

Oceanographic Data Management Platforms

Part II: Data formats and EU Aggregators

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UNIVERSITY OF LISBON
INTERDISCIPLINARY STUDIES
ON SUSTAINABLE ENVIRONMENT AND SEAS

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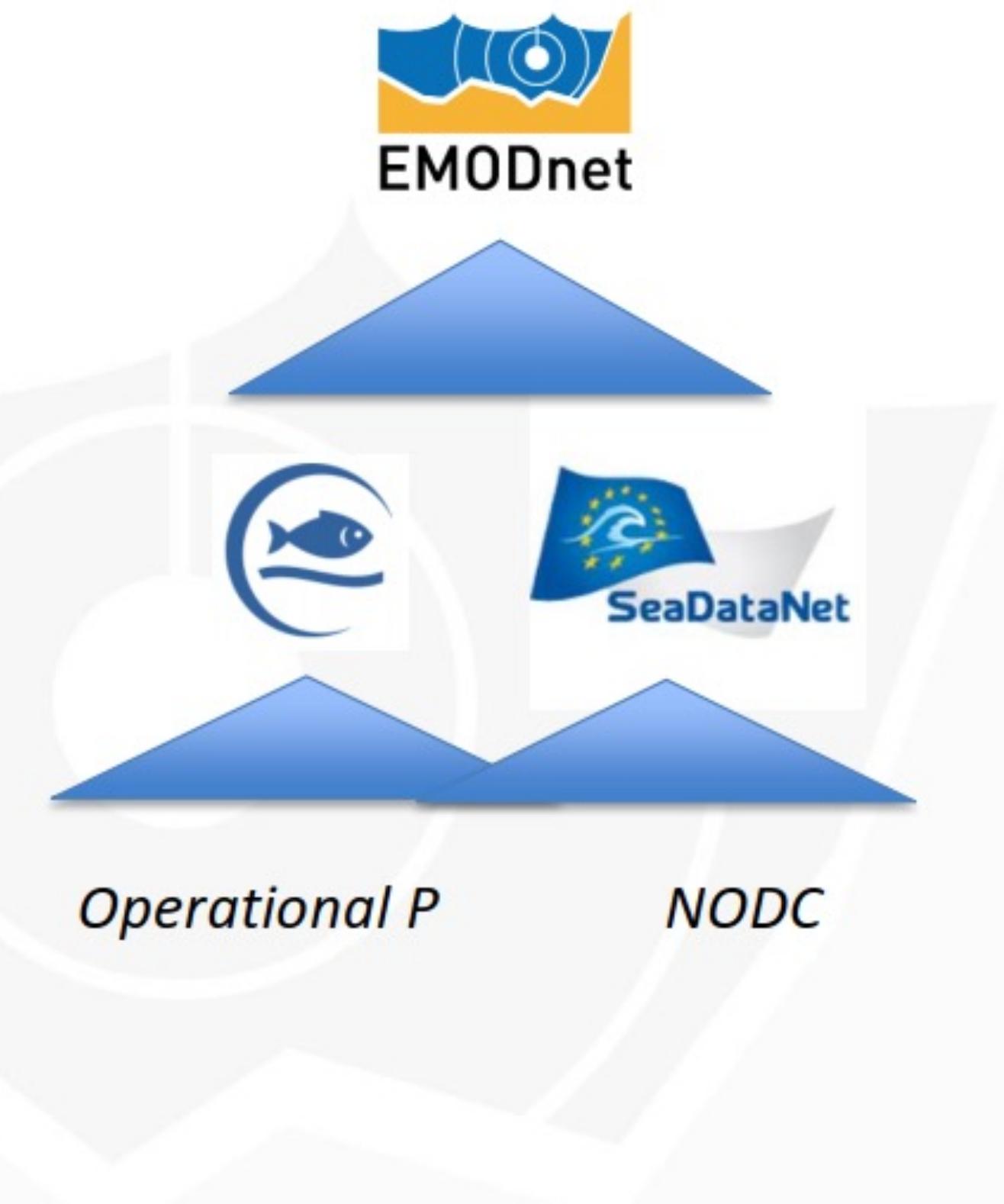


EMODnet

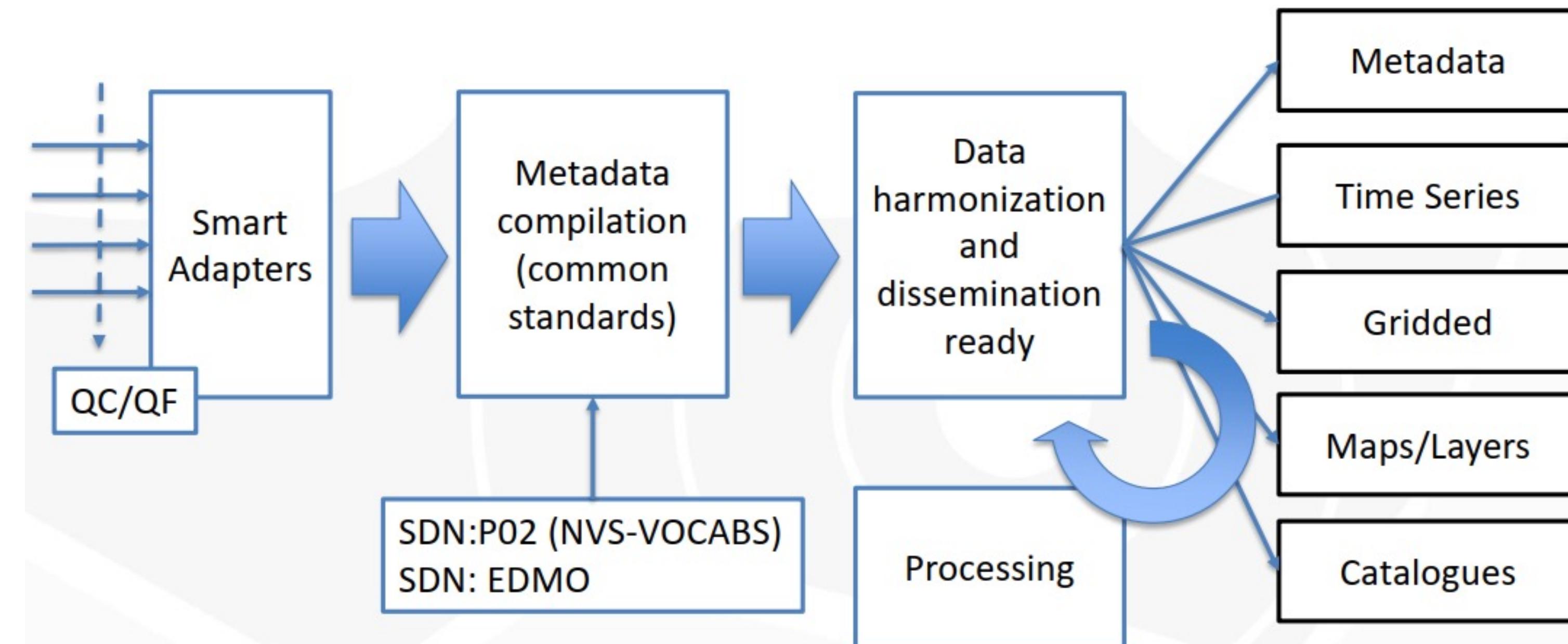
 European Marine
Observation and
Data Network

Data Sources

- **SeaDataNet and NODCs**
- **CMEMS INSTAC**
- ICES
- PSMSL,
- GLOSS,
- SONEL,
- IOC SL
- PANGAEA
- GDAC (Coriolis)
- OCEAN SITES, ARGO
- OSPAR, HELCOM, ACCOBAMS
- JCOMMOPS (metadata)
- EU HFR node, OceanGliders,
- SOOS, IOOS, IMOS, IAPB, DBCP,
- ...

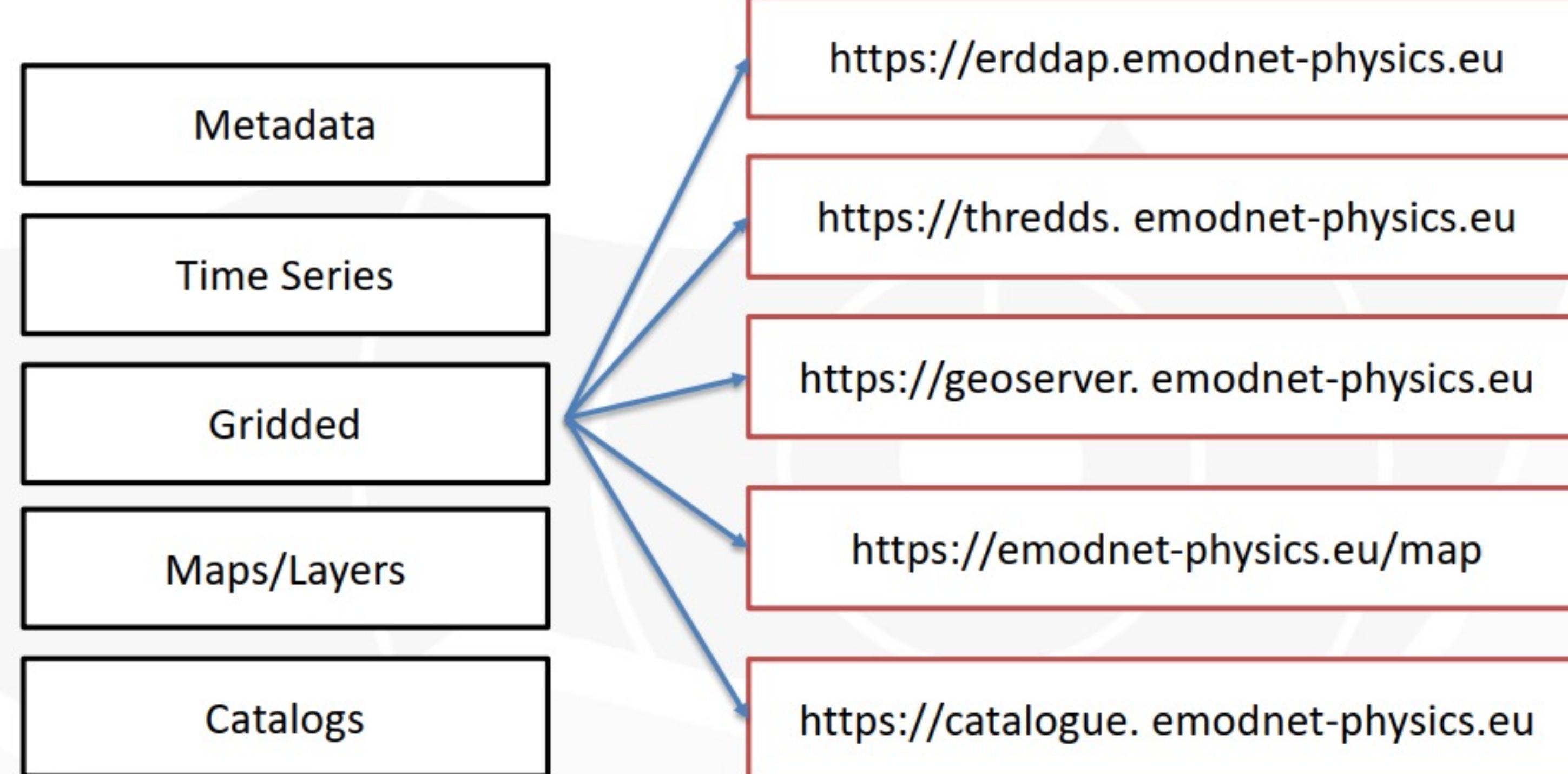


From input to products



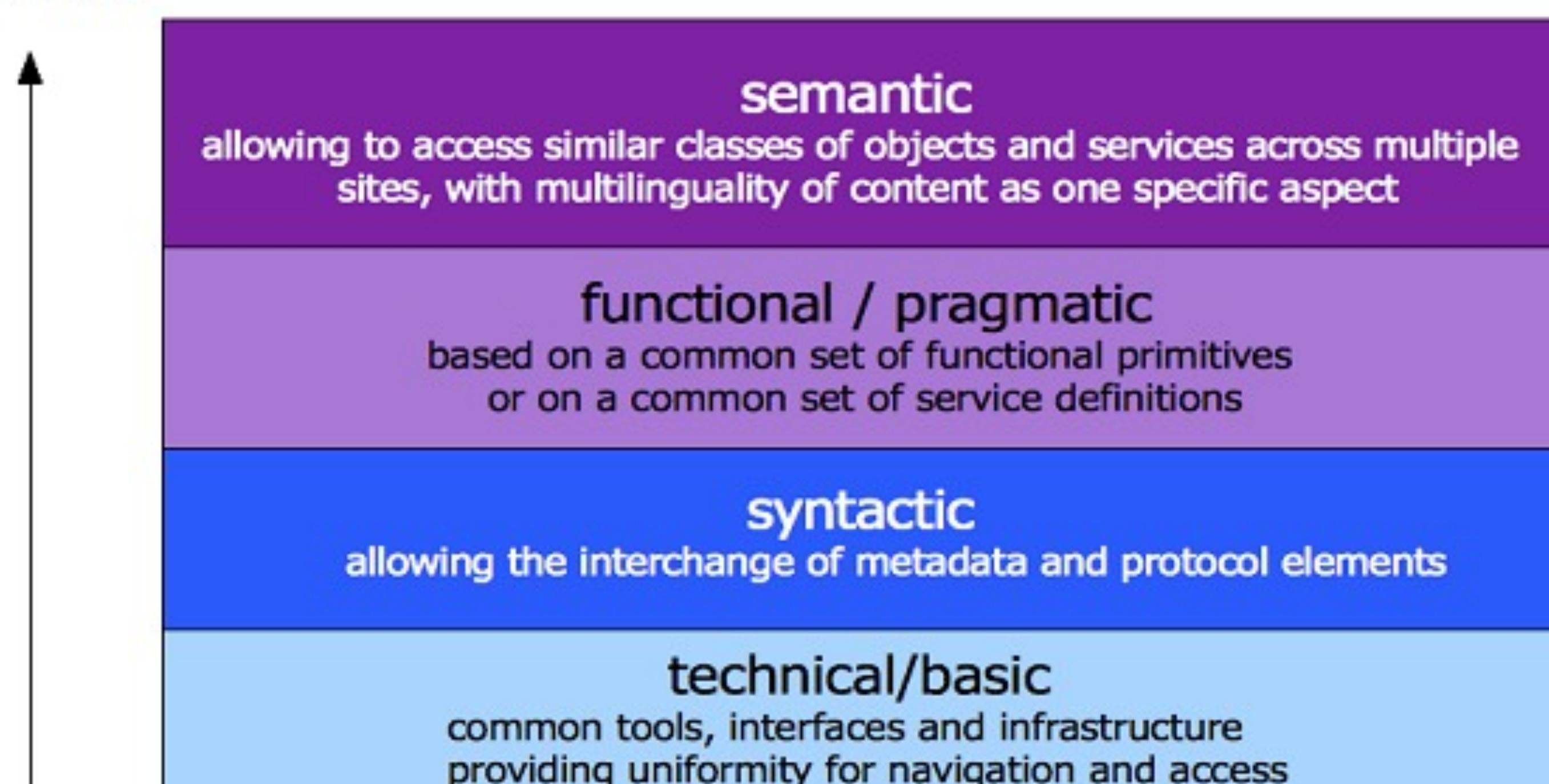
QC/QF are semi-automatic or done by experts
according the age of the data, es. NRT flow: is semi-automatic
HV: experts from SDN do apply a multi-level QC/QF

Discovery and access services



“Interoperability – ability of two and more systems or components to exchange information and to use information that has been exchanged”

Abstract



Concrete

Different formats for:

- **Data:** NetCDF, CSV
- **Metadata:** CF, SeaDataNet, OceanSites
- **Services:** WMS, WFS, SOS, THREDD
- **Catalogue:** CW-S

Aligned with

- CMEMS, SeaDataNet & EMODnet
- Inspire

Developing under **MyCoast** umbrella



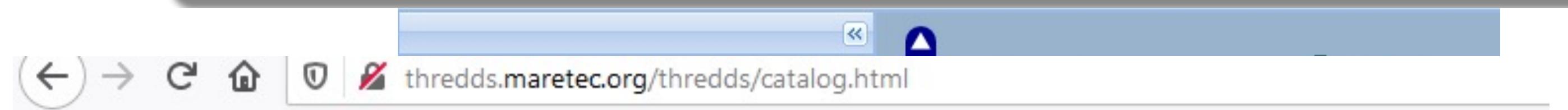
Raia Catalog <http://thredds.marnaraia.org/thredds/catalog.html>

Dataset

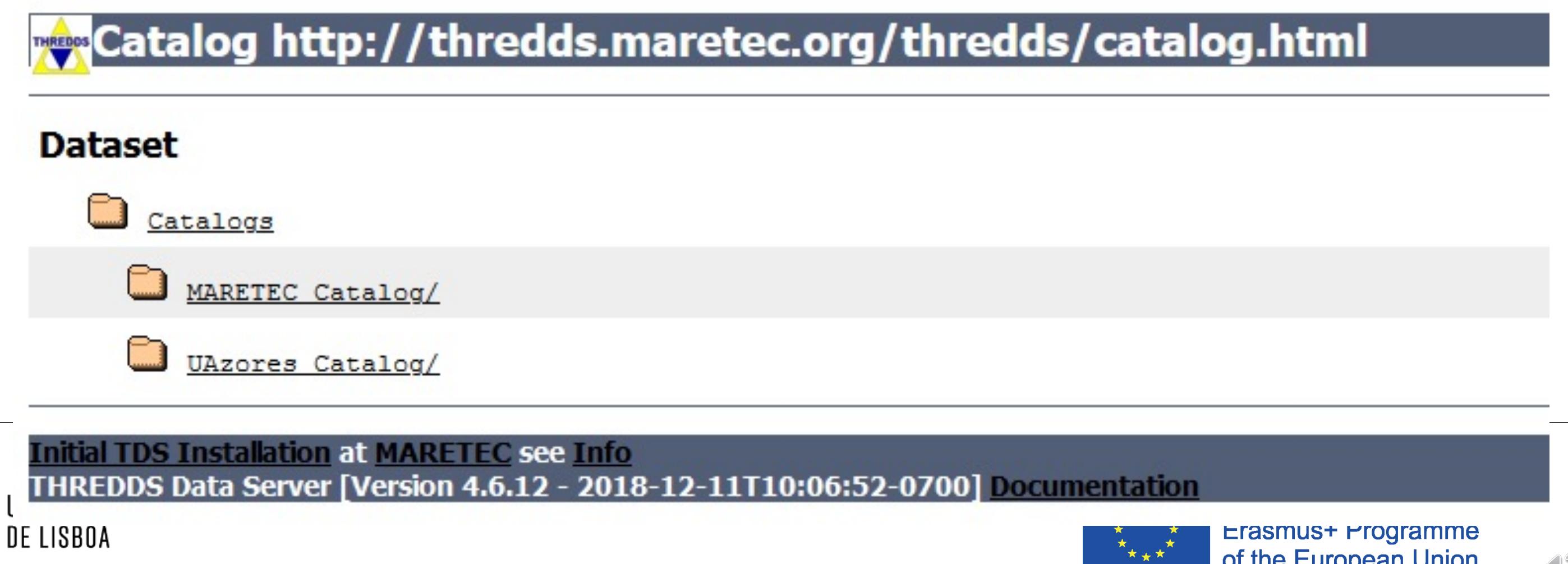
- RAIA Thredds
- METEOGALICIA
- Thredds MeteoGalicia/
- INTECMAR
- Thredds INTECMAR/
- IEO
- Thredds Instituto Español Oceanografia/
- UA
- Thredds Universidade de Aveiro/

Size Last Modified

RAIA TDS at RAIA see [Info](#)
THREDDS Data Server [Version 4.6.11 - 2017-12-04T16:22:46-0700] [Documentation](#)



(thredds.maretec.org/thredds/catalog.html)



Catalog <http://thredds.maretec.org/thredds/catalog.html>

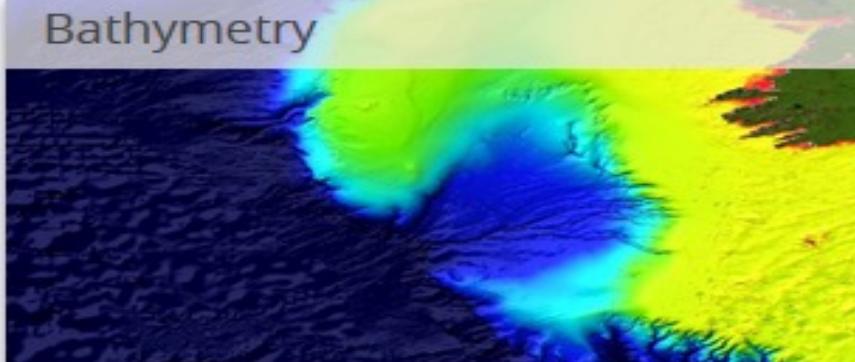
Dataset

- Catalogs
- MARETEC Catalog/
- UAzores Catalog/

Initial TDS Installation at MARETEC see [Info](#)
THREDDS Data Server [Version 4.6.12 - 2018-12-11T10:06:52-0700] [Documentation](#)

Seven lots

- Lot 1 bathymetry:
- Lot 2 geology:
- Lot 3 physical habitats:
- Lot 4 chemistry:
- Lot 5 biology:
- Lot 6 physics:
- Lot 7 human activity



Bathymetry

Data on bathymetry (water depth), coastlines, and geographical location of underwater features: wrecks.

[Read more](#) [Portal](#)



Geology

Data on seabed substrate, sea-floor geology, coastal behaviour, geological events, and minerals.

[Read more](#) [Portal](#)



Seabed Habitats

Data on modelled seabed habitats based on seabed substrate, energy, biological zone, and salinity.

[Read more](#) [Portal](#)



Chemistry

Data on the concentration of nutrients, organic matter, pesticides, heavy metals, radionuclides and antifoulants in water, sediment and biota.

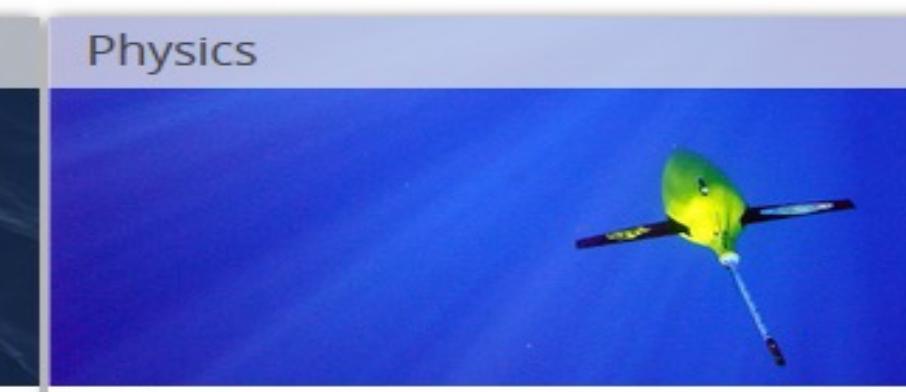
[Read more](#) [Portal](#)



Biology

Data on temporal and spatial distribution of species abundance and biomass from several taxa.

[Read more](#) [Portal](#)



Physics

Data on salinity, temperature, waves, currents, sea-level, light attenuation, and FerryBoxes.

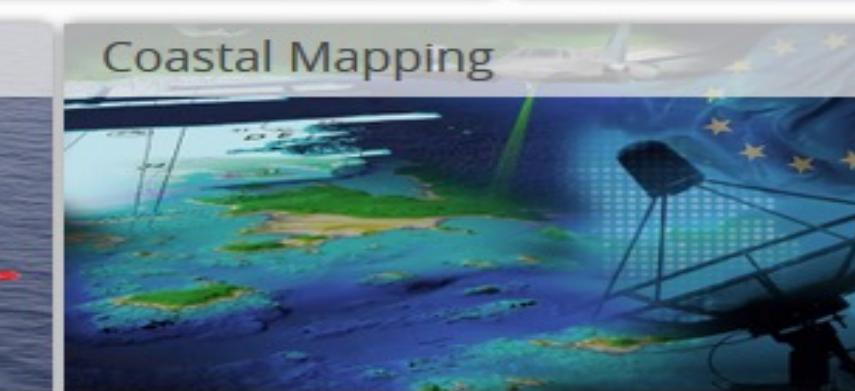
[Read more](#) [Portal](#)



Human Activities

Data on the intensity and spatial extent of human activities at sea.

[Read more](#) [Portal](#)

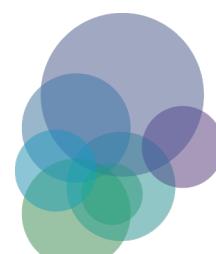
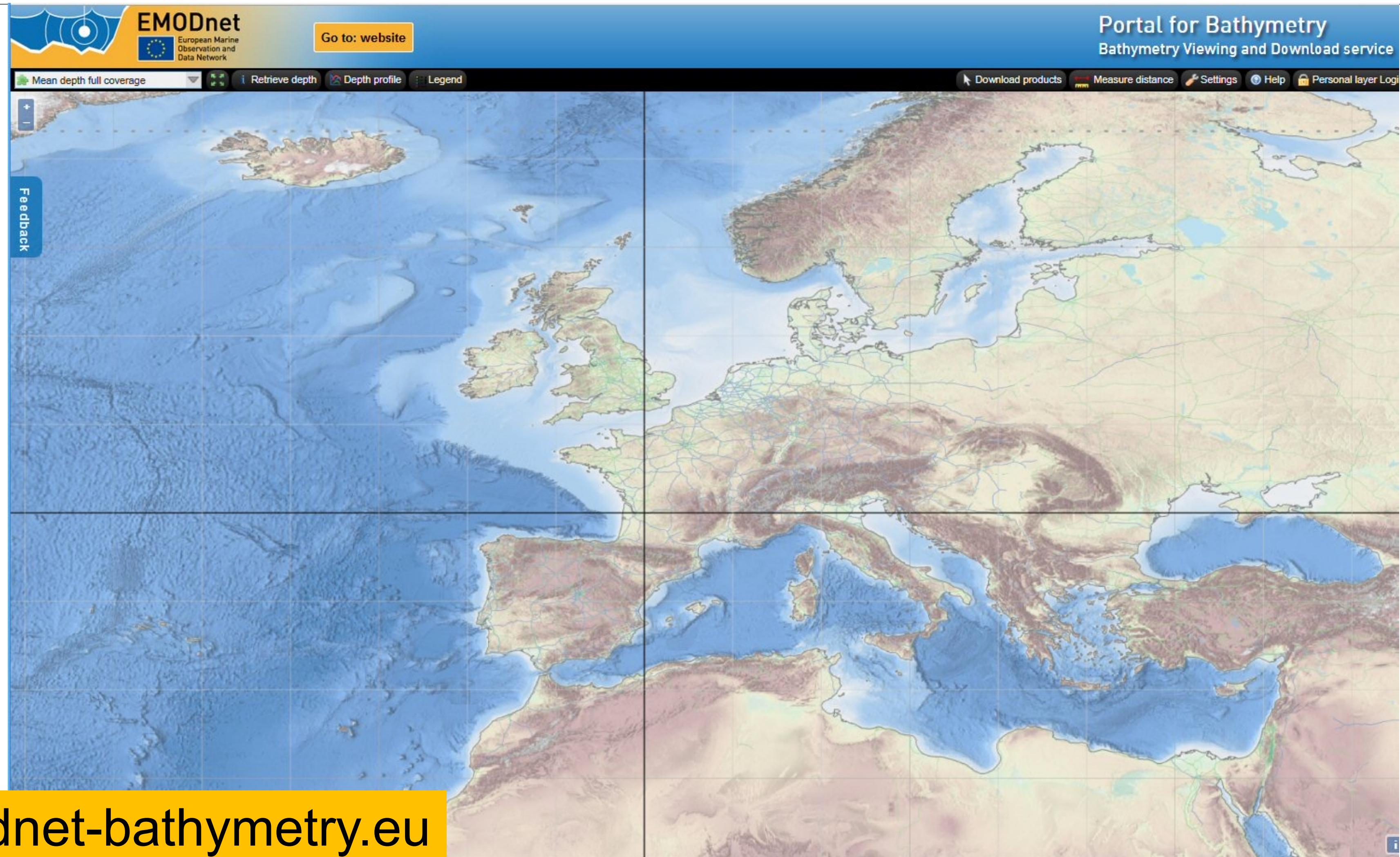


Coastal Mapping

Building a Joint European Coastal Mapping Programme.

[Read more](#) [Portal](#)





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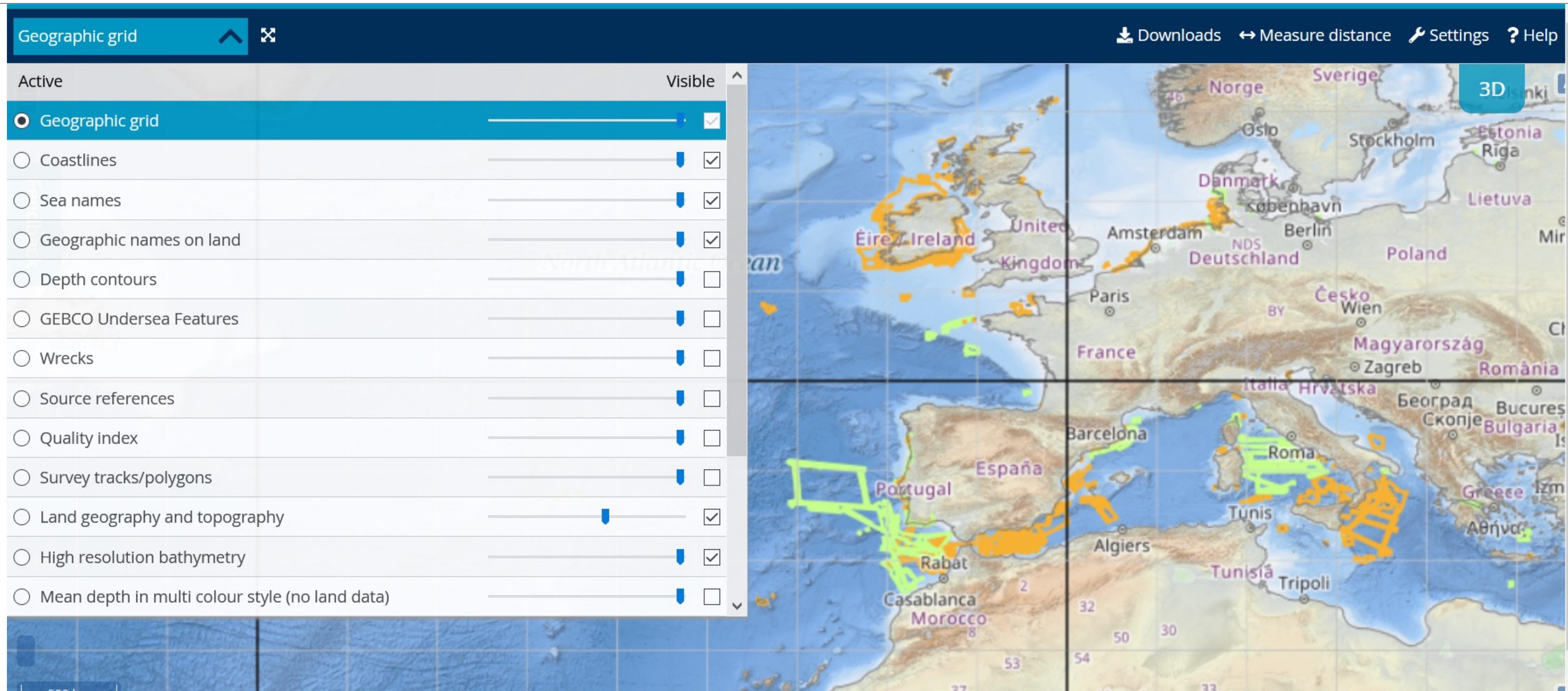
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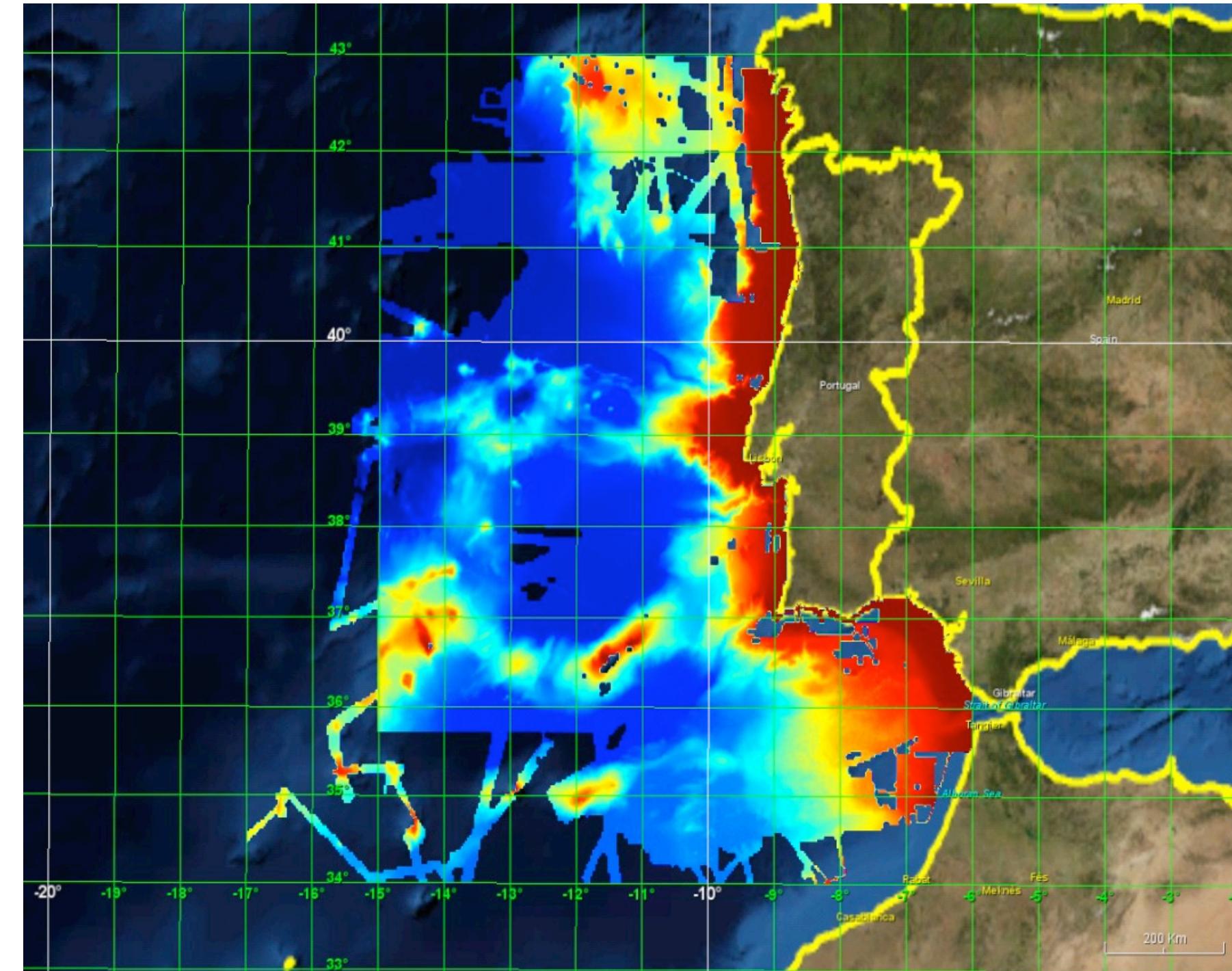
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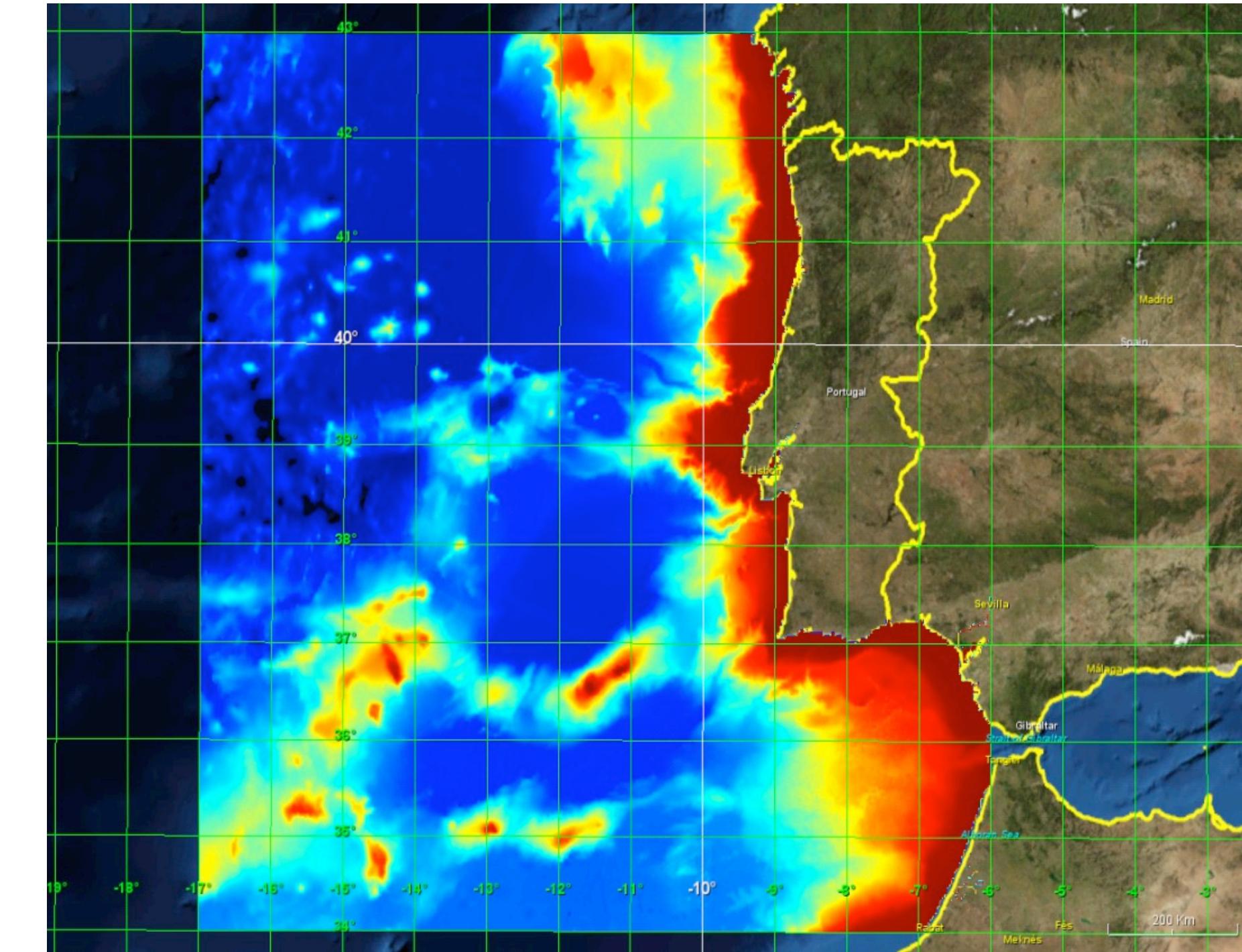
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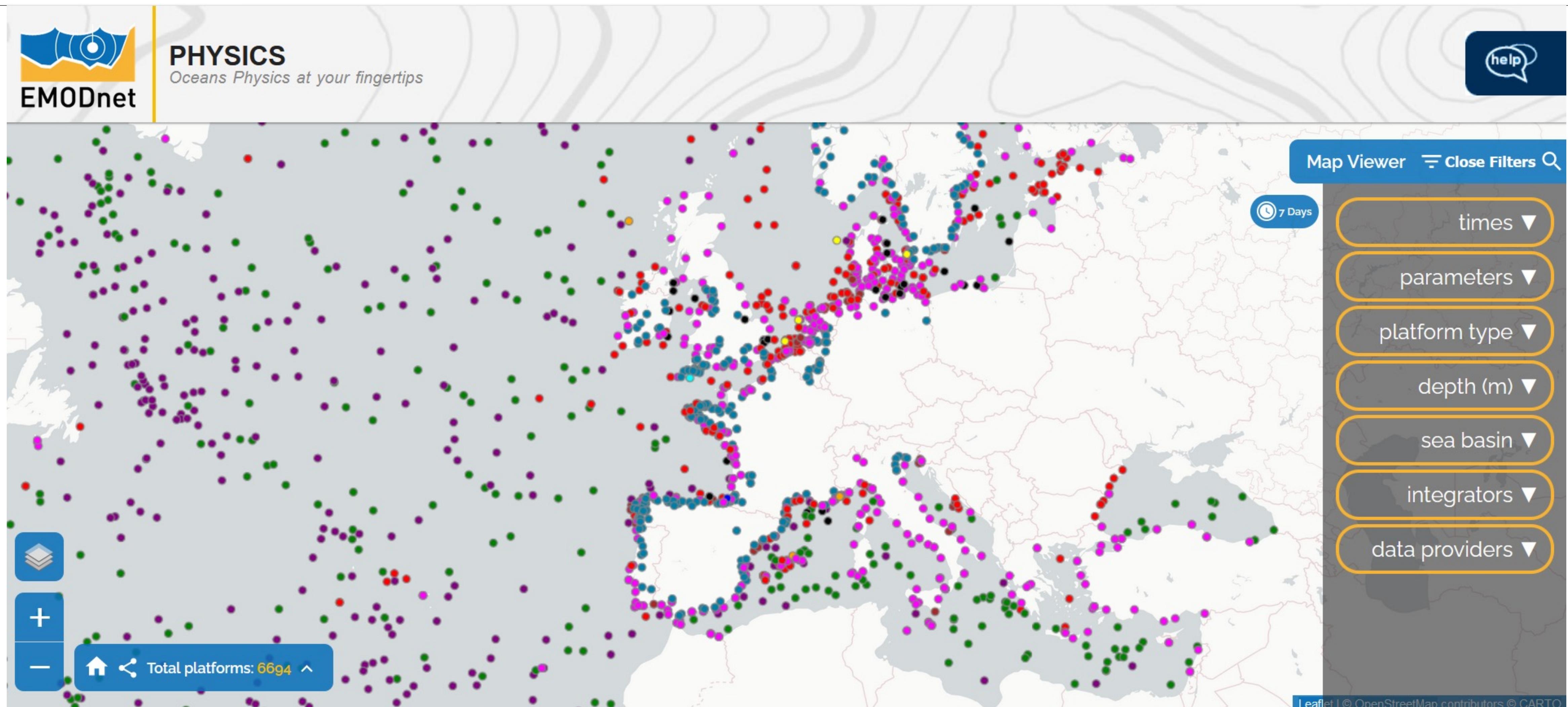
Average depth for the interpolated DTM (using survey data & CDTM's)



Resulting DTM with average depth after GEBCO integration and smoothing



European Marine Observation and Data Network (EMODnet)



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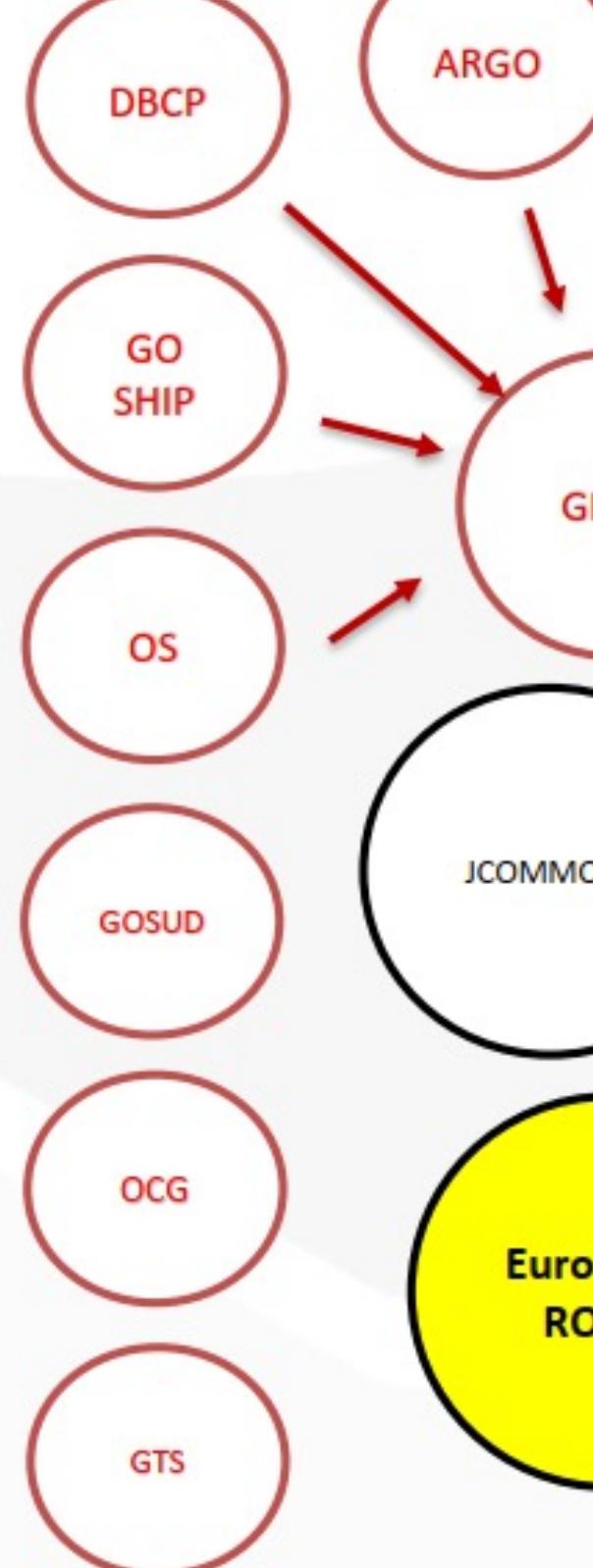


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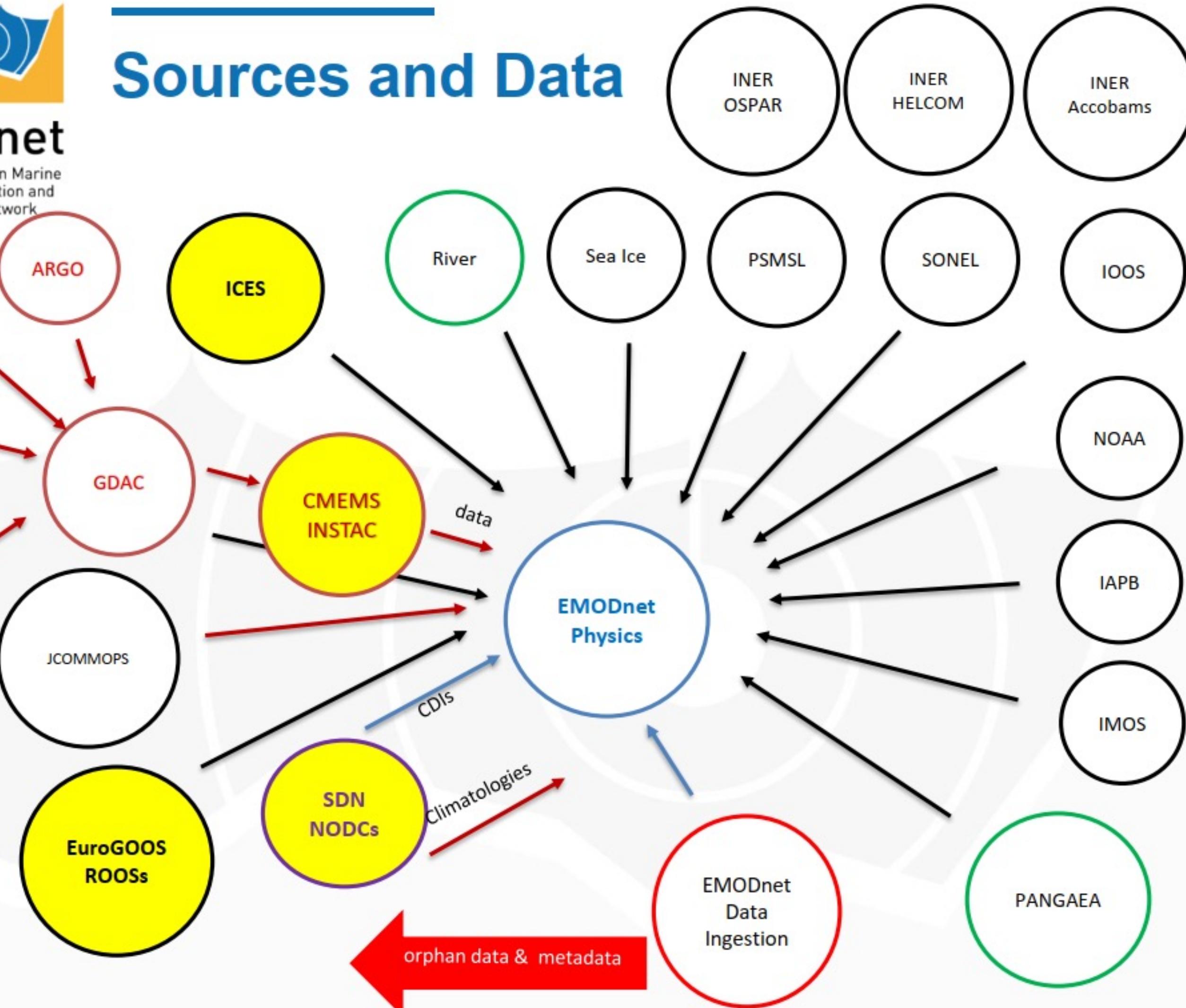


EMODnet

European Marine
Observation and
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Sources and Data



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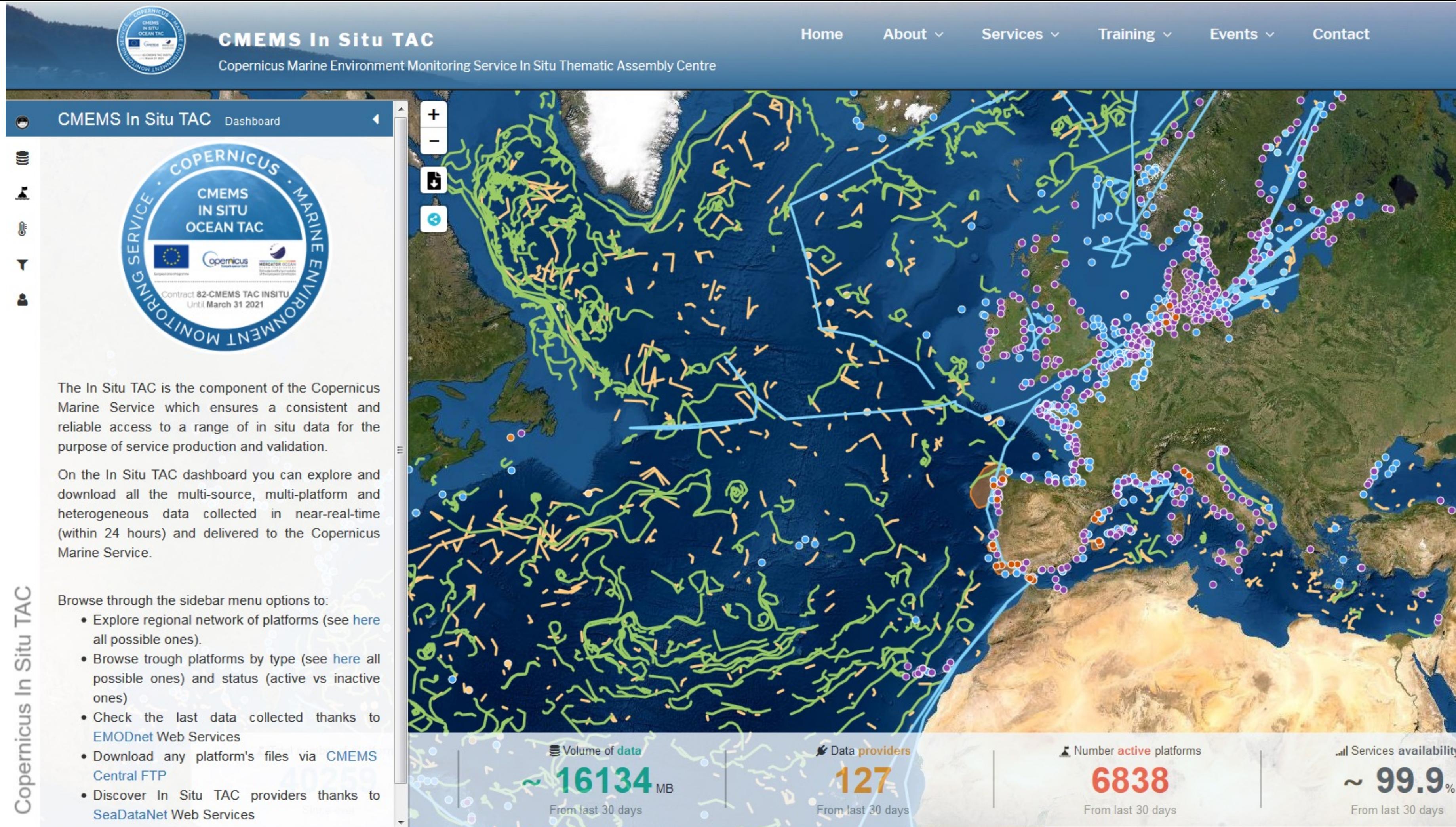
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Copernicus Marine Service

Providing free and open marine data and services to enable marine policy implementation, support Blue growth and scientific innovation.

Access Data >

DATA

OCEAN PRODUCTS
A robust ocean data catalogue, to download or visualise data including hindcasts, nowcasts and forecasts.

EXPERTISE

OCEAN STATE REPORT
Extensive annual analysis on the state of the ocean over nearly 20 years and severe/notable annual events.

TRENDS

OCEAN MONITORING INDICATORS
Essential variables monitoring the health of the ocean over the past quarter of a century.

EXPLORATION

OCEAN VISUALISATION
Dive into our 4D digital oceans through our visualisation tool in the past, present and future.



Access your ocean information

Home User Corner Contact Us

OCEAN PRODUCTS > OCEAN MONITORING INDICATORS > OCEAN STATE REPORT >

Hello, Sign in

0

Search by keyword  

Found 180 ocean products matching your criteria. 

REGIONAL DOMAIN 

PARAMETERS 

TEMPORAL COVERAGE

From 1992-01-01 To 2021-05-11

If checked, the search results will only show products containing the whole selected time range

PRODUCT WITH DEPTH LEVEL 



GLOBAL_ANALYSIS_FORECAST_PHY_001_024

GLOBAL OCEAN 1/12° PHYSICS ANALYSIS AND FORECAST UPDATED DAILY

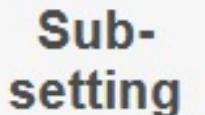
MODEL  GLO

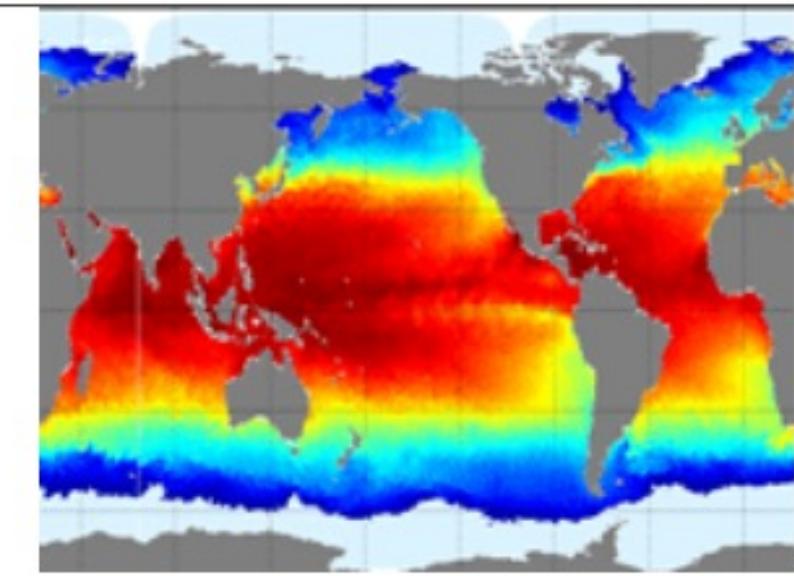
T bottomT S SSH 3DUV MLD SIC SIT SIUV 

0.083 degree x 0.083 degree (50 depth levels)

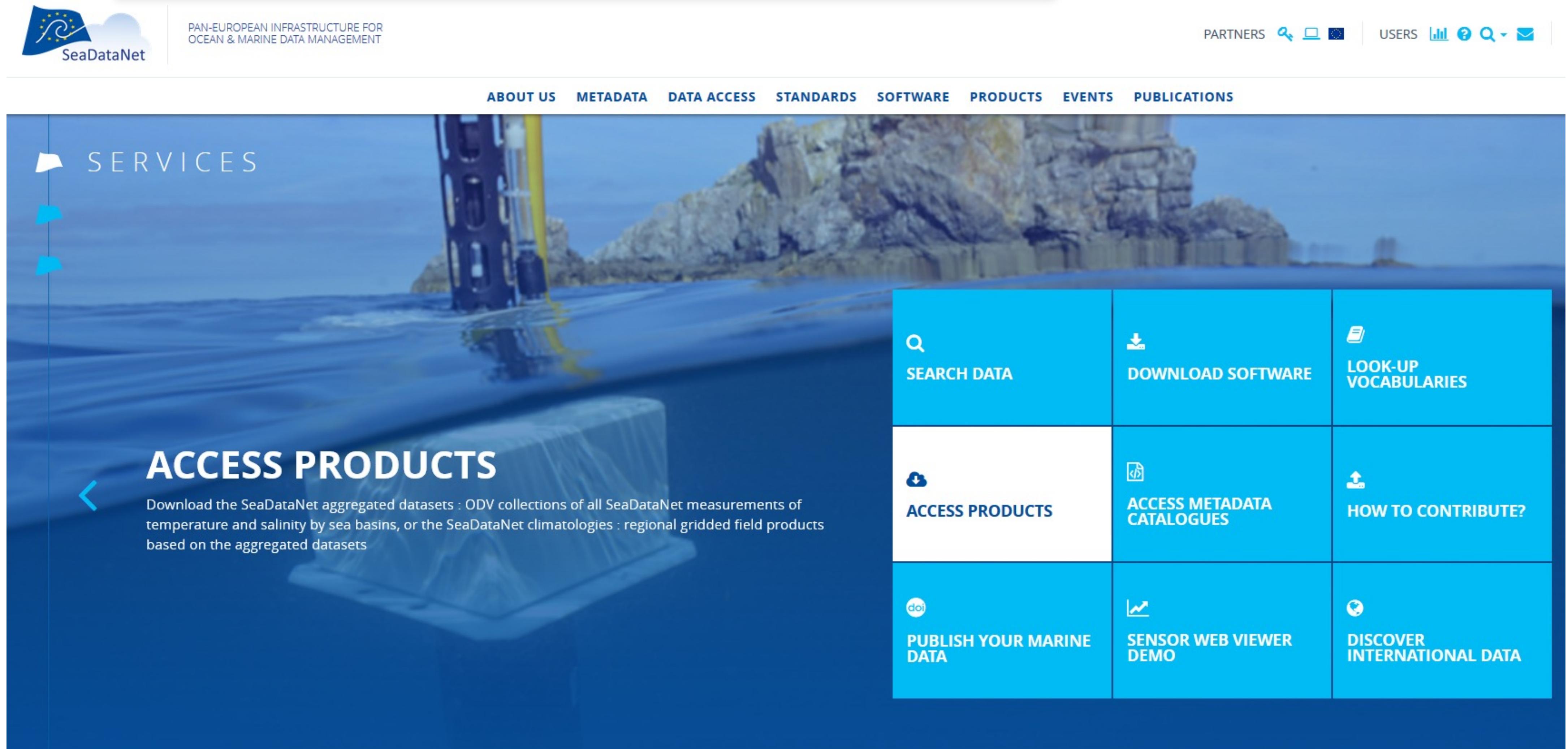
From 2018-07-07 to Present

hourly-mean,daily-mean,monthly-mean,6-hourly-instantaneous







The screenshot shows the SeaDataNet website. At the top, there is a navigation bar with links: PARTNERS, USERS, and various search and filter icons. Below the navigation is a main menu with links: ABOUT US, METADATA, DATA ACCESS, STANDARDS, SOFTWARE, PRODUCTS, EVENTS, and PUBLICATIONS. The main content area features a large image of an underwater scientific instrument (a mooring) deployed in the ocean. On the left, there is a sidebar with a 'SERVICES' section and a 'ACCESS PRODUCTS' section. The 'ACCESS PRODUCTS' section contains text about aggregated datasets and climatologies, along with a left arrow icon. On the right, there is a 3x3 grid of links:

 SEARCH DATA	 DOWNLOAD SOFTWARE	 LOOK-UP VOCABULARIES
 ACCESS PRODUCTS	 ACCESS METADATA CATALOGUES	 HOW TO CONTRIBUTE?
 PUBLISH YOUR MARINE DATA	 SENSOR WEB VIEWER DEMO	 DISCOVER INTERNATIONAL DATA

Questions or comments to:

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Thank you very much for your attention

Ulisses



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