

Sample No.	Sedimentary unit	Rock type	Latitude/N	Longitude/E	Analytical method
R-CP1	Carboniferous-Permian strata in Rutog area	quartz sandstone	79.925033°	33.710358°	U-Pb dating
R-CP2	Carboniferous-Permian strata in Rutog area	quartz sandstone	79.895117°	33.697647°	U-Pb dating
G-CP1	Carboniferous-Permian strata in Gangma Co area	quartz sandstone	84.316017°	33.874714°	U-Pb dating
G-CP2	Carboniferous-Permian strata in Gangma Co area	quartz sandstone	84.358629°	33.907424°	U-Pb dating
G-CP3	Carboniferous-Permian strata in Gangma Co area	graywacke	84.358629°	33.902942°	U-Pb dating
G-M1	continental blocks in the Gangma Co melange	conglomerate	84.268056°	33.822500°	U-Pb dating
G-M2	continental blocks in the Gangma Co melange	graywacke	84.229561°	33.786514°	U-Pb dating
G-M3	continental blocks in the Gangma Co melange	quartz sandstone	84.426567°	33.757950°	U-Pb dating
G-M4	continental blocks in the Gangma Co melange	quartz sandstone	84.229561°	33.786514°	U-Pb dating
G-M5	continental blocks in the Gangma Co melange	quartz sandstone	84.229575°	33.785086°	U-Pb dating

Table S1. Description of the samples collected from the South Qiangtang.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
R-CP1-001	148.31	198.67	0.74651432	0.066	0.00127	1.27104	0.02321	0.13964	0.00149	806	21	833	10	843	8	843	8	98.81%
R-CP1-002	180.19	285.66	0.630784849	0.16188	0.00255	11.0967	0.16516	0.49709	0.00504	2475	13	2531	14	2601	22	2475	13	95.16%
R-CP1-004	35.36	200.58	0.176288763	0.07503	0.0013	1.96791	0.03229	0.19018	0.00197	1069	17	1105	11	1122	11	1069	17	95.28%
R-CP1-005	249.36	231.7	1.076219249	0.06301	0.00124	1.06243	0.01989	0.12227	0.00131	709	22	735	10	744	8	744	8	98.79%
R-CP1-006	29.57	119.11	0.248257913	0.07521	0.00151	1.75811	0.0335	0.1695	0.00184	1074	21	1030	12	1009	10	1074	21	106.44%
R-CP1-009	127.1	122.34	1.038907961	0.06665	0.00169	1.22585	0.02994	0.13337	0.0015	827	32	812	14	807	9	807	9	100.62%
R-CP1-010	109.52	197.07	0.555741615	0.06109	0.00142	0.91659	0.02039	0.10879	0.00121	642	29	661	11	666	7	666	7	99.25%
R-CP1-011	70.81	78.53	0.90169362	0.06142	0.00218	0.88357	0.03056	0.10432	0.00128	654	53	643	16	640	7	640	7	100.47%
R-CP1-012	112.08	125.2	0.895207668	0.05887	0.00195	0.72396	0.02326	0.08918	0.00106	562	49	553	14	551	6	551	6	100.36%
R-CP1-013	62.89	169.48	0.371076233	0.06174	0.0015	0.89864	0.02103	0.10555	0.00118	665	31	651	11	647	7	647	7	100.62%
R-CP1-014	62.84	130.89	0.480097792	0.0583	0.00206	0.7522	0.02579	0.09355	0.00117	541	53	570	15	576	7	576	7	98.96%
R-CP1-015	56.67	97.61	0.580575761	0.06226	0.00235	0.9592	0.03518	0.11171	0.00141	683	57	683	18	683	8	683	8	100.00%
R-CP1-017	108.32	240.74	0.449946	0.07298	0.00136	1.71978	0.03031	0.17088	0.00181	1013	19	1016	11	1017	10	1013	19	99.61%
R-CP1-018	103.14	198.7	0.519073981	0.0594	0.00169	0.79722	0.02193	0.09732	0.00113	582	40	595	12	599	7	599	7	99.33%
R-CP1-019	87.77	163.68	0.536229228	0.06207	0.00176	0.91912	0.02514	0.10737	0.00124	677	39	662	13	657	7	657	7	100.76%
R-CP1-021	216.09	303.03	0.713097713	0.05912	0.00143	0.7448	0.0173	0.09136	0.00101	572	31	565	10	564	6	564	6	100.18%
R-CP1-022	92.61	261.95	0.353540752	0.06072	0.00137	0.86339	0.01866	0.10311	0.00113	629	28	632	10	633	7	633	7	99.84%
R-CP1-024	207.57	567.88	0.365517363	0.18585	0.00296	13.41018	0.20143	0.52323	0.00533	2706	12	2709	14	2713	23	2706	12	99.74%
R-CP1-025	51.97	157.49	0.329989206	0.06135	0.00185	0.90504	0.02638	0.10697	0.00128	652	42	654	14	655	7	655	7	99.85%
R-CP1-026	35.47	80.43	0.4410046	0.06706	0.00224	1.30693	0.04225	0.14133	0.00178	840	46	849	19	852	10	852	10	99.65%
R-CP1-029	97.83	470.34	0.207998469	0.07112	0.00126	1.60373	0.02687	0.16353	0.00171	961	18	972	10	976	9	976	9	99.59%
R-CP1-030	201.89	344.41	0.586190877	0.06807	0.00127	1.38817	0.02459	0.14787	0.00156	871	20	884	10	889	9	889	9	99.44%
R-CP1-031	150.68	138.74	1.086060257	0.06818	0.00194	1.31774	0.03608	0.14016	0.00167	874	37	854	16	846	9	846	9	100.95%
R-CP1-033	109.51	141.96	0.771414483	0.08393	0.00174	2.31472	0.04565	0.19999	0.0022	1291	22	1217	14	1175	12	1291	22	109.87%
R-CP1-034	51.61	168.76	0.305818914	0.0719	0.00152	1.73237	0.03505	0.17472	0.00191	983	24	1021	13	1038	10	983	24	94.70%
R-CP1-035	107.24	93.82	1.143039864	0.16688	0.00287	11.17682	0.18154	0.48567	0.00525	2527	14	2538	15	2552	23	2527	14	99.02%
R-CP1-036	213.71	148.83	1.435933616	0.1321	0.00226	7.56205	0.12209	0.4151	0.0044	2126	14	2180	14	2238	20	2126	14	95.00%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
R-CP1-037	73.24	79.9	0.916645807	0.16059	0.00282	10.54217	0.1749	0.47603	0.00523	2462	14	2484	15	2510	23	2462	14	98.09%
R-CP1-038	60.91	265.4	0.229502638	0.06106	0.00136	0.91899	0.01949	0.10914	0.00121	641	27	662	10	668	7	668	7	99.10%
R-CP1-039	193.34	394.2	0.490461695	0.12479	0.00203	6.38222	0.09822	0.37087	0.00379	2026	14	2030	14	2033	18	2026	14	99.66%
R-CP1-040	183.89	562.41	0.32696787	0.14783	0.00307	8.22382	0.14737	0.40348	0.00422	2321	36	2256	16	2185	19	2321	36	106.22%
R-CP1-041	12.95	45.03	0.287586054	0.06636	0.00357	1.22492	0.06452	0.13386	0.002	818	85	812	29	810	11	810	11	100.25%
R-CP1-042	146.3	238.57	0.613237205	0.11226	0.00192	4.99282	0.08077	0.3225	0.00338	1836	15	1818	14	1802	16	1836	15	101.89%
R-CP1-043	152.15	356.37	0.426943907	0.06009	0.00121	0.90023	0.01719	0.10863	0.00117	607	23	652	9	665	7	665	7	98.05%
R-CP1-044	75.12	111.14	0.675904265	0.0598	0.00226	0.73459	0.02691	0.08908	0.00115	596	57	559	16	550	7	550	7	101.64%
R-CP1-045	25.18	232.67	0.108221945	0.05912	0.00149	0.77726	0.01888	0.09534	0.00108	572	33	584	11	587	6	587	6	99.49%
R-CP1-046	79.9	338.69	0.235908943	0.06001	0.00128	0.84346	0.01717	0.10192	0.00111	604	26	621	9	626	6	626	6	99.20%
R-CP1-047	84.43	191.99	0.439762488	0.26536	0.00434	24.55249	0.37974	0.67096	0.00697	3279	12	3291	15	3310	27	3279	12	99.06%
R-CP1-048	274.97	173.67	1.583290148	0.05823	0.00179	0.70141	0.02092	0.08735	0.00103	538	45	540	12	540	6	540	6	100.00%
R-CP1-049	204.13	224.36	0.909832412	0.06749	0.00148	1.27909	0.02672	0.13743	0.00153	853	25	836	12	830	9	830	9	100.72%
R-CP1-050	22.53	185.57	0.121409711	0.10505	0.00189	4.32221	0.0736	0.29834	0.00319	1715	16	1698	14	1683	16	1715	16	101.90%
R-CP1-051	124.36	286.8	0.433612273	0.17655	0.00291	12.17164	0.19012	0.49992	0.00518	2621	13	2618	15	2613	22	2621	13	100.31%
R-CP1-052	77.49	60.1	1.289351082	0.05915	0.00363	0.80188	0.04843	0.09831	0.00147	573	106	598	27	604	9	604	9	99.01%
R-CP1-053	56.04	82.64	0.678121975	0.07111	0.00252	1.43978	0.04942	0.14683	0.00192	961	49	906	21	883	11	883	11	102.60%
R-CP1-054	53.31	53.79	0.991076408	0.06531	0.00379	1.2265	0.06917	0.13619	0.00239	784	89	813	32	823	14	823	14	98.78%
R-CP1-055	5.06	66.88	0.075657895	0.05939	0.00339	0.81509	0.04567	0.09953	0.00146	581	96	605	26	612	9	612	9	98.86%
R-CP1-056	15.28	39.54	0.386444107	0.0612	0.00474	0.92704	0.07069	0.10984	0.00186	646	136	666	37	672	11	672	11	99.11%
R-CP1-057	19.04	21.51	0.885169689	0.06448	0.00784	1.19279	0.14375	0.13415	0.00274	757	225	797	67	811	16	811	16	98.27%
R-CP1-058	180.08	688.46	0.2615693	0.15779	0.00259	9.64323	0.15005	0.44316	0.00454	2432	13	2401	14	2365	20	2432	13	102.83%
R-CP1-059	217.24	167.83	1.294405053	0.0608	0.00182	0.86289	0.02497	0.10292	0.00122	632	42	632	14	631	7	631	7	100.16%
R-CP1-060	8.88	58.94	0.15066169	0.06137	0.0035	0.98071	0.0548	0.11587	0.00172	652	95	694	28	707	10	707	10	98.16%
R-CP1-061	36.07	32.91	1.096019447	0.13097	0.00349	6.83046	0.17337	0.3782	0.00512	2111	26	2090	22	2068	24	2111	26	102.08%
R-CP1-062	164.59	242.5	0.678721649	0.06145	0.00151	0.86189	0.02028	0.1017	0.00116	655	31	631	11	624	7	624	7	101.12%
R-CP1-063	252.8	159.85	1.58148264	0.16219	0.00281	10.54371	0.17276	0.47142	0.00503	2479	14	2484	15	2490	22	2479	14	99.56%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
R-CP1-064	59.19	49.82	1.188077077	0.06374	0.00384	1.12854	0.06682	0.1284	0.00192	733	100	767	32	779	11	779	11	98.46%
R-CP1-065	141.65	148.48	0.954000539	0.13045	0.00234	6.77364	0.11514	0.37652	0.00407	2104	16	2082	15	2060	19	2104	16	102.14%
R-CP1-066	406.72	398.83	1.019782865	0.05842	0.00122	0.75696	0.01503	0.09396	0.00103	546	25	572	9	579	6	579	6	98.79%
R-CP1-067	125.07	75	1.6676	0.05971	0.00301	0.76945	0.03789	0.09345	0.00136	593	81	579	22	576	8	576	8	100.52%
R-CP1-068	31.46	62.52	0.503198976	0.06889	0.003	1.29935	0.0551	0.13677	0.00189	895	65	845	24	826	11	826	11	102.30%
R-CP1-069	87.3	45.24	1.929708223	0.05908	0.00528	0.75512	0.06648	0.09268	0.00171	570	161	571	38	571	10	571	10	100.00%
R-CP1-070	168.69	412.67	0.408776989	0.07153	0.00133	1.61814	0.02866	0.16405	0.00174	973	20	977	11	979	10	979	10	99.80%
R-CP1-071	147.78	339.82	0.434877288	0.11328	0.00196	5.31916	0.08743	0.34049	0.00357	1853	15	1872	14	1889	17	1853	15	98.09%
R-CP1-072	116.96	384.88	0.303886926	0.06119	0.00129	0.87514	0.01753	0.10371	0.00113	646	25	638	9	636	7	636	7	100.31%
R-CP1-073	66.8	108.92	0.613294161	0.06061	0.00227	0.81645	0.02963	0.09769	0.00127	625	56	606	17	601	7	601	7	100.83%
R-CP1-074	127.17	78.96	1.61056231	0.06875	0.00234	1.48439	0.04908	0.15658	0.00199	891	47	924	20	938	11	938	11	98.51%
R-CP1-075	89.56	142.9	0.62673198	0.06514	0.00171	1.16385	0.02935	0.12955	0.00153	779	33	784	14	785	9	785	9	99.87%
R-CP1-076	393.75	870.17	0.452497788	0.07438	0.00131	1.70499	0.02844	0.16622	0.00173	1052	18	1010	11	991	10	991	10	101.92%
R-CP1-077	112.52	192.12	0.585675619	0.06593	0.00158	1.24436	0.02858	0.13687	0.00156	804	29	821	13	827	9	827	9	99.27%
R-CP1-078	89.74	89.39	1.003915427	0.06052	0.00269	0.79092	0.03434	0.09476	0.00128	622	70	592	19	584	8	584	8	101.37%
R-CP1-079	19.84	73.92	0.268398268	0.06691	0.00278	1.20609	0.0488	0.13071	0.00175	835	62	803	22	792	10	792	10	101.39%
R-CP1-080	15.26	76.31	0.199973791	0.06037	0.00307	0.83643	0.04163	0.10047	0.00145	617	83	617	23	617	8	617	8	100.00%
R-CP1-081	624.25	1123.81	0.55547646	0.05935	0.0011	0.73739	0.01296	0.0901	0.00095	580	21	561	8	556	6	556	6	100.90%
R-CP1-082	60.89	69.77	0.872724667	0.1131	0.00261	4.97954	0.1093	0.31928	0.00396	1850	22	1816	19	1786	19	1850	22	103.58%
R-CP1-083	81.64	153.96	0.530267602	0.06958	0.00181	1.38252	0.03445	0.14409	0.00171	916	32	882	15	868	10	868	10	101.61%
R-CP1-084	33.27	21.72	1.531767956	0.06251	0.00797	1.05481	0.13291	0.12236	0.00284	692	235	731	66	744	16	744	16	98.25%
R-CP1-085	26.03	36.3	0.71707989	0.06861	0.00442	1.29627	0.08174	0.137	0.00231	887	103	844	36	828	13	828	13	101.93%
R-CP1-086	124.7	293.01	0.425582745	0.11197	0.00204	4.75539	0.08208	0.30797	0.00329	1832	17	1777	14	1731	16	1832	17	105.83%
R-CP1-087	126.11	158.58	0.795245302	0.16189	0.00297	9.56089	0.16654	0.42826	0.0047	2475	15	2393	16	2298	21	2475	15	107.70%
R-CP1-088	147.82	383.89	0.38505822	0.05988	0.00142	0.76533	0.01734	0.09268	0.00104	599	30	577	10	571	6	571	6	101.05%
R-CP1-089	28.91	294.38	0.0982064	0.07519	0.00152	1.85383	0.03569	0.17879	0.00195	1074	22	1065	13	1060	11	1074	22	101.32%
R-CP1-090	112.11	199.61	0.561645208	0.06046	0.00175	0.83519	0.02336	0.10017	0.00118	620	40	616	13	615	7	615	7	100.16%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
R-CP1-091	57.64	438.9	0.131328321	0.06786	0.00136	1.30509	0.02489	0.13946	0.00151	864	22	848	11	842	9	842	9	100.71%
R-CP1-092	33.11	27.53	1.202687977	0.15886	0.0041	9.83836	0.2419	0.4491	0.00625	2444	23	2420	23	2391	28	2444	23	102.22%
R-CP1-093	135.58	922.65	0.146946296	0.06874	0.00198	1.42436	0.03807	0.15028	0.00162	891	61	899	16	903	9	903	9	99.56%
R-CP1-094	47.65	102.79	0.463566495	0.2674	0.00584	23.84947	0.44292	0.64687	0.00744	3291	35	3262	18	3216	29	3291	35	102.33%
R-CP1-095	103.03	103.83	0.992295098	0.06494	0.00237	1.1464	0.04067	0.12802	0.00164	772	53	776	19	777	9	777	9	99.87%
R-CP1-096	193.47	219.76	0.880369494	0.06309	0.00151	1.11992	0.02572	0.12873	0.00147	711	30	763	12	781	8	781	8	97.70%
R-CP1-097	64.43	137.59	0.468275311	0.07351	0.00193	1.62257	0.04072	0.16006	0.00192	1028	32	979	16	957	11	957	11	102.30%
R-CP1-098	81.32	148.65	0.547056845	0.11025	0.0022	4.41391	0.08378	0.2903	0.00324	1804	19	1715	16	1643	16	1804	19	109.80%
R-CP1-099	143.11	396.22	0.361188229	0.062	0.00141	0.8626	0.01872	0.10089	0.00113	674	28	632	10	620	7	620	7	101.94%
R-CP1-100	97	289.62	0.334921621	0.05997	0.00152	0.82662	0.02009	0.09996	0.00114	602	33	612	11	614	7	614	7	99.67%
R-CP1-101	117.55	418.25	0.281052002	0.06746	0.00143	1.0951	0.02218	0.11771	0.0013	852	24	751	11	717	7	717	7	104.74%
R-CP1-102	135.37	249.42	0.542739155	0.07219	0.00158	1.61047	0.03368	0.16178	0.00182	991	25	974	13	967	10	967	10	100.72%
R-CP1-103	40.64	114.55	0.354779572	0.06322	0.00243	0.99918	0.03732	0.11461	0.00149	716	57	703	19	699	9	699	9	100.57%
R-CP1-104	225.19	371.67	0.605886943	0.06064	0.00141	0.82777	0.01847	0.09899	0.00111	626	29	612	10	608	7	608	7	100.66%
R-CP1-105	61.93	155.49	0.398289279	0.06139	0.00201	0.85298	0.02706	0.10075	0.00125	653	47	626	15	619	7	619	7	101.13%
R-CP1-106	34.25	267.01	0.128272349	0.05808	0.00167	0.69059	0.01917	0.08622	0.00102	533	40	533	12	533	6	533	6	100.00%
R-CP1-107	113.33	326.37	0.347243926	0.07365	0.00148	1.752	0.03361	0.17249	0.00188	1032	22	1028	12	1026	10	1032	22	100.58%
R-CP1-108	96.21	250.88	0.383490115	0.05922	0.00147	0.80659	0.01926	0.09876	0.00113	575	32	601	11	607	7	607	7	99.01%
R-CP1-109	45.29	107.8	0.42012987	0.06292	0.00187	1.06976	0.03057	0.12329	0.00156	706	39	739	15	749	9	749	9	98.66%
R-CP1-110	106.19	378.92	0.280243851	0.06132	0.00133	0.94478	0.0196	0.11172	0.00124	650	26	675	10	683	7	683	7	98.83%
R-CP1-111	29.41	34.27	0.858185001	0.10727	0.00287	4.39346	0.11221	0.29701	0.00389	1754	28	1711	21	1676	19	1754	28	104.65%
R-CP1-112	112.09	230.99	0.485259102	0.05922	0.00148	0.83884	0.02012	0.10272	0.00117	575	32	619	11	630	7	630	7	98.25%
R-CP1-113	76.77	69.42	1.105877269	0.06622	0.00215	1.25585	0.03953	0.13752	0.00172	813	45	826	18	831	10	831	10	99.40%
R-CP1-114	259.86	396.91	0.654707616	0.0633	0.00134	0.75851	0.01537	0.08689	0.00096	718	25	573	9	537	6	537	6	106.70%
R-CP1-115	73.15	44.48	1.644559353	0.05877	0.00333	0.77176	0.04277	0.09522	0.00146	559	94	581	25	586	9	586	9	99.15%
R-CP1-116	137.39	148.31	0.92637044	0.05951	0.00156	0.81875	0.0206	0.09977	0.00117	586	34	607	12	613	7	613	7	99.02%
R-CP1-117	54.76	192.96	0.283789386	0.28711	0.00643	25.51079	0.49554	0.64444	0.00717	3402	36	3328	19	3206	28	3402	36	106.11%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
R-CP1-118	495.5	625.51	0.792153603	0.05842	0.00116	0.73431	0.01385	0.09115	0.00098	546	23	559	8	562	6	562	6	99.47%
R-CP1-119	64.28	94.03	0.683611613	0.06716	0.00171	1.33419	0.03254	0.14405	0.0017	843	31	861	14	868	10	868	10	99.19%

Table S2. U-Pb dating results of the zircon from R-CP1 in Rutog area.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
R-CP2-01	102.14	128.55	0.794554648	0.08834	0.00523	1.82367	0.10562	0.14973	0.00181	1390	117	1054	38	899	10	899	10	117.24%
R-CP2-02	70.11	135.89	0.515932004	0.06811	0.00114	1.33376	0.02019	0.14199	0.00133	872	17	861	9	856	8	856	8	100.58%
R-CP2-03	88.59	61.46	1.441425317	0.07212	0.00386	1.36847	0.07134	0.13762	0.00168	989	112	876	31	831	9	831	9	105.42%
R-CP2-04	48.76	71.27	0.684158833	0.14883	0.00214	8.92082	0.11443	0.43461	0.00401	2333	11	2330	12	2326	18	2333	11	100.30%
R-CP2-05	88.77	106.51	0.833442869	0.0606	0.00128	0.78321	0.01547	0.09372	0.00094	625	26	587	9	578	6	578	6	101.56%
R-CP2-06	160.76	228.01	0.705056796	0.06527	0.00102	1.14584	0.01618	0.1273	0.00116	783	15	775	8	772	7	772	7	100.39%
R-CP2-07	32.34	49.34	0.655451966	0.06143	0.00177	0.87623	0.02412	0.10342	0.00112	654	40	639	13	634	7	634	7	100.79%
R-CP2-08	21.47	61.57	0.348708787	0.0622	0.00168	0.84629	0.02176	0.09865	0.00106	681	37	623	12	606	6	606	6	102.81%
R-CP2-09	156.28	184.89	0.845259343	0.06682	0.00107	1.21154	0.01759	0.13148	0.00121	832	16	806	8	796	7	796	7	101.26%
R-CP2-10	71.11	163.88	0.43391506	0.07356	0.00116	1.80867	0.02578	0.17828	0.00164	1029	15	1049	9	1058	9	1029	15	97.26%
R-CP2-11	10.88	182.14	0.05973427	0.07362	0.00142	1.02373	0.01731	0.10085	0.00094	1031	40	716	9	619	6	619	6	115.67%
R-CP2-12	63.83	69.28	0.921333718	0.07114	0.00142	1.58101	0.02921	0.16115	0.0016	961	22	963	11	963	9	963	9	100.00%
R-CP2-13	111.74	98.62	1.133035895	0.09996	0.00152	3.78724	0.05151	0.27473	0.00254	1623	13	1590	11	1565	13	1623	13	103.71%
R-CP2-14	92.72	284.85	0.325504652	0.06849	0.00105	1.24454	0.01712	0.13176	0.0012	883	14	821	8	798	7	798	7	102.88%
R-CP2-15	109.79	182.27	0.602348165	0.06495	0.00108	1.16934	0.01764	0.13055	0.00121	773	17	786	8	791	7	791	7	99.37%
R-CP2-16	108.22	76.69	1.411135741	0.09997	0.0016	3.71957	0.05381	0.2698	0.00257	1624	14	1576	12	1540	13	1624	14	105.45%
R-CP2-17	39.26	81.83	0.479775144	0.07965	0.00202	1.95301	0.04558	0.17784	0.00178	1188	51	1099	16	1055	10	1188	51	112.61%
R-CP2-18	100.3	188.29	0.532688937	0.11475	0.00166	5.02939	0.06486	0.31779	0.00288	1876	11	1824	11	1779	14	1876	11	105.45%
R-CP2-19	95.21	106.19	0.896600433	0.10959	0.00165	4.66634	0.06281	0.30874	0.00286	1793	12	1761	11	1735	14	1793	12	103.34%
R-CP2-20	21.57	56.7	0.38042328	0.1621	0.00251	10.2266	0.14233	0.45745	0.00445	2478	12	2455	13	2428	20	2478	12	102.06%
R-CP2-21	86.32	65.95	1.308870356	0.09832	0.00162	3.79587	0.05692	0.27994	0.0027	1593	14	1592	12	1591	14	1593	14	100.13%
R-CP2-22	163.6	114.15	1.433201927	0.16103	0.00234	10.3993	0.13538	0.46825	0.00431	2467	11	2471	12	2476	19	2467	11	99.64%
R-CP2-23	35.94	46.53	0.7724049	0.06607	0.002	1.13959	0.03312	0.12507	0.00138	809	42	772	16	760	8	760	8	101.58%
R-CP2-24	136.27	313.89	0.434132977	0.1772	0.00251	11.36508	0.14337	0.46507	0.00418	2627	10	2554	12	2462	18	2627	10	106.70%
R-CP2-25	53.62	41.49	1.292359605	0.16575	0.0027	9.93632	0.14639	0.43467	0.0044	2515	12	2429	14	2327	20	2515	12	108.08%
R-CP2-26	148.43	198.37	0.748248223	0.07141	0.00119	1.49149	0.02263	0.15144	0.00142	969	16	927	9	909	8	909	8	101.98%
R-CP2-27	16.67	37.9	0.439841689	0.06872	0.00282	1.2238	0.04867	0.12912	0.00162	890	61	812	22	783	9	783	9	103.70%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
R-CP2-28	108.63	196.24	0.553556869	0.06576	0.00116	1.15207	0.01865	0.12704	0.00121	799	19	778	9	771	7	771	7	100.91%
R-CP2-29	136.94	248.95	0.550070295	0.16441	0.00236	10.32655	0.13225	0.45544	0.00412	2502	11	2464	12	2419	18	2502	11	103.43%
R-CP2-30	65.42	95.18	0.687329271	0.069	0.0015	1.34564	0.02733	0.14141	0.00145	899	25	866	12	853	8	853	8	101.52%
R-CP2-31	50.22	338.57	0.14832974	0.06609	0.00106	1.19704	0.01738	0.13134	0.00122	809	16	799	8	796	7	796	7	100.38%
R-CP2-32	28.58	32.84	0.870280146	0.05979	0.0037	0.70712	0.04292	0.08576	0.00126	596	106	543	26	530	7	530	7	102.45%
R-CP2-33	147.27	114.89	1.281834799	0.07536	0.00391	1.61345	0.08115	0.15528	0.00201	1078	107	975	32	931	11	931	11	104.73%
R-CP2-34	127.77	81.22	1.573134696	0.05754	0.00169	0.73853	0.02068	0.09307	0.00102	512	42	562	12	574	6	574	6	97.91%
R-CP2-35	131.73	144.48	0.911752492	0.0654	0.00124	1.1538	0.02024	0.12792	0.00125	787	21	779	10	776	7	776	7	100.39%
R-CP2-36	116.23	404.01	0.287690899	0.07338	0.00114	1.71181	0.02405	0.16915	0.00156	1024	15	1013	9	1007	9	1024	15	101.69%
R-CP2-37	23.84	39.92	0.597194389	0.15956	0.00267	10.21227	0.15533	0.46409	0.00475	2451	13	2454	14	2458	21	2451	13	99.72%
R-CP2-38	21.86	47.74	0.457896942	0.05887	0.00272	0.80125	0.03621	0.09868	0.00122	562	77	598	20	607	7	607	7	98.52%
R-CP2-39	109.21	286.4	0.381319832	0.05888	0.00115	0.66727	0.01211	0.08217	0.0008	563	23	519	7	509	5	509	5	101.96%
R-CP2-40	69.84	213.18	0.32761047	0.06472	0.00161	1.01454	0.02319	0.11368	0.00111	765	54	711	12	694	6	694	6	102.45%
R-CP2-41	158.93	190.78	0.833053779	0.16208	0.00241	10.09225	0.13478	0.45149	0.00416	2477	11	2443	12	2402	18	2477	11	103.12%
R-CP2-42	99.88	176.52	0.565828235	0.16409	0.00245	10.13022	0.13627	0.44764	0.00415	2498	11	2447	12	2385	18	2498	11	104.74%
R-CP2-43	133.74	203.21	0.658136903	0.07516	0.00264	1.65372	0.05541	0.15957	0.00168	1073	72	991	21	954	9	954	9	103.88%
R-CP2-44	126.31	125.46	1.006775068	0.16358	0.00251	9.96893	0.13813	0.44188	0.00419	2493	12	2432	13	2359	19	2493	12	105.68%
R-CP2-45	212.55	166.56	1.276116715	0.10269	0.00162	4.14258	0.05919	0.29251	0.00276	1673	13	1663	12	1654	14	1673	13	101.15%
R-CP2-46	35.85	147.78	0.242590337	0.061	0.00145	0.86662	0.01934	0.10302	0.00108	639	30	634	11	632	6	632	6	100.32%
R-CP2-47	81.2	77.63	1.045987376	0.07204	0.00188	1.52879	0.03791	0.15388	0.00167	987	33	942	15	923	9	923	9	102.06%
R-CP2-48	157.01	198.33	0.791660364	0.06009	0.00122	0.82569	0.01559	0.09964	0.00099	607	24	611	9	612	6	612	6	99.84%
R-CP2-49	45.24	88.52	0.511070944	0.06719	0.0015	1.28541	0.02687	0.13871	0.00144	844	26	839	12	837	8	837	8	100.24%
R-CP2-50	137.82	91.04	1.51384007	0.058	0.0019	0.67877	0.02133	0.08486	0.001	530	48	526	13	525	6	525	6	100.19%
R-CP2-51	96.35	39.2	2.457908163	0.05867	0.00329	0.7063	0.0387	0.0873	0.00122	555	95	543	23	540	7	540	7	100.56%
R-CP2-52	32.26	80.11	0.402696293	0.17736	0.0028	11.78515	0.16817	0.48181	0.00468	2628	12	2587	13	2535	20	2628	12	103.67%
R-CP2-53	58.7	41.95	1.399284863	0.15082	0.00269	7.63303	0.12444	0.36699	0.00384	2355	14	2189	15	2015	18	2355	14	116.87%
R-CP2-54	52.33	93.73	0.558305772	0.06432	0.00156	1.06772	0.02453	0.12037	0.00126	752	31	738	12	733	7	733	7	100.68%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
R-CP2-55	13.25	25.28	0.524129747	0.08034	0.00516	1.25139	0.07798	0.11296	0.00177	1205	130	824	35	690	10	690	10	119.42%
R-CP2-56	76.13	354.63	0.214674449	0.06151	0.00107	0.87541	0.01389	0.1032	0.00098	657	18	639	8	633	6	633	6	100.95%
R-CP2-57	31.85	200.07	0.159194282	0.06965	0.00123	1.47467	0.0238	0.15353	0.00148	918	18	920	10	921	8	921	8	99.89%
R-CP2-58	90.51	112.42	0.805105853	0.15848	0.00251	9.20856	0.13206	0.42133	0.00405	2440	12	2359	13	2267	18	2440	12	107.63%
R-CP2-59	160.47	115.38	1.390795632	0.10917	0.0023	1.42214	0.02754	0.09446	0.00103	1786	20	898	12	582	6	582	6	154.30%
R-CP2-60	136.83	147.55	0.927346662	0.1617	0.00251	10.13333	0.1421	0.4544	0.00429	2474	12	2447	13	2415	19	2474	12	102.44%
R-CP2-61	96.18	148.73	0.646675183	0.066	0.00132	1.21855	0.02264	0.13387	0.00134	806	23	809	10	810	8	810	8	99.88%
R-CP2-62	38.39	80.65	0.47600744	0.32104	0.00496	31.19705	0.43721	0.70462	0.00677	3575	11	3525	14	3438	26	3575	11	103.98%
R-CP2-63	197.02	556.71	0.353900595	0.06461	0.0015	1.08989	0.023	0.12235	0.00116	762	50	748	11	744	7	744	7	100.54%
R-CP2-64	48.53	110.92	0.437522539	0.06226	0.00144	1.00424	0.02184	0.11695	0.00122	683	29	706	11	713	7	713	7	99.02%
R-CP2-65	20.89	278.72	0.07494977	0.07431	0.00124	1.7679	0.02688	0.1725	0.00164	1050	16	1034	10	1026	9	1050	16	102.34%
R-CP2-66	138.54	412.98	0.335464187	0.05969	0.00105	0.79304	0.01286	0.09634	0.00092	592	19	593	7	593	5	593	5	100.00%
R-CP2-67	34.68	31.95	1.085446009	0.06749	0.00643	0.82487	0.07723	0.08865	0.0016	853	206	611	43	548	9	548	9	111.50%
R-CP2-68	113.85	456.72	0.249277457	0.07489	0.00121	1.71376	0.02512	0.16593	0.00155	1066	15	1014	9	990	9	990	9	102.42%
R-CP2-69	137.18	191.64	0.715821332	0.15988	0.0025	9.35272	0.13288	0.42416	0.004	2454	12	2373	13	2279	18	2454	12	107.68%
R-CP2-70	87.49	295.6	0.29597429	0.06787	0.00117	1.26765	0.01995	0.13544	0.00129	865	18	831	9	819	7	819	7	101.47%
R-CP2-71	23.27	207.24	0.112285273	0.06038	0.00122	0.79287	0.01495	0.09522	0.00095	617	24	593	8	586	6	586	6	101.19%
R-CP2-72	68.62	204.8	0.335058594	0.0671	0.00122	1.28916	0.02163	0.13931	0.00136	841	19	841	10	841	8	841	8	100.00%
R-CP2-73	74.4	408.37	0.182187722	0.07043	0.00143	1.37982	0.02489	0.1421	0.00135	941	43	880	11	857	8	857	8	102.68%
R-CP2-74	107.28	788.74	0.136014403	0.05907	0.00115	0.71128	0.01219	0.08733	0.00081	570	43	546	7	540	5	540	5	101.11%
R-CP2-75	24.16	64.84	0.3726095	0.07235	0.004	1.35596	0.07299	0.13592	0.00167	996	115	870	31	822	10	822	10	105.84%
R-CP2-76	33.49	105.87	0.31633135	0.06014	0.00157	0.82443	0.02047	0.0994	0.00107	609	35	611	11	611	6	611	6	100.00%
R-CP2-77	32.49	64.97	0.500076959	0.26966	0.00431	24.83798	0.36185	0.6679	0.00653	3304	12	3302	14	3298	25	3304	12	100.18%
R-CP2-78	93.38	94.44	0.988775942	0.16154	0.00263	9.89157	0.14664	0.444	0.00431	2472	13	2425	14	2369	19	2472	13	104.35%
R-CP2-79	136.93	107.35	1.275547275	0.05828	0.00159	0.70292	0.01827	0.08746	0.00093	540	38	541	11	540	6	540	6	100.19%
R-CP2-80	67.54	60.21	1.121740575	0.11037	0.00199	4.84839	0.08057	0.31853	0.00322	1806	16	1793	14	1783	16	1806	16	101.29%
R-CP2-81	66.53	116.25	0.572301075	0.11409	0.00193	5.0204	0.07766	0.31907	0.00311	1866	15	1823	13	1785	15	1866	15	104.54%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
R-CP2-82	138.07	82.16	1.680501461	0.06794	0.00162	1.17644	0.02643	0.12556	0.00134	867	29	790	12	762	8	762	8	103.67%
R-CP2-83	152.12	153.7	0.989720234	0.16503	0.00266	10.21514	0.15035	0.44883	0.00428	2508	13	2454	14	2390	19	2508	13	104.94%
R-CP2-84	36.03	69.39	0.519239083	0.06448	0.00173	1.10177	0.02808	0.1239	0.00135	757	35	754	14	753	8	753	8	100.13%
R-CP2-85	255.81	399.56	0.640229252	0.15514	0.00328	8.96376	0.16763	0.41904	0.00415	2403	37	2334	17	2256	19	2403	37	106.52%
R-CP2-86	208.28	850.53	0.244882603	0.10668	0.00202	3.68817	0.06072	0.25073	0.00235	1744	36	1569	13	1442	12	1744	36	120.94%
R-CP2-87	39.78	69.33	0.573777585	0.10686	0.00192	4.49786	0.07415	0.3052	0.00308	1747	16	1731	14	1717	15	1747	16	101.75%
R-CP2-88	363.49	249.63	1.45611505	0.10145	0.00167	3.85633	0.05797	0.27562	0.00263	1651	15	1605	12	1569	13	1651	15	105.23%
R-CP2-89	55.74	125.79	0.443119485	0.12818	0.00214	6.5756	0.10037	0.37198	0.00361	2073	14	2056	13	2039	17	2073	14	101.67%
R-CP2-90	82.56	71.34	1.157275021	0.06923	0.00172	1.28732	0.03032	0.13484	0.00145	906	31	840	13	815	8	815	8	103.07%
R-CP2-91	80.1	259.96	0.308124327	0.09421	0.00194	3.32584	0.06074	0.25603	0.00246	1512	40	1487	14	1469	13	1512	40	102.93%
R-CP2-92	37.42	168.38	0.22223542	0.0604	0.00121	0.91166	0.017	0.10944	0.00109	618	23	658	9	669	6	669	6	98.36%
R-CP2-93	59.39	41.11	1.444660667	0.10733	0.00207	4.54546	0.0811	0.3071	0.00319	1755	18	1739	15	1726	16	1755	18	101.68%
R-CP2-94	152.44	182.21	0.83661709	0.08065	0.00139	2.37107	0.03766	0.21317	0.00207	1213	17	1234	11	1246	11	1213	17	97.35%
R-CP2-95	59.09	158.77	0.372173584	0.12585	0.00256	6.39841	0.11406	0.36874	0.00361	2041	37	2032	16	2023	17	2041	37	100.89%
R-CP2-96	67.35	76.59	0.879357618	0.06341	0.00154	1.06966	0.02455	0.12233	0.0013	722	31	739	12	744	7	744	7	99.33%
R-CP2-97	156.06	97.04	1.608202803	0.05724	0.00153	0.7117	0.01816	0.09016	0.00097	501	37	546	11	556	6	556	6	98.20%
R-CP2-98	131.49	112.99	1.163731304	0.05822	0.00137	0.76668	0.01708	0.09548	0.001	538	31	578	10	588	6	588	6	98.30%
R-CP2-99	141.81	161.74	0.876777544	0.06953	0.00133	1.22363	0.02169	0.12761	0.00128	915	20	811	10	774	7	774	7	104.78%
R-CP2-100	232.27	258.2	0.899573974	0.06456	0.00115	1.14492	0.01885	0.1286	0.00125	760	19	775	9	780	7	780	7	99.36%
R-CP2-101	100.75	397.93	0.253185234	0.05746	0.0011	0.58776	0.01046	0.07417	0.00074	509	22	469	7	461	4	461	4	101.74%
R-CP2-102	113.47	176.68	0.642234548	0.06502	0.00124	1.15294	0.02039	0.12858	0.00128	775	21	779	10	780	7	780	7	99.87%
R-CP2-103	83.55	72.26	1.156241351	0.06675	0.00156	1.2776	0.02825	0.13879	0.00147	830	29	836	13	838	8	838	8	99.76%
R-CP2-104	72.91	157.01	0.464365327	0.08732	0.00153	2.86317	0.04625	0.23776	0.00233	1368	17	1372	12	1375	12	1368	17	99.49%
R-CP2-105	107.98	184.61	0.584908727	0.05836	0.00117	0.74063	0.0139	0.09202	0.00093	543	24	563	8	567	5	567	5	99.29%
R-CP2-106	106.92	84.55	1.264577173	0.06353	0.00147	1.04633	0.02284	0.11943	0.00127	726	28	727	11	727	7	727	7	100.00%
R-CP2-107	85.87	136.25	0.630238532	0.1695	0.00285	11.43363	0.17643	0.48914	0.00474	2553	14	2559	14	2567	21	2553	14	99.45%
R-CP2-108	53.41	65.01	0.821565913	0.16355	0.00283	10.59048	0.16858	0.46953	0.00469	2493	14	2488	15	2481	21	2493	14	100.48%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
R-CP2-109	100.76	154.48	0.652252719	0.23645	0.00395	20.56805	0.31579	0.63076	0.00609	3096	13	3118	15	3153	24	3096	13	98.19%
R-CP2-110	32.97	26.82	1.229306488	0.07701	0.00544	1.39595	0.09623	0.13148	0.00203	1121	145	887	41	796	12	796	12	111.43%
R-CP2-111	92.87	97.75	0.950076726	0.06145	0.00159	0.7395	0.01816	0.08726	0.00094	655	34	562	11	539	6	539	6	104.27%
R-CP2-112	173.99	155.52	1.11876286	0.07127	0.00133	1.60394	0.02779	0.16319	0.00163	965	20	972	11	974	9	974	9	99.79%
R-CP2-113	134.03	113.79	1.177871518	0.1645	0.00281	11.3992	0.17917	0.50248	0.00493	2502	14	2556	15	2624	21	2502	14	95.35%
R-CP2-114	87.7	115.18	0.761416913	0.11169	0.00196	5.30414	0.08589	0.34436	0.00341	1827	16	1870	14	1908	16	1827	16	95.75%
R-CP2-115	84.06	67.69	1.24183779	0.07317	0.00161	1.70208	0.03505	0.16868	0.0018	1019	25	1009	13	1005	10	1019	25	101.39%
R-CP2-116	24.32	29.85	0.814740369	0.07879	0.0101	1.11639	0.14154	0.10277	0.00195	1167	268	761	68	631	11	631	11	120.60%
R-CP2-117	33.44	83.54	0.400287288	0.0631	0.00167	0.89373	0.02249	0.10271	0.00112	712	35	648	12	630	7	630	7	102.86%
R-CP2-118	58.41	87.4	0.668306636	0.06136	0.00154	0.86776	0.02058	0.10255	0.00112	652	32	634	11	629	7	629	7	100.79%
R-CP2-119	11.74	40.66	0.288735858	0.07478	0.00197	1.92122	0.04816	0.18629	0.00209	1063	32	1088	17	1101	11	1063	32	96.55%
R-CP2-120	45.59	51.1	0.892172211	0.15805	0.00283	14.28437	0.23667	0.65539	0.00676	2435	15	2769	16	3249	26	2435	15	74.95%

Table S3. U-Pb dating results of the zircon from R-CP2 in Rutog area.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP1-01	288.07	216.34	1.331561431	0.06924	0.00103	1.12375	0.01687	0.11768	0.00134	906	15	765	8	717	8	717	8	106.69%
G-CP1-02	62.65	103.74	0.60391363	0.06683	0.00115	1.25997	0.02152	0.1367	0.00161	832	18	828	10	826	9	826	9	100.24%
G-CP1-03	383.76	305.57	1.255882449	0.0743	0.00099	1.79036	0.02428	0.17473	0.00195	1050	12	1042	9	1038	11	1050	12	101.16%
G-CP1-04	149.79	90.67	1.652034852	0.1748	0.00225	12.07321	0.1586	0.50083	0.00567	2604	10	2610	12	2617	24	2604	10	99.50%
G-CP1-05	71.3	60.33	1.18183325	0.06889	0.00133	1.31038	0.02501	0.13793	0.00164	895	21	850	11	833	9	833	9	102.04%
G-CP1-06	83.39	182.15	0.457809498	0.06232	0.00092	0.95649	0.01428	0.11128	0.00126	685	15	681	7	680	7	680	7	100.15%
G-CP1-07	93.52	189.78	0.492781115	0.06317	0.00104	0.86601	0.01415	0.0994	0.00115	714	17	633	8	611	7	611	7	103.60%
G-CP1-08	144.19	95.55	1.509052852	0.10267	0.00139	4.37654	0.06025	0.3091	0.0035	1673	12	1708	11	1736	17	1673	12	96.37%
G-CP1-09	259.57	698.24	0.371748969	0.07294	0.00094	1.36947	0.01798	0.13615	0.00151	1012	12	876	8	823	9	823	9	106.44%
G-CP1-10	22.04	42.87	0.514112433	0.07333	0.0017	1.72447	0.03916	0.17053	0.00219	1023	26	1018	15	1015	12	1023	26	100.79%
G-CP1-11	122.17	100.1	1.22047952	0.06696	0.00121	1.24673	0.02222	0.135	0.00161	837	19	822	10	816	9	816	9	100.74%
G-CP1-12	78.43	82.09	0.955414789	0.15332	0.0039	8.87444	0.19532	0.41981	0.00533	2383	44	2325	20	2260	24	2383	44	105.44%
G-CP1-13	39.79	94.71	0.420124591	0.11406	0.0016	5.34892	0.07566	0.34005	0.00391	1865	12	1877	12	1887	19	1865	12	98.83%
G-CP1-14	123.3	90.64	1.360326567	0.06612	0.00132	1.21179	0.02389	0.13289	0.00161	810	22	806	11	804	9	804	9	100.25%
G-CP1-15	76.15	221.24	0.344196348	0.10855	0.00142	4.48873	0.05993	0.29984	0.00336	1775	11	1729	11	1691	17	1775	11	104.97%
G-CP1-16	69.24	95.45	0.725091671	0.07395	0.00144	1.10357	0.02097	0.1082	0.00132	1040	19	755	10	662	8	662	8	114.05%
G-CP1-17	47.63	65.87	0.723090937	0.06792	0.00152	1.18869	0.02603	0.12689	0.00161	866	25	795	12	770	9	770	9	103.25%
G-CP1-18	27.5	43.28	0.635397412	0.06685	0.00195	1.23378	0.03511	0.13382	0.00184	833	37	816	16	810	10	810	10	100.74%
G-CP1-19	130.27	191.82	0.679126264	0.06794	0.001	1.35067	0.02003	0.14415	0.00163	867	14	868	9	868	9	868	9	100.00%
G-CP1-20	181.42	240.61	0.754000249	0.16309	0.00205	10.28267	0.13229	0.45718	0.00507	2488	10	2461	12	2427	22	2488	10	102.51%
G-CP1-21	94.01	111.17	0.84564181	0.06997	0.00133	1.39674	0.02607	0.14473	0.00176	927	20	888	11	871	10	871	10	101.95%
G-CP1-22	154.78	144.46	1.07143846	0.05961	0.00132	0.71635	0.0156	0.08714	0.00107	589	27	549	9	539	6	539	6	101.86%
G-CP1-23	70.86	58.29	1.215645908	0.0617	0.00437	0.85771	0.05923	0.10083	0.00161	664	157	629	32	619	9	619	9	101.62%
G-CP1-24	15.37	24.23	0.634337598	0.06629	0.00272	1.27357	0.05057	0.1393	0.00226	816	56	834	23	841	13	841	13	99.17%
G-CP1-25	95.7	110.93	0.862706211	0.06855	0.00128	1.38495	0.02551	0.1465	0.00177	885	19	883	11	881	10	881	10	100.23%
G-CP1-26	66.13	156.32	0.423042477	0.108	0.00146	4.64675	0.06368	0.31197	0.00351	1766	11	1758	11	1750	17	1766	11	100.91%
G-CP1-27	98.02	614.33	0.159555939	0.07871	0.00167	1.11884	0.02016	0.1031	0.00117	1165	43	762	10	633	7	633	7	120.38%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP1-28	149.69	364.43	0.410751036	0.06999	0.00175	1.44791	0.032	0.15004	0.00174	928	52	909	13	901	10	901	10	100.89%
G-CP1-29	28.12	51.07	0.5506168	0.06507	0.00199	1.15835	0.03441	0.12907	0.00182	777	39	781	16	783	10	783	10	99.74%
G-CP1-30	134.87	305.78	0.441068742	0.07116	0.00106	1.47776	0.02217	0.15059	0.00172	962	14	921	9	904	10	904	10	101.88%
G-CP1-31	219.97	365.07	0.602541978	0.1025	0.00248	3.68994	0.07775	0.2611	0.00308	1670	46	1569	17	1495	16	1670	16	111.71%
G-CP1-32	64.99	188.65	0.344500398	0.07281	0.0011	1.57523	0.02392	0.15687	0.00179	1009	15	960	9	939	10	939	10	102.24%
G-CP1-33	136.07	274.4	0.495881924	0.06389	0.00101	1.07511	0.01701	0.12202	0.0014	738	16	741	8	742	8	742	8	99.87%
G-CP1-34	326.66	196.17	1.665188357	0.06618	0.00117	1.14221	0.02002	0.12515	0.00148	812	18	774	9	760	8	760	8	101.84%
G-CP1-35	131.56	45.15	2.913842746	0.0619	0.00778	0.7529	0.09335	0.08821	0.00184	671	282	570	54	545	11	545	11	104.59%
G-CP1-36	66.97	81.85	0.818204032	0.06522	0.0016	1.17842	0.02822	0.13101	0.00169	781	29	791	13	794	10	794	10	99.62%
G-CP1-37	259.29	223.96	1.157751384	0.05985	0.0011	0.81129	0.01476	0.09828	0.00117	598	20	603	8	604	7	604	7	99.83%
G-CP1-38	176.79	152.51	1.159202675	0.15936	0.00212	10.22945	0.13837	0.46545	0.00522	2449	10	2456	13	2464	23	2449	10	99.39%
G-CP1-39	63.42	97.55	0.650128139	0.11652	0.00165	5.36206	0.07648	0.33367	0.0038	1904	12	1879	12	1856	18	1904	12	102.59%
G-CP1-40	191.69	255.93	0.748993866	0.07325	0.00107	1.73798	0.0256	0.17204	0.00195	1021	14	1023	9	1023	11	1021	14	99.80%
G-CP1-41	63.2	119.35	0.529534981	0.06506	0.00119	1.24454	0.02247	0.13871	0.00166	776	19	821	10	837	9	837	9	98.09%
G-CP1-42	80.88	163.54	0.494557906	0.12591	0.00174	6.33293	0.08849	0.36471	0.00412	2042	11	2023	12	2004	19	2042	11	101.90%
G-CP1-43	182.53	152.35	1.198096488	0.15987	0.00218	10.19325	0.14039	0.46231	0.00521	2454	11	2452	13	2450	23	2454	11	100.16%
G-CP1-44	47.11	593.92	0.079320447	0.06916	0.00103	1.2936	0.01929	0.13562	0.00154	904	14	843	9	820	9	820	9	102.80%
G-CP1-45	159.37	320.13	0.497829007	0.12425	0.00271	5.54145	0.10218	0.32346	0.00377	2018	40	1907	16	1807	18	2018	18	111.68%
G-CP1-46	234.09	154.66	1.513578171	0.06676	0.00128	1.10155	0.02076	0.11963	0.00143	830	21	754	10	728	8	728	8	103.57%
G-CP1-47	132.54	81.85	1.619303604	0.07674	0.00137	1.95777	0.03446	0.185	0.0022	1114	18	1101	12	1094	12	1114	18	101.83%
G-CP1-48	258.32	135	1.913481481	0.06015	0.00134	0.78624	0.01715	0.09479	0.00117	609	26	589	10	584	7	584	7	100.86%
G-CP1-49	45.17	103.01	0.438501116	0.05829	0.0016	0.69989	0.01877	0.08706	0.00115	541	36	539	11	538	7	538	7	100.19%
G-CP1-50	347.81	143.64	2.421400724	0.10546	0.00157	4.32608	0.0646	0.29745	0.00342	1722	13	1698	12	1679	17	1722	13	102.56%
G-CP1-51	165.27	112.62	1.467501332	0.17045	0.00247	11.78263	0.17137	0.50123	0.0058	2562	11	2587	14	2619	25	2562	11	97.82%
G-CP1-52	249.06	374.66	0.664762718	0.07373	0.00112	1.55913	0.02371	0.15333	0.00175	1034	14	954	9	920	10	920	10	103.70%
G-CP1-53	108.81	115.33	0.943466574	0.0653	0.00312	1.04986	0.0481	0.1166	0.0016	784	103	729	24	711	9	711	9	102.53%
G-CP1-54	213.73	722.45	0.295840543	0.05803	0.00144	0.66542	0.0146	0.08316	0.00096	531	56	518	9	515	6	515	6	100.58%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP1-55	626.09	574.86	1.08911735	0.1558	0.00217	5.79628	0.08148	0.26976	0.00303	2411	11	1946	12	1540	15	2411	15	156.56%
G-CP1-56	137.16	207.64	0.660566365	0.07082	0.00129	1.39269	0.02499	0.14258	0.0017	952	19	886	11	859	10	859	10	103.14%
G-CP1-57	636.97	759.87	0.838261808	0.06756	0.00271	0.64504	0.02452	0.06924	0.00087	855	85	505	15	432	5	432	5	116.90%
G-CP1-58	136.64	250.86	0.544686279	0.1709	0.00241	10.8019	0.15313	0.45831	0.00517	2566	11	2506	13	2432	23	2566	11	105.51%
G-CP1-59	83.17	91.65	0.907474086	0.18202	0.00267	12.86187	0.1888	0.51237	0.00592	2671	11	2670	14	2667	25	2671	11	100.15%
G-CP1-60	132.89	540.97	0.24565133	0.29778	0.00414	25.67985	0.36035	0.62531	0.007	3459	10	3334	14	3131	28	3459	28	110.48%
G-CP1-61	58.65	68.27	0.859088912	0.06214	0.00213	0.75764	0.02521	0.0884	0.00126	679	47	573	15	546	7	546	7	104.95%
G-CP1-62	186.78	151.56	1.232383215	0.16214	0.0024	10.13568	0.15016	0.45328	0.0052	2478	12	2447	14	2410	23	2478	12	102.82%
G-CP1-63	143.95	318.64	0.451763746	0.06417	0.0011	1.07932	0.01841	0.12196	0.00142	747	18	743	9	742	8	742	8	100.13%
G-CP1-64	88.69	265.38	0.334200015	0.06004	0.00107	0.83267	0.01461	0.10055	0.00117	605	19	615	8	618	7	618	7	99.51%
G-CP1-65	273.6	232.92	1.174652241	0.06437	0.00111	1.09331	0.01873	0.12316	0.00143	754	18	750	9	749	8	749	8	100.13%
G-CP1-66	48.06	79.49	0.604604353	0.06548	0.0017	1.20418	0.03036	0.13334	0.00178	790	31	803	14	807	10	807	10	99.50%
G-CP1-67	293.36	241.77	1.213384622	0.07256	0.0014	1.11918	0.0211	0.11183	0.00136	1002	20	763	10	683	8	683	8	111.71%
G-CP1-68	90.58	375.27	0.241372878	0.0585	0.00116	0.62537	0.01214	0.07752	0.00093	549	23	493	8	481	6	481	6	102.49%
G-CP1-69	132.46	129.34	1.024122468	0.06763	0.00147	1.23857	0.02635	0.1328	0.00166	857	24	818	12	804	9	804	9	101.74%
G-CP1-70	99.82	146.28	0.682389937	0.16795	0.00255	11.00472	0.16655	0.47513	0.00548	2537	12	2524	14	2506	24	2537	12	101.24%
G-CP1-71	73.09	75.96	0.962216956	0.05793	0.00198	0.72294	0.02406	0.0905	0.0013	527	48	552	14	558	8	558	8	98.92%
G-CP1-72	391.21	685.36	0.570809502	0.06222	0.00205	0.96099	0.02943	0.11201	0.00135	682	72	684	15	684	8	684	8	100.00%
G-CP1-73	128.08	435.3	0.294233862	0.129	0.00266	5.64364	0.09682	0.31729	0.00364	2084	37	1923	15	1777	18	2084	18	117.28%
G-CP1-74	96.77	150.18	0.644360101	0.06067	0.00117	0.97868	0.01855	0.11698	0.0014	628	21	693	10	713	8	713	8	97.19%
G-CP1-75	120.01	153.76	0.780502081	0.06647	0.00143	1.13897	0.02393	0.12425	0.00155	821	24	772	11	755	9	755	9	102.25%
G-CP1-76	61.75	100.45	0.614733698	0.06645	0.00178	1.18732	0.03085	0.12957	0.00172	821	32	795	14	785	10	785	10	101.27%
G-CP1-77	110.45	220.29	0.501384539	0.06297	0.00121	0.97994	0.01851	0.11285	0.00135	707	21	694	9	689	8	689	8	100.73%
G-CP1-78	497.31	439.81	1.130738273	0.06229	0.00116	0.70743	0.0129	0.08235	0.00098	684	20	543	8	510	6	510	6	106.47%
G-CP1-79	230.55	283.39	0.813543174	0.06406	0.0012	1.06998	0.0197	0.12111	0.00144	744	20	739	10	737	8	737	8	100.27%
G-CP1-80	106.24	140	0.758857143	0.11396	0.00184	5.14675	0.08216	0.32749	0.0038	1864	14	1844	14	1826	18	1864	14	102.08%
G-CP1-81	715.23	632.87	1.130137311	0.14086	0.00221	4.30894	0.06707	0.22182	0.00254	2238	13	1695	13	1291	13	2238	13	173.35%

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G-CP1-83	89.78	91.56	0.980559196	0.11294	0.00198	5.20605	0.08975	0.33426	0.00401	1847	15	1854	15	1859	19	1847	15	99.35%
G-CP1-84	76.31	87.94	0.867750739	0.10327	0.00182	4.09519	0.07084	0.28757	0.00344	1684	16	1653	14	1629	17	1684	16	103.38%
G-CP1-85	261.35	252.81	1.033780309	0.113	0.00184	4.72103	0.07621	0.30294	0.00351	1848	14	1771	14	1706	17	1848	14	108.32%
G-CP1-86	144.08	166.8	0.863788969	0.06623	0.00137	1.19792	0.02415	0.13116	0.00161	814	23	800	11	794	9	794	9	100.76%
G-CP1-87	115.55	600.57	0.192400553	0.05903	0.00109	0.69693	0.01262	0.08562	0.00101	568	20	537	8	530	6	530	6	101.32%
G-CP1-88	270.82	611.58	0.442820236	0.1838	0.0029	12.67783	0.19872	0.50017	0.00571	2687	12	2656	15	2615	25	2687	12	102.75%
G-CP1-89	1384.78	535.38	2.586536666	0.07577	0.00132	1.08408	0.01864	0.10375	0.00122	1089	17	746	9	636	7	636	7	117.30%
G-CP1-90	37.33	55.83	0.668636934	0.06264	0.00223	1.06719	0.03712	0.12355	0.00175	696	50	737	18	751	10	751	10	98.14%
G-CP1-91	54.54	60.38	0.903279232	0.06321	0.00208	1.04342	0.03318	0.11969	0.00174	715	43	726	16	729	10	729	10	99.59%
G-CP1-92	118.86	356.12	0.3337639	0.07222	0.00188	1.64927	0.03828	0.16563	0.00196	992	54	989	15	988	11	988	11	100.10%
G-CP1-93	223.62	150.02	1.490601253	0.10594	0.00185	4.36121	0.07497	0.29852	0.00354	1731	16	1705	14	1684	18	1731	16	102.79%
G-CP1-94	114.39	194.56	0.587942023	0.16464	0.00276	10.94904	0.18119	0.48224	0.00565	2504	14	2519	15	2537	25	2504	14	98.70%
G-CP1-95	282.12	325.42	0.866941184	0.07371	0.00134	1.57434	0.02803	0.15488	0.00183	1034	18	960	11	928	10	928	10	103.45%
G-CP1-96	13.34	25.21	0.529155097	0.10793	0.00266	4.22333	0.10008	0.28374	0.00405	1765	23	1679	19	1610	20	1765	23	109.63%
G-CP1-97	101.48	92.53	1.096725386	0.07276	0.00156	1.69458	0.03539	0.16889	0.00209	1007	23	1006	13	1006	12	1007	23	100.10%
G-CP1-98	30.17	54.1	0.55767098	0.07196	0.0021	1.35144	0.03811	0.13618	0.00192	985	35	868	16	823	11	823	11	105.47%
G-CP1-99	48.53	53.86	0.901039733	0.06715	0.00184	1.24488	0.03294	0.13444	0.00183	842	33	821	15	813	10	813	10	100.98%
G-CP1-100	51.93	115.46	0.449766153	0.07153	0.00151	1.67169	0.03435	0.16947	0.0021	973	23	998	13	1009	12	973	23	96.43%
G-CP1-101	263.54	741.53	0.355400321	0.07052	0.00196	1.44476	0.03628	0.14858	0.00176	944	58	908	15	893	10	893	10	101.68%
G-CP1-102	122.19	118.44	1.031661601	0.10246	0.00188	3.91996	0.07055	0.27744	0.00333	1669	17	1618	15	1578	17	1669	17	105.77%
G-CP1-103	73.18	60.08	1.21804261	0.0624	0.00201	0.99271	0.03105	0.11537	0.00163	688	43	700	16	704	9	704	9	99.43%
G-CP1-104	135.72	319.03	0.425414538	0.0598	0.00204	0.76589	0.02429	0.09289	0.00115	596	76	577	14	573	7	573	7	100.70%
G-CP1-105	128.83	124.35	1.036027342	0.06889	0.00161	1.19383	0.02698	0.12567	0.00162	895	26	798	12	763	9	763	9	104.59%
G-CP1-106	140.69	446.28	0.315250515	0.06099	0.00186	0.62081	0.0173	0.07383	0.00091	639	67	490	11	459	5	459	5	106.75%
G-CP1-107	132.76	122.24	1.086060209	0.06634	0.00161	1.18375	0.02792	0.12941	0.00166	817	28	793	13	784	9	784	9	101.15%
G-CP1-108	257.32	230.56	1.116065232	0.06864	0.0014	1.264	0.02514	0.13353	0.00163	888	22	830	11	808	9	808	9	102.72%
G-CP1-109	123.38	202.55	0.609133547	0.16203	0.00289	9.09116	0.15886	0.40687	0.00483	2477	15	2347	16	2201	22	2477	15	112.54%

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G-CP2-01	213.68	272.12	0.785241805	0.1637	0.00196	9.55922	0.11233	0.42342	0.00438	2494	9	2393	11	2276	20	2494	9	109.58%
G-CP2-02	132.89	154.59	0.859628695	0.05764	0.00095	0.66952	0.01067	0.08423	0.00092	516	17	520	6	521	5	521	5	99.81%
G-CP2-03	180.3	255.6	0.705399061	0.06073	0.00084	0.78524	0.01065	0.09375	0.00099	630	14	588	6	578	6	578	6	101.73%
G-CP2-04	21.82	33.93	0.643088712	0.06459	0.00183	1.13607	0.03106	0.12753	0.00164	761	36	771	15	774	9	774	9	99.61%
G-CP2-05	369.13	663.48	0.556354374	0.05972	0.00075	0.77751	0.00962	0.0944	0.00098	593	12	584	5	582	6	582	6	100.34%
G-CP2-06	131.54	468.23	0.280930312	0.06007	0.00077	0.83932	0.01061	0.10131	0.00106	606	12	619	6	622	6	622	6	99.52%
G-CP2-07	93.64	51.51	1.817899437	0.05949	0.00168	0.75299	0.0206	0.09178	0.00114	585	38	570	12	566	7	566	7	100.71%
G-CP2-08	49.44	107.6	0.459479554	0.06819	0.00111	1.21553	0.01915	0.12925	0.00142	874	16	808	9	784	8	784	8	103.06%
G-CP2-09	50.17	20.98	2.391325071	0.14623	0.00245	6.83752	0.10989	0.33906	0.00406	2302	13	2091	14	1882	20	2302	13	122.32%
G-CP2-10	103.07	669.18	0.154024328	0.06026	0.00077	0.81588	0.01021	0.09817	0.00102	613	12	606	6	604	6	604	6	100.33%
G-CP2-11	86.07	160.91	0.534895283	0.06629	0.00097	1.25248	0.01785	0.13701	0.00147	816	14	825	8	828	8	828	8	99.64%
G-CP2-12	89.9	67.27	1.33640553	0.05964	0.00141	0.78335	0.01799	0.09524	0.00113	591	30	587	10	586	7	586	7	100.17%
G-CP2-13	24.07	55.95	0.430205541	0.06525	0.0013	1.15821	0.02233	0.12872	0.00147	782	22	781	11	781	8	781	8	100.00%
G-CP2-14	110.63	602.47	0.183627401	0.06462	0.00081	1.07149	0.01319	0.12024	0.00125	762	12	739	6	732	7	732	7	100.96%
G-CP2-15	186.86	246.61	0.75771461	0.06567	0.00091	1.11332	0.01504	0.12294	0.0013	796	13	760	7	747	7	747	7	101.74%
G-CP2-16	194.24	156.78	1.238933537	0.0573	0.00098	0.69341	0.01153	0.08776	0.00097	503	19	535	7	542	6	542	6	98.71%
G-CP2-17	626.72	321.54	1.949119861	0.05964	0.00088	0.70357	0.01014	0.08554	0.00092	591	15	541	6	529	5	529	5	102.27%
G-CP2-18	183.77	379.48	0.484267946	0.13755	0.00268	4.76868	0.07699	0.25145	0.00273	2197	35	1779	14	1446	14	2197	35	151.94%
G-CP2-19	89.76	313.23	0.28656259	0.16029	0.00269	9.41351	0.12329	0.42594	0.00446	2459	29	2379	12	2287	20	2459	29	107.52%
G-CP2-20	114.1	141.44	0.806702489	0.0788	0.00128	1.29889	0.02041	0.11952	0.00133	1167	15	845	9	728	8	728	8	116.07%
G-CP2-21	283.23	561.53	0.504389792	0.15391	0.00185	9.7753	0.11608	0.46057	0.00478	2390	9	2414	11	2442	21	2390	9	97.87%
G-CP2-22	898.6	908.86	0.988711133	0.06537	0.00083	1.074	0.01338	0.11914	0.00125	786	12	741	7	726	7	726	7	102.07%
G-CP2-23	512.86	1096.72	0.467630754	0.057	0.00073	0.61482	0.00773	0.07822	0.00082	492	13	487	5	485	5	485	5	100.41%
G-CP2-24	100.11	43.04	2.325975836	0.06866	0.00183	1.21364	0.03116	0.12818	0.00166	889	32	807	14	777	9	777	9	103.86%
G-CP2-25	14.54	272.38	0.053381306	0.06471	0.00114	1.12201	0.01587	0.12575	0.00131	765	38	764	8	764	7	764	7	100.00%
G-CP2-26	84.49	245.37	0.344337124	0.17862	0.00221	12.11845	0.14789	0.492	0.00519	2640	9	2614	11	2579	22	2640	9	102.37%
G-CP2-27	120.69	425.79	0.283449588	0.05806	0.00085	0.68072	0.00975	0.08502	0.00091	532	15	527	6	526	5	526	5	100.19%

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G-CP2-28	137.07	569.87	0.240528542	0.14907	0.00257	5.7332	0.07816	0.27894	0.00295	2335	30	1936	12	1586	15	2335	30	147.23%
G-CP2-29	92.79	161.27	0.575370497	0.09201	0.00133	2.86879	0.04028	0.2261	0.00247	1468	12	1374	11	1314	13	1468	12	111.72%
G-CP2-30	99.6	257.38	0.386976455	0.07332	0.00104	1.67418	0.02327	0.16559	0.00178	1023	13	999	9	988	10	988	10	101.11%
G-CP2-31	63.98	68.41	0.935243385	0.09157	0.00148	3.11783	0.04888	0.24691	0.00278	1458	14	1437	12	1423	14	1458	14	102.46%
G-CP2-32	84.9	238.5	0.355974843	0.05949	0.001	0.79629	0.01308	0.09706	0.00107	585	18	595	7	597	6	597	6	99.66%
G-CP2-33	187.02	299.68	0.62406567	0.0614	0.00097	0.86728	0.01329	0.10243	0.00112	653	16	634	7	629	7	629	7	100.79%
G-CP2-34	98.86	280.13	0.352907579	0.07033	0.00102	1.49298	0.02124	0.15395	0.00167	938	14	928	9	923	9	923	9	100.54%
G-CP2-35	190.93	188.67	1.011978587	0.06621	0.00111	1.17257	0.01919	0.12843	0.00143	813	17	788	9	779	8	779	8	101.16%
G-CP2-36	162.09	520.52	0.311400138	0.06613	0.00092	1.0512	0.01433	0.11527	0.00123	810	13	729	7	703	7	703	7	103.70%
G-CP2-37	295.89	468.47	0.631609281	0.16252	0.00203	7.16672	0.08818	0.3198	0.00337	2482	9	2132	11	1789	16	2482	9	138.74%
G-CP2-38	137.95	232.37	0.593665275	0.06649	0.00106	1.19473	0.01848	0.13031	0.00143	822	16	798	9	790	8	790	8	101.01%
G-CP2-39	218.97	1001.66	0.218607112	0.07342	0.00139	1.37213	0.02157	0.13554	0.00143	1026	39	877	9	819	8	819	8	107.08%
G-CP2-40	299.47	180.81	1.656269012	0.07166	0.00119	1.51319	0.02437	0.15314	0.00172	976	16	936	10	919	10	919	10	101.85%
G-CP2-41	49.54	221.19	0.223970342	0.17545	0.00296	11.51766	0.15139	0.4761	0.00505	2610	29	2566	12	2510	22	2610	29	103.98%
G-CP2-42	451.72	649.47	0.695520963	0.06701	0.00094	0.92141	0.01274	0.09972	0.00107	838	13	663	7	613	6	613	6	108.16%
G-CP2-43	128.39	245.05	0.523933891	0.07021	0.00118	1.52571	0.02497	0.1576	0.00177	935	17	941	10	943	10	943	10	99.79%
G-CP2-44	99.63	134.75	0.739369202	0.06695	0.00145	1.2311	0.02581	0.13336	0.0016	836	24	815	12	807	9	807	9	100.99%
G-CP2-45	111.26	131.48	0.846212352	0.07318	0.00142	1.7586	0.03303	0.17427	0.00205	1019	20	1030	12	1036	11	1019	20	98.36%
G-CP2-46	33.98	52.36	0.648968678	0.06348	0.00243	1.05802	0.03937	0.12087	0.00174	724	54	733	19	736	10	736	10	99.59%
G-CP2-47	87.49	240.76	0.363390929	0.0685	0.00181	1.43747	0.03417	0.1522	0.00174	884	56	905	14	913	10	913	10	99.12%
G-CP2-48	186.67	311.28	0.599685171	0.08118	0.00213	2.2888	0.05417	0.20449	0.00233	1226	53	1209	17	1199	12	1226	53	102.25%
G-CP2-49	168.61	171.99	0.980347695	0.1578	0.00388	9.03412	0.19329	0.41523	0.00504	2432	43	2341	20	2239	23	2432	43	108.62%
G-CP2-50	84.67	248.26	0.341053734	0.16263	0.00211	10.37905	0.133	0.46283	0.00496	2483	10	2469	12	2452	22	2483	10	101.26%
G-CP2-51	39.43	55.83	0.706251119	0.06202	0.00366	0.96139	0.05481	0.11243	0.00174	675	130	684	28	687	10	687	10	99.56%
G-CP2-52	186.02	307.3	0.605336804	0.07613	0.00115	1.90652	0.02824	0.18161	0.002	1098	14	1083	10	1076	11	1098	11	102.04%
G-CP2-53	42.08	140.06	0.300442667	0.0592	0.00145	0.80117	0.01896	0.09815	0.00122	574	30	597	11	604	7	604	7	98.84%
G-CP2-54	100.04	93.72	1.067434913	0.05786	0.00203	0.67603	0.02301	0.08474	0.00116	524	51	524	14	524	7	524	7	100.00%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP2-55	122.35	269.76	0.453551305	0.06682	0.00183	1.30258	0.03245	0.14139	0.00162	832	59	847	14	853	9	853	9	99.30%
G-CP2-56	215.58	238.36	0.904430274	0.16035	0.00378	9.64274	0.19599	0.43614	0.0052	2459	41	2401	19	2333	23	2459	41	105.40%
G-CP2-57	118.26	180.91	0.653695208	0.05885	0.00154	0.68607	0.01749	0.08455	0.00105	562	34	530	11	523	6	523	6	101.34%
G-CP2-58	81.62	75.28	1.084218916	0.07153	0.0018	1.47479	0.0359	0.14954	0.00193	973	29	920	15	898	11	898	11	102.45%
G-CP2-59	522.54	505.27	1.034179745	0.26613	0.00559	21.53434	0.37105	0.58687	0.00703	3283	34	3163	17	2977	29	3283	34	110.28%
G-CP2-60	242.15	285.69	0.847597046	0.06387	0.00108	0.984	0.01625	0.11174	0.00125	737	18	696	8	683	7	683	7	101.90%
G-CP2-61	89.2	114.08	0.781907433	0.05565	0.00198	0.61119	0.02113	0.07964	0.0011	438	52	484	13	494	7	494	7	97.98%
G-CP2-62	1.135	217.39	0.005221031	0.06045	0.0013	0.7733	0.01612	0.09277	0.00111	620	25	582	9	572	7	572	7	101.75%
G-CP2-63	441.7	190.95	2.313170987	0.09235	0.00143	2.84628	0.04321	0.22352	0.00251	1475	14	1368	11	1300	13	1475	14	113.46%
G-CP2-64	43.23	127.79	0.338289381	0.07387	0.00164	1.54062	0.03308	0.15126	0.00186	1038	24	947	13	908	10	908	10	104.30%
G-CP2-65	179.76	377.46	0.476235893	0.08256	0.00119	2.33305	0.03325	0.20495	0.00224	1259	13	1222	10	1202	12	1259	13	104.74%
G-CP2-66	371.69	250.23	1.485393438	0.05765	0.0012	0.73187	0.01482	0.09207	0.00108	516	25	558	9	568	6	568	6	98.24%
G-CP2-67	518.8	710.59	0.730097525	0.13419	0.00313	3.72725	0.0756	0.20145	0.00233	2154	42	1577	16	1183	13	2154	42	182.08%
G-CP2-68	50.8	127.57	0.398212746	0.06201	0.0016	0.87468	0.02192	0.10229	0.00129	674	32	638	12	628	8	628	8	101.59%
G-CP2-69	48.08	99.95	0.48104052	0.07018	0.00155	1.48182	0.03179	0.15313	0.00185	934	25	923	13	918	10	918	10	100.54%
G-CP2-70	89.6	272.07	0.329327011	0.05983	0.00107	0.79697	0.01396	0.0966	0.00109	597	20	595	8	594	6	594	6	100.17%
G-CP2-71	157.74	282.9	0.557582185	0.07012	0.0011	1.49672	0.02312	0.1548	0.00172	932	15	929	9	928	10	928	10	100.11%
G-CP2-72	188.93	446.82	0.42283246	0.06868	0.00173	1.41476	0.03192	0.1494	0.00168	889	53	895	13	898	9	898	9	99.67%
G-CP2-73	293.78	203.16	1.446052373	0.06576	0.00121	1.17873	0.02123	0.13	0.00149	799	20	791	10	788	9	788	9	100.38%
G-CP2-74	61.78	46.41	1.331178625	0.06411	0.00251	1.08114	0.04131	0.12229	0.00175	745	56	744	20	744	10	744	10	100.00%
G-CP2-75	78.44	231.9	0.338249245	0.06934	0.0018	1.46324	0.0341	0.15305	0.00176	909	55	915	14	918	10	918	10	99.67%
G-CP2-76	125.37	557.86	0.224733804	0.05985	0.00091	0.7639	0.01146	0.09257	0.00102	598	16	576	7	571	6	571	6	100.88%
G-CP2-77	401.68	742.61	0.540903031	0.11375	0.00265	3.19115	0.06474	0.20346	0.00232	1860	43	1455	16	1194	12	1860	43	155.78%
G-CP2-78	572.3	419.33	1.364796223	0.07126	0.00104	1.44033	0.02082	0.14658	0.0016	965	14	906	9	882	9	882	9	102.72%
G-CP2-79	18.8	49.28	0.381493506	0.07359	0.00177	1.60871	0.03744	0.15853	0.00203	1030	27	974	15	949	11	949	11	102.63%
G-CP2-80	94.37	135.61	0.695892633	0.18136	0.00247	12.34422	0.16722	0.49363	0.00539	2665	10	2631	13	2586	23	2665	10	103.05%
G-CP2-81	137.12	222.17	0.617185038	0.07234	0.00117	1.54613	0.02465	0.155	0.00174	996	16	949	10	929	10	929	10	102.15%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP2-82	395.53	223.18	1.772246617	0.05923	0.00112	0.71091	0.01314	0.08705	0.00101	576	21	545	8	538	6	538	6	101.30%
G-CP2-83	269.24	431.72	0.623644955	0.05967	0.001	0.68624	0.01129	0.0834	0.00093	592	18	531	7	516	6	516	6	102.91%
G-CP2-84	532.45	653.83	0.814355413	0.06574	0.00099	0.94526	0.01405	0.10427	0.00115	798	15	676	7	639	7	639	7	105.79%
G-CP2-85	139.13	229.04	0.607448481	0.06619	0.00116	1.17226	0.02014	0.12843	0.00146	812	18	788	9	779	8	779	8	101.16%
G-CP2-86	203.73	169.06	1.205075121	0.05965	0.00124	0.72997	0.01479	0.08875	0.00105	591	24	557	9	548	6	548	6	101.64%
G-CP2-87	137.95	273.05	0.505218824	0.16589	0.00335	9.7003	0.16227	0.42409	0.0048	2517	35	2407	15	2279	22	2517	35	110.44%
G-CP2-88	40.23	224.55	0.179158317	0.07291	0.0012	1.61963	0.02626	0.16109	0.00182	1011	16	978	10	963	10	963	10	101.56%
G-CP2-89	133.81	179.25	0.746499303	0.10689	0.00158	4.24796	0.06207	0.28821	0.00321	1747	13	1683	12	1633	16	1747	13	106.98%
G-CP2-90	140.47	205.48	0.683618844	0.05958	0.00122	0.72157	0.01445	0.08783	0.00104	588	24	552	9	543	6	543	6	101.66%
G-CP2-91	230.25	532.91	0.432061699	0.06575	0.00099	1.07111	0.01592	0.11814	0.0013	798	15	739	8	720	7	720	7	102.64%
G-CP2-92	392.31	1538.53	0.254990153	0.09147	0.00186	2.40535	0.04118	0.19073	0.00208	1456	40	1244	12	1125	11	1456	40	129.42%
G-CP2-93	81.93	67.01	1.222653335	0.07284	0.00163	1.71162	0.03735	0.17042	0.00211	1010	25	1013	14	1014	12	1010	25	99.61%
G-CP2-94	54.62	96.61	0.565365904	0.06457	0.00146	1.06013	0.02329	0.11906	0.00146	760	26	734	11	725	8	725	8	101.24%
G-CP2-95	199.89	417.62	0.47864087	0.06812	0.00188	1.38118	0.03473	0.14706	0.00169	872	59	881	15	884	9	884	9	99.66%
G-CP2-96	172.97	542.02	0.319121066	0.1601	0.00303	9.10956	0.13998	0.41266	0.00454	2457	33	2349	14	2227	21	2457	33	110.33%
G-CP2-97	104.04	170.35	0.610742589	0.06665	0.00123	1.24817	0.02253	0.1358	0.00158	827	19	823	10	821	9	821	9	100.24%
G-CP2-98	110.47	106.97	1.032719454	0.0614	0.00139	0.83154	0.01837	0.09821	0.0012	653	27	614	10	604	7	604	7	101.66%
G-CP2-99	85.03	172.13	0.493987103	0.0709	0.00124	1.55423	0.02673	0.15897	0.00183	955	18	952	11	951	10	951	10	100.11%
G-CP2-100	35.24	80.91	0.435545668	0.06962	0.00227	1.51152	0.04553	0.15747	0.00196	917	69	935	18	943	11	943	11	99.15%
G-CP2-101	30.36	24.3	1.249382716	0.13937	0.00535	7.69587	0.27153	0.40047	0.00604	2219	68	2196	32	2171	28	2219	68	102.21%
G-CP2-102	72.73	56.25	1.292977778	0.05763	0.00206	0.69561	0.02428	0.08753	0.00122	516	52	536	15	541	7	541	7	99.08%
G-CP2-103	345.93	508	0.680964567	0.07367	0.00111	1.52181	0.02271	0.1498	0.00166	1032	14	939	9	900	9	900	9	104.33%
G-CP2-104	207.55	302.88	0.685254886	0.06904	0.00233	1.44878	0.04561	0.15218	0.00183	900	71	909	19	913	10	913	10	99.56%
G-CP2-105	55.05	59.76	0.921184739	0.07083	0.00194	1.30569	0.03478	0.13367	0.00175	953	33	848	15	809	10	809	10	104.82%
G-CP2-106	94.33	244.07	0.386487483	0.12961	0.00272	6.61539	0.11695	0.37019	0.0042	2093	38	2061	16	2030	20	2093	38	103.10%
G-CP2-107	234.4	291.54	0.804006311	0.07888	0.00123	1.88545	0.02912	0.17334	0.00194	1169	15	1076	10	1030	11	1169	15	113.50%
G-CP2-108	148.37	333.51	0.444874217	0.06683	0.00109	1.15505	0.01868	0.12532	0.00141	832	17	780	9	761	8	761	8	102.50%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP2-109	238.62	89.19	2.675412042	0.08063	0.00163	1.72462	0.03397	0.15511	0.00189	1212	21	1018	13	930	11	930	11	109.46%
G-CP2-110	26.58	524.92	0.050636287	0.06954	0.00108	1.3094	0.02016	0.13653	0.00152	915	15	850	9	825	9	825	9	103.03%
G-CP2-111	209.77	654.42	0.320543382	0.06947	0.00105	1.31331	0.01978	0.13708	0.00152	913	15	852	9	828	9	828	9	102.90%
G-CP2-112	138.76	296.3	0.468309146	0.16195	0.0034	8.30212	0.14596	0.3718	0.00426	2476	36	2265	16	2038	20	2476	36	121.49%
G-CP2-113	68.56	274.22	0.250018234	0.0588	0.00156	0.73717	0.01759	0.09093	0.00105	560	59	561	10	561	6	561	6	100.00%

Table S4+5. U-Pb dating results of the zircon from R-CP1 and R-CP2 in Gangma Co area.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP3-01	247.47	237.6	1.041540404	0.06573	0.00095	1.1151	0.01428	0.12304	0.00108	798	13	761	7	748	6	748	6	101.74%
G-CP3-02	189.13	119.64	1.580825811	0.07035	0.00111	1.45736	0.02059	0.15024	0.00136	939	15	913	9	902	8	902	8	101.22%
G-CP3-03	114.38	228.5	0.500568928	0.073	0.00099	1.73048	0.02054	0.1719	0.00149	1014	12	1020	8	1023	8	1014	12	99.12%
G-CP3-04	38.94	104.93	0.371104546	0.06366	0.00121	1.01354	0.01779	0.11545	0.0011	730	21	711	9	704	6	704	6	100.99%
G-CP3-05	3.27	17.47	0.187178019	0.16464	0.00266	10.71851	0.15566	0.47211	0.00488	2504	12	2499	13	2493	21	2504	12	100.44%
G-CP3-06	158.71	762.52	0.208138803	0.05916	0.00101	0.69168	0.01019	0.08479	0.00073	573	38	534	6	525	4	525	4	101.71%
G-CP3-07	620.4	1437.58	0.431558592	0.05814	0.00119	0.58637	0.01082	0.07315	0.00063	535	46	469	7	455	4	455	4	103.08%
G-CP3-08	76.88	553.81	0.138820173	0.06149	0.00098	0.77172	0.01045	0.09103	0.00077	656	35	581	6	562	5	562	5	103.38%
G-CP3-09	281.82	479	0.588350731	0.16208	0.00259	9.08776	0.12086	0.40666	0.00359	2477	28	2347	12	2200	16	2477	28	112.59%
G-CP3-10	154.59	244.6	0.632011447	0.06121	0.00093	0.87536	0.01182	0.1037	0.00092	647	15	638	6	636	5	636	5	100.31%
G-CP3-11	56.5	148.9	0.379449295	0.10212	0.00134	3.81122	0.04319	0.27063	0.00236	1663	10	1595	9	1544	12	1663	10	107.71%
G-CP3-12	104.99	132.31	0.793515229	0.0811	0.0012	2.07333	0.02707	0.1854	0.00167	1224	13	1140	9	1096	9	1224	13	111.68%
G-CP3-13	269	707.3	0.380319525	0.0689	0.00128	1.26494	0.0208	0.13315	0.00116	896	39	830	9	806	7	806	7	102.98%
G-CP3-14	214.41	428.64	0.500209966	0.28284	0.00399	23.65965	0.26305	0.60669	0.00527	3379	23	3254	11	3057	21	3379	23	110.53%
G-CP3-15	348.82	874.54	0.398861116	0.05879	0.00122	0.64382	0.01213	0.07942	0.00069	559	46	505	7	493	4	493	4	102.43%
G-CP3-16	149.85	252.22	0.594124177	0.07294	0.00101	1.60405	0.01937	0.15947	0.00139	1012	12	972	8	954	8	954	8	101.89%
G-CP3-17	58.23	43.19	1.348228757	0.16761	0.00229	10.59195	0.12636	0.45827	0.00424	2534	9	2488	11	2432	19	2534	9	104.19%
G-CP3-18	10.21	79.9	0.127784731	0.06717	0.00161	0.96308	0.02101	0.10399	0.00103	843	51	685	11	638	6	638	6	107.37%
G-CP3-19	84.71	128.04	0.661590128	0.07347	0.00113	1.70507	0.0235	0.16829	0.00151	1027	14	1010	9	1003	8	1027	14	102.39%
G-CP3-20	90.9	422.81	0.214990185	0.12726	0.00181	5.93533	0.06771	0.33825	0.00286	2060	26	1966	10	1878	14	2060	26	109.69%
G-CP3-21	37.13	50.05	0.741858142	0.12973	0.00184	6.71419	0.08383	0.37532	0.00347	2094	10	2074	11	2054	16	2094	10	101.95%
G-CP3-22	275.71	251.94	1.094347861	0.07243	0.00099	1.58351	0.01886	0.15853	0.00138	998	12	964	7	949	8	949	8	101.58%
G-CP3-23	210.15	639.1	0.328821781	0.10484	0.00165	3.99427	0.05285	0.27633	0.00237	1711	30	1633	11	1573	12	1711	30	108.77%
G-CP3-24	95.73	81.43	1.175610954	0.07088	0.00122	1.66741	0.02602	0.1706	0.0016	954	17	996	10	1015	9	954	17	93.99%
G-CP3-25	165.59	140.79	1.176148874	0.0928	0.00123	2.89663	0.03347	0.22636	0.00197	1484	10	1381	9	1315	10	1484	10	112.85%
G-CP3-26	161.57	97	1.665670103	0.0597	0.00128	0.73288	0.01467	0.08902	0.00087	593	27	558	9	550	5	550	5	101.45%
G-CP3-27	317.84	354.07	0.897675601	0.06047	0.00086	0.77239	0.00967	0.09263	0.00081	620	13	581	6	571	5	571	5	101.75%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP3-28	114.42	249.32	0.458928285	0.07449	0.00103	1.64588	0.01988	0.16022	0.00141	1055	12	988	8	958	8	958	8	103.13%
G-CP3-29	257.57	120.5	2.137510373	0.06006	0.00113	0.74207	0.01281	0.0896	0.00085	606	21	564	7	553	5	553	5	101.99%
G-CP3-30	1565.74	713.6	2.194142377	0.06358	0.00087	0.59639	0.0072	0.06802	0.00059	728	12	475	5	424	4	424	4	112.03%
G-CP3-31	141.28	125.58	1.125019908	0.16409	0.00206	10.10227	0.10944	0.44643	0.00387	2498	8	2444	10	2379	17	2498	8	105.00%
G-CP3-32	86.93	490.63	0.17718036	0.07223	0.00113	1.49376	0.01961	0.15	0.00128	992	33	928	8	901	7	901	7	103.00%
G-CP3-33	238.5	268.92	0.886880857	0.07266	0.00098	1.56519	0.01855	0.15621	0.00136	1004	11	957	7	936	8	936	8	102.24%
G-CP3-34	79.82	201.53	0.396070064	0.0728	0.00102	1.67119	0.02052	0.16646	0.00146	1008	12	998	8	993	8	993	8	100.50%
G-CP3-35	222.03	105.06	2.113363792	0.0711	0.00113	1.53896	0.02212	0.15696	0.00143	960	15	946	9	940	8	940	8	100.64%
G-CP3-36	109.18	129.85	0.840816327	0.08005	0.00115	2.11741	0.02688	0.1918	0.00171	1198	12	1154	9	1131	9	1198	12	105.92%
G-CP3-37	165.26	1388.12	0.119053108	0.06058	0.00089	0.74131	0.00905	0.08875	0.00074	624	33	563	5	548	4	548	4	102.74%
G-CP3-38	637.45	460.11	1.385429571	0.07377	0.00096	1.44318	0.01637	0.14187	0.00122	1035	11	907	7	855	7	855	7	106.08%
G-CP3-39	275.02	377.04	0.729418629	0.06222	0.00094	0.82759	0.01115	0.09645	0.00086	682	15	612	6	594	5	594	5	103.03%
G-CP3-40	143.08	404.04	0.354123354	0.06839	0.00128	1.35958	0.02252	0.14418	0.00126	880	40	872	10	868	7	868	7	100.46%
G-CP3-41	94.54	239.92	0.394048016	0.06298	0.00097	1.00144	0.01386	0.1153	0.00103	708	15	705	7	703	6	703	6	100.28%
G-CP3-42	146.35	899.64	0.162676182	0.05821	0.00095	0.60012	0.00836	0.07478	0.00063	537	36	477	5	465	4	465	4	102.58%
G-CP3-43	34.16	227.7	0.150021959	0.16123	0.00224	9.39456	0.10356	0.4226	0.00359	2469	24	2377	10	2272	16	2469	24	108.67%
G-CP3-44	298.6	206.6	1.445304937	0.0588	0.001	0.71049	0.01102	0.08762	0.0008	560	19	545	7	541	5	541	5	100.74%
G-CP3-45	170.67	954.28	0.178846879	0.06966	0.00107	1.2982	0.01667	0.13517	0.00114	918	32	845	7	817	6	817	6	103.43%
G-CP3-46	281.5	397.89	0.707481967	0.11452	0.00143	4.96844	0.05346	0.3146	0.00268	1872	9	1814	9	1763	13	1872	9	106.18%
G-CP3-47	180.37	317.24	0.568560081	0.06359	0.00095	0.98763	0.01313	0.11261	0.001	728	14	698	7	688	6	688	6	101.45%
G-CP3-48	181.09	188.02	0.963142219	0.07227	0.00106	1.55617	0.02036	0.15614	0.00139	994	13	953	8	935	8	935	8	101.93%
G-CP3-49	267.09	239.86	1.113524556	0.05886	0.00097	0.69703	0.01041	0.08588	0.00078	562	17	537	6	531	5	531	5	101.13%
G-CP3-50	390.21	318.91	1.223574049	0.10028	0.00127	3.7552	0.04127	0.27154	0.00233	1629	9	1583	9	1549	12	1629	9	105.16%
G-CP3-51	202.08	465.09	0.434496549	0.07524	0.00144	1.51562	0.02565	0.14609	0.00129	1075	39	937	10	879	7	879	7	106.60%
G-CP3-52	410.15	382.75	1.071587198	0.07216	0.00095	1.48612	0.01708	0.14934	0.00129	990	11	925	7	897	7	897	7	103.12%
G-CP3-53	210.92	270.52	0.779683572	0.07069	0.001	1.43025	0.01793	0.14672	0.0013	948	13	902	7	883	7	883	7	102.15%
G-CP3-54	187.23	509.46	0.367506772	0.06849	0.00135	1.27835	0.02246	0.13538	0.0012	883	42	836	10	818	7	818	7	102.20%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP3-55	139.35	181.12	0.769379417	0.07183	0.00108	1.52207	0.0204	0.15367	0.00139	981	14	939	8	922	8	922	8	101.84%
G-CP3-56	144.56	388.59	0.372011632	0.06213	0.00089	0.81514	0.01034	0.09514	0.00084	679	13	605	6	586	5	586	5	103.24%
G-CP3-57	163.03	126.33	1.290508984	0.16511	0.00211	10.68841	0.1186	0.46941	0.0041	2509	9	2496	10	2481	18	2509	9	101.13%
G-CP3-58	65.9	91.91	0.717005767	0.06574	0.00123	1.13556	0.01952	0.12526	0.00118	798	21	770	9	761	7	761	7	101.18%
G-CP3-59	188.71	178.33	1.058206695	0.17634	0.00222	11.48434	0.12506	0.47224	0.00408	2619	8	2563	10	2493	18	2619	8	105.05%
G-CP3-60	585	487.18	1.20078821	0.06257	0.00089	0.77009	0.00969	0.08924	0.00079	694	13	580	6	551	5	551	5	105.26%
G-CP3-61	200.21	236.54	0.846410755	0.0648	0.00099	1.12741	0.01545	0.12616	0.00113	768	15	767	7	766	6	766	6	100.13%
G-CP3-62	17.09	49.64	0.344278807	0.06955	0.00178	1.28926	0.03101	0.13441	0.00147	915	32	841	14	813	8	813	8	103.44%
G-CP3-63	202.92	295.22	0.687351805	0.07187	0.001	1.46353	0.01798	0.14766	0.0013	982	12	915	7	888	7	888	7	103.04%
G-CP3-64	233.18	236.96	0.984047941	0.08847	0.00119	2.8888	0.03397	0.23678	0.00207	1393	11	1379	9	1370	11	1393	11	101.68%
G-CP3-65	228.48	704.43	0.324347345	0.0857	0.00146	2.03647	0.02967	0.17235	0.0015	1331	34	1128	10	1025	8	1331	34	129.85%
G-CP3-66	174.3	254.76	0.68417334	0.07121	0.00102	1.49689	0.01902	0.15243	0.00136	963	13	929	8	915	8	915	8	101.53%
G-CP3-67	28.64	211.37	0.135496996	0.07468	0.0011	1.62503	0.02122	0.15779	0.00142	1060	13	980	8	944	8	944	8	103.81%
G-CP3-68	244.72	452.26	0.541104674	0.08497	0.0011	2.21724	0.02506	0.18922	0.00163	1315	10	1186	8	1117	9	1315	10	117.73%
G-CP3-69	173.39	403	0.430248139	0.06937	0.0014	1.38668	0.02507	0.14499	0.00129	910	42	883	11	873	7	873	7	101.15%
G-CP3-70	200.25	411.06	0.48715516	0.16389	0.00207	9.45178	0.10303	0.41819	0.00359	2496	8	2383	10	2252	16	2496	8	110.83%
G-CP3-71	165.87	259.4	0.639437163	0.07286	0.00102	1.62404	0.01999	0.16163	0.00142	1010	12	980	8	966	8	966	8	101.45%
G-CP3-72	174.66	205.62	0.849430989	0.16471	0.0021	10.65987	0.11804	0.46928	0.00407	2505	9	2494	10	2480	18	2505	9	101.01%
G-CP3-73	75.06	165.03	0.454826395	0.07928	0.00113	2.15514	0.02725	0.1971	0.00175	1179	12	1167	9	1160	9	1179	12	101.64%
G-CP3-74	87.99	131.09	0.671218247	0.06634	0.00111	1.14323	0.01727	0.12495	0.00116	817	17	774	8	759	7	759	7	101.98%
G-CP3-75	652.91	810.51	0.805554527	0.07391	0.00096	1.36555	0.01552	0.13398	0.00115	1039	11	874	7	811	7	811	7	107.77%
G-CP3-76	123.31	216.46	0.569666451	0.06063	0.00099	0.80351	0.01188	0.0961	0.00087	626	17	599	7	592	5	592	5	101.18%
G-CP3-77	141.07	125.29	1.125947801	0.06515	0.00109	1.17218	0.01788	0.13046	0.00121	779	17	788	8	790	7	790	7	99.75%
G-CP3-78	221.25	198.93	1.112200271	0.07053	0.00104	1.5521	0.0205	0.15956	0.00142	944	14	951	8	954	8	954	8	99.69%
G-CP3-79	287.29	608.63	0.47202734	0.05806	0.00134	0.69821	0.0148	0.08722	0.00078	532	52	538	9	539	5	539	5	99.81%
G-CP3-80	493.73	610.25	0.80906186	0.12752	0.00258	2.83729	0.05085	0.16137	0.00152	2064	37	1365	13	964	8	964	8	141.60%
G-CP3-81	103.34	136.58	0.756626153	0.16488	0.00216	10.64207	0.12159	0.46801	0.00412	2506	9	2492	11	2475	18	2506	9	101.25%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP3-82	107.6	456.78	0.235561977	0.05896	0.00112	0.66635	0.01115	0.08197	0.00073	565	42	518	7	508	4	508	4	101.97%
G-CP3-83	177.58	112.9	1.572896368	0.05965	0.00127	0.71279	0.01412	0.08665	0.00085	591	26	546	8	536	5	536	5	101.87%
G-CP3-84	293.61	173.62	1.691107015	0.1592	0.00208	9.71583	0.11054	0.44252	0.00387	2447	9	2408	10	2362	17	2447	9	103.60%
G-CP3-85	67	134	0.5	0.17475	0.00234	10.60612	0.12412	0.44008	0.00394	2604	9	2489	11	2351	18	2604	9	110.76%
G-CP3-86	135.06	467.88	0.28866376	0.05962	0.00088	0.70607	0.00926	0.08587	0.00076	590	14	542	6	531	5	531	5	102.07%
G-CP3-87	103.51	367.68	0.281521976	0.06125	0.00091	0.80989	0.01072	0.09588	0.00085	648	14	602	6	590	5	590	5	102.03%
G-CP3-88	81.09	210.69	0.384878257	0.17127	0.00223	11.32152	0.12845	0.47931	0.00418	2570	9	2550	11	2524	18	2570	9	101.82%
G-CP3-89	79.3	63.55	1.247836349	0.09875	0.00151	3.70903	0.05092	0.27235	0.00254	1601	13	1573	11	1553	13	1601	13	103.09%
G-CP3-90	79.35	92.4	0.858766234	0.16179	0.0022	8.6514	0.1034	0.38774	0.00349	2474	9	2302	11	2112	16	2474	9	117.14%
G-CP3-91	193.61	265.68	0.728733815	0.11176	0.0015	4.10395	0.04829	0.26626	0.00234	1828	10	1655	10	1522	12	1828	10	120.11%
G-CP3-92	187.94	395.99	0.474607945	0.15425	0.00201	7.96856	0.09036	0.37458	0.00325	2394	9	2227	10	2051	15	2394	9	116.72%
G-CP3-93	199.42	277.17	0.719486236	0.07098	0.00103	1.35112	0.01747	0.13802	0.00123	957	13	868	8	833	7	833	7	104.20%
G-CP3-94	414.01	1216.67	0.34028126	0.07893	0.00105	1.2397	0.01442	0.11389	0.00099	1170	11	819	7	695	6	695	6	117.84%
G-CP3-95	429.15	1164	0.368685567	0.07364	0.00138	1.53423	0.02528	0.1511	0.00133	1032	39	944	10	907	7	907	7	104.08%
G-CP3-96	75.6	87.24	0.866574966	0.06516	0.00143	1.04794	0.02147	0.11661	0.00117	780	26	728	11	711	7	711	7	102.39%
G-CP3-97	265.77	679.85	0.390924469	0.06269	0.00087	0.84001	0.01034	0.09716	0.00085	698	13	619	6	598	5	598	5	103.51%
G-CP3-98	215.78	210.4	1.025570342	0.07034	0.00105	1.47326	0.01961	0.15187	0.00137	938	14	919	8	911	8	911	8	100.88%
G-CP3-99	244.98	348.72	0.702512044	0.07229	0.00101	1.58067	0.01944	0.15854	0.0014	994	12	963	8	949	8	949	8	101.48%
G-CP3-100	203.61	186.41	1.092269728	0.16817	0.00222	11.04108	0.12783	0.47607	0.00418	2540	9	2527	11	2510	18	2540	9	101.20%
G-CP3-101	85.84	186.16	0.461108724	0.29498	0.00387	26.53555	0.30495	0.65228	0.00572	3444	8	3366	11	3237	22	3444	8	106.39%
G-CP3-102	74.84	152.14	0.491915341	0.1051	0.00151	3.78899	0.04829	0.26142	0.00237	1716	11	1590	10	1497	12	1716	11	114.63%
G-CP3-103	335.29	146.55	2.287888093	0.07101	0.0011	1.5326	0.02144	0.1565	0.00143	958	15	944	9	937	8	937	8	100.75%
G-CP3-104	158.89	287.41	0.552833931	0.05877	0.00094	0.70422	0.01019	0.08689	0.00079	559	17	541	6	537	5	537	5	100.74%
G-CP3-105	253.83	249.41	1.017721824	0.07134	0.00107	1.56378	0.02106	0.15895	0.00144	967	14	956	8	951	8	951	8	100.53%
G-CP3-106	106.7	713.74	0.149494214	0.07052	0.00112	1.34997	0.01803	0.13884	0.00119	944	33	868	8	838	7	838	7	103.58%
G-CP3-107	177.16	373.71	0.474057424	0.07013	0.00189	1.47448	0.03717	0.15249	0.00143	932	56	920	15	915	8	915	8	100.55%
G-CP3-108	458.72	810.8	0.56576221	0.06188	0.00087	0.80111	0.00992	0.09387	0.00083	670	13	597	6	578	5	578	5	103.29%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-CP3-109	184.98	580.32	0.31875517	0.05856	0.00121	0.74622	0.01393	0.09243	0.00083	551	46	566	8	570	5	570	5	99.30%
G-CP3-110	76.07	56.36	1.349716111	0.16243	0.00232	10.50639	0.13335	0.46902	0.00435	2481	10	2480	12	2479	19	2481	10	100.08%
G-CP3-111	74.13	112.69	0.657822344	0.06721	0.0012	1.20329	0.0196	0.12982	0.00124	844	19	802	9	787	7	787	7	101.91%
G-CP3-112	106.82	37.92	2.816983122	0.0744	0.00178	1.61273	0.03624	0.15718	0.00169	1052	28	975	14	941	9	941	9	103.61%
G-CP3-113	114	461.68	0.246924277	0.06185	0.0009	0.90086	0.01173	0.10561	0.00094	669	14	652	6	647	5	647	5	100.77%
G-CP3-114	165.82	252.68	0.656245053	0.06408	0.001	1.06273	0.01498	0.12026	0.00109	744	15	735	7	732	6	732	6	100.41%
G-CP3-115	357.29	465.67	0.767260077	0.19785	0.00355	13.26875	0.20268	0.48641	0.0046	2809	30	2699	14	2555	20	2809	30	109.94%
G-CP3-116	106.1	234.94	0.451604665	0.07382	0.00109	1.70416	0.02244	0.16739	0.00151	1037	13	1010	8	998	8	998	8	101.20%
G-CP3-117	500.05	1027.92	0.486467819	0.1422	0.0019	8.36736	0.09813	0.42667	0.00372	2254	10	2272	11	2291	17	2254	10	98.38%
G-CP3-118	369.72	1235.57	0.299230315	0.11927	0.0016	3.72234	0.04383	0.22631	0.00197	1945	10	1576	9	1315	10	1945	10	147.91%
G-CP3-119	148.27	75.62	1.960724676	0.06755	0.00184	0.80995	0.02099	0.08694	0.00093	855	36	602	12	537	6	537	6	112.10%
G-CP3-120	193.27	199.42	0.969160566	0.16361	0.00223	10.04845	0.12112	0.44533	0.00396	2493	10	2439	11	2374	18	2493	10	105.01%

Table S6. U-Pb dating results of the zircon from G-CP3 in Gangma Co area.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M1-01	176.82	219.06	0.807176116	0.05689	0.00084	0.63802	0.00928	0.08133	0.00089	487	15	501	6	504	5	504	5	99.40%
G-M1-02	134.67	505.32	0.266504393	0.07211	0.00088	1.34105	0.01634	0.13487	0.00143	989	11	864	7	816	8	816	8	105.88%
G-M1-03	24.21	208.81	0.115942723	0.07116	0.00092	1.58261	0.02034	0.16128	0.00173	962	12	963	8	964	10	964	10	99.90%
G-M1-04	114.8	361.52	0.31754813	0.06907	0.00087	1.36083	0.01716	0.14288	0.00153	901	12	872	7	861	9	861	9	101.28%
G-M1-05	44.74	163.13	0.274259793	0.06981	0.00097	1.47451	0.02036	0.15319	0.00167	923	13	920	8	919	9	919	9	100.11%
G-M1-06	351.68	742.57	0.473598449	0.09918	0.00116	1.72536	0.02033	0.12616	0.00134	1609	10	1018	8	766	8	766	8	132.90%
G-M1-07	76.21	191.08	0.398838183	0.34406	0.00384	36.21461	0.40996	0.76335	0.00807	3681	8	3672	11	3657	30	3681	30	100.66%
G-M1-08	165.12	335.39	0.492322371	0.06654	0.00082	1.24794	0.01545	0.13603	0.00145	823	12	822	7	822	8	822	8	100.00%
G-M1-09	51.78	69.32	0.746970571	0.06672	0.00127	1.35498	0.02513	0.14729	0.00174	829	20	870	11	886	10	886	10	98.19%
G-M1-10	327.91	404.25	0.811156463	0.06688	0.00081	1.26761	0.01544	0.13746	0.00146	834	11	831	7	830	8	830	8	100.12%
G-M1-11	393.06	597.45	0.657896058	0.07069	0.00085	1.38265	0.01666	0.14186	0.00151	948	11	882	7	855	9	855	9	103.16%
G-M1-12	151.05	214.48	0.70426147	0.16487	0.00327	9.66005	0.15734	0.42495	0.00481	2506	34	2403	15	2283	22	2506	22	109.77%
G-M1-13	115.02	240.08	0.479090303	0.15662	0.0018	8.94694	0.10393	0.41429	0.00441	2419	9	2333	11	2235	20	2419	20	108.23%
G-M1-14	151.81	233.38	0.650484189	0.1634	0.00187	11.13472	0.129	0.49423	0.00526	2491	9	2534	11	2589	23	2491	23	96.21%
G-M1-15	106.17	198.99	0.533544399	0.07149	0.00091	1.63201	0.0208	0.16557	0.00178	971	12	983	8	988	10	988	10	99.49%
G-M1-16	101.62	147.35	0.689650492	0.15776	0.0032	9.28873	0.15544	0.42703	0.00489	2432	35	2367	15	2292	22	2432	22	106.11%
G-M1-17	204.78	452.61	0.4524425	0.1516	0.00172	9.68256	0.11175	0.46322	0.00491	2364	9	2405	11	2454	22	2364	22	96.33%
G-M1-18	85.43	131.37	0.650300677	0.19222	0.00223	14.44473	0.16973	0.545	0.00585	2761	9	2779	11	2804	24	2761	24	98.47%
G-M1-19	115.96	197.07	0.588420358	0.16184	0.0019	9.92804	0.1178	0.4449	0.00478	2475	9	2428	11	2373	21	2475	21	104.30%
G-M1-20	123.27	443.76	0.277785289	0.15129	0.00173	8.84856	0.10284	0.42419	0.00451	2361	9	2323	11	2279	20	2361	9	103.60%
G-M1-21	324.91	307.24	1.057512043	0.07094	0.00088	1.54345	0.01928	0.15781	0.00169	956	11	948	8	945	9	945	9	100.32%
G-M1-22	80.39	90.51	0.88818915	0.06939	0.00116	1.31248	0.02165	0.13718	0.00156	910	17	851	10	829	9	829	9	102.65%
G-M1-23	579.7	279.98	2.070505036	0.06616	0.00092	1.06121	0.01472	0.11634	0.00127	811	13	734	7	709	7	709	7	103.53%
G-M1-24	141.6	233.41	0.606657812	0.07032	0.00093	1.47061	0.01942	0.15169	0.00165	938	12	918	8	910	9	910	9	100.88%
G-M1-25	34.89	347.93	0.100278792	0.07083	0.00089	1.55462	0.01958	0.15919	0.00171	953	12	952	8	952	10	952	10	100.00%
G-M1-26	46.28	170.72	0.27108716	0.0783	0.00103	2.13484	0.02822	0.19776	0.00216	1154	12	1160	9	1163	12	1154	12	99.23%
G-M1-27	49.12	73.63	0.667119381	0.19311	0.00235	14.12864	0.17349	0.53065	0.00581	2769	9	2758	12	2744	24	2769	9	100.91%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M1-28	60.94	58.9	1.034634975	0.06497	0.00141	1.17936	0.02491	0.13166	0.00159	773	25	791	12	797	9	797	9	99.25%
G-M1-29	131.64	612	0.215098039	0.07801	0.00144	1.94826	0.02911	0.18114	0.00194	1147	37	1098	10	1073	11	1147	37	106.90%
G-M1-30	177.31	158.42	1.119239995	0.1596	0.00193	9.33673	0.11384	0.42429	0.0046	2451	9	2372	11	2280	21	2451	9	107.50%
G-M1-31	140.95	154.86	0.910176934	0.05878	0.00105	0.71791	0.01265	0.08859	0.00102	559	20	549	7	547	6	547	6	100.37%
G-M1-32	177.57	339.95	0.522341521	0.05863	0.00086	0.70416	0.01032	0.08711	0.00096	553	15	541	6	538	6	538	6	100.56%
G-M1-33	304.56	244.92	1.243508084	0.09357	0.00119	3.15773	0.04034	0.24477	0.00266	1499	11	1447	10	1411	14	1499	11	106.24%
G-M1-34	31.08	73.67	0.421881363	0.08101	0.00261	1.86481	0.05511	0.16696	0.00213	1222	65	1069	20	995	12	995	12	107.44%
G-M1-35	33.8	401.28	0.084230463	0.0786	0.00134	2.09949	0.02805	0.19372	0.00206	1162	35	1149	9	1141	11	1162	35	101.84%
G-M1-36	95.03	91.41	1.039601794	0.15961	0.00206	10.27477	0.13294	0.4669	0.0052	2452	10	2460	12	2470	23	2452	10	99.27%
G-M1-37	225.52	279.52	0.806811677	0.07586	0.00105	1.87878	0.02592	0.17963	0.00198	1091	13	1074	9	1065	11	1091	13	102.44%
G-M1-38	108.27	134.76	0.803428317	0.11974	0.0016	6.03068	0.08065	0.36528	0.00408	1952	11	1980	12	2007	19	1952	11	97.26%
G-M1-39	324.16	806.83	0.40176989	0.07173	0.00162	1.47962	0.02916	0.14961	0.00166	978	47	922	12	899	9	899	9	102.56%
G-M1-40	87.59	138.37	0.633012936	0.06553	0.0014	1.1851	0.02471	0.13117	0.00158	791	24	794	11	795	9	795	9	99.87%
G-M1-41	63.94	186.97	0.341979997	0.07146	0.00115	1.56758	0.02491	0.1591	0.00181	971	16	957	10	952	10	952	10	100.53%
G-M1-42	187.52	486.48	0.385462917	0.10868	0.00224	3.62678	0.06258	0.24204	0.00273	1777	38	1555	14	1397	14	1777	38	127.20%
G-M1-43	105.54	124.54	0.847438574	0.05788	0.00179	0.64613	0.01956	0.08097	0.00104	525	44	506	12	502	6	502	6	100.80%
G-M1-44	51.24	125.16	0.409395973	0.06605	0.00178	1.17613	0.03078	0.12915	0.00169	808	33	790	14	783	10	783	10	100.89%
G-M1-45	99.93	51.29	1.948333008	0.05788	0.00274	0.66069	0.03055	0.08279	0.00128	525	74	515	19	513	8	513	8	100.39%
G-M1-46	283.78	408.64	0.694449883	0.2481	0.00307	18.29308	0.22937	0.53478	0.00588	3173	9	3005	12	2762	25	3173	9	114.88%
G-M1-47	109.17	183.56	0.594737416	0.16081	0.00335	9.87132	0.17001	0.44521	0.00521	2464	36	2423	16	2374	23	2464	36	103.79%
G-M1-48	74.2	391.29	0.189629175	0.09579	0.00128	3.04279	0.04078	0.23039	0.00254	1544	11	1418	10	1337	13	1544	11	115.48%
G-M1-49	100.98	189.26	0.533551728	0.06998	0.00125	1.44244	0.02545	0.14949	0.00175	928	18	907	11	898	10	898	10	101.00%
G-M1-50	77.09	67.51	1.141904903	0.15451	0.00466	7.86633	0.21095	0.36926	0.00509	2396	52	2216	24	2026	24	2396	52	118.26%
G-M1-51	242.32	440.61	0.549964821	0.14606	0.00301	5.78632	0.09897	0.28733	0.0033	2300	36	1944	15	1628	17	2300	36	141.28%
G-M1-52	292.42	227.22	1.286946572	0.06748	0.00121	1.21396	0.02156	0.13048	0.00151	853	19	807	10	791	9	791	9	102.02%
G-M1-53	97.71	203.31	0.480596134	0.06261	0.00119	0.92439	0.01727	0.10708	0.00124	695	21	665	9	656	7	656	7	101.37%
G-M1-54	289.6	429.93	0.673598028	0.09975	0.00246	3.74321	0.08134	0.27217	0.00317	1619	47	1581	17	1552	16	1619	47	104.32%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M1-55	57.7	174.52	0.330621132	0.24137	0.00305	19.52943	0.25007	0.58685	0.00649	3129	9	3068	12	2977	26	3129	9	105.11%
G-M1-56	115.49	165.35	0.698457817	0.06725	0.00132	1.33844	0.02582	0.14434	0.00174	846	21	863	11	869	10	869	10	99.31%
G-M1-57	38.8	193.49	0.200527159	0.06539	0.00118	1.18621	0.02107	0.13157	0.00154	787	19	794	10	797	9	797	9	99.62%
G-M1-58	114.78	239.05	0.480150596	0.07571	0.0011	1.89571	0.02756	0.18161	0.00204	1087	14	1080	10	1076	11	1087	14	101.02%
G-M1-59	131.43	253.71	0.518032399	0.08748	0.00119	2.84853	0.03912	0.23617	0.00262	1371	12	1368	10	1367	14	1371	12	100.29%
G-M1-60	30.68	256.59	0.119568183	0.25271	0.00317	22.17315	0.28306	0.63638	0.00698	3202	9	3191	12	3175	27	3202	9	100.85%
G-M1-61	241.94	321.35	0.752886261	0.1317	0.0017	6.12652	0.08033	0.33739	0.00372	2121	10	1994	11	1874	18	2121	10	113.18%
G-M1-62	110.86	69.93	1.585299585	0.10734	0.00168	4.62842	0.07201	0.31275	0.00364	1755	13	1754	13	1754	18	1755	13	100.06%
G-M1-63	100.26	178.16	0.562752582	0.07125	0.00115	1.41287	0.02268	0.14383	0.00165	965	16	894	10	866	9	866	9	103.23%
G-M1-64	276.24	391.52	0.705557826	0.16156	0.00208	10.1792	0.13333	0.45698	0.00504	2472	10	2451	12	2426	22	2472	10	101.90%
G-M1-65	164.7	586.03	0.281043633	0.06937	0.00098	1.35162	0.01915	0.14131	0.00158	910	13	868	8	852	9	852	9	101.88%
G-M1-66	358.81	115.9	3.095858499	0.05822	0.00163	0.69402	0.01902	0.08646	0.00111	538	38	535	11	535	7	535	7	100.00%
G-M1-67	333.8	838.31	0.398182057	0.16836	0.00216	10.58983	0.1382	0.45621	0.00502	2541	10	2488	12	2423	22	2541	10	104.87%
G-M1-68	425.64	714.49	0.595725622	0.05838	0.00087	0.65785	0.00981	0.08173	0.00092	544	15	513	6	506	5	506	5	101.38%
G-M1-69	345.99	299.43	1.155495441	0.05954	0.00104	0.6835	0.01183	0.08325	0.00096	587	19	529	7	515	6	515	6	102.72%
G-M1-70	229.06	344.66	0.664596994	0.0698	0.00114	1.48778	0.02419	0.15459	0.00178	922	16	925	10	927	10	927	10	99.78%
G-M1-71				0.2659	0.00348	24.33034	0.32362	0.66363	0.0074	3282	9	3282	13	3281	29	3282	9	100.03%
G-M1-72	128.65	100.5	1.280099502	0.07204	0.00148	1.65067	0.0334	0.16617	0.002	987	22	990	13	991	11	991	11	99.90%
G-M1-73	76.25	189.74	0.401865711	0.06971	0.0012	1.37511	0.02344	0.14306	0.00166	920	17	878	10	862	9	862	9	101.86%
G-M1-74	218.96	265.52	0.824645978	0.16354	0.00218	8.92885	0.12084	0.39598	0.00442	2493	10	2331	12	2151	20	2493	10	115.90%
G-M1-75	263.32	590.6	0.445851676	0.05903	0.00093	0.65137	0.01024	0.08002	0.00091	568	16	509	6	496	5	496	5	102.62%
G-M1-76	172.27	349.97	0.492242192	0.08659	0.00125	2.75677	0.04004	0.23089	0.00261	1351	13	1344	11	1339	14	1351	13	100.90%
G-M1-77	137.95	909.38	0.15169676	0.06691	0.00095	1.14305	0.01636	0.12389	0.00139	835	14	774	8	753	8	753	8	102.79%
G-M1-78	58.83	347.47	0.169309581	0.05837	0.00097	0.71861	0.01188	0.08929	0.00102	544	18	550	7	551	6	551	6	99.82%
G-M1-79	676.36	242.94	2.784061908	0.16293	0.00226	8.38903	0.11743	0.37342	0.00423	2486	11	2274	13	2045	20	2486	11	121.56%
G-M1-80	44.33	79.95	0.554471545	0.19955	0.0028	15.14045	0.21422	0.55025	0.00633	2823	11	2824	13	2826	26	2823	11	99.89%
G-M1-81	220.72	221.66	0.995759271	0.07678	0.00119	2.00447	0.03102	0.18934	0.00218	1115	15	1117	10	1118	12	1115	15	99.73%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
G-M1-82	109.16	143.21	0.762237274	0.0989	0.0015	3.83132	0.05835	0.28094	0.00324	1603	13	1599	12	1596	16	1603	13	100.44%
G-M1-83	126.02	124.12	1.015307767	0.16513	0.00238	10.36528	0.15078	0.45521	0.00526	2509	11	2468	13	2418	23	2509	11	103.76%
G-M1-84	1033	355.33	2.907156728	0.1109	0.0018	1.1598	0.01861	0.07584	0.00089	1814	14	782	9	471	5	471	5	166.03%
G-M1-85	155.54	167.58	0.928153718	0.07347	0.00134	1.43237	0.02597	0.14137	0.00167	1027	19	903	11	852	9	852	9	105.99%
G-M1-86	110.44	148.5	0.743703704	0.06341	0.00129	1.04002	0.02097	0.11895	0.00142	722	23	724	10	725	8	725	8	99.86%
G-M1-87	163.89	1223.13	0.133992298	0.0686	0.00099	1.22081	0.0179	0.12906	0.00146	887	14	810	8	783	8	783	8	103.45%
G-M1-88	271.92	403.72	0.673536114	0.07192	0.00117	1.15546	0.01871	0.11651	0.00135	984	16	780	9	710	8	710	8	109.86%
G-M1-89	79.99	126.01	0.63479089	0.06471	0.00121	1.19032	0.02212	0.13339	0.00159	765	20	796	10	807	9	807	9	98.64%
G-M1-90	84.16	235.44	0.357458376	0.30997	0.00436	26.29321	0.37553	0.61513	0.00707	3521	10	3358	14	3091	28	3521	10	112.91%
G-M1-91	316.07	393.41	0.8034112	0.16403	0.0039	9.68875	0.19711	0.42838	0.00526	2498	41	2406	19	2298	24	2498	41	108.70%
G-M1-92	122.48	211.63	0.578745924	0.10291	0.00266	4.20667	0.09598	0.29648	0.0036	1677	49	1675	19	1674	18	1677	49	100.18%
G-M1-93	207.28	273.75	0.757187215	0.07104	0.00125	1.35715	0.02368	0.13854	0.00164	959	18	871	10	836	9	836	9	104.19%
G-M1-94	126.48	350.09	0.361278528	0.07214	0.00115	1.52028	0.02425	0.15282	0.00177	990	16	939	10	917	10	917	10	102.40%
G-M1-95	228.32	157.58	1.448914837	0.06845	0.00146	1.06022	0.02226	0.11232	0.00139	882	24	734	11	686	8	686	8	107.00%
G-M1-96	208.39	311.52	0.668945814	0.09677	0.00142	3.6668	0.05443	0.27478	0.00314	1563	13	1564	12	1565	16	1563	13	99.87%
G-M1-97	39.7	68	0.583823529	0.23786	0.00364	18.88591	0.29062	0.57576	0.00697	3106	11	3036	15	2931	29	3106	11	105.97%
G-M1-98	91.57	50.76	1.803979511	0.10503	0.00204	4.40553	0.08424	0.30417	0.00384	1715	18	1713	16	1712	19	1715	18	100.18%
G-M1-99	184.19	322.63	0.570901652	0.16529	0.0024	10.02475	0.14773	0.43978	0.00505	2511	11	2437	14	2350	23	2511	11	106.85%
G-M1-100	190.31	209.71	0.907491298	0.07095	0.00126	1.32299	0.02331	0.13522	0.00161	956	18	856	10	818	9	818	9	104.65%
G-M1-101	66.61	136.16	0.489203878	0.07052	0.0014	1.52751	0.03002	0.15706	0.00191	944	21	941	12	940	11	940	11	100.11%
G-M1-102	340.83	612.9	0.556093979	0.07718	0.00122	1.41108	0.02239	0.13257	0.00154	1126	15	894	9	803	9	803	9	111.33%
G-M1-103	43.11	247.26	0.174350886	0.06302	0.00107	1.00737	0.0171	0.1159	0.00136	709	18	708	9	707	8	707	8	100.14%
G-M1-104	66.04	88.13	0.749347555	0.07064	0.00166	1.35831	0.03139	0.13943	0.00179	947	27	871	14	841	10	841	10	103.57%
G-M1-105	160.24	292.64	0.547566976	0.06777	0.00111	1.33994	0.02217	0.14335	0.00167	862	17	863	10	864	9	864	9	99.88%
G-M1-106	182.92	433.11	0.422340745	0.16372	0.00241	10.08365	0.15088	0.44657	0.00513	2494	12	2442	14	2380	23	2494	12	104.79%
G-M1-107	400.38	341.1	1.173790677	0.07406	0.00149	0.55498	0.01109	0.05434	0.00066	1043	22	448	7	341	4	341	4	131.38%
G-M1-108	137.72	227.09	0.60645559	0.07212	0.00119	1.65035	0.02745	0.16591	0.00195	989	17	990	11	990	11	990	11	100.00%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M1-109	70.08	384.32	0.182348043	0.07339	0.00118	1.59821	0.02585	0.15789	0.00184	1025	16	970	10	945	10	945	10	102.65%
G-M1-110	58.75	66.07	0.889208415	0.16008	0.00266	9.18466	0.15283	0.41598	0.0051	2457	13	2357	15	2242	23	2457	13	109.59%
G-M1-111	213.1	266.09	0.800856853	0.07546	0.00124	1.90029	0.03142	0.18259	0.00214	1081	16	1081	11	1081	12	1081	16	100.00%
G-M1-112	542.84	361.04	1.503545314	0.05341	0.00107	0.38768	0.00773	0.05263	0.00063	346	24	333	6	331	4	331	4	100.60%
G-M1-113	185.82	616.99	0.301171818	0.16106	0.00241	8.47177	0.12917	0.38135	0.0044	2467	12	2283	14	2083	21	2467	12	118.43%
G-M1-114	164.86	222.29	0.741643799	0.07612	0.00137	1.67276	0.03011	0.15932	0.00192	1098	18	998	11	953	11	953	11	104.72%

Table S7. U-Pb dating results of the zircon from G-M1 in Gangma Co area.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M2-01	234.01	458.31	0.510593267	0.15025	0.00198	9.1552	0.12088	0.44182	0.00479	2349	10	2354	12	2359	21	2349	10	99.58%
G-M2-02	110.12	35.74	3.081141578	0.06701	0.00212	1.15989	0.03559	0.12551	0.00173	838	41	782	17	762	10	762	10	102.62%
G-M2-03	132.28	239.99	0.551189633	0.27413	0.00364	20.66105	0.27439	0.54648	0.00597	3330	9	3123	13	2811	25	3330	9	118.46%
G-M2-04	941.43	845.13	1.113946967	0.0715	0.00108	0.44288	0.00659	0.04491	0.0005	972	14	372	5	283	3	283	3	131.45%
G-M2-05	93.77	85.63	1.095060142	0.05901	0.00135	0.72032	0.01603	0.0885	0.0011	567	27	551	9	547	7	547	7	100.73%
G-M2-06	283.22	301.18	0.940367886	0.06891	0.00255	1.16143	0.04065	0.12223	0.00149	896	78	783	19	743	9	743	9	105.38%
G-M2-07	50.43	275.14	0.183288508	0.06094	0.00098	0.86577	0.01378	0.10301	0.00116	637	17	633	7	632	7	632	7	100.16%
G-M2-08	26.14	33.82	0.772915435	0.07321	0.00189	1.7228	0.04288	0.17062	0.00231	1020	29	1017	16	1016	13	1020	29	100.39%
G-M2-09	155.87	554.97	0.280862029	0.07009	0.00098	1.44391	0.02021	0.14938	0.00164	931	13	907	8	897	9	897	9	101.11%
G-M2-10	236.69	72.27	3.275079563	0.16318	0.00229	10.54135	0.14721	0.46839	0.00524	2489	11	2484	13	2476	23	2489	11	100.53%
G-M2-11	46.93	118.38	0.396435209	0.11281	0.00161	5.24575	0.07427	0.33717	0.00375	1845	12	1860	12	1873	18	1845	12	98.51%
G-M2-12	260.77	571.26	0.456482162	0.06992	0.00098	1.46847	0.02054	0.15228	0.00167	926	13	917	8	914	9	914	9	100.33%
G-M2-13	102.68	300.55	0.341640326	0.0591	0.00098	0.76506	0.01255	0.09386	0.00106	571	18	577	7	578	6	578	6	99.83%
G-M2-14	23.11	38.69	0.597311967	0.07305	0.002	1.6057	0.0428	0.15939	0.00211	1015	33	972	17	953	12	953	12	101.99%
G-M2-15	120.31	119.73	1.004844233	0.05915	0.00131	0.67457	0.01451	0.08269	0.00101	573	26	523	9	512	6	512	6	102.15%
G-M2-16	36.54	84.78	0.430997877	0.07205	0.00147	1.49692	0.02982	0.15065	0.00183	987	22	929	12	905	10	905	10	102.65%
G-M2-17	360.53	458.97	0.785519751	0.06705	0.001	1.066	0.01584	0.11527	0.00128	839	15	737	8	703	7	703	7	104.84%
G-M2-18	211.46	378.75	0.558310231	0.07368	0.00113	1.22108	0.0185	0.12017	0.00135	1033	15	810	8	732	8	732	8	110.66%
G-M2-19	131.2	187.5	0.699733333	0.18303	0.00252	12.41442	0.17042	0.49179	0.00544	2681	10	2636	13	2578	24	2681	10	104.00%
G-M2-20	167.8	288.4	0.581830791	0.07054	0.00106	1.46586	0.02187	0.15067	0.00168	944	14	916	9	905	9	905	9	101.22%
G-M2-21	138.97	151	0.920331126	0.16385	0.0023	10.62333	0.14886	0.47012	0.00525	2496	11	2491	13	2484	23	2496	11	100.48%
G-M2-22	117.31	216.84	0.540997971	0.16129	0.00224	9.46208	0.13129	0.42537	0.00471	2469	11	2384	13	2285	21	2469	11	108.05%
G-M2-23	480.06	602.81	0.796370332	0.09443	0.00135	1.7265	0.02447	0.13256	0.00147	1517	12	1018	9	802	8	802	8	126.93%
G-M2-24	216.45	448.7	0.482393581	0.06946	0.00102	1.37094	0.02004	0.14312	0.00159	912	14	877	9	862	9	862	9	101.74%
G-M2-25	37.4	105.77	0.353597428	0.13271	0.00277	6.44563	0.11176	0.35227	0.00407	2134	37	2039	15	1945	19	2134	37	109.72%
G-M2-26	241.51	108.29	2.230215163	0.07093	0.00135	1.59441	0.02963	0.16299	0.00195	955	20	968	12	973	11	973	11	99.49%
G-M2-27	94.28	79.03	1.192964697	0.06521	0.00156	1.1087	0.02574	0.12327	0.00157	781	28	758	12	749	9	749	9	101.20%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M2-28	182.81	285.63	0.640023807	0.0649	0.00107	1.02208	0.01663	0.11419	0.0013	771	17	715	8	697	8	697	8	102.58%
G-M2-29	119.3	355.37	0.335706447	0.07087	0.0011	1.41583	0.02177	0.14485	0.00163	954	15	896	9	872	9	872	9	102.75%
G-M2-30	57.9	105.07	0.551061197	0.06961	0.00133	1.50375	0.0281	0.15663	0.00186	917	20	932	11	938	10	938	10	99.36%
G-M2-31	260.69	151.81	1.717212305	0.05949	0.00131	0.73932	0.01585	0.09011	0.00111	585	26	562	9	556	7	556	7	101.08%
G-M2-32	57.73	102.56	0.562890016	0.0581	0.00161	0.68861	0.01851	0.08594	0.00113	534	36	532	11	531	7	531	7	100.19%
G-M2-33	48.93	90.8	0.538876652	0.07329	0.00144	1.72161	0.03313	0.17033	0.00205	1022	21	1017	12	1014	11	1022	21	100.79%
G-M2-34	161.06	336.35	0.47884644	0.07063	0.00115	1.17829	0.0189	0.12097	0.00138	947	16	791	9	736	8	736	8	107.47%
G-M2-35	12.87	376.36	0.034195983	0.06892	0.00108	1.42266	0.02198	0.14968	0.00168	896	15	898	9	899	9	899	9	99.89%
G-M2-36	155.32	275.51	0.563754492	0.07086	0.00118	1.5232	0.02493	0.15585	0.00178	953	16	940	10	934	10	934	10	100.64%
G-M2-37	227.56	225.67	1.008375061	0.05983	0.00122	0.57776	0.01152	0.07002	0.00084	597	23	463	7	436	5	436	5	106.19%
G-M2-38	20.06	40.73	0.492511662	0.07071	0.00216	1.6538	0.04908	0.1696	0.00236	949	38	991	19	1010	13	949	38	93.96%
G-M2-39	90.84	80.33	1.130835304	0.06563	0.00155	1.21998	0.02796	0.13478	0.00174	795	27	810	13	815	10	815	10	99.39%
G-M2-40	53.33	136.72	0.390067291	0.0708	0.00133	1.63207	0.03005	0.16716	0.002	952	19	983	12	996	11	996	11	98.69%
G-M2-41	66.66	73.72	0.90423223	0.06592	0.00173	1.24742	0.03179	0.13721	0.00181	804	32	822	14	829	10	829	10	99.16%
G-M2-42	49.12	88.8	0.553153153	0.06841	0.00161	1.44301	0.03307	0.15295	0.00194	881	27	907	14	917	11	917	11	98.91%
G-M2-43	207.48	161.41	1.285422217	0.07788	0.00144	1.6656	0.03014	0.15507	0.00185	1144	18	996	11	929	10	929	10	107.21%
G-M2-44	91.02	169.75	0.536200295	0.06935	0.00128	1.55649	0.02821	0.16274	0.00192	909	19	953	11	972	11	972	11	98.05%
G-M2-45	94.14	250.98	0.375089649	0.17926	0.00258	12.46925	0.17895	0.50438	0.00564	2646	11	2640	13	2633	24	2646	11	100.49%
G-M2-46	426.93	540.81	0.789426971	0.07296	0.00114	1.4897	0.02312	0.14805	0.00168	1013	15	926	9	890	9	890	9	104.04%
G-M2-47	5.79	308.57	0.018763976	0.0573	0.00112	0.6866	0.01317	0.08688	0.00103	503	22	531	8	537	6	537	6	98.88%
G-M2-48	221.59	290.3	0.763313813	0.06846	0.00113	1.37901	0.02248	0.14606	0.00167	883	17	880	10	879	9	879	9	100.11%
G-M2-49	90.71	99.83	0.908644696	0.05668	0.00166	0.6708	0.01908	0.08582	0.00115	479	39	521	12	531	7	531	7	98.12%
G-M2-50	187.98	182.91	1.02771855	0.15962	0.00236	10.24753	0.15086	0.4655	0.00528	2452	12	2457	14	2464	23	2452	12	99.51%
G-M2-51	318.19	1164.95	0.273136186	0.06921	0.00103	1.22302	0.01803	0.12814	0.00143	905	14	811	8	777	8	777	8	104.38%
G-M2-52	165.87	330.68	0.501602758	0.05762	0.00102	0.65623	0.01146	0.08259	0.00095	515	20	512	7	512	6	512	6	100.00%
G-M2-53	55.3	225.07	0.245701337	0.05727	0.00122	0.69026	0.01439	0.08739	0.00106	502	25	533	9	540	6	540	6	98.70%
G-M2-54	120.45	226.54	0.531694182	0.17	0.00248	11.07478	0.1607	0.47238	0.0053	2558	11	2529	14	2494	23	2558	11	102.57%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M2-55	241.39	165.97	1.454419473	0.05689	0.00147	0.54188	0.0136	0.06906	0.0009	487	33	440	9	430	5	430	5	102.33%
G-M2-56	502.02	933.88	0.537563713	0.07096	0.00108	1.17074	0.01763	0.11962	0.00134	956	15	787	8	728	8	728	8	108.10%
G-M2-57	297.12	382.2	0.777394035	0.06632	0.00113	1.14361	0.01917	0.12503	0.00144	816	17	774	9	759	8	759	8	101.98%
G-M2-58	98.54	82.48	1.19471387	0.06273	0.00174	0.74479	0.02002	0.08609	0.00115	699	35	565	12	532	7	532	7	106.20%
G-M2-59	101.43	87.92	1.15366242	0.06949	0.00148	1.52799	0.03168	0.15943	0.00199	913	23	942	13	954	11	954	11	98.74%
G-M2-60	30.84	72.04	0.428095502	0.15746	0.00248	8.89189	0.13832	0.40947	0.00479	2429	12	2327	14	2212	22	2429	12	109.81%
G-M2-61	55.88	71.53	0.781210681	0.18107	0.00508	7.50445	0.18557	0.30058	0.00398	2663	48	2174	22	1694	20	2663	48	157.20%
G-M2-62	139.46	788.59	0.176847284	0.07341	0.00112	1.35983	0.02054	0.13432	0.00151	1025	14	872	9	812	9	812	9	107.39%
G-M2-63	150.72	246.13	0.612359322	0.07339	0.00117	1.72218	0.02714	0.17015	0.00194	1025	15	1017	10	1013	11	1025	15	101.18%
G-M2-64	223.1	447.42	0.498636628	0.26121	0.0038	24.32333	0.35333	0.6752	0.00753	3254	11	3281	14	3326	29	3254	11	97.84%
G-M2-65	102.86	233.1	0.441269841	0.07163	0.00119	1.40526	0.02299	0.14225	0.00164	975	16	891	10	857	9	857	9	103.97%
G-M2-66	86.15	395.37	0.21789716	0.11235	0.00168	4.69834	0.06998	0.30323	0.00341	1838	13	1767	12	1707	17	1838	13	107.67%
G-M2-67	89.12	213.31	0.417795696	0.06827	0.00119	1.31793	0.02259	0.13998	0.00163	877	18	854	10	845	9	845	9	101.07%
G-M2-68	198.36	178.26	1.112756648	0.09888	0.00157	3.64089	0.05726	0.26699	0.00307	1603	14	1559	13	1526	16	1603	14	105.05%
G-M2-69	205.46	293.38	0.700320404	0.15974	0.00238	9.32054	0.13829	0.42307	0.00477	2453	12	2370	14	2274	22	2453	12	107.87%
G-M2-70	501.2	697.74	0.718319145	0.05714	0.00093	0.61191	0.00986	0.07765	0.00088	497	17	485	6	482	5	482	5	100.62%
G-M2-71	55.87	111.66	0.50035823	0.16466	0.00252	10.33996	0.15729	0.45534	0.00522	2504	12	2466	14	2419	23	2504	12	103.51%
G-M2-72	47.24	64.7	0.730139104	0.0635	0.00163	1.16494	0.02891	0.13302	0.00175	725	31	784	14	805	10	805	10	97.39%
G-M2-73	138.19	239.57	0.576825145	0.07124	0.00118	1.55928	0.02552	0.15872	0.00182	964	16	954	10	950	10	950	10	100.42%
G-M2-74	118.38	327.59	0.361366342	0.06996	0.00116	1.33531	0.02185	0.1384	0.00159	927	16	861	10	836	9	836	9	102.99%
G-M2-75	210.51	466.49	0.451263693	0.0652	0.00105	1.1177	0.01778	0.12431	0.00141	781	16	762	9	755	8	755	8	100.93%
G-M2-76	118.41	258.79	0.457552456	0.11216	0.00172	4.63675	0.07077	0.29976	0.0034	1835	13	1756	13	1690	17	1835	13	108.58%
G-M2-77	90.61	100.77	0.899176342	0.12899	0.00207	6.72016	0.1067	0.37778	0.0044	2084	13	2075	14	2066	21	2084	13	100.87%
G-M2-78	114.25	127.46	0.896359642	0.09163	0.00155	3.11659	0.0519	0.24663	0.00289	1460	15	1437	13	1421	15	1460	15	102.74%
G-M2-79	643.76	673.09	0.956424847	0.14873	0.00223	9.16267	0.13668	0.4467	0.00502	2331	12	2354	14	2381	22	2331	12	97.90%
G-M2-80	58.17	203.93	0.285244937	0.06766	0.0012	1.36168	0.02378	0.14594	0.00171	858	18	873	10	878	10	878	10	99.43%
G-M2-81	117.11	179.64	0.651914941	0.1668	0.00257	11.37728	0.17429	0.49458	0.00565	2526	12	2555	14	2590	24	2526	12	97.53%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M2-82	174.32	357.17	0.488058908	0.1823	0.00278	12.41546	0.18859	0.49384	0.00561	2674	12	2636	14	2587	24	2674	12	103.36%
G-M2-83	159.43	440.95	0.361560268	0.17688	0.0027	10.52685	0.15996	0.43156	0.00489	2624	12	2482	14	2313	22	2624	12	113.45%
G-M2-84	85.91	100.13	0.85798462	0.06599	0.0015	1.10903	0.02458	0.12187	0.00154	806	26	758	12	741	9	741	9	102.29%
G-M2-85	92.05	139.1	0.661754134	0.06321	0.00132	1.03702	0.02118	0.11896	0.00145	715	24	722	11	725	8	725	8	99.59%
G-M2-86	32.86	474.16	0.069301502	0.09047	0.00144	2.52531	0.03985	0.2024	0.00232	1435	14	1279	11	1188	12	1435	14	120.79%
G-M2-87	230.29	221.8	1.038277728	0.0637	0.00127	1.02564	0.02001	0.11675	0.0014	732	22	717	10	712	8	712	8	100.70%
G-M2-88	133.22	247.14	0.539046694	0.1779	0.00279	9.68519	0.15083	0.39476	0.00455	2633	12	2405	14	2145	21	2633	12	122.75%
G-M2-89	22.58	81.82	0.275971645	0.06983	0.00171	1.54478	0.03671	0.16041	0.00211	923	28	948	15	959	12	959	12	98.85%
G-M2-90	337.64	207.15	1.629930002	0.05727	0.00122	0.66865	0.01394	0.08466	0.00103	502	25	520	8	524	6	524	6	99.24%
G-M2-91	239.67	381.1	0.628890055	0.06325	0.00114	0.96803	0.01717	0.11097	0.0013	717	19	687	9	678	8	678	8	101.33%
G-M2-92	52.95	319.41	0.165774397	0.07094	0.00126	1.4582	0.02551	0.14905	0.00175	956	18	913	11	896	10	896	10	101.90%
G-M2-93	214.88	365.5	0.587906977	0.07723	0.00128	1.88614	0.03085	0.1771	0.00205	1127	16	1076	11	1051	11	1127	16	107.23%
G-M2-94	81.05	99.33	0.815966979	0.08154	0.00162	2.27107	0.04416	0.20197	0.00249	1234	20	1203	14	1186	13	1234	20	104.05%
G-M2-95	160.19	190.73	0.839878362	0.16207	0.00256	10.01141	0.15686	0.44793	0.00515	2477	13	2436	14	2386	23	2477	13	103.81%
G-M2-96	178.76	188.25	0.949588313	0.06796	0.00129	1.24382	0.0232	0.13271	0.00159	867	20	821	10	803	9	803	9	102.24%
G-M2-97	101.87	446.2	0.228305693	0.07036	0.00117	1.39067	0.02293	0.14332	0.00165	939	17	885	10	863	9	863	9	102.55%
G-M2-98	105.33	100.67	1.046289858	0.07677	0.00262	0.39943	0.01299	0.03773	0.00059	1115	40	341	9	239	4	239	4	142.68%
G-M2-99	208.18	365.21	0.570028203	0.06942	0.00123	1.29973	0.02262	0.13577	0.00159	911	18	846	10	821	9	821	9	103.05%
G-M2-100	91.22	136.27	0.669406326	0.1058	0.00184	4.17487	0.07136	0.28613	0.0034	1728	15	1669	14	1622	17	1728	15	106.54%
G-M2-101	161.69	244.34	0.661741835	0.06943	0.00128	1.43737	0.02609	0.15011	0.00179	912	19	905	11	902	10	902	10	100.33%
G-M2-102	163.17	145.6	1.120673077	0.15902	0.00257	9.59083	0.1537	0.43735	0.00509	2445	13	2396	15	2339	23	2445	13	104.53%
G-M2-103	71.46	455.98	0.1567174	0.06947	0.00123	0.96566	0.01688	0.1008	0.00119	913	18	686	9	619	7	619	7	110.82%
G-M2-104	105.19	184.2	0.571064061	0.0909	0.00158	2.92663	0.05017	0.23346	0.00276	1445	16	1389	13	1353	14	1445	16	106.80%
G-M2-105	208.81	358.87	0.581854153	0.09597	0.00158	3.3172	0.05399	0.25064	0.0029	1547	15	1485	13	1442	15	1547	15	107.28%
G-M2-106	92.19	115.48	0.798320055	0.07602	0.0015	1.97713	0.03807	0.18859	0.00232	1096	20	1108	13	1114	13	1096	20	98.38%
G-M2-107	118.27	797.65	0.148273052	0.1036	0.00166	3.80537	0.06056	0.26637	0.00305	1690	14	1594	13	1522	16	1690	14	111.04%
G-M2-108	133.23	380.47	0.350172155	0.05955	0.00109	0.8434	0.01523	0.10271	0.00121	587	20	621	8	630	7	630	7	98.57%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M2-109	461.44	844.34	0.5465097	0.15047	0.00238	8.47872	0.13369	0.40861	0.00467	2351	13	2284	14	2209	21	2351	13	106.43%
G-M2-110	721.12	512.27	1.407695161	0.16005	0.00255	8.80801	0.13972	0.39907	0.00458	2456	13	2318	14	2165	21	2456	13	113.44%
G-M2-111	101.62	92.97	1.093040766	0.06483	0.00161	1.16641	0.02823	0.13047	0.00168	769	30	785	13	791	10	791	10	99.24%
G-M2-112	337.32	355.29	0.949421599	0.06671	0.00116	1.17759	0.02023	0.12802	0.00149	829	18	790	9	777	9	777	9	101.67%
G-M2-113	371.02	571.84	0.648817851	0.05701	0.00103	0.57367	0.01025	0.07296	0.00086	492	20	460	7	454	5	454	5	101.32%
G-M2-114	33.6	288.48	0.116472546	0.07103	0.00126	1.68026	0.02943	0.17154	0.00202	958	18	1001	11	1021	11	958	18	93.83%
G-M2-115	160.78	125.48	1.281319732	0.05925	0.00149	0.73147	0.01786	0.08953	0.00116	576	31	557	10	553	7	553	7	100.72%
G-M2-116	91.5	176.54	0.518296137	0.10863	0.00185	4.45546	0.07486	0.29742	0.0035	1777	15	1723	14	1679	17	1777	15	105.84%
G-M2-117	43.61	64.79	0.6730977	0.12922	0.00234	6.8744	0.1223	0.38577	0.00474	2087	15	2095	16	2103	22	2087	15	99.24%
G-M2-118	68.58	224.37	0.305655836	0.15226	0.00253	7.41361	0.12179	0.35307	0.00413	2371	14	2163	15	1949	20	2371	14	121.65%
G-M2-119	30.73	69.44	0.442540323	0.06957	0.00158	1.50587	0.03323	0.15697	0.00201	916	25	933	13	940	11	940	11	99.26%
G-M2-120	491.9	355.12	1.385165578	0.16269	0.0027	4.21149	0.06914	0.18772	0.0022	2484	13	1676	13	1109	12	2484	13	223.99%

Table S8. U-Pb dating results of the zircon from G-M2 in Gangma Co area.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M3-01	131.47	174.28	0.754360799	0.13406	0.00167	7.18508	0.0892	0.38866	0.00415	2152	10	2135	11	2117	19	2152	10	101.65%
G-M3-02	41.18	294.17	0.139987082	0.11113	0.00138	4.82222	0.05982	0.31467	0.00335	1818	10	1789	10	1764	16	1818	10	103.06%
G-M3-03	59.77	162.09	0.368745759	0.11183	0.00144	5.01476	0.06428	0.3252	0.0035	1829	10	1822	11	1815	17	1829	10	100.77%
G-M3-04	218.47	100.55	2.172749876	0.1019	0.00146	3.86257	0.05472	0.2749	0.00305	1659	12	1606	11	1566	15	1659	12	105.94%
G-M3-05	142.14	181.88	0.781504289	0.06721	0.00226	1.30528	0.04106	0.14085	0.00167	844	72	848	18	849	9	849	9	99.88%
G-M3-06	289.11	164.08	1.762006338	0.0997	0.00128	3.93062	0.05021	0.28589	0.00306	1618	11	1620	10	1621	15	1618	11	99.81%
G-M3-07	137.08	358.42	0.382456336	0.07045	0.00156	1.41869	0.02725	0.14605	0.00159	942	46	897	11	879	9	879	9	102.05%
G-M3-08	112.72	383.32	0.294062402	0.07268	0.00095	1.51114	0.01971	0.15078	0.00161	1005	12	935	8	905	9	905	9	103.31%
G-M3-09	89.31	93.91	0.951016931	0.07108	0.00116	1.57368	0.0252	0.16055	0.00178	960	16	960	10	960	10	960	10	100.00%
G-M3-10	64.32	77.3	0.832082794	0.06817	0.00115	1.41162	0.0234	0.15016	0.00169	874	17	894	10	902	9	902	9	99.11%
G-M3-11	30.82	25.45	1.211001965	0.18715	0.00263	13.53201	0.1873	0.52434	0.00602	2717	10	2718	13	2718	25	2717	10	99.96%
G-M3-12	224.09	776.14	0.288723684	0.07077	0.00145	1.20992	0.02104	0.124	0.00133	951	43	805	10	754	8	754	8	106.76%
G-M3-13	121.58	95.56	1.272289661	0.09904	0.00138	3.86242	0.05312	0.2828	0.00311	1606	12	1606	11	1605	16	1606	12	100.06%
G-M3-14	65.92	139.89	0.471227393	0.07305	0.00201	1.49847	0.03746	0.14877	0.00173	1015	57	930	15	894	10	894	10	104.03%
G-M3-15	131.12	106.92	1.226337449	0.07119	0.00116	1.57928	0.02537	0.16087	0.00179	963	16	962	10	962	10	962	10	100.00%
G-M3-16	114.37	154.35	0.740978296	0.1585	0.00336	8.55151	0.1522	0.39131	0.00452	2440	37	2291	46	2129	21	2440	37	114.61%
G-M3-17	167.88	432.57	0.388099036	0.05954	0.00154	0.79898	0.0187	0.09732	0.00109	587	58	596	11	599	6	599	6	99.50%
G-M3-18	107.05	216.86	0.493636447	0.08853	0.00123	2.77265	0.03816	0.22712	0.00248	1394	12	1348	10	1319	13	1394	12	105.69%
G-M3-19	18.89	66.72	0.283123501	0.06	0.00169	0.82903	0.02291	0.1002	0.00123	604	39	613	13	616	7	616	7	99.51%
G-M3-20	34.81	50.84	0.684697089	0.06434	0.00225	1.04218	0.03548	0.11746	0.00161	753	49	725	18	716	9	716	9	101.26%
G-M3-21	54.33	243.35	0.223258681	0.06099	0.00098	0.8247	0.01314	0.09805	0.00108	639	17	611	7	603	6	603	6	101.33%
G-M3-22	166.2	139.98	1.187312473	0.09437	0.00143	3.20318	0.04758	0.24614	0.00276	1516	13	1458	11	1419	14	1516	13	106.84%
G-M3-23	138.54	279.09	0.496399011	0.15818	0.00197	8.70235	0.10821	0.39894	0.00428	2436	9	2307	11	2164	20	2436	9	112.57%
G-M3-24	141.69	171.9	0.82425829	0.06613	0.00125	1.22012	0.02248	0.13379	0.00154	810	20	810	10	809	9	809	9	100.12%
G-M3-25	118.83	1205.87	0.098542961	0.09449	0.00114	3.46218	0.04207	0.26571	0.00281	1518	10	1519	10	1519	14	1518	10	99.93%
G-M3-26	182.46	269.21	0.677760856	0.07172	0.00106	1.41669	0.0206	0.14324	0.00157	978	14	896	9	863	9	863	9	103.82%
G-M3-27	212.83	234.53	0.907474524	0.06822	0.00107	1.21042	0.01865	0.12866	0.00142	875	15	805	9	780	8	780	8	103.21%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M3-28	101.52	59.85	1.696240602	0.06873	0.00255	0.75993	0.02769	0.08018	0.00105	891	53	574	16	497	6	497	6	115.49%
G-M3-29	159.29	239.03	0.666401707	0.18698	0.00233	12.79159	0.15949	0.49609	0.00535	2716	9	2664	12	2597	23	2716	9	104.58%
G-M3-30	101.24	103.82	0.975149297	0.06571	0.00158	1.08542	0.02544	0.11978	0.00147	797	29	746	12	729	8	729	8	102.33%
G-M3-31	37.99	733.91	0.05176384	0.10687	0.00172	3.95464	0.0484	0.26837	0.00279	1747	30	1625	10	1533	14	1747	30	113.96%
G-M3-32	106.57	149.97	0.710608788	0.09892	0.00141	3.71088	0.05217	0.27203	0.00301	1604	12	1574	11	1551	15	1604	12	103.42%
G-M3-33	224.94	398.52	0.564438422	0.16834	0.00322	7.3268	0.11386	0.31566	0.00351	2541	33	2152	14	1768	17	2541	33	143.72%
G-M3-34	195.62	370.27	0.528317174	0.06932	0.00178	1.34907	0.03125	0.14116	0.00159	908	54	867	14	851	9	851	9	101.88%
G-M3-35	101.22	190.78	0.530558759	0.16027	0.0032	8.13953	0.13368	0.36833	0.0042	2459	35	2247	15	2022	20	2459	35	121.61%
G-M3-36	59.21	166.28	0.35608612	0.17076	0.00224	10.49111	0.13646	0.44551	0.00491	2565	10	2479	12	2375	22	2565	10	108.00%
G-M3-37	161.58	422.33	0.382591812	0.08557	0.0012	1.7435	0.02417	0.14775	0.00161	1328	12	1025	9	888	9	888	9	115.43%
G-M3-38	69.08	201.77	0.342370025	0.06048	0.00118	0.82123	0.01576	0.09847	0.00113	621	22	609	9	605	7	605	7	100.66%
G-M3-39	65.02	108.91	0.597006703	0.07145	0.00153	1.60288	0.03356	0.16267	0.00196	970	24	971	13	972	11	972	11	99.90%
G-M3-40	71.26	76.26	0.934434828	0.06856	0.00167	1.37791	0.03274	0.14574	0.00178	886	29	880	14	877	10	877	10	100.34%
G-M3-41	119.23	249.24	0.478374258	0.10753	0.00143	4.52072	0.05983	0.30485	0.00332	1758	11	1735	11	1715	16	1758	11	102.51%
G-M3-42	189.1	317.75	0.595121951	0.16307	0.00204	9.97812	0.12493	0.44371	0.00478	2488	9	2433	12	2367	21	2488	9	105.11%
G-M3-43	111.28	451.77	0.24632003	0.07215	0.001	1.4853	0.02045	0.14928	0.00162	990	13	924	8	897	9	897	9	103.01%
G-M3-44	220.15	564.11	0.390260765	0.06078	0.00095	0.83362	0.01278	0.09946	0.0011	631	16	616	7	611	6	611	6	100.82%
G-M3-45	183.86	167.56	1.097278587	0.06632	0.0012	1.23204	0.02197	0.1347	0.00153	816	19	815	10	815	9	815	9	100.00%
G-M3-46	161.77	142.79	1.132922474	0.14803	0.00201	8.7613	0.11811	0.42917	0.00479	2323	10	2313	12	2302	22	2323	10	100.91%
G-M3-47	401.16	236.63	1.695304906	0.06128	0.00121	0.59382	0.0115	0.07027	0.0008	649	23	473	7	438	5	438	5	107.99%
G-M3-48	257.27	671.07	0.383372823	0.05801	0.00092	0.64587	0.01015	0.08074	0.00089	530	17	506	6	501	5	501	5	101.00%
G-M3-49	79.12	139.14	0.568635906	0.07889	0.00122	2.01257	0.03066	0.18499	0.00205	1169	14	1120	10	1094	11	1169	14	106.86%
G-M3-50	298.81	144.23	2.071760383	0.16172	0.00211	10.35898	0.13451	0.46447	0.00509	2474	10	2467	12	2459	22	2474	10	100.61%
G-M3-51	151.72	682.16	0.222411165	0.09125	0.00178	2.79688	0.04559	0.2223	0.0024	1452	38	1355	12	1294	13	1452	38	112.21%
G-M3-52	271.94	374.91	0.725347417	0.06067	0.00097	0.82786	0.01312	0.09894	0.00109	628	17	612	7	608	6	608	6	100.66%
G-M3-53	75.81	366.69	0.206741389	0.11401	0.00148	5.16496	0.06682	0.32851	0.00356	1864	11	1847	11	1831	17	1864	11	101.80%
G-M3-54	96.79	413.35	0.234159913	0.18467	0.00228	11.84277	0.14648	0.46501	0.00497	2695	9	2592	12	2462	22	2695	9	109.46%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M3-55	116.18	367.32	0.316290972	0.18848	0.00326	8.93964	0.12063	0.34399	0.00372	2729	29	2332	12	1906	18	2729	29	143.18%
G-M3-56	109.81	168.3	0.652465835	0.16379	0.00214	10.27801	0.1338	0.45502	0.005	2495	10	2460	12	2418	22	2495	10	103.18%
G-M3-57	199.88	522.66	0.382428347	0.1615	0.00202	8.86147	0.11095	0.39788	0.00427	2471	9	2324	11	2159	20	2471	9	114.45%
G-M3-58	141.57	463.41	0.305496213	0.07497	0.00101	1.56185	0.02094	0.15106	0.00163	1068	12	955	8	907	9	907	9	105.29%
G-M3-59	68.01	52.81	1.287824276	0.07155	0.0021	1.5831	0.04526	0.16044	0.00213	973	37	964	18	959	12	959	12	100.52%
G-M3-60	87.24	395.61	0.220520209	0.06067	0.00095	0.80257	0.01237	0.09592	0.00106	628	16	598	7	590	6	590	6	101.36%
G-M3-61	217.86	254.18	0.857109135	0.08048	0.00117	2.24694	0.03218	0.20243	0.00223	1209	13	1196	10	1188	12	1209	13	101.77%
G-M3-62	499.52	640.89	0.779416124	0.06274	0.00093	0.70452	0.01032	0.08143	0.00089	699	15	541	6	505	5	505	5	107.13%
G-M3-63	75.13	214.65	0.350011647	0.11355	0.00151	5.19741	0.06871	0.33191	0.00362	1857	11	1852	11	1848	18	1857	11	100.49%
G-M3-64	46.67	119.66	0.390021728	0.05783	0.00154	0.68374	0.01786	0.08574	0.00104	523	36	529	11	530	6	530	6	99.81%
G-M3-65	121.76	212.1	0.574068835	0.0656	0.00107	1.18367	0.01908	0.13083	0.00146	794	17	793	9	793	8	793	8	100.00%
G-M3-66	135.2	332.22	0.406959244	0.11352	0.00146	5.18156	0.06665	0.33096	0.00357	1857	10	1850	11	1843	17	1857	10	100.76%
G-M3-67	63.01	292.99	0.215058534	0.06013	0.00091	0.85897	0.01281	0.10359	0.00114	608	15	630	7	635	7	635	7	99.21%
G-M3-68	269.26	445.52	0.604372419	0.1184	0.00149	5.36506	0.06754	0.32858	0.00352	1932	10	1879	11	1831	17	1932	10	105.52%
G-M3-69	96.3	773.17	0.124552168	0.07577	0.00097	1.67646	0.02156	0.16044	0.00172	1089	12	1000	8	959	10	959	10	104.28%
G-M3-70	169.18	123.39	1.371099765	0.06532	0.00131	1.11508	0.02182	0.12379	0.00145	785	22	761	10	752	8	752	8	101.20%
G-M3-71	86.82	302.26	0.287236154	0.07074	0.00108	1.5006	0.02251	0.15381	0.00171	950	15	931	9	922	10	922	10	100.98%
G-M3-72	144.23	234.02	0.616314845	0.09092	0.00122	3.09115	0.04138	0.24651	0.00268	1445	12	1430	10	1420	14	1445	12	101.76%
G-M3-73	289.01	615.73	0.469377812	0.07039	0.00169	1.35924	0.02884	0.14005	0.00156	940	50	872	12	845	9	845	9	103.20%
G-M3-74	46.16	459.54	0.100448274	0.07127	0.001	1.36833	0.01911	0.13922	0.00152	965	13	875	8	840	9	840	9	104.17%
G-M3-75	103.47	236.48	0.437542287	0.18243	0.0023	12.9796	0.16438	0.51589	0.00557	2675	9	2678	12	2682	24	2675	9	99.74%
G-M3-76	256.17	137.42	1.864139135	0.07363	0.00116	1.73667	0.02698	0.17102	0.00191	1031	15	1022	10	1018	11	1031	15	101.28%
G-M3-77	270.94	207.78	1.303975359	0.07169	0.00111	1.53656	0.02355	0.15542	0.00173	977	15	945	9	931	10	931	10	101.50%
G-M3-78	78.34	341.53	0.229379557	0.07236	0.00103	1.65738	0.02333	0.16609	0.00182	996	13	992	9	991	10	991	10	100.10%
G-M3-79	120.24	247.7	0.485425918	0.07321	0.00104	1.70346	0.02395	0.16871	0.00185	1020	13	1010	9	1005	10	1020	13	101.49%
G-M3-80	294.23	1459.99	0.201528778	0.06833	0.00086	1.26195	0.01597	0.13391	0.00143	879	12	829	7	810	8	810	8	102.35%
G-M3-81	97.99	910.05	0.107675402	0.05818	0.00081	0.6617	0.00913	0.08246	0.00089	537	14	516	6	511	5	511	5	100.98%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M3-82	44.16	61.9	0.713408724	0.0678	0.00169	1.33139	0.03225	0.14238	0.00182	862	29	859	14	858	10	858	10	100.12%
G-M3-83	62.06	98.63	0.629220318	0.06596	0.00131	1.20761	0.02353	0.13276	0.00154	805	22	804	11	804	9	804	9	100.00%
G-M3-84	59.96	340.8	0.175938967	0.06957	0.00104	1.44657	0.02147	0.15077	0.00167	916	14	908	9	905	9	905	9	100.33%
G-M3-85	295.85	210.22	1.407335173	0.06931	0.00106	1.45043	0.02196	0.15173	0.00169	908	15	910	9	911	9	911	9	99.89%
G-M3-86	254.83	159.21	1.600590415	0.06647	0.00121	1.11655	0.01996	0.12179	0.00141	821	19	761	10	741	8	741	8	102.70%
G-M3-87	177.59	497.16	0.357208947	0.05831	0.00159	0.63084	0.01563	0.07846	0.00089	542	61	497	10	487	5	487	5	102.05%
G-M3-88	1025.09	823.85	1.244267767	0.15115	0.0019	9.18737	0.11588	0.44074	0.00472	2359	10	2357	12	2354	21	2359	10	100.21%
G-M3-89	127.69	112.08	1.139275517	0.07012	0.00129	1.50914	0.02728	0.15605	0.00181	932	19	934	11	935	10	935	10	99.89%
G-M3-90	122.77	89.06	1.37850887	0.06607	0.00147	1.21593	0.02628	0.13344	0.00164	809	25	808	12	807	9	807	9	100.12%
G-M3-91	172.84	328.37	0.526357463	0.06357	0.001	1.00825	0.01558	0.11501	0.00128	727	16	708	8	702	7	702	7	100.85%
G-M3-92	98.24	111.98	0.877299518	0.07448	0.00126	1.83414	0.03041	0.17856	0.00206	1055	16	1058	11	1059	11	1055	16	99.62%
G-M3-93	150.47	478.57	0.314415864	0.07122	0.00099	1.51763	0.02094	0.15451	0.00169	964	13	938	8	926	9	926	9	101.30%
G-M3-94	147.07	420.84	0.349467731	0.07174	0.00097	1.54786	0.02079	0.15645	0.00169	979	12	950	8	937	9	937	9	101.39%
G-M3-95	185.98	216.35	0.859625607	0.16166	0.00209	10.39266	0.13482	0.46614	0.00506	2473	10	2470	12	2467	22	2473	10	100.24%
G-M3-96	250.28	270.6	0.924907613	0.10248	0.00142	3.96036	0.05454	0.2802	0.00309	1670	12	1626	11	1592	16	1670	12	104.90%
G-M3-97	327.51	521.37	0.628171932	0.07186	0.00101	1.45943	0.02046	0.14726	0.00161	982	13	914	8	886	9	886	9	103.16%
G-M3-98	20.59	78.21	0.263265567	0.15947	0.00237	9.22815	0.13522	0.41958	0.00488	2450	11	2361	13	2259	22	2450	11	108.46%
G-M3-99	245.18	468.38	0.523463854	0.17428	0.00226	9.34453	0.12109	0.38878	0.00422	2599	10	2372	12	2117	20	2599	10	122.77%
G-M3-100	41.53	107.37	0.386793331	0.06724	0.00244	0.82424	0.02805	0.0889	0.00114	845	77	610	16	549	7	549	7	111.11%
G-M3-101	164.4	153.13	1.073597597	0.06774	0.00125	1.33496	0.02412	0.14289	0.00167	861	19	861	10	861	9	861	9	100.00%
G-M3-102	85.23	83.9	1.015852205	0.06753	0.00178	1.19409	0.03066	0.1282	0.00164	854	32	798	14	778	9	778	9	102.57%
G-M3-103	173.33	229.25	0.756074155	0.05727	0.00113	0.63956	0.01233	0.08097	0.00094	502	23	502	8	502	6	502	6	100.00%
G-M3-104	55.34	74.78	0.740037443	0.16174	0.00222	9.92092	0.13554	0.44477	0.00495	2474	10	2427	13	2372	22	2474	10	104.30%
G-M3-105	147.31	463.86	0.317574268	0.06587	0.00104	1.1369	0.01777	0.12514	0.0014	802	16	771	8	760	8	760	8	101.45%
G-M3-106	104.09	137.7	0.755918664	0.06864	0.0013	1.39563	0.02586	0.14742	0.00172	888	20	887	11	886	10	886	10	100.11%
G-M3-107	58.64	52.33	1.120580929	0.15712	0.00237	9.8585	0.14635	0.45496	0.0053	2425	12	2422	14	2417	23	2425	12	100.33%
G-M3-108	284.79	97	2.935979381	0.10336	0.00171	4.20394	0.06807	0.2949	0.00347	1685	14	1675	13	1666	17	1685	14	101.14%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M3-109	207.85	718.72	0.289194679	0.17633	0.00314	9.62491	0.13597	0.39589	0.00431	2619	30	2400	13	2150	20	2619	30	121.81%
G-M3-110	96.37	259.78	0.370967742	0.18057	0.00242	11.8085	0.15814	0.47418	0.00523	2658	10	2589	13	2502	23	2658	10	106.24%
G-M3-111	164.45	367.66	0.447288255	0.07796	0.00115	2.10951	0.03095	0.19619	0.00218	1146	14	1152	10	1155	12	1146	14	99.22%
G-M3-112	91.11	119.26	0.763961093	0.06477	0.00166	1.11931	0.02792	0.1253	0.0016	767	31	763	13	761	9	761	9	100.26%
G-M3-113	98.87	125.29	0.78912922	0.06553	0.00138	1.14639	0.02372	0.12685	0.00149	791	24	776	11	770	9	770	9	100.78%
G-M3-114	852.65	428.16	1.991428438	0.07124	0.00433	1.12358	0.06643	0.11438	0.0016	964	128	765	32	698	9	698	9	109.60%
G-M3-115	107.39	121.39	0.884669248	0.09925	0.00149	3.66787	0.05427	0.26796	0.00302	1610	13	1564	12	1530	15	1610	13	105.23%
G-M3-116	211.07	390.34	0.540733719	0.07023	0.00108	1.4536	0.02208	0.15008	0.00168	935	15	911	9	901	9	901	9	101.11%
G-M3-117	78.26	220.14	0.355501045	0.17988	0.0024	11.77547	0.1572	0.47465	0.00521	2652	10	2587	12	2504	23	2652	10	105.91%
G-M3-118	90.31	225.36	0.400736599	0.18133	0.00244	12.68028	0.1703	0.50705	0.00559	2665	10	2656	13	2644	24	2665	10	100.79%
G-M3-119	93.57	141	0.663617021	0.08984	0.00133	3.05856	0.04493	0.24684	0.00276	1422	13	1422	11	1422	14	1422	13	100.00%
G-M3-120	141.05	368.26	0.383017433	0.07764	0.0018	1.75967	0.03569	0.16437	0.00184	1138	47	1031	13	981	10	981	10	105.10%

Table S9. U-Pb dating results of the zircon from G-M3 in Gangma Co area.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M4-001	114.63	274	0.418357664	0.06604	0.00091	1.20145	0.01476	0.13192	0.00117	808	12	801	7	799	7	799	7	100.25%
G-M4-002	170.46	243.04	0.70136603	0.18417	0.00216	12.08801	0.12272	0.47595	0.00412	2691	8	2611	10	2510	18	2691	8	107.21%
G-M4-003	165.62	177.79	0.931548456	0.07089	0.00125	0.7912	0.01282	0.08093	0.00077	954	18	592	7	502	5	502	5	117.93%
G-M4-004	379.86	178.06	2.133325845	0.05776	0.00109	0.67692	0.01181	0.08499	0.00081	521	22	525	7	526	5	526	5	99.81%
G-M4-005	44.26	98.28	0.45034595	0.19267	0.00234	13.53395	0.1434	0.50937	0.00454	2765	8	2718	10	2654	19	2765	8	104.18%
G-M4-006	358.83	506.87	0.707933001	0.09296	0.00113	3.09964	0.0329	0.24178	0.0021	1487	9	1433	8	1396	11	1487	9	106.52%
G-M4-007	114.51	88.87	1.288511309	0.09639	0.00147	3.3129	0.04568	0.24924	0.00235	1555	13	1484	11	1435	12	1555	13	108.36%
G-M4-008	81.67	48.25	1.692642487	0.072	0.0018	1.65642	0.03948	0.16683	0.00176	986	31	992	15	995	10	995	10	99.70%
G-M4-009	184.69	210.55	0.877178817	0.06831	0.00103	1.29677	0.01776	0.13767	0.00125	878	14	844	8	831	7	831	7	101.56%
G-M4-010	157.38	141.1	1.115379164	0.11574	0.00147	5.1533	0.0576	0.32288	0.00288	1891	9	1845	10	1804	14	1891	9	104.82%
G-M4-011	393.75	268.19	1.468175547	0.07296	0.00275	1.34982	0.04891	0.13418	0.0014	1013	78	867	21	812	8	812	8	106.77%
G-M4-012	424.26	321.4	1.320037337	0.06102	0.00094	0.79852	0.01112	0.0949	0.00086	640	15	596	6	584	5	584	5	102.05%
G-M4-013	326.21	347.08	0.939869771	0.16363	0.00192	10.12059	0.10265	0.44851	0.00387	2494	8	2446	9	2389	17	2494	8	104.40%
G-M4-014	994.89	525.36	1.893730014	0.15053	0.00434	6.82691	0.18146	0.32892	0.00365	2352	50	2089	24	1833	18	2352	50	128.31%
G-M4-015	188.59	354.9	0.531389124	0.16548	0.00196	9.04977	0.09268	0.39658	0.00344	2512	8	2343	9	2153	16	2512	8	116.67%
G-M4-016	61.88	131.14	0.471862132	0.06084	0.00133	0.80771	0.01664	0.09627	0.00095	634	28	601	9	593	6	593	6	101.35%
G-M4-017	437.24	603.93	0.723991191	0.0714	0.00172	1.57759	0.03508	0.16025	0.00149	969	50	961	14	958	8	958	8	100.31%
G-M4-018	121.03	166.6	0.726470588	0.06533	0.00117	1.09612	0.01823	0.12167	0.00115	785	20	751	9	740	7	740	7	101.49%
G-M4-019	77.03	120.93	0.636980071	0.07848	0.00128	1.99981	0.02965	0.18477	0.00174	1159	15	1115	10	1093	9	1159	15	106.04%
G-M4-020	92.79	155.36	0.597257981	0.16266	0.00199	9.8528	0.10494	0.43925	0.0039	2483	8	2421	10	2347	17	2483	8	105.79%
G-M4-021	358.87	1255.71	0.285790509	0.14974	0.00213	5.95802	0.06746	0.28857	0.00249	2343	25	1970	10	1634	12	2343	25	143.39%
G-M4-022	320.28	309.66	1.034295679	0.14513	0.00173	8.06735	0.08375	0.40309	0.00351	2289	8	2239	9	2183	16	2289	8	104.86%
G-M4-023	280.62	301.87	0.929605459	0.06535	0.00103	1.06301	0.01529	0.11795	0.00108	786	16	735	8	719	6	719	6	102.23%
G-M4-024	381.66	453.91	0.840827477	0.07327	0.00095	1.58615	0.01823	0.15698	0.00138	1021	11	965	7	940	8	940	8	102.66%
G-M4-025	148.33	436.86	0.339536694	0.06543	0.0009	1.11219	0.01358	0.12326	0.00109	788	12	759	7	749	6	749	6	101.34%
G-M4-026	29.72	65.93	0.450781132	0.06684	0.00201	1.25294	0.03612	0.13594	0.0015	833	42	825	16	822	9	822	9	100.36%
G-M4-027	121.88	168.34	0.72401093	0.07962	0.00119	2.08388	0.02797	0.1898	0.00175	1188	13	1144	9	1120	9	1188	13	106.07%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M4-028	101.23	127.55	0.793649549	0.07532	0.00129	1.71806	0.02694	0.1654	0.00157	1077	17	1015	10	987	9	987	9	102.84%
G-M4-029	244.71	336.86	0.72644422	0.09425	0.00206	2.35232	0.04647	0.18101	0.00171	1513	42	1228	14	1072	9	1513	42	141.14%
G-M4-030	77.13	832.07	0.092696528	0.07052	0.00103	1.35631	0.01611	0.13949	0.0012	944	31	870	7	842	7	842	7	103.33%
G-M4-031	62.32	108.77	0.572952101	0.05919	0.00164	0.70686	0.01872	0.08661	0.00091	574	39	543	11	535	5	535	5	101.50%
G-M4-032	306.17	248.11	1.234009109	0.07168	0.00106	1.48032	0.0197	0.14976	0.00136	977	14	922	8	900	8	900	8	102.44%
G-M4-033	81.78	219.55	0.372489182	0.0615	0.0012	0.8243	0.01504	0.0972	0.00094	657	23	610	8	598	6	598	6	102.01%
G-M4-034	12.92	433.7	0.029790178	0.09543	0.00129	3.32207	0.03473	0.25247	0.00215	1537	26	1486	8	1451	11	1537	26	105.93%
G-M4-035	99.11	548.16	0.180804874	0.06148	0.00085	0.82883	0.01029	0.09776	0.00087	656	13	613	6	601	5	601	5	102.00%
G-M4-036	178.78	134.11	1.333084781	0.12189	0.00325	5.89261	0.14455	0.35063	0.00369	1984	49	1960	21	1938	18	1984	49	102.37%
G-M4-037	159.08	327.49	0.48575529	0.16342	0.00195	9.77972	0.10114	0.43395	0.00377	2491	8	2414	10	2323	17	2491	8	107.23%
G-M4-038	152.39	291.28	0.523173579	0.11195	0.00139	4.92165	0.05348	0.3188	0.0028	1831	9	1806	9	1784	14	1831	9	102.63%
G-M4-039	111.28	181.37	0.613552407	0.06781	0.00123	1.26065	0.02121	0.13482	0.00127	863	20	828	10	815	7	815	7	101.60%
G-M4-040	652.64	1098.22	0.594270729	0.07134	0.00165	1.53582	0.03263	0.15613	0.00143	967	48	945	13	935	8	935	8	101.07%
G-M4-041	150.82	344.2	0.438175479	0.16629	0.00198	10.48208	0.10834	0.4571	0.00397	2521	8	2478	10	2427	18	2521	8	103.87%
G-M4-042	160.23	155.92	1.027642381	0.16717	0.00206	10.89911	0.11722	0.47279	0.00421	2530	8	2515	10	2496	18	2530	8	101.36%
G-M4-043	266.08	277.78	0.957880337	0.07039	0.00104	1.39628	0.0185	0.14385	0.0013	940	14	887	8	866	7	866	7	102.42%
G-M4-044	119.24	155.31	0.767754813	0.07125	0.00217	1.56978	0.04507	0.1598	0.00162	964	64	958	18	956	9	956	9	100.21%
G-M4-045	313.51	226.78	1.382441132	0.09811	0.00129	3.54372	0.04118	0.26191	0.00234	1589	10	1537	9	1500	12	1589	10	105.93%
G-M4-046	191.73	333.24	0.575351098	0.14956	0.00251	6.11066	0.08577	0.29634	0.00272	2341	29	1992	12	1673	14	2341	29	139.93%
G-M4-047	42.35	690.26	0.061353693	0.08855	0.00122	2.35906	0.02562	0.19322	0.00164	1394	27	1230	8	1139	9	1394	27	122.39%
G-M4-048	375.59	339.79	1.105359192	0.16309	0.00196	9.58678	0.10029	0.42625	0.00372	2488	8	2396	10	2289	17	2488	8	108.69%
G-M4-049	130.56	124.83	1.045902427	0.06579	0.00133	1.17099	0.02216	0.12907	0.00127	800	23	787	10	783	7	783	7	100.51%
G-M4-050	335.88	216.07	1.554496228	0.07277	0.00113	1.5923	0.02237	0.15866	0.00146	1008	15	967	9	949	8	949	8	101.90%
G-M4-051	189.65	148.42	1.27779275	0.0611	0.00142	0.81431	0.01794	0.09665	0.00096	643	30	605	10	595	6	595	6	101.68%
G-M4-052	85.41	828.99	0.103028987	0.09542	0.00133	3.20209	0.03541	0.24339	0.00207	1536	27	1458	9	1404	11	1536	27	109.40%
G-M4-053	232.21	208.28	1.114893413	0.07294	0.00112	1.67835	0.02341	0.16687	0.00154	1012	14	1000	9	995	9	995	9	100.50%
G-M4-054	159.35	734.51	0.216947353	0.0607	0.00086	0.7662	0.0098	0.09153	0.00081	629	14	578	6	565	5	565	5	102.30%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
G-M4-055	517.91	302.77	1.710572382	0.08379	0.00134	1.0933	0.01576	0.09462	0.00089	1288	14	750	8	583	5	583	5	128.64%
G-M4-056	143.83	165.01	0.871644143	0.05891	0.00139	0.69578	0.0156	0.08565	0.00086	564	31	536	9	530	5	530	5	101.13%
G-M4-057	177.93	253.14	0.70289168	0.05837	0.00113	0.69323	0.01249	0.08612	0.00082	544	23	535	7	533	5	533	5	100.38%
G-M4-058	84.84	152.25	0.557241379	0.06939	0.00126	1.55974	0.02626	0.16299	0.00156	910	19	954	10	973	9	973	9	98.05%
G-M4-059	85	124.13	0.684765971	0.06875	0.00144	1.39573	0.02736	0.14722	0.00147	891	24	887	12	885	8	885	8	100.23%
G-M4-060	270.13	893.12	0.302456557	0.21434	0.00299	14.25712	0.15578	0.48242	0.00419	2939	23	2767	10	2538	18	2939	23	115.80%
G-M4-061	224.03	322.74	0.69415009	0.09656	0.00124	3.25555	0.03695	0.24448	0.00216	1559	10	1471	9	1410	11	1559	10	110.57%
G-M4-062	12.97	27.84	0.465876437	0.06076	0.00472	0.89438	0.06856	0.10674	0.00163	631	140	649	37	654	9	654	9	99.24%
G-M4-063	437.66	316.98	1.380718026	0.08204	0.00391	1.17382	0.05419	0.10377	0.0012	1246	96	788	25	636	7	636	7	123.90%
G-M4-064	24.78	25.71	0.963827305	0.10942	0.00321	3.86282	0.10708	0.25601	0.00336	1790	32	1606	22	1469	17	1790	32	121.85%
G-M4-065	248.35	361.56	0.686884611	0.07101	0.001	1.48306	0.0187	0.15145	0.00136	958	13	923	8	909	8	909	8	101.54%
G-M4-066	362.71	294.41	1.231989403	0.12768	0.00159	6.30517	0.06895	0.3581	0.00316	2066	9	2019	10	1973	15	2066	9	104.71%
G-M4-067	48.42	59.37	0.815563416	0.07395	0.00198	1.74983	0.04461	0.17159	0.0019	1040	34	1027	16	1021	10	1040	34	101.86%
G-M4-068	386.39	1033.65	0.373811251	0.10205	0.00176	2.46374	0.03637	0.1751	0.00156	1662	33	1261	11	1040	9	1662	33	159.81%
G-M4-069	53.23	146.14	0.36423977	0.06646	0.00156	0.88323	0.01955	0.09637	0.00098	821	29	643	11	593	6	593	6	108.43%
G-M4-070	224.3	215.14	1.042576927	0.071	0.00114	1.53633	0.02253	0.15692	0.00146	957	16	945	9	940	8	940	8	100.53%
G-M4-071	293.68	321.75	0.912758353	0.05898	0.00108	0.69824	0.01182	0.08585	0.00081	566	21	538	7	531	5	531	5	101.32%
G-M4-072	93.36	182.46	0.511673792	0.06842	0.00137	0.98067	0.01825	0.10394	0.00103	881	22	694	9	637	6	637	6	108.95%
G-M4-073	121.7	250.79	0.485266558	0.06133	0.00114	0.82519	0.01427	0.09757	0.00092	651	21	611	8	600	5	600	5	101.83%
G-M4-074	99.2	129.27	0.767386091	0.17413	0.00341	10.39969	0.17435	0.43315	0.00439	2598	33	2471	16	2320	20	2598	33	111.98%
G-M4-075	208.29	1291.39	0.161291322	0.06593	0.00113	0.89509	0.01314	0.09846	0.00086	804	37	649	7	605	5	605	5	107.27%
G-M4-076	217.9	365.07	0.596871833	0.18688	0.00227	11.74608	0.12433	0.45578	0.00398	2715	8	2584	10	2421	18	2715	8	112.14%
G-M4-077	319.34	417.93	0.764099251	0.16165	0.00196	9.94553	0.10538	0.44615	0.00389	2473	8	2430	10	2378	17	2473	8	103.99%
G-M4-078	133.4	226.59	0.588728541	0.07025	0.00184	1.49541	0.0364	0.1544	0.0015	936	55	929	15	926	8	926	8	100.32%
G-M4-079	110.75	111.9	0.989722967	0.10637	0.00158	4.27604	0.05711	0.29151	0.00277	1738	12	1689	11	1649	14	1738	12	105.40%
G-M4-080	529.31	1007.84	0.525192491	0.15532	0.00264	7.94165	0.11405	0.37083	0.00338	2405	30	2224	13	2033	16	2405	30	118.30%
G-M4-081	384.27	439.69	0.873956651	0.07339	0.00102	1.62468	0.02015	0.16054	0.00144	1025	12	980	8	960	8	960	8	102.08%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M4-082	111.73	209.07	0.534414311	0.18697	0.00233	12.68611	0.13811	0.49203	0.00437	2716	8	2657	10	2579	19	2716	8	105.31%
G-M4-083	117.05	224.74	0.520824063	0.06857	0.00116	1.29981	0.02019	0.13746	0.0013	886	17	846	9	830	7	830	7	101.93%
G-M4-084	307.46	1396.99	0.220087474	0.11085	0.0017	1.58742	0.01998	0.10387	0.00091	1813	28	965	8	637	5	637	5	151.49%
G-M4-085	365.2	209.74	1.741203395	0.11677	0.00394	5.53674	0.17603	0.34389	0.00386	1907	62	1906	27	1905	19	1907	62	100.10%
G-M4-086	24.9	183.85	0.135436497	0.18857	0.00239	13.37848	0.14904	0.51446	0.00464	2730	8	2707	11	2676	20	2730	8	102.02%
G-M4-087	102.49	53.67	1.909632942	0.10003	0.00493	3.92609	0.18629	0.28467	0.0038	1625	94	1619	38	1615	19	1625	94	100.62%
G-M4-088	111.83	224.42	0.498306746	0.06013	0.00157	0.79219	0.01959	0.09553	0.00102	608	35	592	11	588	6	588	6	100.68%
G-M4-089	134.77	597.12	0.225700027	0.18669	0.00228	12.2404	0.13039	0.47545	0.00414	2713	8	2623	10	2507	18	2713	8	108.22%
G-M4-090	196.3	200.51	0.979003541	0.06969	0.00124	1.36715	0.02232	0.14225	0.00137	919	18	875	10	857	8	857	8	102.10%
G-M4-091	89.5	520.8	0.171850998	0.07804	0.00126	1.94724	0.02627	0.18097	0.00159	1148	33	1097	9	1072	9	1148	33	107.09%
G-M4-092	406.62	1684.83	0.241341856	0.05942	0.00084	0.40618	0.00511	0.04957	0.00044	583	13	346	4	312	3	312	3	110.90%
G-M4-093	307.65	242.17	1.27038857	0.05882	0.00135	0.7099	0.0154	0.08752	0.00087	560	30	545	9	541	5	541	5	100.74%
G-M4-094	84.3	151.41	0.556766396	0.07318	0.00222	1.21752	0.0347	0.12066	0.00124	1019	63	809	16	734	7	734	7	110.22%
G-M4-095	302.53	1678.07	0.180284493	0.06267	0.00083	0.67304	0.00792	0.07788	0.00068	697	12	523	5	483	4	483	4	108.28%
G-M4-096	286.14	346.09	0.826779161	0.0727	0.00115	1.50502	0.02169	0.15012	0.00139	1006	15	932	9	902	8	902	8	103.33%
G-M4-097	78.4	99.99	0.784078408	0.05681	0.0025	0.60785	0.02614	0.07759	0.00091	484	74	482	17	482	5	482	5	100.00%
G-M4-098	98.83	118.99	0.830573998	0.15953	0.00335	9.38406	0.17164	0.42662	0.00442	2451	36	2376	17	2290	20	2451	36	107.03%
G-M4-099	151.91	144.18	1.053613539	0.07083	0.00139	1.50921	0.02762	0.1545	0.00153	953	22	934	11	926	9	926	9	100.86%
G-M4-100	545.59	378.76	1.440463618	0.07066	0.0011	1.43912	0.02042	0.14769	0.00136	948	15	905	9	888	8	888	8	101.91%
G-M4-101	69.04	64.46	1.071051815	0.13941	0.00393	6.71733	0.17322	0.34947	0.00401	2220	50	2075	23	1932	19	2220	50	114.91%
G-M4-102	134.16	260.81	0.514397454	0.06059	0.00133	0.78343	0.01616	0.09377	0.00092	625	28	587	9	578	5	578	5	101.56%
G-M4-103	124.48	168.31	0.739587666	0.0725	0.00134	1.64011	0.02809	0.16405	0.00161	1000	19	986	11	979	9	979	9	100.72%
G-M4-104	114.83	137.33	0.836161072	0.06873	0.00145	1.51317	0.02996	0.15964	0.00161	891	24	936	12	955	9	955	9	98.01%
G-M4-105	219.96	109.07	2.016686532	0.10429	0.00164	4.32808	0.06156	0.30092	0.00291	1702	13	1699	12	1696	14	1702	13	100.35%
G-M4-106	173.4	137.93	1.257159429	0.15433	0.00377	8.85962	0.19473	0.41635	0.00445	2394	43	2324	20	2244	20	2394	43	106.68%
G-M4-107	180.72	126.33	1.430539064	0.07156	0.00144	1.50968	0.0284	0.15298	0.00153	973	22	934	11	918	9	918	9	101.74%
G-M4-108	335.29	166.62	2.012303445	0.10024	0.00143	3.79191	0.04836	0.2743	0.00252	1629	11	1591	10	1563	13	1629	11	104.22%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M4-109	3.1	8.31	0.373044525	0.07048	0.01223	1.47955	0.25358	0.15222	0.00471	942	314	922	104	913	26	913	26	100.99%
G-M4-110	536.12	483.23	1.109450986	0.07181	0.00099	1.56716	0.01924	0.15825	0.00141	981	12	957	8	947	8	947	8	101.06%
G-M4-111	154.08	413.62	0.372515836	0.07256	0.00102	1.55478	0.01957	0.15538	0.00139	1002	12	952	8	931	8	931	8	102.26%
G-M4-112	121.58	379.56	0.320318263	0.0617	0.00099	0.73322	0.01072	0.08617	0.00079	664	16	558	6	533	5	533	5	104.69%
G-M4-113	118.3	346.14	0.341769226	0.05979	0.00101	0.75506	0.01174	0.09158	0.00085	596	18	571	7	565	5	565	5	101.06%
G-M4-114	154.12	538.95	0.285963447	0.16286	0.00243	7.35566	0.08845	0.32758	0.00288	2486	26	2156	11	1827	14	2486	26	136.07%
G-M4-115	209.01	277.5	0.753189189	0.06648	0.00102	1.22746	0.01713	0.13389	0.00122	822	15	813	8	810	7	810	7	100.37%
G-M4-116	126.57	117.96	1.072990844	0.06027	0.00158	0.77387	0.01933	0.09312	0.00097	613	36	582	11	574	6	574	6	101.39%
G-M4-117	106.74	186.71	0.571688715	0.07328	0.00113	1.76549	0.02458	0.1747	0.00162	1022	14	1033	9	1038	9	1022	14	98.46%
G-M4-118	81.86	82.77	0.989005678	0.06755	0.00157	1.30194	0.0285	0.13976	0.00146	855	28	847	13	843	8	843	8	100.47%
G-M4-119	132.04	234.94	0.562015834	0.0718	0.00106	1.62445	0.02168	0.16406	0.0015	980	14	980	8	979	8	979	8	100.10%
G-M4-120	44.75	77.15	0.580038885	0.18236	0.0025	12.56709	0.1531	0.49972	0.00471	2674	9	2648	11	2613	20	2674	9	102.33%

Table S10. U-Pb dating results of the zircon from G-M4 in Gangma Co area.

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M5-001	154.03	393.38	0.391555239	0.07111	0.00101	1.57825	0.0203	0.16094	0.00145	961	13	962	8	962	8	962	8	100.00%
G-M5-002	270.5	484.76	0.558008086	0.07083	0.00101	1.53563	0.01969	0.15722	0.00142	953	13	945	8	941	8	941	8	100.43%
G-M5-003	183.9	212.24	0.866471919	0.07033	0.00117	1.44201	0.02195	0.14866	0.00141	938	16	907	9	893	8	893	8	101.57%
G-M5-004	308.7	394.55	0.782410341	0.0706	0.00102	1.50777	0.01962	0.15485	0.0014	946	13	934	8	928	8	928	8	100.65%
G-M5-005	111.09	225.26	0.493163456	0.15465	0.00213	8.81837	0.10936	0.41347	0.00376	2398	10	2319	11	2231	17	2398	10	107.49%
G-M5-006	173.14	413.1	0.419123699	0.07075	0.00105	1.5253	0.02048	0.15633	0.00143	950	14	941	8	936	8	936	8	100.53%
G-M5-007	123.34	308.46	0.399857356	0.16225	0.00221	9.77939	0.11949	0.43706	0.00393	2479	10	2414	11	2337	18	2479	10	106.08%
G-M5-008	46.81	120.37	0.388884273	0.10543	0.00158	3.97767	0.05429	0.27358	0.00255	1722	12	1630	11	1559	13	1722	12	110.46%
G-M5-009	327.41	760.21	0.430683627	0.05813	0.0009	0.67615	0.00961	0.08435	0.00078	535	16	524	6	522	5	522	5	100.38%
G-M5-010	172.16	438.76	0.392378521	0.10633	0.00147	4.51819	0.05599	0.30812	0.00277	1737	11	1734	10	1731	14	1737	11	100.35%
G-M5-011	150.03	146.24	1.025916302	0.09041	0.00137	3.01796	0.04149	0.24204	0.00225	1434	13	1412	10	1397	12	1434	13	102.65%
G-M5-012	166.79	659.18	0.253026487	0.07028	0.00102	1.4757	0.01946	0.15225	0.00139	937	13	920	8	914	8	914	8	100.66%
G-M5-013	47.03	307.16	0.153112384	0.10566	0.00149	4.44764	0.05654	0.30522	0.00277	1726	11	1721	11	1717	14	1726	11	100.52%
G-M5-014	127.46	122.62	1.039471538	0.06986	0.0016	1.37851	0.02973	0.14308	0.00152	924	27	880	13	862	9	862	9	102.09%
G-M5-015	83.44	46.91	1.778725219	0.15971	0.00249	10.00603	0.14186	0.45428	0.00449	2453	12	2435	13	2414	20	2453	12	101.62%
G-M5-016	101.06	461.23	0.219109772	0.07117	0.0011	1.54878	0.02182	0.15781	0.00146	962	15	950	9	945	8	945	8	100.53%
G-M5-017	372.68	629.94	0.5916119	0.06224	0.00101	0.84127	0.01255	0.098	0.00092	682	17	620	7	603	5	603	5	102.82%
G-M5-018	283.75	144	1.970486111	0.07085	0.00131	1.509	0.02597	0.15443	0.00149	953	20	934	11	926	8	926	8	100.86%
G-M5-019	61.27	250.12	0.244962418	0.17851	0.00251	11.99253	0.15192	0.48713	0.00444	2639	10	2604	12	2558	19	2639	10	103.17%
G-M5-020	192.82	501.6	0.384409888	0.10713	0.00153	4.59922	0.05915	0.31131	0.00283	1751	11	1749	11	1747	14	1751	11	100.23%
G-M5-021	114.3	381.12	0.299905542	0.05831	0.00108	0.70615	0.01215	0.08782	0.00085	541	21	542	7	543	5	543	5	99.82%
G-M5-022	487.32	918.52	0.530549144	0.06909	0.00101	1.3252	0.01752	0.13909	0.00126	901	14	857	8	840	7	840	7	102.02%
G-M5-023	257.49	323.14	0.796837284	0.07158	0.00111	1.53366	0.02168	0.15537	0.00143	974	15	944	9	931	8	931	8	101.40%
G-M5-024	77.72	113.33	0.685784876	0.16266	0.00236	10.39441	0.13628	0.46335	0.00431	2483	11	2471	12	2454	19	2483	11	101.18%
G-M5-025	70.96	171.65	0.413399359	0.06829	0.00138	1.35898	0.0257	0.14431	0.00144	877	23	871	11	869	8	869	8	100.23%
G-M5-026	54.27	555.97	0.097613181	0.07003	0.00108	1.4979	0.02098	0.15509	0.00143	929	15	930	9	929	8	929	8	100.11%
G-M5-027	136.59	131.54	1.038391364	0.1614	0.00235	10.4145	0.13716	0.4679	0.00435	2470	11	2472	12	2474	19	2470	11	99.84%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
G-M5-028	166.95	305.66	0.546195119	0.06645	0.00116	1.17163	0.01887	0.12786	0.00123	821	18	787	9	776	7	776	7	101.42%
G-M5-029	369.47	152.8	2.417997382	0.06897	0.00139	1.40935	0.02667	0.14816	0.00147	898	23	893	11	891	8	891	8	100.22%
G-M5-030	111.8	131.45	0.850513503	0.06946	0.00133	1.47744	0.02633	0.15422	0.0015	912	21	921	11	925	8	925	8	99.57%
G-M5-031	273.34	387.21	0.705921851	0.16152	0.00231	10.21526	0.13166	0.4586	0.00416	2472	11	2454	12	2433	18	2472	11	101.60%
G-M5-032	219.4	353.4	0.620826259	0.14346	0.00209	6.38559	0.08396	0.32276	0.00296	2269	11	2030	12	1803	14	2269	11	125.85%
G-M5-033	42.25	336.49	0.125560938	0.07729	0.00142	1.92982	0.03058	0.1811	0.00168	1129	37	1091	11	1073	9	1129	37	105.22%
G-M5-034	242.61	131.82	1.840464269	0.09844	0.0016	3.81851	0.05685	0.28126	0.00271	1595	14	1597	12	1598	14	1595	14	99.81%
G-M5-035	67.48	182.62	0.369510459	0.07089	0.00123	1.54093	0.02472	0.15762	0.00151	954	18	947	10	944	8	944	8	100.32%
G-M5-036	119.44	67.77	1.762431754	0.16519	0.00274	10.58552	0.16021	0.46465	0.00477	2509	13	2487	14	2460	21	2509	13	101.99%
G-M5-037	81.39	178.94	0.4548452	0.27919	0.00404	23.65858	0.30954	0.61446	0.00568	3358	10	3254	13	3088	23	3358	10	108.74%
G-M5-038	231.15	253.81	0.910720618	0.07005	0.00131	1.41784	0.02448	0.14677	0.00145	930	20	896	10	883	8	883	8	101.47%
G-M5-039	130.02	227.02	0.57272487	0.07034	0.00122	1.56576	0.02502	0.1614	0.00153	938	18	957	10	965	8	965	8	99.17%
G-M5-040	124.09	74.02	1.6764388	0.07007	0.00178	1.48568	0.03603	0.15374	0.00162	930	32	925	15	922	9	922	9	100.33%
G-M5-041	80.69	353.49	0.228266712	0.19194	0.00281	13.73862	0.1817	0.51902	0.00478	2759	11	2732	13	2695	20	2759	11	102.37%
G-M5-042	132.18	322.98	0.409251347	0.19117	0.00279	13.87494	0.18321	0.52628	0.00483	2752	11	2741	13	2726	20	2752	11	100.95%
G-M5-043	66.69	73.52	0.907100109	0.06667	0.00199	1.2453	0.03576	0.13543	0.00149	827	41	821	16	819	8	819	8	100.24%
G-M5-044	49.97	663.88	0.075269627	0.06825	0.00109	1.357	0.01983	0.14418	0.00134	876	16	871	9	868	8	868	8	100.35%
G-M5-045	124.76	167.67	0.744080635	0.07308	0.00142	1.66831	0.03012	0.16553	0.00165	1016	21	997	11	987	9	987	9	101.01%
G-M5-046	292.71	306.51	0.954976999	0.06993	0.00118	1.48032	0.02284	0.15351	0.00145	926	17	922	9	921	8	921	8	100.11%
G-M5-047	96.71	42.62	2.269122478	0.06688	0.00257	1.30636	0.04887	0.14164	0.00168	834	58	849	22	854	9	854	9	99.41%
G-M5-048	137.74	529.89	0.259940742	0.07141	0.00114	1.54289	0.02252	0.15668	0.00146	969	15	948	9	938	8	938	8	101.07%
G-M5-049	161.46	520.67	0.310100448	0.16962	0.00251	10.72285	0.1433	0.45839	0.0042	2554	11	2499	12	2432	19	2554	11	105.02%
G-M5-050	85.94	680.5	0.126289493	0.06599	0.00105	0.96979	0.014	0.10657	0.00098	806	16	688	7	653	6	653	6	105.36%
G-M5-051	152.79	219.59	0.695796712	0.07167	0.00137	1.54159	0.02724	0.15597	0.00154	977	20	947	11	934	9	934	9	101.39%
G-M5-052	151	124.7	1.210906175	0.16165	0.00252	8.15797	0.11528	0.36595	0.00347	2473	12	2249	13	2010	16	2473	12	123.03%
G-M5-053	248.54	224.24	1.108366036	0.07317	0.00138	1.5534	0.02704	0.15394	0.00152	1019	20	952	11	923	8	923	8	103.14%
G-M5-054	225.47	244.91	0.920623903	0.07252	0.00132	1.57446	0.02651	0.15743	0.00153	1001	19	960	10	942	9	942	9	101.91%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
G-M5-055	291.49	165.83	1.757763975	0.0726	0.00145	1.37929	0.0256	0.13777	0.00138	1003	22	880	11	832	8	832	8	105.77%
G-M5-056	163.31	701.09	0.232937283	0.06974	0.00135	1.34905	0.02297	0.14029	0.00129	921	41	867	10	846	7	846	7	102.48%
G-M5-057	55.2	227.59	0.242541412	0.10634	0.00204	4.32528	0.07199	0.295	0.00284	1738	36	1698	14	1666	14	1738	36	104.32%
G-M5-058	93.14	342.49	0.271949546	0.28591	0.00429	24.12263	0.32728	0.61181	0.0056	3396	11	3273	13	3077	22	3396	11	110.37%
G-M5-059	149.95	192.03	0.780867573	0.16026	0.00247	10.13795	0.14165	0.45871	0.00428	2458	12	2447	13	2434	19	2458	12	100.99%
G-M5-060	63.94	100.88	0.633822363	0.06953	0.00173	1.45439	0.03405	0.15167	0.00167	915	30	912	14	910	9	910	9	100.22%
G-M5-061	119.37	360.97	0.330692301	0.16312	0.0025	10.1455	0.14088	0.451	0.00418	2488	12	2448	13	2400	19	2488	12	103.67%
G-M5-062	197.96	252.51	0.783968952	0.09922	0.00162	3.75559	0.0559	0.27448	0.00261	1610	14	1583	12	1564	13	1610	14	102.94%
G-M5-063	183.53	494.08	0.371458063	0.16047	0.00246	9.85678	0.13688	0.44539	0.00412	2461	12	2421	13	2375	18	2461	12	103.62%
G-M5-064	182.5	463.03	0.394142928	0.1658	0.00254	10.64349	0.14761	0.4655	0.00429	2516	12	2493	13	2464	19	2516	12	102.11%
G-M5-065	127.77	137.62	0.928426101	0.16452	0.00264	10.5317	0.15407	0.46419	0.00449	2503	13	2483	14	2458	20	2503	13	101.83%
G-M5-066	101.42	387.11	0.261992715	0.06928	0.00122	1.29413	0.02086	0.13545	0.0013	907	18	843	9	819	7	819	7	102.93%
G-M5-067	40.69	120.2	0.338519135	0.06904	0.00171	1.42976	0.03349	0.15018	0.0016	900	31	901	14	902	9	902	9	99.89%
G-M5-068	405.46	312.38	1.297970421	0.08091	0.00138	2.03437	0.03168	0.18232	0.00175	1219	16	1127	11	1080	10	1219	16	112.87%
G-M5-069	53.56	30.56	1.752617801	0.06637	0.00417	1.11331	0.06872	0.12164	0.00179	818	105	760	33	740	10	740	10	102.70%
G-M5-070	127.35	169.74	0.750265111	0.07123	0.00147	1.36411	0.02621	0.13888	0.0014	964	23	874	11	838	8	838	8	104.30%
G-M5-071	195.46	348.76	0.560442711	0.07063	0.00124	1.47497	0.0237	0.15143	0.00145	947	18	920	10	909	8	909	8	101.21%
G-M5-072	326.45	464.3	0.703101443	0.06985	0.0012	1.40917	0.02215	0.14628	0.00139	924	17	893	9	880	8	880	8	101.48%
G-M5-073	172.9	557.79	0.309973287	0.0689	0.00117	1.24815	0.01941	0.13136	0.00124	896	17	823	9	796	7	796	7	103.39%
G-M5-074	29.41	55.13	0.533466352	0.07278	0.00226	1.6824	0.05005	0.16763	0.00192	1008	42	1002	19	999	11	999	11	100.30%
G-M5-075	107.96	128.25	0.841793372	0.07073	0.00152	1.54932	0.03121	0.15884	0.00163	950	25	950	12	950	9	950	9	100.00%
G-M5-076	197.81	355.99	0.555661676	0.06948	0.00122	1.44598	0.02336	0.15091	0.00144	913	18	908	10	906	8	906	8	100.22%
G-M5-077	214.6	255.43	0.840151901	0.07086	0.00129	1.53117	0.02564	0.15669	0.00152	953	19	943	10	938	8	938	8	100.53%
G-M5-078	104.51	491.03	0.212838319	0.09207	0.00179	3.03673	0.05178	0.23922	0.00224	1469	38	1417	13	1383	12	1469	38	106.22%
G-M5-079	106.22	478.56	0.221957539	0.07262	0.00123	1.62125	0.02508	0.16189	0.00153	1003	17	978	10	967	8	967	8	101.14%
G-M5-080	151.94	178.35	0.851920381	0.07171	0.00129	1.61389	0.02673	0.1632	0.00157	978	19	976	10	975	9	975	9	100.10%
G-M5-081	112.64	231.52	0.486523842	0.06412	0.00194	0.97904	0.02785	0.11074	0.00112	746	65	693	14	677	7	677	7	102.36%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	Age	1σ	
G-M5-082	264.28	559.81	0.472088744	0.09847	0.00158	3.41231	0.04982	0.2513	0.00233	1595	14	1507	11	1445	12	1595	14	110.38%
G-M5-083	229.61	402.2	0.570885132	0.07081	0.0012	1.52082	0.02362	0.15575	0.00147	952	17	939	10	933	8	933	8	100.64%
G-M5-084	82.47	415.08	0.198684591	0.07214	0.00123	1.61999	0.02529	0.16283	0.00154	990	17	978	10	972	9	972	9	100.62%
G-M5-085	400.51	717.08	0.558529034	0.06972	0.0019	1.47177	0.03749	0.15311	0.0015	920	57	919	15	918	8	918	8	100.11%
G-M5-086	162.65	88.01	1.848085445	0.27062	0.00435	25.1978	0.36887	0.67519	0.0064	3310	12	3316	14	3326	25	3310	12	99.52%
G-M5-087	96.47	128.28	0.752026816	0.06729	0.00148	1.26806	0.02602	0.13665	0.00142	847	26	832	12	826	8	826	8	100.73%
G-M5-088	212.39	354.98	0.598315398	0.0573	0.00114	0.63466	0.01171	0.08032	0.00079	503	24	499	7	498	5	498	5	100.20%
G-M5-089	114.21	277.77	0.411167513	0.06772	0.00127	1.19198	0.02064	0.12764	0.00124	860	20	797	10	774	7	774	7	102.97%
G-M5-090	120.1	544.93	0.22039528	0.07018	0.00119	1.46358	0.02274	0.15123	0.00143	934	17	915	9	908	8	908	8	100.77%
G-M5-091	190.6	280.76	0.678871634	0.09185	0.00153	3.17146	0.0483	0.25039	0.00235	1464	15	1450	12	1440	12	1464	15	101.67%
G-M5-092	487.46	729.1	0.668577699	0.1155	0.00188	5.07483	0.07528	0.31862	0.00296	1888	14	1832	13	1783	14	1888	14	105.89%
G-M5-093	134.01	186.62	0.718090237	0.06933	0.00134	1.41661	0.02525	0.14817	0.00146	909	21	896	11	891	8	891	8	100.56%
G-M5-094	180.92	462.04	0.39156783	0.163	0.00266	10.37959	0.15388	0.46176	0.00429	2487	13	2469	14	2447	19	2487	13	101.63%
G-M5-095	318.73	504.53	0.631736468	0.07264	0.00125	1.53635	0.02414	0.15337	0.00145	1004	17	945	10	920	8	920	8	102.72%
G-M5-096	123.99	229.51	0.540237898	0.07171	0.00125	1.61981	0.02596	0.1638	0.00156	978	18	978	10	978	9	978	9	100.00%
G-M5-097	99.07	163.2	0.607046569	0.18132	0.00303	11.80308	0.17956	0.47204	0.0045	2665	13	2589	14	2493	20	2665	13	106.90%
G-M5-098	117.5	171.48	0.685211103	0.10333	0.0018	4.07022	0.06466	0.28565	0.00275	1685	16	1648	13	1620	14	1685	16	104.01%
G-M5-099	303.29	301.4	1.006270737	0.12791	0.00212	6.51343	0.09829	0.36926	0.00345	2069	14	2048	13	2026	16	2069	14	102.12%
G-M5-100	219.26	484.71	0.452352953	0.0718	0.00123	1.34306	0.02094	0.13564	0.00128	980	17	865	9	820	7	820	7	105.49%
G-M5-102	148.56	86.6	1.715473441	0.07031	0.00155	1.51139	0.03126	0.15587	0.00161	937	26	935	13	934	9	934	9	100.11%
G-M5-103	169.09	191.74	0.881871284	0.09984	0.00171	3.78452	0.05904	0.27489	0.00261	1621	16	1589	13	1566	13	1621	16	103.51%
G-M5-104	144.46	87.53	1.650405575	0.06996	0.00156	1.51047	0.03152	0.15658	0.00163	927	26	935	13	938	9	938	9	99.68%
G-M5-105	417.49	598.4	0.697677139	0.13678	0.00317	4.68969	0.09802	0.24867	0.00249	2187	41	1765	17	1432	13	2187	41	152.72%
G-M5-106	41.36	160.69	0.257390006	0.07394	0.00181	1.59789	0.03574	0.15674	0.00156	1040	51	969	14	939	9	939	9	103.19%
G-M5-107	13.32	31.16	0.427471117	0.06927	0.00235	1.44086	0.04703	0.15084	0.00182	907	47	906	20	906	10	906	10	100.00%
G-M5-108	60.3	153.51	0.392808286	0.06091	0.00127	0.86791	0.01688	0.10333	0.00103	636	25	634	9	634	6	634	6	100.00%
G-M5-109	98.54	191.31	0.515080236	0.05777	0.00119	0.66991	0.01287	0.08409	0.00084	521	25	521	8	520	5	520	5	100.19%

Sample No.	Content (ppm)			Corrected ratios						Age (Ma)						Best age		Concordance
	Th	U	Th/U	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$	1 σ	$^{207}\text{Pb}/^{235}\text{U}$	1 σ	$^{206}\text{Pb}/^{238}\text{U}$	1 σ	Age	1 σ	
G-M5-110	117.15	171.18	0.684367333	0.14299	0.00245	5.84625	0.09149	0.2965	0.00282	2264	14	1953	14	1674	14	2264	14	135.24%
G-M5-111	266.84	113.31	2.354955432	0.06093	0.00169	0.70049	0.01848	0.08337	0.00091	637	38	539	11	516	5	516	5	104.46%
G-M5-112	144.33	169.5	0.851504425	0.17325	0.00298	11.83369	0.18585	0.49533	0.00474	2589	14	2591	15	2594	20	2589	14	99.81%
G-M5-113	175.47	139.04	1.262010932	0.1201	0.00212	4.58423	0.07397	0.2768	0.00267	1958	16	1746	13	1575	13	1958	16	124.32%
G-M5-114	373.64	302.35	1.23578634	0.30614	0.00521	28.89774	0.44885	0.68451	0.00647	3502	13	3450	15	3362	25	3502	13	104.16%
G-M5-115	101.61	335.42	0.302933635	0.28649	0.00489	25.41076	0.39572	0.6432	0.00608	3399	13	3324	15	3202	24	3399	13	106.15%
G-M5-116	279.28	294.76	0.947482698	0.08589	0.00154	1.77835	0.02916	0.15016	0.00144	1336	17	1038	11	902	8	902	8	115.08%
G-M5-117	162.85	197.14	0.826062697	0.16525	0.00286	10.81435	0.17104	0.47458	0.00453	2510	14	2507	15	2504	20	2510	14	100.24%
G-M5-118	130.97	208.94	0.626830669	0.15229	0.00266	8.15524	0.13025	0.38832	0.00373	2372	15	2248	14	2115	17	2372	15	112.15%
G-M5-119	87.49	123.81	0.706647282	0.15819	0.0028	8.9465	0.14479	0.41012	0.00399	2436	15	2333	15	2215	18	2436	15	109.98%
G-M5-120	239.41	498.03	0.480714013	0.16385	0.00284	9.97096	0.15746	0.4413	0.00418	2496	14	2432	15	2356	19	2496	14	105.94%
G-M5-121	425.91	926.11	0.459891374	0.15082	0.0026	9.24317	0.14523	0.44443	0.00417	2355	15	2362	14	2370	19	2355	15	99.37%

Table S11. U-Pb dating results of the zircon from G-M5 in Gangma Co area.

No.	Latitude	Longitude	die direction	dip angle	planes
1	33.75876944	84.42664444	201	89	S1
2	33.75867500	84.42658333	209	86	S1
3	33.75838889	84.42640000	15	75	S1
4	33.75816944	84.42648333	26	68	S1
5	33.75795000	84.42656667	6	74	S1
6	33.75779444	84.42652778	7	62	S1
7	33.75748333	84.42645278	356	76	S1
8	33.75725278	84.42641111	5	63	S1
9	33.75701944	84.42636944	352	61	S1
10	33.75691667	84.42637500	12	63	S1
11	33.75660833	84.42639167	199	77	S1
12	33.75649722	84.42640833	193	52	S1
13	33.75605000	84.42646111	185	66	S1
14	33.75616111	84.42646111	190	82	S1
15	33.75571389	84.42646111	201	80	S1
16	33.75557222	84.42646111	188	88	S1
17	33.75528611	84.42646667	206	83	S1
18	33.75484167	84.42659722	216	46	S1
19	33.75461944	84.42659444	201	32	S1
20	33.75439722	84.42658889	192	68	S1
21	33.75433611	84.42657222	188	37	S1
22	33.75415000	84.42651389	182	74	S1
23	33.75398056	84.42646111	194	68	S1
24	33.75363611	84.42636111	28	81	S1
25	33.75347778	84.42627500	32	83	S1

Table S12. Attitude of the S1 foliation in Gangma Co mélange.

No.	Latitude	Longitude	die direction	dip angle	planes
1	33.78508611	84.22957500	329	57	S2
2	33.75380833	84.42641111	262	65	S2
3	33.75506389	84.42653056	202	89	S2
4	33.75582778	84.42646111	188	80	S2
5	33.75631573	84.42643962	22	83	S2
6	33.75635672	84.42643254	35	71	S2
7	33.75763889	84.42648889	180	84	S2
8	33.78511389	84.22957778	13	37	S2
9	33.78514167	84.22958056	336	75	S2
10	33.78531944	84.22958611	202	77	S2
11	33.78531944	84.22958611	202	73	S2
12	33.78616944	84.22960278	187	41	S2
13	33.78634167	84.22958056	315	61	S2
14	33.78636944	84.22958056	286	56	S2
15	33.78642778	84.22956944	185	85	S2
16	33.78642778	84.22956944	26	89	S2
17	33.78651389	84.22956111	199	81	S2
18	33.78675556	84.22974444	25	67	S2
19	33.78678333	84.22974444	29	32	S2
20	33.78680556	84.22978333	62	81	S2
21	33.78693889	84.22986389	324	53	S2
22	33.78695473	84.22991732	38	35	S2
23	33.78699444	84.22986389	346	70	S2
24	33.78707222	84.22994444	163	83	S2
25	33.78720556	84.23002500	325	54	S2
26	33.78723333	84.23002500	349	57	S2
27	33.78763889	84.23026389	344	47	S2

No.	Latitude	Longitude	die direction	dip angle	planes
28	33.78766667	84.23026389	338	38	S2
29	33.78805278	84.23029444	356	45	S2
30	33.78808056	84.23029444	351	60	S2
31	33.78826944	84.23028611	199	81	S2
32	33.78848611	84.23027778	156	75	S2
33	33.78862778	84.23013889	350	42	S2
34	33.78865556	84.23013889	356	51	S2
35	33.78872222	84.23005000	341	46	S2
36	33.78924167	84.22980556	325	60	S2
37	33.78926944	84.22980556	353	57	S2
38	33.78956667	84.22953889	316	51	S2
39	33.78959444	84.22953889	334	43	S2
40	33.78960278	84.22946667	167	70	S2
41	33.78963889	84.22939444	196	89	S2
42	33.78978056	84.22910278	274	63	S2
43	33.78980833	84.22910278	285	55	S2
44	33.78998056	84.22854167	288	58	S2
45	33.79000833	84.22854167	295	75	S2
46	33.79004167	84.22845278	22	64	S2
47	33.79016389	84.22827778	282	42	S2
48	33.79019167	84.22827778	291	49	S2
49	33.78867500	84.23009167	15	59	S2
50	33.78875000	84.23005000	347	54	S2

Table S13. Attitude of the S2 foliation in Gangma Co mélange.

No.	Latitude	Longitude	die direction	dip angle	planes
1	33.78524444	84.22958333	137	69	D2 fold axial plane
2	33.78524444	84.22958333	172	81	D2 fold axial plane
3	33.78531944	84.22958611	315	63	D2 fold axial plane
4	33.78542222	84.22958889	296	63	D2 fold axial plane
5	33.78591000	84.22843000	151	4	D2 fold axial plane
6	33.78591102	84.22847203	183	35	D2 fold axial plane
7	33.78542222	84.22958889	274	45	D2 fold axial plane
8	33.78552500	84.22959167	336	54	D2 fold axial plane
9	33.78552500	84.22959167	118	60	D2 fold axial plane
10	33.78608333	84.22961389	37	57	D2 fold axial plane
11	33.78616944	84.22960278	2	49	D2 fold axial plane
12	33.78621154	84.22960101	209	22	D2 fold axial plane
13	33.78621733	84.22959572	110	30	D2 fold axial plane
14	33.78625556	84.22959167	169	64	D2 fold axial plane
15	33.78642778	84.22956944	174	68	D2 fold axial plane
16	33.78651389	84.22956111	286	63	D2 fold axial plane
17	33.78656111	84.22959722	54	67	D2 fold axial plane
18	33.78661111	84.22963611	231	64	D2 fold axial plane
19	33.78665833	84.22967222	156	54	D2 fold axial plane
20	33.78680556	84.22978333	107	73	D2 fold axial plane
21	33.78735000	84.23010556	146	88	D2 fold axial plane
22	33.78749444	84.23018333	40	38	D2 fold axial plane
23	33.78749444	84.23018333	288	25	D2 fold axial plane
24	33.78735000	84.23010556	304	63	D2 fold axial plane
25	33.78784444	84.23027778	341	70	D2 fold axial plane
26	33.78816111	84.23029167	134	47	D2 fold axial plane
27	33.78816111	84.23029167	318	61	D2 fold axial plane

No.	Latitude	Longitude	die direction	dip angle	planes
28	33.78826944	84.23028611	161	83	D2 fold axial plane
29	33.78853333	84.23023333	236	61	D2 fold axial plane
30	33.78858056	84.23018611	312	53	D2 fold axial plane
31	33.78867500	84.23009167	317	66	D2 fold axial plane
32	33.78885278	84.22998889	314	77	D2 fold axial plane
33	33.78885278	84.22998889	341	56	D2 fold axial plane
34	33.78935000	84.22971667	327	49	D2 fold axial plane
35	33.78960278	84.22946667	228	64	D2 fold axial plane
36	33.78969762	84.22931520	118	36	D2 fold axial plane
37	33.78970187	84.22921590	98	20	D2 fold axial plane
38	33.78960278	84.22946667	314	60	D2 fold axial plane
39	33.78963889	84.22939444	352	51	D2 fold axial plane
40	33.78963889	84.22939444	275	56	D2 fold axial plane
41	33.78967500	84.22932222	325	68	D2 fold axial plane
42	33.78982778	84.22894444	294	64	D2 fold axial plane
43	33.78982778	84.22894444	310	57	D2 fold axial plane
44	33.78991944	84.22863056	287	70	D2 fold axial plane
45	33.79004167	84.22845278	316	73	D2 fold axial plane
46	33.79010278	84.22836389	297	69	D2 fold axial plane
47	33.79025000	84.22805556	271	62	D2 fold axial plane
48	33.75858056	84.42652222	239	59	D2 fold axial plane
49	33.75848611	84.42646111	306	57	D2 fold axial plane
50	33.75763889	84.42648889	17	79	D2 fold axial plane
51	33.75681389	84.42638056	22	62	D2 fold axial plane
52	33.75671111	84.42638611	22	76	D2 fold axial plane
53	33.75638611	84.42642500	195	53	D2 fold axial plane
54	33.75635672	84.42643254	286	18	D2 fold axial plane

No.	Latitude	Longitude	die direction	dip angle	planes
55	33.75631573	84.42643962	196	34	D2 fold axial plane
56	33.75627500	84.42644167	183	53	D2 fold axial plane
57	33.75593889	84.42646111	197	83	D2 fold axial plane
58	33.75543056	84.42646389	96	75	D2 fold axial plane
59	33.75506389	84.42653056	335	86	D2 fold axial plane
60	33.75427500	84.42655278	135	88	D2 fold axial plane
61	33.75421389	84.42653333	201	66	D2 fold axial plane
62	33.78531944	84.22958611	273	16	D2 fold axial plane
63	33.78670556	84.22971111	243	29	D2 fold axial plane
64	33.78685432	84.22985542	74	18	D2 fold axial plane
65	33.78695473	84.22991732	340	9	D2 fold axial plane
66	33.78707222	84.22994444	6	7	D2 fold axial plane
67	33.78774167	84.23026944	41	14	D2 fold axial plane
68	33.78774167	84.23026944	281	35	D2 fold axial plane
69	33.78848611	84.23027778	334	31	D2 fold axial plane
70	33.78898333	84.22992778	336	35	D2 fold axial plane
71	33.78935000	84.22971667	191	41	D2 fold axial plane

Table S14. Attitude of the D2 fold axial planes in Gangma Co mélange.

No.	Latitude	Longitude	die direction	dip angle	lines
1	33.78524444	84.22958333	212	35	D2 fold axis
2	33.78524444	84.22958333	251	51	D2 fold axis
3	33.78531944	84.22958611	278	57	D2 fold axis
4	33.78542222	84.22958889	5	36	D2 fold axis
5	33.78591000	84.22843000	221	3	D2 fold axis
6	33.78591102	84.22847203	240	22	D2 fold axis
7	33.78542222	84.22958889	341	21	D2 fold axis
8	33.78552500	84.22959167	22	44	D2 fold axis
9	33.78552500	84.22959167	66	48	D2 fold axis
10	33.78608333	84.22961389	319	20	D2 fold axis
11	33.78616944	84.22960278	72	24	D2 fold axis
12	33.78621154	84.22960101	263	14	D2 fold axis
13	33.78621733	84.22959572	46	14	D2 fold axis
14	33.78625556	84.22959167	120	52	D2 fold axis
15	33.78642778	84.22956944	277	6	D2 fold axis
16	33.78651389	84.22956111	232	49	D2 fold axis
17	33.78656111	84.22959722	346	43	D2 fold axis
18	33.78661111	84.22963611	144	3	D2 fold axis
19	33.78665833	84.22967222	86	27	D2 fold axis
20	33.78680556	84.22978333	171	57	D2 fold axis
21	33.78735000	84.23010556	234	33	D2 fold axis
22	33.78749444	84.23018333	339	22	D2 fold axis
23	33.78749444	84.23018333	235	16	D2 fold axis
24	33.78735000	84.23010556	343	57	D2 fold axis
25	33.78784444	84.23027778	67	11	D2 fold axis
26	33.78816111	84.23029167	220	3	D2 fold axis
27	33.78816111	84.23029167	37	19	D2 fold axis

No.	Latitude	Longitude	die direction	dip angle	lines
28	33.78826944	84.23028611	250	7	D2 fold axis
29	33.78853333	84.23023333	245	63	D2 fold axis
30	33.78858056	84.23018611	326	52	D2 fold axis
31	33.78867500	84.23009167	244	33	D2 fold axis
32	33.78885278	84.22998889	228	17	D2 fold axis
33	33.78885278	84.22998889	278	34	D2 fold axis
34	33.78935000	84.22971667	37	20	D2 fold axis
35	33.78960278	84.22946667	264	59	D2 fold axis
36	33.78969762	84.22931520	197	8	D2 fold axis
37	33.78970187	84.22921590	27	6	D2 fold axis
38	33.78960278	84.22946667	13	42	D2 fold axis
39	33.78963889	84.22939444	68	18	D2 fold axis
40	33.78963889	84.22939444	353	21	D2 fold axis
41	33.78967500	84.22932222	49	14	D2 fold axis
42	33.78982778	84.22894444	343	55	D2 fold axis
43	33.78982778	84.22894444	20	29	D2 fold axis
44	33.78991944	84.22863056	13	12	D2 fold axis
45	33.79004167	84.22845278	39	20	D2 fold axis
46	33.79010278	84.22836389	20	18	D2 fold axis
47	33.79025000	84.22805556	339	35	D2 fold axis
48	33.75858056	84.42652222	218	62	D2 fold axis
49	33.75848611	84.42646111	345	49	D2 fold axis
50	33.75763889	84.42648889	66	74	D2 fold axis
51	33.75681389	84.42638056	17	64	D2 fold axis
52	33.75671111	84.42638611	313	55	D2 fold axis
53	33.75638611	84.42642500	126	56	D2 fold axis
54	33.75635672	84.42643254	296	18	D2 fold axis

No.	Latitude	Longitude	die direction	dip angle	lines
55	33.75631573	84.42643962	233	29	D2 fold axis
56	33.75627500	84.42644167	128	38	D2 fold axis
57	33.75593889	84.42646111	121	64	D2 fold axis
58	33.75543056	84.42646389	37	62	D2 fold axis
59	33.75506389	84.42653056	248	47	D2 fold axis
60	33.75427500	84.42655278	221	56	D2 fold axis
61	33.75421389	84.42653333	278	26	D2 fold axis
62	33.78531944	84.22958611	194	3	D2 fold axis
63	33.78670556	84.22971111	274	23	D2 fold axis
64	33.78685432	84.22985542	28	12	D2 fold axis
65	33.78695473	84.22991732	330	8	D2 fold axis
66	33.78707222	84.22994444	290	3	D2 fold axis
67	33.78774167	84.23026944	3	12	D2 fold axis
68	33.78774167	84.23026944	355	11	D2 fold axis
69	33.78848611	84.23027778	342	31	D2 fold axis
70	33.78898333	84.22992778	309	32	D2 fold axis
71	33.78935000	84.22971667	230	34	D2 fold axis

Table S15. Attitude of the D2 fold axis in Gangma Co mélange.

No.	Latitude	Longitude	die direction	dip angle	planes
1	33.78573056	84.22959722	273	16	D3 fold axial plane
2	33.78670556	84.22971111	243	29	D3 fold axial plane
3	33.78707222	84.22994444	6	7	D3 fold axial plane
4	33.78784444	84.23027778	41	14	D3 fold axial plane
5	33.78794722	84.23028611	281	35	D3 fold axial plane
6	33.78848611	84.23027778	334	31	D3 fold axial plane
7	33.78911389	84.22986667	336	35	D3 fold axial plane
8	33.78945833	84.22962778	191	41	D3 fold axial plane
9	33.75506784	84.42653473	286	18	D3 fold axial plane
10	33.75631795	84.42643324	98	20	D3 fold axial plane
11	33.75848853	84.42646752	118	36	D3 fold axial plane
12	33.78591345	84.22847433	151	4	D3 fold axial plane
13	33.78621564	84.22959754	183	35	D3 fold axial plane
14	33.78621583	84.22960632	340	9	D3 fold axial plane
15	33.78670974	84.22971467	196	34	D3 fold axial plane
16	33.78749345	84.23018987	209	22	D3 fold axial plane
17	33.78774976	84.23026366	74	18	D3 fold axial plane
18	33.78853258	84.23028544	110	30	D3 fold axial plane
19	33.78973350	84.22921976	40	38	D3 fold axial plane
20	33.78982457	84.22894368	288	25	D3 fold axial plane

Table S16. Attitude of the D3 fold axial plane in Gangma Co mélange.

No.	Latitude	Longitude	die direction	dip angle	lines
1	33.78573056	84.22959722	194	3	D3 fold axis
2	33.78670556	84.22971111	274	23	D3 fold axis
3	33.78707222	84.22994444	290	3	D3 fold axis
4	33.78784444	84.23027778	3	12	D3 fold axis
5	33.78794722	84.23028611	355	11	D3 fold axis
6	33.78848611	84.23027778	342	31	D3 fold axis
7	33.78911389	84.22986667	309	32	D3 fold axis
8	33.78945833	84.22962778	230	34	D3 fold axis
9	33.75506784	84.42653473	296	18	D3 fold axis
10	33.75631795	84.42643324	27	6	D3 fold axis
11	33.75848853	84.42646752	197	8	D3 fold axis
12	33.78591345	84.22847433	221	3	D3 fold axis
13	33.78621564	84.22959754	240	22	D3 fold axis
14	33.78621583	84.22960632	330	8	D3 fold axis
15	33.78670974	84.22971467	233	29	D3 fold axis
16	33.78749345	84.23018987	263	14	D3 fold axis
17	33.78774976	84.23026366	28	12	D3 fold axis
18	33.78853258	84.23028544	46	14	D3 fold axis
19	33.78973350	84.22921976	339	22	D3 fold axis
20	33.78982457	84.22894368	235	16	D3 fold axis

Table S17. Attitude of the D3 fold axis in Gangma Co mélange.