

Supplementary Table S4 | Statistical outputs for pairwise comparisons of alpha diversity indices giving FDR-corrected *p*-values for Dunn's *post hoc* test performed on a Kruskal-Wallis test to account for non-gaussian repartitions. **(A)** Comparisons of groups separating habitat and month in the water column. **(B)** Comparisons of groups separating water type. These tests correspond to the ones represented on the **Supplementary Figure S1** and **S2**. Significant *p*-values are written in black.

A

Comparisons	nOTU	Chao1	ACE	Pielou's evenness	Shannon	Inverse Simpson's	Relative singletons
August - June	1,58.10 ⁻⁰²	1,55.10 ⁻⁰³	1,77.10 ⁻⁰³	6,81.10 ⁻⁰⁴	9,66.10 ⁻⁰³	8,20.10 ⁻⁰⁴	2,00.10 ⁻⁰³
August - River	7,14.10 ⁻⁰⁶	3,05.10 ⁻⁰⁴	5,98.10 ⁻⁰⁴	4,82.10 ⁻⁰⁴	1,38.10 ⁻⁰⁴	5,19.10 ⁻⁰⁴	5,10.10 ⁻⁰⁴
June - River	2,15.10 ⁻⁰³	1,00.10 ⁻⁰¹	1,31.10 ⁻⁰¹	6,42.10 ⁻⁰⁹	3,48.10 ⁻⁰⁸	9,16.10 ⁻⁰⁹	2,77.10 ⁻⁰⁸
August - Sediment	2,38.10 ⁻⁰⁷	9,16.10 ⁻⁰⁷	2,35.10 ⁻⁰⁶	3,20.10 ⁻⁰⁵	8,49.10 ⁻⁰⁶	1,13.10 ⁻⁰⁵	1,30.10 ⁻⁰³
June - Sediment	3,61.10 ⁻⁰⁴	9,52.10 ⁻⁰³	1,45.10 ⁻⁰²	8,37.10 ⁻¹²	1,35.10 ⁻¹⁰	2,12.10 ⁻¹²	2,35.10 ⁻⁰⁸
River - Sediment	4,47.10 ⁻⁰¹	2,44.10 ⁻⁰¹	2,39.10 ⁻⁰¹	4,23.10 ⁻⁰¹	4,48.10 ⁻⁰¹	3,43.10 ⁻⁰¹	2,83.10 ⁻⁰¹

B

Comparisons	nOTU	Chao1	ACE	Pielou's evenness	Shannon	Inverse Simpson's	Relative singletons
AdW - Estuary SW	2,24.10 ⁻⁰²	8,02.10 ⁻⁰³	4,65.10 ⁻⁰³	4,93.10 ⁻⁰¹	3,26.10 ⁻⁰¹	4,99.10 ⁻⁰¹	6,90.10 ⁻⁰²
AdW - Fjord SW	3,11.10 ⁻⁰¹	3,22.10 ⁻⁰¹	3,49.10 ⁻⁰¹	1,06.10 ⁻⁰¹	7,83.10 ⁻⁰²	1,62.10 ⁻⁰¹	2,15.10 ⁻⁰¹
Estuary SW - Fjord SW	1,01.10 ⁻⁰²	3,83.10 ⁻⁰³	2,73.10 ⁻⁰³	1,20.10 ⁻⁰¹	4,13.10 ⁻⁰²	1,80.10 ⁻⁰¹	2,60.10 ⁻⁰¹
AdW - Glacier SW	3,95.10 ⁻⁰¹	3,17.10 ⁻⁰¹	2,90.10 ⁻⁰¹	1,94.10 ⁻⁰¹	2,03.10 ⁻⁰¹	1,77.10 ⁻⁰¹	2,64.10 ⁻⁰¹
Estuary SW - Glacier SW	1,31.10 ⁻⁰¹	1,16.10 ⁻⁰¹	1,05.10 ⁻⁰¹	2,00.10 ⁻⁰¹	1,34.10 ⁻⁰¹	1,86.10 ⁻⁰¹	3,41.10 ⁻⁰¹
Fjord SW - Glacier SW	2,76.10 ⁻⁰¹	2,19.10 ⁻⁰¹	2,12.10 ⁻⁰¹	4,89.10 ⁻⁰¹	4,31.10 ⁻⁰¹	4,15.10 ⁻⁰¹	4,74.10 ⁻⁰¹
AdW - River	3,50.10 ⁻⁰⁵	3,08.10 ⁻⁰³	4,07.10 ⁻⁰³	4,37.10 ⁻⁰⁵	3,15.10 ⁻⁰⁵	4,20.10 ⁻⁰⁵	1,77.10 ⁻⁰⁴
Estuary SW - River	1,94.10 ⁻⁰²	2,87.10 ⁻⁰¹	3,77.10 ⁻⁰¹	1,14.10 ⁻⁰⁴	3,45.10 ⁻⁰⁴	1,04.10 ⁻⁰⁴	2,00.10 ⁻⁰⁶
Fjord SW - River	1,56.10 ⁻⁰⁵	1,49.10 ⁻⁰³	2,39.10 ⁻⁰³	1,04.10 ⁻⁰⁶	3,52.10 ⁻⁰⁷	2,86.10 ⁻⁰⁶	2,78.10 ⁻⁰⁵
Glacier SW - River	4,01.10 ⁻⁰³	5,94.10 ⁻⁰²	7,74.10 ⁻⁰²	1,38.10 ⁻⁰⁴	1,24.10 ⁻⁰⁴	1,06.10 ⁻⁰⁴	7,56.10 ⁻⁰⁴
AdW - Sediment	1,86.10 ⁻⁰⁶	4,68.10 ⁻⁰⁵	6,65.10 ⁻⁰⁵	1,74.10 ⁻⁰⁶	1,63.10 ⁻⁰⁶	4,76.10 ⁻⁰⁷	4,35.10 ⁻⁰⁴
Estuary SW - Sediment	7,43.10 ⁻⁰³	8,19.10 ⁻⁰²	1,28.10 ⁻⁰¹	8,65.10 ⁻⁰⁶	4,71.10 ⁻⁰⁵	2,61.10 ⁻⁰⁶	3,87.10 ⁻⁰⁶
Fjord SW - Sediment	9,72.10 ⁻⁰⁷	2,46.10 ⁻⁰⁵	4,57.10 ⁻⁰⁵	2,21.10 ⁻⁰⁸	8,46.10 ⁻⁰⁹	2,21.10 ⁻⁰⁸	6,45.10 ⁻⁰⁵
Glacier SW - Sediment	1,76.10 ⁻⁰³	1,31.10 ⁻⁰²	1,83.10 ⁻⁰²	2,98.10 ⁻⁰⁵	3,27.10 ⁻⁰⁵	1,03.10 ⁻⁰⁵	1,91.10 ⁻⁰³
River - Sediment	4,47.10 ⁻⁰¹	2,44.10 ⁻⁰¹	2,39.10 ⁻⁰¹	4,23.10 ⁻⁰¹	4,48.10 ⁻⁰¹	3,43.10 ⁻⁰¹	2,83.10 ⁻⁰¹