



Arctic River organic matter transport

Peter Raymond (1), Orjan Gustafsson (2), Jorien Vonk (3), Robert Spencer (4), and Jim McClelland (5)

(1) Yale Univ., School of Forestry and Environmental Studies, New Haven, United States (peter.raymond@yale.edu), (2) Stockholm University, Stockholm Sweden, (orjan.gustafsson@aces.su.se), (3) VU University, Amsterdam, Netherlands, (J.E.vonk@uu.nl), (4) FSU, Tallahassee, United States, (rgspencer@magnet.fsu.edu), (5) University Texas, Port Aransas, United States, (jimm@utexas.edu)

Arctic Rivers have unique hydrology and biogeochemistry. They also have a large impact on the Arctic Ocean due to the large amount of riverine inflow and small ocean volume. With respect to organic matter, their influence is magnified by the large stores of soil carbon and distinct soil hydrology. Here we present a recap of what is known of Arctic River organic matter transport. We will present a summary of what is known of the ages and sources of Arctic River dissolved and particulate organic matter. We will also discuss the current status of what is known about changes in riverine organic matter export due to global change.