Data Repository Item 2009025

#	40/39	σ	39/40($\times10^{-4}$)	σ	36/40($\times10^{-6}$)	σ	t [Ma]	σ
1	158.69	0.65	62.11	0.20	48.49	7.04	576.42	6.07
2	134.66	0.76	72.52	0.33	79.24	8.99	500.11	7.36
3	146.04	0.88	67.92	0.35	27.21	7.85	536.65	8.36
4	136.34	2.12	67.59	0.76	265.29	26.06	505.56	20.57
5	164.62	1.64	60.67	0.50	4.12	16.82	594.74	15.16
6	145.38	0.96	67.88	0.36	44.41	11.09	534.54	9.18
7	153.40	0.66	64.68	0.23	26.31	6.65	559.88	6.22
8	151.60	1.65	64.39	0.54	80.89	18.10	554.22	15.55
9	145.26	1.07	66.99	0.39	90.92	11.54	534.18	10.21
10	149.68	1.49	65.87	0.55	47.51	15.73	548.16	14.16
11	148.46	1.12	66.63	0.42	36.36	11.52	544.33	10.65
12	145.71	1.69	68.09	0.65	26.68	16.14	535.58	16.12
13	150.75	0.50	64.70	0.19	83.11	4.18	551.56	4.71
14	160.67	0.60	61.30	0.21	50.87	4.41	582.57	5.61
15	147.40	0.73	67.43	0.28	20.71	7.33	540.97	6.98
16	139.04	0.45	71.42	0.20	23.47	4.32	514.25	4.32
17	147.17	1.87	67.12	0.72	41.34	16.74	540.22	17.76
18	147.45	1.52	67.40	0.59	21.07	12.99	541.12	14.44
19	136.34	0.96	73.10	0.43	11.51	8.82	505.54	9.33
20	132.07	0.84	75.22	0.41	22.19	9.25	491.70	8.25
21	154.10	0.51	63.05	0.18	95.98	4.11	562.07	4.77
22	158.97	0.70	61.19	0.24	92.04	5.15	577.28	6.51
23	154.12	0.56	64.32	0.20	29.70	5.13	562.14	5.30
24	164.22	0.87	61.16	0.28	–	–	593.51	8.07
25	167.89	1.27	59.69	0.38	–	–	604.80	11.71
26	144.61	0.64	68.94	0.27	10.26	6.17	532.08	6.14
27	143.60	1.20	68.46	0.46	57.00	13.68	528.88	11.51
28	147.17	0.74	67.32	0.29	31.11	6.97	540.24	7.03
29	149.24	1.12	65.83	0.41	59.30	11.39	546.79	10.59
30	143.22	1.57	64.86	0.55	240.72	16.79	527.65	15.06
31	140.11	0.60	70.47	0.27	42.58	5.07	517.70	5.75
32	139.03	1.38	71.02	0.61	42.67	12.31	514.23	13.29
33	162.35	1.07	61.39	0.35	11.48	9.63	587.75	9.94
34	143.89	0.84	69.12	0.33	18.47	9.34	529.80	8.02
35	154.70	1.62	64.10	0.57	28.44	14.91	563.95	15.26
36	156.65	1.79	63.48	0.62	19.14	16.15	570.05	16.76
37	158.25	0.80	61.20	0.25	106.49	7.92	575.04	7.49

38	142.11	0.70	67.45	0.27	140.21	7.72	524.12	6.73
39	142.33	1.08	69.02	0.42	59.47	11.52	524.81	10.39
40	160.60	0.67	61.80	0.23	25.44	4.25	582.33	6.19
41	143.93	0.78	67.78	0.25	82.79	9.97	529.91	7.42
42	141.58	1.26	69.95	0.48	32.63	16.09	522.40	12.12
43	152.54	0.57	63.71	0.20	95.54	4.95	557.18	5.35
44	157.31	0.67	62.15	0.21	75.24	6.70	572.12	6.25
45	143.30	1.31	68.50	0.52	62.18	12.46	527.92	12.51
46	138.42	1.21	70.36	0.49	87.93	13.30	512.27	11.65
47	158.41	1.44	63.10	0.49	1.43	10.37	575.55	13.40
48	144.48	0.77	68.89	0.31	15.72	7.95	531.68	7.34
49	151.90	1.03	64.82	0.37	52.01	9.93	555.17	9.71
50	142.07	0.88	70.02	0.37	17.90	7.91	523.97	8.48

Table 1: $^{40}Ar/^{39}Ar$ single grain ages (J = 0.0023722 ± 0.0000090)

T (^{o}C)	40/39	σ	39/40($\times 10^{-4}$)	σ	36/40($\times 10^{-6}$)	σ	Σ 39	t [Ma]	σ
450	119.59	0.09	80.70	0.05	118.25	0.82	0.010	450.02	0.88
500	114.60	0.10	86.34	0.07	35.75	0.59	0.023	433.32	0.99
550	121.95	0.11	81.05	0.07	39.45	0.45	0.042	457.87	1.08
600	129.38	0.13	76.71	0.08	25.31	0.28	0.068	482.35	1.31
650	135.86	0.15	73.22	0.08	17.60	0.24	0.096	503.43	1.41
700	141.41	0.15	70.35	0.07	17.49	0.29	0.123	521.27	1.44
750	144.82	0.15	68.70	0.07	17.02	0.28	0.148	532.16	1.42
800	146.73	0.15	67.70	0.07	22.55	0.30	0.174	538.22	1.45
850	148.68	0.82	66.75	0.14	25.43	16.36	0.202	544.41	7.81
900	146.03	0.82	68.39	0.15	4.38	19.03	0.236	535.99	7.80
925	148.74	0.12	67.02	0.05	10.76	0.45	0.246	544.59	1.16
950	149.16	0.15	66.80	0.07	12.20	0.38	0.259	545.93	1.40
975	149.41	0.13	66.70	0.06	11.70	0.42	0.273	546.70	1.24
1000	150.23	0.14	66.31	0.06	12.82	0.34	0.291	549.28	1.34
1025	150.41	0.15	66.25	0.06	12.06	0.32	0.311	549.85	1.40
1050	150.21	0.15	66.33	0.07	12.38	0.34	0.333	549.22	1.42
1075	150.71	0.15	66.07	0.07	14.58	0.31	0.356	550.82	1.46
1100	151.85	0.17	65.50	0.07	18.11	0.22	0.382	554.40	1.61
1100	145.21	0.76	67.31	0.12	76.40	13.26	0.420	533.39	7.28
1100	151.17	0.50	65.17	0.17	50.09	5.80	0.499	552.26	4.68
1100	153.68	0.43	64.27	0.11	41.46	7.98	0.573	560.12	4.07
1100	152.53	1.32	64.06	0.13	77.41	25.06	0.605	556.53	12.40
1100	154.55	0.61	63.32	0.13	72.29	9.78	0.654	562.85	5.76

1125	154.34	0.24	63.71	0.08	56.59	2.56	0.659	562.20	2.21
1140	150.08	0.36	64.33	0.10	116.68	5.63	0.680	548.82	3.40
1155	151.54	0.65	63.85	0.07	109.45	12.65	0.696	553.43	6.11
1170	153.14	0.40	63.59	0.11	88.60	5.95	0.716	558.43	3.77
1185	154.47	0.37	62.56	0.10	113.91	5.26	0.835	562.61	3.48
1200	159.88	0.33	61.37	0.11	63.80	3.14	0.983	579.46	3.08
1215	161.64	0.35	61.67	0.08	10.80	5.11	0.998	584.92	3.29
1230	166.05	3.42	62.05	0.58	–	–	0.999	598.47	31.49
1250	131.05	23.01	60.57	2.83	698.13	384.73	1.000	487.80	225.18
1275	67.30	23.48	54.58	3.14	2141.25	386.21	1.000	266.88	259.61
1300	32.48	24.42	92.63	6.49	2365.96	703.72	1.000	133.75	290.73

Table 2: $^{40}Ar/^{39}Ar$ step-heating experiment (J = 0.0023691 ± 0.0000090)

#	N_s	N_i	t [Ma]	σ	U [ppm]	#	N_s	N_i	t [Ma]	σ	U [ppm]
1	258	25	621	131	13	37	303	41	451	76	162
2	203	35	356	66	14	128	133	20	407	98	161
3	138	21	402	95	15	114	147	22	409	94	166
4	620	87	435	51	16	198	165	41	249	44	95
5	186	29	393	79	17	141	93	13	437	130	93
6	249	45	340	56	18	183	461	64	440	59	104
7	205	27	463	95	19	158	107	15	435	120	135
8	149	21	433	101	20	85	166	25	406	88	98
9	74	10	451	152	21	162	367	67	337	45	112
10	276	77	222	29	22	187	319	49	399	62	126
11	197	27	445	92	23	99	190	31	376	73	146
12	241	37	399	71	24	84	96	16	368	100	127
					25	173	26	60	407	86	

Table 3: Zircon fission track data ($\rho_D = 8.33\times10^5 cm^{-2}$, ζ = 147 yr cm^2).

#	N_s	N_i	t [Ma]	σ	U [ppm]	Cl [wt %]	#	N_s	N_i	t [Ma]	σ	U [ppm]	Cl [wt %]

1	35	15	140	44	8	0.031	31	45	7	379	156	2	0.023
2	37	14	159	51	20	0.094	32	71	20	212	56	11	0.006
3	74	17	259	72	6	0.006	33	39	7	330	138	3	0.052
4	74	18	245	67	10	0.007	34	7	2	209	168	1	0.019
5	134	20	395	99	7	0.007	35	141	38	222	44	18	0.019
6	35	7	297	125	4	0.006	36	47	7	396	163	3	0.105
7	32	10	192	71	5	0.058	37	26	7	222	96	4	0.015
8	85	29	176	40	14	0.012	38	533	103	307	40	39	0.071
9	90	21	255	65	25	0.012	39	74	13	337	104	8	0.033
10	55	7	461	188	3	0.011	40	114	31	220	47	13	0.031
11	93	29	192	43	20	0.026	41	48	18	160	46	6	0.006
12	12	4	180	105	7	0.034	42	118	25	281	65	11	0.08
13	39	9	258	97	10	0.011	43	220	48	273	48	33	0.061
14	26	8	195	80	8	0.159	44	55	8	405	156	14	0.048
15	25	12	125	45	11	0.011	45	573	118	289	36	40	0.015
16	30	7	255	109	6	0.116	46	23	5	274	136	5	0.007
17	64	17	225	63	12	0.08	47	241	42	340	62	14	0.058
18	44	9	290	108	5	0.027	48	32	10	192	71	3	0.008
19	9	11	50	23	5	0.038	49	154	20	452	112	7	0.031
20	123	32	229	48	39	0.053	50	128	16	469	129	6	0.037
21	59	15	235	70	14	0.014	51	28	16	105	34	5	0.042

22	20	12	100	37	7	0.06	52	149	36	247	49	12	0.018
23	8	2	239	189	1	0.011	53	49	5	570	271	2	0.005
24	109	25	260	61	19	0.008	54	26	6	258	118	3	0.116
25	102	20	303	77	8	0.006	55	27	3	525	322	1	0.016
26	132	21	371	91	10	0.001	56	407	89	272	37	30	0.048
27	78	13	355	109	6	0.011	57	42	5	491	235	2	0.004
28	49	9	323	119	5	0.038	58	279	109	154	21	53	0.064
29	127	22	342	83	7	0.011	59	66	14	280	85	9	0.009
30	205	85	145	21	41	0.019	60	13	4	195	112	5	0.002

Table 4: Apatite fission track data ($\rho_D = 4.4\times10^5 cm^{-2}$, ζ =276 yr cm^2).

^{232}Th [fmol]	err	^{238}U [fmol]	σ	^{4}He [fmol]	σ	F_t	t [Ma]	σ
147.26	15.41	176.67	18.45	10.21	0.11	0.74	50.7	4.4
196.79	20.27	335.79	34.34	12.69	0.13	0.78	33.0	2.9
216.06	22.38	382.99	39.18	31.94	0.28	0.74	77.3	6.8
2101.62	215.68	1581.32	161.79	162.26	1.34	0.78	77.5	6.2
304.61	43.98	48.66	11.93	5.04	0.02	0.79	41.7	5.8
1165.71	49.47	248.71	19.15	30.03	0.08	0.73	61.9	5.3
181.15	45.37	47.89	10.35	4.20	0.09	0.77	47.3	8.2

Table 5: (U-Th)/He data. The scatter in the ages can be explained by the inadequate α-ejection correction (Figure 8).