

Supplemental data 2. U-Th-Pb isotopic data of two natural zircons (GJ-1 and Plešovice) obtained by multiple ion counting-ICP-MS technique using 1s laser ablation using ArF Excimer laser ablation shown in fig.4

Sample name	Isotope ratios								Age (Ma)								Elemental concentration ($\mu\text{g/g}$) and ratio								
	$^{207}\text{Pb}/^{235}\text{U}$	2σ	$^{206}\text{Pb}/^{238}\text{U}$	2σ	$^{208}\text{Pb}/^{232}\text{Th}$	2σ	$^{207}\text{Pb}/^{206}\text{Pb}$	2σ	$^{235}\text{U}-^{207}\text{Pb}$	2σ	$^{238}\text{U}-^{206}\text{Pb}$	2σ	$^{232}\text{Th}-^{208}\text{Pb}$	2σ	$^{207}\text{Pb}-^{206}\text{Pb}$	2σ	U	2σ	Th	2σ	Pb	2σ	Th/U	2σ	
Multi Collector-ICP-MS 1s data																									
GJ1																									
GJ1-1	0.8319	0.0445	0.0991	0.0022	0.0391	0.0112	0.0609	0.0030	614.7	24.9	608.9	12.8	774.8	219.5	635.9	108.4	457.05	164.22	22.39	16.09	23.59	9.18	0.05	0.01	
GJ1-2	0.8676	0.0453	0.0982	0.0022	0.0261	0.0075	0.0641	0.0030	634.2	24.9	603.6	12.6	521.1	148.3	745.1	103.5	477.63	171.62	32.76	23.54	24.53	9.54	0.07	0.02	
GJ1-3	0.8696	0.0450	0.0988	0.0022	0.0301	0.0086	0.0639	0.0030	635.4	24.7	607.1	12.6	598.8	170.4	737.4	102.5	491.07	176.44	27.65	19.87	25.34	9.86	0.06	0.02	
GJ1-4	0.8419	0.0444	0.1002	0.0022	0.0540	0.0156	0.0609	0.0029	620.2	24.8	615.8	12.9	1062.7	300.7	636.5	106.7	471.56	169.43	14.58	10.48	24.53	9.54	0.03	0.01	
GJ1-5	0.8158	0.0437	0.0976	0.0022	0.0261	0.0076	0.0606	0.0030	605.7	24.8	600.3	12.7	521.4	149.3	626.0	108.9	460.89	165.60	27.79	19.97	23.29	9.06	0.06	0.02	
GJ1-6	0.8263	0.0443	0.0991	0.0022	0.0321	0.0093	0.0605	0.0030	611.6	24.9	609.0	12.9	639.3	182.7	621.0	109.1	454.06	163.14	22.68	16.30	23.29	9.06	0.05	0.01	
GJ1-7	0.8160	0.0439	0.0982	0.0022	0.0299	0.0086	0.0603	0.0030	605.8	24.8	603.7	12.8	594.6	169.2	613.7	109.5	456.31	163.95	27.69	19.90	23.29	9.06	0.06	0.02	
GJ1-8	0.8063	0.0433	0.0997	0.0022	0.0253	0.0073	0.0587	0.0029	600.4	24.6	612.4	12.9	505.7	144.1	555.2	110.5	462.26	166.09	33.04	23.74	23.85	9.28	0.07	0.02	
GJ1-9	0.8542	0.0451	0.0966	0.0021	0.0266	0.0076	0.0641	0.0031	626.9	25.0	594.5	12.5	529.9	151.0	745.7	104.8	468.01	168.16	30.92	22.22	23.66	9.20	0.07	0.02	
GJ1-10	0.8044	0.0430	0.0961	0.0021	0.0313	0.0090	0.0607	0.0030	599.3	24.5	591.7	12.5	623.6	177.8	628.2	108.6	471.42	169.38	24.88	17.88	23.53	9.15	0.05	0.02	
GJ1-11	0.8143	0.0442	0.0994	0.0022	0.0271	0.0078	0.0594	0.0029	604.9	25.0	611.0	12.9	540.5	154.3	582.1	111.2	443.86	159.48	28.51	20.49	22.85	8.89	0.06	0.02	
GJ1-12	0.8102	0.0436	0.0986	0.0022	0.0377	0.0108	0.0596	0.0029	602.6	24.7	606.1	12.8	747.7	212.2	589.6	110.0	458.39	164.70	22.09	15.87	23.46	9.13	0.05	0.01	
GJ1-13	0.8121	0.0439	0.0999	0.0022	0.0405	0.0117	0.0590	0.0029	603.6	24.9	613.8	13.0	803.4	228.3	565.7	111.2	448.81	161.26	19.32	13.89	23.20	9.02	0.04	0.01	
GJ1-14	0.7987	0.0428	0.0962	0.0021	0.0456	0.0131	0.0602	0.0029	596.1	24.4	591.8	12.5	901.5	255.8	612.4	109.2	470.98	169.23	17.23	12.38	23.49	9.14	0.04	0.01	
GJ1-15	0.8397	0.0441	0.0987	0.0022	0.0224	0.0064	0.0617	0.0029	619.0	24.6	606.6	12.7	447.1	127.6	664.5	105.8	478.97	172.09	36.41	26.16	24.57	9.56	0.08	0.02	
Plešovice																									
Plešovice-1	0.4049	0.0426	0.0540	0.0044	0.0152	0.0096	0.0544	0.0037	345.2	31.2	338.8	26.7	305.9	193.0	388.5	158.5	917.49	139.87	103.26	31.48	27.78	4.59	0.11	0.06	
Plešovice-2	0.4131	0.0414	0.0546	0.0044	0.0196	0.0124	0.0549	0.0033	351.1	30.2	342.7	26.8	392.9	247.4	407.0	140.5	1164.02	177.44	94.78	28.90	35.55	5.84	0.08	0.05	
Plešovice-3	0.4036	0.0414	0.0538	0.0043	0.0201	0.0127	0.0544	0.0035	344.2	30.4	337.9	26.5	401.6	253.0	387.2	150.0	1037.28	158.13	83.93	25.59	31.23	5.15	0.08	0.05	
Plešovice-4	0.3903	0.0390	0.0552	0.0044	0.0181	0.0114	0.0513	0.0031	334.6	28.9	346.1	27.0	362.6	228.2	255.8	143.8	1233.89	188.09	111.06	33.86	37.79	6.21	0.09	0.05	
Plešovice-5	0.3899	0.0389	0.0542	0.0043	0.0210	0.0132	0.0522	0.0031	334.3	28.8	340.3	26.6	419.2	263.6	293.0	141.9	1255.19	191.34	104.68	31.91	38.05	6.25	0.08	0.05	
Plešovice-6	0.4044	0.0404	0.0553	0.0044	0.0187	0.0118	0.0531	0.0032	344.8	29.6	346.7	27.1	375.1	236.1	332.0	141.4	1203.15	183.41	106.40	32.44	37.08	6.09	0.09	0.05	
Plešovice-7	0.3894	0.0387	0.0548	0.0044	0.0171	0.0108	0.0516	0.0030	333.9	28.7	343.7	26.8	343.7	216.2	266.5	141.4	1280.05	195.13	130.52	39.79	39.11	6.42	0.10	0.06	
Plešovice-8	0.3744	0.0380	0.0543	0.0044	0.0182	0.0115	0.0500	0.0031	322.9	28.4	340.7	26.6	363.6	229.1	196.2	151.3	1174.96	179.11	97.07	29.59	35.20	5.79	0.08	0.05	
Plešovice-9	0.3983	0.0397	0.0540	0.0043	0.0206	0.0130	0.0536	0.0032	340.4	29.2	338.7	26.4	411.5	258.8	352.2	139.8	1245.07	189.80	103.36	31.51	37.62	6.18	0.08	0.05	
Plešovice-10	0.4047	0.0398	0.0544	0.0043	0.0206	0.0130	0.0539	0.0031	345.1	29.1	341.6	26.6	413.1	259.6	368.3	134.3	1332.55	203.13	115.63	35.25	40.78	6.69	0.09	0.05	
Plešovice-11	0.3988	0.0385	0.0536	0.0043	0.0178	0.0112	0.0539	0.0029	340.7	28.3	336.6	26.2	357.0	224.3	368.8	127.7	1519.82	231.68	147.56	44.99	45.74	7.49	0.10	0.05	
Plešovice-12	0.4178	0.0397	0.0536	0.0043	0.0239	0.0151	0.0566	0.0030	354.5	28.8	336.4	26.1	477.7	299.8	474.3	119.7	1624.94	247.70	115.64	35.25	49.05	8.03	0.07	0.04	
Plešovice-13	0.3838	0.0368	0.0541	0.0043	0.0203	0.0128	0.0515	0.0028	329.9	27.3	339.4	26.3	406.2	255.0	262.9	127.7	1644.98	250.75	145.77	44.44	49.73	8.14	0.09	0.05	
Plešovice-14	0.3801	0.0367	0.0538	0.0043	0.0194	0.0122	0.0512	0.0028	327.1	27.4	338.1	26.2	387.9	243.7	249.5	131.3	1563.36	238.31	130.79	39.88	46.78	7.66	0.08	0.05	
Plešovice-15	0.3998	0.0372	0.0547	0.0043	0.0212	0.0134	0.0530	0.0026	341.5	27.3	343.5	26.5	424.8	266.5	327.7	115.0	1980.76	301.93	150.07	45.75	60.45	9.87	0.08	0.04	