

GSA Data Repository item 2002107: Table DR 1. Summary of SHRIMP U-Pb results of zircons from the lower Inindia Beds.

Spot	U (ppm)	Th/U	f (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ $^{207}\text{Pb}/^{235}\text{U}$	$\pm$ $^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ $^{206}\text{Pb}/^{238}\text{U}$	$\pm$ $^{207}\text{Pb}/^{206}\text{Pb}$	Discor (%)					
1.1	166	0.52	0.24	0.2521	3.0	3.160	3.5	0.0908	1.7	1449	39	1443	33	0
2.1	497	2.29	2.62	0.1225	2.9	1.445	3.9	0.0856	2.5	745	20	1329	49	44
3.1	217	0.87	0.25	0.2543	3.0	3.190	3.2	0.0911	1.3	1461	39	1448	26	-1
4.1	346	1.98	3.49	0.1135	2.9	1.207	5.3	0.0771	4.4	693	19	1124	88	38
5.1	765	0.71	3.73	0.0986	2.9	1.069	4.3	0.0786	3.2	606	17	1162	64	48
6.1	125	1.17	0.26	0.1889	3.1	1.928	4.4	0.0741	3.2	1115	31	1043	65	-7
7.1	256	0.15	0.08	0.1738	2.9	1.753	3.4	0.0731	1.8	1033	28	1018	36	-2
8.1	338	0.98	1.55	0.1414	2.9	1.405	4.2	0.0721	3.1	852	23	989	63	14
9.1	89	0.40	0.00	0.2075	3.2	2.381	4.0	0.0832	2.4	1216	35	1274	47	5
10.1	172	0.41	0.19	0.1822	3.0	1.822	3.6	0.0725	2.0	1079	30	1001	41	-8
11.1	327	0.58	0.24	0.1789	1.7	1.933	2.8	0.0784	2.2	1061	17	1156	43	8
12.1	477	0.38	0.49	0.1691	1.6	1.799	2.8	0.0772	2.3	1007	15	1125	45	11
13.1	541	0.87	0.45	0.1666	1.6	1.755	2.5	0.0764	1.9	993	15	1106	37	10
14.1	486	0.63	0.90	0.1467	1.6	1.567	3.1	0.0775	2.6	883	13	1133	52	22
15.1	241	1.17	0.00	0.2952	1.7	4.251	2.0	0.1044	1.0	1667	25	1704	18	2
16.1	873	1.57	3.71	0.1237	1.5	1.752	3.0	0.1027	2.6	752	11	1673	48	55
17.1	332	2.61	2.00	0.1362	1.7	1.416	4.4	0.0754	4.1	823	13	1080	82	24
18.1	430	1.94	2.61	0.1386	1.6	1.482	4.3	0.0776	4.0	837	13	1136	80	26
19.1	369	0.36	0.17	0.1859	1.7	1.939	2.7	0.0756	2.1	1099	17	1086	42	-1
20.1	332	0.36	0.30	0.1766	1.7	1.825	2.6	0.0750	2.0	1049	16	1067	40	2
21.1	388	0.58	0.00	0.1783	1.6	1.832	2.0	0.0746	1.2	1057	16	1056	24	0
22.1	790	2.79	7.20	0.0682	1.7	0.668	7.2	0.0711	7.0	425	7	959	140	56
23.1	76	1.19	0.00	0.3094	2.3	4.490	3.3	0.1051	2.3	1738	34	1717	43	-1
24.1	387	0.52	0.05	0.4514	1.6	10.140	1.7	0.1629	0.6	2401	32	2486	9	3
25.1	440	1.19	2.00	0.1403	1.6	1.475	3.8	0.0763	3.4	846	13	1102	68	23
26.1	131	0.82	0.39	0.1672	2.1	1.631	4.6	0.0708	4.1	997	19	950	83	-5
27.1	817	1.29	4.04	0.1076	1.6	1.386	4.6	0.0935	4.3	659	10	1497	81	56
28.1	474	1.34	2.29	0.1374	1.6	1.445	4.3	0.0763	4.0	830	13	1102	79	25
29.1	187	0.38	0.00	0.3723	1.8	6.680	2.0	0.1301	0.9	2040	31	2100	16	3
30.1	218	0.54	0.07	0.1769	1.8	1.894	3.3	0.0776	2.8	1050	18	1138	55	8
31.1	700	2.63	4.04	0.0804	1.6	0.952	4.6	0.0858	4.4	499	8	1335	84	63
32.1	129	0.82	0.00	0.1756	2.1	1.866	3.6	0.0771	2.9	1043	20	1123	58	7
33.1	328	0.84	0.08	0.1832	1.7	1.918	2.1	0.0759	1.3	1085	17	1093	27	1
34.1	188	0.39	0.00	0.1880	1.8	2.005	2.4	0.0774	1.5	1110	19	1131	30	2
35.1	173	0.40	0.00	0.1592	1.9	1.556	2.6	0.0709	1.8	952	17	954	37	0
36.1	343	0.34	0.00	0.1850	1.7	1.990	2.2	0.0780	1.5	1094	17	1147	29	5
37.1	324	0.70	0.01	0.1836	1.7	1.956	2.1	0.0773	1.2	1087	17	1128	25	4
38.1	707	1.50	4.19	0.0905	1.6	0.950	4.9	0.0761	4.6	559	9	1098	92	49
39.1	105	0.66	0.00	0.1866	2.2	2.094	3.3	0.0814	2.5	1103	22	1231	49	10
40.1	102	0.56	0.89	0.1916	2.2	1.910	5.3	0.0721	4.8	1130	23	989	98	-14
41.1	381	1.11	0.24	0.2461	1.7	2.966	2.2	0.0874	1.4	1418	22	1370	27	-4
42.1	160	0.44	0.26	0.1882	1.9	1.951	4.4	0.0752	4.0	1112	20	1074	80	-4
43.1	311	0.72	0.12	0.4259	1.7	8.650	1.8	0.1473	0.7	2287	32	2314	12	1
44.1	60	0.82	0.00	0.2049	2.6	2.175	3.7	0.0770	2.7	1202	29	1121	53	-7
45.1	234	0.44	0.05	0.1754	1.8	1.892	2.5	0.0782	1.7	1042	17	1152	34	10
46.1	152	1.68	0.10	0.2140	2.2	2.572	3.3	0.0872	2.5	1250	26	1364	47	8
47.1	254	0.47	0.00	0.3278	1.7	5.130	2.0	0.1135	1.1	1828	27	1856	20	2
48.1	595	1.57	3.16	0.1237	1.7	1.282	4.6	0.0752	4.2	752	12	1073	85	30
49.1	560	0.74	2.04	0.1329	1.6	1.413	4.1	0.0771	3.7	804	12	1125	74	28
50.1	155	0.86	0.44	0.1786	2.1	1.874	4.0	0.0761	3.4	1060	20	1097	68	3

Correction for common Pb using the  $^{204}\text{Pb}$  method. Errors are  $1\sigma$ .  $f\text{ (%)}:$  Percentage of  $^{206}\text{Pb}$  common in the total  $^{206}\text{Pb}$ . Error in standard calibration was 0.67% (not included in above errors but required when comparing data from different mounts).

GSA Data Repository item 2002##: Table DR 2. Summary of SHRIMP U-Pb results of zircons from the upper Inindia Beds.

Spot	U (ppm)	Th/U	f (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{235}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ (%)	Discor (%)
1.1	131	0.55	0.80	0.2263	3.6	2.600	5.4	0.0835	4.0	1315	43	1280	79	-3
2.1	169	1.31	1.13	0.2111	3.3	2.770	5.2	0.0952	4.0	1235	37	1532	75	19
3.1	233	1.14	0.17	0.2892	3.2	4.400	3.6	0.1103	1.8	1638	46	1804	33	9
4.1	270	0.93	0.81	0.1864	3.2	1.982	4.5	0.0771	3.2	1102	32	1124	63	2
5.1	245	0.23	0.15	0.2103	3.2	2.477	3.7	0.0854	1.9	1230	35	1325	37	7
6.1	420	0.65	0.68	0.1864	3.0	1.909	3.9	0.0743	2.5	1102	31	1049	51	-5
7.1	247	0.92	0.17	0.2965	3.2	4.230	3.4	0.1034	1.3	1674	47	1685	24	1
8.1	212	1.45	0.46	0.2027	3.3	2.170	5.0	0.0778	3.8	1190	35	1142	75	-4
9.1	229	0.19	0.25	0.1526	3.2	1.462	4.2	0.0695	2.6	916	28	913	54	0
10.1	115	0.48	0.61	0.2064	3.5	2.310	5.4	0.0812	4.0	1209	39	1226	79	1
11.1	166	0.93	0.13	0.2785	3.3	3.810	4.0	0.0992	2.3	1584	46	1610	42	2
12.1	116	0.98	0.57	0.2524	3.5	3.350	4.8	0.0962	3.3	1451	45	1552	62	7
13.1	65	0.69	3.29	0.1075	4.0	1.027	6.2	0.0693	4.7	658	53	908	21	28
14.1	237	0.73	1.28	0.2142	3.2	3.020	4.4	0.1022	3.0	1251	37	1664	56	25
15.1	52	0.89	0.62	0.1068	4.2	0.955	8.5	0.0649	7.3	654	26	770	150	15
16.1	84	0.76	1.80	0.3170	3.6	4.680	8.5	0.1073	7.7	1773	56	1755	140	-1
17.1	124	4.23	4.48	0.0978	3.6	0.900	13.0	0.0668	13.0	601	21	833	270	28
18.1	118	1.25	0.36	0.2599	3.4	3.380	4.5	0.0942	3.0	1490	45	1512	57	1
19.1	141	1.13	0.94	0.1132	3.4	0.922	5.9	0.0591	4.9	692	22	569	110	-21
20.1	154	0.68	0.45	0.2602	3.3	3.580	4.1	0.0999	2.5	1491	43	1622	46	8
21.1	100	0.54	0.70	0.2394	3.4	2.810	4.5	0.0851	2.9	1383	43	1319	57	-5
22.1	203	0.43	0.48	0.1794	3.2	1.813	4.3	0.0733	2.9	1064	31	1022	58	-4
23.1	128	0.87	0.07	0.2910	3.3	3.860	3.7	0.0963	1.7	1646	48	1553	32	-6
24.1	111	1.14	0.90	0.2257	3.4	3.100	5.6	0.0996	4.5	1312	40	1617	83	19
25.1	102	0.92	1.02	0.1689	3.5	1.530	6.7	0.0656	5.7	1006	33	792	120	-27
26.1	240	0.27	0.24	0.1638	3.1	1.584	3.7	0.0701	1.9	978	28	932	39	-5
27.1	86	0.95	0.42	0.2433	3.7	3.170	4.8	0.0944	3.1	1404	46	1515	58	7
28.1	179	2.33	0.06	0.1998	3.2	2.248	3.6	0.0816	1.8	1174	34	1236	34	5
29.1	233	1.65	1.02	0.2538	3.1	3.680	3.7	0.1052	2.0	1458	40	1718	37	15
30.1	167	0.99	0.71	0.2919	3.2	4.270	3.8	0.1060	2.0	1651	46	1732	37	5
31.1	143	1.41	1.07	0.1691	3.4	2.020	5.4	0.0865	4.1	1007	32	1349	80	25
32.1	144	0.70	0.62	0.2294	3.2	3.110	4.2	0.0983	2.7	1331	39	1592	50	16
33.1	91	1.55	0.67	0.2483	3.6	2.810	6.1	0.0820	4.8	1430	47	1246	95	-15
34.1	273	0.67	0.12	0.1841	3.1	1.966	3.4	0.0774	1.6	1089	31	1133	31	4
35.1	154	0.93	0.08	0.1862	3.2	1.966	3.9	0.0766	2.2	1101	32	1110	44	1
36.1	402	0.36	0.11	0.1802	3.0	1.867	3.3	0.0752	1.3	1068	30	1073	25	0
37.1	301	0.62	0.30	0.3074	3.0	4.590	3.3	0.1082	1.3	1728	46	1769	23	2
38.1	104	1.09	0.19	0.1919	3.3	2.109	4.3	0.0797	2.8	1132	34	1190	56	5
39.1	124	0.99	0.24	0.2246	3.2	2.630	3.9	0.0848	2.2	1306	38	1312	43	0
40.1	44	1.16	-0.96	0.1287	3.2	1.290	8.4	0.0726	7.8	781	23	1003	160	22
41.1	126	0.69	0.39	0.2843	3.2	3.840	3.8	0.0980	2.2	1613	45	1586	41	-2
42.1	228	1.42	0.98	0.2502	3.1	3.260	3.7	0.0944	2.0	1440	40	1517	39	5
43.1	80	0.55	0.64	0.1157	3.6	1.001	8.7	0.0628	7.9	706	24	701	170	-1
44.1	60	1.21	0.74	0.1797	3.8	1.713	5.8	0.0691	4.4	1065	37	903	92	-18
45.1	293	0.17	0.08	0.1763	3.2	1.907	3.5	0.0784	1.5	1047	31	1158	29	10
46.1	468	0.81	3.31	0.1268	3.1	1.365	5.5	0.0780	4.5	770	23	1148	90	33
47.1	160	0.40	0.30	0.2015	3.4	2.580	4.1	0.0927	2.3	1184	36	1481	44	20
48.1	89	1.34	0.18	0.3050	3.4	4.560	3.9	0.1084	1.9	1716	51	1772	35	3
49.1	139	1.32	0.41	0.1860	3.2	1.985	4.5	0.0774	3.1	1100	33	1132	61	3
50.1	328	1.29	3.23	0.2012	3.1	3.180	4.4	0.1147	3.1	1182	33	1875	56	37
51.1	222	0.65	0.25	0.1847	3.0	1.914	3.3	0.0752	1.3	1092	30	1073	27	-2
52.1	102	1.01	5.19	0.2680	3.9	3.590	28.0	0.0970	27.0	1532	54	1565	510	2
53.1	141	0.54	0.27	0.2224	3.3	2.560	4.3	0.0834	2.9	1295	38	1278	56	-1
54.1	372	1.63	2.14	0.2512	3.0	5.320	3.5	0.1537	1.7	1445	39	2387	29	39
55.1	272	0.68	-0.09	0.1958	3.1	2.186	3.4	0.0810	1.5	1153	32	1221	29	6
56.1	26	1.87	1.78	0.3350	4.3	4.700	8.7	0.1018	7.5	1862	69	1657	140	-12
57.1	178	1.03	1.00	0.2989	3.2	4.450	4.9	0.1080	3.7	1686	47	1766	67	5
58.1	224	0.51	0.22	0.3099	3.1	4.670	3.3	0.1092	1.2	1740	47	1787	22	3
59.1	114	1.10	0.12	0.2931	3.2	4.480	3.6	0.1110	1.5	1657	47	1815	27	9
60.1	165	0.52	0.35	0.1790	3.2	1.897	4.1	0.0769	2.5	1061	31	1118	51	5

Correction for common Pb using the  $^{204}\text{Pb}$  method. Errors are  $1\sigma$ . f (%): Percentage of  $^{206}\text{Pb}$  common in the total  $^{206}\text{Pb}$ . Error in standard calibration was 1.16% (not included in above errors but required when comparing data from different mounts).

GSA Data Repository item 2002##: Table DR 3. Summary of SHRIMP U-Pb results of zircons from the Winnall Beds (Mt. Connor).

Spot	U (ppm)	Th/U	f (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{235}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ (%)	Discor (%)
1.1	132	1.21	0.00	0.1861	1.8	2.021	2.5	0.0788	1.7	1100	19	1167	34	6
2.1	263	0.39	0.05	0.1937	1.8	2.066	2.1	0.0774	1.0	1141	19	1131	20	-1
3.1	246	1.09	0.00	0.2269	1.8	2.649	2.0	0.0847	1.0	1318	21	1308	19	-1
4.1	130	2.04	0.00	0.5139	1.9	14.115	2.0	0.1992	0.6	2673	42	2820	10	5
5.1	577	0.36	0.00	0.1440	1.7	1.396	1.9	0.0703	0.9	867	14	937	19	7
6.1	15	3.05	0.00	0.1912	3.8	2.283	12.7	0.0866	12.1	1128	40	1351	233	17
7.1	311	0.53	0.00	0.5172	1.7	14.441	1.8	0.2025	0.4	2687	38	2847	7	6
8.1	237	0.67	0.00	0.2707	1.8	3.682	2.0	0.0986	0.9	1545	24	1598	17	3
9.1	388	0.71	0.86	0.1523	1.7	1.602	2.8	0.0763	2.2	914	15	1103	44	17
10.1	536	0.44	0.01	0.2277	1.7	2.667	1.8	0.0849	0.6	1323	20	1314	12	-1
11.1	202	0.59	0.02	0.3115	1.8	4.698	2.0	0.1094	0.8	1748	28	1789	14	2
12.1	113	1.02	0.15	0.1763	2.1	1.863	3.8	0.0766	3.2	1047	20	1112	65	6
13.1	80	1.22	0.21	0.2190	2.2	2.540	3.1	0.0841	2.2	1277	25	1295	44	1
14.1	154	0.21	0.00	0.3491	1.9	5.883	2.0	0.1222	0.8	1930	31	1989	14	3
15.1	122	0.18	0.26	0.1996	2.2	2.100	2.6	0.0763	1.5	1173	23	1104	30	-6
16.1	122	1.23	0.00	0.2046	2.0	2.267	2.6	0.0803	1.6	1200	22	1206	32	0
17.1	51	0.81	1.20	0.1976	2.5	1.960	7.0	0.0719	6.5	1162	26	984	133	-18
18.1	106	1.17	0.17	0.2065	2.3	2.178	3.6	0.0765	2.8	1210	25	1108	56	-9
19.1	147	0.76	0.35	0.2201	1.9	2.438	2.4	0.0804	1.4	1282	23	1206	28	-6
20.1	272	0.53	0.00	0.2024	1.8	2.209	2.1	0.0791	1.1	1188	19	1176	23	-1
21.1	119	0.33	0.18	0.3439	2.0	5.415	2.3	0.1142	1.2	1905	32	1868	21	-2
22.1	86	0.61	0.00	0.1981	2.2	2.243	3.2	0.0821	2.4	1165	23	1248	46	7
23.1	82	0.98	0.11	0.2065	2.2	2.204	2.9	0.0774	1.9	1210	24	1132	39	-7
24.1	438	0.55	0.09	0.1925	1.7	2.089	2.0	0.0787	0.9	1135	18	1164	19	3
25.1	186	0.68	0.00	0.2912	1.8	4.085	2.2	0.1017	1.1	1647	27	1656	21	1
26.1	154	0.45	0.00	0.1634	1.9	1.628	2.5	0.0723	1.5	976	18	993	32	2
27.1	321	0.66	0.00	0.1769	1.8	1.830	2.3	0.0750	1.5	1050	17	1069	30	2
28.1	180	0.31	0.00	0.3092	1.8	4.709	2.0	0.1105	0.9	1737	28	1807	16	4
29.1	420	0.65	0.51	0.2054	1.7	2.532	2.2	0.0894	1.3	1204	19	1413	24	15
30.1	158	0.69	0.09	0.2006	1.9	2.219	2.4	0.0802	1.5	1179	21	1203	29	2
31.1	146	0.45	0.00	0.5123	1.9	12.437	2.0	0.1761	0.6	2666	41	2616	11	-2
32.1	122	0.94	0.07	0.3221	2.0	4.783	2.3	0.1077	1.3	1800	31	1761	23	-2
33.1	240	0.35	0.03	0.1892	1.8	2.027	2.1	0.0777	1.1	1117	19	1139	22	2
34.1	179	1.04	0.07	0.2023	1.9	2.201	2.5	0.0789	1.6	1188	20	1169	32	-2
35.1	54	0.97	0.48	0.2164	2.5	2.253	5.6	0.0755	5.0	1263	29	1082	100	-17
36.1	196	0.78	0.23	0.1649	1.9	1.622	2.7	0.0713	2.0	984	17	967	41	-2
37.1	324	0.43	0.05	0.2473	1.7	3.121	1.9	0.0915	0.8	1424	22	1458	15	2
38.1	213	0.90	0.12	0.1941	1.9	2.110	2.6	0.0788	1.8	1144	20	1168	35	2
39.1	106	1.03	0.00	0.2036	2.1	2.317	4.3	0.0825	3.7	1194	23	1258	73	5
40.1	134	0.69	0.22	0.3030	2.0	4.305	2.4	0.1031	1.3	1706	29	1680	24	-2
41.1	77	1.62	0.19	0.4707	2.1	10.606	2.4	0.1634	1.1	2486	44	2492	19	0
42.1	58	0.24	0.02	0.1884	2.4	1.874	3.3	0.0721	2.3	1113	24	990	48	-12
43.1	236	1.19	0.70	0.1726	1.8	1.858	3.0	0.0781	2.4	1026	17	1149	48	11
44.1	27	1.63	0.00	0.1817	3.2	2.014	5.8	0.0804	4.8	1076	31	1207	95	11
45.1	183	1.19	0.00	0.2231	1.9	2.602	2.2	0.0846	1.2	1298	22	1306	23	1
46.1	106	0.83	0.00	0.1867	2.1	2.053	2.8	0.0798	1.8	1103	21	1191	36	7
47.1	73	0.52	0.00	0.3078	2.2	4.541	2.6	0.1070	1.4	1730	33	1749	25	1
48.1	148	0.73	0.00	0.1852	2.0	2.080	2.7	0.0815	1.9	1095	20	1233	37	11
49.1	154	0.58	0.20	0.1885	1.9	1.930	2.4	0.0743	1.4	1113	20	1048	29	-6
50.1	93	0.80	0.31	0.2135	2.1	2.392	3.5	0.0812	2.7	1248	24	1227	54	-2
51.1	105	0.64	0.08	0.5095	2.0	12.884	2.1	0.1834	0.7	2654	43	2684	12	1
52.1	297	0.15	0.00	0.2342	1.8	2.797	1.9	0.0866	0.8	1356	22	1352	16	0
53.1	53	1.25	0.26	0.3291	2.3	5.051	3.2	0.1113	2.1	1834	37	1821	39	-1
54.1	49	0.62	0.18	0.5025	2.4	11.841	2.7	0.1709	1.2	2624	51	2567	21	-2
55.1	270	0.93	0.35	0.2156	1.9	2.340	2.2	0.0787	1.2	1259	21	1165	23	-8
56.1	126	0.84	0.16	0.2054	2.0	2.235	2.7	0.0789	1.8	1204	22	1170	36	-3
57.1	34	2.63	0.99	0.2140	2.8	2.227	6.8	0.0755	6.2	1250	32	1081	124	-16
58.1	127	0.94	0.00	0.1994	2.0	2.204	2.7	0.0802	1.8	1172	21	1201	35	2
59.1	152	0.93	0.00	0.2035	1.9	2.207	2.3	0.0787	1.3	1194	21	1164	25	-3
60.1	101	1.19	0.00	0.2011	2.1	2.130	4.1	0.0768	3.6	1181	23	1116	71	-6

Correction for common Pb using the  $^{204}\text{Pb}$  method. Errors are  $1\sigma$ .  $f\text{ (%)}:$  Percentage of  $^{206}\text{Pb}$  common in the total  $^{206}\text{Pb}$ . Error in standard calibration was 1.34% (not included in above errors but required when comparing data from different mounts).

GSA Data Repository item 2002##: Table DR 4. Summary of SHRIMP U-Pb results of zircons from the Mutitjulu Arkose (Uluru).

Spot	U (ppm)	Th/U	f (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{235}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ (%)	Discor (%)
1.1	547	0.59	0.21	0.2014	1.9	2.197	2.2	0.0791	1.3	1183	20	1175	25	-1
2.1	435	0.90	0.31	0.1940	1.9	2.085	2.5	0.0779	1.5	1143	20	1145	31	0
3.1	250	0.81	0.39	0.1612	2.1	1.789	3.6	0.0805	2.9	963	19	1209	57	20
4.1	290	0.79	1.51	0.1895	2.0	1.994	4.4	0.0763	3.9	1119	21	1103	77	-1
5.1	358	0.49	0.00	0.2068	1.9	2.308	2.5	0.0809	1.6	1212	21	1220	31	1
6.1	143	0.90	0.68	0.2055	2.3	2.150	4.9	0.0758	4.3	1205	25	1090	86	-11
7.1	772	0.39	0.00	0.1988	1.8	2.198	2.0	0.0802	0.8	1169	19	1202	16	3
8.1	212	1.10	0.26	0.2045	2.2	2.260	2.9	0.0801	1.9	1200	24	1200	37	0
9.1	346	0.55	0.39	0.1898	1.9	2.063	2.8	0.0788	2.1	1120	20	1168	41	4
10.1	127	1.31	0.78	0.1999	2.5	2.040	6.9	0.0738	6.4	1175	27	1037	130	-13
11.1	167	0.56	0.00	0.2141	2.2	2.472	3.9	0.0838	3.2	1251	25	1287	62	3
12.1	1058	0.27	0.01	0.2098	1.8	2.322	1.9	0.0803	0.7	1227	20	1204	14	-2
13.1	281	0.84	0.35	0.2057	2.0	2.208	2.5	0.0778	1.6	1206	22	1143	31	-6
14.1	541	0.30	0.01	0.2123	1.8	2.370	2.1	0.0809	0.9	1241	21	1220	18	-2
15.1	729	0.80	0.39	0.1882	1.8	2.110	2.1	0.0813	1.1	1112	19	1229	22	10
16.1	597	0.22	0.16	0.1928	1.8	2.133	2.4	0.0802	1.6	1136	19	1203	31	6
17.1	439	0.67	0.02	0.2021	1.9	2.248	2.3	0.0807	1.3	1187	20	1213	25	2
18.1	114	0.80	2.73	0.2089	2.7	2.420	9.4	0.0840	9.0	1223	30	1292	170	5
19.1	763	1.30	1.50	0.1539	1.8	1.684	3.0	0.0793	2.3	923	16	1181	46	22
20.1	1012	0.30	0.10	0.1984	1.8	2.169	2.0	0.0793	1.0	1167	19	1179	19	1
21.1	207	0.69	0.00	0.2093	2.2	2.372	2.9	0.0822	1.9	1225	25	1250	37	2
22.1	176	0.56	0.00	0.1657	2.3	1.937	3.1	0.0848	2.0	988	21	1311	39	25
23.1	407	0.71	0.00	0.2123	2.0	2.309	2.4	0.0789	1.5	1241	22	1170	29	-6
24.1	657	0.77	0.22	0.2030	2.0	2.188	2.4	0.0782	1.3	1191	21	1151	27	-3
25.1	343	0.67	0.16	0.2063	2.0	2.261	2.6	0.0795	1.6	1209	22	1184	32	-2
26.1	2241	0.23	0.07	0.1998	1.8	2.162	1.9	0.0785	0.6	1174	19	1159	12	-1
27.1	2089	0.33	0.95	0.1834	1.8	2.044	2.2	0.0808	1.3	1085	18	1217	26	11
28.1	1348	0.35	0.03	0.2026	1.9	2.205	2.0	0.0790	0.8	1189	20	1171	15	-2
29.1	141	0.85	0.31	0.1987	2.7	2.166	4.3	0.0790	3.4	1168	29	1173	66	0
30.1	1787	0.34	0.05	0.1993	1.8	2.152	2.0	0.0783	0.8	1171	19	1155	15	-1
31.1	2192	0.22	0.63	0.1968	1.8	2.132	2.1	0.0786	1.1	1158	19	1161	22	0
32.1	273	1.75	2.50	0.2262	2.3	2.940	5.0	0.0943	4.4	1315	27	1515	84	13
33.1	1399	0.51	0.29	0.1924	1.9	2.092	2.2	0.0788	1.2	1135	19	1168	24	3
34.1	1197	0.26	0.25	0.1878	1.8	2.051	2.2	0.0792	1.3	1109	19	1178	26	6
35.1	359	1.00	1.65	0.2077	2.2	2.270	5.6	0.0791	5.2	1217	24	1175	100	-4
36.1	705	0.37	0.12	0.1884	1.9	2.089	2.4	0.0804	1.4	1113	20	1207	27	8
37.1	166	1.08	0.92	0.1838	2.6	1.930	5.8	0.0760	5.2	1087	26	1095	100	1
38.1	1285	0.41	0.29	0.1973	1.8	2.115	2.2	0.0777	1.3	1161	19	1140	26	-2
39.1	1935	0.41	3.42	0.1787	1.9	1.863	4.4	0.0756	4.0	1060	18	1085	80	2
40.1	1543	0.48	0.20	0.1926	1.8	2.110	2.1	0.0795	1.1	1136	19	1183	21	4
41.1	133	0.80	0.65	0.1903	3.1	2.038	4.2	0.0777	2.9	1123	32	1138	58	1
42.1	80	0.71	0.00	0.2104	3.2	2.286	3.6	0.0788	1.8	1231	36	1167	35	-5
43.1	1233	0.30	0.06	0.2025	2.9	2.204	2.9	0.0790	0.5	1189	31	1171	11	-2
44.1	1220	0.38	0.00	0.1990	2.9	2.145	2.9	0.0782	0.5	1170	31	1151	9	-2
45.1	831	0.78	0.29	0.1780	2.9	1.947	3.0	0.0793	0.9	1056	28	1180	18	10
46.1	82	0.84	1.72	0.1949	3.3	1.880	8.8	0.0699	8.2	1148	34	924	170	-24
47.1	330	0.95	0.14	0.1982	2.9	2.198	3.1	0.0804	1.1	1166	31	1208	21	3
48.1	458	0.60	0.99	0.1818	2.9	1.905	3.4	0.0760	1.8	1077	29	1095	36	2
49.1	329	0.72	0.05	0.1992	2.9	2.201	3.1	0.0801	1.0	1171	31	1200	19	2
50.1	284	0.66	0.10	0.2097	2.9	2.299	3.4	0.0795	1.6	1227	33	1185	32	-4
51.1	1213	0.34	0.28	0.1923	2.9	2.100	2.9	0.0792	0.7	1134	30	1177	14	4
52.1	252	1.07	0.00	0.2073	2.9	2.283	3.1	0.0799	1.0	1214	33	1194	19	-2
53.1	115	0.78	0.00	0.1807	3.2	2.044	3.6	0.0820	1.7	1071	32	1246	33	14
54.1	122	0.63	0.34	0.2066	3.1	2.154	3.9	0.0756	2.5	1211	34	1085	50	-12
55.1	263	0.77	0.36	0.1941	2.9	2.201	3.4	0.0823	1.6	1143	31	1251	32	9
56.1	708	0.60	0.26	0.1773	2.9	1.920	3.1	0.0786	1.2	1052	28	1161	24	9
57.1	244	0.91	0.04	0.1907	2.9	2.113	3.2	0.0804	1.3	1125	30	1206	26	7
58.1	727	0.53	0.00	0.2006	2.9	2.210	2.9	0.0799	0.5	1178	31	1195	11	1
59.1	1485	0.62	0.74	0.1654	2.9	1.765	3.0	0.0774	0.9	987	26	1131	17	13
60.1	750	0.69	0.41	0.1852	2.9	2.034	3.1	0.0796	1.0	1095	29	1188	19	8
61.1	186	0.65	0.03	0.2008	3.0	2.221	3.3	0.0802	1.2	1180	33	1202	23	2
62.1	1509	0.79	0.61	0.1699	2.9	1.793	3.1	0.0765	1.2	1012	27	1108	24	9

Correction for common Pb using the  $^{204}\text{Pb}$  method. Errors are  $1\sigma$ . f (%): Percentage of  $^{206}\text{Pb}$  common in the total  $^{206}\text{Pb}$ . Error in standard calibration was 1.21% (not included in above errors but required when comparing data from different mounts).

GSA Data Repository item 2002##: Table DR 5. Summary of SHRIMP U-Pb results of zircons from the Mt. Currie Conglomerate (Kata Tjuta).

Spot	U (ppm)	Th/U	f (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{235}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ (%)	$^{206}\text{Pb}/^{238}\text{U}$	$\pm$ (%)	$^{207}\text{Pb}/^{206}\text{Pb}$	$\pm$ (%)	Discor (%)
1.1	41	0.76	0.21	0.1889	2.5	1.945	5.1	0.0747	4.5	1,115	26	1,060	90	-5
2.1	81	0.97	0.18	0.1817	1.9	1.899	3.5	0.0758	2.9	1,076	18	1,089	59	1
3.1	509	1.64	0.09	0.1804	1.4	1.839	1.8	0.0740	1.1	1,069	14	1,040	22	-3
4.1	319	0.74	0.22	0.2024	1.5	2.218	1.8	0.0795	1.0	1,188	16	1,184	21	0
5.1	350	0.55	0.22	0.2090	1.5	2.266	2.1	0.0786	1.4	1,224	17	1,162	29	-5
6.1	443	0.72	0.03	0.1806	1.4	1.854	1.7	0.0745	0.9	1,070	14	1,054	18	-2
7.1	156	1.28	0.00	0.1765	1.6	1.820	2.1	0.0748	1.4	1,048	16	1,062	28	1
8.1	217	0.56	0.09	0.1920	1.5	2.056	1.8	0.0777	1.1	1,132	15	1,139	22	1
9.1	845	0.11	0.24	0.1994	1.4	2.164	1.6	0.0787	0.8	1,172	15	1,165	15	-1
10.1	39	0.87	1.40	0.1824	2.3	1.650	7.4	0.0656	7.0	1,099	26	1,216	48	10
11.1	152	0.84	-0.11	0.1827	1.6	1.977	2.4	0.0785	1.7	1,081	16	1,159	35	7
12.1	87	0.94	-0.19	0.1973	1.8	2.224	2.7	0.0818	2.1	1,161	19	1,240	40	6
13.1	360	0.44	0.03	0.2327	1.4	2.663	1.7	0.0830	0.9	1,349	17	1,269	17	-6
14.1	72	1.08	0.64	0.1867	1.9	1.793	3.7	0.0697	3.2	1,111	23	1,082	48	-3
15.1	119	0.78	0.16	0.1846	1.7	1.852	2.7	0.0728	2.1	1,092	17	1,007	42	-8
16.1	267	0.74	0.03	0.2038	1.5	2.247	1.8	0.0800	1.0	1,196	16	1,196	20	0
17.1	325	1.25	0.21	0.1871	1.5	1.903	2.1	0.0738	1.5	1,106	15	1,035	30	-7
18.1	102	1.10	-0.03	0.2083	1.7	2.297	2.2	0.0800	1.5	1,220	19	1,196	29	-2
19.1	35	0.79	1.66	0.1656	2.6	1.440	9.3	0.0630	8.9	999	27	1007	69	1
20.1	197	0.82	-0.06	0.2196	1.7	2.465	2.4	0.0814	1.7	1,280	20	1,232	33	-4
21.1	202	0.59	0.30	0.1859	1.5	1.887	2.6	0.0736	2.1	1,099	15	1,031	42	-7
22.1	173	0.65	0.15	0.1963	1.6	2.160	2.3	0.0798	1.7	1,155	17	1,193	34	3
23.1	47	0.92	0.46	0.1803	2.1	1.860	4.1	0.0748	3.5	1,069	21	1,064	70	0
24.1	169	0.66	-0.12	0.1815	1.6	1.880	2.1	0.0751	1.4	1,075	16	1,072	29	0
25.1	778	0.30	0.08	0.2043	1.4	2.253	1.5	0.0800	0.7	1,198	15	1,196	14	0
26.1	712	0.34	0.26	0.1860	1.4	2.016	1.6	0.0786	0.9	1,100	14	1,162	17	5
27.1	296	0.73	0.03	0.1956	1.5	2.134	2.0	0.0791	1.3	1,152	15	1,175	26	2
28.1	468	0.59	-0.09	0.2181	1.4	2.556	1.6	0.0850	0.8	1,272	16	1,315	15	3
29.1	106	1.04	-0.03	0.1981	2.1	2.031	2.8	0.0744	1.8	1,165	23	1,051	36	-11
30.1	28	0.77	-0.26	0.1944	3.4	2.080	6.4	0.0775	5.4	1,145	36	1,133	110	-1
31.1	240	0.55	0.20	0.2037	1.5	2.190	2.1	0.0780	1.4	1,195	17	1,146	28	-4
32.1	543	0.55	0.10	0.2004	1.4	2.184	1.7	0.0790	0.9	1,177	15	1,173	18	0
32.2	113	0.82	0.07	0.2079	1.8	2.223	2.6	0.0776	1.9	1,218	20	1,136	37	-7
33.1	76	0.87	0.51	0.1830	1.9	1.772	3.5	0.0702	2.9	1,083	19	935	59	-16
34.1	777	0.66	0.03	0.2193	1.4	2.528	1.5	0.0836	0.6	1,278	16	1,283	12	0
35.1	194	0.77	-0.03	0.2038	1.5	2.249	1.9	0.0800	1.2	1,196	17	1,197	23	0
36.1	220	1.17	-0.01	0.1842	1.5	1.921	1.9	0.0756	1.1	1,090	15	1,085	22	0
37.1	827	0.61	0.01	0.2080	1.4	2.300	1.5	0.0802	0.5	1,218	15	1,202	11	-1
38.1	289	0.71	0.14	0.1979	1.5	2.205	2.0	0.0808	1.3	1,164	16	1,217	26	4
39.1	61	0.91	-0.07	0.1817	2.1	1.887	3.2	0.0754	2.4	1,076	21	1,078	48	0
40.1	56	0.76	-0.13	0.1806	2.0	1.911	3.2	0.0767	2.5	1,070	20	1,114	50	4

Correction for common Pb using the  $^{204}\text{Pb}$  method. Errors are  $1\sigma$ .  $f\text{ (%)}:$  Percentage of  $^{206}\text{Pb}$  common in the total  $^{206}\text{Pb}$ . Error in standard calibration was 0.64% (not included in above errors but required when comparing data from different mounts).

Data from the literature used to construct Figure 2: Gawler Craton: Ireland et al. (1998); Arunta Inlier: Black and Shaw (1992, 1995), Collins et al. (1995), Collins and Williams (1995), Lafrance et al. (1995), Young et al. (1995), Zhao and Bennett (1995), Vry et al. (1996), Williams et al. (1996), Hand et al. (1999), Rubatto et al. (2001), W.J. Collins, Northern Territory Geological Survey and Australian Geological Survey Organisation (pers. comm.); Musgrave Complex: Maboko (1988), Camacho and Fanning (1995), Camacho et al. (1997), Camacho (1997), White et al. (1999), Northern Territory Geological Survey (pers. comm.). Paterson Orogen and Albany-Fraser Block: Nelson (1995, 1996, 1999, 2000), Clark et al. (1999, 2000).

- Black, L.P., and Shaw, R.D., 1992, U-Pb zircon chronology of prograde Proterozoic events in the Central and Southern Provinces of the Arunta block, central Australia: Australian Journal of Earth Sciences, v. 39, p. 153–171.
- Black, L.P., and Shaw, R.D., 1995, An assessment, based on U-Pb zircon data, of Rb-Sr dating in the Arunta inlier, central Australia: Precambrian Research, p. 71, 3–15.
- Camacho, A., 1997, An isotopic study of deep-crustal orogenic processes: Musgrave block, central Australia [Ph.D. thesis]: Canberra, Australian National University, 302 p.
- Camacho, A., and Fanning, C.M., 1995, Some isotopic constraints on the evolution of the granulite and upper amphibolite facies terranes in the eastern Musgrave block, central Australia: Precambrian Research, v. 71, p. 155–181.
- Clark, D.J., Kinny, P.D., Post, N.J., and Hensen, B.J., 1999, Relationships between magmatism, metamorphism and deformation in the Fraser Complex, Western Australia; constraints from new SHRIMP U-Pb zircon geochronology: Australian Journal of Earth Sciences, v. 46, p. 923–932.
- Clark, D.J., Hensen, B.J., and Kinny, P.D., 2000, Geochronological constraints for a two-stage history of the Albany-Fraser orogen, Western Australia: Precambrian Research, v. 102, p. 155–183.
- Collins, W.J., and Williams, I.S., 1995, SHRIMP ionprobe dating of short-lived Proterozoic tectonic cycles in the northern Arunta inlier, central Australia: Precambrian Research, v. 71, p. 69–89.
- Collins, W.J., Williams, I.S., Shaw R.D., and McLaughlin N.A., 1995, The age of the Ormiston Pound Granite: implications for Mesoproterozoic evolution of the Arunta inlier, central Australia: Precambrian Research, v. 71, p. 91–105.
- Hand, M., Mawby, J., Kinny, P., and Foden, J., 1999, U-Pb ages from the Harts Range, central Australia: evidence for Early Ordovician extension and constraints on Carboniferous metamorphism: Journal of the Geological Society [London] Journal, v. 156, p. 715–730.
- Ireland, T.R., Floettmann, T., Fanning, C.M., Gibson, G.M., and Preiss, W.V., 1998, Development of the early Paleozoic Pacific margin of Gondwana from detrital-zircon ages across the Delamerian orogen: Geology, v. 26, p. 243–246.
- Lafrance B., Clarke, G.L., Collins, W.J., and Williams, I.S., 1995, The emplacement of the Wuluma granite : melt generation and migration along steeply dipping extensional fractures at the close of the Late Strangways orogenic event, Arunta block, central Australia: Precambrian Research v. 72, p. 43–67.
- Maboko, M.A.H., 1988, Metamorphic and geochronological evolution in the Musgrave Ranges, Central Australia [Ph.D thesis]: Canberra, Australian National University, 244 p.

- Nelson, D.R., 1995, Compilation of SHRIMP U-Pb zircon geochronology data, 1994: Western Australia Geological Survey, Record 1995/3.
- Nelson, D.R., 1996, Compilation of SHRIMP U-Pb zircon geochronology data, 1995: Western Australia Geological Survey, Record 1996/5.
- Nelson, D.R., 1999, Compilation of geochronology data, 1998: Western Australia Geological Survey, Record 1999/2.
- Nelson, D.R., 2000, Compilation of geochronology data, 1999: Western Australia Geological Survey, Record 2000/2.
- Rubatto, D., Williams, I.S., and Buick, I.S., 2001, Zircon and monazite response to prograde metamorphism in the Reynolds Range, central Australia: Contributions to Mineralogy and Petrology, v. 140, p. 458–468.
- Sun, S-S., Sheraton, J.W., Glikson, A.Y., and Stewart, A.J., 1996, A major magmatic event during 1050–1080 Ma in central Australia, and emplacement age for the Giles Complex: Australian Geological Survey Organisation, Research Newsletter, v. 24, p. 13–15.
- Vry, J.K., Compston W., and Cartwright, I.S., 1996, SHRIMP II dating of zircons and monazites: reassessing the timing of high-grade metamorphism and fluid flow in the Reynolds Range, northern Arunta block, Australia: Journal of metamorphic Geology, v. 14, p. 335–350.
- Webb, A.W., 1983, Geochronology of the Musgrave block: Mineral Resources Review, South Australian Department of Mines and Energy, v. 155, p. 23–37.
- White, R.W., Clarke, G.L., and Nelson, D.R., 1999, SHRIMP U-Pb zircon dating of Grenville-age events in the western part of the Musgrave block, central Australia: Journal of metamorphic Geology, v. 17, p. 465–481.
- Williams, I.S., Buick, I.S., and Cartwright, I.S., 1996, An extended episode of early Mesoproterozoic metamorphic fluid flow in the Reynolds Range, central Australia: Journal of metamorphic Geology, v. 14, p. 29–47.
- Young, D.N., Fanning, C.M., Shaw, R.D., Edgoose, C.J., Blake, D.H., Page, R.W., and Camacho, A., 1995, U-Pb zircon dating of tectonomagmatic events in the northern Arunta inlier, central Australia: Precambrian Research, v. 71, p. 45–68.
- Young, D.N., Duncan, N., Camacho, A., Ferenczi, P.A., and Madigan, T.L.A., 2002, Ayers Rock: Northern Territory Geological Survey, Explanatory Notes SG52-8, scale 1:250 000.
- Zhao, J., and Bennett, V.C., 1995, SHRIMP U-Pb zircon geochronology of granites in the Arunta inlier, central Australia: Implications for Proterozoic crustal evolution: Precambrian Research, v. 71, p. 17–44.