

NORWAY, European Arctic and DBO related activities/plans

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DBO -concept

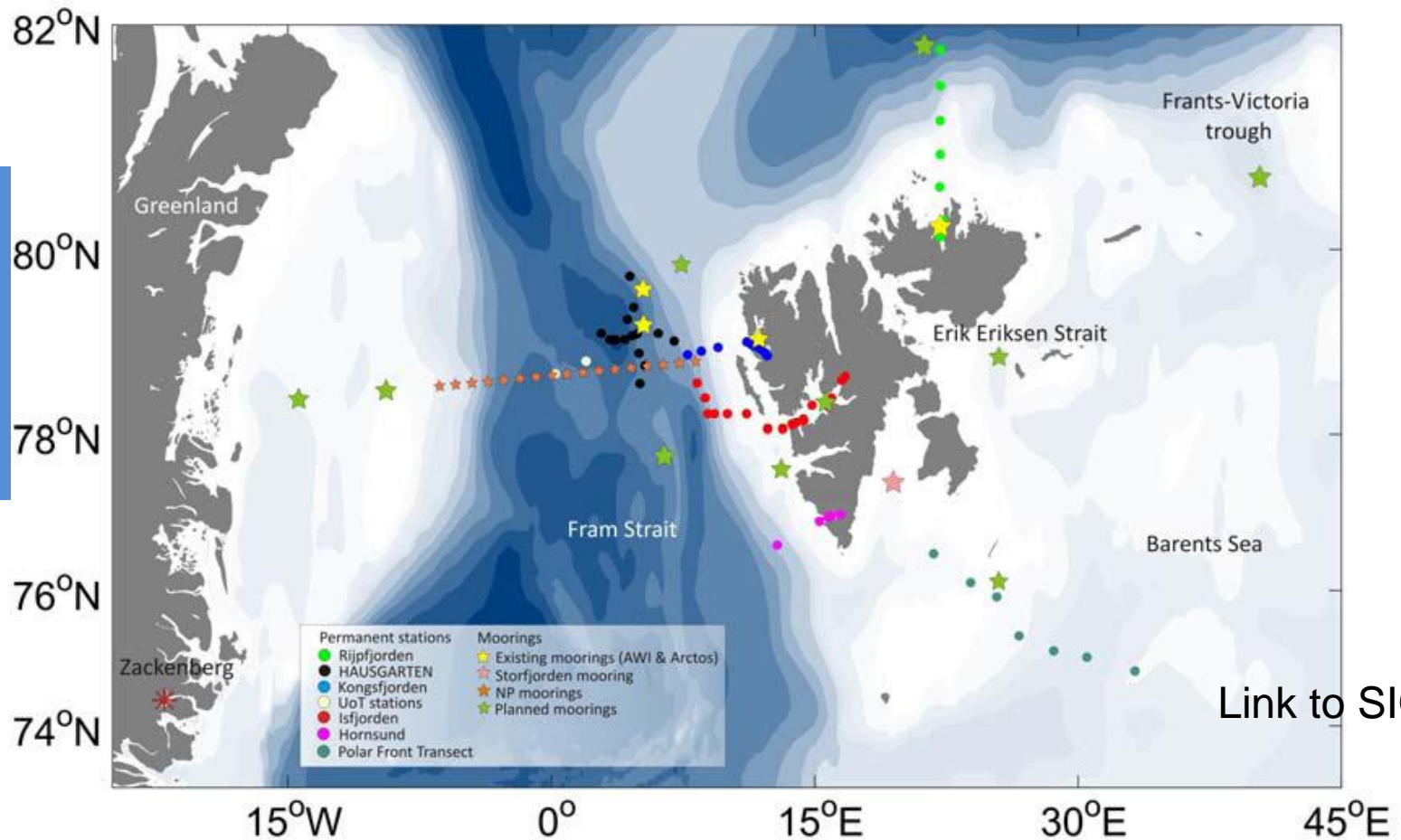
- Not yet realized or implemented in the European Arctic
- BUT; opportunities exist
- Needs coordination: a core program/ project to be organized and initiated

Main monitoring activities at present:

- **Norwegian Polar Institute (NP):** Arctic Ecosystem Monitoring Program (AEM/MOSJ)
 - Long term transect (Kongsfjord since 1995)
 - Database of all phyto- and zooplankton data (cooperation with Poland)
 - Established cross shelf sampling transect north of Spitsbergen
- **Institute of Marine Research (IMR)**
 - Extensive ecosystem surveys for fisheries, plankton and physics in the Barents Sea in cooperation with Russia
- **UNIS (Svalbard University Studies)**
 - Annual cruises as student courses around Spitsbergen, including mooring surveys (3 moorings in fjord systems)
- **University of Tromsø**
 - Benthos hard bottom
 - Project related process and community studies on pelagic-benthic coupling in Barents Sea, Fram Strait and Spitsbergen area

Example: Observations around Svalbard

- Community Time Series (Polar Front, KongHau, Rijpfjord)

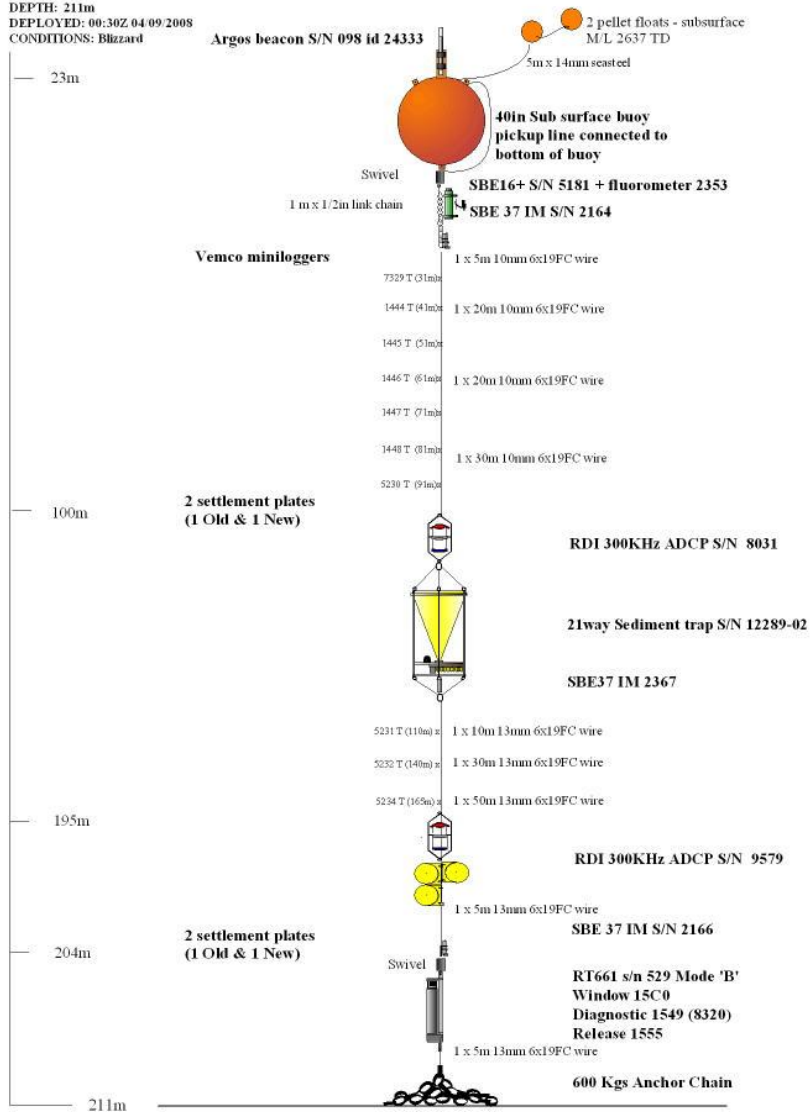


CTD
PhPI
ZooPI
Nutr
Soft b.
Hard b.

[Link to SIOS](#)

Kongsfjorden 2002-2010

LAT: 78° 59.179'N
LON: 011° 20.929'E
DEPTH: 211m
DEPLOYED: 00:30Z 04/09 2008
CONDITIONS: Blizzard



Oceanographic moorings

Norwegian Polar Institute/Scottish Association of Marine Scientists/UNIS

CTD

Fluorescence

ADCP (currents, vertical migrating zooplankton)

Sediment traps (vertical flux, zooplankton species comp.)

Rjipfjord, Kongsfjord, Billefjord

SIOS (Svalbard Integrated observing systems):

Suggested 8 moorings

Initiatives that could take a coordinating role

- SIOS – Svalbard integrating observatory network. But requires that ship-based sampling is included – not only observatories (operational phase planned end 2013)
- CoE application Centre for Arctic Marine Productivity (CAMP) from ARCTOS: have idea to identify potential stations north of Svalbard-Fram Strait
- FRAM centre (Tromsø): establish mooring array north of Spitsbergen, one mooring with biological sensors (shelfbreak) from summer 2012 – will make a test DBO station
- Konghau/ Hausgarten transect (AWI/NP/UiT/SIOS) could identify Fram Strait station as DBO