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
14D26403	12.0 %		0.0388631	2.491	94.6588	2.561	0.5649477	6.917	14.73869	0.283	237.9772	0.102	15.94050 ± 0.10729	49.44 ± 0.33	98.30	6.20	0.067 ± 0.003
14D26405	13.0 %	✓	0.0570985	1.880	164.3554	1.560	0.9687687	3.935	25.14615	0.179	400.6247	0.061	15.84387 ± 0.06747	49.14 ± 0.21	99.01	10.58	0.065 ± 0.002
14D26406	14.0 %	✓	0.0293090	3.424	71.5453	3.297	0.4250257	9.191	10.80509	0.392	172.6616	0.140	15.76847 ± 0.14733	48.91 ± 0.45	98.24	4.55	0.065 ± 0.004
14D26408	15.0 %	✓	0.0524979	1.952	134.3750	1.821	0.8176752	4.554	21.16017	0.210	338.0642	0.072	15.80958 ± 0.07840	49.04 ± 0.24	98.53	8.91	0.067 ± 0.002
14D26409	16.0 %	✓	0.0623183	1.710	149.1182	1.668	0.8617457	4.611	23.25327	0.193	371.7825	0.066	15.76798 ± 0.07226	48.91 ± 0.22	98.19	9.79	0.067 ± 0.002
14D26411	17.0 %	✓	0.0844716	1.346	205.3119	1.283	1.1654096	3.337	31.99499	0.148	509.8622	0.048	15.72717 ± 0.05528	48.78 ± 0.17	98.26	13.46	0.067 ± 0.002
14D26412	18.0 %	✓	0.0968009	1.251	285.4321	1.043	1.5047084	2.456	44.00792	0.115	696.6383	0.036	15.75758 ± 0.04301	48.88 ± 0.13	99.11	18.52	0.066 ± 0.001
14D26414	19.0 %	✓	0.0541202	1.939	179.6225	1.420	0.9490923	4.333	27.21130	0.166	430.2075	0.057	15.81048 ± 0.06203	49.04 ± 0.19	99.56	11.45	0.065 ± 0.002
14D26415	20.0 %	✓	0.0386541	2.611	119.7857	1.970	0.7094015	5.336	19.61826	0.213	309.9033	0.078	15.75842 ± 0.08040	48.88 ± 0.25	99.35	8.26	0.070 ± 0.003
14D26417	21.0 %		0.0259208	3.884	85.4061	2.793	0.4631620	8.343	13.55460	0.301	212.1965	0.114	15.65060 ± 0.11384	48.55 ± 0.35	99.55	5.70	0.068 ± 0.004
14D26418	22.0 %		0.0079329	11.616	25.8832	9.002	0.0992937	37.225	4.22215	0.920	65.9720	0.364	15.61436 ± 0.34767	48.44 ± 1.06	99.52	1.78	0.070 ± 0.013
14D26420	23.0 %		0.0021971	40.371	10.5343	21.824	0.0420552	88.372	1.43684	2.854	22.7939	1.052	16.06643 ± 1.07798	49.82 ± 3.30	100.77	0.60	0.058 ± 0.026
14D26421	24.0 %		0.0026466	33.540	2.6404	88.875	0.0301647	131.096	0.47531	8.652	8.4195	2.845	16.56880 ± 3.33987	51.36 ± 10.21	93.19	0.20	0.077 ± 0.138
		Σ	0.5528309	0.667	1528.6690	0.585	8.6014502	1.614	237.62474	0.066	3777.1035	0.023					

Information on Analysis and Constants Used in Calculations

Project = **RURUTU (13-INT-08)**
Sample = **RR1310-D18-23**
Material = **Hornblende**
Location = **Rurutu Hotspot**
Region = **Tuvalu**
Analyst = **Kevin Konrad**
Irradiation = **14-OSU-02 (2A48-14)**
Position = **X: 0 | Y: 0 | Z/H: 57.5 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al. (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.03974 ± 0.00841**
FCT-NM J-value = **0.00173870 ± 0.00000162**
Air Shot 40Ar/36Ar = **303.9910 ± 0.4165**
Air Shot MDF = **0.99300804 ± 0.00066611 (LIN)**
Experiment Type = **Incremental Heating**
Extraction Method = **Bulk Laser Heating**
Heating = **77 sec**
Isolation = **6.00 min**
Instrument = **ARGUS-VI-D**
Preferred Age = **Plateau Age**
Age Classification = **Eruption Age**
IGSN = **IEKK1-RR1310-D18-23AM**
Rock Class = **Igneous>Volcanic>Mafic**
Lithology = **Basalt**
Lat-Lon = **8°37.6'S - 178°58.2'E**

Age Equations = **Min et al. (2000)**
Negative Intensities = **Allowed**
Collector Calibrations = **40Ar 36Ar**
Decay 40K = **5.530 ± 0.048 E-10 1/a**
Decay 39Ar = **2.940 ± 0.016 E-07 1/h**
Decay 37Ar = **8.230 ± 0.012 E-04 1/h**
Decay 36Cl = **2.257 ± 0.015 E-06 1/a**
Decay 40K(EC,β⁺) = **0.580 ± 0.009 E-10 1/a**
Decay 40K(β⁻) = **4.950 ± 0.043 E-10 1/a**
Atmospheric 40/36(a) = **295.50**
Atmospheric 38/36(a) = **0.1869**
Production 39/37(ca) = **0.0006756 ± 0.0000089**
Production 38/37(ca) = **0.0000718 ± 0.0000092**
Production 36/37(ca) = **0.0002663 ± 0.0000004**
Production 40/39(k) = **0.003823 ± 0.000102**
Production 38/39(k) = **0.012031 ± 0.000019**
Production 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
Age Plateau		15.77537 ± 0.02757 (± 0.17%)	**48.93 ± 0.12 (± 0.25%)**	1.45	85.51	0.066 ± 0.001
			Full External Error ± 1.10	18%	8	
			Analytical Error ± 0.08	2.07	2σ Confidence Limit	
				1.2023	Error Magnification	
Total Fusion Age		15.78107 ± 0.02482 (± 0.16%)	**48.95 ± 0.12 (± 0.24%)**		13	0.067 ± 0.001
			Full External Error ± 1.10			
			Analytical Error ± 0.08			
Normal Isochron	**234.99 ± 101.40 (± 43.15%)**	15.80988 ± 0.06625 (± 0.42%)	**49.04 ± 0.22 (± 0.45%)**	1.42	85.51	
			Full External Error ± 1.12	20%	8	
			Analytical Error ± 0.20	2.15	2σ Confidence Limit	
				1.1931	Error Magnification	
				1	Number of Iterations	
				0.0000019296	Convergence	
Inverse Isochron	**248.20 ± 95.76 (± 38.58%)**	15.80382 ± 0.06817 (± 0.43%)	**49.02 ± 0.23 (± 0.46%)**	1.50	85.51	
Clustered Points			Full External Error ± 1.12	17%	8	
			Analytical Error ± 0.21	2.15	2σ Confidence Limit	
				1.2261	Error Magnification	
				3	Number of Iterations	
				0.0000639898	Convergence	
				1%	Spreading Factor	

Notes
A long and lovely hornblende plateau. The low temperature steps were removed from the spectrum as no Ar was released.

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
14D26403	12.0 %		0.0135311	94.6588	0.3790704	14.67474	233.9226	49.44 ± 0.33	98.30	6.20	0.067 ± 0.003
14D26405	13.0 %	✓	0.0131164	164.3554	0.6533191	25.03512	396.6531	49.14 ± 0.21	99.01	10.58	0.065 ± 0.002
14D26406	14.0 %	✓	0.0101618	71.5453	0.2885749	10.75676	169.6177	48.91 ± 0.45	98.24	4.55	0.065 ± 0.004
14D26408	15.0 %	✓	0.0165329	134.3750	0.5514513	21.06938	333.0981	49.04 ± 0.24	98.53	8.91	0.067 ± 0.002
14D26409	16.0 %	✓	0.0224216	149.1182	0.5683004	23.15252	365.0684	48.91 ± 0.22	98.19	9.79	0.067 ± 0.002
14D26411	17.0 %	✓	0.0295471	205.3119	0.7618828	31.85629	501.0093	48.78 ± 0.17	98.26	13.46	0.067 ± 0.002
14D26412	18.0 %	✓	0.0204776	285.4321	0.9532479	43.81508	690.4197	48.88 ± 0.13	99.11	18.52	0.066 ± 0.001
14D26414	19.0 %	✓	0.0060869	179.6225	0.6091385	27.08995	428.3053	49.04 ± 0.19	99.56	11.45	0.065 ± 0.002
14D26415	20.0 %	✓	0.0066028	119.7857	0.4645132	19.53733	307.8775	48.88 ± 0.25	99.35	8.26	0.070 ± 0.003
14D26417	21.0 %		0.0030807	85.4061	0.2940729	13.49690	211.2346	48.55 ± 0.35	99.55	5.70	0.068 ± 0.004
14D26418	22.0 %		0.0010248	25.8832	0.0466575	4.20466	65.6531	48.44 ± 1.06	99.52	1.78	0.070 ± 0.013
14D26420	23.0 %		0.0006162	10.5343	0.0242130	1.42972	22.9705	49.82 ± 3.30	100.77	0.60	0.058 ± 0.026
14D26421	24.0 %		0.0019356	2.6404	0.0239164	0.47352	7.8457	51.36 ± 10.21	93.19	0.20	0.077 ± 0.138
		Σ	0.1439031	1528.6690	5.6183583	236.59197	3733.6756				

Information on Analysis

Project = **RURUTU (13-INT-08)**
Sample = **RR1310-D18-23**
Material = **Hornblende**
Location = **Rurutu Hotspot**
Region = **Tuvalu**
Analyst = **Kevin Konrad**
Irradiation = **14-OSU-02 (2A48-14)**
J = **0.00173870 ± 0.00000162**
FCT-NM = **28.201 ± 0.023 Ma**

Results	40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD	39Ar(k) (%,n)	K/Ca ± 2σ
Age Plateau	15.77537	± 0.02757	**48.93**	**± 0.12**	1.45	85.51	0.066 ± 0.001
		± 0.17%		**± 0.25%**	18%	8	
			Full External Error	± 1.10	2.07	2σ Confidence Limit	
			Analytical Error	± 0.08	1.2023	Error Magnification	
Total Fusion Age	15.78107	± 0.02482	**48.95**	**± 0.12**		13	0.067 ± 0.001
		± 0.16%		**± 0.24%**			
			Full External Error	± 1.10			
			Analytical Error	± 0.08			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
14D26403	12.0 %		1084.52 ± 186.73	17583.25 ± 3026.08	0.9994
14D26405	13.0 %	✓	1908.70 ± 370.82	30536.61 ± 5931.68	0.9998
14D26406	14.0 %	✓	1058.55 ± 246.86	16987.16 ± 3959.60	0.9994
14D26408	15.0 %	✓	1274.39 ± 187.49	20443.05 ± 3006.55	0.9995
14D26409	16.0 %	✓	1032.60 ± 115.78	16577.47 ± 1857.72	0.9993
14D26411	17.0 %	✓	1078.15 ± 97.74	17251.81 ± 1563.24	0.9994
14D26412	18.0 %	✓	2139.66 ± 303.44	34011.39 ± 4822.81	0.9999
14D26414	19.0 %	✓	4450.55 ± 1831.21	70660.79 ± 29073.13	1.0000
14D26415	20.0 %	✓	2958.96 ± 1066.79	46924.11 ± 16916.46	0.9999
14D26417	21.0 %		4381.12 ± 3387.86	68862.65 ± 53249.08	1.0000
14D26418	22.0 %		4102.73 ± 8895.67	64356.96 ± 139536.61	1.0000
14D26420	23.0 %		2320.40 ± 8119.28	36985.08 ± 129398.79	0.9998
14D26421	24.0 %		244.64 ± 277.71	4348.91 ± 4884.75	0.9869

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**234.99 ± 101.40**	15.80988 ± 0.06625	**49.04 ± 0.22**	1.42
	± 43.15%	± 0.42%	**± 0.45%**	20%
			Full External Error ± 1.12	
			Analytical Error ± 0.20	

Statistics				
2σ Confidence Limit	2.15	Convergence	0.000001929609
Error Magnification	1.1931	Number of Iterations	1
Number of Data Points	8	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
14D26403	12.0 %		0.0616790 ± 0.0003727	0.00005687 ± 0.00000979	0.0040
14D26405	13.0 %	✓	0.0625051 ± 0.0002380	0.00003275 ± 0.00000636	0.0020
14D26406	14.0 %	✓	0.0623145 ± 0.0005213	0.00005887 ± 0.00001372	0.0040
14D26408	15.0 %	✓	0.0623385 ± 0.0002779	0.00004892 ± 0.00000719	0.0032
14D26409	16.0 %	✓	0.0622892 ± 0.0002553	0.00006032 ± 0.00000676	0.0037
14D26411	17.0 %	✓	0.0624951 ± 0.0001959	0.00005796 ± 0.00000525	0.0032
14D26412	18.0 %	✓	0.0629102 ± 0.0001528	0.00002940 ± 0.00000417	0.0015
14D26414	19.0 %	✓	0.0629847 ± 0.0002218	0.00001415 ± 0.00000582	0.0009
14D26415	20.0 %	✓	0.0630585 ± 0.0002874	0.00002131 ± 0.00000768	0.0015
14D26417	21.0 %		0.0636211 ± 0.0004111	0.00001452 ± 0.00001123	0.0010
14D26418	22.0 %		0.0637496 ± 0.0012674	0.00001554 ± 0.00003369	0.0012
14D26420	23.0 %		0.0627389 ± 0.0038367	0.00002704 ± 0.00009460	0.0021
14D26421	24.0 %		0.0562534 ± 0.0102892	0.00022994 ± 0.00025827	0.0158

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**248.20 ± 95.76**	15.80382 ± 0.06817	**49.02 ± 0.23**	1.50
Clustered Points	**± 38.58%**	± 0.43%	**± 0.46%**	17%
			Full External Error ± 1.12	
			Analytical Error ± 0.21	

Statistics				
2σ Confidence Limit	2.15	Convergence	0.0000639898
Error Magnification	1.2261	Number of Iterations	3
Number of Data Points	8	Calculated Line	Weighted York-2
Spreading Factor	1.2%		

Degassing Patterns			36Ar(a) [fA]	%1σ	36Ar(c) [fA]	%1σ	36Ar(ca) [fA]	%1σ	36Ar(cl) [fA]	%1σ	37Ar(ca) [fA]	%1σ	38Ar(a) [fA]	%1σ	38Ar(c) [fA]	%1σ	38Ar(k) [fA]	%1σ	38Ar(ca) [fA]	%1σ	38Ar(cl) [fA]	%1σ	39Ar(k) [fA]	%1σ	39Ar(ca) [fA]	%1σ	40Ar(r) [fA]	%1σ	40Ar(a) [fA]	%1σ	40Ar(c) [fA]	%1σ	40Ar(k) [fA]	%1σ
14D26403	12.0 %		0.0135311	8.60	0.0000000	0.00	0.0252077	2.57	0.0001243	10.35	94.6588	2.56	0.0025290	8.60	0.0000000	0.00	0.1765518	0.33	0.0067965	13.07	0.3790704	10.39	14.67474	0.28	0.0639515	2.88	233.9226	0.18	3.998447	8.60	0.0000000	0.00	0.0561015	2.68
14D26405	13.0 %	✓	0.0131164	9.71	0.0000000	0.00	0.0437678	1.57	0.0002143	5.91	164.3554	1.56	0.0024514	9.71	0.0000000	0.00	0.3011975	0.24	0.0118007	12.91	0.6533191	5.98	25.03512	0.18	0.1110385	2.04	396.6531	0.11	3.875882	9.71	0.0000000	0.00	0.0957092	2.67
14D26406	14.0 %	✓	0.0101618	11.65	0.0000000	0.00	0.0190525	3.30	0.0000947	13.57	71.5453	3.30	0.0018992	11.65	0.0000000	0.00	0.1294146	0.43	0.0051370	13.24	0.2885749	13.60	10.75676	0.39	0.0483360	3.55	169.6177	0.25	3.002818	11.65	0.0000000	0.00	0.0411231	2.69
14D26408	15.0 %	✓	0.0165329	7.35	0.0000000	0.00	0.0357841	1.83	0.0001809	6.82	134.3750	1.82	0.0030900	7.35	0.0000000	0.00	0.2534857	0.26	0.0096481	12.95	0.5514513	6.88	21.06938	0.21	0.0907838	2.25	333.0981	0.13	4.885483	7.35	0.0000000	0.00	0.0805483	2.67
14D26409	16.0 %	✓	0.0224216	5.60	0.0000000	0.00	0.0397102	1.67	0.0001864	7.06	149.1182	1.67	0.0041906	5.60	0.0000000	0.00	0.2785480	0.25	0.0107067	12.93	0.5683004	7.12	23.15252	0.19	0.1007443	2.13	365.0684	0.12	6.625595	5.60	0.0000000	0.00	0.0885121	2.67
14D26411	17.0 %	✓	0.0295471	4.53	0.0000000	0.00	0.0546746	1.29	0.0002500	5.19	205.3119	1.28	0.0055223	4.53	0.0000000	0.00	0.3832630	0.22	0.0147414	12.88	0.7618828	5.28	31.85629	0.15	0.1387087	1.84	501.0093	0.09	8.731160	4.53	0.0000000	0.00	0.1217866	2.66
14D26412	18.0 %	✓	0.0204776	7.09	0.0000000	0.00	0.0760106	1.05	0.0003128	4.00	285.4321	1.04	0.0038273	7.09	0.0000000	0.00	0.5271393	0.20	0.0204940	12.86	0.9532479	4.10	43.81508	0.12	0.1928379	1.68	690.4197	0.07	6.051124	7.09	0.0000000	0.00	0.1675051	2.66
14D26414	19.0 %	✓	0.0060869	20.57	0.0000000	0.00	0.0478335	1.43	0.0001999	6.82	179.6225	1.42	0.0011376	20.57	0.0000000	0.00	0.3259192	0.23	0.0128969	12.90	0.6091385	6.88	27.08995	0.17	0.1213530	1.94	428.3053	0.10	1.798674	20.57	0.0000000	0.00	0.1035649	2.67
14D26415	20.0 %	✓	0.0066028	18.03	0.0000000	0.00	0.0318989	1.98	0.0001524	8.21	119.7857	1.97	0.0012341	18.03	0.0000000	0.00	0.2350536	0.27	0.0086006	12.97	0.4645132	8.26	19.53733	0.21	0.0809272	2.37	307.8775	0.14	1.951116	18.03	0.0000000	0.00	0.0746912	2.67
14D26417	21.0 %		0.0030807	38.66	0.0000000	0.00	0.0227436	2.80	0.0000965	13.18	85.4061	2.79	0.0005758	38.66	0.0000000	0.00	0.1623812	0.34	0.0061322	13.12	0.2940729	13.21	13.49690	0.30	0.0577003	3.09	211.2346	0.20	0.910346	38.66	0.0000000	0.00	0.0515986	2.68
14D26418	22.0 %		0.0010248	108.41	0.0000000	0.00	0.0068927	9.00	0.0000153	79.24	25.8832	9.00	0.0001915	108.41	0.0000000	0.00	0.0505863	0.94	0.0018584	15.67	0.0466575	79.25	4.20466	0.93	0.0174867	9.10	65.6531	0.62	0.302842	108.41	0.0000000	0.00	0.0160744	2.82
14D26420	23.0 %		0.0006162	174.93	0.0000000	0.00	0.0028053	21.82	0.0000079	153.52	10.5343	21.82	0.0001152	174.93	0.0000000	0.00	0.0172010	2.88	0.0007564	25.31	0.0242130	153.52	1.42972	2.87	0.0071170	21.86	22.9705	1.74	0.182073	174.93	0.0000000	0.00	0.0054658	3.91
14D26421	24.0 %		0.0019356	56.09	0.0000000	0.00	0.0007031	88.88	0.0000078	165.37	2.6404	88.87	0.0003618	56.09	0.0000000	0.00	0.0056970	8.69	0.0001896	89.79	0.0239164	165.38	0.47352	8.69	0.0017838	88.88	7.8457	5.10	0.571966	56.09	0.0000000	0.00	0.0018103	9.09
		Σ	0.1439031	3.05	0.0000000	0.00	0.4070846	0.59	0.0018432	2.49	1528.6690	0.59	0.0268955	3.05	0.0000000	0.00	2.8464380	0.09	0.1097584	4.31	5.6183583	2.51	236.59197	0.07	1.0327688	0.73	3733.6756	0.04	42.523378	3.05	0.0000000	0.00	0.9044911	0.89
		Σ							0.5528309	0.90	1528.6690	0.59									8.6014502	1.64			237.62474	0.07							3777.1035	0.05

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D26403	12.0 %		16.146430	0.048547	6.422474	0.165484	0.002637	0.000066	201.957	54.137199	1.00142691	1.142E-11
14D26405	13.0 %	✓	15.931846	0.030183	6.536006	0.102636	0.002271	0.000043	201.974	54.155024	1.00142703	1.923E-11
14D26406	14.0 %	✓	15.979647	0.066526	6.621442	0.219863	0.002713	0.000093	201.983	54.164682	1.00142709	8.288E-12
14D26408	15.0 %	✓	15.976442	0.035445	6.350376	0.116377	0.002481	0.000049	202.000	54.183259	1.00142721	1.623E-11
14D26409	16.0 %	✓	15.988401	0.032606	6.412787	0.107693	0.002680	0.000046	202.008	54.192178	1.00142727	1.785E-11
14D26411	17.0 %	✓	15.935688	0.024850	6.417002	0.082908	0.002640	0.000036	202.026	54.210765	1.00142739	2.447E-11
14D26412	18.0 %	✓	15.829839	0.019106	6.485925	0.068063	0.002200	0.000028	202.034	54.219689	1.00142745	3.344E-11
14D26414	19.0 %	✓	15.809881	0.027688	6.601025	0.094394	0.001989	0.000039	202.051	54.238285	1.00142757	2.065E-11
14D26415	20.0 %	✓	15.796680	0.035838	6.105828	0.121011	0.001970	0.000052	202.060	54.247957	1.00142764	1.488E-11
14D26417	21.0 %		15.654945	0.050351	6.300892	0.177020	0.001912	0.000075	202.077	54.265818	1.00142776	1.019E-11
14D26418	22.0 %		15.625223	0.154648	6.130341	0.554749	0.001879	0.000219	202.086	54.275496	1.00142782	3.167E-12
14D26420	23.0 %		15.863938	0.482628	7.331556	1.613700	0.001529	0.000619	202.103	54.294111	1.00142794	1.094E-12
14D26421	24.0 %		17.713782	1.613394	5.555112	4.960445	0.005568	0.001929	202.112	54.303049	1.00142800	4.041E-13

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
14D26403	12.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.5652261 ± 0.2385394
14D26405	13.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.7447149 ± 0.2385394
14D26406	14.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.7689404 ± 0.2385394
14D26408	15.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.7629699 ± 0.2385394
14D26409	16.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.7600619 ± 0.2385394
14D26411	17.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.7910582 ± 0.2385394
14D26412	18.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.8280035 ± 0.2385394
14D26414	19.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.9363749 ± 0.2385394
14D26415	20.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.9919357 ± 0.2385394
14D26417	21.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	6.0291163 ± 0.2385394
14D26418	22.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.9749012 ± 0.2385394
14D26420	23.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.6015227 ± 0.2385394
14D26421	24.0 %	0.0198363 ± 0.0007318	0.0268444 ± 0.0298599	0.0575219 ± 0.0269507	0.0223325 ± 0.0305049	5.2404317 ± 0.2385394

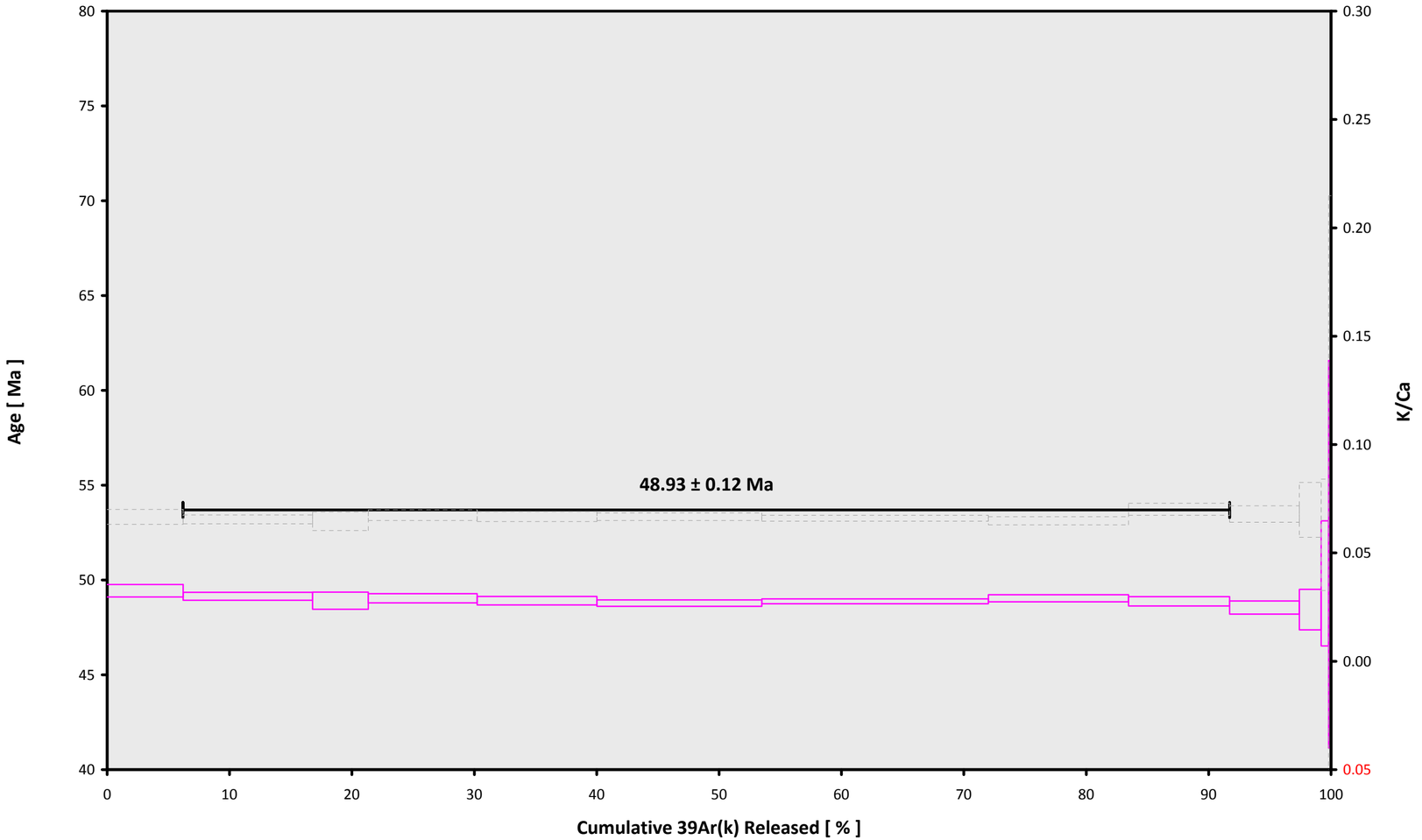
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
14D26403	12.0 %	0.0570114 ± 0.0005583	0.6567	EXP 150 of 150	1.6850321 ± 0.0303791	0.0650	EXP 150 of 150	0.4995269 ± 0.0275249	0.0002	EXP 150 of 150	14.5926476 ± 0.0261280	0.9241	EXP 150 of 150	244.149829 ± 0.047396	0.9934	EXP 150 of 150
14D26405	13.0 %	0.0744547 ± 0.0007045	0.6123	EXP 150 of 150	2.9444952 ± 0.0305402	0.2460	EXP 150 of 150	0.8977020 ± 0.0261652	0.0153	EXP 149 of 150	24.9127576 ± 0.0281487	0.9707	EXP 150 of 150	407.391940 ± 0.052465	0.9985	EXP 150 of 150
14D26406	14.0 %	0.0478723 ± 0.0006163	0.5940	EXP 150 of 150	1.2663743 ± 0.0294137	0.0633	EXP 150 of 150	0.3615613 ± 0.0275115	0.0149	EXP 150 of 150	10.6920689 ± 0.0279683	0.8485	EXP 150 of 150	178.871245 ± 0.044113	0.9726	EXP 150 of 150
14D26408	15.0 %	0.0700539 ± 0.0006378	0.6760	EXP 149 of 150	2.4012213 ± 0.0290818	0.1611	EXP 150 of 150	0.7487209 ± 0.0249076	0.0530	EXP 150 of 150	20.9602221 ± 0.0284787	0.9564	EXP 150 of 150	344.690028 ± 0.051095	0.9977	EXP 150 of 150
14D26409	16.0 %	0.0794477 ± 0.0006906	0.5690	EXP 150 of 150	2.6671780 ± 0.0293505	0.2156	EXP 150 of 150	0.7921753 ± 0.0284184	0.0463	EXP 150 of 150	23.0357516 ± 0.0285225	0.9634	EXP 150 of 150	378.491540 ± 0.053548	0.9981	EXP 150 of 150
14D26411	17.0 %	0.1006388 ± 0.0007735	0.4314	EXP 149 of 150	3.6811210 ± 0.0294590	0.2245	EXP 150 of 150	1.0915935 ± 0.0272398	0.0227	EXP 150 of 150	31.7040999 ± 0.0289122	0.9798	EXP 150 of 150	516.954676 ± 0.052754	0.9992	EXP 150 of 150
14D26412	18.0 %	0.1124326 ± 0.0008613	0.6169	EXP 150 of 150	5.1272548 ± 0.0319684	0.4108	EXP 150 of 150	1.4261484 ± 0.0244336	0.0261	EXP 150 of 150	43.6161882 ± 0.0273802	0.9907	EXP 150 of 150	704.244388 ± 0.068073	0.9994	EXP 150 of 150
14D26414	19.0 %	0.0716058 ± 0.0006723	0.6536	EXP 150 of 150	3.2155201 ± 0.0290309	0.2686	EXP 149 of 150	0.8783006 ± 0.0302741	0.0275	EXP 150 of 150	26.9605591 ± 0.0272432	0.9760	EXP 150 of 150	437.241938 ± 0.053629	0.9987	EXP 150 of 150
14D26415	20.0 %	0.0568115 ± 0.0006218	0.6687	EXP 150 of 150	2.1350211 ± 0.0274068	0.0998	EXP 150 of 150	0.6419611 ± 0.0258096	0.0866	EXP 150 of 150	19.4312471 ± 0.0248221	0.9628	EXP 150 of 150	316.686278 ± 0.046449	0.9973	EXP 150 of 150
14D26417	21.0 %	0.0446313 ± 0.0006225	0.6205	EXP 150 of 150	1.5140375 ± 0.0295573	0.0626	EXP 150 of 150	0.3991644 ± 0.0269264	0.0121	EXP 150 of 150	13.4184868 ± 0.0249620	0.9247	EXP 150 of 150	218.767240 ± 0.041988	0.9916	EXP 150 of 150
14D26418	22.0 %	0.0274246 ± 0.0004909	0.7164	EXP 150 of 150	0.4400527 ± 0.0294451	0.0048	EXP 150 of 150	0.0403835 ± 0.0245333	0.0084	EXP 150 of 150	4.1643721 ± 0.0233841	0.4923	EXP 148 of 150	72.115272 ± 0.030879	0.9828	EXP 150 of 150
14D26420	23.0 %	0.0219380 ± 0.0004294	0.7439	EXP 150 of 150	0.1631141 ± 0.0287363	0.0076	EXP 150 of 150	0.0160548 ± 0.0248302	0.0006	EXP 150 of 150	1.4024453 ± 0.0268803	0.0127	EXP 150 of 150	28.453630 ± 0.030778	0.9944	EXP 150 of 150
14D26421	24.0 %	0.0223679 ± 0.0004306	0.7216	EXP 150 of 150	0.0207605 ± 0.0299723	0.0005	EXP 150 of 150	0.0277790 ± 0.0281781	0.0000	EXP 150 of 150	0.4489860 ± 0.0270624	0.0067	EXP 150 of 150	13.681432 ± 0.027815	0.9966	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
14D26403	12.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26405	13.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26406	14.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26408	15.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26409	16.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26411	17.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26412	18.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26414	19.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26415	20.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26417	21.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26418	22.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26420	23.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01
14D26421	24.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	57.50	French Polynesia\Rurutu (13-INT-08)	14D26397	01

Sample Parameters		Sample	Material	Location	Standard Name	Standard (in Ma)	%1σ	Standard Reference	Standard 40Ar/39Ar	%1σ	J	%1σ	Air 40Ar/36Ar	%1σ	MDF (lin)	%1σ	Volume Ratio	Sensitivity (mol/volt)	Day	Month	Year	Hour	Min	Resist
14D26403	12.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	14	7	1
14D26405	13.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	14	31	1
14D26406	14.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	14	44	1
14D26408	15.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	15	9	1
14D26409	16.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	15	21	1
14D26411	17.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	15	46	1
14D26412	18.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	15	58	1
14D26414	19.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	16	23	1
14D26415	20.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	16	36	1
14D26417	21.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	17	0	1
14D26418	22.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	17	13	1
14D26420	23.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	17	38	1
14D26421	24.0 %	RR1310-D18-23	Hornblende	Rurutu Hotspot	FCT-NM (2A48-14)	28.201	0.082	Kuiper et al. (2008)	9.03974	0.093	0.00173870	0.093	303.991	0.137	0.99300804	0.067	1	4.8E-14	2	OCT	2014	17	50	1

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(cl)	%1σ	K/Ca	%1σ	K/Cl	%1σ	Ca/Cl	%1σ
14D26403	12.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26405	13.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26406	14.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26408	15.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26409	16.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26411	17.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26412	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26414	19.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26415	20.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26417	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26418	22.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26420	23.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26421	24.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.0006756	1.32	0.0000718	12.82	0.0002663	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0

14D26397.AGE >>> RR1310-D18-23 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
48.93 ± 0.12
TOTAL FUSION
48.95 ± 0.12
NORMAL ISOCHRON
49.04 ± 0.22
INVERSE ISOCHRON
49.02 ± 0.23

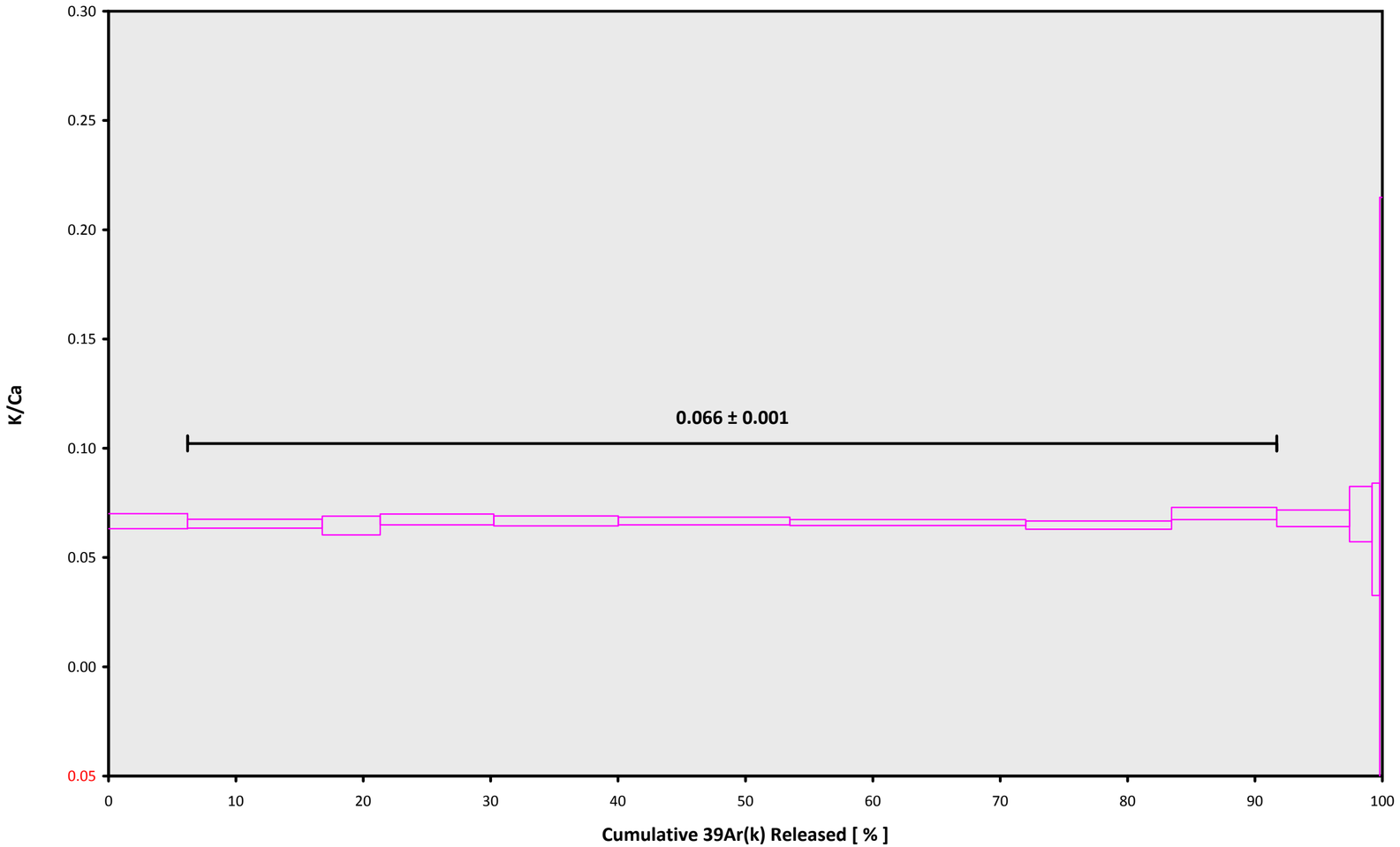
MSWD (PROBABILITY)
1.45 (18%)

Sample Info

Hornblende
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-02 (2A48-14)
J = 0.00173870 ± 0.00000162

14D26397.AGE >>> RR1310-D18-23 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

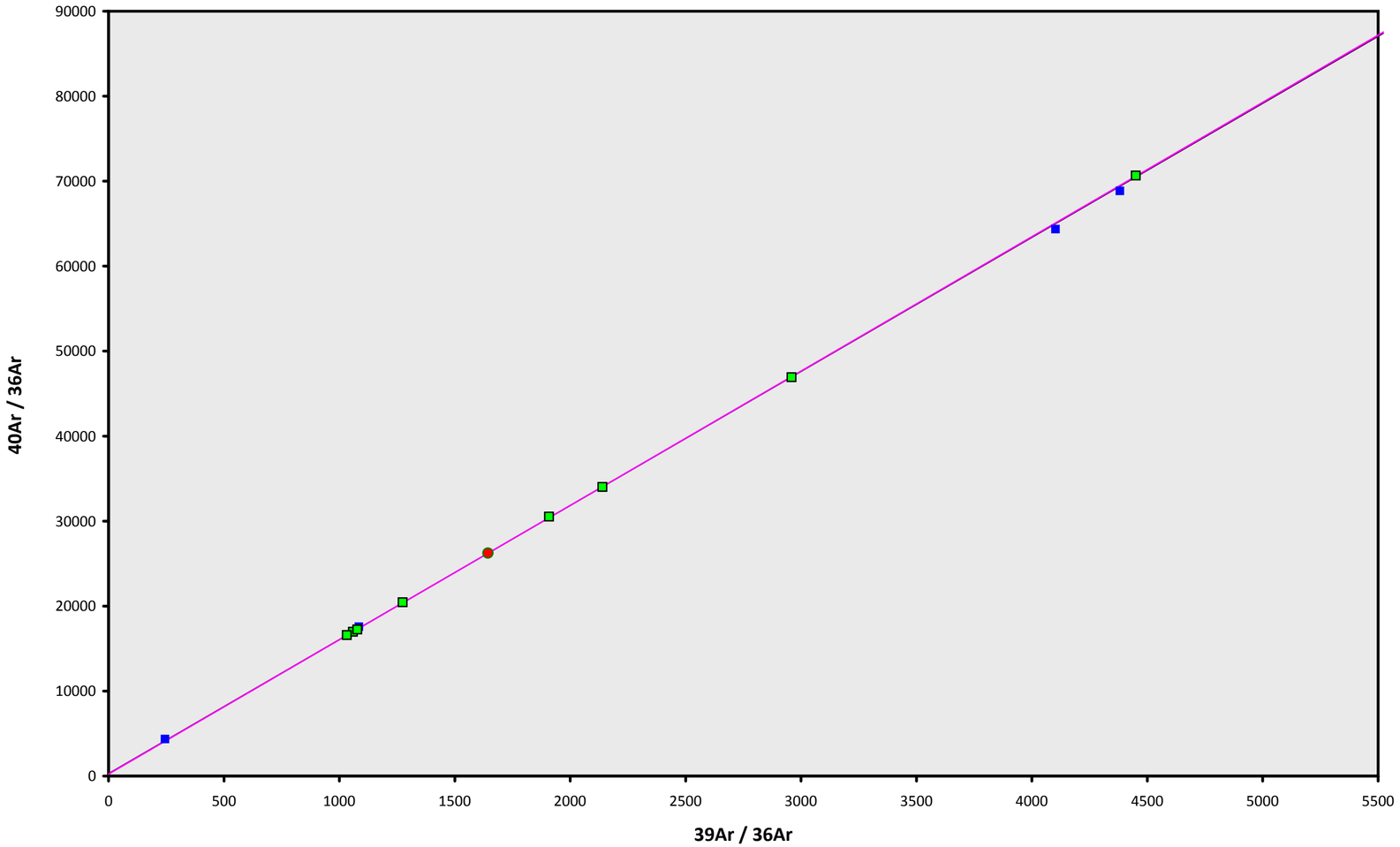
WEIGHTED PLATEAU
48.93 ± 0.12
TOTAL FUSION
48.95 ± 0.12
NORMAL ISOCHRON
49.04 ± 0.22
INVERSE ISOCHRON
49.02 ± 0.23

Sample Info

Hornblende
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-02 (2A48-14)
J = 0.00173870 ± 0.00000162

14D26397.AGE >>> RR1310-D18-23 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
48.93 ± 0.12
TOTAL FUSION
48.95 ± 0.12
NORMAL ISOCHRON
49.04 ± 0.22
INVERSE ISOCHRON
49.02 ± 0.23

MSWD (PROBABILITY)
1.42 (20%)

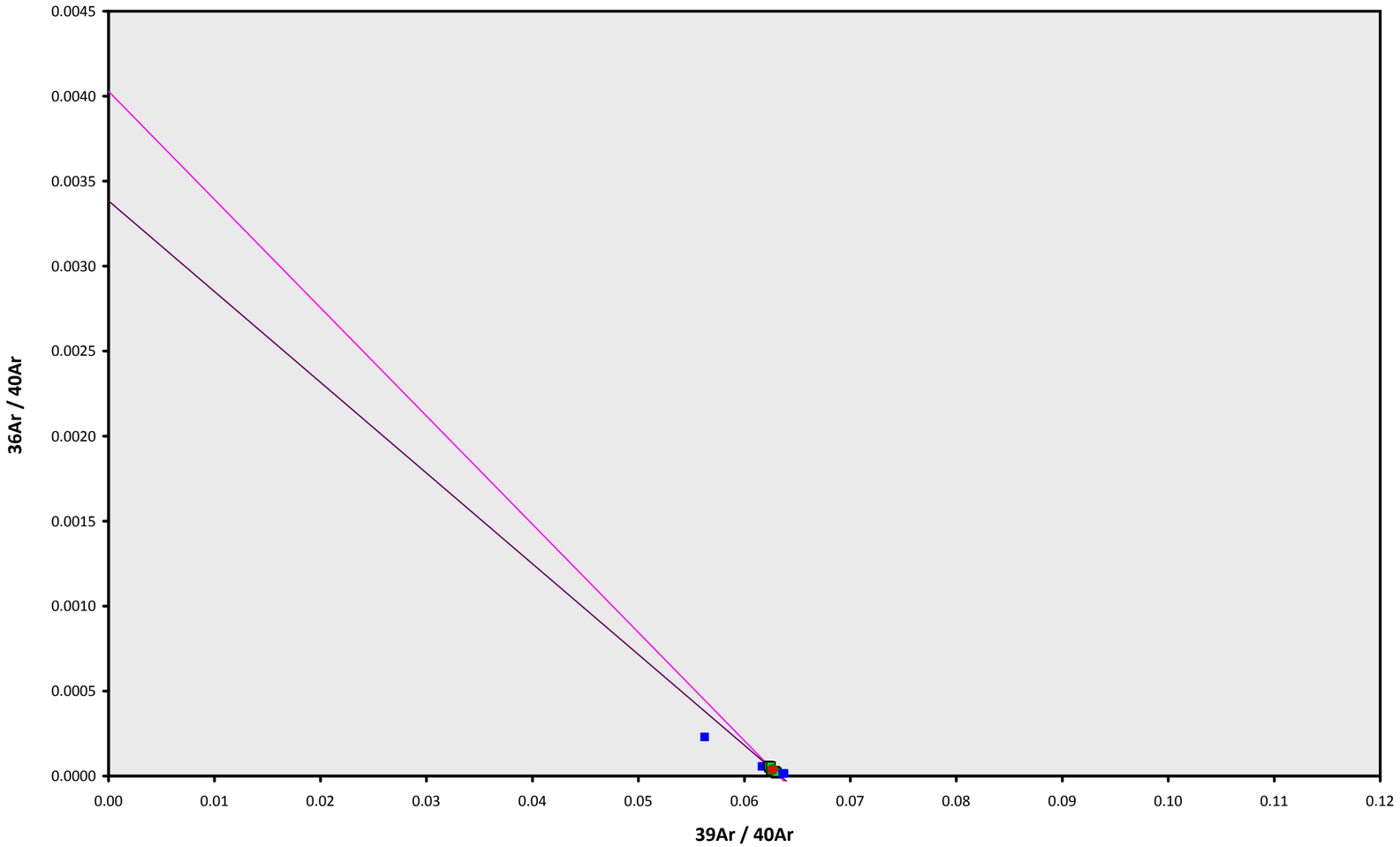
40AR/36AR INTERCEPT
235.0 ± 101.4

Sample Info

Hornblende
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-02 (2A48-14)
J = 0.00173870 ± 0.00000162

14D26397.AGE >>> RR1310-D18-23 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
48.93 ± 0.12
TOTAL FUSION
48.95 ± 0.12
NORMAL ISOCHRON
49.04 ± 0.22
INVERSE ISOCHRON
49.02 ± 0.23

MSWD (PROBABILITY)
1.50 (17%)

SPREADING FACTOR
1.2%

40AR/36AR INTERCEPT
248.2 ± 95.8

Sample Info

Hornblende
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-02 (2A48-14)
J = 0.00173870 ± 0.00000162