

**APPENDIX 1**

**Results of electron microprobe analyses presenting concentrations of Th, U, Pb and Y, calculated Th\* and monazite Th-U-total Pb ages**

Analysis	Comment	Th [wt.%]	±2	U [wt.%]	±2	Pb [wt.%]	±2	Y [wt.%]	Th* [wt.%]	Th/U	Age (Ma)	±1	Average age ± 2 (Ma)	MSWD
The granitoid KZ4 from the Klodzko–Zloty Stok Pluton														
mnz1-1		6.708	0.062	0.545	0.014	0.125	0.006	2.763	8.48	12.3	330	18.3	329 ± 4.8	0.72
mnz2-1		3.124	0.035	0.694	0.014	0.080	0.006	2.675	5.38	4.5	333	27.2		
mnz5-1		3.235	0.036	0.550	0.013	0.075	0.006	2.523	5.02	5.9	335	29.0		
mnz7-1		3.359	0.037	0.480	0.013	0.071	0.006	2.037	4.92	7.0	324	29.5		
mnz8-1		3.384	0.037	0.589	0.014	0.084	0.006	2.338	5.30	5.7	354	27.8		
mnz9-1		3.161	0.035	0.349	0.013	0.063	0.006	2.533	4.30	9.0	331	33.4		
mnz10-1		3.351	0.037	0.520	0.013	0.073	0.006	2.110	5.04	6.4	325	28.9		
mnz12-1		3.431	0.038	0.267	0.012	0.064	0.006	2.568	4.30	12.9	336	33.5		
mnz16-1		3.095	0.035	0.607	0.014	0.073	0.006	2.987	5.07	5.1	322	28.7		
mnz17-1		4.175	0.043	0.749	0.014	0.096	0.006	2.851	6.61	5.6	325	22.5		
mnz18-1		3.810	0.040	0.352	0.013	0.078	0.006	1.278	4.96	10.8	353	29.4		
mnz19-1		3.286	0.036	0.501	0.013	0.072	0.006	1.557	4.91	6.6	330	29.3		
mnz20-1		2.869	0.033	0.408	0.013	0.062	0.006	2.766	4.20	7.0	330	34.1		
mnz20-2		2.834	0.033	0.806	0.015	0.082	0.006	2.490	5.45	3.5	337	26.8		
mnz21-1		2.987	0.034	0.532	0.013	0.066	0.006	2.157	4.72	5.6	315	30.6		
mnz22-1		3.069	0.035	0.694	0.014	0.076	0.006	2.514	5.32	4.4	321	27.3		
mnz24-1		2.661	0.032	0.747	0.014	0.072	0.006	2.224	5.09	3.6	318	28.2		
mnz25-1		3.251	0.036	0.365	0.013	0.066	0.006	2.778	4.44	8.9	336	32.8		
mnz26-1		2.971	0.034	0.581	0.014	0.073	0.006	2.148	4.86	5.1	337	30.0		
mnz27-1		2.467	0.030	1.128	0.016	0.095	0.006	2.879	6.14	2.2	349	24.3		
mnz28-1		3.112	0.035	1.233	0.017	0.105	0.006	1.861	7.12	2.5	330	21.0		
mnz29-1		3.583	0.039	0.523	0.013	0.072	0.006	2.926	5.28	6.8	308	27.4		
mnz30-1		3.059	0.035	0.871	0.015	0.087	0.006	2.478	5.89	3.5	331	25.1		
mnz31-1		3.100	0.035	0.486	0.013	0.068	0.006	2.559	4.68	6.4	326	31.0		
mnz32-1		3.006	0.034	0.572	0.014	0.075	0.006	2.858	4.87	5.3	345	30.0		
mnz33-1		3.370	0.037	0.514	0.013	0.068	0.006	2.632	5.04	6.6	303	28.6		
mnz34-1		3.504	0.038	0.712	0.014	0.084	0.006	2.679	5.82	4.9	326	25.2		
mnz35-1		3.754	0.040	0.341	0.013	0.073	0.006	2.637	4.86	11.0	335	29.7		
mnz36-1		3.228	0.036	0.432	0.013	0.064	0.006	2.641	4.63	7.5	309	31.1		
mnz38-1		2.689	0.032	0.667	0.014	0.072	0.006	2.081	4.86	4.0	331	29.6		
mnz39-1		3.133	0.035	0.328	0.013	0.060	0.006	2.671	4.20	9.5	322	34.1		
mnz39-2		3.691	0.039	0.386	0.013	0.074	0.006	2.621	4.95	9.6	337	29.5		
mnz40-1		3.049	0.035	0.570	0.014	0.068	0.006	2.743	4.90	5.3	311	29.5		
The Javornik granodiorite OS338														
mnz 2-1	alt	7.290	0.066	0.265	0.012	0.126	0.006	0.943	8.15	27.5	345	18.7	343 ± 4.0	0.84
mnz 2-2	alt	7.492	0.068	0.284	0.013	0.127	0.006	1.023	8.42	26.4	337	18.3		
mnz 3-1		9.935	0.086	0.317	0.013	0.161	0.006	0.826	10.97	31.4	329	14.6		
mnz 3-2		7.439	0.067	0.345	0.013	0.136	0.006	1.125	8.56	21.6	354	18.1		
mnz 3-3		5.994	0.057	0.326	0.013	0.108	0.006	1.158	7.05	18.4	342	21.4		
mnz 3-4		5.990	0.057	0.221	0.012	0.099	0.006	0.973	6.71	27.1	329	22.3		
mnz 3-5		7.384	0.067	0.318	0.013	0.132	0.006	1.072	8.42	23.2	352	18.4		
mnz 3-6		4.907	0.048	0.182	0.012	0.081	0.006	0.783	5.50	27.0	329	26.4		
mnz 4-1	alt	5.317	0.051	0.208	0.012	0.087	0.006	0.821	5.99	25.5	326	24.3		
mnz 4-2	alt	5.749	0.055	0.232	0.012	0.101	0.006	0.892	6.50	24.8	348	22.9		
mnz 4-3	alt	8.451	0.075	0.306	0.013	0.148	0.006	0.876	9.45	27.6	350	16.7		
mnz 4-4	alt	4.640	0.046	0.258	0.012	0.088	0.006	1.121	5.48	18.0	361	27.1		
mnz 4-5	alt	5.516	0.053	0.229	0.012	0.096	0.006	0.984	6.26	24.1	345	23.7		
mnz 4-6	alt	7.422	0.067	0.343	0.013	0.132	0.006	1.112	8.54	21.6	345	18.3		
mnz 4-7	alt	7.258	0.066	0.277	0.013	0.130	0.006	0.919	8.16	26.2	356	19.0		
mnz 4-8	alt	6.489	0.060	0.334	0.013	0.117	0.006	1.137	7.58	19.4	344	20.2		
mnz 5-1	alt	7.872	0.071	0.337	0.013	0.136	0.006	1.063	8.97	23.4	339	17.3		
mnz 5-2	alt	8.584	0.076	0.337	0.013	0.145	0.006	1.099	9.68	25.5	336	16.2		
mnz 6-1	alt	7.312	0.066	0.266	0.013	0.128	0.006	0.846	8.18	27.5	349	18.9		
mnz 6-2	alt	5.430	0.052	0.182	0.012	0.089	0.006	0.715	6.02	29.8	332	24.5		
mnz 6-3	alt	7.306	0.066	0.258	0.013	0.125	0.006	0.984	8.15	28.3	344	18.9		
mnz 7-1		6.766	0.062	0.320	0.013	0.123	0.006	1.059	7.81	21.1	351	19.7		
mnz 7-2		7.019	0.064	0.281	0.013	0.123	0.006	1.017	7.93	25.0	347	19.4		
mnz 8-1		7.880	0.071	0.293	0.013	0.135	0.006	1.009	8.83	26.9	342	17.5		
The paragneiss OS338P														
mnz 9-1		5.392	0.052	0.288	0.012	0.092	0.006	0.974	6.33	18.7	326	23.3	344 ± 4.9	1.10
mnz 10-1	alt	6.763	0.062	0.220	0.012	0.118	0.006	0.864	7.48	30.8	354	20.4		
mnz 11-1		6.603	0.061	0.214	0.012	0.109	0.006	0.875	7.30	30.9	335	20.7		
mnz 12-1		5.838	0.055	0.142	0.012	0.095	0.006	0.725	6.30	41.2	337	23.6		
mnz 15-1		5.755	0.055	0.254	0.012	0.109	0.006	1.006	6.58	22.6	369	23.1		
mnz 16-1		5.813	0.055	0.147	0.012	0.104	0.006	0.681	6.29	39.5	369	24.1		
mnz 17-1	alt	2.954	0.034	0.385	0.013	0.065	0.006	1.030	4.21	7.7	346	34.2		
mnz 18-1	alt	3.188	0.036	1.700	0.019	0.128	0.006	1.218	8.71	1.9	330	17.8		
mnz 18-2	alt	3.793	0.040	0.326	0.012	0.072	0.006	0.896	4.85	11.6	334	29.7		
mnz 19-1	alt	4.319	0.044	0.140	0.012	0.077	0.006	0.669	4.77	30.9	361	30.6		
mnz 20-1		7.099	0.065	0.316	0.013	0.129	0.006	0.949	8.13	22.5	354	19.0		
mnz 20-2		6.910	0.063	0.229	0.012	0.116	0.006	0.809	7.66	30.2	338	19.8		
mnz 21-1	alt	6.369	0.059	0.227	0.012	0.112	0.006	0.748	7.11	28.0	353	21.5		
mnz 22-1	alt	2.686	0.032	0.200	0.012	0.051	0.005	1.271	3.34	13.4	343	42.0		
mnz 22-3	alt	2.278	0.029	0.215	0.012	0.049	0.006	1.005	2.98	10.6	370	47.7		
mnz 23-1	alt	6.814	0.063	0.294	0.013	0.118	0.006	0.930	7.77	23.2	340	19.6		
mnz 24-1	alt	3.668	0.039	0.227	0.012	0.068	0.006	0.850	4.41	16.1	347	32.8		
mnz 25-1	alt	5.258	0.051	0.305	0.013	0.100	0.006	0.862	6.25	17.2	357	24.1		
mnz 26-1	alt	4.521	0.046	0.238	0.012	0.081	0.006	0.862	5.29	19.0	341	27.8		
mnz 29-1		4.361	0.044	0.746	0.014	0.100	0.006	1.876	6.79	5.8	330	22.0		
mnz 29-3		2.131	0.028	0.736	0.014	0.070	0.006	1.163	4.53	2.9	346	31.8		
mnz 29-4		3.252	0.036	0.256	0.012	0.064	0.006	0.873	4.09	12.7	353	35.0		
mnz 30-1		4.106	0.042	0.214	0.012	0.072	0.006	0.807	4.80	19.2	337	30.1		
mnz 31-1		8.586	0.076	0.194	0.012	0.138	0.006	0.579	9.22	44.3	335	16.8		
The mica schist SK19														
mnz 1-1		1.324	0.022	0.355	0.012	0.039	0.005	1.652	2.48	3.7	351	55.9	336 ± 4.5	0.71
mnz 1-2		2.657	0.032	0.391	0.013	0.060	0.006	2.066	3.93	6.8	340	36.1		
mnz 1-3		2.888	0.033	0.366	0.013	0.057	0.006	2.143	4.08	7.9	315	34.9		
mnz 1-4		1.240	0.021	0.359	0.012	0.036	0.005	1.713	2.41	3.5	332	57.1		
mnz 1-2n		1.606	0.024	0.393	0.013	0.042	0.006	2.038	2.88	4.1	330	48.5		
mnz 2-1		2.373	0.030	0.586	0.014	0.064	0.006	1.528	4.28	4.1	337	33.5		
mnz 2-2		2.322	0.029	0.591	0.013	0.059	0.006	1.553	4.24	3.9	312	33.1		
mnz 2-1n		2.409	0.030	0.570	0.013	0.070	0.006	1.539	4.27	4.2	368	33.6		
mnz 4-1	And incl													