

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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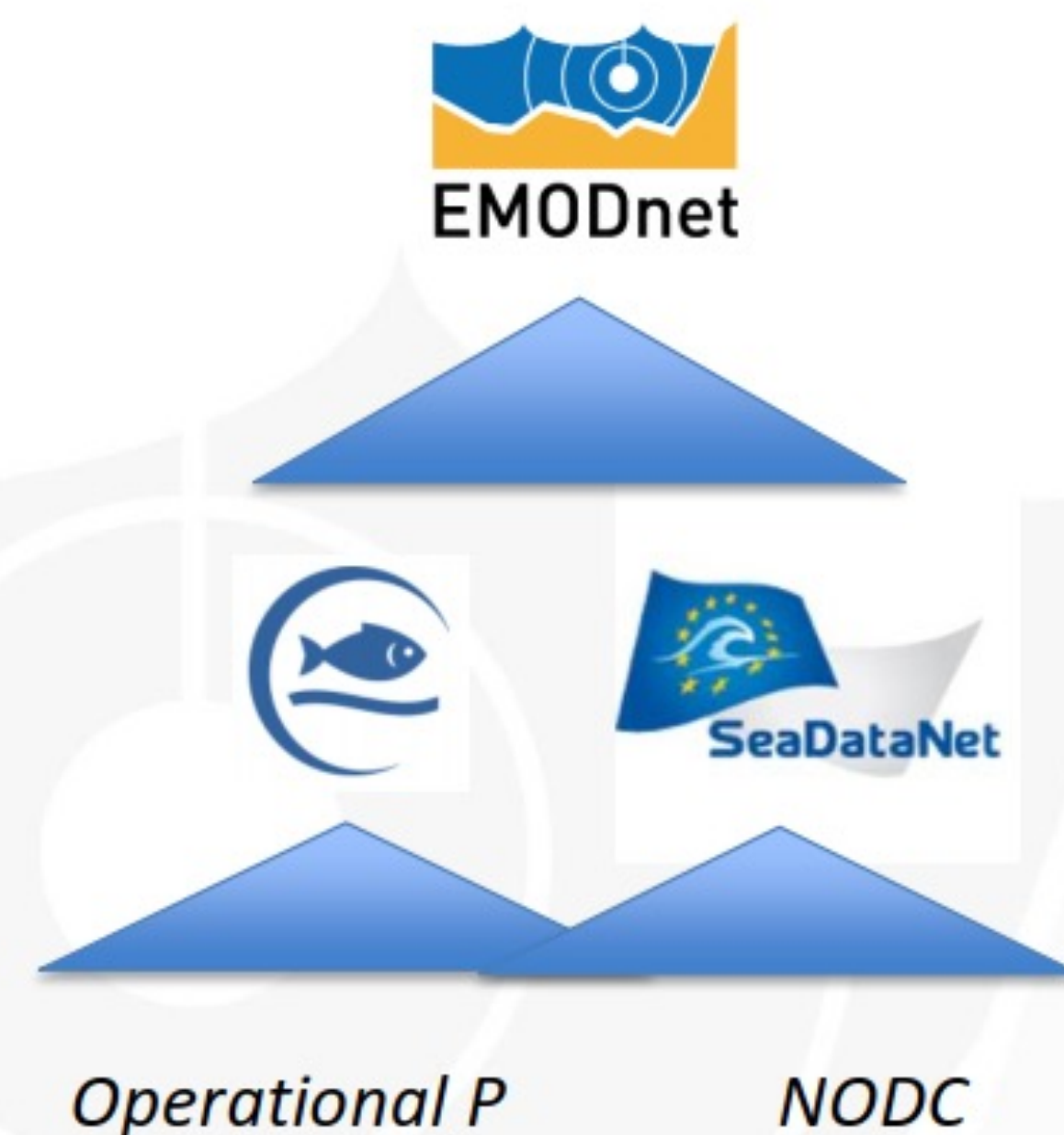


EMODnet



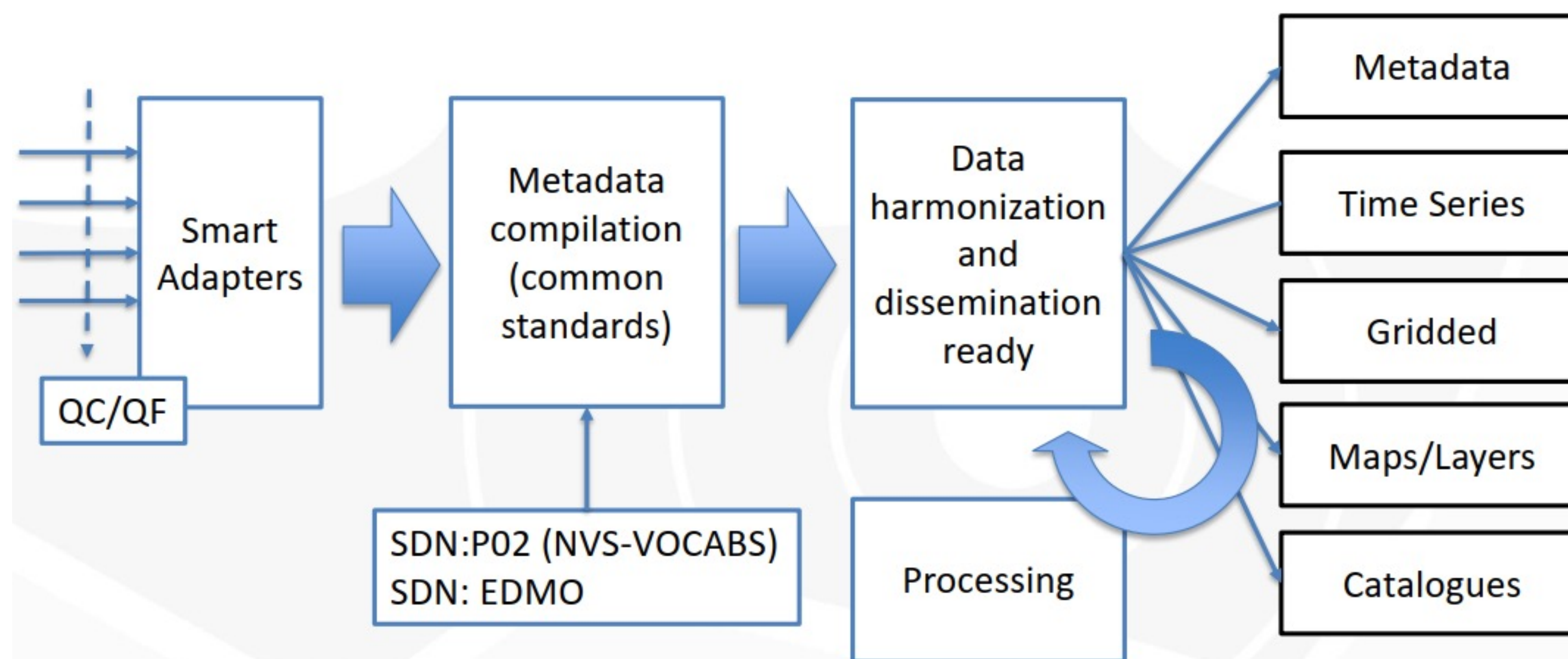
Data Sources

- **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

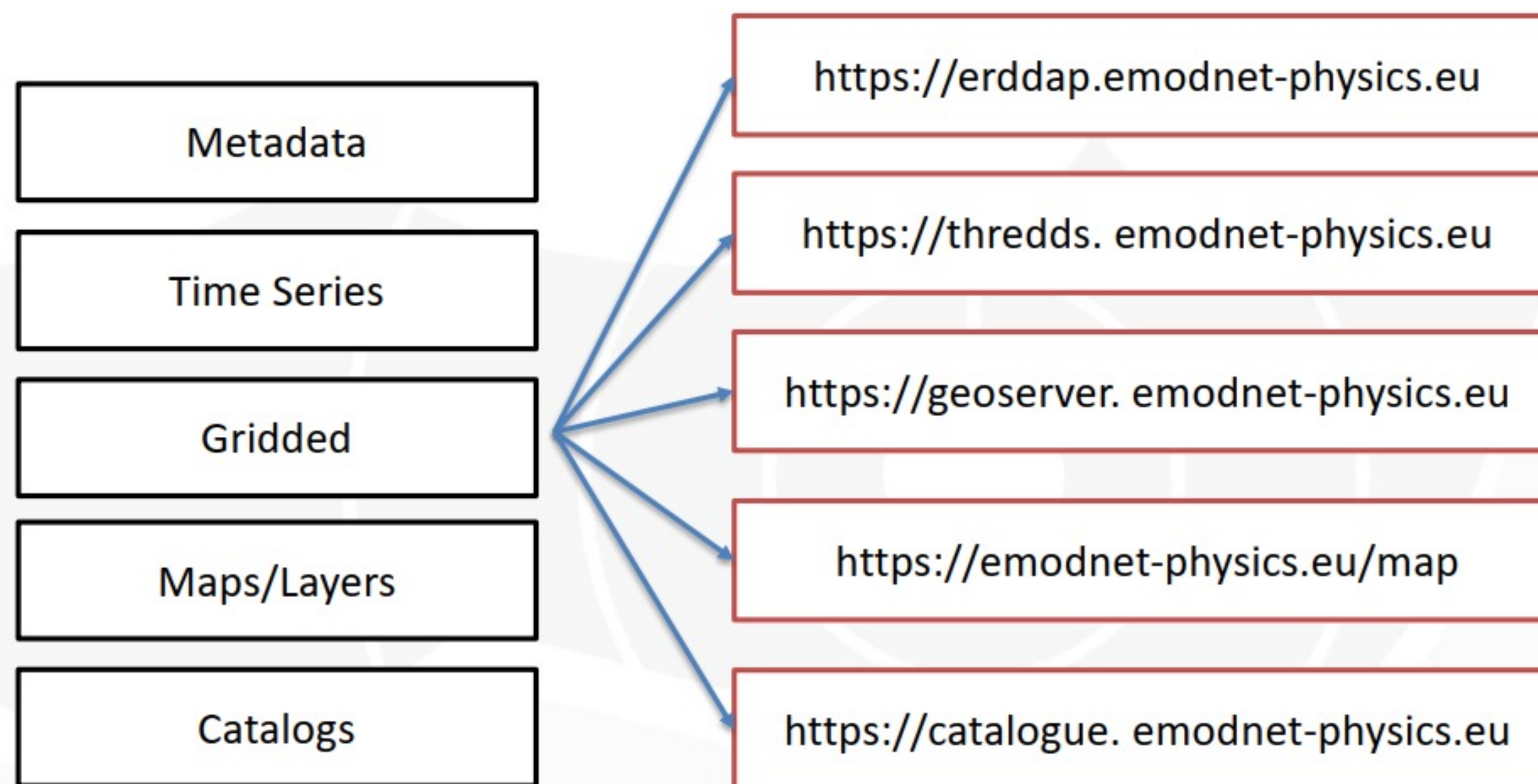


QC/QF are semi-automatic or done by experts
 according the age of the data, es. NRT flow: is semi-automatic
 HV: experts from SDN do apply a multi-level QC/QF

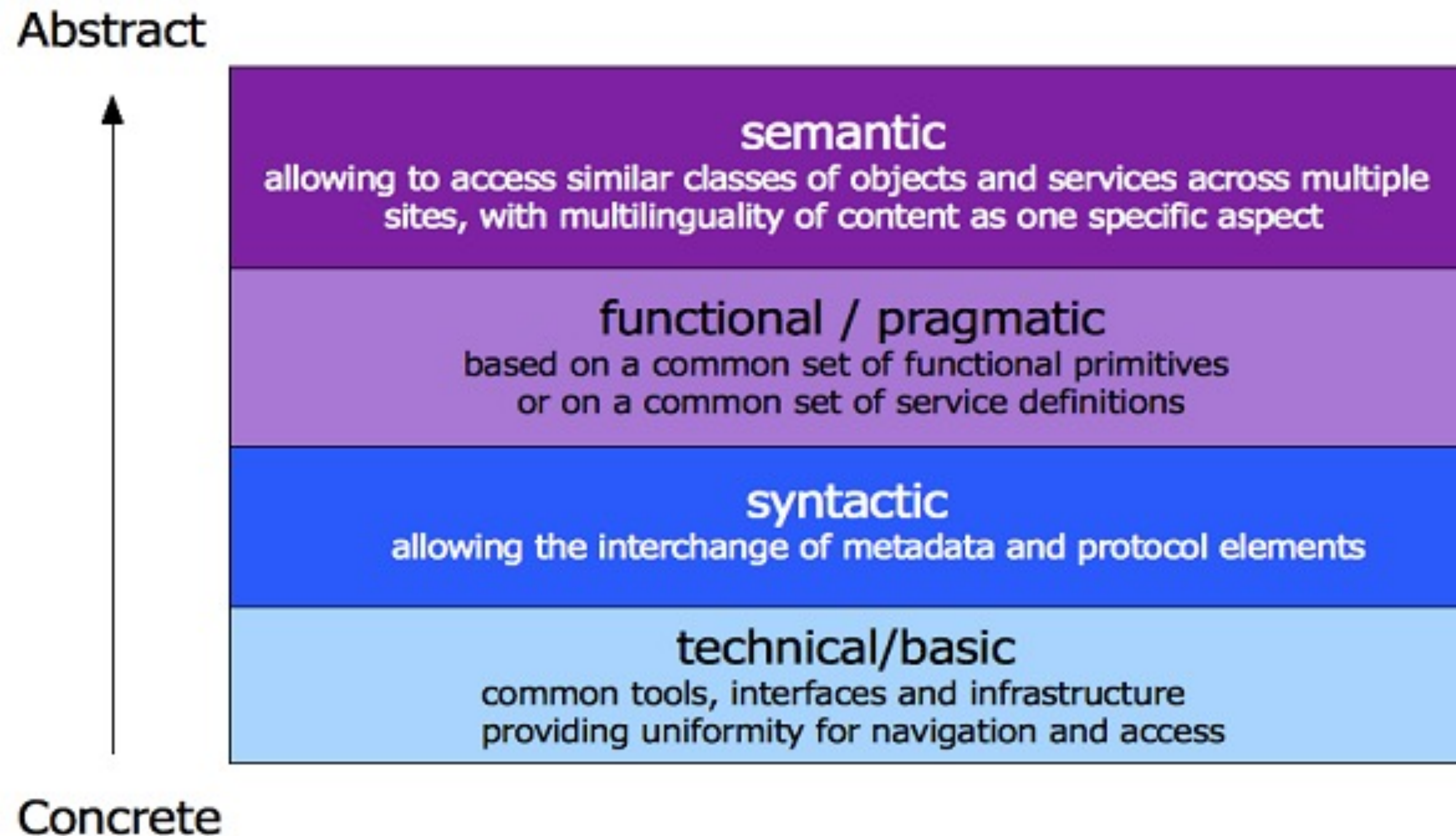




Discovery and access services



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



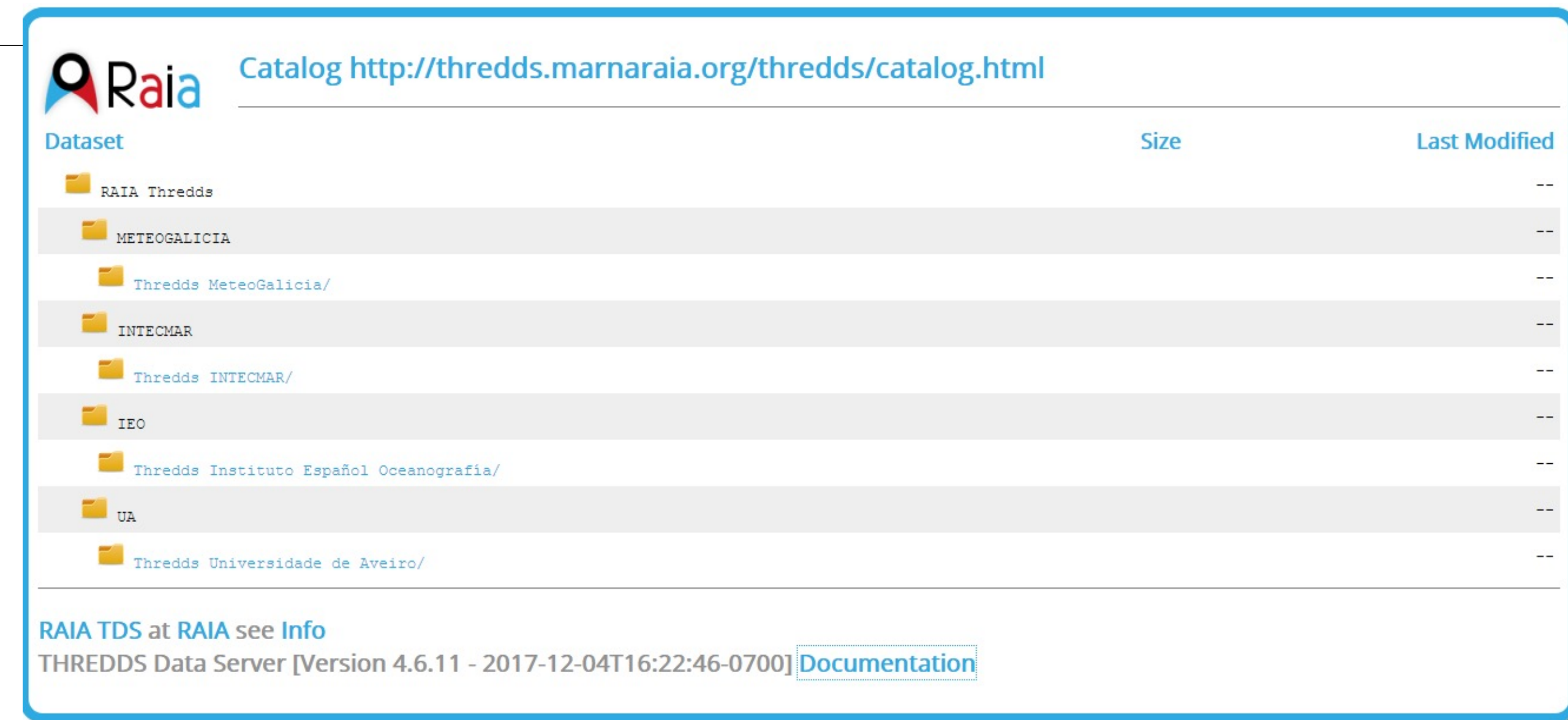
Different formats for:

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

Aligned with

- CMEMS, SeaDataNet & EMODnet
- Inspire

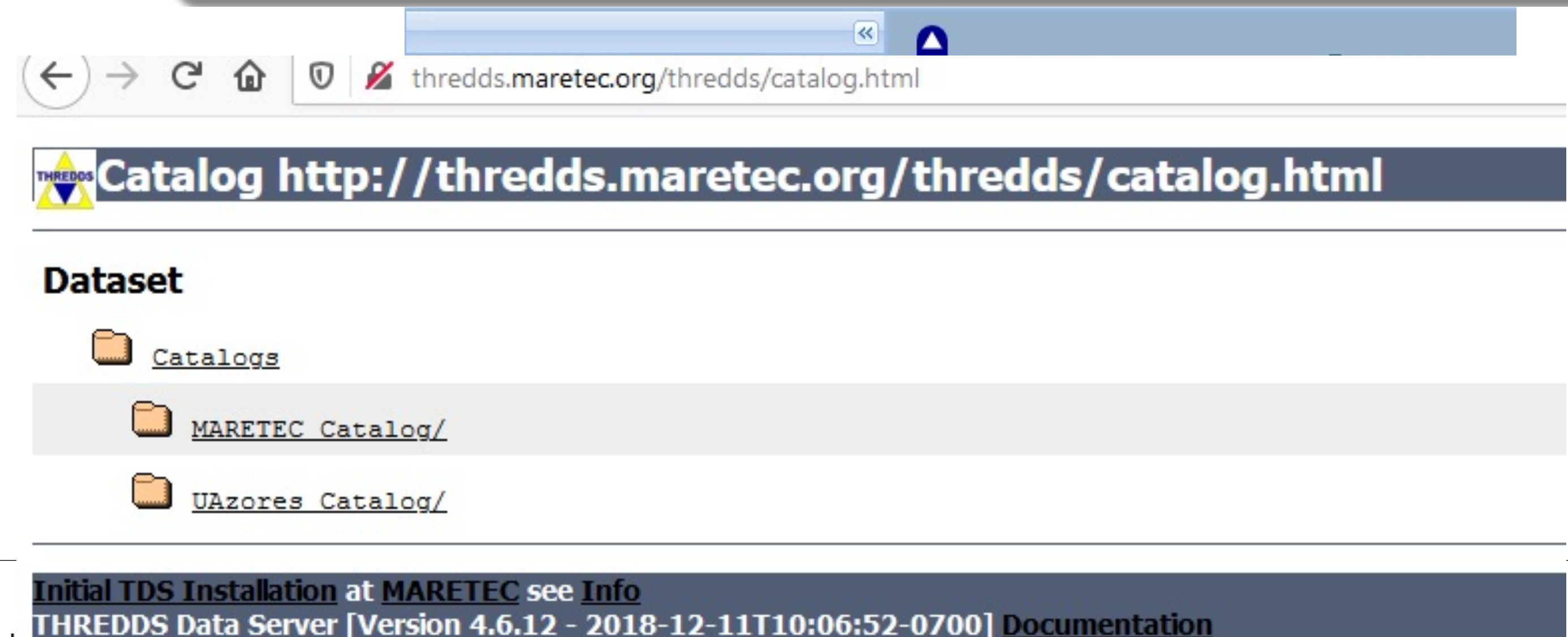
Developing under **MyCoast** umbrella



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

Dataset	Size	Last Modified
RAIA Thredds		--
METEOGALICIA		--
Thredds MeteoGalicia/		--
INTECMAR		--
Thredds INTECMAR/		--
IEO		--
Thredds Instituto Español Oceanografia/		--
UA		--
Thredds Universidade de Aveiro/		--

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



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

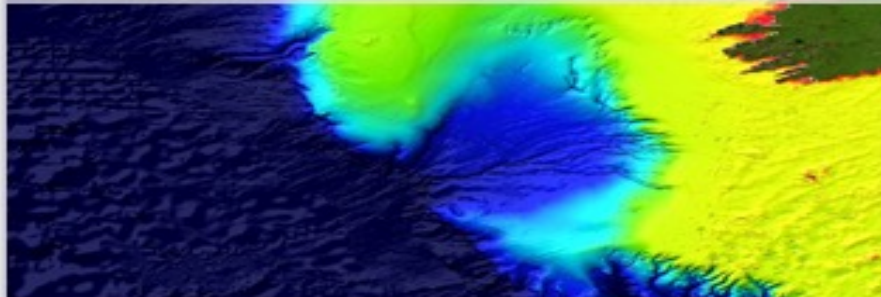
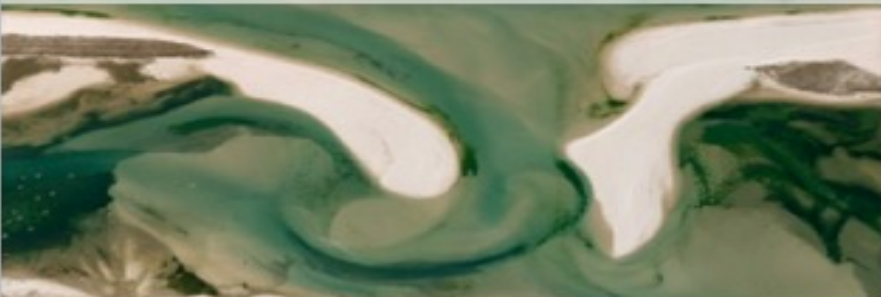





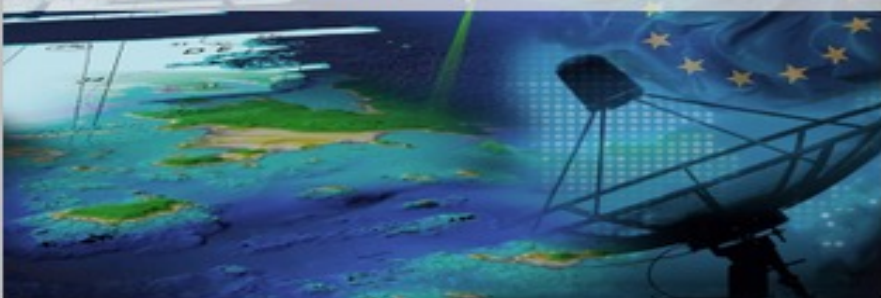
Dataset
Catalogs
MARETEC Catalog/
UAzores Catalog/

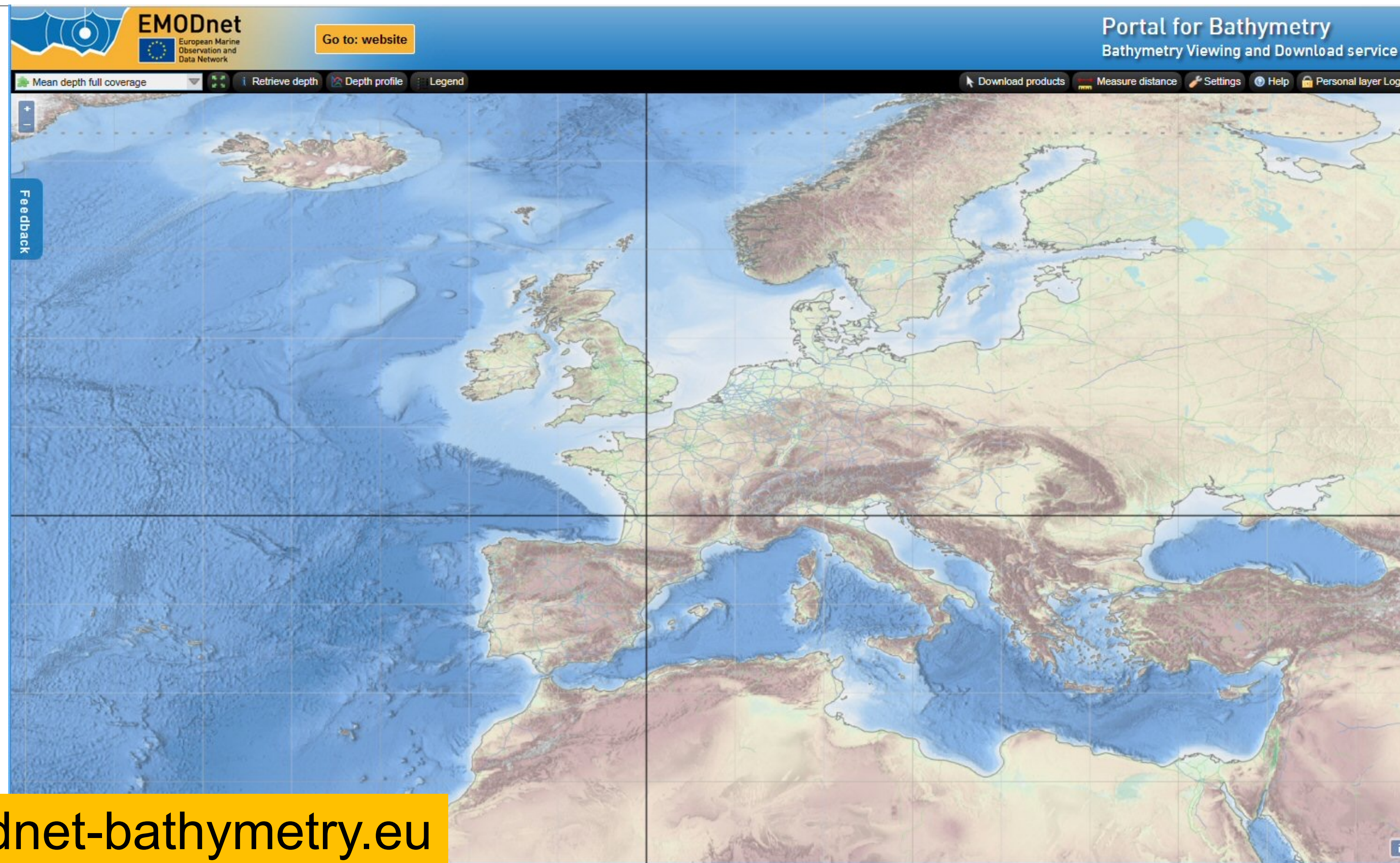
Initial TDS Installation at MARETEC see [Info](#)
THREDDS Data Server [Version 4.6.12 - 2018-12-11T10:06:52-0700] [Documentation](#)

Seven lots

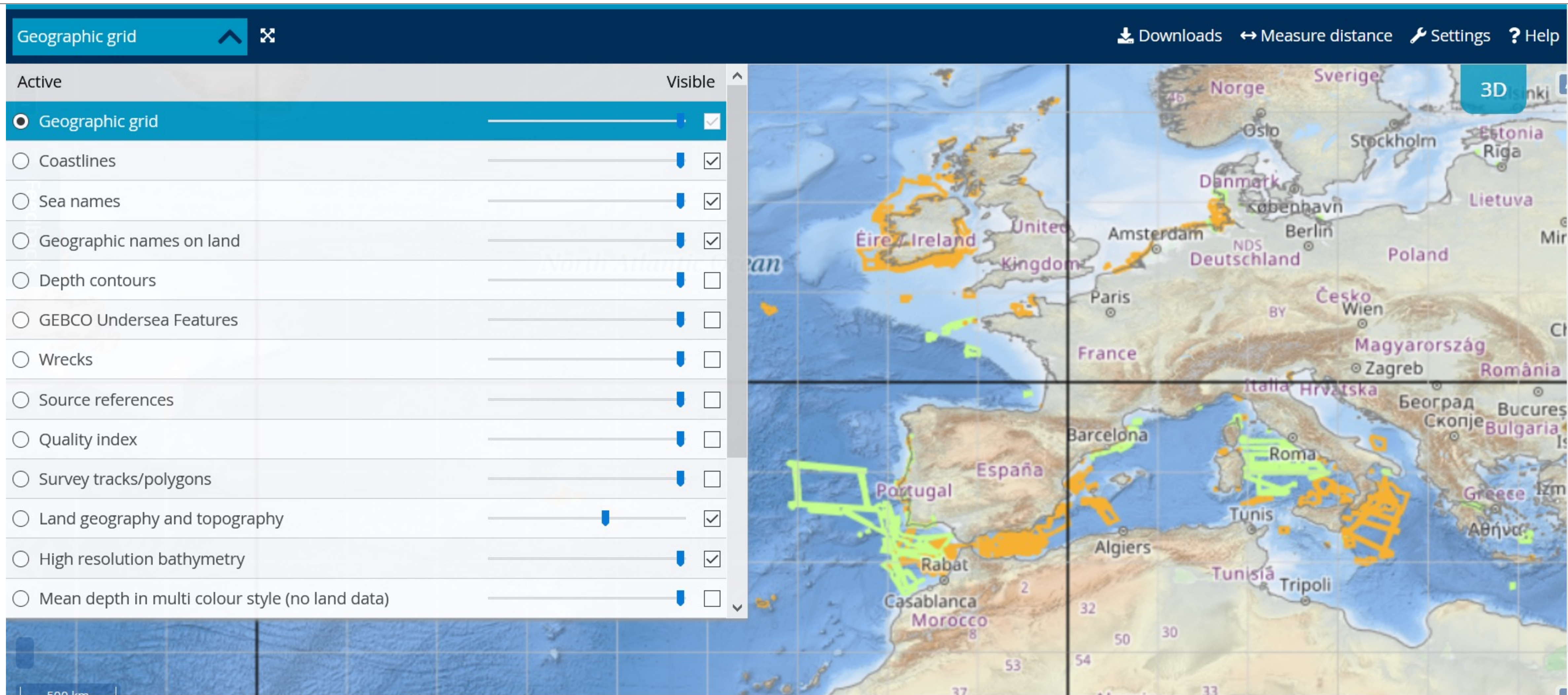
- Lot 1 bathymetry:
- Lot 2 geology:
- Lot 3 physical habitats:
- Lot 4 chemistry:
- Lot 5 biology:
- Lot 6 physics:
- Lot 7 human activity



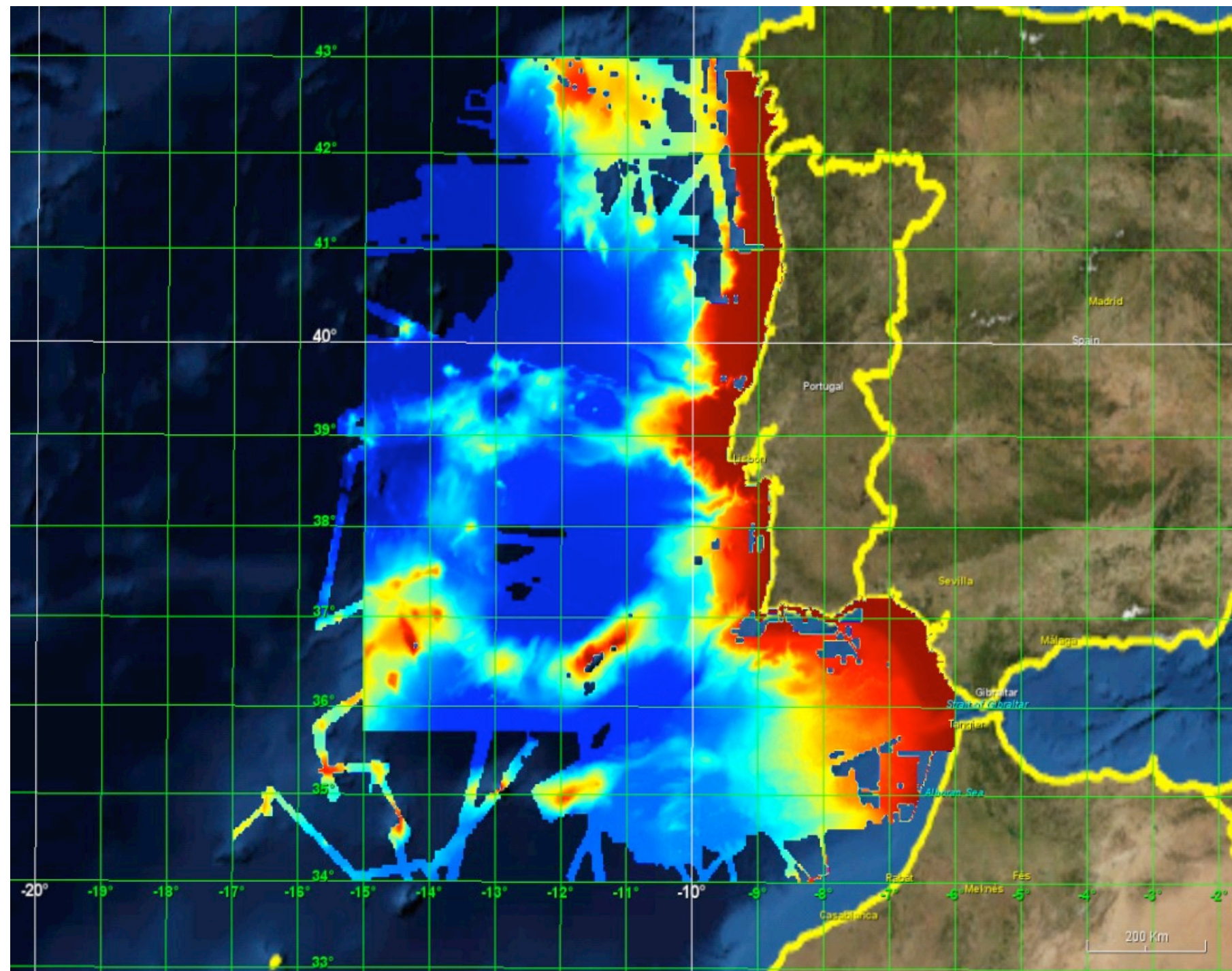
Bathymetry  Data on bathymetry (water depth), coastlines, and geographical location of underwater features: wrecks. Read more Portal	Geology  Data on seabed substrate, sea-floor geology, coastal behaviour, geological events, and minerals. Read more Portal	Seabed Habitats  Data on modelled seabed habitats 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



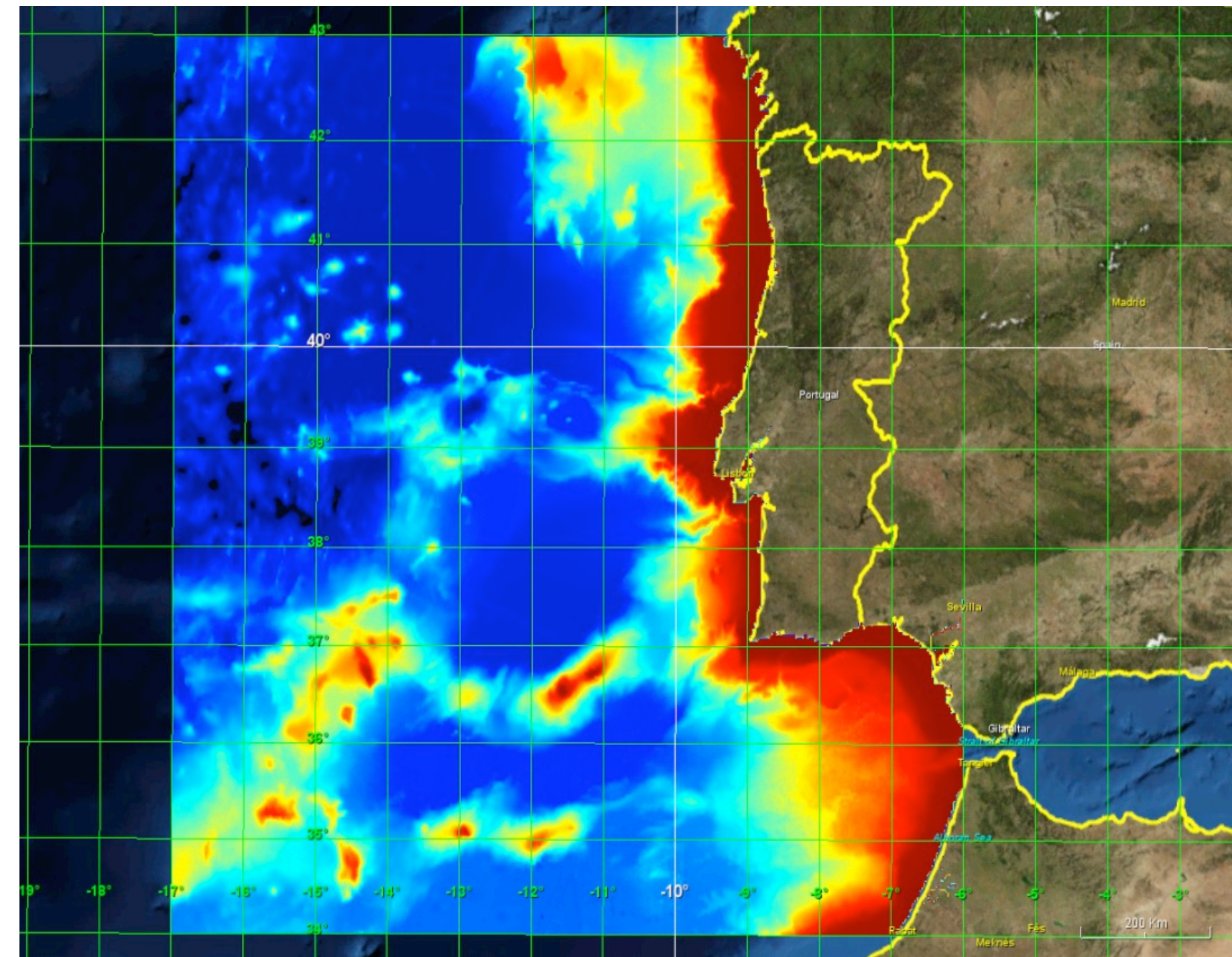
<http://www.emodnet-bathymetry.eu>



Ulisses Regional DTM production, including GEBCO for gaps – example Atlantic near Iberian peninsula

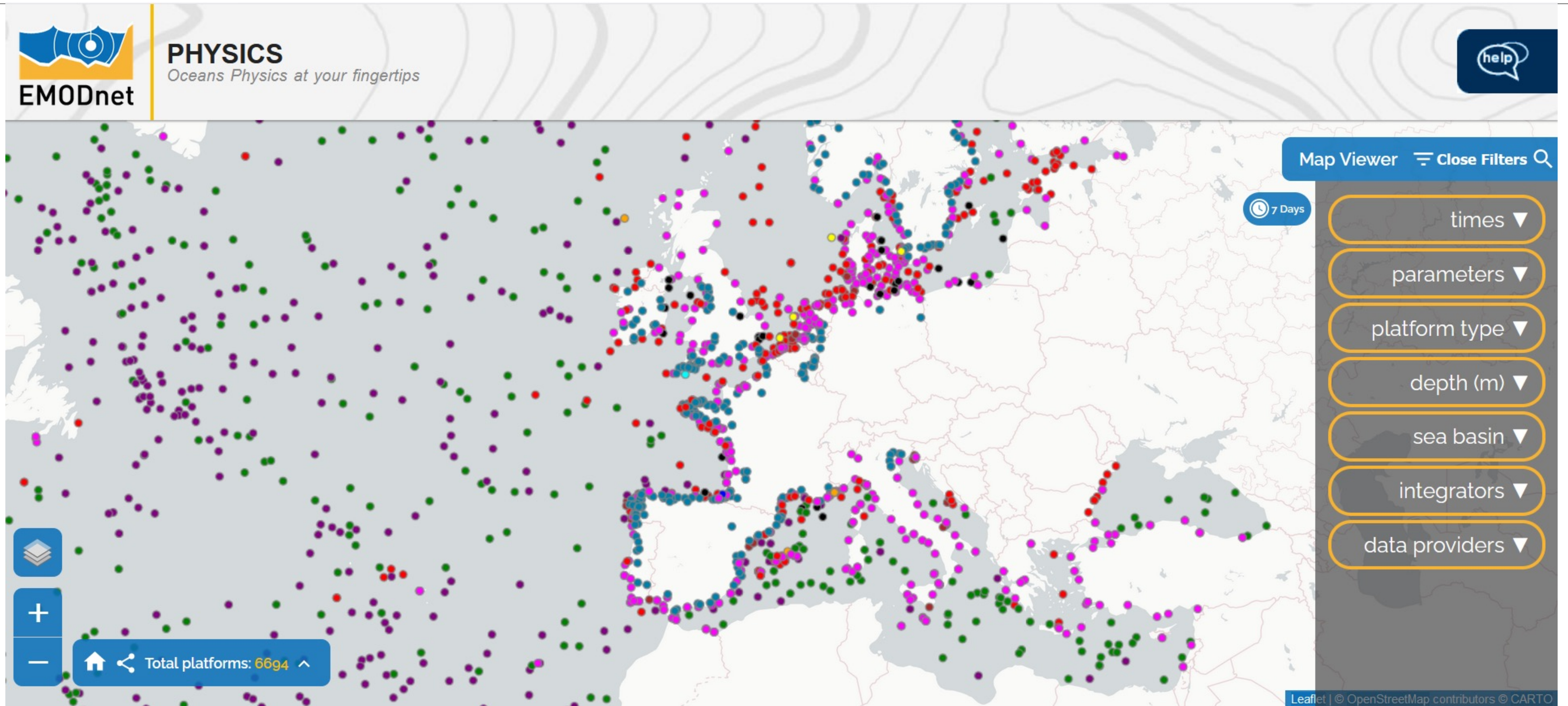


Average depth for the interpolated DTM (using survey data & CDTM's)



Resulting DTM with average depth after GEBCO integration and smoothing

UliSses European Marine Observation and Data Network (EMODnet)



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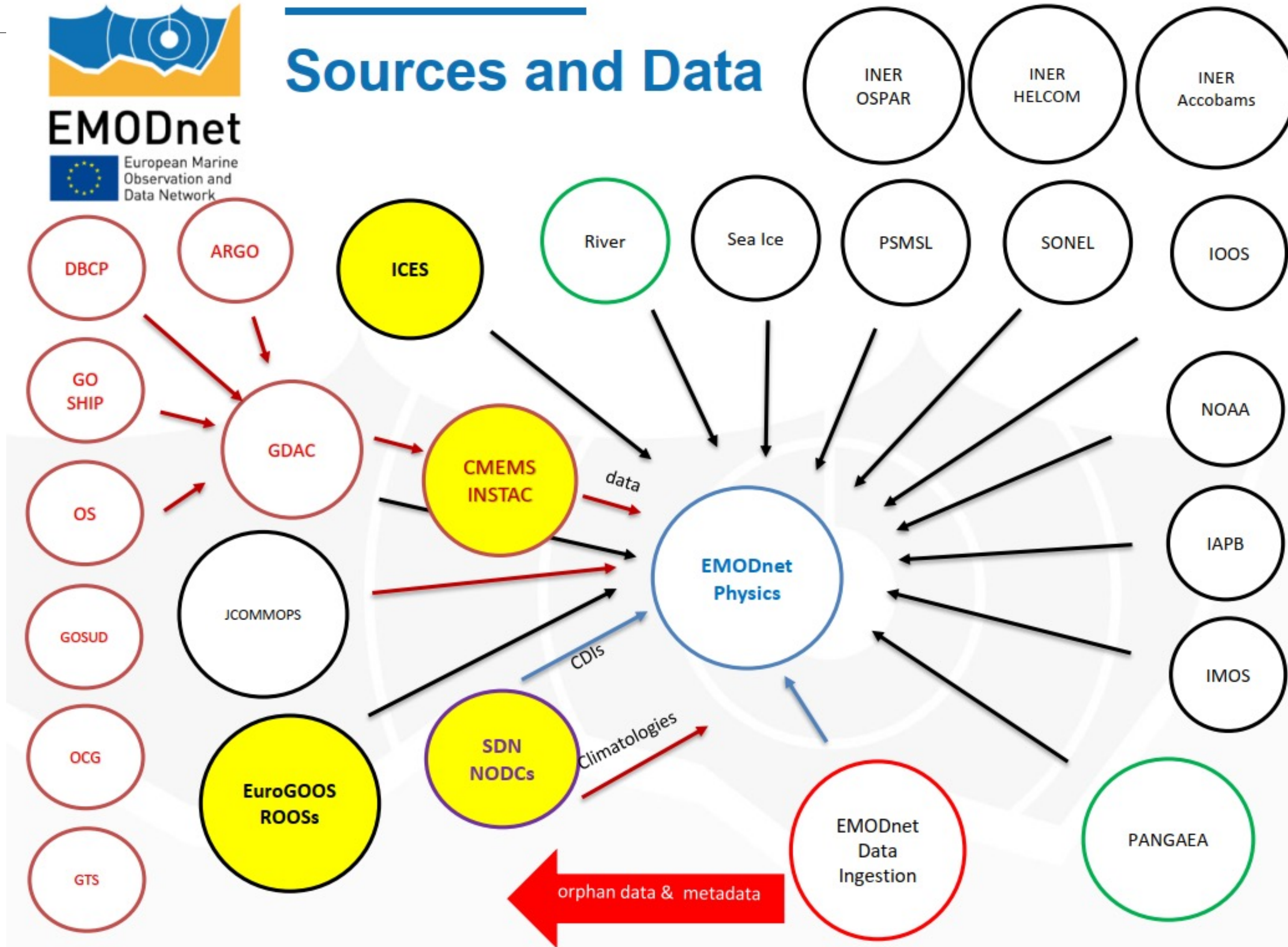


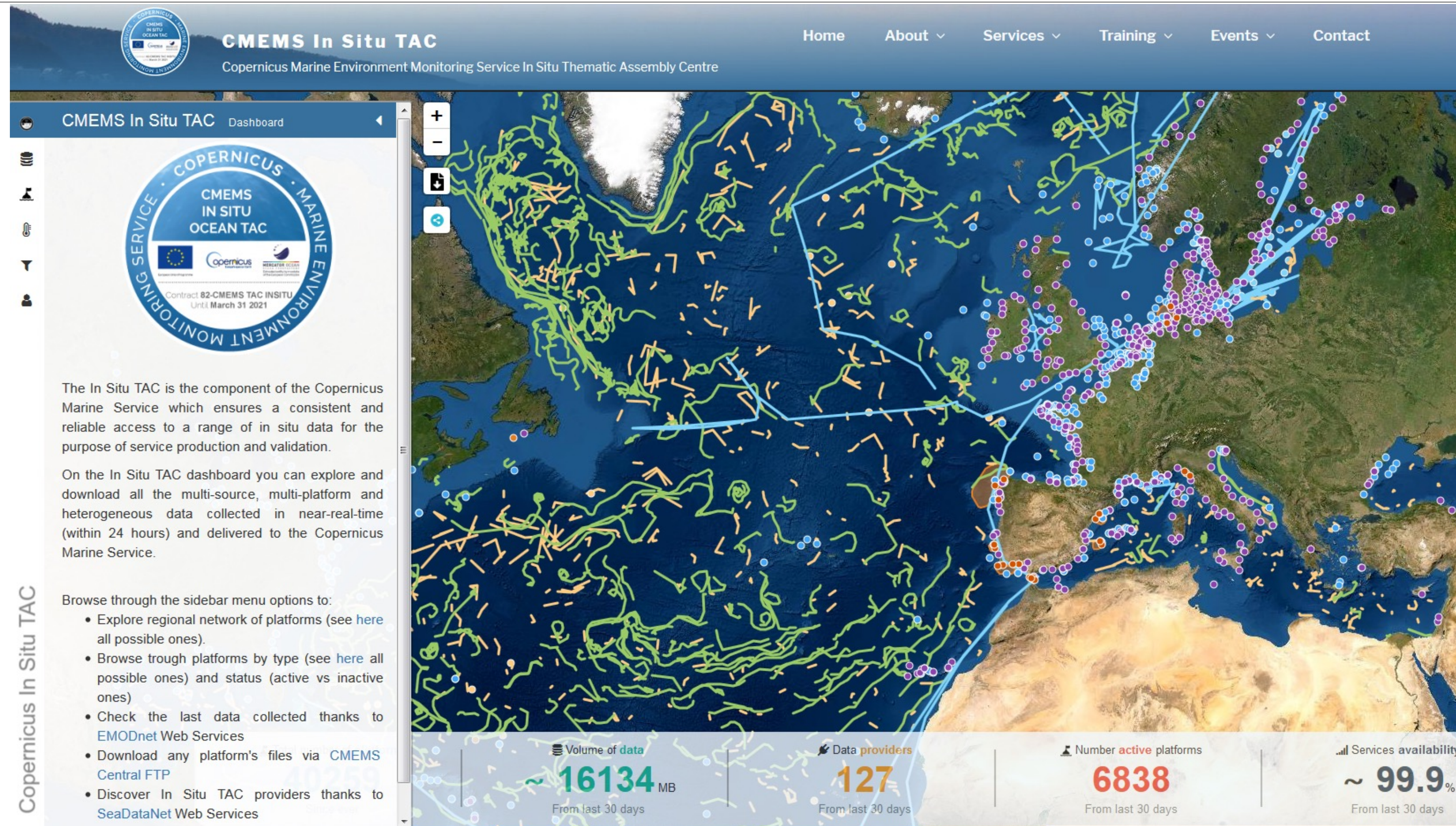


EMODnet



Sources and Data







Copernicus Marine Environment Monitoring Service

<https://marine.copernicus.eu>



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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.



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Hello, Sign in

Search by keyword

?

REGIONAL DOMAIN

PARAMETERS

TEMPORAL COVERAGE

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

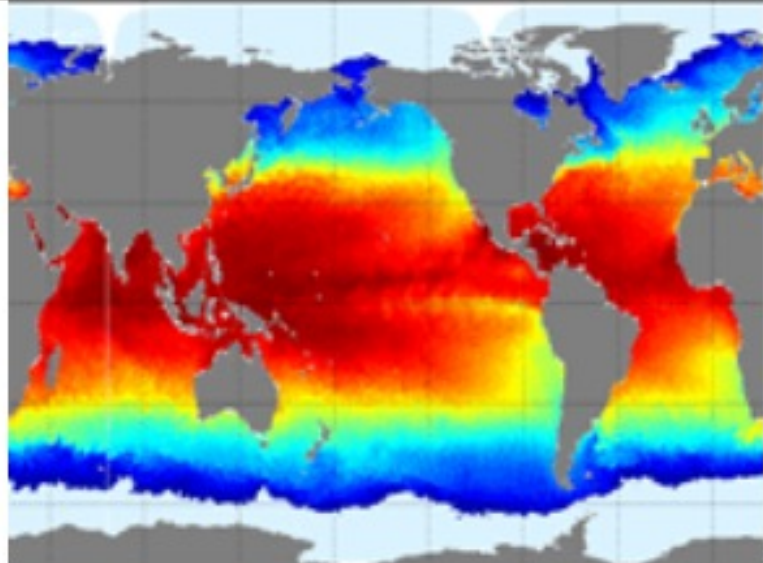
☐ If checked, the search results will only show products containing the whole selected time range


PRODUCT WITH DEPTH LEVEL☐

Reset Search Filters

Found 180 ocean products matching your criteria.

Export results


GLOBAL_ANALYSIS_FORECAST_PHY_001_024		
GLOBAL OCEAN 1/12° PHYSICS ANALYSIS AND FORECAST UPDATED DAILY		
MODEL	<div><div></div><div></div><div></div><div></div></div>	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		
MORE INFO	ADD TO CART	WMS Sub-setting


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SERVICES

ACCESS PRODUCTS

Download the SeaDataNet aggregated datasets : ODV collections of all SeaDataNet measurements of temperature and salinity by sea basins, or the SeaDataNet climatologies : regional gridded field products based on the aggregated datasets



SEARCH DATA



DOWNLOAD SOFTWARE



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VOCABULARIES



ACCESS PRODUCTS



ACCESS METADATA
CATALOGUES



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DATA



SENSOR WEB VIEWER
DEMO



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INTERNATIONAL DATA

Questions or comments to:
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Thank you very much for your attention

Ulisses
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