

THE NIPPON FOUNDATION-GEBCO

SEABED 2030

Report from the Regional Center for the Atlantic and Indian Oceans

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2021 EAST ATLANTIC HYDROGRAPHIC COMMISSION (EAthC)

What is Seabed 2030?

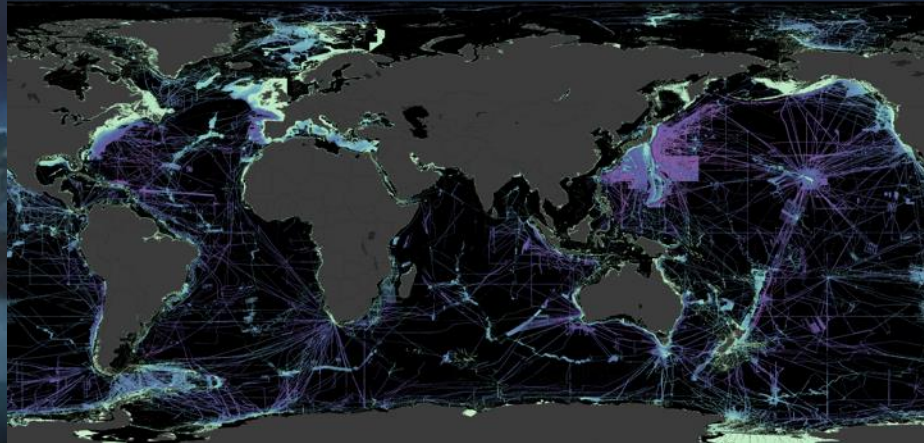
The Nippon Foundation - GEBCO Seabed 2030 Project is a collaborative project to inspire the complete mapping of the world's ocean by 2030, and to compile all bathymetric data into the freely-available GEBCO Ocean Map.

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.



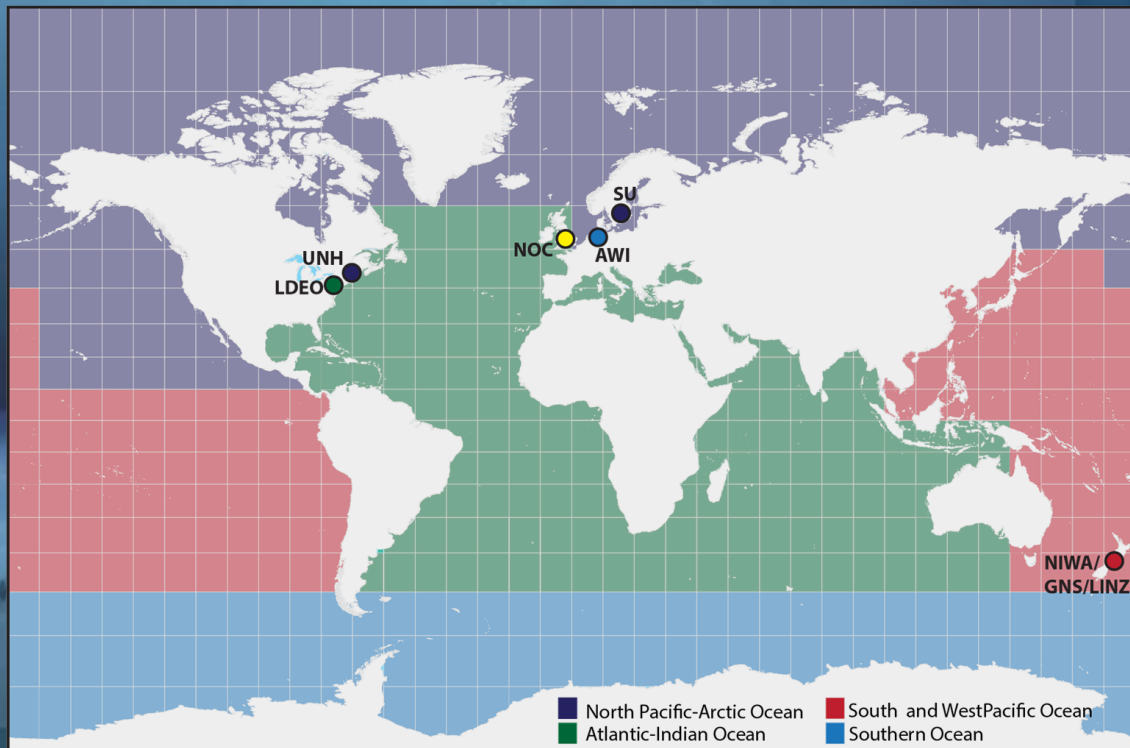
Why is Seabed 2030 Important?

- 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

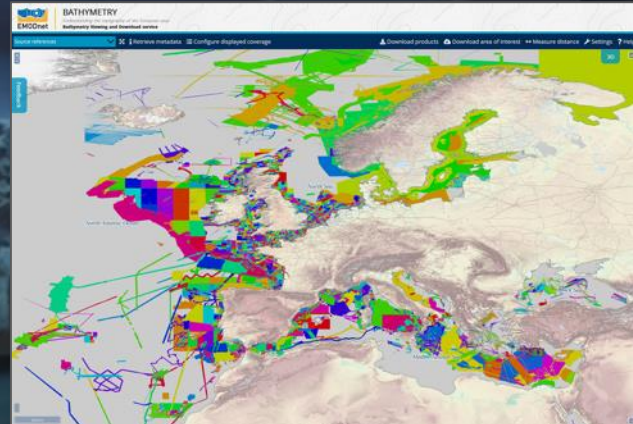
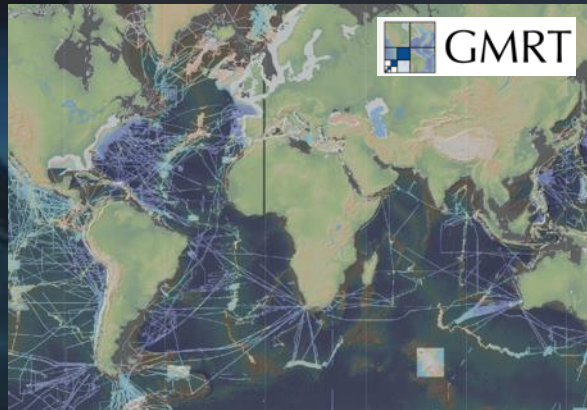
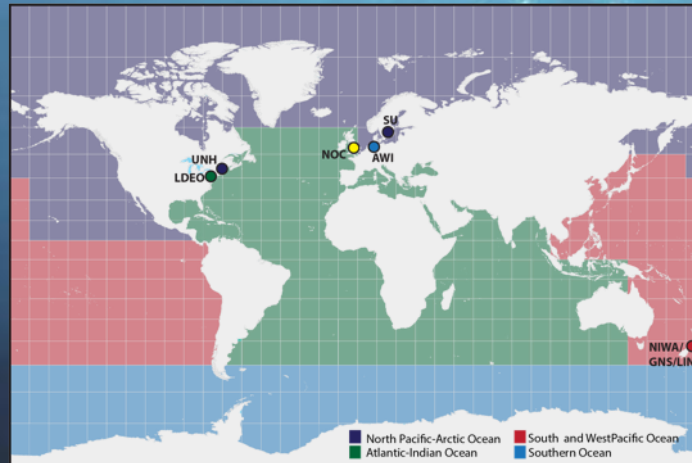
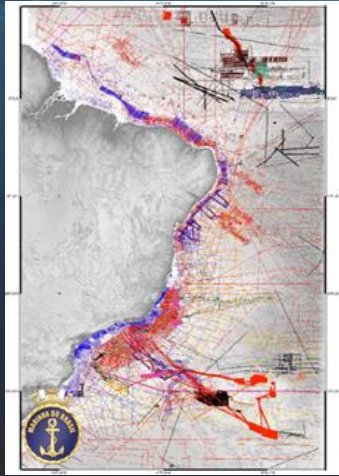


Seabed 2030: Regional Approach

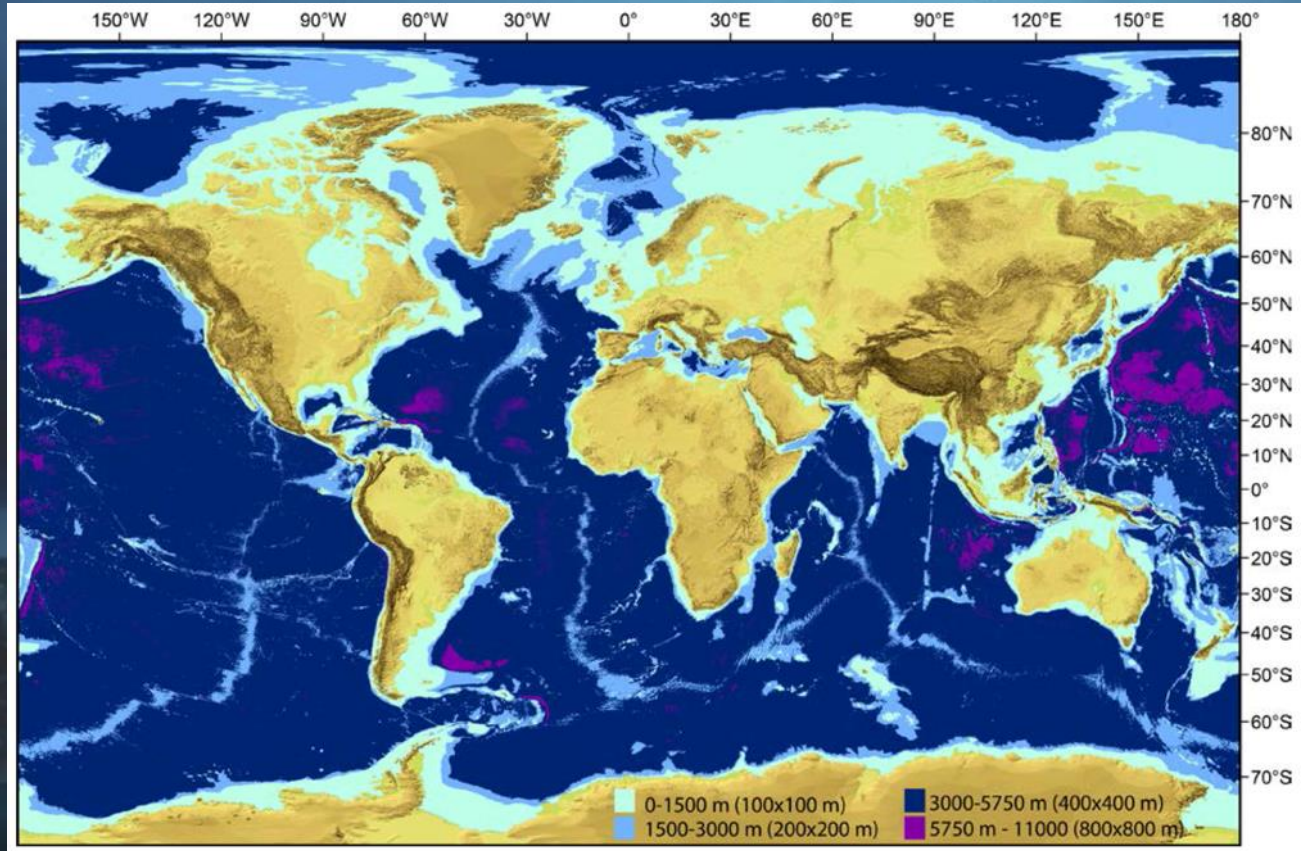
- Regional Centers (RDACCs)
 - Engage with stakeholders
 - Build upon existing efforts
 - Assemble regional products
 - Identify gaps
- Global Center (GDACC)
 - Assemble global products
 - Disseminate global products



Collaborate with existing data synthesis efforts



What does 100% mapped mean?



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



The screenshot shows the GEBCO website homepage. The header includes navigation links: Home, Data & Products, Seabed 2030, Training, News & Media, About, and Contact. Below the header is a banner with the GEBCO logo (General Bathymetric Chart of the Oceans) and the text: "GEBCO aims to provide the most authoritative, publicly available bathymetry data sets for the world's oceans." There are three buttons: "Download GEBCO's global grid", "Download polar grids", and "Contribute data". Below the banner are three featured sections: "Gridded Bathymetry Data" with a world map, "Data & Products" with a regional map, and "Seabed 2030" with a 3D seabed visualization. Each section has a "Read more" button.

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

IHO International Hydrographic Organization

General Bathymetric Chart of the Oceans

GEBCO aims to provide the most authoritative, publicly available bathymetry data sets for the world's oceans.

Download GEBCO's global grid Download polar grids Contribute data

Gridded Bathymetry Data

GEBCO's gridded bathymetric data sets are global terrain models for ocean and land. The grids are available to download or access through Web Map Services.

Read more

Data & Products

GEBCO produces and makes available a range of bathymetric data sets and products. This includes a global bathymetric grid; gazetteer of undersea feature names; a Web Map Service and printable maps of ocean bathymetry.

Read more

Seabed 2030

Seabed 2030 is a collaborative project between the Nippon Foundation and GEBCO. It aims to bring together all available bathymetric data to produce the definitive map of the world ocean floor by 2030 and make it available to all.

Read more

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

How to Access the GEBCO Grid



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 files 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)

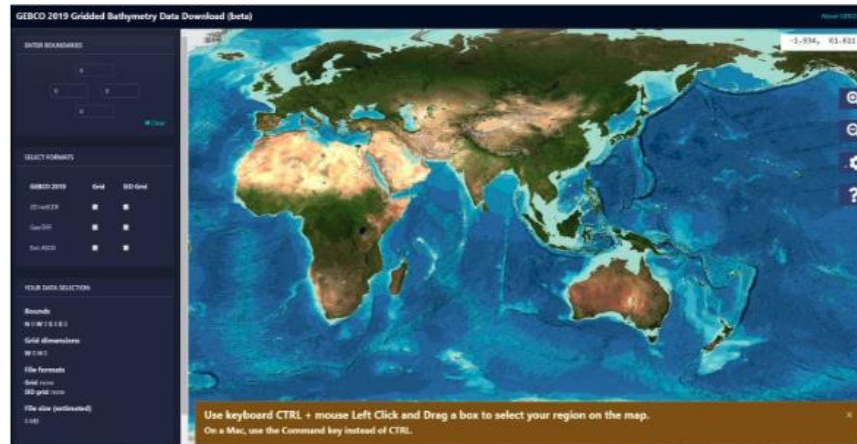
Jump to

- > [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

International
Hydrographic
Organization

International Hydrographic Organization
Organisation Hydrographique Internationale

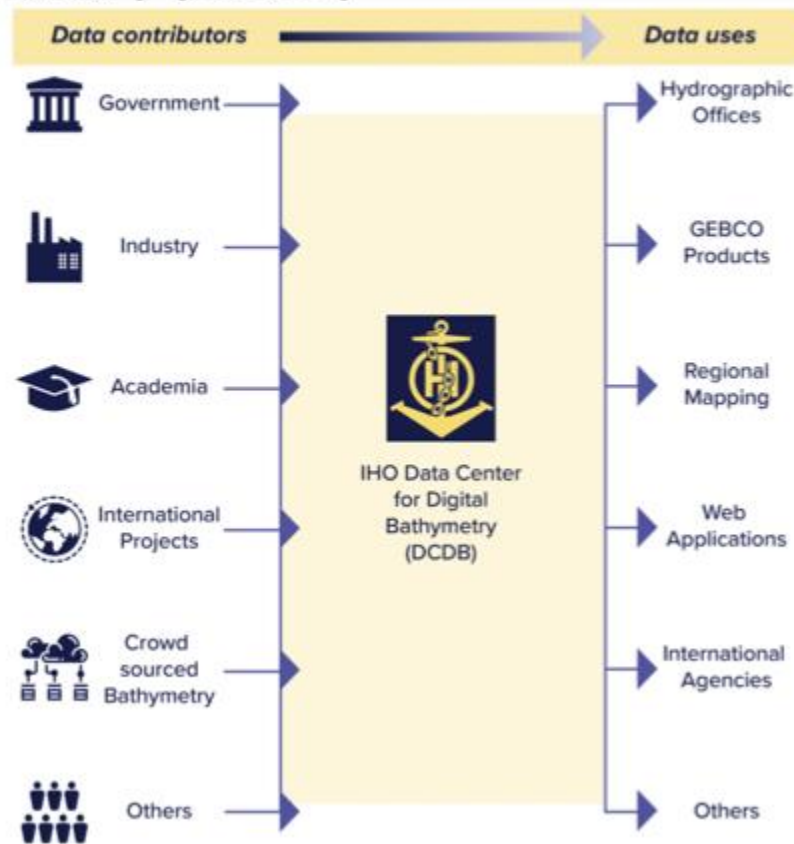


IHO Data Center for Digital Bathymetry (DCDB)

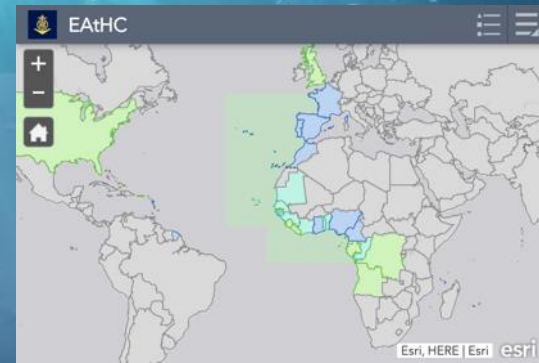
The IHO DCDB is the recognized IHO repository for all ocean bathymetric data.

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

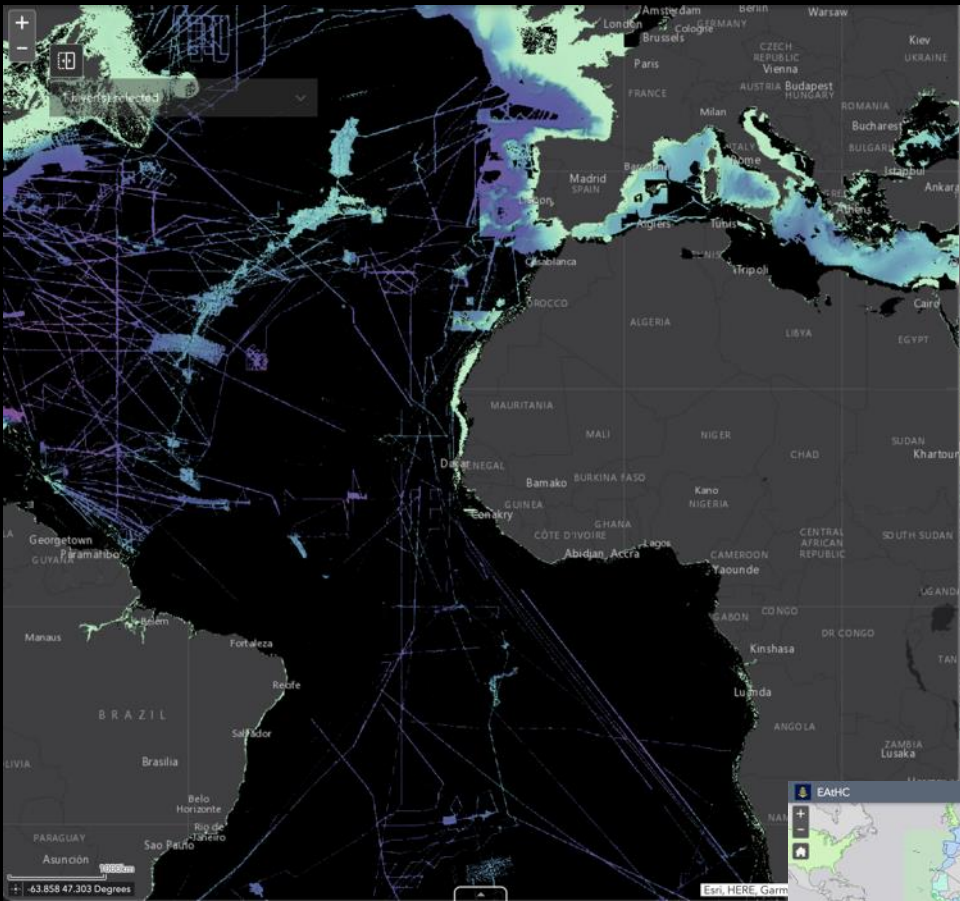
www.ngdc.noaa.gov/iho/
maps.ngdc.noaa.gov/viewers/iho_dcdb/



Status of Mapping: GEBCO 2021



GEBCO 2020



GEBCO 2021



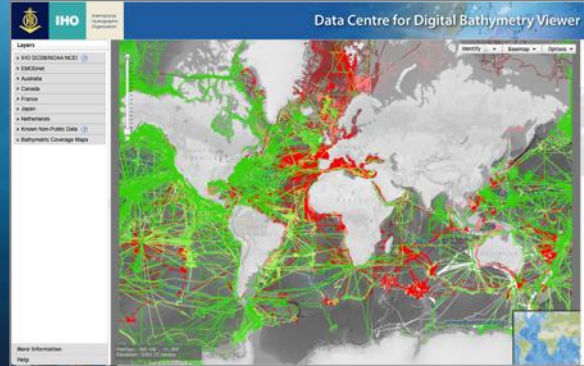
<https://bit.ly/3xyoJzi>

How much of the EAtHC region has been mapped?



**GEBCO 2021
Data Coverage**

+



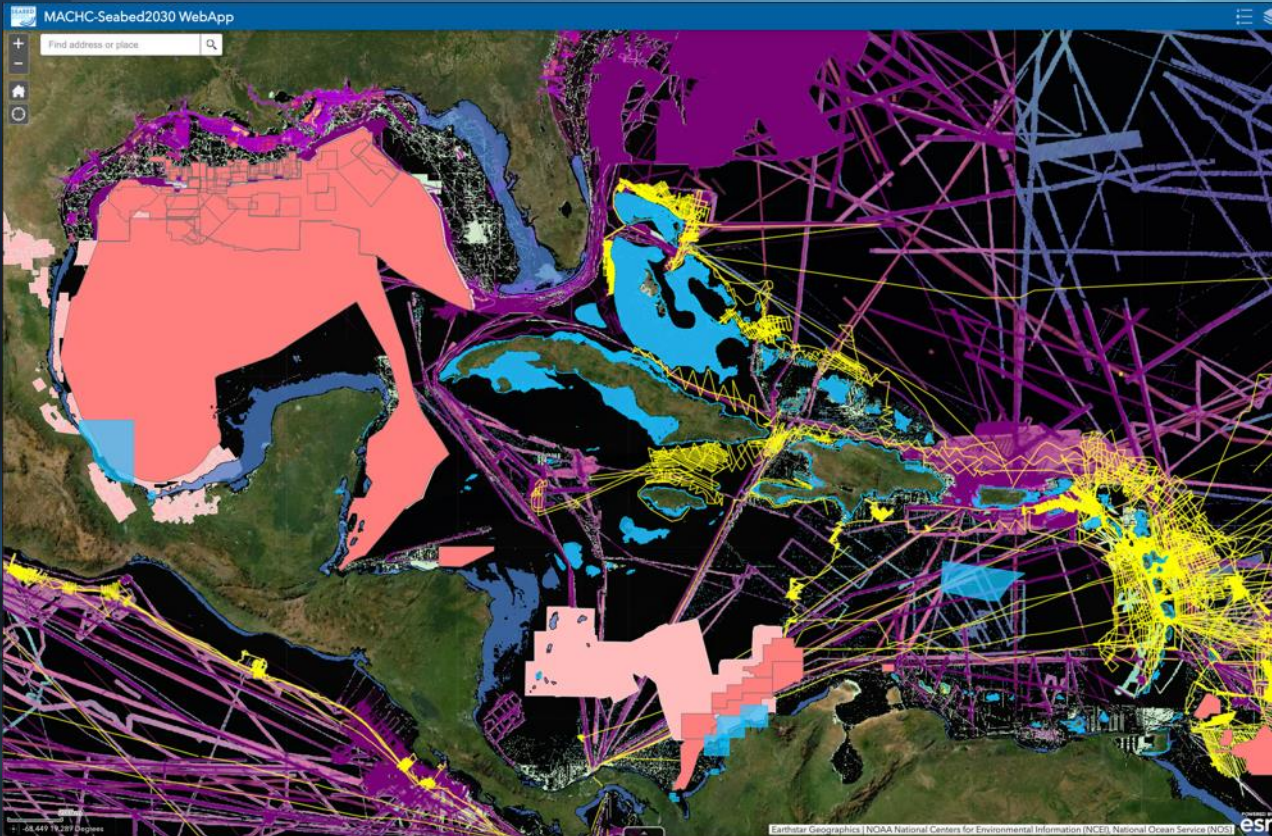
**Known existing data
not yet shared and/or
not yet integrated**

+

?

**Unknown
existing data
not yet shared**

Example Custom Web Application (MACHC)



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



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

