

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 08020).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		ρ [§]	Ages [Ma] ¶		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		f ²⁰⁶ % ¹	Concordance ²	
				²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.		²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.			
<i>Size fraction: >400 μm</i>																			
01	35	42	b-0	0.1542	0.0031	1.475	0.053	0.0694	0.0021	0.55	924	17	920	22	911	62	0.51	101.5	
02	35	180	b-0	0.1571	0.0030	1.498	0.040	0.0692	0.0013	0.70	941	17	930	16	904	39	0.00	104.1	
03a	35	136	b-0	0.1195	0.0043	1.139	0.050	0.0692	0.0017	0.82	728	25	772	24	903	52	0.30	80.6	
03b	35	58	b-0	0.1517	0.0040	1.443	0.062	0.0690	0.0023	0.62	910	23	907	26	899	69	2.67	101.3	
03c	35	54	b-0	0.1109	0.0028	0.963	0.037	0.0630	0.0019	0.64	678	16	685	19	708	63	0.63	95.8	
04	35	57	b-0	0.1138	0.0030	1.179	0.050	0.0752	0.0025	0.63	695	17	791	23	1073	66	0.08	64.8	
05a	35	158	b-0	0.1521	0.0053	1.455	0.068	0.0694	0.0022	0.75	913	30	912	28	910	64	0.06	100.3	
05b	35	38	b-0	0.1520	0.0046	1.466	0.069	0.0700	0.0025	0.65	912	26	917	28	927	73	0.31	98.4	
06	35	55	b-0	0.1612	0.0046	1.582	0.070	0.0712	0.0024	0.65	964	25	963	27	963	69	0.00	100.1	
07	35	65	b-0	0.1502	0.0053	1.440	0.080	0.0695	0.0030	0.63	902	30	906	33	915	89	0.02	98.6	
08a	35	174	b-0	0.1100	0.0029	1.043	0.040	0.0688	0.0019	0.69	673	17	725	20	892	58	0.06	75.5	
08b	35	205	b-0	0.1534	0.0044	1.472	0.058	0.0696	0.0019	0.73	920	25	919	24	916	56	0.02	100.5	
08c	35	69	b-0	0.1530	0.0045	1.487	0.066	0.0705	0.0023	0.66	918	25	925	27	943	68	0.00	97.3	
09	35	55	b-0	0.1548	0.0054	1.495	0.067	0.0701	0.0020	0.78	928	30	929	27	931	57	0.00	99.6	
10	35	65	b-0	0.1521	0.0040	1.461	0.049	0.0697	0.0014	0.80	912	23	914	20	919	41	0.00	99.3	
11	35	173	b-0	0.1523	0.0043	1.454	0.050	0.0692	0.0014	0.82	914	24	912	21	906	41	0.08	100.9	
12	35	48	b-0	0.1552	0.0046	1.514	0.057	0.0708	0.0016	0.79	930	26	936	23	951	47	0.00	97.7	
13	35	82	b-0	0.1550	0.0045	1.502	0.055	0.0703	0.0016	0.80	929	25	931	22	938	45	0.11	99.0	
14	35	51	b-0	0.1259	0.0026	1.203	0.036	0.0693	0.0015	0.68	764	15	802	17	908	45	0.12	84.1	
15	35	293	b-0	0.1506	0.0044	1.433	0.050	0.0690	0.0013	0.84	905	25	903	21	899	38	0.08	100.6	
<i>Size fraction: 300-400 μm</i>																			
16	35	43	y,t-0	0.1653	0.0029	1.671	0.050	0.0733	0.0018	0.59	986	16	998	19	1023	49	0.35	96.4	
17	35	232	y,t-0	0.1561	0.0058	1.492	0.067	0.0693	0.0017	0.84	935	33	927	27	908	50	0.28	103.0	
18	35	65	y,t-0	0.1526	0.0045	1.440	0.058	0.0685	0.0018	0.74	915	25	906	24	883	56	0.62	103.7	
19	35	367	y,t-0	0.1582	0.0045	1.535	0.055	0.0704	0.0016	0.79	947	25	945	22	940	46	0.05	100.7	
20	35	227	y,t-0	0.1540	0.0025	1.483	0.039	0.0698	0.0015	0.61	924	14	924	16	924	43	0.09	100.0	
21	35	93	y,t-0	0.1565	0.0053	1.523	0.068	0.0706	0.0021	0.75	938	29	940	27	945	60	0.00	99.3	
22	35	42	y,t-0	0.1130	0.0035	1.113	0.046	0.0715	0.0019	0.75	690	20	760	22	971	55	0.00	71.1	
23a	35	91	y,t-0	0.1522	0.0049	1.499	0.066	0.0714	0.0022	0.73	913	27	930	27	970	62	0.04	94.2	
23b	35	56	y,t-0	0.1450	0.0047	1.430	0.066	0.0716	0.0023	0.71	873	27	902	28	973	67	0.00	89.7	
24	35	48	y,t-0	0.1627	0.0054	1.609	0.074	0.0717	0.0022	0.73	972	30	974	29	978	64	0.12	99.3	
25a	35	141	y,t-0	0.1605	0.0042	1.570	0.052	0.0709	0.0014	0.79	960	23	958	20	956	41	0.18	100.4	
25b	35	226	y,t-0	0.1254	0.0028	1.215	0.036	0.0703	0.0014	0.76	761	16	808	17	937	40	0.06	81.3	
26	35	42	y,t-0	0.1615	0.0035	1.635	0.069	0.0734	0.0026	0.52	965	20	984	27	1025	73	0.37	94.1	
27	35	95	y,t-0	0.1522	0.0033	1.514	0.044	0.0721	0.0014	0.74	913	18	936	18	990	40	0.19	92.2	

* Internally-unstandardized estimates based on count rates of ²³⁸U only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on ²⁰⁷Pb/²³⁵U and ²⁰⁶Pb/²³⁸U.

¶ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ (²⁰⁶Pb/²⁰⁴Pb)_{common} / (²⁰⁶Pb/²⁰⁴Pb)_{sample}.

² 100 * (²⁰⁶Pb/²³⁸U age) / (²⁰⁷Pb/²⁰⁶Pb age).

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 08020).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡ ²⁰⁶ Pb/ ²³⁸ U ± 2 s.d.		²⁰⁷ Pb/ ²³⁵ U ± 2 s.d.	²⁰⁷ Pb/ ²⁰⁶ Pb ± 2 s.d.	e [§]	Ages [Ma] ²⁰⁶ Pb/ ²³⁸ U ± 2 s.d.	²⁰⁷ Pb/ ²³⁵ U ± 2 s.d.	²⁰⁷ Pb/ ²⁰⁶ Pb ± 2 s.d.	f ²⁰⁶ % ¹	Concordance ²					
<i>Size fraction: 300-400 μm</i>																		
28a	35	91	y,t-0	0.1470	0.0041	1.410	0.047	0.0696	0.0013	0.84	884	23	893	20	916	37	0.12	96.5
28b	35	66	y,t-0	0.1681	0.0046	1.676	0.061	0.0723	0.0017	0.75	1002	25	999	23	995	48	0.04	100.7
29	35	39	y,t-0	0.1474	0.0043	1.407	0.053	0.0692	0.0017	0.76	886	24	892	22	905	50	0.05	98.0
30	35	114	y,t-0	0.1265	0.0038	1.194	0.046	0.0685	0.0016	0.78	768	22	798	21	882	49	0.00	87.0
31a	35	24	y,t-0	0.1710	0.0047	1.715	0.068	0.0727	0.0021	0.69	1018	26	1014	26	1006	59	0.16	101.1
31b	35	72	y,t-0	0.1537	0.0037	1.482	0.048	0.0699	0.0015	0.75	922	21	923	20	926	44	0.06	99.5
32	35	73	y,t-0	0.1541	0.0042	1.466	0.052	0.0690	0.0016	0.77	924	23	916	21	899	46	0.00	102.8
33a	35	1212	y,t-1	0.1528	0.0047	1.450	0.055	0.0689	0.0016	0.81	916	26	910	23	895	47	0.01	102.4
33b	35	887	y,t-1	0.0851	0.0035	0.731	0.033	0.0623	0.0012	0.91	527	21	557	19	683	41	0.51	77.1
34	35	59	y,t-0	0.1581	0.0046	1.545	0.055	0.0709	0.0015	0.81	946	25	948	22	953	43	0.01	99.3
35	35	145	y,t-0	0.1254	0.0036	1.165	0.039	0.0674	0.0011	0.86	761	21	784	18	851	35	0.00	89.5
36	35	174	y,t-0	0.1585	0.0046	1.552	0.051	0.0710	0.0011	0.88	949	26	951	20	957	32	0.01	99.1
37a	35	67	y,t-0	0.1524	0.0046	1.470	0.060	0.0700	0.0019	0.74	914	26	918	25	928	57	0.16	98.5
37b	35	88	y,t-0	0.1507	0.0051	1.445	0.062	0.0695	0.0019	0.78	905	28	908	26	914	55	0.04	99.0
38a	35	107	y,t-0	0.1495	0.0052	1.454	0.064	0.0705	0.0019	0.79	898	29	911	27	944	55	0.00	95.2
38b	35	112	y,t-0	0.1482	0.0041	1.438	0.053	0.0704	0.0017	0.76	891	23	905	22	940	49	0.11	94.7
39	35	106	y,t-0	0.1526	0.0042	1.455	0.054	0.0692	0.0017	0.74	915	23	912	22	905	51	0.12	101.2
40	35	90	y,t-0	0.2084	0.0048	2.331	0.080	0.0811	0.0021	0.67	1220	26	1222	25	1225	50	0.14	99.6
41a	35	53	y,t-0	0.1532	0.0034	1.481	0.056	0.0701	0.0021	0.59	919	19	922	23	931	63	0.13	98.7
41b	35	91	y,t-0	0.1529	0.0033	1.472	0.054	0.0698	0.0021	0.59	917	18	919	22	924	61	0.00	99.3
42	35	130	y,t-0	0.1513	0.0038	1.470	0.053	0.0705	0.0018	0.69	908	21	918	22	942	54	0.08	96.5
43	35	60	y,t-0	0.1582	0.0036	1.542	0.053	0.0707	0.0018	0.66	947	20	947	21	948	53	0.14	99.9
44a	35	627	y,t-0	0.1494	0.0033	1.423	0.036	0.0691	0.0008	0.88	897	19	899	15	902	25	0.04	99.5
44b	35	180	y,t-0	0.0842	0.0019	0.810	0.029	0.0698	0.0020	0.62	521	11	602	16	922	58	0.00	56.5
45	35	32	y,t-0	0.1482	0.0039	1.445	0.052	0.0707	0.0018	0.72	891	22	908	22	949	51	0.00	93.9
46	35	423	y,t-1	0.1524	0.0024	1.447	0.029	0.0689	0.0009	0.78	914	14	909	12	896	26	0.07	102.0
47	35	275	y,t-0	0.1522	0.0039	1.447	0.047	0.0689	0.0014	0.79	913	22	908	19	897	41	0.00	101.8
48	35	350	y,t-0	0.1539	0.0033	1.484	0.037	0.0700	0.0009	0.86	923	19	924	15	927	26	0.06	99.5
49	35	107	y,t-0	0.1513	0.0032	1.457	0.042	0.0699	0.0014	0.72	908	18	913	18	925	42	0.05	98.2
50a	35	78	y,t-1	0.0881	0.0025	0.746	0.027	0.0614	0.0014	0.78	544	15	566	16	654	49	0.00	83.2
50b	35	12	y,t-0	0.1051	0.0059	1.068	0.161	0.0737	0.0103	0.37	644	34	738	79	1033	287	6.64	62.4
51	35	71	y,t-0	0.1599	0.0037	1.626	0.054	0.0738	0.0017	0.70	956	21	980	21	1035	48	0.24	92.4
52	35	41	y,t-0	0.1601	0.0030	1.564	0.044	0.0709	0.0015	0.66	957	17	956	17	954	43	0.48	100.3
53	35	155	y,t-0	0.1699	0.0037	1.685	0.048	0.0720	0.0013	0.77	1011	20	1003	18	985	37	0.03	102.7
54	35	140	y,t-0	0.1554	0.0022	1.496	0.030	0.0698	0.0010	0.72	931	12	929	12	922	28	0.02	101.0
55	35	121	y,t-0	0.1500	0.0042	1.413	0.047	0.0683	0.0012	0.85	901	24	894	20	877	37	0.00	102.7

* Internally-unstandardized estimates based on count rates of ²³⁸U only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on ²⁰⁷Pb/²³⁵U and ²⁰⁶Pb/²³⁸U.

¹ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

² 100*(²⁰⁶Pb/²⁰⁴Pb)_{common}/(²⁰⁶Pb/²⁰⁴Pb)_{sample}.

³ 100*(²⁰⁶Pb/²³⁸U age)/(²⁰⁷Pb/²⁰⁶Pb age).

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 08020).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		207Pb/235U		207Pb/206Pb		ρ§	Ages [Ma]		207Pb/235U		207Pb/206Pb		f206‰¹	Concordance²	
				206Pb/238U	±2 s.d.	±2 s.d.	±2 s.d.	±2 s.d.	±2 s.d.		206Pb/238U	±2 s.d.	±2 s.d.	±2 s.d.	±2 s.d.	±2 s.d.			
Size fraction: 200-300 μm																			
56	35	572	b-1	0.2290	0.0048	2.715	0.068	0.0860	0.0012	0.83	1329	25	1333	19	1338	27	0.15	99.4	
57	35	423	b-1	0.2090	0.0045	2.360	0.066	0.0819	0.0014	0.78	1223	24	1230	20	1243	34	0.07	98.4	
58	35	282	y,t-0	0.1218	0.0031	1.124	0.037	0.0669	0.0014	0.78	741	18	765	18	835	43	0.06	88.8	
59	25	53	y,t-0	0.1554	0.0035	1.489	0.049	0.0695	0.0017	0.68	931	20	926	20	914	50	0.00	101.9	
60a	35	151	y,t-0	0.1267	0.0041	1.213	0.064	0.0694	0.0029	0.61	769	23	806	29	911	87	0.10	84.4	
60b	35	96	y,t-0	0.1115	0.0031	1.073	0.044	0.0698	0.0021	0.67	682	18	740	22	922	62	0.00	73.9	
61a	35	68	y,t-0	0.1557	0.0034	1.496	0.057	0.0697	0.0022	0.57	933	19	929	23	919	64	0.01	101.5	
61b	35	262	y,t-0	0.1559	0.0035	1.498	0.053	0.0697	0.0019	0.63	934	19	930	22	920	57	0.01	101.5	
62a	35	203	y,t-0	0.1131	0.0025	1.086	0.039	0.0696	0.0020	0.62	691	15	746	19	917	59	0.10	75.4	
62b	35	43	y,t-0	0.1527	0.0037	1.464	0.057	0.0695	0.0021	0.63	916	21	916	23	915	62	0.00	100.1	
63a	35	659	y,t-0	0.1535	0.0032	1.479	0.047	0.0699	0.0017	0.66	920	18	922	19	925	49	0.00	99.5	
63b	25	259	y,t-0	0.1295	0.0030	1.258	0.044	0.0704	0.0018	0.66	785	17	827	20	941	53	0.25	83.4	
64a	35	74	y,t-0	0.1551	0.0036	1.497	0.053	0.0700	0.0019	0.66	929	20	929	22	929	55	0.00	100.0	
64b	35	609	y,t-0	0.1523	0.0030	1.477	0.051	0.0703	0.0020	0.57	914	17	921	21	938	58	0.04	97.4	
65a	35	313	y,t-0	0.1471	0.0040	1.402	0.045	0.0691	0.0011	0.86	885	23	890	19	902	34	0.01	98.1	
65b	35	38	y,t-0	0.1589	0.0045	1.554	0.061	0.0710	0.0019	0.72	951	25	952	24	956	55	0.19	99.4	
66a	35	178	y,t-0	0.1579	0.0038	1.523	0.049	0.0700	0.0015	0.75	945	21	940	20	927	43	0.05	101.9	
66b	35	103	y,t-0	0.1581	0.0030	1.539	0.037	0.0706	0.0011	0.78	946	17	946	15	946	31	0.08	100.0	
67a	35	132	y,t-0	0.1545	0.0045	1.492	0.051	0.0701	0.0013	0.85	926	25	927	21	930	37	0.00	99.6	
67b	35	295	y,t-0	0.1515	0.0043	1.469	0.048	0.0704	0.0012	0.86	909	24	918	20	939	35	0.01	96.8	
68a	35	67	y,t-0	0.1640	0.0032	1.621	0.050	0.0717	0.0017	0.64	979	18	978	19	978	49	0.00	100.1	
68b	35	71	y,t-0	0.1548	0.0031	1.488	0.043	0.0697	0.0014	0.71	928	18	925	17	920	41	0.00	100.8	
69a	35	415	y,t-0	0.1549	0.0027	1.489	0.033	0.0697	0.0009	0.79	928	15	926	14	921	28	0.01	100.8	
69b	35	99	y,t-0	0.1524	0.0027	1.462	0.035	0.0696	0.0011	0.74	915	15	915	14	916	33	0.10	99.9	
69c	25	68	y,t-0	0.0778	0.0012	0.683	0.022	0.0637	0.0018	0.49	483	7	528	13	731	60	0.00	66.1	
70a	35	146	y,t-0	0.1550	0.0029	1.497	0.035	0.0701	0.0010	0.79	929	16	929	14	931	30	0.07	99.8	
70b	12	1856	y,t-0	0.0807	0.0022	0.750	0.023	0.0674	0.0010	0.88	500	13	568	13	850	31	0.27	58.8	
Size fraction: <200 μm																			
71	35	160	b-0	0.1483	0.0022	1.412	0.037	0.0691	0.0015	0.58	891	13	894	15	900	44	0.00	99.0	
72	35	511	b-0	0.1538	0.0027	1.461	0.042	0.0689	0.0016	0.60	922	15	914	17	896	48	0.62	102.9	
73	35	202	y,t-0	0.1562	0.0023	1.514	0.041	0.0703	0.0016	0.54	935	13	936	17	937	47	0.04	99.8	
74	35	66	y,t-0	0.1502	0.0027	1.446	0.045	0.0698	0.0018	0.59	902	15	908	19	923	52	0.00	97.8	
75	25	488	y,t-0	0.1057	0.0016	0.943	0.029	0.0647	0.0017	0.51	648	10	675	15	765	56	0.03	84.7	
76	12	85	y,t-0	0.2458	0.0084	3.005	0.171	0.0886	0.0040	0.60	1417	43	1409	43	1397	87	0.00	101.5	

* Internally-unstandardized estimates based on count rates of 238 only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL. (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on 207Pb/235U and 206Pb/238U.

¶ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ $(^{206}\text{Pb}/^{204}\text{Pb})_{\text{common}} / (^{206}\text{Pb}/^{204}\text{Pb})_{\text{sample}}$.

² $100 * (^{206}\text{Pb}/^{238}\text{U age}) / (^{207}\text{Pb}/^{206}\text{Pb age})$.

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 09019).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		ρ [§]	Ages [Ma]		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		f ²⁰⁶ ¶	Concordance ²	
				²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.		²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.			
Size fraction: >400 μm																			
01a	35	105	b-1	0.2039	0.0034	2.294	0.047	0.0816	0.0010	0.81	1196	18	1211	14	1236	23	0.00	96.8	
01b	35	242	b-1	0.2149	0.0043	2.440	0.056	0.0824	0.0009	0.88	1255	23	1254	17	1254	21	0.00	100.0	
02a	35	691	b-1	0.2169	0.0038	2.468	0.051	0.0825	0.0009	0.84	1265	20	1263	15	1258	22	0.01	100.6	
02b	35	307	b-1	0.2156	0.0055	2.446	0.071	0.0823	0.0011	0.89	1259	29	1256	21	1252	26	0.10	100.5	
03	35	496	b-0	0.1740	0.0036	1.756	0.039	0.0732	0.0006	0.93	1034	20	1029	14	1019	17	0.03	101.5	
Size fraction: 300-400 μm																			
04	35	1706	b-1	0.0762	0.0016	0.596	0.014	0.0567	0.0007	0.87	474	9	475	9	481	25	0.15	98.4	
05	35	684	b-1	0.1785	0.0032	1.840	0.039	0.0747	0.0008	0.85	1059	18	1060	14	1062	23	1.72	99.8	
06	35	1385	b-1	0.0986	0.0017	0.824	0.019	0.0606	0.0010	0.73	606	10	610	11	624	34	1.19	97.1	
07	35	1153	b-1	0.1678	0.0032	1.668	0.039	0.0721	0.0010	0.81	1000	18	996	15	988	28	0.32	101.2	
08	35	1195	b-1	0.1717	0.0042	1.727	0.050	0.0729	0.0011	0.85	1022	23	1018	19	1012	31	0.01	101.0	
09	35	603	b-1	0.2007	0.0028	2.202	0.045	0.0796	0.0012	0.69	1179	15	1182	14	1187	29	0.01	99.3	
10a	35	2143	b-1	0.1550	0.0022	1.511	0.032	0.0707	0.0011	0.67	929	12	935	13	949	32	0.15	97.9	
10b	12	589	b-1	0.1667	0.0068	1.649	0.077	0.0717	0.0016	0.88	994	38	989	30	978	46	0.13	101.6	
11a	35	998	b-1	0.2248	0.0025	2.655	0.050	0.0857	0.0013	0.59	1307	13	1316	14	1331	29	0.19	98.2	
11b	25	159	b-1	0.2292	0.0036	2.670	0.063	0.0845	0.0015	0.66	1330	19	1320	17	1304	34	0.05	102.0	
12	35	707	b-1	0.0751	0.0013	0.578	0.017	0.0558	0.0013	0.60	467	8	463	11	443	53	0.72	105.4	
13	35	150	b-0	0.5473	0.0084	14.717	0.335	0.1950	0.0033	0.68	2814	35	2797	22	2785	27	0.32	101.0	
14	35	198	p-0	0.3079	0.0044	4.486	0.100	0.1057	0.0018	0.64	1730	22	1728	18	1726	31	0.00	100.3	
15a	35	47	p-0	0.1733	0.0028	1.765	0.054	0.0738	0.0019	0.52	1030	15	1033	20	1037	53	0.00	99.4	
15b	35	198	p-0	0.1651	0.0024	1.662	0.046	0.0730	0.0017	0.52	985	13	994	18	1014	48	0.00	97.1	
16a	35	148	p-0	0.1714	0.0018	1.733	0.043	0.0733	0.0016	0.43	1020	10	1021	16	1023	45	0.09	99.6	
16b	35	145	p-0	0.1746	0.0022	1.770	0.046	0.0735	0.0017	0.49	1038	12	1035	17	1028	46	0.04	100.9	
17a	35	89	p-0	0.1776	0.0025	1.825	0.049	0.0745	0.0017	0.52	1054	14	1055	17	1056	46	0.00	99.8	
17b	35	64	p-0	0.1775	0.0027	1.835	0.044	0.0750	0.0014	0.64	1053	15	1058	16	1068	37	0.00	98.6	
18a	35	104	p-0	0.1979	0.0025	2.138	0.045	0.0783	0.0013	0.60	1164	13	1161	15	1156	33	0.05	100.7	
18b	35	70	p-0	0.1964	0.0026	2.105	0.052	0.0777	0.0016	0.53	1156	14	1151	17	1140	41	0.07	101.4	
19	35	238	t-0	0.1005	0.0016	0.834	0.019	0.0602	0.0010	0.70	617	10	616	11	610	36	0.00	101.1	
20a	35	388	t-0	0.2009	0.0057	2.181	0.071	0.0787	0.0013	0.87	1180	31	1175	23	1165	32	0.60	101.3	
20b	25	135	t-1	0.2020	0.0045	2.196	0.058	0.0788	0.0011	0.85	1186	24	1180	19	1168	28	0.12	101.6	
21a	35	138	t-0	0.2019	0.0039	2.197	0.051	0.0789	0.0010	0.82	1186	21	1180	16	1170	26	0.05	101.3	
21b	25	34	t-0	0.2024	0.0058	2.198	0.085	0.0788	0.0020	0.75	1188	31	1181	27	1167	51	0.05	101.8	
22	35	74	t-0	0.1811	0.0031	1.865	0.042	0.0747	0.0011	0.76	1073	17	1069	15	1060	30	0.05	101.2	

* Internally-unstandardized estimates based on count rates of ²³⁸U only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on ²⁰⁷Pb/²³⁵U and ²⁰⁶Pb/²³⁸U.

¶ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ (²⁰⁶Pb/²⁰⁴Pb)_{common} / (²⁰⁶Pb/²⁰⁴Pb)_{sample}.

² 100 * (²⁰⁶Pb/²³⁸U age) / (²⁰⁷Pb/²⁰⁶Pb age).

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 09019).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		ϕ [§]	Ages [Ma]		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		f ²⁰⁶ Pb [¶]	Concordance ²	
				²⁰⁶ Pb/ ²³⁸ U	± 2 s.d.	± 2 s.d.	± 2 s.d.	± 2 s.d.	± 2 s.d.		± 2 s.d.	± 2 s.d.							
<i>Size fraction: 300-400 μm</i>																			
23	35	380	t-0	0.1811	0.0055	1.866	0.064	0.0747	0.0012	0.89	1073	30	1069	23	1062	32	0.01	101.1	
24	35	40	t-0	0.2684	0.0065	3.513	0.101	0.0949	0.0015	0.84	1533	33	1530	23	1527	30	0.04	100.4	
25	35	23	t-0	0.1668	0.0040	1.658	0.060	0.0721	0.0020	0.66	995	22	993	23	988	56	0.00	100.6	
26	35	15	t-0	0.1881	0.0043	1.978	0.075	0.0763	0.0023	0.60	1111	23	1108	25	1102	60	0.11	100.8	
27a	35	82	t-1	0.2336	0.0043	2.800	0.071	0.0869	0.0015	0.72	1353	22	1355	19	1359	34	0.11	99.6	
27b	25	25	t-1	0.2400	0.0080	2.891	0.145	0.0873	0.0033	0.67	1387	42	1379	38	1368	72	0.33	101.4	
<i>Size fraction: 200-300 μm</i>																			
28a	35	462	b-1	0.2909	0.0068	4.074	0.115	0.1016	0.0016	0.83	1646	34	1649	23	1653	29	0.07	99.6	
28b	35	619	b-1	0.2972	0.0049	4.177	0.089	0.1019	0.0014	0.78	1677	24	1669	17	1660	25	0.04	101.1	
29a	35	151	b-1	0.5435	0.0076	14.685	0.258	0.1960	0.0021	0.79	2798	32	2795	17	2793	18	0.00	100.2	
29b	35	820	b-1	0.1071	0.0020	1.472	0.040	0.0996	0.0020	0.67	656	11	919	17	1617	38	0.29	40.6	
30a	35	755	b-1	0.1723	0.0049	1.736	0.063	0.0731	0.0016	0.79	1025	27	1022	23	1016	44	0.06	100.8	
30b	35	1353	b-1	0.1683	0.0044	1.671	0.055	0.0720	0.0015	0.79	1003	24	998	21	986	42	0.01	101.7	
31a	35	25	p-0	0.2114	0.0063	2.345	0.111	0.0805	0.0030	0.63	1236	33	1226	34	1208	73	0.00	102.3	
31b	25	108	p-0	0.1829	0.0046	1.924	0.076	0.0763	0.0023	0.64	1083	25	1090	26	1104	61	0.39	98.1	
32	35	72	p-0	0.5736	0.0152	16.397	0.573	0.2073	0.0047	0.76	2923	62	2900	33	2885	37	0.10	101.3	
33	35	1074	p-0	0.1863	0.0050	1.944	0.061	0.0757	0.0013	0.85	1101	27	1096	21	1086	33	0.02	101.4	
34a	35	42	p-0	0.1886	0.0054	1.977	0.074	0.0760	0.0019	0.76	1114	29	1108	25	1096	49	0.15	101.6	
34b	35	113	p-0	0.1786	0.0048	1.827	0.061	0.0742	0.0015	0.81	1060	26	1055	22	1046	40	0.07	101.3	
35a	35	378	p-1	0.2923	0.0075	4.036	0.121	0.1001	0.0015	0.86	1653	38	1641	24	1627	29	0.03	101.6	
35b	25	410	p-0	0.2096	0.0037	2.781	0.078	0.0962	0.0021	0.64	1227	20	1350	21	1552	40	0.09	79.0	
36a	35	74	p-0	0.2384	0.0049	2.889	0.085	0.0879	0.0018	0.70	1378	25	1379	22	1380	40	0.25	99.9	
36b	35	196	p-0	0.2925	0.0067	4.036	0.109	0.1001	0.0015	0.84	1654	33	1641	22	1626	27	0.00	101.7	
37a	35	128	p-0	0.1886	0.0043	1.973	0.058	0.0759	0.0014	0.78	1114	23	1106	20	1092	37	0.00	102.0	
37b	35	492	p-0	0.1788	0.0035	1.844	0.045	0.0748	0.0011	0.80	1060	19	1061	16	1063	29	0.06	99.7	
38a	35	45	t-0	0.1805	0.0037	1.879	0.055	0.0755	0.0016	0.70	1070	20	1074	19	1081	42	0.10	98.9	
38b	35	319	t-0	0.1802	0.0027	1.880	0.045	0.0757	0.0014	0.64	1068	15	1074	16	1087	37	0.05	98.3	
39a	35	43	t-0	0.1811	0.0031	1.882	0.062	0.0753	0.0021	0.52	1073	17	1075	22	1078	56	0.10	99.6	
39b	35	28	t-0	0.1801	0.0051	1.872	0.077	0.0754	0.0023	0.68	1067	28	1071	27	1079	61	0.13	99.0	
40a	35	15	t-0	0.2406	0.0053	2.948	0.118	0.0889	0.0030	0.55	1390	28	1394	30	1401	64	0.49	99.2	
40b	35	131	t-0	0.2191	0.0039	2.486	0.065	0.0823	0.0016	0.68	1277	21	1268	19	1252	37	0.04	102.0	
41a	35	83	t-0	0.2074	0.0028	2.277	0.056	0.0796	0.0016	0.54	1215	15	1205	17	1188	41	0.19	102.3	
41b	35	113	t-0	0.1915	0.0025	2.027	0.049	0.0767	0.0016	0.55	1130	14	1124	16	1114	40	0.03	101.4	

* Internally-unstandardized estimates based on count rates of ²³⁸U only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on ²⁰⁷Pb/²³⁵U and ²⁰⁶Pb/²³⁸U.

¶ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ (²⁰⁶Pb/²⁰⁴Pb)_{common} / (²⁰⁶Pb/²⁰⁴Pb)_{sample}.

² 100 * (²⁰⁶Pb/²³⁸U age) / (²⁰⁷Pb/²⁰⁶Pb age).

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 09019).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡ $^{206}\text{Pb}/^{238}\text{U}$ ± 2 s.d.		$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.	ρ^{\S}	Ages [Ma] $^{206}\text{Pb}/^{238}\text{U}$ ± 2 s.d.		$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.	$f^{206\%1}$	Concordance ²
Size fraction: 200-300 μm																		
42a	35	44	t-0	0.1847	0.0057	1.901	0.074	0.0747	0.0017	0.80	1093	31	1082	26	1059	47	0.14	103.1
42b	35	36	t-0	0.1685	0.0038	1.699	0.058	0.0731	0.0019	0.65	1004	21	1008	22	1017	53	0.29	98.7
43	35	61	t-0	0.1807	0.0044	1.855	0.071	0.0745	0.0022	0.64	1071	24	1065	25	1054	59	0.00	101.6
44a	35	28	t-0	0.2810	0.0056	3.801	0.138	0.0981	0.0030	0.55	1597	28	1593	29	1588	57	0.00	100.5
44b	35	44	t-0	0.2262	0.0052	2.688	0.099	0.0862	0.0025	0.62	1315	27	1325	27	1342	56	0.00	97.9
45a	35	25	t-0	0.1790	0.0034	1.825	0.069	0.0740	0.0024	0.50	1061	18	1055	25	1041	66	0.00	102.0
45b	25	44	t-0	0.1616	0.0027	1.591	0.062	0.0714	0.0025	0.43	965	15	967	24	970	72	0.00	99.5
45c	12	31	t-0	0.1633	0.0084	1.602	0.119	0.0712	0.0038	0.69	975	47	971	47	962	110	6.40	101.3
46a	35	52	t-0	0.2927	0.0073	4.102	0.155	0.1016	0.0029	0.66	1655	37	1655	31	1654	52	0.11	100.0
46b	25	72	t-0	0.2799	0.0057	3.794	0.142	0.0983	0.0031	0.54	1591	29	1591	30	1593	59	0.00	99.9
47a	35	21	t-0	0.1559	0.0054	1.520	0.139	0.0707	0.0060	0.38	934	30	938	56	949	174	0.80	98.4
47b	25	9	t-0	0.1604	0.0065	1.563	0.109	0.0707	0.0040	0.58	959	36	956	43	948	117	0.27	101.1
48a	35	39	t-0	0.2277	0.0033	2.668	0.087	0.0850	0.0025	0.44	1323	17	1320	24	1315	57	0.18	100.6
48b	35	21	t-0	0.1682	0.0038	1.935	0.108	0.0834	0.0042	0.41	1002	21	1093	37	1279	99	0.00	78.4
49a	35	36	t-0	0.1829	0.0040	1.890	0.075	0.0750	0.0025	0.55	1083	22	1078	26	1067	67	0.25	101.5
49b	35	73	t-0	0.1854	0.0043	1.957	0.076	0.0766	0.0024	0.60	1096	24	1101	26	1110	62	0.23	98.8
50a	35	294	b-0	0.6262	0.0092	21.036	0.608	0.2437	0.0061	0.51	3134	36	3140	28	3144	40	0.02	99.7
50b	25	884	b-0	0.0960	0.0018	0.995	0.033	0.0751	0.0021	0.56	591	11	701	17	1072	56	0.51	55.1
51a	35	91	t-0	0.1723	0.0035	1.744	0.045	0.0734	0.0012	0.79	1025	19	1025	17	1026	32	0.07	99.8
51b	25	247	t-0	0.1713	0.0029	1.738	0.040	0.0736	0.0012	0.73	1019	16	1023	15	1030	32	0.04	98.9
52a	35	116	t-0	0.1945	0.0043	2.087	0.058	0.0779	0.0013	0.79	1145	23	1145	19	1143	34	0.13	100.2
52b	35	182	t-0	0.1782	0.0045	1.898	0.060	0.0773	0.0014	0.81	1057	25	1081	21	1128	37	0.09	93.7
Size fraction: <200 μm																		
53	35	200	b-1	0.5215	0.0045	13.338	0.339	0.1855	0.0044	0.34	2706	19	2704	24	2703	39	0.02	100.1
54	35	450	b-1	0.2103	0.0038	2.368	0.071	0.0816	0.0019	0.61	1231	20	1233	21	1237	47	0.05	99.5
55	35	453	b-1	0.2867	0.0039	6.394	0.184	0.1617	0.0041	0.47	1625	19	2031	25	2474	43	0.20	65.7
56	35	430	b-0	0.1790	0.0024	1.866	0.054	0.0756	0.0019	0.47	1061	13	1069	19	1085	51	0.08	97.8
57a	35	264	p-0	0.2074	0.0041	2.303	0.070	0.0806	0.0019	0.64	1215	22	1213	22	1211	46	0.04	100.3
57b	35	205	p-0	0.1992	0.0037	2.191	0.062	0.0798	0.0017	0.66	1171	20	1178	20	1191	42	0.02	98.3
58	35	275	p-0	0.1986	0.0046	2.166	0.074	0.0791	0.0020	0.68	1168	25	1170	24	1174	50	0.10	99.5
59	12	81	p-0	0.1903	0.0210	2.278	0.294	0.0868	0.0058	0.85	1123	114	1205	91	1356	130	0.02	82.8
60	35	142	p-0	0.1730	0.0034	1.738	0.053	0.0729	0.0017	0.65	1029	19	1023	20	1010	47	0.11	101.8
61	25	348	t-0	0.2587	0.0062	3.321	0.134	0.0931	0.0030	0.59	1483	32	1486	32	1491	62	0.07	99.5

* Internally-unstandardized estimates based on count rates of 238 only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

ρ^{\S} Correlation coefficient between errors on $^{207}\text{Pb}/^{235}\text{U}$ and $^{206}\text{Pb}/^{238}\text{U}$.

\uparrow Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ $(^{206}\text{Pb}/^{204}\text{Pb})_{\text{common}} / (^{206}\text{Pb}/^{204}\text{Pb})_{\text{sample}}$.

² $100 * (^{206}\text{Pb}/^{238}\text{U age}) / (^{207}\text{Pb}/^{206}\text{Pb age})$.

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 09019).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.	ρ^{\S}	Ages [Ma]		± 2 s.d.	$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.	$f^{206\%}$ ¹	Concordance ²
				$^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.						$^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.							
Size fraction: <200 μm																			
62	35	113	t-0	0.1726	0.0042	1.737	0.057	0.0730	0.0016	0.75	1026	23	1022	21	1014	44	0.01	101.2	
63	35	181	t-0	0.1770	0.0037	1.811	0.052	0.0742	0.0014	0.74	1051	20	1049	19	1046	39	0.00	100.4	
64a	35	186	t-0	0.1934	0.0040	2.082	0.065	0.0781	0.0018	0.67	1140	22	1143	21	1148	46	0.28	99.3	
64b	35	275	t-0	0.1777	0.0033	1.825	0.053	0.0745	0.0017	0.64	1054	18	1055	19	1055	45	0.03	99.9	
65	35	209	t-0	0.2332	0.0032	2.781	0.070	0.0865	0.0018	0.55	1351	17	1350	19	1349	40	0.00	100.1	
66	35	143	t-0	0.1977	0.0025	2.150	0.053	0.0789	0.0016	0.52	1163	14	1165	17	1169	41	0.02	99.5	
67	35	79	t-0	0.1829	0.0030	1.902	0.053	0.0754	0.0017	0.59	1083	16	1082	18	1080	45	0.13	100.3	

* Internally-unstandardized estimates based on count rates of 238 only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

ρ^{\S} Correlation coefficient between errors on $^{207}\text{Pb}/^{235}\text{U}$ and $^{206}\text{Pb}/^{238}\text{U}$.

\uparrow Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ $(^{206}\text{Pb}/^{204}\text{Pb})_{\text{common}} / (^{206}\text{Pb}/^{204}\text{Pb})_{\text{sample}}$.

² $100 * (^{206}\text{Pb}/^{238}\text{U age}) / (^{207}\text{Pb}/^{206}\text{Pb age})$.

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 10017).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		$^{207}\text{Pb}/^{235}\text{U}$		$^{207}\text{Pb}/^{206}\text{Pb}$		ρ^{\S}	Ages [Ma]		$^{207}\text{Pb}/^{235}\text{U}$		$^{207}\text{Pb}/^{206}\text{Pb}$		$f^{206\%1}$	Concordance ²	
				$^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.		$^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.			
Size fraction: >400 μm																			
01a	35	970	b-1	0.0904	0.0027	0.789	0.048	0.0632	0.0033	0.50	558	16	590	27	716	112	1.48	77.9	
01b	35	31	b-0	0.1255	0.0046	1.258	0.071	0.0727	0.0031	0.64	762	26	827	32	1007	88	0.39	75.7	
03a	35	61	y,t-0	0.1519	0.0036	1.456	0.046	0.0695	0.0014	0.75	911	20	912	19	914	43	0.00	99.7	
03b	35	26	y,t-0	0.1751	0.0048	1.784	0.067	0.0739	0.0019	0.73	1040	26	1040	24	1038	52	0.54	100.2	
Size fraction: 300-400 μm																			
04a	35	1492	b-1	0.1760	0.0049	1.799	0.070	0.0741	0.0020	0.72	1045	27	1045	25	1045	55	0.03	100.0	
04b	35	907	b-1	0.1889	0.0034	1.991	0.063	0.0765	0.0020	0.56	1115	18	1113	22	1107	53	0.03	100.8	
05	35	437	b-1	0.3263	0.0083	5.007	0.189	0.1113	0.0031	0.67	1820	40	1821	32	1821	51	0.00	100.0	
06	35	1781	b-1	0.1629	0.0033	1.601	0.045	0.0713	0.0014	0.71	973	18	971	18	966	41	0.01	100.7	
07	35	1739	b-1	0.1722	0.0045	1.703	0.061	0.0717	0.0017	0.73	1024	25	1010	23	978	50	0.01	104.8	
08a	35	311	b-1	0.4201	0.0097	12.165	0.418	0.2100	0.0053	0.68	2261	44	2617	32	2906	41	0.05	77.8	
08b	25	104	b-1	0.5746	0.0156	16.941	0.814	0.2138	0.0085	0.56	2927	64	2932	46	2935	64	0.15	99.7	
09	35	1113	b-1	0.1749	0.0054	1.790	0.072	0.0742	0.0019	0.77	1039	30	1042	26	1047	52	0.01	99.2	
10	35	1989	b-1	0.1111	0.0031	1.008	0.040	0.0658	0.0018	0.70	679	18	708	20	800	59	0.24	84.9	
11	35	381	b-1	0.1672	0.0053	1.671	0.062	0.0725	0.0014	0.86	996	30	998	24	1000	38	0.04	99.6	
12a	35	1178	b-1	0.1671	0.0038	1.678	0.050	0.0728	0.0014	0.77	996	21	1000	19	1010	38	0.20	98.7	
12b	35	513	b-1	0.1671	0.0031	1.684	0.043	0.0731	0.0013	0.73	996	17	1003	16	1017	35	0.00	97.9	
13	35	1210	b-1	0.1937	0.0038	2.049	0.054	0.0767	0.0013	0.76	1141	21	1132	18	1114	34	0.00	102.4	
14a	35	518	y,t-0	0.2358	0.0055	2.826	0.099	0.0869	0.0023	0.67	1365	29	1362	26	1359	50	0.05	100.4	
14b	35	558	y,t-0	0.2251	0.0053	2.622	0.082	0.0845	0.0017	0.75	1309	28	1307	23	1304	40	0.02	100.4	
15	35	236	y,t-0	0.1655	0.0036	1.648	0.060	0.0722	0.0021	0.59	987	20	989	23	993	60	0.03	99.4	
16	35	47	y,t-0	0.2070	0.0037	2.304	0.073	0.0807	0.0021	0.56	1213	20	1213	22	1214	51	0.00	99.9	
17	35	284	y,t-0	0.1781	0.0034	1.827	0.053	0.0744	0.0016	0.65	1057	18	1055	19	1052	44	0.00	100.5	
18	35	206	y,t-0	0.2974	0.0078	4.214	0.145	0.1027	0.0023	0.76	1679	39	1677	28	1674	42	0.01	100.3	
19	35	73	y,t-0	0.1754	0.0045	1.790	0.066	0.0740	0.0020	0.69	1042	24	1042	24	1042	54	0.12	99.9	
20	35	151	y,t-0	0.5340	0.0142	13.909	0.479	0.1889	0.0041	0.77	2758	60	2744	33	2733	36	0.00	100.9	
21	35	490	y,t-1	0.1590	0.0040	1.572	0.052	0.0717	0.0016	0.76	951	22	959	21	978	44	0.00	97.3	
22	35	58	y,t-0	0.2184	0.0068	2.499	0.090	0.0830	0.0015	0.86	1273	36	1272	26	1269	36	0.07	100.3	
23	35	37	y,t-0	0.1988	0.0058	2.150	0.080	0.0784	0.0018	0.79	1169	31	1165	26	1158	45	0.00	101.0	
24	35	136	y,t-0	0.3224	0.0083	4.849	0.146	0.1091	0.0017	0.85	1802	40	1794	25	1784	29	0.06	101.0	
25	35	26	y,t-0	0.1808	0.0045	1.870	0.063	0.0750	0.0017	0.75	1071	25	1071	22	1069	45	0.00	100.2	
26a	35	135	y,t-0	0.1827	0.0042	1.897	0.051	0.0753	0.0011	0.86	1082	23	1080	18	1077	28	0.00	100.4	
26b	35	22	y,t-0	0.1762	0.0034	1.816	0.055	0.0747	0.0017	0.64	1046	19	1051	20	1061	47	0.00	98.6	

* Internally-unstandardized estimates based on count rates of 238 only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

ρ^{\S} Correlation coefficient between errors on $^{207}\text{Pb}/^{235}\text{U}$ and $^{206}\text{Pb}/^{238}\text{U}$.

\S Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ $(^{206}\text{Pb}/^{204}\text{Pb})_{\text{common}} / (^{206}\text{Pb}/^{204}\text{Pb})_{\text{sample}}$.

² $100 * (^{206}\text{Pb}/^{238}\text{U age}) / (^{207}\text{Pb}/^{206}\text{Pb age})$.

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 10017).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		ρ [§]	Ages [Ma]		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		f ²⁰⁶ % [¶]	Concordance [‡]	
				²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.		²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.			
<i>Size fraction: 300-400 μm</i>																			
27	35	46	y,t-0	0.2019	0.0056	2.204	0.082	0.0792	0.0020	0.74	1186	30	1182	26	1176	49	0.00	100.8	
28	35	468	y,t-0	0.3246	0.0089	4.999	0.160	0.1117	0.0018	0.86	1812	43	1819	27	1827	30	0.00	99.2	
29a	35	342	y,t-0	0.1794	0.0038	1.841	0.047	0.0744	0.0010	0.84	1064	21	1060	17	1053	28	0.00	101.0	
29b	35	28	y,t-0	0.1846	0.0055	1.927	0.075	0.0757	0.0019	0.77	1092	30	1090	26	1087	50	0.11	100.4	
30	35	40	y,t-0	0.1881	0.0057	1.985	0.084	0.0765	0.0023	0.71	1111	31	1110	28	1109	59	0.00	100.1	
31	35	713	y,t-1	0.1987	0.0052	2.139	0.066	0.0780	0.0013	0.85	1169	28	1161	21	1148	32	0.00	101.8	
32	35	16	y,t-0	0.1817	0.0048	1.893	0.090	0.0756	0.0030	0.56	1076	26	1079	32	1084	80	0.00	99.3	
33	35	16	y,t-0	0.0974	0.0055	0.795	0.072	0.0592	0.0042	0.62	599	32	594	41	575	155	1.10	104.2	
34	35	24	y,t-0	0.1837	0.0043	1.926	0.071	0.0761	0.0022	0.63	1087	23	1090	25	1096	57	0.09	99.1	
35	35	469	y,t-0	0.1763	0.0046	1.784	0.064	0.0734	0.0018	0.73	1047	25	1040	23	1025	50	0.01	102.1	
36a	35	210	y,t-0	0.1760	0.0038	1.787	0.071	0.0737	0.0024	0.55	1045	21	1041	26	1032	67	0.03	101.2	
36b	35	198	y,t-0	0.2086	0.0071	2.319	0.106	0.0806	0.0025	0.75	1221	38	1218	32	1212	60	0.00	100.8	
<i>Size fraction: 200-300 μm</i>																			
37a	35	931	b-1	0.1755	0.0044	1.795	0.063	0.0742	0.0018	0.73	1042	24	1044	23	1047	48	0.08	99.5	
37b	35	152	b-1	0.1804	0.0080	1.862	0.099	0.0749	0.0022	0.84	1069	44	1068	35	1065	58	0.13	100.4	
37c	25	1704	b-1	0.1102	0.0033	0.993	0.039	0.0654	0.0017	0.76	674	19	700	20	786	54	0.05	85.7	
38a	25	1139	b-1	0.1452	0.0068	2.105	0.113	0.1051	0.0028	0.87	874	38	1150	37	1717	48	0.18	50.9	
38b	25	707	b-1	0.1812	0.0068	3.294	0.144	0.1319	0.0030	0.85	1073	37	1480	34	2123	40	0.05	50.6	
39a	35	1007	b-1	0.2133	0.0099	2.416	0.126	0.0822	0.0019	0.89	1246	53	1248	37	1250	46	0.04	99.7	
39b	35	443	b-1	0.2146	0.0064	2.434	0.082	0.0823	0.0013	0.89	1253	34	1253	24	1252	30	0.04	100.1	
40a	35	988	b-1	0.1220	0.0042	1.144	0.043	0.0680	0.0011	0.90	742	24	774	21	867	35	0.10	85.6	
40b	35	242	b-1	0.1671	0.0043	1.672	0.050	0.0726	0.0011	0.86	996	24	998	19	1003	31	0.11	99.3	
41a	35	738	b-1	0.1717	0.0065	1.730	0.072	0.0731	0.0013	0.91	1021	36	1020	27	1016	35	0.05	100.5	
41b	35	1320	b-1	0.1197	0.0045	1.102	0.046	0.0667	0.0012	0.90	729	26	754	22	830	37	0.18	87.8	
42a	35	227	b-0	0.2254	0.0059	2.671	0.079	0.0859	0.0012	0.89	1310	31	1320	22	1337	26	0.00	98.0	
42b	12	135	b-0	0.1951	0.0177	2.109	0.229	0.0784	0.0047	0.84	1149	96	1152	75	1158	118	0.00	99.2	
43a	35	563	b-0	0.2180	0.0054	2.489	0.075	0.0828	0.0015	0.82	1271	28	1269	22	1265	34	0.00	100.5	
43b	35	389	b-0	0.2172	0.0073	2.515	0.100	0.0840	0.0018	0.85	1267	39	1276	29	1292	41	0.08	98.1	
44a	35	261	b-0	0.5005	0.0122	12.226	0.350	0.1772	0.0027	0.85	2616	52	2622	27	2627	25	0.01	99.6	
44b	25	96	b-0	0.5014	0.0178	12.299	0.493	0.1779	0.0033	0.89	2620	76	2627	38	2634	31	0.00	99.5	
45a	35	475	b-1	0.2472	0.0085	5.591	0.227	0.1641	0.0036	0.85	1424	44	1915	35	2498	36	1.09	57.0	
45b	25	134	b-1	0.5072	0.0193	12.677	0.580	0.1813	0.0046	0.83	2645	82	2656	43	2665	42	0.12	99.2	
46a	35	711	b-1	0.2914	0.0080	6.280	0.237	0.1563	0.0041	0.73	1649	40	2016	33	2416	44	0.08	68.2	

* Internally-unstandardized estimates based on count rates of ²³⁸U only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on ²⁰⁷Pb/²³⁵U and ²⁰⁶Pb/²³⁸U.

¶ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ (²⁰⁶Pb/²⁰⁴Pb)_{common} / (²⁰⁶Pb/²⁰⁴Pb)_{sample}.

² 100 * (²⁰⁶Pb/²³⁸U age) / (²⁰⁷Pb/²⁰⁶Pb age).

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 10017).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		ρ [§]	Ages [Ma]		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		f ²⁰⁶ % ¹	Concordance ²	
				²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.		²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.			
Size fraction: 200-300 μm																			
46b	12	80	b-1	0.2583	0.0165	4.030	0.320	0.1132	0.0053	0.80	1481	84	1640	65	1851	85	0.25	80.0	
47a	35	140	b-1	0.1919	0.0069	2.338	0.097	0.0884	0.0019	0.86	1131	37	1224	30	1391	40	0.04	81.3	
47b	35	309	b-1	0.2352	0.0059	2.825	0.090	0.0871	0.0017	0.79	1361	31	1362	24	1363	38	0.05	99.9	
48a	35	351	b-1	0.3220	0.0057	4.870	0.118	0.1097	0.0018	0.73	1800	28	1797	20	1794	30	0.02	100.3	
48b	25	96	b-1	0.3020	0.0167	4.463	0.333	0.1072	0.0054	0.74	1701	83	1724	62	1753	92	0.00	97.1	
49a	35	1077	b-0	0.1711	0.0033	1.735	0.044	0.0735	0.0012	0.75	1018	18	1021	16	1029	34	0.00	99.0	
49b	25	1299	b-0	0.1721	0.0034	1.732	0.048	0.0730	0.0014	0.73	1024	19	1021	18	1013	38	0.00	101.0	
50	35	81	y,t-0	0.1765	0.0040	1.811	0.070	0.0744	0.0023	0.59	1048	22	1049	25	1052	63	0.00	99.6	
51a	35	705	y,t-1	0.3967	0.0077	7.371	0.215	0.1348	0.0029	0.66	2154	35	2157	26	2161	38	0.04	99.7	
51b	25	181	y,t-0	0.0925	0.0032	0.815	0.036	0.0639	0.0018	0.77	570	19	605	20	740	60	0.00	77.1	
52a	35	230	y,t-0	0.3260	0.0063	4.958	0.134	0.1103	0.0021	0.72	1819	31	1812	23	1804	34	0.01	100.8	
52b	35	139	y,t-0	0.3237	0.0056	4.903	0.112	0.1099	0.0016	0.76	1808	27	1803	19	1797	27	0.04	100.6	
53a	35	85	y,t-0	0.2126	0.0049	2.379	0.080	0.0812	0.0020	0.68	1242	26	1236	24	1225	48	0.12	101.4	
53b	35	34	y,t-0	0.1992	0.0058	2.166	0.079	0.0789	0.0018	0.80	1171	31	1170	25	1169	44	0.00	100.2	
54a	35	71	y,t-0	0.1963	0.0039	2.119	0.052	0.0783	0.0011	0.81	1156	21	1155	17	1154	28	0.00	100.2	
54b	35	89	y,t-0	0.1836	0.0032	1.924	0.044	0.0760	0.0011	0.76	1087	17	1090	15	1095	30	0.06	99.2	
55a	35	120	y,t-0	0.2205	0.0053	2.540	0.079	0.0835	0.0017	0.77	1285	28	1284	23	1282	39	0.00	100.2	
55b	35	348	y,t-0	0.1955	0.0041	2.095	0.060	0.0777	0.0015	0.73	1151	22	1147	20	1140	39	0.00	100.9	
56a	35	236	y,t-0	0.1780	0.0056	1.824	0.071	0.0743	0.0017	0.82	1056	31	1054	25	1050	45	0.00	100.5	
56b	35	50	y,t-0	0.1769	0.0048	1.816	0.066	0.0744	0.0018	0.75	1050	26	1051	24	1054	48	0.13	99.7	
57a	35	320	y,t-0	0.3271	0.0063	4.976	0.117	0.1103	0.0015	0.82	1824	31	1815	20	1805	24	0.00	101.1	
57b	35	159	y,t-0	0.3131	0.0108	4.654	0.190	0.1078	0.0024	0.84	1756	53	1759	34	1763	40	0.12	99.6	
58a	35	516	y,t-1	0.2354	0.0052	2.813	0.079	0.0867	0.0015	0.79	1363	27	1359	21	1353	33	0.01	100.7	
58b	12	143	y,t-0	0.0735	0.0070	0.568	0.087	0.0560	0.0068	0.62	457	42	457	57	453	271	2.56	100.9	
59a	35	191	y,t-0	0.2517	0.0046	3.152	0.087	0.0908	0.0019	0.66	1447	24	1445	21	1443	40	0.08	100.3	
59b	35	200	y,t-0	0.2519	0.0051	3.143	0.086	0.0905	0.0016	0.75	1448	26	1443	21	1437	34	0.01	100.8	
60a	35	106	y,t-0	0.1655	0.0050	1.643	0.071	0.0720	0.0022	0.71	987	28	987	27	986	62	0.28	100.1	
60b	35	167	y,t-0	0.1651	0.0039	1.646	0.051	0.0723	0.0014	0.77	985	22	988	20	994	41	0.03	99.1	
61a	35	13	y,t-0	0.5351	0.0111	14.280	0.380	0.1936	0.0032	0.78	2763	46	2768	25	2773	27	0.00	99.6	
61b	35	64	y,t-0	0.5124	0.0120	13.585	0.373	0.1923	0.0027	0.85	2667	51	2721	26	2762	23	0.00	96.5	
Size fraction: <200 μm																			
62	12	72	b-0	0.3480	0.0181	8.128	0.616	0.1694	0.0093	0.69	1925	87	2245	69	2552	93	0.00	75.4	
63	35	211	b-0	0.1440	0.0025	1.425	0.036	0.0718	0.0013	0.68	867	14	899	15	979	38	0.07	88.5	

* Internally-unstandardized estimates based on count rates of ²³⁸U only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on ²⁰⁷Pb/²³⁵U and ²⁰⁶Pb/²³⁸U.

¹ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

² 100*(²⁰⁶Pb/²⁰⁴Pb)_{common}/(²⁰⁶Pb/²⁰⁴Pb)_{sample}.

³ 100*(²⁰⁶Pb/²³⁸U age)/(²⁰⁷Pb/²⁰⁶Pb age).

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 10017).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.	ρ^{\S}	Ages [Ma] $^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.	$f^{206}\%$ ¹	Concordance ²
Size fraction: <200 μm																		
64	35	95	y,t-0	0.1813	0.0033	1.871	0.047	0.0748	0.0013	0.73	1074	18	1071	17	1064	34	0.08	100.9
65	35	109	y,t-0	0.2022	0.0054	2.195	0.073	0.0787	0.0016	0.80	1187	29	1180	23	1166	39	0.00	101.8
66	35	112	y,t-0	0.2309	0.0074	2.698	0.117	0.0847	0.0025	0.74	1339	39	1328	32	1310	57	0.09	102.3
67a	35	183	y,t-0	0.1845	0.0045	1.923	0.059	0.0756	0.0014	0.79	1091	25	1089	21	1084	38	0.09	100.7
67b	35	214	y,t-0	0.1794	0.0049	1.883	0.062	0.0761	0.0014	0.83	1064	27	1075	22	1098	37	0.00	96.9
68	25	93	y,t-0	0.1658	0.0048	1.636	0.073	0.0716	0.0024	0.65	989	26	984	28	974	69	0.00	101.6
69	35	36	y,t-0	0.1719	0.0037	1.712	0.060	0.0722	0.0020	0.61	1023	20	1013	23	992	57	0.40	103.1
70	25	198	y,t-0	0.2069	0.0071	2.295	0.103	0.0804	0.0023	0.77	1212	38	1211	32	1208	57	0.00	100.4

* Internally-unstandardized estimates based on count rates of 238 only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

ρ^{\S} Correlation coefficient between errors on $^{207}\text{Pb}/^{235}\text{U}$ and $^{206}\text{Pb}/^{238}\text{U}$.

¹ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

² $100 * (^{206}\text{Pb}/^{238}\text{U})_{\text{common}} / (^{206}\text{Pb}/^{204}\text{Pb})_{\text{sample}}$.

² $100 * (^{206}\text{Pb}/^{238}\text{U} \text{ age}) / (^{207}\text{Pb}/^{206}\text{Pb} \text{ age})$.

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 12001).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		ϕ [§]	Ages [Ma]		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		f ²⁰⁶ % ¹	Concordance ²	
				²⁰⁶ Pb/ ²³⁸ U	± 2 s.d.		± 2 s.d.		± 2 s.d.		²⁰⁶ Pb/ ²³⁸ U	± 2 s.d.		± 2 s.d.		± 2 s.d.			
Size fraction: >400 μm																			
01	35	39	b-0	0.2018	0.0065	2.219	0.090	0.0798	0.0019	0.80	1185	35	1187	28	1191	48	0.33	99.4	
02a	35	127	b-0	0.1974	0.0037	2.133	0.051	0.0784	0.0012	0.78	1161	20	1160	16	1157	29	0.68	100.4	
02b	35	104	b-0	0.2032	0.0050	2.231	0.064	0.0796	0.0012	0.85	1193	27	1191	20	1187	30	0.01	100.5	
02c	35	59	b-0	0.2111	0.0061	2.396	0.093	0.0823	0.0021	0.74	1235	33	1241	28	1253	51	0.00	98.6	
03	35	16	b-0	0.2013	0.0069	2.181	0.112	0.0786	0.0030	0.67	1182	37	1175	36	1161	75	0.00	101.8	
04	35	---	b-0	0.1845	0.0087	1.886	0.138	0.0741	0.0041	0.65	1092	48	1076	48	1045	112	1.75	104.5	
05a	35	16	b-0	0.1493	0.0069	1.635	0.092	0.0794	0.0026	0.82	897	39	984	35	1182	64	0.00	75.9	
05b	35	30	b-0	0.1706	0.0045	1.850	0.069	0.0787	0.0021	0.71	1015	25	1063	25	1164	52	0.94	87.2	
05c	35	10	b-0	0.1772	0.0053	1.847	0.099	0.0756	0.0033	0.56	1052	29	1062	35	1084	89	0.00	97.0	
06	35	329	b-0	0.1602	0.0034	1.592	0.042	0.0720	0.0012	0.79	958	19	967	17	987	33	0.02	97.0	
Size fraction: 300-400 μm																			
07a	35	108	b-0	0.5417	0.0129	14.398	0.430	0.1928	0.0035	0.80	2790	54	2776	28	2766	30	0.70	100.9	
07b	35	139	b-0	0.2665	0.0061	4.133	0.108	0.1125	0.0014	0.88	1523	31	1661	21	1840	23	0.08	82.8	
08	35	39	b-0	0.1798	0.0039	1.865	0.069	0.0752	0.0023	0.58	1066	21	1069	24	1074	61	0.19	99.3	
09a	35	49	b-0	0.2959	0.0073	4.201	0.132	0.1030	0.0020	0.78	1671	36	1674	26	1679	36	0.00	99.5	
09b	35	169	b-0	0.2903	0.0088	4.044	0.138	0.1010	0.0016	0.89	1643	44	1643	28	1643	29	0.00	100.0	
10a	35	129	b-0	0.1951	0.0051	2.104	0.070	0.0782	0.0016	0.78	1149	27	1150	23	1152	42	0.00	99.7	
10b	35	17	b-0	0.1887	0.0045	1.958	0.113	0.0753	0.0040	0.41	1114	24	1101	39	1076	106	0.57	103.6	
11a	35	36	b-0	0.1842	0.0041	1.924	0.059	0.0758	0.0016	0.72	1090	22	1090	21	1089	43	0.00	100.1	
11b	35	49	b-0	0.1821	0.0034	1.900	0.058	0.0757	0.0018	0.62	1078	19	1081	20	1087	48	0.07	99.1	
12	35	68	b-0	0.1823	0.0032	1.869	0.045	0.0743	0.0012	0.74	1080	18	1070	16	1051	33	0.17	102.7	
13	35	54	b-0	0.1880	0.0050	1.967	0.074	0.0759	0.0020	0.70	1110	27	1104	25	1092	54	0.12	101.6	
14	35	60	b-0	0.2916	0.0058	4.054	0.105	0.1008	0.0017	0.77	1649	29	1645	21	1640	31	0.03	100.6	
15	35	937	b-0	0.1898	0.0046	2.020	0.063	0.0772	0.0015	0.77	1120	25	1122	21	1126	40	0.05	99.5	
16	35	58	b-0	0.3304	0.0105	5.176	0.187	0.1136	0.0020	0.88	1840	51	1849	31	1858	31	0.00	99.1	
17a	35	807	b-0	0.2345	0.0045	2.736	0.075	0.0846	0.0016	0.71	1358	24	1338	20	1307	38	0.04	103.9	
17b	25	191	b-0	0.2302	0.0160	2.699	0.225	0.0850	0.0039	0.83	1335	84	1328	62	1316	90	0.11	101.4	
18	35	105	b-1	0.1833	0.0044	1.892	0.063	0.0748	0.0017	0.72	1085	24	1078	22	1064	47	0.02	101.9	
19	35	44	b-0	0.2779	0.0099	3.756	0.149	0.0980	0.0017	0.90	1581	50	1583	32	1587	33	0.00	99.6	
20	35	98	b-0	0.1020	0.0032	0.851	0.035	0.0605	0.0016	0.77	626	19	625	19	620	56	0.08	101.0	
21	35	213	b-0	0.2046	0.0067	2.234	0.083	0.0792	0.0014	0.88	1200	36	1192	26	1177	34	0.00	101.9	
22	35	123	b-0	0.3137	0.0103	4.582	0.168	0.1059	0.0017	0.90	1759	51	1746	31	1731	30	0.01	101.6	
23a	35	386	b-1	0.4748	0.0175	10.782	0.436	0.1647	0.0027	0.91	2505	77	2505	38	2504	28	0.16	100.0	

* Internally-unstandardized estimates based on count rates of 238 only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on ²⁰⁷Pb/²³⁵U and ²⁰⁶Pb/²³⁸U.

¶ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ (²⁰⁶Pb/²⁰⁴Pb)_{common} / (²⁰⁶Pb/²⁰⁴Pb)_{sample}.

² 100 * (²⁰⁶Pb/²³⁸U age) / (²⁰⁷Pb/²⁰⁶Pb age).

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 12001).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		ρ [§]	Ages [Ma]		²⁰⁷ Pb/ ²³⁵ U		²⁰⁷ Pb/ ²⁰⁶ Pb		f ²⁰⁶ % ¹	Concordance ²	
				²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.		²⁰⁶ Pb/ ²³⁸ U	±2 s.d.		±2 s.d.		±2 s.d.			
Size fraction: 300-400 μm																			
23b	12	278	b-1	0.4682	0.0220	10.452	0.557	0.1619	0.0041	0.88	2476	97	2476	49	2476	42	0.13	100.0	
24	35	18	b-0	0.1909	0.0063	2.041	0.091	0.0776	0.0024	0.73	1126	34	1129	30	1136	60	0.00	99.1	
25a	35	12	b-0	0.1783	0.0072	1.854	0.104	0.0754	0.0029	0.72	1058	39	1065	37	1080	78	0.49	98.0	
25b	35	34	b-0	0.1699	0.0078	1.703	0.093	0.0727	0.0021	0.84	1011	43	1010	35	1006	59	0.10	100.6	
Size fraction: 200-300 μm																			
26a	35	584	b-0	0.1870	0.0051	1.974	0.067	0.0766	0.0016	0.80	1105	28	1107	23	1110	41	0.03	99.6	
26b	35	1379	b-0	0.1750	0.0033	1.786	0.060	0.0740	0.0021	0.56	1040	18	1040	22	1042	56	0.05	99.8	
27a	35	199	b-0	0.4363	0.0168	9.091	0.394	0.1511	0.0030	0.89	2334	75	2347	40	2359	34	0.04	99.0	
27b	25	188	b-0	0.3111	0.0143	4.569	0.244	0.1065	0.0029	0.86	1746	70	1744	44	1741	49	0.00	100.3	
28a	35	231	y,t-0	0.1828	0.0048	1.883	0.084	0.0747	0.0027	0.59	1082	26	1075	30	1060	73	0.01	102.1	
28b	35	434	y,t-0	0.1774	0.0040	1.804	0.072	0.0738	0.0024	0.56	1053	22	1047	26	1035	67	0.00	101.7	
29a	35	21	y,t-0	0.1890	0.0059	1.997	0.108	0.0766	0.0034	0.58	1116	32	1115	37	1112	88	0.05	100.4	
29b	35	125	y,t-0	0.0949	0.0021	0.787	0.032	0.0601	0.0021	0.54	584	12	589	18	608	75	0.18	96.0	
30a	35	245	y,t-0	0.1719	0.0045	1.766	0.067	0.0745	0.0020	0.69	1023	25	1033	25	1055	55	0.03	96.9	
30b	35	25	y,t-0	0.1868	0.0057	1.973	0.111	0.0766	0.0036	0.54	1104	31	1106	38	1111	94	0.04	99.4	
33a	35	63	y,t-0	0.1803	0.0051	1.853	0.083	0.0745	0.0026	0.63	1068	28	1064	29	1056	70	0.37	101.1	
33b	35	70	y,t-0	0.1870	0.0058	1.959	0.099	0.0760	0.0030	0.61	1105	31	1101	34	1094	80	0.25	101.0	
34a	35	154	y,t-0	0.1859	0.0063	1.978	0.093	0.0772	0.0025	0.72	1099	34	1108	32	1126	65	0.03	97.6	
34b	35	10	y,t-0	0.1783	0.0052	1.839	0.092	0.0748	0.0030	0.58	1058	29	1060	33	1064	82	0.06	99.4	
35a	35	486	y,t-0	0.1986	0.0049	2.141	0.077	0.0782	0.0020	0.69	1168	27	1162	25	1152	52	0.01	101.4	
35b	35	407	y,t-0	0.2062	0.0049	2.276	0.080	0.0801	0.0021	0.67	1209	26	1205	25	1198	52	0.00	100.9	
36a	35	24	y,t-0	0.1761	0.0042	1.815	0.072	0.0747	0.0024	0.60	1046	23	1051	26	1062	64	0.00	98.5	
36b	35	23	y,t-0	0.1800	0.0046	1.870	0.090	0.0754	0.0031	0.53	1067	25	1071	32	1078	83	0.00	99.0	
37a	35	151	y,t-0	0.3113	0.0059	4.565	0.127	0.1063	0.0022	0.68	1747	29	1743	23	1738	37	0.03	100.5	
37b	35	113	y,t-0	0.3001	0.0075	4.324	0.139	0.1045	0.0021	0.77	1692	37	1698	27	1706	38	0.19	99.2	
38a	35	135	y,t-0	0.1752	0.0041	1.776	0.060	0.0735	0.0018	0.70	1041	23	1037	22	1028	49	0.09	101.2	
38b	35	550	y,t-0	0.1659	0.0036	1.655	0.051	0.0724	0.0016	0.70	989	20	992	20	997	45	0.03	99.3	
39a	35	81	y,t-0	0.1981	0.0063	2.166	0.088	0.0793	0.0020	0.78	1165	34	1170	28	1180	50	0.00	98.7	
39b	25	55	y,t-0	0.1752	0.0048	1.789	0.072	0.0741	0.0022	0.68	1041	26	1042	26	1043	59	0.00	99.7	
40a	35	98	y,t-0	0.1807	0.0042	1.858	0.056	0.0746	0.0014	0.78	1071	23	1066	20	1058	38	0.07	101.2	
40b	35	220	y,t-0	0.1790	0.0042	1.854	0.054	0.0751	0.0013	0.80	1062	23	1065	19	1072	35	0.04	99.1	
41a	35	54	y,t-0	0.1809	0.0045	1.860	0.066	0.0746	0.0018	0.71	1072	25	1067	23	1058	50	0.00	101.3	
41b	35	121	y,t-0	0.1664	0.0038	1.656	0.047	0.0722	0.0012	0.81	992	21	992	18	991	34	0.08	100.1	

* Internally-unstandardized estimates based on count rates of ²³⁸U only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

§ Correlation coefficient between errors on ²⁰⁷Pb/²³⁵U and ²⁰⁶Pb/²³⁸U.

¹ Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

² $100 * (^{206}\text{Pb}/^{204}\text{Pb})_{\text{common}} / (^{206}\text{Pb}/^{204}\text{Pb})_{\text{sample}}$.

³ $100 * (^{206}\text{Pb}/^{238}\text{U age}) / (^{207}\text{Pb}/^{206}\text{Pb age})$.

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 12001).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		$^{207}\text{Pb}/^{235}\text{U}$		$^{207}\text{Pb}/^{206}\text{Pb}$		ρ^{\S}	Ages [Ma]		$^{207}\text{Pb}/^{235}\text{U}$		$^{207}\text{Pb}/^{206}\text{Pb}$		$f^{206\%1}$	Concordance ²	
				$^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.		$^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.			
<i>Size fraction: 200-300 μm</i>																			
42a	35	212	y,t-0	0.1717	0.0043	1.736	0.059	0.0733	0.0017	0.74	1021	24	1022	22	1023	46	0.00	99.9	
42b	35	543	y,t-0	0.1736	0.0046	1.755	0.054	0.0733	0.0012	0.86	1032	25	1029	20	1023	32	0.00	100.8	
43a	35	224	y,t-0	0.2583	0.0116	3.271	0.167	0.0918	0.0022	0.88	1481	60	1474	40	1464	46	0.01	101.2	
43b	35	360	y,t-0	0.2464	0.0082	3.053	0.117	0.0899	0.0017	0.86	1420	42	1421	29	1422	37	0.02	99.8	
44a	35	45	y,t-0	0.1915	0.0058	2.129	0.083	0.0806	0.0020	0.78	1129	31	1158	27	1213	48	0.03	93.1	
44b	35	34	y,t-0	0.2158	0.0053	2.454	0.083	0.0825	0.0019	0.72	1259	28	1259	24	1257	46	0.00	100.2	
45a	35	7	y,t-0	0.2189	0.0087	2.475	0.149	0.0820	0.0037	0.66	1276	46	1265	44	1245	89	0.00	102.5	
45b	25	30	y,t-0	0.1952	0.0063	2.079	0.094	0.0773	0.0025	0.71	1149	34	1142	31	1128	63	0.00	101.9	
46a	35	234	y,t-0	0.3462	0.0076	5.569	0.180	0.1167	0.0028	0.68	1916	36	1911	28	1906	43	0.20	100.5	
46b	35	153	y,t-0	0.3462	0.0110	5.534	0.210	0.1159	0.0024	0.84	1916	53	1906	33	1895	37	0.06	101.1	
47a	35	335	y,t-0	0.4789	0.0116	10.957	0.309	0.1660	0.0024	0.86	2522	51	2520	26	2517	24	0.21	100.2	
47b	25	103	y,t-0	0.2706	0.0088	5.130	0.208	0.1375	0.0033	0.80	1544	45	1841	34	2196	42	0.19	70.3	
48a	35	74	y,t-0	0.2010	0.0060	2.207	0.085	0.0796	0.0019	0.78	1181	32	1183	27	1188	48	0.00	99.4	
48b	35	68	y,t-0	0.1800	0.0074	1.861	0.102	0.0750	0.0027	0.75	1067	40	1067	36	1069	73	0.23	99.8	
49a	35	162	y,t-0	0.2282	0.0048	2.711	0.072	0.0862	0.0014	0.80	1325	25	1332	20	1342	30	0.11	98.7	
49b	35	54	y,t-0	0.1828	0.0035	1.893	0.057	0.0751	0.0017	0.64	1082	19	1079	20	1072	46	0.00	101.0	
49c	35	34	y,t-0	0.1727	0.0060	1.766	0.080	0.0742	0.0022	0.77	1027	33	1033	29	1047	59	0.00	98.1	
50a	35	19	y,t-0	0.1836	0.0055	1.904	0.084	0.0752	0.0024	0.68	1087	30	1083	29	1074	65	0.00	101.2	
50b	35	13	y,t-0	0.1830	0.0065	1.928	0.100	0.0764	0.0029	0.69	1084	36	1091	35	1106	75	0.43	98.0	
51	35	288	y,t-0	0.3307	0.0098	5.143	0.201	0.1128	0.0029	0.76	1842	47	1843	33	1845	46	0.20	99.8	
51b	25	212	y,t-0	0.2681	0.0094	4.036	0.180	0.1092	0.0030	0.79	1531	48	1641	36	1786	50	0.00	85.7	
<i>Size fraction: >200 μm</i>																			
52	25	172	y,t-0	0.2635	0.0094	6.335	0.273	0.1744	0.0042	0.83	1507	48	2023	38	2600	40	0.13	58.0	
53	35	91	y,t-0	0.1268	0.0020	1.165	0.039	0.0666	0.0020	0.46	769	11	784	18	827	62	0.45	93.1	
54	25	131	y,t-0	0.4198	0.0069	10.472	0.372	0.1809	0.0057	0.46	2260	31	2477	33	2661	52	0.00	84.9	
55	35	702	y,t-1	0.1853	0.0034	1.975	0.055	0.0773	0.0016	0.65	1096	18	1107	19	1129	42	0.03	97.1	
56	35	42	y,t-0	0.1863	0.0048	1.957	0.081	0.0762	0.0025	0.61	1101	26	1101	28	1100	66	0.00	100.1	
57	35	131	y,t-0	0.2351	0.0065	2.835	0.117	0.0874	0.0027	0.67	1361	34	1365	31	1370	59	0.06	99.3	
58	35	421	y,t-0	0.1691	0.0049	1.705	0.060	0.0731	0.0015	0.82	1007	27	1011	22	1018	41	0.00	99.0	
59	35	240	y,t-0	0.1691	0.0034	1.720	0.047	0.0738	0.0013	0.75	1007	19	1016	17	1036	36	0.03	97.2	
60	25	153	y,t-0	0.2241	0.0092	2.621	0.117	0.0848	0.0015	0.92	1304	48	1307	33	1312	35	0.09	99.4	
61	35	91	y,t-0	0.1798	0.0052	1.862	0.065	0.0751	0.0015	0.83	1066	28	1068	23	1072	40	0.00	99.4	
62	35	64	y,t-0	0.1821	0.0040	1.873	0.054	0.0746	0.0014	0.77	1079	22	1072	19	1058	37	0.00	101.9	

* Internally-unstandardized estimates based on count rates of 238 only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

ρ^{\S} Correlation coefficient between errors on $^{207}\text{Pb}/^{235}\text{U}$ and $^{206}\text{Pb}/^{238}\text{U}$.

\uparrow Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ $(^{206}\text{Pb}/^{204}\text{Pb})_{\text{common}} / (^{206}\text{Pb}/^{204}\text{Pb})_{\text{sample}}$.

² $100 * (^{206}\text{Pb}/^{238}\text{U age}) / (^{207}\text{Pb}/^{206}\text{Pb age})$.

Appendix B: U-Pb isotope data and –ages from the LA-ICP-MS analysis of zircon (sample 12001).

Analysis	Spot size [μm]	U* [ppm]	Color†	Ratios‡		$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.	ρ^{\S}	Ages [Ma]		± 2 s.d.	$^{207}\text{Pb}/^{235}\text{U}$	± 2 s.d.	$^{207}\text{Pb}/^{206}\text{Pb}$	± 2 s.d.	$f^{206\%}{}^1$	Concordance ²
				$^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.						$^{206}\text{Pb}/^{238}\text{U}$	± 2 s.d.							
Size fraction: >200 μm																			
63	35	141	y,t-0	0.2031	0.0044	2.236	0.059	0.0798	0.0012	0.82	1192	24	1192	19	1193	30	0.17	99.9	
64	35	80	y,t-0	0.1916	0.0036	2.188	0.069	0.0828	0.0021	0.60	1130	20	1177	22	1265	50	0.23	89.3	
65	35	339	y,t-0	0.1928	0.0032	2.056	0.044	0.0773	0.0011	0.76	1136	17	1134	15	1130	28	0.02	100.6	
66	35	54	y,t-0	0.1610	0.0044	1.578	0.085	0.0711	0.0033	0.51	962	24	962	33	961	95	0.34	100.2	
67	35	107	y,t-0	0.1911	0.0038	2.049	0.055	0.0778	0.0014	0.73	1127	20	1132	18	1142	36	0.04	98.7	

* Internally-unstandardized estimates based on count rates of 238 only.

† Color of grains (b = brown, y,t = yellow-transparent, t = transparent, p = pink) and appearance in CL (0 = distinct, 1 = cloudy/patchy).

‡ Uncertainties are absolute internal 2 s.d.

ρ^{\S} Correlation coefficient between errors on $^{207}\text{Pb}/^{235}\text{U}$ and $^{206}\text{Pb}/^{238}\text{U}$.

\dagger Calculated using IsoPlot v. 3.72 (Ludwig, 2009) and applying the U-decay constant after Steiger and Jäger (1977).

¹ $(^{206}\text{Pb}/^{204}\text{Pb})_{\text{common}} / (^{206}\text{Pb}/^{204}\text{Pb})_{\text{sample}}$.

² $100 * (^{206}\text{Pb}/^{238}\text{U age}) / (^{207}\text{Pb}/^{206}\text{Pb age})$.