

A photograph of an Arctic coastal landscape. On the left, a steep, snow-covered hillside descends towards a sandy beach. The beach is scattered with dark rocks and leads to a calm, dark blue sea. In the distance, a range of snow-capped mountains is visible under a clear blue sky. The overall scene is serene and desolate.

Arctic Coastal Dynamics

a LOICZ-IGBP regional
and International Arctic Science Council (IASC)
project

Paul Overduin, Alfred Wegener Institute

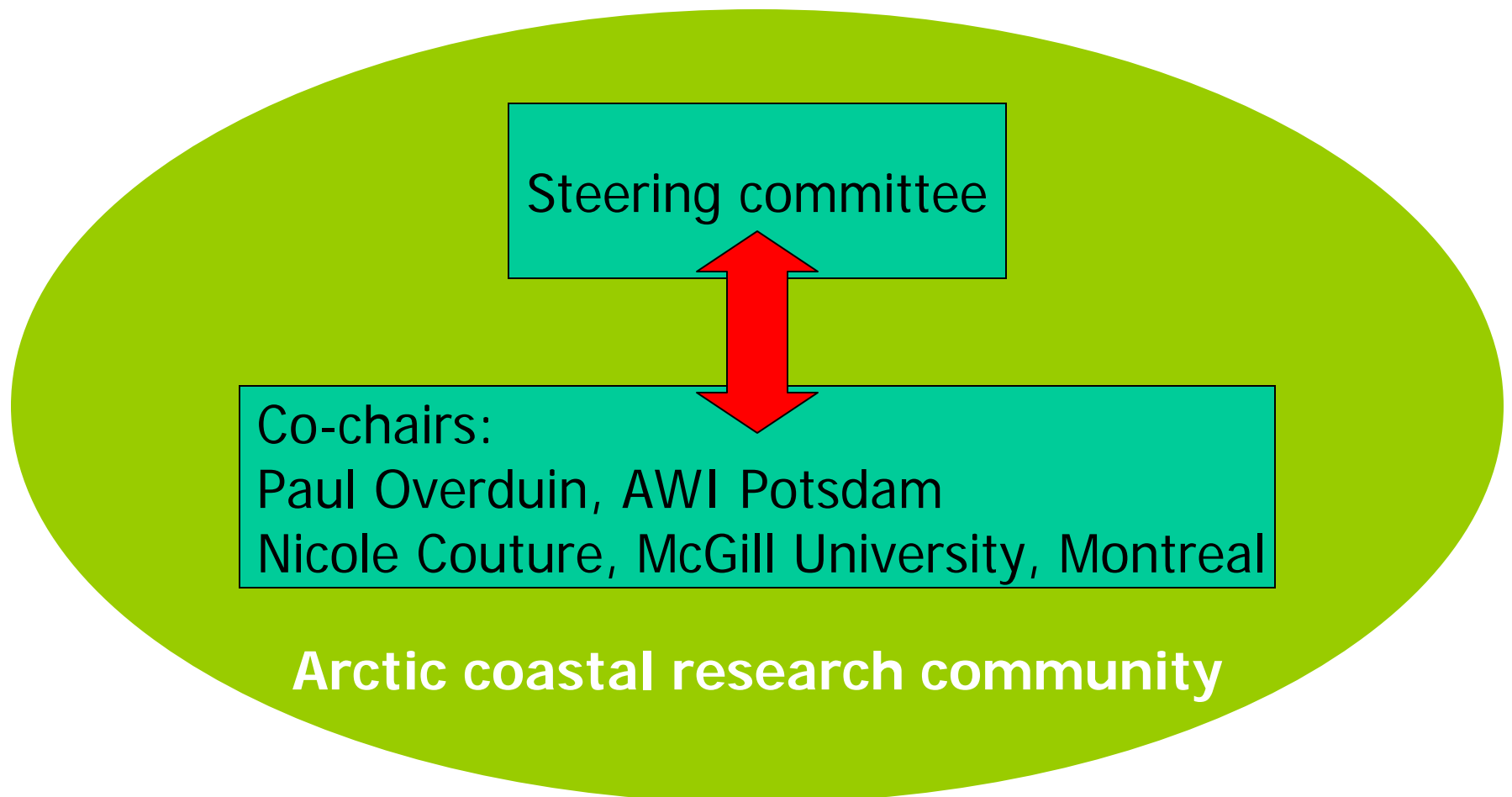


Alfred Wegener Institute for Polar and Marine Research, Potsdam

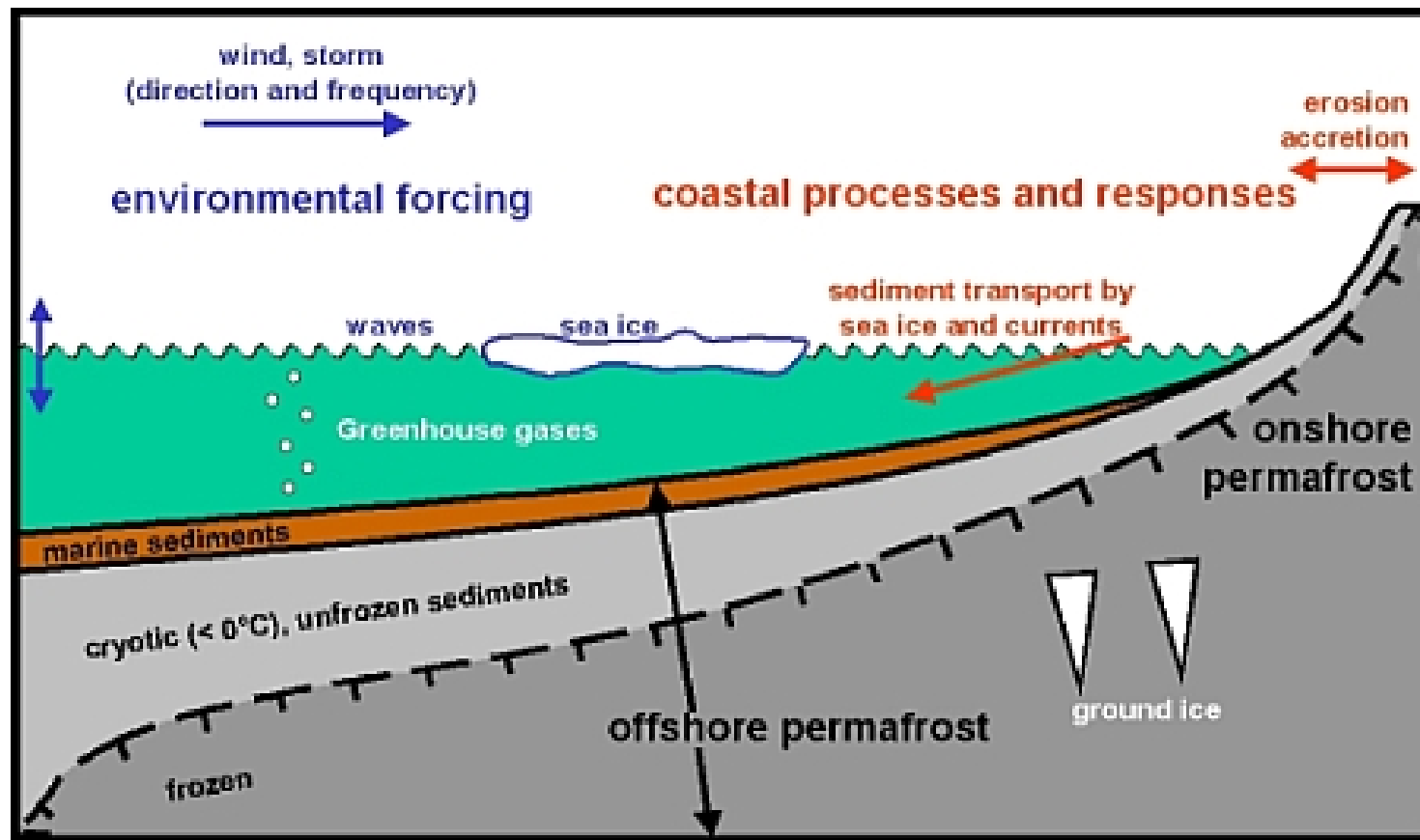


- daughter institute of the Bremerhaven mothership
- atmospheric and geoscience departments
- geoscience: active in paleoclimate and permafrost studies (Russia, Canada, Alaska, Spitsbergen, Greenland)

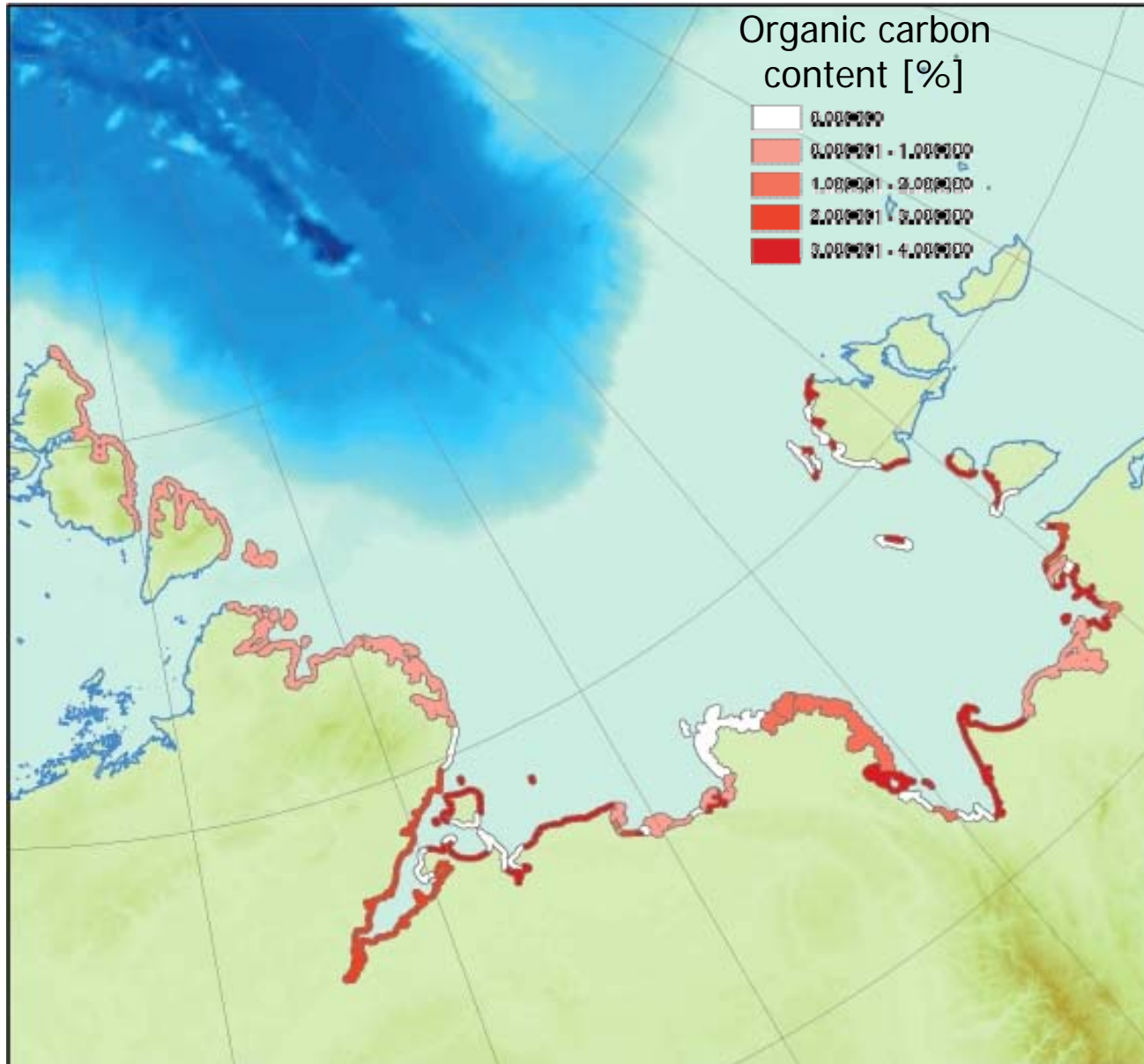
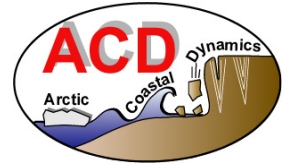
ACD Organisation



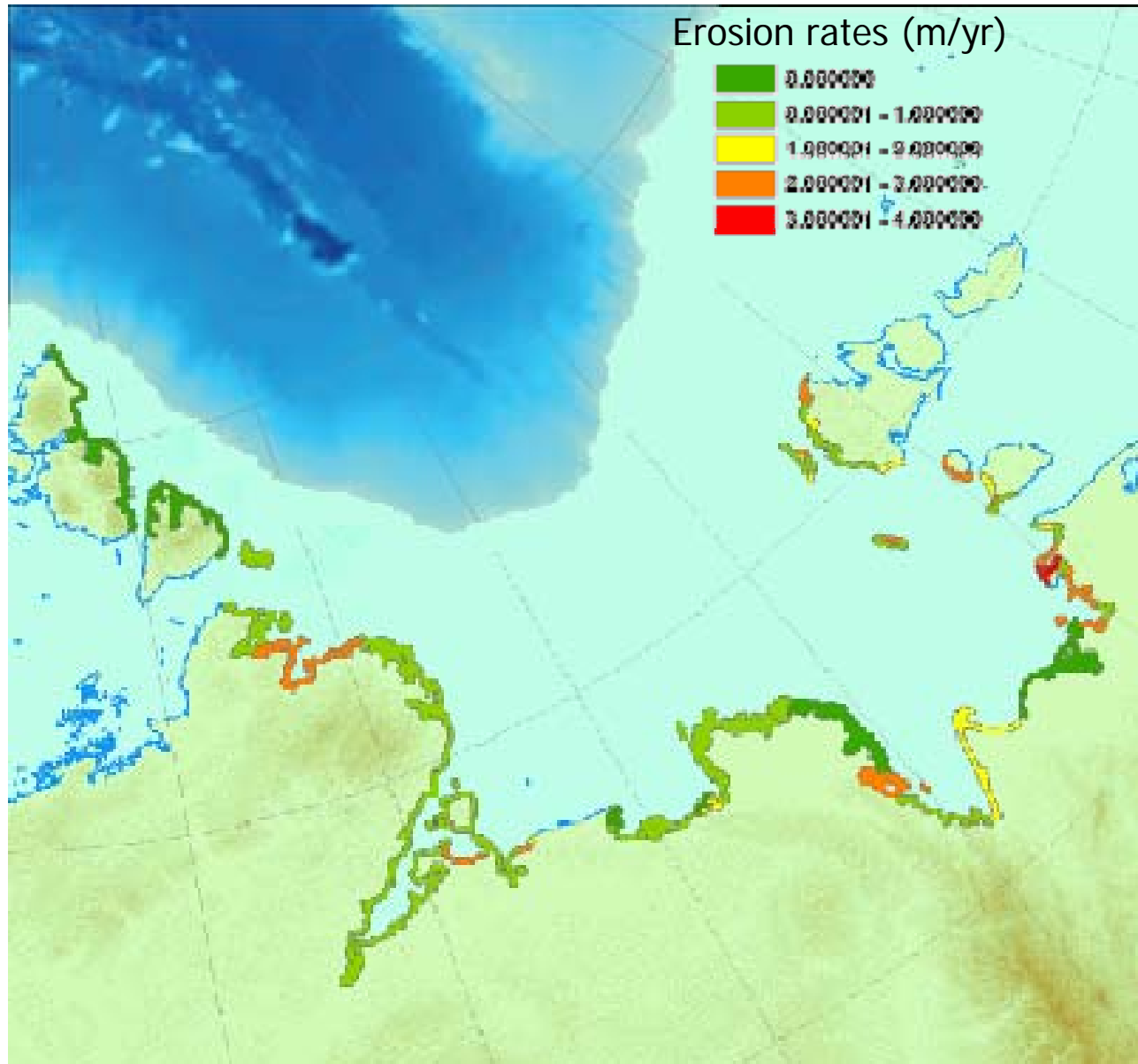
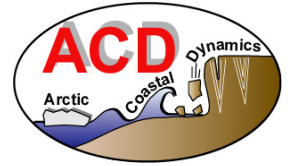
ACD: coastal processes and forcing in permafrost regions



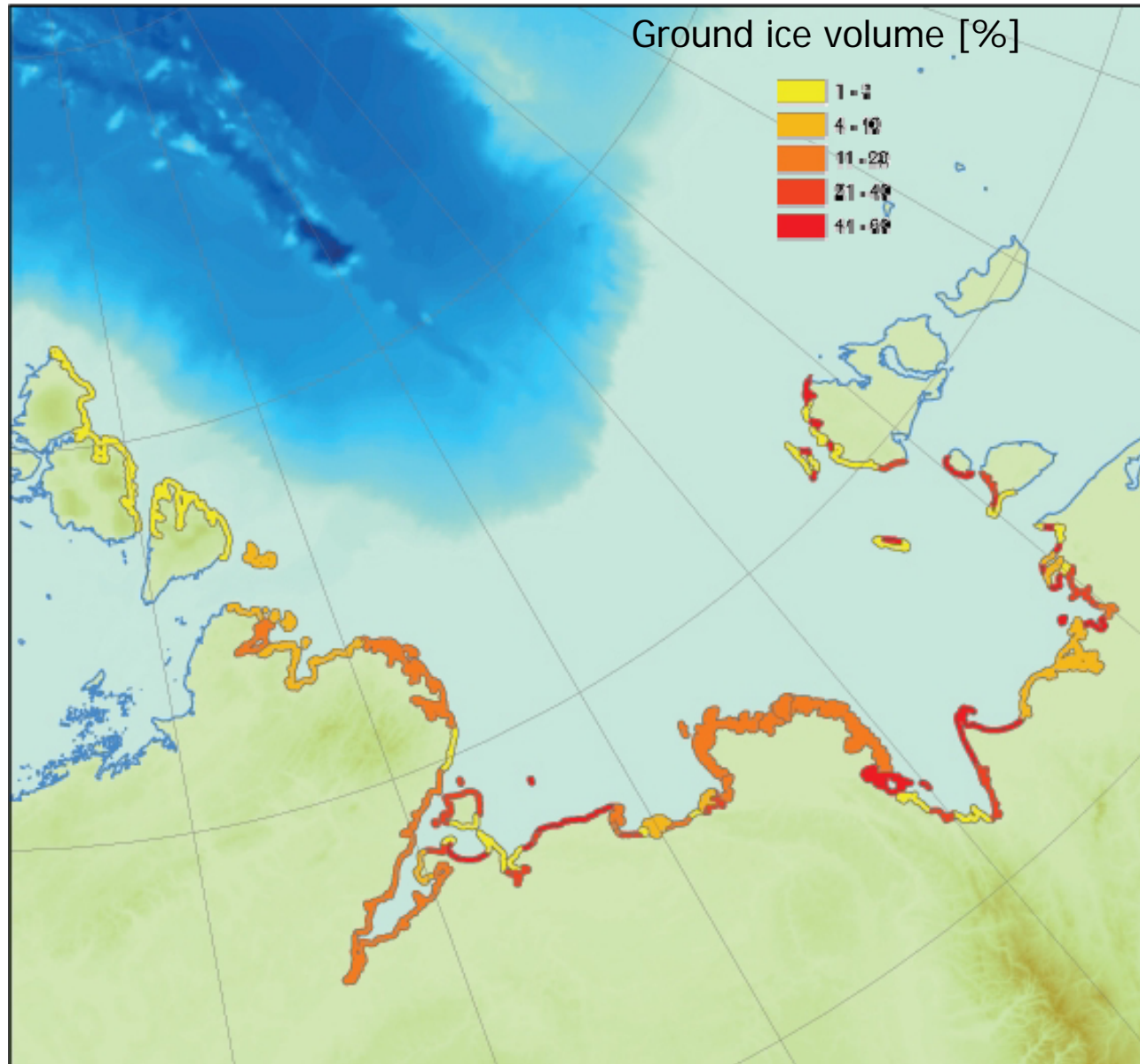
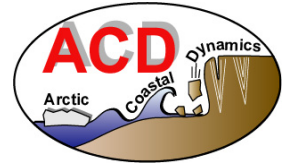
Organic carbon content



Erosion rates



Ground ice volumes



Deliverables

- 5 volumes of workshop proceedings
- Special issue of Geo-Marine Letters (2005)
- Volume of regional and process-based studies (2006)

The International Conference on Arctic Research Planning II

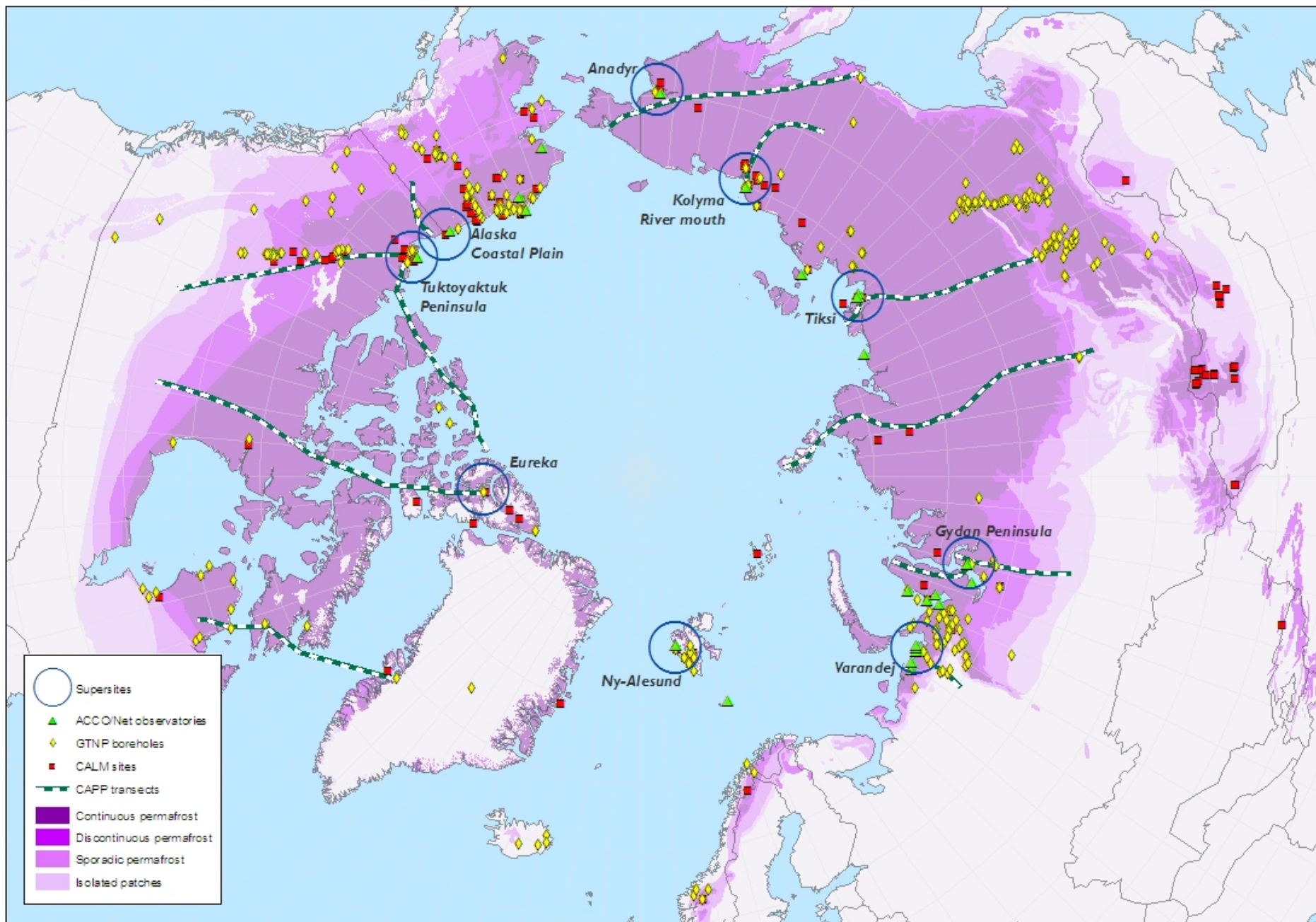
- > 450 politicians, scientists, indigenous peoples, educators...
- Broadened focus for Arctic coastal processes: biodiversity, human dimensions of change
- ACD II works in the context of ICARP II

ACD II

- Identified by IASC as supported project
- Fall workshop → science and implementation plan
- Overlap with ICARP II in terms of goals (supersite and monitoring) and leadership (ACD II S.C. and WG3)
- Leading IPY cluster on Coastal Margins and participating in DIS

ACD II in the 5th IPY: Arctic Circum-Polar Coastal Observatory Network

- an answer to ICARP II goals
- 24 established ACD study sites as candidates for observatories
- sites for interdisciplinary coastal research



6th Workshop on Arctic Coastal Dynamics

- Groningen, Netherlands, October 2006
- Aims:
 - Develop science plan → key science questions
 - Bring sociologists and biologists to the Arctic coastal geomorphology community
 - Design monitoring template for Arctic coastal observatories