

## Supplementary Information for

# Age and Chemistry of Dissolved Organic Carbon Reveal Enhanced Leaching of Ancient Labile Carbon at the Permafrost Thaw Zone

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## Supplementary Figures

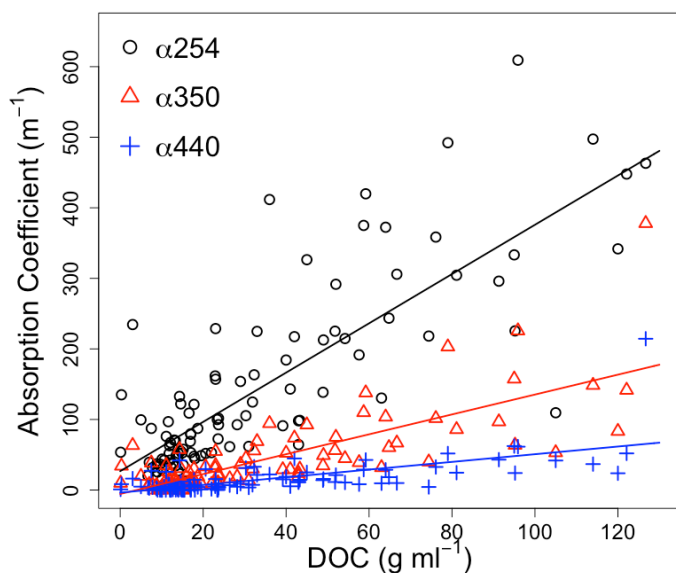


Figure S1. Absorption coefficients for 254, 350, and 440 nm wavelengths and DOC concentration. Regression followed by correlation: a254: slope = 3.49, R<sup>2</sup> = 0.65, p < 0.01; a350: slope = 1.41, R<sup>2</sup> = 0.59, p < 0.01; a440: slope = 0.54, R<sup>2</sup> = 0.42, p < 0.01.

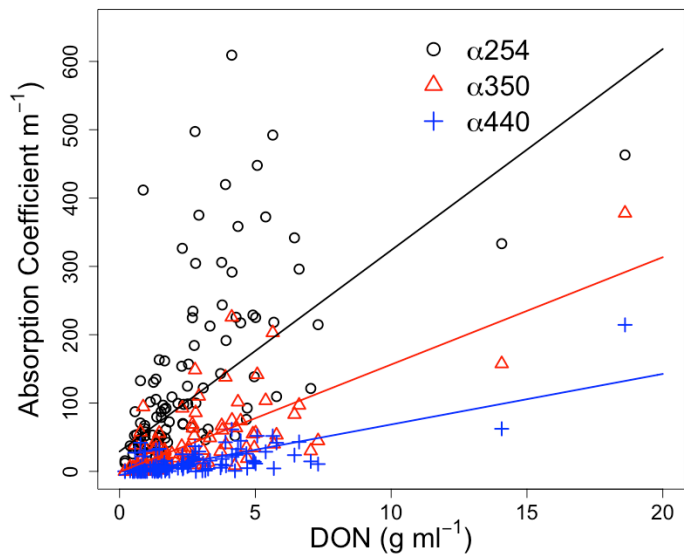


Figure S2. Absorption coefficients for 254, 350, and 440 nm wavelengths and DON concentration. Regression followed by correlation:  $\alpha_{254}$ : slope = 29.45,  $R^2 = 0.58$ ,  $p < 0.01$ ;  $\alpha_{350}$ : slope = 15.71,  $R^2 = 0.74$ ,  $p < 0.01$ ;  $\alpha_{440}$ : slope = 7.40,  $R^2 = 0.77$ ,  $p < 0.01$ .

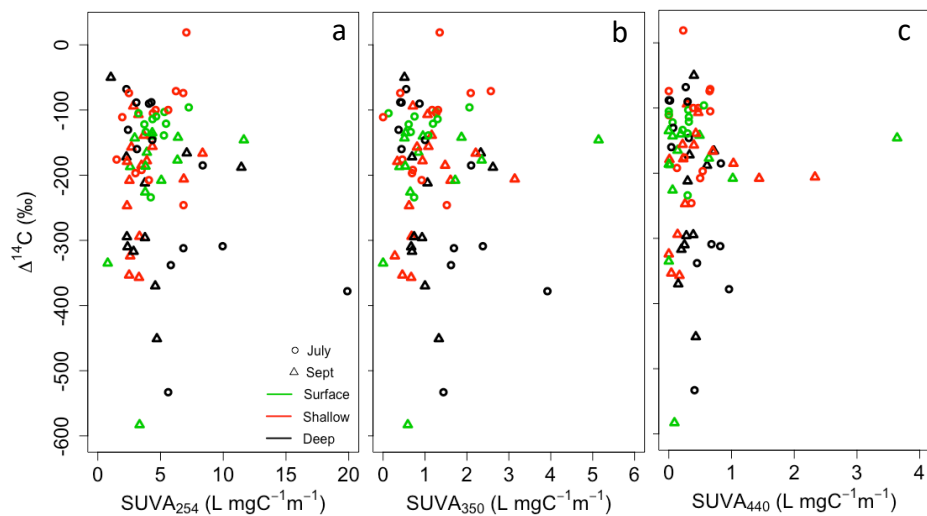


Figure S3.  $SUVA_{254}$  (a),  $SUVA_{350}$  (b), and  $SUVA_{440}$  vs.  $^{14}C$  of DOC.