

Table S1. Physical and chemical characteristics of water samples (means $\pm$ SD) for each month and water type. Categories include physical and chemical parameters and organic matter.

	May			June			August		
	River	Fjord SW	Fjord AW	River	Fjord SW	Fjord AdW	River	Fjord SW	Fjord AdW
Number of samples	1	7	20	7	53	10	7	44	14
Water Mass	N/A	SW	ArW	N/A	SW/IW	TAW/ArW	N/A	SW/IW	AW
PHYSICAL									
Salinity	N/A	33.5 ± 0.6	34.4 ± 0.2	N/A	27.6 ± 9.9	34.7 ± 0.3	N/A	28.6 ± 6.0	35.3 ± 0.5
Temp (°C)	N/A	0.3 ± 0.4	-0.2 ± 0.4	5.5 ± 1.3	4.6 ± 1.7	1.8 ± 0.6	N/A	7.7 ± 1.7	4.5 ± 0.8
Turbidity (NTU)	N/A	2.9 ± 2.4	2.0 ± 2.7	303.0 ± 166.2	7.0 ± 9.7	2.6 ± 1.1	485.2 ± 194.5	20.7 ± 62.2	6.2 ± 10.0
SPM (mg L ⁻¹)	110.5	27.1 ± 9.2	32.3 ± 6.8	348.5 ± 288.0	29.4 ± 7.6	26.1 ± 3.5	170.0 ± 91.7	46.5 ± 41.7	24.2 ± 11.3
CHEMICAL									
NO ₂ +NO ₃ (μ mol L ⁻¹)	3.27	0.36 ± 0.14	0.88 ± 0.96	7.78 ± 2.56	1.27 ± 1.39	0.55 ± 0.26	12.03 ± 7.45	0.93 ± 2.06	0.72 ± 0.45
NH ₄ (μ mol L ⁻¹)	1.91	0.96 ± 0.57	1.08 ± 0.39	1.18 ± 0.50	1.08 ± 0.54	0.95 ± 0.49	1.43 ± 1.05	1.13 ± 0.53	1.25 ± 0.54
PO ₄ (μ mol L ⁻¹)	0.06	0.11 ± 0.03	0.18 ± 0.07	0.04 ± 0.03	0.44 ± 0.67	0.17 ± 0.05	0.56 ± 0.67	0.22 ± 0.09	0.26 ± 0.07
SiO ₂ (μ mol L ⁻¹)	19.31	0.58 ± 0.26	1.29 ± 3.03	20.14 ± 9.63	3.15 ± 4.00	0.99 ± 0.49	35.20 ± 21.09	4.89 ± 5.82	3.50 ± 0.98
PartN (μ mol L ⁻¹)	14.99	5.85 ± 3.97	4.65 ± 1.48	31.28 ± 29.44	4.76 ± 2.32	4.02 ± 3.18	41.25 ± 57.17	5.20 ± 5.14	2.91 ± 2.02
PartP (μ mol L ⁻¹)	3.67	0.17 ± 0.02	0.23 ± 0.10	4.35 ± 4.42	0.37 ± 0.24	0.15 ± 0.09	4.58 ± 3.55	0.66 ± 1.13	0.12 ± 0.09
ORGANIC MATTER									
DOC (μ mol L ⁻¹)	980	206 ± 170	161 ± 127	604 ± 550	95 ± 21	101 ± 15	43 ± 19	71 ± 17	77 ± 11
POC (μ mol L ⁻¹)	205.7	28.5 ± 11.0	29.5 ± 5.8	549.4 ± 604.6	41.8 ± 24.2	25.4 ± 11.0	789.1 ± 1412.5	65.4 ± 99.9	19.1 ± 8.1
C:N (molar ratio)	13.7	6.1 ± 2.5	6.6 ± 1.3	16.3 ± 3.1	9.0 ± 3.8	7.2 ± 2.2	16.7 ± 6.8	10.5 ± 5.5	7.5 ± 2.0
Chl <i>a</i> (mg/m ³)	N/A	0.29 ± 0.20	1.51 ± 1.75	N/A	0.80 ± 0.80	1.46 ± 0.94	N/A	0.89 ± 0.54	0.96 ± 0.43
$\delta^{13}\text{C}$ (‰)	-26.5	-24.0 ± 0.8	-23.8 ± 0.8	-26.5 ± 1.1	-26.2 ± 2.1	-27.4 ± 1.3	-26.5 ± 1.0	-26.4 ± 0.8	-27.3 ± 0.9
$\delta^{15}\text{N}$ (‰)	1.5	5.0 ± 1.0	5.3 ± 0.4	3.4 ± 1.1	4.6 ± 0.7	4.9 ± 0.7	3.0 ± 0.6	4.3 ± 0.8	4.3 ± 0.8
$a_{\text{CDOM}}(375)$ (1/m)	1.58	0.30 ± 0.11	0.24 ± 0.20	0.53 ± 0.36	1.04 ± 0.71	0.93 ± 0.39	0.54 ± 0.35	0.30 ± 0.21	0.35 ± 0.22
SUVA ₂₅₄ (m ² /gC)	0.83	1.54 ± 0.74	2.59 ± 1.55	2.42 ± 2.10	2.81 ± 1.14	1.71 ± 0.81	5.65 ± 1.65	2.86 ± 0.67	2.52 ± 0.39
S ₂₇₅₋₂₉₅	0.02	23.95 ± 3.21	28.45 ± 8.74	0.01 ± 0.0	17.55 ± 3.48	17.23 ± 2.22	0.01 ± 0.01	22.13 ± 6.95	14.36 ± 2.22
S ₃₅₀₋₄₀₀	0.02	18.29 ± 9.82	33.66 ± 26.64	0.02 ± 0.0	25.15 ± 17.58	32.86 ± 17.30	0.02 ± 0.01	12.12 ± 6.19	8.94 ± 7.72
S _R	1.1	4.4 ± 1.4	5.0 ± 1.3	0.8 ± 0.1	1.3 ± 0.9	1.3 ± 1.3	0.8 ± 0.3	3.4 ± 2.5	4.8 ± 2.4