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Zircon geochronology and trace element characteristics of eclogites and granulites from the Orlica-Śnieżnik complex, Bohemian Massif

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Appendix

Table A1. Laser and ICP–MS instrument details and operating parameters

Laser			**ICP-MS**	
Model	New Wave Research UP-193HE		Model	Element2, ThermoFinnigan
Type	Excimer		Type	Magnetic Sectorfield
Wavelength	193 nm		Scan mode	E-scan
	U-Pb:	*Trace Elements:*	Forward power	1300 W
Spot size	35 µm	35 µm	Reflected power	< 2 W
Repetition rate	10 Hz	5 Hz	Cooling gas (Ar)	16 l/min
Laser fluency	~5 J/cm^2	~9 J/cm^2	Auxilliary gas (Ar)	0.9 l/min
Laser warm up	20 s	20 s	Sample gas (Ar)	1.2 l/min
Ablation time	35 s	40 s	Carrier gas (He)	0.5 – 0.8 l/min
Washout time	45 s	45 s	Dwell time	50 ms (4 points/peak)

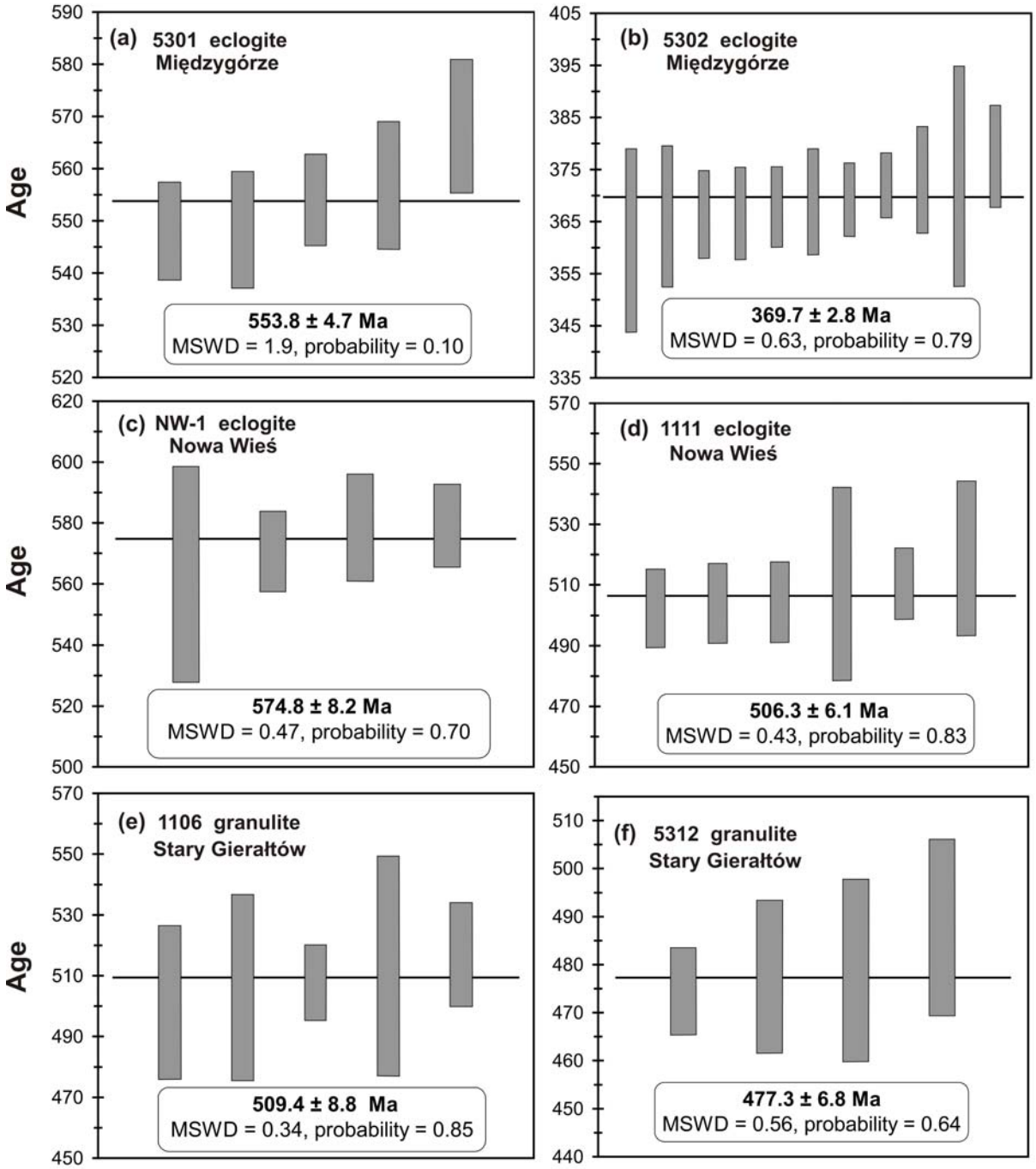

Figure A1: Weighted averages of screened zircon data considered to constrain protolith ages (a, c–f) and time of metamorphism (b). Error bars are 2σ. See text for explanation.

Table A2. LA-ICPMS U-Pb data for (U)HP rocks of the Orlica-Śnieżnik complex.

Spot	CL type	Isotopic ratios: $^{206}Pb/^{204}Pb$	$f206\%$	$^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ	rho	Ages (Ma): $^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ
Eclogite 5302; sample location: Międzygórze, N 50° 13.548´, E 016° 46.097´																
5302_1	2	–	–	0.05611	0.00282	0.41586	0.02287	0.05376	0.00120	0.91	351.9	17.2	353.1	16.4	361.0	50.3
5302_2	2	–	–	0.05422	0.00268	0.39938	0.02144	0.05342	0.00113	0.92	340.4	16.4	341.2	15.6	346.8	47.8
5302_3	2	–	–	0.05970	0.00350	0.44538	0.02777	0.05411	0.00115	0.94	373.8	21.3	374.0	19.5	375.6	47.7
5302_4	2	–	–	0.05766	0.00291	0.42751	0.02312	0.05377	0.00106	0.93	361.4	17.7	361.4	16.4	361.7	44.3
5302_5	2	–	–	0.05958	0.00169	0.44217	0.01498	0.05382	0.00099	0.84	373.1	10.3	371.8	10.5	363.7	41.6
5302_6	2	658	2.21	0.05660	0.00168	0.41950	0.01467	0.05376	0.00100	0.85	354.9	10.2	355.7	10.5	361.0	41.9
5302_7	2	4021	0.44	0.05407	0.00194	0.39593	0.01613	0.05311	0.00102	0.88	339.5	11.9	338.7	11.7	333.4	43.6
5302_8	2	189823	0.00	0.05656	0.00137	0.41117	0.01210	0.05272	0.00089	0.82	354.7	8.3	349.7	8.7	317.0	38.2
5302_9	2	–	–	0.06033	0.00162	0.45298	0.01584	0.05445	0.00122	0.77	377.6	9.9	379.4	11.1	389.9	50.3
5302_10	2	6375	0.20	0.05381	0.00138	0.39193	0.01301	0.05283	0.00111	0.77	337.8	8.4	335.8	9.5	321.6	47.9
5302_11	2	9757	0.18	0.05842	0.00224	0.43833	0.02075	0.05441	0.00151	0.81	366.0	13.7	369.1	14.7	388.3	62.2
5302_12	2	–	–	0.05653	0.00141	0.41936	0.01544	0.05381	0.00145	0.68	354.5	8.6	355.6	11.0	363.0	61.0
5302_13	2	–	–	0.05941	0.00104	0.44282	0.01379	0.05405	0.00139	0.56	372.1	6.3	372.2	9.7	373.4	58.1
5302_14	2	5809	0.23	0.05092	0.00077	0.36960	0.01058	0.05265	0.00128	0.53	320.1	4.7	319.4	7.8	313.6	55.5
5302_15	2	1626	0.98	0.05717	0.00119	0.42923	0.01372	0.05446	0.00132	0.65	358.4	7.2	362.6	9.7	390.0	54.6
5302_16	2	3873	0.42	0.05896	0.00117	0.43849	0.01271	0.05394	0.00114	0.68	369.3	7.1	369.2	9.0	368.7	47.6
5302_17	2	–	–	0.05872	0.00128	0.43650	0.01303	0.05391	0.00110	0.73	367.8	7.8	367.8	9.2	367.4	46.0
5302_18	2	–	–	0.05849	0.00140	0.43497	0.01575	0.05394	0.00147	0.66	366.4	8.5	366.7	11.1	368.6	61.3
5302_19	2	–	–	0.05852	0.00147	0.43738	0.01483	0.05421	0.00124	0.74	366.6	8.9	368.4	10.5	379.8	51.3
5302_20	2	–	–	0.05889	0.00169	0.43836	0.01515	0.05399	0.00105	0.83	368.9	10.3	369.1	10.7	370.6	43.7
5302_21	2	–	–	0.06527	0.00149	0.49309	0.01466	0.05479	0.00105	0.77	407.6	9.0	407.0	10.0	403.7	42.8
Eclogite 1111; sample location: Nowa Wieś, coordinates not available																
1111_1	1	44299	0.04	0.07372	0.00283	0.56735	0.02268	0.05582	0.00062	0.96	458.5	17.0	456.3	14.7	445.1	24.5
1111_2	1	13206	0.13	0.07234	0.00230	0.55673	0.01883	0.05581	0.00065	0.94	450.3	13.8	449.4	12.3	445.0	25.8
1111_3	1	117913	0.02	0.07744	0.00212	0.60278	0.01800	0.05646	0.00068	0.92	480.8	12.7	479.0	11.4	470.5	26.6
1111_4	1	8297	0.21	0.07666	0.00276	0.59546	0.02339	0.05634	0.00088	0.92	476.1	16.5	474.4	14.9	465.8	34.7
1111_5	1	6575	0.27	0.06835	0.00132	0.52292	0.01200	0.05549	0.00068	0.84	426.2	8.0	427.1	8.0	432.0	27.5
1111_6	1	12451	0.14	0.06946	0.00160	0.53137	0.01359	0.05548	0.00062	0.90	432.9	9.6	432.7	9.0	431.8	24.9
1111_7	1	7722	0.23	0.08620	0.00206	0.69037	0.01864	0.05808	0.00073	0.88	533.0	12.2	533.0	11.2	533.0	27.7
1111_8	1	23672	0.07	0.06158	0.00124	0.45893	0.01097	0.05405	0.00070	0.84	385.2	7.5	383.5	7.6	373.4	29.2
1111_9	1	15157	0.12	0.07914	0.00139	0.62302	0.01330	0.05710	0.00069	0.82	491.0	8.3	491.7	8.3	495.4	26.8
1111_10	1	43838	0.03	0.07472	0.00279	0.57746	0.02480	0.05605	0.00119	0.87	464.5	16.8	462.8	16.0	454.5	47.0
1111_11	1	13096	0.14	0.06660	0.00170	0.50401	0.01643	0.05489	0.00111	0.78	415.6	10.3	414.4	11.1	407.8	45.4
1111_12	1	13096	0.14	0.08129	0.00222	0.63979	0.02145	0.05708	0.00111	0.81	503.8	13.2	502.2	13.3	494.7	43.1
1111_13	1	–	–	0.07705	0.00261	0.59685	0.02372	0.05618	0.00117	0.85	478.5	15.6	475.2	15.1	459.7	46.1
1111_14	1	71888	0.02	0.07609	0.00214	0.58857	0.02220	0.05610	0.00141	0.74	472.7	12.8	470.0	14.2	456.5	55.9
1111_15	1	38598	0.04	0.07236	0.00219	0.55349	0.02465	0.05548	0.00181	0.68	450.3	13.2	447.3	16.1	431.6	72.8
1111_16	1	104357	0.01	0.07778	0.00275	0.60605	0.02604	0.05651	0.00138	0.82	482.9	16.4	481.1	16.5	472.5	54.2
1111_17	1	10027	0.18	0.07861	0.00206	0.61204	0.01970	0.05647	0.00106	0.81	487.8	12.3	484.8	12.4	470.9	41.4
1111_18	1	–	–	0.07511	0.00240	0.57867	0.02267	0.05588	0.00126	0.82	466.9	14.4	463.6	14.6	447.5	50.2
1111_19	1	2329	0.77	0.07716	0.00192	0.60316	0.01973	0.05670	0.00121	0.76	479.1	11.5	479.2	12.5	479.8	47.0
1111_20	1	6767	0.26	0.08239	0.00198	0.65944	0.02044	0.05805	0.00114	0.77	510.4	11.8	514.3	12.5	531.7	43.0
1111_21	1	32550	0.05	0.07356	0.00423	0.56309	0.03535	0.05552	0.00140	0.92	457.6	25.4	453.5	23.0	433.2	56.2
1111_22	1	53260	0.03	0.06772	0.00401	0.51878	0.03341	0.05556	0.00141	0.92	422.4	24.2	424.3	22.3	434.8	56.4

Cont. Table A2. LA-ICPMS U-Pb data for (U)HP rocks of the Orlica-Śnieżnik complex.

	CL	Isotopic ratios:									Ages (Ma):					
Spot	type	$^{206}Pb/^{204}Pb$	ƒ206%	$^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ	rho	$^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ
1111_23	1	4462	0.41	0.06014	0.00344	0.44517	0.02693	0.05369	0.00106	0.95	376.5	20.9	373.9	18.9	358.0	44.4
1111_24	1	13993	0.13	0.08238	0.00539	0.64605	0.04432	0.05688	0.00118	0.95	510.3	32.1	506.0	27.3	486.8	45.8
1111_25	1	21210	0.08	0.07763	0.00479	0.60383	0.04158	0.05641	0.00173	0.90	482.0	28.6	479.7	26.3	468.7	67.9
1111_26	1	13959	0.13	0.08380	0.00431	0.67256	0.03659	0.05821	0.00103	0.95	518.8	25.6	522.3	22.2	537.6	38.7
1111_27	1	14742	0.12	0.06192	0.00306	0.46366	0.02376	0.05431	0.00072	0.97	387.3	18.6	386.8	16.5	383.9	29.8
1111_28	1	9008	0.20	0.07172	0.00370	0.54890	0.03128	0.05551	0.00134	0.91	446.5	22.3	444.3	20.5	432.8	53.6
1111_29	1	6742	0.26	0.07790	0.00425	0.61263	0.03535	0.05704	0.00106	0.95	483.5	25.4	485.2	22.3	493.1	41.1
1111_30	1	10086	0.18	0.06349	0.00333	0.48035	0.02689	0.05487	0.00108	0.94	396.8	20.2	398.3	18.4	407.0	44.0
1111_31	1	18227	0.10	0.07590	0.00193	0.58701	0.02575	0.05609	0.00200	0.58	471.6	11.6	469.0	16.5	456.1	79.3
1111_32	1	7044	0.25	0.08135	0.00223	0.64502	0.02090	0.05751	0.00099	0.85	504.2	13.3	505.4	12.9	511.1	37.8
1111_33	1	22267	0.08	0.07655	0.00221	0.59818	0.02070	0.05667	0.00108	0.84	475.5	13.2	476.1	13.2	478.9	42.1
1111_34	1	21953	0.08	0.08102	0.00217	0.64188	0.02265	0.05746	0.00132	0.76	502.2	13.0	503.5	14.0	509.3	50.4
1111_35	1	14631	0.12	0.07223	0.00257	0.57060	0.02398	0.05729	0.00128	0.85	449.6	15.5	458.4	15.5	502.9	49.2
1111_36	1	9828	0.18	0.07544	0.00245	0.59838	0.02281	0.05753	0.00115	0.85	468.8	14.7	476.2	14.5	511.9	44.0
1111_37	1	5875	0.30	0.07308	0.00222	0.57982	0.02281	0.05754	0.00144	0.77	454.7	13.3	464.3	14.7	512.5	54.8
1111_38	1	15757	0.11	0.08042	0.00251	0.63248	0.02726	0.05704	0.00170	0.72	498.6	15.0	497.6	17.0	493.0	65.7
1111_39	1	8212	0.22	0.07996	0.00257	0.63268	0.02750	0.05739	0.00168	0.74	495.9	15.4	497.8	17.1	506.5	64.3
1111_40	1	3714564	0.00	0.07922	0.00390	0.62262	0.04710	0.05700	0.00327	0.65	491.5	23.3	491.5	29.5	491.7	126.9
1111_41	1	8122	0.22	0.07176	0.00145	0.56823	0.02347	0.05743	0.00207	0.49	446.8	8.7	456.9	15.2	508.0	79.3
1111_42	1	11775	0.15	0.08502	0.00286	0.67910	0.03495	0.05793	0.00226	0.65	526.0	17.0	526.2	21.1	527.2	85.5
1111_43	1	64651	0.03	0.07574	0.00181	0.58365	0.02632	0.05589	0.00214	0.53	470.6	10.9	466.8	16.9	448.1	85.0
Eclogite NW-1; sample location: Nowa Wieś, N 50° 12.646´, E 016° 45.801´																
NW_1	1	19234	0.09	0.08520	0.00192	0.67846	0.01844	0.05776	0.00087	0.83	527.1	11.4	525.8	11.2	520.6	33.2
NW_2	1	1467	1.24	0.06261	0.00205	0.47287	0.02145	0.05478	0.00172	0.72	391.5	12.4	393.2	14.8	403.3	70.4
NW_3	1	2954	0.61	0.09398	0.00232	0.80019	0.02609	0.06175	0.00131	0.76	579.0	13.7	596.9	14.7	665.6	45.5
NW_4	1	8606	0.21	0.09252	0.00227	0.75706	0.02150	0.05935	0.00085	0.86	570.4	13.4	572.3	12.4	579.9	31.0
NW_5	2	10354	0.11	0.05965	0.00106	0.44260	0.01230	0.05381	0.00115	0.64	373.5	6.5	372.1	8.7	363.3	48.2
NW_6	1	1093	1.65	0.06596	0.00432	0.50011	0.03672	0.05499	0.00183	0.89	411.7	26.1	411.8	24.9	412.0	74.5
NW_7	3	17455	0.09	0.05381	0.00146	0.39314	0.01244	0.05299	0.00086	0.86	337.9	8.9	336.7	9.1	328.3	37.0
NW_8	2	–	–	0.05714	0.00138	0.42167	0.01372	0.05352	0.00116	0.74	358.2	8.4	357.2	9.8	351.2	49.1
NW_9	1	14153	0.13	0.07593	0.00222	0.58484	0.01964	0.05586	0.00093	0.87	471.8	13.3	467.6	12.6	446.9	36.8
NW_10	3	9640	0.18	0.05410	0.00156	0.39908	0.01386	0.05350	0.00103	0.83	339.6	9.6	341.0	10.1	350.3	43.6
NW_11	1	11526	0.15	0.06033	0.00196	0.44806	0.01676	0.05387	0.00100	0.87	377.6	11.9	375.9	11.8	365.5	41.9
NW_12	1	4564	0.39	0.08972	0.00273	0.74869	0.02777	0.06052	0.00128	0.82	553.9	16.2	567.5	16.1	622.4	45.8
NW_13	1	10168	0.17	0.07905	0.00280	0.62593	0.02711	0.05743	0.00144	0.82	490.4	16.7	493.6	16.9	508.1	55.0
NW_14	2	2542	0.72	0.04930	0.00149	0.36134	0.01330	0.05316	0.00112	0.82	310.2	9.1	313.2	9.9	335.6	47.8
NW_15	2	40053	0.02	0.06170	0.00156	0.46373	0.01602	0.05451	0.00128	0.73	386.0	9.5	386.9	11.1	392.2	52.7
NW_16	1	3011	0.70	0.07114	0.00242	0.54121	0.01988	0.05517	0.00076	0.93	443.0	14.6	439.2	13.1	419.4	30.8
NW_17	1	18289	0.10	0.06006	0.00216	0.45022	0.01948	0.05437	0.00131	0.83	376.0	13.1	377.4	13.6	386.4	54.1
NW_18	1	4054	0.44	0.07525	0.00262	0.58061	0.02322	0.05596	0.00110	0.87	467.7	15.7	464.9	14.9	450.9	43.6
NW_19	1	5444	0.31	0.08906	0.00231	0.71686	0.02150	0.05838	0.00088	0.86	550.0	13.7	548.8	12.7	544.0	33.1
NW_20	1	2756	0.71	0.08462	0.00237	0.66808	0.02159	0.05726	0.00092	0.87	523.6	14.1	519.5	13.1	501.6	35.6
NW_21	2	16663	0.11	0.08554	0.00213	0.68233	0.01990	0.05785	0.00088	0.85	529.1	12.6	528.2	12.0	524.2	33.4
NW_22	1	12257	0.13	0.08509	0.00273	0.67169	0.02420	0.05725	0.00093	0.89	526.4	16.2	521.7	14.7	501.3	35.9
NW_23	1	188651	0.01	0.08110	0.00286	0.63668	0.02482	0.05693	0.00095	0.90	502.7	17.0	500.2	15.4	489.1	36.7
NW_24	1	26336	0.06	0.06226	0.00151	0.46777	0.01337	0.05449	0.00082	0.85	389.3	9.2	389.7	9.2	391.5	33.8

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	CL	Isotopic ratios:									Ages (Ma):					
Spot	type	$^{206}Pb/^{204}Pb$	$f206\%$	$^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ	rho	$^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ
NW_25	1	2554	0.70	0.08413	0.00248	0.65985	0.02477	0.05688	0.00132	0.78	520.7	14.7	514.5	15.2	487.0	51.4
NW_26	1	1245	1.45	0.07677	0.00216	0.59502	0.02604	0.05622	0.00189	0.64	476.8	12.9	474.1	16.6	461.0	74.5
NW_27	2	–	–	0.06195	0.00197	0.46368	0.01727	0.05428	0.00105	0.86	387.5	12.0	386.8	12.0	383.0	43.4
NW_28	1	18425	0.10	0.08587	0.00317	0.68334	0.02874	0.05772	0.00116	0.88	531.0	18.8	528.8	17.3	519.1	44.2
NW_29	1	1894	0.95	0.07672	0.00112	0.59689	0.02118	0.05642	0.00182	0.41	476.5	6.7	475.3	13.5	469.1	71.6
NW_30	1	26817	0.05	0.05892	0.00204	0.43863	0.01694	0.05399	0.00092	0.90	369.0	12.4	369.3	12.0	370.8	38.4
NW_31	1	8935	0.20	0.08254	0.00252	0.65138	0.02467	0.05724	0.00129	0.80	511.2	15.0	509.3	15.2	500.7	49.5
NW_32	2	13219	0.10	0.05376	0.00200	0.39124	0.01721	0.05278	0.00124	0.84	337.6	12.2	335.3	12.6	319.5	53.5
NW_33	1	7507	0.24	0.08665	0.00206	0.69538	0.02208	0.05820	0.00123	0.75	535.7	12.2	536.0	13.2	537.5	46.1
NW_34	1	2332	0.77	0.07559	0.00348	0.58537	0.02886	0.05617	0.00100	0.93	469.7	20.8	467.9	18.5	459.1	39.5
NW_35	2	–	–	0.05659	0.00253	0.41602	0.02013	0.05331	0.00099	0.92	354.9	15.4	353.2	14.4	342.3	42.2
NW_36	1	2174	0.83	0.07625	0.00366	0.58723	0.03090	0.05586	0.00121	0.91	473.7	21.9	469.1	19.8	446.7	48.0
NW_37	2	29073	0.04	0.05481	0.00285	0.40369	0.02250	0.05342	0.00108	0.93	344.0	17.4	344.3	16.3	346.6	45.7
NW_38	1	5022	0.35	0.09126	0.00605	0.73777	0.05175	0.05864	0.00134	0.95	562.9	35.7	561.1	30.2	553.7	50.0
NW_39	3	66584	0.03	0.05252	0.00294	0.38352	0.02258	0.05296	0.00095	0.95	330.0	18.0	329.6	16.6	327.2	40.9
NW_40	2	7335	0.22	0.06269	0.00410	0.49174	0.03447	0.05689	0.00143	0.93	391.9	24.9	406.1	23.5	487.5	55.4
NW_41	2	45256	0.02	0.05434	0.00347	0.39770	0.02714	0.05308	0.00127	0.94	341.1	21.2	340.0	19.7	332.4	54.3
NW_42	2	7615	0.18	0.05605	0.00356	0.42203	0.03062	0.05461	0.00192	0.87	351.5	21.7	357.5	21.9	396.4	78.9
NW_43	2	98405	0.01	0.05538	0.00239	0.40751	0.01920	0.05337	0.00101	0.92	347.5	14.6	347.1	13.9	344.5	42.7
NW_44	2	8646	0.18	0.05845	0.00256	0.43493	0.02068	0.05397	0.00101	0.92	366.2	15.6	366.7	14.6	369.9	42.0
NW_46	2	49075	0.02	0.06753	0.00296	0.51709	0.02493	0.05554	0.00111	0.91	421.2	17.9	423.2	16.7	434.0	44.5
NW_47	1	8028	0.23	0.06566	0.00269	0.49483	0.02310	0.05466	0.00123	0.88	409.9	16.2	408.2	15.7	398.3	50.5
NW_48	2	5088	0.32	0.05210	0.00166	0.38399	0.01451	0.05346	0.00109	0.84	327.4	10.1	330.0	10.6	348.4	46.2
NW_49	2	19523	0.06	0.05510	0.00217	0.40427	0.01783	0.05321	0.00107	0.89	345.7	13.2	344.7	12.9	338.0	45.4
NW_50	2	2887	0.61	0.05942	0.00236	0.46185	0.02144	0.05637	0.00136	0.86	372.1	14.4	385.5	14.9	467.1	53.3
NW_51	1	5617	0.32	0.08952	0.00346	0.72561	0.03512	0.05879	0.00172	0.80	552.7	20.4	554.0	20.7	559.4	63.7
NW_52	1	4996	0.35	0.08977	0.00300	0.72743	0.02914	0.05877	0.00130	0.83	554.2	17.7	555.0	17.1	558.6	48.3
NW_53	1	1340	1.35	0.06226	0.00372	0.46288	0.03071	0.05392	0.00156	0.90	389.4	22.5	386.3	21.3	367.7	65.4
NW_54	1	4145	0.43	0.08937	0.00235	0.72219	0.02368	0.05861	0.00115	0.80	551.8	13.9	552.0	14.0	552.7	42.7
NW_55	3	–	–	0.05573	0.00236	0.40996	0.01976	0.05335	0.00123	0.88	349.6	14.4	348.8	14.2	343.8	52.1
NW_56	1	8059	0.22	0.07873	0.00289	0.62958	0.02887	0.05800	0.00159	0.80	488.5	17.3	495.8	18.0	529.9	60.2
NW_57	2	–	–	0.05661	0.00189	0.41591	0.01668	0.05329	0.00119	0.83	355.0	11.5	353.1	12.0	341.0	50.4
NW_58	1	961	1.88	0.06543	0.00333	0.48972	0.03147	0.05429	0.00213	0.79	408.5	20.2	404.7	21.5	383.0	88.2
NW_59	1	3897	0.46	0.09387	0.00302	0.76510	0.02918	0.05911	0.00121	0.84	578.4	17.8	576.9	16.8	571.4	44.5
NW_60	1	2556	0.69	0.09911	0.00313	0.82217	0.04005	0.06016	0.00223	0.65	609.2	18.4	609.3	22.3	609.5	80.2
NW_61	1	1349	1.34	0.07136	0.00283	0.54073	0.02797	0.05496	0.00183	0.77	444.3	17.0	438.9	18.4	410.6	74.4
NW_63	2	4018	0.30	0.05793	0.00138	0.42566	0.01381	0.05329	0.00117	0.74	363.0	8.4	360.1	9.8	341.4	49.8
NW_66	2	1848	0.88	0.05594	0.00164	0.41088	0.01505	0.05327	0.00116	0.80	350.9	10.0	349.5	10.8	340.3	49.5
NW_67	3	13686	0.13	0.05409	0.00164	0.39228	0.01410	0.05260	0.00102	0.84	339.5	10.0	336.0	10.3	311.8	44.1
NW_68	2	6534	0.27	0.05934	0.00129	0.44054	0.01134	0.05384	0.00075	0.84	371.6	7.8	370.6	8.0	364.5	31.4
NW_69	1	2249	0.79	0.09703	0.00231	0.81016	0.02282	0.06056	0.00091	0.85	597.0	13.6	602.5	12.8	623.6	32.4
NW_70	2	21931	0.08	0.08181	0.00234	0.64383	0.02216	0.05708	0.00110	0.83	506.9	13.9	504.7	13.7	494.5	42.3
NW_71	1	11209	0.16	0.08610	0.00290	0.68690	0.02511	0.05786	0.00082	0.92	532.4	17.2	530.9	15.1	524.5	31.1
NW_72	1	1301	1.39	0.05611	0.00197	0.40991	0.01919	0.05298	0.00164	0.75	351.9	12.1	348.8	13.8	328.0	70.1
NW_73	2	5557	0.32	0.05236	0.00177	0.40076	0.01500	0.05551	0.00090	0.90	329.0	10.8	342.2	10.9	433.0	36.2

Cont. Table A2. LA-ICPMS U-Pb data for (U)HP rocks of the Orlica-Śnieżnik complex.

Spot	CL type	Isotopic ratios: $^{206}Pb/^{204}Pb$	$f206\%$	$^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ	rho	Ages (Ma): $^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ
Granulite 1106; sample location: Stary Gierałtów, N 50° 18.503´, E 016° 56.037´																
1106_1	1	16173	0.08	0.06730	0.00348	0.51066	0.02856	0.05503	0.00118	0.92	419.9	21.0	418.9	19.2	413.4	48.0
1106_2	1	–	–	0.06086	0.00304	0.45748	0.02540	0.05452	0.00132	0.90	380.9	18.5	382.5	17.7	392.5	54.3
1106_3	1	–	–	0.05938	0.00299	0.44513	0.02415	0.05437	0.00110	0.93	371.8	18.2	373.9	17.0	386.4	45.6
1106_4	1	1469	1.21	0.06542	0.00327	0.52290	0.02935	0.05797	0.00149	0.89	408.5	19.8	427.1	19.6	528.7	56.3
1106_5	1	11210	0.07	0.05838	0.00365	0.43133	0.02875	0.05358	0.00125	0.94	365.8	22.2	364.1	20.4	353.6	52.8
1106_6	1	4165	0.28	0.07304	0.00422	0.56562	0.03496	0.05616	0.00124	0.93	454.4	25.3	455.2	22.7	458.9	48.9
1106_7	1	1021	0.95	0.06300	0.00387	0.47246	0.03123	0.05439	0.00132	0.93	393.8	23.5	392.9	21.5	387.5	54.4
1106_8	1	373704	0.00	0.06153	0.00357	0.46080	0.02798	0.05431	0.00098	0.96	384.9	21.7	384.8	19.4	384.1	40.4
1106_9	1	–	–	0.06908	0.00424	0.53019	0.03559	0.05566	0.00151	0.91	430.6	25.6	431.9	23.6	439.0	60.5
1106_10	1	9232	0.15	0.06711	0.00268	0.51295	0.02569	0.05544	0.00168	0.80	418.7	16.2	420.4	17.2	430.0	67.4
1106_11	1	–	–	0.07401	0.00317	0.57713	0.02835	0.05656	0.00136	0.87	460.2	19.0	462.6	18.3	474.5	53.2
1106_12	1	–	–	0.07033	0.00296	0.53254	0.02595	0.05492	0.00135	0.86	438.1	17.8	433.5	17.2	408.9	54.8
1106_13	1	–	–	0.07813	0.00299	0.60902	0.02661	0.05653	0.00120	0.87	484.9	17.9	482.9	16.8	473.5	46.8
1106_14	1	97496	0.01	0.07663	0.00291	0.60006	0.02706	0.05679	0.00139	0.84	476.0	17.4	477.3	17.2	483.6	53.9
1106_15	1	–	–	0.07702	0.00504	0.59982	0.04422	0.05649	0.00192	0.89	478.3	30.1	477.1	28.1	471.6	75.4
1106_16	1	–	–	0.06822	0.00431	0.52584	0.03484	0.05590	0.00112	0.95	425.4	26.0	429.0	23.2	448.6	44.5
1106_17	1	12059	0.13	0.06562	0.00403	0.49577	0.03260	0.05480	0.00129	0.93	409.7	24.4	408.8	22.1	404.0	52.8
1106_18	1	2248	0.62	0.08166	0.00518	0.65199	0.04493	0.05790	0.00156	0.92	506.0	30.9	509.7	27.6	526.2	59.2
1106_19	1	–	–	0.06488	0.00422	0.48748	0.03413	0.05450	0.00142	0.93	405.2	25.5	403.2	23.3	391.7	58.3
1106_20	1	2607	0.55	0.07655	0.00552	0.61201	0.04916	0.05798	0.00206	0.90	475.5	33.0	484.8	31.0	529.2	77.7
1106_21	1	–	–	0.05449	0.00409	0.40068	0.03217	0.05333	0.00153	0.93	342.0	25.0	342.1	23.3	342.8	64.9
1106_22	1	–	–	0.08285	0.00612	0.65811	0.05298	0.05761	0.00184	0.92	513.1	36.4	513.5	32.5	515.2	70.3
1106_23	1	269327	0.00	0.05569	0.00409	0.41087	0.03243	0.05351	0.00155	0.93	349.3	25.0	349.5	23.3	350.7	65.5
1106_24	1	29832	0.04	0.07165	0.00396	0.55411	0.03499	0.05609	0.00171	0.88	446.1	23.8	447.7	22.9	455.9	67.7
1106_25	1	45828	0.04	0.07147	0.00384	0.54780	0.03468	0.05559	0.00186	0.85	445.0	23.1	443.6	22.8	436.0	74.5
1106_26	1	–	–	0.08084	0.00427	0.63542	0.03901	0.05701	0.00178	0.86	501.1	25.5	499.5	24.2	492.0	69.0
1106_27	1	4400	0.40	0.07506	0.00354	0.58350	0.03230	0.05638	0.00163	0.85	466.6	21.2	466.7	20.7	467.4	64.2
1106_28	1	–	–	0.05905	0.00330	0.44002	0.02797	0.05404	0.00163	0.88	369.8	20.1	370.3	19.7	373.0	68.1
1106_29	1	756	1.60	0.06795	0.00220	0.51456	0.02197	0.05492	0.00153	0.76	423.8	13.3	421.5	14.7	409.1	62.4
1106_30	1	–	–	0.06136	0.00190	0.46010	0.01968	0.05438	0.00160	0.72	383.9	11.6	384.3	13.7	386.9	66.2
1106_31	1	–	–	0.06405	0.00272	0.49915	0.02681	0.05653	0.00186	0.79	400.2	16.5	411.1	18.2	473.1	73.0
1106_32	1	–	–	0.06249	0.00215	0.47354	0.02176	0.05496	0.00168	0.75	390.8	13.0	393.6	15.0	410.6	68.4
1106_33	1	3449	0.47	0.06569	0.00265	0.49663	0.02492	0.05484	0.00163	0.81	410.1	16.1	409.4	16.9	405.6	66.7
1106_34	1	6859	0.22	0.05927	0.00217	0.44031	0.02007	0.05387	0.00146	0.80	371.2	13.2	370.5	14.1	365.9	61.1
1106_35	1	–	–	0.05702	0.00173	0.41817	0.01696	0.05319	0.00143	0.75	357.4	10.5	354.7	12.1	337.1	61.0
1106_36	1	4009	0.33	0.06858	0.00264	0.51988	0.02525	0.05498	0.00163	0.79	427.6	15.9	425.1	16.9	411.4	66.4
1106_37	1	8570	0.20	0.07039	0.00209	0.54086	0.02277	0.05573	0.00166	0.71	438.5	12.6	439.0	15.0	441.7	66.3
1106_38	1	4522	0.39	0.06491	0.00200	0.49923	0.01890	0.05578	0.00123	0.81	405.4	12.1	411.2	12.8	443.8	48.9
1106_39	1	–	–	0.07078	0.00260	0.54254	0.02393	0.05559	0.00135	0.83	440.8	15.7	440.1	15.8	436.2	54.2
1106_40	1	49868	0.02	0.06737	0.00277	0.50903	0.02389	0.05480	0.00124	0.88	420.3	16.7	417.8	16.1	404.1	50.6
1106_41	1	549	2.56	0.05332	0.00279	0.39057	0.02303	0.05312	0.00144	0.89	334.9	17.1	334.8	16.8	334.2	61.5
1106_42	1	2593	0.53	0.07272	0.00247	0.55931	0.02329	0.05578	0.00135	0.82	452.5	14.8	451.1	15.2	443.9	53.7
1106_43	1	13677	0.05	0.07200	0.00177	0.55772	0.02025	0.05618	0.00150	0.68	448.2	10.6	450.0	13.2	459.7	59.4
1106_44	1	58795	0.02	0.06701	0.00218	0.50819	0.02340	0.05500	0.00179	0.71	418.1	13.2	417.2	15.8	412.4	72.8
1106_45	1	10153	0.15	0.06697	0.00211	0.50565	0.02120	0.05476	0.00152	0.75	417.8	12.7	415.5	14.3	402.6	62.1
1106_46	1	2953	0.50	0.08192	0.00211	0.64882	0.02425	0.05744	0.00156	0.69	507.6	12.6	507.7	14.9	508.5	59.6

Cont. Table A2. LA-ICPMS U-Pb data for (U)HP rocks of the Orlica-Śnieżnik complex.

	CL	Isotopic ratios:									Ages (Ma):					
Spot	type	$^{206}Pb/^{204}Pb$	$f206\%$	$^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ	rho	$^{206}Pb/^{238}U$	±2σ	$^{207}Pb/^{235}U$	±2σ	$^{207}Pb/^{206}Pb$	±2σ
1106_47	1	2191	0.70	0.06564	0.00142	0.49639	0.01773	0.05485	0.00156	0.61	409.8	8.6	409.3	12.0	406.0	63.6
1106_48	1	4332	0.18	0.07667	0.00202	0.59870	0.02179	0.05663	0.00142	0.73	476.2	12.1	476.4	13.8	477.4	55.4
1106_49	1	2675	0.61	0.07164	0.00194	0.55429	0.02091	0.05611	0.00147	0.72	446.0	11.7	447.8	13.7	456.9	58.1
1106_50	1	–	–	0.07863	0.00234	0.61748	0.02498	0.05695	0.00156	0.74	487.9	14.0	488.3	15.7	489.9	60.5
1106_51	1	–	–	0.07419	0.00222	0.59704	0.02504	0.05837	0.00172	0.71	461.3	13.3	475.4	15.9	543.6	64.3
1106_52	1	–	–	0.06794	0.00181	0.51235	0.01722	0.05469	0.00112	0.79	423.7	11.0	420.0	11.6	399.7	45.7
1106_53	1	–	–	0.07923	0.00179	0.62539	0.02006	0.05725	0.00130	0.71	491.5	10.7	493.2	12.5	501.1	50.1
1106_54	1	–	–	0.06928	0.00163	0.53613	0.01908	0.05613	0.00150	0.66	431.8	9.8	435.9	12.6	457.5	59.3
1106_55	1	–	–	0.06546	0.00154	0.49542	0.01459	0.05489	0.00097	0.80	408.8	9.3	408.6	9.9	407.7	39.5
1106_56	1	–	–	0.06303	0.00220	0.47453	0.02037	0.05461	0.00136	0.81	394.0	13.4	394.3	14.0	396.2	55.9
1106_57	1	6334	0.13	0.06864	0.00182	0.52336	0.01916	0.05530	0.00140	0.72	427.9	11.0	427.4	12.8	424.5	56.4
1106_58	1	–	–	0.06775	0.00174	0.51398	0.01729	0.05502	0.00120	0.76	422.6	10.5	421.1	11.6	413.1	48.6
1106_59	1	2534	0.53	0.07288	0.00214	0.57335	0.02193	0.05706	0.00140	0.77	453.5	12.9	460.2	14.2	493.9	54.0
1106_60	1	2495	0.56	0.08591	0.00235	0.68643	0.02529	0.05795	0.00143	0.74	531.3	13.9	530.7	15.2	528.0	54.1
1106_61	1	–	–	0.06927	0.00242	0.52419	0.02412	0.05488	0.00164	0.76	431.8	14.6	427.9	16.1	407.4	66.9
1106_62	1	6441	0.18	0.06218	0.00214	0.46648	0.02049	0.05441	0.00148	0.79	388.8	13.0	388.8	14.2	388.3	61.1
1106_63	1	6650	0.18	0.08350	0.00289	0.67465	0.03167	0.05860	0.00186	0.74	517.0	17.2	523.5	19.2	552.3	69.2
1106_64	1	5613	0.30	0.06566	0.00212	0.49676	0.01836	0.05487	0.00098	0.87	409.9	12.8	409.5	12.5	407.1	40.1
1106_65	1	2632	0.49	0.05814	0.00186	0.43100	0.01612	0.05377	0.00105	0.85	364.3	11.3	363.9	11.4	361.4	43.9
1106_66	1	–	–	0.05935	0.00200	0.44238	0.01772	0.05406	0.00117	0.84	371.7	12.2	371.9	12.5	373.6	48.7
1106_67	1	7889	0.14	0.07434	0.00247	0.57615	0.02326	0.05621	0.00129	0.82	462.3	14.8	462.0	15.0	460.6	51.0
1106_68	1	–	–	0.06964	0.00224	0.53255	0.02129	0.05546	0.00132	0.80	434.0	13.5	433.5	14.1	431.0	53.0
1106_69	1	–	–	0.07201	0.00237	0.55582	0.02131	0.05598	0.00110	0.86	448.3	14.3	448.8	13.9	451.6	43.6
1106_70	1	–	–	0.06977	0.00223	0.53789	0.02125	0.05591	0.00130	0.81	434.8	13.4	437.0	14.0	449.0	51.7
1106_71	1	4364	0.17	0.06403	0.00178	0.48365	0.01926	0.05478	0.00156	0.70	400.1	10.8	400.6	13.2	403.4	63.7
1106_72	1	1756	0.69	0.05608	0.00167	0.41503	0.01564	0.05368	0.00124	0.79	351.7	10.2	352.5	11.2	357.6	52.2
1106_73	1	826	1.77	0.06476	0.00197	0.48417	0.02332	0.05423	0.00202	0.63	404.5	11.9	400.9	16.0	380.5	84.0
1106_74	1	3642	0.31	0.06600	0.00206	0.50006	0.02015	0.05495	0.00140	0.77	412.0	12.4	411.7	13.6	410.4	57.1
1106_75	1	51030	0.03	0.06164	0.00232	0.46130	0.02259	0.05428	0.00171	0.77	385.6	14.1	385.2	15.7	382.7	70.6
1106_76	1	–	–	0.06168	0.00219	0.47094	0.02369	0.05538	0.00197	0.71	385.8	13.3	391.8	16.4	427.6	79.4
1106_77	1	–	–	0.06306	0.00242	0.47460	0.02436	0.05458	0.00186	0.75	394.2	14.7	394.4	16.8	395.2	76.6
1106_78	1	42981	0.02	0.07141	0.00242	0.54902	0.02100	0.05576	0.00099	0.89	444.6	14.6	444.4	13.8	442.9	39.5
1106_79	1	–	–	0.06140	0.00211	0.46034	0.01902	0.05437	0.00125	0.83	384.1	12.8	384.5	13.2	386.6	51.6

All uncertainties are absolute values (2σ); – indicates ^{204}Pb below detection limit.

Table A3. LA-ICPMS trace element data for zircons from eclogites and granulites.

Sample	5302	5302	5302	5302	5302	5302	5302	5302	5302	5302	5302	5302	5302	5302	5302
Spot	4-1	5-1	6-1	3-1	2-1	7-1	8-1	1-1	10-1	9-1	20-1	21-1	22-1	23-1	24-1
CL type	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Sc	987	792	923	991	901	880	1047	973	1179	1077	1124	1042	1011	978	980
Ti	13.7	29.8	10.8	16.1	9.59	11.5	11.5	12.1	13.5	13.3	13.2	9.90	8.18	8.24	9.76
Y	3540	1906	2678	3228	910	1129	3550	11425	97.2	102	86.7	49.4	32.3	31.5	74.1
Nb	1.59	1.59	1.313	2.44	1.151	1.79	1.52	5.07	0.971	0.863	0.926	0.839	0.811	0.804	0.76
La	0.027	0.281	0.008	0.023	0.205	0.010	0.023	0.152	0.001	0.001	0.003	0.007	0.004	0.009	0.002
Ce	17.5	12.0	14.2	27.4	9.22	8.86	13.5	84.6	1.32	1.71	1.39	1.96	1.67	1.82	1.88
Pr	0.310	0.171	0.185	0.210	0.160	0.097	0.270	1.19	0.026	0.020	0.008	0.019	0.013	0.013	0.027
Nd	5.93	2.92	3.19	3.71	2.02	1.41	5.20	18.97	0.41	0.49	0.51	0.45	0.18	0.28	0.54
Sm	11.2	5.82	8.80	8.14	3.62	3.72	11.5	36.8	1.47	2.16	1.45	1.23	0.792	0.616	1.56
Eu	1.65	1.13	1.60	1.13	0.460	0.383	2.00	4.75	1.04	1.15	1.06	0.766	0.469	0.371	1.13
Gd	88.2	49.0	71.0	72.7	25.7	26.0	93.1	281	7.82	7.62	6.12	4.16	2.37	2.19	6.09
Tb	22.9	12.8	18.2	19.5	6.42	6.57	23.5	73.2	1.65	1.54	1.18	0.689	0.501	0.408	1.16
Dy	294	166	231	258	79.5	84.3	298	935	12.8	13.1	10.0	6.28	3.92	3.72	9.73
Ho	113	63.0	82.9	96.7	28.4	32.4	105	341	3.03	3.00	2.46	1.49	1.05	0.862	2.24
Er	514	296	372	448	122	156	480	1553	9.67	10.2	8.10	4.90	3.16	2.84	7.58
Tm	111	65.4	81.2	97.6	25.6	34.8	103	328	1.52	1.69	1.41	0.805	0.557	0.468	1.31
Yb	973	606	714	853	218	323	889	2845	13.0	13.4	11.3	6.60	4.29	3.84	9.94
Lu	163	104	117	140	34.6	54.6	150	443	1.90	2.01	1.66	0.958	0.601	0.615	1.52
Hf	9243	8565	7886	9243	10854	7547	8480	10600	10430	10939	10939	10600	10006	9243	10006
Ta	0.547	0.699	0.426	1.17	0.527	0.985	0.405	1.93	0.106	0.155	0.104	0.114	0.108	0.089	0.111
Pb	108	101	81.6	119	83.7	132	65.0	453	61.5	97	55.3	51.0	43.1	37.0	44.2
Th	247	154	139	326	127	186	134	1286	4.49	4.26	2.03	2.97	2.53	2.82	3.80
U	271	239	135	285	182	334	163	1014	243	357	139	205	123	117	175
Th/U	0.91	0.65	1.03	1.14	0.70	0.56	0.82	1.27	0.02	0.01	0.01	0.01	0.02	0.02	0.02
REE total	2314	1385	1717	2025	555	732	2174	6945	55.7	58.2	46.6	30.3	19.6	18.0	44.7
Yb_N/Sm_N	81.4	97.2	75.7	97.8	56.1	81.0	71.9	72.2	8.28	5.81	7.25	5.01	5.05	5.82	5.94
Eu/Eu*	0.161	0.204	0.196	0.142	0.146	0.119	0.187	0.143	0.939	0.868	1.09	1.04	1.05	0.977	1.12
Ce/Ce*	45.8	13.1	87.4	94.7	12.3	67.1	41.2	47.9	59.2	106	65.1	41.4	54.2	40.0	62.2
Sm_N/La_N	652	32.9	1686	563	28.1	569	794	385	2124	4518	699	292	286	105	1240
Lu_N/Gd_N	14.8	17.0	13.3	15.4	10.8	16.9	13.0	12.7	1.95	2.12	2.18	1.85	2.04	2.26	2.01
Ti-in-zircon, ºC	830	923	804	848	792	811	811	816	775	774	773	745	727	728	744
U/Pb age	447	439	457	478	484	478	438	462	353	339	369	408	n.a.	n.a.	n.a.

Cont. Table A3. LA-ICPMS trace element data for zircons from eclogites and granulites.

Sample	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	5306	1111	1111	1111	1111	1111
Spot	2-1	7-1	4-1	3-1	1-1	5-1	6-1	8-1	9-1	10-1	11-1	39	38	34	32	30
CL type	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
Sc	1040	918	679	954	932	912	953	908	870	939	985	777	920	785	768	703
Ti	27.9	8.78	32.8	24.2	24.0	7.50	27.4	31.4	29.1	13.2	24.1	8.91	15.4	48.2	5.89	14.6
Y	70.4	27.5	16.8	56.7	50.8	26.8	65.5	22.2	59.5	25.2	58.4	5797	7540	3158	5612	4212
Nb	0.931	0.725	0.605	0.809	0.717	0.797	0.764	0.791	0.735	0.787	0.902	8.88	8.55	4.39	3.25	5.00
La	0.007	0.005	0.156	0.008	0.011	0.002	0.024	0.034	0.038	0.004	0.008	0.262	134	2.10	9.26	94.9
Ce	4.60	1.85	2.97	4.21	4.04	1.71	6.46	7.11	6.84	3.28	6.47	77.8	335	43.1	55.9	188
Pr	0.024	0.020	0.137	0.044	0.069	0.008	0.127	0.296	0.065	0.024	0.093	0.463	31.9	1.07	2.79	20.1
Nd	0.89	0.35	1.07	0.92	1.00	0.16	1.85	3.52	1.26	0.44	1.86	8.08	133.32	8.10	19.20	80.02
Sm	1.75	0.735	0.689	1.46	1.41	0.515	2.17	2.07	1.44	0.743	4.55	20.1	40.5	10.2	20.3	17.9
Eu	1.08	0.347	0.380	0.854	0.729	0.310	1.11	0.663	0.845	0.331	2.10	1.08	3.00	0.937	1.29	1.54
Gd	6.97	2.16	1.51	5.23	4.19	2.04	6.69	2.50	5.11	2.08	9.34	181	218	83.0	159	85.5
Tb	1.39	0.437	0.292	1.02	0.832	0.369	1.27	0.426	0.962	0.374	1.47	46.3	53.8	20.9	40.0	20.5
Dy	10.1	3.20	2.23	7.44	6.71	3.29	9.78	2.93	8.06	3.30	9.79	575	697	283	508	301
Ho	2.43	0.854	0.511	1.73	1.52	0.819	2.10	0.691	1.96	0.737	1.80	191	243	97.6	171	128
Er	7.24	2.84	1.60	5.75	5.02	2.69	6.61	2.10	6.52	2.55	5.05	776	1059	423	718	689
Tm	1.12	0.476	0.274	0.895	0.811	0.498	1.00	0.301	1.04	0.446	0.749	151	215	86.3	143	167
Yb	7.59	3.26	1.88	6.45	6.35	3.10	7.54	2.41	7.13	2.75	4.93	1227	1820	725	1189	1633
Lu	1.18	0.529	0.335	1.11	0.975	0.577	1.12	0.434	1.13	0.490	0.757	181	285	111	180	280
Hf	10769	8819	8734	10006	9837	9073	10600	10261	9497	8480	12380	10685	12974	13059	11109	9667
Ta	0.132	0.066	0.107	0.106	0.106	0.070	0.119	0.102	0.103	0.088	0.155	5.23	5.06	3.26	2.09	3.20
Pb	64.2	51.2	16.9	34.7	31.6	59.4	57.8	36.2	46.6	35.1	39.7	773	1036	432	469	631
Th	29.1	13.7	6.48	23.1	16.8	9.07	38.9	18.2	34.7	20.7	16.9	2198	4525	1023	1443	2274
U	210	208	62.5	138	102	224	225	133	188	131	153	1818	2626	1034	1098	1898
Th/U	0.14	0.07	0.10	0.17	0.17	0.04	0.17	0.14	0.18	0.16	0.11	1.21	1.72	0.99	1.31	1.20
REE total	46.3	17.1	14.0	37.1	33.7	16.1	47.9	25.5	42.4	17.5	49.0	3435	5269	1895	3216	3708
Yb_N/Sm_N	4.05	4.14	2.55	4.12	4.20	5.62	3.24	1.09	4.62	3.45	1.01	56.9	42.0	66.3	54.6	85.3
Eu/Eu*	0.945	0.842	1.14	0.945	0.917	0.925	0.893	0.891	0.952	0.814	0.985	0.055	0.098	0.098	0.070	0.121
Ce/Ce*	85.9	43.4	4.89	54.5	35.8	122	28.5	17.0	33.0	86.5	57.8	53.7	1.23	6.93	2.64	1.04
Sm_N/La_N	403	220	7.02	294	209	546	147	95.9	59.9	337	927	122	0.479	7.73	3.49	0.299
Lu_N/Gd_N	1.36	1.97	1.79	1.71	1.87	2.28	1.35	1.40	1.78	1.89	0.652	8.06	10.5	10.8	9.11	26.3
Ti-in-zircon, ºC	852	734	871	836	835	720	850	866	857	772	836	784	843	988	744	837
U/Pb age	337	345	346	346	327	336	341	343	339	339	345	496	499	502	504	397

Cont. Table A3. LA-ICPMS trace element data for zircons from eclogites and granulites.

Sample	1111	1111	1111	1111	1111	NW-1	NW-1	NW-1	NW-1	NW-1	NW-1	NW-1	NW-1	NW-1	NW-1	NW-1
Spot	27	23	12	11	8	52	51	54	58	19	12	47	43	41	37	10
CL type	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3
Sc	716	764	807	790	671	655	702	620	709	671	663	910	683	779	792	719
Ti	20.9	10.5	13.3	31.7	24.7	7.85	11.5	11.1	11.5	7.38	8.42	8.86	4.04	5.78	3.13	8.02
Y	3616	8657	4850	4680	4401	4857	3432	4729	5069	5450	3758	197	38.4	37.2	42.9	55.8
Nb	5.17	18.15	8.26	7.67	8.75	1.58	1.80	2.68	1.86	1.51	1.60	0.758	0.522	0.503	0.537	0.526
La	118	17.2	156	34.3	373	0.073	0.293	1.13	0.059	0.046	0.037	4.06	0.010	0.009	0.013	0.024
Ce	254	114	337	109	790	25.3	19.2	87.1	33.1	28.9	21.9	23.4	1.65	3.06	0.651	4.12
Pr	26.8	5.87	35.7	7.68	91.7	0.490	0.373	1.210	0.461	0.452	0.253	2.410	0.014	0.028	0.002	0.082
Nd	108.73	32.75	142.25	34.59	368.64	8.14	4.68	11.89	8.87	7.59	4.70	14.54	0.40	0.36	0.06	1.25
Sm	19.1	29.0	26.3	18.5	57.2	15.6	8.36	19.0	17.8	15.6	10.8	5.86	0.990	0.790	0.317	2.75
Eu	1.86	1.49	3.03	2.03	7.13	1.33	0.859	1.23	2.15	1.58	1.67	2.44	0.508	0.476	0.319	1.25
Gd	72.3	226	111	142	122	125	72.9	144	138	131	91.5	13.85	5.55	3.23	2.47	7.97
Tb	16.9	57.2	27.6	36.7	26.5	31.3	19.2	35.7	33.9	33.7	23.3	2.77	1.05	0.630	0.563	1.26
Dy	252	761	386	468	360	412	260	436	440	450	310	23.1	6.63	5.34	5.38	8.59
Ho	111	283	150	158	144	144	97.2	146	150	166	117	6.08	1.23	1.23	1.53	1.72
Er	618	1298	718	636	704	624	448	600	654	747	540	21.3	3.46	3.38	5.17	5.00
Tm	158	286	161	126	161	126	96.5	114	134	157	118	3.71	0.439	0.580	0.879	0.702
Yb	1633	2636	1476	1050	1482	1057	873	903	1125	1354	1066	28.8	3.18	4.50	7.08	5.15
Lu	286	420	243	153	237	171	142	145	181	226	185	4.39	0.438	0.600	1.05	0.707
Hf	8734	8310	10006	11363	9413	8649	8819	9073	10176	8904	8819	12211	11363	10430	12804	11278
Ta	3.62	7.31	5.90	5.39	3.60	1.01	0.860	1.67	0.918	0.914	0.873	0.263	0.100	0.049	0.098	0.101
Pb	605	1089	839	854	802	216	150	290	151	197	128	921	71.8	43.0	55.7	129
Th	1684	6496	2598	2575	4667	731	490	1033	522	689	447	34.2	10.1	11.2	4.36	24.1
U	1784	2896	2413	2212	2258	536	397	653	374	492	308	3131	278	160	221	548
Th/U	0.94	2.24	1.08	1.16	2.07	1.36	1.24	1.58	1.40	1.40	1.45	0.01	0.04	0.07	0.02	0.04
REE total	3675	6169	3973	2976	4923	2742	2042	2646	2919	3319	2490	157	25.5	24.2	25.5	40.6
Yb_N/Sm_N	79.8	85.0	52.4	53.0	24.2	63.4	97.4	44.3	58.8	81.2	92.0	4.58	3.00	5.31	20.8	1.75
Eu/Eu*	0.153	0.056	0.171	0.121	0.261	0.092	0.106	0.072	0.132	0.107	0.162	0.828	0.663	0.911	1.10	0.816
Ce/Ce*	1.09	2.73	1.09	1.62	1.03	32.2	14.0	17.9	48.4	48.2	54.2	1.80	33.3	46.2	33.2	22.2
Sm_N/La_N	0.257	2.68	0.268	0.856	0.244	339	45.4	26.8	484	535	459	2.29	157	140	38.5	180
Lu_N/Gd_N	31.8	14.9	17.6	8.65	15.7	11.0	15.7	8.12	10.5	13.9	16.3	2.55	0.635	1.49	3.43	0.714
Ti-in-zircon, ºC	878	802	826	931	899	772	811	807	810	766	779	784	710	742	688	774
U/Pb age	387	377	504	416.0	385	554	553	552	409	550	554	410	348	341	344	340

Cont. Table A3. LA-ICPMS trace element data for zircons from eclogites and granulites.

Sample	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106
Spot	1	10	21	22	26	35	41	44	45	46	50	51	53	72	74
CL type	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Sc	860	862	814	952	882	1077	883	897	927	850	918	815	899	885	887
Ti	22.2	18.6	19.0	25.2	10.8	23.6	14.7	25.9	14.5	15.0	12.6	11.8	32.9	22.3	17.0
Y	1333	890	1037	1174	645	753	686	650	1178	1024	1183	586	1601	524	1307
Nb	1.27	1.04	1.02	1.16	0.886	1.29	1.17	1.13	0.959	0.886	1.03	0.96	1.19	0.884	1.16
La	0.085	0.064	0.311	0.129	0.308	0.089	0.032	0.407	0.126	0.071	0.034	0.097	0.434	0.387	0.107
Ce	5.7	5.7	8.1	5.8	2.6	6.9	4.9	5.1	4.5	4.0	3.4	2.9	5.1	6.1	5.6
Pr	0.160	0.099	0.317	0.299	0.104	0.083	0.063	0.196	0.221	0.136	0.116	0.056	0.392	0.203	0.131
Nd	2.69	1.88	3.44	3.44	1.48	1.43	1.18	1.78	3.58	2.45	2.44	0.91	4.79	2.25	2.58
Sm	5.73	3.63	4.74	4.67	2.49	2.10	2.11	2.42	5.62	5.05	5.63	2.22	7.13	2.96	5.12
Eu	1.26	0.855	0.957	1.19	0.445	0.491	0.361	0.591	1.11	1.01	1.05	0.320	1.17	0.692	0.980
Gd	41.7	28.4	31.3	36.9	18.3	18.5	17.3	18.5	41.5	36.4	38.6	16.3	45.7	16.0	38.3
Tb	10.0	6.86	7.65	8.75	4.48	4.75	4.31	4.79	9.69	8.73	9.18	4.21	11.2	3.79	9.15
Dy	123	84.8	94.2	108	56.1	63.6	58.1	60.3	118	107	115	55.5	145	47.1	119
Ho	43.8	30.6	34.4	39.3	21.2	25.2	22.4	22.6	41.2	37.0	40.9	20.5	52.9	17.8	43.2
Er	190	135	155	173	95.3	120	104	104	178	159	177	95.4	233	82.4	192
Tm	40.1	29.4	33.4	37.6	21.1	27.5	23.5	23.6	38.6	34.4	37.6	21.1	51.2	18.9	40.6
Yb	363	268	300	339	197	260	224	229	347	314	344	200	460	181	359
Lu	64.4	48.3	55.4	62.8	36.8	48.5	40.8	38.7	58.1	51.4	56.5	34.5	78.2	33.5	63.8
Hf	7886	8141	7462	8480	8395	11278	9582	8649	8480	8056	8734	8480	8480	7971	9073
Ta	0.300	0.250	0.263	0.311	0.302	0.371	0.400	0.317	0.288	0.206	0.254	0.330	0.363	0.311	0.339
Pb	40.8	25.9	28.0	35.2	23.0	30.4	28.5	31.1	31.2	26.6	28.7	26.6	39.8	41.3	43.4
Th	68.5	47.0	62.8	61.3	28.4	49.4	37.6	70.0	40.7	42.1	37.7	30.6	59.7	96.9	60.3
U	153	86.0	102	128	73.9	99.0	99.3	103	96.9	87.1	83.0	82.4	137	147	145
Th/U	0.45	0.55	0.62	0.48	0.38	0.50	0.38	0.68	0.42	0.48	0.45	0.37	0.44	0.66	0.41
REE total	891	644	729	821	458	579	503	512	848	760	830	454	1097	413	880
Yb_N/Sm_N	59.0	69.0	59.0	67.7	73.9	116	98.9	88.4	57.7	58.0	57.0	84.2	60.2	57.1	65.5
Eu/Eu*	0.248	0.258	0.240	0.278	0.202	0.241	0.183	0.270	0.223	0.228	0.217	0.163	0.198	0.308	0.214
Ce/Ce*	11.8	17.3	6.23	7.16	3.52	19.4	26.5	4.33	6.42	9.75	13.0	9.44	2.99	5.23	11.3
Sm_N/La_N	108	90.7	24.2	57.6	12.9	37.5	106	9.45	70.9	113	262	36.4	26.1	12.2	76.1
Lu_N/Gd_N	12.4	13.7	14.2	13.7	16.2	21.2	19.0	16.8	11.3	11.3	11.8	17.0	13.7	16.9	13.4
Ti-in-zircon, ºC	886	864	867	901	804	893	838	905	836	840	821	814	935	886	854
U/Pb age	420	419	342	513	501	357	335	418	418	508	488	461	492	352	412

Concentrations in ppm. $Eu/Eu^* = Eu_N/\sqrt{(Sm_N*Gd_N)}$, $Ce/Ce^* = Ce_N/\sqrt{(La_N*Pr_N)}$, normalisation to chondrite after Boynton (1984). Ti-in-zircon temperatures after Ferry & Watson (2007), assuming $a_{SiO2}=1$ and $a_{TiO2}=0.6$ for magmatic zircon (CL type 1 and 4) and $a_{SiO2}=1$ and $a_{TiO2}=1$ for metamorphic zircon (CL type 2 and 3).