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*Supplement of*

## **Glaciation's topographic control on Holocene erosion at the eastern edge of the Alps**

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**Supplementary Data. Compilation of  $^{10}\text{Be}$  Derived Erosion Rates Across the European Alps**

Study	Sample ID	Lat (dd)	Long (dd)	Mean Slope (deg)	Published Erosion Rate (mm ky <sup>-1</sup> )	SLHL $^{10}\text{Be}$ Prod Rate* (at g <sup>-1</sup> yr <sup>-1</sup> )	Rescaled Erosion Rate* (mm ky <sup>-1</sup> )
Delunel et al., 2010	Rd01	45.053	5.844	30.8	510	4.59	444
Delunel et al., 2010	Rd02	45.015	6.062	35.9	860	4.59	750
Delunel et al., 2010	Rd03	45.038	6.192	25.8	1450	4.59	1264
Delunel et al., 2010	Rd04	44.987	6.481	29.2	1440	4.59	1255
Delunel et al., 2010	Rd05	44.893	6.445	34.6	1200	4.59	1046
Delunel et al., 2010	Rd06	44.881	6.442	36.2	1290	4.59	1124
Delunel et al., 2010	Rd07	44.870	6.485	28.9	1690	4.59	1473
Delunel et al., 2010	Rd08	44.949	5.868	31.4	350	4.59	305
Delunel et al., 2010	Rd09	44.891	5.887	31.3	290	4.59	253
Delunel et al., 2010	Rd10	44.881	5.985	35.4	390	4.59	340
Delunel et al., 2010	Mb130	44.799	5.959	27.7	670	4.59	584
Delunel et al., 2010	Mb146	44.787	6.069	33.4	650	4.59	566
Dixon et al., this study	Feistrichbach	47.151	14.778	19.5	69	4	69
Dixon et al., this study	Gleinbach	47.222	14.872	20.4	86	4	86
Dixon et al., this study	Bistrica	46.613	15.139	15.1	69	4	69
Dixon et al., this study	Lassnitz1	46.820	15.184	15.5	39	4	39
Dixon et al., this study	Lassnitz3	46.838	15.173	14.8	57	4	57
Dixon et al., this study	Lavant1	46.939	14.824	11.4	94	4	94
Dixon et al., this study	Lavant2	46.663	14.945	14.2	77	4	77
Dixon et al., this study	Mooskogel	47.359	15.372	22.4	104	4	104
Dixon et al., this study	Ratten	47.487	15.732	16.8	81	4	81
Dixon et al., this study	Stanz	47.465	15.506	19.0	99	4	99
Dixon et al., this study	Thorl	47.482	15.245	21.9	118	4	118
Dixon et al., this study	# Thorl-qtz	47.482	15.245	10.9	118	4	118
Dixon et al., this study	Veitsch	47.564	15.502	20.1	152	4	152
Dixon et al., this study	# Veitsch-qtz	47.564	15.502	19.0	152	4	152
Dixon et al., this study	Pohorju1	46.529	15.434	14.8	77	4	77
Dixon et al., this study	Pohorju2	46.560	15.425	14.6	98	4	98
Dixon et al., this study	Velka	46.585	15.328	16.0	96	4	96
Dixon et al., this study	Kleinsolk	47.382	13.938	30.6	173	4	173
Dixon et al., this study	Obertal	47.354	13.665	28.9	199	4	199
Dixon et al., this study	SaintNico	47.335	14.038	27.4	238	4	238
Dixon et al., this study	Untertal	47.357	13.698	30.3	178	4	178
Dixon et al., this study	Ingering	47.285	14.680	24.4	94	4	94
Dixon et al., this study	Krug	47.275	14.657	21.9	77	4	77
Dixon et al., this study	Rottenmann	47.477	14.347	27.2	200	4	200
Dixon et al., this study	Seckaur	47.283	14.871	21.2	71	4	71
Dixon et al., this study	Triebental	47.444	14.516	23.6	229	4	229
Dixon et al., this study	Pickel	47.003	15.750	7.0	102	4	102
Dixon et al., this study	Stiefing	46.905	15.592	7.2	114	4	114
Glotzbach et al., 2013	CGP 200	45.528	6.786	29.0	560	4.49	499
Glotzbach et al., 2013	CGP 201	45.527	6.787	29.0	1330	4.49	1185
Glotzbach et al., 2013	CGP 202	45.549	6.466	25.9	730	4.49	650
Glotzbach et al., 2013	CGP 203	45.454	6.697	23.6	1160	4.49	1033
Glotzbach et al., 2013	CGP 204	45.454	6.702	28.7	390	4.49	347

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Glotzbach et al., 2013	CGP 205	45.587	6.460	31.0	1000	4.49	891
Glotzbach et al., 2013	CGP 206	45.374	7.057	22.0	270	4.49	241
Glotzbach et al., 2013	CGP 208	45.390	6.255	27.8	730	4.49	650
Glotzbach et al., 2013	CGP 209	45.494	6.321	34.2	600	4.49	535
Glotzbach et al., 2013	CGP 210	45.414	6.145	27.7	330	4.49	294
Glotzbach et al., 2013	CGP 211	45.383	6.097	27.9	380	4.49	339
Glotzbach et al., 2013	RD47	44.681	6.697	24.3	580	4.49	517
Glotzbach et al., 2013	RD48	44.719	6.762	23.8	500	4.49	445
Glotzbach et al., 2013	RD49	44.778	6.860	25.0	400	4.49	356
Legrain et al., 2015	Fra-4	46.880	14.922	12.7	47	4.5	42
Legrain et al., 2015	Fra-5	46.890	14.934	17.2	55	4.5	49
Legrain et al., 2015	Pro-4	46.852	14.987	12.9	36	4.5	32
Legrain et al., 2015	Bla-1	46.831	15.063	21.0	59	4.5	52
Legrain et al., 2015	Bis-2	46.683	15.092	10.3	47	4.5	42
Legrain et al., 2015	Bis-3	46.686	15.081	15.1	51	4.5	45
Legrain et al., 2015	Twl-1	46.899	14.862	23.3	89	4.5	79
Legrain et al., 2015	Fra-3	46.874	14.891	24.6	56	4.5	50
Legrain et al., 2015	Pro-7	46.844	14.971	26.8	123	4.5	109
Legrain et al., 2015	Pro-8	46.854	14.908	27.6	63	4.5	56
Legrain et al., 2015	Las-4	46.838	15.173	28.3	69	4.5	61
Legrain et al., 2015	Bis-5	46.672	15.060	17.7	117	4.5	104
Legrain et al., 2015	Bis-6	46.673	15.066	16.9	82	4.5	73
Legrain et al., 2015	Bis-1	46.613	15.139	17.9	69	4.5	61
Legrain et al., 2015	Las-3	46.838	15.173	18.6	61	4.5	54
Legrain et al., 2015	Pro-2	46.844	14.945	27.8	149	4.5	132
Legrain et al., 2015	Pro-6	46.848	14.927	29.4	111	4.5	99
Legrain et al., 2015	Sti-1	49.905	15.591	9.3	123	4.5	109
Legrain et al., 2015	Pic-1	47.003	15.750	10.4	110	4.5	98
Legrain et al., 2015	Sau-1	46.842	15.311	5.9	33	4.5	29
Norton et al., 2008	Trub2	46.992	7.883	22.5	451	5.53	326
Norton et al., 2008	Trub3	46.968	7.893	18.7	334	5.53	242
Norton et al., 2008	Trub4	46.979	7.934	19.4	405	5.53	293
Norton et al., 2008	Trub5	46.999	7.918	19.5	324	5.53	234
Norton et al., 2008	Trub6	46.948	7.888	17.3	630	5.53	456
Norton et al., 2008	Fon1	47.030	8.061	17.3	643	5.53	465
Norton et al., 2008	Fon2	47.037	8.033	15.9	540	5.53	391
Norton et al., 2008	Fon3	47.029	7.982	16.2	450	5.53	326
Norton et al., 2008	Fon4	46.972	7.982	16.2	331	5.53	239
Norton et al., 2008	Fon5	46.970	7.967	18.2	380	5.53	275
Norton et al., 2008	Fon6	46.986	7.972	18.4	390	5.53	282
Norton et al., 2008	Fon7	46.982	8.002	19.0	472	5.53	341
Norton et al., 2010	Mil	46.522	8.323	27.0	466	5.53	337
Norton et al., 2010	Ober	46.512	8.306	29.0	345	5.53	250
Norton et al., 2010	Nider 1	46.525	8.269	21.0	174	5.53	126
Norton et al., 2010	Nider2	46.524	8.272	23.0	160	5.53	116
Norton et al., 2010	Nider3	46.501	8.292	29.0	218	5.53	158
Norton et al., 2010	Ges	46.499	8.281	31.0	402	5.53	291

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Norton et al., 2010	Mins	46.491	8.261	31.0	2120	5.53	1534
Norton et al., 2010	Rec	46.468	8.239	32.0	1130	5.53	817
Norton et al., 2010	Hil	46.448	8.208	30.0	297	5.53	215
Norton et al., 2010	Hil 2	46.448	8.183	24.0	152	5.53	110
Norton et al., 2010	Wil	46.442	8.197	27.0	84	5.53	61
Norton et al., 2010	Wil 2	46.459	8.173	29.0	97	5.53	70
Norton et al., 2010	Ritz	46.452	8.226	31.0	264	5.53	191
Norton et al., 2010	Spi	46.446	8.211	26.0	591	5.53	428
Norton et al., 2010	Chr	46.436	8.204	31.0	800	5.53	579
Norton et al., 2010	Bet	46.432	8.189	29.0	1410	5.53	1020
Norton et al., 2010	Löü	46.419	8.172	32.0	880	5.53	637
Norton et al., 2011	Ahrn	47.064	12.173	30.5	1230	5.53	890
Norton et al., 2011	Antholzer	46.860	12.127	30.1	302	5.53	218
Norton et al., 2011	Arno	46.030	10.624	30.1	469	5.53	339
Norton et al., 2011	Avisio	46.357	11.660	24.8	359	5.53	260
Norton et al., 2011	Bergler	46.800	11.509	32.9	246	5.53	178
Norton et al., 2011	Bergler 2	46.800	11.509	32.9	376	5.53	272
Norton et al., 2011	Bergler 3	46.800	11.509	32.9	264	5.53	191
Norton et al., 2011	Bitto	46.070	9.569	30.7	436	5.53	315
Norton et al., 2011	Castello	46.109	9.991	34.6	1060	5.53	767
Norton et al., 2011	di Ada me	46.086	10.461	33.0	480	5.53	347
Norton et al., 2011	di Venina	46.089	9.907	34.8	760	5.53	550
Norton et al., 2011	Fersina	46.102	11.324	25.3	325	5.53	235
Norton et al., 2011	Flagger	46.770	11.535	33.3	1370	5.53	991
Norton et al., 2011	Flagger 2	46.770	11.535	33.3	1470	5.53	1063
Norton et al., 2011	Fusino	46.371	10.244	31.0	356	5.53	258
Norton et al., 2011	Hoeller	47.205	12.421	32.5	650	5.53	470
Norton et al., 2011	Hoeller 2	47.205	12.421	32.5	1090	5.53	788
Norton et al., 2011	Krimmler	47.134	12.186	31.5	537	5.53	388
Norton et al., 2011	Lagorai	46.238	11.517	29.7	214	5.53	155
Norton et al., 2011	Masino	46.241	9.642	35.4	301	5.53	218
Norton et al., 2011	Melach	47.170	11.153	30.1	548	5.53	396
Norton et al., 2011	Muhl	47.304	12.321	25.0	850	5.53	615
Norton et al., 2011	Nero	46.309	11.551	24.4	287	5.53	208
Norton et al., 2011	Novate	46.259	9.513	40.5	710	5.53	514
Norton et al., 2011	Oglio	46.224	10.393	29.2	660	5.53	477
Norton et al., 2011	Pfitsch	46.954	11.594	31.4	530	5.53	383
Norton et al., 2011	Pitze	47.013	10.836	33.5	680	5.53	492
Norton et al., 2011	Plime	46.520	10.733	31.5	1100	5.53	796
Norton et al., 2011	Schnalz	46.726	10.879	32.8	580	5.53	420
Norton et al., 2011	Silla	46.125	11.239	17.3	240	5.53	174
Norton et al., 2011	Talfer	46.676	11.385	25.0	324	5.53	234
Norton et al., 2011	Tauern	47.120	12.457	29.9	1240	5.53	897
Norton et al., 2011	Val moena	46.230	11.473	29.6	168	5.53	122
Norton et al., 2011	Watten	47.209	11.623	26.4	519	5.53	375
Norton et al., 2011	Wildschoen	47.399	12.025	23.7	730	5.53	528
Norton et al., 2011	Zemm	47.049	11.776	35.8	710	5.53	514

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Norton et al., 2011	Ziel	46.712	11.026	32.9	750	5.53	543
Savi et al., 2014	S01	46.678	11.066	28.2	1460	4.43	1318
Savi et al., 2014	S02	46.671	11.073	27.8	1210	4.43	1093
Savi et al., 2014	S03	46.693	11.051	28.0	395	4.43	357
Savi et al., 2014	S06	46.704	11.039	26.1	307	4.43	277
Savi et al., 2014	S07	46.701	11.038	34.3	342	4.43	309
Savi et al., 2014	S08	46.695	11.046	26.6	412	4.43	372
Savi et al., 2014	S09	46.697	11.051	38.4	2650	4.43	2393
Savi et al., 2014	S10	46.697	11.053	35.0	1920	4.43	1734
Savi et al., 2014	S11	46.710	11.030	25.7	484	4.43	437
Savi et al., 2014	S13	46.704	11.037	37.1	146	4.43	132
Savi et al., 2014	S14	46.705	11.036	26.0	474	4.43	428
Savi et al., 2014	S15	46.718	11.007	25.3	606	4.43	547
Savi et al., 2014	S16	46.723	11.023	22.4	577	4.43	521
Savi et al., 2014	S18	46.707	11.053	25.7	657	4.43	593
Savi et al., 2014	S19	46.719	11.023	25.3	433	4.43	391
Savi et al., 2014	S20	46.714	11.031	22.4	829	4.43	749
Wittmann et al., 2007	Mag 1	46.223	8.741	30	410	5.53	297
Wittmann et al., 2007	Mag 2	46.253	8.713	31	360	5.53	260
Wittmann et al., 2007	Mag 4	46.288	8.532	30	1120	5.53	810
Wittmann et al., 2007	Mag 8	46.340	8.608	30	780	5.53	564
Wittmann et al., 2007	Mag 10	46.389	8.667	31	770	5.53	557
Wittmann et al., 2007	Mag 11-2	46.300	8.617	29	770	5.53	557
Wittmann et al., 2007	Mag 11-4	46.242	8.711	29	800	5.53	579
Wittmann et al., 2007	Mag 13	46.448	8.526	27	690	5.53	499
Wittmann et al., 2007	Mag 16	46.395	8.656	28	1060	5.53	767
Wittmann et al., 2007	Mag 17	46.409	8.642	28	350	5.53	253
Wittmann et al., 2007	Mag 18	46.447	8.666	27	600	5.53	434
Wittmann et al., 2007	Anza	46.023	8.262	31	830	5.53	600
Wittmann et al., 2007	Sesia	45.812	8.256	29	500	5.53	362
Wittmann et al., 2007	Toce	46.146	8.309	27	1175	5.53	850
Wittmann et al., 2007	Verz	46.253	8.843	30	595	5.53	430
Wittmann et al., 2007	Mela 1	46.140	8.583	24	1280	5.53	926
Wittmann et al., 2007	Mela 2	46.177	8.704	24	1050	5.53	760
Wittmann et al., 2007	Mela 3	46.181	8.711	27	610	5.53	441
Wittmann et al., 2007	Lonza	46.402	7.783	28	1280	5.53	926
Wittmann et al., 2007	Gren	46.375	8.101	29	1320	5.53	955
Wittmann et al., 2007	Chie	46.503	8.307	24	690	5.53	499
Wittmann et al., 2007	Furka	46.588	8.494	23	1140	5.53	825
Wittmann et al., 2007	Tic	46.520	8.561	25	800	5.53	579
Wittmann et al., 2007	Reuss	46.827	8.641	28	1580	5.53	1143
Wittmann et al., 2007	Klem	47.043	8.206	16	480	5.53	347
Wittmann et al., 2007	Buetsch 1	46.847	7.407	9	110	5.53	80
Wittmann et al., 2007	Buetsch 2	46.840	7.438	9	100	5.53	72
Wittmann et al., 2007	Emme	47.047	7.633	13	260	5.53	188
Wittmann et al., 2007	Wasen	47.043	7.795	16	290	5.53	210
Wittmann et al., 2007	Taf	46.882	7.302	5	160	5.53	116

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Wittmann et al., 2007	Sense	46.825	7.320	16	250	5.53	181
Wittmann et al., 2016	T1	46.143	9.406	25.4	725	5.53	525
Wittmann et al., 2016	T2	45.855	10.141	25.2	380	5.53	275
Wittmann et al., 2016	T3	46.238	9.028	27.0	853	5.53	617
Wittmann et al., 2016	T4	46.203	9.018	30.8	741	5.53	536
Wittmann et al., 2016	T5	46.058	8.681	31.3	286	5.53	207
Wittmann et al., 2016	T6	45.956	8.527	35.8	244	5.53	177
Wittmann et al., 2016	T7	46.124	8.300	26.9	1265	5.53	915
Wittmann et al., 2016	T8	45.991	8.397	30.3	1483	5.53	1073
Wittmann et al., 2016	T9	45.840	8.423	20.1	86	5.53	62
Wittmann et al., 2016	T10	45.762	8.321	15.9	78	5.53	57
Wittmann et al., 2016	T11	45.631	8.379	24.5	188	5.53	136
Wittmann et al., 2016	T12	45.520	7.839	25.5	581	5.53	420
Wittmann et al., 2016	T13	45.265	7.975	23.3	568	5.53	411
Wittmann et al., 2016	T14	45.405	7.642	27.2	266	5.53	193
Wittmann et al., 2016	T15	45.090	7.398	22.6	810	5.53	586
Wittmann et al., 2016	T16	44.648	7.437	19.7	105	5.53	76
Wittmann et al., 2016	T17	44.589	7.520	21.3	134	5.53	97

\* Published rates used sea-level, high-latitude (SLHL) production rates shown here. All rates are rescaled to SLHL production rate of 4.0 at g<sub>quartz</sub><sup>-1</sup> yr<sup>-1</sup>