

# Holocene oceanic variability in the Nordic Seas as reconstructed from planktic and benthic foraminiferal isotopes

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## Objectives:

The Holocene has been long described as a period of relatively stable oceanographic and climatic conditions, especially compared to the highly variable Pleistocene. However, more studies show significant environmental fluctuations also within the present interglacial. Their spatial and temporal distribution is however not known well enough. The Nordic Seas are an important location to study the paleoceanographical variability during the last 10,000 years.



Fig. 1. Map showing the surface water circulation in the Nordic Seas. The cores studied in the project are marked with green dots.

## Methods:

The main focus of the project are the oxygen and carbon isotopes from planktic and benthic foraminifera and the planktic foraminiferal species distribution, as they yield diverse information on multiple environmental parameters, such as temperature, salinity, current strength, sea ice cover, bioproductivity etc. Additional proxies, as e.g. IRD counts, are also used.

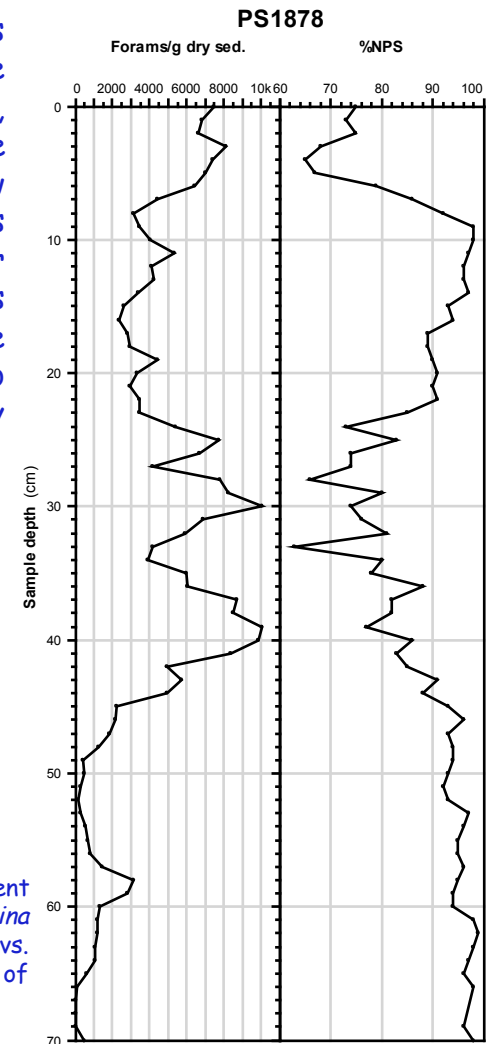


Fig. 2. The number of forams per 1 g of dry sediment (left) and the percentage of *Neogloboquadrina pachyderma* (sin) in the planktic assemblages (right) vs. depth in the PS1878 core from the southern slope of the Vesterisbanken seamount.