



Zooplankton distribution and diversity in the area under the influence of the West Spitsbergen Current in the summer of 2019

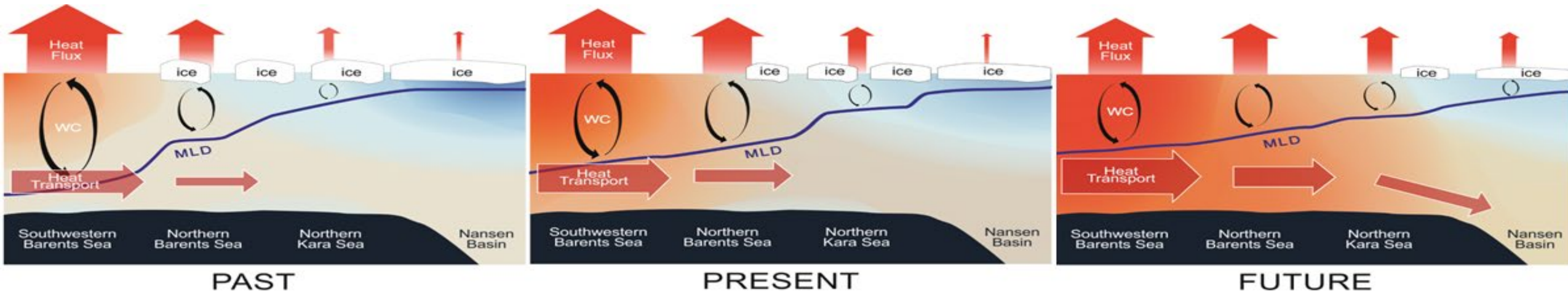
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This study was supported by the grant no. 2017/27/B/NZ8/01056 from the National Science Centre, awarded to Agata Weydmann-Zwolicka

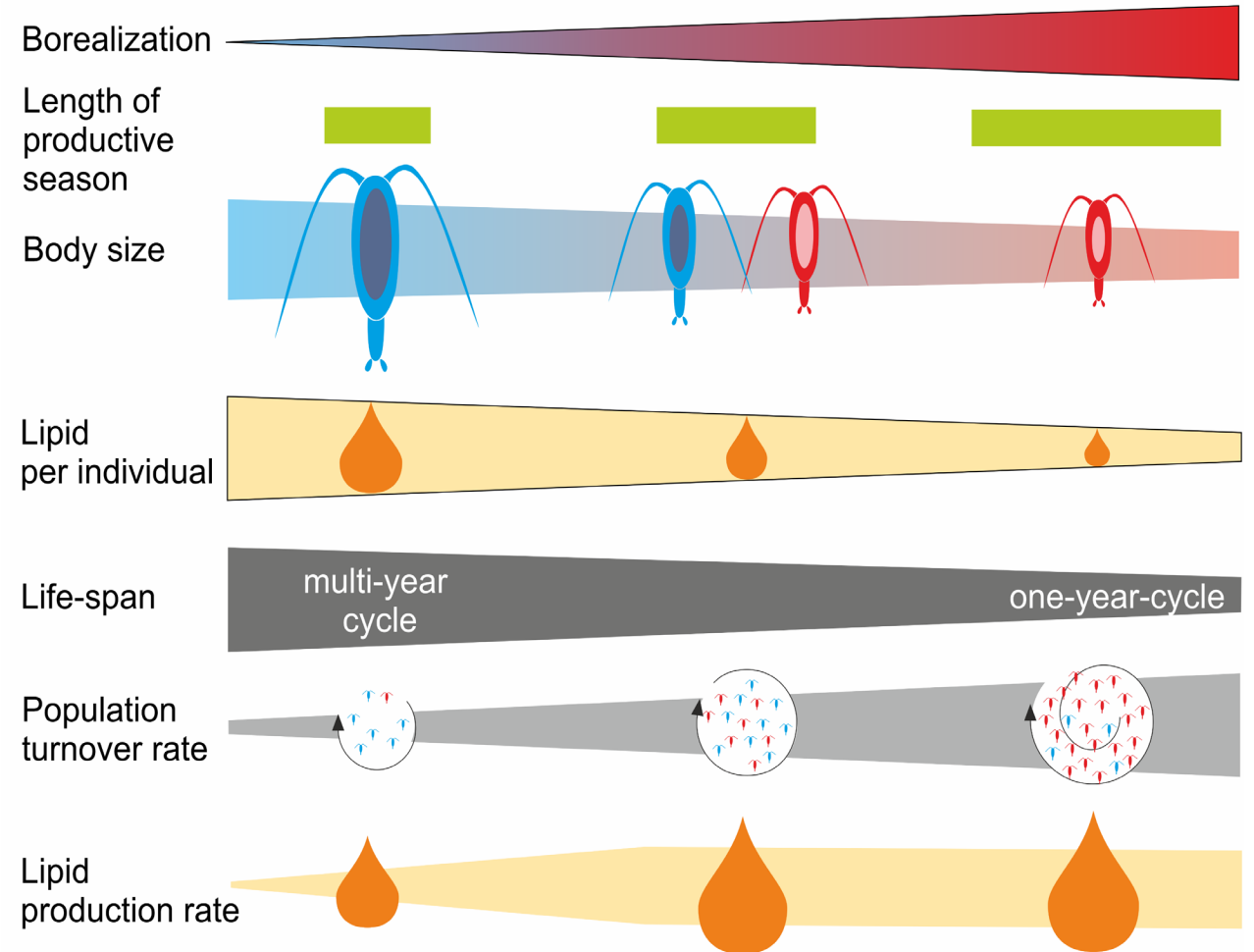
CHANGING ARCTIC

- The Arctic in the face of global climate changes
- Atlantification



CHANGING ARCTIC

- Influx of boreal taxa
- Ecosystem response
- Plankton as a good indicator of climate-driven change

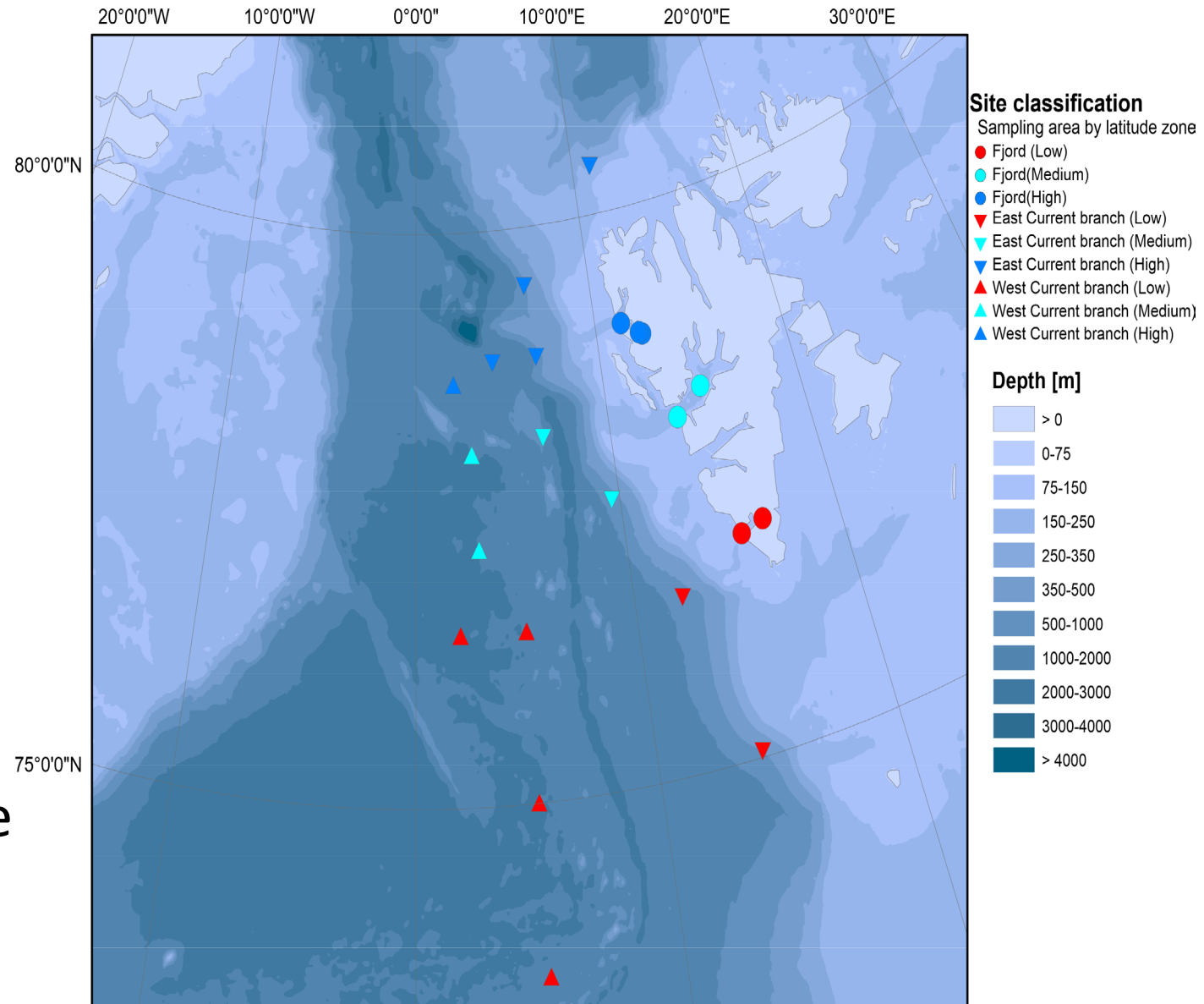


OUR GOALS

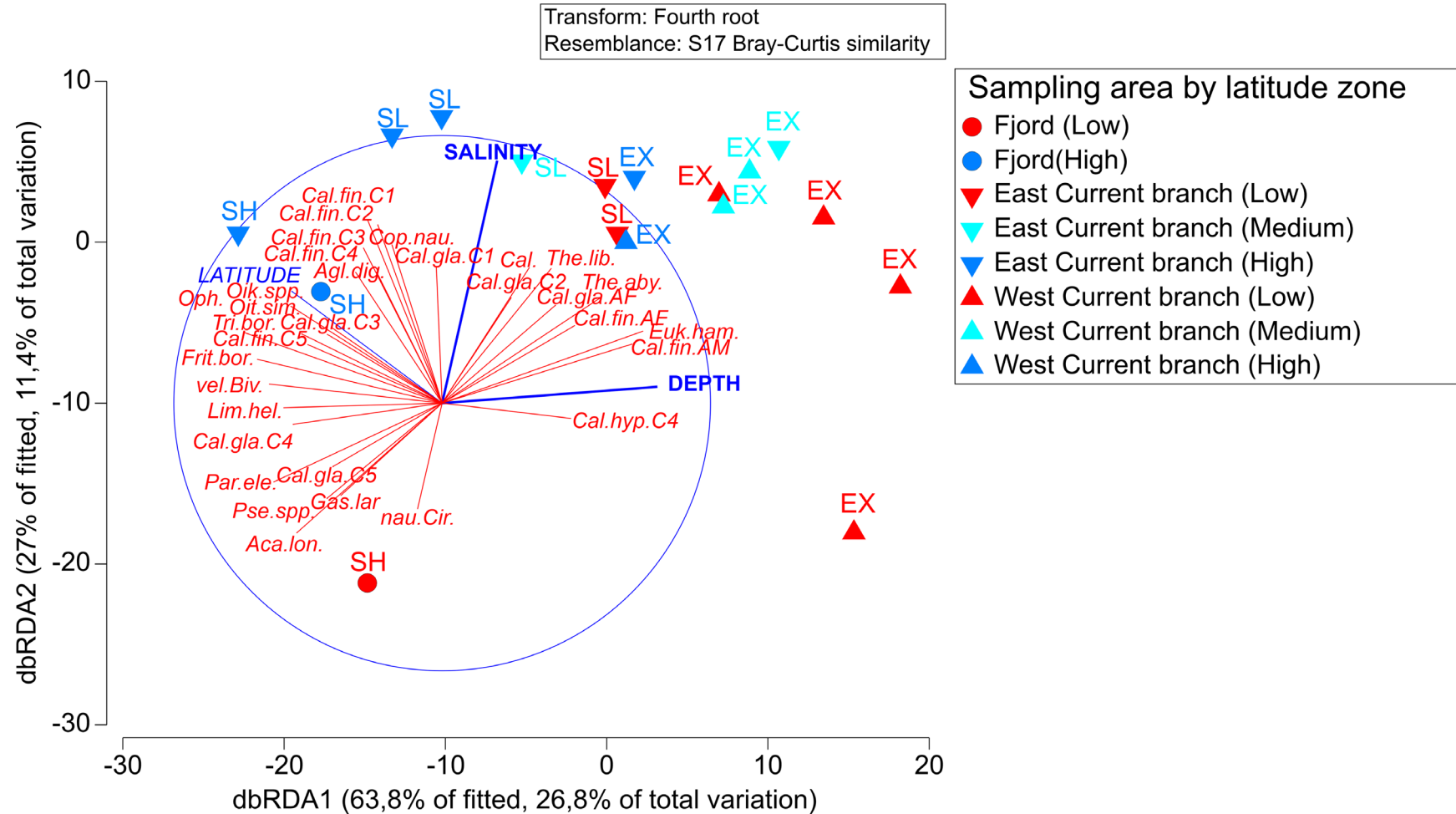
- To recognize the diversity of zooplankton
- To determine how zooplankton was shaped by the influence of the West Spitsbergen Current (WSC)

SAMPLING

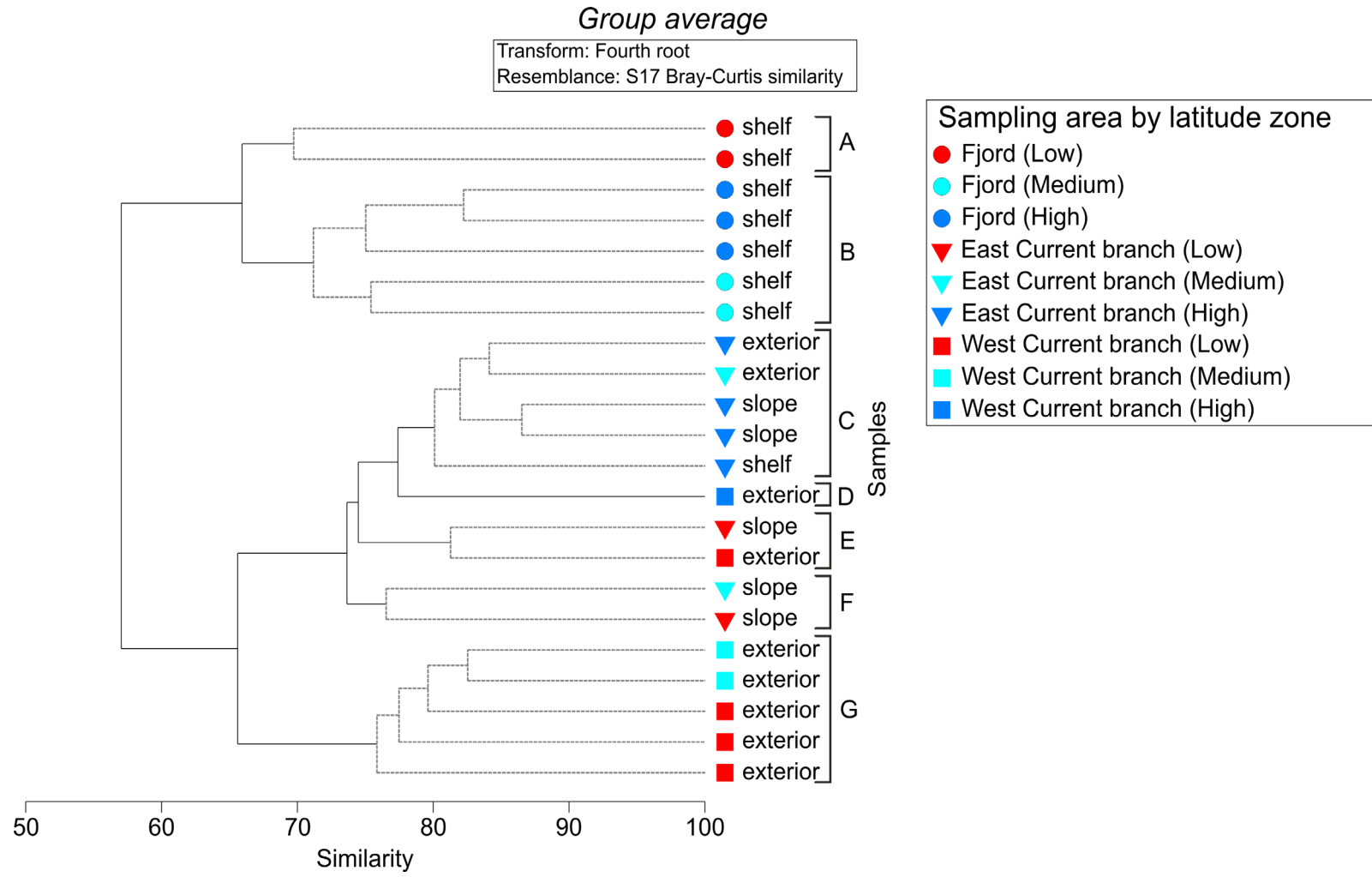
- Summer of 2019
- 24 stations
- Two branches of WSC
- 3 fjords with different regime



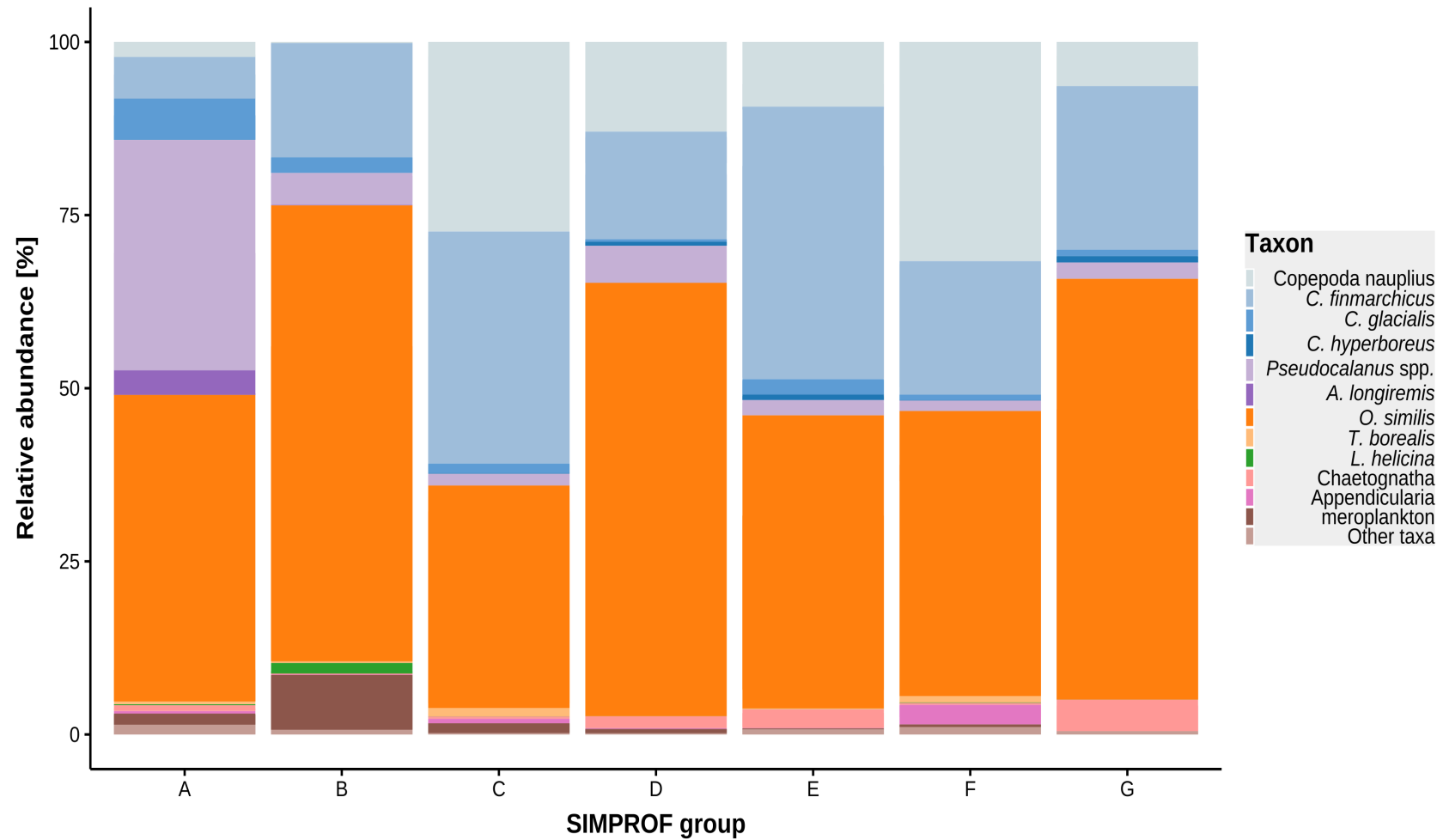
INFLUENCE OF ENVIRONMENTAL FACTORS



ECOLOGICAL GROUPS

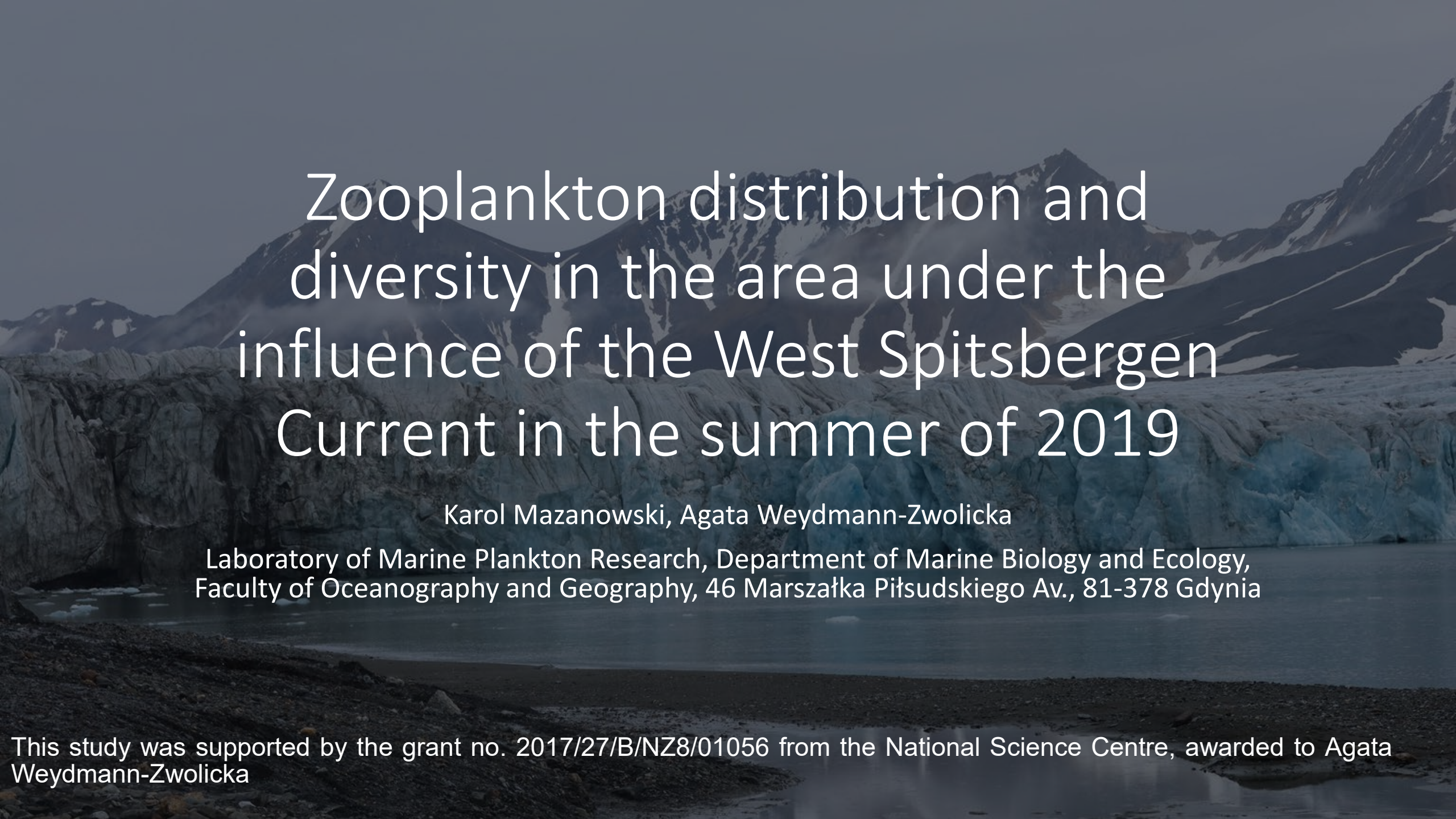


HORIZONTAL DISTRIBUTION



CONCLUSIONS

- Influence of abiotic factors (the area of sampling, depth of station, mean salinity) on the distribution of zooplankton
- Six major ecological groups
- *O. similis* and *C. finmarchicus* were the taxa that contributed the most to each of the distinguished ecological group
- In fjords, omnivorous zooplankton taxa were predominant, while in the WSC there was more herbivorous taxa



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