

Table S1: General descriptive statistics (mean, median, standard deviation (SD), minimum and maximum values) for DOC concentrations, and DOM quality parameters (abs<sub>254nm</sub>, SUVA, S<sub>R</sub>, FI, HIX, C1%, C2%, C3%, C4% and C5%) for each sampled event.

DOC	Snowmelt		spring dry		spring wet		fall dry	
	bog	forest	bog	forest	bog	forest	bog	forest
N	5	5	13	24	21	23	18	25
mean	5.9	11.0	24.3	27.0	12.9	20.7	34.5	39.1
median	5.1	11.2	23.6	26.5	12.8	21.3	34.4	39.4
SD	1.3	0.6	1.7	1.7	2.1	1.9	1.9	4.2
Minimum	5.0	10.2	21.9	23.6	9.4	17.9	30.2	32.2
Maximum	7.9	11.7	26.8	31.7	18.4	23.1	37.3	45.8

Abs	Snowmelt		spring dry		spring wet		fall dry	
	bog	forest	bog	forest	bog	forest	bog	forest
N	5	7	12	23	21	23	18	25
mean	58	112	256	309	138	244	337	377
median	49	113	252	310	135	248	338	376
SD	15	10	21	14	23	24	18	52
Minimum	45	97	225	272	102	203	289	284
Maximum	80	128	290	341	203	281	366	489

SUVA	Snowmelt		spring dry		spring wet		fall dry	
	bog	forest	bog	forest	bog	forest	bog	forest
N	5	5	12	23	21	23	18	25
mean	4.2	4.3	4.5	5.0	4.6	5.1	4.3	4.2
median	4.3	4.2	4.6	5.0	4.6	5.1	4.2	4.3
SD	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.3
Minimum	3.9	4.2	4.2	4.6	4.3	4.6	3.9	3.1
Maximum	4.4	4.5	4.7	5.2	5.0	5.5	4.6	4.6

S <sub>R</sub>	Snowmelt		spring dry		spring wet		fall dry	
	bog	forest	bog	forest	bog	forest	bog	forest
N	5	7	12	23	21	23	18	25
mean	1.83	2.02	1.77	1.80	1.66	1.83	1.89	1.90
median	1.83	2.01	1.74	1.79	1.66	1.85	1.88	1.90
SD	0.04	0.07	0.07	0.04	0.03	0.06	0.05	0.04

Minimum	1.78	1.96	1.70	1.75	1.58	1.68	1.81	1.80
Maximum	1.88	2.17	1.90	1.88	1.72	1.88	1.95	1.99

FI	Snowmelt		spring dry		spring wet		fall dry	
	bog	forest	bog	forest	bog	forest	bog	forest
N	5	7	10	11	13	13	17	18
mean	1.61	1.67	1.61	1.62	1.57	1.61	1.63	1.65
median	1.60	1.67	1.62	1.62	1.57	1.62	1.63	1.65
SD	0.05	0.02	0.04	0.03	0.04	0.04	0.05	0.04
Minimum	1.54	1.64	1.54	1.58	1.53	1.54	1.55	1.59
Maximum	1.67	1.70	1.66	1.66	1.69	1.68	1.72	1.73

HIX	Snowmelt		spring dry		spring wet		fall dry	
	Bog	forest	bog	forest	bog	forest	bog	forest
N	5	7	10	11	13	13	17	18
mean	0.83	0.87	0.92	0.91	0.85	0.91	0.93	0.93
median	0.81	0.87	0.91	0.91	0.84	0.90	0.93	0.93
SD	0.05	0.04	0.02	0.03	0.02	0.03	0.01	0.01
Minimum	0.76	0.81	0.88	0.85	0.82	0.87	0.92	0.91
Maximum	0.91	0.93	0.95	0.94	0.89	0.95	0.94	0.96

C1	Snowmelt		spring dry		spring wet		fall dry	
	Bog	forest	bog	forest	bog	forest	bog	forest
N	5	7	10	11	13	13	17	18
mean	44	43	44	43	42	42	45	44
median	44	43	43	43	42	42	45	44
SD	2	1	1	1	1	1	1	1
Minimum	41	42	42	42	41	41	44	42
Maximum	47	45	46	44	43	43	46	46

C2	Snowmelt		spring dry		spring wet		fall dry	
	Bog	Forest	bog	forest	bog	forest	bog	forest
N	5	7	10	11	13	13	17	18
mean	23	27	27	28	27	31	25	27
median	23	27	27	29	27	31	25	27
SD	1	1	1	2	1	1	1	1
Minimum	22	25	26	23	26	30	24	25
Maximum	26	28	29	30	30	31	26	28

C3	Snowmelt		spring dry		spring wet		drought		fall dry	
	bog	forest	bog	forest	bog	forest	bog	forest	bog	forest
N	5	7	10	11	13	13	7	14	17	18
mean	14	21	14	17	15	19	13	16	14	16
median	14	20	14	17	15	20	13	16	14	17
SD	1	1	1	2	1	2	1	1	1	2
Minimum	13	20	13	13	14	16	12	13	12	13
Maximum	15	22	15	20	17	21	14	18	15	21

  

C4	Snowmelt		spring dry		spring wet		drought		fall dry	
	Bog	Forest	bog	forest	bog	forest	bog	forest	bog	forest
N	5	7	10	11	13	13	7	14	17	18
mean	7	0	9	5	7	1	12	9	12	8
median	7	0	9	6	7	0	11	8	12	8
SD	2	0	1	2	1	2	1	2	1	3
Minimum	4	0	8	3	6	0	10	6	10	4
Maximum	9	0	11	9	8	6	13	12	14	13

  

C5	Snowmelt		spring dry		spring wet		drought		fall dry	
	bog	forest	bog	forest	bog	forest	bog	forest	bog	forest
N	5	7	10	11	13	13	7	14	17	18
mean	12	9	6	6	9	7	5	4	4	5
median	12	9	6	6	10	7	5	5	4	5
SD	3	2	1	2	1	1	0	1	0	1
Minimum	9	7	4	5	7	5	5	3	4	3
Maximum	16	12	8	13	11	8	6	5	5	6