ARISE M1 PhD studentship:

The potential contribution of terrestrial organic matter to the Arctic food web

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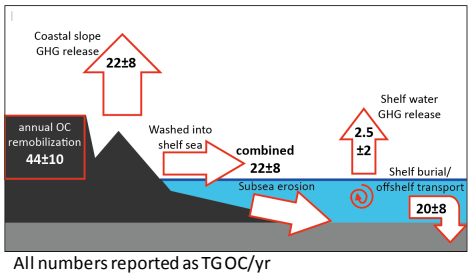
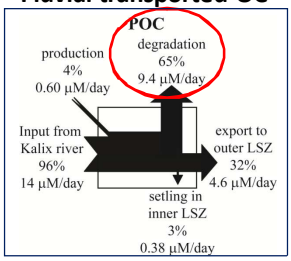
Fate of terrestrial organic Carbon in the Arctic Ocean

Coastal erosion[1]



All numbers reported as TG OC/yr

Fluvial transported OC[2]

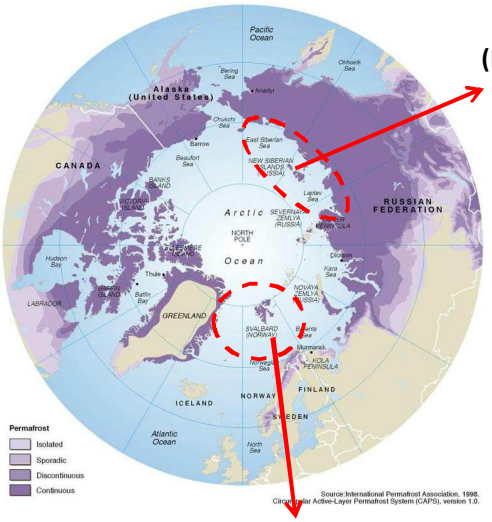


- **Remobilized organic carbon behaves non-conservatively, with highest degradation rates close to point of entry[1-4].**

Q: What happens to the terrestrial Organic Nitrogen in the Arctic Ocean?

[1]Vonk et al. Nature 2012;[2]van Dongen et al. MC 2008; [3]Sanchez-Garcia et al. GBC 2011; [4]Alling et al. GBC 2011

Use samples from:

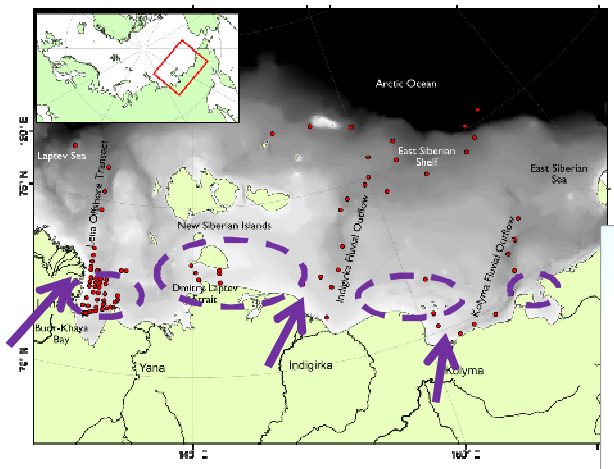


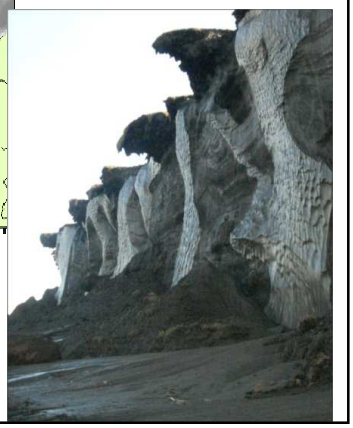
Samples collected during ISSS-08 (International Siberian Shelf Study 2008) expedition

Project Partner:
Örjan Gustafsson
Stockholm University

Barents Sea, Fram strait-Arise cruise

Samples collected during ISSS-08





-δ^{15}N Amino Acid Isotope analysis
-Organic Geochemical analyses (Py-GCMS etc.)
-fractionation experiments, based on density, size and settling velocity (SPLITT)