

Supplementary Material

Table S1. List of published paleoflood records from lake

Lake	Country	Latitude	Longitude	Reference
Blanc Aiguilles Rouges	France	45.98	6.92	Wilhelm et al., 2013, J. of Quat. Sci. 28(2): 189–199
Anterne	France	45.99	6.79	Arnaud et al., 2002, Terra Nova 14, 225–232
Anterne	France	45.99	6.79	Giguët-Covex et al., 2011, The Holocene 21(4), 651–665
Anterne	France	45.99	6.79	Giguët-Covex et al., 2012, Quat. Research 77(1): 12–22
Bourget	France	45.77	5.84	Chapron et al., 2005, Boreas 34(4), 404–416
Bourget	France	45.77	5.84	Jenny et al., 2014, J. of Paleolimnology 51(4): 469–483
Bourget	France	45.77	5.84	Evin et al., 2019, Global and Planetary Change 172, 114–123
Allos	France	44.23	6.72	Wilhelm et al., 2012, Quat. Research 78(1): 1–12
Allos	France	44.23	6.72	Wilhelm et al., 2015, <i>Sedimentology</i> 62(4): 1103–1117
Allos	France	44.23	6.72	Brisset et al., 2017, <i>Geology</i> . doi: 10.1130/G38498.1
Foréant	France	44.71	6.99	Wilhelm et al., 2016, <i>Climate of the Past</i> 12, 299–316
Savine	France	45.105	6.55	Sabatier et al., 2017, Quat. Science Reviews
Gers	France	46.03	6.73	Bajard et al., 2020, Pal., Pal., Pal. 538, 109462
Ammersee	Germany	48.00	11.12	Czymzik M. et al., 2010, WRR 46, W11528
Ammersee	Germany	48.00	11.12	Czymzik M. et al., 2013, Quat. Sci. Rev. 61, 96–110
Lehnmühle	Germany	50.83	13.59	Kämpf et al., 2012, Quat. Science J. 61(1), 3–15
Mondsee	Austria	47.48	13.23	Swierczynski et al., 2012, <i>Geology</i> 40(11), 1047–1050
Mondsee	Austria	47.48	13.23	Swierczynski, et al., 2013, Quat. Sci. Rev. 80 (2013). 78–90
Mondsee	Austria	47.48	13.23	Schubert et al., 2020, Pal. Pal. Pal. 559
Oeschinen	Switzerland	46.5	7.73	Amann et al., 2015, Quat. Sci. Rev. 115, 89–100.
Lauerz	Switzerland	47.04	8.61	Busmann et al., 2010, Swiss J Geosci. 103: 43–59
Baldegg	Switzerland	47.2	8.26	Glur et al., 2013, Scientific Reports 3: 2770
Seelisberg	Switzerland	46.96	8.57	Glur et al., 2013, Scientific Reports 3: 2770
Hinterer Schwendisee	Switzerland	47.18	9.33	Glur et al., 2013, Scientific Reports 3: 2770
Faelen	Switzerland	47.25	9.42	Glur et al., 2013, Scientific Reports 3: 2770
Hinterburg	Switzerland	46.72	8.07	Glur et al., 2013, Scientific Reports 3: 2770
Trueb	Switzerland	46.79	8.39	Glur et al., 2015, Holocene 25, 280–287
Glattalp	Switzerland	46.92	8.9	Glur et al., 2013, Scientific Reports 3: 2770
Grimsel	Switzerland	46.57	8.33	Glur et al., 2013, Scientific Reports 3: 2770
Iffig	Switzerland	46.39	7.41	Glur et al., 2013, Scientific Reports 3: 2770
Alzasca	Switzerland	46.26	8.59	Wirth et al., 2013, Quat. Sci. Rev. 80, 112–128.
Cadagno	Switzerland	46.54	8.71	Wirth et al., 2013, Quat. Sci. Rev. 80, 112–128.
Ledro	Italy	45.87	10.75	Wirth et al., 2013, Quat. Sci. Rev. 80, 112–128.
Ledro	Italy	45.87	10.75	Vanniere et al., 2013, Clim. Past 9, 1193–1209.
Ledro	Italy	45.87	10.75	Simonneau et al., 2013, Clim. Past, 9, 825–840
Garlate	Italy	45.82	9.41	Wirth et al., 2013, Quat. Sci. Rev. 80, 112–128.
Ghirla	Italy	45.91	8.82	Wirth et al., 2013, Quat. Sci. Rev. 80, 112–128.
di Braies	Italy	46.69	12.08	Irmeler et al., 2006, Geomorphol 77:69–78
Maggiore	Italy	45.92	8.52	Kämpf et al., 2012, Freshwater Biology 57, 2076–2090
Montcortes	Spain	42.33	0.99	Corella et al., 2014, Quat. Sci. Rev. 93(0):77–90.
Cape Bounty Watershed Observatory	Canada	74.53	-109.32	Lapointe et al., 2012, J. Paleolimnol., 48, 159–173.
Nicolay	Canada	77.53	-95.47	Lamoureux, 2000, J. Paleolimnol.
Suigetsu	Japan	35.58	135.88	Schlögl et al., 2014, Quat. Sci. Rev. 83, 157 – 170.
Silvaplana	Switzerland	46.24	9.52	Stewart et al., 2011, Pal., Pal., Pal. 311/3–4, 215–123

Russvatnet	Norway	61.54	8.66	Storen et al., 2008, Holocene 18, 1179e1191.
Meringsdalsvatnet	Norway	61.67	9.19	Storen et al., 2010, Quat. Sci. Rev.,29, 3021–3033.
Meringsdalsvatnet	Norway	61.67	9.19	Storen et al., 2016, G3 17(10), 4236-4235
Butjonna	Norway	62.13	10.16	Boe et al. , 2006, The Holocene 16: 445–455
Oldevatnet	Norway	61.78	6.82	Vasskog et al., 2011, The Holocene 21, 597–614.
Atnsjoen	Norway	61.88	10.14	Nesje et al., 2001, J. of Paleolimnology 25: 329–342.
Fryasletta	Norway	61.55	10.01	Nesje et al., 2016, In: Ingar M. Gundersen (ed.), Gård og utmark i Gudbrandsdalen - Arkeologiske undersøkelser i Fron 2011-2012, Norway
TT Lake	China	31.1	86.57	Ahlborn et al., 2015, The Holocene 25, 508–522
Taravilla	Spain	40.39	1.59	Moreno et al., 2008, J. of Paleolimnology 40, 943–961.
PAD 54 ('Horseshoe Slough')	Canada	58.52	-111.34	Wolfe et al., 2006,Canada. Hydro. Proc. 20: 4131-4153.
PAD 15 ('Pete's Creek')	Canada	58.57	-111.29	Wolfe et al., 2008, GRL 35, L24402
El Tobar	Spain	40.53	-3.93	Barreiro-Lostres et al., 2017, Catena 149, 782–798
El Tejo	Spain	39	-1.87	Barreiro-Lostres et al., 2017, Catena 149, 782–798
La Parra	Spain	39.98	-1.87	Barreiro-Lostres et al., 2017, Catena 149, 782–798
Amherst Lake	USA	43.49	-72.7	Noren et al., 2002, Nature 419, 821-824
Beebe Pond	USA	43.74	-73.18	Noren et al., 2002, Nature 419, 821-824
Chapel Pond	USA	44.14	-73.75	Noren et al., 2002, Nature 419, 821-824
Duck Pond	USA	44.71	-72.07	Noren et al., 2002, Nature 419, 821-824
Echo Lake	USA	43.47	-72.7	Noren et al., 2002, Nature 419, 821-824
Emerald Pond	USA	43.27	-73.01	Noren et al., 2002, Nature 419, 821-824
Dunmore	USA	43.91	-73.07	Noren et al., 2002, Nature 419, 821-824
Elligo	USA	44.59	-72.36	Noren et al., 2002, Nature 419, 821-824
Morey	USA	43.92	-72.16	Noren et al., 2002, Nature 419, 821-824
Richmond Pond	USA	44.42	-72.95	Gran et al., 1999, J. of Geoscience Education 4 7 , 420-447
Ritterbush Pond	USA	44.75	-72.6	Brown et al., 2000, Geology 28, 335-338
Thirteenth Lake	USA	43.71	-74.13	Noren et al., 2002, Nature 419, 821-824
Vail Pond	USA	44.71	-72.07	Noren et al., 2002, Nature 419, 821-824
Crystal	USA	43.91	-71.08	Parris et al., 2010, J. of Paleolimnology 43, 1, 29-49
Ogontz	USA	44.27	-71.91	Parris et al., 2010, J. of Paleolimnology 43, 1, 29-49
Sandy Pond	USA	42.78	-72.28	Parris et al., 2010, J. of Paleolimnology 43, 1, 29-49
South Pond	USA	44.6	-71.36	Parris et al., 2010, J. of Paleolimnology 43, 1, 29-49
Stinson	USA	43.87	-71.8	Parris et al., 2010, J. of Paleolimnology 43, 1, 29-49
Worthley Pond	USA	44.46	-70.4	Parris et al., 2010, J. of Paleolimnology 43, 1, 29-49
Iseo	Italy	45.72	10.1	Lauterbach et al., 2012, The Holocene 22, 749–760
Iseo	Italy	45.72	10.1	Rapuc et al., 2019, Global and Planetary Change 175, 160-172
Dead Sea	Israel	31.47	35.39	Neugebauer et al., 2015, The Holocene, 25, 1358-1371
Kizaki	Japan	36.55	137.84	Ito et al., 2010, Environmental Earth Sciences 60, 1607-1618
Tahoe	USA	39.09	-120.03	Oslegger et al., 2009, J. of Paleolimnology 42:103–122
Tutira	New-Zealand	-39.22	176.89	Page et al., 2010, Marine Geology 270 : 30–44
Waikopiro	New-Zealand	-39.23	176.89	Page et al., 2010, Marine Geology 270 : 30–44
Nakaumi	Japan	35.46	133.19	Ota et al., 2017, J. Quat. Sci. DOI: 10.1002/jqs.2982
Potrok Aike	Argentina Patagonia	-51.59	-70.21	Jouve et al., 2017, Pal. Pal. Pal. 472, 33-50
Brotherswater	UK	54,51	-2.92	Schillereff et al., 2019, Global and Planetary Change 182, 102998
Muzelle	France	44,94	6,09	Fouinat et al., 2017, Quat. Research 87, 407-22
Bassenthwaite	UK	54,3	3,11	Chiverell et al., 2019, Earth Surface Proc. Landforms 44, 2366-2376

Thun	Switzerland	46,69	7,71	Wirth et al., 2011, Sedimentology 58, 1737-1761.
Sandvinvatnet	Norway	60,04	6,54	Ekblom et al., 2020, Frontiers in Earth science 8, 239
Flyginnssjøen	Norway	60,14	12,07	Engeland et al., 2020, Hydro. and Earth Sys. Sci. 24, 5595-5619
Storsjön	Sweden	63,25	14,31	Labuhn et al., 2018, Quat. 1(1), 2
Buarvatnet	Norway	59,23	5,4	Rothe et al., 2019, Boréas 48(3), 616-634
Quinault	USA	47,48	-123,87	Smith et al., 2019, The Holocene 29(8), 1273-1291
Pianico-Sellere	Italy	45,81	10,04	Witt et al., 2017, Hydrol. Earth Syst. Sci., 21, 5547–5581
Kanas	China	48,8	87,03	Zhou et al., 2018, Chinese Geographical sciences 28, 773–783
Svartvatnet	Norway	67.98	13.14	Røthe et al., 2019, The Holocene 2019, 29(8)