Oceanographic processes in and around Baffin Bay impacting or being impacted by Greenland

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[Logo images]
Question: Historical Ocean Variability in Baffin and Disko Bay

Method: Analysis of historical Summer TS sections

Key Idea: Significant changes in heat input to West Greenland due to BOTH Irminger Water and Arctic Water changes
Question: Will Melt From All Coastal Glaciers be Similarly Taken up by the Sub-Polar Ocean

Method: Ariane Lagrangian tool to release virtual floats in $\frac{1}{4}$ degree NEMO hindcast, for 10 years

Key Idea: Freshwater from different glaciers will be taken up by ocean quite differently
Question: Does Enhanced Melt from the GrIS impact FW Transport in the CAA and at Davis Strait

Method: Sensitivity experiments with 10-15 km resolution Pan-Arctic NEMO model configuration

Key Idea: FW from Greenland stored in Baffin Bay, changing steric heights, reducing CAA transport (routing more Arctic export through Fram Strait) and delays signature of enhanced Greenland melt at Davis Strait