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
14D34803	2.0 %		0.1043958	1.378	0.149846	74.913	0.0272673	133.495	0.0975819	35.615	37.36787	0.118	66.99113 ± 48.56626	197.06 ± 135.35	17.48	1.50	0.280 ± 0.464
14D34804	3.0 %		0.2078234	0.840	0.486843	21.392	0.0291847	126.961	0.1646186	21.694	72.37268	0.060	66.94601 ± 29.77872	196.94 ± 83.00	15.20	2.52	0.145 ± 0.089
14D34806	4.0 %		0.1675341	1.002	0.469368	22.800	0.0544913	64.366	0.0684439	51.210	56.75572	0.073	106.94876 ##########	305.13 ± 291.45	12.84	1.05	0.062 ± 0.070
14D34807	5.0 %		0.1244123	1.200	0.843375	11.805	0.0098793	356.492	0.1575840	23.092	44.31097	0.094	48.48544 ± 23.17112	144.74 ± 66.47	17.18	2.41	0.080 ± 0.042
14D34809	6.5 %		0.2129888	0.813	1.379309	7.862	0.0056493	658.418	0.3331422	10.536	70.62353	0.065	23.45686 ± 5.84246	71.47 ± 17.45	11.03	5.10	0.104 ± 0.027
14D34810	8.0 %	✓	0.1895377	0.865	2.466001	4.225	0.0604253	64.209	0.4877397	7.417	64.02622	0.069	16.89137 ± 3.21392	51.75 ± 9.71	12.82	7.47	0.085 ± 0.015
14D34812	10.0 %	✓	0.3136618	0.636	4.237661	2.451	0.0711323	51.940	0.6923278	5.203	103.68022	0.046	16.42446 ± 2.42687	50.34 ± 7.34	10.92	10.59	0.070 ± 0.008
14D34813	12.0 %	✓	0.1753163	0.957	5.063598	2.181	0.0586374	61.106	0.7268093	5.013	63.68139	0.070	16.96391 ± 2.19417	51.97 ± 6.63	19.27	11.11	0.061 ± 0.007
14D34815	14.5 %	✓	0.0400815	3.243	5.321805	2.047	0.0241694	160.486	0.7909874	4.514	25.09154	0.160	17.35270 ± 1.85451	53.14 ± 5.60	54.45	12.09	0.064 ± 0.006
14D34816	17.0 %	✓	0.0644155	2.169	4.066248	2.688	0.0562297	68.298	0.6979254	5.161	29.23506	0.149	15.13050 ± 1.97122	46.42 ± 5.97	35.98	10.68	0.074 ± 0.009
14D34818	20.0 %	✓	0.0123049	10.206	3.423443	3.251	0.0220636	178.288	0.6551899	5.565	13.37156	0.326	15.32044 ± 2.05885	47.00 ± 6.23	74.80	10.03	0.082 ± 0.011
14D34819	23.0 %	✓	0.0102347	12.288	2.622920	4.146	0.0122910	295.160	0.6146500	5.653	12.01882	0.346	15.00872 ± 2.09434	46.05 ± 6.35	76.53	9.41	0.100 ± 0.014
14D34821	26.0 %		0.0314004	4.180	2.076481	4.801	0.0425710	89.197	0.5273241	6.858	35.36907	0.121	49.91553 ± 7.02328	148.84 ± 20.10	74.22	8.08	0.109 ± 0.018
14D34823	28.0 %		0.0055074	22.252	1.664426	6.379	0.0299825	126.306	0.5197044	6.828	7.85172	0.475	12.25131 ± 2.18715	37.68 ± 6.66	80.92	7.96	0.134 ± 0.025
		Σ	1.6596146	0.344	34.271324	1.166	0.0682714	204.147	6.5340286	2.046	635.75637	0.025					

Information on Analysis and Constants Used in Calculations

Project = **RURUTU (13-INT-08)**
Sample = **RR1310-D07-09**
Material = **Clinopyroxene**
Location = **Rurutu Hotspot**
Region = **Tuvalu**
Analyst = **Kevin Konrad**
Irradiation = **14-OSU-06 (6A34-14)**
Position = **X: 0 | Y: 0 | Z/H: 53.24 mm**
FCT-NM Age = **28.201 ± 0.023 Ma**
FCT-NM Reference = **Kuiper et al (2008)**
FCT-NM 40Ar/39Ar Ratio = **9.14509 ± 0.00969**
FCT-NM J-value = **0.00171867 ± 0.00000182**
Air Shot 40Ar/36Ar = **303.3230 ± 0.5035**
Air Shot MDF = **0.99354392 ± 0.00070564 (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-D07-09CP**
Rock Class = **Igneous>Volcanic>Mafic**
Lithology = **Basalt**
Lat-Lon = **5°58.6'S - 176°53.9'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		16.09541 ± 0.82024 (± 5.10%)	**49.34 ± 2.48 (± 5.03%)**	0.90	71.38	0.070 ± 0.008
		Full External Error ± 2.72		50%	7	
		Analytical Error ± 2.48		2.15	2σ Confidence Limit	
				1.0000	Error Magnification	
Total Fusion Age		22.73336 ± 1.06934 (± 4.70%)	**69.31 ± 3.20 (± 4.62%)**		14	0.082 ± 0.004
		Full External Error ± 3.56				
		Analytical Error ± 3.20				
Normal Isochron	**297.88 ± 5.25 (± 1.76%)**	15.79476 ± 1.10209 (± 6.98%)	**48.43 ± 3.34 (± 6.89%)**	0.94	71.38	
		Full External Error ± 3.51		45%	7	
		Analytical Error ± 3.33		2.26	2σ Confidence Limit	
				1.0000	Error Magnification	
				22	Number of Iterations	
				0.0001224780	Convergence	
Inverse Isochron	**297.61 ± 5.30 (± 1.78%)**	15.89766 ± 1.12239 (± 7.06%)	**48.75 ± 3.40 (± 6.97%)**	0.95	71.38	
		Full External Error ± 3.57		45%	7	
		Analytical Error ± 3.40		2.26	2σ Confidence Limit	
				1.0000	Error Magnification	
Notes				3	Number of Iterations	
This clinopyroxene separate had an atmospheric intercept and fairly long (albite large error) plateau. The ages is within error of the plagioclase separate from this lava flow and is deemed reliable.				0.0000140497	Convergence	
				70%	Spreading Factor	

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
14D34803	2.0 %		0.1043559	0.149846	0.0000000	0.0974807	6.53034	197.06 ± 135.35	17.48	1.50	0.280 ± 0.464
14D34804	3.0 %		0.2076938	0.486843	0.0000000	0.1642897	10.99854	196.94 ± 83.00	15.20	2.52	0.145 ± 0.089
14D34806	4.0 %		0.1674091	0.469368	0.0000000	0.0681268	7.28607	305.13 ± 291.45	12.84	1.05	0.062 ± 0.070
14D34807	5.0 %		0.1241877	0.843375	0.0000000	0.1570142	7.61290	144.74 ± 66.47	17.18	2.41	0.080 ± 0.042
14D34809	6.5 %		0.2126215	1.379309	0.0000000	0.3322103	7.79261	71.47 ± 17.45	11.03	5.10	0.104 ± 0.027
14D34810	8.0 %	✓	0.1888796	2.466001	0.0190987	0.4860737	8.21045	51.75 ± 9.71	12.82	7.47	0.085 ± 0.015
14D34812	10.0 %	✓	0.3125330	4.237661	0.0041207	0.6894649	11.32409	50.34 ± 7.34	10.92	10.59	0.070 ± 0.008
14D34813	12.0 %	✓	0.1739666	5.063598	0.0170564	0.7233883	12.27150	51.97 ± 6.63	19.27	11.11	0.061 ± 0.007
14D34815	14.5 %	✓	0.0386638	5.321805	0.0070879	0.7873920	13.66338	53.14 ± 5.60	54.45	12.09	0.064 ± 0.006
14D34816	17.0 %	✓	0.0633300	4.066248	0.0357377	0.6951783	10.51839	46.42 ± 5.97	35.98	10.68	0.074 ± 0.009
14D34818	20.0 %	✓	0.0113933	3.423443	0.0000000	0.6528770	10.00236	47.00 ± 6.23	74.80	10.03	0.082 ± 0.011
14D34819	23.0 %	✓	0.0095362	2.622920	0.0000000	0.6128780	9.19852	46.05 ± 6.35	76.53	9.41	0.100 ± 0.014
14D34821	26.0 %		0.0308475	2.076481	0.0000000	0.5259212	26.25164	148.84 ± 20.10	74.22	8.08	0.109 ± 0.018
14D34823	28.0 %		0.0050641	1.664426	0.0000000	0.5185799	6.35328	37.68 ± 6.66	80.92	7.96	0.134 ± 0.025
		Σ	1.6504819	34.271324	0.0831014	6.5108749	148.01407				

Information on Analysis

Project = **RURUTU (13-INT-08)**
Sample = **RR1310-D07-09**
Material = **Clinopyroxene**
Location = **Rurutu Hotspot**
Region = **Tuvalu**
Analyst = **Kevin Konrad**
Irradiation = **14-OSU-06 (6A34-14)**
J = **0.00171867 ± 0.00000182**
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	16.09541 ± 0.82024 (± 5.10%)	**49.34 ± 2.48 (± 5.03%)**	0.90	71.38	0.070 ± 0.008
			50%	7	
	Full External Error	± 2.72	2.15	2σ Confidence Limit	
	Analytical Error	± 2.48	1.0000	Error Magnification	
Total Fusion Age	22.73336 ± 1.06934 (± 4.70%)	**69.31 ± 3.20 (± 4.62%)**		14	0.082 ± 0.004
	Full External Error	± 3.56			
	Analytical Error	± 3.20			

Normal Isochron			39(k)/36(a) ± 2σ	40(a+r)/36(a) ± 2σ	r.i.
14D34803	2.0 %		0.93 ± 0.67	358.08 ± 9.91	0.0385
14D34804	3.0 %		0.79 ± 0.34	348.46 ± 5.87	0.0385
14D34806	4.0 %		0.41 ± 0.42	339.02 ± 6.82	0.0194
14D34807	5.0 %		1.26 ± 0.59	356.80 ± 8.60	0.0516
14D34809	6.5 %		1.56 ± 0.33	332.15 ± 5.43	0.0766
14D34810	8.0 %	✓	2.57 ± 0.39	338.97 ± 5.90	0.1155
14D34812	10.0 %	✓	2.21 ± 0.23	331.73 ± 4.25	0.1210
14D34813	12.0 %	✓	4.16 ± 0.43	366.04 ± 7.08	0.1876
14D34815	14.5 %	✓	20.37 ± 2.30	648.89 ± 43.69	0.5950
14D34816	17.0 %	✓	10.98 ± 1.24	461.59 ± 20.42	0.3909
14D34818	20.0 %	✓	57.30 ± 14.17	1173.42 ± 258.88	0.8917
14D34819	23.0 %	✓	64.27 ± 18.46	1260.09 ± 332.57	0.9184
14D34821	26.0 %		17.05 ± 2.76	1146.51 ± 97.62	0.5260
14D34823	28.0 %		102.40 ± 51.52	1550.07 ± 750.55	0.9621

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Normal Isochron	**297.88 ± 5.25** **± 1.76%**	15.79476 ± 1.10209 ± 6.98%	**48.43 ± 3.34** **± 6.89%**	0.94 45%
			Full External Error ± 3.51	
			Analytical Error ± 3.33	

Statistics				
	2σ Confidence Limit	2.26	Convergence	0.000122477997
	Error Magnification	1.0000	Number of Iterations	22
	Number of Data Points	7	Calculated Line	Weighted York-2

Inverse Isochron			39(k)/40(a+r) ± 2σ	36(a)/40(a+r) ± 2σ	r.i.
14D34803	2.0 %		0.0026087 ± 0.0018601	0.00279269 ± 0.00007729	0.0003
14D34804	3.0 %		0.0022701 ± 0.0009869	0.00286981 ± 0.00004837	0.0002
14D34806	4.0 %		0.0012004 ± 0.0012351	0.00294966 ± 0.00005933	0.0001
14D34807	5.0 %		0.0035435 ± 0.0016425	0.00280268 ± 0.00006758	0.0003
14D34809	6.5 %		0.0047040 ± 0.0009940	0.00301069 ± 0.00004919	0.0005
14D34810	8.0 %	✓	0.0075920 ± 0.0011301	0.00295012 ± 0.00005138	0.0007
14D34812	10.0 %	✓	0.0066501 ± 0.0006949	0.00301447 ± 0.00003859	0.0006
14D34813	12.0 %	✓	0.0113600 ± 0.0011444	0.00273195 ± 0.00005284	0.0010
14D34815	14.5 %	✓	0.0313845 ± 0.0028480	0.00154109 ± 0.00010376	0.0017
14D34816	17.0 %	✓	0.0237811 ± 0.0024656	0.00216643 ± 0.00009582	0.0019
14D34818	20.0 %	✓	0.0488349 ± 0.0054635	0.00085221 ± 0.00018801	0.0017
14D34819	23.0 %	✓	0.0510031 ± 0.0057939	0.00079360 ± 0.00020945	0.0016
14D34821	26.0 %		0.0148704 ± 0.0020454	0.00087221 ± 0.00007426	0.0005
14D34823	28.0 %		0.0660634 ± 0.0090632	0.00064513 ± 0.00031238	0.0014

Results	40(a)/36(a) ± 2σ	40(r)/39(k) ± 2σ	Age ± 2σ (Ma)	MSWD
Inverse Isochron	**297.61 ± 5.30**	15.89766 ± 1.12239	**48.75 ± 3.40**	0.95
	± 1.78%	± 7.06%	**± 6.97%**	45%
			Full External Error ± 3.57	
			Analytical Error ± 3.40	

Statistics				
	2σ Confidence Limit	2.26	Convergence	0.0000140497
	Error Magnification	1.0000	Number of Iterations	3
	Number of Data Points	7	Calculated Line	Weighted York-2
	Spreading Factor	70.5%		

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
14D34803	2.0 %		0.1043559	1.38	0.0000000	0.00	0.0000399	74.91	0.0000000	0.00	0.149846	74.91	0.0195041	1.38	0.0000000	0.00	0.0011728	35.65	0.0000108	76.00	0.0000000	0.00	0.0974807	35.65	0.0001012	74.92	6.53034	6.55	30.83716	1.38	0.0000000	0.00	0.0003727	35.75
14D34804	3.0 %		0.2076938	0.84	0.0000000	0.00	0.0001296	21.39	0.0000000	0.00	0.486843	21.39	0.0388180	0.84	0.0000000	0.00	0.0019766	21.74	0.0000350	24.94	0.0000000	0.00	0.1642897	21.74	0.0003289	21.43	10.99854	4.71	61.37351	0.84	0.0000000	0.00	0.0006281	21.90
14D34806	4.0 %		0.1674091	1.00	0.0000000	0.00	0.0001250	22.80	0.0000000	0.00	0.469368	22.80	0.0312888	1.00	0.0000000	0.00	0.0008196	51.45	0.0000337	26.16	0.0000000	0.00	0.0681268	51.45	0.0003171	22.84	7.28607	6.83	49.46939	1.00	0.0000000	0.00	0.0002604	51.52
14D34807	5.0 %		0.1241877	1.20	0.0000000	0.00	0.0002246	11.81	0.0000000	0.00	0.843375	11.80	0.0232107	1.20	0.0000000	0.00	0.0018890	23.18	0.0000606	17.43	0.0000000	0.00	0.1570142	23.18	0.0005698	11.88	7.61290	5.82	36.69747	1.20	0.0000000	0.00	0.0006003	23.33
14D34809	6.5 %		0.2126215	0.81	0.0000000	0.00	0.0003673	7.86	0.0000000	0.00	1.379309	7.86	0.0397390	0.81	0.0000000	0.00	0.0039968	10.57	0.0000990	15.04	0.0000000	0.00	0.3322103	10.57	0.0009319	7.97	7.79261	6.59	62.82965	0.81	0.0000000	0.00	0.0012700	10.90
14D34810	8.0 %	✓	0.1888796	0.87	0.0000000	0.00	0.0006567	4.23	0.0000014	203.17	2.466001	4.22	0.0353016	0.87	0.0000000	0.00	0.0058480	7.44	0.0001771	13.50	0.0190987	203.17	0.4860737	7.44	0.0016660	4.43	8.21045	5.93	55.81391	0.87	0.0000000	0.00	0.0018583	7.90
14D34812	10.0 %	✓	0.3125330	0.64	0.0000000	0.00	0.0011285	2.46	0.0000003	896.72	4.237661	2.45	0.0584124	0.64	0.0000000	0.00	0.0082950	5.23	0.0003043	13.05	0.0041207	896.72	0.6894649	5.22	0.0028630	2.78	11.32409	5.22	92.35350	0.64	0.0000000	0.00	0.0026358	5.86
14D34813	12.0 %	✓	0.1739666	0.96	0.0000000	0.00	0.0013484	2.19	0.0000013	210.10	5.063598	2.18	0.0325144	0.96	0.0000000	0.00	0.0087031	5.04	0.0003636	13.00	0.0170564	210.10	0.7233883	5.04	0.0034210	2.55	12.27150	4.06	51.40712	0.96	0.0000000	0.00	0.0027655	5.70
14D34815	14.5 %	✓	0.0386638	3.36	0.0000000	0.00	0.0014172	2.05	0.0000005	547.30	5.321805	2.05	0.0072263	3.36	0.0000000	0.00	0.0094731	4.54	0.0003821	12.98	0.0070879	547.30	0.7873920	4.53	0.0035954	2.44	13.66338	2.83	11.42515	3.36	0.0000000	0.00	0.0030102	5.26
14D34816	17.0 %	✓	0.0633300	2.21	0.0000000	0.00	0.0010828	2.69	0.0000027	107.47	4.066248	2.69	0.0118364	2.21	0.0000000	0.00	0.0083637	5.18	0.0002920	13.10	0.0357377	107.48	0.6951783	5.18	0.0027472	2.99	10.51839	3.95	18.71401	2.21	0.0000000	0.00	0.0026577	5.82
14D34818	20.0 %	✓	0.0113933	11.03	0.0000000	0.00	0.0009117	3.25	0.0000000	0.00	3.423443	3.25	0.0021294	11.03	0.0000000	0.00	0.0078548	5.59	0.0002458	13.23	0.0000000	0.00	0.6528770	5.58	0.0023129	3.51	10.00236	3.74	3.36671	11.03	0.0000000	0.00	0.0024959	6.19
14D34819	23.0 %	✓	0.0095362	13.19	0.0000000	0.00	0.0006985	4.15	0.0000000	0.00	2.622920	4.15	0.0017823	13.19	0.0000000	0.00	0.0073735	5.67	0.0001883	13.47	0.0000000	0.00	0.6128780	5.67	0.0017720	4.35	9.19852	4.07	2.81796	13.19	0.0000000	0.00	0.0023430	6.26
14D34821	26.0 %		0.0308475	4.26	0.0000000	0.00	0.0005530	4.80	0.0000000	0.00	2.076481	4.80	0.0057654	4.26	0.0000000	0.00	0.0063274	6.88	0.0001491	13.69	0.0000000	0.00	0.5259212	6.88	0.0014029	4.98	26.25164	1.49	9.11542	4.26	0.0000000	0.00	0.0020106	7.37
14D34823	28.0 %		0.0050641	24.21	0.0000000	0.00	0.0004432	6.38	0.0000000	0.00	1.664426	6.38	0.0009465	24.21	0.0000000	0.00	0.0062390	6.84	0.0001195	14.32	0.0000000	0.00	0.5185799	6.84	0.0011245	6.51	6.35328	5.73	1.49645	24.21	0.0000000	0.00	0.0019825	7.34
		Σ	1.6504819	0.35	0.0000000	0.00	0.0091265	1.17	0.0000062	101.64	34.271324	1.17	0.3084751	0.35	0.0000000	0.00	0.0783323	2.05	0.0024607	4.31	0.0831014	101.65	6.5108749	2.05	0.0231537	1.24	148.01407	1.15	487.71741	0.35	0.0000000	0.00	0.0248911	2.20
		Σ							1.6596146	0.34	34.271324	1.17									0.4723695	17.89			6.5340286	2.05							635.75637	0.38

Additional Parameters			40Ar/39Ar	1σ	37Ar/39Ar	1σ	36Ar/39Ar	1σ	Time (days)	37Ar (decay)	39Ar (decay)	40Ar (moles)
14D34803	2.0 %		382.938563	136.385488	1.535592	1.273746	1.069827	0.381307	46.172	2.495397	1.00032672	1.794E-12
14D34804	3.0 %		439.638509	95.373625	2.957401	0.901023	1.262454	0.274076	46.180	2.495808	1.00032678	3.474E-12
14D34806	4.0 %		829.230124	424.645258	6.857703	3.844141	2.447759	1.253726	46.197	2.496664	1.00032690	2.724E-12
14D34807	5.0 %		281.189486	64.931514	5.351905	1.387962	0.789498	0.182553	46.206	2.497109	1.00032697	2.127E-12
14D34809	6.5 %		211.992154	22.335673	4.140303	0.544283	0.639333	0.067560	46.223	2.497932	1.00032708	3.390E-12
14D34810	8.0 %	✓	131.271293	9.737157	5.055978	0.431576	0.388604	0.029019	46.232	2.498377	1.00032715	3.073E-12
14D34812	10.0 %	✓	149.755963	7.791770	6.120887	0.352036	0.453054	0.023747	46.249	2.499234	1.00032727	4.977E-12
14D34813	12.0 %	✓	87.617735	4.392469	6.966886	0.380854	0.241214	0.012310	46.258	2.499645	1.00032733	3.057E-12
14D34815	14.5 %	✓	31.721792	1.432762	6.728053	0.333452	0.050673	0.002816	46.275	2.500503	1.00032745	1.204E-12
14D34816	17.0 %	✓	41.888517	2.162907	5.826193	0.339047	0.092296	0.005167	46.283	2.500914	1.00032751	1.403E-12
14D34818	20.0 %	✓	20.408685	1.137614	5.225116	0.336754	0.018781	0.002183	46.301	2.501772	1.00032763	6.418E-13
14D34819	23.0 %	✓	19.553920	1.107466	4.267339	0.299152	0.016651	0.002252	46.310	2.502218	1.00032770	5.769E-13
14D34821	26.0 %		67.072738	4.600565	3.937770	0.329646	0.059547	0.004782	46.327	2.503076	1.00032782	1.698E-12
14D34823	28.0 %		15.108046	1.034101	3.202641	0.299263	0.010597	0.002467	46.344	2.503901	1.00032794	3.769E-13

Procedure Blanks		36Ar ± 1σ (SE) [fA]	37Ar ± 1σ (SE) [fA]	38Ar ± 1σ (SE) [fA]	39Ar ± 1σ (SE) [fA]	40Ar ± 1σ (SE) [fA]
14D34803	2.0 %	0.0252050 ± 0.0010769	0.0798465 ± 0.0293814	0.0280469 ± 0.0257471	0.0444265 ± 0.0252095	7.3525529 ± 0.0284603
14D34804	3.0 %	0.0251835 ± 0.0010769	0.0620026 ± 0.0293814	0.0013963 ± 0.0257471	0.0737352 ± 0.0252095	7.4700921 ± 0.0284603
14D34806	4.0 %	0.0250693 ± 0.0010769	0.0516498 ± 0.0293814	0.0164530 ± 0.0257471	0.0934438 ± 0.0252095	7.5206231 ± 0.0284603
14D34807	5.0 %	0.0249620 ± 0.0010769	0.0552032 ± 0.0293814	0.0080055 ± 0.0257471	0.0890302 ± 0.0252095	7.4806148 ± 0.0284603
14D34809	6.5 %	0.0246708 ± 0.0010769	0.0681046 ± 0.0293814	0.0212513 ± 0.0257471	0.0681073 ± 0.0252095	7.3557306 ± 0.0284603
14D34810	8.0 %	0.0244672 ± 0.0010769	0.0752925 ± 0.0293814	0.0391095 ± 0.0257471	0.0544760 ± 0.0252095	7.2833588 ± 0.0284603
14D34812	10.0 %	0.0240146 ± 0.0010769	0.0840654 ± 0.0293814	0.0677124 ± 0.0257471	0.0318308 ± 0.0252095	7.1741853 ± 0.0284603
14D34813	12.0 %	0.0237871 ± 0.0010769	0.0847858 ± 0.0293814	0.0763963 ± 0.0257471	0.0244907 ± 0.0252095	7.1443930 ± 0.0284603
14D34815	14.5 %	0.0233567 ± 0.0010769	0.0785080 ± 0.0293814	0.0812681 ± 0.0257471	0.0182351 ± 0.0252095	7.1352871 ± 0.0284603
14D34816	17.0 %	0.0232024 ± 0.0010769	0.0724722 ± 0.0293814	0.0775049 ± 0.0257471	0.0190378 ± 0.0252095	7.1524457 ± 0.0284603
14D34818	20.0 %	0.0230911 ± 0.0010769	0.0578566 ± 0.0293814	0.0609463 ± 0.0257471	0.0241513 ± 0.0252095	7.2066712 ± 0.0284603
14D34819	23.0 %	0.0231966 ± 0.0010769	0.0520391 ± 0.0293814	0.0508623 ± 0.0257471	0.0253691 ± 0.0252095	7.2263437 ± 0.0284603
14D34821	26.0 %	0.0238568 ± 0.0010769	0.0537585 ± 0.0293814	0.0398921 ± 0.0257471	0.0137309 ± 0.0252095	7.1861688 ± 0.0284603
14D34823	28.0 %	0.0252579 ± 0.0010769	0.0864936 ± 0.0293814	0.0585074 ± 0.0257471	0.0330128 ± 0.0252095	6.9518910 ± 0.0284603

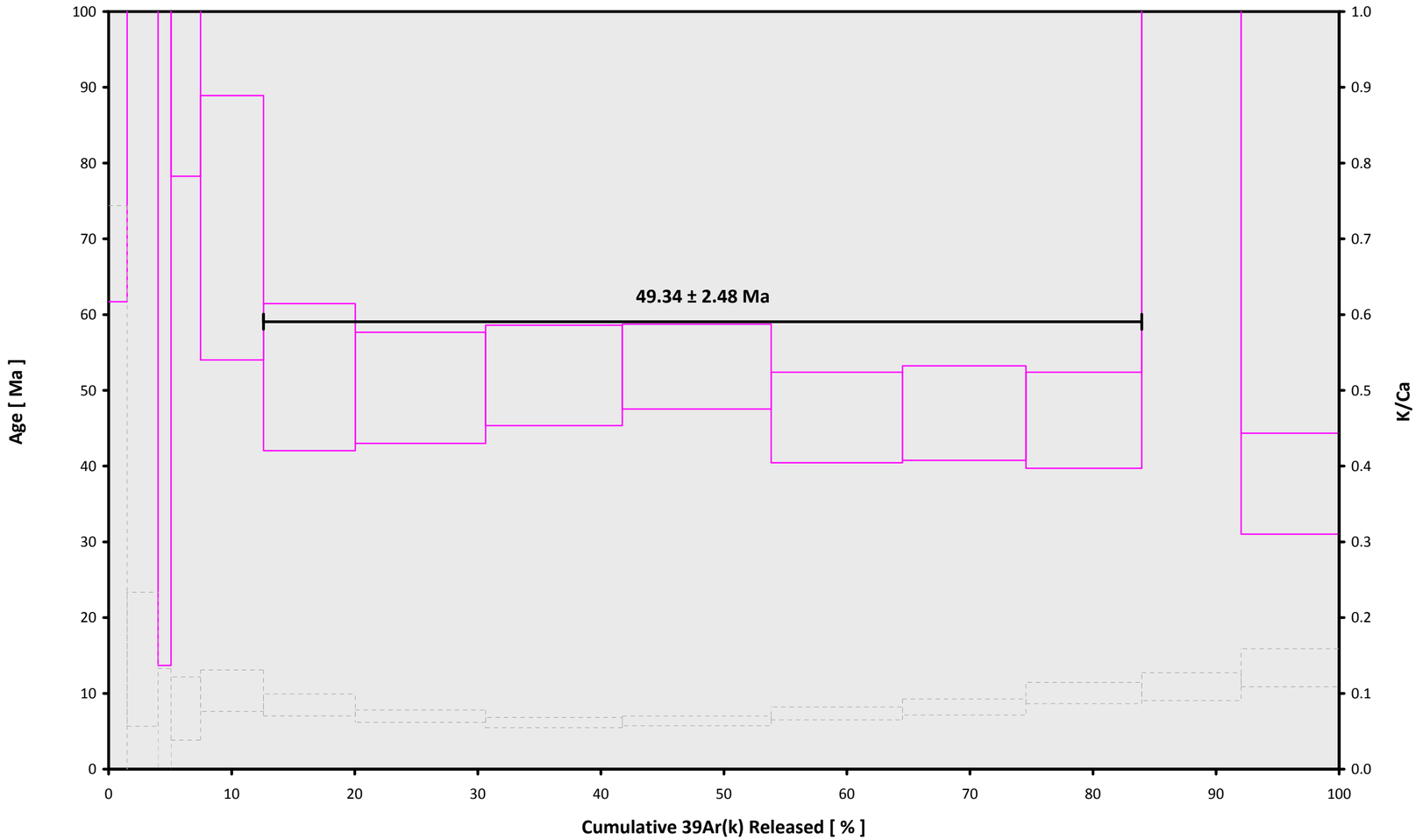
Intercept Values		36Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	37Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	38Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	39Ar ± 1σ (SE) [fA]	r2	Regression (type,n)	40Ar ± 1σ (SE) [fA]	r2	Regression (type,n)
14D34803	2.0 %	0.1244978 ± 0.0007936	0.0083	EXP 150 of 150	0.1387341 ± 0.0329059	0.0050	EXP 150 of 150	0.0549622 ± 0.0250616	0.0051	EXP 150 of 150	0.1413479 ± 0.0235802	0.0449	EXP 150 of 150	44.829373 ± 0.033810	0.9940	EXP 150 of 150
14D34804	3.0 %	0.2228483 ± 0.0011268	0.3685	EXP 150 of 150	0.2532944 ± 0.0284782	0.0014	EXP 150 of 150	0.0274116 ± 0.0259771	0.0039	EXP 150 of 150	0.2372396 ± 0.0249516	0.0149	EXP 150 of 150	80.053780 ± 0.033056	0.9820	EXP 150 of 150
14D34806	4.0 %	0.1844142 ± 0.0010852	0.2255	EXP 150 of 150	0.2360119 ± 0.0300568	0.0019	EXP 150 of 150	0.0373348 ± 0.0231456	0.0008	EXP 150 of 150	0.1614245 ± 0.0240082	0.0568	EXP 150 of 150	64.441821 ± 0.029892	0.9883	EXP 150 of 150
14D34807	5.0 %	0.1432930 ± 0.0008592	0.1171	EXP 150 of 150	0.3864117 ± 0.0257820	0.0000	EXP 150 of 150	0.0177573 ± 0.0233588	0.0274	EXP 150 of 150	0.2455477 ± 0.0258985	0.0261	EXP 149 of 150	51.920782 ± 0.030355	0.9919	EXP 150 of 150
14D34809	6.5 %	0.2272485 ± 0.0010993	0.3068	EXP 150 of 150	0.6096061 ± 0.0307787	0.0008	EXP 150 of 150	0.0156749 ± 0.0261753	0.0029	EXP 150 of 150	0.3989946 ± 0.0240785	0.0025	EXP 150 of 150	78.185168 ± 0.036383	0.9630	EXP 150 of 150
14D34810	8.0 %	0.2047401 ± 0.0009999	0.3177	EXP 150 of 150	1.0432444 ± 0.0283351	0.0021	EXP 150 of 150	0.0205358 ± 0.0283511	0.0056	EXP 149 of 150	0.5389144 ± 0.0256023	0.0206	EXP 150 of 150	71.496255 ± 0.033653	0.9771	EXP 150 of 150
14D34812	10.0 %	0.3223443 ± 0.0013023	0.5865	EXP 150 of 150	1.7468568 ± 0.0279419	0.0428	EXP 150 of 150	0.0025016 ± 0.0258273	0.0075	EXP 150 of 150	0.7194725 ± 0.0253810	0.0322	EXP 150 of 150	111.156698 ± 0.038494	0.1250	EXP 150 of 150
14D34813	12.0 %	0.1905338 ± 0.0010742	0.1761	EXP 150 of 150	2.0713350 ± 0.0314441	0.1505	EXP 150 of 150	0.0185159 ± 0.0242485	0.0002	EXP 150 of 150	0.7463805 ± 0.0259552	0.0114	EXP 150 of 150	71.011449 ± 0.034518	0.9746	EXP 150 of 150
14D34815	14.5 %	0.0614790 ± 0.0005971	0.3345	EXP 149 of 150	2.1656412 ± 0.0305577	0.1160	EXP 149 of 150	0.0574107 ± 0.0283381	0.0012	EXP 149 of 150	0.8038684 ± 0.0249343	0.0001	EXP 149 of 150	32.299983 ± 0.028532	0.9946	EXP 150 of 150
14D34816	17.0 %	0.0844693 ± 0.0007580	0.0245	EXP 150 of 150	1.6669320 ± 0.0309431	0.0531	EXP 150 of 150	0.0220011 ± 0.0278223	0.0004	EXP 150 of 150	0.7122390 ± 0.0253838	0.0031	EXP 150 of 150	36.472745 ± 0.033067	0.9914	EXP 150 of 150
14D34818	20.0 %	0.0347946 ± 0.0005158	0.5086	EXP 150 of 150	1.3997990 ± 0.0320792	0.0408	EXP 150 of 150	0.0827250 ± 0.0290649	0.0049	EXP 150 of 150	0.6749062 ± 0.0259918	0.0157	EXP 149 of 150	20.617221 ± 0.033233	0.9938	EXP 150 of 150
14D34819	23.0 %	0.0329310 ± 0.0005201	0.5178	EXP 150 of 150	1.0800043 ± 0.0307602	0.0437	EXP 149 of 150	0.0629946 ± 0.0248882	0.0057	EXP 150 of 150	0.6358585 ± 0.0235652	0.0053	EXP 150 of 150	19.280203 ± 0.030566	0.9947	EXP 150 of 150
14D34821	26.0 %	0.0537224 ± 0.0006255	0.2677	EXP 150 of 150	0.8672863 ± 0.0256491	0.0005	EXP 150 of 150	0.0819136 ± 0.0272389	0.0160	EXP 150 of 150	0.5374854 ± 0.0255837	0.0284	EXP 150 of 150	42.658362 ± 0.031934	0.9878	EXP 150 of 150
14D34823	28.0 %	0.0304961 ± 0.0004458	0.5796	EXP 150 of 150	0.7383711 ± 0.0293797	0.0148	EXP 150 of 150	0.0881029 ± 0.0271000	0.0072	EXP 150 of 150	0.4831735 ± 0.0246301	0.0001	EXP 150 of 150	14.826501 ± 0.024284	0.9965	EXP 150 of 150

Project Info		Analyst	Irradiation	X-pos	Y-pos	Z/H-pos	Project	Experiment	Nmb
14D34803	2.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34804	3.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34806	4.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34807	5.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34809	6.5 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34810	8.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34812	10.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34813	12.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34815	14.5 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34816	17.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34818	20.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34819	23.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34821	26.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	01
14D34823	28.0 %	Kevin Konrad	14-OSU-06	0.00	0.00	53.24	French Polynesia\Rurutu (13-INT-08)	14D34802	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
14D34803	2.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	16	22	1
14D34804	3.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	16	34	1
14D34806	4.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	16	59	1
14D34807	5.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	17	12	1
14D34809	6.5 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	17	36	1
14D34810	8.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	17	49	1
14D34812	10.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	18	14	1
14D34813	12.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	18	26	1
14D34815	14.5 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	18	51	1
14D34816	17.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	19	3	1
14D34818	20.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	19	28	1
14D34819	23.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	19	41	1
14D34821	26.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	20	6	1
14D34823	28.0 %	RR1310-D07-09	Clinopyroxene	Rurutu Hotspot	FCT-NM (6A34-14)	28.201	0.082	Kuiper et al (2008)	9.14509	0.106	0.00171867	0.106	303.323	0.166	0.9935439	0.071	1	4.8E-14	13	DEC	2014	20	30	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
14D34803	2.0 %	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
14D34804	3.0 %	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
14D34806	4.0 %	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
14D34807	5.0 %	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
14D34809	6.5 %	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
14D34810	8.0 %	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
14D34812	10.0 %	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
14D34813	12.0 %	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
14D34815	14.5 %	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
14D34816	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
14D34818	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
14D34819	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
14D34821	26.0 %	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
14D34823	28.0 %	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

14D34802.AGE >>> RR1310-D07-09 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
49.34 ± 2.48
TOTAL FUSION
69.31 ± 3.20
NORMAL ISOCHRON
48.43 ± 3.34
INVERSE ISOCHRON
48.75 ± 3.40

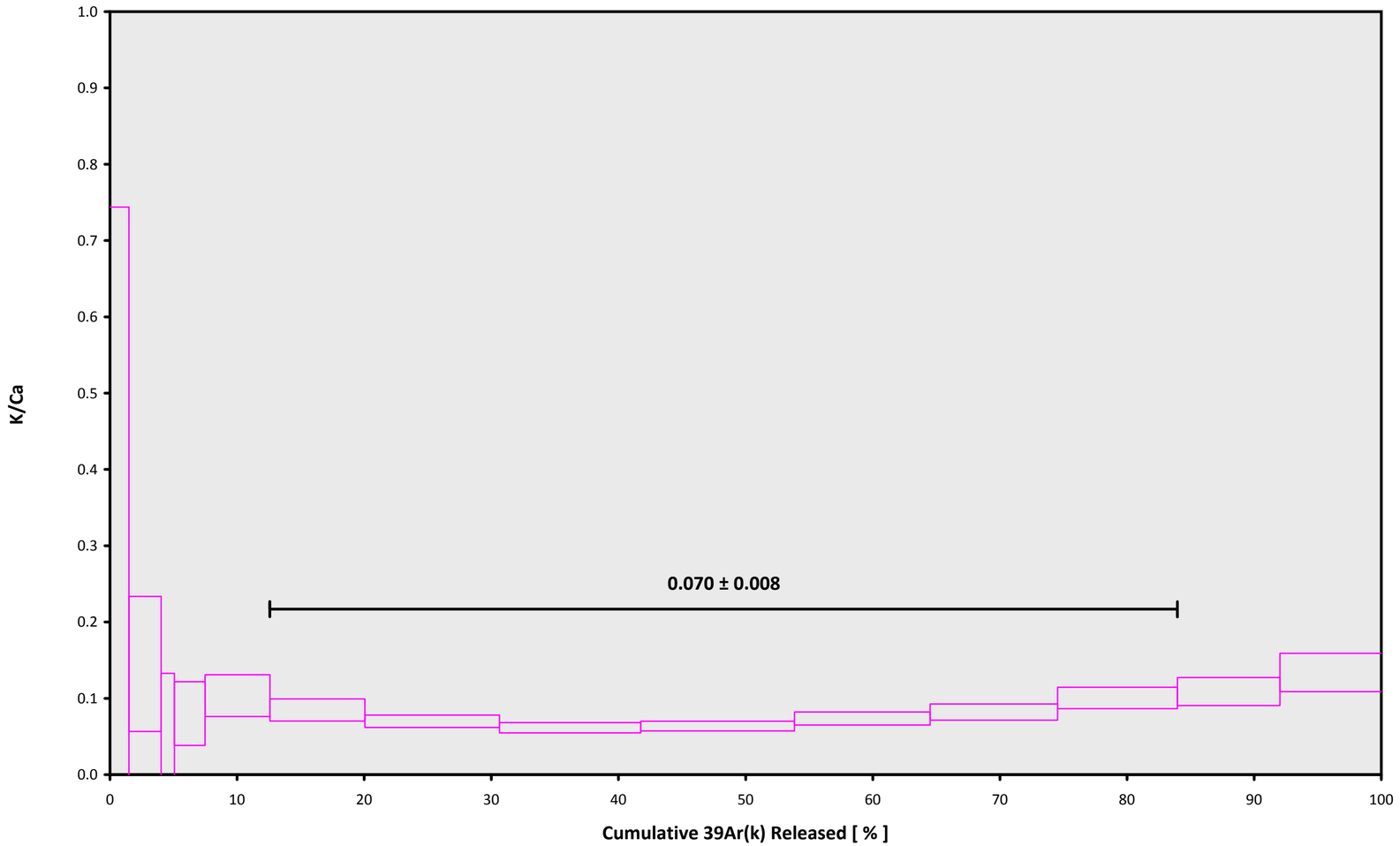
MSWD (PROBABILITY)
0.90 (50%)

Sample Info

Clinopyroxene
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-06 (6A34-14)
J = 0.00171867 ± 0.00000182

14D34802.AGE >>> RR1310-D07-09 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
49.34 ± 2.48
TOTAL FUSION
69.31 ± 3.20
NORMAL ISOCHRON
48.43 ± 3.34
INVERSE ISOCHRON
48.75 ± 3.40

Sample Info

Clinopyroxene
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-06 (6A34-14)
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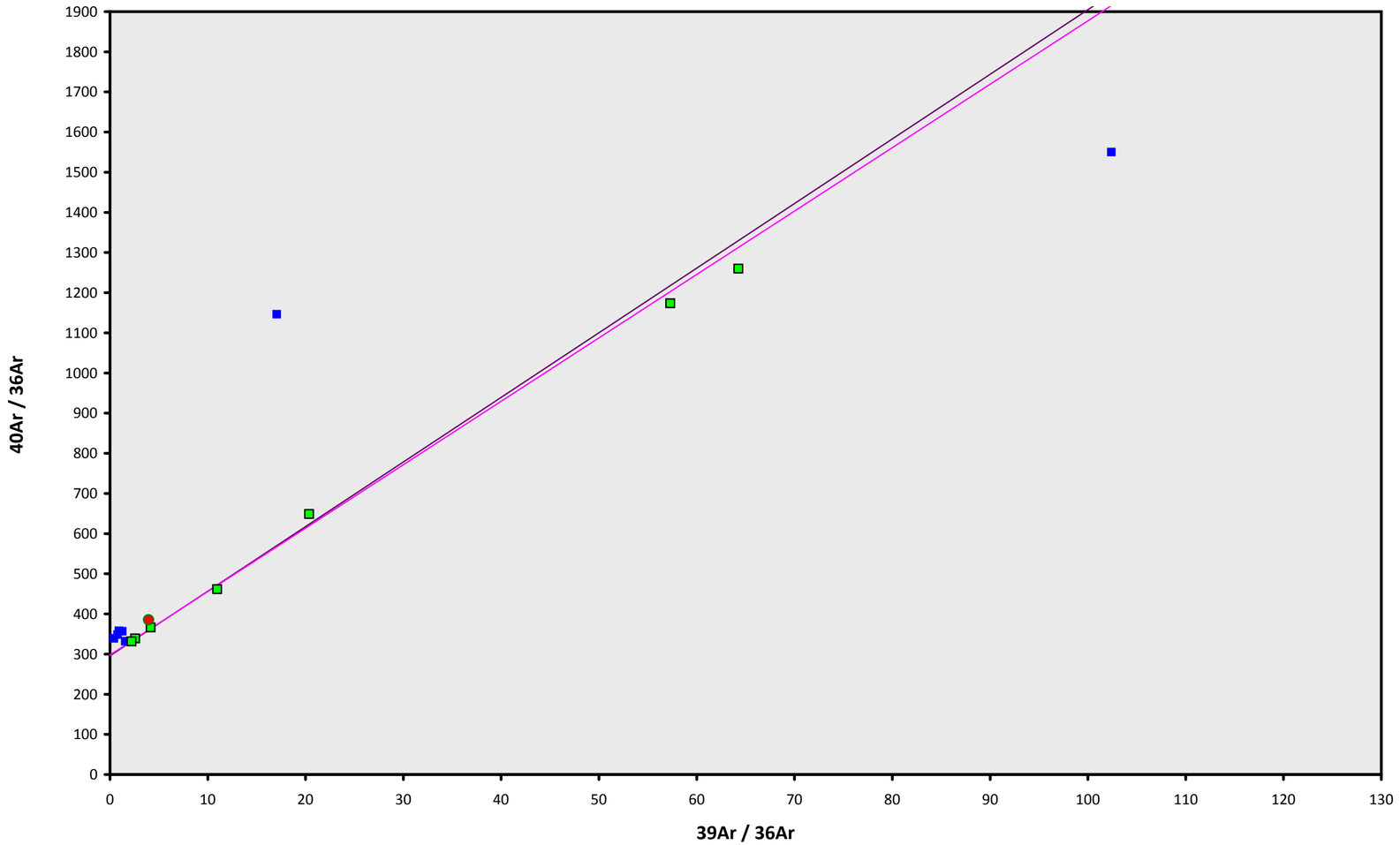
14D34802.AGE >>> RR1310-D07-09 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
49.34 ± 2.48
TOTAL FUSION
69.31 ± 3.20
NORMAL ISOCHRON
48.43 ± 3.34
INVERSE ISOCHRON
48.75 ± 3.40

MSWD (PROBABILITY)
0.94 (45%)

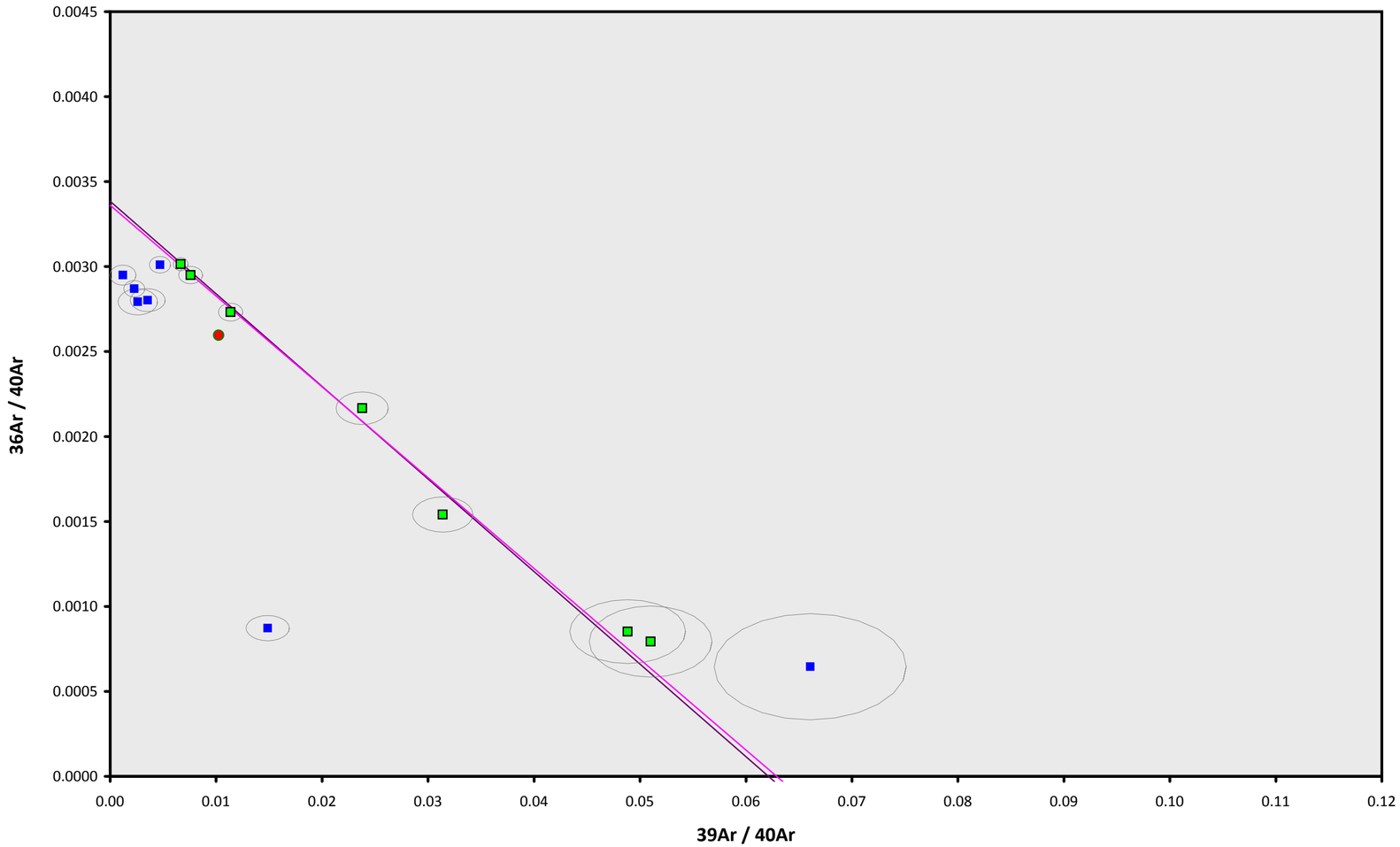
40AR/36AR INTERCEPT
297.9 ± 5.2

Sample Info

Clinopyroxene
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-06 (6A34-14)
J = 0.00171867 ± 0.00000182

14D34802.AGE >>> RR1310-D07-09 >>> FRENCH POLYNESIA | RURUTU (13-INT-08) PROJECT



Ar-Ages in Ma

WEIGHTED PLATEAU
49.34 ± 2.48
TOTAL FUSION
69.31 ± 3.20
NORMAL ISOCHRON
48.43 ± 3.34
INVERSE ISOCHRON
48.75 ± 3.40

MSWD (PROBABILITY)
0.95 (45%)

SPREADING FACTOR
70.5%

40AR/36AR INTERCEPT
297.6 ± 5.3

Sample Info

Clinopyroxene
Rurutu Hotspot
Kevin Konrad

IRR = 14-OSU-06 (6A34-14)
J = 0.00171867 ± 0.00000182