THE NIPPON FOUNDATION-GEBCO

SEABED 2030

Report from the Regional Center for the Atlantic and Indian Oceans

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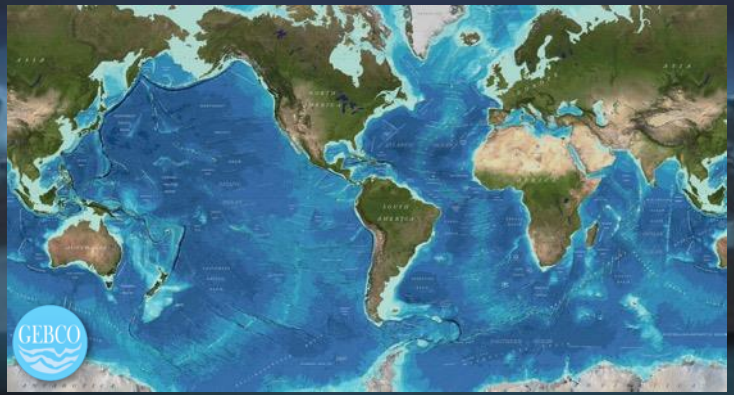
Hosted at Columbia University's Lamont-Doherty Earth Observatory, NY, USA

2021 EAST ATLANTIC HYDROGRAPHIC COMMISSION (EAtHC)

What is Seabed 2030?

The Nippon Foundation - GEBCO Seabed 2030 Project is a collaborative project to inspire the complete mapping of the world's ocean by 2030, and to compile all bathymetric data into the freely-available GEBCO Ocean Map.

> *Seabed 2030 aspires to empower the world to make policy decisions, use the ocean sustainably, and undertake scientific research that is informed by a detailed understanding of the global ocean floor.*



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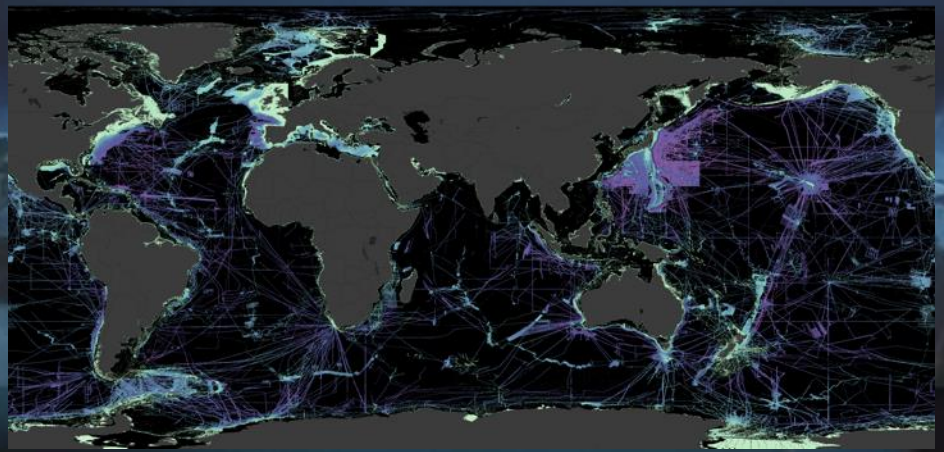
Why is Seabed 2030 Important?

- Bathymetry data is an essential ocean observation
- Seabed mapping data has broad use and value
- Ocean processes extend beyond territorial waters
- Only ~20% of the ocean has been mapped with direct observation
- Mapping the entire ocean is a massive task that can only be achieved through cooperation and coordination



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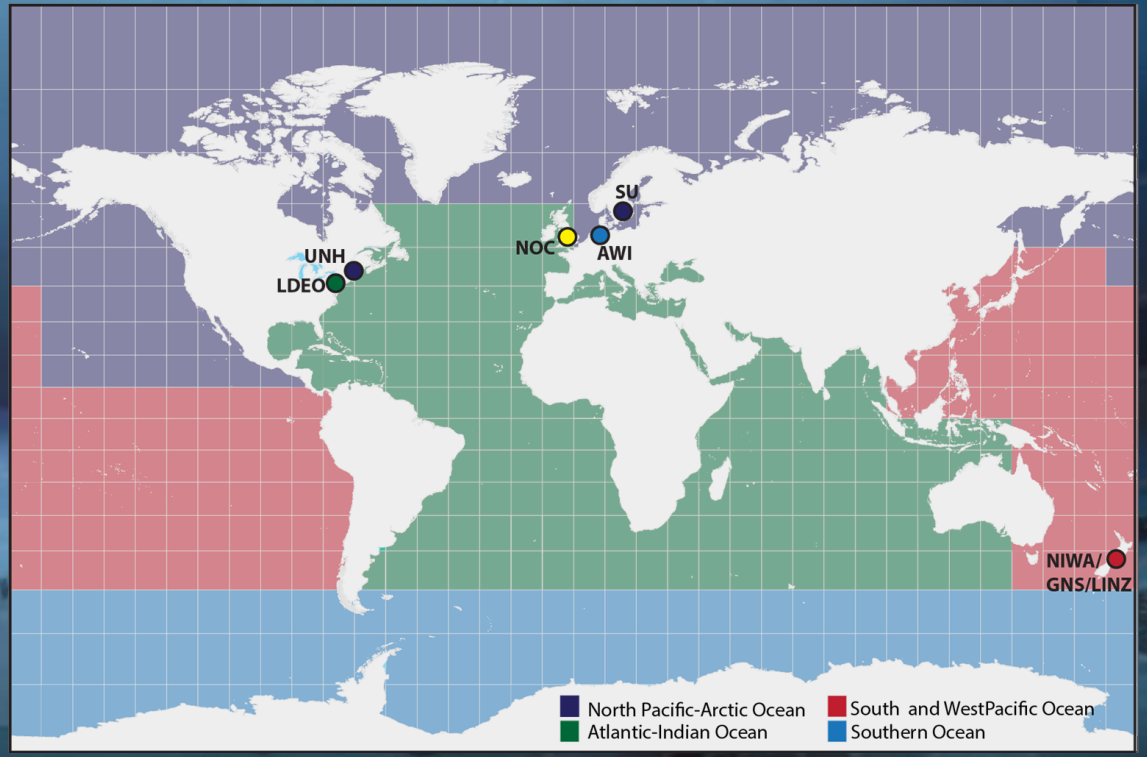
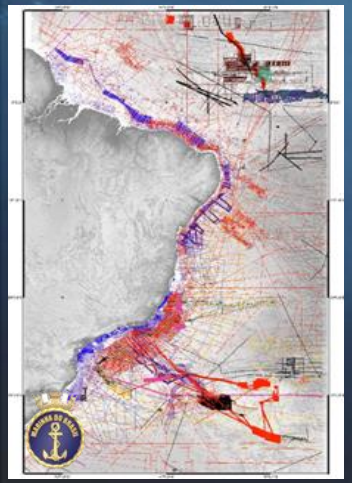
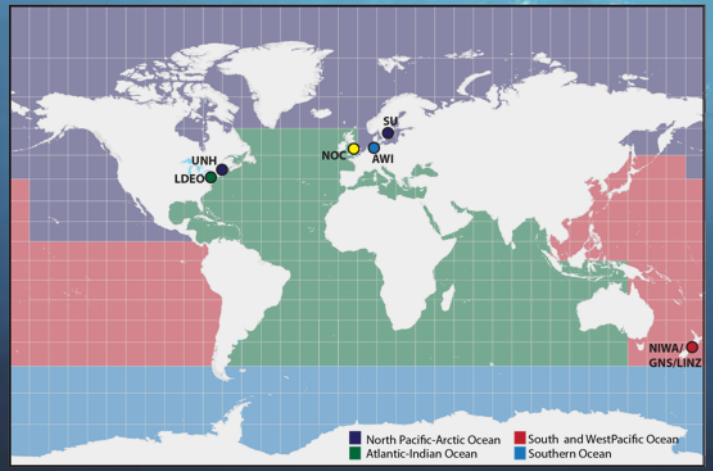
Seabed 2030: Regional Approach

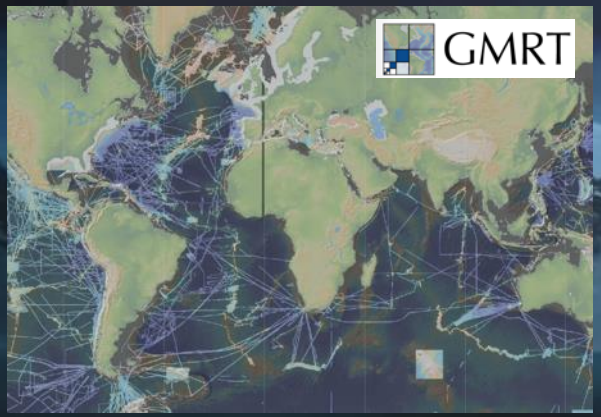
- Regional Centers (RDACCs)
  - Engage with stakeholders
  - Build upon existing efforts
  - Assemble regional products
  - Identify gaps
- Global Center (GDACC)
  - Assemble global products
  - Disseminate global products

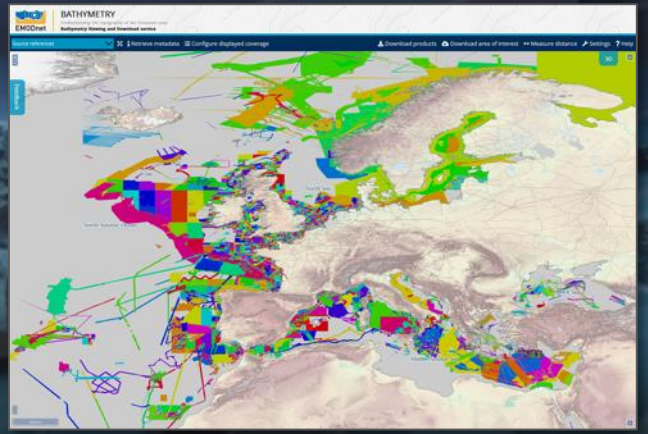


Collaborate with existing data synthesis efforts

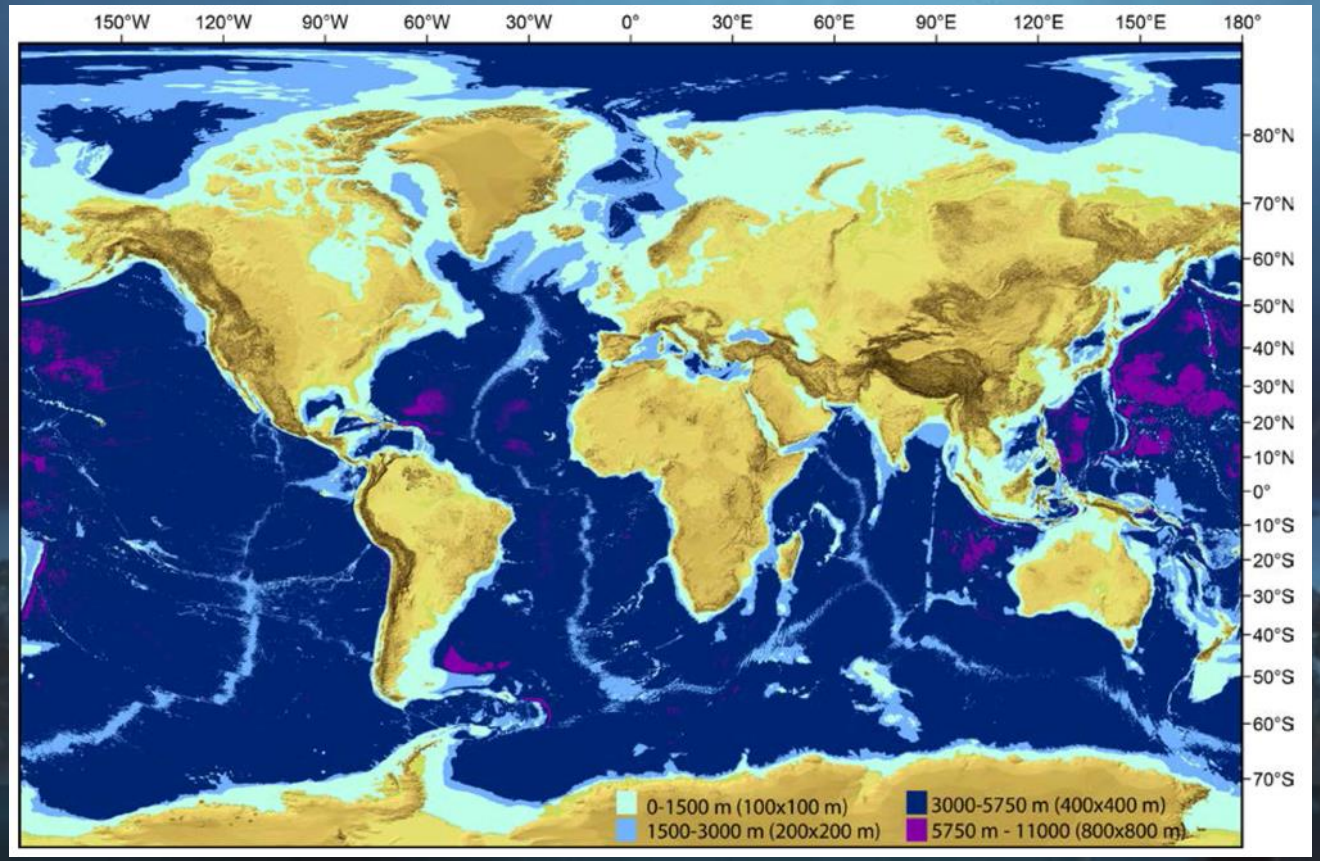








What does 100% mapped mean?



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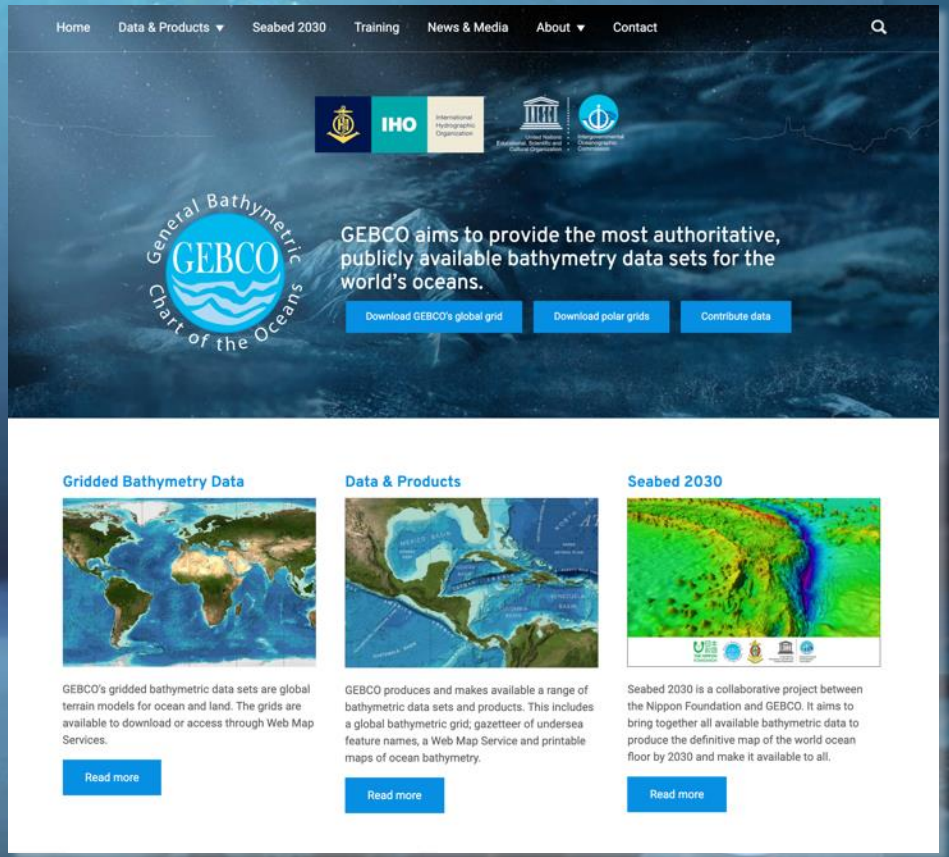
GEBCO Products

- Global gridded bathymetric data
  - 2014: 30 arc-second grid
  - 2019 - 2021: 15 arc-second grid
- Gazetteer of Undersea Feature Names
- Grid viewing software
- Printable maps
- Web Map Service (WMS)
- IHO-IOC GEBCO Cook Book



Download the GEBCO grid from: gebco.net or seabed2030.org

How to Access the GEBCO Grid

Home | Data & Products ▾ | Seabed 2030 | Training | News & Media | About ▾ | Contact

Gridded Bathymetry Data

Home » Data & Products » Gridded Bathymetry Data

Global ocean & land terrain models

GEBCO's gridded bathymetric data set, the GEBCO_2020 grid, is a global terrain model for ocean and land at 15 arc-second intervals. It is accompanied by a Type Identifier (TID) Grid that gives information on the types of source data that the GEBCO_2020 Grid is based.

- Download global coverage grids
- Download data for user-defined areas

More information about the grid, its terms of use and attribution.

Download global coverage grids

The GEBCO_2020 Grid and TID Grid can be download as global files in netCDF format or a set of 8 tiles (each with an area of 90° x 90°), giving global coverage, in Esri ASCII raster and data GeoTiff formats. The data filea are included in a zip file along with the data set documentation.

GEBCO_2020 Grid	netCDF (4 Gbytes, 7.5 Gbytes uncompressed)	Data GeoTiff (4 Gbytes, 8 Gbytes uncompressed)	Esri ASCII raster (5 Gbytes, 20 Gbytes uncompressed)
GEBCO_2020 TID Grid	netCDF 90 Mbytes, 4 Gbytes uncompressed)	Data GeoTiff (96 Mbytes, 7 Gbytes uncompressed)	Esri ASCII raster (108 Mbytes, 9.5 Gbytes uncompressed)

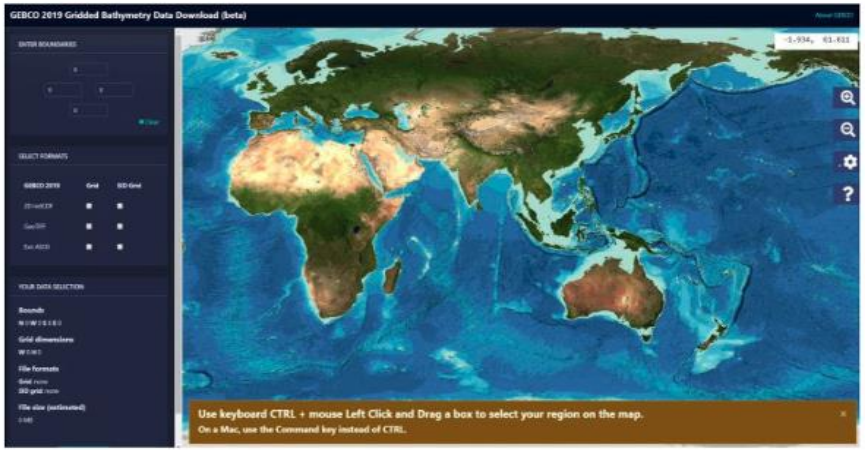
Jump to

- Seabed 2030
- Contribute data
- IBCAO_v4
- GEBCO Web Services
- Printable maps
- Historical GEBCO data sets
- Imagery
- Undersea feature names
- Historical GEBCO charts
- IHO-IOC GEBCO Cook Book
- History of GEBCO book

Share this

Download data for user-defined areas

Use our application to select and download data in netCDF, Esri ASCII raster and data GeoTiff formats.

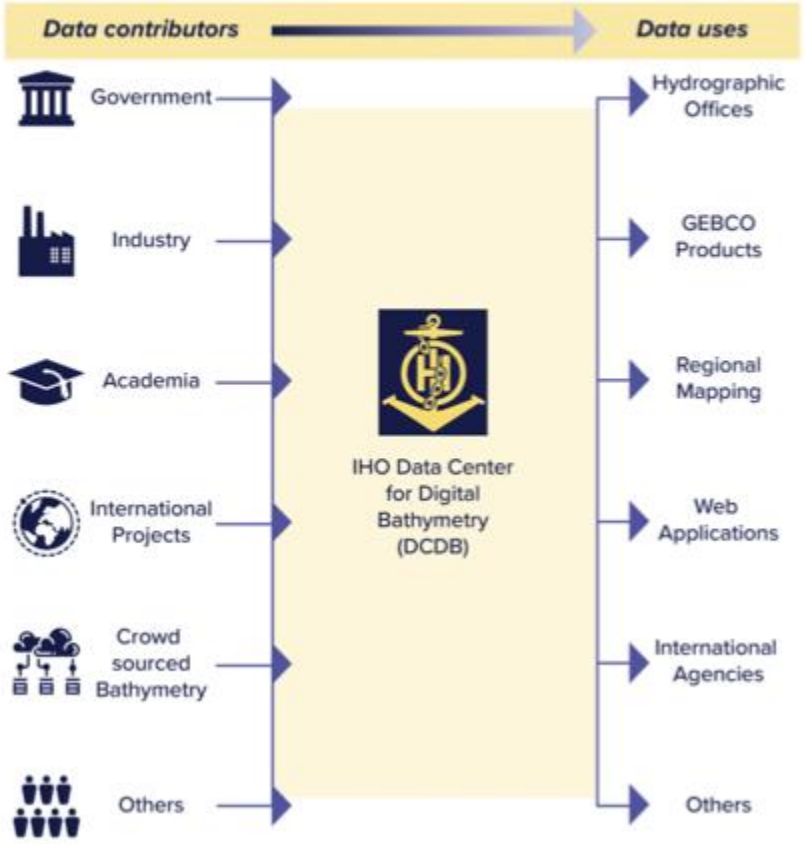


Download the GEBCO grid from: gebco.net or seabed2030.org

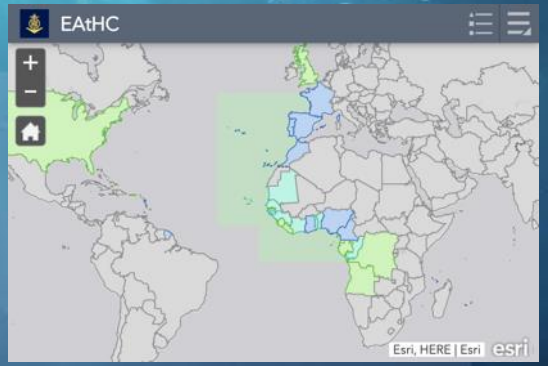
IHO Data Center for Digital Bathymetry (DCDB)

> *The IHO DCDB is the recognized IHO repository for all ocean bathymetric data.*

The DCDB works closely with the Seabed 2030 Project to provide long-term preservation, discovery and access of source bathymetry data.



www.ngdc.noaa.gov/iho/
maps.ngdc.noaa.gov/viewers/iho_dcdb/



Status of Mapping: GEBCO 2021

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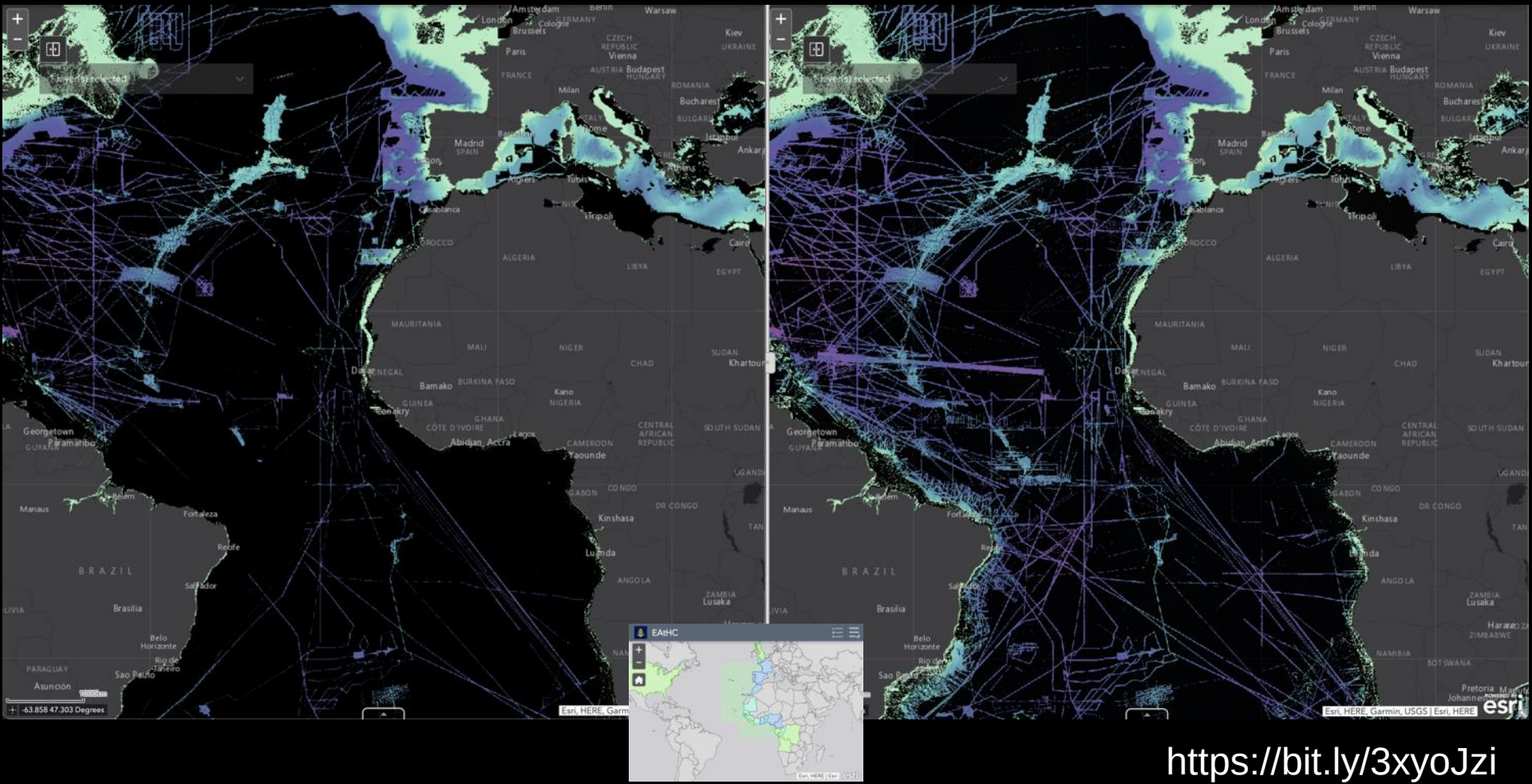
GEBCO 2020

GEBCO 2021



https://bit.ly/3xyoJzi

How much of the EAtHC region has been mapped?

GEBCO 2021
Data Coverage

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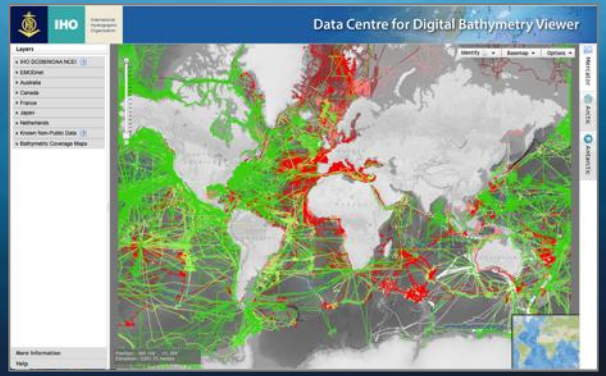


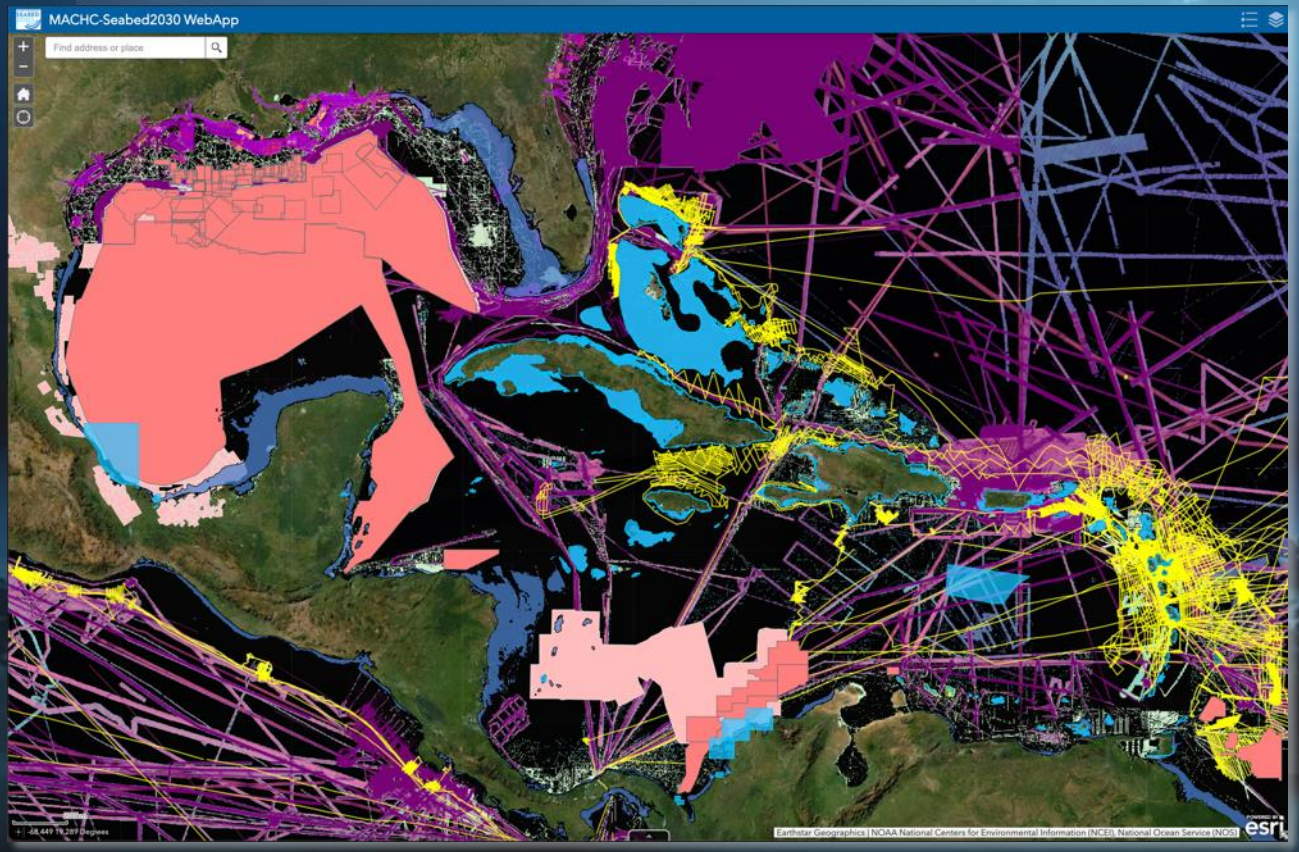
Known existing data
not yet shared and/or
not yet integrated

+

?

Unknown
existing data
not yet shared

Example Custom Web Application (MACHC)



- GEBCO basemap
- Existing data
  - Not yet integrated
  - Not yet shared
- Data acquisition plans

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What to Contribute?

- Gridded products
- ENC data
- Multibeam data
- Single beam data
- CSB data
- Polygons of data coverage
- Metadata

Thank you!

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www.seabed2030.org