Powering the European Marine Data Ecosystem

For a digital and green future

EMODnet OPEN CONFERENCE 2023

EMODnet
European Marine Observation and Data Network

Session 1: EMODnet: a unified public marine data service

EMODnet Chemistry

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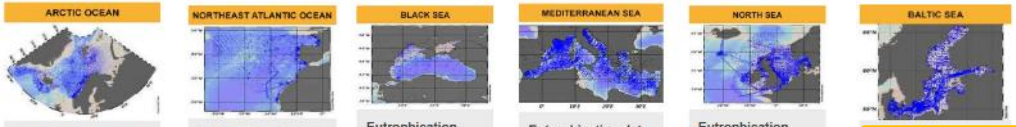
EMODnet Chemistry

Latest offer and key achievements

Eutrophication: Phosphate, Nitrate, Nitrite, Dissolved Oxygen, Chlorophyll-a, etc. in water



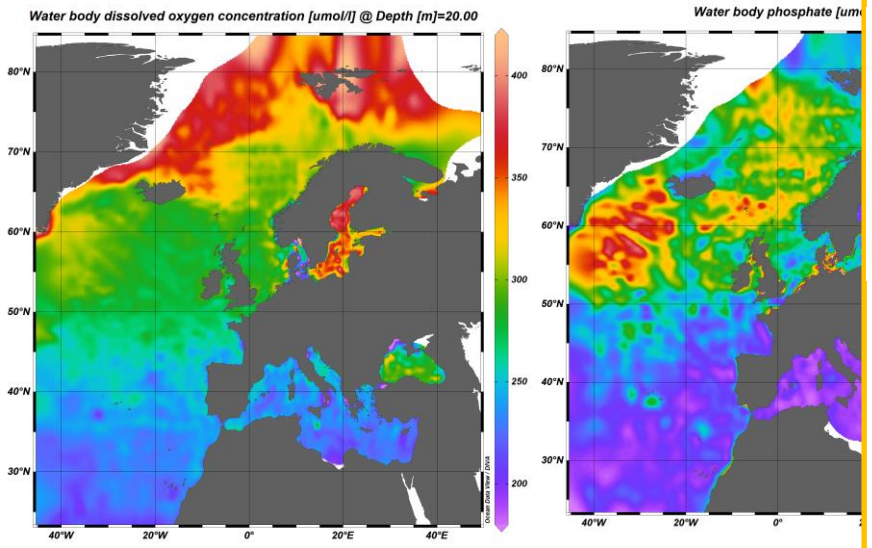
Eutrophication data collections in the Arctic - DOI: 10.6092/xe56-z804

Eutrophication data collections in the Atlantic - DOI: 10.6092/hmh8-x461

Eutrophication data collections in the Black Sea - DOI: 10.6092/e9jp-ra41

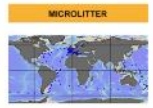
Eutrophication data collections in the Mediterranean Sea - DOI: 10.6092/ep6n-tp63

Eutrophication data collections in the North Sea - DOI: 10.6092/64h8-3q06



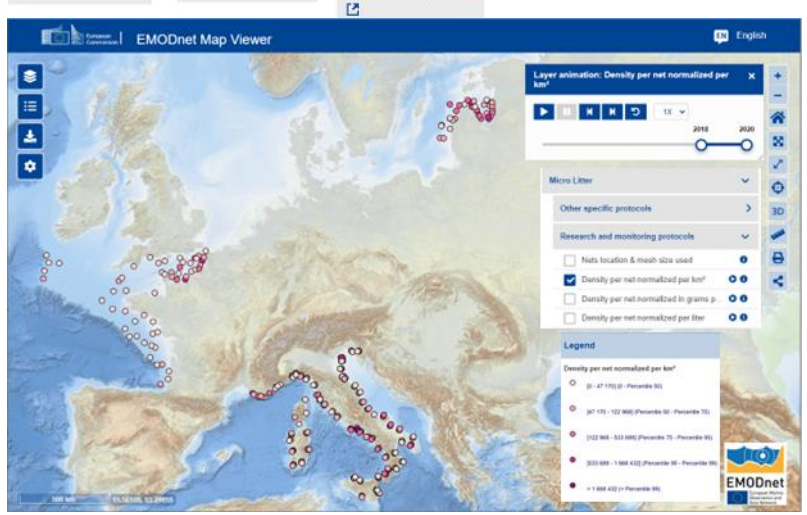
Marine litter: Micro and Macro in water, on beaches and seafloor

Marine litter data collections of Beach Litter - DOI: 10.6092/kva0-xe59

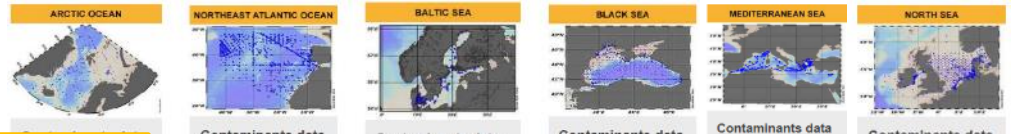


Marine litter data collections of Micro Litter - DOI: 10.13120/q6t1-2r39

Marine litter data collections of Seafloor Litter - DOI: 10.13120/wgyh-sc94



Contaminants: Hydrocarbons, Heavy metals Pesticides, etc. in water, biota and sediment



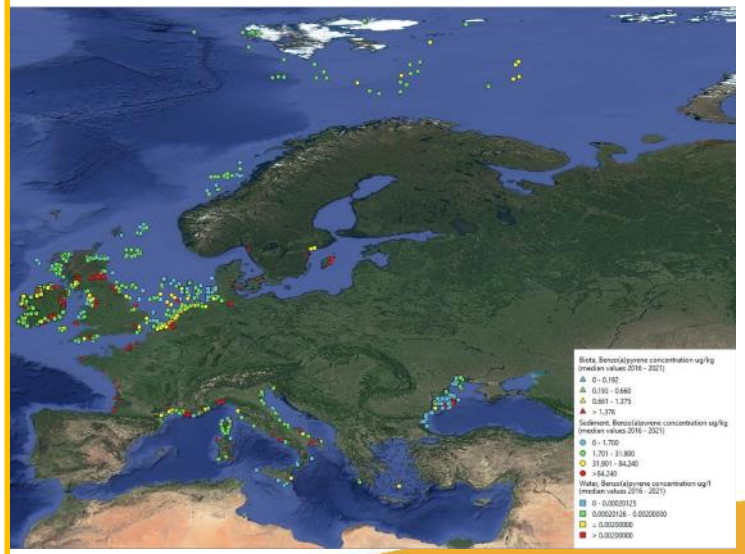
Contaminants data collections in the Atlantic - DOI: 10.6092/byac-h177

Contaminants data collections in the Baltic - DOI: 10.6092/28y3-th08

Contaminants data collections in the Black Sea - DOI: 10.6092/jbge-hy83

Contaminants data collections in the Mediterranean Sea - DOI: 10.6092/yyvd-0g91

Contaminants data collections in the North Sea - DOI: 10.6092/42t8-zy38



EMODnet Chemistry

User community

Since 2017, MSFD reporting on marine litter has been based on data managed by EMODnet Chemistry, as confirmed by **representatives of TG ML, EC JRC** and **EU DG Env.**

Since 2021, **Helsinki Commission - HELCOM** has selected EMODnet Chemistry as the web-based platform for managing beach litter data to assess the state of the Baltic Sea.

In 2022, **Copernicus Marine Service** Thematic Assembly Centre used EMODnet Chemistry eutrophication data collections for their products.

In 2023, **EC JRC** received the first data collections for the MSFD Descriptor 5 (eutrophication), Descriptors 8 and 9 (contaminants).

EMODnet Chemistry

Future evolution over 3 main key areas

- **Data quantity** by

  Expanding the network and data sources

  Managing additional data types => Seafloor macrolitter from images

  Floating macrolitter

  New emerging contaminants

- **Data Quality** by

  Extending the data validation loop to all data in the collections (new and updated/old)

  Adoption of the new webODV development in synergy with the EOSC Blue-Cloud 2026 project

- **Optimisation of work processes** by

  Improving the harmonisation of vocabularies

  Strengthening the data flow from real-time (e.g. EMODnet Physics) to long-term archiving in the National Data Centres (e.g. EMODnet Chemistry)

  Coordinate data release schedule with key stakeholders

  Resumption of cooperation at the request of the Black Sea Commission

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