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Supplemental Material

Table S1. Correlations

TABLE S1. CORRELATIONS

Lake/ Section	n	P vs Ti	P vs Al	P vs Fe	P vs Ca	P/Ti vs C_{org}	P/Ti vs P Accum. Rate	Ti vs Al
Geanies								
20	3	-0.998, 0.0401	+0.212, 0.864	+0.090, 0.9429	-0.652, 0.5480	-0.836, 0.3698	+0.993, 0.0244	+0.897, 0.2909
19	10	+0.768, 0.0095	+0.804, 0.005	+0.876, 0.0009	-0.840, 0.0024	+0.751, 0.0124	-0.058, 0.8737	+0.951, <0.0001
18	7	+0.402, 0.3717	+0.728, 0.0636	+0.730, 0.0626	-0.563, 0.1880	+0.571, 0.1803	-0.0242, 0.6015	+0.594, 0.1599
17	9	+0.643, 0.0618	+0.841, 0.0045	+0.949, <0.0001	-0.063, 0.8723	+0.016, 0.9664	-0.0174, 0.6550	+0.366, 0.3332
16	19	+0.779, <0.0001	+0.624, 0.0043	+0.620, 0.0047	-0.232, 0.3402	+0.350, 0.1455	+0.047, 0.8491	+0.964, <0.0001
15	6	+0.973, 0.0011	-0.356, 0.4884	-0.376, 0.4624	+0.240, 0.6480	+0.591, 0.2163	+0.257, 0.6234	+0.930, 0.0082
14	24	+0.627, 0.001	+0.819, <0.0001	+0.866, <0.0001	-0.333, 0.1122	+0.258, 0.2229	-0.027, 0.9005	+0.670, 0.0004
13	6	-0.451, 0.3694	+0.656, 0.1573	+0.097, 0.8555	+0.273, 0.6005	+0.212, 0.6863	+0.428, 0.3977	+0.830, 0.0433
12	19	+0.586, 0.0083	+0.771, 0.0001	+0.569, 0.0111	-0.920, 0.6005	-0.345, 0.1487	+0.188, 0.4410	+0.941, <0.0001
11	17	-0.002, 0.9946	+0.311, 0.224	-0.217, 0.4036	-0.620, 0.0083	-0.067, 0.7985	+0.386, 0.1261	+0.707, 0.0015
10	17	+0.839, <0.0001	+0.875, <0.0001	+0.826, <0.0001	-0.981, <0.0001	+0.037, 0.8891	-0.513, 0.0353	+0.963, <0.0001
9	14	+0.953, <0.0001	+0.917, <0.0001	+0.740, 0.0011	-0.981, <0.0001	-0.316, 0.2325	-0.569, 0.0216	+0.990, <0.0001
All	151	+0.768, <0.0001	+0.657, <0.0001	+0.624, <0.0001	-0.560, <0.0001	+0.132, 0.1029	-0.284, 0.0004	+0.920, <0.0001
Hoxa Head								
38	5	-0.223, 0.7184	+0.828, 0.0835	-0.677, 0.2093	-0.916, 0.0289	-0.914, 0.0300	+0.654, 0.2314	+0.845, 0.0717
37	2	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†
36	2	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†
35	5	0.446, 0.4513	+0.601, 0.2841	+0.421, 0.4807	-0.817, 0.0915	-0.030, 0.9617	+0.417, 0.4851	+0.847, 0.0704
34	6	0.839, 0.0369	+0.783, 0.0655	+0.900, 0.0146	-0.434, 0.3903	+0.217, 0.6794	-0.657, 0.1564	+0.929, 0.0073
33	10	-0.493, 0.1476	-0.064, 0.8515	+0.031, 0.9289	-0.383, 0.2457	-0.328, 0.3254	+0.626, 0.0394	+0.685, 0.0201
32	9	-0.382, 0.31	+0.608, 0.1101	+0.814, 0.014	-0.851, 0.0074	-0.719, 0.0443	+0.802, 0.0166	+0.723, 0.0429
31	7	-0.253, 0.5846	+0.446, 0.316	+0.544, 0.2067	-0.642, 0.1204	-0.881, 0.0089	+0.571, 0.1808	+0.704, 0.0774
30	3	0.516, 0.6548	+0.434, 0.7141	-0.463, 0.6934	-0.928, 0.2429	-0.911, 0.2713	-0.266, 0.8283	+0.994, 0.0686
29	5	0.027, 0.9653	+0.111, 0.8596	+0.281, 0.647	-0.104, 0.8678	-0.056, 0.9294	+0.167, 0.7883	+0.666, 0.2195
28	10	0.149, 0.6809	+0.526, 0.1184	+0.582, 0.0779	-0.429, 0.2162	-0.710, 0.0215	+0.145, 0.6902	+0.780, 0.0078
27	4	0.289, 0.7112	+0.976, 0.0239	+0.991, 0.0095	-0.952, 0.0485	+0.310, 0.6897	+0.881, 0.1194	+0.892, 0.1084
26	2	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†
25	3	0.977, 0.1381	+0.992, 0.0799	+0.468, 0.6902	+0.959, 0.1827	+0.866, 0.3338	-0.899, 0.2885	+0.990, 0.0901
24	12	0.269, 0.3983	+0.774, 0.0031	+0.878, 0.0002	-0.760, 0.0042	+0.022, 0.9454	+0.170, 0.5966	+0.448, 0.1445
23	8	-0.043, 0.9199	-0.105, 0.8038	-0.247, 0.5555	-0.010, 0.9821	+0.291, 0.4852	+0.782, 0.0219	+0.823, 0.012

22	3	-0.987, 0.1028	-0.532, 0.643	-0.146, 0.9068	-0.137, 0.9124	-0.688, 0.5166	+0.988, 0.0997	+0.513, 0.6572
21	4	0.446, 0.5543	+0.548, 0.4521	+0.681, 0.3186	+0.101, 0.8986	+0.187, 0.813	-0.286, 0.714	+0.950, 0.0500
20	4	0.016, 0.984	+0.792, 0.2085	+0.934, 0.0661	-0.864, 0.1361	-0.584, 0.4165	+0.597, 0.403	+0.882, 0.1184
19	5	0.606, 0.2787	-0.114, 0.8554	-0.468, 0.4263	+0.319, 0.6012	-0.352, 0.5614	-0.125, 0.8409	+0.411, 0.4917
18	8	0.678, 0.0646	+0.900, 0.0023	+0.884, 0.0036	-0.800, 0.0172	-0.286, 0.4924	-0.084, 0.8438	+0.950, 0.0003
All	117	-0.007, 0.9363	+0.197, 0.0335	+0.249, 0.0068	-0.300, 0.001	-0.086, 0.3555	+0.415, <0.0001	+0.781, <0.0001
Ella								
1	13	+0.016, 0.9588	+0.510, 0.0751	+0.660, 0.0140	+0.640, 0.0189	+0.320, 0.2921	+0.800, 0.0010	+0.870, <0.0001
Hegglie Ber								
3	1	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†	N.A.†
2	4	-0.530, 0.4709	-0.640, 0.3599	+0.504, 0.4964	+0.370, 0.6335	+0.970, 0.0298	+0.932, 0.0682	+0.970, 0.0339
1	4	-0.212, 0.7878	-0.331, 0.6690	+0.506, 0.4936	-0.300, 0.7010	+0.099, 0.9012	+0.430, 0.5835	+0.820, 0.1834
All	9	-0.467, 0.2054	-0.552, 0.1232	-0.070, 0.8575	-0.503, 0.1680	+0.921, 0.0004	+0.880, 0.0018	+0.983, <0.0001
Heintzbjerg								
Famennian	27	+0.238, 0.2326	+0.352, 0.0716	+0.478, 0.0116	-0.540, 0.2874	+0.484, 0.0106	*	+0.872, <0.0001
UKW	40	-0.107, 0.5094	-0.194, 0.2304	-0.078, 0.6310	+0.014, 0.9300	-0.200, 0.2167	+0.142, 0.4467	+0.500, 0.0013
Midnatspas	21	-0.440, 0.0457	+0.120, 0.6033	+0.370, 0.0991	-0.220, 0.3376	-0.365, 0.2167	-0.491, 0.0239	+0.805, <0.0001
LKW	17	-0.163, 0.5311	-0.248, 0.3379	-0.380, 0.1374	+0.196, 0.4513	+0.165, 0.5272	*	+0.919, <0.0001
All	105	-0.104, 0.2907	-0.101, 0.3061	+0.025, 0.8000	-0.061, 0.4513	+0.021, 0.8305	+0.270, 0.0566	+0.690, <0.0001

Note: Correlations noted as r values (+/-) followed by *P*-value performed for each lake cycle, or significant division within the sample set in the case of Heintzbjerg, as well as for the sequence.

* P accumulation rate could not be calculated for this portion of the sequence.

† N.A. denotes lakes where correlation was not possible due to insufficient data points.