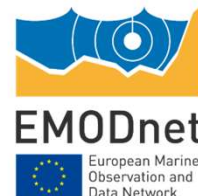


EMODnet Chemistry, the data infrastructure for seawater quality: key services and latest results

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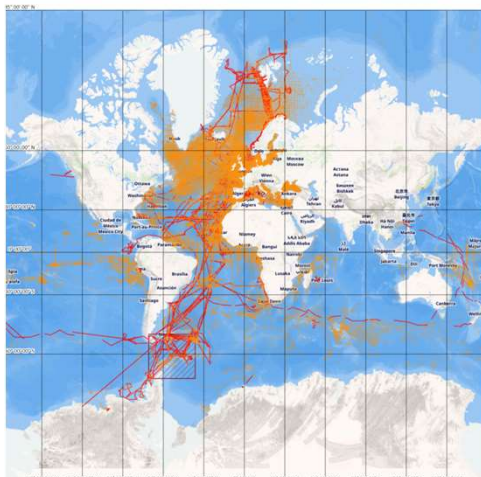
Matrix of chemicals by region

Group of Variables	Arctic Ocean	Baltic Sea	North Sea	Northeast Atlantic Ocean	Black Sea	Mediterranean Sea
Acidity	■					
Antifoulants		■				
Chlorophyll			■			
Dissolved gasses		■				
Fertilisers			■			
Hydrocarbons		■				
Heavy metals			■			
Marine litter			■			
Organic matter			■			
Polychlorinated biphenyls			■			
Pesticides and biocides			■			
Radionuclides			■			
Silicates			■			

Legend: ■ 1-50 ■ 51-250 ■ 251-1000 ■ 1001-2500 ■ 2501-5000 ■ 5001-10000 ■ 10001-25000 ■ >25000

Number of measurement data sets for each group of chemical variables per marine region

Launched by the European Commission in 2009, the European Marine Observation and Data Network (EMODnet) works to observe the ocean, process the data according to international standards and make this information freely available. EMODnet Chemistry network consists of 67 data centres in 32 countries. It focuses on marine chemical data and data products related to eutrophication, ocean acidification, and contaminants, including marine litter.



EMODnet Chemistry CDI data Discovery and Access Service powered by SeaDataNet (above) to browse and download over 1,200,000 measurement data of 13 groups of variables.

Arctic Ocean - Eutrophication and Acidity aggregated datasets 1923-2023
 EMODnet Chemistry aims to provide access to marine chemistry datasets and derived data products concerning eutrophication, acidity and contaminants. The importance of the selected substances and other parameters relate to the

Black Sea - Eutrophication and Acidity aggregated datasets
 EMODnet Chemistry aims to provide access to marine chemistry datasets and derived data products concerning eutrophication, acidity and contaminants.

European beach litter standardized, harmonized and
 EMODnet Chemistry aims to provide access to marine chemistry data sets and derived data products concerning eutrophication, ocean acidification, contaminants and litter.

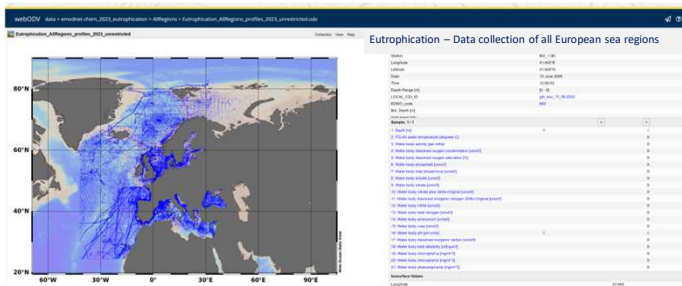
The Consortium annually releases harmonised, standardised, and validated data collections.

North East Atlantic Ocean - Contaminants aggregated
 EMODnet Chemistry aims to provide access to marine chemistry data sets and derived data products concerning eutrophication, ocean acidification and contaminants.

Mediterranean Sea - Contaminants aggregated
 EMODnet Chemistry aims to provide access to marine chemistry data sets and derived data products concerning eutrophication, ocean acidification and contaminants.

European seafloor litter standardized, harmonized and
 EMODnet Chemistry aims to provide access to marine chemistry data sets and derived data products concerning eutrophication, ocean acidification, contaminants and litter.

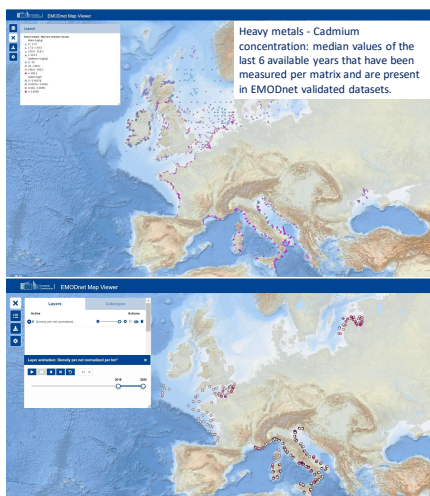
European floating micro-litter standardized, harmonized and
 EMODnet Chemistry aims to provide access to marine chemistry data sets and derived data products concerning eutrophication, ocean acidification, contaminants and litter.



EMODnet Chemistry webODV Explorer and Extractor service to analyse and extract data sets from the data collections for contaminants and eutrophication.

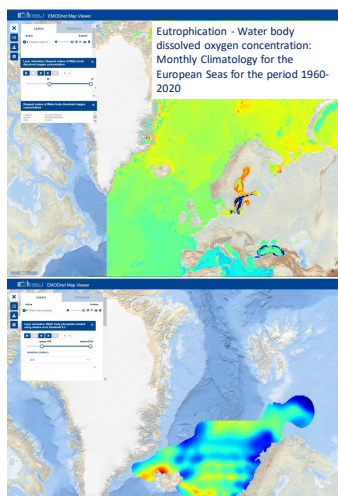


Data products on the Map Viewer (below) including examples of the maps that users can create with the webODV Explorer and Extractor tool (right).



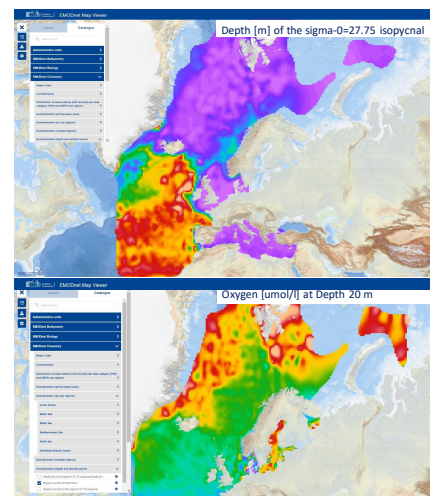
Heavy metals - Cadmium concentration: median values of the last 6 available years that have been measured per matrix and are present in EMODnet validated datasets.

Marine litter - The density of floating micro-litter per net normalized per km² per year from research and monitoring protocols.



Eutrophication - Water body dissolved oxygen concentration: Monthly Climatology for the European Seas for the period 1960-2020

Eutrophication - Moving 6-year analysis of phosphate in the Arctic Ocean, for each season in the period 1970-2017.



Depth [m] of the sigma-t=27.75 isopycnal

Oxygen [µmol/l] at depth 20 m



CHEMISTRY

emodnet.ec.europa.eu

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