

OPEN and Fair Data an EMODnet Perspective

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EMODnet
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EMODnet | A trusted in situ marine data service, open and free for all

7 EMODnet thematic domains

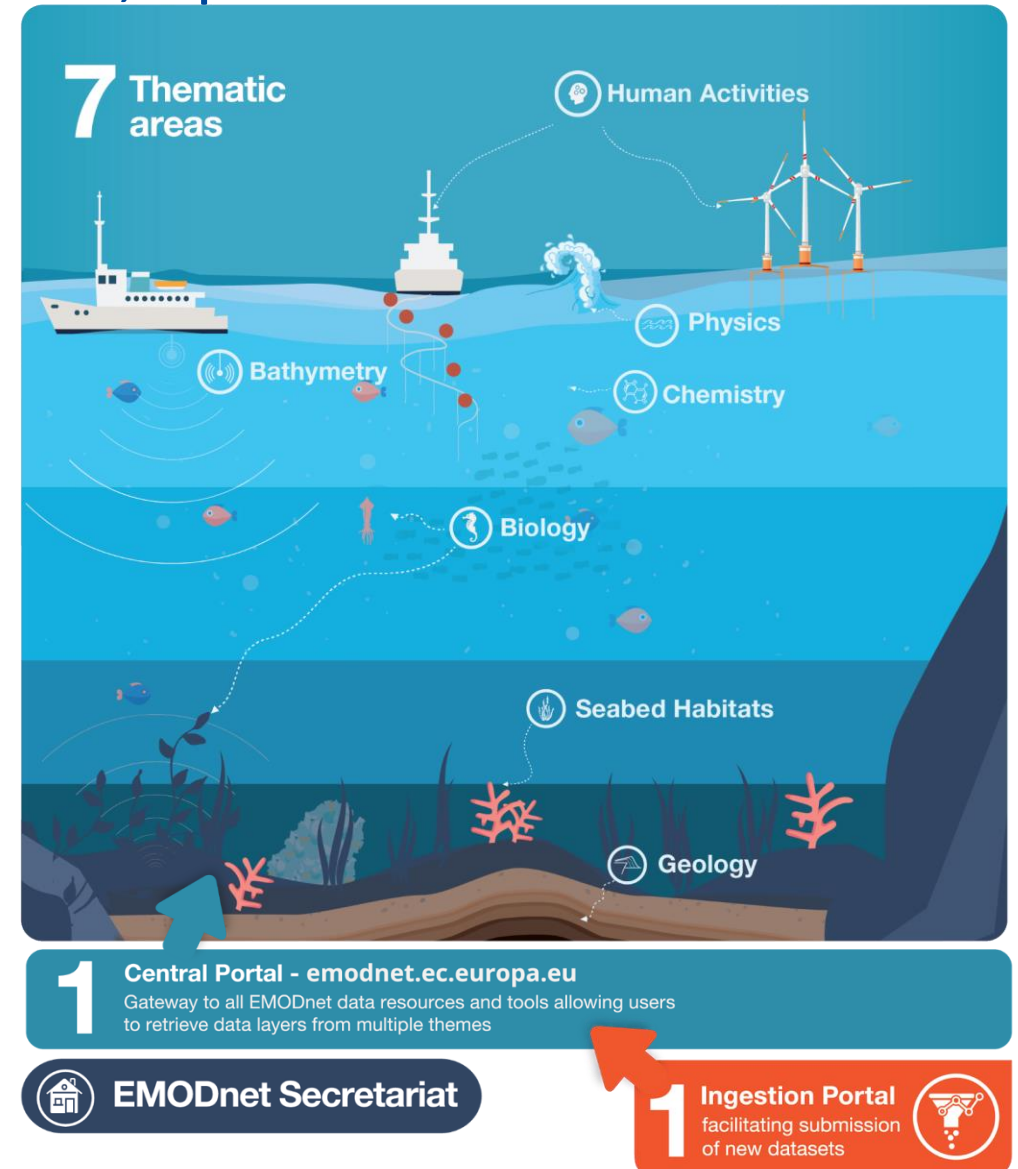
Datasets

- ✓ *from hundreds of data providers*
- ✓ *harmonized, standardized & integrated*
- ✓ *from seafloor to surface*

Data products & maps

Coverage

- ✓ *European seas*



EMODnet | made possible by a large European community of *in situ* marine data experts connecting ocean observations with data infrastructures & users for a user-driven, operational service

**More than a decade of partnership,
collaboration and excellence**



Large core network of >120 organizations
and hundreds of experts across the marine knowledge value chain

Expert communities
Specialized in data management, visualization, developing products and services

Guided by EC Policy guidance & vision objectives

Supported by a Secretariat

Key | Data and data product processing levels

L0

Raw data. Unprocessed instrument data at full resolution, including synchronisation methods (e.g. elimination of CTD up-down duplicates) and excluding communication artifacts.

L1

Full resolution data reconstructed with calibration coefficients, geo- and time-referenced.

L2

Geo- and time-referenced processed (derived) data with a minimum QC. Near-real time (NRT) with full spatial and/or temporal resolution.

L3

Delayed mode data with further QC, usually with some completeness, consistency and space/time uniformity. Data QC checks may include comparison with historical data and/or Level 5 products such as climatologies or gridded data.

L4

Collated data from different measurements, samples and/or sources that have been integrated in a data system by means of standardisation and/or categorisation, and subset or otherwise selected or derived to fulfil a specific requirement. Data can represent numerical values and presence/absence of a category or entity. Integration of datasets at this level enables further QC based on parameter to parameter relationships (e.g. TS diagrams).

L5

Model or analysis output that uses data of Level 2 and/or 3 as input. Data products of this level represent the spatial distribution of a single parameter derived from multiple measurements. Data are aggregated and undergo some level of geo-processing and spatial or temporal interpolation to cover data gaps and/or solve data discrepancies.

L5A. One-dimensional distribution of a specific parameter, without variations on the temporal or depth dimensions.

L5B. Two-dimensional distribution of a specific parameter, with variations on the temporal and/or depth dimensions.

L5C. Three-dimensional distribution of a specific parameter.

L6

Derived information from multi-variable model or analysis that has Level 5 data products and/or Level 2-3 data as input. These input data and data products might have been gathered or developed by the thematic lot itself, by other thematic lots or third parties.

DataData products

UKRI

NERC
Environmental
Data Service

National
Oceanography
Centre

British
Oceanographic
Data Centre

The NERC Vocabulary Server (NVS)

Service Status

NVS Home | Vocabularies | Thesauri | Search NVS | SPARQL | Other Tools | About NVS

Search for vocabulary collections

emodnet

Search

☒ Identifier ☒ Title ☒ Short title ☒ Description ☒ Governance ☐ Exact match ☐ Case sensitive

Found 14 records | Show 100 | 1

Download results

CSVTSV

ID ↑	Title ↑	Short title ↑	Description ↑	Governance ↑	Links
P36	EMODnet Chemistry chemical groups	EMODNET Chemistry themes	Terms based on the Call for tenders issued by CINEA for the continued funding of EMODnet and used by the EMODnet Chemistry lot to report KPIs on data and data products based on coarse granularity groupings of chemical parameters.	EMODnet Chemistry Lot	Link Icon
P35	EMODnet Chemistry aggregated parameter names	EMODNET chemistry aggregations	Labels used for aggregated parameters in the EMODNET chemistry lot	EMODnet Chemistry Lot	Link Icon
BQ1	EMODnet Bathymetry Quality Indicators of horizontal accuracy (QI_Horizontal)	EMODnet Bathymetry QI_Horizontal	Terms used by the EMODnet Bathymetry Lot to define the estimated horizontal accuracy of bathymetric data (QI_Horizontal).	EMODnet Bathymetry Lot	Link

emodnet.ec.europa.eu



EMODnet
European Marine
Observation and
Data Network

EMODnet | Key Products

Some results of working together



BATHYMETRY



GEOLOGY



SEABED HABITATS



PHYSICS



CHEMISTRY



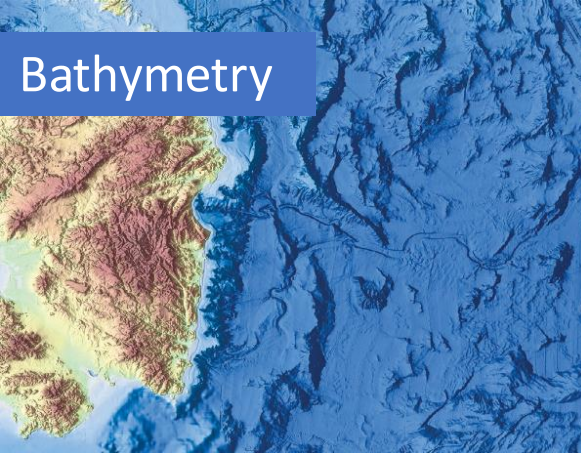
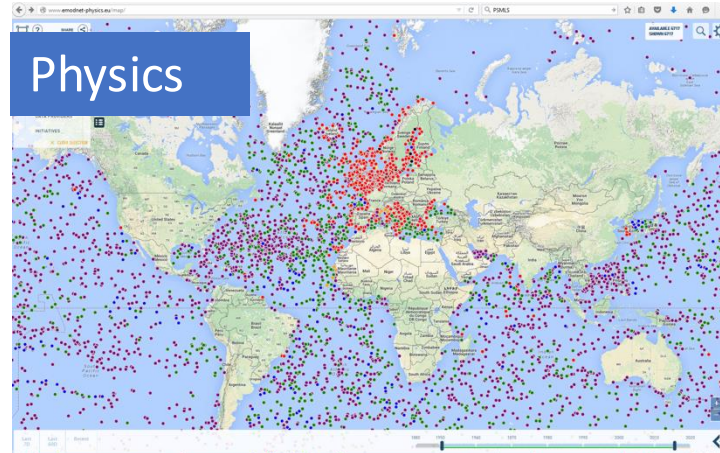
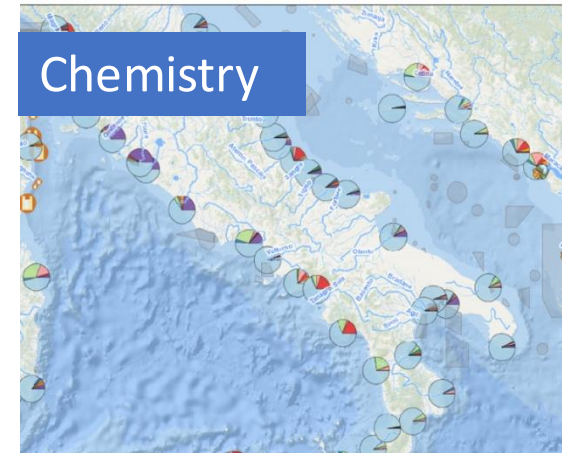
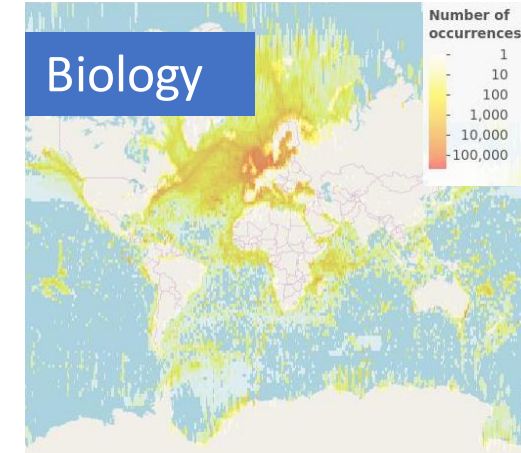
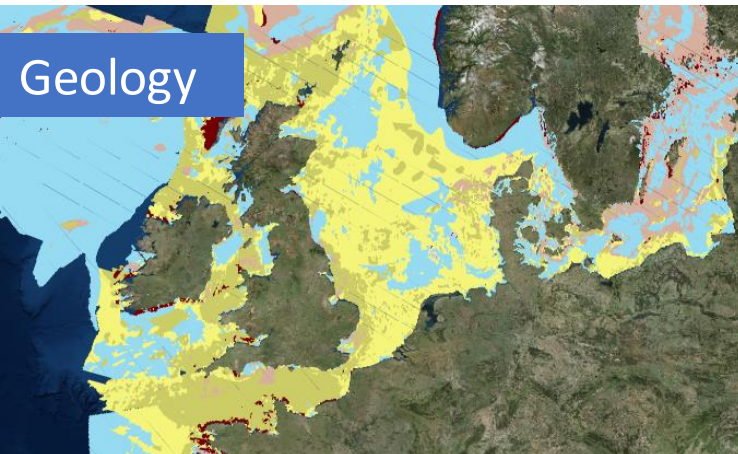
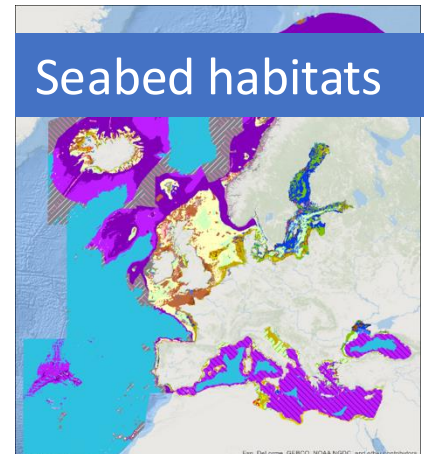
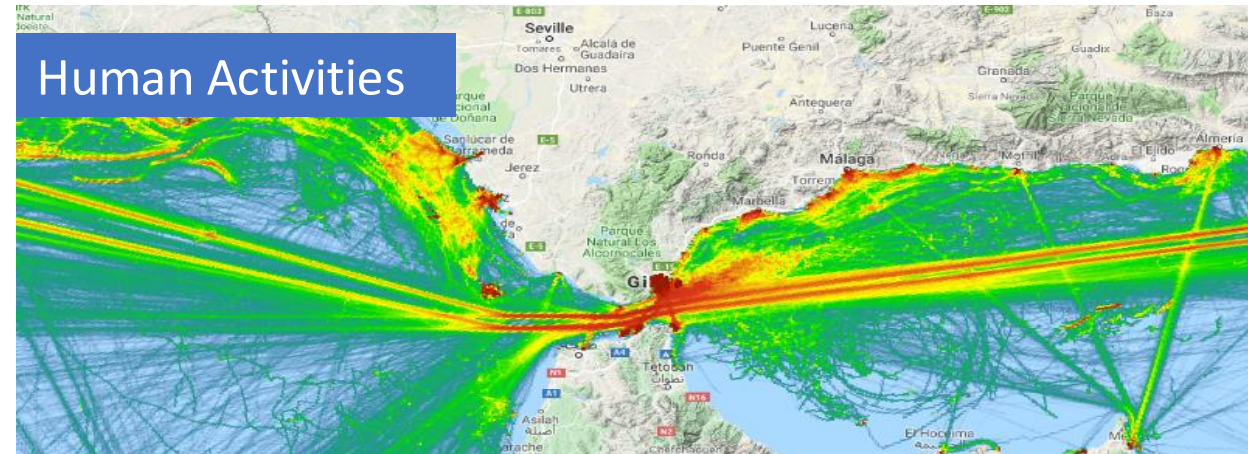
BIOLOGY



HUMAN ACTIVITIES



Consult
the Data &
Data Product Portfolio:

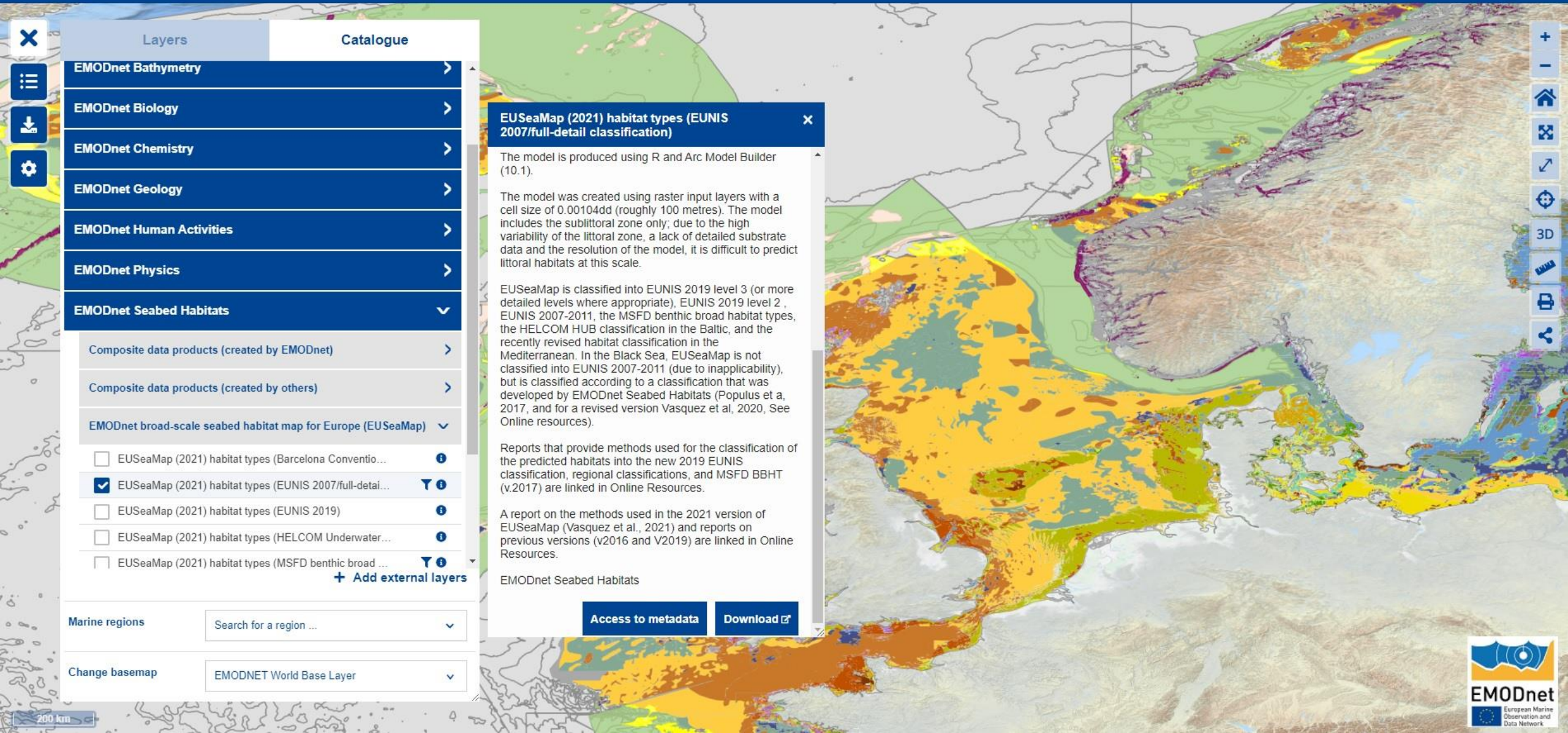


EMODnet | One map viewer – full download



EMODnet Map Viewer

EN English



Layers

Catalogue

EMODnet Bathymetry

EMODnet Biology

EMODnet Chemistry

EMODnet Geology

EMODnet Human Activities

EMODnet Physics

EMODnet Seabed Habitats

Composite data products (created by EMODnet)

Composite data products (created by others)

EMODnet broad-scale seabed habitat map for Europe (EUSeaMap)

☐ EUSeaMap (2021) habitat types (Barcelona Conventio...

☒ EUSeaMap (2021) habitat types (EUNIS 2007/full-detai...

☐ EUSeaMap (2021) habitat types (EUNIS 2019)

☐ EUSeaMap (2021) habitat types (HELCOM Underwater...

☐ EUSeaMap (2021) habitat types (MSFD benthic broad ...

+ Add external layers

Marine regions

Search for a region ...

Change basemap

EMODNET World Base Layer

EUSeaMap (2021) habitat types (EUNIS 2007/full-detail classification)

The model is produced using R and Arc Model Builder (10.1).

The model was created using raster input layers with a cell size of 0.00104dd (roughly 100 metres). The model includes the sublittoral zone only; due to the high variability of the littoral zone, a lack of detailed substrate data and the resolution of the model, it is difficult to predict littoral habitats at this scale.

EUSeaMap is classified into EUNIS 2019 level 3 (or more detailed levels where appropriate), EUNIS 2019 level 2, EUNIS 2007-2011, the MSFD benthic broad habitat types, the HELCOM HUB classification in the Baltic, and the recently revised habitat classification in the Mediterranean. In the Black Sea, EUSeaMap is not classified into EUNIS 2007-2011 (due to inapplicability), but is classified according to a classification that was developed by EMODnet Seabed Habitats (Populus et al, 2017, and for a revised version Vasquez et al, 2020, See Online resources).

Reports that provide methods used for the classification of the predicted habitats into the new 2019 EUNIS classification, regional classifications, and MSFD BBHT (v.2017) are linked in Online Resources.

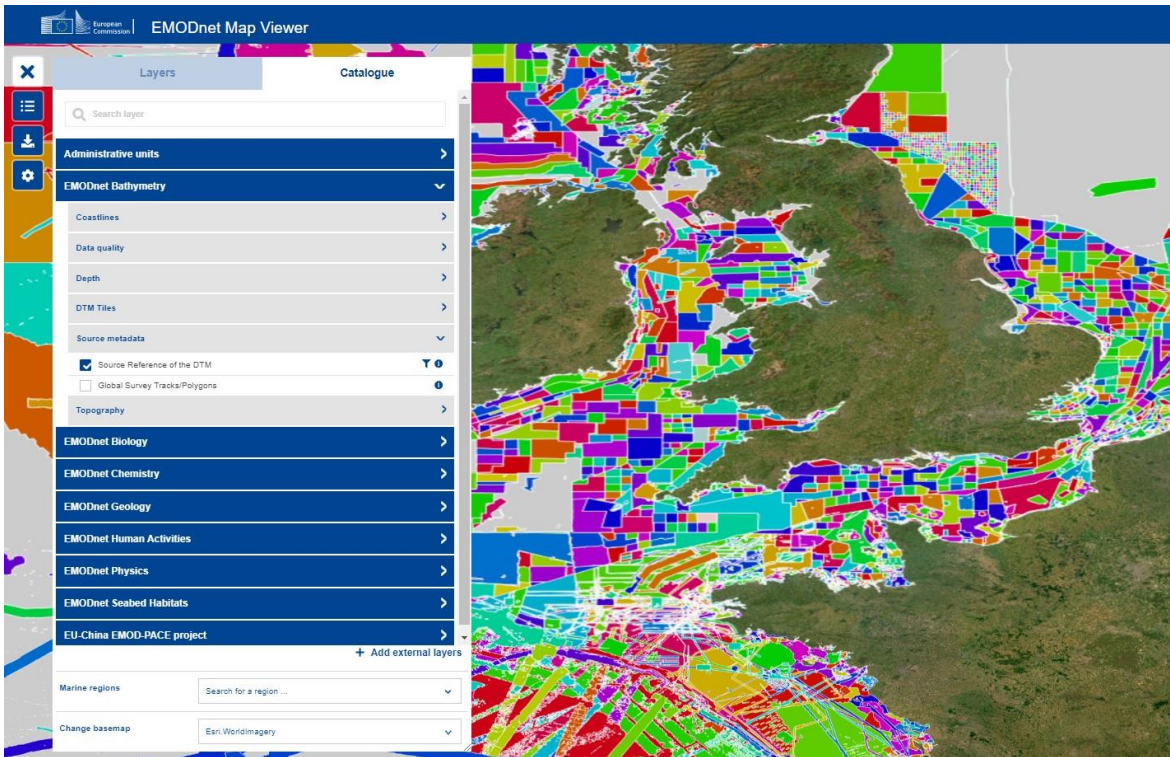
A report on the methods used in the 2021 version of EUSeaMap (Vasquez et al., 2021) and reports on previous versions (v2016 and V2019) are linked in Online Resources.

EMODnet Seabed Habitats

[Access to metadata](#)

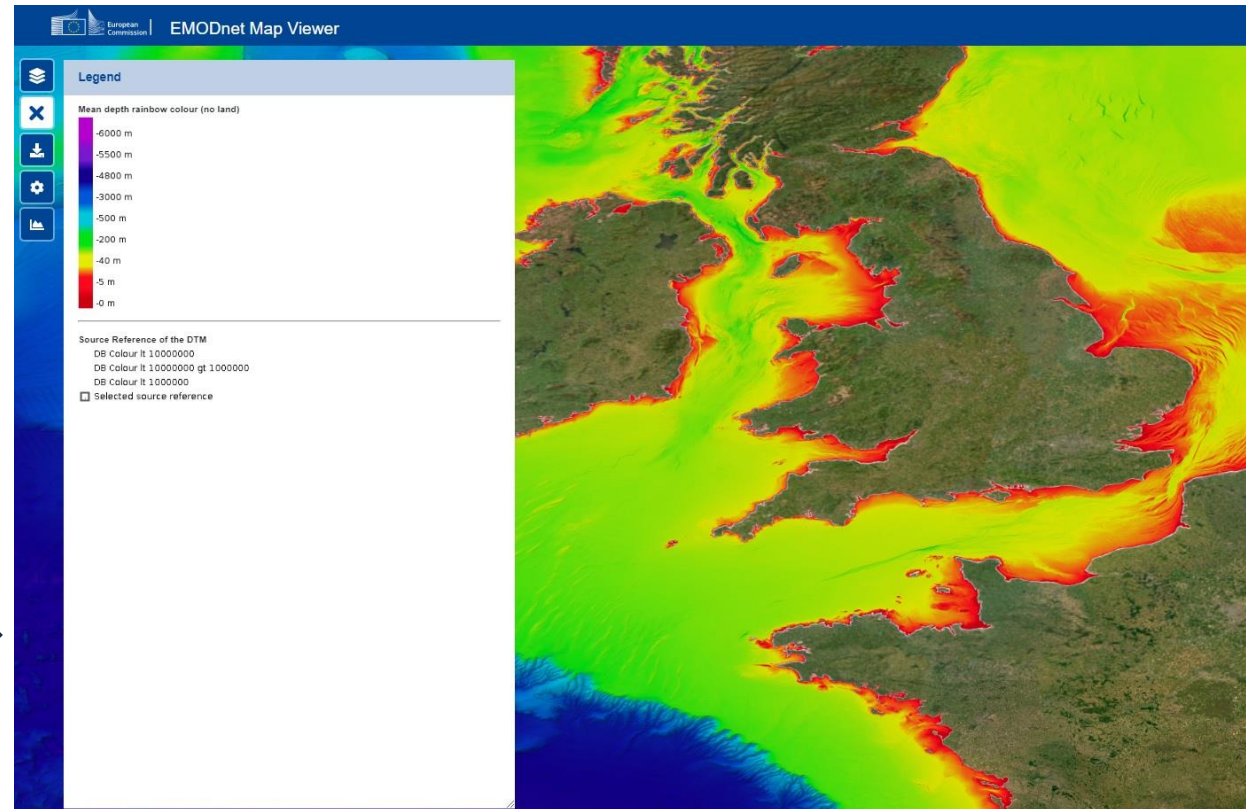
[Download](#)

EMODnet | Bathymetry DTM European wide marine product



Soundings data collected from member states (and others)

Turned into a European Digital Terrain Model of the seabed.



EMODnet | How does it work?

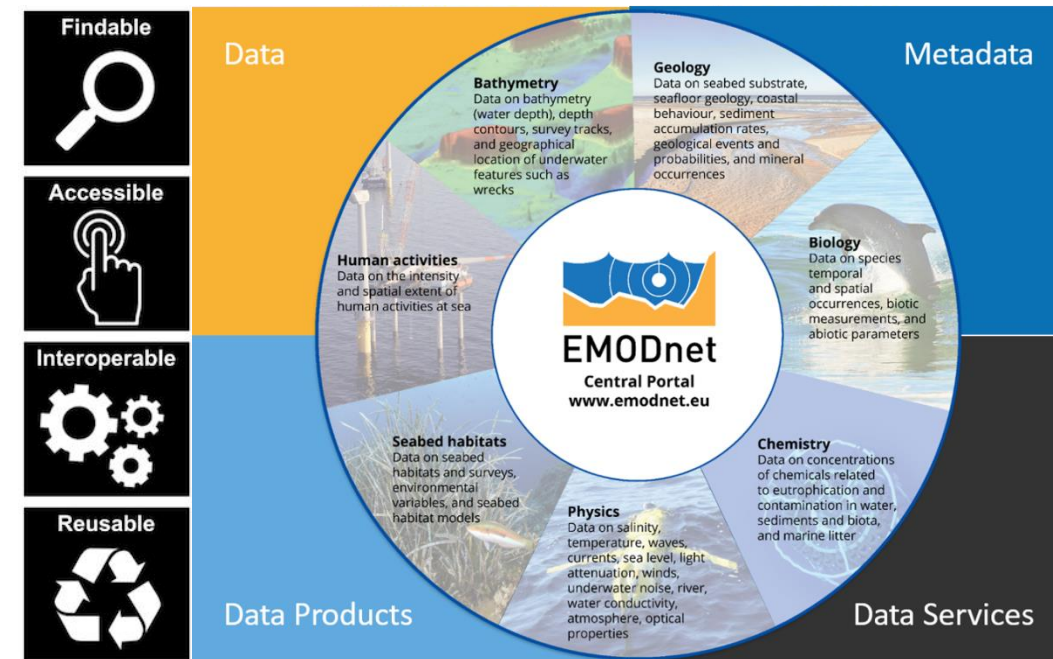
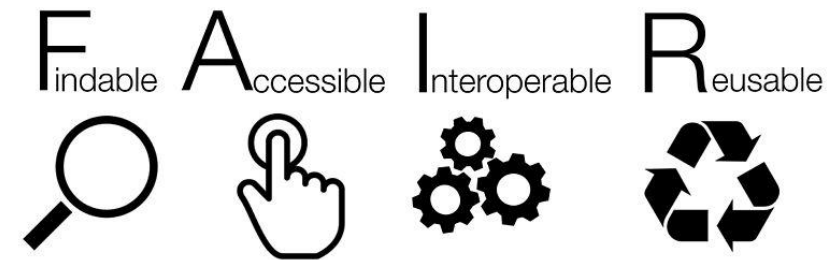
- ❑ **Data Standards** are the rules for structuring the collected information. A set of agreed-upon data standards ensures that the data entered in a system can be reliably ***read, sorted, indexed, retrieved, and communicated between different systems***. Data standards are therefore crucial for ensuring interoperability and the accuracy and portability of data, helping protect its long-term value.
- ❑ **Data harmonization** refers to all efforts to combine data from different sources and provide users with a **comparable** view of all.
- ❑ EMODnet experts, in collaboration with experts from other infrastructures in EU and international levels, ***are developing, reviewing and updating standards*** for all EMODnet available parameters and make available harmonized and quality controlled, European level data products – owned by the Commission.
- ❑ **Permanent service:** long term EU data initiative by DG MARE

EMODnet | Core Goals

Services to discover, visualise and access open and free data & data products from a trusted source

- **INSPIRE** and **FAIR** data principles
- Aggregated, harmonized multi-parameter **datasets**
- Searchable **metadata**
- Integrated **data products** (e.g., maps)
- **Data services** (visualise, query) & **Web services**, machine-to-machine readability (e.g., OGC WMS, WFS)
- **Multidisciplinary**: environmental and human activity data
- **Long-term service** continuity: providing **trust between data providers, data managers & users**
- Promoting change towards a **culture of open data sharing**

Most **comprehensive** (parameter diversity, resolution and coverage) *in situ* marine environmental and human activities **data and data products service in Europe**;
Added value marine data products produced by domain experts that are not offered by other marine data services in Europe or beyond;





2007 INSPIRE Directive is based on a number of common principles:

- Data should be collected only once and kept where it can be maintained most effectively.
- It should be possible to combine seamless spatial information from different sources across Europe and share it with many users and applications.
- It should be possible for information collected at one level/scale to be shared with all levels/scales; detailed for thorough investigations, general for strategic purposes.
- Geographic information needed for good governance at all levels should be readily and transparently available.
- It should be easy to find what geographic information is available, how it can be used to meet a particular need, and under which conditions it can be acquired and used.

OGC: Open Geospatial Consortium – an entity that creates standards for sharing geospatial data:

- *WMS: web map service; WFS: web feature services; CSW: catalogue service for the web*

In 2016, the '[FAIR Guiding Principles for scientific data management and stewardship](#)' were published in *Scientific Data*

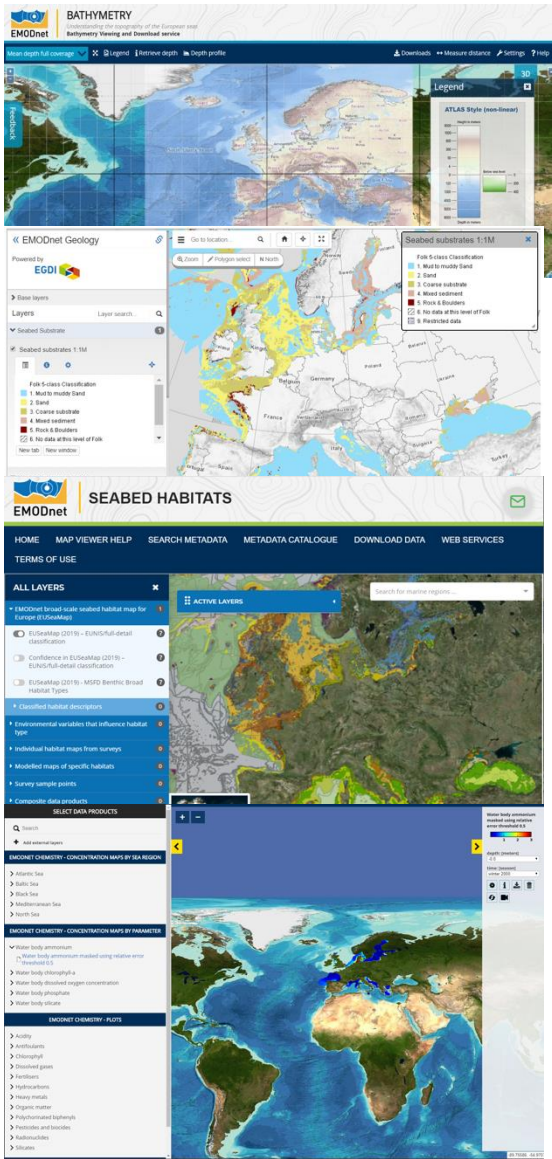
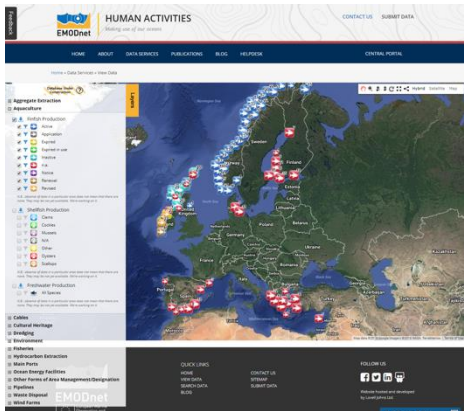
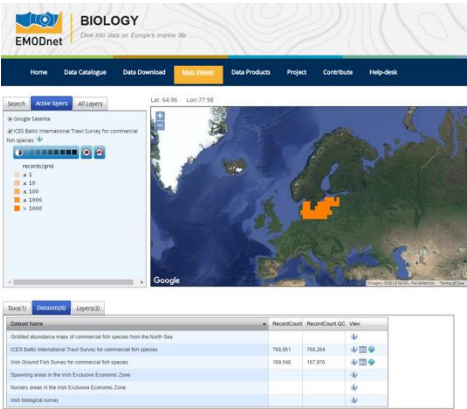
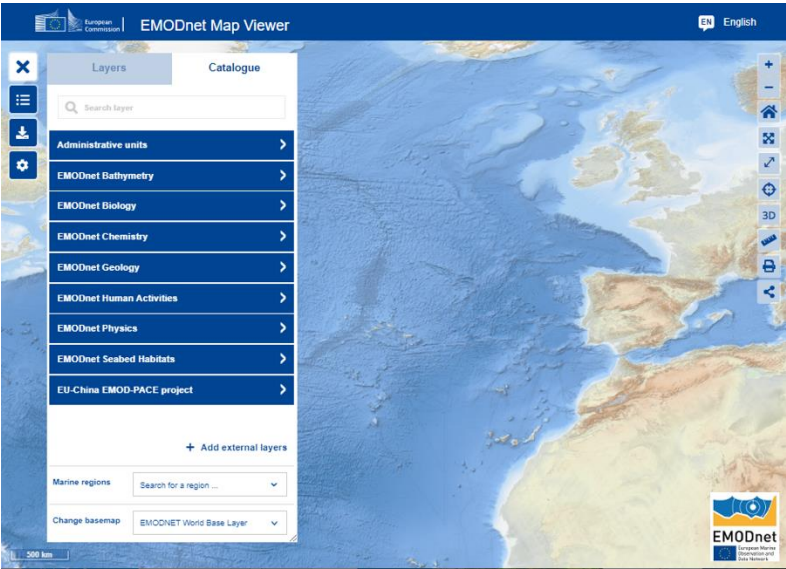
- **Findable:** The first step in (re)using data is to find them. Metadata and data should be easy to find for both humans and computers. Machine-readable metadata are essential for automatic discovery of datasets and services,
- **Accessible:** Once the user finds the required data, she/he/they need to know how they can be accessed, possibly including authentication and authorisation.
- **Interoperable:** The data usually need to be integrated with other data. In addition, the data need to interoperate with applications or workflows for analysis, storage, and processing.
- **Reusable:** Optimise the reuse of data by making sure that metadata and data are well-described so that they can be replicated and/or combined in different settings.

EMODnet | Open Data Directive (2003/2019)

- **Open Data (2019):** Open Data Directive of EU. is an EU directive that stipulates minimum requirements for EU member states regarding making public sector information available for re-use. Includes the categories of “High Value Dataset”, as referred to in Article 13(1) of the directive. Datasets included in this category will have to be published completely and freely in machine-readable format and via APIs.
 - Geospatial
 - Earth observation and environment
 - Meteorological
 - Statistics
 - Companies and company ownership
 - Mobility

Data licence, used by EMODnet = Creative Commons 4.0 by.

January 2023, we switched to one map viewer



One central map viewer

to visualise all EMODnet data

1 OCEAN 1 EMODnet

One single portal

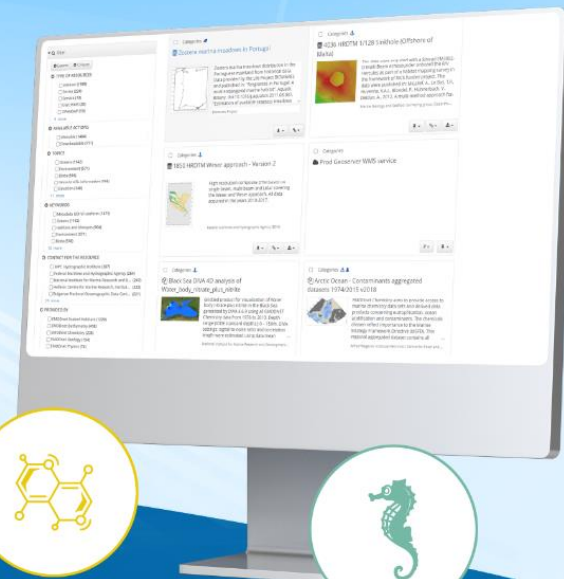
One central metadata catalogue

to enhance data search and discovery

140
partners

+100
use cases

Discover, visualise and
download marine data and products
across 7 thematics and hundreds of parameters



BATHYMETRY



HUMAN ACTIVITIES



PHYSICS



GEOLOGY



SEABED HABITATS



CHEMISTRY



BIOLOGY

EMODNET.EC.EUROPA.EU



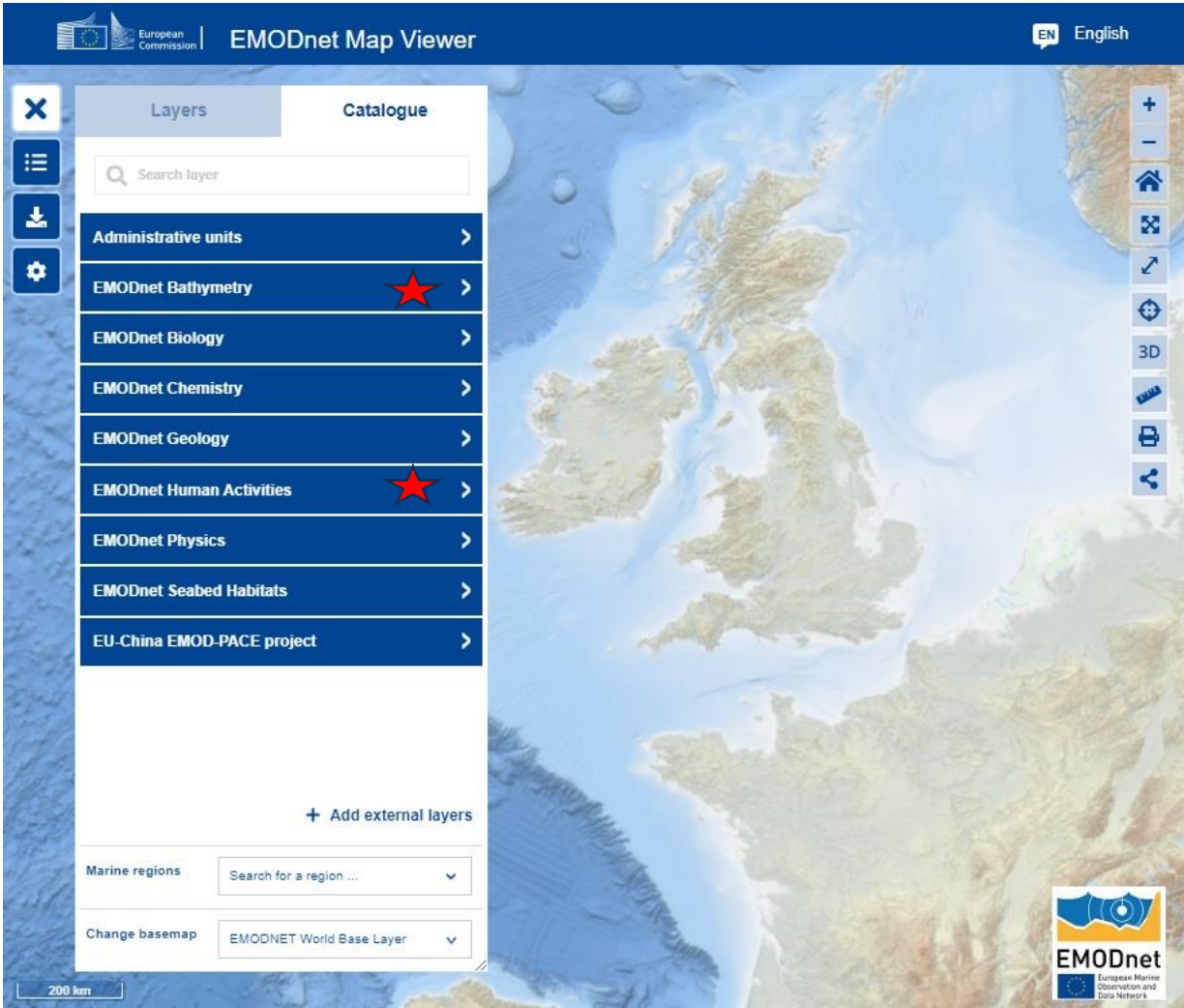
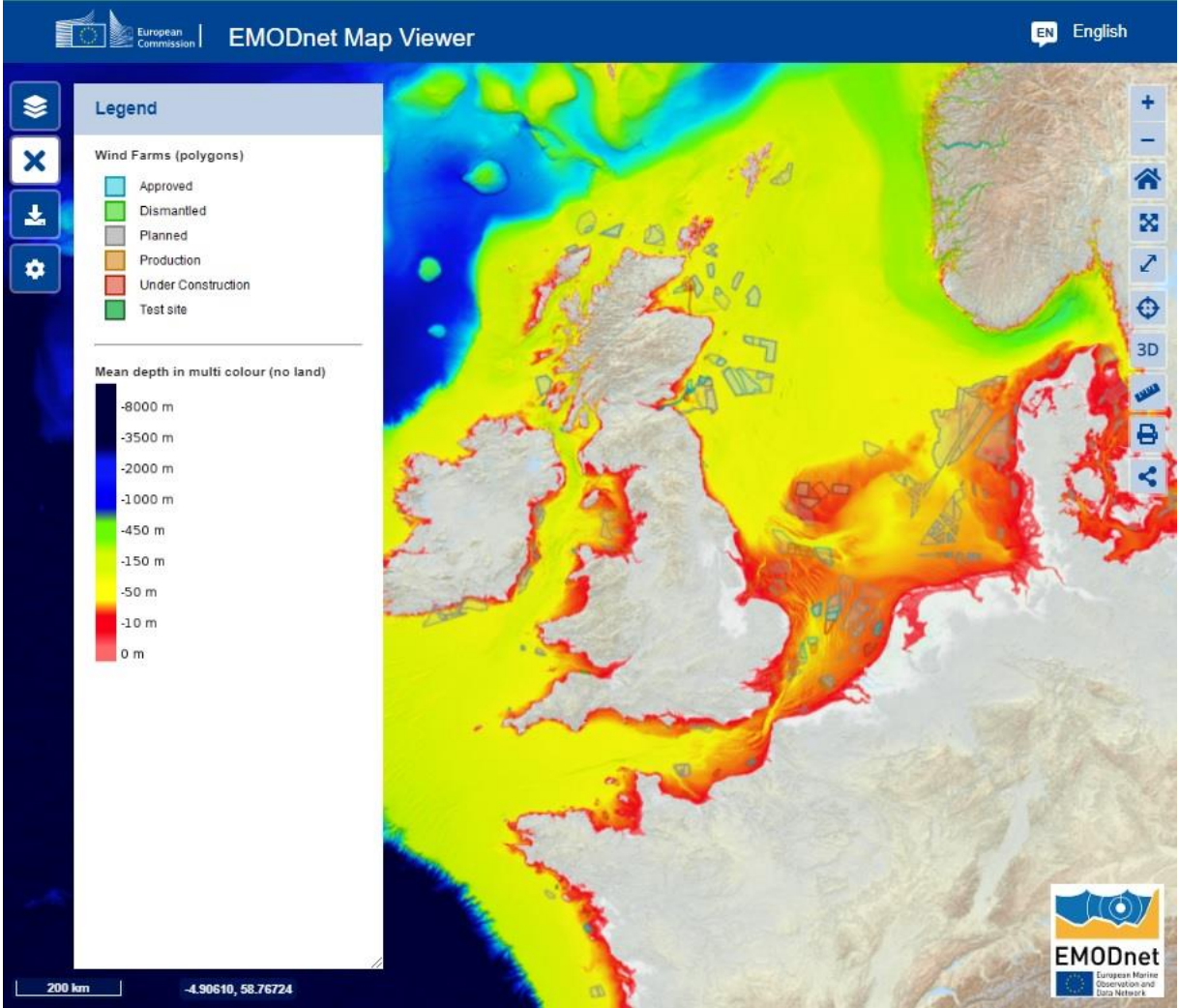
The European Marine Observation and Data Network (EMODnet) is financed by the European Union under regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund

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YOUR GATEWAY TO *IN SITU* MARINE DATA IN EUROPE AND BEYOND



EMODnet | One map viewer for data discovery and download



EMODnet | One map viewer – subset and download – OPENDAP/ERDDAP

The screenshot displays the EMODnet Map Viewer interface. The main map area shows bathymetry data for the Mediterranean Sea, with a color scale ranging from red (shallow) to yellow (deep). A black rectangular box highlights a specific area in the central part of the sea. On the left side, there is a 'Layers' panel with a search bar and a list of layers. The 'EMODnet Bathymetry' layer is expanded, showing options like 'Bathymetric contours', 'Mean depth in multi colour (no land)' (which is selected), 'Mean depth natural colour (with land)', 'Mean depth rainbow colour (no land)', and 'High Resolution bathymetry'. Below this, there are sections for 'DTM Tiles' and 'Marine regions'. At the bottom left, a scale bar indicates 10 km. On the right side, there is a 'Product selection' panel with a table showing the selected layer and format. The table has two columns: 'Layer' and 'Format'. The selected layer is 'Mean depth in multi colour (no land)' and the format is 'nc'. There is also a button to 'Click here to select an area on the map' and a 'Clear all selections' button at the bottom right.

Layer	Format
Mean depth in multi colour (no land)	nc
OpenStreetMap (OSM)	No data on the server

EMODnet | One map viewer – subset and download: OGC - WFS

The screenshot displays the EMODnet Map Viewer interface. The main map shows the distribution of Orcinus orca in the North Atlantic, with a color-coded legend indicating record counts per grid cell. A black rectangle highlights a specific area of interest. The interface includes several panels:

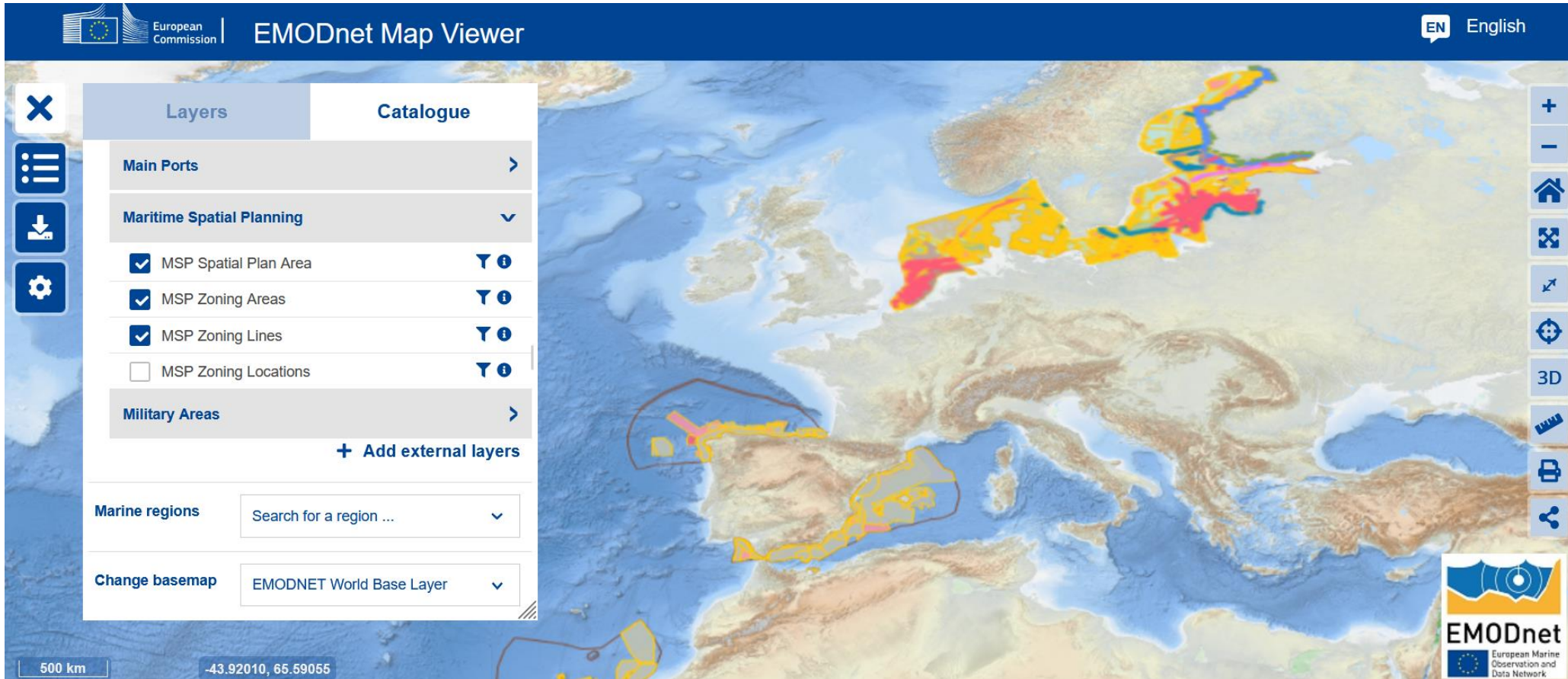
- Legend:** Lists observation counts from 1 to > 60,000, color-coded from dark blue to red.
- Filter layers:** A panel with a search bar containing "Orcinus orca" and a "Predefined filters" dropdown. It includes "Clear" and "Apply" buttons.
- Product selection:** A table showing selected layers and their formats.
- Data Table:** A table titled "EurOBIS database observations" showing the record count for the selected area.

Layer	Format
EurOBIS database observations	CSV
OpenStreetMap (OSM)	No data on the server

RecordCount
1

EMODnet
European Marine Observation and Data Network

EMODnet: Maritime Spatial Planning (MSP) OGC - WMS



European Commission | EMODnet Map Viewer

EN English

Layers | **Catalogue**

Main Ports >

Maritime Spatial Planning v

- ☒ MSP Spatial Plan Area
- ☒ MSP Zoning Areas
- ☒ MSP Zoning Lines
- ☐ MSP Zoning Locations

Military Areas >

+ Add external layers

Marine regions Search for a region ... v

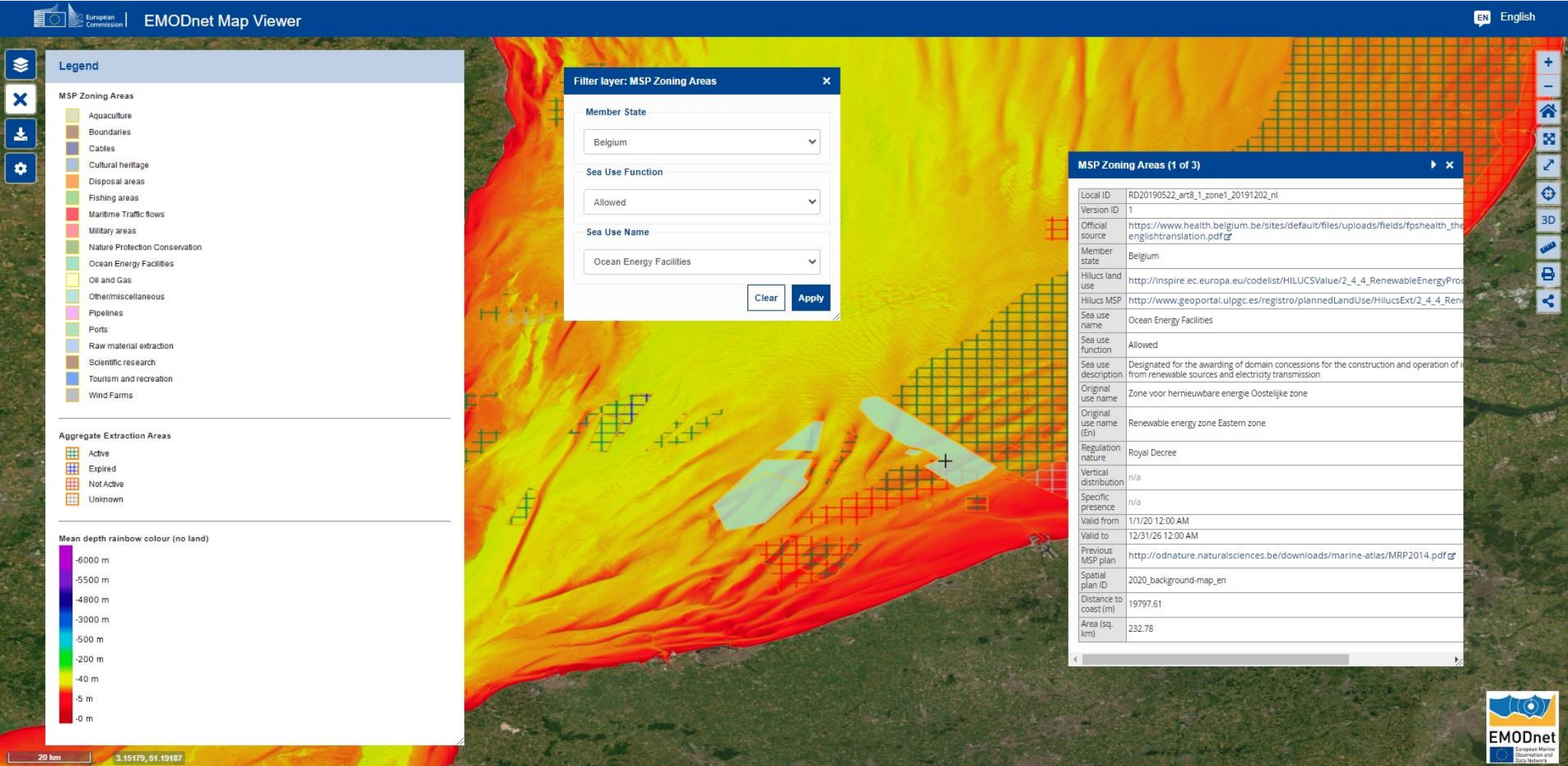
Change basemap EMODNET World Base Layer v

500 km -43.92010, 66.59055

EMODnet
European Marine
Observation and
Data Network

EU Member State Maritime Spatial Plans on EMODnet Map Viewer, noting not all EU Member States are currently available as the Member State must first provide EMODnet with metadata to enable EMODnet to produce geospatial layers

EMODnet | Human Activities



EMODnet | One central catalogue: OGC - CSW

EMODnet Product Catalogue

Search English

Search ...

Nothing in basket

Filter

- TYPE OF RESOURCES
 - Dataset (570)
 - Series (19)
- AVAILABLE ACTIONS
 - Viewable (453)
 - Downloadable (58)
- TOPICS
 - Environment (568)
 - Biota (203)
 - Oceans (99)
 - Geoscientific information (25)
 - Imagery base maps earth cover (2)
- KEYWORDS
 - Environment (568)
 - Habitats and biotopes (538)
 - Metadata GDI-VI-conform (528)
 - Marine habitat mapping (278)
 - Biota (203)
- CONTACT FOR THE RESOURCE
 - Hellenic Centre for Marine Rese... (132)
 - Hellenic National Oceanographic... (131)
 - National Parks and Wildlife Service (79)
 - Joint Nature Conservation Commit... (56)
 - EMODnet Seabed Habitats (43)
- PROVIDED BY
 - EMODnet Seabed Habitats (564)
 - EMODnet Chemistry (19)
 - EMODnet Human Activities (5)
- YEARS
 - 2022 (5)
 - 2021 (15)
 - 2019 (16)
 - 2018 (10)
 - 2017 (27)
- FORMATS

Categories

- North East Atlantic Ocean - Contaminants aggregated datasets 1970/2017 v2018
- North Sea - Contaminants aggregated datasets 1970/2017 v2018
- Black Sea - Contaminants aggregated datasets 1974/2017 v2018
- Baltic Sea - Contaminants aggregated datasets 1972/2017 v2018
- Mediterranean Sea - Contaminants aggregated datasets 1974/2017 v2018
- Habitat Map of "Capo Milazzo" marine protected area



EMODnet Product Catalogue

Search English

Back to search Previous Next

Download Display mode

North Sea - Contaminants aggregated datasets 1959/2019 v2021

EMODnet Chemistry aims to provide access to marine chemistry data sets and derived data products concerning eutrophication, ocean acidification and contaminants. The chemicals chosen reflect importance to the Marine Strategy Framework Directive (MSFD). This regional aggregated dataset contains all unrestricted EMODnet Chemistry data on contaminants, and covers the North Sea with 34978 CDI records divided per matrices: 1460 biota, 24740 water profiles, 8080 sediment profiles and 281 sediment time series. For water, the temporal range is from 1959-10-03 to 2019-12-30. For sediment, the temporal range is from 1970-07-11 to 2019-12-18 for profile data and from 1993-09-16 to 2015-06-15 for the time series. For biota, the temporal range is from 1979-02-26 to 2018-02-28. Data were aggregated and quality controlled by 'Aarhus University, Department of Bioscience, Marine Ecology Roskilde from Denmark'. Regional datasets concerning contaminants are automatically harvested. Parameter names in these datasets are based on P01, BODC Parameter Usage Vocabulary, which is available at: http://seadatanet.maris2.nl/bandit/browse_step.php. Each measurement value has a quality flag indicator. The resulting data collections for each Sea Basin are harmonised, and the collections are quality controlled by EMODnet Chemistry Regional Leaders using ODV Software and following a common methodology for all Sea Regions. Harmonisation means that: (1) unit conversion is carried out to express contaminant concentrations with a limited set of measurement units (according to EU directives 2013/39/UE, Comm. Dec. EU 2017/848) and (2) merging of variables described by different 'local names' but corresponding exactly to the same concepts in BODC P01 vocabulary. Detailed documentation is available at: <https://doi.org/10.6092/b62e8d7-dc92-4305-9337-7634a5cae3f4>. Explore and extract data at: <https://emodnet-chemistry.webodv.awi.de/contaminants%3ENorthSea>. The harmonised dataset can also be downloaded as ODV spreadsheet (TXT file), which is composed of metadata header followed by tab separated values. This worksheet can be imported to ODV Software for visualisation (More information can be found at: <https://www.seadatanet.org/Software/ODV>). The same dataset is offered also as XLSX file in a long/vertical format, in which each P01 measurement is a record line. Additionally, there are a series of columns that split P01 terms in subcomponents (measure, substance, CAS number, matrix...). This transposed format is more adapted to worksheet applications users (e.g. LibreOffice Calc). The original datasets can be searched and downloaded from EMODnet Chemistry Download Service: <https://emodnet-chemistry.maris.nl/search>.

Overviews

Water

Sediment timeseries

Sediment profiles

Biota

Identification Content ReferenceSystem Quality DomainConsistency

Distribution format **Zip file (ODV spreadsheet and transposed spreadsheet) (Version: 1.0)**

Distributor

Organisation name	National Institute of Oceanography and Applied Geophysics - OGS, Division of Oceanography
Delivery point	Borgo Grotta Gigante 42/c
City	Sgonico (Trieste)
Postal code	34010
Country	Italy
Electronic mail address	nodc@ogs.trieste.it
Linkage	http://www.ogs.trieste.it/
Role	Distributor: Party who distributes the resource

Search and filter INSPIRE metadata of all EMODnet products emodnet.ec.europa.eu/geonetwork

EMODnet web services

- Access EMODnet data, products and metadata through INSPIRE-compliant OGC web services and other API's
- Web service documentation and R code examples available on GitHub: github.com/EMODnet/Web-Service-Documentation
- Find additional code examples on the EMODnet Github



A screenshot of the GitHub repository page for "EMODnet / Web-Service-Documentation". The page shows the repository name, a public status, and navigation tabs for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, and Insights. The "main" branch is selected, showing 2 branches and 0 tags. A file list table is displayed with columns for file name, commit message, and time ago. The "README.md" file is selected, showing its content. The README title is "EMODnet web service documentation". It includes a section for "R tutorial" with a "launch binder" button and a section for "Documentation". The right sidebar shows repository statistics: 73 commits, 2 stars, 2 forks, and 2 contributors. The "Languages" section shows "Jupyter Notebook" at 100.0%.

EMODnet | One central ERDDAP

**ERDDAP server @ EMODnet**
Easier access to scientific data

English
Brought to you by EMODnet

ERDDAP

ERDDAP is a data server that gives you a simple, consistent way to download subsets of scientific datasets in common file formats. It has oceanographic data.

Start Using ERDDAP:
Search for Interesting Datasets

- <https://erddap.emodnet.eu/erddap/index.html>
- An API to Gridded datasets

**ERDDAP server @ EMODnet**
Easier access to scientific data

English
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ERDDAP > List of All Datasets

154 matching datasets, listed in alphabetical order.

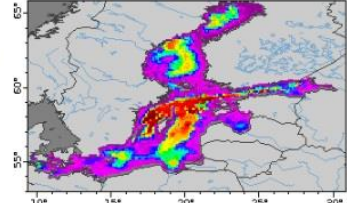
**ERDDAP server @ EMODnet**
Easier access to scientific data

English
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ERDDAP > griddap > Make A Graph

Dataset Title: **Baltic Sea, DIVAnd 6-year seasonal analysis of Water body phosphate 1980/2018 v2021 [time][lat][lon], 0.1deg, 1982-2015**Information: **Swedish Meteorological and Hydrological Institute** (Dataset ID: **Baltic_Sea_PO_3D_8d0f_49af_274c**)
Summary | License | FGDC | ISO 19115 | Metadata | Background | Data Access FormGraph Type: **surface**
X Axis: **longitude**
Y Axis: **latitude**
Color: **Water_body_phosphate_deepest**Dimensions: **time (UTC)**
Start: **2015-10-16T00:00:00Z**
Stop: **2015-10-16T00:00:00Z**
latitude (degrees_north): **53.0** to **65.9**
longitude (degrees_east): **9.4** to **30.9**Graph Settings
Color Bar: **Minimum:** **Maximum:** **N Sections:**
Draw land mask: **Y Axis Minimum:** **Maximum:** **Ascending**

Redraw the Graph (Please be patient. It may take a while to get the data.)

Optional:
Then set the File Type: **.htmlTable** (File Type information)
and **Download the Data or an Image**
or view the URL: **https://erddap.emodnet.eu/erddap/griddap/Baltic_Sea_PO_3D_8d0f_49af_274c**
(Documentation / Bypass this form)

Deepest values of Water body phosphate (umol/l)
Baltic Sea, DIVAnd 6-year seasonal analysis of Water body phosphate 1980/2018 v2021 [time][lat][lon], 0.1deg, 1982-2015
Data courtesy of Swedish Meteorological and Hydrological Institute

EMODnet | Benefits of Interoperable data/metadata.

ERDDAP Dataset Discovery

Search Datasets

sst

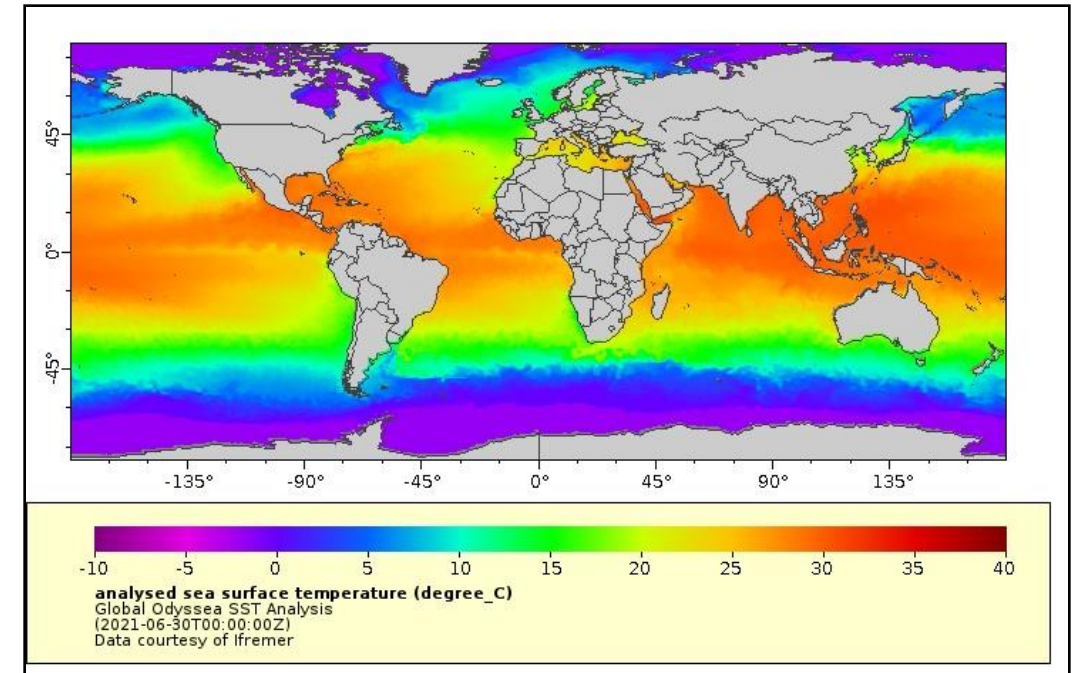
Type some words about the dataset you seek, then press the green button

Search Clear

Searched 35 ERDDAP servers; found 3168 datasets from 19 servers; total search time 11160ms.

Title	Institution	Dataset
+ Daily MUR SST, Final product	Jet Propulsion Laboratory	SST_Anomalies_Caledonie erddap.ifremer.fr
+ Global Odyssey SST Analysis	Ifremer	IFR-L4-SSTfnd-ODYSSEA-GLOB_010 erddap.ifremer.fr
+ Global Drifter Program - 1 Hour Interpolated QC Drifter Data	NOAA Atlantic Oceanographic and Meteorological Laboratory	drifter_hourly_qc erddap.ifremer.fr
+ Global Drifter Program - 6 Hour Interpolated QC Drifter Data	NOAA Atlantic Oceanographic and Meteorological Laboratory	drifter_6hour_qc erddap.ifremer.fr
+ OISST-V2-AVHRR Daily 1/4 degree By time, depth, latitude, longitude	NOAA/NCEI	ncdc_oisst_v2_avhrr_by_time_zlev_lat_lon www.ncei.noaa.gov
+ OISST-V2-AVHRR Daily 1/4 degree Preliminary By time, depth, latitude, longitude	NOAA/NCEI	ncdc_oisst_v2_avhrr_prelim_by_time_zlev_lat_lon www.ncei.noaa.gov
+ OISST-V2-AVHRR-AMSR Daily 1/4 degree By time, depth, latitude, longitude	NOAA/NCEI	ncdc_oisst_v2_avhrr_amsr_by_time_zlev_lat_lon www.ncei.noaa.gov
+ AEC GOMEX SST and CHL Climatology	Naval Research Laboratory	AEC_gomex_satellite_climo www.ncei.noaa.gov
+ AEC USEAST SST and CHL Climatology	Naval Research Laboratory	AEC_useast_satellite_climo www.ncei.noaa.gov
+ AEC USWEST SST and CHL Climatology	Naval Research Laboratory	AEC_uswest_satellite_climo www.ncei.noaa.gov
+ HYCOM Region 1 2D	Naval Oceanographic Office via NOAA NCEI	HYCOM_reg1_latest2d www.ncei.noaa.gov
+ HYCOM Region 17 2D	Naval Oceanographic Office via NOAA NCEI	HYCOM_reg17_latest2d www.ncei.noaa.gov

<http://erddap.com/#search=sst>

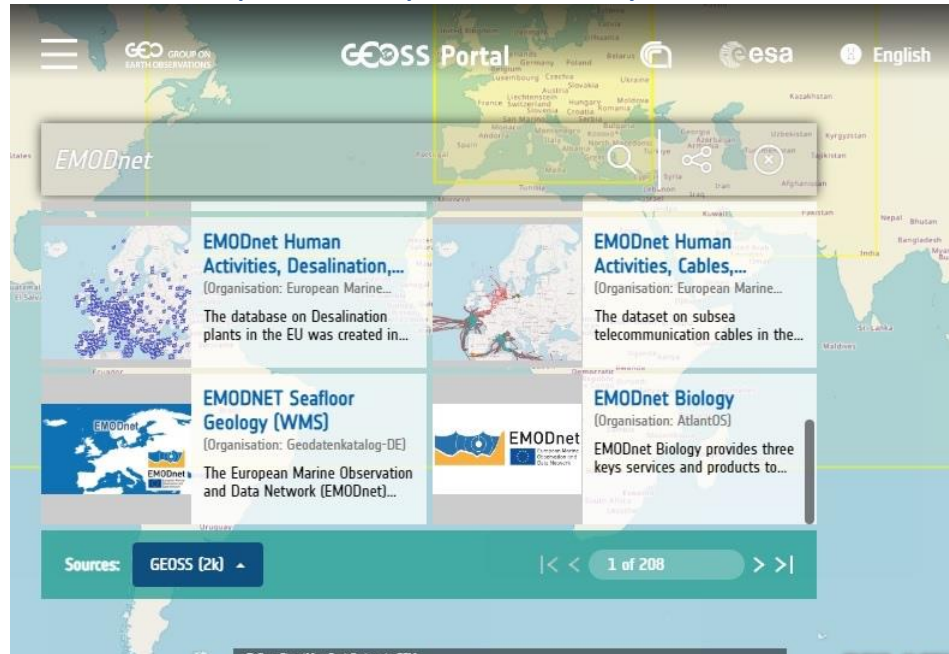


[https://erddap.ifremer.fr/erddap/griddap/IFR-L4-SSTfnd-ODYSSEA-GLOB_010.largePng?analysed_sst%5B\(2021-06-30T00:00:00Z\)%5D%5B\(-79.95\):\(79.95\)%5D%5B\(-179.95\):\(179.95\)%5D&.draw=surface&.vars=longitude%7Clatitude%7Canalysed_sst&.colorBar=%7C%7C%7C%7C%7C&.bgColor=0xffccccff](https://erddap.ifremer.fr/erddap/griddap/IFR-L4-SSTfnd-ODYSSEA-GLOB_010.largePng?analysed_sst%5B(2021-06-30T00:00:00Z)%5D%5B(-79.95):(79.95)%5D%5B(-179.95):(179.95)%5D&.draw=surface&.vars=longitude%7Clatitude%7Canalysed_sst&.colorBar=%7C%7C%7C%7C%7C&.bgColor=0xffccccff)

EMODnet | A European marine data best practice with global reach, and a contributor to the Global Ocean Data Ecosystem

GEOSS Portal

International portal, implemented by ESA



Ocean InfoHub

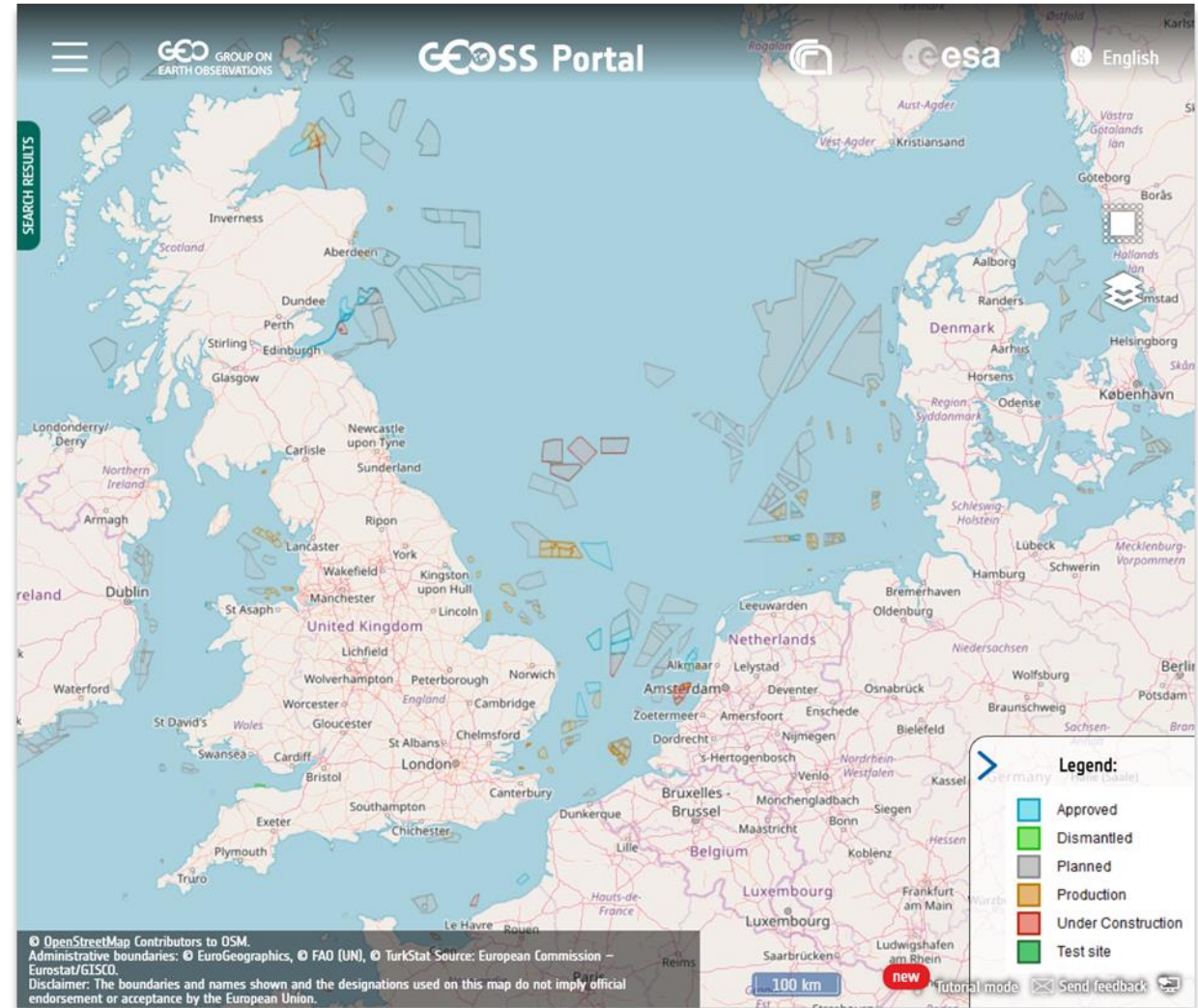
Implemented by IODE of IOC/UNESCO



EMODnet's FAIR common metadata catalogue is the backbone for EMODnet's contribution to the the **global ocean data digital ecosystem**, the UN Decade of Ocean Science for Sustainable Development, Sustainable Development Goals (SDG) agenda and OceanData 2030, via **machine-machine data harvesting**.

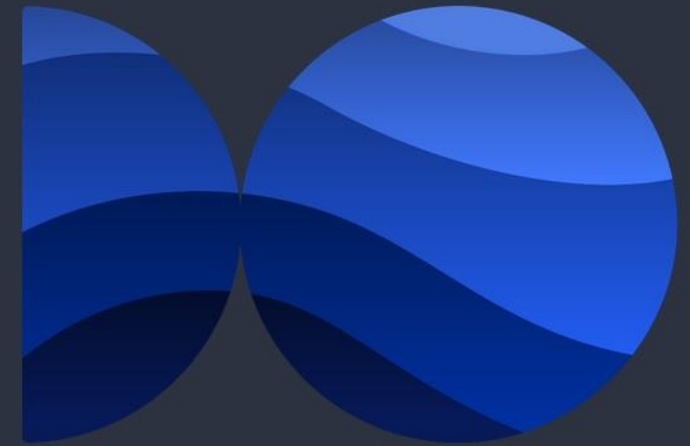
Metadata harmonisation – Ongoing task

- Users access metadata through one central EMODnet catalogue
 - Need to further improve on how metadata and download options are displayed to users
 - Requires metadata from different thematics to be formatted in a common way
- EMODnet catalogue is harvested in other portals:
 - Improving interoperability with these platforms requires metadata to be formatted according to ISO/INSPIRE standards



European Digital Twin of the Ocean

Explore and share ocean data, models and services in an open and collaborative way



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Discover how to contribute to reproducible science with trainings and tutorials

[Browse our tutorials](#)



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Take advantage of near-data computing, collaborate, and build end-user apps and reproducible processes

[Discover the Datalab](#)



Explore oceanographic data

View public data and create private data catalogs

[Access the viewer](#)

EDITO services

The screenshot displays the EDITO Datalab Service catalog interface. The top navigation bar includes links for Home, Trainings and tutorials, Datalab, Viewer, About EDITO, Support, and a Login button. The left sidebar contains a list of services: Reduce, My account, Project settings, Service catalog (highlighted), My Services, Process catalog, My Processes, My Secrets, My Files, and Data Explorer. The main content area is titled "Service catalog" and features a search bar and a list of services: Jupyter-python, Rstudio, Jupyter-pytorch, and Jupyter-r. Each service card includes a description and a "Launch" button. An inset window shows a JupyterLab IDE interface with a file browser, a notebook, a console, and a sidebar with various file types like Terminal, Text File, Markdown File, Julia File, Python File, and Show Contextual Help.

EDITO Datalab

Home Trainings and tutorials Datalab Viewer About EDITO Support [Login](#)

Service catalog

Explore, launch and configure services with just a few clicks.
You are exploring Helm Chart Repository [IDE: Services for datascientists](#).

SEARCH

Playground Ocean modelling Ocean data quality Data visualization What-If applications Focus applications IDE Databases Automation

Jupyter-python

The JupyterLab IDE with Python, Julia, and a collection of standard data science packages.

Launch

Rstudio

The RStudio IDE with a collection of standard data science packages.

Launch

Jupyter-pytorch

The JupyterLab IDE with Python and the deep-learning framework PyTorch.

Launch

Jupyter-r

The JupyterLab IDE with R and a collection of standard data science packages.

Launch

Funded by the European Union

MISSIONS

2022 - 2024 EDITO Infra

File Edit View Run Kernel Git Tabs Settings Help

onyxia@jupyter-python-750 X Launcher X +

Filter files by name: /

Name Last Modified

Notebook

Python 3 (ipykernel) Julia 1.10.2

Console

Python 3 (ipykernel) Julia 1.10.2

Other

Terminal Text File Markdown File Julia File Python File Show Contextual Help

EDITO services

Copernicus Marine Data Store

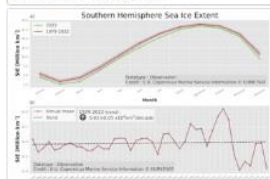
Browse

Description

Data from the Copernicus Marine Data Store, in Analysis-Ready, Cloud-Optimised (ARCO) format.

Catalogs 278

Filter catalogs by title



Antarctic Monthly Sea Ice Extent from Observations Reprocessing

DEFINITION Sea Ice Extent (SIE) is defined as the area covered by sufficient sea ice, that is the area of...

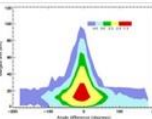
1/1/1978, 12:00:00 AM UTC - 12/1/2022, 12:00:00 AM UTC



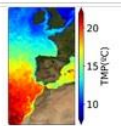
Antarctic Ocean - High Resolution Sea Ice Information

For the Antarctic Sea - A sea ice concentration product based on satellite SAR imagery and microwave...

1/1/1970, 12:00:00 AM UTC



Antarctic Ocean Sea Ice Drift Reprocessed



Atlantic-Iberian Biscay Irish-Ocean Physics Reanalysis

The IBI-MFC provides a ocean physical reanalysis product for the Iberia-Biscay-Ireland (IBI) area starting in...

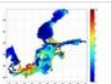
1/1/1993, 12:00:00 AM UTC - 12/28/2021, 11:00:00 PM UTC



Baltic Sea - Sea Ice Concentration and Thickness Charts

For the Baltic Sea- The operational sea ice service at FMI provides ice parameters over the Baltic Sea. The...

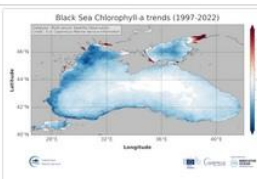
1/1/2018, 12:00:00 AM UTC - 5/7/2024, 12:00:00 AM UTC



Baltic Sea Biogeochemistry Analysis and Forecast

This Baltic Sea biogeochemical model product provides forecasts for the biogeochemical conditions in the...

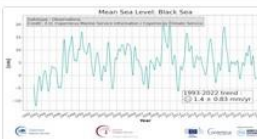
10/1/2020, 12:00:00 AM UTC - 5/13/2024, 12:00:00 AM UTC



Black Sea Chlorophyll-a trend map from Observations Reprocessing

DEFINITION This product includes the Black Sea satellite chlorophyll trend map based on regional chlorophyll...

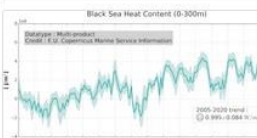
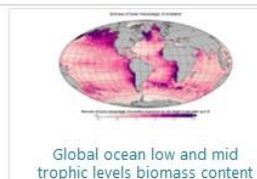
1/1/1970, 12:00:00 AM UTC



Black Sea Mean Sea Level time series and trend from Observations Reprocessing

DEFINITION The ocean monitoring indicator on mean sea level is derived from the DUACS delayed-time...

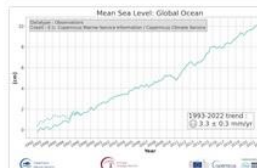
1/1/1993, 12:00:00 AM UTC - 8/4/2022, 12:00:00 AM UTC



Global ocean low and mid-trophic levels biomass content hindcast

The Low and Mid-Trophic Levels (LMTL) reanalysis for global ocean is produced at CLS on behalf of Globa...

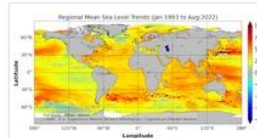
1/1/1998, 12:00:00 AM UTC - 12/31/2022, 12:00:00 AM UTC



Global Ocean Mean Sea Level time series and trend from Observations Reprocessing

DEFINITION The ocean monitoring indicator on mean sea level is derived from the DUACS delayed-time...

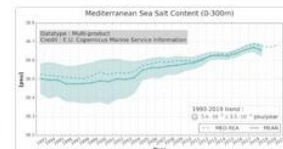
1/1/1993, 12:00:00 AM UTC - 8/4/2022, 12:00:00 AM UTC



Mediterranean Meridional Overturning Circulation Index from Reanalysis

DEFINITION Time mean meridional Eulerian streamfunctions are computed using the velocity field...

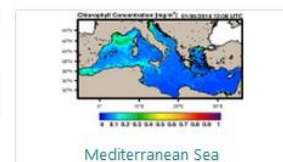
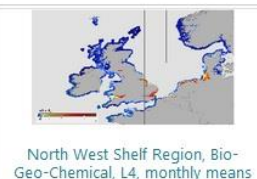
1/1/1987, 12:00:00 AM UTC - 1/1/2021, 12:00:00 AM UTC



Mediterranean Ocean Salt Content (0-300m)

DEFINITION Ocean salt content (OSQ) is defined and represented here as the volume average of the integral o...

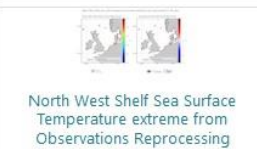
1/1/1993, 12:00:00 AM UTC - 1/1/2019, 12:00:00 AM UTC



North West Shelf Region, Bio-Geo-Chemical, L4, monthly means and interpolated daily observation

The High-Resolution Ocean Colour (HR-OC) Consortium (Brockmann Consult, Royal Belgian Institute of...

1/4/2020, 12:00:00 AM UTC - 10/31/2023, 12:00:00 AM UTC



North West Shelf Sea Surface Temperature extreme from Observations Reprocessing

DEFINITION The OMI_EXTREME_SST_NORTHWESTSHEL F_sst_mean_and_anomaly_obs...

1/1/1970, 12:00:00 AM UTC



North West Shelf Sea Surface Temperature extreme from Reanalysis

DEFINITION The CMEMS NORTHWESTSHEL F_omi_tempsal_extreme_var_temp_mean_and_anomaly...

1/1/1970, 12:00:00 AM UTC

Spatial
Temporal
Asset
Catalogue



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