

Table S1. Water chemistry of the surface water of Lake Hongfeng

Time	Sites	T	DO	pH	TDS	NH ₄ ⁺	DIC	HCO ₃ ⁻	CO ₃ ²⁻	CO ₂	pCO ₂	FCO ₂	F ⁻	Cl ⁻	NO ₃ ⁻	SO ₄ ²⁻	Ca ²⁺	K ⁺	Mg ²⁺	Na ⁺	
(M.-D. of 2013)		°C	mg l ⁻¹			mgN l ⁻¹	mmol l ⁻¹				µatm	mmol m ⁻² d ⁻¹	mg l ⁻¹								
1-24	HPJ	6.7	10.2	8.07	258	0.36	2.38	2.30	0.01	0.07	1172.3	20.2	0.12	5.13	4.3	73.4	57.6	1.2	22.0	5.5	
	HPQ	7.6	9.3	8.11	266	0.43	2.13	2.06	0.01	0.06	969.3	15.4	0.21	5.53	5.8	80.0			8.1	4.1	
	A1	7.3	9.7	8.15	262	0.40	2.64	2.57	0.01	0.06	1096.3	18.4	0.13	5.05	4.8	76.9	59.5	0.7	23.2	7.5	
	B1	7.5	9.0	8.12	274	0.55	2.22	2.15	0.01	0.06	987.6	15.9	0.17	5.97	6.5	87.1	40.5		15.3	6.1	
	C1	7.6	9.5	8.19	276	0.60	2.43	2.36	0.01	0.05	923.8	14.3	0.14	5.92	6.8	90.3	20.6		6.7	5.4	
3-5	HPQ	12.0	9.8	7.86	144	0.35	2.33	2.22	0.01	0.10	1961.5	38.9	0.13	5.23	5.2	74.7	51.8	1.1	18.4	7.5	
	A1	12.4	9.8	7.86	269	0.54	2.26	2.16	0.01	0.09	1912.8	37.8	0.07	5.41	4.3	66.3	52.0	0.9	21.5	7.5	
	B1	12.2	9.7	7.86	277	0.37	2.14	2.04	0.01	0.09	1805.5	35.3	0.10	6.20	6.5	88.8	51.5	2.1	19.5	8.1	
	C1	12.0	9.5	7.84	291	0.61	1.94	1.85	0.00	0.09	1701.0	32.8	0.12	5.45	7.0	86.8	49.6	2.2	18.8	8.0	
3-25	HPJ	16.5	9.1	8.79	226	0.24	2.18	2.12	0.05	0.01	233.1	-2.0	0.01	7.32	3.7	73.2	55.5	1.8	22.2	5.8	
	HPQ	16.8	9.8	8.70	262	0.12	2.19	2.14	0.04	0.01	289.8	-0.7	0.19	7.27	5.0	77.6	53.0	1.3	21.2	6.1	
	A1	16.8	9.7	8.77	261	0.19	1.56	1.51	0.03	0.01	175.0	-3.4	0.03	6.97	4.2	72.8	55.0	1.3	21.4	7.0	
	B1	17.5	9.4	8.82	273	0.14	2.09	2.03	0.05	0.01	211.4	-2.5	0.27	6.82	5.7	87.9	51.9	1.7	20.3	7.1	
	C1	16.8	9.4	8.65	273	0.12	1.86	1.82	0.03	0.01	277.4	-1.0	0.32	6.79	6.6	97.4	51.9	0.5	19.8	8.6	
4-1	HPJ	15.9	8.9	8.66	288	0.17	2.23	2.18	0.04	0.01	320.1	0.0	0.04	7.36	3.0	76.5	58.7	1.8	16.4	6.4	
	HPQ	16.0	9.2	8.58	272	0.14	2.06	2.02	0.03	0.02	357.4	0.9	0.08	7.46	4.4	91.9	57.1	2.4	15.5	7.4	
	A1	16.3	9.0	8.50	274	0.16	1.59	1.56	0.02	0.01	332.8	0.3	0.11	7.25	3.6	80.9	57.2	2.0	17.4	7.9	
	B1	16.0	9.5	8.81	278	0.14	1.63	1.58	0.04	0.01	164.9	-3.6	0.16	5.79	5.8	88.1	55.9	1.4	15.4	9.1	
	C1	16.5	9.4	8.66	286	0.14	1.65	1.61	0.03	0.01	238.3	-1.9	0.12	6.97	6.1	90.8	63.6	1.3	18.2	11.9	

4-20	HPJ1	18.4	8.7	8.90	293	0.46	2.04	1.97	0.06	0.01	172.0	-3.5	0.15	7.79	2.5	83.7	54.7	0.9	16.5	6.5
	HPQ	19.2	8.8	8.57	265	0.16	2.26	2.21	0.02	0.03	331.3	0.3	0.16	6.44	4.5	76.8	53.2	1.3	15.5	5.9
	A1	19.8	8.5	8.58	266	0.15	2.28	2.23	0.04	0.02	414.4	2.3	0.14	7.71	3.2	90.4	52.6	1.9	15.3	6.0
	B1	19.5	8.6	8.75	274	0.14	2.14	2.08	0.05	0.01	260.4	-1.4	0.15	6.57	4.6	104.7	58.3	0.2	17.1	11.1
	C1	18.8	8.7	8.59	277	0.14	2.31	2.25	0.04	0.02	405.7	2.1	0.19	6.13	5.0	101.2	56.7	0.4	16.7	10.0
5-11	HPJ	18.1	8.8	8.45	229	0.44	2.09	2.04	0.02	0.02	502.4	4.3	0.09	7.71	0.7	86.0	51.7	0.9	16.7	6.8
	HPQ	18.5	9.4	8.45	235	0.21	2.02	1.98	0.02	0.02	488.4	4.0	0.14	7.05	4.1	103.4	52.0		16.0	10.4
	A1	18.2	8.6	8.39	234	0.26	2.05	2.01	0.02	0.02	568.0	5.9	0.06	7.79	2.7	95.1	52.2	0.6	17.4	9.4
	B1	18.6	9.6	8.72	242	0.20	1.54	1.50	0.03	0.01	199.5	-2.8	0.08	7.28	5.3	102.9	50.9	0.5	15.9	10.0
	C1	18.0	8.8	8.59	253	0.27	1.94	1.90	0.03	0.01	338.0	0.5	0.15	6.01	5.7	104.8	52.2	0.7	15.7	10.6
5-25	HPJ	22.7		9.03	203	0.31	1.63	1.55	0.07	0.00	107.0	-5.0	0.23	7.56	n.a.	77.0	38.5	1.5	15.9	5.5
	HPQ	23.7		8.85	203	0.28	1.68	1.62	0.05	0.01	171.5	-3.5	0.22	7.36	0.5	85.5	37.1	0.9	16.0	7.6
	A1	23.6		8.91	200	0.24	1.40	1.35	0.05	0.00	123.9	-4.6	0.19	7.53	n.a.	82.9				
	B1	23.9		8.95	221	0.23	1.42	1.37	0.06	0.00	115.2	-4.8	0.22	7.42	4.9	102.2	43.3	0.6	17.1	11.6
	C1	23.6		8.81	233	0.21	1.42	1.37	0.04	0.01	158.8	-3.8	0.21	6.89	5.0	104.5	46.6	0.8	17.1	11.0
6-10	HPJ	22.3		8.46	343	0.75	1.64	1.60	0.02	0.01	407.4	2.1	0.27	8.63	1.4	72.1	39.2	0.2	15.1	11.7
	HPQ	23.3		8.70	319	0.42	1.57	1.53	0.03	0.01	226.4	-2.2	0.23	7.14	1.1	75.9				
	A1	22.8		8.67	324	0.60	1.30	1.26	0.03	0.01	200.8	-2.8	0.24	7.95	0.7	74.0	37.0	1.8	15.7	5.9
	B1	22.5		8.71	338	0.42	1.37	1.34	0.03	0.01	191.7	-3.0	0.21	6.68	3.0	86.3	37.9	2.0	15.7	8.3
	C1	22.5		8.65	350	0.36	1.42	1.39	0.03	0.01	228.3	-2.1	0.21	6.66	4.8	93.5	38.3	1.6	15.8	9.9
6-25	HPJ	25.9	9.2	8.93	237	0.30	1.06	1.02	0.04	0.00	92.4	-5.4	0.23	12.59	5.4	80.2	42.3	2.1	21.4	4.3
	HPQ	26.3	9.4	8.98	236	0.26	1.06	1.01	0.05	0.00	82.5	-5.6	0.20	9.01	1.9	90.5	37.6	0.4	17.0	8.3
	A1	25.7	8.5	8.86	231	0.27	1.16	1.12	0.04	0.00	119.0	-4.7	0.20	9.03	2.8	82.5	36.5	0.4	14.7	6.4
	B1	26.7	8.6	9.18	248	0.24	1.42	1.32	0.10	0.00	68.5	-5.9	0.19	7.74	2.1	96.9	36.7	0.5	16.1	9.8
	C1	26.7	8.5	8.94	263	0.28	1.19	1.14	0.05	0.00	102.5	-5.1	0.20	7.62	2.7	107.4	38.0	0.4	16.5	10.6
7-6	HPJ	24.0	6.7	9.30	260	0.44	1.65	1.51	0.14	0.00	56.9	-6.2	0.19	8.42	3.5	77.0	33.7	2.3	11.4	4.6

	HPQ	25.1	7.4	9.03	242	0.20	1.55	1.47	0.07	0.00	105.1	-5.1	0.19	8.68	6.0	72.6	36.3	2.2	14.2	3.5
	A1	24.4	6.7	8.78	249	0.23	1.43	1.39	0.04	0.01	174.7	-3.4	0.21	8.44	4.6	74.8	41.9	2.4	11.9	4.3
	B1	25.0	7.4	8.99	255	0.19	1.54	1.47	0.07	0.00	114.8	-4.8	0.21	7.41	3.1	91.5	34.5	2.3	13.3	6.6
	C1	24.8	6.8	8.82	259	0.17	1.36	1.32	0.04	0.01	152.0	-4.0	0.18	7.21	3.2	94.1	34.1	2.2	13.5	7.2
8-15	HPJ	25.8	6.5	9.05	254	0.40	1.59	1.51	0.08	0.00	104.0	-5.1		8.06	2.8	71.5				
	HPQ	26.3	5.9	8.83	262	0.23	1.57	1.52	0.05	0.01	175.0	-3.4		8.13	3.4	87.0				
	A1	26.3	9.3	8.95	256	0.23	1.56	1.49	0.06	0.00	130.7	-4.5		7.92	3.2	77.2				
	B1	26.3	6.9	8.90	276	0.21	1.52	1.46	0.06	0.00	142.9	-4.1		7.54	3.7	94.6				
	C1	26.4	5.9	8.64	280	0.21	1.66	1.61	0.03	0.01	288.8	-0.7		7.34	4.0	97.4				
9-20	HPJ	24.1	8.0	8.49	253	0.17	1.63	1.59	0.02	0.01	388.1	1.6	0.26	7.43	2.1	72.7	53.3	2.7	16.3	7.8
	HPQ	25.4	8.6	8.64	261	0.17	1.56	1.52	0.03	0.01	267.8	-1.2	0.25	7.63	2.6	85.0	53.8	2.8	15.6	6.5
	A1	24.6	8.4	8.60	352	0.17	1.76	1.72	0.03	0.01	328.4	0.2	0.26	7.63	2.3	78.7	51.1	2.7	15.6	7.0
	B1	25.7	7.6	8.61	287	0.17	1.61	1.57	0.03	0.01	297.0	-0.5	0.22	7.18	3.4	102.2	57.1	2.5	19.3	10.7
	C1	25.6	7.6	8.59	288	0.19	1.61	1.57	0.03	0.01	310.9	-0.2	0.17	8.24	3.9	106.1	60.3	2.9	18.6	11.6
10-19	HPJ	18.1	5.9	8.09	265	0.21	1.95	1.90	0.01	0.04	1067.4	17.7	0.18	7.24	1.8	75.1	59.5	2.8	14.3	5.5
	HPQ	18.7	3.6	7.77	292	0.14	1.98	1.88	0.00	0.09	2233.6	45.4	0.24	7.22	4.4	94.2	46.3	2.2	10.9	6.0
	A1	18.3	4.7	7.89	271	0.13	1.92	1.84	0.01	0.07	1650.3	31.6	0.20	7.36	2.5	77.5	90.0	4.4	23.3	9.3
	B1	18.8	5.4	7.90	308	0.16	1.78	1.72	0.01	0.06	1510.2	28.3	0.24	6.58	3.3	102.9	75.0	3.4	21.5	12.0
	C1	18.6	5.9	8.02	311	0.13	1.89	1.83	0.01	0.05	1218.4	21.3	0.20	6.74	3.3	110.2	65.5	2.7	18.0	10.5
11-23	HPJ	13.9	10.4	8.23	276	0.69	2.05	2.00	0.01	0.04	770.6	10.7	0.21	8.09	2.1	85.2				
	HPQ	15.0	8.3	7.95	302	0.28	2.00	1.93	0.01	0.07	1441.0	26.6	0.22	7.34	2.5	100.4				
	A1	14.8	9.1	8.07	279	0.44	1.94	1.89	0.01	0.05	1064.4	17.7	0.21	7.69	2.8	82.3				
	B1	15.6	9.4	7.99	319	0.19	2.03	1.96	0.01	0.06	1344.3	24.3	0.18	6.97	2.8	111.7				
	C1	15.4	10.2	8.16	322	0.23	2.05	2.00	0.01	0.04	922.3	14.3	0.21	7.38	3.1	119.4				
12-14	HPJ	9.4	14.1	8.36	286	0.54	2.47	2.42	0.02	0.04	652.4	6.7	0.19	7.70	1.9	81.5				
	HPQ	11.6	8.4	7.92	313	0.24	2.53	2.43	0.01	0.09	1856.0	35.2	0.21	7.26	1.8	100.1				

A1	10.9	10.7	8.14	291	0.45	2.33	2.27	0.01	0.05	1036.7	15.8	0.22	7.95	2.1	88.7
B1	11.8	9.4	7.98	328	0.38	2.17	2.09	0.01	0.07	1395.9	24.3	0.23	6.78	2.1	124.5
C1	11.9	10.0	7.84	329	0.55	2.38	2.27	0.01	0.11	2092.3	40.8	0.22	6.90	2.2	118.0

Table S2. Water chemistry of the stream waters in the catchment

Time	Sites	T	DO	pH	TDS	NH ₄ ⁺	DIC	HCO ₃ ⁻	CO ₃ ²⁻	CO ₂	pCO ₂	FCO ₂	F ⁻	Cl ⁻	NO ₃ ⁻	SO ₄ ²⁻	Ca ²⁺	K ⁺	Mg ²⁺	Na ⁺	
(M-D of 2013)		°C	mg l ⁻¹		mg l ⁻¹	mgN l ⁻¹	mmol l ⁻¹				µatm	mmol m ⁻² d ⁻¹	mg l ⁻¹								
1-24	R1	6.8	8.4	8.06	290	1.74	2.92	2.82	0.01	0.09	1473.7	68.4	0.16	5.56	4.9	79.0	43.1	0.5	18.5	11.8	
	R5	9.8	11.7	8.01	304	0.48	4.39	4.24	0.01	0.14	2573.4	133.4	0.10	6.27	1.7	67.1	68.7	2.3	26.8	4.6	
	R6	9.2	9.6	8.34	291	0.23	3.41	3.33	0.02	0.05	940.1	36.8	0.04	3.49	0.8	74.7	68.6	0.9	12.5	4.0	
	R7	9.3	8.6	8.54	370	0.65	4.16	4.07	0.04	0.04	725.5	24.1	0.19	14.02	12.9	91.3	77.3	2.3	30.1	9.2	
	R8	9.1	8.9	7.98	275	0.30	3.81	3.67	0.01	0.13	2368.2	121.4	0.11	6.15	4.4	41.2	71.3	1.4	14.7	11.4	
	R9	15.3	6.7	8.04	579	0.16	4.33	4.20	0.02	0.12	2555.7	132.7	0.07	4.49	8.8	243.7	102.7	0.8	29.2	56.9	
	R10	14.0	8.0	7.53	968	0.69	2.58	2.37	0.00	0.22	4577.4	252.2	0.11	5.29	13.8	631.3	117.2	1.1	37.2	115.8	
	R11	12.8	7.3	8.00	702	0.20	2.57	2.48	0.01	0.08	1603.0	76.0	0.09	4.43	12.2	418.5	103.9	0.8	31.6	73.5	
	H3	9.2	7.8	7.99	284	0.19	3.38	3.26	0.01	0.11	2058.7	103.0	0.02	2.42	1.7	56.7	77.8		13.2	12.1	
3-31	R1	18.6	6.6	9.00	267	0.48	1.44	1.38	0.06	0.00	96.0	-13.1	0.10	7.52	3.4	103.6	45.9	2.4	22.0	7.7	
	R2	18.3	4.9	7.71	449	4.07	2.73	2.58	0.01	0.14	3491.6	187.8	0.00	6.79		151.7	89.0	5.2	24.8	22.6	
	R3	21.1	3.1	8.57	377	1.46	2.99	2.92	0.05	0.02	567.4	14.8	0.05	6.85	30.5	94.2	69.6	2.2	29.7	7.4	
	R5	19.0	3.5	8.73	235	0.63	1.67	1.63	0.04	0.01	212.6	-6.3	0.01	4.96		66.8	46.2	0.4	17.3	2.9	
	R6	17.9		8.40	243	0.48	1.62	1.58	0.02	0.02	435.9	6.9	0.02	3.85	0.9	63.1	62.9	2.1	13.8	5.1	
	R7	19.0	6.0	8.54	317	0.56	2.49	2.44	0.03	0.02	493.3	10.4	0.14	17.41	8.7	88.1	61.3	3.0	22.2	10.4	
	R8	18.0	12.9	8.44	238	0.60	2.29	2.25	0.02	0.02	564.1	14.6	0.00	9.50	6.7	42.3	71.8	3.6	12.8	9.2	
	R9	17.6	4.9	7.69	624	0.54	3.31	3.12	0.01	0.18	4379.6	240.6	0.00	4.80	4.7	294.1	104.0	2.3	29.9	93.4	
	R10	19.7	6.7	8.21	1008	1.23	2.10	2.05	0.01	0.04	896.9	34.5	0.00	6.09	11.3	697.6	145.2	3.4	45.4	147.1	
	R11	19.5	8.2	8.27	735	0.66	2.08	2.03	0.02	0.03	770.2	26.8	0.00	3.45	10.4	469.1	111.1	2.6	35.0	96.5	

	H3	15.9	4.5	7.67	241	2.26	2.81	2.63	0.00	0.17	3784.7	205.1	0.03	4.06	0.8	38.6	74.9	3.1	11.3	5.2
4-28	R1	11.4	5.3	7.25	267	0.61	2.01	1.70	0.00	0.31	6073.0	340.5	0.25	6.88	8.4	99.3	65.3	1.4	16.4	10.1
	R2	18.5	5.4	7.23	449	1.88	2.89	2.47	0.00	0.41	10130.3	580.5	0.24	13.23	38.0	193.2	95.8	2.7	27.1	40.4
	R3	18.9	7.5	7.80	371	1.42	2.56	2.44	0.01	0.11	2709.3	141.5	0.17	10.25	20.1	111.9	89.2	1.8	29.6	14.2
	R4	17.8	6.6	7.75	367	0.27	2.83	2.69	0.01	0.14	3294.3	176.0	0.11	4.56	5.6	162.1	109.4	0.1	19.8	6.4
	R5	21.0	6.6	7.76	261	0.27	2.62	2.50	0.01	0.12	3130.2	166.3	0.05	6.57	0.3	76.3	66.7	3.6	19.8	4.1
	R6	21.3	8.5	8.24	205	0.14	1.84	1.80	0.01	0.03	750.9	25.6	0.14	3.75		81.5	58.4	0.1	18.1	5.9
	R7	20.9	8.6	8.09	283	0.20	2.34	2.27	0.01	0.05	1331.5	60.0	0.42	16.17		91.2	65.7	0.5	20.9	11.5
	R8	22.0	9.7	8.15	229	0.44	2.30	2.24	0.01	0.04	1160.6	49.9	0.14	10.34	1.7	67.1	65.6	2.3	12.7	9.1
	R9	20.5	9.8	7.88	403	0.16	3.04	2.92	0.01	0.11	2758.4	144.7	0.09	7.34	0.8	180.5	81.2	0.4	28.2	36.3
	R10	20.0	5.2	6.74	1235	1.28	1.16	0.77	0.00	0.39	9940.5	569.5	0.08	8.66	12.2	844.9	162.7	3.5	48.8	172.3
	R11	19.0	7.8	7.76	7345	0.31	2.04	1.94	0.00	0.10	2369.1	121.3	0.09	6.03	7.0	495.2	124.1	1.9	36.0	95.7
	H3	20.3	8.5	7.55	285	0.09	3.22	2.98	0.00	0.23	5999.1	336.1	0.09	2.09		45.7	63.5		16.3	7.4
6-28	R1	12.5	2.6	8.06	325	0.49	5.52	5.35	0.02	0.15	2983.5	157.7	0.05	7.67	23.1	78.5	88.3	0.2	31.9	7.9
	R2	21.5	5.3	7.52	540	4.41	3.04	2.80	0.00	0.23	6126.6	343.7	0.30	11.45	23.6	185.7	96.8	2.6	22.7	23.4
	R3	22.0	9.7	8.05	403	0.17	2.62	2.54	0.01	0.06	1677.0	80.4	0.20	7.05	5.7	103.6	66.0	1.6	16.8	10.4
	R4	19.3	7.0	7.76	488	0.23	3.80	3.62	0.01	0.18	4448.0	244.3	0.09	4.36	12.4	185.4		1.0	23.7	4.6
	R5	24.7	5.4	7.55	292	0.21	3.35	3.12	0.01	0.23	6737.0	379.7	0.20	4.72	2.3	47.8	64.6	0.7	15.0	3.7
	R6	24.2	8.1	7.95	232	0.17	2.45	2.37	0.01	0.07	2001.4	99.6	0.17	3.20	3.0	37.4	61.7	1.4	8.8	2.5
	R7	24.4	7.4	7.88	265	0.24	2.42	2.33	0.01	0.08	2348.9	120.1	0.23	8.25	5.9	66.2	59.5	1.1	15.9	6.4
	R8	24.6	6.1	7.86	263	0.16	3.06	2.95	0.01	0.11	3093.7	164.3	0.14	4.72	4.9	50.3	71.5	0.4	12.2	4.1
	R9	23.6	11.6	7.98	605	0.24	4.99	4.83	0.02	0.13	3810.2	206.9	0.13	3.83	5.8	56.7	91.1	0.7	13.7	3.3
	R10	22.9	5.1	6.96	884	0.79	0.48	0.38	0.00	0.11	3022.3	160.2	0.09	7.24	15.1	508.0		1.9	41.7	78.3
	R11	24.5	7.4	7.94	702	0.31	1.23	1.19	0.00	0.04	1049.2	43.3	0.12	6.60	15.8	392.0		1.7	32.1	52.2
	H3	23.4	0.2	7.43	456	0.20	3.42	3.11	0.00	0.31	8649.9	492.9	0.18	3.97	4.7	60.4	76.0	0.8	19.1	4.4
7-24	R1	14.6	4.6	8.44	324	0.83	2.11	2.07	0.02	0.02	495.9	10.5	0.23	6.52	4.5	90.0	53.4	2.3	13.6	6.9

	R2	20.6	5.3	7.45	494	1.97	2.31	2.10	0.00	0.21	5349.4	297.7	0.25	10.36	25.9	151.0	80.2	2.3	19.9	17.3
	R3	23.5	8.6	8.17	416	0.28	3.54	3.46	0.02	0.06	1746.8	84.6	0.11	7.98	22.6	74.7	69.1	1.9	23.4	4.0
	R4	19.0	7.2	7.77	475	0.17	3.09	2.94	0.01	0.14	3504.1	188.4	0.08	3.70	9.1	159.3	98.5	1.7	19.2	1.9
	R5	25.6	5.3	7.71	323	0.06	3.47	3.30	0.01	0.17	4957.5	274.4	0.12	3.42	4.1	27.1	54.9	0.8	19.5	0.7
	R6	26.5	8.3	8.03	261	0.09	2.08	2.02	0.01	0.05	1474.9	68.4	0.14	3.48	1.8	48.1	46.9	1.3	16.3	1.4
	R7	26.3	12.2	8.41	277	0.12	2.04	2.00	0.02	0.02	605.2	17.0	0.21	9.97	2.3	59.8	44.9	1.6	13.6	3.9
	R8	26.6	6.7	7.81	214	0.16	1.77	1.70	0.01	0.07	2058.8	103.0	0.23	3.18	1.0	35.9	44.2	1.5	7.2	1.7
	R9	25.2	12.3	8.00	436	0.12	3.64	3.53	0.02	0.09	2708.1	141.7	0.11	7.98	9.9	103.9	79.3	1.6	21.0	8.8
	R10	27.0	6.5	7.61	1215	0.61	1.84	1.73	0.00	0.11	3343.1	179.2	0.11	7.21	15.0	720.8	157.9	2.1	44.4	106.1
	R11	27.0	7.0	8.12	722	0.21	1.61	1.57	0.01	0.03	938.0	36.7	0.11	5.43	10.6	381.2	102.3	2.0	28.4	49.0
8-28	R1	15.0	8.1	7.77	332	0.37	2.75	2.61	0.01	0.13	2944.6	155.4		6.26	1.2	87.0	70.6	3.1	17.3	6.7
	R2	21.4	4.0	7.67	546	0.88	2.47	2.33	0.00	0.14	3617.6	195.2		11.04	0.0	193.6	74.4	3.6	22.1	20.6
	R3	22.0	6.1	8.33	423	0.09	3.83	3.75	0.03	0.05	1282.0	57.1		6.97	23.4	77.3	88.0	2.6	24.8	3.6
	R4	19.3	5.0	7.95	488	0.14	3.45	3.33	0.01	0.11	2634.7	137.0		4.02	7.4	169.7	81.5	2.6	23.0	2.7
	R5	25.9	4.4	7.88	315	0.16	3.08	2.97	0.01	0.10	3037.1	160.8		4.57	3.0	62.2	73.9	3.6	16.4	2.5
	R6	24.9	7.1	8.36	246	0.13	2.08	2.04	0.02	0.02	678.5	21.3		2.96	3.1	57.9	62.5	2.9	6.8	1.7
	R7	25.1	6.5	8.19	316	0.84	2.13	2.08	0.02	0.03	1029.0	42.1		7.70	5.9	81.3	72.2	4.2	11.9	3.6
	R8	25.8	7.0	8.24	283	0.12	3.03	2.96	0.02	0.04	1317.4	59.2		3.97	3.7	45.2	85.0	2.7	7.8	2.0
	R9	23.3	10.2	8.63	533	0.16	4.07	3.97	0.08	0.02	693.2	22.6		8.83	8.4	168.1	87.6	3.5	31.1	23.4
	R10	24.8	3.6	7.72	897	0.02	2.85	2.71	0.01	0.13	3933.4	214.1		7.10	15.5	484.7	106.4	2.7	35.8	59.4
	R11	25.9	4.7	8.48	624	0.16	2.52	2.47	0.04	0.02	632.6	18.6		5.57	12.9	283.9	80.3	2.9	28.6	34.6
	H3	25.3	2.8	7.70	364	0.12	3.59	3.41	0.01	0.18	5219.6	290.0		3.45	6.2	66.3	68.9	3.2	13.8	2.3
9-23	R1	15.6	1.5	7.55	335	0.47	2.53	2.33	0.00	0.20	4403.0	241.7	0.22	6.23	0.2	91.1	85.7	2.2	19.6	10.7
	R2	20.9	5.1	7.65	423	0.52	1.99	1.87	0.00	0.11	3018.7	159.8	0.25	9.63	23.0	130.5	95.2	3.9	23.1	15.7
	R3	20.2	7.5	8.13	416	0.12	3.40	3.31	0.02	0.07	1751.6	84.8	0.09	6.03	25.3	72.5	106.0	1.5	32.8	4.4
	R4	17.4	6.4	7.75	449	0.13	2.80	2.65	0.01	0.14	3238.1	172.7	0.09	3.91	7.5	153.6	86.3	1.5	22.1	5.2

	R5	20.4	5.3	7.66	322	0.05	1.94	1.83	0.00	0.11	2858.1	150.2	0.10	3.55	2.5	37.0	75.3	1.2	28.7	3.3
	R6	23.7	6.1	7.92	255	0.07	1.62	1.57	0.01	0.05	1412.8	64.7	0.11	3.64	0.4	63.8	69.0	1.5	8.9	4.6
	R7	23.4	7.2	8.12	325	0.10	2.04	1.99	0.01	0.04	1126.1	47.8	0.12	12.72	5.8	82.8	48.1	1.6	14.2	6.0
	R8	20.1	4.4	7.73	268	0.14	2.10	1.99	0.00	0.10	2638.6	137.3	0.08	6.16	1.3	41.6	48.6	1.8	1.4	3.7
	R9	16.9	6.7	8.01	663	0.09	3.40	3.30	0.01	0.09	2195.9	111.4	0.12	6.70	13.8	271.7	97.6	3.7	21.9	82.8
	R10	16.4	5.7	7.79	995	0.20	1.62	1.54	0.00	0.07	1693.9	81.7	0.19	6.92	15.4	553.5	176.6	3.1	35.8	126.4
	R11	22.2	7.3	8.21	689	0.14	2.03	1.99	0.01	0.03	898.3	34.3	0.15	5.51	18.0	363.1	105.8	1.8	31.2	64.0
	H3	20.7	2.2	7.42	321	0.10	3.20	2.90	0.00	0.30	7906.2	448.9	0.15	3.55	0.1	46.5	96.1	2.5	15.9	3.9
10-30	R1	13.9	5.4	7.73	324	0.38	2.75	2.60	0.01	0.15	3169.0	168.7	0.21	6.86	2.2	92.3	100.2	2.9	21.1	12.1
	R2	18.0	6.4	7.58	424	1.10	2.60	2.41	0.00	0.18	4387.3	240.8	0.24	10.84	23.1	163.2	76.9	4.7	28.4	24.4
	R3	17.7	10.7	7.97	436	0.26	4.32	4.18	0.02	0.13	3085.9	163.8	0.13	7.96	25.1	89.0	75.4	1.9	36.5	8.9
	R4	16.5	7.6	7.69	428	0.94	3.43	3.23	0.01	0.19	4477.0	246.0	0.09	3.82	7.9	149.1	85.1	2.3	23.6	4.7
	R5	16.7	7.9	7.61	333	0.97	3.70	3.45	0.01	0.25	5754.6	321.6	0.13	8.79	1.7	57.0	90.3	5.1	21.3	5.9
	R6	16.4	9.2	8.02	261	0.88	2.39	2.32	0.01	0.07	1497.9	69.8	0.10	4.24	0.5	58.6	87.5	2.6	10.5	4.6
	R7	16.1	9.4	8.12	322	0.82	3.05	2.97	0.01	0.07	1521.2	71.2	0.15	13.40	9.1	76.3	79.9	3.7	26.1	11.9
	R8	17.4	11.1	7.84	278	0.19	2.64	2.52	0.01	0.11	2502.7	129.3	0.09	7.80	5.0	46.5	64.9	5.0	2.9	3.8
	R9	14.7	8.5	7.87	630	1.01	3.97	3.81	0.01	0.16	3398.3	182.6	0.18	10.67	15.6	266.0	100.2	5.0	25.3	70.6
	R10	14.6	7.5	7.80	780	1.00	2.05	1.95	0.00	0.09	2045.9	102.5	0.15	7.47	15.9	431.1	145.5	3.4	38.7	98.1
	R11	15.5	8.7	8.10	711	0.97	2.64	2.57	0.01	0.06	1363.7	61.9	0.12	5.51	21.0	390.0	120.2	2.3	29.7	86.4
	H3	16.4	5.6	7.55	284	0.83	3.17	2.92	0.00	0.24	5567.2	310.5	0.10	3.51	1.4	62.5	96.6	3.1	6.6	4.2
11-27	R1	12.2	8.2	7.32	302		2.70	2.34	0.00	0.36	7170.3	405.4	0.18	6.66	0.2	93.2				
	R2	14.6	9.0	7.22	410		2.81	2.37	0.00	0.44	9436.5	539.5	0.20	11.45	28.9	143.1				
	R3	16.7	10.7	7.66	401		4.40	4.13	0.01	0.26	6134.7	344.1	0.10	7.11	24.4	88.9				
	R4	14.3	10.3	7.68	441		3.40	3.19	0.01	0.20	4390.6	240.9	0.07	5.68	8.0	178.8				
	R5	12.6	13.0	8.04	326		3.82	3.70	0.01	0.11	2170.0	109.5	0.10	6.95	2.8	65.9				
	R6	12.4	12.2	8.06	281		2.50	2.42	0.01	0.07	1355.6	61.4	0.09	6.10	0.4	79.9				

	R7	12.3	12.9	8.08	349		3.12	3.02	0.01	0.08	1612.9	76.6	0.24	14.37	11.6	92.6
	R8	10.5	11.9	7.84	308	0.20	3.19	3.04	0.01	0.15	2756.7	144.3	0.08	8.97	6.2	54.7
	R9	10.7	14.4	8.10	643		3.88	3.77	0.02	0.10	1881.2	92.8	0.14	10.80	10.7	256.9
	R10	10.0	9.6	7.84	910		2.67	2.55	0.01	0.12	2293.1	117.1	0.13	7.56	14.2	511.5
	R11	10.8	12.4	8.09	689		2.61	2.53	0.01	0.07	1294.9	57.8	0.13	6.25	14.0	351.2
	H3	11.7	5.0	7.56	354	0.10	3.75	3.44	0.00	0.31	6035.8	338.2	0.11	4.92	6.7	79.3
12-21	R1	9.4	6.4	8.23	332	0.00	1.81	1.76	0.01	0.04	641.6	19.2	0.21	6.96	2.6	116.7
	R2	9.3	7.1	7.85	449	0.05	2.17	2.06	0.00	0.10	1801.0	87.8	0.21	10.05	18.7	155.4
	R3	10.2	8.0	8.13	432	0.10	3.32	3.23	0.01	0.08	1495.1	69.7	0.14	7.24	25.1	83.6
	R4	10.9	6.9	7.96	462	0.14	2.62	2.52	0.01	0.09	1740.5	84.1	0.08	7.28	7.8	165.4
	R5	6.3	9.0	8.08	354	0.17	2.65	2.57	0.01	0.08	1273.4	56.5	0.12	6.69	4.3	86.9
	R6	5.9	9.4	8.24	312	0.13	2.08	2.03	0.01	0.04	691.9	22.1	0.11	5.77	3.4	83.0
	R7	5.9	10.1	8.20	434	0.09	2.33	2.27	0.01	0.05	849.2	31.4	0.24	10.53	17.0	134.4
	R8	8.0	21.1	8.14	311	0.21	2.17	2.11	0.01	0.05	930.2	36.3	0.09	5.61	10.3	68.5
	R9	5.6	8.3	8.08	631	0.12	3.11	3.01	0.01	0.09	1478.6	69.0	0.10	9.31	17.8	231.6
	R10	6.9	7.7	7.96	852	-0.01	1.96	1.88	0.01	0.07	1238.0	54.7	0.13	7.26	15.7	418.4
	R11	6.0	9.3	8.13	696	0.06	1.88	1.82	0.01	0.05	801.9	28.6	0.11	6.15	15.1	343.4
	H3	4.9	11.3	7.92	375	0.28	2.59	2.47	0.01	0.11	1745.3	84.4	0.11	4.43	14.3	89.1

Table S3. Water chemistry of groundwater in the catchment

Time (M.-D. of 2013)	Sites	T	DO	pH	TDS	NH ₄ ⁺	DIC	HCO ₃ ⁻	CO ₃ ²⁻	CO ₂	pCO ₂	F ⁻	Cl ⁻	NO ₃ ⁻	SO ₄ ²⁻	Ca ²⁺	K ⁺	Mg ²⁺	Na ⁺
		°C	mg l ⁻¹		mg l ⁻¹	mgN l ⁻¹		mmol l ⁻¹			µatm			mg l ⁻¹					
1-24	J5	12.0	3.6	7.57	327	0.09	4.07	3.74	0.00	0.32	6432.3	0.05	1.81	4.8	66.4	90.5		16.3	5.1
	J8	14.0	4.4	7.40	500	0.48	7.15	6.37	0.01	0.78	16617.8	0.02	9.65	10.8	84.4	89.1	7.1	46.5	4.4
	J10	15.4	3.1	7.52	387	0.07	5.65	5.18	0.01	0.47	10445.6	0.00	2.80	10.0	56.1	89.7	39.0	13.7	7.4
	J11	14.6	4.3	7.61	356	0.16	2.63	2.40	0.00	0.23	4900.1				4.0	53.0		2.9	5.5
	J12	14.6	3.9	7.51	254	0.17	4.41	4.10	0.01	0.31	6644.8	0.03	2.64	27.0	68.9	89.7	0.3	13.7	7.4
	J13	15.4	2.4	7.32	346	0.10	5.23	4.57	0.00	0.66	14610.8		4.74	9.9	70.2	58.8			1.5
	J14	14.0	5.0	7.58	265	0.09	3.68	3.40	0.00	0.28	5861.2		2.58	7.6	23.0	77.2	0.2	0.9	3.5
	J15	15.3	7.5	7.96	267	0.06	3.67	3.54	0.01	0.12	2588.7		1.96	14.1	23.4	75.0		1.9	3.7
	J16	15.4	2.1	7.54	403	0.07	5.75	5.29	0.01	0.46	10189.2		18.41	12.6	67.4	88.1	6.3	40.9	15.0
	J17	13.6	0.4	7.20	683	1.28	7.00	5.85	0.00	1.15	24065.0		25.18	17.2	94.3	109.2	14.5	49.4	32.8
	J19	15.0	6.7	7.63	307	0.00	4.86	4.53	0.01	0.32	7055.4		1.80	9.5	18.2	57.4		30.3	2.5
	J21	15.9	5.9	7.61	341	0.13	5.32	4.95	0.01	0.36	8171.2	0.11	2.22	5.0	24.3	64.0		32.4	7.5
	J24	15.3	6.3	7.84	337	0.02	4.79	4.58	0.01	0.20	4419.7	0.04	1.77	12.9	39.3	58.2		32.5	2.2
	J26	15.6	2.3	7.53	350	0.03	5.44	4.99	0.01	0.44	9868.1	0.13	1.39	13.8	24.1	61.5		34.2	10.5
	J27	14.9	5.4	7.89	416	0.07	7.05	6.76	0.02	0.26	5782.2	0.22	2.26	1.5	42.3	72.0	0.3	42.3	2.0
	J28	12.4	3.6	7.67	270	0.07	3.96	3.71	0.01	0.25	5090.9	0.01	2.35	6.6	32.6	82.6		2.4	2.7
	D1	12.1	7.4	7.73	474	0.68	5.01	4.72	0.01	0.28	5619.5	0.07	12.67	42.8	98.2	69.9	0.9	36.0	10.2
	D2	14.8	8.1	8.23	220	0.06	3.27	3.19	0.02	0.06	1245.9	0.04	0.67	2.0	28.3	64.7		4.7	1.8
	Q2	11.0	8.1	8.12	449	0.03	4.15	4.03	0.02	0.10	1930.4	0.05	2.38	99.2	63.7	97.8		21.7	6.7
	Q4	16.7	6.4	8.00	145	0.00	2.45	2.37	0.01	0.07	1611.9		0.29	0.9	13.6	37.5		1.1	5.1

	Q5	15.6	2.8	7.59	273	0.05	4.57	4.23	0.01	0.33	7288.6		0.17	1.0	7.5	77.1		12.1	2.3
	Q6	15.9	4.5	7.45	346	0.07	4.69	4.24	0.00	0.45	10105.4	0.03	5.49	25.1	42.9	93.3		7.3	6.4
	J1	15.5	2.3	7.49	494	2.46	3.65	3.32	0.00	0.32	7195.5	0.00	3.00	24.0	39.7	66.2	0.7	29.5	3.4
	J2	16.8	0.4	7.46	442	0.20	4.23	3.84	0.00	0.39	9054.2	0.00	12.16	37.0	110.6	106.2	1.7	29.9	16.2
	J3	16.8	5.7	7.90	213	0.13	4.40	4.23	0.01	0.16	3628.1	0.00	7.63	26.2	65.5	86.4	0.7	30.6	6.2
	J4	16.9	4.1	7.76	351	0.23	6.25	5.94	0.01	0.30	7033.1	0.02	35.47	49.5	162.5		16.4	21.9	17.4
	J5	13.9	6.9	7.66	335	0.28	3.74	3.50	0.01	0.24	5010.5	0.00	2.07	7.1	68.8	88.0	0.8	18.6	4.7
	J6	14.8	3.1	7.23	722	3.64	4.11	3.48	0.00	0.62	13595.7	0.09	7.07	19.4	170.1	107.1	3.1	45.9	8.4
	J7	14.2	6.4	7.66	744	3.29	6.13	5.74	0.01	0.39	8253.8	0.02	50.60	1.5	307.2	162.8	13.5	48.3	42.8
	J8	16.2	4.4	7.68	486	2.60	6.21	5.84	0.01	0.36	8234.3	0.00	9.44	11.5	75.3	86.4	9.7	45.7	5.2
	J9	16.7	6.0	7.84	175	1.91	2.62	2.51	0.01	0.11	2460.7	0.00	0.34	0.8	14.0	54.7	0.3	2.0	4.0
	J10	18.8	4.0	7.56	349	0.33						0.00	2.58	7.7	48.3	98.0	0.7	22.0	3.0
	J11	16.5	6.0	7.58	322	0.50	3.57	3.31	0.00	0.26	5902.3	0.05	2.64	28.3	61.7	92.5	0.8	12.5	4.7
3-31	J12	16.8	8.9	8.01	230	0.09	2.38	2.30	0.01	0.07	1532.7	0.07	0.30	1.6	70.0	72.3	0.3	1.7	1.6
	J13	15.6	4.2	7.25	327	0.45	3.86	3.30	0.00	0.56	12439.1	0.00	4.75	12.3	65.1	101.4	1.6	1.7	2.8
	J14	16.3	12.6	7.23	195	0.50	2.48	2.12	0.00	0.37	8422.8	0.03	2.45	2.6	29.5	58.1	0.7	0.5	3.4
	J15	18.1	10.1	7.41	237	0.22	2.83	2.55	0.00	0.28	6865.7	0.00	2.27	17.9	23.5	70.9	0.8	0.9	0.9
	J16	16.8	5.1	7.04	383	6.23	6.08	4.75	0.00	1.33	28412.7	0.01	11.10	6.9	37.3	76.0	0.4	38.7	9.8
	J17	14.1	2.3	7.30	726	0.39	5.26	4.58	0.00	0.67	15629.1	0.00	70.11	40.9	180.3	123.2	14.5	53.9	48.1
	J18	17.3	2.9	7.30	357	0.18	5.23	4.56	0.00	0.66	15662.8	0.00	6.29	13.8	42.8	64.4	0.5	33.1	4.6
	J19	16.9	7.2	7.40	291	0.11	4.33	3.88	0.00	0.45	10514.8	0.00	1.87	12.3	24.5	53.2	0.1	28.0	1.6
	J20	17.8	9.9	7.52	309	0.15	4.54	4.17	0.01	0.36	8683.9	0.00	2.23	12.7	42.6	54.6	0.3	27.2	1.8
	J21	17.4	6.2	7.79	319	0.31	4.65	4.43	0.01	0.21	4922.1	0.00	3.56	14.9	35.7	61.6	0.4	31.1	2.8
	J22	17.2	3.5	7.33	370	0.38	4.04	3.55	0.00	0.48	11367.0	0.16	6.70	42.7	78.4	116.4	0.6	3.8	5.1
	J23	14.4	5.9	8.00	533	0.70	4.27	4.13	0.02	0.13	2723.5	0.00	1.82	12.4	33.4	65.0	0.4	36.0	2.7

J24	15.9	4.3	7.59	348	0.14	2.32	2.15	0.00	0.16	3724.0	0.00	0.92	5.8	27.0	58.7	0.3	5.4	4.4
J25	16.0	5.2	7.73	349	0.14	4.61	4.36	0.01	0.24	5464.3	0.01	2.03	18.1	25.3	60.6	0.6	32.4	2.9
J26	16.5	4.2	7.87	319	0.10	4.09	3.93	0.01	0.16	3590.9	0.00	3.08	14.3	20.0	56.5	0.1	30.2	1.7
J27	16.9	8.4	7.63	357	0.07	4.74	4.43	0.01	0.30	7072.3	0.00	3.27	18.6	23.1	66.9	0.1	33.6	2.1
D1	13.4	7.9	7.51	501	0.65	4.31	3.92	0.00	0.38	7889.1	0.05	18.80	45.6	100.4	87.3	2.6	43.7	12.1
D2	16.8	3.1	7.74	423	0.26	5.81	5.51	0.01	0.29	6823.2	0.10	1.95	2.4	33.7	69.4	0.5	40.7	1.9
Q1	15.4		7.92	220	0.30	2.48	2.39	0.01	0.09	1918.7	0.00	0.51	2.7	16.7	65.6	0.1	4.6	1.6
Q2	13.5	10.0	7.97	429	0.10	3.30	3.19	0.01	0.11	2223.9	0.02	1.77	113.6	54.3	100.2	0.3	26.0	2.0
Q3	16.5	9.0	8.11	299	0.93	3.34	3.25	0.02	0.07	1709.0	0.03	9.22	3.4	39.9	54.9	3.8	25.9	11.5
Q4	18.7	6.9	8.10	140	0.08	1.73	1.68	0.01	0.04	932.7	0.00	0.29	1.1	10.8	42.6	0.2	0.1	1.6
Q5	16.1	3.4	7.13	273	1.51	2.98	2.44	0.00	0.54	12214.6	0.00	0.63	4.4	27.8	74.6	0.1	9.5	1.3
Q6	16.1	4.7	7.72	340	0.35	3.55	3.36	0.01	0.19	4312.1	0.00	5.42	23.9	44.6	94.1	0.8	5.0	3.6
J1	16.5	1.4	6.97	436	0.83	3.77	2.87	0.00	0.90	20824.7	0.06	12.28	34.4	123.8	65.9	0.2	25.3	13.1
J2	17.3	2.8	7.05	384	0.07	3.45	2.74	0.00	0.71	16748.5	0.05	8.53	23.8	83.4	54.0		31.4	9.4
J3	17.5	5.6	7.74	192	0.03	2.32	2.19	0.00	0.12	2743.9	0.03	1.99	6.2	54.9	54.3		4.7	1.7
J4	17.5	7.1	7.39	313	0.12	3.70	3.31	0.00	0.39	9261.7	0.09	3.89	22.4	63.2	44.3		29.3	2.2
J5	15.5	7.0	7.36	308	0.07	3.36	2.97	0.00	0.39	8672.3	0.09	1.59	7.0	71.7	65.8		20.2	3.4
J6	17.2	2.9	6.89	631	0.90	5.94	4.32	0.00	1.62	38096.7	0.07	36.58	42.4	166.5	105.3	9.6	15.6	21.6
J7	16.1	3.0	7.34	605	0.91	4.98	4.38	0.00	0.59	13505.2	0.03	38.65	3.6	233.1	84.4	6.0	35.0	30.2
J8	16.7	3.7	7.12	481	1.32	6.09	4.98	0.00	1.11	25670.6	0.02	13.09	15.1	90.5	39.7	15.9	45.7	4.7
J9	18.3	6.2	7.82	166	0.03	2.54	2.42	0.01	0.10	2549.0	0.09	0.78	0.6	20.9	46.2		2.1	0.8
J10	21.7	4.9	7.40	354	0.19	4.12	3.71	0.00	0.40	10768.6	0.07	2.89	5.9	59.1	92.1	3.0	20.6	3.7
J11	17.6	5.3	7.52	307	0.21	3.41	3.13	0.00	0.27	6509.1	0.11	2.77	27.4	63.8	67.5		15.8	6.7
J12	17.3	5.2	7.72	220	0.09	3.53	3.34	0.01	0.18	4359.0	0.08	0.53	1.2	58.3	95.2	0.8	10.8	9.5
J13	16.5	3.6	7.30	326	0.27	2.01	1.75	0.00	0.26	5946.0	0.04	5.20	12.9	61.4	72.5	0.2	6.3	6.5
J14	20.0	9.8	7.84	157	0.13	2.59	2.48	0.01	0.10	2550.8	0.10	2.33	0.3	15.0	56.7	0.5	3.4	3.6

J15	17.4	8.7	7.78	216	0.14	4.79	4.56	0.01	0.22	5191.9	0.04	2.31	17.3	27.4	72.0		8.7	6.4
J16	17.1	4.5	7.35	371	0.30	5.18	4.58	0.00	0.60	13977.6		14.26	7.4	53.4	49.3		37.7	7.4
J17	16.1	1.8	6.77	605	2.82	4.29	2.85	0.00	1.44	32686.8	0.07	48.50	28.3	153.0	116.5	18.2	51.5	33.7
J18	16.8	3.1	7.28	330	0.14	3.79	3.28	0.00	0.50	11727.7		5.68	13.5	40.1	61.8		37.4	9.7
J19	16.6	7.0	7.45	259	0.02	3.94	3.57	0.00	0.37	8588.8	0.07	1.84	11.5	17.1	38.4		28.8	4.6
J20	16.4	4.2	7.25	296	0.21	4.01	3.44	0.00	0.57	13081.3	0.10	3.89	13.3	30.6	53.3		31.0	8.5
J21	17.0	5.6	7.47	289	0.27	3.46	3.15	0.00	0.31	7282.8		3.54	13.2	31.3	39.7		30.7	4.7
J22	16.8	6.7	7.20	374	0.14	3.17	2.68	0.00	0.49	11491.0	0.08	8.76	27.4	95.2	83.3		12.3	8.5
J23	18.7	14.2	7.78	533	0.38	4.10	3.90	0.01	0.18	4523.9	0.14	12.40	7.8	279.1	87.7	3.9	52.3	13.9
J24	17.1	3.2	7.45	320	0.06	3.71	3.36	0.00	0.35	8141.4	0.08	2.61	15.3	31.3	66.9		33.5	1.1
J25	18.6	7.3	7.86	414	0.09	3.60	3.46	0.01	0.14	3329.5	0.07	2.63	10.6	50.7	55.5		31.6	3.6
J26	16.6	8.7	7.45	294	0.01	4.15	3.76	0.00	0.39	9046.4	0.04	3.45	15.5	23.0	54.0		29.0	5.2
J27	16.5	8.2	7.36	317	0.03	2.39	2.12	0.00	0.27	6270.0	0.04	3.75	16.9	37.3	39.0		32.0	2.5
D1	16.0	6.8	7.25	423	0.24	3.75	3.21	0.00	0.54	12148.7	0.12	14.13	45.6	106.8	76.6	0.5	40.8	11.5
D2	17.7	5.0	7.38	416	0.14	5.32	4.74	0.00	0.57	13620.0	0.22	8.09	8.9	69.3	56.1	0.1	48.8	9.5
Q1	17.1	7.7	7.40	205	0.09	2.49	2.23	0.00	0.26	6068.5	0.09	0.34	2.7	23.9	67.0		12.1	6.2
Q1	16.6	8.4	7.86	449	0.05	2.75	2.64	0.01	0.11	2471.9	0.09	4.07	152.4	75.2	100.6		24.9	1.4
Q3	18.3	5.3	7.48	291	0.30	3.52	3.21	0.00	0.30	7383.8	0.04	6.09	5.4	27.5	60.3	1.1	24.6	4.9
Q4	21.6	10.7	8.53	103	0.05	1.66	1.62	0.02	0.01	347.9	0.05	0.65	0.4	11.5	36.4		4.9	3.1
Q5	16.6	5.4	7.65	226	0.06	2.75	2.58	0.00	0.17	3913.7	0.05	1.56	3.9	52.0	85.9		17.0	0.9
Q6	16.3	7.4	7.70	300	0.10	3.14	2.96	0.01	0.17	3993.6	0.09	6.55	26.9	61.9	60.6	0.2	8.5	1.4
J1	16.7	2.0	7.48	468	0.14	3.54	3.22	0.00	0.31	7261.3	0.08	10.99	33.4	116.7		0.8	21.0	10.1
J2	17.0	0.4	7.43	442	0.07	3.94	3.55	0.00	0.39	9033.2	0.10	8.19	26.9	76.1	78.7	1.0	25.3	4.4
J3	17.2	4.1	7.94	225	0.05	2.77	2.67	0.01	0.09	2076.9	0.05	2.41	5.0	41.2	68.7	0.1	7.7	3.5
J4	17.3	6.9	7.61	364	0.06	4.64	4.32	0.01	0.31	7332.9	0.07	5.07	24.5	59.7	77.5	0.1	25.1	2.6
J5	16.5	8.2	7.65	328	0.05	3.26	3.05	0.01	0.20	4652.0	0.05	2.60	7.8	80.5	94.8		10.7	1.9

J6	16.9	0.3	7.94	611	0.66	6.24	6.02	0.02	0.20	4758.7	0.10	22.87	45.1	120.1		7.4	13.1	10.1
J7	18.1		7.45	657	0.48	6.44	5.84	0.01	0.59	14229.7	0.07	32.19	4.6	188.0		4.2	33.5	25.3
J8	17.2	1.8	7.12	559	1.07	7.15	5.86	0.00	1.28	30118.6	0.10	11.24	26.0	96.6	96.4	13.2	46.5	7.0
J9	20.6	4.6	7.82	208	0.05	2.50	2.40	0.01	0.10	2618.9	0.03	2.13	0.8	22.9	61.6	0.0	4.4	2.2
J10	20.4	2.4	7.29	364	0.13	4.93	4.32	0.00	0.61	15723.3	0.15	9.83	13.5	237.3	100.8	2.1	27.9	49.9
J11	17.2	5.3	7.50	345	0.28	3.57	3.27	0.00	0.30	6996.2	0.11	3.65	26.9	72.2	90.8	1.6	13.4	2.8
J12	18.8	6.3	7.63	252	0.07	2.78	2.60	0.00	0.17	4250.7	0.06	2.52	1.1	67.4	75.1	0.0	5.2	2.7
J13	17.8	2.6	7.40	390	0.13	4.30	3.85	0.00	0.44	10506.8	0.03	7.98	17.5	76.8		0.8	4.4	3.1
J14	21.6	10.4	7.91	264	0.21	3.45	3.33	0.01	0.11	2976.9	0.05	3.20	6.8	22.1	80.2	0.6	3.4	3.1
J15	17.6	7.9	7.83	267	0.12	2.93	2.81	0.01	0.12	2882.8	0.07	4.50	17.2	36.0	78.4	0.3	3.4	2.4
J16	18.1	0.1	7.82	455	1.14	5.58	5.33	0.01	0.23	5628.0	0.08	16.62	7.6	55.3	81.1	1.5	39.5	7.7
J17	17.2		7.12	715	1.63	6.62	5.43	0.00	1.19	27888.7	0.08	40.49	26.5	167.1		15.9	50.8	28.9
J18	20.9	2.5	7.61	442	0.17	5.44	5.09	0.01	0.35	9080.1	0.12	13.20	13.6	73.8	78.2	1.4	37.1	6.8
J19	16.6	6.5	7.56	318	0.00	4.46	4.12	0.01	0.34	7785.9	0.03	3.68	10.5	27.7	57.9		29.8	0.8
J20	16.4	4.4	7.43	340	0.02	4.66	4.19	0.00	0.46	10580.2	0.05	3.81	11.1	32.5	64.7	0.1	32.5	2.3
J21	17.7	4.1	7.48	364	0.16	4.72	4.30	0.01	0.41	9832.7	0.06	7.23	12.1	38.7	65.0	0.4	32.0	3.7
J22	18.1	4.9	7.50	377	0.14	3.90	3.57	0.00	0.32	7743.0	0.12	8.63	40.8	60.2	108.9	0.8	4.9	5.4
J23	23.5	15.5	8.24	462	0.34	2.86	2.80	0.02	0.04	1205.1	0.26	12.64	15.2	182.9	70.2	2.8	42.8	9.8
J24	17.6	3.0	7.66	356	0.09	4.37	4.11	0.01	0.26	6226.3	0.10	6.43	25.5	48.1	63.5	0.2	33.1	2.3
J25	17.5	6.5	7.79	372	0.02	5.36	5.11	0.01	0.24	5670.8	0.08	3.77	12.3	41.9	66.1		35.2	2.0
J26	16.9	7.9	7.55	333	0.02	4.95	4.56	0.01	0.38	8826.8	0.04	5.23	14.4	29.7	60.0	0.1	31.8	1.8
J27	17.0	7.1	7.43	378	0.06	5.17	4.66	0.00	0.51	11854.8	0.05	5.74	20.4	40.4	72.3	0.1	30.7	2.6
J28	19.5	2.4	7.56	272	0.09	3.14	2.91	0.00	0.23	5713.7	0.05	4.44	10.4	46.2	79.5	0.1	4.5	2.2
D1	17.8	4.4	7.34	455	0.26	4.19	3.70	0.00	0.49	11778.1	0.15	9.62	44.3	98.6	84.1	2.2	39.5	8.0
D2	21.2	2.9	7.52	514	0.13	6.59	6.08	0.01	0.50	13230.6	0.23	12.47	21.4	89.3	95.5	1.1	46.5	6.1

	Q1	15.9	7.3	7.71	267	0.06	3.48	3.28	0.01	0.19		0.04	2.06	3.2	52.6	78.7		7.0	2.7
	Q2	21.3	5.7	7.64	371	0.07	2.97	2.79	0.01	0.17	4633.5	0.18	3.82	65.9	77.9	90.5	0.1	16.4	2.3
	Q3	17.1	3.6	7.72	331	0.03	2.14	2.02	0.00	0.11	2610.1	0.04	4.12	8.1	34.0	62.4		28.1	2.5
	Q4	22.8	6.2	7.86	143	0.02	2.14	2.06	0.01	0.08	2104.7	0.04	1.65	0.6	25.7	45.4	0.1	3.6	3.2
	Q5	16.8	5.3	7.82	277	0.05	3.61	3.45	0.01	0.15	3575.9	0.04	2.01	6.2	37.3	70.8	0.4	18.4	1.7
	Q6	20.6	10.0	7.61	358	0.10	3.98	3.72	0.01	0.25	6608.7	0.06	7.04	28.4	60.5	98.0	0.1	13.7	4.4
	J20	17.5	5.5	7.55	345	0.02	4.76	4.40	0.01	0.36	8511.2	0.07	2.78	11.4	25.1	52.7	0.2	27.1	0.6
	J21	17.6	4.2	7.54	361	0.12	4.38	4.04	0.01	0.34	8012.3	0.07	4.17	12.8	29.6	54.0	0.7	26.8	1.4
	J22	17.2	6.9	7.34	397	0.10	3.52	3.10	0.00	0.41	9710.2	0.15	7.86	30.6	70.4	97.4	1.0	4.2	3.6
	J23	24.3	16.5	8.34	501	0.23	2.73	2.67	0.03	0.03	923.8	0.28	14.31	2.1	195.7	63.6	3.3	39.5	8.8
	J24	19.5	5.5	7.57	507	0.17	4.90	4.55	0.01	0.34	8649.1	0.16	9.57	22.0	94.2	78.1	2.3	37.3	3.8
	J25	20.5	6.7	7.67	371	0.03	4.58	4.32	0.01	0.25	6610.4	0.08	2.33	9.4	36.4	54.7	0.6	30.1	0.3
	J26	16.9	7.8	7.53	332	0.00	3.83	3.52	0.00	0.30	7082.6	0.08	3.89	14.7	20.6	47.7	0.3	26.0	0.0
7-24	J27	17.0	7.6	7.41	373	0.03	3.63	3.26	0.00	0.37	8646.8	0.03	4.22	18.5	26.3	57.3	0.5	27.5	0.1
	J28	17.4	2.9	7.29	301	0.09	2.99	2.60	0.00	0.39	9153.5	0.04	3.91	12.8	38.7	71.5	0.6	1.3	0.2
	Q1	16.1	7.4	7.82	244	0.13	2.77	2.64	0.01	0.12	2698.8	0.03	0.81	3.5	20.9	56.9	0.5	3.9	0.0
	Q2	20.6	5.8	7.44	689	0.06	2.79	2.53	0.00	0.25	6597.9	0.08	7.13	193.0	80.8	111.7	0.6	22.1	1.7
	Q3	17.7	4.7	7.79	333	0.03	3.45	3.29	0.01	0.15	3674.0	0.06	3.34	8.2	26.3	51.5	0.3	23.2	0.8
	Q4	25.6	10.4	8.64	121	0.05	1.28	1.25	0.03	0.01	220.3	0.04	0.57	0.2	8.9	27.7	0.3	0.9	0.5
	Q5	16.8	2.2	7.72	282	0.03	3.17	3.00	0.01	0.17	3886.1	0.04	1.81	6.4	30.1	62.4	0.5	10.7	0.1
	Q6	20.2	7.2	7.86	371	0.10	3.23	3.10	0.01	0.12	3053.9	0.06	7.09	31.8	56.0	83.2	1.3	7.4	1.5
	J1	16.6	1.0	7.19	468	0.10	3.90	3.27	0.00	0.62	14350.2		7.29	25.2	85.4	91.9	1.5	18.9	6.2
	J2	17.1		7.32	455	0.07	4.86	4.26	0.00	0.59	13932.1		5.66	18.7	55.1	73.0	0.9	31.5	5.1
8-28	J3	17.1	3.4	7.76	221	0.03	2.48	2.36	0.01	0.12	2796.8		0.82	2.5	22.6	55.8	0.5	4.3	1.6
	J4	16.9	3.9	7.35	382	0.06	3.87	3.42	0.00	0.45	10425.2		3.07	21.9	52.6	74.2	0.9	23.0	1.7
	J5	18.2	7.3	7.62	329	0.05	3.39	3.16	0.01	0.22	5263.3		1.32	4.7	52.9	82.4	0.7	8.1	0.6

J6	16.9		7.14	637	0.45	5.35	4.41	0.00	0.93	21787.2	21.27	38.6	107.5	85.0	10.7	9.1	7.3
J7	19.5		7.10	624	0.42	5.20	4.25	0.00	0.95	23838.5	22.64	3.2	150.0	77.3	4.9	30.9	15.3
J8	19.0	2.4	7.16	566	0.70	6.09	5.09	0.00	0.99	24691.9	9.27	0.0	77.2	70.4	17.0	42.8	3.6
J9	20.4	4.2	7.92	221	0.02	2.72	2.62	0.01	0.09	2252.0	1.07	0.0	14.3	64.2	0.7	3.3	0.7
J10	19.5	1.4	7.38	410	0.12	4.85	4.34	0.00	0.51	12779.5	2.95	6.3	44.5	15.5	0.5	4.5	0.4
J11	18.3	5.9	7.69	331	0.14	2.84	2.68	0.01	0.16	3804.7	2.66	19.2	58.7	91.8	2.3	6.7	1.5
J12	21.4	7.7	7.85	248	0.03	2.44	2.34	0.01	0.09	2398.4	0.65	0.0	49.1	76.5	1.0	3.7	2.4
J13	17.7	1.2	7.23	403	0.09	4.00	3.42	0.00	0.58	13863.5	5.32	10.2	68.8	75.2	2.2	3.4	2.1
J14	20.5	6.3	7.85	269	0.07	3.40	3.26	0.01	0.13	3302.3	2.11	6.0	10.9	64.9	1.5	3.8	2.1
J15	16.6	6.8	7.84	267	0.06	2.51	2.40	0.01	0.10	2355.1	1.92	19.2	33.5	79.4	1.2	3.1	0.5
J16	17.4		7.50	462	0.34	5.25	4.81	0.01	0.44	10427.9	15.10	7.0	41.3	83.5	1.5	37.4	3.7
J17	17.5		7.33	754	1.01	5.97	5.25	0.00	0.71	16872.0	41.40	25.6	160.4	68.0	21.6	46.4	21.1
J18	18.7	0.9	7.54	455	0.09	4.99	4.60	0.01	0.38	9275.2	9.50	11.2	61.5	79.4	1.9	37.9	4.4
J19	16.5	5.7	7.63	320	-0.01	4.34	4.05	0.01	0.28	6435.1	2.09	9.5	13.9	51.8	0.2	30.7	0.6
J20	16.9	4.1	7.57	351	0.02	4.50	4.17	0.01	0.33	7648.2	2.50	10.7	17.7	53.2	0.6	30.7	0.8
J21	17.6	3.8	7.57	364	0.07	4.75	4.40	0.01	0.34	8146.0	4.28	11.0	26.0	63.7	1.3	31.8	2.1
J22	17.9	2.0	7.37	416	0.05	4.02	3.57	0.00	0.44	10533.5	6.72	16.5	68.5	82.7	1.4	4.3	2.6
J23	23.0	4.9	8.39	579	0.24	4.34	4.25	0.05	0.05	1284.6	13.37	2.6	197.4	66.5	5.2	45.8	8.9
J24	18.5	6.6	7.83	507	0.12	5.67	5.42	0.01	0.23	5587.6	7.91	14.9	78.8	81.4	2.7	41.7	3.2
J25	19.4	8.2	7.72	361	0.02	3.93	3.72	0.01	0.20	4999.4	2.88	26.6	39.4	63.1	0.7	33.0	0.5
J26	16.0	7.0	7.58	333	0.00	4.38	4.05	0.01	0.32	7180.7	4.04	13.9	19.7	53.4	0.4	33.5	1.0
J27	16.8	6.6	7.47	374	0.05	4.38	3.98	0.00	0.40	9184.6	4.86	20.9	32.1	56.2	1.1	26.1	2.1
J28	19.4	5.7	7.60	296	0.03	3.03	2.83	0.00	0.20	5008.5	3.19	11.2	41.3	83.8	0.9	3.0	1.0
D1	19.0	5.0	7.51	442	0.10	3.75	3.44	0.00	0.30	7465.4	7.64	50.6	84.5	83.0	2.7	35.0	3.9
D2	18.3	2.6	7.50	476	0.07	6.47	5.93	0.01	0.54	13018.7	4.66	5.5	46.1	53.8	1.9	42.2	1.3

	Q1	16.0	4.2	7.43	267	0.03	3.09	2.78	0.00	0.31	6959.7	0.76	2.1	29.5	85.5	0.6	4.7	0.7	
	Q2	22.3	3.9	7.92	308	0.09	2.74	2.64	0.01	0.09	2336.7	2.23	0.0	65.6	72.1	0.8	15.5	0.8	
	Q3	21.3	3.1	7.58	316	0.17	3.91	3.64	0.01	0.26	6943.6	6.28	3.1	28.1	58.6	3.5	24.2	2.4	
	Q4	27.3	3.4	8.91	130	0.05	1.67	1.60	0.06	0.00	155.7	0.65	0.0	12.3	37.3	1.2	2.6	0.6	
	Q5	16.9	5.5	7.55	267	0.02	3.23	2.98	0.00	0.25	5726.7	1.30	4.8	29.2	63.2	0.6	9.4	0.2	
	Q6	19.2	6.9	7.67	384	0.07	3.60	3.39	0.01	0.20	5091.5	6.55	25.8	66.0	79.7	1.7	6.0	2.7	
	J1	16.6	2.0	7.20	475	0.24	4.24	3.58	0.00	0.66	15318.1	0.06	9.30	33.2	102.5	78.8	0.9	28.1	11.0
	J2	17.1	1.3	7.20	465	0.07	5.04	4.25	0.00	0.78	18343.4	0.06	6.22	22.4	70.6	71.7	0.7	35.2	7.1
	J3	17.3	3.3	7.68	223	0.03	2.47	2.32	0.00	0.14	3323.4	0.05	0.93	5.1	34.0	75.9	0.3	0.4	2.7
	J4	17.2	5.4	7.43	361	0.06	3.26	2.94	0.00	0.32	7483.7	0.07	3.03	21.7	46.5	80.8	0.8	42.7	3.3
	J5	17.2	6.0	7.34	332	0.06	3.00	2.64	0.00	0.35	8267.6	0.05	1.06	2.9	35.6	74.0	0.2	8.1	2.9
	J6	16.9	0.4	6.99	605	0.26	4.80	3.70	0.00	1.11	25781.9	0.10	20.07	47.9	113.8	188.9	11.6	7.4	11.9
	J7	18.7	0.3	7.04	657	0.21	3.90	3.10	0.00	0.80	19742.1	0.08	38.07	6.8	164.8	124.9	5.2	43.4	32.6
	J8	17.1	2.9	7.14	507	0.35	5.32	4.39	0.00	0.93	21746.7	0.08	5.96	11.2	66.6	84.7	9.2	59.6	5.1
	J9	19.4	4.5	7.70	207	0.03	2.15	2.03	0.00	0.11	2853.2	0.04	1.31	0.9	16.2	81.8	0.2	1.5	3.5
9-23	J10	16.9	1.0	7.25	416	0.06	4.53	3.89	0.00	0.64	14890.1	0.02	1.99	5.2	29.4	84.6	1.1	17.8	4.0
	J11	16.8	3.5	7.37	348	0.07	2.72	2.41	0.00	0.30	7003.0	0.12	2.56	23.3	65.7	75.3	1.1	5.6	2.9
	J12	16.1	2.3	7.64	254	0.05	2.10	1.96	0.00	0.13	3028.1	0.09	0.55	1.3	59.5	89.4	0.8	1.4	1.9
	J13	16.5	1.3	7.25	390	0.06	3.80	3.26	0.00	0.54	12421.3	0.05	5.55	11.0	66.0	95.1	2.1	0.9	3.7
	J14	17.8	5.9	7.62	268	0.05	3.28	3.07	0.01	0.21	5072.9	0.06	2.39	6.6	18.3	89.5	2.0	0.5	4.6
	J15	16.6	6.8	7.75	282	0.03	2.39	2.26	0.00	0.12	2731.1	0.05	1.75	11.9	25.5	95.7	1.0	0.4	1.1
	J16	17.2	2.6	7.34	442	0.21	4.82	4.25	0.00	0.57	13303.4	0.08	16.45	8.0	49.6	96.0	3.8	43.2	9.5
	J17	17.3	2.3	7.14	754	0.45	5.91	4.88	0.00	1.03	24234.2	0.10	45.88	30.8	170.2	106.7	22.2	60.4	37.2
	J18	17.7	1.2	7.34	423	0.02	4.11	3.62	0.00	0.48	11413.7	0.06	8.60	10.8	55.4	80.2	1.0	44.7	6.0
	J19	16.4	5.8	7.38	319	-0.01	3.66	3.26	0.00	0.40	9187.6	0.07	2.49	10.5	23.2	74.4	0.3	36.0	2.5
	J20	16.3	4.9	7.31	341	0.00	4.03	3.52	0.00	0.51	11641.3	0.05	2.48	11.7	21.4	68.8	0.4	33.1	1.2

J21	17.2	4.1	7.16	350	0.06	4.16	3.47	0.00	0.70	16404.2	0.06	3.99	11.3	29.4	97.4	0.6	37.6	3.7
J22	18.2	6.6	6.94	403	0.10	3.19	2.40	0.00	0.79	19147.3	0.15	10.38	31.6	83.7	90.8	1.3	2.2	7.3
J23	18.1	7.1	7.47	637	0.12	3.92	3.57	0.00	0.35	8385.3								
J24	18.4	0.4	7.57	455	0.07	4.77	4.43	0.01	0.34	8287.2	0.12	6.71	14.2	68.2	81.3	3.4	44.1	5.8
J25	16.6	5.6	7.63	367	0.02	4.19	3.92	0.01	0.27	6232.6	0.09	2.85	9.5	44.2	79.8	0.2	39.2	3.4
J26	16.5	7.2	7.44	332	-0.01	4.07	3.68	0.00	0.39	9046.7	0.05	3.58	14.0	26.9	53.1		25.6	1.1
J27	16.6	7.1	7.36	373	0.02	3.91	3.46	0.00	0.44	10255.0	0.06	4.01	16.9	34.1	75.9	0.4	37.6	2.1
J28	17.8	5.8	7.68	313	0.07	3.02	2.85	0.01	0.17	4105.1	0.04	5.19	12.1	48.3	83.8	1.1	2.3	4.3
D1	19.0	3.5	7.31	475	0.12	3.71	3.26	0.00	0.45	11186.4	0.13	9.73	45.0	91.9	84.5	2.3	44.7	8.1
D2	16.3	1.9	7.52	455	0.03	5.42	4.97	0.01	0.44	10140.3	0.24	3.81	3.9	50.7	86.1	0.8	53.8	3.9
Q1	15.7	6.4	7.24	241	0.03	2.92	2.49	0.00	0.43	9612.5	0.06	0.85	2.2	25.5	84.6	0.4	1.3	1.3
Q2	17.9	5.2	7.31	676	0.02	2.65	2.32	0.00	0.33	7863.1	0.09	10.78	267.6	89.7	168.4	1.2	24.2	3.1
Q3	16.9	3.0	7.38	334	0.02	3.22	2.86	0.00	0.35	8138.5	0.07	3.25	8.2	27.1	73.6	0.0	32.1	3.0
Q4	20.3	7.1	8.04	149	0.00	1.80	1.75	0.01	0.04	1136.8	0.04	1.25	0.3	11.4	50.5	0.6		3.3
Q5	16.3	3.1	7.52	281	0.00	2.86	2.62	0.00	0.23	5358.7	0.05	2.31	12.1	43.4	90.1	0.1	15.3	4.3
Q6	17.1	6.6	7.66	375	0.06	3.07	2.88	0.01	0.18	4308.4	0.09	6.29	24.2	74.8	85.5	0.9	3.8	5.1
J1	16.3	2.3	7.38	494	0.52	4.25	3.78	0.00	0.47	10663.6	0.06	9.99	31.4	110.6	89.3	3.7	32.6	14.2
J2	16.1		7.31	455	0.12	4.87	4.25	0.00	0.62	14036.0	0.07	7.37	21.7	71.7	92.1	0.7	38.7	8.2
J3																		
J4	16.7	7.4	7.48	367	0.05	4.25	3.87	0.00	0.38	8709.7	0.05	4.35	22.9	54.7	87.6	0.2	34.8	4.2
J5	16.5	9.4	7.38	316	0.06	3.61	3.21	0.00	0.39	9084.0	0.08	1.48	3.5	41.1	94.0	1.0	6.3	1.1
J6	15.9	0.8	7.04	663	0.41	6.01	4.72	0.00	1.28	28963.2	0.08	26.02	48.3	131.3	170.4	11.7	9.2	12.2
J7	17.4	0.3	7.11	702	0.59	5.45	4.45	0.00	1.00	23675.2								
J8	16.6	3.6	7.13	533	0.73	6.37	5.23	0.00	1.14	26299.3	0.09	9.53	18.5	79.7	83.4	13.6	50.7	6.6
J10	17.4	3.6	7.30	403	0.10	4.58	4.00	0.00	0.58	13756.0	0.07	3.78	8.5	62.8	83.5	1.3	16.4	4.6
J11	16.5	5.9	7.44	366	0.21	3.44	3.10	0.00	0.33	7630.9	0.11	4.03	24.3	74.4	76.1	2.5	8.6	4.8

10-30

J12	15.6	2.7	7.63	264	0.06	2.60	2.42	0.00	0.17	3807.0	0.08	1.31	3.0	60.8	86.1	0.3	0.5	3.3
J13	16.3	3.5	7.28	397	0.07	4.49	3.88	0.00	0.60	13771.7	0.05	5.51	9.7	67.5	105.4	1.1	0.2	4.9
J14	16.1	7.2	7.62	267	0.09	3.69	3.44	0.01	0.24	5564.4	0.08	3.33	6.0	21.7	95.5	1.1	1.1	4.4
J15	16.1	9.7	7.77	287	0.06	3.22	3.06	0.01	0.15	3505.2	0.07	3.17	15.2	35.2	77.6	0.1	0.9	3.1
J16	16.7	0.1	7.36	455	0.10	5.31	4.70	0.00	0.60	13943.7	0.05	16.37	9.8	56.4	95.9	0.7	47.4	6.2
J17	16.8	1.6	7.14	754	0.63	6.13	5.06	0.00	1.07	24929.3	0.09	46.32	30.5	175.7	88.6	23.7	62.0	39.3
J18	16.6	2.5	7.51	410	0.07	4.47	4.09	0.01	0.37	8586.0	0.07	7.24	12.8	50.8	79.2	0.2	42.7	4.4
J19	16.1	8.9	7.39	319	0.00	4.10	3.65	0.00	0.44	10029.7	0.04	3.06	10.2	25.3	68.6	0.3	35.0	2.9
J20	15.9	6.3	7.30	350	0.05	4.71	4.09	0.00	0.61	13792.7	0.07	3.55	13.0	31.9	78.3	0.1	37.2	4.2
J21	16.6	6.2	7.09	356	0.10	4.77	3.85	0.00	0.92	21221.7	0.07	4.21	12.3	30.3	80.4	0.4	38.7	4.3
J22	15.7	4.9	6.45	455	0.07	3.24	1.57	0.00	1.67	37448.7	0.12	11.51	49.6	73.9	163.6	2.4	3.7	10.2
J23	15.1	7.5	7.30	715	0.19	5.96	5.17	0.00	0.78	17245.3	0.22	12.40	16.5	239.1	167.2	7.0	79.3	22.9
J24	15.6	5.4	7.65	533	0.26	4.85	4.54	0.01	0.30	6801.4	0.14	14.17	34.6	116.5	80.5	6.3	49.6	12.2
J25	16.0	6.9	7.60	366	0.03	4.48	4.16	0.01	0.31	7038.7	0.14	3.62	26.9	50.5	80.2	0.2	40.4	2.3
J26	15.8	6.9	7.56	240	0.02	4.45	4.10	0.01	0.34	7590.8	0.04	4.51	15.7	27.9	74.5	0.3	38.6	2.7
J27	16.4	7.5	7.51	373	0.00	4.96	4.54	0.01	0.41	9496.8	0.07	4.23	16.4	32.5	106.5	0.2	58.7	4.2
D1	17.4	6.3	7.16	546	0.14	4.18	3.48	0.00	0.70	16531.3	0.14	21.92	64.9	117.8	88.1	4.4	53.7	16.8
D2	15.8	3.7	7.65	475	0.09	6.40	5.99	0.01	0.40	9007.2	0.21	5.09	8.3	57.6	86.9	1.3	52.3	4.2
Q1	15.7	7.6	7.41	243	0.02	3.10	2.77	0.00	0.32	7233.9	0.05	1.16	2.2	21.0	65.1	0.2	0.1	1.7
Q2	15.9	7.1	7.32	715	0.06	3.34	2.92	0.00	0.42	9395.6	0.06	10.83	27.0	77.5	308.1	0.5	40.4	7.7
Q3	16.2	6.5	7.58	334	0.12	4.50	4.17	0.01	0.32	7402.9	0.07	3.76	9.0	27.4	74.8	0.1	32.1	3.7
Q4	17.0	11.1	7.94	144	0.05	1.93	1.86	0.01	0.06	1456.5	0.05	1.13	2.9	12.2	48.1	0.2	0.8	2.5
Q5	16.1	3.4	7.50	283	0.02	3.59	3.28	0.00	0.31	6986.3	0.04	2.08	4.6	38.1	94.5	0.1	9.2	2.8
Q6	16.1	7.5	7.55	373	0.07	3.24	2.99	0.00	0.25	5673.7	0.07	6.72	27.1	70.4	90.5	1.3	2.5	4.9
11-27	J1	16.0	3.8	7.20	465		4.70	3.95	0.00	0.74	16780.5	0.04	10.18	29.5	115.1			

J2	16.4	3.0	7.20	418		5.42	4.57	0.00	0.85	19511.5	0.05	7.07	18.9	75.1
J3	16.5	7.4	7.33	210		2.34	2.06	0.00	0.28	6518.3	0.03	1.84	4.5	41.6
J4	16.6	8.2	7.49	347		4.38	3.99	0.00	0.38	8766.9	0.05	3.93	22.1	55.5
J5	14.8	10.1	8.01	310		3.74	3.62	0.01	0.11	2342.3	0.07	2.11	4.4	62.0
J6	14.9	1.4	7.16	663		5.40	4.46	0.00	0.94	20484.6	0.08	26.41	44.3	136.6
J7	14.8	1.9	7.06	696	0.40	4.62	3.66	0.00	0.97	21095.5	0.04	36.11	5.3	200.5
J8	15.7	3.2	7.28	553	0.21	6.55	5.66	0.00	0.89	19905.7	0.07	9.92	14.9	83.0
J9	14.9	6.4	7.79	200	0.02	2.72	2.59	0.01	0.13	2785.3	0.03	1.35	0.5	18.2
J10	14.9	3.4	7.34	410	0.05	4.97	4.36	0.00	0.60	13229.6	0.05	3.38	9.0	58.3
J11	15.3	7.8	7.56	374	0.06	3.28	3.03	0.00	0.25	5566.0	0.09	3.65	21.1	86.4
J12	14.6	5.3	7.72	266	0.05	2.56	2.42	0.00	0.14	3044.3	0.06	1.26	1.1	63.5
J13	14.4	1.4	7.24	390	0.05	4.55	3.87	0.00	0.68	14667.0	0.03	4.67	7.6	63.0
J14	14.4	7.1	7.79	270	0.02	3.49	3.32	0.01	0.16	3551.0	0.05	3.03	6.5	22.9
J15	15.5	7.9	7.84	283	0.03	3.28	3.14	0.01	0.14	3034.5	0.05	2.95	14.0	33.9
J16	16.0	0.5	7.36	455		5.41	4.79	0.00	0.62	14073.9	0.04	15.74	8.9	57.0
J17	15.9	1.8	7.08	774		6.27	5.03	0.00	1.24	28111.8	0.07	45.24	26.3	177.9
J18	16.4	1.7	7.27	410		4.92	4.25	0.00	0.67	15435.6	0.04	7.10	12.5	51.5
J19	15.7	6.6	7.38	313		4.31	3.83	0.00	0.48	10708.8	0.04	2.50	9.1	19.4
J20	15.6	9.3	7.28	345	0.02	4.70	4.06	0.00	0.64	14270.4	0.04	3.56	12.1	31.3
J21	16.3	5.6	6.84	352	0.06	4.81	3.37	0.00	1.44	32955.6	0.05	4.40	11.5	37.4
J22	14.8	5.5	6.32	462	0.03	4.11	1.68	0.00	2.44	53190.1	0.09	12.67	46.4	85.0
J23	12.6	13.9	7.44	845		5.12	4.59	0.00	0.53	10723.1	0.14	17.44	24.3	361.8
J24	13.7	6.6	7.81	488		4.77	4.55	0.01	0.22	4599.4	0.14	9.88	27.7	112.9
J25	15.0	10.0	7.74	365		3.49	3.30	0.01	0.18	3990.6	0.09	4.49	31.6	63.1
J26	14.7	9.2	7.66	353		4.58	4.29	0.01	0.29	6208.0	0.04	4.83	13.5	38.0
J27	15.5	8.0	7.47	378		4.82	4.37	0.00	0.44	9912.1	0.05	4.37	16.6	37.8

J28	15.0	3.7	7.30	296		3.51	3.05	0.00	0.46	10155.2	0.02	2.62	5.6	38.1	
D1	16.1	8.8	8.03	438		3.88	3.76	0.02	0.10	2363.5	0.11	9.55	56.5	98.2	
D2	13.7	7.0	7.81	468		6.31	6.01	0.01	0.29	6080.0	0.16	4.05	4.1	54.4	
Q1	14.7	10.3	8.04	225		2.86	2.77	0.01	0.08	1673.7	0.05	0.94	2.0	30.6	
Q2	14.5	9.2	7.95	509		3.33	3.21	0.01	0.11	2376.3	0.08	6.53	155.1	96.5	
Q3	14.4	6.2	7.44	334	0.02	4.51	4.05	0.00	0.45	9700.6	0.04	3.49	8.4	30.3	
Q4	13.8	10.2	7.97	144	0.03	1.84	1.77	0.01	0.06	1241.8	0.04	0.76	0.3	12.7	
Q5	15.7	4.2	7.53	283	0.00	3.44	3.16	0.00	0.28	6246.8	0.03	1.54	3.9	36.5	
Q6	15.4	7.3	7.63	393		3.69	3.44	0.01	0.24	5390.3	0.08	7.19	28.5	74.7	
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J1	15.6	0.3	7.76	514	0.06	4.10	3.89	0.01	0.20	4523.4	0.04	11.29	29.6	124.5	
J2	16.1	0.5	7.48	455	0.03	4.25	3.87	0.00	0.38	8631.6	0.03	6.77	19.3	71.0	
J3	15.7	3.4	7.84	222	0.05	1.91	1.83	0.00	0.08	1774.6	0.05	1.22	4.5	41.5	
J4	15.7	5.0	7.60	382	0.05	3.21	2.98	0.00	0.22	5019.4	0.06	4.12	23.1	61.4	
J5	13.1	6.8	7.84	340	-0.01	2.82	2.69	0.01	0.12	2520.7	0.07	1.84	6.0	66.5	
J6	14.6	2.8	7.34	670	-0.01	4.83	4.24	0.00	0.59	12794.8	0.07	27.24	44.0	144.3	
J7	13.9	1.7	7.31	690	0.14	4.37	3.80	0.00	0.57	12181.0	0.06	36.50	5.0	196.6	
J8	14.6	4.7	7.61	546	0.12	5.24	4.87	0.01	0.36	7899.4	0.08	9.29	15.5	83.4	
12-21	J9	14.3	8.5	7.94	204	0.13	2.13	2.06	0.01	0.07	1553.5	0.03	1.00	1.1	23.1
J10	14.6	5.6	7.48	404	0.03	3.63	3.30	0.00	0.33	7218.4	0.07	3.89	8.1	79.1	
J11	14.6	9.9	7.65	359	0.07	2.57	2.41	0.00	0.16	3560.7	0.08	3.79	22.7	82.5	
J12	14.8	2.3	7.61	267	0.00	2.00	1.86	0.00	0.14	3023.6	0.08	0.86	1.4	65.7	
J13	14.8	2.8	7.42	369	0.05	3.29	2.95	0.00	0.34	7419.7	0.03	5.03	10.9	71.6	
J14	11.2	5.6	7.87	258	0.09	2.58	2.47	0.01	0.11	2104.9	0.06	3.13	7.3	23.4	
J15	15.2	6.8	7.98	281	0.09	2.50	2.41	0.01	0.08	1684.5	0.05	3.53	15.1	39.9	
J16	15.2	1.1	7.49	468	0.10	4.31	3.93	0.00	0.38	8461.6	0.05	18.27	11.5	58.8	
J17	15.4	0.0	7.20	761	0.14	5.39	4.53	0.00	0.86	19095.2	0.09	45.02	26.8	179.3	

J18	16.3	0.8	7.41	410	0.05	3.84	3.44	0.00	0.40	9057.3	0.03	7.20	12.6	52.6
J19	15.6	5.5	7.52	320	0.03	3.41	3.13	0.00	0.28	6325.9	0.05	3.20	11.1	35.5
J20	14.9	3.9	7.44	346	0.05	3.64	3.28	0.00	0.36	7903.5	0.04	3.59	12.6	27.5
J21	15.4	3.8	7.23	361	0.07	3.75	3.19	0.00	0.56	12540.5	0.05	4.45	12.3	33.1
J22	14.8	2.3	4.20	468	0.03	3.28	2.75	0.00	0.53	11503.4	0.12	12.30	44.8	78.8
J23	9.1	4.5	7.47	949	0.02	3.66	3.28	0.00	0.38	6854.1	0.26	12.03	17.3	444.6
J24	11.4	5.6	7.95	475	0.14	3.36	3.24	0.01	0.12	2303.4	0.10	8.99	32.1	97.7
J25	13.5	4.2	7.89	356	0.09	2.82	2.71	0.01	0.11	2271.0	0.13	4.41	30.8	64.1
J26	15.2	6.7	7.75	340	0.00	3.30	3.13	0.01	0.17	3706.4	0.04	4.09	14.1	28.5
J27	16.8	6.4	7.61	372	0.00	3.74	3.49	0.01	0.25	5823.0	0.08	5.57	16.2	49.6
D1	14.5	5.4	7.71	475	0.12	3.06	2.88	0.01	0.17	3706.6	0.10	9.50	56.5	94.1
D2	12.6	3.4	7.81	507	0.09	4.63	4.40	0.01	0.22	4390.8	0.17	6.49	8.7	72.3
Q1	14.6	6.4	8.14	244	0.05	2.20	2.14	0.01	0.05	1024.0	0.06	1.22	2.7	41.2
Q2	12.2	6.5	7.70	520	0.06	2.55	2.39	0.00	0.15	3061.1	0.06	5.98	125.1	84.7
Q3	12.7	8.6	7.64	335	0.03	3.40	3.17	0.00	0.23	4681.3	0.04	3.56	8.2	33.5
Q4	10.2	15.2	8.24	142	0.23	1.73	1.69	0.01	0.03	605.9	0.03	0.72	0.5	13.5
Q5	15.3	4.5	7.77	280	0.03	2.56	2.43	0.01	0.12	2752.5	0.05	1.71	4.2	44.9
Q6	15.2	5.3	7.70	388	0.05	2.84	2.68	0.00	0.16	3559.0	0.07	7.43	26.0	70.4

Table S4. Concentrations of OC, IC and TON in the sediments

Depth (cm)	Mass Depth (g cm ⁻²)	OC Concentration (%)	N Concentration (%)	IC concentration (%)	C/N molar ratio
1	0.04	4.32	0.74	3.89	7.54
2	0.14	4.66	0.704	3.85	8.53
3	0.26	4.16	0.677	4.06	7.93
4	0.39	5.04	0.735	3.20	8.84
5	0.58	3.89	0.583	2.95	8.61
6	0.77	3.90	0.563	2.59	8.95
7	1.00	3.65	0.561	2.05	8.40
8	1.16	3.50	0.511	2.67	8.84
9	1.33	3.61	0.493	2.56	9.45
10	1.50	3.54	0.479	2.55	9.53
11	1.67	3.59	0.47	2.32	9.86
12	1.85	3.38	0.483	2.54	9.03
13	2.05	3.82	0.493	2.59	9.99
14	2.20	3.32	0.455	2.61	9.41
15	2.37	3.64	0.476	2.15	9.86
16	2.55	3.95	0.512	2.11	9.96
17	2.69	3.94	0.484	2.41	10.49
18	2.87	3.86	0.492	1.81	10.12
19	3.03	4.42	0.53	1.62	10.75
20	3.19	3.98	0.47	1.61	10.93

21	3.32	3.82	0.418	2.31	11.80
22	3.50	3.90	0.416	2.17	12.08
23	3.66	3.46	0.346	2.19	12.89
24	3.92	2.82	0.292	1.64	12.44
25	4.15	2.59	0.242	1.45	13.82
26	4.51	2.47	0.22	1.53	14.48
27	4.76	2.20	0.239	1.42	11.87
28	5.07	2.69	0.237	1.42	14.63
29	5.37	2.25	0.21	1.37	13.83
30	5.65	2.40	0.235	1.42	13.18
31	6.01	2.56	0.245	1.39	13.46
32	6.26	2.21	0.237	1.44	12.01
33	6.55	2.15	0.241	1.46	11.51
34	6.82	2.10	0.221	1.38	12.24
35	7.05	2.13	0.217	1.48	12.65
36	7.34	1.72	0.221	1.32	10.05
37	7.65	1.90	0.186	1.71	13.19
38	7.99	1.67	0.207	1.46	10.43
39	8.27	1.82	0.214	1.44	10.97
40	8.66	1.71	0.206	1.40	10.70
41	9.04	1.72	0.202	1.52	10.99
42	9.35	1.72	0.223	1.34	9.97
43	9.72	1.71	0.218	1.42	10.11
44	10.08	1.87	0.234	1.41	10.30
45	10.47	1.83	0.22	1.24	10.76
46	10.82	2.07	0.263	1.57	10.14

47	11.11	1.72	0.228	1.37	9.75
48	11.63	1.90	0.236	1.33	10.40
49	12.11	1.84	0.191	1.47	12.41
50	12.80	1.74	0.191	1.40	11.75
