# EMODnet Bathymetry

https://emodnet-bathymetry.eu/

Who are we ?

- Hydrographic offices

- Research institutes

- Small and medium size enterprises

EMODnet Bathymetry's philosophy

- Allow european member states to comply with INSPIRE's Directive and FAIR principles on the bathymetric theme

- Expose existing bathymetric data

- Generate synthetic products covering most of users' needs

- Preserve the data provider at the center of the process (with respect to national jurisdiction national security, data policy, …) with a focus on filiation of the source of the information and its quality
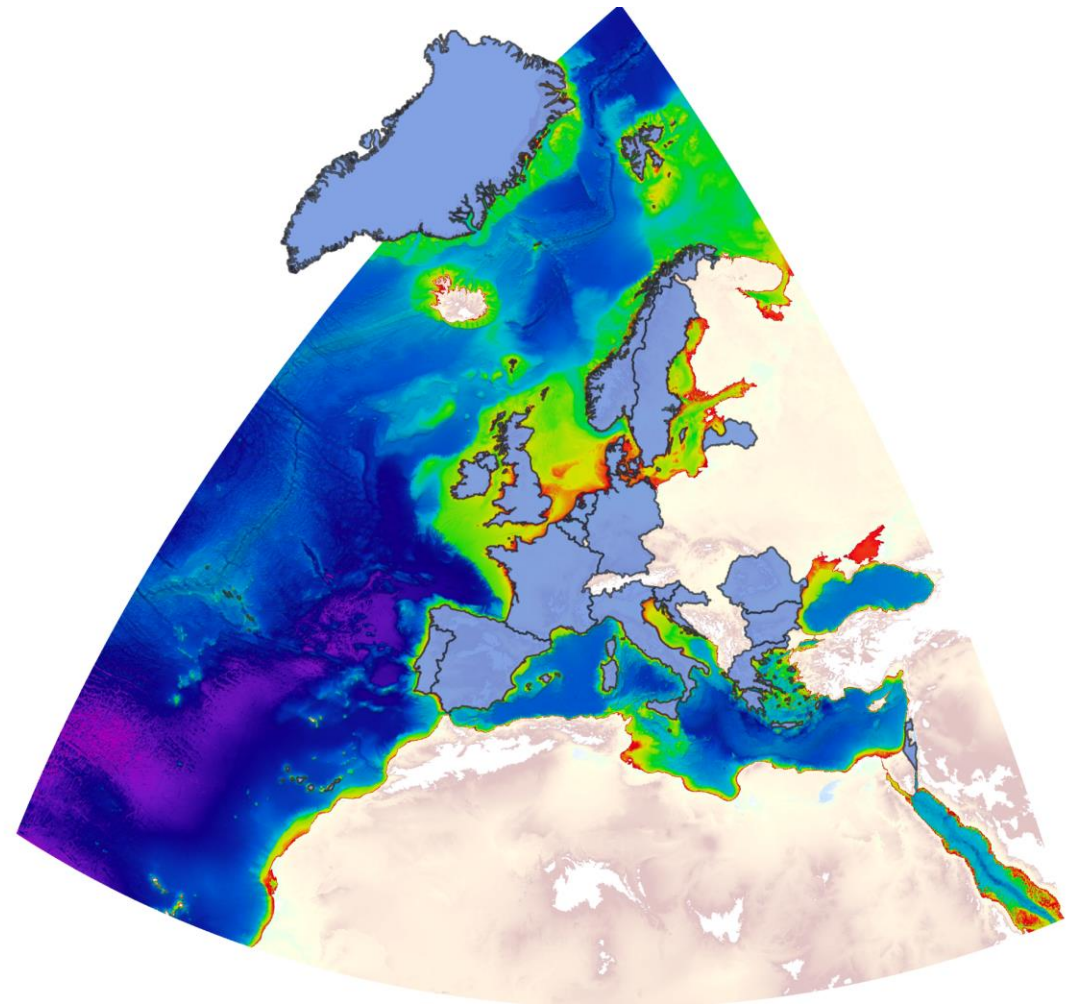
Bathymetric metadata

- Each polygon/poly-line shows the bathymetric coverage/location

- Associated Metadata (INSPIRE compatible, ISO 19115- based upon an unified and agreed thesaurus – BODC held)

- Source data held by the data provider, who decide how to provide its dataset to the final user

EMODnet Bathymetry DTM

- 1/16 arc-minute (approx. 100m)
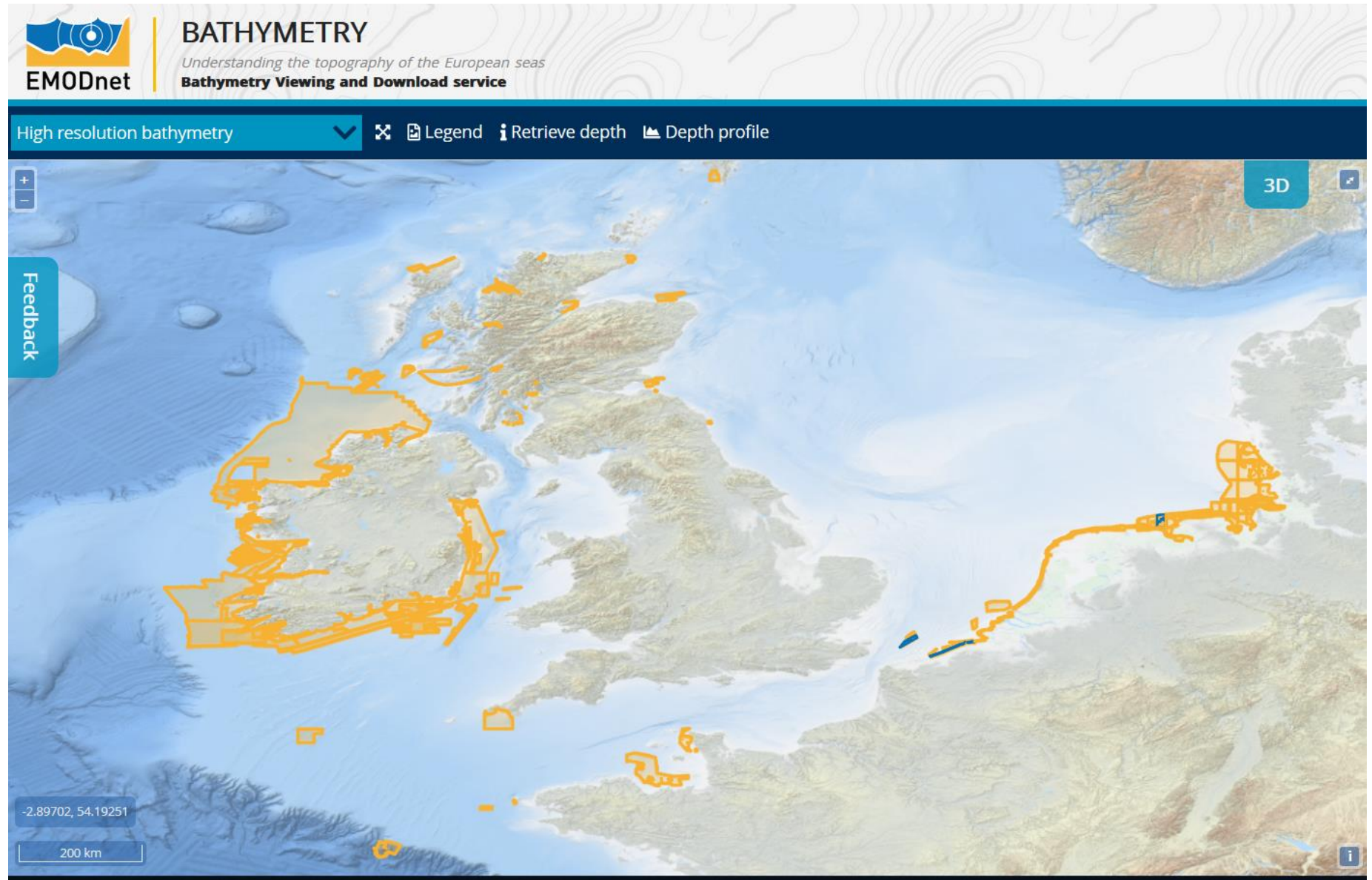- Built from data from partners (HO, Oceanographic centers, private partners)
- DOI, free of charge, free to use
- Available at MSL and LAT

A shared methodology

GLOBAL WORFLOW
Input of a dataset in EMODNET bathymetry DTM

HR DTM

- > 200 High resolution DTM (resolution up to the m)

HR DTM

BATHYMETRY
Understanding the topography of the European seas
Bathymetry Viewing and Download service
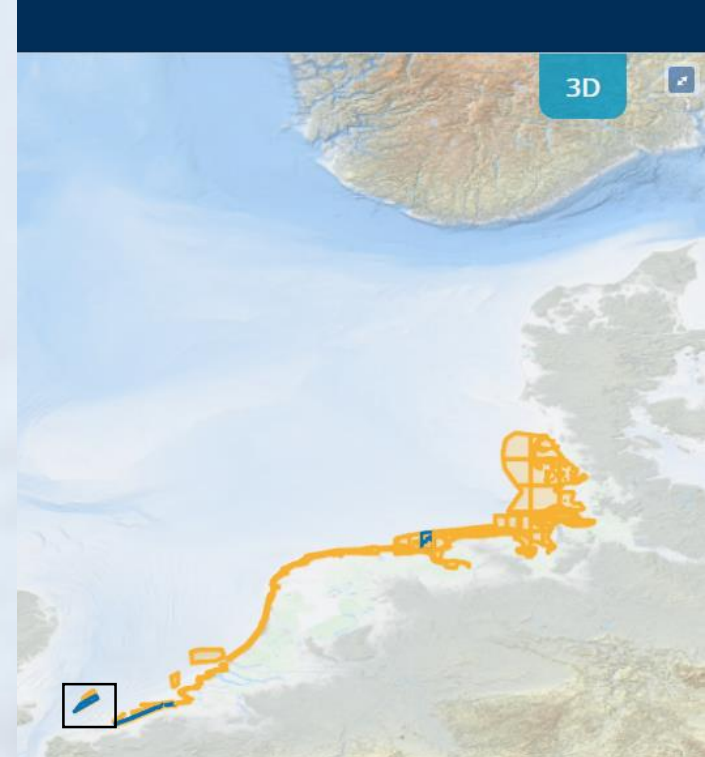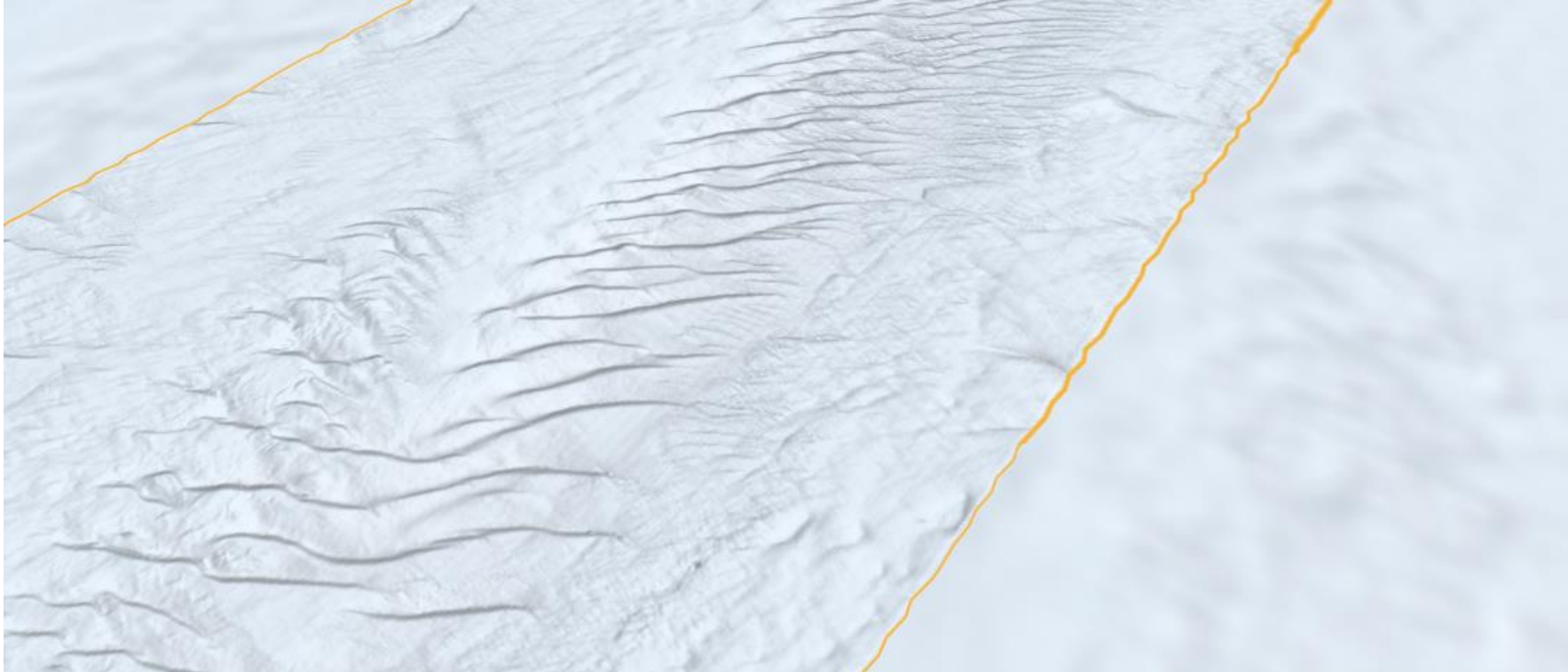
EMODnet

- > 200 High resolution DTM (resolution up to the m)

EMODnet

Use of the Quality layer

Our collaboration with GEBCO Seabed 2030

The Network of Centers

IHO — International Hydrographic Organization
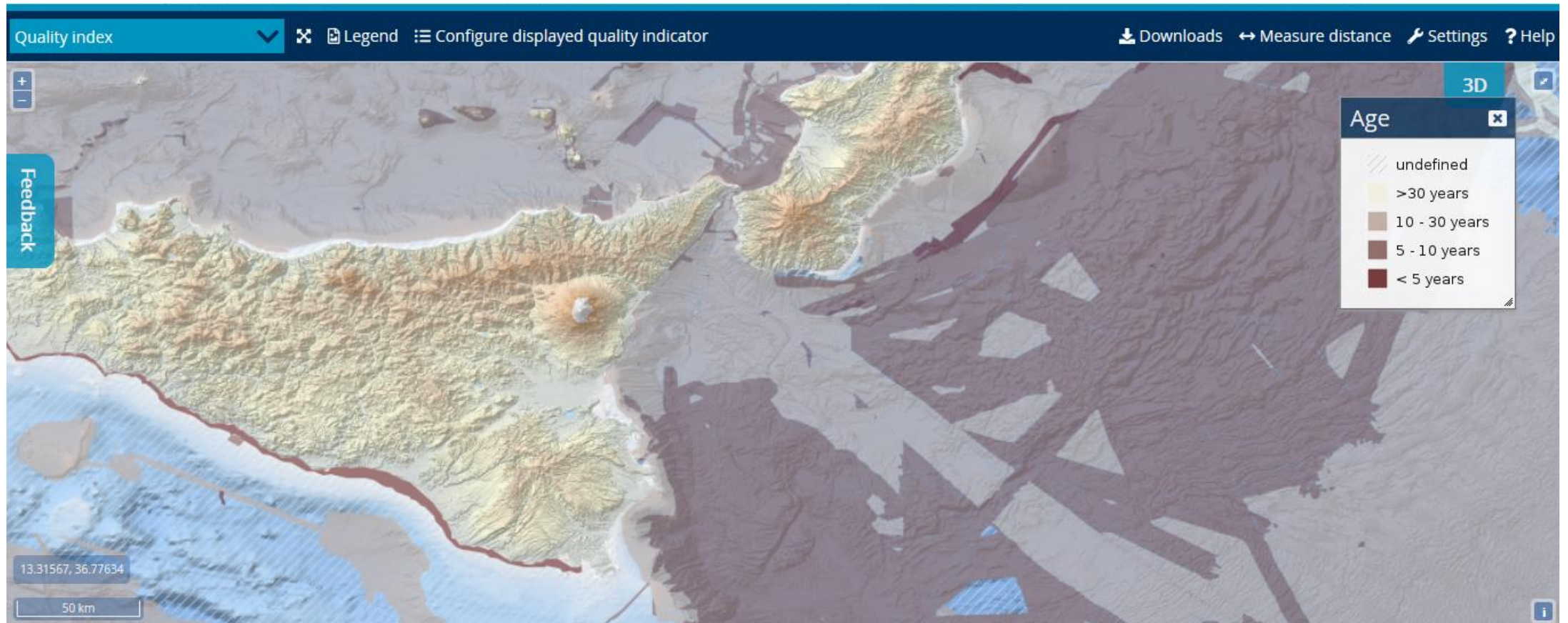
Data Centre for Digital Bathymetry Viewer

Layers

- ▶ IHO DCDB/NOAA NCEI ?
- ▼ EMODnet
  - ☑ EMODnet Multibeam Surveys ?
    - ☐ MAREANO Multibeam Surveys ?
    - ☐ MAREANO Multibeam Shaded Relief ?
  - ☐ EMODnet Single-Beam Surveys ?
  - ☐ MAREANO Single-Beam Surveys ?
  - ☐ EMODnet Digital Terrain Model (DTM) ?
- ▶ Australia
- ▶ Canada
- ▶ France
- ▶ Japan
- ▶ Netherlands
- ▶ Known Non-Public Data ?
- ▶ Bathymetric Coverage Maps

More Information

Help

Identify ▼ | Basemap ▼ | Options ▼

Position: -0.352°, 53.661°
Elevation: 16.9586 meters

Our collaboration with GEBCO Seabed 2030

The Network of Centers
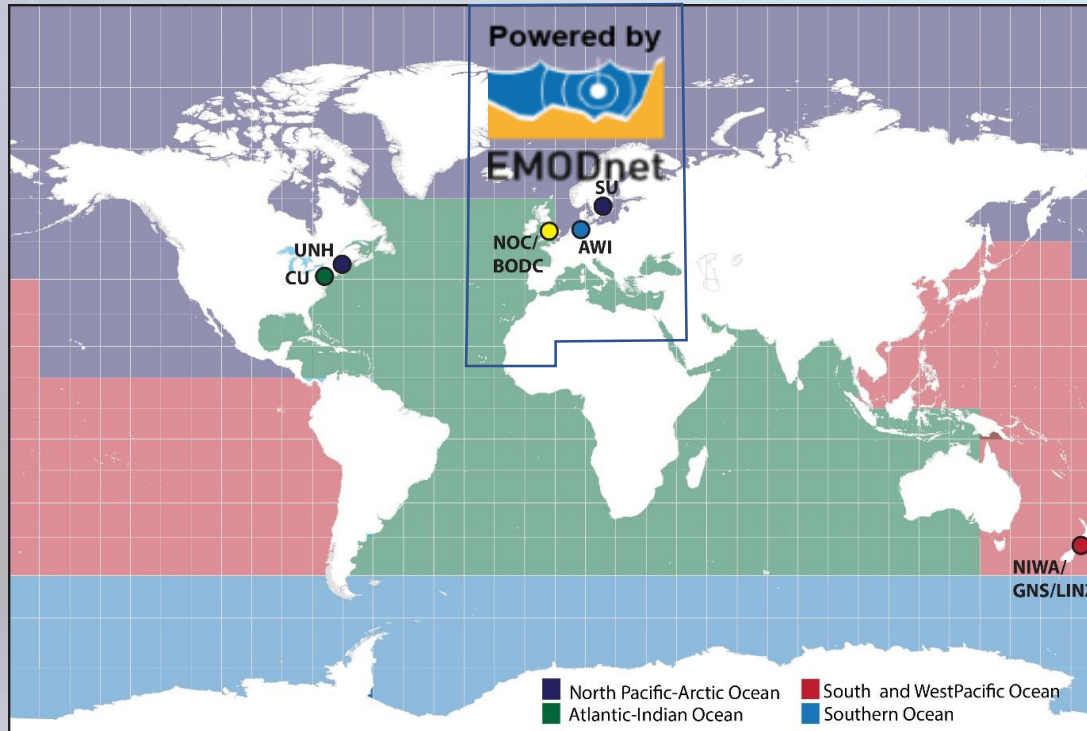
North Pacific –Arctic Ocean
Stockholm University & University of New Hampshire
(**SU** & **UNH**)

Southern Ocean
Alfred-Wegener-Institut (**AWI**)

Atlantic-Indian Ocean
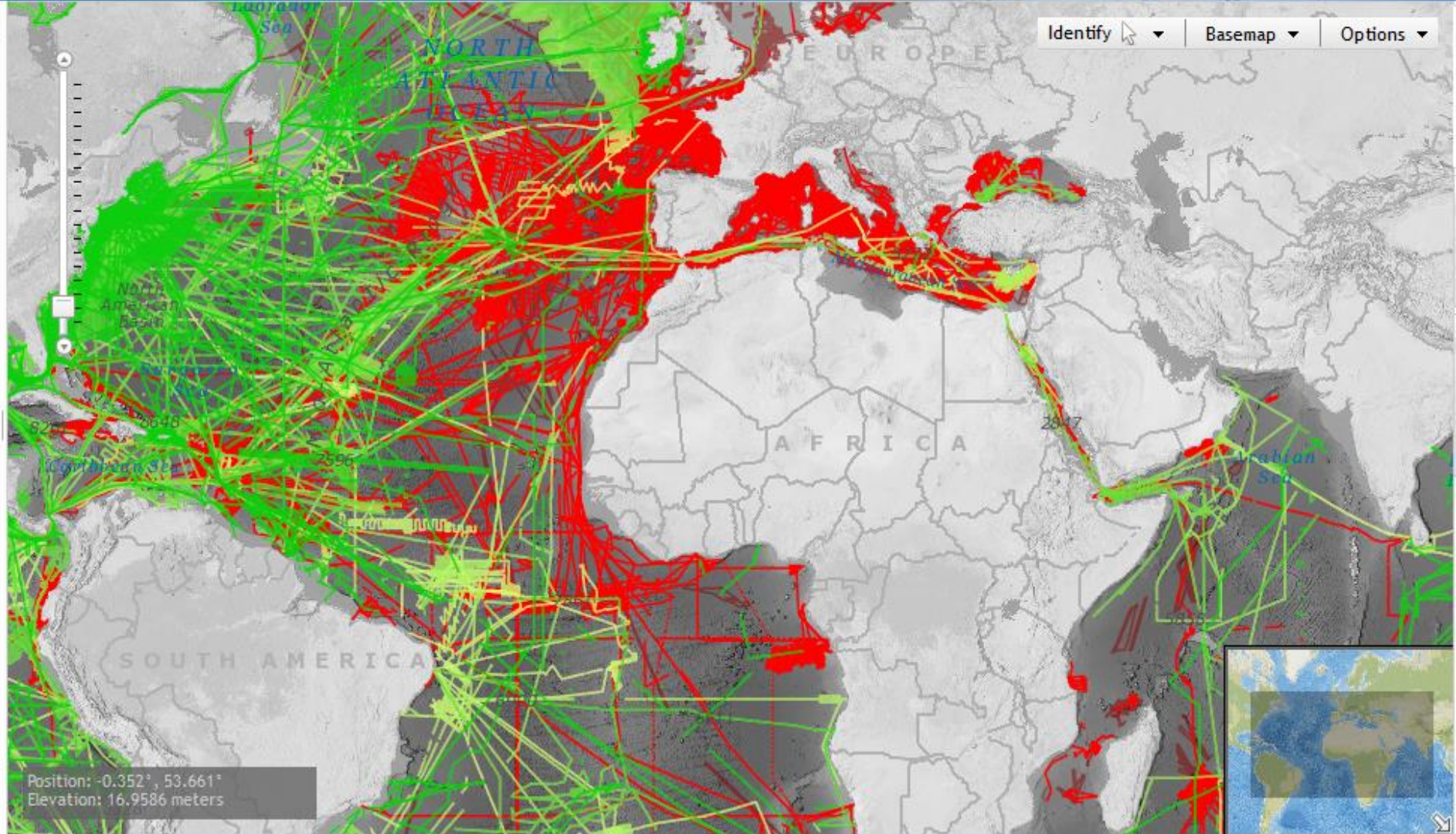Lamont-Doherty Earth Observatory,
Columbia University (**CU**)

South-West Pacific Ocean
National Institute of Water & Atmospheric Research (**NIWA**)
Land Information New Zealand (**LINZ**)
GNS Science (**GNS**)

Global Center
British Oceanographic Data Centre,
National Oceanography Centre (**NOC/BODC**)

Map legend:
- North Pacific-Arctic Ocean
- Atlantic-Indian Ocean
- South and WestPacific Ocean
- Southern Ocean

THE NIPPON FOUNDATION-GEBCO
SEABED 2030

Our driver: the usage of the bathymetric information

Cummulative dowload (DTM tiles and High resolution products)
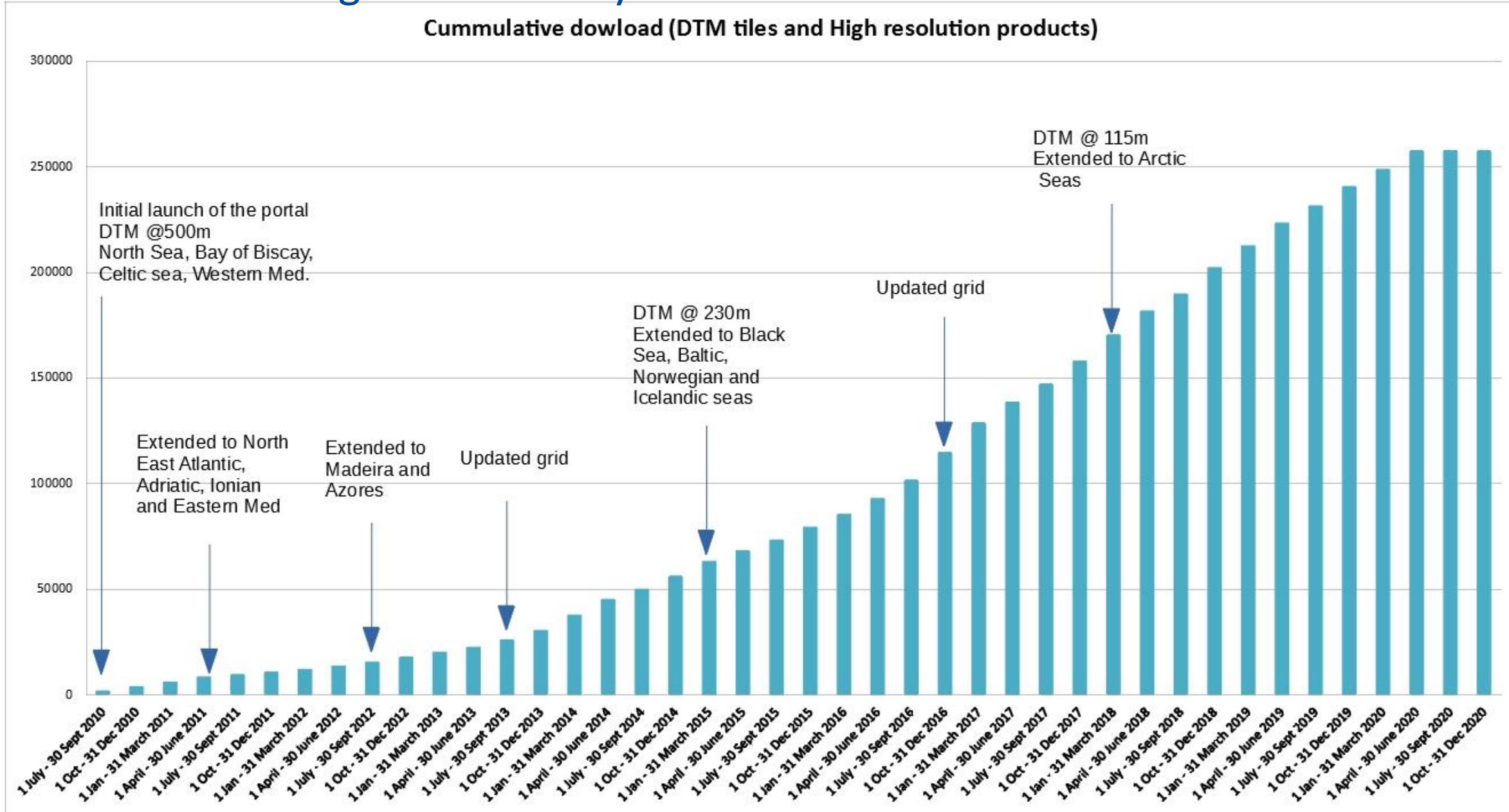
EMODnet Bathymetry's future

- **Update full DTM (end 2022)**

- Improve High-resolution DTMs

- Improve quality assessment of our DTM product

- **New area of interest: "European overseas territories" : Caribbean seas**

- Further facilitate the collaboration between all the actors through automation of services (e.g. integration of information from EMODnet Ingestion) and collaborative virtual environment for the analysis of our production (DTM).

- Efforts in tide modelling (LAT -> MSL shift)

- **Pursue effort in evaluating "new technologies" to fill data gaps / quality assessment (SDB, Altimetry, IceSat-2)**

- **Unifying all portals EMODnet thematic portals into a unique data portal. Foundation for the "Digital Twin of the Ocean"**

- Further collaborate at the international level (DCDB, GEBCO, Seabed 2030)

EMODnet