

Table A2 Summary of zircon grain fission-track data.

Sample Grain No	Fission Track Data			LA-ICPMS Data		Calculated			Remarks
	Ns	Area (10^{-6} cm ²)	ρ_s (10^6 cm ⁻²)	Area-corrected N_U	ρ_U (10^{11} cm ⁻²)	U (ppm)	Age (Ma) t $\pm 2\sigma$		
OA-a1	$\rho_{U\text{-std}} = 2.544 \times 10^{10} / \text{cm}^2$			$\zeta = 20.1 \pm 2.2 (1\sigma)$					
1	104	9.0	11.56	2803865	3.115	1224	19.0	7.1	
2	54	16.0	3.38	2375563	1.485	584	11.6	4.9	
3	9	6.0	1.50	261446	0.436	171	17.6	13.0	
4	6	1.0	6.00	243992	2.440	959	12.6	11.0	
5	not measured								
6	28	8.0	3.50	433350	0.542	213	33.0	16.3	
7	not measured								
8	5	16.0	0.31	238354	0.149	59	10.7	10.2	
9	99	156.0	0.63	2366010	0.152	60	21.4	8.0	
10	not measured								
11	14	60.0	0.23	668346	0.111	44	10.7	6.7	
12	9	36.0	0.25	255012	0.071	28	18.1	13.3	
13	4	8.0	0.50	172360	0.215	85	11.9	12.5	
14	not measured								
15	11	16.0	0.69	231009	0.144	57	24.4	16.6	
16	5	12.0	0.42	117154	0.098	38	21.8	20.7	
17	4	12.0	0.33	207087	0.173	68	9.9	10.4	
18	5	12.0	0.42	114841	0.096	38	22.3	21.1	
19	4	6.0	0.67	129391	0.216	85	15.8	16.6	
20	9	15.0	0.60	179690	0.120	47	25.6	18.9	
21	40	12.0	3.33	625584	0.521	205	32.7	14.6	
22	3	4.0	0.75	130840	0.327	129	11.7	14.1	
23	4	12.0	0.33	278402	0.232	91	7.4	7.7	
24	8	8.0	1.00	159485	0.199	78	25.7	19.9	
25	2	4.0	0.50	143398	0.358	141	7.1	10.4	
Pooled (n= 21)	427	429.0	0.995	12135179	0.283		18.0	5.9	
OA-a5	$\rho_{U\text{-std}} = 4.330 \times 10^{11} / \text{cm}^2$			$\zeta = 18.1 \pm 2.0 (1\sigma)$					
1	15	32.0	0.47	6902840	2.16	50	17.0	10.3	
2	11	10.0	1.10	3338026	3.34	77	25.8	17.6	
3	11	12.0	0.92	4569197	3.81	88	18.9	12.8	
4	23	14.0	1.64	8471097	6.05	140	21.3	11.1	
5	16	12.0	1.33	2978648	2.48	57	42.0	24.8	
6	15	12.0	1.25	3086987	2.57	59	38.0	23.0	
7	11	15.0	0.73	5481451	3.65	84	15.7	10.7	
8	5	8.0	0.63	2556067	3.20	74	15.3	14.5	
9	12	15.0	0.80	5989252	3.99	92	15.7	10.3	
10	8	9.0	0.89	2026499	2.25	52	30.9	23.9	
11	13	8.0	1.63	3223735	4.03	93	31.6	20.1	
12	11	10.0	1.10	5683370	5.68	131	15.2	10.3	
13	18	8.0	2.25	8801745	11.00	254	16.0	9.1	
14	13	9.0	1.44	4208824	4.68	108	24.2	15.4	
15	5	9.0	0.56	3311531	3.68	85	11.8	11.2	
16	16	10.0	1.60	6940467	6.94	160	18.1	10.7	
Pooled (n= 16)	203	193.0	1.05	77569736	4.02		20.5	7.1	
OI-t1	$\rho_{U\text{-std}} = 4.330 \times 10^{11} / \text{cm}^2$			$\zeta = 18.1 \pm 2.0 (1\sigma)$					
1	31	9.0	3.44	18054980	20.06	463	13.5	6.4	
2	11	9.0	1.22	9201163	10.22	236	9.4	6.4	Detrital with older U-Pb age
3	5	12.0	0.42	2449342	2.04	47	16.0	15.2	
4	6	9.0	0.67	5369113	5.97	138	8.8	7.7	
5	18	24.0	0.75	15062964	6.28	145	9.4	5.3	Detrital with older U-Pb age
6	21	12.0	1.75	16892355	14.08	325	9.7	5.3	
7	35	9.0	3.89	21124450	23.47	542	13.0	6.0	
8	7	12.0	0.58	5185298	4.32	100	10.6	8.7	
9	53	6.0	8.83	5212224	8.69	201	79.3	33.2	Detrital with older U-Pb age
10	35	6.0	5.83	2153943	3.59	83	126.3	58.4	Detrital with older U-Pb age
11	41	12.0	3.42	23687004	19.74	456	13.6	6.0	Detrital with older U-Pb age
12	16	12.0	1.33	7169095	5.97	138	17.5	10.3	Detrital with older U-Pb age
13	55	6.0	9.17	6392819	10.65	246	67.2	27.9	Detrital with older U-Pb age
14	6	9.0	0.67	4776155	5.31	123	9.9	8.6	
15	9	8.0	1.13	5795453	7.24	167	12.2	9.0	
16	91	6.0	15.17	5278153	8.80	203	133.9	50.7	Detrital with older U-Pb age
17	37	9.0	4.11	3156064	3.51	81	91.4	41.6	Detrital with older U-Pb age

Table A2 Summary of zircon grain fission-track data (continued).

Sample Grain No	Fission Track Data			LA-ICPMS Data		Calculated			Remarks
	Ns	Area (10 ⁶ cm ²)	ρ_s (10 ⁶ cm ⁻²)	Area-corrected N _U	ρ_U (10 ¹¹ cm ⁻²)	U (ppm)	Age (Ma) t ±2σ		
18	58	8.0	7.25	5546853	6.93	160	81.5	33.5	Detrital with older U-Pb age
Pooled (n= 8)	120	80	1.50	79647146	9.956		11.8	4.3	Adopted
(n= 18:ALL)	535	178	3.01	162507429	9.130		25.8	8.4	
OI-t6	$\rho_{U-std} = 1.728 \times 10^{10} / \text{cm}^2$			$\zeta = 19.0 \pm 2.2 (1\sigma)$					
1	11	12.0	0.92	258829	0.216	125	13.9	9.5	Discordant U-Pb age
2	35	15.0	2.33	292430	0.195	113	39.1	18.2	Detrital with older U-Pb age
3	32	15.0	2.13	330771	0.221	128	31.6	15.1	Discordant U-Pb age
4	14	14.0	1.00	210948	0.151	87	21.7	13.5	Discordant U-Pb age
5	14	21.0	0.67	244502	0.116	67	18.7	11.7	Discordant U-Pb age
6	27	10.0	2.70	1014182	1.014	587	8.7	4.4	Detrital with older U-Pb age
7	24	8.0	3.00	561181	0.701	406	14.0	7.3	Detrital with older U-Pb age
8	104	16.0	6.50	3237671	2.024	1171	10.5	4.0	Detrital with older U-Pb age
9	10	10.0	1.00	238884	0.239	138	13.7	9.7	Discordant U-Pb age
10	25	20.0	1.25	419003	0.210	121	19.5	10.0	Discordant U-Pb age
11	60	10.0	6.00	345413	0.345	200	56.7	23.3	Discordant U-Pb age
12	32	18.0	1.78	383972	0.213	123	27.3	13.0	
13	35	15.0	2.33	806379	0.538	311	14.2	6.6	Detrital with older U-Pb age
14	18	20.0	0.90	617636	0.309	179	9.5	5.4	Detrital with older U-Pb age
15	20	9.0	2.22	547431	0.608	352	12.0	6.6	Detrital with older U-Pb age
16	12	24.0	0.50	281451	0.117	68	14.0	9.2	Discordant U-Pb age
17	80	12.0	6.67	296797	0.247	143	87.7	34.3	Discordant U-Pb age
18	7	9.0	0.78	264064	0.293	170	8.7	7.1	Discordant U-Pb age
19	7	6.0	1.17	201234	0.335	194	11.4	9.4	Detrital with older U-Pb age
20	16	9.0	1.78	207371	0.230	133	25.2	15.0	Discordant U-Pb age
21	11	12.0	0.92	314696	0.262	152	11.4	7.8	
22	30	15.0	2.00	911077	0.607	352	10.8	5.2	Detrital with older U-Pb age
23	3	9.0	0.33	143010	0.159	92	6.9	8.2	
24	21	9.0	2.33	247458	0.275	159	27.7	15.0	Discordant U-Pb age
25	17	6.0	2.83	379761	0.633	366	14.7	8.5	Discordant U-Pb age
26	18	6.0	3.00	348090	0.580	336	16.9	9.7	Detrital with older U-Pb age
27	27	6.0	4.50	433458	0.722	418	20.4	10.2	Discordant U-Pb age
28	13	10.0	1.30	377445	0.377	218	11.3	7.2	Detrital with older U-Pb age
29	15	8.0	1.88	390640	0.488	283	12.6	7.6	Detrital with older U-Pb age
30	not measured								Discordant U-Pb age
Pooled (n= 3)	46	39	1.18	841678	0.216		17.9	7.8	Adopted
Pooled (n= 29:ALL)	784	393	1.99	15147459	0.385		16.9	5.6	
OK-r1	$\rho_{U-std} = 4.330 \times 10^{11} / \text{cm}^2$			$\zeta = 18.1 \pm 2.0 (1\sigma)$					
1	19	25.0	0.76	12070012	4.83	111	12.3	6.9	
2	29	24.0	1.21	14064261	5.86	135	16.2	7.9	
3	19	24.0	0.79	10037325	4.18	97	14.8	8.3	
4	45	24.0	1.88	39029999	16.26	376	9.0	3.9	
5	20	30.0	0.67	16041903	5.35	123	9.8	5.4	
6	19	24.0	0.79	11769583	4.90	113	12.7	7.0	
7	26	15.0	1.73	18876877	12.58	291	10.8	5.4	
8	52	30.0	1.73	19905407	6.64	153	20.5	8.6	
9	24	30.0	0.80	16338671	5.45	126	11.5	5.9	
10	27	40.0	0.68	12652488	3.16	73	16.7	8.3	
11	95	15.0	6.33	53605894	35.74	825	13.9	5.2	
12	63	24.0	2.63	27147733	11.31	261	18.2	7.3	
13	85	40.0	2.13	50530946	12.63	292	13.2	5.1	
14	39	40.0	0.98	25044933	6.26	145	12.2	5.5	
15	49	28.0	1.75	21903022	7.82	181	17.5	7.5	
16	57	40.0	1.43	34328724	8.58	198	13.0	5.4	
17	20	20.0	1.00	10983813	5.49	127	14.3	7.8	
18	31	36.0	0.86	21433355	5.95	137	11.3	5.4	
Pooled (n= 18)	719	509	1.41	415764948	8.168		13.6	4.4	
OK-r2	$\rho_{U-std} = 1.728 \times 10^{10} / \text{cm}^2$			$\zeta = 19.0 \pm 2.2 (1\sigma)$					
1	50	36.0	1.39	1063591	0.295	171	15.4	6.6	
2	31	25.0	1.24	923244	0.369	214	11.0	5.3	
3	34	20.0	1.70	873276	0.437	253	12.7	6.0	
4	24	12.0	2.00	466442	0.389	225	16.8	8.7	

Table A2 Summary of zircon grain fission-track data (continued).

Sample Grain No	Fission Track Data			LA-ICPMS Data		Calculated			Remarks
	Ns	Area (10 ⁶ cm ²)	ρ_s (10 ⁶ cm ⁻²)	Area-corrected N _U	ρ_U (10 ¹¹ cm ⁻²)	U (ppm)	Age (Ma) t ±2σ		
5	30	30.0	1.00	768651	0.256	148	12.8	6.2	
6	26	25.0	1.04	821104	0.328	190	10.4	5.3	
7	12	18.0	0.67	467222	0.260	150	8.4	5.6	
8	35	20.0	1.75	570884	0.285	165	20.1	9.4	
9	32	25.0	1.28	1645278	0.658	381	6.4	3.0	
10	29	15.0	1.93	587851	0.392	227	16.1	7.9	
11	21	25.0	0.84	889861	0.356	206	7.7	4.2	
12	34	25.0	1.36	810642	0.324	188	13.7	6.4	
13	20	12.0	1.67	476759	0.397	230	13.7	7.6	
14	29	25.0	1.16	821531	0.329	190	11.6	5.7	
15	30	18.0	1.67	692697	0.385	223	14.2	6.9	
16	40	25.0	1.60	951446	0.381	220	13.8	6.2	
17	31	25.0	1.24	816605	0.327	189	12.4	6.0	
18	45	18.0	2.50	830000	0.461	267	17.7	7.8	
19	43	15.0	2.87	1631109	1.087	629	8.6	3.8	
20	41	25.0	1.64	988789	0.396	229	13.6	6.1	
21	47	25.0	1.88	855243	0.342	198	18.0	7.8	
22	31	24.0	1.29	570346	0.238	138	17.8	8.6	
23	44	25.0	1.76	1353194	0.541	313	10.6	4.7	
24	27	16.0	1.69	578316	0.361	209	15.3	7.7	
25	26	20.0	1.30	751496	0.376	217	11.3	5.7	
26	25	12.0	2.08	731376	0.609	353	11.2	5.7	
27	22	15.0	1.47	672136	0.448	259	10.7	5.7	
28	26	20.0	1.30	817400	0.409	237	10.4	5.3	
29	31	16.0	1.94	642408	0.402	232	15.8	7.6	
30	36	16.0	2.25	645607	0.404	234	18.2	8.4	
Pooled (n=30)	952	628	1.52	24714506	0.394		12.6	4.1	

N_s, Number of spontaneous tracks; ρ_s , Spontaneous track density; N_U, Total count of ²³⁸U by LA-ICPMS; ρ_U , ²³⁸U-count density; std, U-standard