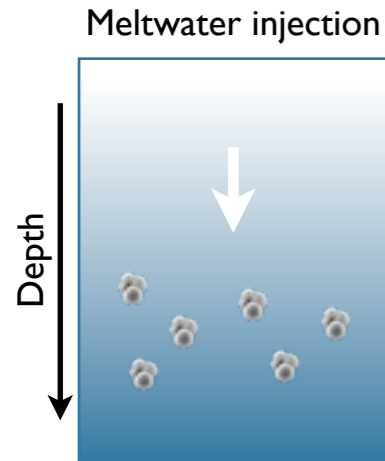


# Modeling the effect of meltwater on the habitat of Arctic planktonic foraminifera

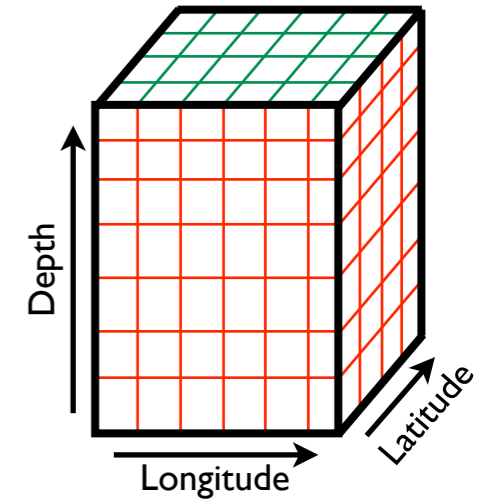
Kerstin Kretschmer



Meltwater injections lead to the descent of *Neogloboquadrina pachyderma* (sin.) in the water column.

Existing meltwater reconstructions based on *N. pachyderma* (sin.) are biased as actual and assumed calcification depth do not match.

The implementation of a depth-habitat module in an ecosystem modeling approach could help to correct the offset.



## Project aims

1. Enhancing PLAFOM with depth-habitat and oxygen-isotope modules.
2. Optimizing parameterizations by performing sensitivity experiments.
3. Assessing impact of meltwater events in the Arctic and North Atlantic Ocean.



Quantification of bias in meltwater reconstructions.

