

Presented by Karl Zinglensen on behalf of the:
**Greenland Rising &
Greenland CSB Seabed2030
teams**





unesco

Intergovernmental
Oceanographic
Commission

THE NIPPON FOUNDATION-GEBCO



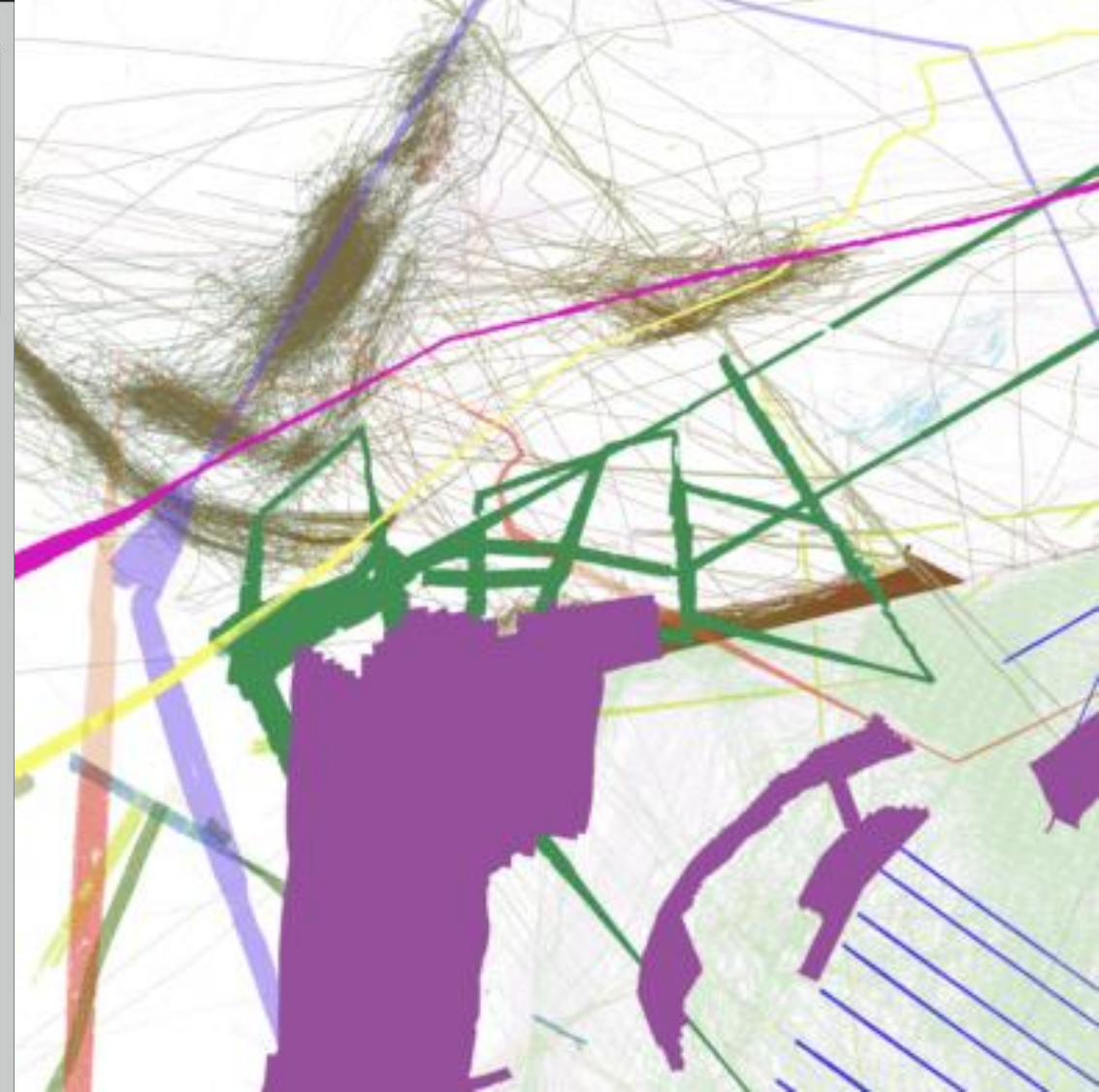
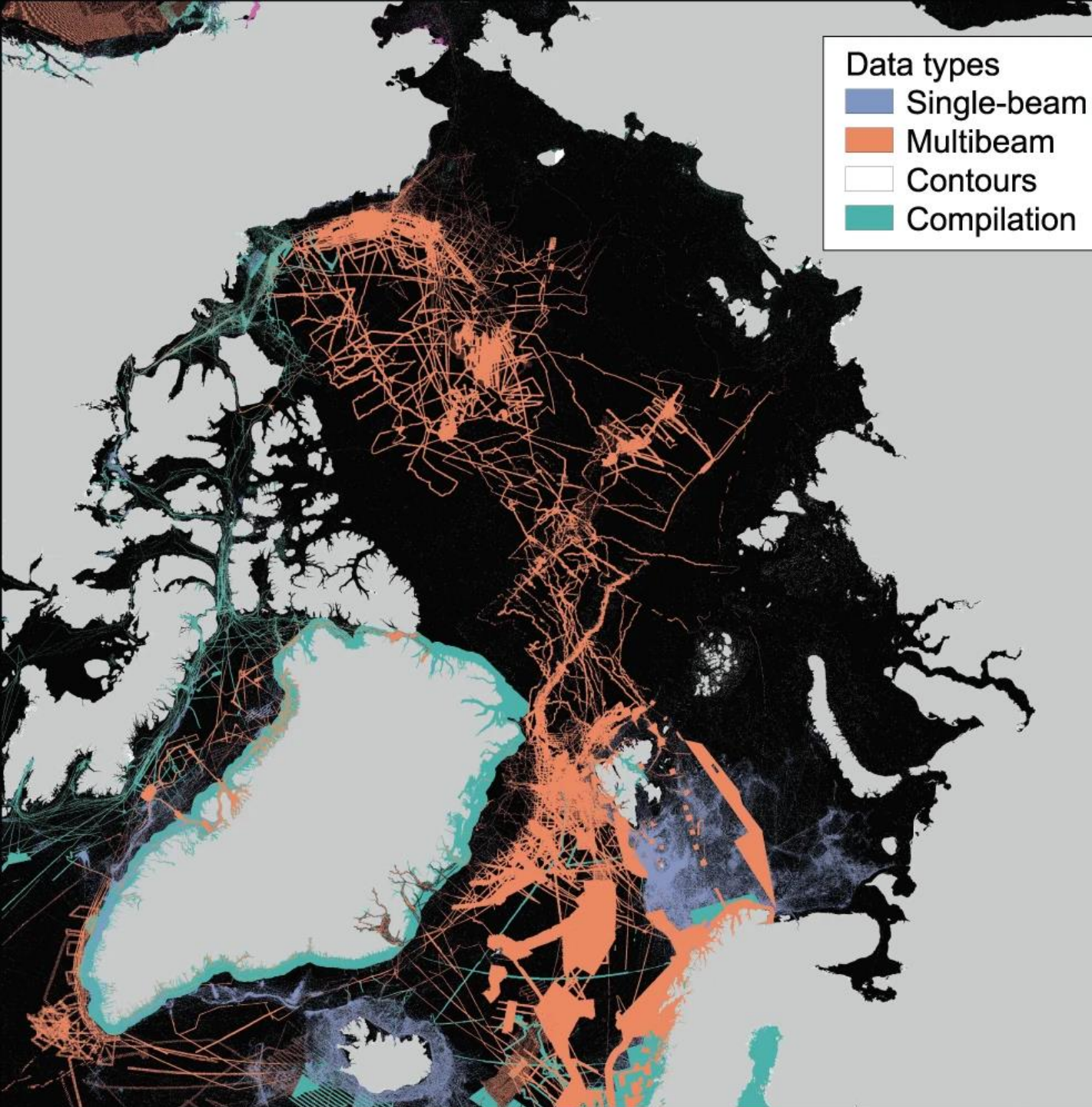
Supported by



**THE NIPPON
FOUNDATION**



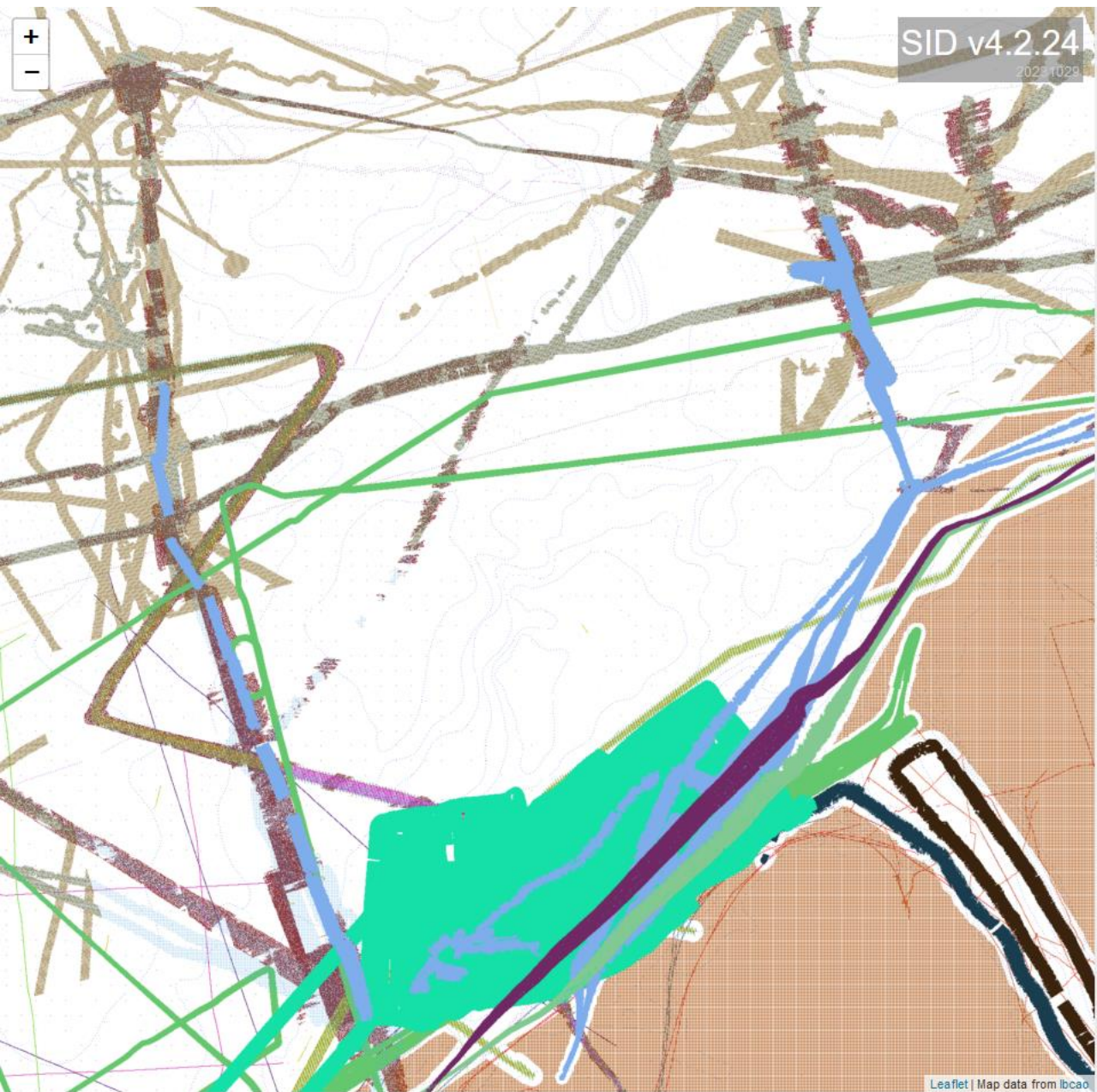
**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development



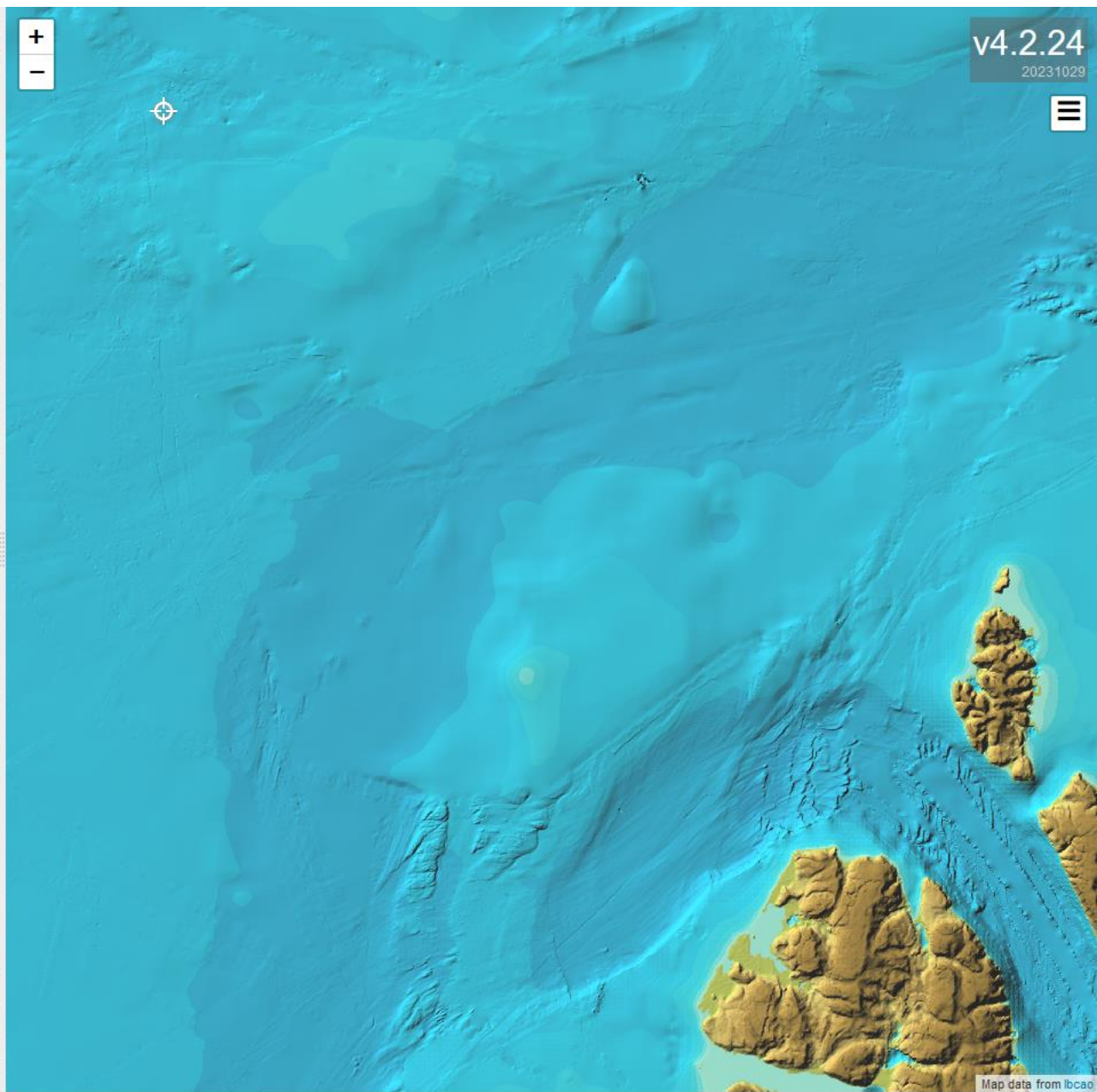
The International Bathymetric Chart of the Arctic Ocean Version 4.0

Jakobsson, M., Mayer, L.A., Bringensparr, C. *et al.* The International Bathymetric Chart of the Arctic Ocean Version 4.0. *Sci Data* **7**, 176 (2020).

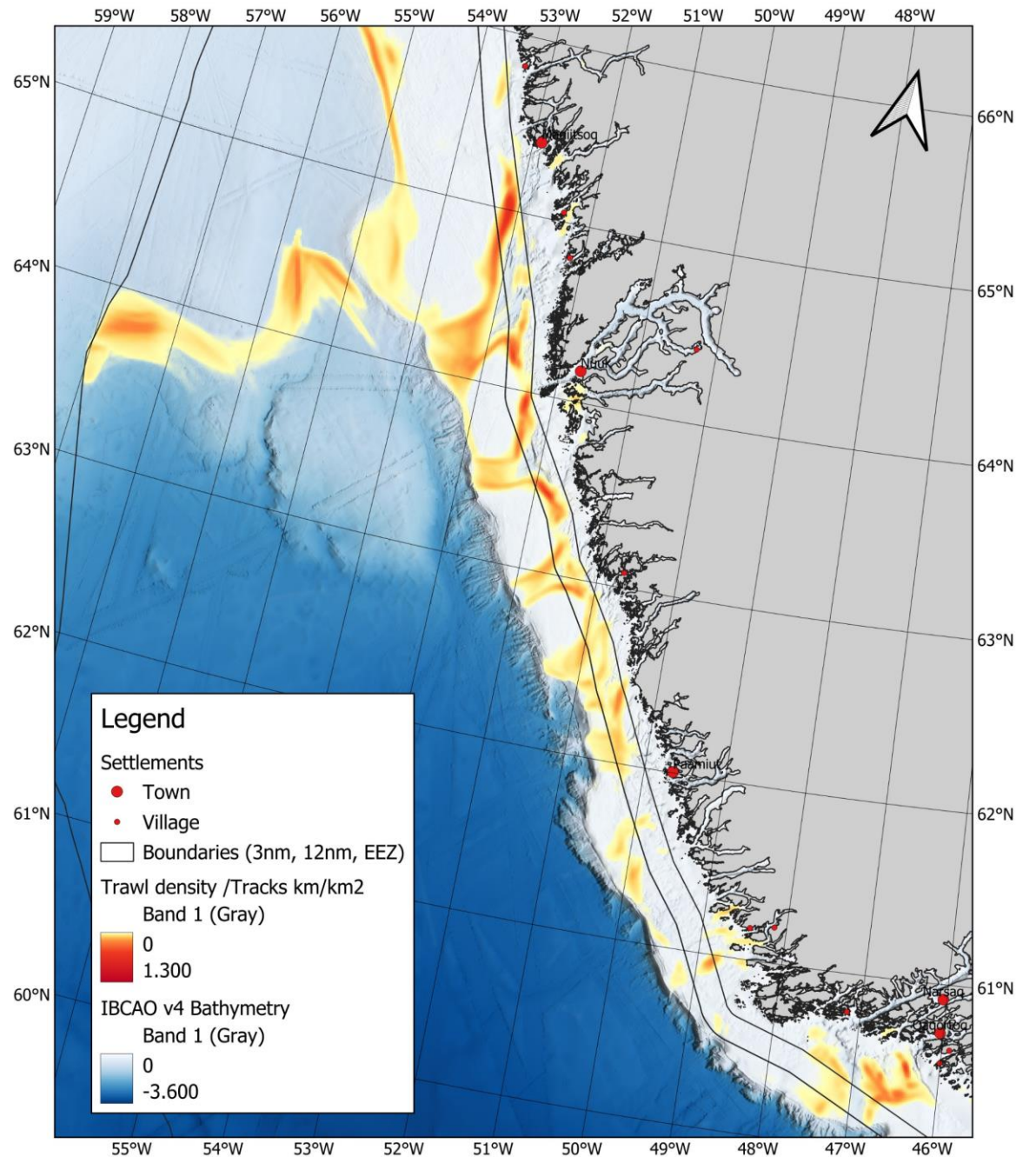
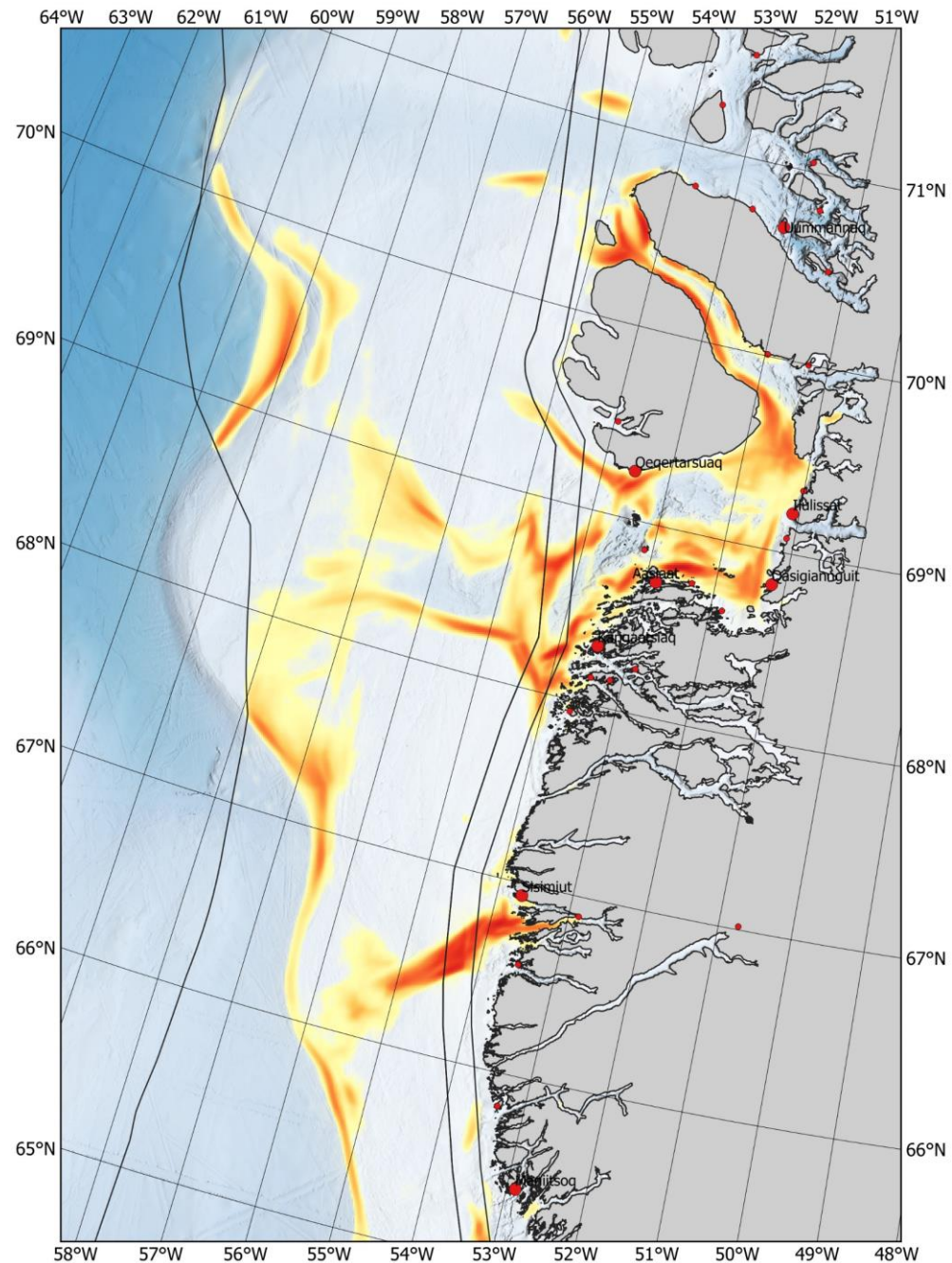
<https://www.nature.com/articles/s41597-020-0520-9>



Map: from IBCAO and Stockholm University



Near Qaanaaq, North-West Greenland



Processed data from the LULI database Greenland Fishery License Agency, GFLK. Jakobsson, M., et al. (2020): The International Bathymetric Chart of the Arctic Ocean Version 4.0, Nature Scientific Data (Paper #SDATA-20-00261A). Long, S., et al. (2021): Deep-sea benthic habitats and the impacts of trawling on them in the offshore Greenland halibut fishery, Davis Strait, west Greenland, ICES Journal of Marine Science, Volume 78, Issue 8, <https://doi.org/10.1093/icesjms/fsab148>



Photo: Alex Rivest



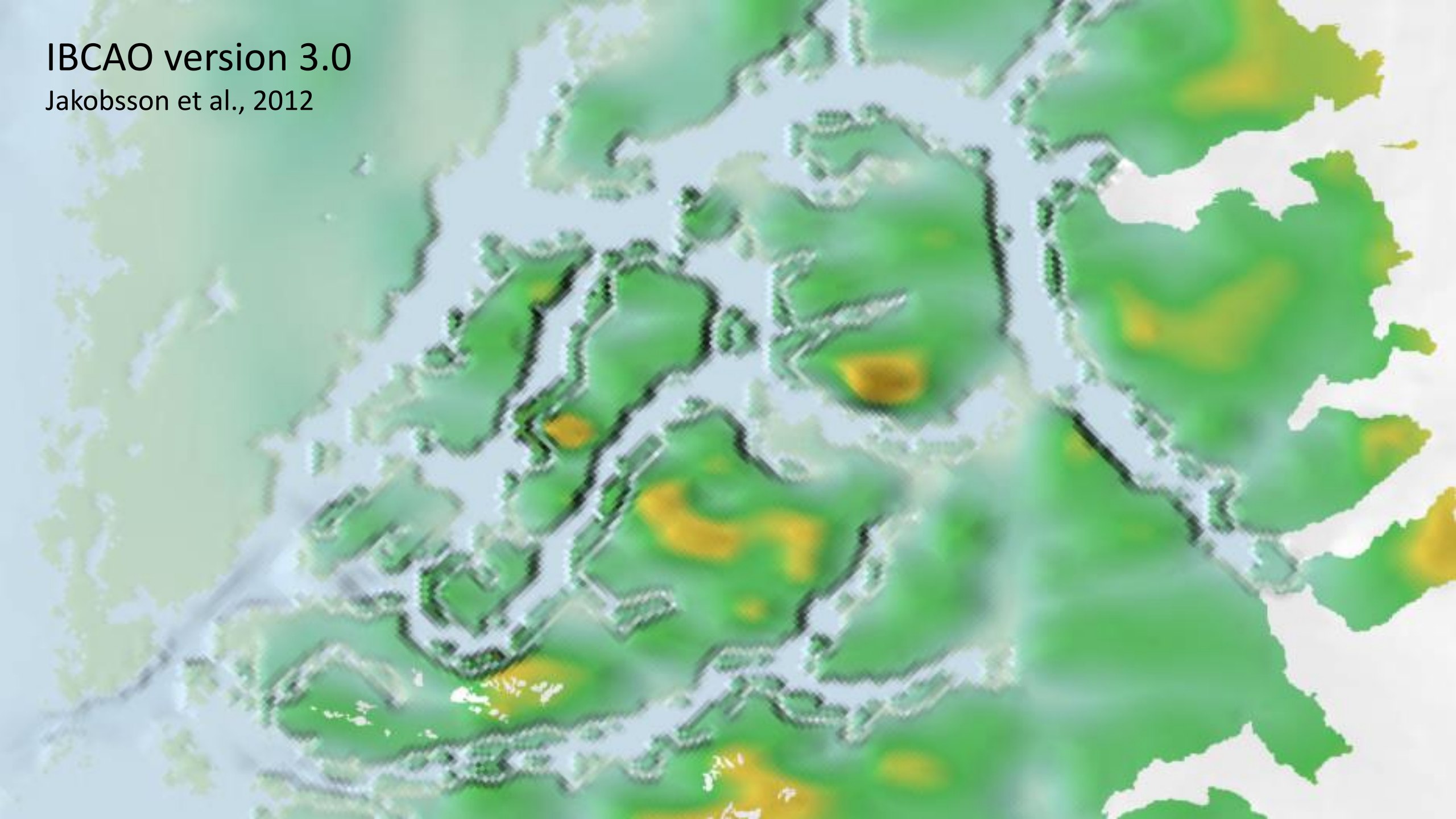
Photo: Karl Zinglensen



Photo: Karl Zinglensen

IBCAO version 3.0

Jakobsson et al., 2012



BedMachine v3
Morlighem et al., 2017



IBCAO v4.2.13

seabed.geo.su.se

Jakobsson, M., et al. (2020)





Photo: Karl Zinglensen





TeamSurv



www.teamsurv.eu

NMEA
Data
Logger

Ch 2 ●

Ch 1 ●

Ch 1 | Ch 2 | 9-30V DC
B A | B A | - +



Made in UK. V1.0 Ser 172



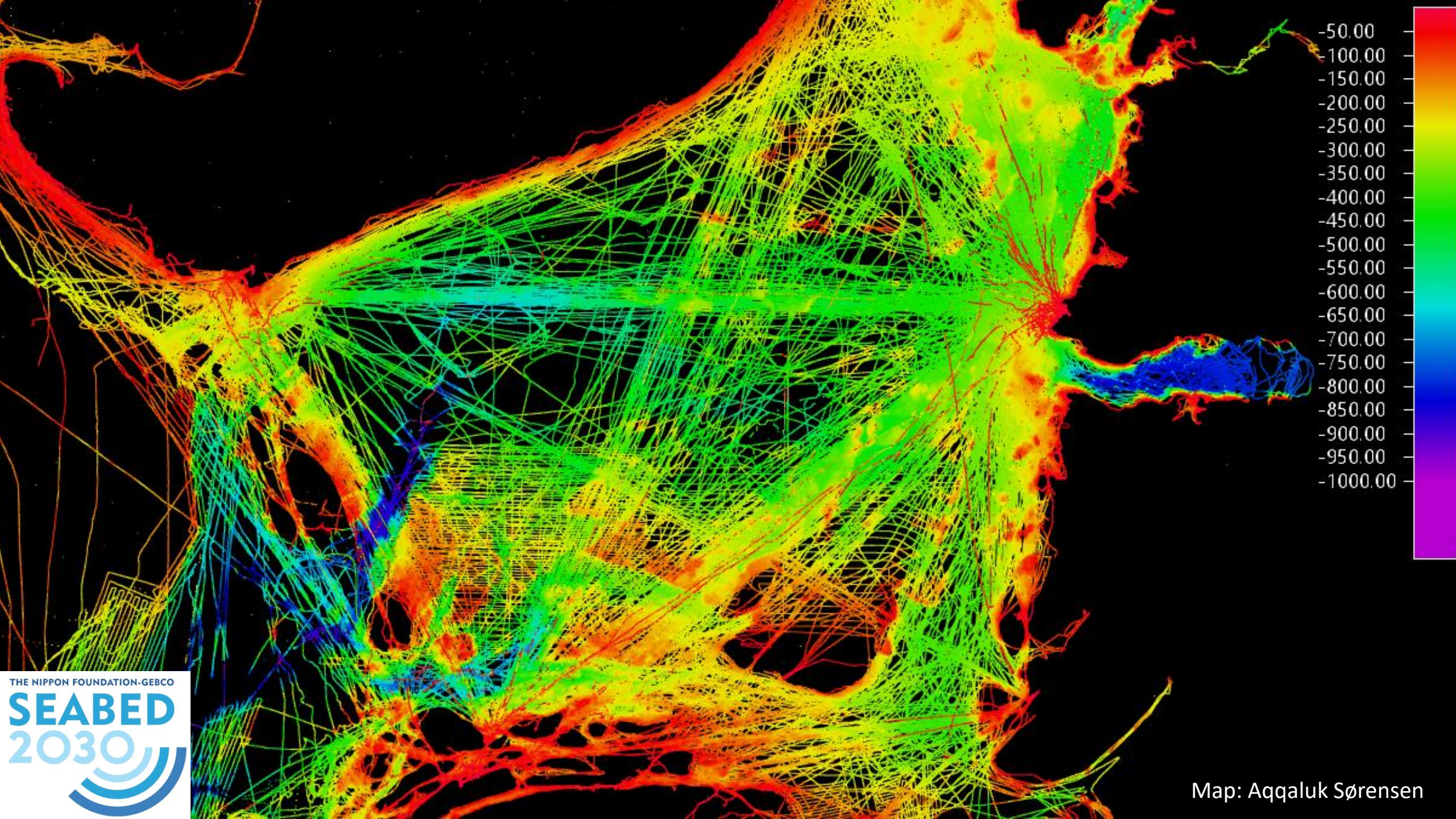


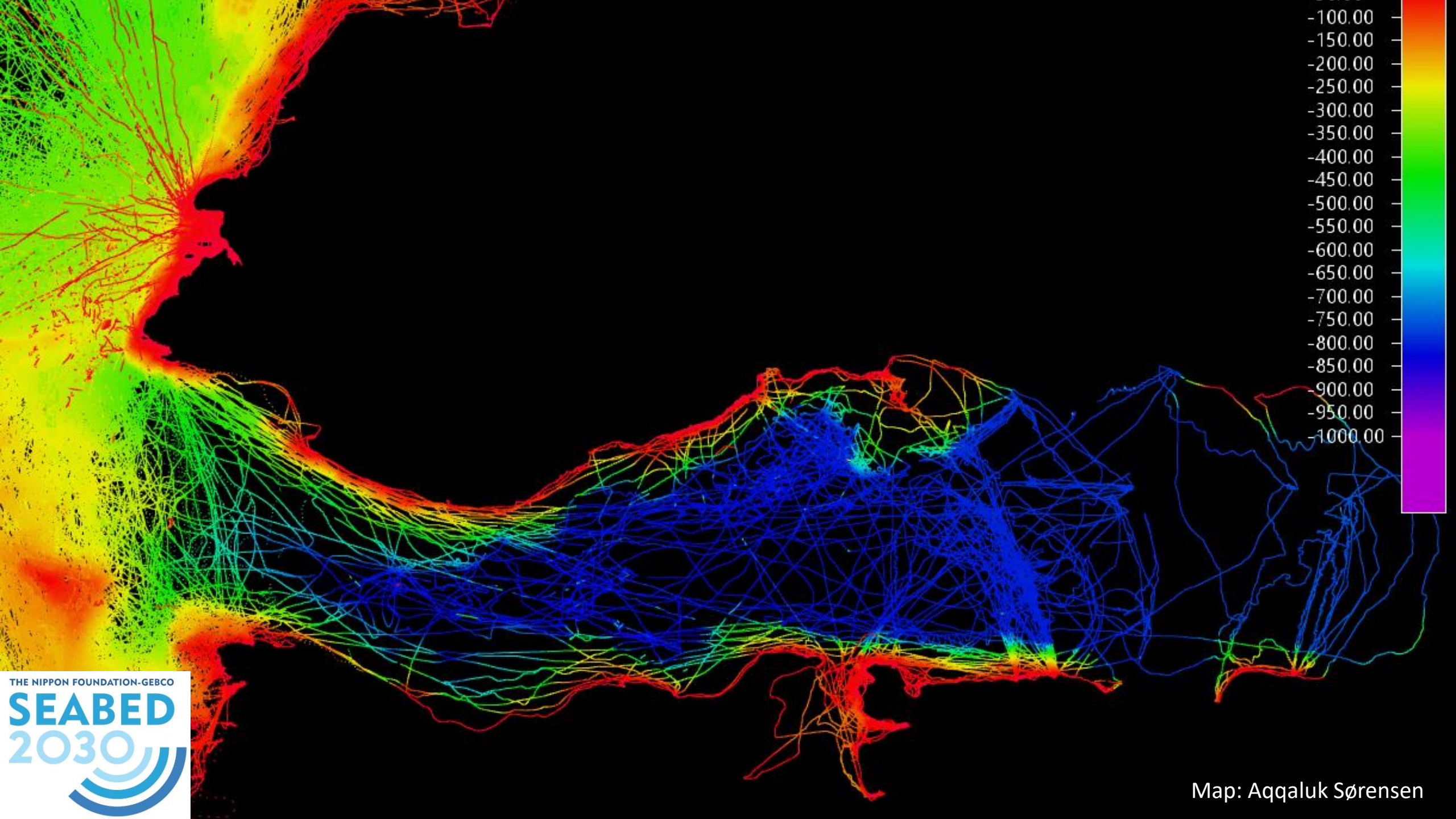




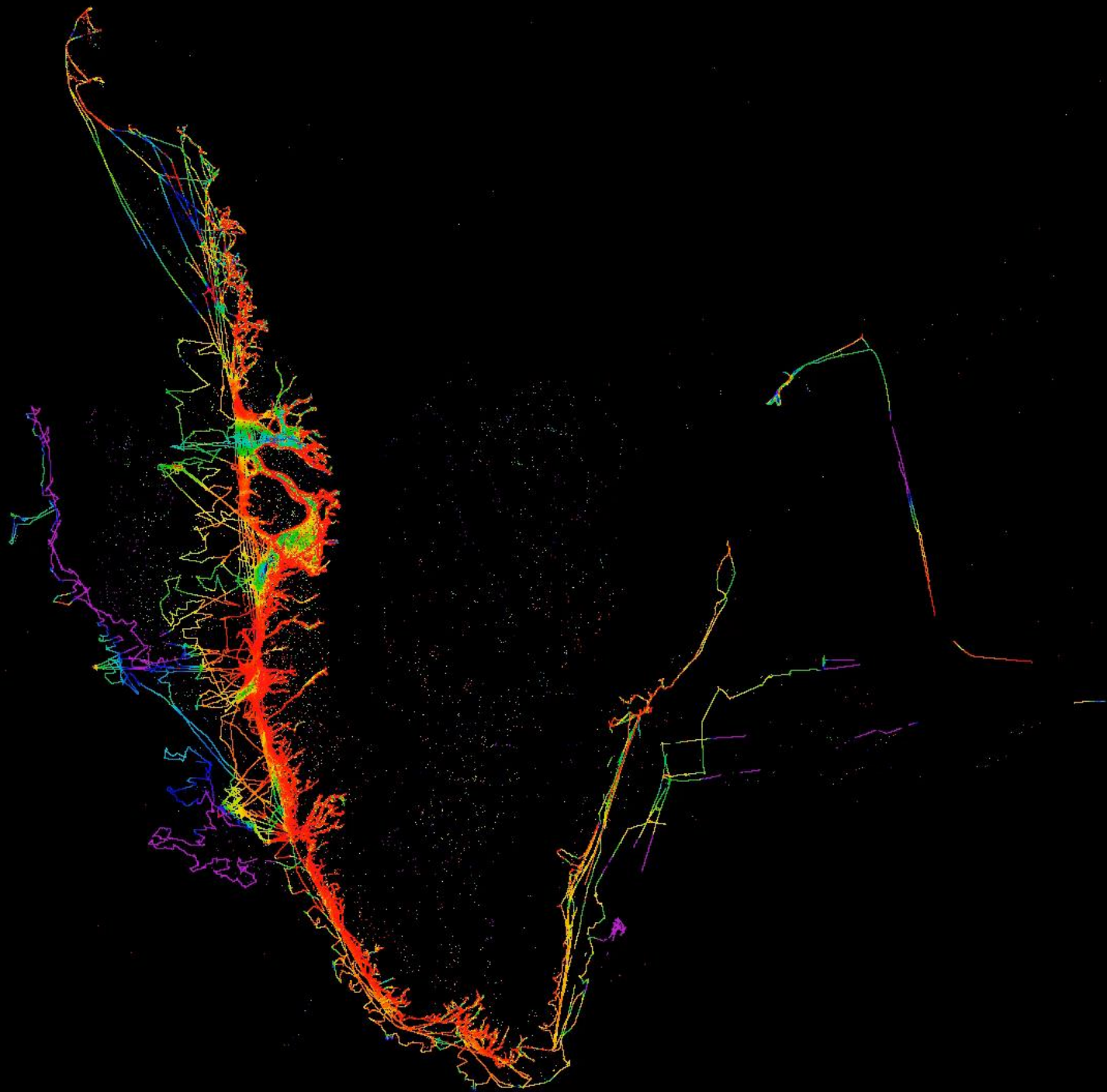
Photo: Karl Zinglensen

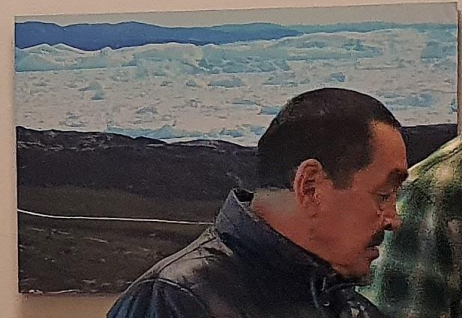
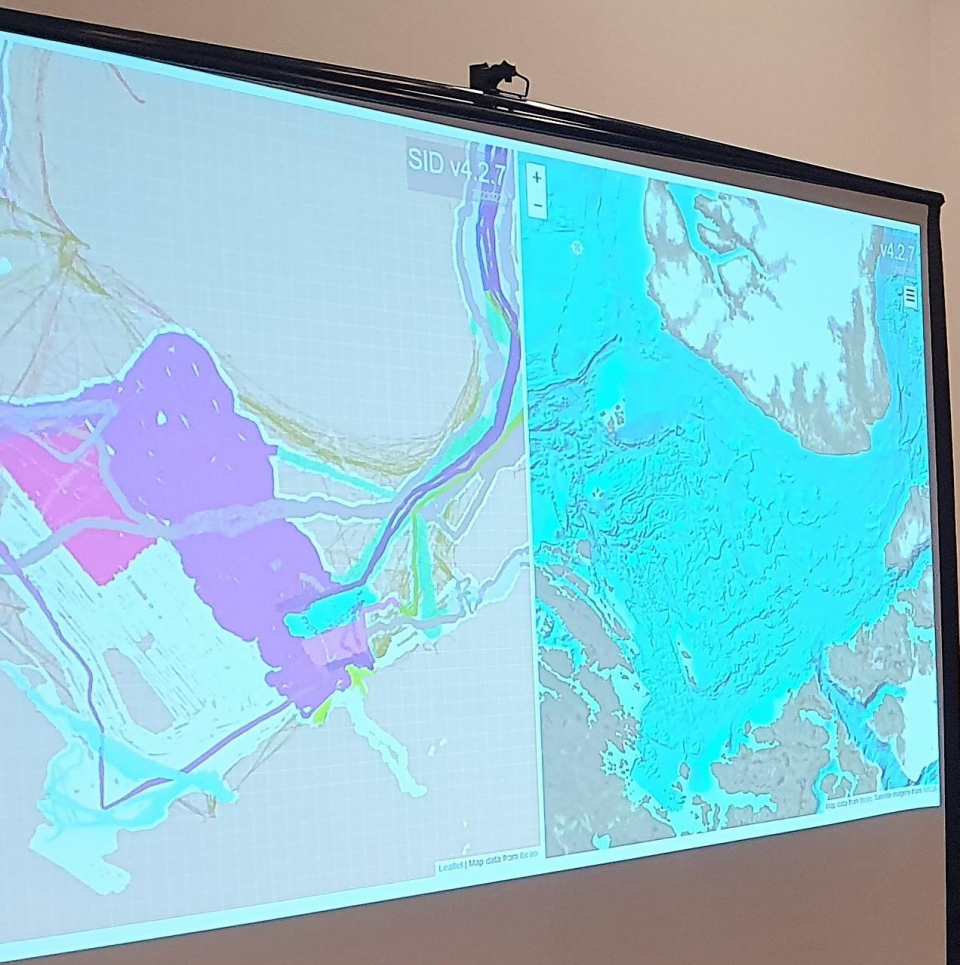






-100.00
-150.00
-200.00
-250.00
-300.00
-350.00
-400.00
-450.00
-500.00
-550.00
-600.00
-650.00
-700.00
-750.00
-800.00
-850.00
-900.00
-950.00
-1000.00





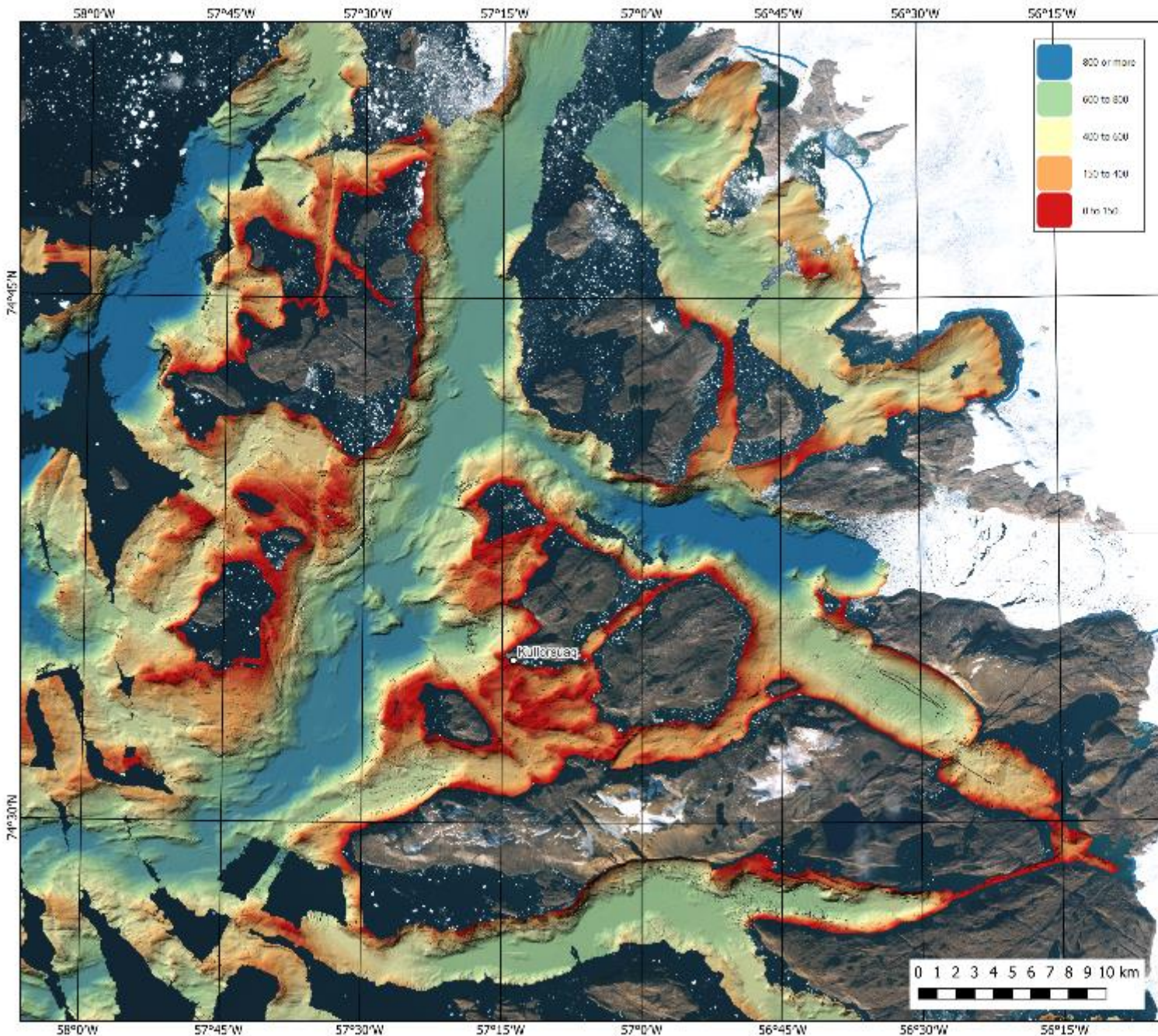
Hold afstand!

Qanllinaver





Photo: Karl Zinglensen



Kullorsuup eqqani Kullorsuaq area

2021-mi misissuinermi
missingersukkat
Temporary measurements
from survey in 2021

Asseq sumiissusersiubut taamalu
immami sillimaniammermut
atorneqarsinnaanngilaq.
The map should not be used for
navigation or for any other
purpose involving safety at sea.

Contact:
Karl Zinglesen, kazi@natur.gl
Aqqaluk Sørensen, aqs@natur.gl
Tel: +299 361200

This map is produced from these data sets:
- SDFE satellite image mosaic, 2019-2020,
- NASA Ocean Melting Greenland bathymetry,
cruise 2015,
- Greenland Rising bathymetry, cruise 2021.



Greenland Rising is a project
between Columbia University
and Greenland Institute of
Natural Resources funded by
National Science Foundation's
Navigating the New Arctic
programme

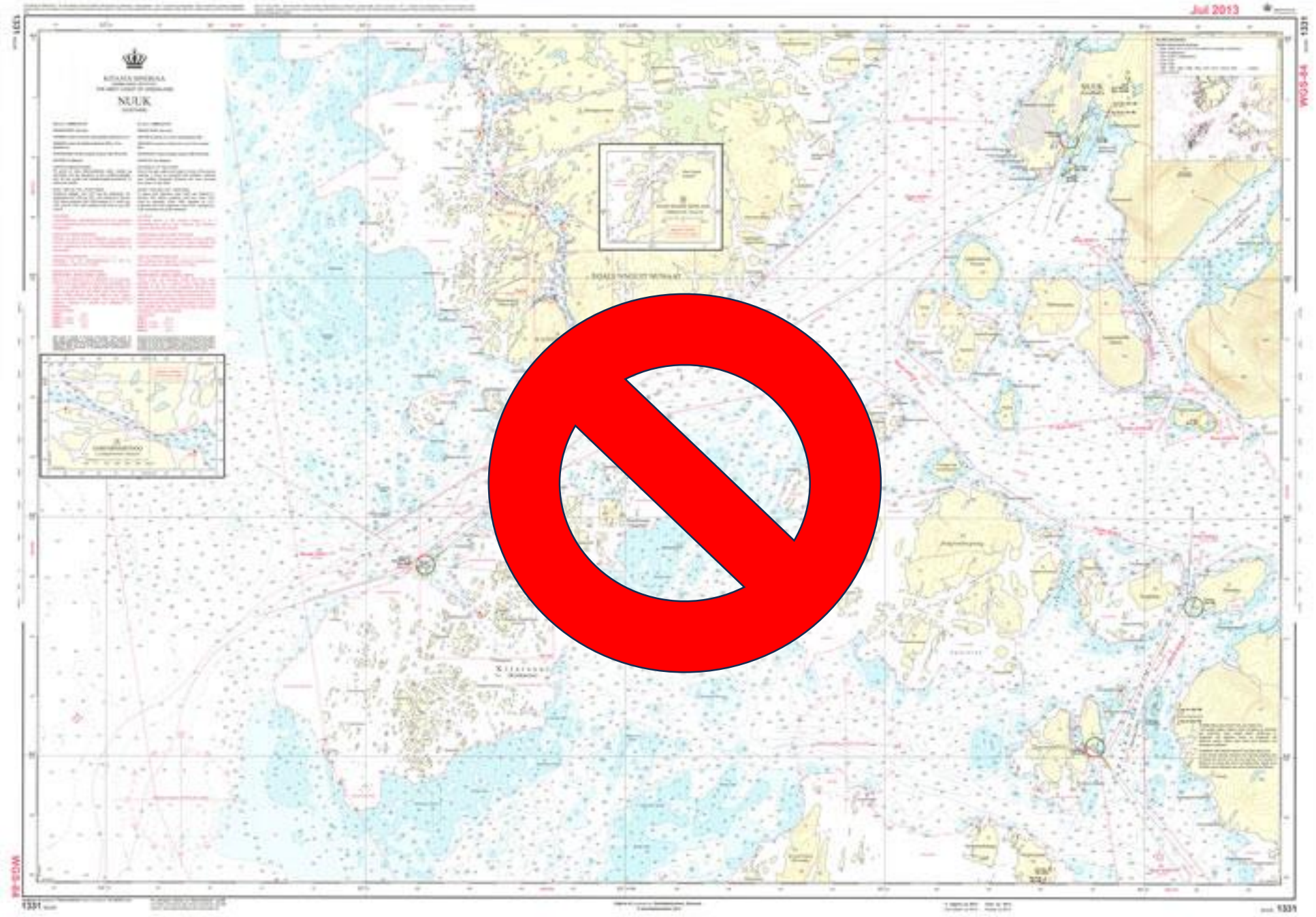


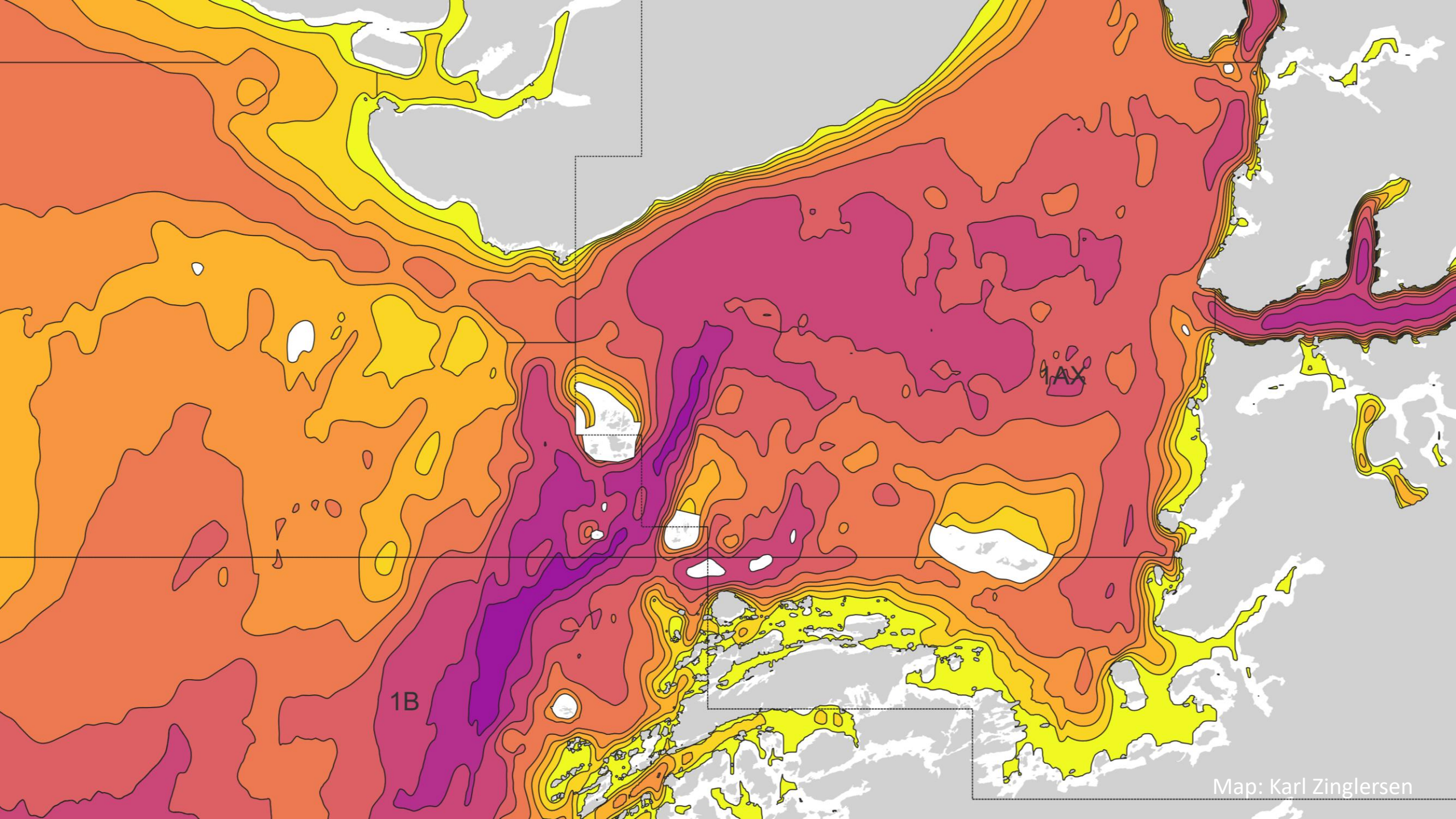
OMG, 2020. OMG Swath Gridded Multibeam
Echo Sounding (MBES) Bathymetry, Ver. 1.
PO, DAAC, CA, USA. Dataset accessed
[2021-06-10] at <https://doi.org/10.5067/OMGEV-MBES1>.



Get this map on
Avenza Maps










1B

9AX

Widespread natural methane and oil leakage from sub-marine Arctic reservoirs

Article March 2023 · 352 Reads · 6 Citations





natureportfolio [Nature Communications](#)

 Pavel Serov ·  Rune Mattingsdal ·  Monica Winsborrow · Andreassen

Recirculation of Canada Basin Deep Water in the Amundsen Basin, Arctic

Article September 2023 · 59 Reads




Journal of Physical Oceanography

 Salar Karam ·  Céline Heuzé ·  Vasco Müller ·  Yixi Zheng

Storstrømmen and L. Bistrup Bræ, North Greenland, Protected From Warm Atlantic Ocean Waters

Article March 2022 · 235 Reads · 1 Citation





WILEY [Geophysical Research Letters](#)

 E. Rignot ·  Anders Anker Bjørk ·  Nolwenn Chauché ·

Age and Geochemistry of High Arctic Large Igneous Province Tholeiitic Magmatism in NW Axel Heiberg...

Article November 2023 · 28 Reads





WILEY [Geochemistry, Geophysics, Geosystems](#)

 F. M. Deegan ·  V. Pease ·  I. G. Nobre Silva · [...] ·  G

An Updated View of the Water Masses on the Northeast Greenland Shelf and Their Link to the...

Article April 2023 · 207 Reads · 1 Citation





Journal of Geophysical Research: Oceans

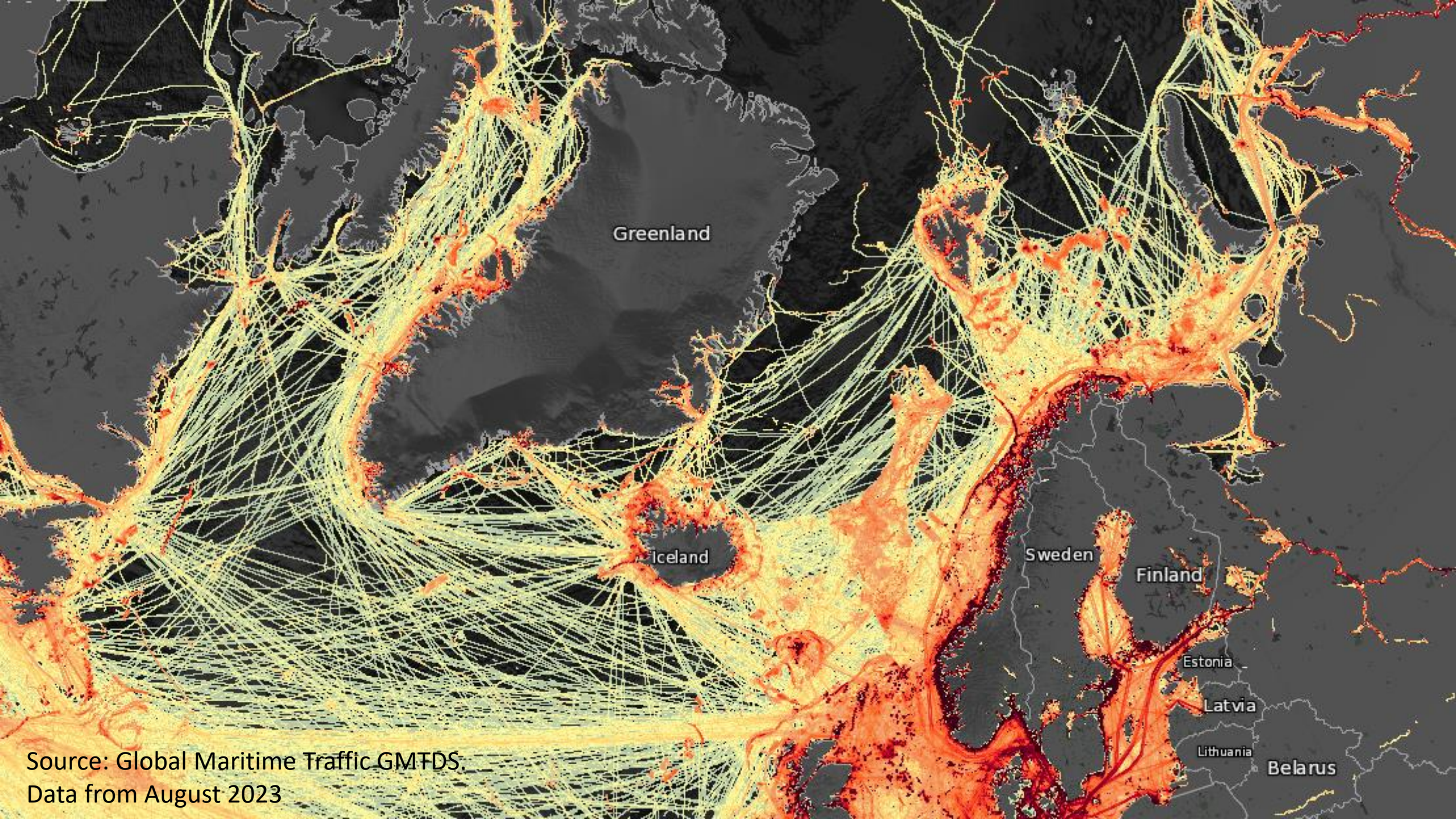
 Esty Willcox ·  J. Bendtsen ·  John Mortensen · [...] ·  Søren Rysgaard

Nitrous Oxide Dynamics in the Siberian Arctic Ocean and Vulnerability to Climate Change

Article May 2023 · 173 Reads · 1 Citation

Journal of Geophysical Research: Biogeosciences

 Birgit Wild ·  Nicholas E. Ray ·  Céline Lett · [...] ·  Volker Brüchert



Greenland

Iceland

Sweden

Finland

Estonia

Latvia

Lithuania

Belarus

Source: Global Maritime Traffic GMTDS
Data from August 2023