

# R/V Kronprins Haakon i Sør, sydsommersesongen 2026/27: Kysttokt og Bouvetøyatokt

T. Hattermann, S. Moreau m. fl.





# Leg 1, «Kysttokt»

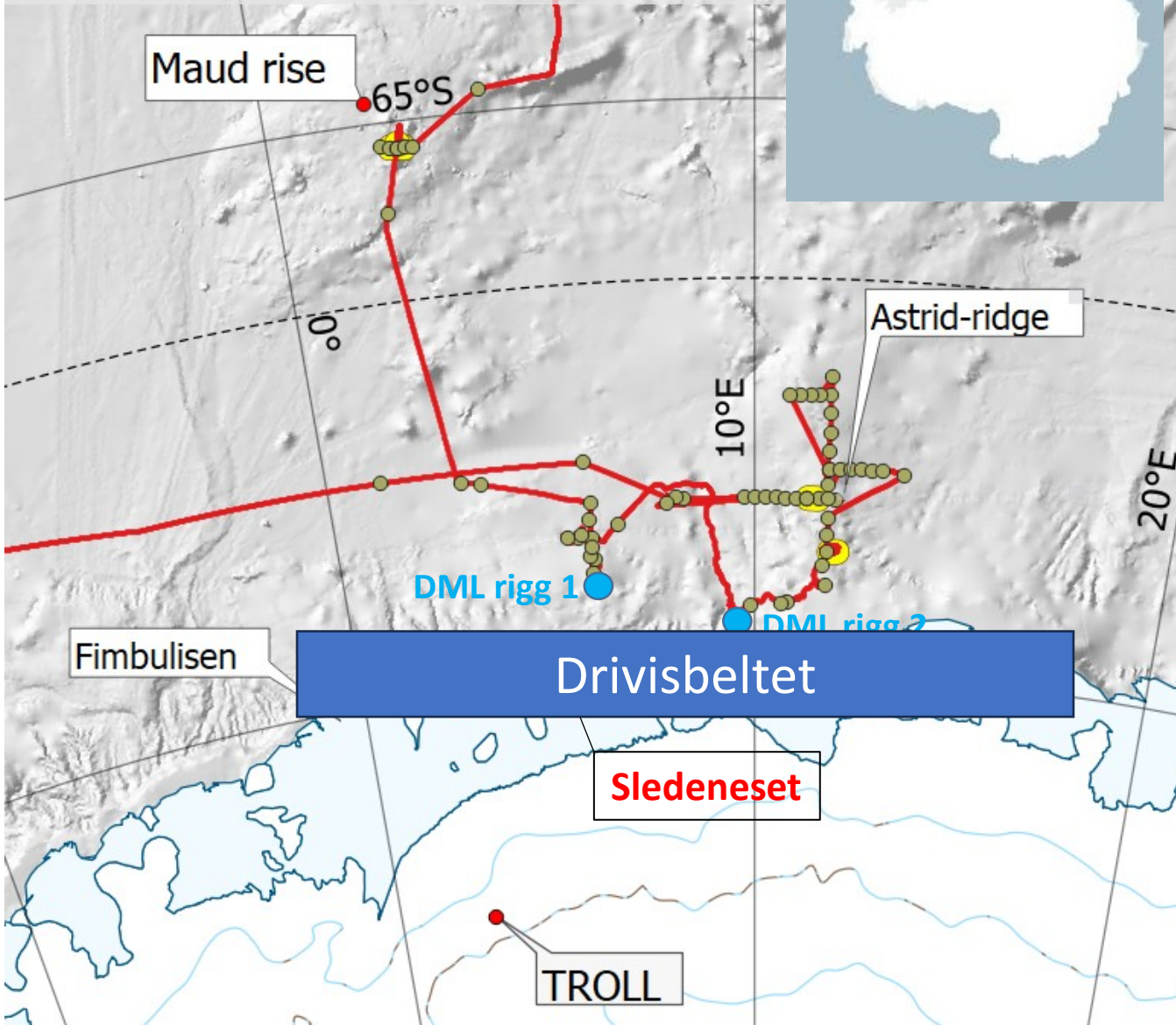
Avg. Cape Town 06. januar 2027

Fokus på kystområdet i Kong Håkon VII Hav

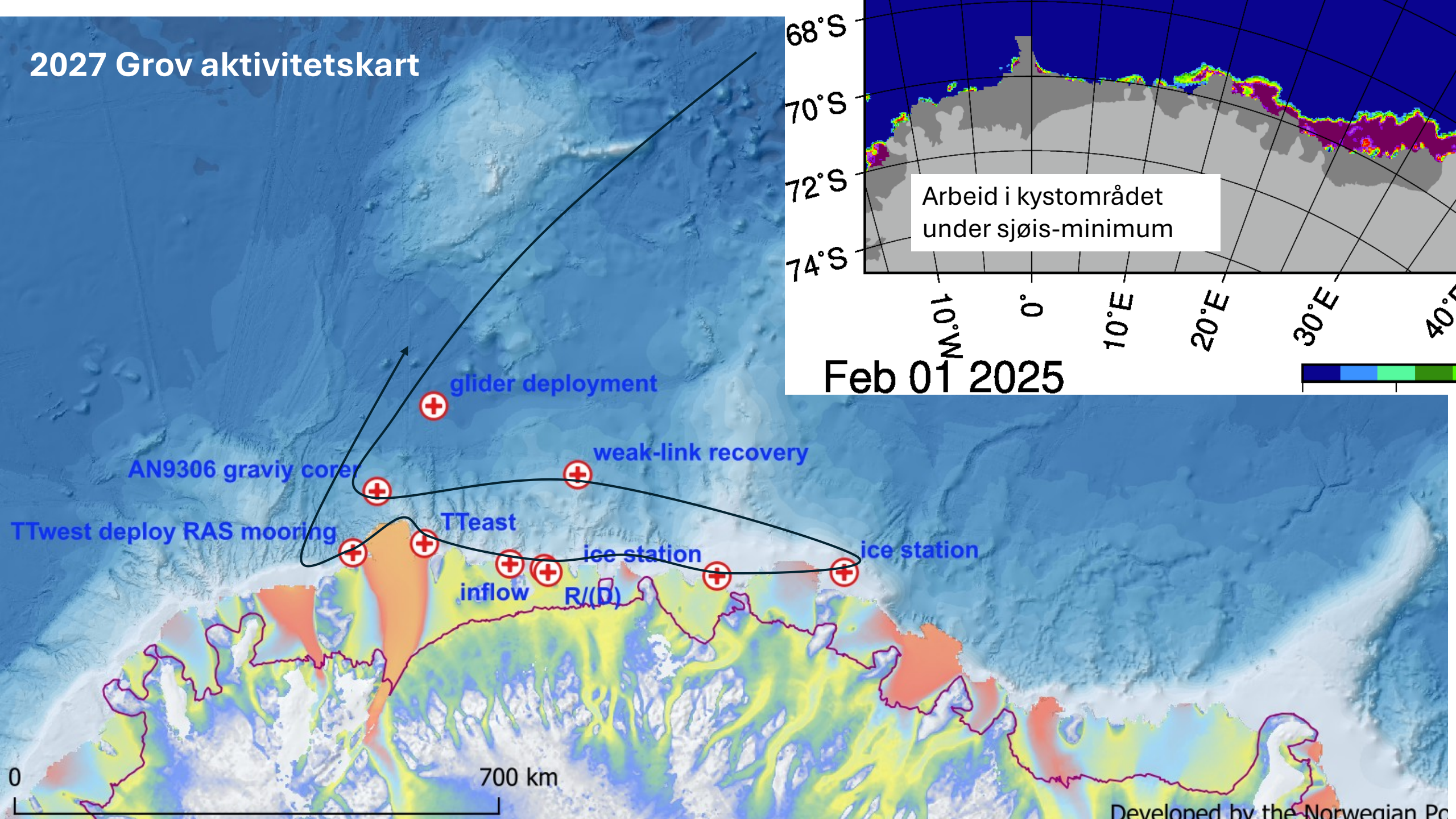
- Kunnskapsinnhenting for arealforvaltning (MPA-RMP)
- Påvirkning av land- og havis på primærproduksjon og økosystem dynamikk (NFR-ICRYME)
- Kryosfærisk karbondynamikk, metan under isen, sedimentkjemi, paleoperspektive (UiT-iC3)
- Kyststrømdynamikk, isbremsmelting og Trolltunga prosessforståelse (UiB-GFI)

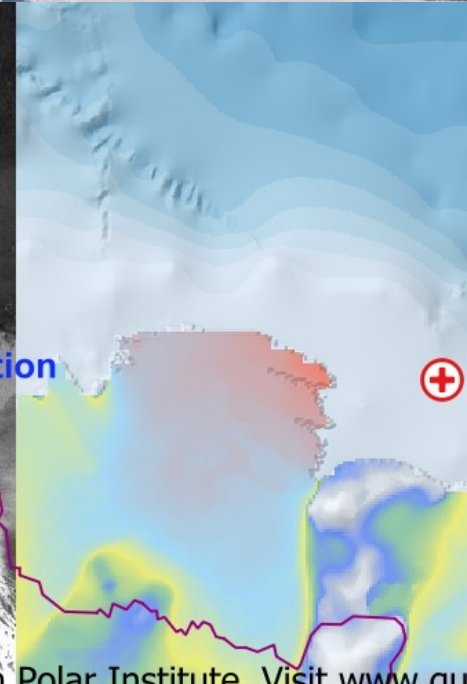
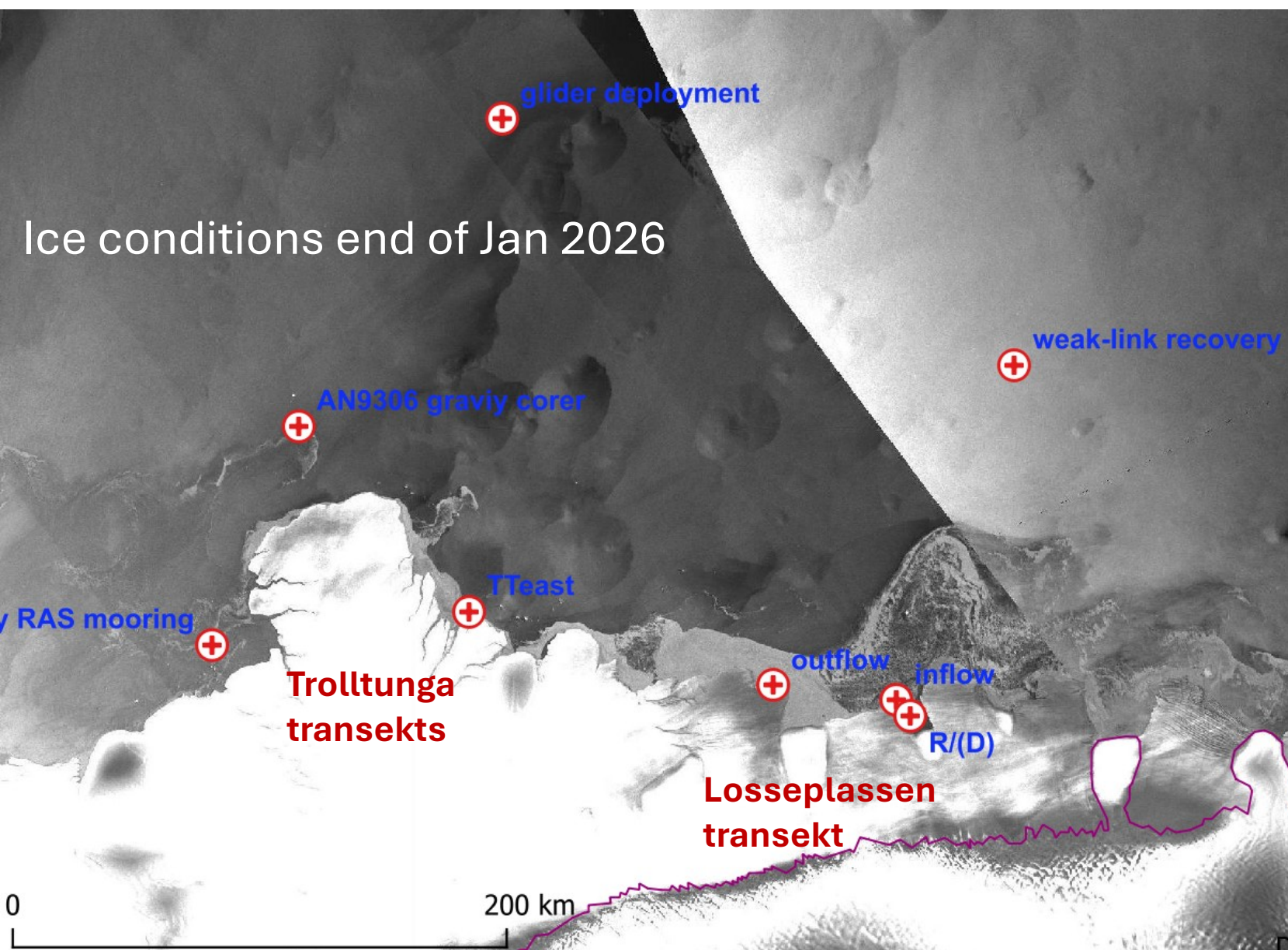


# 2019 KPH-Økosystemtokt Mars-April, dyphavsfokus



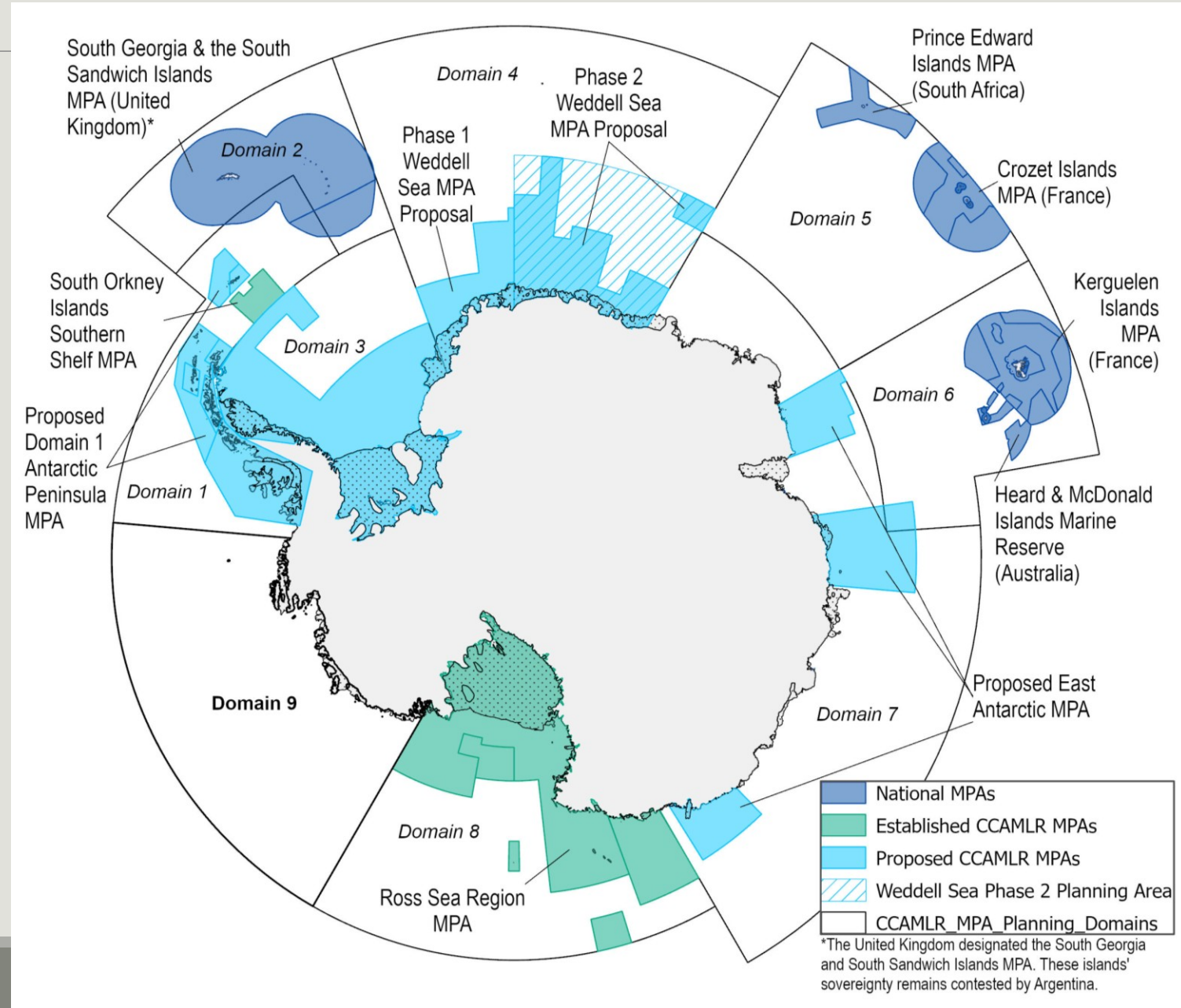
# 2027 Grov aktivitetskart





# MPAs in the Southern Ocean

Outside national territories implemented by the *Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)*



# MPAs in the Southern Ocean

Outside national territories implemented by the *Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)*

- Conservation based on **best scientific evidence...**

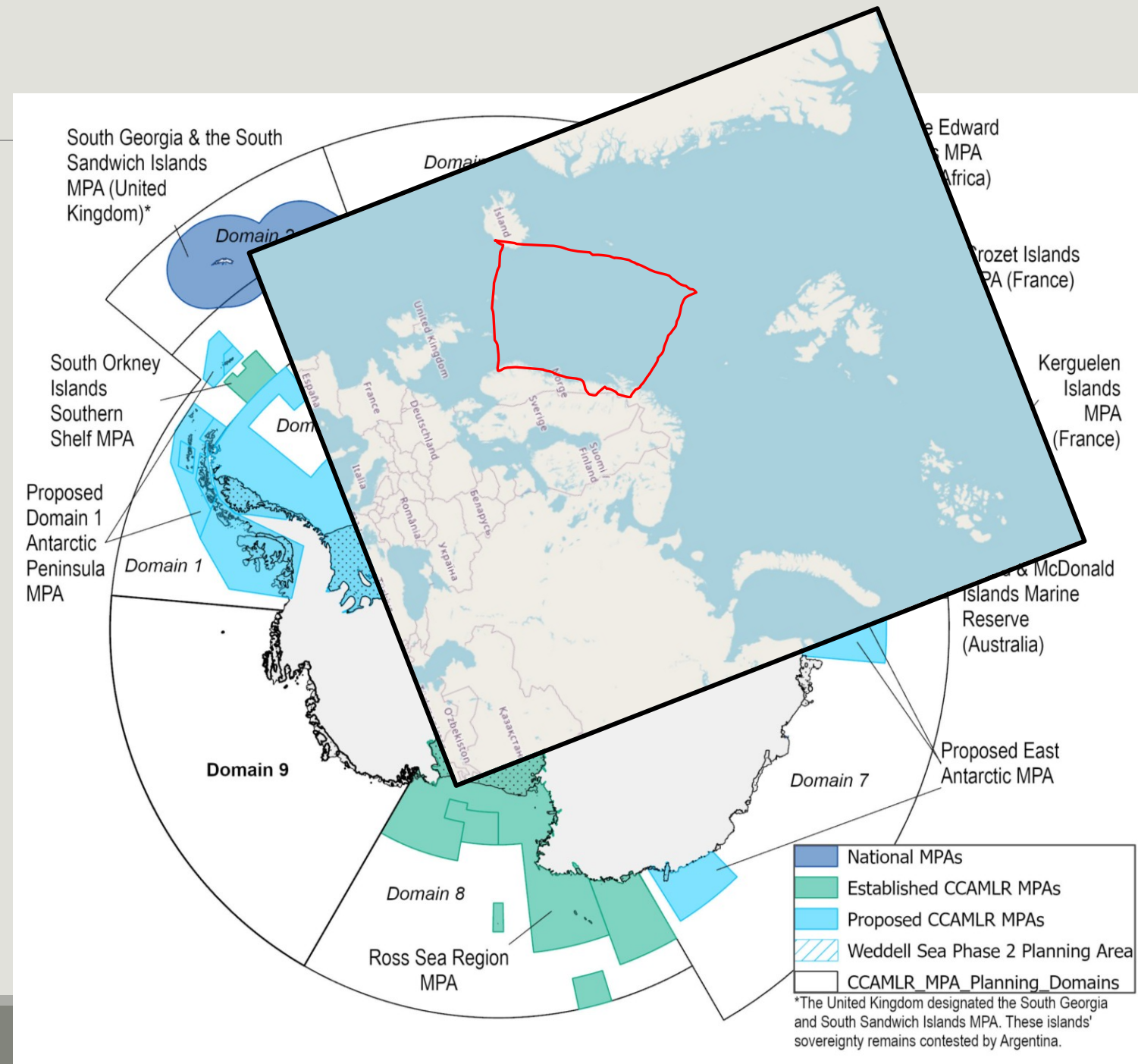
...for a vast area in one of the least studied places on Earth

-> Focus on **coastal habitats** in 2027

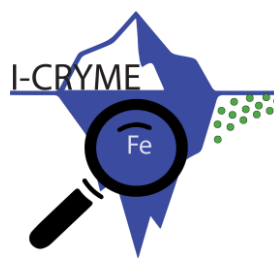
-> **Benthic** mapping (UiB, AHT)

-> **Zooplankton** remote sensing (UiT, SB)

-> **Top-predator** monitoring (in prep...)



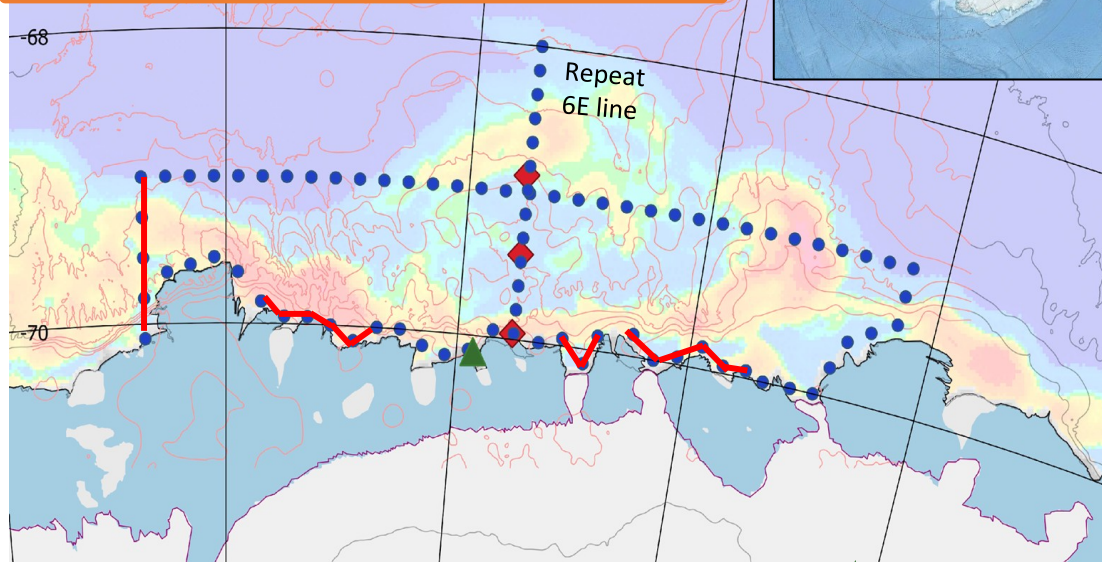
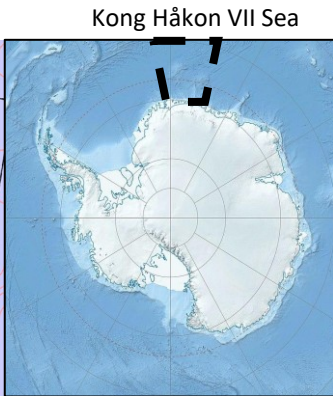
# NFR Scientific Renewal Project: I-CRYME: Impact of CRYosphere Melting on Southern Ocean Ecosystems and biogeochemical cycles



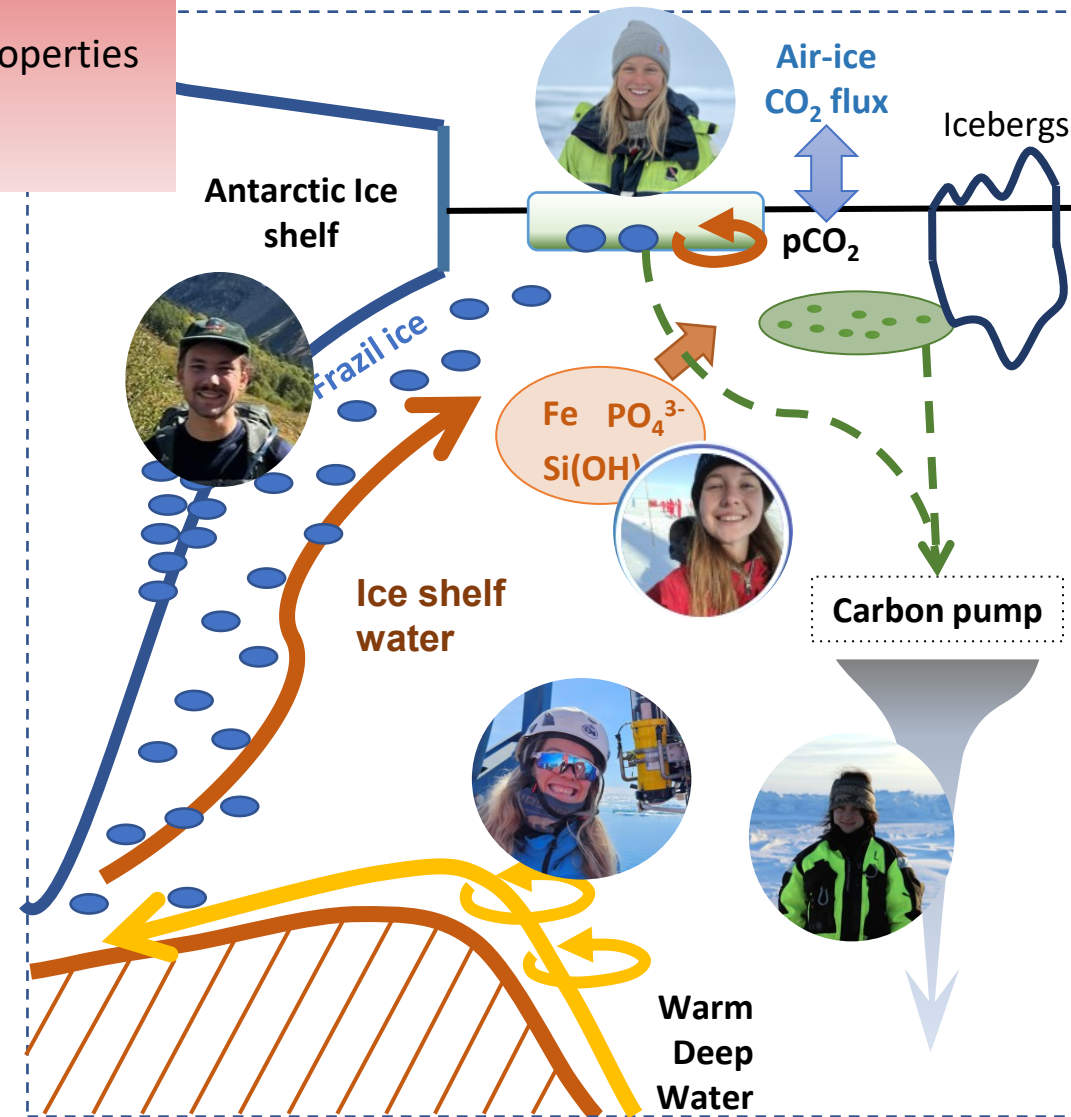
Moreau S., Hattermann T., Smedsrud L.H., Lannuzel D., Ardelan M., Campbell K., von Appen W.-J., Daae K., Gerland S., Meyer A., Smith I.J., Leonard G., Wadham J., van der Merwe P., Fransson A., Assmy P., Chierici M., Meiners K.

- Combine field, laboratory and modeling activities
- Quantify and map meltwater fluxes and their biogeochemical properties
- Understand the impact of the melting cryosphere on the marine ecosystem of the Kong Håkon VII Sea in the Southern Ocean

Sea ice & water column stations  
 Comprehensive PP & BGC program  
 Trace Metal Iron sampling  
 Ice Shelf Water & Platelet ice mapping  
 Turbulence/ mixing

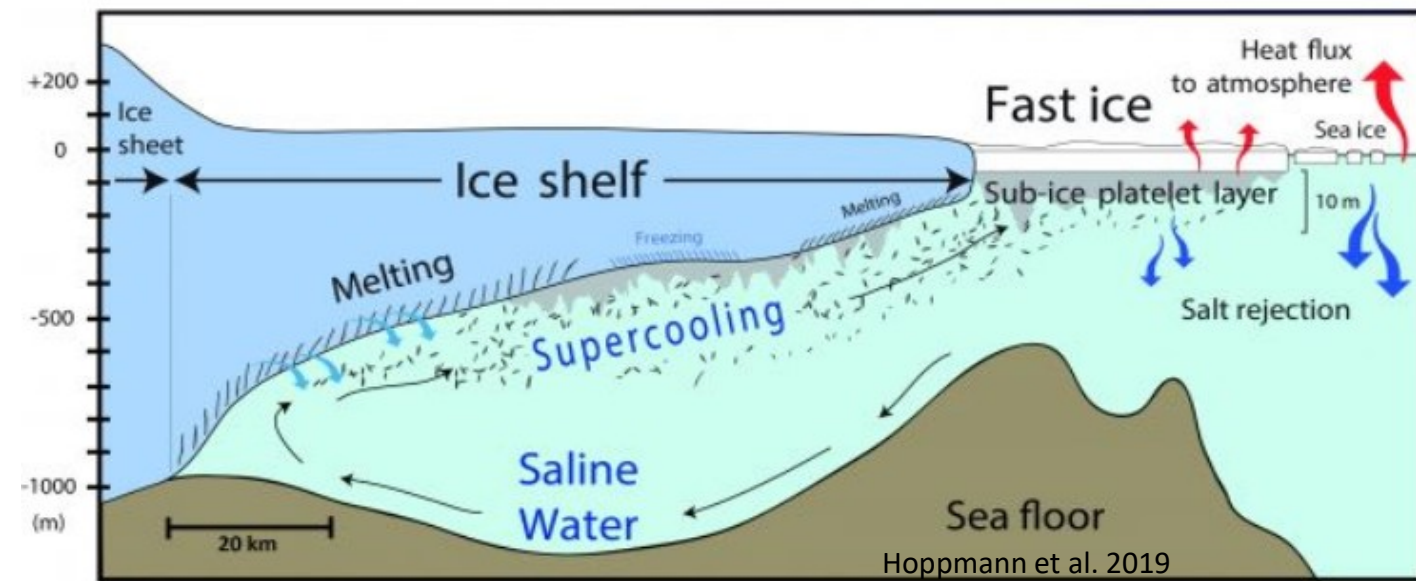


◆ Long-term mooring stations ● CTD stations — Triaxus track ▲ Landfast ice station





H1: Platelet ice («stav-is») formed from supercooled Ice Shelf Water



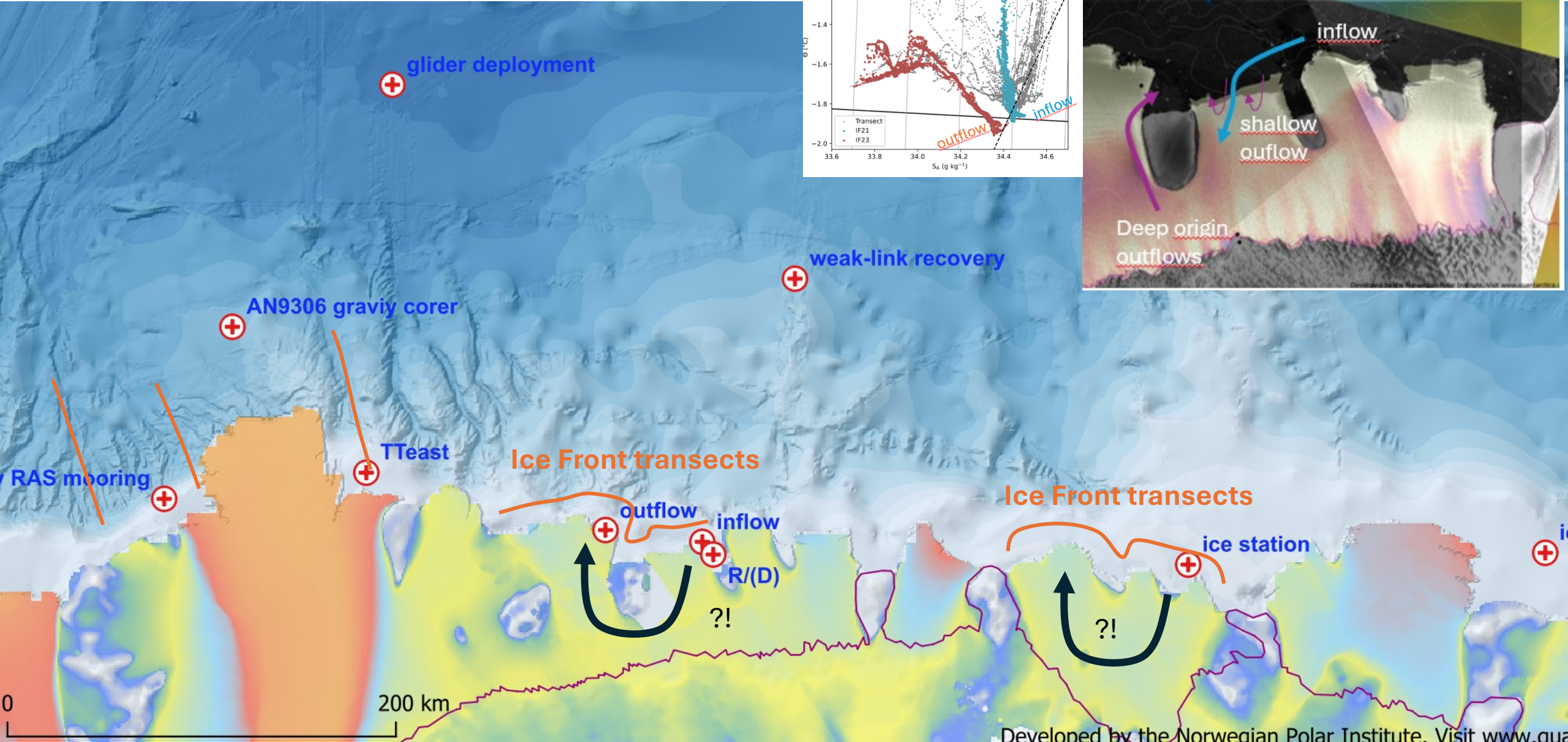
Freezing point for 34.5 PSU (°C)

-1.86



-2.24

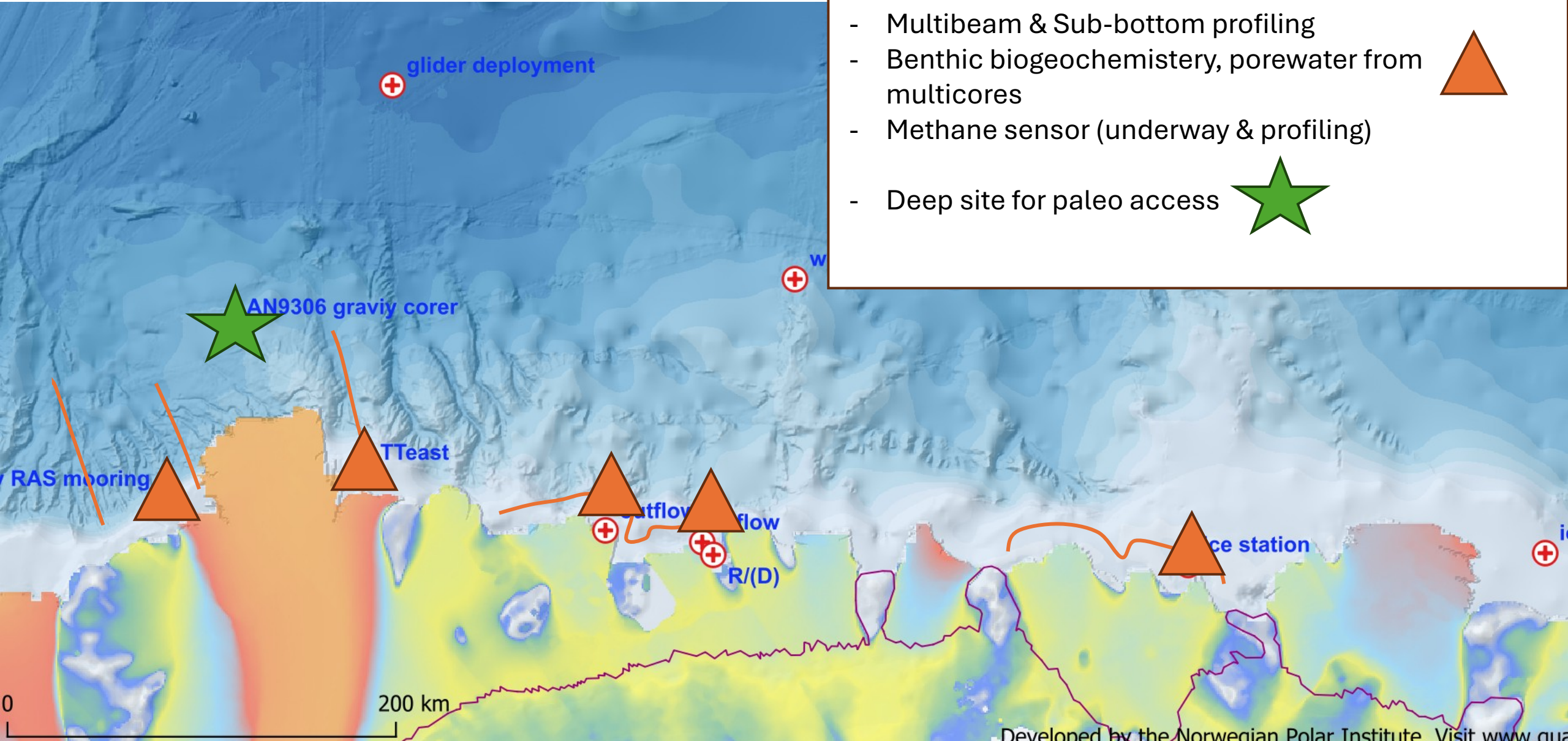
-2.62

# I-CRYME «Sampling coastal inhomogenities»

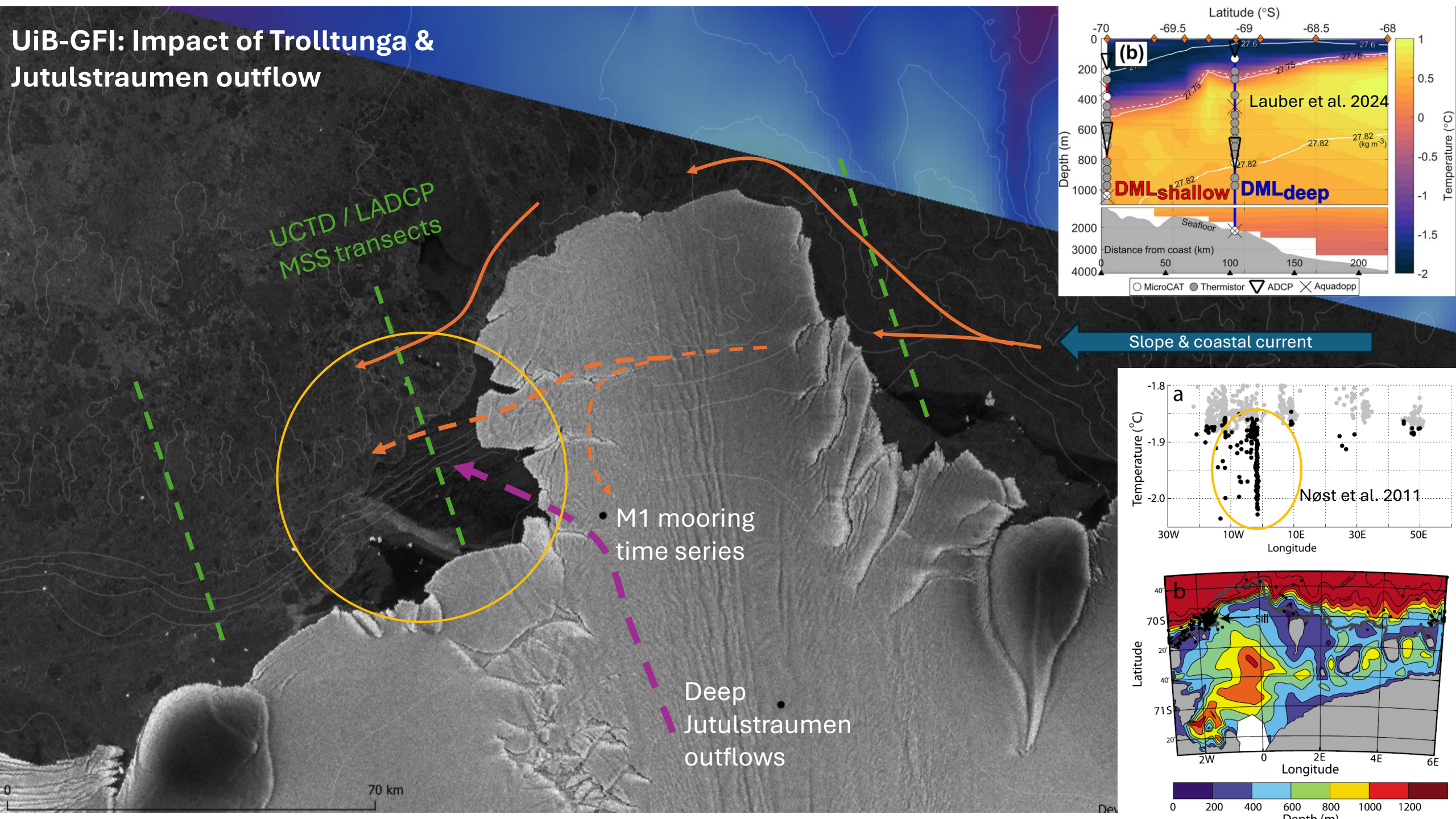


## UiT-iC3 – Carbon under ice sheets

- Multibeam & Sub-bottom profiling
- Benthic biogeochemistry, porewater from multicores 
- Methane sensor (underway & profiling)
- Deep site for paleo access 



# UiB-GFI: Impact of Trolltunga & Jutulstraumen outflow



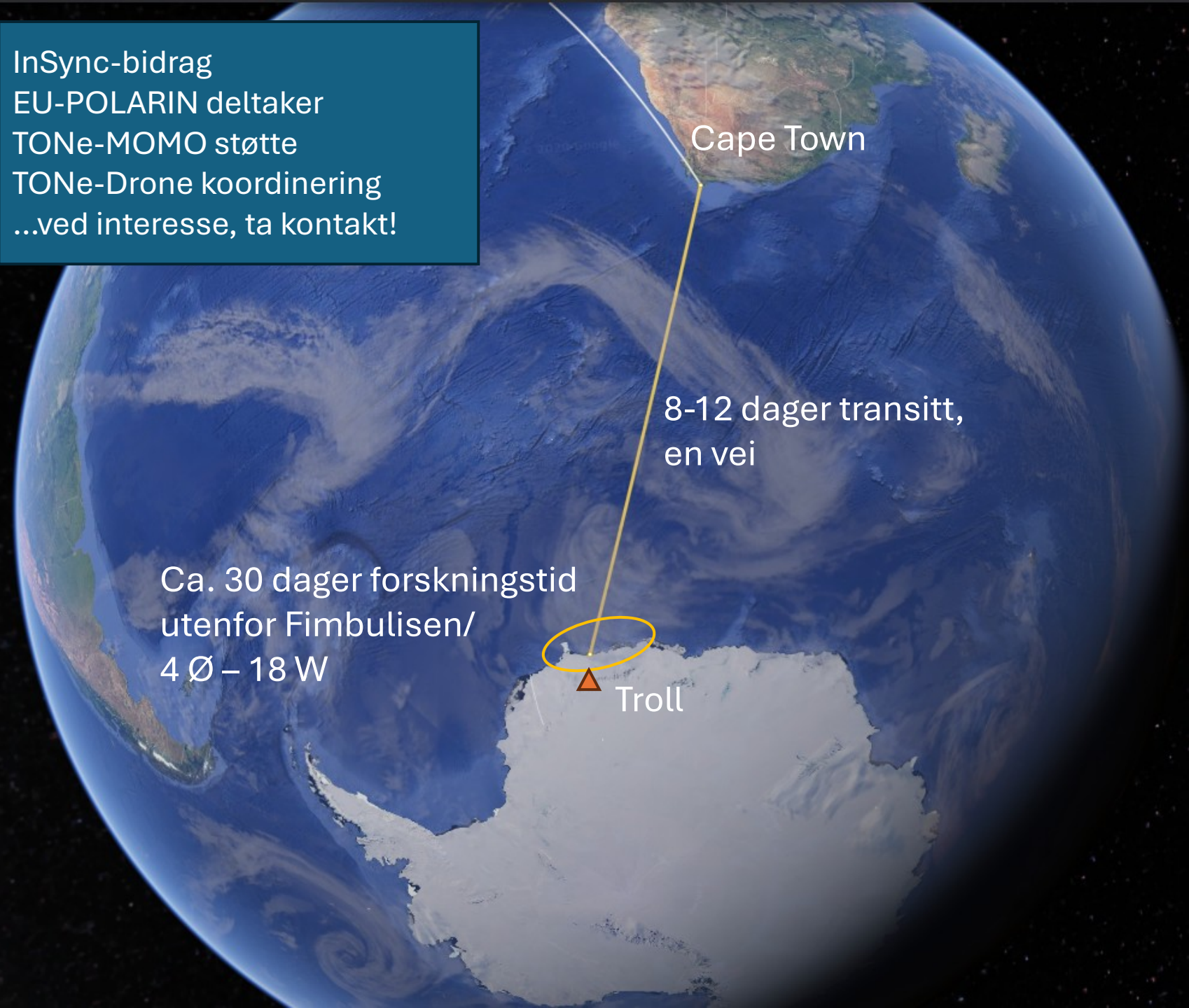
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InSync-bidrag  
EU-POLARIN deltaker  
TONE-MOMO støtte  
TONE-Drone koordinering  
...ved interesse, ta kontakt!



Cape Town

8-12 dager transitt,  
en vei

Ca. 30 dager forskningstid  
utenfor Fimbulisen/  
4 Ø – 18 W

Troll

