.000298	0.9665	LIN # 6	0.195950	0.000229	0.8886	LIN # 1
06C2979	3.63 W	0.000753	0.000011	0.2588	LIN #	0.146761	0.000992	0.8603	LIN # 2 7	0.001796	0.000016	0.5817	LIN #	0.029439	0.000056	0.9495	LIN # 1	0.169695	0.000233	0.9058	LIN #
06C2981	4.80 W	0.001401	0.000011	0.8618	LIN # 1 7	0.339695	0.000857	0.9898	EXP # 2 10	0.002010	0.000022	0.4514	LIN #	0.031860	0.000067	0.7006	LIN #	0.278846	0.000244	0.9234	LIN # 2 9

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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	
06C2959	0.09 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.09	28.03	0.01	0.0018304	0.4	1.00378	0.16	10	1.012E-19	28	AUG	2006	06	30	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2961	0.12 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.12	28.03	0.01	0.0018304	0.4	1.00378	0.16	10	1.012E-19	28	AUG	2006	07	30	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2962	0.18 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.18	28.03	0.01	0.0018304	0.4	1.00378	0.16	10	1.012E-19	28	AUG	2006	08	01	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2963	0.21 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.21	28.03	0.01	0.0018304	0.4	1.00378	0.16	10	1.012E-19	28	AUG	2006	08	31	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2965	0.24 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.24	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	09	32	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2966	0.29 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.29	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	10	03	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2967	0.32 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.32	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	10	33	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2969	0.44 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.44	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	11	34	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2970	0.53 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.53	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	12	04	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2971	0.65 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.65	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	12	35	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2973	0.85 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	0.85	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	13	36	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2974	1.12 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	1.12	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	14	14	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2975	1.44 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	1.44	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	14	46	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2977	1.95 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	1.95	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	15	47	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2978	3.18 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	3.18	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	16	18	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2979	3.63 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	3.63	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	16	49	001	OSU2F06	Samoa	06C2959	01	FCT-3
06C2981	4.80 W	MUL-1 2F17-06	Groundmass 210-300μm	Muli, Samoa	Jamie Russell	4.8	28.03	0.01	0.0018304	0.4	1.00378	0.16	1.0179	1.012E-19	28	AUG	2006	17	50	001	OSU2F06	Samoa	06C2959	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	
06C2959	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
06C2961	0.12	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
06C2962	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
06C2963	0.21	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
06C2965	0.24	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
06C2966	0.29	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
06C2967	0.32	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
06C2969	0.44	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
06C2970	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
06C2971	0.65	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
06C2973	0.85	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
06C2974	1.12	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
06C2975	1.44	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
06C2977	1.95	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
06C2978	3.18	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
06C2979	3.63	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
06C2981	4.80	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

06C2957.AGE >>> MUL-1 2F17-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

0.97 ± 0.11

TOTAL FUSION

6.70 ± 2.63

NORMAL ISOCHRON

0.95 ± 0.15

INVERSE ISOCHRON

0.95 ± 0.15

MSWD (PROBABILITY)

0.57 (81%)

Sample Info

Groundmass 210-300µm

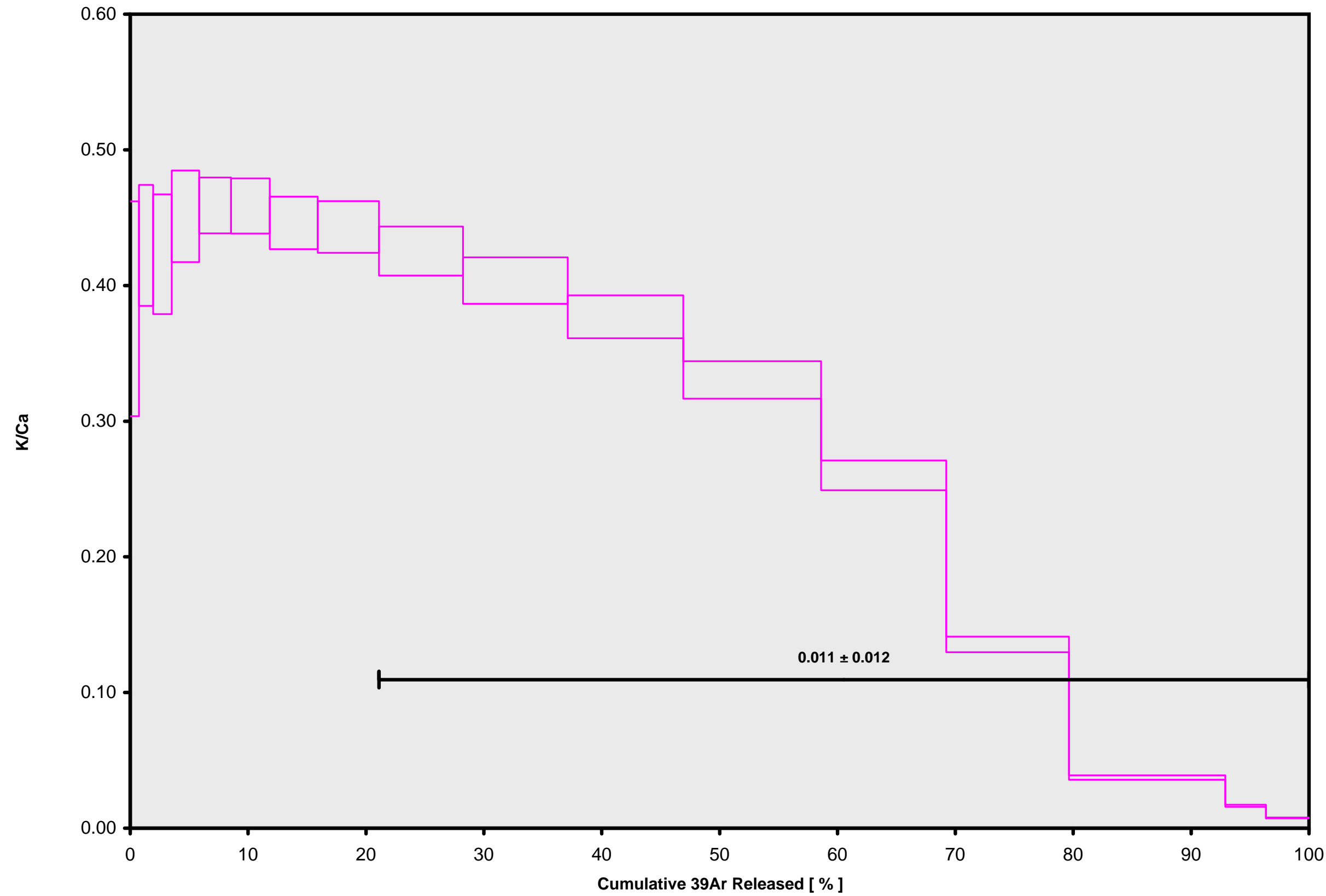
Muli, Samoa

Jamie Russell

IRR = OSU2F06

J = 0.00183040 ± 0.00000732

06C2957.AGE >>> MUL-1 2F17-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

0.97 ± 0.11

TOTAL FUSION

6.70 ± 2.63

NORMAL ISOCHRON

0.95 ± 0.15

INVERSE ISOCHRON

0.95 ± 0.15

Sample Info

Groundmass 210-300 μ m

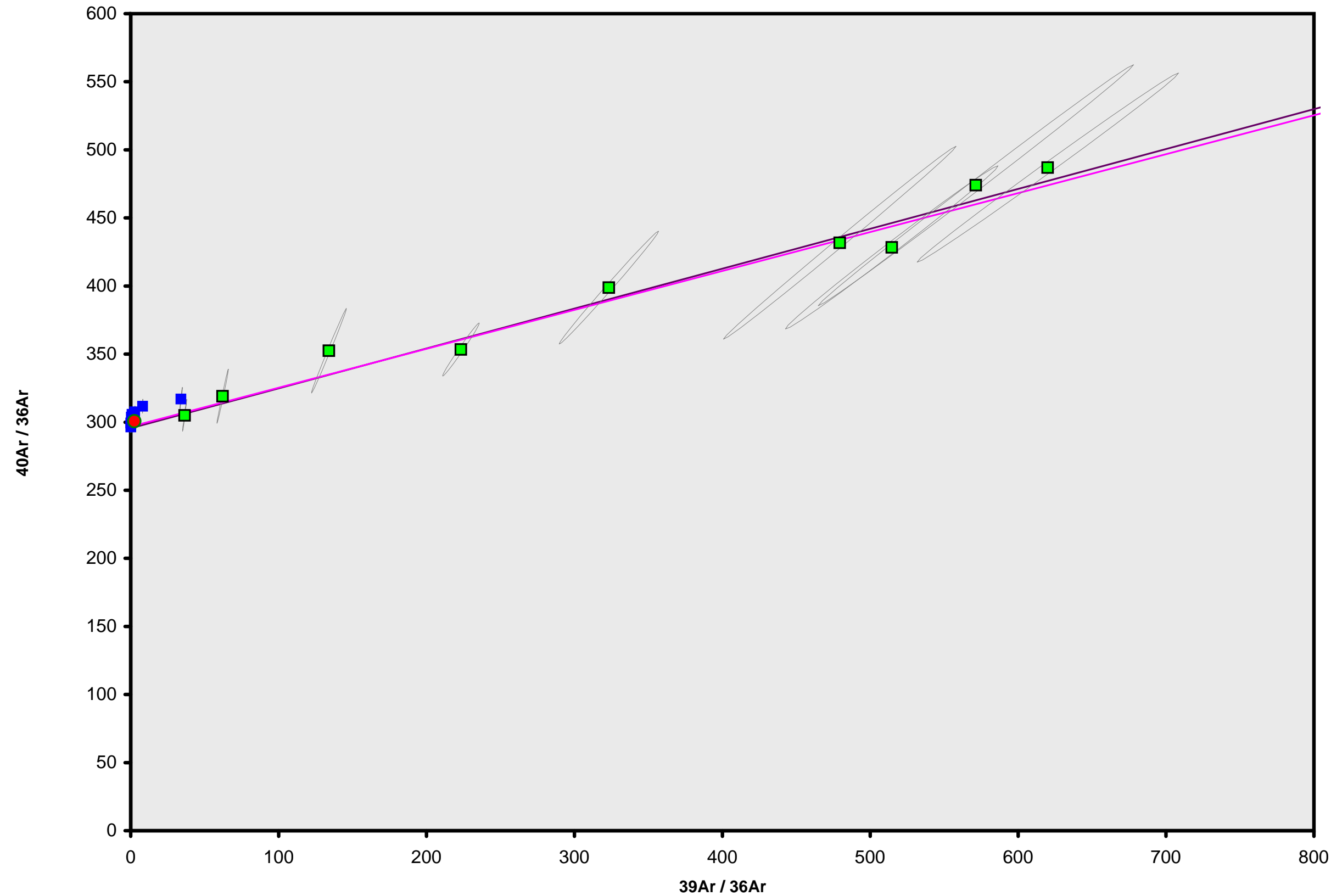
Muli, Samoa

Jamie Russell

IRR = OSU2F06

J = $0.00183040 \pm 0.00000732$

06C2957.AGE >>> MUL-1 2F17-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

0.97 ± 0.11

TOTAL FUSION

6.70 ± 2.63

NORMAL ISOCHRON

0.95 ± 0.15

INVERSE ISOCHRON

0.95 ± 0.15

MSWD (PROBABILITY)

0.62 (74%)

40AR/36AR INTERCEPT

296.7 ± 10.1

Sample Info

Groundmass 210-300 μ m

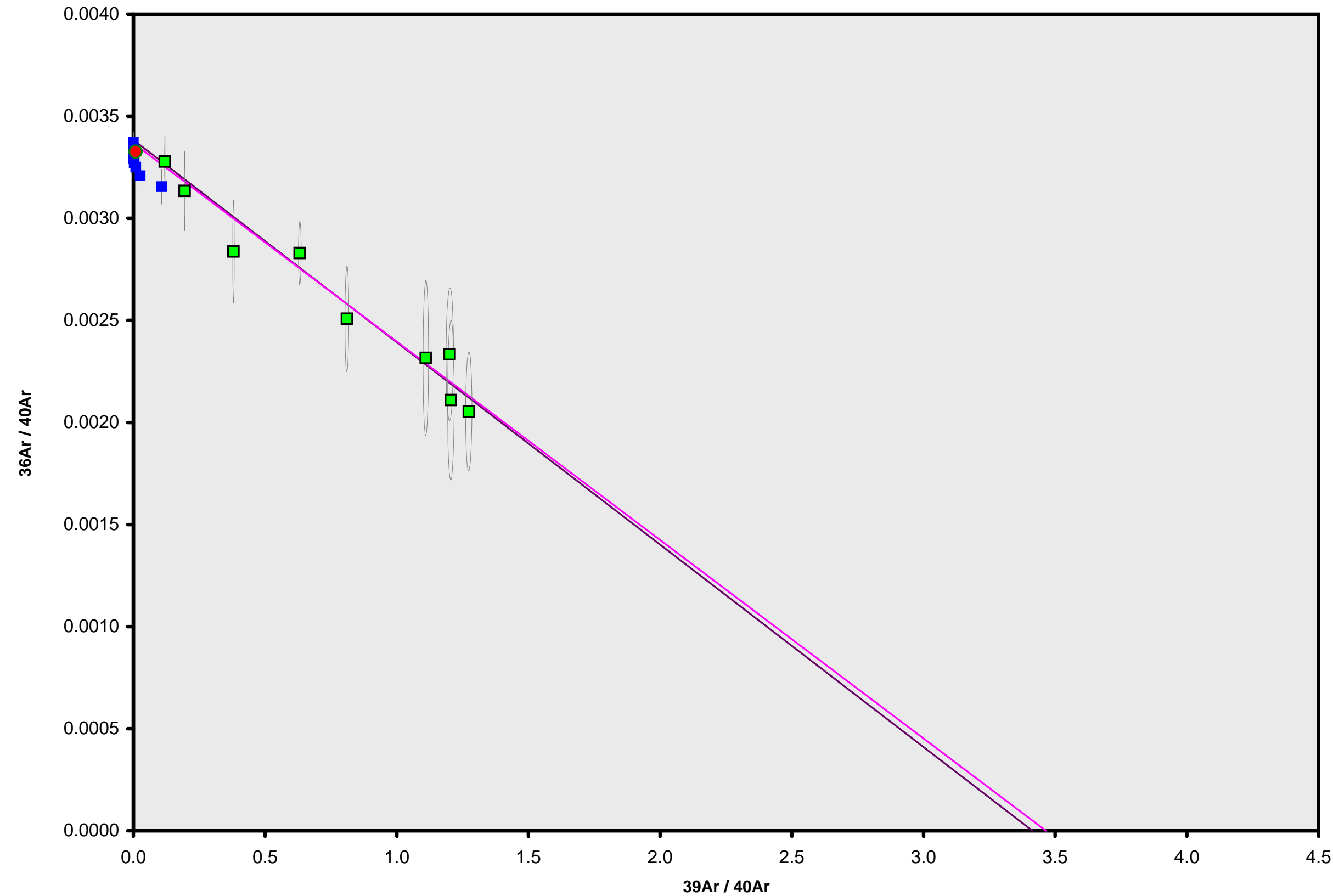
Muli, Samoa

Jamie Russell

IRR = OSU2F06

J = $0.00183040 \pm 0.00000732$

06C2957.AGE >>> MUL-1 2F17-06 >>> SAMOA PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU

0.97 ± 0.11

TOTAL FUSION

6.70 ± 2.63

NORMAL ISOCHRON

0.95 ± 0.15

INVERSE ISOCHRON

0.95 ± 0.15

MSWD (PROBABILITY)

0.63 (73%)

SPREADING FACTOR

33.3%

40AR/36AR INTERCEPT

296.9 ± 10.1

Sample Info

Groundmass 210-300 μm

Muli, Samoa

Jamie Russell

IRR = OSU2F06

J = $0.00183040 \pm 0.00000732$