

Major data gaps

- Water mass distribution in Baffin Bay – (John/Peter)
- Interactions between ice streams and ocean (Upernavik) – Dorthe/Christine
- Linking atmosphere-land-ice-ocean interaction (Torben/Lotte)
- Systemizing parameters and analysis (protocols, metadata) (Claus/Søren)

Overall groups

1. Overall overview of data (Søren/Claus)
2. Workshop of Baffin Bay (Dorthe)
3. Workshop of Greenland-Norwegian Seas (Marit/Søren)
4. Linking science questions to engineering solutions (Asgeir/Claus)

Action Plans - timeline

- Workshop Baffin Bay – Early Spring – Dorthe
- Workshop on plankton-community monitoring workshop in Nuuk – early spring (Uwe)
- Greenland gradient (GIOS) April 1 (Hindsgavl gruppen)
- Workshop Polar dream – summer 2020 Tromsø (Asgeir)
- Workshop on Upernavik glacier-ocean initiative – autumn 2020 (Christine)
- Data guidelines – summer 2020 (Claus)
- Small meeting on ASP education collaboration – 2019 (Lotte)
- CIOOS – Canadian integrated ocean observing system (Phill)

Metadata – and calibrations

Parameters to be measured (round table):

- T, S, C, Water isotopes, nutrients, TA, TCO₂, atmosphere, wind, Chl a, fluorescence, DOC, cDOM, anions and cations.
- Discharge Greenland Ice sheet.
- Traces of meltwater.
- Inflow water – impact of ice melting, biogeochemistry, ecosystems, fisheries. Interest in inflow and outflow to the AO, migrating and new species, seasonality, freshwater components, tracers, Fram Strait mooring lines.
- Community based monitoring (Baffin Bay, Hudson Bay).
- Air-ice-sea exchange of heat fluxes, aerosols & clouds.
- Trace element interactions, glacier freshwater runoff, carbon budgets and integrations/processes and interactions between species.
- Connecting coast and off shore ocean and deep parts of Baffin Bay (T, S, Freshwater and nutrients). Looking for new components (perhaps genomics) to trace freshwater in offshore waters.
- Integrate process studies and experiments into the surveys (SERF, lab etc).
- Photochemical reactions, molecular biology and microbial ecology.
- Seasonal and interannual variability in fish species and production.
- Connection between distribution of water masses, larvae drift and fish biology.
- Small scale turbulence – vertical and horizontal heat and nutrient exchange.

- Contaminants across boundaries (atm, ice, land, lake, oceans).
- Low quality high frequencies instruments, linked to communities.
- Processes related to ice streams. Ocean and ice connections, process studies (e.g. AUVs, small instruments).
- How is the mixing of freshwater in the fjords that relates to pollution and fisheries.
- Relevance of our work to the public – outreach. Collaboration, co-production. Involve communities early.
- Connecting scales (natural and social science). Local to regional to global. Upscaling. Link to remote sensing.
- Linkages between physical, chemical and biological interactions.
- Robotics and low costs instruments.
- Instrumental intercalibration.
- Atlantification and degradation (wood, oil etc.).
- Paleoclimate proxies, sediment loads, grain sizes.
- In a paleoproxy science how do we connect surface, subsurface and bottom water.
- Extend the time scales from present to past (decadal scales). What is normal?
- Coordinate offshore cruises with coastal local work (Fjord scale).
- Collaborating with fisheries on shelf and offshore areas. Focus of shelf breaks.
- Well working and fully updated Isaaffik.
- Ice mélange and icebergs (seasonal and annual melting and connection to biology).

1. Finding a pathway to get local partners into the projects
2. National and International partners
3. Systemizing parameters and analysis (protocols, metadata)

Note Marit Reigstad – Nansen Legacy has something, Mosaik also, GEM data, Pangea, ICES, CCADI

Synoptic cruises – get an overview

- a. Baffin Bay.
- b. Greenland Sea.