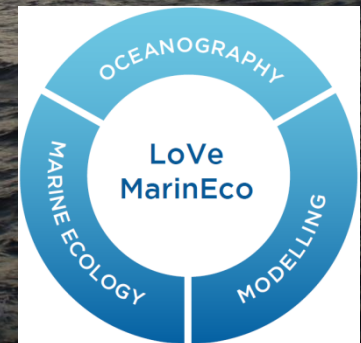




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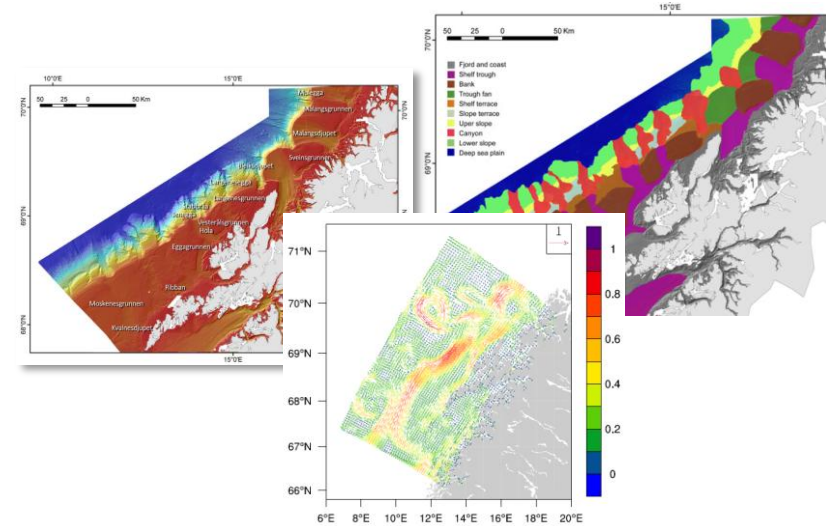
Benthic communities in the Lofoten-Vesterålen region

Marc Silberberger



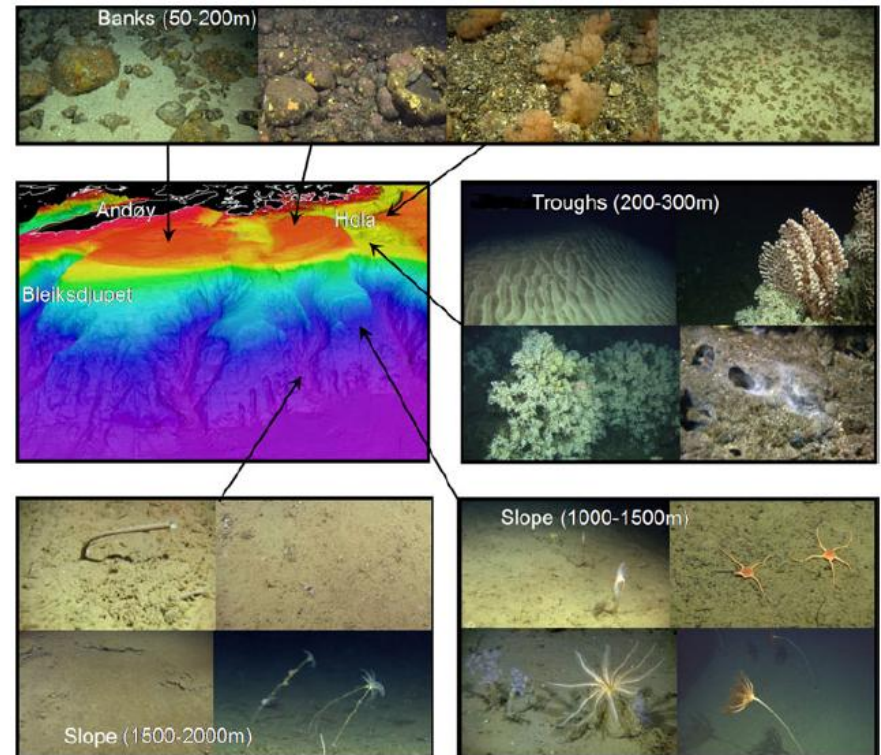
Lofoten-Vesterålen region

- Complex physical environment:
 - Narrow continental shelf
 - Diverse marine landscapes
 - Complex current system
- Ecologically important region:
 - Main spawning ground of commercially important fish species
 - High density of marine mammals
 - Large sea bird colonies



Benthos in LoVe

- High density of coral and sponge reefs
- Different megafaunal assemblages are associated with the various landscape elements
- **Large knowledge gaps about benthic diversity and benthic ecosystem functioning**



Buhl-Mortensen et al. 2012

PhD project

Working title:

- Structure, transport and production of benthic organisms in the Lofoten-Vesterålen region

Main objectives:

- Temporal and spatial distribution of planktonic larvae of benthic invertebrates
- Food web structure and benthic-pelagic coupling
- Benthic communities in the Lofoten-Vesterålen region

Benthic communities in the LoVe region

- What benthic communities are associated with the various marine landscapes in the study area?
- What are relevant spatial scales?
- What environmental gradients are structuring benthic communities in the study area?

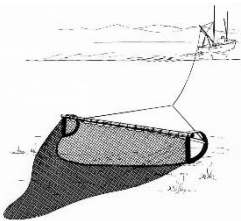
MAREANO data

- Sampling gear:

- Van Veen grab (Infauna)

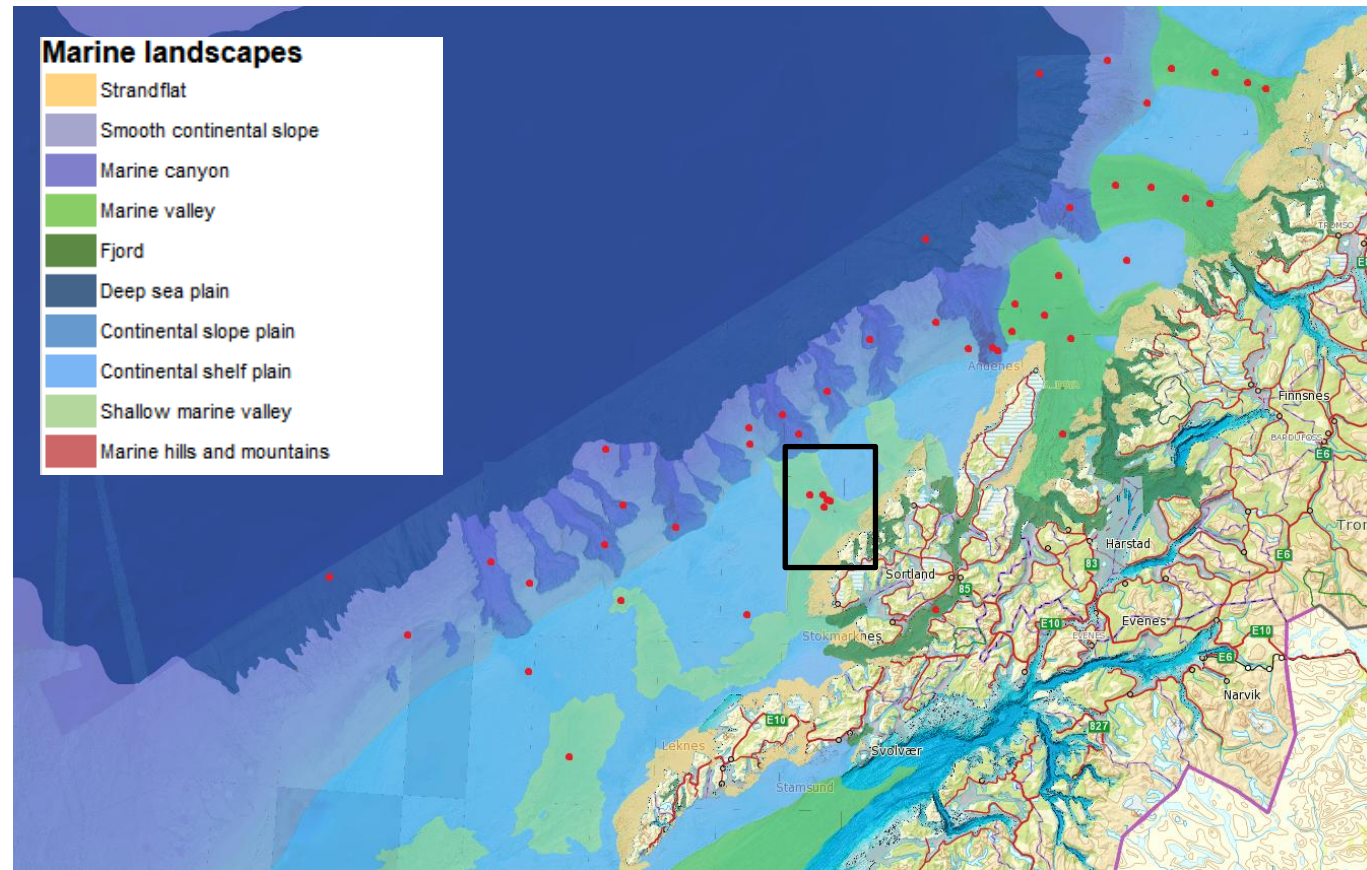


- Beam trawl (Epifauna)



- Sampled in:

- 2007
- 2008
- 2009



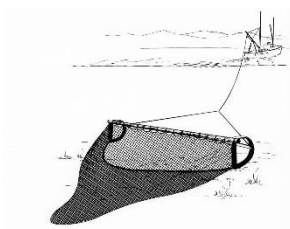
Additional benthos sampling

- Sampling gear:

- Van Veen grab
(Infauna)

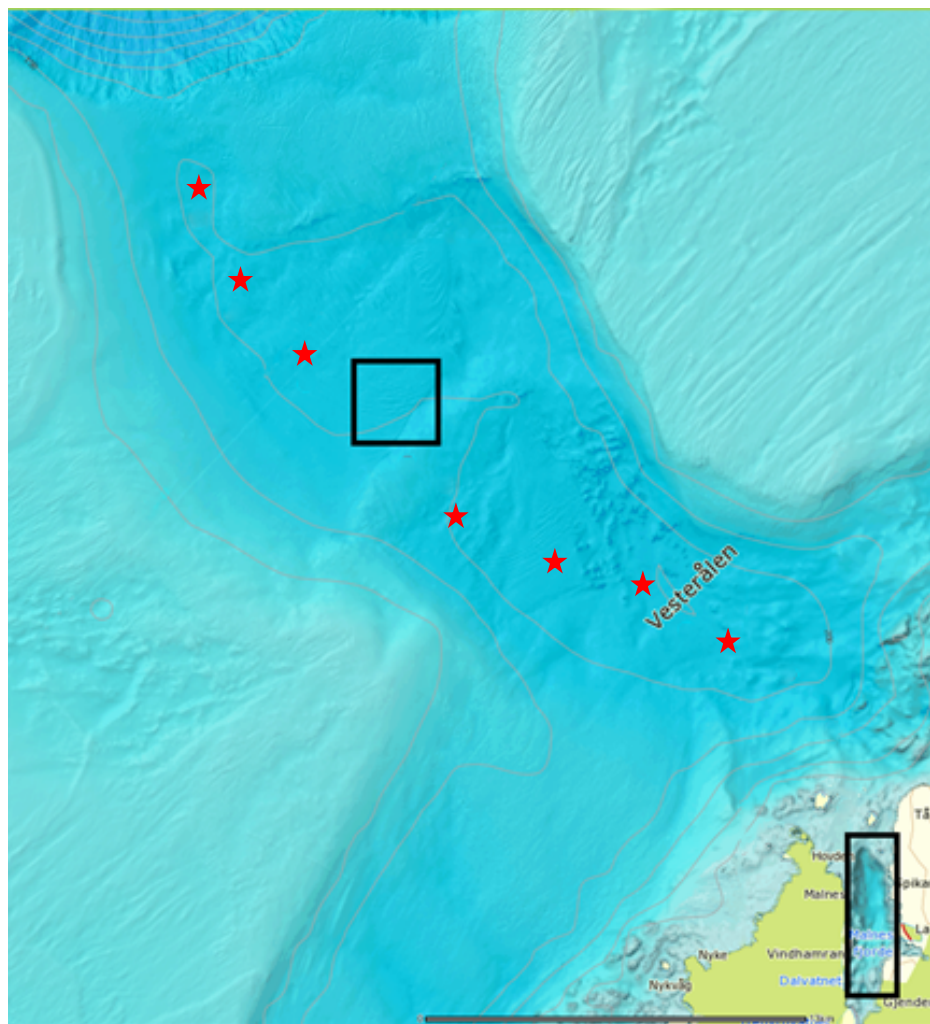


- Beam trawl
(Epifauna)

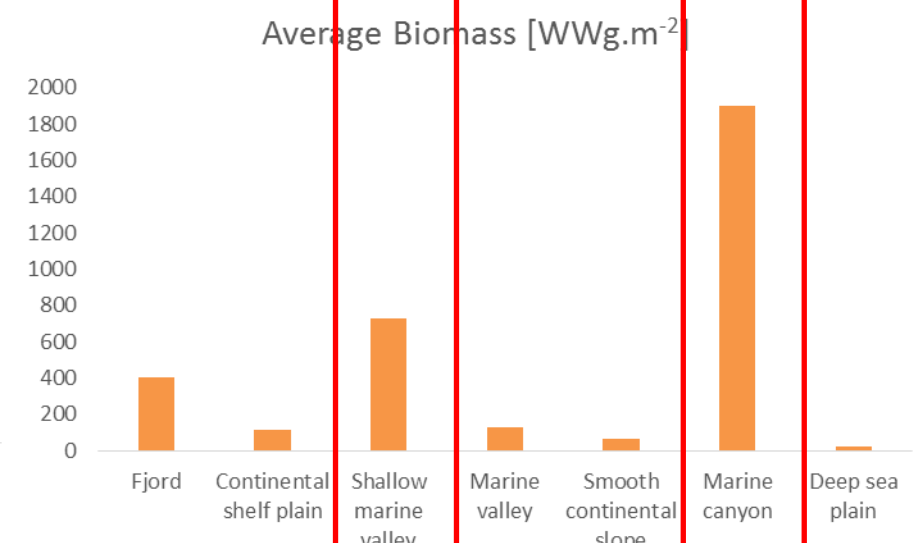
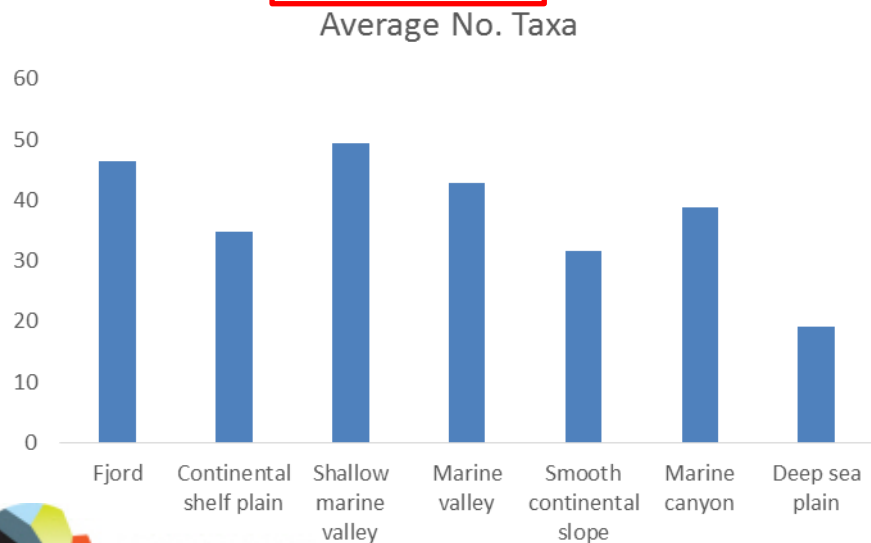
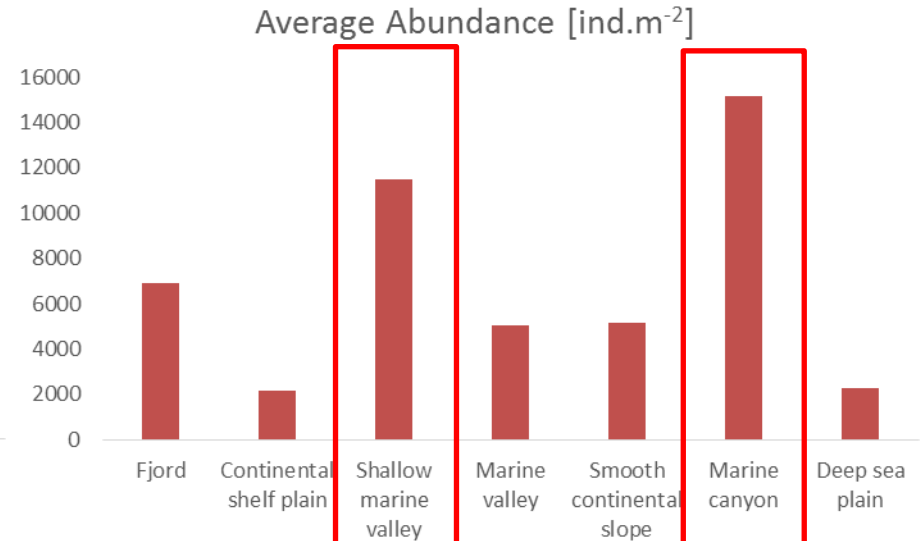
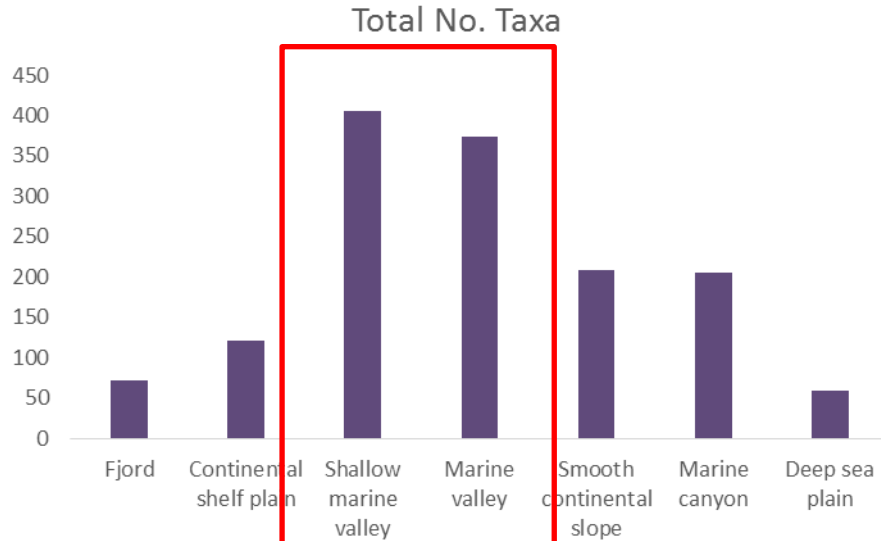


- Sampled in:

- 2014
- 2015

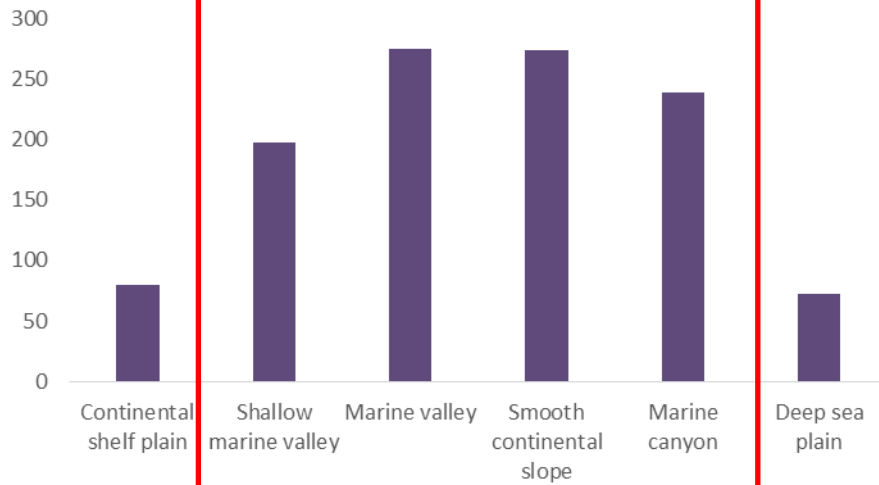


Infauna

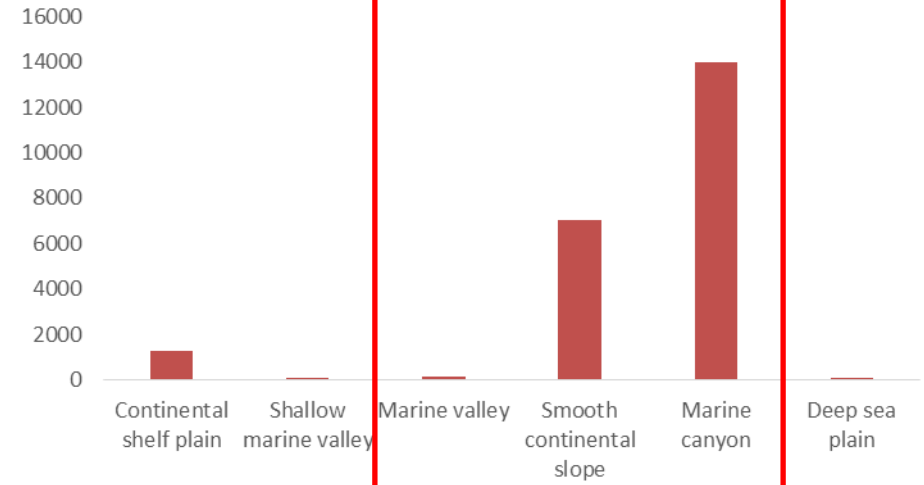


Epifauna

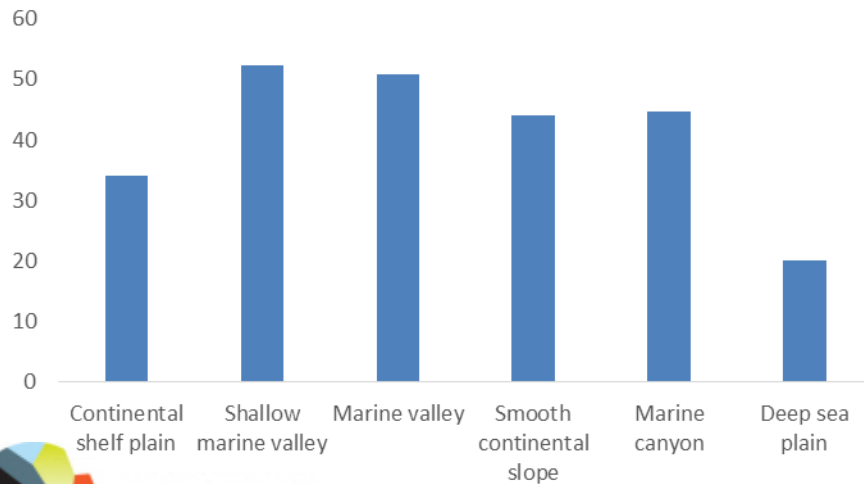
Total No. Taxa



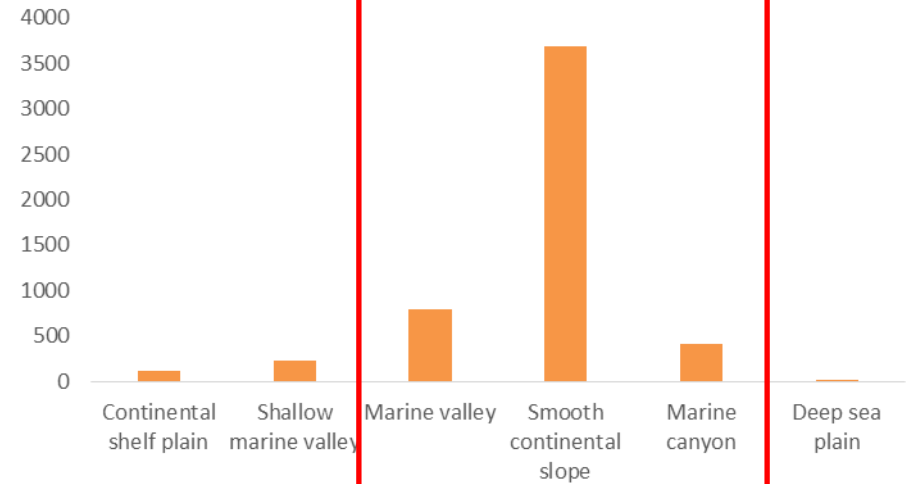
Average Abundance [ind.100m⁻²]



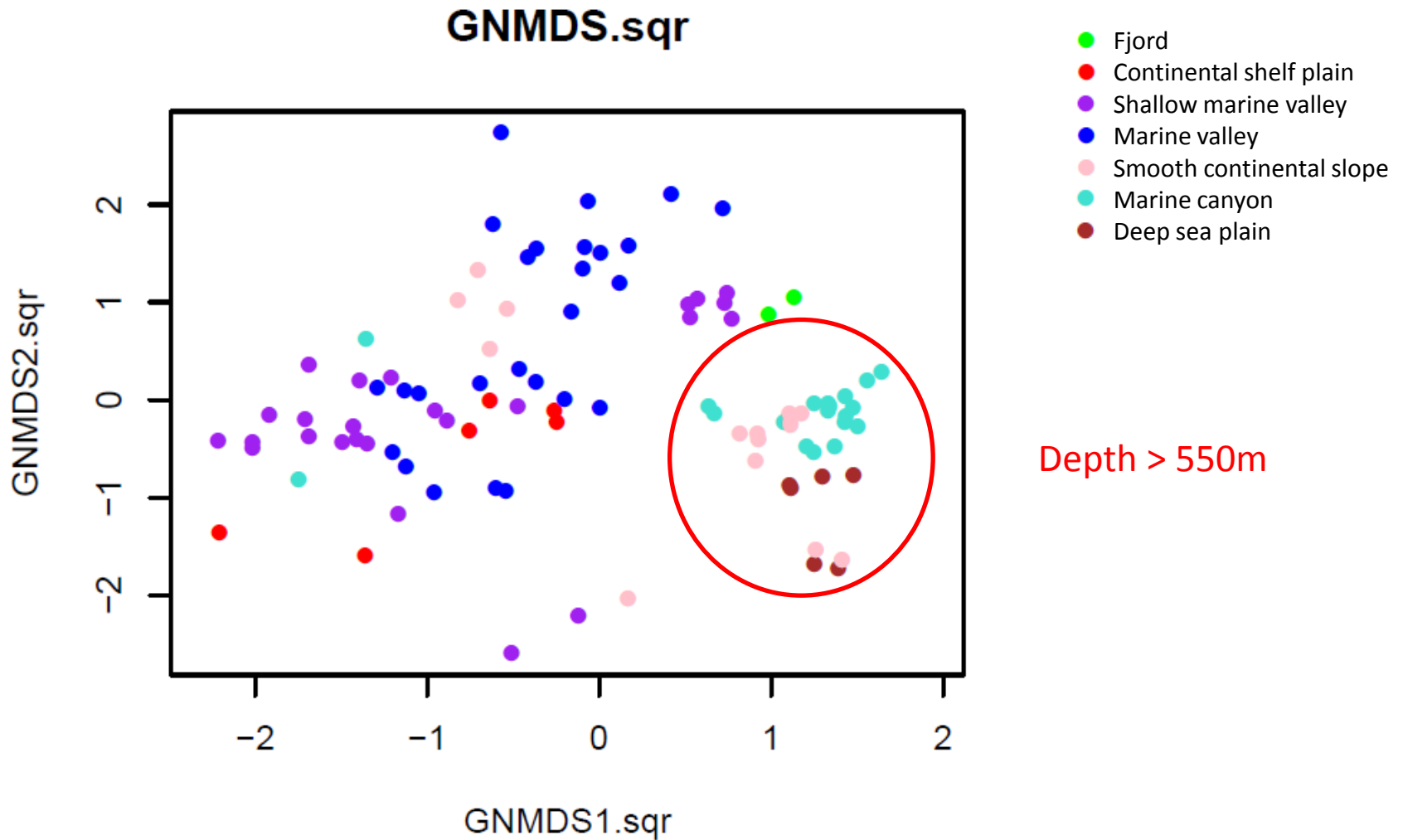
Average No. Taxa



Average Biomass [WWg.100m⁻²]

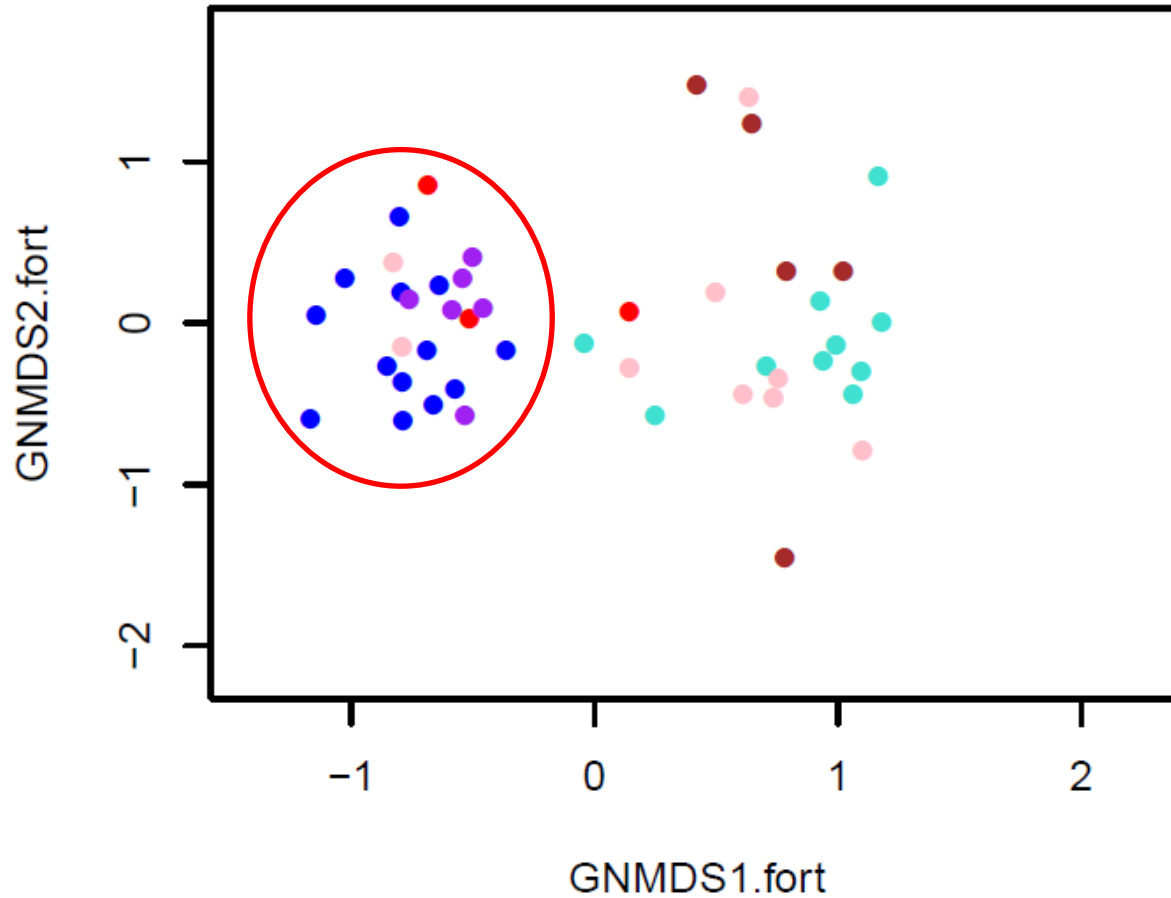


Infauna



Epifauna

GNMDS.fort



Depth < 550m

Summary

- High number of taxa in the marine valleys
- High abundances in the marine canyons
- Deep (>550m) and shallow (<550m) communities seem to differ for infauna and epifauna
 - Infauna has a higher variability at shallow stations

Acknowledgements

Scientific partner:



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Akvaplan
niva



mareano
samler kunnskap om havet



Funding organization:

