



EMODnet

European Marine
Observation and
Data Network

EMODnet Geology & Seabed Habitats

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Seabed Habitats: Helen Lillis, JNCC, UK

Workshop on Progress in Measuring and Reporting Blue Carbon
26 June 2024, Online



The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund.

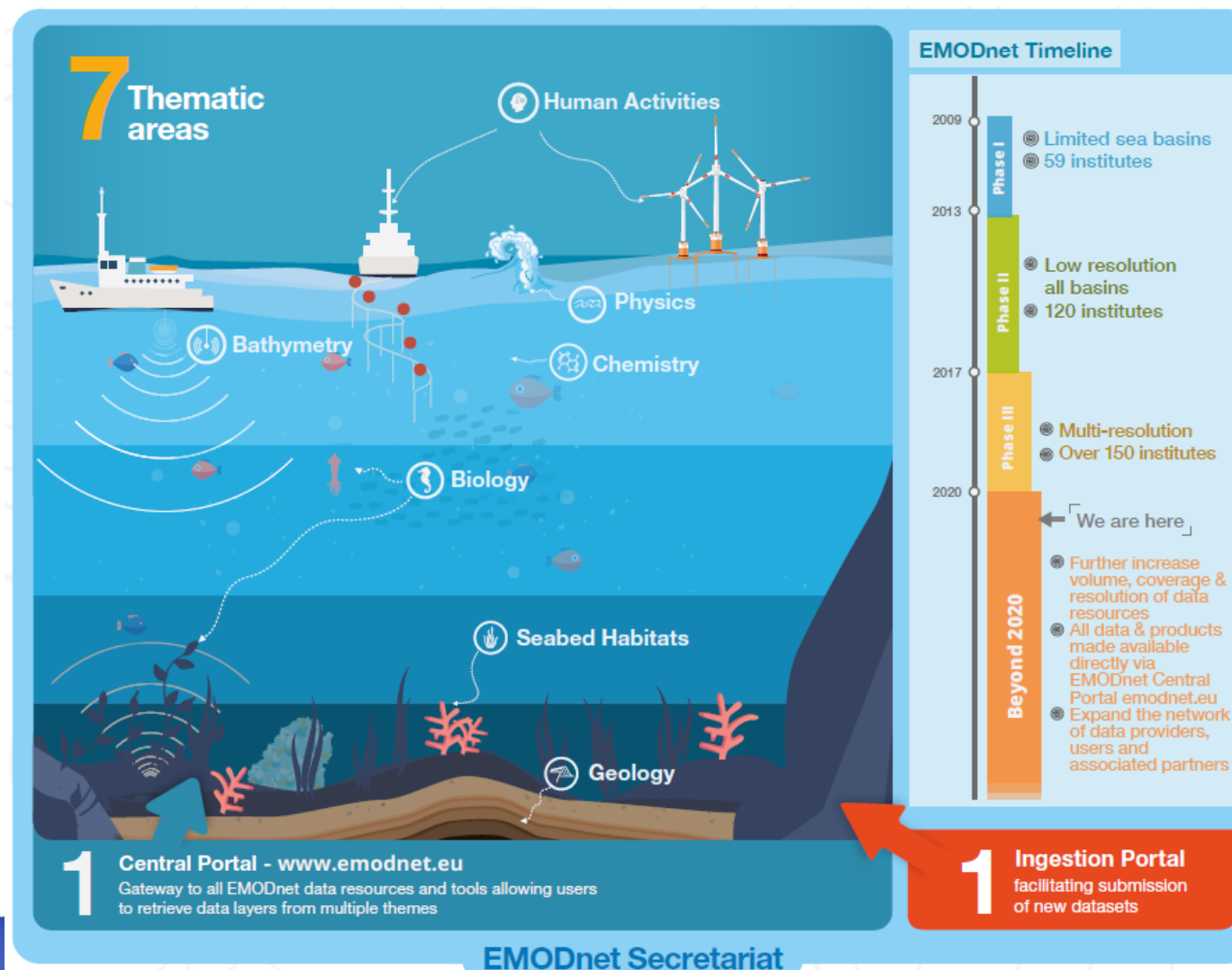
EMODnet – European marine data and observation network

Introduction

The European Commission (EC) in situ marine data service

Established in 2009;
7 thematic lots

Over 120 organisations assembling and making available marine data, metadata and products.

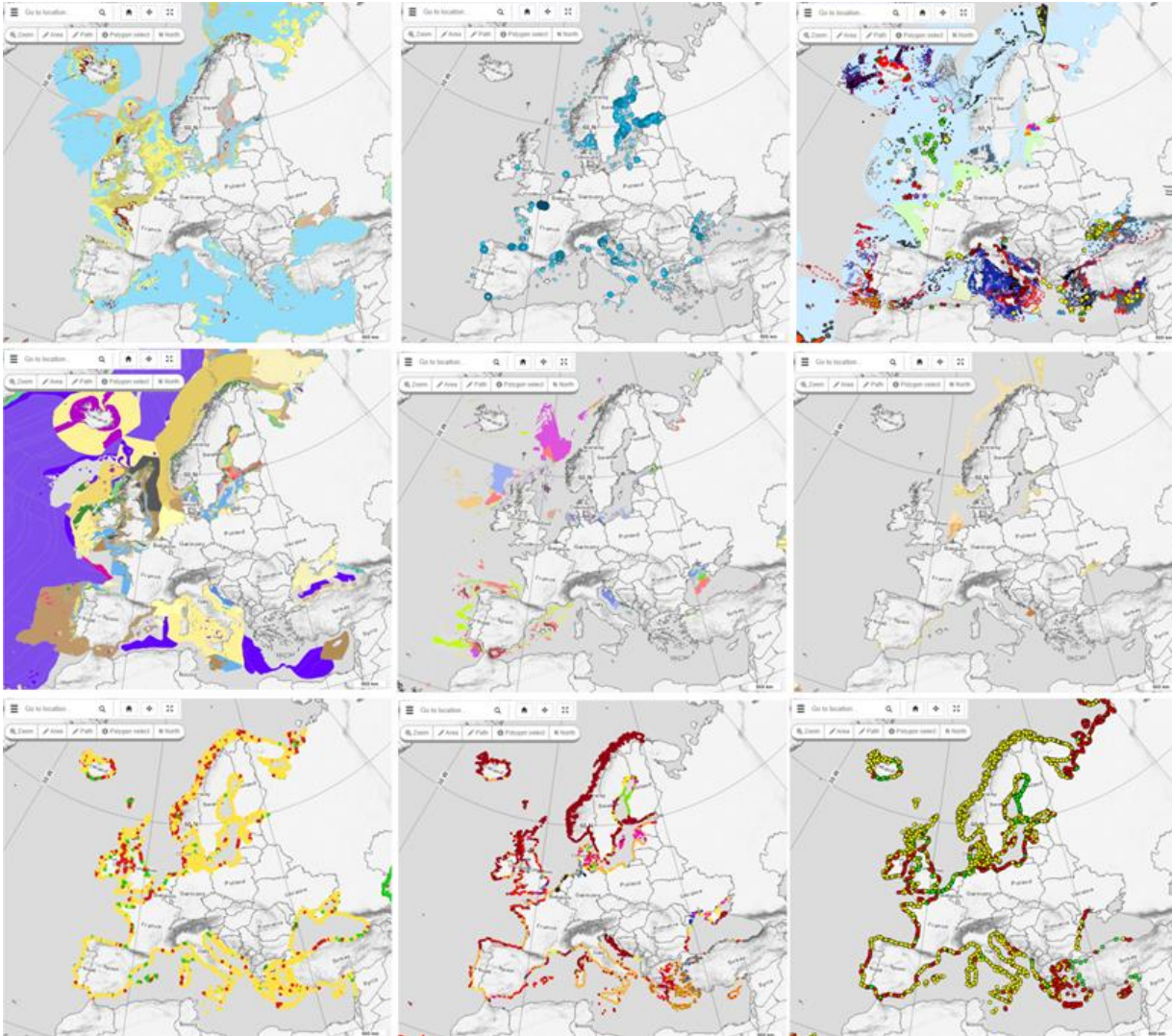


Some principles:

- Collect data once and use it many times
- Develop standards across and within
- Build on existing efforts
- Ownership, accuracy & precision

EMODnet Geology

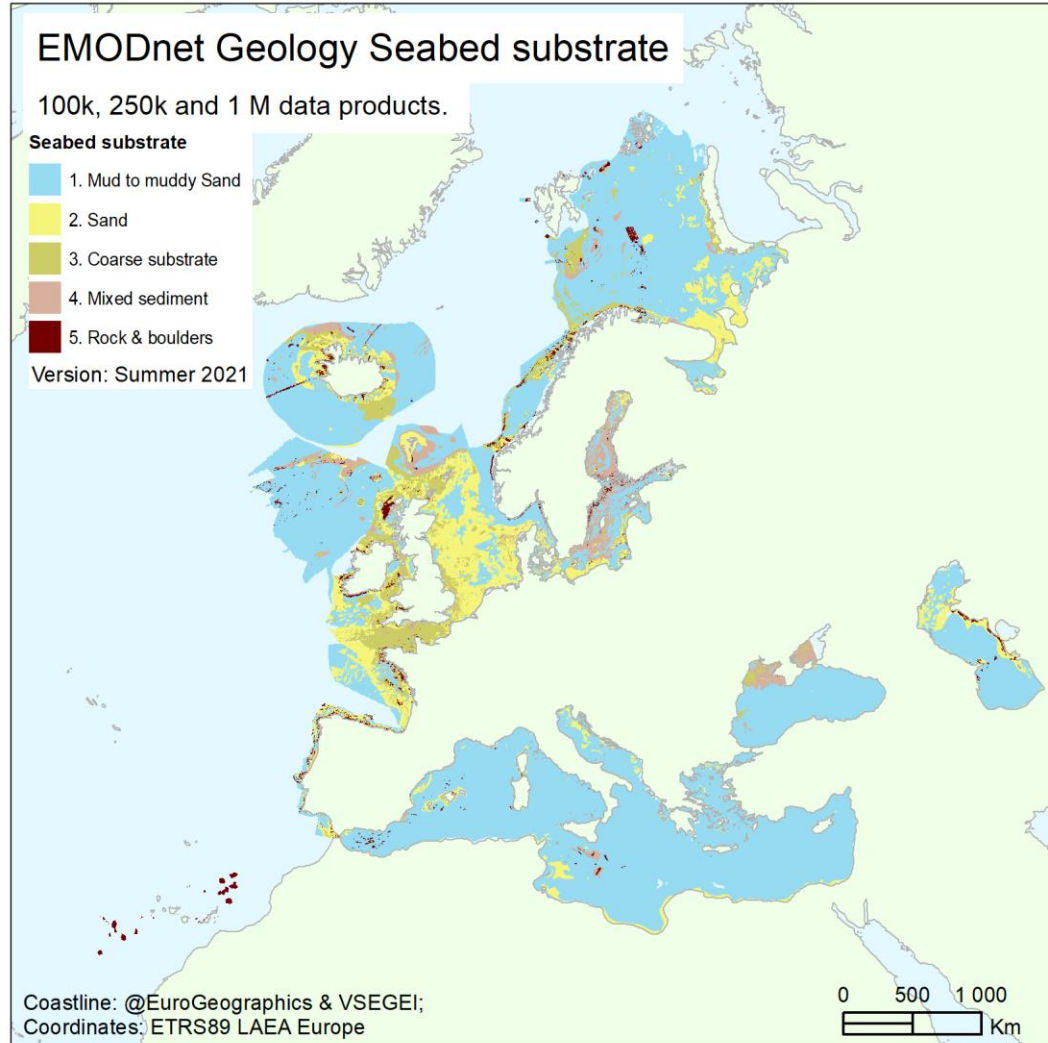
Data products



- Consists of 40 partners, most are members of European geological surveys + some expert organizations. Coordinated by GTK, Finland.
- Harmonised marine geological data products on:
 - Seabed substrate, Sedimentation rates
 - Pre-Quaternary Geology, Quaternary Geology
 - Geomorphology
 - Coastal behavior (satellite&field, types)
 - Geological events
 - Marine minerals
 - Submerged landscapes
- Target scale 1:100 000 or more detailed, coarser scales included to improve the coverage
- New phase from Sept 2025 (tender ongoing): organic carbon of sediments

EMODnet Geology

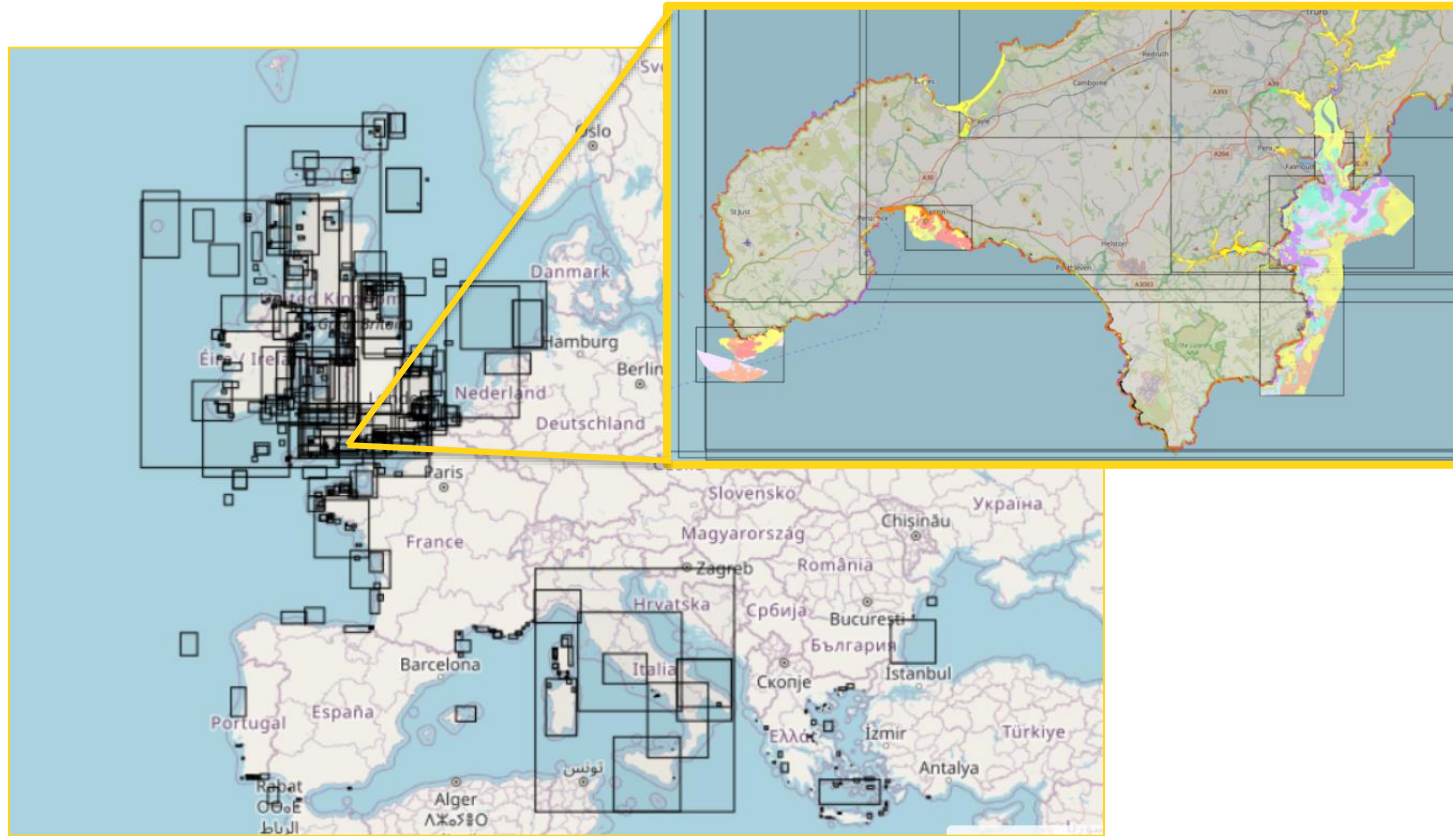
Seabed substrate



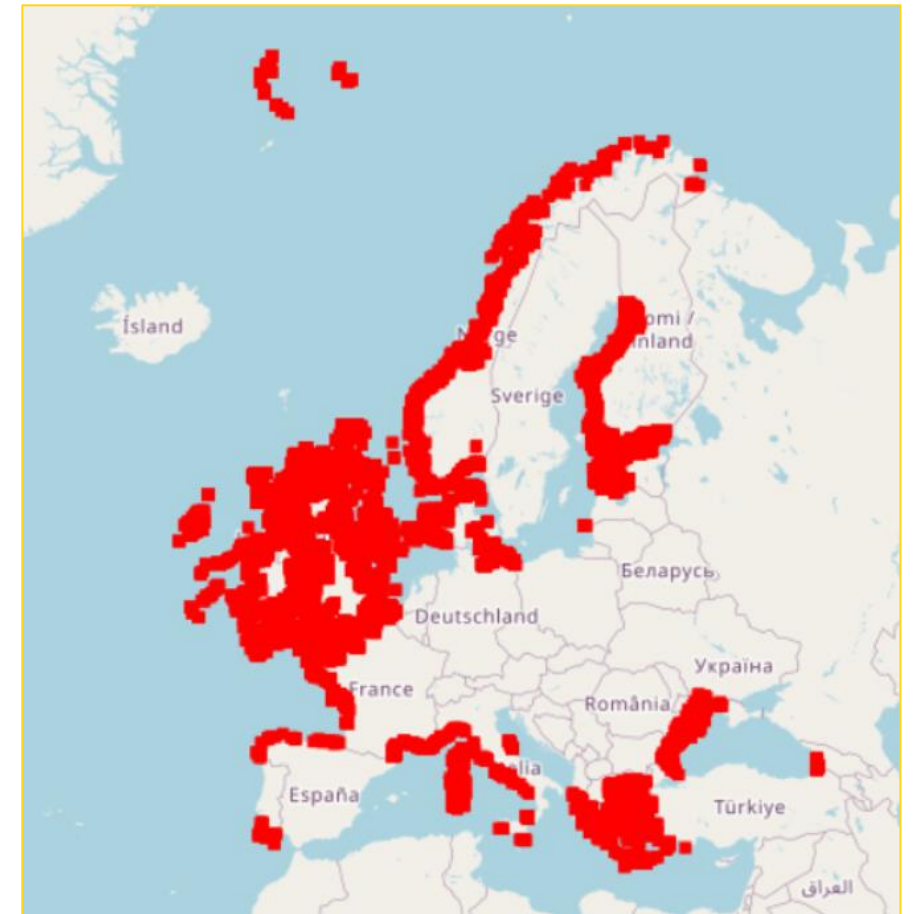
- Surface of the seabed (down to 30 cm)
- Modified Folk classification (5-7-16 classes), EUNIS compatible
- Attribute table includes information on the original data, e.g. substrate might have been harmonized from the original (national) classification system
- Sedimentation rates (cm/year), recent (~since AD 1900)
 - About 1500 points
 - Historical records of anthropogenic radionuclides (e.g. ^{137}Cs and ^{241}Am), lead (Pb) and stable Lead isotope ($^{206}/^{207}\text{Pb}$ ratios), data based on annually laminated sediments
- New phase from Sept 2025 (tender ongoing), includes organic carbon in sediments

EMODnet Seabed Habitats

Standardised collection of individual habitat maps in the European standard classification system, EUNIS

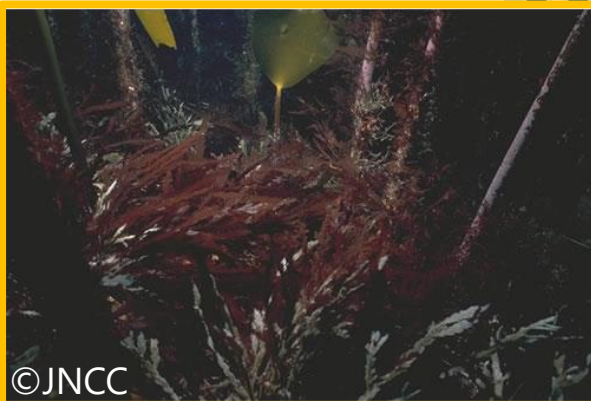
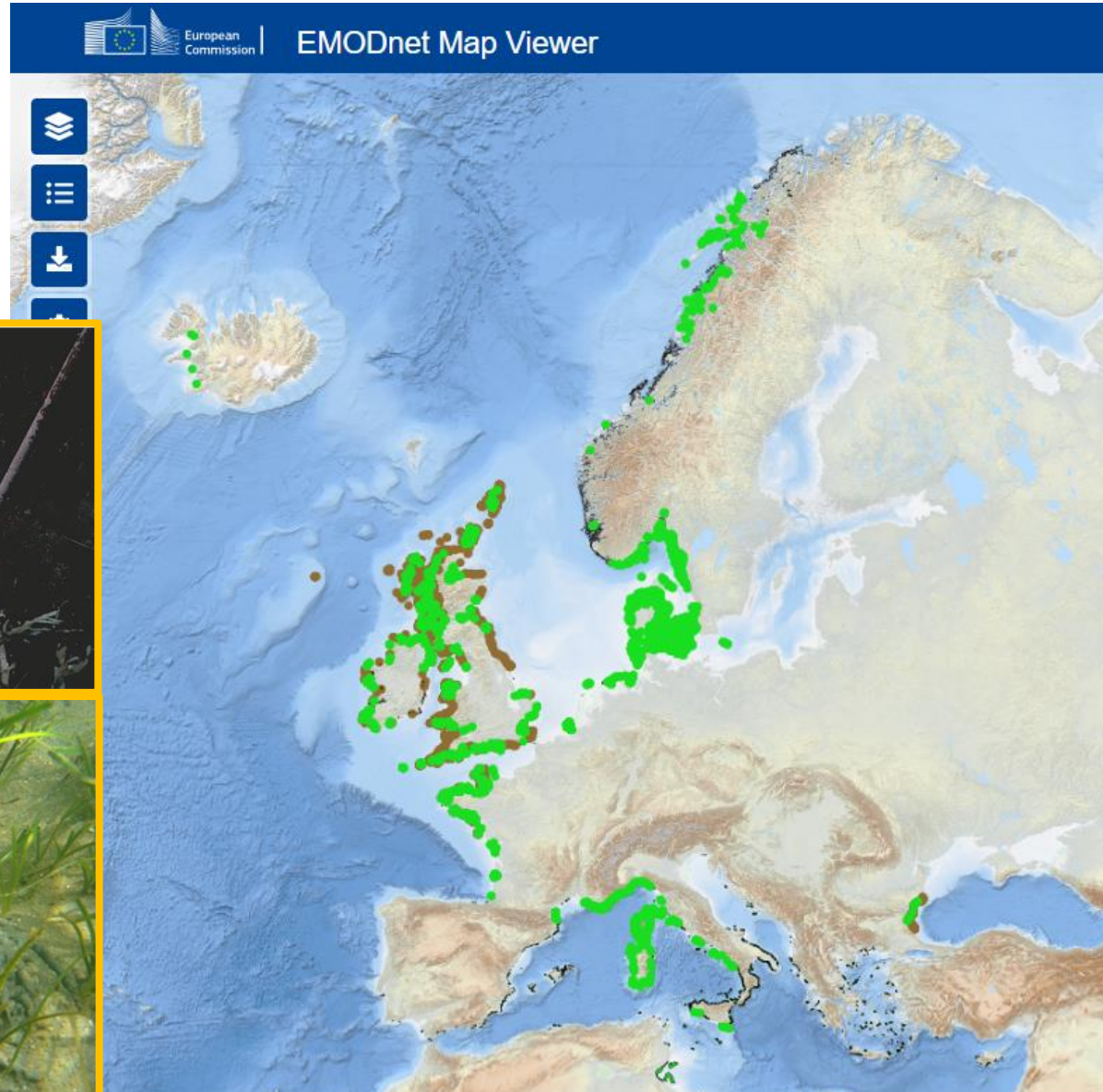


Standardised collection of survey sample points with habitat information



EMODnet Seabed Habitats

Harmonised data products



We bring together the data from the library of habitat maps and survey sample points to create harmonised data products, including the European distribution of blue carbon habitats:

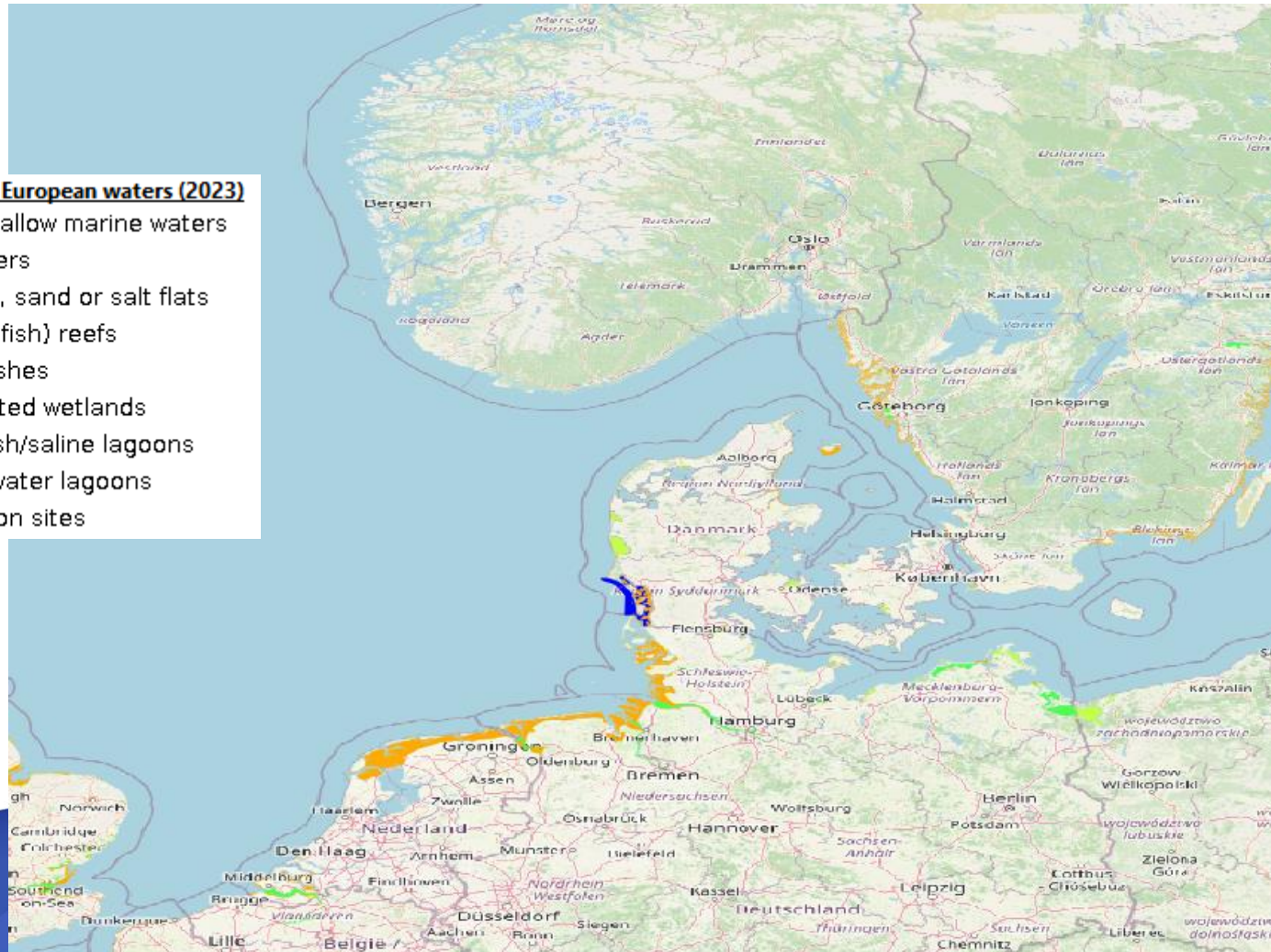
- Seagrass beds
- Macroalgal canopy (e.g. kelp forests)

EMODnet Seabed Habitats

Harmonised data products

Coastal Wetlands in European waters (2023)

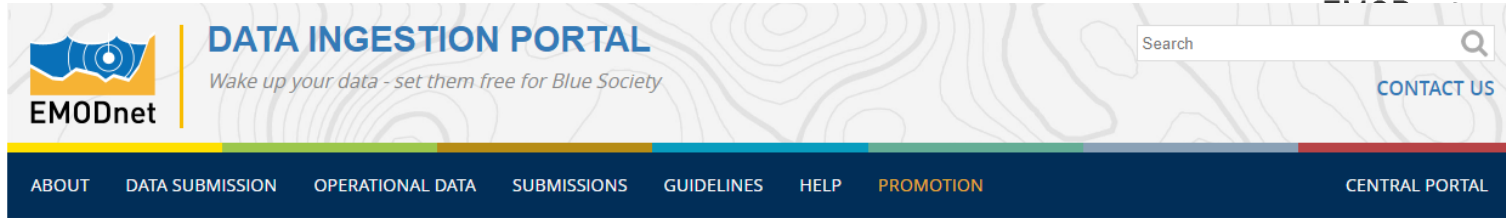
- A - Permanent shallow marine waters
- F - Estuarine waters
- G - Intertidal mud, sand or salt flats
- Ga - Bivalve (shellfish) reefs
- H - Intertidal marshes
- I - Intertidal forested wetlands
- J - Coastal brackish/saline lagoons
- K - Coastal freshwater lagoons
- S - Salt exploitation sites



We bring together the data from the library of habitat maps and survey sample points to create harmonised data products, including the European distribution of blue carbon habitats:

- Coastal wetlands

Services that EMODnet can offer



/ News / EMODnet Guidelines for European Project Data Submissions

EMODnet Guidelines for European Project Data Submissions

30 MARCH 2024

EMODnet Data Ingestion, in collaboration with EMODnet Thematic Coordinators and the Secretariat, have produced an EMODnet Guidance document on European project data submissions to EMODnet. This is an output from the webinar 'EMODnet for Horizon Europe and Mission: Restore our Ocean and Waters' on 28th February 2024, organised by EMODnet, [https://www.emodnet.eu/en/news/2024/03/30/emodnet-guidelines-for-european-project-data-submissions](#).

The new [EMODnet guidance document](#) is primarily aimed at European Research and Innovation projects that seek advice and guidelines on preparing and submitting data to EMODnet. It is designed to inform EU project data management plans, and to optimise the planning of data to be submitted to EMODnet. It covers the full cycle of data submission into the EMODnet service, where Europe's in situ marine data capability is offered as pan-European FAIR data, data products and metadata, for open and free use by all. The webinar recording and further information are available [here](#).

MORE NEWS

EMODnet: *in situ* marine data service

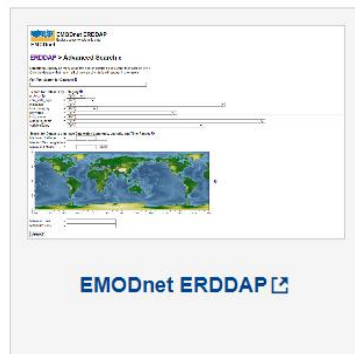
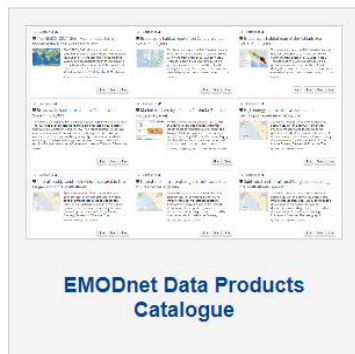
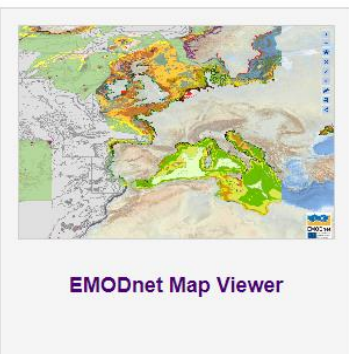
1. Advice on how to find the data you need:

emodnet.ec.europa.eu/en/contact-us

2. Stewardship of project outputs:

emodnet-ingestion.eu

3. Collaboration with projects to produce new data products – we don't want to duplicate effort





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the latest news

