



EMODnet



European Marine
Observation and
Data Network

Your gateway to marine data in Europe

EMODnet and the Nature Directives

EMODnet Biology

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Scope

- ① Data and metadata resulting from observations of marine species in European waters
- ① Excludes parameters that are collected or distributed under the Data Collection Framework for fisheries
- ① Functional groups: Algae, Angiosperms, Benthos, Birds, Fish, Mammals, Phytoplankton, Reptiles, Zooplankton
- ① Marine regions: Arctic Ocean, Atlantic Ocean, Baltic Sea, Black Sea, Mediterranean Sea, North Sea
- ① Provides free access to all the data and metadata obtained within EurOBIS (European OBIS node) and WoRMS (Marine species register)



Data access- Catalogue

📡 [https://www.emodnet-biology.eu/
data-catalog?module=dataset&extfrm=1](https://www.emodnet-biology.eu/data-catalog?module=dataset&extfrm=1)

📡 1583 metadata records

📡 1056 datasets with online data
(some records are created before data
are submitted, allows for discoverability)

The screenshot shows the EMODnet Biology Data Catalog search interface. At the top, there is a navigation bar with the EMODnet logo, the word "BIOLOGY", the tagline "Dive into data on Europe's marine life", a search box, and links for "CONTACT US" and "SUBMIT DATA". Below this is a dark blue navigation menu with links for "ABOUT", "DATA & DATA PRODUCT ACCESS", "ATLAS OF MARINE LIFE", "NEWS & EVENTS", "TERMS & CONDITIONS", "GET INVOLVED!", and "HELPDESK".

The main content area is titled "Data Catalog" and shows "EMODNET: Datasets [1583]" with a "simple search" link. The search form includes the following fields:

- Search in all fields: Title or word in abstract
- Theme:
- Data type:
- Data origin:
- Title:
- Institute:
- Person:
- Word in abstract:
- Begin date: before [MM/YYYY]
- End date: before [MM/YYYY]
- Archived:
- Thesaurus term: [search]
- Taxonomic term: [search]
- Geographical term: [search]
- author:
- year:
- Availability:

At the bottom of the search form, there is a "search" button, a "show full list" link, and a "help" link. A "simple search" link is also present at the bottom left. A footer note states: "All data in the Integrated Marine Information System (IMIS) is subject to the VLIIZ privacy policy".

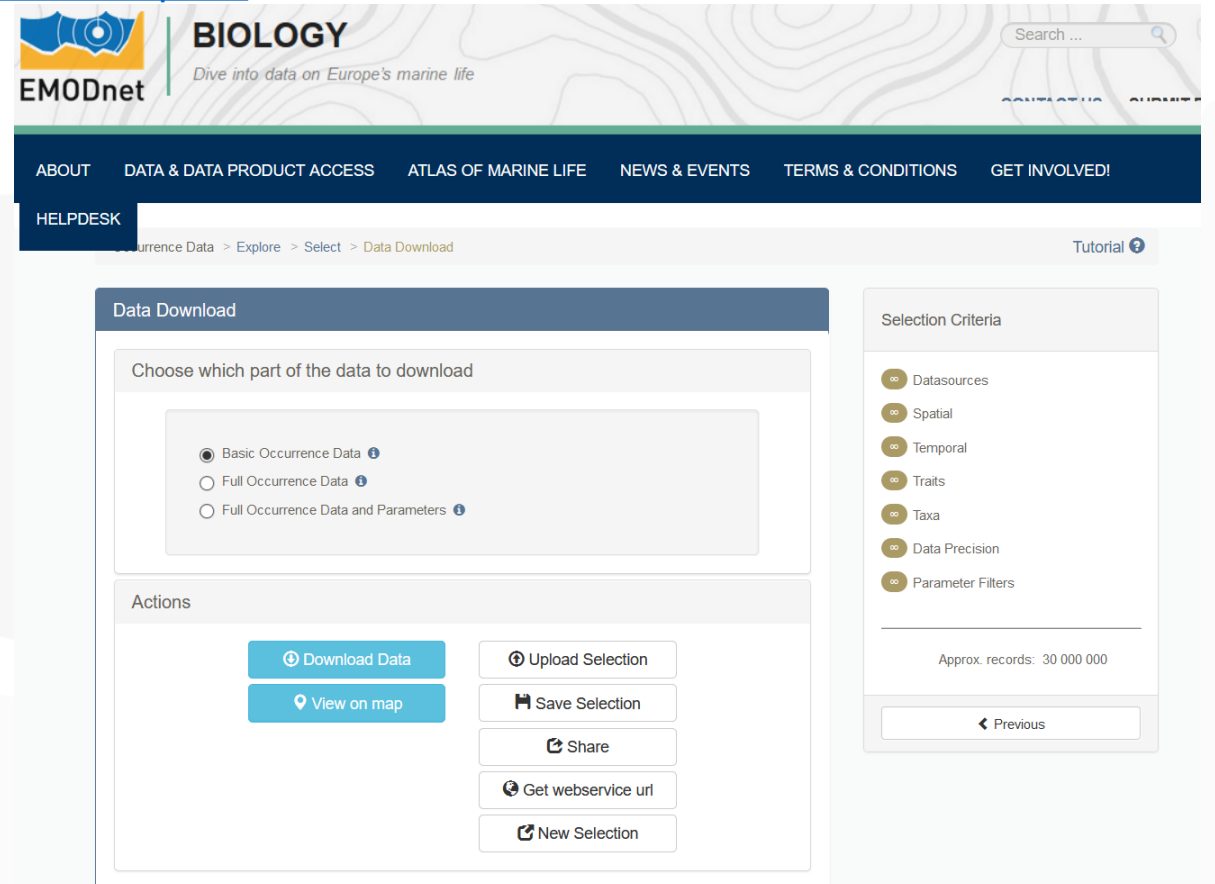
Data Access- Download toolbox

📍 <https://www.emodnet-biology.eu/toolbox/en/download/occurrence/explore>

📍 Allows for searching datasets via e.g. Taxonomy or various legal documents, e.g. Habitats Directive, MSFD indicators, etc.

📍 No registration to download data

📍 Form to download data implemented due to metric purposes, it requests organisation type, country, purpose, email is not a mandatory field



The screenshot shows the EMODnet Biology website interface. The header includes the EMODnet logo, the word "BIOLOGY", and the tagline "Dive into data on Europe's marine life". A search bar is located in the top right corner. The navigation menu includes "ABOUT", "DATA & DATA PRODUCT ACCESS", "ATLAS OF MARINE LIFE", "NEWS & EVENTS", "TERMS & CONDITIONS", and "GET INVOLVED!". A "HELPDESK" button is also visible. The main content area is titled "Data Download" and contains a section for "Choose which part of the data to download" with three radio button options: "Basic Occurrence Data" (selected), "Full Occurrence Data", and "Full Occurrence Data and Parameters". Below this is an "Actions" section with buttons for "Download Data", "View on map", "Upload Selection", "Save Selection", "Share", "Get webservice url", and "New Selection". On the right side, there is a "Selection Criteria" panel with a list of filter categories: "Datasources", "Spatial", "Temporal", "Traits", "Taxa", "Data Precision", and "Parameter Filters". At the bottom of this panel, it indicates "Approx. records: 30 000 000" and a "Previous" button.

Data Access- Web services

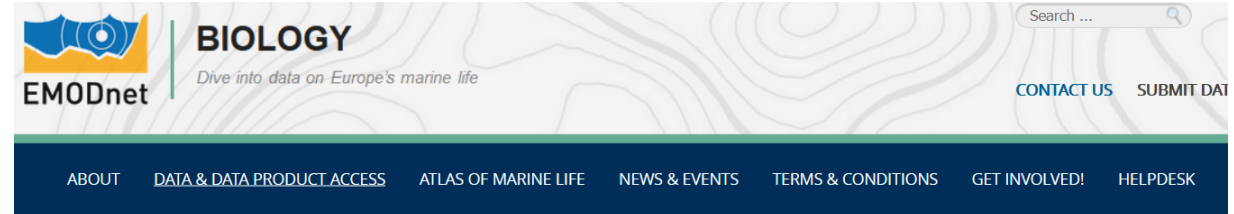
📡 Detailed information can be found via

<https://www.emodnet-biology.eu/emodnet-biology-api>

📡 R package using webservices to download

EMODnet Biology data (<https://github.com/lifewatch/eurobis/>)

📡 Output formats: csv, json, shapefile, kml



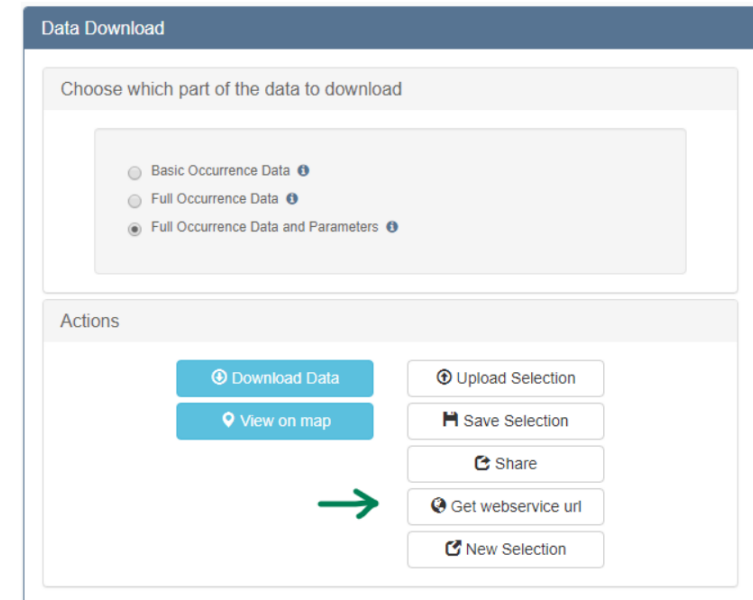
Web services documentation

EMODnet Biology Data

The EMODnet Biology data are available as a Web Feature Service (WFS) in accordance with the Open Geospatial Consortium (OGC) specifications. This webservice supports requests for geographical feature data (with vector geometry and attributes). The base link for performing a WFS request to EMODnet Biology is:

<https://geo.vliz.be/geoserver/Dataportal/ows?>

Essentially, the [Download Toolbox](#) developed by EMODnet Biology acts as an interactive builder for WFS requests. The URL to the WFS request can be copied to the clipboard at the last step of the selection in the Download Toolbox.



Technical details of the WFS can be retrieved by following GetCapabilities request:

<https://geo.vliz.be/geoserver/Dataportal/ows?service=wfs&version=1.1.0&request=GetCapabilities>



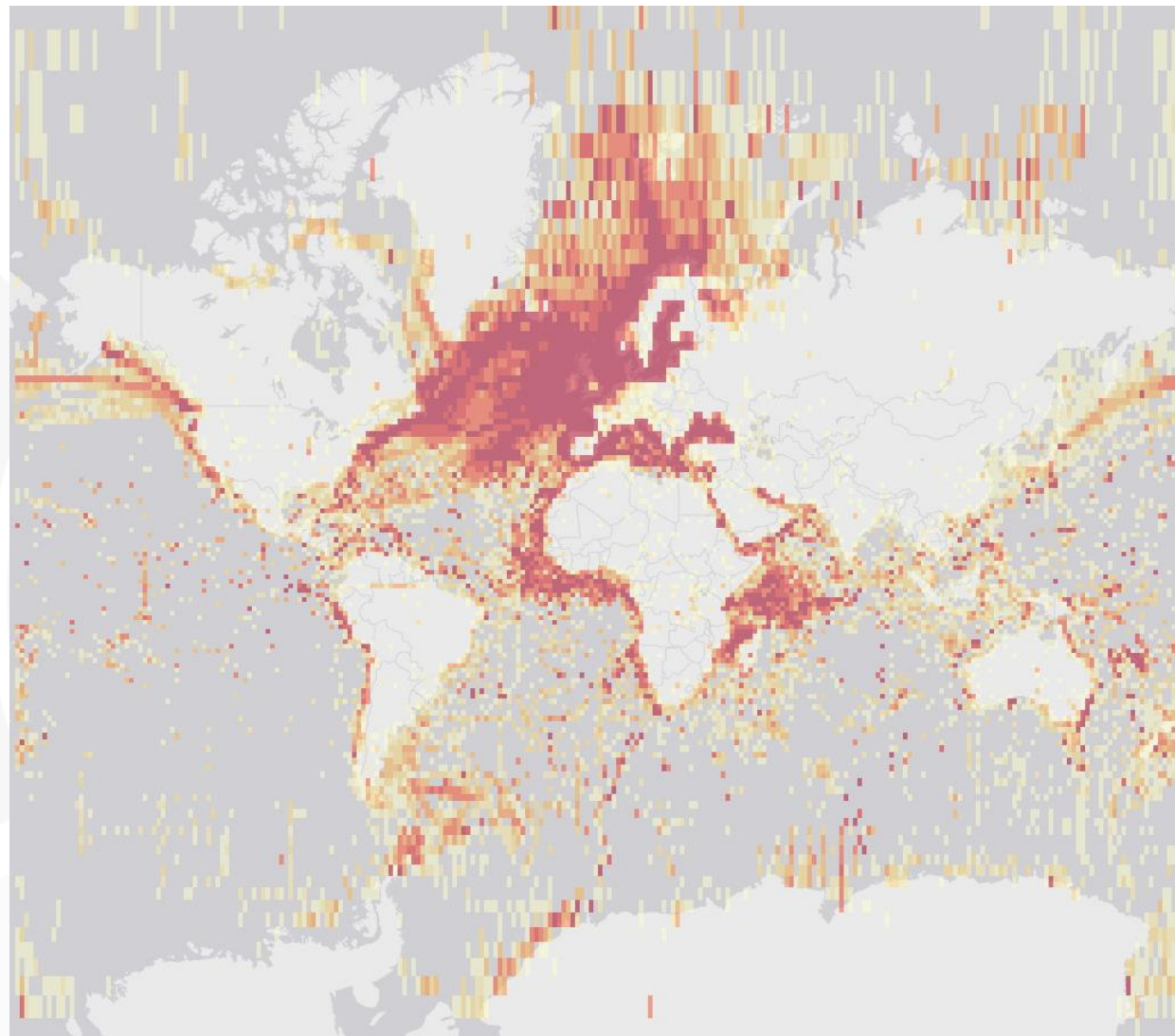
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Data distribution

📶 ~25 million occurrences

📶 88% QC-ed data





Data products

 <https://www.emodnet-biology.eu/about-atlas>

 28 products

The screenshot shows the EMODnet Biology website interface. At the top, there is a search bar and navigation links for 'CONTACT US' and 'SUBMIT DATA'. Below this is a dark blue navigation bar with links for 'ABOUT', 'DATA & DATA PRODUCT ACCESS', 'ATLAS OF MARINE LIFE', 'NEWS & EVENTS', 'TERMS & CONDITIONS', 'GET INVOLVED!', and 'HELPDESK'. The main content area is titled 'Data Catalog' and includes a link to '[view external version]'. The featured product is 'Gridded abundance map of the loggerhead sea turtle *Caretta Caretta* around the Azores'. Under the heading 'Citation', the text reads: 'Flanders Marine Institute (VLIZ); Royal Netherlands Institute for Sea Research (NIOZ); (2015); Gridded abundance map of the loggerhead sea turtle *Caretta Caretta* around the Azores; European Marine Observation Data Network (EMODnet) Biology project (www.emodnet-biology.eu), funded by the European Commission's Directorate - General for Maritime Affairs and Fisheries (DG MARE). Contact: data@vliz.be'. Below this is an 'Archived data' section with an 'MDA' icon. The 'Archived file' is listed as '137205_Caretta_caretta.zip'. The 'Availability' section states: 'This dataset is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.' At the bottom, there is a 'Picture' section with a video player thumbnail and the caption 'Caretta caretta, author: NIOZ, VLIZ'.

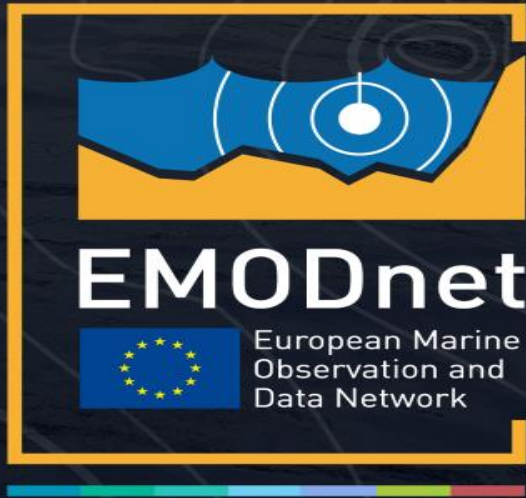


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Questions

- ⦿ Not easy to find the data required for Nature Directive assessments
- ⦿ Is there information on the data providers?
- ⦿ As we hold mainly data from scientific expeditions/surveys, how can we avoid duplication with datasets relevant for this legal assessment?
- ⦿ Who should we contact within EEA/European country's to obtain the data?



www.emodnet.eu

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