THE NIPPON FOUNDATION-GEBCO SEABED 2030

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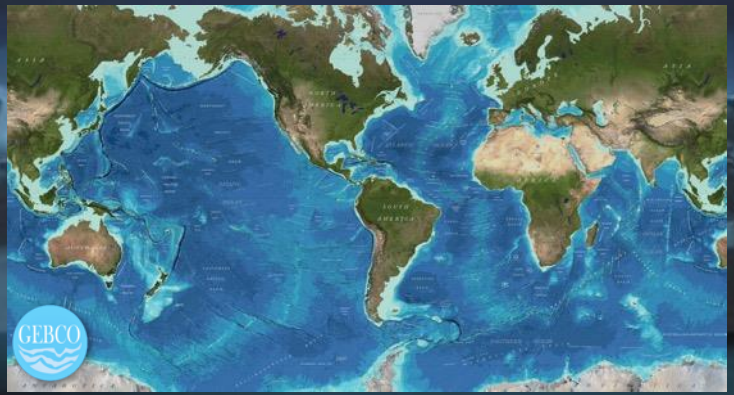
Southwest Atlantic Hydrographic Commission (SWAtHC) March 2023

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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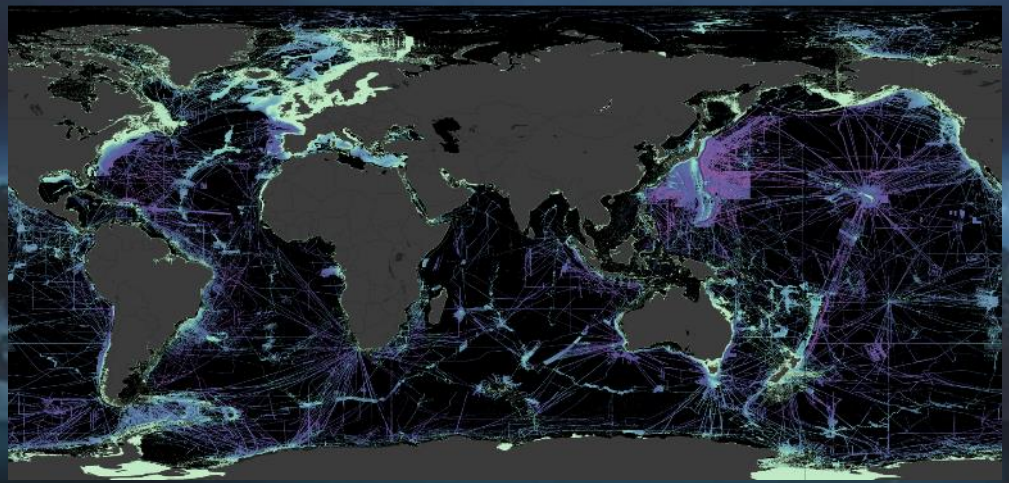
Why is Seabed 2030 Important?

- Bathymetry data is an essential ocean observation
- Seabed mapping data has broad use and value
- Ocean processes extend beyond territorial waters
- Only ~23% 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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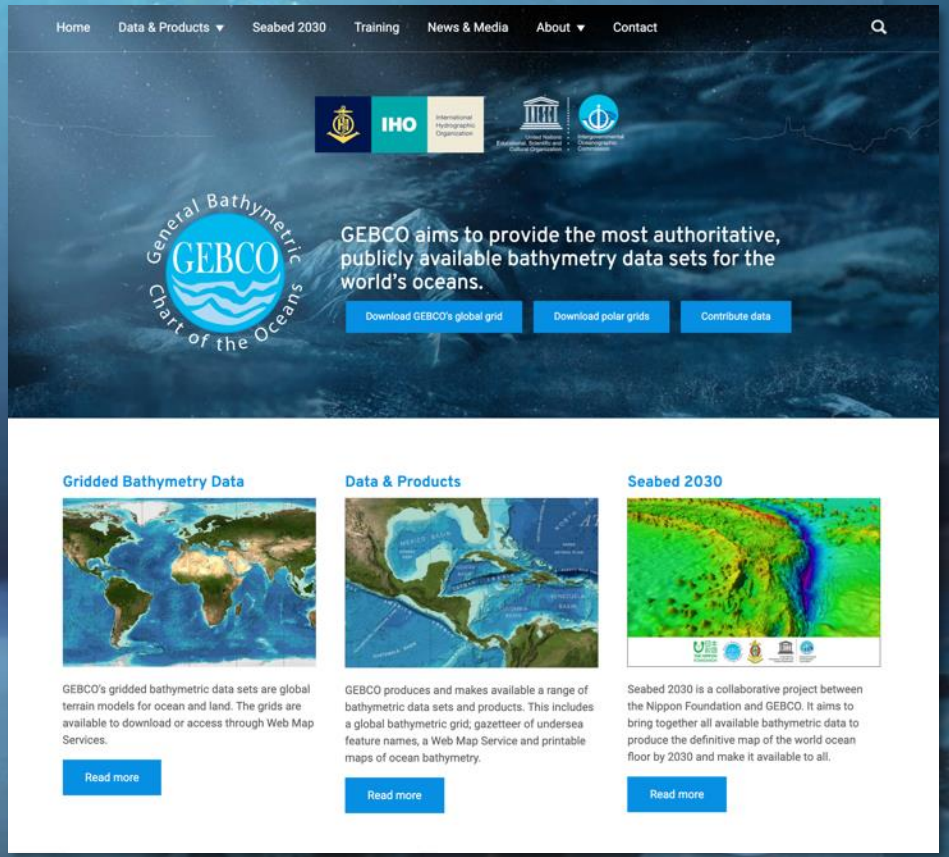
GEBCO Products

- Global gridded bathymetric data
  - ➢ 2014: 30 arc-second grid
  - ➢ 2019 - 2022: 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)

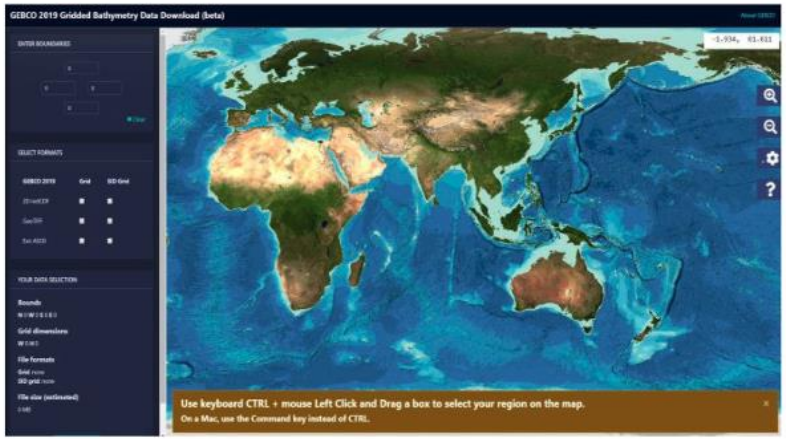
Jump to

- > 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

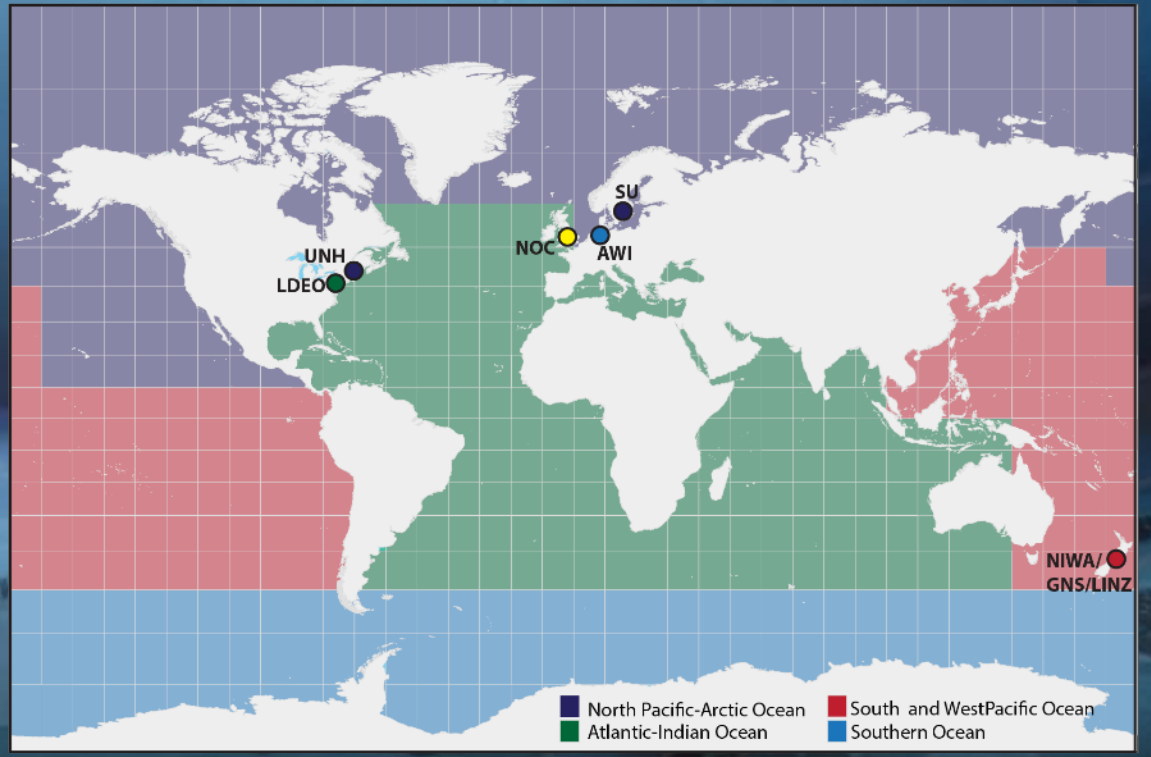
Use our application to select and download data in netCDF, Esri ASCII raster and data GeoTiff formats.



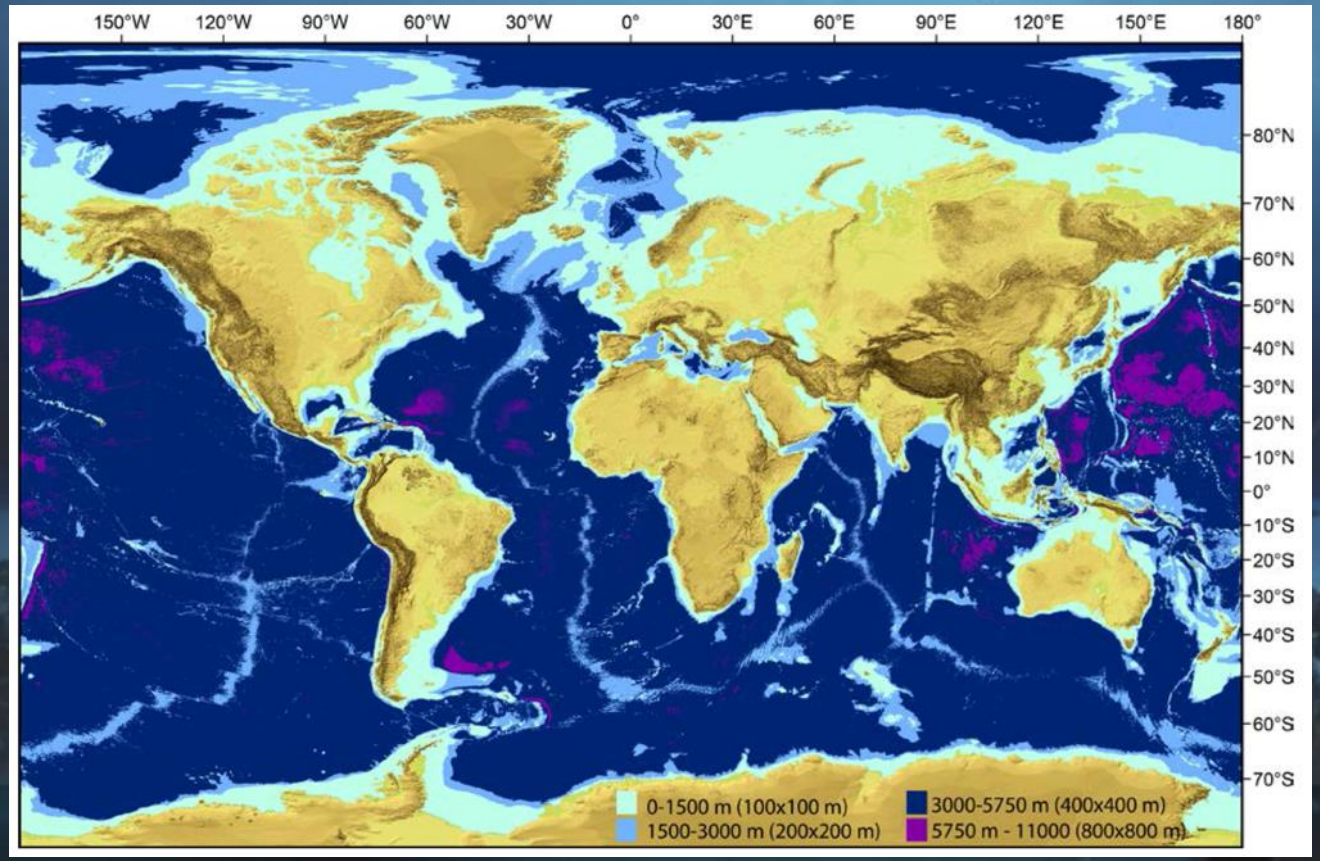
Download the GEBCO grid from: gebco.net or seabed2030.org

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



What does 100% mapped mean?



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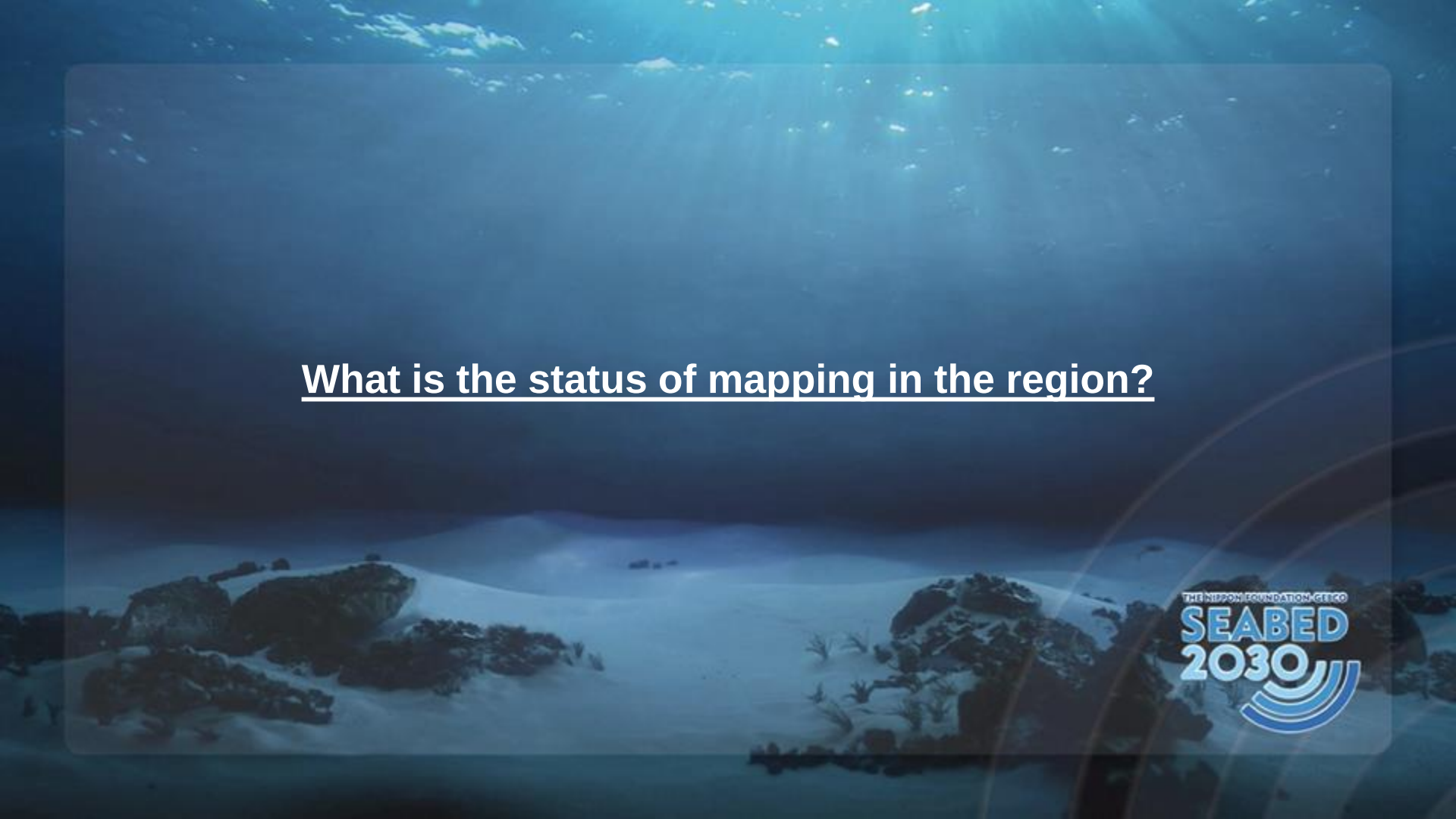
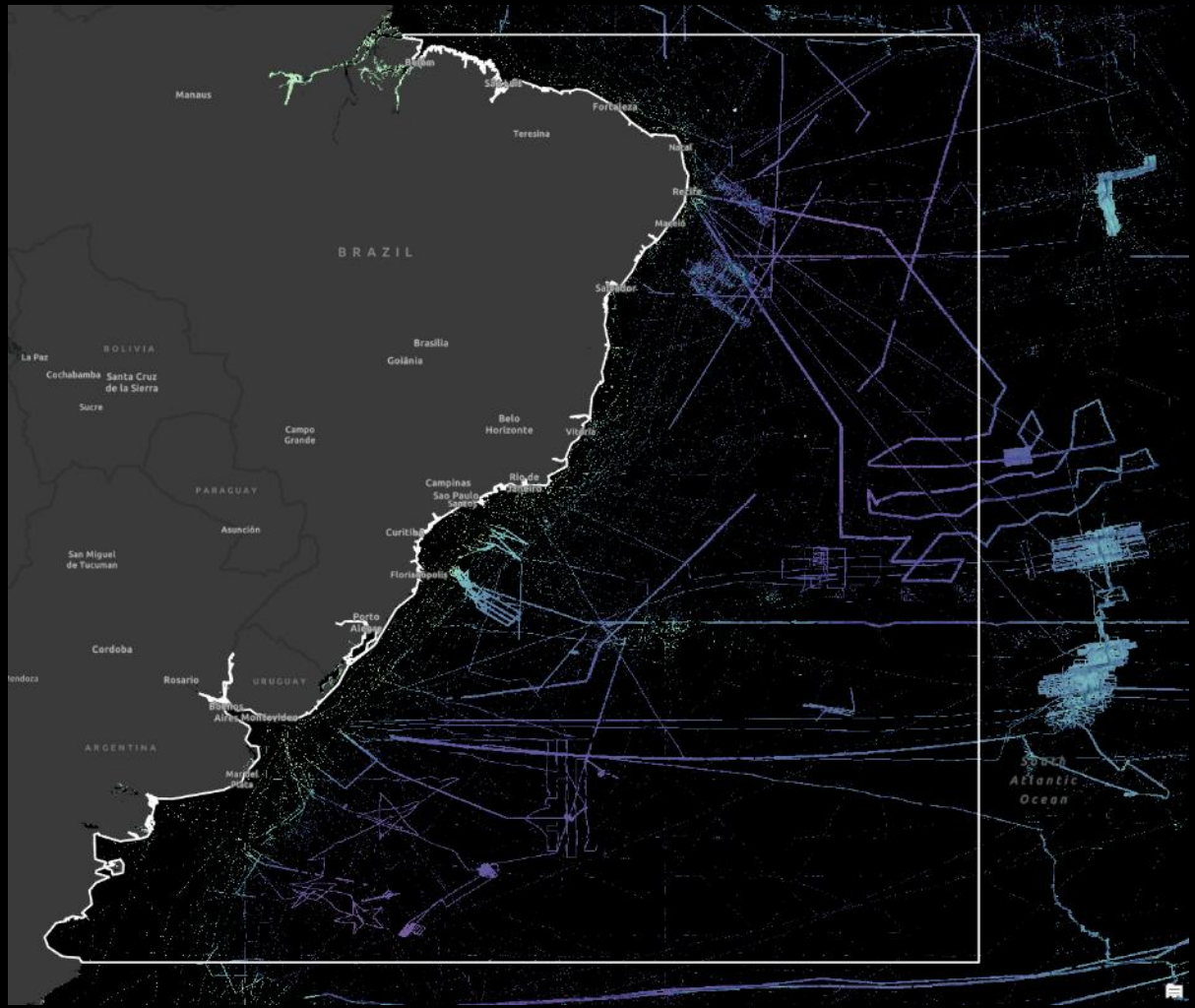

What is the status of mapping in the region?
THE NIPPON FOUNDATION-GEBCO
SEABED
2030

GEBCO 2014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Sucre
Campo Grande
Belo Horizonte
Vitória
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Santos
Asunción
Curitiba
San Miguel de Tucuman
Porto Alegre
Cordoba
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Montevideo
ARGENTINA
Mar del Plata
South Atlantic Ocean

GEBCO 2019

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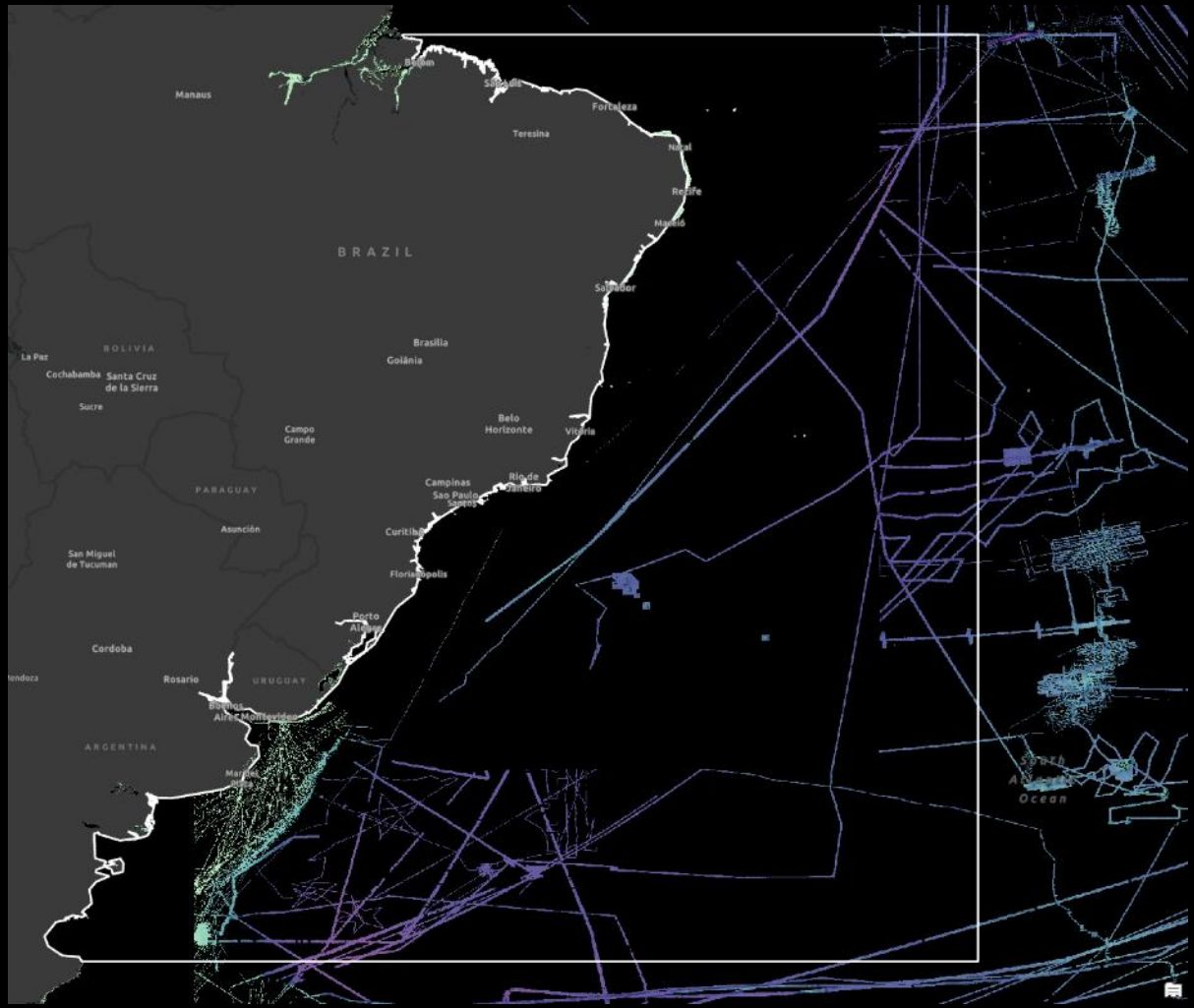
GEBCO 2020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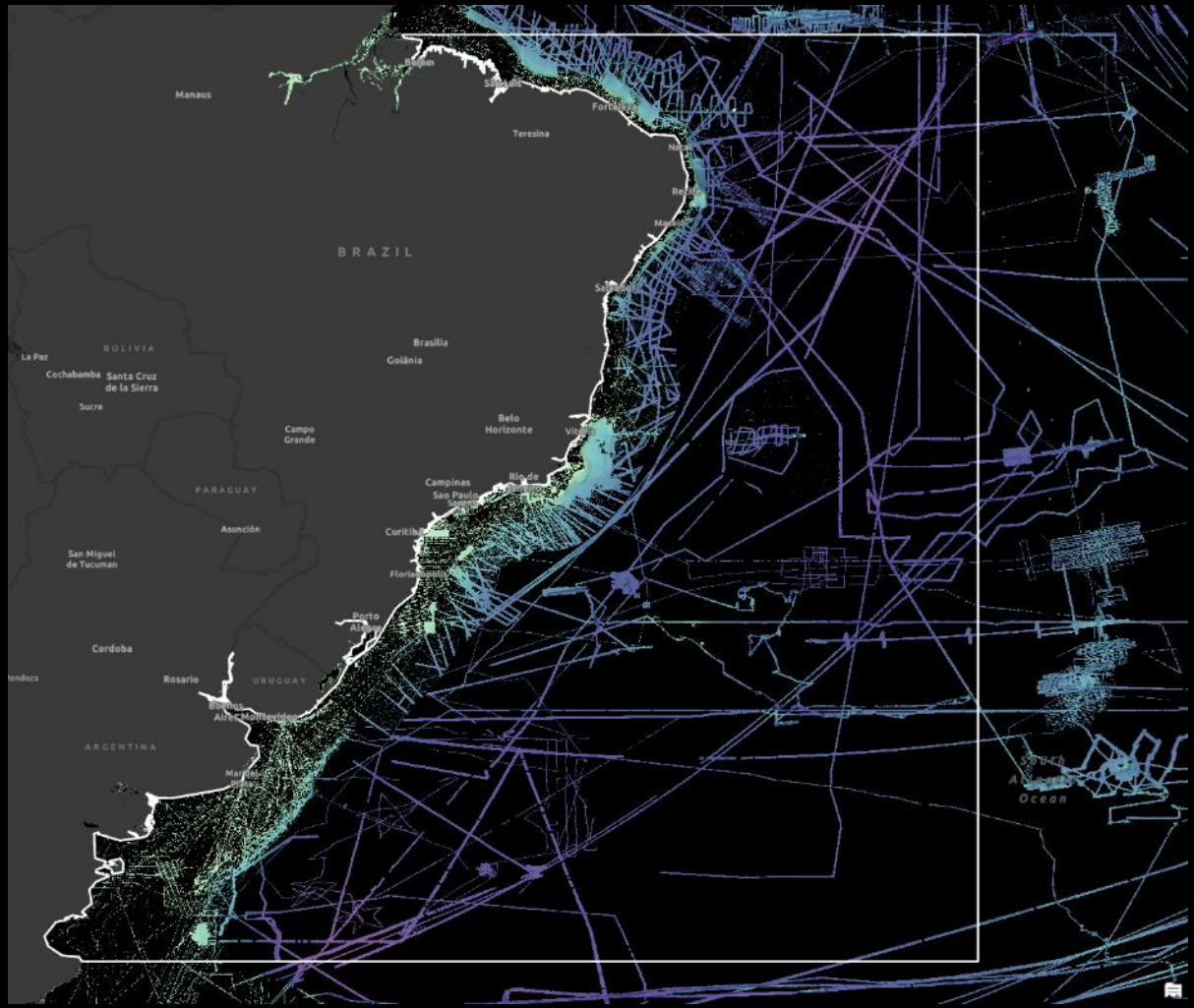
GEBCO 2021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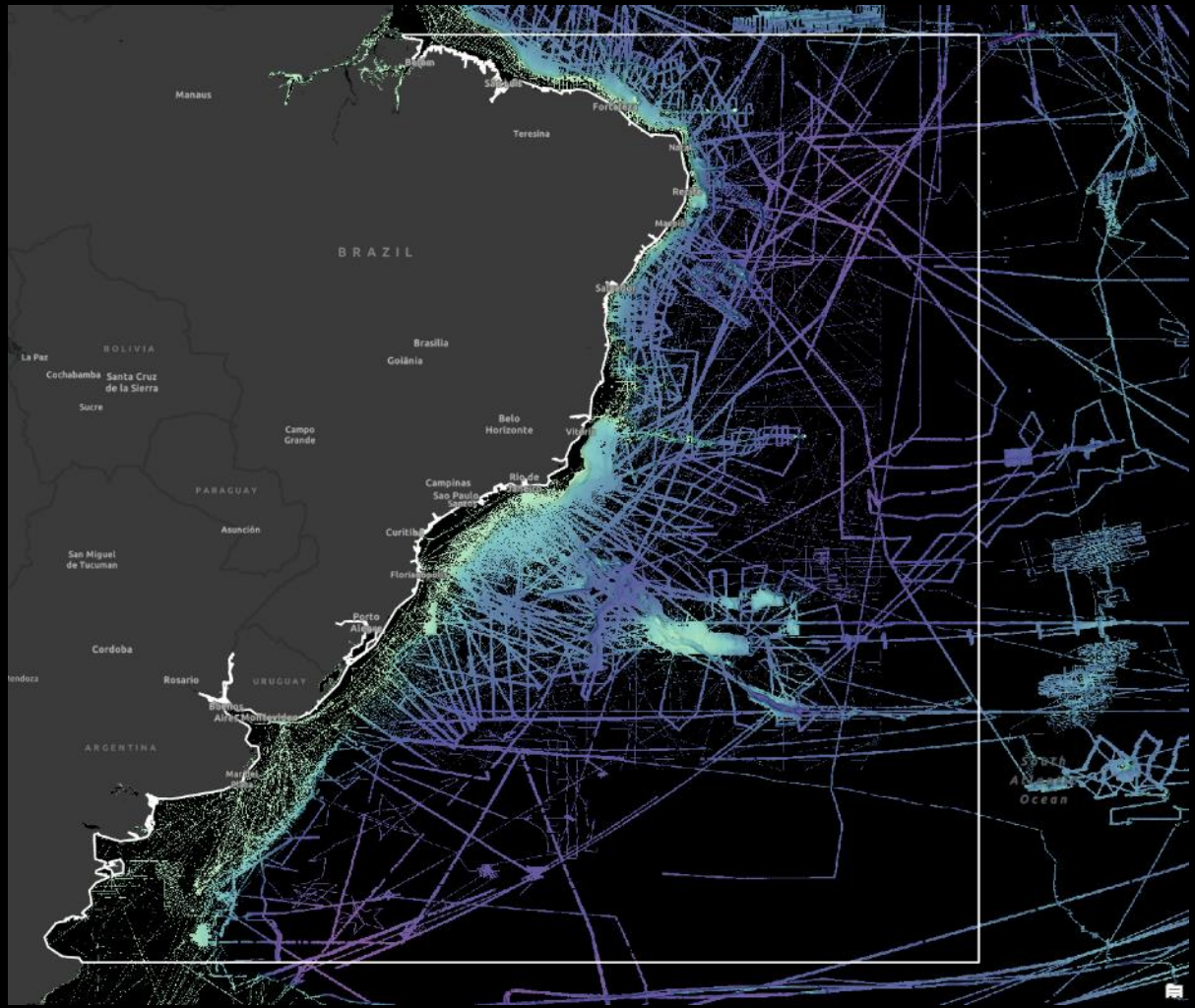
GEBCO 2022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Overview of Data in the SWAtHC region

- Multiple sectors
  - Government
  - Academia
  - Industry
- Multiple data types
  - ENC
  - Multibeam
  - Singlebeam
  - Seismic
- Curated data from 9 countries

THANK YOU TO ALL CONTRIBUTORS!

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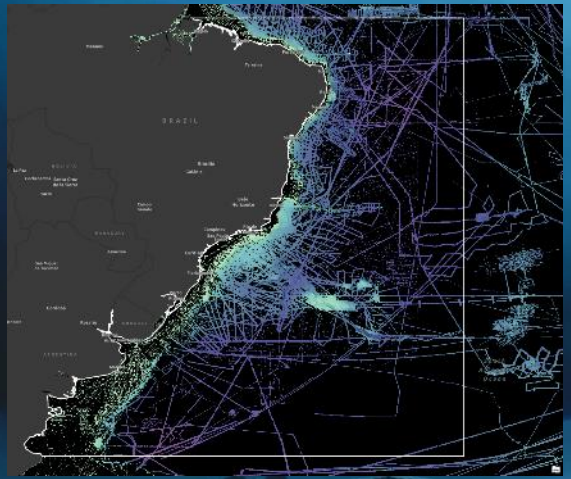
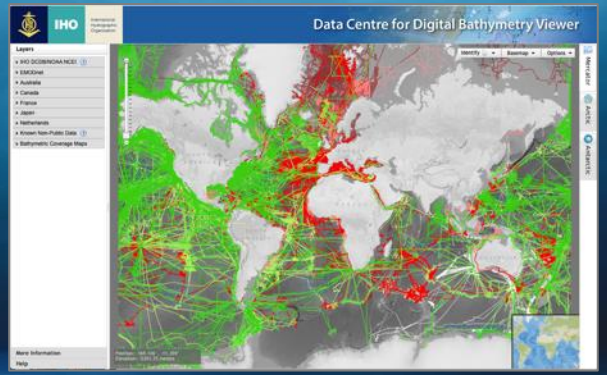
How much of the SWAtHC region has been mapped?



GEBCO 2022
Data Coverage

+



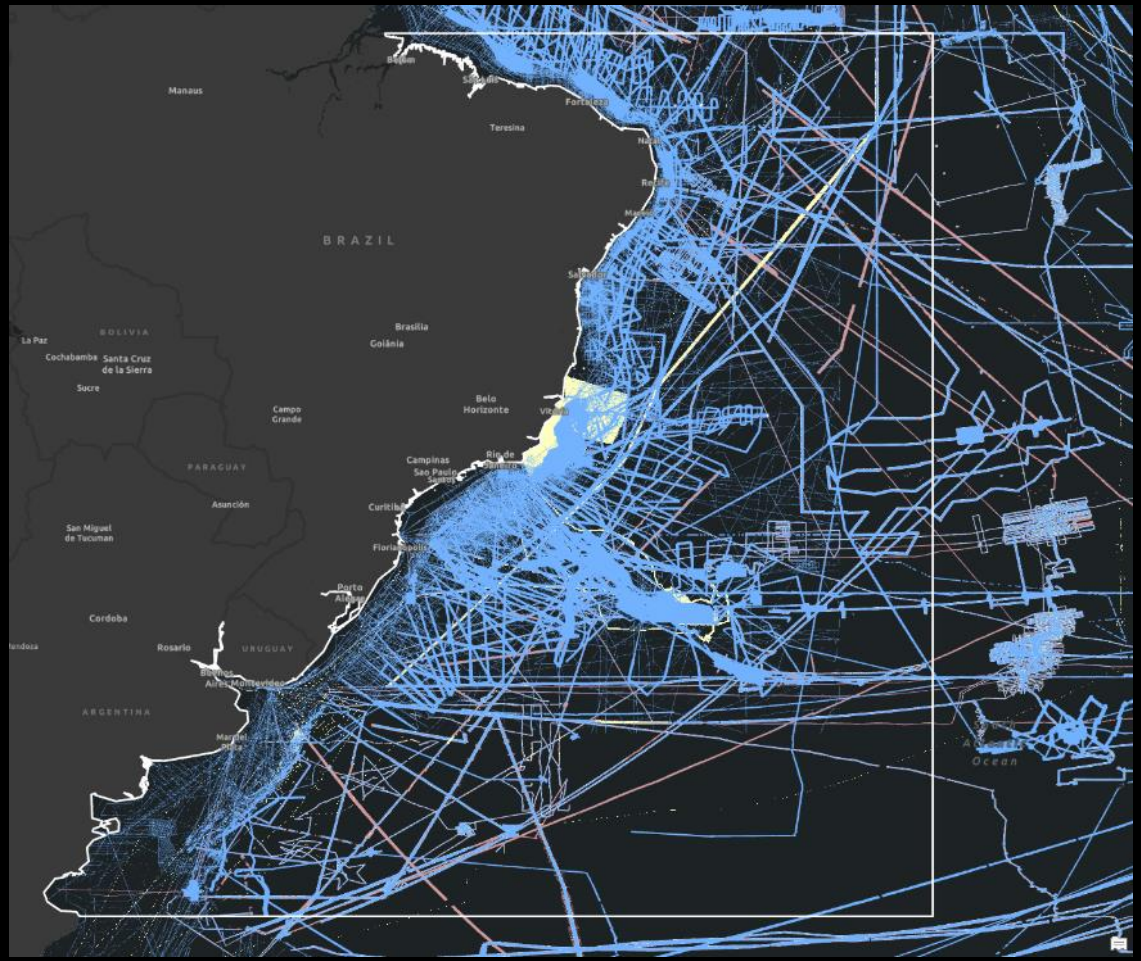
Known existing data
not yet shared and/or
not yet integrated

+ ?

Unknown
existing data
not yet shared

GEBCO 2020: 10.4% mapped
GEBCO 2021: 21.9% mapped
GEBCO 2022: 22.6% mapped

GEBCO 2022 plus newly contributed data



Ongoing Need for Data Contributions

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

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https://www.gebco.net/about_us/contributing_data/

How to Contribute Data

https://www.gebco.net/about_us/contributing_data/

GEBCO Data Contribution Form

GEBCO's aim is to provide the most authoritative, publicly-available bathymetry of the world's oceans. It operates under the joint auspices of the International Hydrographic Organization (IHO) and the Intergovernmental Oceanographic Commission (IOC) (of UNESCO). GEBCO is continually working to improve its data products and gratefully acknowledges all data contributions to help map the gaps.

Seabed 2030 is a collaborative project between The Nippon Foundation and GEBCO 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.

PRIVACY NOTICE:
Your email contact will only be used by the GEBCO and the Seabed 2030 Team to contact you about the data sets of which you have made us aware. We will take all reasonable precautions to protect your personal data from loss, misuse, or alteration. We will not forward or sell on your email contact to 3rd parties.

Accelerating Toward 2030:

- Technical Innovation
  - Data acquisition
  - Data synthesis & integration
- Collaboration
  - Leverage efforts to work toward common goals
  - Share knowledge, data, approaches, workflows, and tools
  - Prioritization for mapping campaigns

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Thank you!

atlantic-indian@seabed2030.org

www.seabed2030.org