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
14D26494	13.0 %	✓	0.0235025	6.025	25.33739	8.925	0.0147945	257.643	1.240774	2.906	24.30017	1.046	15.80864 ± 1.26278	50.25 ± 3.96	79.61	9.68	0.0208 ± 0.0039
14D26496	14.0 %	✓	0.0325280	4.307	111.22312	2.167	0.0854315	43.540	2.222683	1.645	38.08583	0.669	17.33280 ± 0.76519	55.03 ± 2.39	97.73	16.99	0.0083 ± 0.0005
14D26497	15.0 %	✓	0.0304368	4.678	49.64142	4.501	0.0199876	193.369	0.859771	4.000	18.76674	1.356	16.55246 ± 1.87086	52.58 ± 5.86	72.87	6.54	0.0072 ± 0.0009
14D26499	16.0 %	✓	0.0018642	73.068	7.16868	31.593	0.0122729	317.405	0.116662	30.277	1.50166	16.920	13.55299 ± 12.49396	43.17 ± 39.32	100.92	0.88	0.0067 ± 0.0060
14D26500	17.0 %	✓	0.0199335	6.977	52.34812	4.331	0.0435690	88.381	0.529562	6.609	10.24066	2.482	17.14093 ± 3.20212	54.43 ± 10.02	82.72	3.91	0.0041 ± 0.0007
14D26502	18.0 %	✓	0.1139391	1.417	177.44872	1.467	0.0226096	180.762	3.878507	0.930	82.29827	0.311	16.64936 ± 0.44447	52.89 ± 1.39	76.04	29.73	0.0091 ± 0.0003
14D26503	19.0 %	✓	0.0153956	8.940	51.33080	4.326	0.0024522	1435.940	0.322954	10.874	4.87829	5.208	15.14909 ± 5.11773	48.18 ± 16.06	89.52	2.28	0.0024 ± 0.0006
14D26505	20.0 %	✓	0.0628136	2.405	199.06666	1.238	0.1429360	26.892	3.343034	1.120	55.72716	0.457	16.46446 ± 0.51565	52.31 ± 1.61	94.80	25.38	0.0069 ± 0.0002
14D26506	21.0 %	✓	0.0113405	12.228	34.20180	6.547	0.1101260	36.261	0.390952	8.691	5.88213	4.324	14.22068 ± 3.83550	45.27 ± 12.06	88.93	2.91	0.0046 ± 0.0010
14D26508	22.0 %	✓	0.0172720	8.076	58.14387	4.153	0.0173261	225.848	0.197914	18.239	3.75922	6.761	20.36266 ± 11.36193	64.47 ± 35.34	85.93	1.25	0.0012 ± 0.0005
14D26509	23.0 %		0.0109417	12.620	34.54825	6.339	0.0568805	67.350	0.019351	191.976	1.13041	22.508	155.66539 #########	587.73 ± 12994.03	54.94	0.03	0.0000 ± 0.0009
14D26511	24.0 %		0.0296851	4.724	94.25437	2.650	0.0019777	1940.705	0.124075	28.197	1.90419	13.342	9.09056 ± 20.31683	29.07 ± 64.45	28.83	0.48	0.0003 ± 0.0003
		Σ	0.3696525	1.334	894.71320	0.907	0.4661225	28.611	13.246240	0.934	248.47470	0.355					

Information on Analysis and Constants Used in Calculations

Project = **RURUTU (13-INT-08)**
Sample = **RR1310-D11-10**
Material = **Hornblende**
Location = **Rurutu Hotspot**
Region = **Tuvalu**
Analyst = **Kevin Konrad**
Irradiation = **14-OSU-02 (2A19-14)**
Position = **X: 0 | Y: 0 | Z/H: 23.7 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al. (2008)**
FCT-NM 40Ar/39Ar Ratio = **8.81730 ± 0.00838**
FCT-NM J-value = **0.00178256 ± 0.00000169**
Air Shot 40Ar/36Ar = **303.9860 ± 0.4165**
Air Shot MDF = **0.99301204 ± 0.00066613 (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-D11-10AM**
Rock Class = **Igneous>Volcanic**
Lithology = **Basalt**
Lat-Lon = **8°15.2'S - 177°00.9'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		16.62804 ± 0.29284 (± 1.76%)	**52.82 ± 0.92 (± 1.75%)**	0.91 (52%)	99.55 (10)	0.0067 ± 0.0016
		Full External Error ± 1.50		1.94	2σ Confidence Limit	
		Analytical Error ± 0.92		1.0000	Error Magnification	
Total Fusion Age		16.58263 ± 0.43397 (± 2.62%)	**52.68 ± 1.36 (± 2.59%)**		12	0.0061 ± 0.0002
		Full External Error ± 1.80				
		Analytical Error ± 1.36				
Normal Isochron	**358.82 ± 58.02 (± 16.17%)**	15.51218 ± 0.86472 (± 5.57%)	**49.32 ± 2.71 (± 5.50%)**	1.10 (36%)	99.55 (10)	
No Convergence		Full External Error ± 2.93		2.00	2σ Confidence Limit	
		Analytical Error ± 2.71		1.0490	Error Magnification	
				100	Number of Iterations	
				0.0074378339	Convergence	
Inverse Isochron	**287.11 ± 38.22 (± 13.31%)**	16.73457 ± 0.49076 (± 2.93%)	**53.15 ± 1.54 (± 2.90%)**	0.98 (45%)	99.55 (10)	
		Full External Error ± 1.95		2.00	2σ Confidence Limit	
		Analytical Error ± 1.54		1.0000	Error Magnification	
				3	Number of Iterations	
				0.0001322598	Convergence	
				54%	Spreading Factor	

Notes
A small amount of hornlende that didn't release any Ar until higher temperature steps. The resulting plateau had large error but was very consistant and reliable with an atmospheric intercept.

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
14D26494	13.0 %	✓	0.0167552	25.33739	0.0000000	1.223656	19.34433	50.25 ± 3.96	79.61	9.68	0.0208 ± 0.0039
14D26496	14.0 %	✓	0.0028925	111.22312	0.0510680	2.147541	37.22289	55.03 ± 2.39	97.73	16.99	0.0083 ± 0.0005
14D26497	15.0 %	✓	0.0172162	49.64142	0.0032653	0.826233	13.67620	52.58 ± 5.86	72.87	6.54	0.0072 ± 0.0009
14D26499	16.0 %	✓	0.0000482	7.16868	0.0104219	0.111819	1.51548	43.17 ± 39.32	100.92	0.88	0.0067 ± 0.0060
14D26500	17.0 %	✓	0.0059824	52.34812	0.0327466	0.494196	8.47097	54.43 ± 10.02	82.72	3.91	0.0041 ± 0.0007
14D26502	18.0 %	✓	0.0666845	177.44872	0.0000000	3.758622	62.57864	52.89 ± 1.39	76.04	29.73	0.0091 ± 0.0003
14D26503	19.0 %	✓	0.0017262	51.33080	0.0000000	0.288275	4.36710	48.18 ± 16.06	89.52	2.28	0.0024 ± 0.0006
14D26505	20.0 %	✓	0.0097731	199.06666	0.0882144	3.208544	52.82693	52.31 ± 1.61	94.80	25.38	0.0069 ± 0.0002
14D26506	21.0 %	✓	0.0021987	34.20180	0.1028338	0.367845	5.23101	45.27 ± 12.06	88.93	2.91	0.0046 ± 0.0010
14D26508	22.0 %	✓	0.0017883	58.14387	0.0000000	0.158632	3.23018	64.47 ± 35.34	85.93	1.25	0.0012 ± 0.0005
14D26509	23.0 %		0.0017237	34.54825	0.0541257	0.003990	0.62107	587.73 ± 12994.03	54.94	0.03	0.0000 ± 0.0009
14D26511	24.0 %		0.0045852	94.25437	0.0000000	0.060397	0.54904	29.07 ± 64.45	28.83	0.48	0.0003 ± 0.0003
		Σ	0.1312776	894.71320	0.3426758	12.641772	209.63385				

Information on Analysis

Project = **RURUTU (13-INT-08)**
Sample = **RR1310-D11-10**
Material = **Hornblende**
Location = **Rurutu Hotspot**
Region = **Tuvalu**
Analyst = **Kevin Konrad**
Irradiation = **14-OSU-02 (2A19-14)**
J = **0.00178256 ± 0.00000169**
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	16.62804 ± 0.29284	**52.82 ± 0.92**	0.91	99.55	0.0067 ± 0.0016
	± 1.76%	**± 1.75%**	52%	10	
	Full External Error	± 1.50	1.94	2σ Confidence Limit	
	Analytical Error	± 0.92	1.0000	Error Magnification	
Total Fusion Age	16.58263 ± 0.43397	**52.68 ± 1.36**		12	0.0061 ± 0.0002
	± 2.62%	**± 2.59%**			
	Full External Error	± 1.80			
	Analytical Error	± 1.36			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
14D26494	13.0 %	✓	73.03 ± 14.09	1450.03 ± 268.08	0.9460
14D26496	14.0 %	✓	742.45 ± 791.86	13164.32 ± 14034.32	0.9994
14D26497	15.0 %	✓	47.99 ± 9.49	1089.88 ± 197.61	0.8966
14D26499	16.0 %	✓	2317.82 ± 143155.64	31117.88 ± 1921864.02	0.9999
14D26500	17.0 %	✓	82.61 ± 43.48	1711.48 ± 871.76	0.9585
14D26502	18.0 %	✓	56.36 ± 3.16	1233.93 ± 65.54	0.9330
14D26503	19.0 %	✓	167.00 ± 292.75	2825.44 ± 4913.50	0.9885
14D26505	20.0 %	✓	328.30 ± 111.07	5700.83 ± 1924.82	0.9972
14D26506	21.0 %	✓	167.30 ± 231.82	2674.67 ± 3680.18	0.9891
14D26508	22.0 %	✓	88.71 ± 157.67	2101.81 ± 3622.12	0.9636
14D26509	23.0 %		2.31 ± 43.33	655.81 ± 1178.25	0.0900
14D26511	24.0 %		13.17 ± 17.70	415.24 ± 302.23	0.4690

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**358.82 ± 58.02**	15.51218 ± 0.86472	**49.32 ± 2.71**	1.10
No Convergence	**± 16.17%**	± 5.57%	**± 5.50%**	36%
			Full External Error ± 2.93	
			Analytical Error ± 2.71	

Statistics				
	2σ Confidence Limit	2.00	Convergence	0.007437833874
	Error Magnification	1.0490	Number of Iterations	100
	Number of Data Points	10	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ		36(a)/40(a+r) ± 2σ		r.i.
14D26494	13.0 %	✓	0.0503655	± 0.0031523	0.00068964	± 0.00012750	0.0379
14D26496	14.0 %	✓	0.0563990	± 0.0020657	0.00007596	± 0.00008098	0.0046
14D26497	15.0 %	✓	0.0440339	± 0.0038586	0.00091753	± 0.00016636	0.0463
14D26499	16.0 %	✓	0.0744851	± 0.0534247	0.00003214	± 0.00198474	0.0026
14D26500	17.0 %	✓	0.0482671	± 0.0072513	0.00058429	± 0.00029762	0.0322
14D26502	18.0 %	✓	0.0456787	± 0.0009233	0.00081042	± 0.00004305	0.0360
14D26503	19.0 %	✓	0.0591068	± 0.0156753	0.00035393	± 0.00061549	0.0235
14D26505	20.0 %	✓	0.0575886	± 0.0014466	0.00017541	± 0.00005923	0.0099
14D26506	21.0 %	✓	0.0625511	± 0.0127705	0.00037388	± 0.00051443	0.0266
14D26508	22.0 %	✓	0.0422050	± 0.0200584	0.00047578	± 0.00081993	0.0223
14D26509	23.0 %		0.0035294	± 0.0658001	0.00152484	± 0.00273958	0.0061
14D26511	24.0 %		0.0317219	± 0.0377652	0.00240822	± 0.00175280	0.0822

Results	40(a)/36(a) ± 2σ		40(r)/39(k) ± 2σ		Age ± 2σ (Ma)		MSWD
Inverse Isochron	**287.11**	**± 38.22**	16.73457	± 0.49076	**53.15**	**± 1.54**	0.98
		± 13.31%		± 2.93%		**± 2.90%**	45%
					Full External Error	± 1.95	
					Analytical Error	± 1.54	

Statistics				
	2σ Confidence Limit	2.00	Convergence	0.0001322598
	Error Magnification	1.0000	Number of Iterations	3
	Number of Data Points	10	Calculated Line	Weighted York-2
	Spreading Factor	54.0%		

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
14D26494	13.0 %	✓	0.0167552	9.18	0.0000000	0.00	0.0067473	8.93	0.0000000	0.00	25.33739	8.92	0.0031315	9.18	0.0000000	0.00	0.0147218	2.95	0.0018192	15.62	0.0000000	0.00	1.223656	2.95	0.0171179	9.02	19.34433	2.69	4.951159	9.18	0.0000000	0.00	0.0046780	3.97
14D26496	14.0 %	✓	0.0028925	53.30	0.0000000	0.00	0.0296187	2.17	0.0000168	72.88	111.22312	2.17	0.0005406	53.30	0.0000000	0.00	0.0258371	1.71	0.0079858	13.00	0.0510680	72.89	2.147541	1.70	0.0751423	2.54	37.22289	1.40	0.854730	53.30	0.0000000	0.00	0.0082100	3.16
14D26497	15.0 %	✓	0.0172162	8.96	0.0000000	0.00	0.0132195	4.50	0.0000011	######	49.64142	4.50	0.0032177	8.96	0.0000000	0.00	0.0099404	4.17	0.0035643	13.59	0.0032653	######	0.826233	4.17	0.0335377	4.69	13.67620	3.82	5.087381	8.96	0.0000000	0.00	0.0031587	4.94
14D26499	16.0 %	✓	0.0000482	######	0.0000000	0.00	0.0019090	31.59	0.0000034	373.84	7.16868	31.59	0.0000090	######	0.0000000	0.00	0.0013453	31.62	0.0005147	34.10	0.0104219	373.84	0.111819	31.62	0.0048432	31.62	1.51548	33.54	0.014256	######	0.0000000	0.00	0.0004275	31.73
14D26500	17.0 %	✓	0.0059824	25.35	0.0000000	0.00	0.0139403	4.33	0.0000108	117.62	52.34812	4.33	0.0011181	25.35	0.0000000	0.00	0.0059457	7.09	0.0037586	13.53	0.0327466	117.62	0.494196	7.09	0.0353664	4.53	8.47097	6.08	1.767805	25.35	0.0000000	0.00	0.0018893	7.57
14D26502	18.0 %	✓	0.0666845	2.64	0.0000000	0.00	0.0472546	1.47	0.0000000	0.00	177.44872	1.47	0.0124633	2.64	0.0000000	0.00	0.0452200	0.97	0.0127408	12.90	0.0000000	0.00	3.758622	0.96	0.1198844	1.97	62.57864	0.93	19.705257	2.64	0.0000000	0.00	0.0143692	2.83
14D26503	19.0 %	✓	0.0017262	86.79	0.0000000	0.00	0.0136694	4.33	0.0000000	0.00	51.33080	4.33	0.0003226	86.79	0.0000000	0.00	0.0034682	12.20	0.0036856	13.53	0.0000000	0.00	0.288275	12.19	0.0346791	4.52	4.36710	11.69	0.510083	86.79	0.0000000	0.00	0.0011021	12.48
14D26505	20.0 %	✓	0.0097731	16.88	0.0000000	0.00	0.0530115	1.25	0.0000290	43.64	199.06666	1.24	0.0018266	16.88	0.0000000	0.00	0.0386020	1.18	0.0142930	12.88	0.0882144	43.65	3.208544	1.17	0.1344894	1.81	52.82693	1.04	2.887958	16.88	0.0000000	0.00	0.0122663	2.91
14D26506	21.0 %	✓	0.0021987	68.66	0.0000000	0.00	0.0091079	6.55	0.0000338	38.85	34.20180	6.55	0.0004109	68.66	0.0000000	0.00	0.0044255	9.25	0.0024557	14.40	0.1028338	38.86	0.367845	9.25	0.0231067	6.68	5.23101	9.82	0.649708	68.66	0.0000000	0.00	0.0014063	9.62
14D26508	22.0 %	✓	0.0017883	85.90	0.0000000	0.00	0.0154837	4.16	0.0000000	0.00	58.14387	4.15	0.0003342	85.90	0.0000000	0.00	0.0019085	22.78	0.0041747	13.48	0.0000000	0.00	0.158632	22.78	0.0392820	4.36	3.23018	16.11	0.528435	85.90	0.0000000	0.00	0.0006065	22.94
14D26509	23.0 %		0.0017237	86.97	0.0000000	0.00	0.0092002	6.34	0.0000178	70.80	34.54825	6.34	0.0003222	86.97	0.0000000	0.00	0.0000480	931.89	0.0024806	14.30	0.0541257	70.80	0.003990	931.89	0.0233408	6.48	0.62107	82.25	0.509356	86.97	0.0000000	0.00	0.0000153	931.89
14D26511	24.0 %		0.0045852	33.86	0.0000000	0.00	0.0250999	2.65	0.0000000	0.00	94.25437	2.65	0.0008570	33.86	0.0000000	0.00	0.0007266	58.01	0.0067675	13.09	0.0000000	0.00	0.060397	58.01	0.0636783	2.96	0.54904	95.51	1.354912	33.86	0.0000000	0.00	0.0002309	58.07
		Σ	0.1312776	4.10	0.0000000	0.00	0.2382621	0.91	0.0001128	29.80	894.71320	0.91	0.0245358	4.10	0.0000000	0.00	0.1520932	0.98	0.0642404	4.77	0.3426758	29.80	12.641772	0.98	0.6044682	1.03	209.63385	0.87	38.792528	4.10	0.0000000	0.00	0.0483295	1.54
		Σ							0.3696525	1.57	894.71320	0.91									0.5835451	17.51			13.246240	0.94							248.47470	0.97

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D26494	13.0 %	✓	19.584691	0.604878	20.420642	1.916642	0.018942	0.001267	202.581	54.808913	1.00143132	1.166E-12
14D26496	14.0 %	✓	17.135069	0.304259	50.040025	1.361562	0.014635	0.000675	202.599	54.827712	1.00143144	1.828E-12
14D26497	15.0 %	✓	21.827595	0.921806	57.737938	3.476432	0.035401	0.002179	202.607	54.836737	1.00143150	9.008E-13
14D26499	16.0 %	✓	12.871813	4.464434	61.448126	26.888806	0.015980	0.012639	202.624	54.855545	1.00143162	7.208E-14
14D26500	17.0 %	✓	19.337989	1.365242	98.851733	7.810830	0.037641	0.003618	202.633	54.864575	1.00143168	4.916E-13
14D26502	18.0 %	✓	21.219060	0.208056	45.751813	0.794625	0.029377	0.000498	202.650	54.883392	1.00143180	3.950E-12
14D26503	19.0 %	✓	15.105206	1.821182	158.941399	18.600924	0.047671	0.006711	202.659	54.893179	1.00143187	2.342E-13
14D26505	20.0 %	✓	16.669637	0.201716	59.546712	0.994423	0.018789	0.000499	202.676	54.912006	1.00143199	2.675E-12
14D26506	21.0 %	✓	15.045645	1.460520	87.483351	9.519367	0.029007	0.004352	202.685	54.921045	1.00143205	2.823E-13
14D26508	22.0 %	✓	18.994168	3.694644	293.782993	54.953714	0.087270	0.017407	202.702	54.939882	1.00143217	1.804E-13
14D26509	23.0 %		58.415738	112.912184	1785.342119	##########	0.565433	1.087837	202.710	54.948926	1.00143223	5.426E-14
14D26511	24.0 %		15.347019	4.787448	759.654359	215.145418	0.239251	0.068402	202.728	54.967772	1.00143235	9.140E-14

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
14D26494	13.0 %	0.0174664 ± 0.0012355	0.0606396 ± 0.0279519	0.0309024 ± 0.0267077	0.0561184 ± 0.0244670	5.5749065 ± 0.2532268
14D26496	14.0 %	0.0194148 ± 0.0012355	0.0244323 ± 0.0279519	0.0788713 ± 0.0267077	0.0130006 ± 0.0244670	5.6243024 ± 0.2532268
14D26497	15.0 %	0.0197544 ± 0.0012355	0.0458313 ± 0.0279519	0.0829924 ± 0.0267077	0.0090705 ± 0.0244670	5.6108374 ± 0.2532268
14D26499	16.0 %	0.0197787 ± 0.0012355	0.0631492 ± 0.0279519	0.0742264 ± 0.0267077	0.0184052 ± 0.0244670	5.5558408 ± 0.2532268
14D26500	17.0 %	0.0196288 ± 0.0012355	0.0625986 ± 0.0279519	0.0679416 ± 0.0267077	0.0261277 ± 0.0244670	5.5308226 ± 0.2532268
14D26502	18.0 %	0.0192993 ± 0.0012355	0.0520250 ± 0.0279519	0.0614481 ± 0.0267077	0.0391274 ± 0.0244670	5.5065343 ± 0.2532268
14D26503	19.0 %	0.0192044 ± 0.0012355	0.0444708 ± 0.0279519	0.0638789 ± 0.0267077	0.0416494 ± 0.0244670	5.5139424 ± 0.2532268
14D26505	20.0 %	0.0192505 ± 0.0012355	0.0309918 ± 0.0279519	0.0793808 ± 0.0267077	0.0360796 ± 0.0244670	5.5657493 ± 0.2532268
14D26506	21.0 %	0.0193630 ± 0.0012355	0.0260455 ± 0.0279519	0.0895773 ± 0.0267077	0.0291779 ± 0.0244670	5.6027989 ± 0.2532268
14D26508	22.0 %	0.0196223 ± 0.0012355	0.0194623 ± 0.0279519	0.1049794 ± 0.0267077	0.0114822 ± 0.0244670	5.6785405 ± 0.2532268
14D26509	23.0 %	0.0196518 ± 0.0012355	0.0175019 ± 0.0279519	0.1030693 ± 0.0267077	0.0049143 ± 0.0244670	5.6991816 ± 0.2532268
14D26511	24.0 %	0.0191136 ± 0.0012355	0.0122755 ± 0.0279519	0.0570236 ± 0.0267077	0.0083002 ± 0.0244670	5.6570739 ± 0.2532268

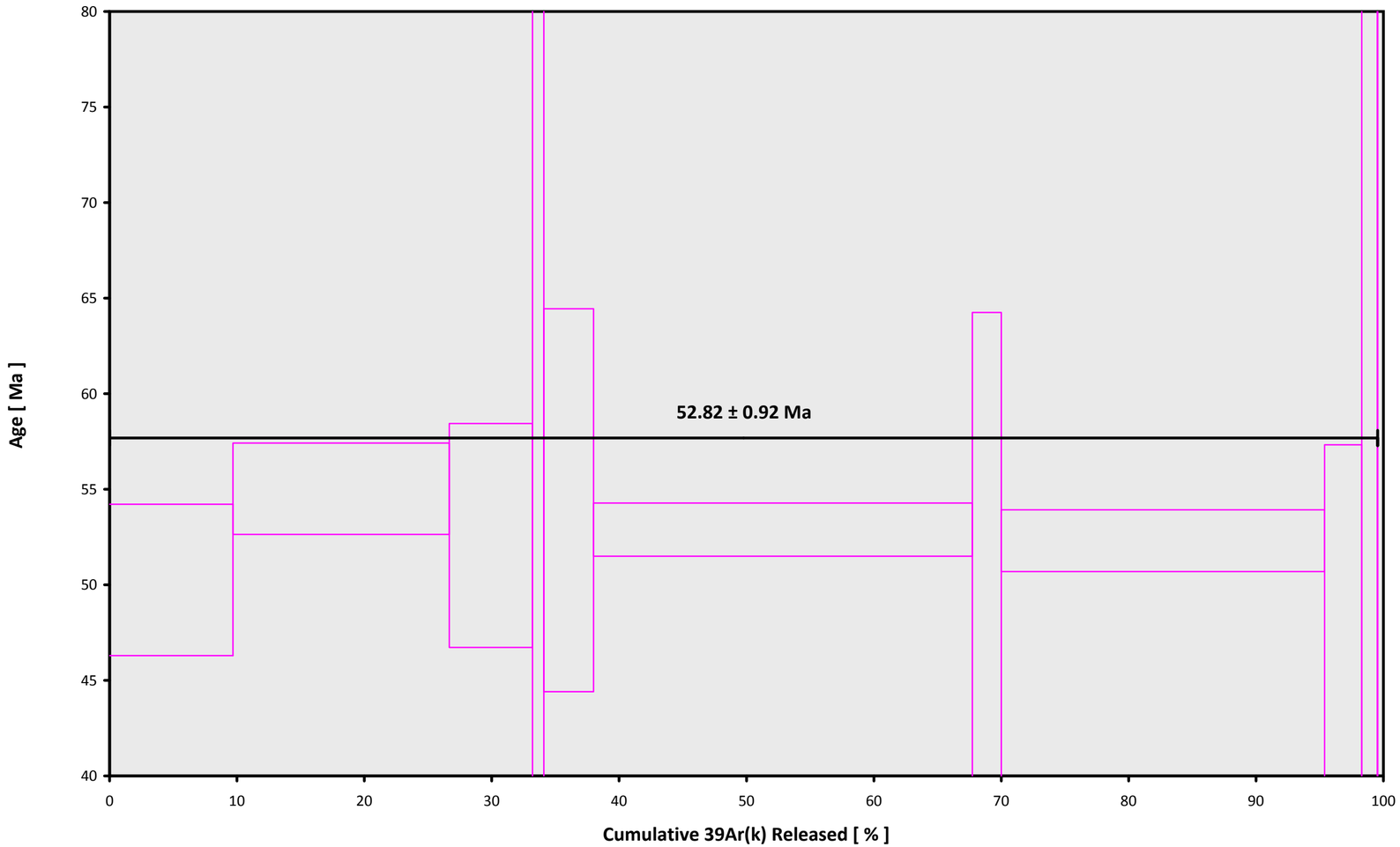
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
14D26494	13.0 %	0.0399484 ± 0.0005522	0.6885	EXP 150 of 150	0.5132484 ± 0.0290306	0.0002	EXP 150 of 150	0.0454902 ± 0.0264439	0.0053	EXP 150 of 150	1.1742404 ± 0.0260563	0.0025	EXP 150 of 150	29.9370968 ± 0.0293635	0.9981	EXP 150 of 150
14D26496	14.0 %	0.0505304 ± 0.0005121	0.6801	EXP 150 of 150	1.9616959 ± 0.0304313	0.1250	EXP 150 of 150	0.0053664 ± 0.0251378	0.0008	EXP 150 of 150	2.1910255 ± 0.0267137	0.0498	EXP 150 of 150	43.8073410 ± 0.0324923	0.9969	EXP 150 of 150
14D26497	15.0 %	0.0488696 ± 0.0005675	0.6425	EXP 150 of 150	0.8404771 ± 0.0279446	0.0010	EXP 150 of 150	0.0632841 ± 0.0271855	0.0006	EXP 150 of 150	0.8434838 ± 0.0237435	0.0025	EXP 150 of 150	24.4254747 ± 0.0307199	0.9979	EXP 150 of 150
14D26499	16.0 %	0.0215620 ± 0.0004140	0.8310	EXP 150 of 150	0.0647981 ± 0.0291904	0.0017	EXP 150 of 150	0.0621250 ± 0.0276054	0.0022	EXP 150 of 150	0.0972779 ± 0.0250621	0.0002	EXP 150 of 150	7.0613299 ± 0.0276301	0.9985	EXP 150 of 150
14D26500	17.0 %	0.0386968 ± 0.0004908	0.6887	EXP 150 of 150	0.8715617 ± 0.0286890	0.0192	EXP 150 of 150	0.0249814 ± 0.0269870	0.0012	EXP 150 of 150	0.4989891 ± 0.0246112	0.0102	EXP 150 of 150	15.7976254 ± 0.0287548	0.9982	EXP 150 of 150
14D26502	18.0 %	0.1282910 ± 0.0008783	0.0205	EXP 150 of 150	3.1134892 ± 0.0316916	0.2992	EXP 150 of 150	0.0391543 ± 0.0301773	0.0331	EXP 150 of 150	3.8068222 ± 0.0259632	0.3552	EXP 150 of 150	88.0148603 ± 0.0394315	0.9851	EXP 150 of 150
14D26503	19.0 %	0.0339315 ± 0.0004534	0.7359	EXP 150 of 150	0.8710579 ± 0.0275078	0.0696	EXP 150 of 150	0.0614610 ± 0.0221857	0.0016	EXP 150 of 150	0.2785938 ± 0.0247782	0.0093	EXP 150 of 150	10.4046840 ± 0.0273485	0.9984	EXP 150 of 150
14D26505	20.0 %	0.0793367 ± 0.0007316	0.2942	EXP 149 of 150	3.5183151 ± 0.0261747	0.3253	EXP 150 of 150	0.0615578 ± 0.0268926	0.0081	EXP 150 of 150	3.2788912 ± 0.0278518	0.2780	EXP 150 of 150	61.4351444 ± 0.0340359	0.9934	EXP 150 of 150
14D26506	21.0 %	0.0302110 ± 0.0004821	0.7371	EXP 150 of 150	0.5836633 ± 0.0282571	0.0174	EXP 150 of 150	0.0190098 ± 0.0289319	0.0389	EXP 150 of 150	0.3584924 ± 0.0231634	0.0000	EXP 150 of 150	11.4999387 ± 0.0297252	0.9979	EXP 150 of 150
14D26508	22.0 %	0.0361444 ± 0.0005020	0.6679	EXP 150 of 150	1.0167017 ± 0.0321068	0.0444	EXP 150 of 150	0.1220634 ± 0.0278461	0.0308	EXP 149 of 150	0.1847707 ± 0.0261257	0.0229	EXP 150 of 150	9.4473537 ± 0.0283418	0.9981	EXP 150 of 150
14D26509	23.0 %	0.0301184 ± 0.0004663	0.7000	EXP 150 of 150	0.5980706 ± 0.0269732	0.0091	EXP 150 of 150	0.0469837 ± 0.0267124	0.0003	EXP 150 of 150	0.0142743 ± 0.0275384	0.0883	EXP 150 of 150	6.8324730 ± 0.0307410	0.9977	EXP 150 of 150
14D26511	24.0 %	0.0475098 ± 0.0005165	0.5462	EXP 150 of 150	1.6665505 ± 0.0330619	0.1187	EXP 148 of 150	0.0550735 ± 0.0268139	0.0002	EXP 150 of 150	0.1147336 ± 0.0245948	0.0406	EXP 150 of 150	7.5661207 ± 0.0274703	0.9981	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
14D26494	13.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26496	14.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26497	15.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26499	16.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26500	17.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26502	18.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26503	19.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26505	20.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26506	21.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26508	22.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26509	23.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	01
14D26511	24.0 %	Kevin Konrad	14-OSU-02	0.00	0.00	23.70	French Polynesia\Rurutu (13-INT-08)	14D26486	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
14D26494	13.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	5	6	1
14D26496	14.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	5	31	1
14D26497	15.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	5	43	1
14D26499	16.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	6	8	1
14D26500	17.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	6	20	1
14D26502	18.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	6	45	1
14D26503	19.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	6	58	1
14D26505	20.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	7	23	1
14D26506	21.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	7	35	1
14D26508	22.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	8	0	1
14D26509	23.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	8	12	1
14D26511	24.0 %	RR1310-D11-10	Hornblende	Rurutu Hotspot	FCT-NM (2A19-14)	28.201	0.082	Kuiper et al. (2008)	8.8173	0.095	0.00178256	0.095	303.986	0.137	0.993012	0.067	1	4.8E-14	3	OCT	2014	8	37	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
14D26494	13.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26496	14.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26497	15.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26499	16.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26500	17.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26502	18.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26503	19.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26505	20.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26506	21.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26508	22.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26509	23.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0
14D26511	24.0 %	295.5	0	0.018	35	0.1869	0	1.493	3	0.000676	1.32	7.18E-05	12.82	0.000266	0.15	0.003823	2.66	0.012031	0.16	0	0	0.43	0	0	0	0	0

14D26486.AGE >>> RR1310-D11-10 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
52.82 ± 0.92
TOTAL FUSION
52.68 ± 1.36
NORMAL ISOCHRON
49.32 ± 2.71
INVERSE ISOCHRON
53.15 ± 1.54

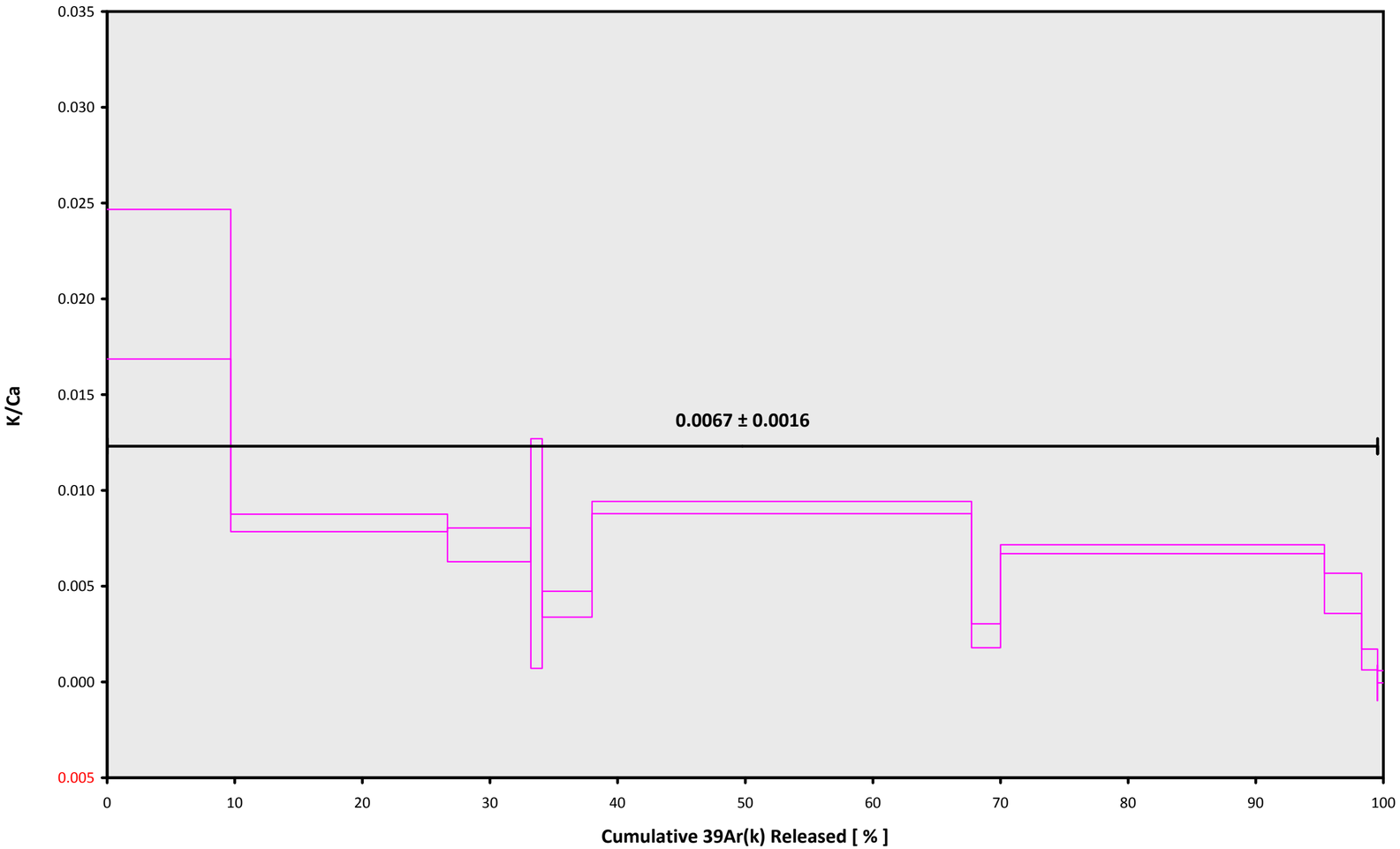
MSWD (PROBABILITY)
0.91 (52%)

Sample Info

Hornblende
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-02 (2A19-14)
J = 0.00178256 ± 0.00000169

14D26486.AGE >>> RR1310-D11-10 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

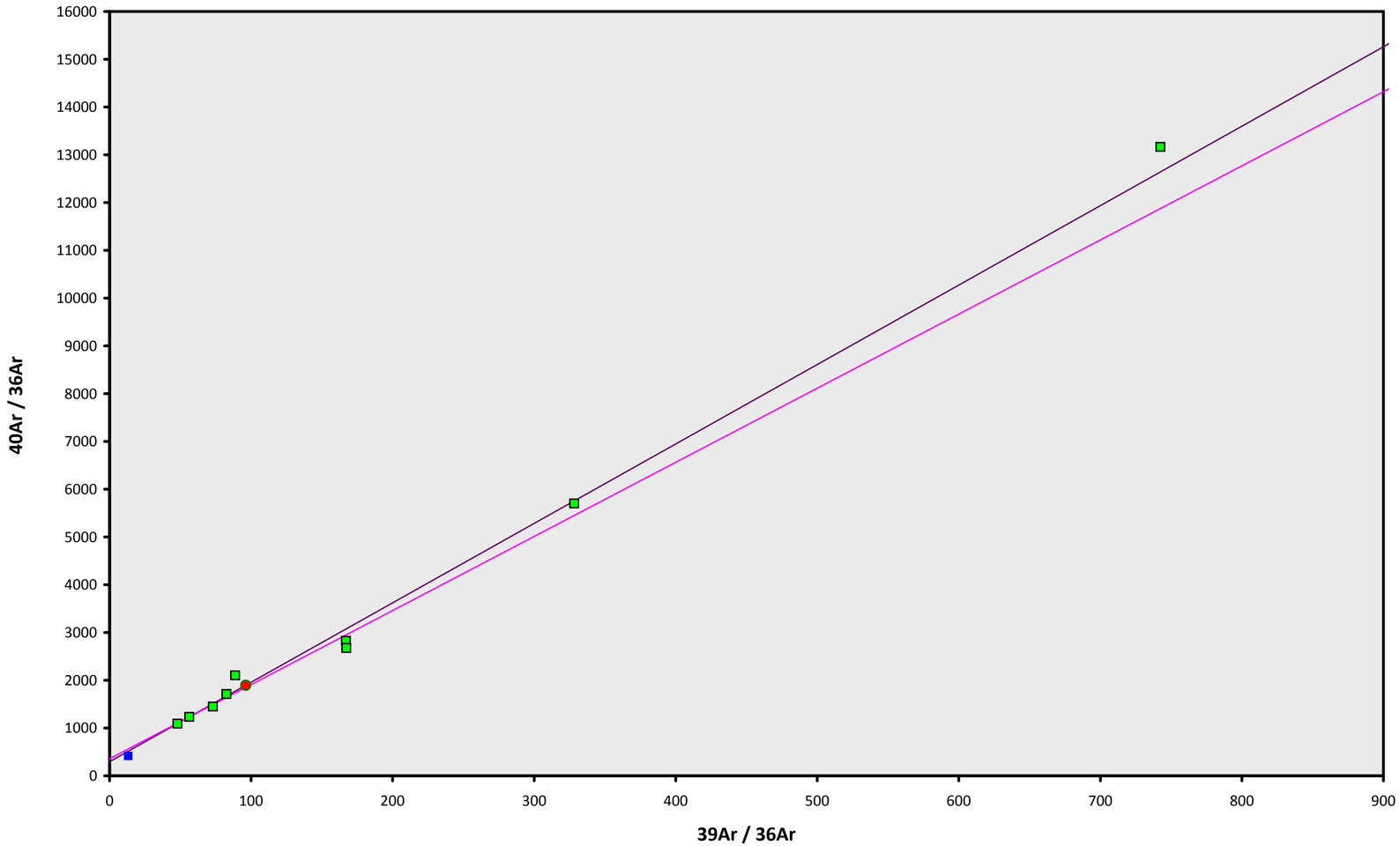
WEIGHTED PLATEAU
52.82 ± 0.92
TOTAL FUSION
52.68 ± 1.36
NORMAL ISOCHRON
49.32 ± 2.71
INVERSE ISOCHRON
53.15 ± 1.54

Sample Info

Hornblende
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-02 (2A19-14)
J = 0.00178256 ± 0.00000169

14D26486.AGE >>> RR1310-D11-10 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
52.82 ± 0.92
TOTAL FUSION
52.68 ± 1.36
NORMAL ISOCHRON
49.32 ± 2.71
INVERSE ISOCHRON
53.15 ± 1.54

MSWD (PROBABILITY)
1.10 (36%)

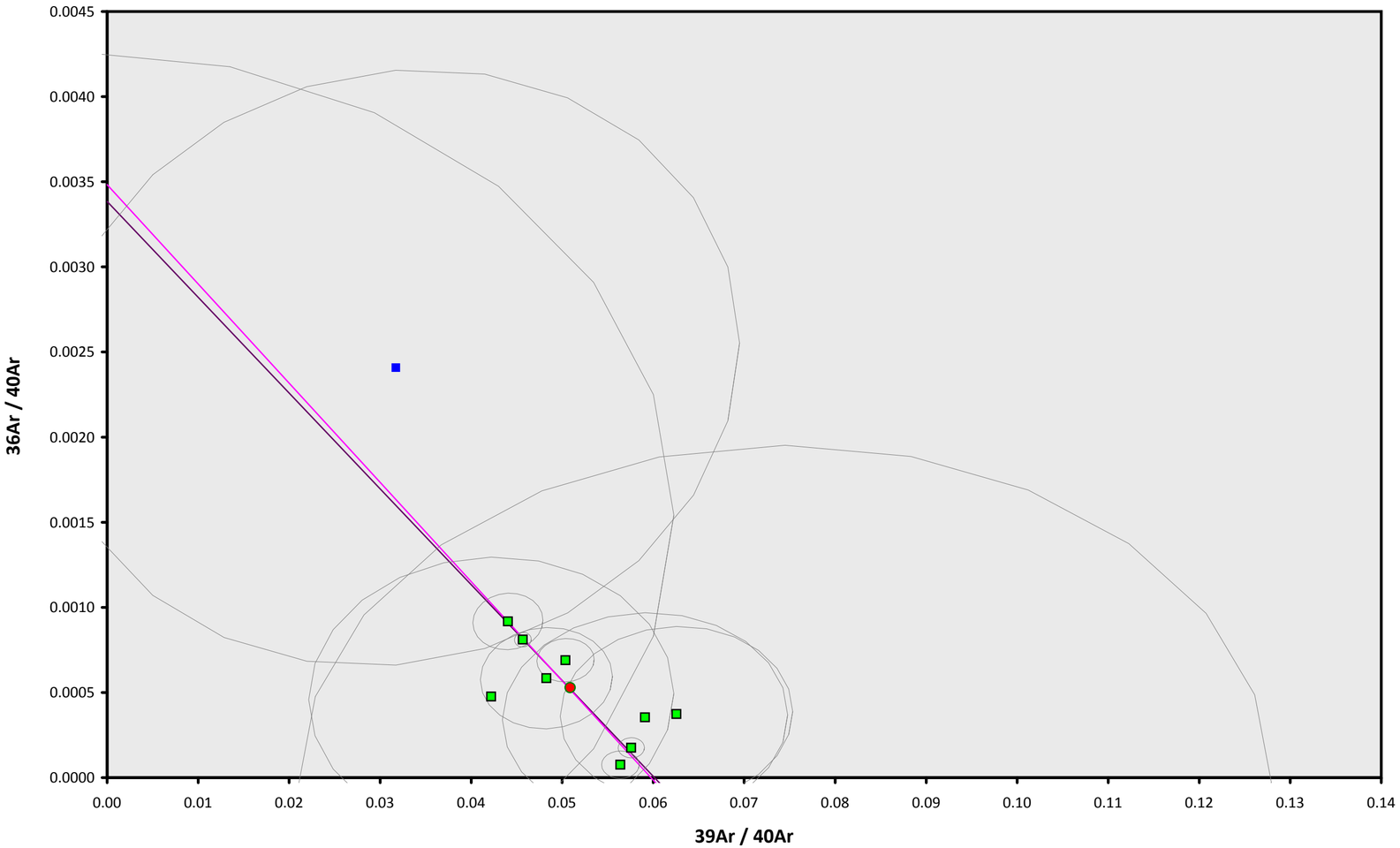
40AR/36AR INTERCEPT
358.8 ± 58.0

Sample Info

Hornblende
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-02 (2A19-14)
J = 0.00178256 ± 0.00000169

14D26486.AGE >>> RR1310-D11-10 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
52.82 ± 0.92
TOTAL FUSION
52.68 ± 1.36
NORMAL ISOCHRON
49.32 ± 2.71
INVERSE ISOCHRON
53.15 ± 1.54

MSWD (PROBABILITY)
0.98 (45%)

SPREADING FACTOR
54.0%

40AR/36AR INTERCEPT
287.1 ± 38.2

Sample Info

Hornblende
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-02 (2A19-14)
J = 0.00178256 ± 0.00000169