

...and Polish!

'Norwegian' contribution to Marine Night campaigns, 2014-2015



Sensing the physical environment

- Colin Griffiths, Finlo Cottier, Geir Johnsen, Mark Moline, Asgeir Sørensen, Jon Cohen, Jørgen Berge, et al.
- Moorings, acoustics
- Detection of light fields above and below the water
- Remote sensing using ROV, AUV, new sensors
- Bioluminescence
- Electrophysiology of zooplankton eyes

Phytoplankton/protist studies

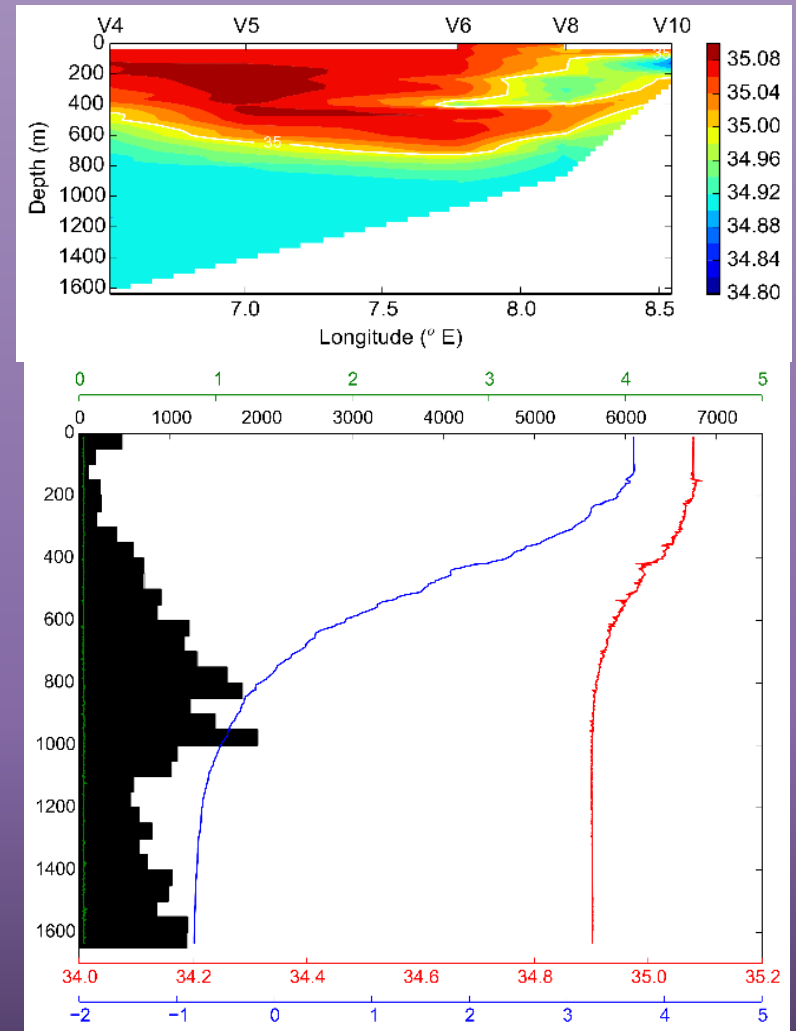
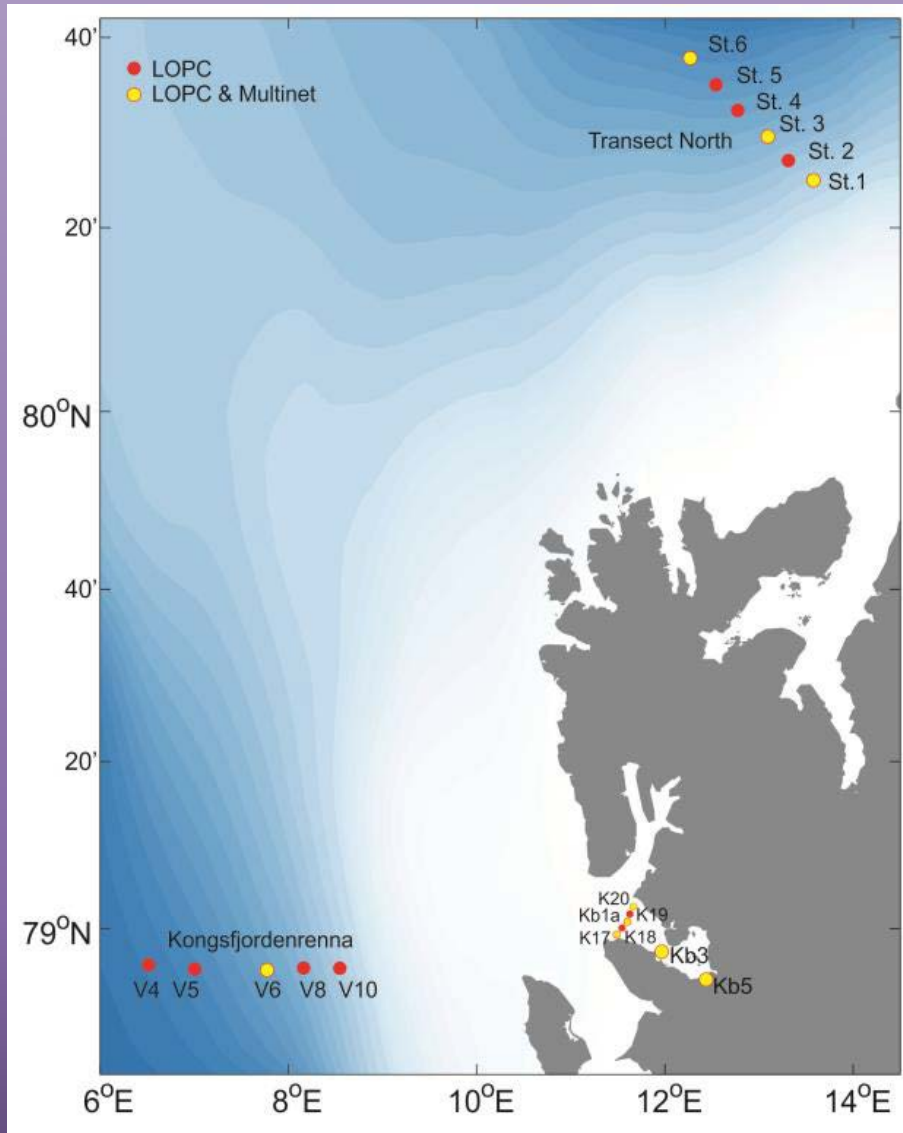
- Tove Gabrielsen, Eva Leu, Kasia Zamelczyk, Josef Wiktor (IOPAS), Clara Hoppe (AWI)
- Community analysis (genetics)
- Chl a concentrations, stable isotopes (2014 primarily)
- Photosynthetic ability at low light (2014, 2015)
- Acclimation time (2015)
- Germination of algal resting-spores (2015)
- Planktonic foraminifera (2015)

Zooplankton communities

- Malin Daase, Sünnje Basedow, Fredrika Norbin, Ksenia Kosobokova (Shirshov Inst.)
- Fjord-shelf-slope transects
- LOPC (2015), MPS (2014, 2015), VPR (mainly 2014)
- Lipid sac measurements
- Copepod sex ratios
- Reproductive activity
- Meroplankton (larvae of benthic organisms)

2015

- Transects also include echosounder (EK60)



Other zooplankton work

- Julie Grenvald, Gérald Darnis, Trine Calleson, Carl Ballantine
- In conjunction with CircA sampling
- Krill surveys (2014, 2015)
- Respiration and fecal pellet production experiments (2014, 2015)
- Circadian clock genes in krill (2014) and *Calanus* (2015, AWI)

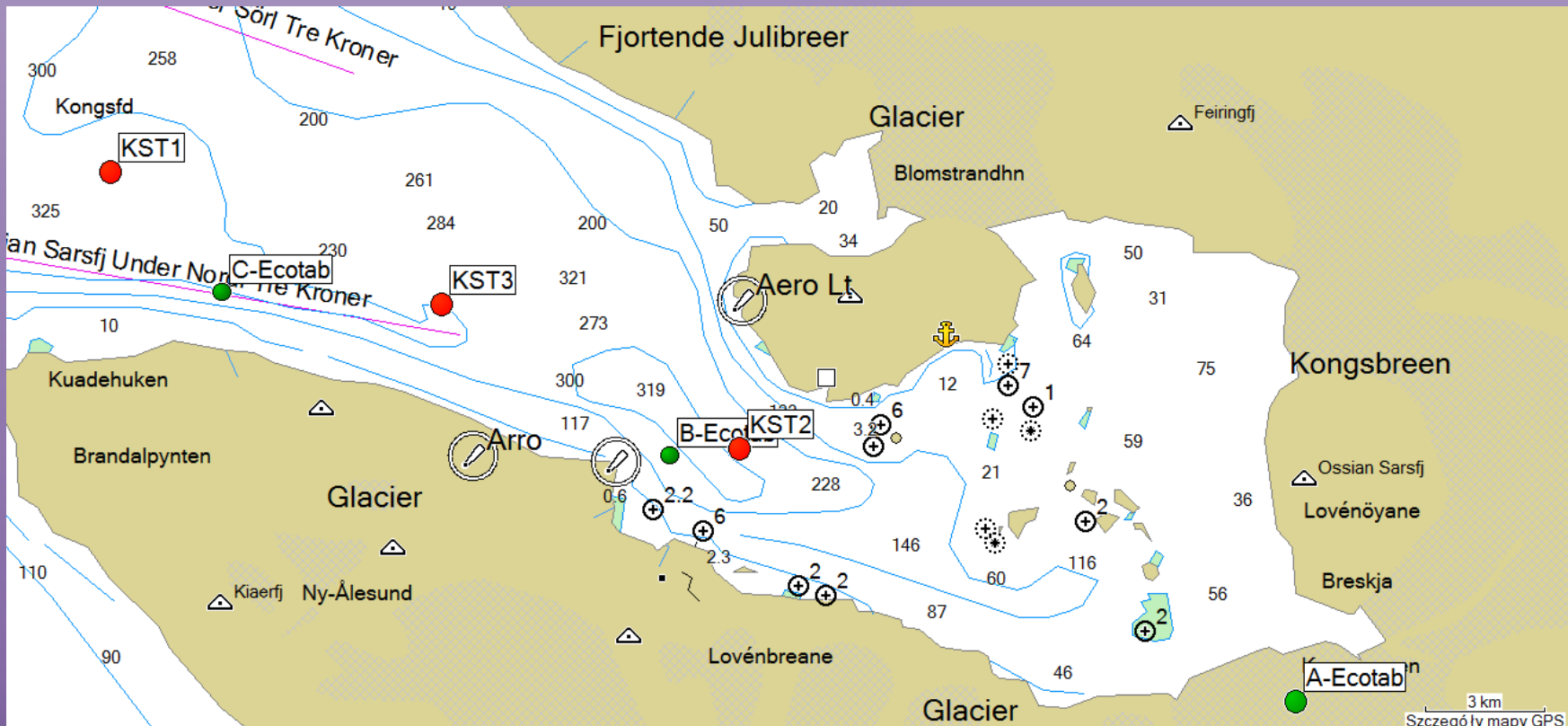
Hyperbenthos

- Maeve McGovern, Paul Renaud, Jan Marcin Węśławski (IOPAS)
- 2014-2015 (winter, summer (R/V *Oceania*), autumn)
- Community structure (abundance, biomass, sex ratios)
- Stable isotopes, fatty-acid trophic markers
- Link with predators (fish, decapods)



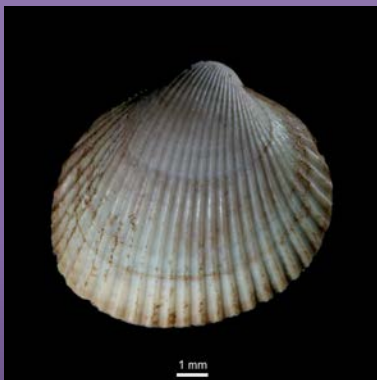
Benthos (1)

- Nathalie Morata, Maria Włodarska-Kowalczyk, Mikołaj Mazurkiewicz (IOPAS)
- Community structure (seasonal, spatial)
- Sediment parameters (quality/quantity food supply)
- Community functioning (respiration, bioturbation)



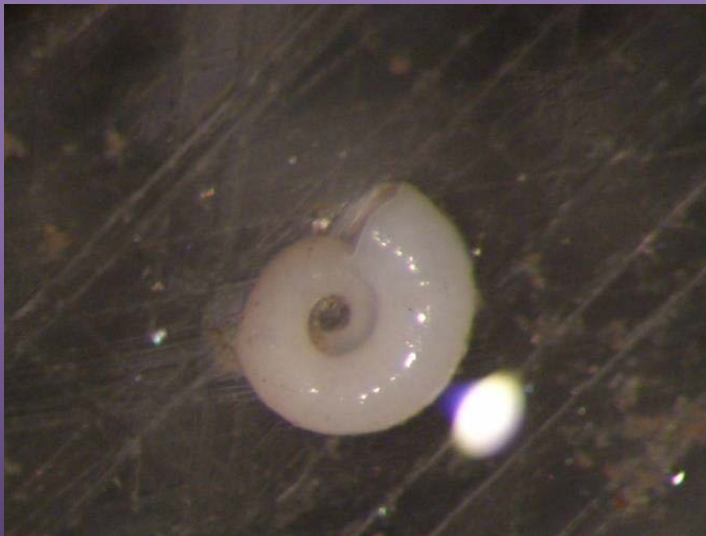
Benthos (2)

- Joanna Legeżyńska, Monika Kędra, Paul Renaud
- Benthic food-webs (isotopes, fatty acids)
 - Seasonal/spatial variability
 - Winter diets



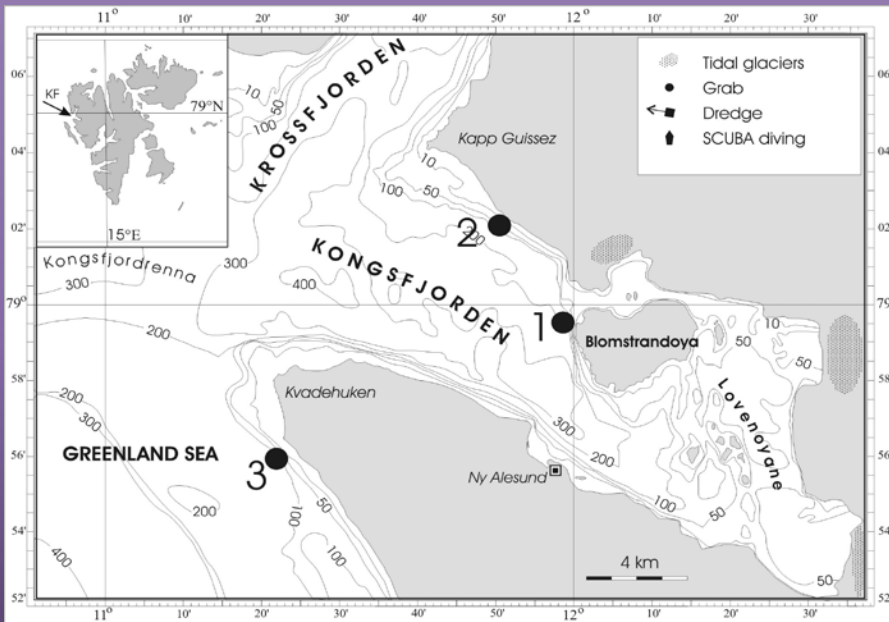
Benthos (3)

- Kirstin Meyer, Paul Renaud, Andrew Sweetman
- Settlement of benthic organisms
- Deployed Autumn 2015
- Recovered January 2015: Ny-Ålesund, Longyearbyen
- Redeployed January 2015



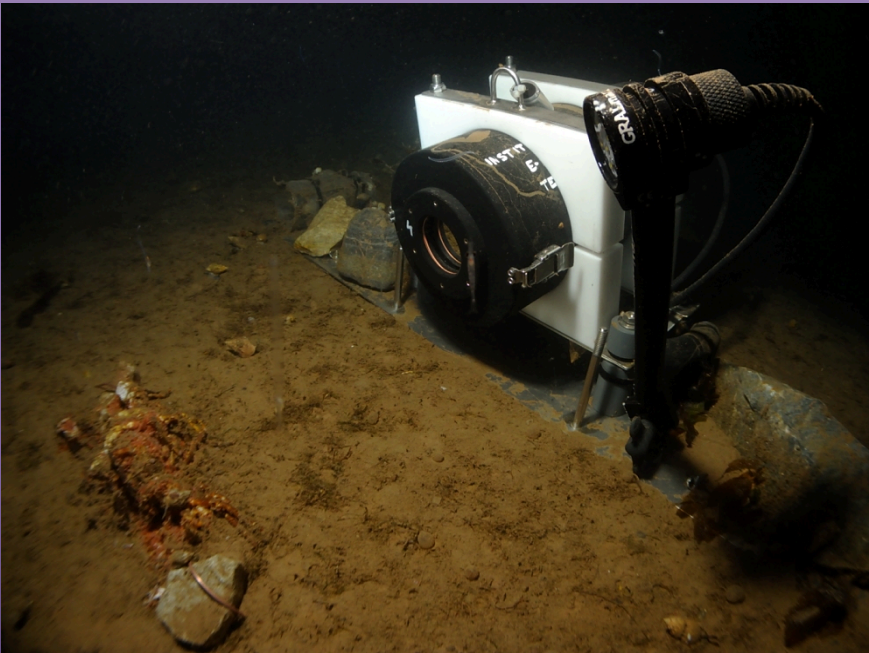
Benthos (4)

- Piotr Kukliński, Piotr Bałazy
- Skeletal mineralogy of encrusting fauna
- Seasonal studies
- Relate data to acidification



Benthos (5)

- Piotr Bałazy, Piotr Kukliński
- Benthic activities during polar night
- Scavenging fauna, feeding activity



<https://www.youtube.com/watch?v=AKWVvK0Z6Xg>

Benthos (6)

- Frank Beuchel, Ingrid Hansen
- Imaging of hard-substrate communities (2015)
- Video and UHI images at Kvadehuken
- Testing of new monitoring techniques

Fish

- Marine Cusa, Carl Ballantine, (Renaud, Varpe, Berge, McGovern)
- Total epibenthic megafauna from pelagic trawl (2014), bottom trawl (2014, 2015)
- Fish collected for evidence of feeding (stomachs, isotopes)
- Focus on gadoids

- Øystein Varpe and Univ. Lund
- Sensitivity of fish eyes (esp gadoids)

Birds

- Jørgen Berge, Øystein Varpe, Anya Gonchar (SPbSU)
- Diets of Kongsfjord seabirds during winter
- Parasites of seabirds in winter