

Table 2.1 Sample locations around Antarctica in this study and references

No.	Site name	Latitude	Longitude	Sample type	Sampling area*	Sample depth (cm)	Reference
1	178-1099B	-64.95	-64.32	Sand	I	107-130	This study
2	178-1096B	-67.57	-76.96	Sand	I	100-123	This study
3	35-324	-69.05	-98.79	Clay&Claystone	I	95-118	This study
4	28-271	-76.72	-175.05	Silty clay	II	94-117	This study
5	28-273A	-74.54	174.63	Coarse sand	II	84-107	This study
6	318-U1358A	-66.09	143.31	Clast-rich sandy diamict	III	12-38	This study
7	318-U1357A	-66.41	140.43	Diatom bearing Sand	III	20-43	This study
8	318-U1355A	-63.84	138.82	Clayey sand	III	75-98	This study
9	28-268	-63.95	105.16	Sand	IV	71-94	This study
10	119-740A	-68.76	76.68	Sand	V	79-102	This study
11	119-741A	-68.39	76.38	Sandstone	V	100-123	This study
12	113-692B	-70.72	-13.82	Sand/sandstone	VIII	40-63	This study
13	DF80-34	-69.92	162.83	Sand rich layer	II	213-226	Pierce et al. (2014)
14	38521	-77.30	160.92	Conglomerate	II	N/A	Paulsen et al. (2017b)
15	32746	-77.80	160.55	Sandstone	II	N/A	Paulsen et al. (2017a)
16	DF79-47	-66.67	148.73	Sand rich layer	III	563-567; 568-576	Pierce et al. (2014)
17	NBP 01-01JPC11	-66.56	143.05	Diamict	III	2305-2310; 2370-2375	Pierce et al. (2014)
18	ELT37-09	-65.55	141.10	Sand rich layer	III	137-139; 140-144	Pierce et al. (2014)
19	ELT37-13	-64.67	132.98	Sand rich layer	IV	112-117; 113-120	Pierce et al. (2014)
20	ELT37-16 A	-63.97	127.45	Sand rich layer	IV	228-233	Pierce et al. (2014)
21	NBP01-01 JPC25	-68.75	76.70	Diamict	V	1305; 1405	Pierce et al. (2014)
22	ODP Site 1166A	-67.70	74.79	Diamict and fluvial	V	60, 80, 100	van de Fliedert et al. (2008)
23	NBP01-01 JPC34	-68.25	72.73	Diamict	V	70, 292, 345	Pierce et al. (2014)
24	ODP Site 1165B	-64.37	67.22	Ice rafted debris	VI	35, 70, 80, 100-102, 120	Pierce et al. (2014)
25	NBP01-01 JPC40	-67.18	65.74	Diamict	VI	2370	Pierce et al. (2014)
26	IO 1277-23	-67.90	14.58	Sand rich layer	VII	887-889; 889-891	Pierce et al. (2014)
27	IWSOE 70 3-18-1	-70.30	-6.81	Sand rich layer	VII	31-33	Pierce et al. (2014)
28	IO 1578-16	-70.61	-10.06	Sand rich layer	VII	128-130	Pierce et al. (2014)
29	IWSOE 70 3-17-2	-71.17	-12.37	Sand rich layer	VIII	55-59	Pierce et al. (2014)
30	IO 1578-28	-72.19	-15.31	Sand rich layer	VIII	235.5-237	Pierce et al. (2014)
31	IO 1578-27	-72.41	-19.42	Sand rich layer	VIII	735.5-737	Pierce et al. (2014)
32	IWSOE 70 03-11-03	-73.98	-23.65	Sand rich layer	VIII	228-230	Pierce et al. (2014)
33	IWSOE 68 13	-75.45	-26.55	Sand rich layer	VIII	8-14	Pierce et al. (2014)
34	IWSOE69 G21	-72.80	-29.37	Sand rich layer	VIII	79-82	Pierce et al. (2014)
35	IWSOE 69 G17	-76.88	-32.83	Sand rich layer	VIII	158-162	Pierce et al. (2014)
36	IWSOE 70 2-22-1	-77.53	-37.97	Sand rich layer	IX	22-27	Pierce et al. (2014)

*Sampling area is divided according to the area of ice flow of Antarctic ice sheet (Rignot et al., 2011)

Note: The weightings are 4% for I, 29% for II, 6% for III, 10% for IV, 18% for V, 6% for VI, 8% for VII, 3% for VIII and 16% for IX.

Reference

Paulsen, T., Deering, C., Sliwinski, J., Bachmann, O., Guillon, M., 2017a. New detrital zircon age and trace element evidence for 1450Ma igneous zircon sources in East Antarctica. *Precambrian Res.* 300, 53-58.

Paulsen, T., Deering, C., Sliwinski, J., Valencia, V., Bachmann, O., Guillon, M., 2017b. Detrital zircon ages and trace element compositions of Permian-Triassic foreland basin strata of the Gondwanide orogen, Antarctica. *Geosphere* 13, 2085-2093.

Pierce, E.L., Hemming, S.R., Williams, T., van de Fliedert, T., Thomson, S.N., Reiners, P.W., Gehrels, G.E., Brachfeld, S.A., Goldstein, S.L., 2014. A comparison of detrital U-Pb zircon, 40Ar/39Ar hornblende, 40Ar/39Ar biotite ages in marine sediments off East Antarctica: Implications for the geology of subglacial terrains and provenance studies. *Earth-Science Reviews* 138, 156-178.

Rignot, E., Mouginot, J., Scheuchl, B., 2011. Ice Flow of the Antarctic Ice Sheet. *Science* 333, 1427-1430.

van de Fliedert, T., Hemming, S.R., Goldstein, S.L., Gehrels, G.E., Cox, S.E., 2008. Evidence against a young volcanic origin of the Gamburtsev Subglacial Mountains, Antarctica. *Geophysical Research Letters* 35.

Table 2.2 Sample locations in Australia

Sample	Latitude	Longitude	Watercourse/Desert	Sampling area*
Sample from rivers				
Murray	-35.13	139.29	Murray	II
Bega	-36.67	149.83	Bega	II
Murrumbidgee	-34.53	144.84	Murrumbidgee	II
Shaw	-20.71	119.33	Shaw	III
Ord	-15.51	128.42	Ord	VI
De Grey	-20.32	119.26	De Grey	III
Sample from top of soil†				
2007190248	-28.06	139.28	Cooper Creek	VI
2007190223	-27.69	138.28	Warburton River	VI
2007191087	-22.22	146.56	Belyando River	I
2007191519	-17.96	140.84	Flinders River	VI
2007190313	-13.83	130.73	Daly River	VI
2007191457	-15.45	130.35	Victoria River	VI
2007191043	-17.74	123.65	Fitzroy River	VI
2007190066	-20.32	119.26	De Gray River	III
2007191415	-21.98	115.03	Ashburton River	III
2007190475	-27.63	114.25	Murchison River	III
2007190251	-31.68	135.39	Lake Everard	VI
2007190134	-30.17	137.75	Mulgaria Watercourse	VI
2007190907	-32.16	135.86	Lake Torrens	VI
2007190238	-27.27	122.94	Lake Wells	VII
2007190398	-28.75	122.19	Lake Carey	VII
2007190707	-33.40	117.74	Lake Dumbleyung	VII
2007190717	-30.96	121.29	Lake Brown	VII
2007190914	-27.39	117.77	Nalla Creek	VII
2007191130	-30.84	118.27	Lake Campion	VII
Sample from sand dune field‡				
B1103	-19.78	121.06	Great Sandy Desert	VII
CPL61	-28.31	124.75	Great Victoria Desert	VII
B1200	-20.76	134.25	Tanami Desert	VII
CTJ98	-23.61	138.51	Simpson Desert	VI
SP135	-35.77	140.80	Lowan Sand	II
SP221	-27.04	138.40	Simpson Desert	VI
CTJ64	-21.04	125.99	Great Sandy Desert	VII
B167	-25.52	118.05	Great Victoria Desert	VII
CTJ20	-24.04	122.27	Great Victoria Desert	VII
CPL17	-28.54	131.17	Great Victoria Desert	VII

*Sampling area is divided according to the study of Stein et al. (2014) and shown in Fig. 2.2

†: Sample from National Geochemical Survey of Australia (NGSA; www.ga.gov.au/ngsa). NGSA samples from top of soil (Caritat and Cooper, 2011, 2016) were obtained from Geoscience Australia.

‡: Samples of sand dunes were from the sample archive of the study of Pell, S.D. (1994).

Note: The weightings are 6% for I, 7% for II, 8% for III, 9% for IV, 14% for V, 18% for VI and 38% for VII.

References:

- De Caritat, P., Cooper, M., 2011. National Geochemical Survey of Australia: The Geochemical Atlas of Australia. Geoscience Australia Record 2011/20 (2 Volumes), 557 pp.
- De Caritat, P., Cooper, M., 2016. A continental-scale geochemical atlas for resource exploration and environmental management: the National Geochemical Survey of Australia. *Geochemistry: Exploration, Environment, Analysis* 16, 3-13.
- Pell, S.D., 1994. The provenance of the Australian continental dunefields.
- Stein, J.L., Hutchinson, M.F., Stein, J.A., 2014. A new stream and nested catchment framework for Australia. *Hydrol. Earth Syst. Sci.* 18, 1917-1933.

Table 2.3 Acquisition time of selected masses for zircon U-Pb dating by LA-ICP-MS.

Mass	Element Name	Acquisition time (ms)
Session: 20191107		
29	Si	5
31	P	10
49	Ti	20
51	V	10
89	Y	10
91	Zr	5
93	Nb	10
139	La	10
140	Ce	10
141	Pr	10
146	Nd	10
147	Sm	10
153	Eu	10
163	Dy	10
172	Yb	10
175	Lu	10
177	Hf	10
181	Ta	10
206	Pb	35
207	Pb	35
208	Pb	35
232	Th	35
238	U	35
	<i>Total</i>	355

119-741A_146		545	9	6/38	0.087	540	0.648	507	98	545	9	6/38	0.088	544	0.773	581	98
119-741A_147	1.3	542	19	Pbcor6/38	0.088	542	0.648	507	107	544	19	Pbcor6/38	0.088	544	0.733	558	97
119-741A_149	1.0	552	11	Pbcor6/38	0.089	552	0.674	523	106	551	11	6/38	0.089	548	0.647	507	108
119-741A_150		314	5	6/38	0.050	312	0.340	297	101	314	5	6/38	0.047	299	0.090	87	101
119-741A_151	2.0	579	22	Pbcor6/38	0.094	579	0.726	554	105	577	22	6/38	0.092	568	0.537	437	113
119-741A_152	4.1	285	8	Pbcor6/38	0.045	285	0.305	270	105	289	8	6/38	0.044	275	0.121	116	88
119-741A_153	0.8	537	9	6/38	0.087	537	0.663	517	103	538	9	Pbcor6/38	0.087	538	0.721	551	98
119-741A_156	1.9	559	15	Pbcor6/38	0.091	559	0.697	537	104	561	15	Pbcor6/38	0.091	561	0.775	582	96
119-741A_158	1.6	502	7	Pbcor6/38	0.081	502	0.602	478	105	504	7	Pbcor6/38	0.081	504	0.674	523	96
119-741A_161	1.4	531	8	Pbcor6/38	0.086	531	0.653	510	104	533	8	Pbcor6/38	0.086	533	0.715	548	97
119-741A_162		569	10	6/38	0.092	569	0.732	558	101	569	10	6/38	0.092	568	0.733	559	101
119-741A_163	3.5	527	11	6/38	0.084	523	0.639	502	97	523	11	Pbcor6/38	0.085	523	0.686	530	99
119-741A_165		512	9	6/38	0.082	510	0.626	493	100	512	9	6/38	0.083	511	0.682	528	100
119-741A_166		525	13	6/38	0.085	524	0.652	510	100	525	13	6/38	0.085	528	0.768	579	100
119-741A_167		853	10	6/38	0.142	853	1.247	822	104	853	10	6/38	0.141	850	1.242	820	104
119-741A_169	1.0	537	7	Pbcor6/38	0.087	537	0.670	521	103	536	7	Pbcor6/38	0.087	536	0.677	525	102
119-741A_170		524	15	6/38	0.085	523	0.636	500	103	524	15	6/38	0.086	530	0.807	601	103
119-741A_171	3.1	539	13	Pbcor6/38	0.087	539	0.668	519	104	536	13	Pbcor6/38	0.087	536	0.636	500	107
119-741A_172	2.1	574	14	Pbcor6/38	0.093	574	0.737	561	102	572	14	Pbcor6/38	0.093	572	0.716	548	104
119-741A_174	4.2	907	14	Pbcor6/38	0.151	907	1.426	900	101	911	14	6/38	0.152	912	1.556	953	98
119-741A_175	0.1	528	9	Pbcor6/38	0.085	528	0.673	523	101	528	9	Pbcor6/38	0.085	528	0.679	526	100
119-741A_177	2.2	605	11	Pbcor6/38	0.098	605	0.807	601	101	607	11	6/38	0.099	607	0.856	628	97
119-741A_178	0.6	544	8	Pbcor6/38	0.088	544	0.701	539	101	543	8	Pbcor6/38	0.088	543	0.698	537	101
119-741A_181	3.3	496	14	Pbcor6/38	0.080	496	0.602	478	104	499	14	6/38	0.081	500	0.710	545	96
119-741A_182		544	8	6/38	0.088	544	0.704	541	100	544	8	6/38	0.088	543	0.692	534	100
119-741A_184	1.0	513	18	Pbcor6/38	0.083	513	0.651	509	101	514	18	6/38	0.084	522	0.842	620	105
119-741A_185	5.8	773	12	Pbcor6/38	0.127	773	1.139	772	100	779	12	6/38	0.131	794	1.602	971	94
119-741A_189		537	19	6/38	0.086	534	0.672	522	99	537	19	6/38	0.087	540	0.815	605	99
119-741A_190	0.2	561	11	Pbcor6/38	0.091	561	0.729	556	101	560	11	Pbcor6/38	0.091	560	0.733	558	100
119-741A_191	6.7	513	15	Pbcor6/38	0.083	513	0.641	503	102	520	15	6/38	0.084	520	0.805	599	91
119-741A_196	0.1	540	6	Pbcor6/38	0.087	540	0.694	535	101	540	6	Pbcor6/38	0.087	540	0.700	539	100
119-741A_197	2.7	557	13	Pbcor6/38	0.090	557	0.724	553	101	560	13	6/38	0.091	563	0.839	619	97
119-741A_198	3.2	543	12	Pbcor6/38	0.088	543	0.709	544	100	546	12	6/38	0.089	550	0.852	626	95
119-741A_199	0.9	424	5	Pbcor6/38	0.068	424	0.530	432	98	425	5	Pbcor6/38	0.068	425	0.535	435	98
119-741A_200	1.0	545	16	Pbcor6/38	0.088	545	0.695	536	102	546	16	6/38	0.089	549	0.784	587	104

*Age type: 6/38, uncorrected ²⁰⁶Pb/²³⁸U age; Pbcor6/38, corrected ²⁰⁶Pb/²³⁸U age.

Table 3 Comparison of uncorrected and ²⁰⁷Pb corrected ²⁰⁶Pb/²³⁸U ages for sample Murray

Sample ID	Best age (Ma)*	2SE	Age type†	Difference‡	Uncorrected ²⁰⁶ Pb/ ²³⁸ U age	²⁰⁷ Pb corrected ²⁰⁶ Pb/ ²³⁸ U age
20170201_Murray1-10	502	27	6/38	0	502	502
20170201_Murray1-11	571	24	Pbcor6/38	2	569	571
20170201_Murray1-12	247	11	Pbcor6/38	1	247	247
20170201_Murray1-13	575	25	Pbcor6/38	1	574	575
20170201_Murray1-21	404	18	Pbcor6/38	1	405	404
20170201_Murray1-22	511	26	6/38	3	511	514
20170201_Murray1-25	525	30	Pbcor6/38	2	527	525
20170201_Murray1-31	448	21	Pbcor6/38	2	450	448
20170201_Murray1-32	562	25	Pbcor6/38	1	561	562
20170201_Murray1-35	586	27	6/38	1	586	585
20170201_Murray1-38	526	23	Pbcor6/38	1	527	526
20170201_Murray1-39	574	25	6/38	0	574	574
20170201_Murray1-40	417	19	Pbcor6/38	1	419	417
20170201_Murray1-45	834	36	Pbcor6/38	2	836	834
20170201_Murray1-46	508	23	Pbcor6/38	1	509	508
20170201_Murray1-48	143	8	Pbcor6/38	1	144	143
20170201_Murray1-49	473	21	Pbcor6/38	1	474	473
20170201_Murray1-52	596	27	Pbcor6/38	1	595	596
20170201_Murray1-53	232	11	Pbcor6/38	2	230	232
20170201_Murray1-57	589	25	Pbcor6/38	2	587	589
20170201_Murray1-61	565	24	Pbcor6/38	1	564	565
20170201_Murray1-62	543	26	Pbcor6/38	6	537	543
20170201_Murray1-66	326	15	Pbcor6/38	1	327	326
20170201_Murray1-68	542	24	Pbcor6/38	1	544	542
20170201_Murray1-69	550	28	Pbcor6/38	3	547	550
20170201_Murray1-70	220	12	Pbcor6/38	1	218	220
20170201_Murray1-72	578	25	Pbcor6/38	2	577	578
20170201_Murray1-73	528	23	Pbcor6/38	2	531	528
20170201_Murray1-76	181	9	Pbcor6/38	0	182	181
20170201_Murray1-78	569	26	Pbcor6/38	2	567	569
20170201_Murray1-79	325	15	6/38	0	325	325
20170201_Murray1-80	507	24	Pbcor6/38	2	509	507
20170201_Murray1-83	501	26	Pbcor6/38	0	501	501
20170201_Murray1-84	541	24	6/38	1	541	540
20170201_Murray1-85	608	27	Pbcor6/38	1	607	608
20170201_Murray1-86	590	26	6/38	1	590	589
20170201_Murray1-87	320	15	Pbcor6/38	2	322	320
20170201_Murray1-88	411	19	6/38	0	411	410
20170201_Murray1-89	635	30	Pbcor6/38	5	640	635
20170201_Murray1-90	745	37	Pbcor6/38	12	757	745
20170201_Murray1-91	593	28	Pbcor6/38	1	594	593
20170201_Murray1-92	582	29	Pbcor6/38	0	582	582
20170201_Murray1-94	603	31	6/38	0	603	603
20170201_Murray1-95	461	23	Pbcor6/38	4	465	461
20170201_Murray1-96	460	22	Pbcor6/38	1	461	460
20170201_Murray1-98	750	35	Pbcor6/38	3	753	750
20170201_Murray1-99	512	24	Pbcor6/38	3	515	512
20170201_Murray1-100	540	26	Pbcor6/38	5	535	540
20170201_Murray2-5	533	23	6/38	0	533	533
20170201_Murray2-6	550	23	6/38	0	550	551
20170201_Murray2-7	557	26	6/38	1	557	558
20170201_Murray2-9	549	23	Pbcor6/38	2	547	549
20170201_Murray2-10	509	23	6/38	0	509	508
20170201_Murray2-19	534	27	6/38	1	534	533
20170201_Murray2-20	499	22	Pbcor6/38	1	500	499
20170201_Murray2-21	512	22	6/38	1	512	513
20170201_Murray2-23	463	20	Pbcor6/38	1	463	463
20170201_Murray2-24	576	25	6/38	0	576	576
20170201_Murray2-28	570	27	Pbcor6/38	4	566	570
20170201_Murray2-29	537	24	Pbcor6/38	1	537	537
20170201_Murray2-30	588	26	Pbcor6/38	5	583	588
20170201_Murray2-32	175	9	Pbcor6/38	2	173	175
20170201_Murray2-33	619	26	6/38	1	619	619
20170201_Murray2-35	582	25	6/38	1	582	583
20170201_Murray2-36	558	24	Pbcor6/38	0	558	558
20170201_Murray2-37	524	22	Pbcor6/38	2	526	524
20170201_Murray2-39	594	25	Pbcor6/38	0	595	594
20170201_Murray2-40	575	26	Pbcor6/38	4	571	575
20170201_Murray2-41	928	39	6/38	2	928	930
20170201_Murray2-42	548	27	Pbcor6/38	1	549	548
20170201_Murray2-43	480	24	6/38	0	480	480
20170201_Murray2-44	500	21	Pbcor6/38	1	501	500
20170201_Murray2-45	598	27	Pbcor6/38	2	596	598
20170201_Murray2-46	652	30	Pbcor6/38	2	650	652
20170201_Murray2-47	600	28	Pbcor6/38	1	601	600
20170201_Murray2-48	594	25	Pbcor6/38	1	593	594
20170201_Murray2-52	851	38	6/38	1	851	852
20170201_Murray2-54	493	22	6/38	0	493	494
20170201_Murray2-56	503	22	Pbcor6/38	1	503	503
20170201_Murray2-57	576	24	Pbcor6/38	0	576	576
20170201_Murray2-59	193	9	6/38	1	193	193
20170201_Murray2-60	571	26	Pbcor6/38	1	570	571

*: The age closer to Concordia

†: 6/38, uncorrected ²⁰⁶Pb/²³⁸U age; Pbcor6/38, corrected ²⁰⁶Pb/²³⁸U age;

‡: Difference between uncorrected and corrected age.

Table with columns for date, latitude, longitude, and four data series (A, B, C, D). The table contains approximately 1000 rows of data.

Table is subdivided according to the latitude of the stations (P = 2000 m, N = 60 m, and S = 10 m) and mass weight (W = 0.5 g). The data are sorted according to chronological order (including 2000 m).

σ is the standard deviation of the primary error, σ_{int} is the standard deviation of the secondary error, σ_{tot} is the total standard deviation.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

σ_{tot} is calculated from σ_{tot} = (σ_{int}² + σ_{int}² + σ_{int}²)^{0.5}.

Table 4.2 U-Pb ages of zircon references for each analytical session.

Session	Reference	Number	Mean ²⁰⁶ Pb/ ²³⁸ U age	2SD	2SE	Mean ²⁰⁷ Pb/ ²³⁵ U age	2SD	2SE	Mean ²⁰⁷ Pb/ ²⁰⁶ Pb age	2SD	2SE	Analyzed unknown sample
20191107	91500	25	1073.0	35.9	7.2	1069.7	25.8	5.2	1065.2	47.7	9.5	35-324 (No. 1-208)
	Temora 2	25	417.0	2.5	0.5	415.6	16.1	3.2	406.1	119.0	23.8	
	R33	12	417.9	20.6	5.9	412.2	21.9	6.3	376.5	159.6	46.1	
20191108_1	91500	28	1081.6	36.7	6.9	1085.7	58.1	11.0	1067.2	74.4	14.1	178-10998 (No. 1-236)
	Temora 2	27	417.0	3.9	0.7	415.4	4.5	0.9	370.2	144.8	27.9	
	R33	9	421.8	11.5	3.8	423.1	29.9	10.0	405.2	189.1	63.0	
20191108_2	91500	30	1080.5	19.9	3.6	1068.6	27.8	5.1	1065.4	39.9	7.3	119-740A (No. 1-25) 318-U1357A (No. 1-84) 28-273A (No. 1-110)
	Temora 2	30	416.3	12.1	2.2	414.1	13.8	2.5	417.6	108.2	19.8	
	R33	15	417.5	19.1	4.9	422.8	32.9	8.5	473.0	139.3	36.0	
20191109	91500	20	1077.0	22.0	4.9	1070.2	27.0	6.0	1063.4	57.5	12.9	113-692B (No. 1-170)
	Temora 2	20	417.3	7.6	1.7	417.2	15.6	3.5	418.4	137.0	30.6	
	R33	7	418.5	8.6	3.3	415.7	6.4	2.4	424.9	56.7	21.4	
20200720	91500	24	1069.8	23.1	4.7	1045.0	52.2	10.7	1064.0	167.6	34.2	178-10968 (No. 1-150)
	Temora 2	18	416.6	10.1	2.4	401.2	50.8	12.0	383.3	289.7	68.3	
	R33	11	417.6	16.3	4.9	408.2	26.7	8.1	448.4	156.0	47.0	
20200722	91500	27	1066.6	34.9	6.7	1031.9	57.2	11.0	1068.1	176.1	33.9	178-10968 (No. 151-320)
	Temora 2	26	416.5	3.9	0.8	408.0	36.3	7.1	443.1	243.5	47.7	
	R33	10	418.6	6.5	2.0	406.1	33.7	10.7	434.7	197.2	62.4	
20200723	91500	29	1063.0	35.3	6.6	1024.5	38.0	7.1	1066.2	14.9	2.8	178-10968 (No. 321-480) 318-U1355A (No. 1-30)
	Temora 2	27	415.0	8.2	1.6	407.3	40.9	7.9	450.0	270.9	52.1	
	R33	10	415.4	12.9	4.1	410.3	36.8	11.6	440.5	229.7	72.6	
20200731	91500	28	1065.3	29.3	5.5	1041.5	90.4	17.1	1065.7	41.1	7.8	318-U1355A (No. 31-211) 318-U1358A (No. 1-20)
	Temora 2	12	418.2	5.9	1.7	405.8	89.6	25.9	362.0	261.9	75.6	
	R33	27	417.1	10.2	2.0	394.4	62.0	11.9	337.8	373.1	71.8	
20200813_1	91500	14	1075.2	18.1	4.8	1057.0	55.6	14.9	1067.1	165.7	44.3	318-U1358A (No. 21-110)
	Temora 2	14	417.0	5.4	1.5	408.8	40.6	10.8	417.0	271.4	72.5	
	R33	7	417.7	4.5	1.7	403.9	45.0	17.0	483.8	401.2	151.6	
	OG1	4	3501.8	64.3	32.2	3481.5	36.8	18.4	3467.6	41.6	20.8	
20200813_2	91500	21	1071.6	19.5	4.3	1047.3	66.4	14.5	1063.6	50.6	11.0	318-U1358A (No. 111-200) 28-271 (No. 1-40)
	Temora 2	20	417.6	7.9	1.8	407.9	45.4	10.2	432.4	340.5	76.1	
	R33	9	417.1	3.3	1.1	406.4	38.8	12.9	451.3	300.6	100.2	
	OG1	10	3459.4	82.7	26.2	3457.3	65.2	20.6	3477.8	76.9	24.3	
20200814_1	91500	25	1053.2	56.2	11.2	1028.0	52.2	10.4	1065.8	32.7	6.5	28-271 (No. 41-220)
	Temora 2	26	417.1	6.7	1.3	404.6	62.2	12.2	447.7	346.6	68.0	
	R33	10	416.5	6.2	2.0	413.0	36.6	11.6	486.6	237.3	75.0	
	OG1	8	3519.3	169.6	60.0	3474.8	68.2	24.1	3471.1	12.0	4.3	
20200814_2	91500	30	1058.5	46.0	8.4	1037.1	56.2	10.3	1065.4	12.7	2.3	119-741A (No. 1-200)
	Temora 2	31	417.4	10.2	1.8	408.1	40.7	7.3	425.3	288.8	51.9	
	R33	14	416.0	4.5	1.2	405.3	64.6	17.3	440.7	285.2	76.2	
	OG1	8	3530.8	121.3	42.9	3478.0	71.5	25.3	3459.4	25.8	9.1	
20200815	91500	38	1059.1	37.4	6.1	1039.1	30.3	4.9	1064.8	5.7	0.9	119-741A (No. 201-232) 28-268 (No. 1-211)
	Temora 2	35	416.7	5.2	0.9	404.9	48.3	8.2	418.8	282.8	47.8	
	R33	16	417.0	2.6	0.6	396.1	62.0	15.5	389.6	328.5	82.1	
	R33	16	417.0	2.6	0.6	396.1	62.0	15.5	389.6	328.5	82.1	
	OG1	15	3445.6	203.3	52.5	3465.4	66.5	17.2	3469.7	8.1	2.1	

Note: All the data were processed via Lolite software (Paton et al., 2011).

Reference:

Paton, C., Hellstrom, J., Paul, B., Woodhead, J., Hergt, J., 2011. Lolite: Freeware for the visualisation and processing of mass spectrometric data. Journal of Analytical Atomic Spectrometry 26, 2508-2518.

Table 4.3 U-Pb ages for Grain 41 and 149 from the site 318-U1358A

Mass sweep	²⁰⁶ Pb/ ²³⁸ U Age (Ma)	²⁰⁷ Pb/ ²⁰⁶ Pb Age (Ma)	²⁰⁶ Pb CPS*	²⁰⁷ Pb CPS	²³⁸ U CPS
318-U1358A_41					
1	3412	4562	293	180	459
2	3941	4202	327	157	423
3	4214	4169	347	163	409
4	4093	4035	345	148	422
5	4454	4283	345	175	375
6	3790	4334	335	176	451
7	4173	4193	354	169	418
8	4011	4261	342	171	425
9	4126	4245	356	176	425
10	4323	4257	399	199	446
11	4337	4473	379	219	421
12	4266	4368	396	213	449
13	4236	4390	414	226	474
14	4475	3895	435	170	460
15	4584	4415	434	241	443
16	4580	4047	446	193	455
17	3996	4349	405	215	498
18	3934	4378	410	222	514
19	4159	4036	447	192	519
20	3553	4102	392	176	560
Mean	4133	4250	Concordance†		97%
Uncertainty of counting statistics (1 RSD %) ‡					
1 RSD % of Mean	7.5	3.95			1.99
2SE	139	75			
318-U1358A_149					
1	4432	4405	1294	733	1444
2	4727	4354	1351	739	1374
3	4864	4337	1380	746	1345
4	4536	4342	1319	716	1416
5	4521	4198	1364	671	1467
6	4082	4248	1204	612	1487
7	4176	4208	1221	604	1459
8	4194	4388	1180	661	1399
9	3959	4165	1101	529	1408
10	3997	4266	1073	552	1352
11	3843	4217	1075	535	1424
12	3669	4191	955	467	1342
13	3897	4297	1020	536	1321
14	4001	4187	1097	535	1369
15	4142	4481	1054	628	1253
16	4632	4096	1177	540	1196
17	4031	4401	1092	616	1341
18	4301	4303	1126	594	1264
19	4225	4118	1130	526	1297
Mean	4223	4274	Concordance		99%
Uncertainty of counting statistics (1 RSD %) ‡					
1 RSD % of Mean	7.62	2.48			1.15
2SE	148	49			

*: CPS, the net count after background correction.

†: Concordance is calculated by ²⁰⁷Pb/²⁰⁶Pb vs ²⁰⁶Pb/²³⁸U ages.

‡: Error from ion counting statistics (Wielandt and Bizzarro, 2011) combines the uncertainty of ²⁰⁷Pb and ²⁰⁶Pb counts, added in quadrature.

Reference:

Wielandt, D., Bizzarro, M., 2011. A TIMS-based method for the high precision measurements of the three-isotope potassium composition of small samples. Journal of Analytical Atomic Spectrometry 26, 366-377.

Table 4.4 Oxygen isotopic data for detrital zircons from Antarctica.

Sample ID	Best age (Ma)	ZSE	$\delta^{18}\text{O}_{\text{VSMOW}}^*$	\pm Within-spot precision (95% conf.)	\pm Spot precision (95% conf.)†
28-268_1	1420	70	5.17	0.12	0.57
28-268_4	1324	98	6.20	0.21	0.59
28-268_5	1509	70	7.25	0.16	0.57
28-268_6	1107	159	6.96	0.07	0.56
28-268_7	530	6	6.49	0.17	0.58
28-268_8	1563	74	7.36	0.12	0.57
28-268_11	1189	116	8.19	0.26	0.61
28-268_12	689	19	5.82	0.13	0.57
28-268_14	536	10	7.69	0.20	0.59
28-268_15	1128	95	7.66	0.15	0.57
28-268_16	1213	88	6.01	0.22	0.59
28-268_20	1238	65	8.07	0.22	0.60
28-268_22	1213	154	7.09	0.19	0.59
28-268_28	1199	204	8.43	0.19	0.58
28-268_31	1275	115	7.65	0.19	0.58
28-268_34	1199	118	8.76	0.21	0.59
28-268_46	304	13	4.11	0.12	0.57
28-268_49	3332	26	5.65	0.19	0.58
28-268_52	1154	66	8.03	0.33	0.64
28-268_53	1240	175	8.35	0.06	0.56
28-268_55	1261	61	6.21	0.25	0.61
28-268_62	1181	50	6.87	0.37	0.67
28-268_64	1174	145	7.78	0.08	0.56
28-268_65	1249	74	6.87	0.13	0.57
28-268_68	1561	68	6.42	0.21	0.59
28-268_71	1161	68	7.17	0.41	0.69
28-268_77	473	10	6.58	0.16	0.58
28-268_87	1324	132	7.14	0.29	0.62
28-268_97	1156	137	6.30	0.18	0.58
28-268_103	1235	159	5.93	0.19	0.58
28-268_104	1414	197	6.70	0.13	0.57
28-268_105	1259	71	7.33	0.31	0.63
28-268_113	1308	80	2.50	0.42	0.69
28-268_114	1161	121	8.65	0.17	0.52
28-268_115	1181	92	7.61	0.17	0.53
28-268_116	1261	76	6.72	0.21	0.54
28-268_117	1169	98	7.37	0.38	0.62
28-268_120	414	9	5.73	0.17	0.53
28-268_126	1362	170	7.59	0.38	0.63
28-268_128	1360	222	8.79	0.38	0.63
28-268_130	1199	96	9.32	0.30	0.58
28-268_133	1259	85	5.58	0.25	0.56
28-268_135	636	12	7.04	0.19	0.53
28-268_137	1201	116	6.56	0.15	0.52
28-268_142	1403	155	6.96	0.19	0.53
28-268_144	1440	78	6.04	0.14	0.52
28-268_148	971	151	7.72	0.40	0.64
28-268_150	1194	44	6.50	0.29	0.58
28-268_152	1233	77	8.23	0.24	0.55
28-268_164	1206	135	6.37	0.34	0.60
28-268_170	1337	135	8.35	0.23	0.55
28-268_180	528	22	6.75	0.16	0.52
28-268_185	1201	79	7.76	0.28	0.57
28-268_188	2735	74	5.34	0.19	0.53
28-268_190	1225	94	5.80	0.15	0.52
28-268_194	613	10	9.58	0.20	0.54
28-268_200	1216	83	7.67	0.31	0.59
28-268_202	1199	145	7.22	0.13	0.52
28-268_205	1208	73	6.20	0.24	0.55
28-268_208	1154	109	8.23	0.21	0.54
28-268_209	1223	99	6.06	0.20	0.54
28-271_5	501	8	5.66	0.16	0.54
28-271_6	201	6	4.44	0.27	0.59
28-271_12	1208	142	6.94	0.24	0.57
28-271_17	188	5	5.85	0.16	0.54
28-271_21	102	5	3.39	0.17	0.54
28-271_27	531	11	9.42	0.21	0.56
28-271_35	260	5	5.36	0.14	0.54
28-271_37	153	3	5.39	0.30	0.60
28-271_38	214	6	4.75	0.07	0.52
28-271_41	167	5	8.79	0.23	0.57
28-271_43	343	4	7.45	0.15	0.54
28-271_46	118	5	7.38	0.39	0.65
28-271_50	523	8	8.19	0.16	0.54
28-271_53	100	6	9.31	0.15	0.54
28-271_55	102	3	6.74	0.38	0.64
28-271_57	118	2	5.54	0.27	0.58
28-271_67	284	14	3.49	0.20	0.55
28-271_74	223	6	5.52	0.13	0.53
28-271_77	575	12	6.57	0.11	0.53
28-271_86	1008	120	10.12	0.22	0.56
28-271_95	152	11	3.17	0.29	0.59
28-271_96	194	6	4.33	0.13	0.54
28-271_100	231	7	5.63	0.20	0.55
28-271_109	939	28	7.09	0.19	0.55
28-271_118	185	6	6.27	0.29	0.59
28-271_119	174	5	6.38	0.17	0.55
28-271_120	1799	48	8.41	0.07	0.52
28-271_132	506	10	5.94	0.23	0.57
28-271_134	206	6	5.51	0.15	0.54
28-271_136	224	6	5.74	0.25	0.58
28-271_139	205	7	5.86	0.21	0.56
28-271_146	457	13	5.63	0.10	0.53
28-271_155	204	5	4.87	0.24	0.57
28-271_161	925	19	6.88	0.15	0.54
28-271_162	362	9	7.16	0.26	0.58

28-271_174	269	12	4.12	0.18	0.55
28-271_175	188	4	4.94	0.18	0.55
28-271_178	194	5	4.34	0.20	0.55
28-271_184	186	8	6.08	0.12	0.53
28-271_190	287	7	5.68	0.28	0.59
28-271_199	67	3	7.44	0.23	0.57
28-271_200	195	6	5.76	0.32	0.61
28-271_208	270	7	3.78	0.12	0.53
28-271_209	257	13	4.76	0.14	0.54
28-273A-2	1110	60	4.90	0.14	0.45
28-273A-3	1223	70	10.07	0.16	0.45
28-273A-4	495	16	8.04	0.15	0.45
28-273A-8	465	15	9.66	0.11	0.44
28-273A-14	544	18	8.09	0.10	0.43
28-273A-19	515	17	8.52	0.23	0.48
28-273A-24	478	15	10.52	0.14	0.44
28-273A-26	726	24	6.52	0.16	0.45
28-273A-27	516	16	8.14	0.20	0.47
28-273A-31	438	14	10.58	0.11	0.44
28-273A-35	473	15	7.82	0.17	0.46
28-273A-37	411	13	7.36	0.25	0.49
28-273A-48	513	16	6.28	0.13	0.44
28-273A-51	616	20	6.96	0.14	0.45
28-273A-52	529	17	6.79	0.15	0.45
28-273A-53	907	50	5.42	0.19	0.46
28-273A-54	509	16	7.50	0.17	0.46
28-273A-55	111	4	6.46	0.26	0.50
28-273A-58	465	15	8.96	0.17	0.45
28-273A-61	486	15	7.10	0.24	0.49
28-273A-76	239	8	4.94	0.16	0.45
28-273A-79	2115	33	7.59	0.24	0.49
28-273A-81	452	15	8.47	0.16	0.45
28-273A-92	457	15	7.20	0.22	0.48
28-273A-96	1060	32	8.70	0.19	0.46
28-273A-102	461	14	7.53	0.11	0.44
28-273A-103	539	17	9.63	0.11	0.44
28-273A-106	632	19	7.62	0.16	0.45
28-273A-109	1105	31	6.12	0.12	0.44
35-324-1	1645	51	5.12	0.14	0.50
35-324-3	204	6	7.57	0.15	0.50
35-324-4	626	14	7.24	0.16	0.51
35-324-5	289	7	5.71	0.16	0.51
35-324-10	269	6	4.96	0.18	0.51
35-324-12	985	31	8.52	0.15	0.50
35-324-14	1076	64	9.84	0.12	0.50
35-324-15	546	14	7.24	0.10	0.49
35-324-17	206	7	8.44	0.13	0.50
35-324-19	564	14	8.20	0.12	0.50
35-324-27	240	8	4.15	0.14	0.50
35-324-30	100	5	4.26	0.19	0.52
35-324-36	299	8	5.62	0.24	0.54
35-324-38	545	12	9.44	0.16	0.51
35-324-42	560	12	8.11	0.13	0.50
35-324-44	559	12	8.81	0.19	0.52
35-324-47	191	5	7.27	0.18	0.51
35-324-52	106	4	5.89	0.12	0.50
35-324-55	128	3	5.14	0.10	0.49
35-324-56	174	4	8.82	0.13	0.50
35-324-57	1414	51	6.36	0.10	0.49
35-324-59	187	6	4.58	0.14	0.50
35-324-62	197	5	5.30	0.10	0.49
35-324-63	182	6	5.42	0.13	0.50
35-324-64	224	6	4.12	0.19	0.52
35-324-65	241	6	5.87	0.23	0.53
35-324-68	179	5	4.11	0.15	0.50
35-324-71	97	3	3.89	0.16	0.51
35-324-73	574	14	6.81	0.16	0.51
35-324-74	178	5	8.13	0.14	0.50
35-324-75	593	20	6.02	0.13	0.50
35-324-76	187	6	8.53	0.15	0.50
35-324-77	1591	46	8.48	0.14	0.50
35-324-79	720	16	7.63	0.17	0.51
35-324-87	554	13	7.14	0.11	0.49
35-324-89	586	14	7.51	0.26	0.54
35-324-90	110	5	4.21	0.27	0.55
35-324-92	323	10	6.61	0.12	0.50
35-324-93	103	4	3.83	0.12	0.50
35-324-96	1002	39	7.92	0.20	0.52
35-324-97	521	11	6.98	0.28	0.55
35-324-98	113	4	3.94	0.15	0.50
35-324-101	250	8	7.16	0.18	0.51
35-324-106	549	12	8.39	0.12	0.50
35-324-111	1092	55	5.45	0.18	0.51
35-324-115	647	19	4.93	0.24	0.54
35-324-116	1016	33	6.30	0.14	0.50
35-324-122	1113	42	6.40	0.24	0.54
35-324-124	1738	24	5.96	0.22	0.53
35-324-131	202	6	6.16	0.18	0.51
35-324-133	1762	25	8.58	0.15	0.50
35-324-139	207	5	6.25	0.14	0.50
35-324-142	526	13	8.96	0.14	0.50
35-324-157	2417	23	2.97	0.19	0.52
35-324-160	1013	75	8.48	0.13	0.50
35-324-164	1762	29	6.61	0.20	0.52
35-324-183	507	12	5.28	0.15	0.50
35-324-187	1948	21	6.33	0.17	0.51
35-324-193	191	5	10.30	0.16	0.51
113-692B-1	1322	50	4.72	0.16	0.45
113-692B-10	629	12	10.15	0.17	0.45
113-692B-21	1049	79	6.78	0.19	0.46

113-692B-24	674	14	7.02	0.19	0.47
113-692B-29	517	13	6.81	0.25	0.49
113-692B-31	629	11	8.25	0.15	0.45
113-692B-45	1141	66	5.93	0.13	0.44
113-692B-55	900	20	6.05	0.14	0.45
113-692B-69	1254	55	8.20	0.11	0.44
113-692B-72	530	15	7.40	0.26	0.50
113-692B-75	3524	37	6.63	0.11	0.44
113-692B-82	3358	35	6.23	0.14	0.45
113-692B-85	1146	84	4.57	0.21	0.47
113-692B-88	1049	68	6.94	0.17	0.46
113-692B-99	1065	72	8.04	0.23	0.48
113-692B-113	1458	62	7.89	0.19	0.46
113-692B-116	500	12	5.89	0.22	0.48
113-692B-125	1131	62	6.85	0.13	0.44
113-692B-128	646	12	9.30	0.11	0.44
113-692B-131	544	9	6.89	0.12	0.44
113-692B-135	502	12	8.13	0.11	0.44
113-692B-138	633	11	7.22	0.10	0.43
113-692B-163	530	10	10.36	0.13	0.44
113-692B-166	939	22	7.13	0.11	0.44
119-740A-1	723	27	10.29	0.09	0.47
119-740A-5	752	23	13.16	0.13	0.48
119-740A-8	825	31	11.32	0.17	0.49
119-740A-11	1008	78	5.54	0.14	0.48
119-740A-14	2868	17	5.93	0.33	0.57
119-740A-21	560	18	8.98	0.12	0.48
119-741A_1	553	15	7.24	0.30	0.58
119-741A_7	523	15	7.16	0.17	0.53
119-741A_9	558	15	7.64	0.26	0.56
119-741A_12	979	153	6.68	0.21	0.56
119-741A_18	498	11	6.32	0.19	0.55
119-741A_19	522	8	7.29	0.18	0.55
119-741A_20	537	13	7.31	0.08	0.52
119-741A_23	555	9	6.95	0.29	0.59
119-741A_24	555	11	6.97	0.28	0.59
119-741A_26	547	10	6.77	0.18	0.55
119-741A_29	541	11	7.28	0.39	0.65
119-741A_30	1070	118	7.67	0.15	0.54
119-741A_33	1049	98	6.26	0.12	0.53
119-741A_35	962	175	7.41	0.28	0.59
119-741A_38	565	15	7.26	0.39	0.65
119-741A_39	566	10	6.98	0.15	0.54
119-741A_40	285	11	8.14	0.20	0.56
119-741A_48	562	22	7.74	0.28	0.59
119-741A_55	515	19	7.48	0.26	0.58
119-741A_59	529	19	7.53	0.08	0.52
119-741A_60	550	10	6.62	0.34	0.62
119-741A_67	528	14	7.27	0.15	0.54
119-741A_69	1027	102	7.11	0.22	0.56
119-741A_71	263	7	7.19	0.08	0.52
119-741A_73	546	22	6.94	0.14	0.54
119-741A_77	549	8	8.36	0.21	0.56
119-741A_81	491	10	7.20	0.16	0.54
119-741A_87	567	9	7.11	0.11	0.53
119-741A_94	538	13	7.25	0.11	0.53
119-741A_110	567	13	7.14	0.27	0.59
119-741A_116	548	10	7.20	0.09	0.53
119-741A_121	882	11	7.85	0.29	0.59
119-741A_132	550	12	8.75	0.33	0.62
119-741A_133	273	4	6.19	0.22	0.56
119-741A_140	499	8	7.14	0.14	0.54
119-741A_144	527	8	7.08	0.14	0.54
119-741A_150	314	5	6.04	0.15	0.54
119-741A_170	524	15	7.15	0.15	0.54
119-741A_173	1016	139	6.11	0.13	0.53
119-741A_175	528	9	7.37	0.17	0.54
119-741A_178	544	8	7.38	0.14	0.54
119-741A_182	544	8	6.42	0.16	0.54
119-741A_197	557	13	7.97	0.24	0.57
119-741A_202	1046	158	3.96	0.12	0.53
119-741A_206	570	16	6.50	0.39	0.65
119-741A_208	514	7	7.38	0.29	0.59
119-741A_209	364	16	7.34	0.15	0.54
119-741A_214	530	11	7.63	0.19	0.55
119-741A_215	544	9	7.70	0.09	0.53
119-741A_216	550	6	7.51	0.21	0.56
119-741A_220	516	9	7.68	0.30	0.60
119-741A_228	547	13	7.52	0.12	0.53
119-741A_229	535	17	6.25	0.29	0.59
178-10968_8	944	13	6.90	0.28	0.62
178-10968_20	2056	122	6.72	0.14	0.57
178-10968_22	108	5	4.43	0.41	0.69
178-10968_33	242	3	5.12	0.33	0.65
178-10968_39	295	8	5.02	0.27	0.61
178-10968_73	938	19	7.12	0.40	0.68
178-10968_78	137	6	5.01	0.33	0.65
178-10968_93	1477	131	4.83	0.38	0.67
178-10968_118	617	9	6.19	0.22	0.59
178-10968_131	104	7	4.16	0.38	0.67
178-10968_144	222	4	6.65	0.19	0.58
178-10968_173	105	5	4.18	0.30	0.63
178-10968_176	1705	58	7.43	0.33	0.64
178-10968_177	110	4	5.96	0.20	0.59
178-10968_182	1273	84	4.18	0.49	0.74
178-10968_188	261	11	5.53	0.11	0.55
178-10968_192	119	5	5.14	0.14	0.56
178-10968_208	1110	73	4.52	0.44	0.70
178-10968_217	210	7	5.27	0.26	0.60
178-10968_224	280	7	8.34	0.19	0.57

178-10968_229	131	7	5.07	0.34	0.64
178-10968_230	113	4	5.30	0.25	0.59
178-10968_256	95	6	5.75	0.05	0.54
178-10968_261	23	1	8.72	0.28	0.61
178-10968_262	84	3	4.51	0.16	0.56
178-10968_284	107	4	5.90	0.14	0.56
178-10968_307	23	3	5.54	0.33	0.63
178-10968_312	137	5	5.25	0.26	0.60
178-10968_313	1939	80	5.31	0.19	0.57
178-10968_331	540	10	9.66	0.20	0.57
178-10968_335	191	9	6.92	0.19	0.57
178-10968_348	480	10	6.16	0.22	0.58
178-10968_354	125	7	4.87	0.31	0.62
178-10968_360	1399	73	7.73	0.22	0.58
178-10968_364	208	5	7.54	0.18	0.57
178-10968_368	89	3	5.58	0.23	0.59
178-10968_370	153	4	7.52	0.28	0.61
178-10968_403	390	7	5.77	0.14	0.56
178-10968_421	522	13	7.29	0.10	0.55
178-10968_433	189	6	10.42	0.23	0.59
178-10968_435	118	4	3.42	0.14	0.56
178-10968_471	25	2	8.33	0.17	0.56
178-10968_478	81	5	4.55	0.29	0.61
178-10968_479	64	4	3.77	0.20	0.57
178-10998-2	86	3	4.55	0.22	0.53
178-10998-3	91	4	4.69	0.15	0.50
178-10998-9	86	3	4.51	0.14	0.50
178-10998-10	75	2	3.48	0.18	0.51
178-10998-16	64	3	4.56	0.19	0.52
178-10998-19	34	2	5.04	0.14	0.50
178-10998-24	69	3	4.61	0.21	0.52
178-10998-26	604	19	6.23	0.14	0.50
178-10998-27	19	1	5.01	0.15	0.50
178-10998-32	58	2	4.81	0.12	0.50
178-10998-33	44	2	5.05	0.11	0.49
178-10998-34	70	2	3.83	0.23	0.53
178-10998-35	84	3	4.67	0.15	0.50
178-10998-36	56	3	4.55	0.11	0.49
178-10998-41	58	3	4.36	0.21	0.53
178-10998-43	132	4	5.35	0.14	0.50
178-10998-48	49	2	4.97	0.21	0.52
178-10998-50	46	2	4.73	0.14	0.50
178-10998-53	52	2	5.00	0.11	0.49
178-10998-59	49	2	4.58	0.12	0.50
178-10998-62	56	2	4.74	0.23	0.53
178-10998-68	62	2	4.40	0.13	0.50
178-10998-69	56	3	4.89	0.15	0.50
178-10998-79	67	3	4.75	0.14	0.50
178-10998-84	1030	85	5.98	0.11	0.49
178-10998-87	54	2	4.68	0.14	0.50
178-10998-101	68	3	4.19	0.20	0.52
178-10998-105	60	3	3.77	0.10	0.49
178-10998-108	54	2	4.27	0.14	0.50
178-10998-111	73	3	3.17	0.14	0.50
178-10998-117	52	2	4.70	0.12	0.50
178-10998-122	71	3	4.32	0.11	0.49
178-10998-123	58	3	4.72	0.11	0.49
178-10998-130	116	4	5.02	0.12	0.50
178-10998-139	44	2	4.70	0.14	0.50
178-10998-145	69	3	4.59	0.12	0.50
178-10998-146	20	1	4.62	0.15	0.50
178-10998-147	20	1	4.71	0.16	0.51
178-10998-148	47	2	4.92	0.12	0.50
178-10998-153	138	5	5.85	0.16	0.51
178-10998-155	58	2	4.76	0.14	0.50
178-10998-159	69	3	4.69	0.21	0.53
178-10998-165	116	5	5.19	0.18	0.52
178-10998-170	24	1	5.06	0.15	0.50
178-10998-183	289	9	5.55	0.10	0.49
178-10998-190	569	17	5.47	0.13	0.50
178-10998-191	63	2	4.30	0.21	0.53
178-10998-195	58	2	4.72	0.13	0.50
178-10998-200	60	2	4.08	0.14	0.50
178-10998-205	134	4	5.83	0.20	0.52
178-10998-207	106	4	4.01	0.13	0.50
178-10998-214	134	7	4.29	0.12	0.50
178-10998-216	63	3	4.70	0.11	0.49
178-10998-217	61	2	4.20	0.18	0.51
178-10998-224	86	4	4.20	0.13	0.50
178-10998-236	47	2	4.99	0.12	0.50
318-U1355A_4	2716	60	5.71	0.15	0.57
318-U1355A_8	1667	119	4.98	0.21	0.59
318-U1355A_9	1553	82	5.75	0.12	0.57
318-U1355A_10	1675	83	5.43	0.44	0.71
318-U1355A_13	2067	50	6.45	0.27	0.62
318-U1355A_14	1228	111	7.55	0.21	0.59
318-U1355A_18	1593	112	5.74	0.16	0.57
318-U1355A_23	1760	117	8.96	0.27	0.62
318-U1355A_24	1631	106	4.06	0.30	0.63
318-U1355A_25	1769	59	10.33	0.11	0.56
318-U1355A_26	573	13	6.36	0.25	0.60
318-U1355A_31	1230	121	7.83	0.17	0.58
318-U1355A_38	1627	45	7.96	0.32	0.64
318-U1355A_41	1595	161	5.76	0.43	0.70
318-U1355A_42	1621	95	3.36	0.22	0.60
318-U1355A_46	1753	53	8.46	0.24	0.60
318-U1355A_48	1574	117	4.63	0.34	0.65
318-U1355A_50	1664	91	10.25	0.45	0.71
318-U1355A_56	1647	97	6.28	0.28	0.62
318-U1355A_64	1726	85	9.46	0.28	0.62

318-U1355A_70	1710	84	8.29	0.14	0.57
318-U1355A_76	114	7	7.80	0.05	0.55
318-U1355A_80	1382	240	5.36	0.41	0.69
318-U1355A_81	1692	53	9.57	0.26	0.61
318-U1355A_84	1807	79	5.21	0.32	0.64
318-U1355A_85	1429	97	3.81	0.12	0.57
318-U1355A_97	1176	115	4.68	0.21	0.59
318-U1355A_99	1714	175	8.50	0.35	0.65
318-U1355A_105	1815	133	6.38	0.21	0.59
318-U1355A_106	1553	97	5.32	0.19	0.58
318-U1355A_110	1606	45	10.63	0.33	0.64
318-U1355A_115	1703	120	4.95	0.15	0.57
318-U1355A_116	1228	121	6.58	0.21	0.59
318-U1355A_119	1523	89	5.38	0.42	0.69
318-U1355A_125	1621	86	4.00	0.33	0.64
318-U1355A_128	1664	179	7.18	0.48	0.73
318-U1355A_131	1750	82	6.27	0.49	0.74
318-U1355A_147	608	14	7.62	0.30	0.63
318-U1355A_149	2672	52	4.85	0.46	0.72
318-U1355A_150	1610	152	4.10	0.30	0.63
318-U1355A_151	1708	107	4.30	0.35	0.66
318-U1355A_160	558	13	9.99	0.07	0.56
318-U1355A_165	1599	89	7.35	0.18	0.58
318-U1355A_169	1495	99	7.36	0.31	0.63
318-U1355A_175	1633	81	5.71	0.27	0.61
318-U1355A_180	1141	141	5.92	0.10	0.56
318-U1355A_184	1805	81	4.63	0.15	0.57
318-U1355A_188	1429	89	6.09	0.31	0.63
318-U1355A_192	1563	99	7.40	0.21	0.59
318-U1355A_193	1691	96	8.50	0.27	0.61
318-U1355A_194	1535	103	5.32	0.21	0.59
318-U1355A_200	1712	86	7.71	0.29	0.62
318-U1355A_201	488	10	10.06	0.20	0.59
318-U1355A_207	117	11	7.26	0.25	0.61
318-U1355A_210	1403	82	3.43	0.34	0.65
318-U1357A-36	1647	38	7.47	0.19	0.46
318-U1357A-39	1729	81	9.05	0.17	0.46
318-U1357A-41	1733	40	6.85	0.14	0.45
318-U1357A-45	1712	60	8.49	0.10	0.44
318-U1357A-46	1191	64	6.20	0.12	0.44
318-U1357A-55	1745	22	5.76	0.16	0.45
318-U1357A-59	2437	19	6.37	0.12	0.44
318-U1357A-60	1879	34	10.91	0.30	0.52
318-U1357A-61	1703	30	6.11	0.14	0.45
318-U1357A-63	1620	37	4.32	0.13	0.44
318-U1357A-64	1689	25	8.18	0.15	0.45
318-U1357A-66	1696	37	10.19	0.23	0.48
318-U1357A-72	1727	28	10.47	0.16	0.45
318-U1357A-75	1608	71	5.93	0.14	0.45
318-U1357A-81	1625	61	6.38	0.20	0.47
318-U1357A-82	1748	31	9.44	0.21	0.47
318-U1357A-83	1608	47	3.86	0.28	0.51
318-U1358A_11	127	10	2.94	0.37	0.66
318-U1358A_14	2339	46	7.77	0.39	0.68
318-U1358A_16	524	18	7.07	0.47	0.73
318-U1358A_21	1705	160	4.58	0.18	0.58
318-U1358A_24	2553	128	6.98	0.17	0.58
318-U1358A_41	4250	75	5.10	0.20	0.59
318-U1358A_45	917	14	5.48	0.18	0.58
318-U1358A_46	630	9	4.94	0.26	0.61
318-U1358A_48	1755	150	5.77	0.22	0.60
318-U1358A_50	125	5	4.79	0.49	0.74
318-U1358A_54	501	11	8.55	0.12	0.56
318-U1358A_55	2666	128	4.69	0.39	0.67
318-U1358A_62	2469	136	7.85	0.39	0.68
318-U1358A_71	1818	147	8.22	0.28	0.62
318-U1358A_80	1694	212	4.62	0.20	0.59
318-U1358A_83	2119	146	7.10	0.11	0.56
318-U1358A_89	1752	152	5.80	0.24	0.60
318-U1358A_92	1151	170	6.26	0.34	0.65
318-U1358A_93	617	9	7.44	0.09	0.56
318-U1358A_97	1767	162	7.89	0.49	0.74
318-U1358A_102	572	9	9.12	0.10	0.56
318-U1358A_108	1851	152	7.11	0.44	0.71
318-U1358A_110	1252	195	8.44	0.22	0.59
318-U1358A_118	602	14	9.75	0.29	0.62
318-U1358A_120	272	8	6.16	0.16	0.57
318-U1358A_124	1895	70	4.65	0.27	0.62
318-U1358A_128	1854	49	7.37	0.23	0.60
318-U1358A_136	2381	51	6.73	0.31	0.64
318-U1358A_141	2402	30	6.90	0.19	0.59
318-U1358A_145	114	4	6.78	0.12	0.56
318-U1358A_149	4274	49	5.26	0.22	0.59
318-U1358A_152	1994	81	6.30	0.26	0.61
318-U1358A_165	2357	35	9.17	0.21	0.59
318-U1358A_170	1843	59	3.19	0.25	0.61
318-U1358A_171	1775	134	4.29	0.17	0.58
318-U1358A_172	1888	39	8.96	0.31	0.63
318-U1358A_179	928	18	8.51	0.24	0.60
318-U1358A_182	555	12	6.99	0.09	0.56
318-U1358A_191	1425	62	6.65	0.26	0.61
318-U1358A_197	523	13	8.83	0.22	0.59

*: $\delta^{18}\text{O}$ (permil) = $\left(\frac{^{18}\text{O}/^{16}\text{O}_{\text{meas}}}{^{18}\text{O}/^{16}\text{O}_{\text{VSMOW}}}-1\right)*1000$, where $^{18}\text{O}/^{16}\text{O}_{\text{meas}}$ is the background, EISIE (Electron Induced Secondary Ion Emission), and IMF (Instrumental Mass Fractionation) corrected 18O/16O ratio, and (18O/16O)VSMOW is the reference value (0.0020052; Baertschi, 1976).

†: Spot uncertainty combines the within-spot uncertainty and the reproducibility (weighted 2SD) of the primary reference zircon, added in quadrature.

References:

Baertschi, P. (1976) Absolute ^{18}O content of standard mean ocean water. Earth and Planetary Science Letters 31, 341-344.

PL_8.1	26/09/2020	12:49:34	0.0020200	0.0000054	7.36	2.68	2.74
PL_11.1	26/09/2020	17:26:25	0.0020206	0.0000007	7.70	0.32	0.63
PL_10.1	26/09/2020	17:19:36	0.0020204	0.0000007	7.59	0.34	0.64
		N					
		Mean	8.21		Weighted mean		8.32
		2SD	2.23		Weighted 2SD		1.88
		2SE	1.00		Weighted 2SE		0.84
Mud Tank							
MudTank_8	26/09/2020	17:40:11	0.0020156	0.0000003	5.21	0.14	0.56
MudTank_7.1	26/09/2020	17:33:22	0.0020156	0.0000003	5.19	0.17	0.56
MudTank_6	26/09/2020	15:43:35	0.0020154	0.0000005	5.09	0.25	0.59
MudTank_5.2	26/09/2020	14:12:36	0.0020149	0.0000003	4.86	0.13	0.55
		N	4				
		Mean	5.08		Weighted mean		5.06
		2SD	0.32		Weighted 2SD		0.38
		2SE	0.16		Weighted 2SE		0.19

*: True $^{18}\text{O}/^{16}\text{O}$ ratio, corrected for background, EISIE and instrumental mass fractionation.

*: $\delta^{18}\text{O}$ (permil) = $(\frac{^{18}\text{O}/^{16}\text{O}_{\text{true}}}{^{18}\text{O}/^{16}\text{O}_{\text{VSMOW}}} - 1) * 1000$, where $^{18}\text{O}/^{16}\text{O}_{\text{true}}$ is the background, EISIE (Electron Induced Secondary Ion Emission), and IMF (Instrumental Mass Fractionation) corrected $^{18}\text{O}/^{16}\text{O}$ ratio, and $(18\text{O}/16\text{O})_{\text{VSMOW}}$ is the reference value (0.0020052; Baertschi, 1976).

‡: Spot uncertainty combines the within-spot uncertainty and the reproducibility (weighted 2SD) of the primary reference zircon, added in quadrature.

References:

Baertschi, P. (1976) Absolute ^{18}O content of standard mean ocean water. Earth and Planetary Science Letters 31, 341-344.

Table 4.7 Lu-Hf isotope data of zircon standards for each session.

Session	Reference zircon	N	Spot size (µm)	Mean $^{176}\text{Hf}/^{177}\text{Hf}$	2SD	Offset*	Mean $^{176}\text{Hf}/^{177}\text{Hf}$ corrected †	ZSE.ext ‡	Analyzed unknown sample	
20200618										
RSES ANU	91500 (Primary)	24	45	0.282280	28	26	0.282300	40	178-1099B (No. 2-236)	
	Mud Tank	19	45	0.282496	21	11	0.282516	35	35-324 (No. 1-93)	
	R33	19	45	0.282750	34	14	0.282770	44		
	Tem2	12	45	0.282658	26	28	0.282678	38		
					Average offset					20
20200619_1										
RSES ANU	91500 (Primary)	8	45	0.282289	19	17	0.282305	27	35-324 (No. 97-193)	
	Mud Tank	6	45	0.282496	21	11	0.282501	27		
	R33	6	45	0.282745	34	19	0.282762	39		
	Tem2	3	45	0.282668	23	18	0.282684	30		
					Average offset					16
20200619_2										
RSES ANU	91500 (Primary)	24	40	0.282277	34	29	0.282306	49	113-692B (No. 1-166)	
	Mud Tank	18	40	0.282484	30	23	0.282513	45	28-273A (No. 2-109)	
	R33	14	40	0.282739	28	25	0.282768	44	119-740A (No. 1-21)	
	Tem2	8	40	0.282652	20	34	0.282681	40	318-U1357A (No. 36-83)	
					Average offset					28
20201014										
RSES ANU	91500 (Primary)	62	35	0.282302	10	4	0.282308	10	318-U1358A (No. 11-191)	28-268 (No. 1-209)
	Mud Tank	64	35	0.282509	9	2	0.282514	9	318-U1355A (No. 4-206)	119-741A (No. 1-229)
	R33	31	35	0.282759	12	5	0.282765	12	178-1096B (No. 8-479)	
	Tem2	20	35	0.282671	22	15	0.282677	22	28-271 (No. 5-209)	
					Average offset					

Reference	$^{176}\text{Hf}/^{177}\text{Hf}$ (solution)	2SD
91500	0.282306	8
MudTank	0.282507	6
R33	0.282764	14
Tem2	0.282686	8

*: Difference between measured value and solution value of reference zircons. Solution values are derived from Woodhead et al. (2005)

†: $^{176}\text{Hf}/^{177}\text{Hf}$ ratio is corrected by the average offset of all reference zircons analyzed.

‡: The errors combine the standard error of mean and the reproducibility (2SD) of the primary reference zircon (91500), added in quadrature.

Reference:

Woodhead, J.D., Hergt, J.M., 2005. A preliminary appraisal of seven natural zircon reference materials for in situ Hf isotope determination. *Geostandards and Geoanalytical Research* 29, 183-195.

Table 4.8 Oxygen and Lu-Hf isotopes systematics for detrital zircon analyzed in this study

Age group (Ma)	N total	$\epsilon\text{Hf}_{(t)}$ Mean	2SD	2SE	$\epsilon\text{Hf}_{(t)}$ Minimum	$\epsilon\text{Hf}_{(t)}$ Maximum	$\delta^{18}\text{O}$ Mean	2SD	2SE	$\delta^{18}\text{O}$ Minimum	$\delta^{18}\text{O}$ Maximum	Percent of zircons (%)		$\delta^{18}\text{O}$ within mantle range (4.7- 5.9 ‰)	$\epsilon\text{Hf}_{(t)}$ within arc mantle array	Juvenile zircon*
												$\delta^{18}\text{O} < 4.7$ ‰	$\delta^{18}\text{O} > 5.9$ ‰			
<100	55	8.3	7.3	1.0	-6.7	11.3	4.78	1.90	0.26	3.17	8.72	56	5	38	95	35
300-100	91	-0.8	10.0	1.0	-17.2	9.6	5.72	3.07	0.32	2.94	10.42	23	33	44	11	7
650-450	104	-7.3	12.2	1.2	-24.2	4.8	7.47	2.29	0.22	4.93	10.52	0	93	7	1	0
1250-1000	60	3.2	8.4	1.1	-9.7	10.0	7.09	2.64	0.34	3.96	10.12	5	88	7	65	5
1850-1500	57	4.1	9.2	1.2	-12.9	12.3	6.85	4.04	0.53	3.19	10.63	19	61	19	56	14

*: Zircons have $\epsilon\text{Hf}_{(t)}$ within arc mantle array and $\delta^{18}\text{O}$ between the mantle zircon range (see Chapter 4.3 for details)

Table with 20 columns: Name, Age, Height, Weight, Eye Color, Hair Color, Skin Tone, Hair Length, Hair Style, Hair Texture, Hair Color (Secondary), Hair Color (Tertiary), Hair Color (Quaternary), Hair Color (Quinary), Hair Color (Senary), Hair Color (Septenary), Hair Color (Octonary), Hair Color (Nonary), Hair Color (Decenary), Hair Color (Undecenary), Hair Color (Dodecenary). Rows list individuals such as 20017030, 20017031, etc., with associated numerical data.

Table with columns for gene IDs, gene names, and various numerical values. Includes a header row and multiple rows of data. The table is truncated at the bottom with a '...' indicating continuation.

Supplementary Table 2: The top 1000 genes for each of the 1000 age groups. The table contains gene names and their corresponding values. It is followed by a legend and a list of references.

References: 1. The 1000 Genomes Project Consortium. A global reference for human genetic variation. Nature. 2012;481:137-149. 2. The 1000 Genomes Project Consortium. An integrated encyclopedia of DNA elements in the human genome. Nature. 2012;481:137-149.

Table 5.2 U-Pb ages of zircon references for each analytical session.

Session	Reference	Number	Mean $^{206}\text{Pb}/^{238}\text{U}$ age	2SD	2SE	Mean $^{207}\text{Pb}/^{235}\text{U}$ age	2SD	2SE	Mean $^{207}\text{Pb}/^{206}\text{Pb}$ age	2SD	2SE
20170201	Temora 2	19	416.8	16.2	3.7	408.3	35.2	8.1	292.4	182.8	41.9
	Pleišovice	19	342.3	8.0	1.8	339.3	22.7	5.2	282.2	135.9	31.2
20170217	Temora 2	10	417.3	9.7	3.1	412.1	7.6	2.4	327.6	52.0	16.4
	R33	11	423.7	18.2	5.5	418.1	55.2	16.6	340.9	296.2	89.3
	Pleišovice	6	344.0	21.6	8.8	340.9	18.9	7.7	299.3	147.3	60.1
20171130	Temora 2	28	416.9	4.3	0.8	415.1	13.5	2.6	376.0	92.4	17.5
	R33	25	419.7	16.6	3.3	424.1	31.3	6.3	409.7	196.9	39.4
	Pleišovice	7	338.5	14.1	5.3	334.6	9.4	3.5	290.3	72.1	27.2
20171131& 20171201_1	Temora 2	40	417.2	8.4	1.3	414.2	15.2	2.4	363.1	105.0	
	R33	32	422.0	19.1	3.4	422.7	35.6	6.3	396.4	169.1	29.9
	Pleišovice	6	341.6	6.3	2.6	338.4	11.4	4.7	317.0	79.6	32.5
20171201_2	Temora 2	20	417.0	6.7	1.5	414.6	6.7	1.5	371.1	132.9	29.7
	R33	15	420.5	10.4	2.7	417.7	48.0	12.4	378.0	220.0	56.8
	Pleišovice	3	342.3	3.6	2.1	339.1	21.8	12.6	289.7	92.5	53.4
20171201_3	Temora 2	19	416.8	2.9	0.7	413.3	12.6	2.9	363.2	92.5	21.2
	R33	16	416.9	15.4	3.9	416.3	25.3	6.3	377.1	133.9	33.5
	Pleišovice	3	343.0	2.6	1.5	344.3	14.0	8.1	343.3	95.3	55.0
20180427	Temora 2	54	417.0	8.5	1.2	415.5	26.0	3.5	372.2	141.8	19.3
	R33	8	417.6	7.7	2.7	419.8	19.8	7.0	387.5	111.2	39.3
	Pleišovice	12	343.3	7.3	2.1	348.8	55.7	16.1	358.4	340.5	98.3
	OG1	23	3461.1	126.0	26.3	3453.6	45.1	9.4	3450.1	17.0	3.6
20180929& 20180930_1	Temora 2	61	417.3	26.8	3.4	414.9	31.3	4.0	362.6	124.3	15.9
	R33	50	420.2	25.7	3.6	418.8	24.5	3.5	371.6	147.1	20.8
	Pleišovice	13	351.8	4.8	1.3	351.3	10.1	2.8	329.8	76.0	21.1
	OG1	3	3569.3	99.2	57.3	3503.3	38.4	22.2	3463.5	12.1	7.0
20180930_2	Temora 2	47	416.5	16.9	2.5	413.8	21.9	3.2	366.4	115.6	16.9
	R33	46	419.8	28.0	4.1	419.4	44.9	6.6	371.1	222.2	32.8
	Pleišovice	15	346.1	5.6	1.5	344.4	8.9	2.3	310.8	69.0	17.8
20201009	91500	13	1079.2	25.8	7.2	1082.4	42.1	11.7	1066.0	36.4	10.1
	Temora 2	10	416.8	2.1	0.7	408.6	45.0	14.2	304.1	298.2	94.3
	R33	4	416.5	11.8	5.9	443.5	95.8	47.9	546.0	585.2	292.6

Note:

1. All the data were processed via Lolite software (Paton et al., 2011).

2. The first reference zircon listed is used as the primary standard for calibrating unknown data in each session.

Reference:

Paton, C., Hellstrom, J., Paul, B., Woodhead, J., Hergt, J., 2011. Lolite: Freeware for the visualisation and processing of mass spectrometric data. *Journal of Analytical Atomic Spectrometry* 26, 2508-2518.

Table 5.3 Oxygen isotopic data for detrital zircons from Australia.

Sample ID	Best age (Ma)	2SE	$\delta^{18}\text{O}_{\text{VSMOW}}^*$	\pm Within-spot precision (95% conf.)	\pm Spot precision (95% conf.) [†]
20170201_Murray1-10	502	27	7.63	0.09	0.43
20170201_Murray1-11	571	24	12.57	0.09	0.43
20170201_Murray1-12	247	11	5.20	0.14	0.44
20170201_Murray1-13	575	25	6.82	0.11	0.43
20170201_Murray1-21	404	18	7.78	0.12	0.43
20170201_Murray1-25	525	30	6.11	0.10	0.43
20170201_Murray1-31	448	21	9.67	0.11	0.43
20170201_Murray1-32	562	25	5.65	0.08	0.42
20170201_Murray1-35	586	27	8.99	0.08	0.42
20170201_Murray1-38	526	23	7.17	0.11	0.43
20170201_Murray1-39	574	25	6.18	0.09	0.43
20170201_Murray1-40	417	19	6.59	0.09	0.43
20170201_Murray1-45	834	36	6.51	0.13	0.44
20170201_Murray1-48	143	8	2.64	0.10	0.43
20170201_Murray1-49	473	21	6.08	0.12	0.43
20170201_Murray1-51	1452	85	6.11	0.14	0.44
20170201_Murray1-52	596	27	7.82	0.10	0.43
20170201_Murray1-53	232	11	5.73	0.10	0.43
20170201_Murray1-57	589	25	9.37	0.11	0.43
20170201_Murray1-61	565	24	7.16	0.10	0.43
20170201_Murray1-62	543	26	6.32	0.11	0.43
20170201_Murray1-69	550	28	7.18	0.11	0.43
20170201_Murray1-70	220	12	6.48	0.11	0.43
20170201_Murray1-72	578	25	8.90	0.10	0.43
20170201_Murray1-76	181	9	6.39	0.12	0.43
20170201_Murray1-78	569	26	7.18	0.10	0.43
20170201_Murray1-80	507	24	9.53	0.09	0.43
20170201_Murray1-84	541	24	7.24	0.09	0.43
20170201_Murray1-85	608	27	7.56	0.08	0.42
20170201_Murray1-86	590	26	7.93	0.10	0.43
20170201_Murray1-87	320	15	7.17	0.10	0.43
20170201_Murray1-88	411	19	7.35	0.09	0.43
20170201_Murray1-90	745	37	6.62	0.11	0.43
20170201_Murray1-91	593	28	6.45	0.09	0.43
20170201_Murray1-92	582	29	7.35	0.10	0.43
20170201_Murray1-96	460	22	8.44	0.09	0.43
20170201_Murray1-100	540	26	6.53	0.09	0.43
20170201_Murray2-1	1429	102	5.86	0.12	0.43
20170201_Murray2-5	533	23	7.42	0.09	0.43
20170201_Murray2-6	550	23	7.76	0.09	0.43
20170201_Murray2-7	557	26	7.83	0.08	0.42
20170201_Murray2-9	549	23	7.36	0.11	0.43
20170201_Murray2-10	509	23	9.09	0.10	0.43
20170201_Murray2-18	2673	27	6.78	0.09	0.43
20170201_Murray2-19	534	27	8.06	0.11	0.43
20170201_Murray2-20	499	22	6.44	0.08	0.42
20170201_Murray2-24	576	25	7.73	0.08	0.42
20170201_Murray2-28	570	27	7.72	0.10	0.43
20170201_Murray2-29	537	24	8.19	0.10	0.43
20170201_Murray2-30	588	26	7.26	0.09	0.43
20170201_Murray2-32	175	9	4.66	0.11	0.43
20170201_Murray2-33	619	26	7.93	0.11	0.43
20170201_Murray2-35	582	25	3.84	0.10	0.43
20170201_Murray2-36	558	24	10.35	0.10	0.43
20170201_Murray2-37	524	22	5.75	0.09	0.43
20170201_Murray2-39	594	25	6.36	0.09	0.43
20170201_Murray2-40	575	26	8.00	0.10	0.43
20170201_Murray2-41	928	39	5.09	0.10	0.43
20170201_Murray2-42	548	27	5.40	0.11	0.43
20170201_Murray2-45	598	27	7.50	0.09	0.43
20170201_Murray2-46	652	30	7.73	0.10	0.43
20170201_Murray2-48	594	25	8.49	0.09	0.43
20170201_Murray2-56	503	22	8.22	0.10	0.43
20170201_Murray2-57	576	24	7.93	0.10	0.43
20170201_Murray2-59	193	9	5.64	0.10	0.43
20170201_Murray2-60	571	26	5.95	0.11	0.43
20170217_Bega-29	2255	61	6.54	0.12	0.46
20170217_Bega-33	432	14	6.13	0.11	0.46
20170217_Bega-34	421	13	6.43	0.11	0.46
20170217_Bega-35	403	14	7.88	0.09	0.46
20170217_Bega-41	430	13	6.55	0.11	0.46
20170217_Bega-45	446	14	6.78	0.15	0.47
20170217_Bega-48	571	19	6.68	0.09	0.46
20170217_Bega-49	431	14	7.96	0.10	0.46
20170217_Bega-51	554	17	7.78	0.10	0.46
20170217_Bega-54	437	14	6.72	0.10	0.46
20170217_Bega-55	452	14	7.89	0.08	0.46
20170217_Bega-57	2029	61	6.85	0.10	0.46
20170217_Bega-58	1171	83	6.51	0.09	0.46
20170217_Bega-59	416	14	7.86	0.09	0.46

20170217_Bega-60	422	14	7.81	0.09	0.46
20170217_Bega-61	482	16	8.38	0.11	0.46
20170217_Bega-62	887	29	6.50	0.10	0.46
20170217_Bega-65	423	14	7.07	0.11	0.46
20170217_Bega-66	414	14	7.40	0.09	0.46
20170217_Bega-67	1062	81	6.35	0.11	0.46
20170217_Bega-68	672	20	5.80	0.11	0.46
20170217_Bega-70	556	16	8.28	0.11	0.46
20170217_Bega-73	566	20	7.34	0.10	0.46
20170217_Bega-74	2710	63	6.25	0.13	0.47
20170217_Bega-75	439	14	8.21	0.09	0.46
20170217_Bega-76	618	18	6.68	0.11	0.46
20170217_Bega-78	444	14	11.07	0.11	0.46
20170217_Bega-79	436	14	6.72	0.11	0.46
20170217_Bega-82	447	15	8.96	0.13	0.47
20170217_Bega-83	431	14	7.49	0.09	0.46
20170217_Bega-84	594	19	8.59	0.12	0.46
20170217_Bega-86	413	13	8.37	0.09	0.46
20170217_Bega-87	428	15	8.16	0.10	0.46
20170217_Bega-88	395	13	8.03	0.10	0.46
20170217_Bega-90	393	13	8.16	0.09	0.46
20170217_Bega-91	442	15	8.21	0.12	0.47
20170217_Bega-94	422	14	7.21	0.13	0.47
20170217_Bega-95	577	18	7.84	0.10	0.46
20170217_Bega-96	421	14	7.00	0.12	0.46
20170217_Bega-98	1032	77	5.12	0.11	0.46
20170217_Bega-99	602	18	7.46	0.11	0.46
20170217_Bega-100	488	16	7.13	0.10	0.46
20171130_Cooper-5	536	12	9.42	0.20	0.79
20171130_Cooper-10	137	4	5.40	0.23	0.80
20171130_Cooper-18	200	6	5.37	0.23	0.80
20171130_Cooper-19	102	3	5.03	0.20	0.79
20171130_Cooper-20	1955	149	7.06	0.24	0.81
20171130_Cooper-28	434	11	5.77	0.24	0.80
20171130_Cooper-31	349	9	4.69	0.20	0.79
20171130_Cooper-34	322	7	6.02	0.24	0.80
20171130_Cooper-35	593	13	9.22	0.21	0.79
20171130_Cooper-38	114	3	4.15	0.21	0.80
20171130_Cooper-39	1527	22	9.52	0.19	0.79
20171130_Cooper-43	235	6	5.83	0.25	0.81
20171130_Cooper-44	1513	20	8.76	0.28	0.82
20171130_Cooper-45	601	13	7.29	0.20	0.79
20171130_Cooper-48	185	5	5.48	0.32	0.83
20171130_Cooper-52	99	3	4.72	0.20	0.79
20171130_Cooper-53	255	6	4.67	0.38	0.85
20171130_Cooper-57	597	13	5.96	0.36	0.85
20171130_Cooper-58	211	5	6.44	0.25	0.81
20171130_Cooper-59	303	8	11.53	0.26	0.81
20171130_Cooper-62	271	6	7.20	0.27	0.81
20171130_Cooper-65	238	7	6.58	0.18	0.79
20171130_Cooper-66	1535	36	8.12	0.24	0.80
20171130_Cooper-69	459	12	8.93	0.27	0.81
20171130_Cooper-70	122	4	5.06	0.24	0.81
20171130_Cooper-71	614	16	9.56	0.28	0.82
20171130_Cooper-76	525	14	8.43	0.17	0.79
20171130_Cooper-77	452	10	6.27	0.19	0.79
20171130_Cooper-81	1511	18	8.23	0.31	0.83
20171130_Cooper-86	389	9	4.25	0.16	0.78
20171130_Cooper-89	157	4	3.62	0.22	0.80
20171130_Warburton-8	112	4	3.58	0.31	0.83
20171130_Warburton-21	117	4	4.46	0.39	0.86
20171130_Warburton-29	280	6	10.42	0.20	0.79
20171130_Warburton-47	94	3	6.00	0.24	0.80
20171130_Warburton-50	100	3	4.67	0.23	0.80
20171130_Warburton-57	531	12	8.07	0.29	0.82
20171130_Warburton-60	244	6	6.20	0.25	0.81
20171130_Warburton-63	455	10	8.08	0.27	0.81
20171130_Warburton-71	447	11	7.16	0.18	0.79
20171130_Warburton-73	463	12	7.21	0.21	0.80
20171130_Warburton-81	89	2	5.09	0.20	0.79
20171130_Warburton-83	326	8	9.77	0.22	0.80
20171130_Warburton-89	246	6	6.03	0.28	0.82
20171201_Belyando-3	490	17	5.93	0.11	0.32
20171201_Belyando-4	478	11	7.39	0.20	0.36
20171201_Belyando-5	1102	47	8.47	0.13	0.32
20171201_Belyando-6	570	14	6.44	0.18	0.35
20171201_Belyando-8	1745	41	7.28	0.14	0.33
20171201_Belyando-11	1467	111	6.06	0.18	0.34
20171201_Belyando-13	259	7	7.71	0.29	0.42
20171201_Belyando-32	348	10	6.33	0.17	0.34
20171201_Belyando-34	168	5	4.80	0.31	0.42
20171201_Belyando-36	319	8	3.06	0.18	0.35
20171201_Belyando-43	353	9	9.52	0.15	0.33
20171201_Belyando-50	1870	96	6.23	0.20	0.35

20171201_Belyando-58	765	18	6.73	0.15	0.33
20171201_Belyando-71	431	11	4.09	0.26	0.40
20171201_Belyando-82	575	13	5.30	0.30	0.42
20171201_Belyando-94	301	7	6.45	0.11	0.31
20171201_Belyando-104	338	8	7.28	0.07	0.30
20171201_Belyando-110	341	9	4.61	0.30	0.42
20171201_Belyando-112	2423	90	7.48	0.27	0.40
20171201_Belyando-115	339	8	4.84	0.17	0.34
20171201_Belyando-121	457	11	9.20	0.22	0.37
20171201_Belyando-122	532	12	10.24	0.36	0.46
20171201_Belyando-123	1950	96	7.45	0.23	0.37
20171201_Belyando-125	1154	114	5.59	0.13	0.32
20171201_Belyando-138	617	15	5.05	0.14	0.33
20171201_Belyando-139	3021	85	6.22	0.08	0.31
20171201_Cooper-91	500	18	4.63	0.31	0.83
20171201_Cooper-94	421	10	11.90	0.20	0.79
20171201_Cooper-99	502	11	6.06	0.29	0.82
20171201_Cooper-102	920	20	6.94	0.26	0.81
20171201_Cooper-104	93	2	7.17	0.25	0.81
20171201_Cooper-108	597	14	6.99	0.20	0.79
20171201_Cooper-109	89	3	3.95	0.31	0.83
20171201_Cooper-110	108	3	5.93	0.31	0.83
20171201_Cooper-111	613	15	6.72	0.28	0.82
20171201_Cooper-113	265	8	8.25	0.17	0.79
20171201_Flinders-3	549	12	9.30	0.20	0.36
20171201_Flinders-5	3609	29	5.21	0.17	0.34
20171201_Flinders-9	1738	48	5.47	0.29	0.41
20171201_Flinders-15	1789	43	4.35	0.09	0.31
20171201_Flinders-21	391	27	5.94	0.37	0.48
20171201_Flinders-26	1558	37	7.94	0.15	0.33
20171201_Flinders-33	1580	38	4.46	0.31	0.43
20171201_Flinders-34	1107	86	11.62	0.11	0.31
20171201_Flinders-39	1509	50	6.50	0.20	0.36
20171201_Flinders-41	1780	40	5.89	0.17	0.34
20171201_Flinders-46	1885	39	7.03	0.18	0.35
20171201_Flinders-50	1625	43	6.02	0.17	0.34
20171201_Great Victoria Desert_BJ67-3	2907	100	3.86	0.15	0.33
20171201_Great Victoria Desert_BJ67-4	2846	105	4.04	0.14	0.33
20171201_Great Victoria Desert_BJ67-5	2731	86	5.48	0.03	0.30
20171201_Murchison-3	495	11	6.32	0.23	0.80
20171201_Murchison-8	694	16	6.81	0.21	0.80
20171201_Murchison-12	2669	33	5.75	0.23	0.80
20171201_Murchison-21	1287	42	5.16	0.29	0.82
20171201_Murchison-22	2617	35	5.51	0.31	0.83
20171201_Murchison-25	1141	59	6.73	0.25	0.81
20171201_Murchison-30	1186	42	8.56	0.25	0.81
20171201_Murchison-39	1154	51	7.83	0.22	0.80
20171201_Murchison-42	655	16	6.19	0.25	0.81
20171201_Murchison-49	1213	59	6.22	0.25	0.81
20171201_Murchison-51	942	41	7.87	0.21	0.79
20171201_Murchison-53	1310	48	7.96	0.22	0.80
20171201_Murchison-54	1054	70	8.08	0.23	0.80
20171201_Murchison-98	482	13	6.40	0.24	0.80
20171201_Murchison-101	2682	32	6.02	0.21	0.79
20171201_Murchison-102	2041	34	6.33	0.21	0.79
20171201_Murchison-104	2689	30	4.96	0.20	0.79
20171201_Murchison-109	3266	29	6.28	0.23	0.80
20171201_Murchison-110	2617	35	5.96	0.32	0.83
20171201_Murchison-113	2620	43	6.41	0.24	0.80
20171201_Murchison-115	855	21	5.83	0.24	0.80
20171202_Great Victoria Desert_BJ67-11	2824	42	4.15	0.27	0.40
20171202_Great Victoria Desert_BJ67-12	2818	57	3.99	0.16	0.34
20171202_Great Victoria Desert_BJ67-15	2831	51	5.05	0.19	0.35
20171202_Great Victoria Desert_BJ67-20	2913	138	4.30	0.16	0.34
20171202_Great Victoria Desert_BJ67-25	2844	35	3.68	0.10	0.31
20171202_Great Victoria Desert_BJ67-32	2824	47	3.77	0.25	0.39
20171202_Great Victoria Desert_BJ67-39	2821	30	3.83	0.31	0.43
20171202_Great Victoria Desert_BJ67-41	2830	15	3.28	0.23	0.37
20171202_Great Victoria Desert_BJ67-45	2751	16	4.94	0.15	0.33
20171202_Great Victoria Desert_BJ67-47	2838	22	5.12	0.12	0.32
20171202_Great Victoria Desert_BJ67-50	2911	65	4.13	0.38	0.48
20171202_Great Victoria Desert_BJ67-66	2890	25	3.94	0.26	0.39
20171202_Great Victoria Desert_BJ67-72	2847	27	4.81	0.16	0.34
20171202_Great Victoria Desert_BJ67-74	2865	14	4.81	0.14	0.33
20171202_Great Victoria Desert_BJ67-75	2750	24	5.70	0.10	0.31
20171202_Great Victoria Desert_BJ67-79	2750	12	5.21	0.26	0.39
20171202_Great Victoria Desert_BJ67-94	2789	67	4.68	0.20	0.36
20171202_Great Victoria Desert_BJ67-100	2815	65	4.52	0.15	0.33
20171202_Great Victoria Desert_BJ67-101	2787	31	4.92	0.18	0.35
20171202_Great Victoria Desert_BJ67-121	2842	89	4.69	0.11	0.32
20171202_Great Victoria Desert_BJ67-129	2798	40	4.45	0.21	0.36
20171202_Great Victoria Desert_BJ67-131	2784	109	4.59	0.07	0.30
20171202_Great Victoria Desert_BJ67-135	2919	58	4.63	0.17	0.34
20180427_Great Sandy Desert_CTJ64-5	1712	79	7.44	0.10	0.33

20180427_Great Sandy Desert_CTJ64-6	1907	80	8.02	0.10	0.33
20180427_Great Sandy Desert_CTJ64-8	1797	91	4.91	0.18	0.36
20180427_Great Sandy Desert_CTJ64-11	1813	80	11.08	0.20	0.37
20180427_Great Sandy Desert_CTJ64-13	1605	83	7.66	0.15	0.44
20180427_Great Sandy Desert_CTJ64-14	1741	81	4.98	0.07	0.32
20180427_Great Sandy Desert_CTJ64-20	1738	81	7.28	0.12	0.43
20180427_Great Sandy Desert_CTJ64-21	1755	83	6.43	0.14	0.44
20180427_Great Sandy Desert_CTJ64-24	1683	82	6.22	0.13	0.43
20180427_Great Sandy Desert_CTJ64-28	2172	78	5.41	0.15	0.44
20180427_Great Sandy Desert_CTJ64-30	1748	84	6.11	0.11	0.33
20180427_Great Sandy Desert_CTJ64-33	1846	80	7.13	0.23	0.39
20180427_Great Sandy Desert_CTJ64-45	1041	93	9.13	0.12	0.33
20180427_Great Sandy Desert_CTJ64-47	1141	92	6.97	0.14	0.39
20180427_Great Sandy Desert_CTJ64-48	2101	78	6.74	0.19	0.36
20180427_Great Sandy Desert_CTJ64-52	2349	77	6.56	0.22	0.47
20180427_Great Sandy Desert_CTJ64-54	1589	84	8.07	0.23	0.38
20180427_Great Sandy Desert_CTJ64-59	445	12	6.31	0.13	0.33
20180427_Great Sandy Desert_CTJ64-67	1548	82	7.32	0.05	0.31
20180427_Great Sandy Desert_CTJ64-71	1825	80	8.76	0.10	0.32
20180427_Great Sandy Desert_CTJ64-80	1931	85	6.34	0.27	0.50
20180427_Great Sandy Desert_CTJ64-81	2336	79	6.93	0.14	0.44
20180427_Great Sandy Desert_CTJ64-83	1843	82	7.06	0.11	0.43
20180427_Great Sandy Desert_CTJ64-84	1846	79	7.36	0.23	0.47
20180427_Great Sandy Desert_CTJ64-90	1839	79	6.74	0.20	0.37
20180427_Great Sandy Desert_CTJ64-94	342	10	6.00	0.16	0.35
20180427_Great Sandy Desert_CTJ64-95	1854	80	7.61	0.18	0.36
20180427_Great Sandy Desert_CTJ64-96	1727	85	6.97	0.30	0.51
20180427_Great Sandy Desert_CTJ64-97	302	9	6.51	0.17	0.35
20180427_Great Sandy Desert_CTJ64-101	1846	80	8.02	0.20	0.46
20180427_Great Sandy Desert_CTJ64-103	1818	85	7.86	0.21	0.46
20180427_Great Sandy Desert_CTJ64-111	371	10	8.31	0.26	0.41
20180427_Great Sandy Desert_CTJ64-115	1913	80	7.94	0.16	0.35
20180427_Great Sandy Desert_CTJ64-126	1171	93	4.60	0.12	0.33
20180427_Great Sandy Desert_CTJ64-127	790	20	5.30	0.22	0.38
20180427_Great Victoria Desert_CPL17-2	1568	87	4.64	0.10	0.32
20180427_Great Victoria Desert_CPL17-12	1166	93	4.52	0.09	0.32
20180427_Great Victoria Desert_CPL17-14	1164	96	3.92	0.20	0.37
20180427_Great Victoria Desert_CPL17-28	1081	90	7.04	0.09	0.32
20180427_Great Victoria Desert_CPL17-30	1549	88	8.80	0.16	0.35
20180427_Great Victoria Desert_CPL17-33	1089	132	6.97	0.19	0.36
20180427_Great Victoria Desert_CPL17-39	885	21	4.94	0.26	0.49
20180427_Great Victoria Desert_CPL17-49	1166	88	4.35	0.09	0.32
20180427_Great Victoria Desert_CPL17-54	1303	92	10.61	0.16	0.35
20180427_Great Victoria Desert_CPL17-56	1136	95	2.89	0.21	0.37
20180427_Great Victoria Desert_CPL17-59	499	13	6.14	0.21	0.37
20180427_Great Victoria Desert_CPL17-62	1181	90	4.99	0.14	0.34
20180427_Great Victoria Desert_CPL17-64	1572	89	5.50	0.20	0.37
20180427_Great Victoria Desert_CPL17-68	1287	91	6.67	0.29	0.51
20180427_Great Victoria Desert_CPL17-80	1154	96	4.09	0.12	0.33
20180427_Great Victoria Desert_CPL17-83	1278	96	4.29	0.09	0.32
20180427_Great Victoria Desert_CPL17-86	2839	71	4.24	0.10	0.33
20180427_Great Victoria Desert_CPL17-92	1423	91	6.83	0.22	0.38
20180427_Great Victoria Desert_CPL17-98	1233	99	0.97	0.19	0.46
20180427_Great Victoria Desert_CPL17-100	1194	89	4.90	0.07	0.32
20180427_Great Victoria Desert_CPL17-106	1166	93	5.24	0.12	0.33
20180427_Great Victoria Desert_CPL17-107	1086	93	7.66	0.15	0.44
20180427_Great Victoria Desert_CPL17-110	2697	71	9.74	0.17	0.35
20180427_Great Victoria Desert_CPL17-117	1164	103	5.49	0.07	0.32
20180427_Great Victoria Desert_CPL17-127	1266	99	7.75	0.22	0.38
20180427_Great Victoria Desert_CTJ20-9	2794	74	3.32	0.13	0.34
20180427_Great Victoria Desert_CTJ20-10	1431	99	8.47	0.22	0.38
20180427_Great Victoria Desert_CTJ20-18	1070	107	2.84	0.24	0.44
20180427_Great Victoria Desert_CTJ20-35	1194	153	2.33	0.03	0.31
20180427_Great Victoria Desert_CTJ20-36	1161	98	4.55	0.24	0.48
20180427_Great Victoria Desert_CTJ20-73	1141	92	1.02	0.10	0.33
20180427_Great Victoria Desert_CTJ20-76	1257	116	5.89	0.14	0.34
20180427_Great Victoria Desert_CTJ20-77	1817	83	5.29	0.25	0.40
20180427_Great Victoria Desert_CTJ20-83	1306	94	6.67	0.11	0.33
20180427_Great Victoria Desert_CTJ20-93	1174	93	8.29	0.14	0.34
20180427_Great Victoria Desert_CTJ20-96	1204	93	5.52	0.13	0.43
20180427_Great Victoria Desert_CTJ20-97	1115	101	2.02	0.16	0.35
20180427_Great Victoria Desert_CTJ20-100	1545	106	6.54	0.27	0.41
20180427_Great Victoria Desert_CTJ20-102	1105	97	6.14	0.21	0.46
20180427_Great Victoria Desert_CTJ20-107	1078	117	7.64	0.14	0.34
20180427_Great Victoria Desert_CTJ20-109	1247	131	4.71	0.11	0.33
20180427_Great Victoria Desert_CTJ20-116	1357	122	4.86	0.07	0.32
20180427_Great Victoria Desert_CTJ20-120	1166	103	4.94	0.17	0.45
20180929_Ashburton-3	2159	67	6.70	0.13	0.33
20180929_Ashburton-4	1760	73	7.76	0.17	0.35
20180929_Ashburton-8	1758	76	10.54	0.17	0.35
20180929_Ashburton-9	1790	70	7.82	0.19	0.36
20180929_Ashburton-15	1775	71	8.13	0.09	0.32
20180929_Ashburton-16	1817	75	7.08	0.19	0.36
20180929_Ashburton-19	1797	71	9.60	0.21	0.37

20180929_Ashburton-21	1235	84	6.37	0.16	0.35
20180929_Ashburton-23	1836	73	6.19	0.06	0.31
20180929_Ashburton-24	1809	71	5.27	0.12	0.33
20180929_Ashburton-26	1676	99	6.24	0.14	0.34
20180929_Ashburton-30	1795	73	5.65	0.35	0.47
20180929_Ashburton-34	1839	84	7.11	0.15	0.35
20180929_Ashburton-37	1779	74	7.51	0.11	0.33
20180929_Daly-3	253	17	7.24	0.22	0.38
20180929_Daly-7	1159	88	5.04	0.14	0.34
20180929_Daly-9	240	16	5.73	0.10	0.33
20180929_Daly-10	98	7	3.84	0.06	0.32
20180929_Daly-11	1865	81	7.80	0.20	0.37
20180929_Daly-15	1578	77	6.25	0.11	0.33
20180929_Daly-16	631	42	8.46	0.23	0.39
20180929_De Grey-1	3475	62	6.30	0.06	0.32
20180929_De Grey-3	3424	59	5.25	0.24	0.39
20180929_De Grey-7	3462	62	5.66	0.14	0.34
20180929_De Grey-11	1216	90	9.01	0.17	0.35
20180929_De Grey-22	3377	55	6.02	0.12	0.33
20180929_De Grey-25	3306	64	5.28	0.30	0.43
20180929_De Grey-27	1852	67	7.87	0.13	0.34
20180929_De Grey-32	713	46	8.48	0.31	0.44
20180929_De Grey-34	1416	117	4.47	0.13	0.34
20180929_Fitzroy-1	1166	106	7.27	0.29	0.42
20180929_Fitzroy-9	1818	73	8.17	0.11	0.33
20180929_Fitzroy-13	1846	71	7.58	0.21	0.37
20180929_Fitzroy-16	1893	67	6.77	0.12	0.33
20180929_Fitzroy-20	1873	71	9.47	0.13	0.33
20180929_Fitzroy-23	1902	79	5.88	0.19	0.36
20180929_Fitzroy-24	1625	69	7.72	0.12	0.33
20180929_Lake Brown-1	2729	68	5.17	0.19	0.37
20180929_Lake Brown-3	2738	63	5.18	0.11	0.33
20180929_Lake Brown-5	1196	94	9.11	0.31	0.44
20180929_Lake Champion-1	2633	65	5.81	0.29	0.42
20180929_Lake Champion-7	1784	72	6.20	0.21	0.38
20180929_Lake Champion-9	2651	62	7.43	0.27	0.41
20180929_Lake Champion-10	2657	69	4.72	0.22	0.38
20180929_Lake Dumbleyung-1	2639	60	7.29	0.24	0.39
20180929_Lake Dumbleyung-4	2644	61	5.69	0.15	0.35
20180929_Lake Dumbleyung-8	2649	62	4.78	0.20	0.37
20180929_Lake Dumbleyung-11	2635	62	6.82	0.17	0.35
20180929_Lake Dumbleyung-13	2652	61	8.57	0.12	0.33
20180929_Lake Dumbleyung-16	2652	63	5.99	0.27	0.41
20180929_Lake Dumbleyung-17	2648	60	3.69	0.04	0.31
20180929_Lake Dumbleyung-23	2635	61	6.15	0.16	0.35
20180929_Lake Dumbleyung-30	2751	61	5.50	0.20	0.37
20180929_Lake Dumbleyung-32	2665	60	6.02	0.19	0.36
20180929_Lake Dumbleyung-33	2632	61	5.78	0.19	0.36
20180929_Lake Dumbleyung-40	2685	62	4.77	0.19	0.36
20180929_Lake Dumbleyung-47	2642	61	8.31	0.21	0.63
20180929_Lake Everard-1	1194	86	5.08	0.18	0.36
20180929_Lake Everard-3	1621	84	5.53	0.16	0.35
20180929_Lake Everard-10	1589	82	5.13	0.18	0.36
20180929_Lake Everard-12	1566	85	5.06	0.06	0.32
20180929_Lake Everard-16	1591	84	5.41	0.09	0.32
20180929_Lake Everard-19	1580	79	4.68	0.22	0.63
20180929_Lake Everard-23	1576	81	6.06	0.33	0.45
20180929_Lake Everard-26	1784	105	5.32	0.25	0.64
20180929_Lake Everard-33	1614	82	7.58	0.11	0.33
20180929_Lake Everard-34	1161	83	4.77	0.18	0.36
20180929_Lake Everard-37	1660	80	4.57	0.23	0.39
20180929_Lake Everard-38	1603	83	4.64	0.15	0.34
20180929_Lake Everard-42	1655	84	6.44	0.18	0.36
20180929_Lake Everard-43	1578	79	7.42	0.16	0.35
20180929_Lake Everard-45	1566	89	5.41	0.12	0.33
20180929_Lake Everard-53	1582	78	5.16	0.18	0.36
20180929_Lake Everard-55	1149	81	5.22	0.13	0.33
20180929_Lake Everard-60	1240	91	5.65	0.06	0.32
20180929_Lake Everard-63	1545	98	5.11	0.13	0.33
20180929_Lake Everard-64	1557	95	5.71	0.13	0.33
20180929_Lake Everard-70	1032	88	5.83	0.24	0.39
20180929_Lake Everard-77	1589	84	5.44	0.28	0.42
20180929_Lake Torrens-1	1599	78	5.22	0.19	0.37
20180929_Lake Torrens-5	1555	78	5.09	0.20	0.37
20180929_Lake Torrens-11	2062	65	3.84	0.14	0.34
20180929_Lake Torrens-16	1259	95	4.10	0.08	0.32
20180929_Lake Torrens-18	1589	82	5.01	0.08	0.32
20180929_Lake Torrens-19	1582	78	7.31	0.20	0.37
20180929_Lake Torrens-21	1576	77	6.42	0.11	0.33
20180929_Lake Torrens-23	1549	84	5.80	0.10	0.32
20180929_Lake Torrens-24	1588	78	5.96	0.12	0.33
20180929_Lake Wells-5	1603	74	9.21	0.19	0.36
20180929_Lake Wells-7	1043	139	6.80	0.25	0.40
20180929_Lake Wells-8	1566	81	6.87	0.09	0.32

20180929_Lake Wells-16	1223	87	6.63	0.23	0.39
20180929_Lake Wells-17	1128	103	7.85	0.20	0.37
20180929_Lake Wells-24	1364	84	4.33	0.10	0.33
20180929_Lake Wells-26	2634	63	6.51	0.07	0.32
20180929_Lake Wells-30	2751	65	5.71	0.16	0.35
20180929_Lake Wells-34	1186	94	6.06	0.18	0.36
20180929_Lake Wells-38	1245	105	6.58	0.26	0.41
20180929_Lake Wells-39	1599	70	5.81	0.05	0.31
20180929_Lake Wells-42	1102	100	3.08	0.09	0.60
20180929_Lake Wells-44	1186	102	7.59	0.21	0.37
20180929_Lake Wells-48	1216	156	6.46	0.17	0.35
20180929_Mulgaria-2	301	20	3.29	0.15	0.34
20180929_Mulgaria-6	252	17	6.41	0.14	0.34
20180929_Mulgaria-8	1631	78	7.55	0.26	0.40
20180929_Mulgaria-10	1169	168	6.20	0.11	0.60
20180929_Mulgaria-11	741	52	6.30	0.23	0.38
20180929_Mulgaria-13	97	7	9.40	0.25	0.40
20180929_Mulgaria-20	174	12	4.52	0.05	0.31
20180929_Mulgaria-23	270	18	9.53	0.24	0.39
20180929_Mulgaria-27	2656	67	6.72	0.31	0.44
20180929_Mulgaria-29	453	29	11.55	0.16	0.35
20180929_Mulgaria-31	320	21	5.12	0.12	0.33
20180929_Mulgaria-32	97	7	2.45	0.09	0.32
20180929_Mulgaria-35	302	20	4.22	0.06	0.31
20180929_Mulgaria-36	1159	109	5.87	0.15	0.34
20180929_Mulgaria-37	1369	84	5.31	0.11	0.60
20180929_Mulgaria-38	150	11	4.60	0.09	0.32
20180929_Mulgaria-39	338	23	7.71	0.04	0.31
20180929_Murrumbidgee-14	443	29	8.33	0.18	0.36
20180929_Murrumbidgee-21	459	31	8.42	0.13	0.33
20180929_Murrumbidgee-22	439	29	9.04	0.23	0.47
20180929_Murrumbidgee-28	416	27	6.66	0.16	0.35
20180929_Murrumbidgee-32	441	29	8.54	0.17	0.35
20180929_Murrumbidgee-39	565	36	7.01	0.18	0.36
20180929_Murrumbidgee-42	407	26	6.99	0.38	0.49
20180929_Murrumbidgee-43	914	58	4.90	0.22	0.38
20180929_Murrumbidgee-51	473	31	10.00	0.15	0.44
20180929_Murrumbidgee-54	457	29	6.27	0.04	0.31
20180929_Murrumbidgee-58	441	29	11.39	0.17	0.35
20180929_Murrumbidgee-66	463	30	7.37	0.14	0.34
20180929_Murrumbidgee-69	1342	83	4.24	0.22	0.38
20180929_Murrumbidgee-70	442	29	9.88	0.16	0.35
20180929_Murrumbidgee-82	493	36	8.52	0.27	0.49
20180929_Murrumbidgee-84	441	29	6.92	0.23	0.39
20180929_Murrumbidgee-91	443	30	9.06	0.20	0.37
20180929_Murrumbidgee-97	447	30	8.63	0.06	0.32
20180929_Victoria-6	875	56	4.88	0.18	0.62
20180930_Lake Carey-1	2679	127	4.74	0.13	0.34
20180930_Lake Carey-4	2741	173	3.14	0.24	0.39
20180930_Lake Carey-8	2723	132	4.57	0.18	0.62
20180930_Lake Carey-9	2678	127	5.86	0.18	0.36
20180930_Lake Carey-10	2689	126	4.84	0.23	0.39
20180930_Lake Carey-11	2705	124	5.22	0.12	0.33
20180930_Lake Carey-15	2680	127	5.08	0.06	0.32
20180930_Lake Carey-21	2689	126	4.68	0.23	0.64
20180930_Lake Carey-22	2662	128	5.02	0.17	0.35
20180930_Lake Carey-23	2750	138	4.32	0.16	0.35
20180930_Lake Carey-26	2654	129	4.51	0.25	0.40
20180930_Lake Carey-32	1206	157	6.23	0.12	0.61
20180930_Lake Carey-37	2708	124	5.57	0.15	0.35
20180930_Murray1-1	162	7	2.89	0.16	0.35
20180930_Murray1-2	177	9	3.78	0.31	0.43
20180930_Murray1-4	1658	145	6.97	0.13	0.34
20180930_Murray1-5	1070	166	4.37	0.19	0.36
20180930_Murray1-6	794	32	5.46	0.18	0.36
20180930_Murray1-8	630	25	8.49	0.36	0.47
20180930_Murray1-15	407	17	9.74	0.29	0.42
20180930_Murray1-16	428	18	6.13	0.20	0.37
20180930_Murray1-18	249	10	4.86	0.14	0.34
20180930_Murray1-23	262	11	7.76	0.38	0.49
20180930_Murray1-26	512	21	5.21	0.07	0.32
20180930_Murray1-27	159	7	4.15	0.13	0.33
20180930_Murray1-34	2606	124	5.64	0.14	0.34
20180930_Murray1-35	421	18	5.27	0.14	0.34
20180930_Murray1-40	526	20	6.85	0.11	0.33
20180930_Murray1-49	2245	134	5.85	0.19	0.36
20180930_Murray1-50	1046	232	6.83	0.19	0.36
20180930_Murray1-55	104	5	6.52	0.32	0.45
20180930_Murray1-63	619	24	9.26	0.25	0.40
20180930_Murray2-68	355	15	6.62	0.20	0.63
20180930_Murray2-73	1667	143	6.96	0.14	0.34
20180930_Murray2-78	1418	145	3.84	0.19	0.36
20180930_Murray2-79	1154	157	5.11	0.13	0.34
20180930_Murray2-82	186	9	9.06	0.20	0.37
20180930_Murray2-83	499	20	4.95	0.13	0.33
20180930_Murray2-92	182	11	7.34	0.09	0.32
20180930_Murray2-94	150	8	3.78	0.17	0.35
20180930_Murray2-95	495	20	5.83	0.13	0.34
20180930_Murray2-96	2688	126	5.74	0.12	0.33
20180930_Murray2-99	1169	191	4.78	0.12	0.33
20180930_Murray2-102	247	13	3.29	0.13	0.34

20180930_Murray2-106	165	8	2.34	0.17	0.35
20180930_Murray2-107	1136	192	4.62	0.21	0.38
20180930_Murray2-108	544	22	3.98	0.15	0.34
20180930_Murray2-109	595	23	6.26	0.22	0.38
20180930_Murrumbidgee-103	2392	121	7.48	0.17	0.45
20180930_Murrumbidgee-108	451	18	7.56	0.08	0.32
20180930_Murrumbidgee-111	2404	131	3.63	0.13	0.43
20180930_Murrumbidgee-118	421	17	8.91	0.10	0.43
20180930_Murrumbidgee-120	469	23	5.54	0.16	0.44
20180930_Murrumbidgee-129	437	18	7.23	0.27	0.41
20180930_Nalla Creek-1	2758	120	4.40	0.11	0.33
20180930_Nalla Creek-4	2762	128	6.56	0.20	0.37
20180930_Nalla Creek-8	2710	124	6.47	0.24	0.39
20180930_Nalla Creek-11	2759	120	4.71	0.25	0.64
20180930_Nalla Creek-18	2679	127	8.02	0.25	0.40
20201009_Lake Brown_A1	2659	44	5.68	0.30	0.49
20201009_Nalla Creek_A1	2708	52	4.68	0.18	0.43
20201009_Nalla Creek_A2	2670	47	4.57	0.14	0.42
20201009_Nalla Creek_A3	2789	34	4.38	0.19	0.44
20180930_Nalla Creek-7	2740	121	5.05	0.14	0.42
20180930_Nalla Creek-9	2766	128	5.66	0.40	0.56
20180930_Nalla Creek-10	2736	122	4.60	0.24	0.46
20180930_Nalla Creek-13	2656	119	5.40	0.13	0.41
20180930_Nalla Creek-17	2739	130	4.55	0.27	0.48
20201009_Nalla Creek_A4	2665	32	5.05	0.20	0.44
20180929_Lake Champion-2	1770	73	8.56	0.35	0.53
20180929_Lake Champion-3	2648	74	6.11	0.16	0.42
20180929_Lake Champion-4	2605	63	6.11	0.35	0.52
20180929_Lake Champion-5	269	18	9.98	0.20	0.44
20180929_Lake Champion-6	2667	66	6.28	0.12	0.41
20201009_Lake Champion_A1	2599	39	6.36	0.13	0.41
20201009_Lake Champion_A3	2674	83	6.66	0.18	0.43
20201009_Lake Champion_A4	2629	42	5.95	0.17	0.43
20180930_Lake Carey-3	2695	125	5.43	0.38	0.55
20180930_Lake Carey-6	2669	128	5.63	0.25	0.46
20180930_Lake Carey-7	2699	125	6.18	0.20	0.44
20180930_Lake Carey-12	2730	131	6.41	0.17	0.43
20180930_Lake Carey-13	2702	125	6.24	0.38	0.54
20180930_Lake Carey-28	1138	148	7.25	0.09	0.40
20180930_Lake Carey-34	2676	127	5.37	0.10	0.40
20180930_Lake Carey-38	2674	127	5.74	0.36	0.53
20180930_Lake Carey-40	2728	122	5.74	0.41	0.57
20201009_Lake Carey_A1	1223	174	7.99	0.40	0.56
20201009_Lake Carey_A2	2634	65	5.79	0.16	0.43
20201009_Lake Carey_A3	1159	73	7.61	0.20	0.44
20201009_Lake Carey_A4	2702	51	6.28	0.09	0.40
20201009_Lake Carey_A5	1146	79	7.63	0.18	0.43
20201009_Lake Carey_A6	1775	72	7.10	0.06	0.40
20201009_Lake Carey_A7	2755	42	6.35	0.22	0.45
20201009_Lake Carey_A8	2685	55	6.19	0.33	0.51
20180929_Lake Wells-22	2640	64	5.21	0.20	0.44
20180929_Lake Wells-29	2662	66	5.78	0.24	0.46
20180929_Lake Wells-41	1696	74	7.28	0.38	0.55
20201009_Lake Wells_A1	1194	84	8.20	0.16	0.42
20201009_Lake Wells_A2	1599	76	6.89	0.31	0.50
20201009_Lake Wells_A3	1181	92	3.84	0.11	0.41
20201009_Lake Wells_A5	2620	68	6.97	0.37	0.54
20201009_Lake Wells_A6	1278	103	7.95	0.29	0.49
20201009_Lake Wells_A7	1213	49	4.83	0.33	0.51
20201009_Lake Wells_A8	999	95	2.20	0.26	0.47
20201009_Lake Wells_A9	1024	83	7.65	0.16	0.42
20201009_Lake Wells_A11	1171	63	7.12	0.31	0.50
20201009_Lake Wells_A12	1249	88	7.62	0.24	0.46
20180929_Lake Dumbleyung-3	2604	65	3.23	0.29	0.49
20180929_Lake Dumbleyung-5	2670	62	6.00	0.16	0.43
20180929_Lake Dumbleyung-7	2655	62	5.19	0.29	0.49
20180929_Lake Dumbleyung-14	2652	61	6.36	0.28	0.48
20180929_Lake Dumbleyung-15	2648	63	5.62	0.18	0.43
20180929_Lake Dumbleyung-21	2641	60	6.61	0.34	0.52
20180929_Lake Dumbleyung-24	2746	66	6.63	0.19	0.43
20180929_Lake Dumbleyung-25	2632	65	6.39	0.45	0.59
20180929_Lake Dumbleyung-26	2669	61	6.17	0.46	0.60
20180929_Lake Dumbleyung-28	2652	61	5.61	0.21	0.44
20180929_Lake Dumbleyung-31	2650	64	6.29	0.32	0.51
20180929_Lake Dumbleyung-34	2651	62	5.49	0.14	0.42
20180929_Lake Dumbleyung-44	2662	61	5.94	0.10	0.41
20180929_Lake Dumbleyung-45	2649	61	5.71	0.08	0.40
20180929_Lake Dumbleyung-53	2624	61	6.26	0.43	0.58
20201009_Lake Dumbleyung_A1	2656	16	5.76	0.30	0.49
20201009_Lake Dumbleyung_A2	2635	23	5.51	0.33	0.51
20201009_Lake Dumbleyung_A3	2648	36	5.79	0.32	0.51
20201009_Lake Dumbleyung_A4	2674	27	5.84	0.13	0.41
20171201_Great Victoria Desert_BJ67-1	3002	151	5.00	0.12	0.47
20171201_Great Victoria Desert_BJ67-10	2814	90	4.50	0.21	0.50
20171202_Great Victoria Desert_BJ67-17	2916	73	7.06	0.24	0.52
20171202_Great Victoria Desert_BJ67-19	2836	32	5.43	0.09	0.47
20171202_Great Victoria Desert_BJ67-24	2713	19	7.08	0.09	0.47
20171202_Great Victoria Desert_BJ67-28	2856	49	4.65	0.24	0.52
20171202_Great Victoria Desert_BJ67-29	2819	14	3.45	0.33	0.56
20171202_Great Victoria Desert_BJ67-30	2717	19	6.26	0.09	0.47
20171202_Great Victoria Desert_BJ67-31	2870	59	5.27	0.05	0.46
20171202_Great Victoria Desert_BJ67-34	2644	26	6.67	0.13	0.48
20171202_Great Victoria Desert_BJ67-38	2855	21	5.98	0.18	0.49
20171202_Great Victoria Desert_BJ67-55	2855	16	3.93	0.30	0.55
20171202_Great Victoria Desert_BJ67-56	2848	38	4.38	0.16	0.49
20171202_Great Victoria Desert_BJ67-62	2768	20	5.99	0.06	0.46
20171202_Great Victoria Desert_BJ67-78	2896	39	3.74	0.11	0.47

20171202_Great Victoria Desert_BJ67-81	2835	39	4.96	0.09	0.47
20171202_Great Victoria Desert_BJ67-82	2873	33	5.10	0.13	0.48
20171202_Great Victoria Desert_BJ67-83	2805	50	4.48	0.18	0.49
20171202_Great Victoria Desert_BJ67-85	2792	33	5.22	0.16	0.49
20171202_Great Victoria Desert_BJ67-88	2817	36	1.45	0.16	0.49
20171202_Great Victoria Desert_BJ67-96	2792	25	4.73	0.15	0.48
20171202_Great Victoria Desert_BJ67-98	2675	26	6.09	0.20	0.50
20171202_Great Victoria Desert_BJ67-108	2827	33	4.98	0.09	0.47
20171202_Great Victoria Desert_BJ67-109	2722	20	4.39	0.08	0.46
20171202_Great Victoria Desert_BJ67-123	2804	21	3.72	0.13	0.47
20171202_Great Victoria Desert_BJ67-130	2806	18	3.72	0.10	0.47
20171202_Great Victoria Desert_BJ67-133	2855	37	-0.49	0.17	0.49
20171202_Great Victoria Desert_BJ67-138	2792	18	2.97	0.14	0.48
20171202_Great Victoria Desert_BJ67-141	2855	60	4.89	0.13	0.47
20201009_Great Victoria Desert_BJ67_A1	2829	60	4.84	0.24	0.52
20201009_Great Victoria Desert_BJ67_A2	2843	66	2.99	0.15	0.48
20201009_Great Victoria Desert_BJ67_A3	2705	19	5.56	0.13	0.48
20201009_Great Victoria Desert_BJ67_A4	2811	35	4.78	0.13	0.47
20201009_Great Victoria Desert_BJ67_A5	2722	40	5.63	0.15	0.48
20071121_Great Victoria Desert_CPL61-12	623	21	5.88		0.32
20071121_Great Victoria Desert_CPL61-13	1705	39	6.35		0.31
20071121_Great Victoria Desert_CPL61-14	1703	40	7.88		0.31
20071121_Great Victoria Desert_CPL61-17	1192	37	8.41		0.40
20071121_Great Victoria Desert_CPL61-19	1166	33	6.12		0.36
20071121_Great Victoria Desert_CPL61-20	1157	35	5.00		0.49
20071121_Great Victoria Desert_CPL61-21	1205	40	7.30		0.43
20071121_Great Victoria Desert_CPL61-22	2780	62	5.33		0.50
20071121_Great Victoria Desert_CPL61-23	1057	34	4.08		0.32
20071121_Great Victoria Desert_CPL61-26	1173	30	9.55		0.31
20071121_Great Victoria Desert_CPL61-27	1664	40	8.51		0.34
20071121_Great Victoria Desert_CPL61-37	1149	42	6.52		0.50
20071121_Great Victoria Desert_CPL61-38	1212	35	7.76		0.50
20071121_Great Victoria Desert_CPL61-39	1186	30	5.48		0.35
20071121_Great Victoria Desert_CPL61-40	2825	65	5.34		0.47
20071121_Great Victoria Desert_CPL61-55	1798	42	8.07		0.48
20071121_Great Victoria Desert_CPL61-60	1655	41	8.27		0.49
20071121_Great Victoria Desert_CPL61-63	1229	50	7.05		0.48
20071121_Great Victoria Desert_CPL61-76	1155	48	8.00		0.35
20071121_Great Victoria Desert_CPL61-83	1234	40	7.63		0.48
20071121_Great Victoria Desert_CPL61-87	1194	34	7.31		0.47
20071121_Great Victoria Desert_CPL61-89	971	40	4.72		0.34
20071121_Great Victoria Desert_CPL61-91	1667	45	6.06		0.51
20071121_Simpson Desert_SP221-11	591	15	6.32		0.44
20071121_Simpson Desert_SP221-12	482	12	1.23		0.48
20071121_Simpson Desert_SP221-15	137	4	4.86		0.31
20071121_Simpson Desert_SP221-16	161	6	4.18		0.33
20071121_Simpson Desert_SP221-24	110	4	4.46		0.49
20071121_Simpson Desert_SP221-25	1765	50	0.75		0.48
20071121_Simpson Desert_SP221-31	110	4	4.88		0.30
20071121_Simpson Desert_SP221-39	94	3	4.35		0.49
20071121_Simpson Desert_SP221-40	449	11	7.11		0.47
20071121_Simpson Desert_SP221-45	99	3	4.69		0.38
20071121_Simpson Desert_SP221-46	188	5	5.49		0.40
20071121_Simpson Desert_SP221-56	359	10	5.18		0.49
20071121_Simpson Desert_SP221-58	264	7	4.73		0.47
20071121_Simpson Desert_SP221-64	251	6	5.96		0.47
20071121_Simpson Desert_SP221-72	108	3	4.58		0.47
20071121_Simpson Desert_SP221-73	374	10	11.09		0.49
20071121_Simpson Desert_SP221-75	579	14	10.82		0.49
20071121_Simpson Desert_SP221-84	532	15	7.52		0.48
20071121_Simpson Desert_SP221-87	499	14	6.43		0.48
20071121_Simpson Desert_SP221-94	251	8	6.48		0.47
20071121_Simpson Desert_SP221-97	460	11	5.58		0.49
20071121_Tanami Desert_BJ200-21	1716	41	6.78		0.31
20071121_Tanami Desert_BJ200-23	1238	42	7.10		0.44
20071121_Tanami Desert_BJ200-25	1783	43	8.76		0.31
20071121_Tanami Desert_BJ200-45	1883	47	9.34		0.33
20071121_Tanami Desert_BJ200-51	1786	43	7.98		0.57
20071121_Tanami Desert_BJ200-56	1888	44	8.62		0.49
20071121_Tanami Desert_BJ200-65	1860	46	7.61		0.43
20071121_Tanami Desert_BJ200-99	1972	45	7.83		0.49
20071129_Lowan Sand_SP135-13	467	12	6.80		0.65
20071129_Lowan Sand_SP135-15	1140	36	5.58		0.72
20071129_Lowan Sand_SP135-18	523	13	9.95		0.67
20071129_Lowan Sand_SP135-19	555	14	8.67		0.70
20071129_Lowan Sand_SP135-2	161	4	2.95		0.66
20071129_Lowan Sand_SP135-23	1163	34	6.67		0.67
20071129_Lowan Sand_SP135-25	580	15	7.67		0.69
20071129_Lowan Sand_SP135-29	520	13	8.51		0.72
20071129_Lowan Sand_SP135-32	396	9	6.88		0.88
20071129_Lowan Sand_SP135-34	584	16	6.66		0.77
20071129_Lowan Sand_SP135-37	1622	36	6.54		0.69
20071129_Lowan Sand_SP135-38	574	13	8.60		0.70
20071129_Lowan Sand_SP135-39	560	13	6.13		0.71
20071129_Lowan Sand_SP135-4	531	11	7.01		0.68
20071129_Lowan Sand_SP135-42	132	4	5.71		0.70
20071129_Lowan Sand_SP135-43	481	11	9.46		0.81
20071129_Lowan Sand_SP135-44	523	14	7.62		0.69
20071129_Lowan Sand_SP135-50	550	13	7.43		0.68
20071129_Lowan Sand_SP135-54	592	14	5.59		0.68
20071129_Lowan Sand_SP135-55	257	6	5.37		0.69
20071129_Lowan Sand_SP135-57	1084	42	4.28		0.72
20071129_Lowan Sand_SP135-58	1086	35	6.46		0.79
20071129_Lowan Sand_SP135-59	249	6	6.44		0.68
20071129_Lowan Sand_SP135-64	573	13	11.05		0.70
20071129_Lowan Sand_SP135-7	247	7	5.51		0.66
20071129_Lowan Sand_SP135-78	620	14	7.81		0.69

20071129_Lowan Sand_SP135-80	486	11	7.12	0.73
20071129_Lowan Sand_SP135-82	580	16	7.28	0.66
20071129_Lowan Sand_SP135-87	579	14	10.48	0.72
20071129_Lowan Sand_SP135-88	383	10	4.78	0.67
20071129_Lowan Sand_SP135-93	642	14	8.36	0.74
20071129_Lowan Sand_SP135-96	596	13	6.01	0.68
20071129_Lowan Sand_SP135-97	534	12	7.19	0.67
20071129_Simpson Desert_CTJ98-5	187	5	4.45	0.55
20071129_Simpson Desert_CTJ98-15	108	3	4.12	0.62
20071129_Simpson Desert_CTJ98-18	559	12	11.21	0.58
20071129_Simpson Desert_CTJ98-27	1736	43	7.82	0.58
20071129_Simpson Desert_CTJ98-31	1708	34	4.74	0.69
20071129_Simpson Desert_CTJ98-34	1224	28	9.88	0.53
20071129_Simpson Desert_CTJ98-35	1995	38	7.94	0.57
20071129_Simpson Desert_CTJ98-38	621	17	8.88	0.55
20071129_Simpson Desert_CTJ98-46	1788	36	8.34	0.59
20071129_Simpson Desert_CTJ98-48	1662	42	7.99	0.53
20071129_Simpson Desert_CTJ98-53	99	2	6.53	0.56
20071129_Simpson Desert_CTJ98-63	138	5	5.47	0.60
20071129_Simpson Desert_CTJ98-64	638	20	7.81	0.55
20071129_Simpson Desert_CTJ98-65	1749	35	7.28	0.61
20071129_Simpson Desert_CTJ98-76	227	7	6.03	0.54
20071129_Simpson Desert_CTJ98-84	162	6	5.97	0.60
20071129_Simpson Desert_CTJ98-94	570	19	8.06	0.59
20071129_Simpson Desert_CTJ98-97	1258	49	6.40	0.56
20071129_Simpson Desert_CTJ98-100	1660	38	6.82	0.54

*: $\delta^{18}\text{O}$ (permil) = $(\frac{^{18}\text{O}/^{16}\text{O}}{^{18}\text{O}/^{16}\text{O}}_{\text{true}} / \frac{^{18}\text{O}/^{16}\text{O}}{^{18}\text{O}/^{16}\text{O}}_{\text{VSMOW}} - 1) * 1000$, where $^{18}\text{O}/^{16}\text{O}_{\text{true}}$ is the background, EISIE, and IMF corrected $^{18}\text{O}/^{16}\text{O}$ ratio, and $(^{18}\text{O}/^{16}\text{O})_{\text{VSMOW}}$ is the reference value (0.0020052; Baertschi, 1976).

†: Spot uncertainty combines the within-spot uncertainty and the reproducibility (weighted 2SD) of the primary reference zircon, added in quadrature.

References:

Baertschi, P. (1976) Absolute ^{18}O content of standard mean ocean water. Earth and Planetary Science Letters 31, 341-344.

Table 5.6 Lu-Hf isotope data of zircon standards for each session.

Session	Reference zircon	N	Spot size (µm)	Mean $^{176}\text{Lu}/^{177}\text{Hf}$	2SD	Offset*	Mean $^{176}\text{Lu}/^{177}\text{Hf}$ corrected †	2SE.ext ‡	Analyzed unknown sample
20170919									
RSES ANU	91500 (Primary)	15	45	0.282283	37	23	0.282307	39	Murray1 (No. 10-100)
	Mud Tank	15	45	0.282493	25	14	0.282517	38	Murray2 (No. 1-60)
	FC1	10	45	0.282148	28	36	0.282172	38	Bega (No. 1-68)
	QGNG	15	45	0.281590	29	22	0.281613	38	
							Average offset		24
20170920									
RSES ANU	91500 (Primary)	16	45	0.282298	40	8	0.282310	57	Bega (No. 73-100)
	Mud Tank	16	45	0.282499	21	8	0.282512	45	
	FC1	6	45	0.282155	23	30	0.282167	46	
	QGNG	14	45	0.281606	49	6	0.281619	63	
							Average offset		13
20190725&26									
GIG CAS	Plešovice (Primary)	145	45	0.282474	49	4			Warburton (No. 21-91)
	91500	72	45	0.282300	84	10		50	Belyando (No. 11-139)
	R33	107	45	0.282795	109	11		55	Great Victoria Desert_CT1 (No. 9-120)
	Mud Tank	66	45	0.282517	62	8		50	Great Sandy Desert_CT164 (No. 4-127)
							2SE		Ashburton (No. 4-37)
Great Victoria Desert_B167 (No. 5-135) Daly (No. 1-16) Lake Everard (No. 1-77) Lake Carey (No. 1-37) 20180930_Murray1 (No. 1-109) Murchision (No. 3-115) De Grey (No. 1-34) Lake Wells (No. 5-48) Nalla Creek (No. 1-18)									
20201014									
RSES ANU	91500 (Primary)	62	35	0.282302	10	4	0.282308	10	Nalla Creek (No. A1-A3&9-17)
	Mud Tank	64	35	0.282509	9	-2	0.282514	9	Lake Campion (No. 2-11&A1-A4)
	R33	31	35	0.282750	12	5	0.282765	12	Lake Carey (No. 3-40&A1-A8)
	Temora 2	20	35	0.282671	22	15	0.282677	22	Lake Wells (No. A1-A12&22-41)
							Average offset		5
20201020									
RSES ANU	91500 (Primary)	11	35	0.282297	13	9	0.282311	13	Great Victoria Desert_B167 (No. 1-133&A2-A5)
	Mud Tank	12	35	0.282507	14	0	0.282520	14	
	R33	5	35	0.282747	12	17	0.282760	12	
	Temora 2	4	35	0.282659	23	27	0.282673	23	
							Average offset		13

Reference	$^{176}\text{Lu}/^{177}\text{Hf}$ (solution)	2SD
91500	0.282306	8
MudTank	0.282507	6
FC1	0.282184	16
QGNG	0.281612	4
R33	0.282764	14
Temora 2	0.282686	8

*: Difference between measured value and solution value of reference zircons. Solution values are derived from Woodhead et al. (2005)

†: $^{176}\text{Lu}/^{177}\text{Hf}$ ratio is corrected by the average offset of all reference zircons analyzed.

‡: The errors combine the standard error of mean and the reproducibility (2SD) of the primary reference zircon (91500), added in quadrature.

§: This session were conducted at State key Laboratory of Isotope Geochemistry, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences (GIG-CAS) (see Chapter 3 Method for details)

Reference:

Woodhead, J.D., Hergt, J.M., 2005. A preliminary appraisal of seven natural zircon reference materials for in situ Hf isotope determination. *Geostandards and Geoanalytical Research* 29, 183-195.