

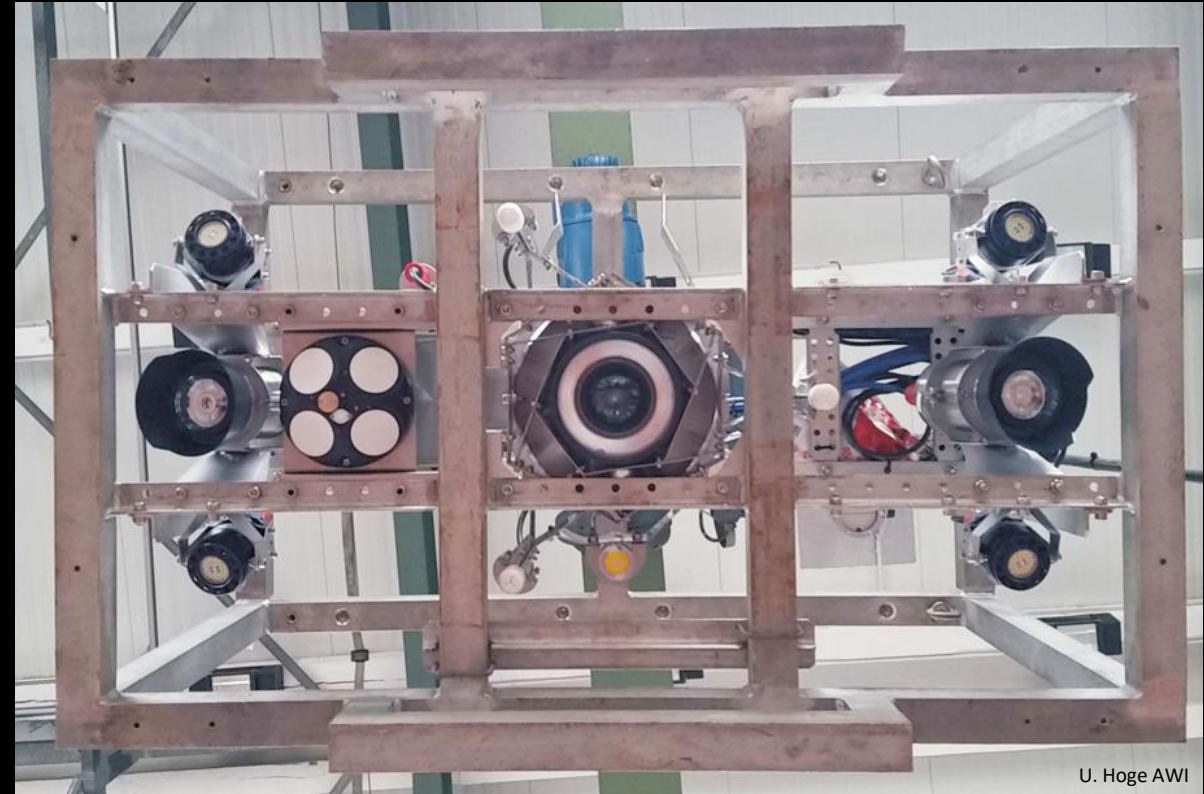
**Mapping Arctic and Antarctic Seas
with towed camera systems**

Towed camera systems

OFOS (Ocean Floor Observation System)

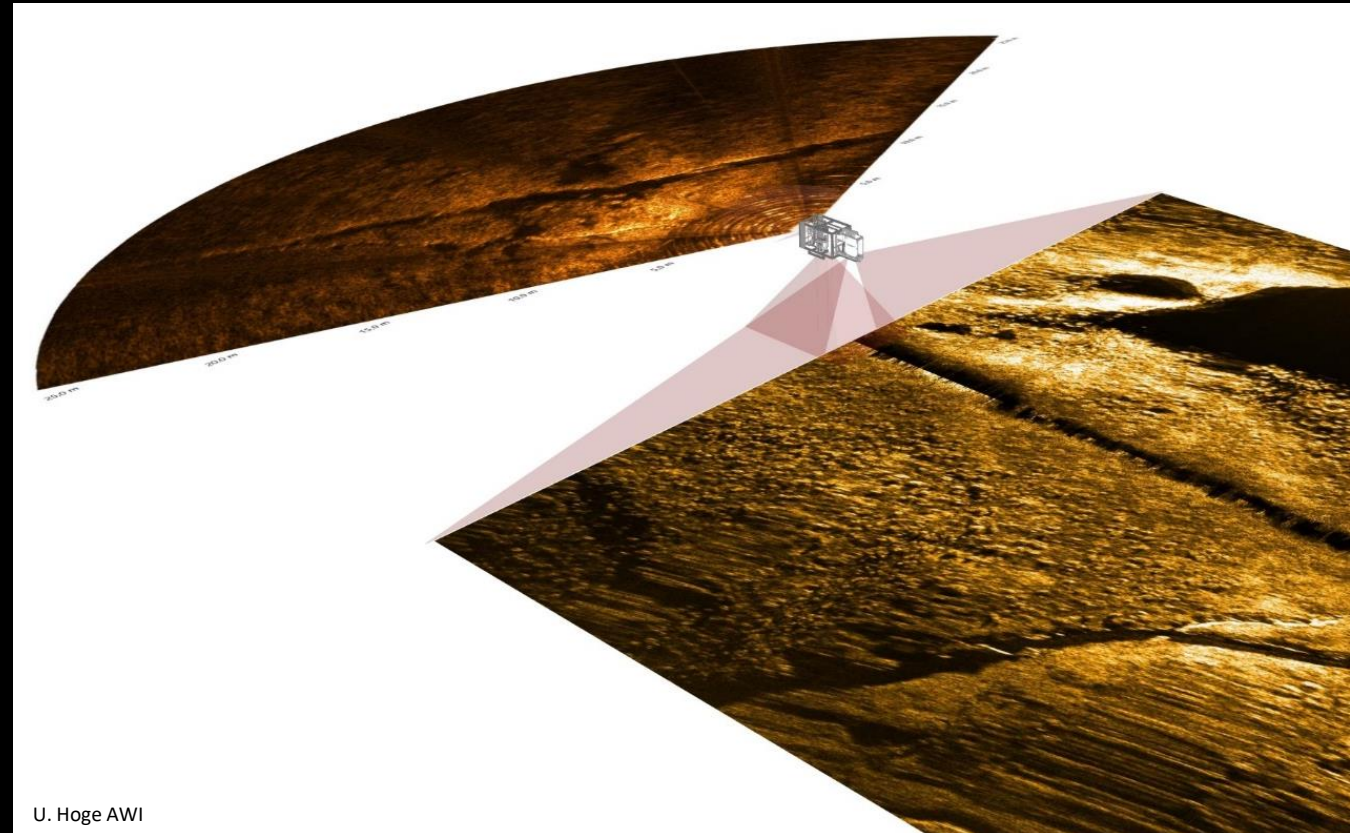


OFOS (Ocean Floor Observation System)





OFOBS (Ocean Floor Observation and Bathymetry System)



Purser et al. 2018

**Fish nest colony, Weddell Sea,
Antarctic Ocean**



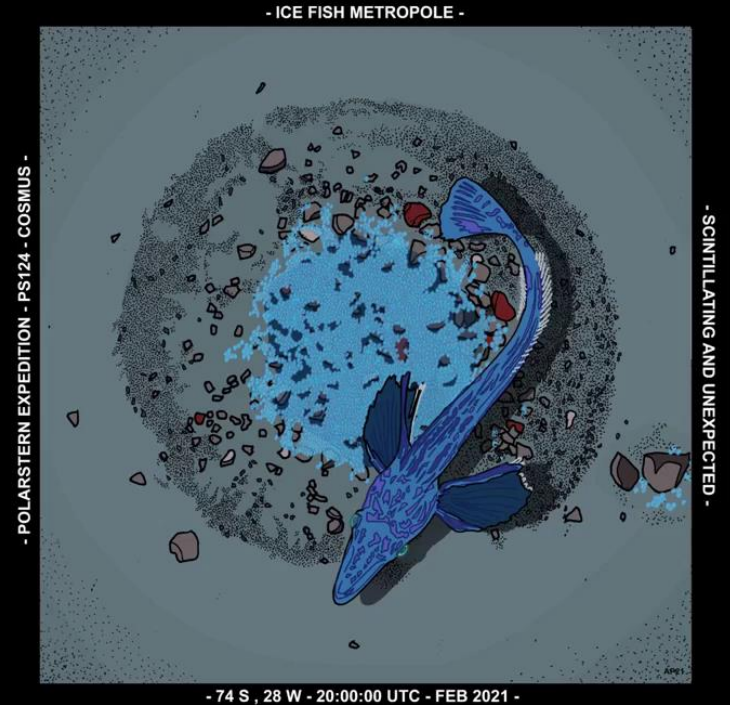
Modified after Purser et al. 2022

A vast icefish breeding colony discovered in the Antarctic

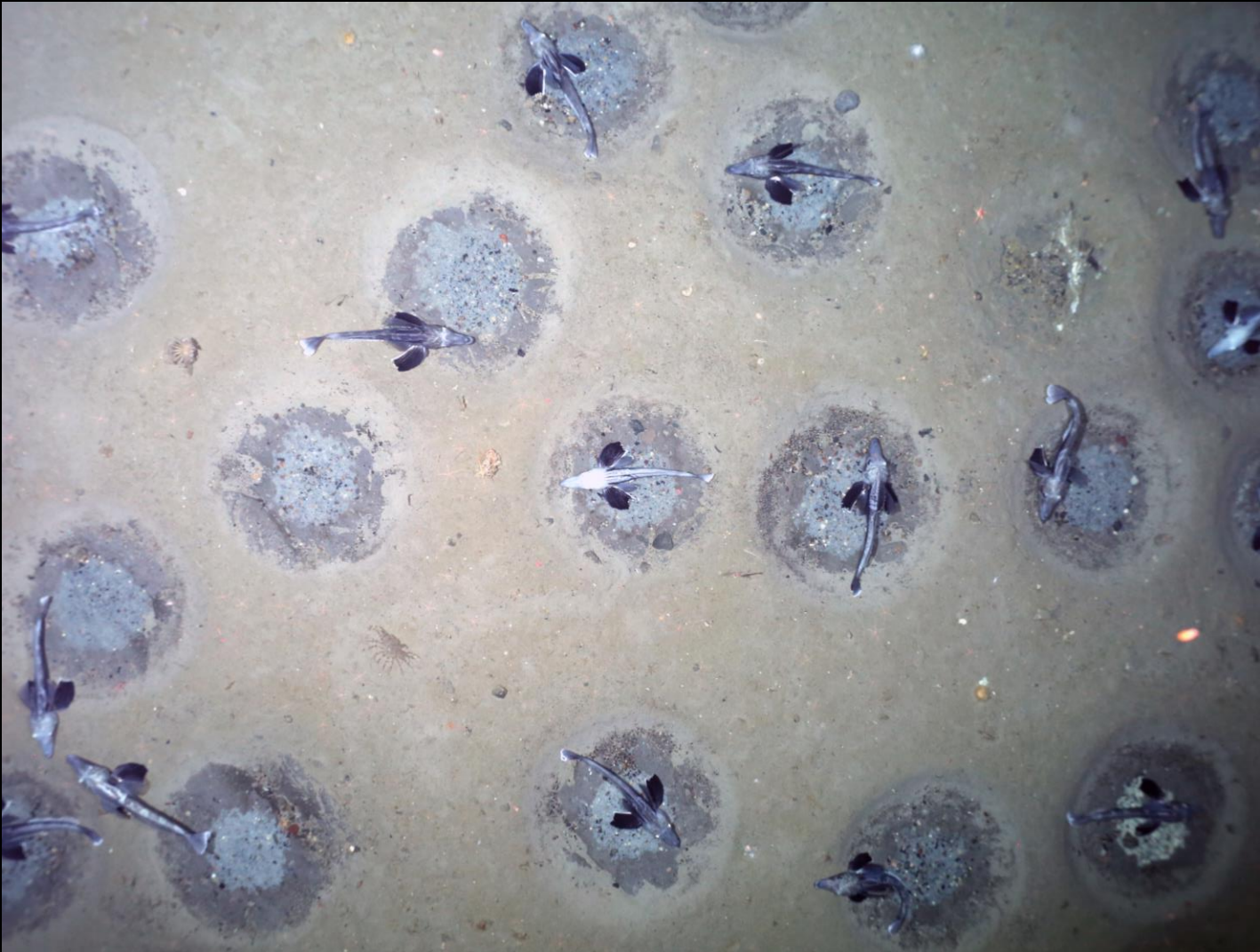
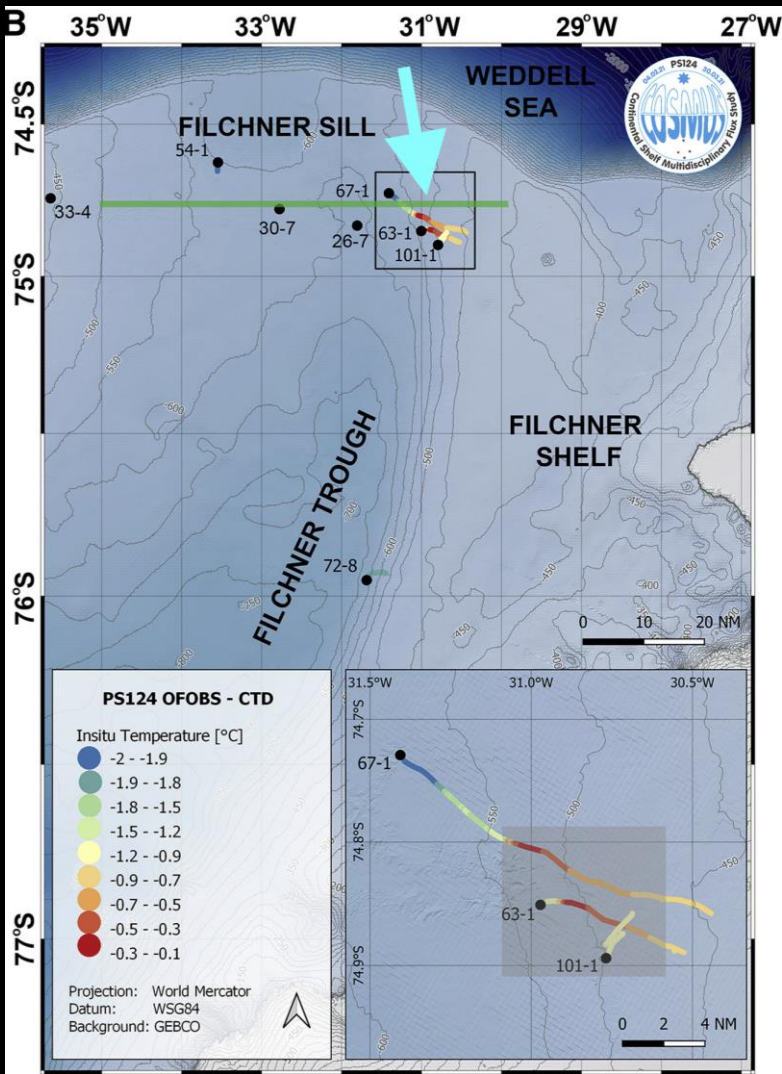
Autun Purser*, Laura Hehemann, Lilian Boehringer, Sandra Tippenhauer, Mia Wege, Horst Bornemann, Santiago E. A. Pineda-Metz, Clara M. Flintrop, Florian Koch, Hartmut H. Hellmer, Patricia Burkhardt-Holm, Markus Janout, Ellen Werner, Barbara Glemser, Jenna Balaguer, Andreas Rogge, Moritz Holtappels, Frank Wenzhoefer

*autun.purser@awi.de

Published in 'Current Biology', 2022

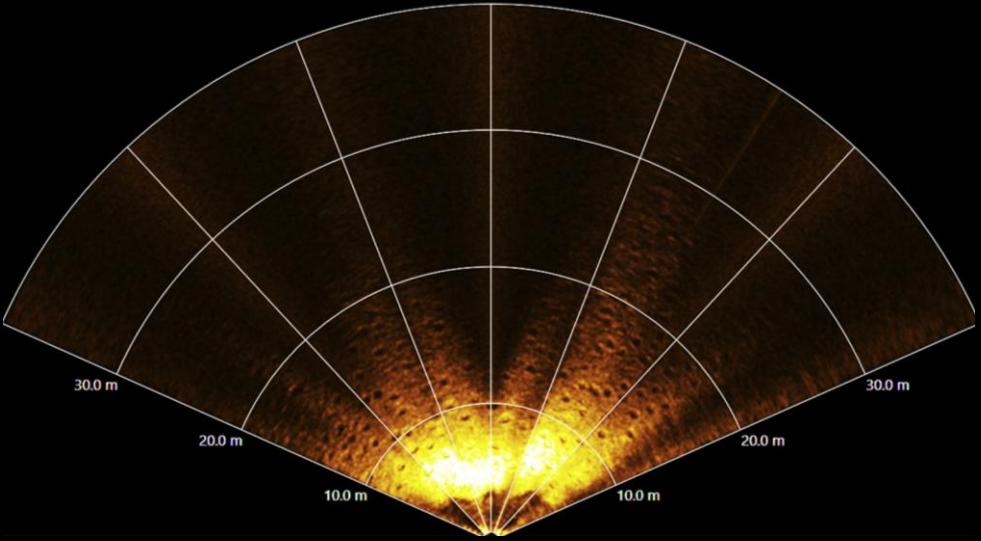
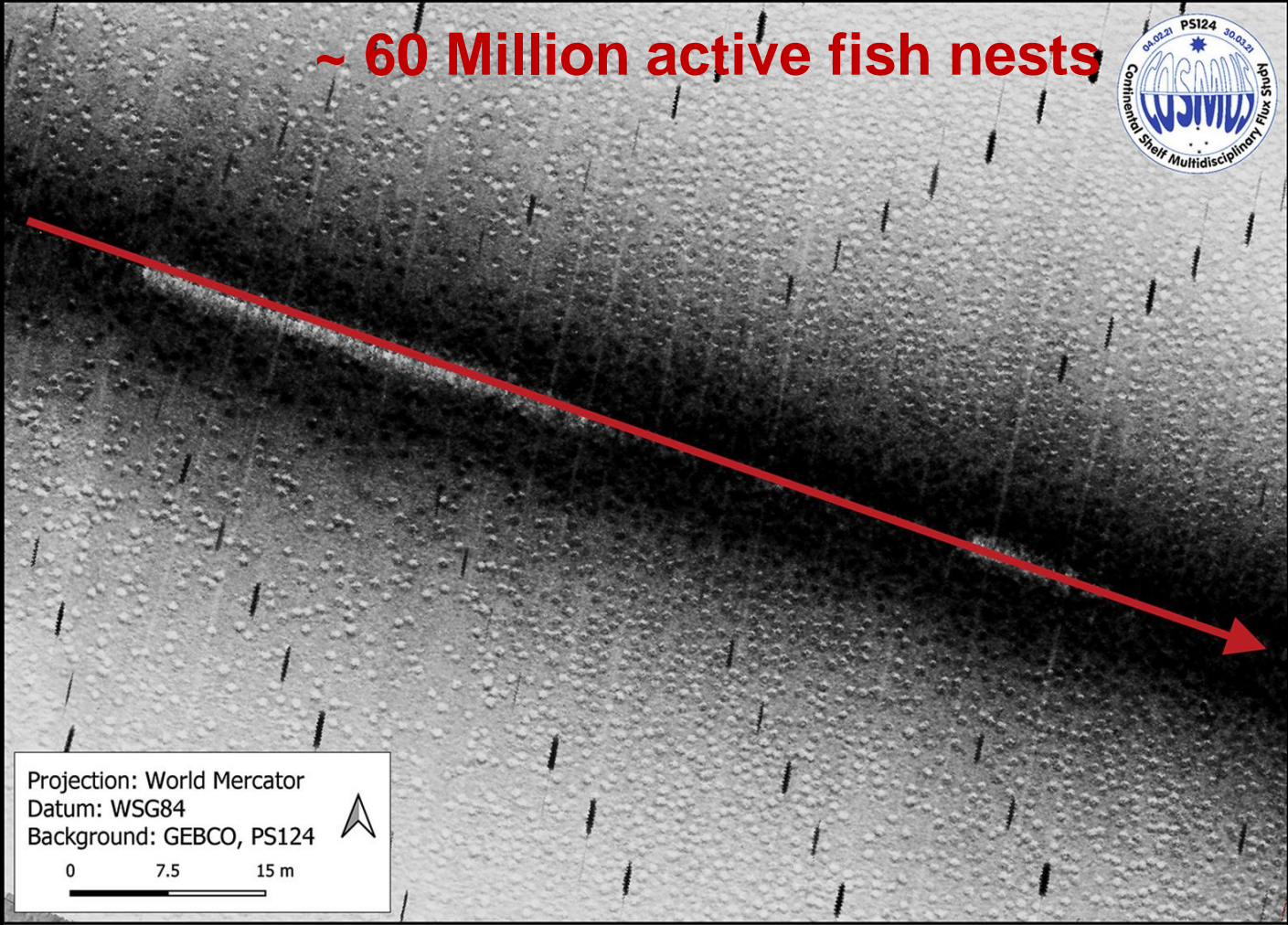


Fish nest colony, Weddell Sea, Antarctic Ocean



Purser et al. 2022

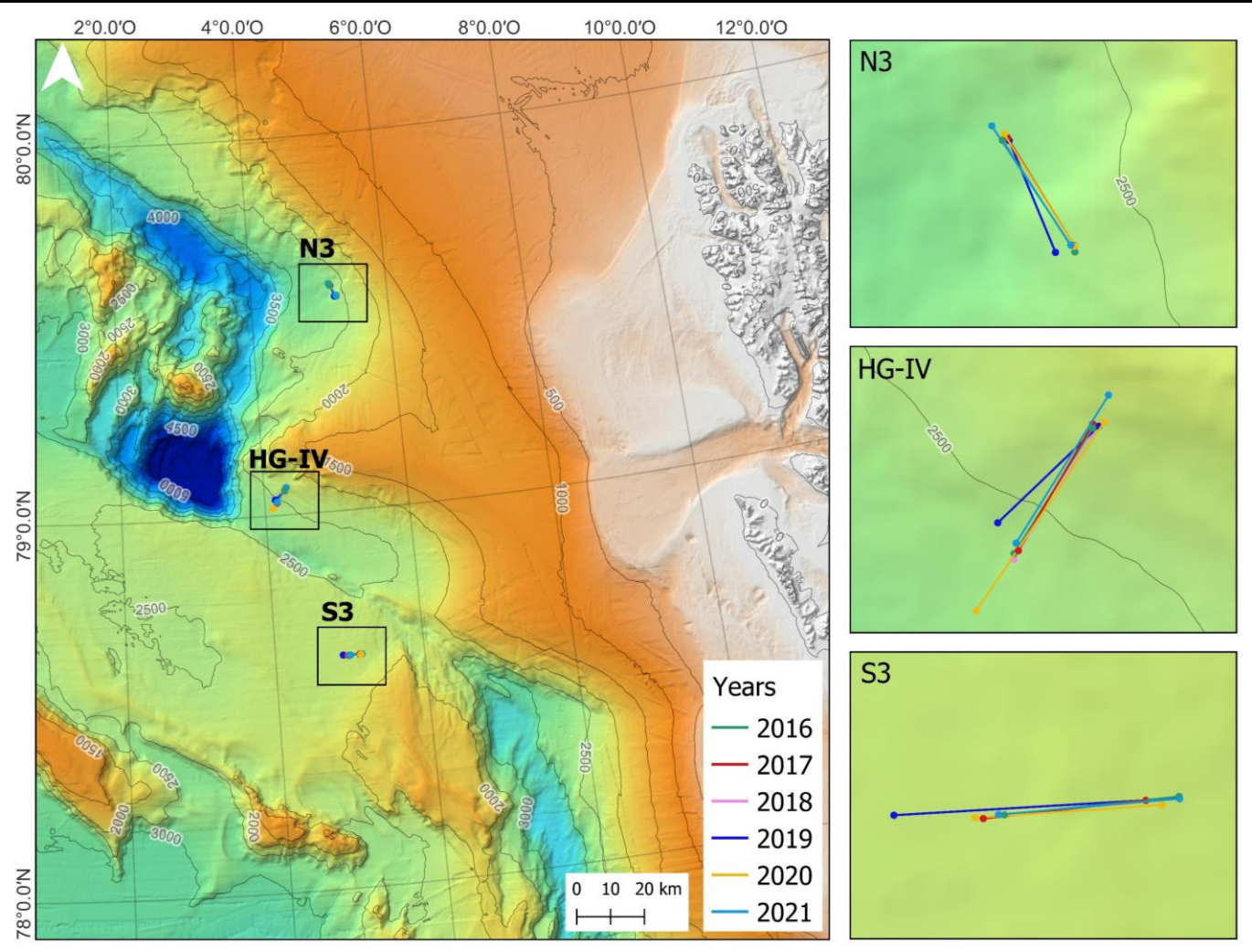
Fish nest colony, Weddell Sea, Antarctic Ocean



Purser et al. 2022

**Benthic megafauna community,
Arctic Ocean**

Benthic megafauna community, Arctic Ocean



Based on IBCAO Jakobsson et al. 2020

Benthic megafauna community, Arctic Ocean

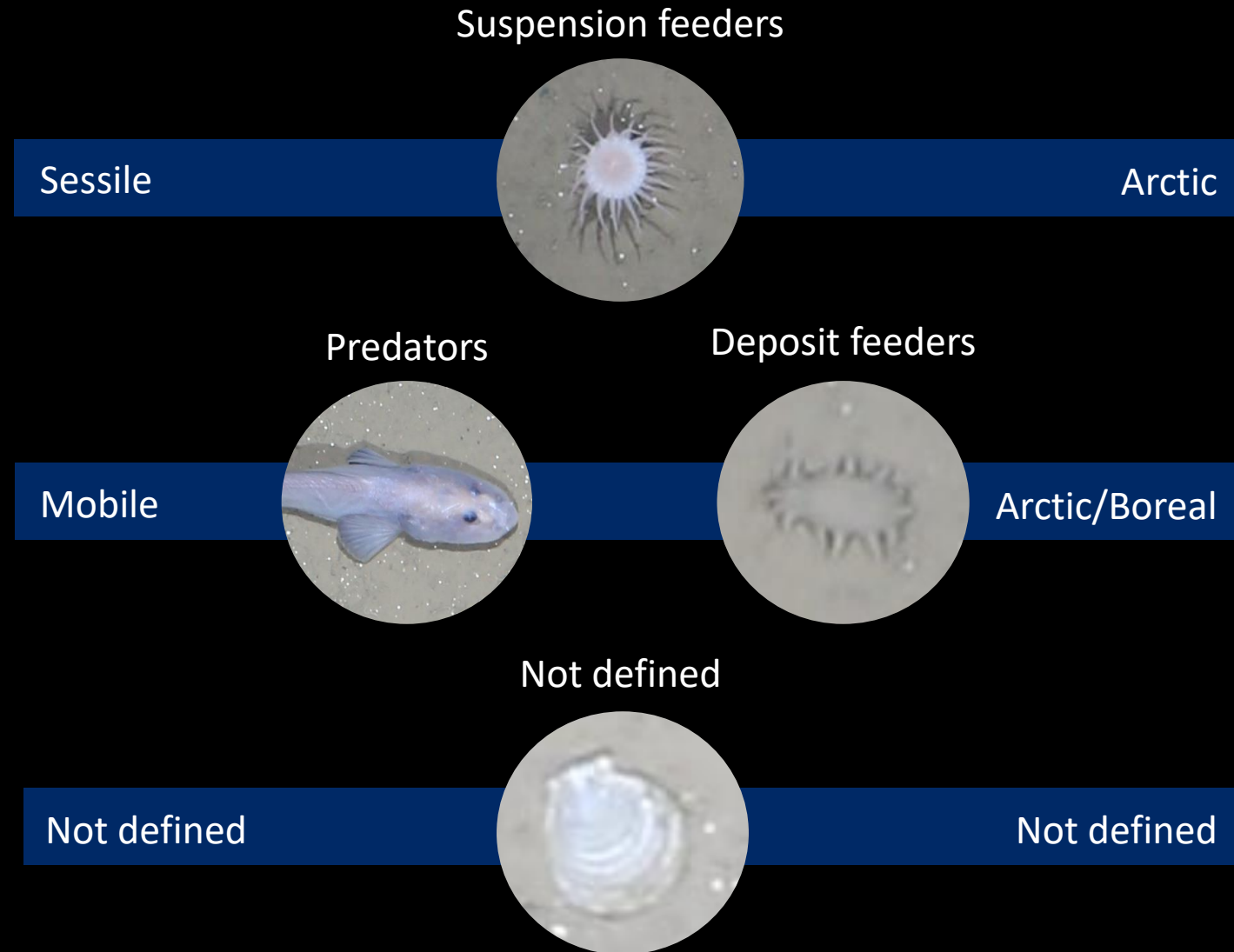


Functional traits

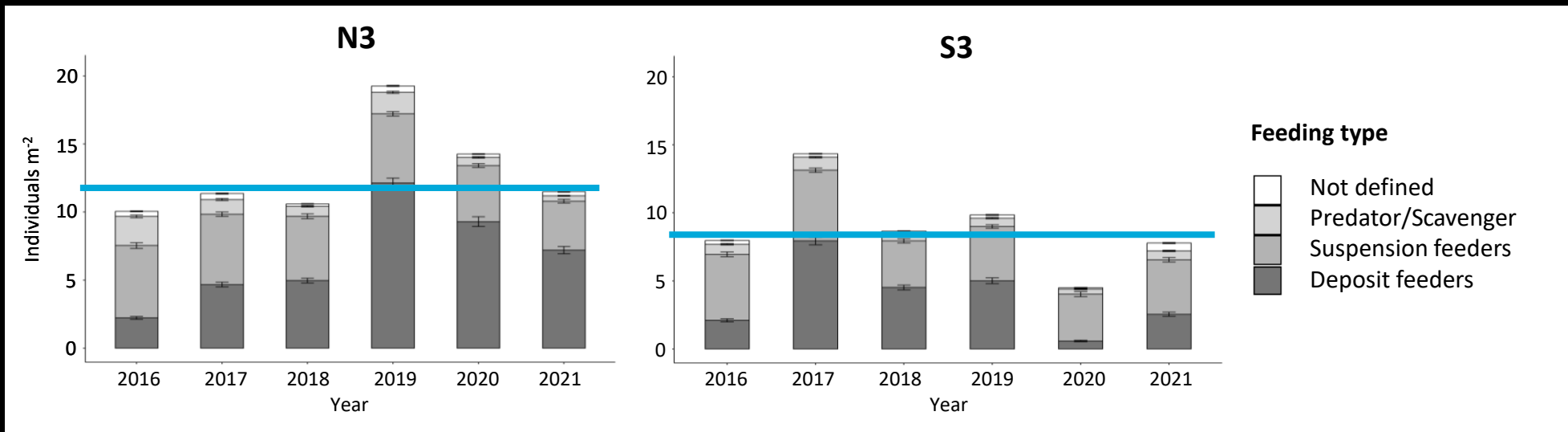
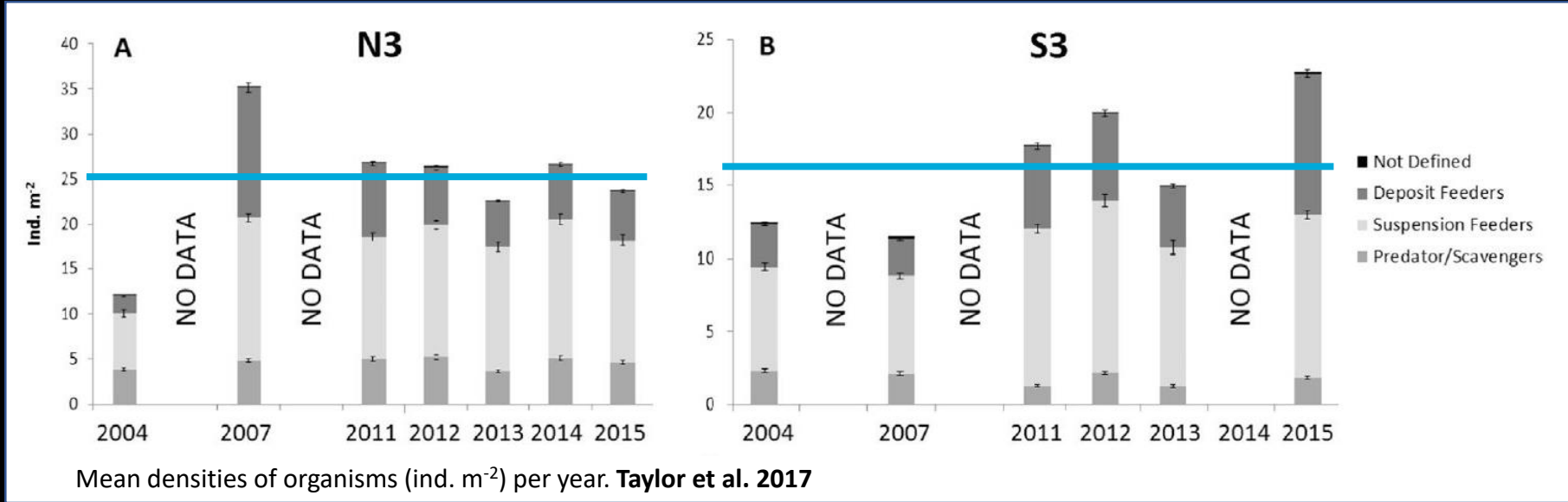
- Mobility types
- **Feeding types**
- Zoogeography

Habitat features

- Dropstones
- Sponge debris
- Stalks
- Burrows

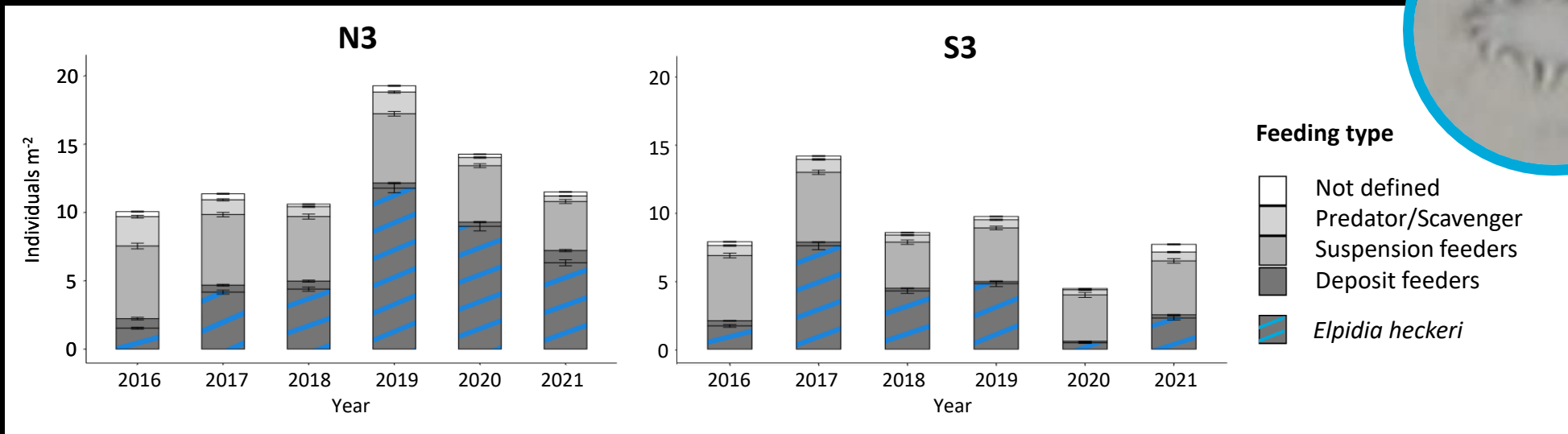
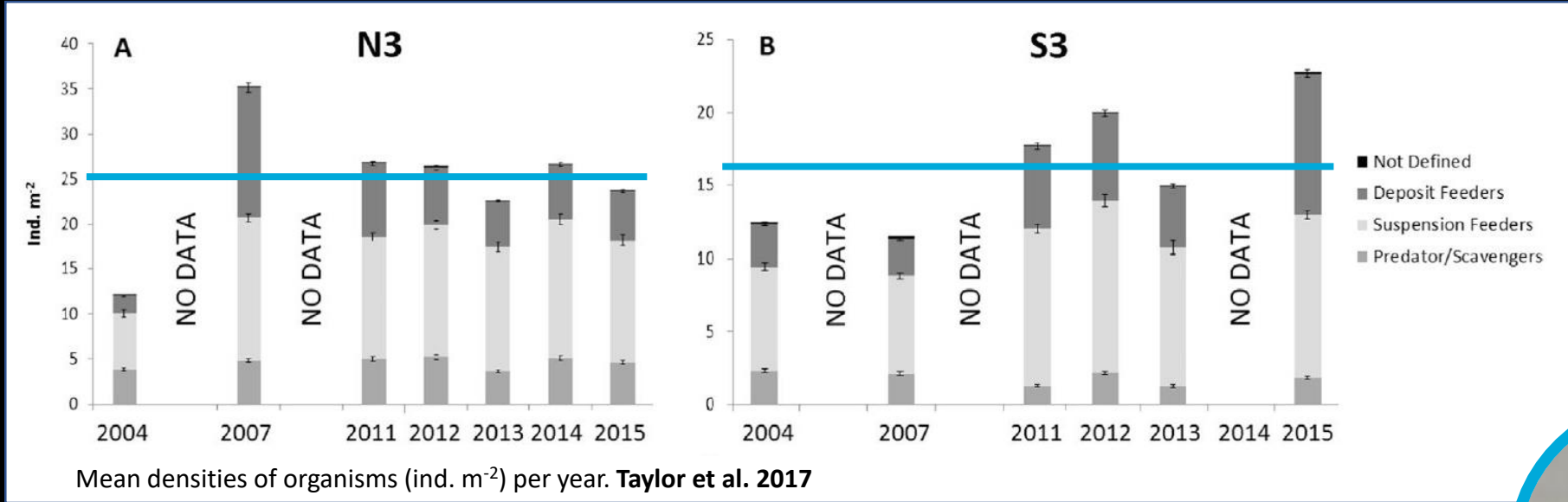


Benthic megafauna community, Arctic Ocean



Preliminary results!

Benthic megafauna community, Arctic Ocean



Preliminary results!

- Combining image and acoustic data sets can increase our understanding of benthic communities
- Habitat analysis of benthic megafauna community at HAUSGARTEN may help explain patterns in megafauna abundance



Thank you!



References

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2. Purser A, Hehemann L, Boehringer L *et al.* (2022) A vast icefish breeding colony discovered in the Antarctic. *Current Biology* 32: 842-850.
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