WP3 - Data collections for eutrophication: Main outcomes and new parameters

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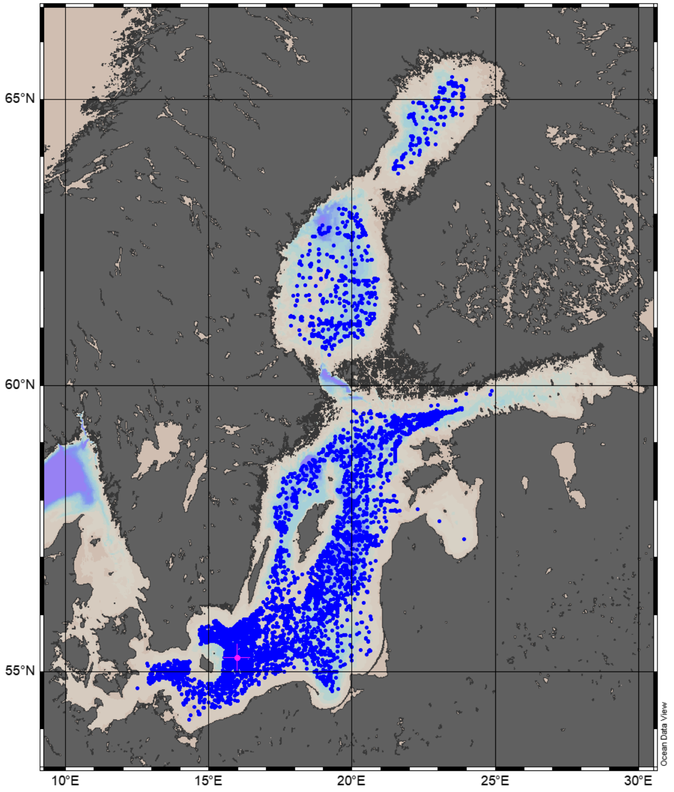
The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund.

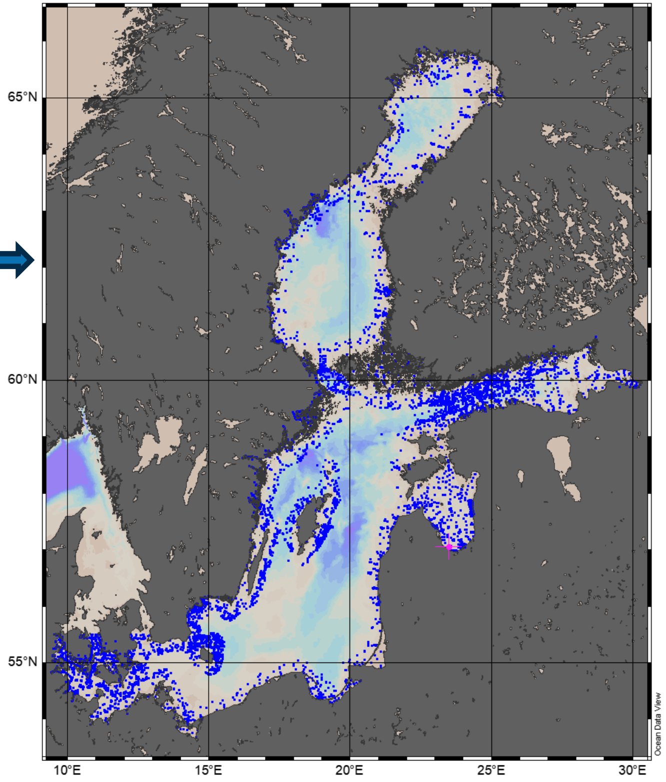
EMODnet Chemistry 5 – oct2023-oct2025

2nd data collections delivered July 2025 (Eutrophication and Contaminants)

Improvements in the data collections:

- Location qualifier – new meta data field
  - Beyond the 12 NM boundary
  - Landward side of the 12 NM boundary
- More ancillary parameters (eut collection)
- New P35 codes (e.g. hydrogen sulphide)
- Updated list of parameters for harmonization of contaminants





Issues when processing the data

- Duplicates
- Wrong primary variable
- Stations on land
- Wrong ODV format
- Mix of eutrophication and contaminants data (in the same dataset)
- Wrong P06 and/or P01 codes
- Wrong depth units in sediment data (values in cm, units in m)
- Mismatches between Local_CDI_Id or EDMO code in ODV data files and data.csv
- ODV.txt files which contain duplicate variable P01 codes (ODV software can not import those data)

Eutrophication parameters

Aggregated to P35

Quality Controlled parameters

- Dissolved oxygen concentration
- Dissolved oxygen saturation
- Chlorophyll-a

- Ammonium
- Nitrate
- Nitrate plus nitrite
- Nitrite
- Dissolved inorganic nitrogen
- Total nitrogen
- Phosphate
- Total phosphorus
- Silicate
- Total alkalinity
- pH

🌟 DIC
🌟 Inorganic sulfur
🌟 POC
🌟 PON
🌟 DOC

Ancillary NOT quality controlled parameters *and availability varying by region:*

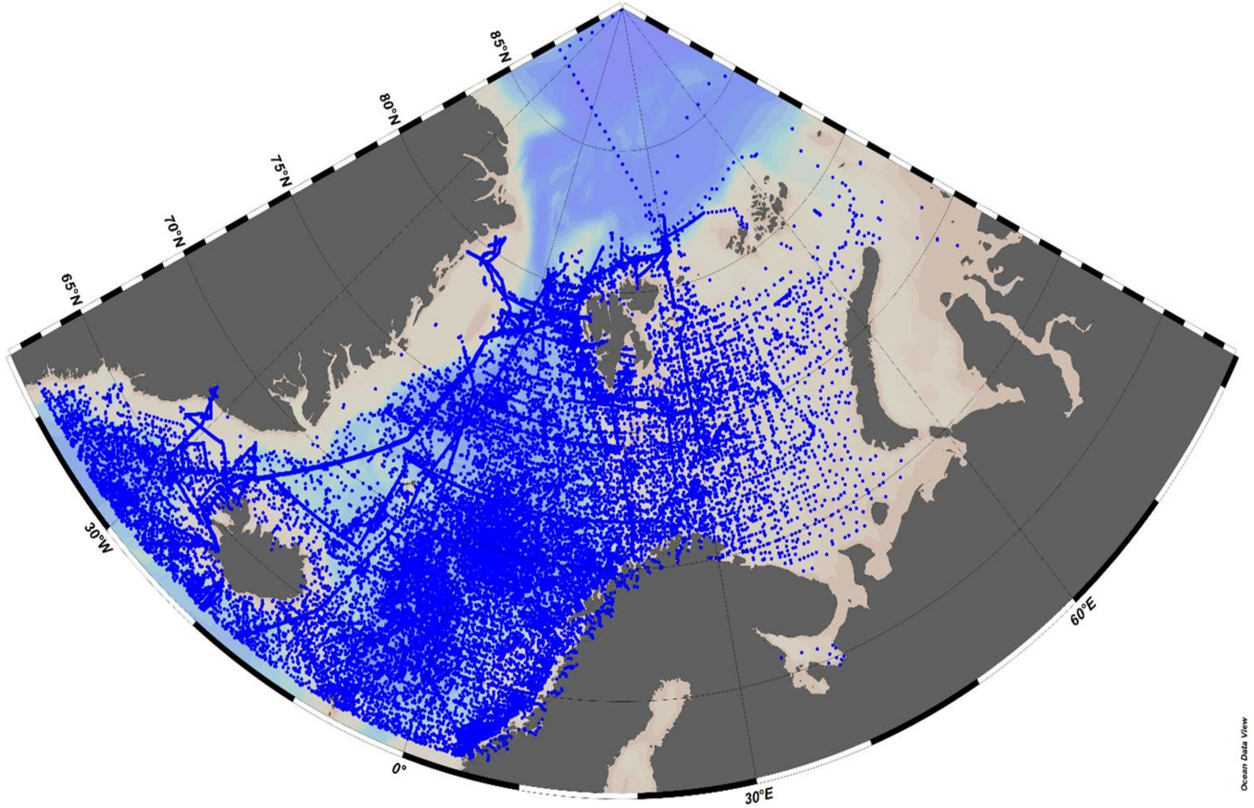
- Temperature
- Salinity
- *Secchi*
- *Turbidity*
- *Total suspended matter*
- *Urea*
- ...

Euthrophication data (1)

Arctic Eutrophication data

Total CDI: 57.007 VP & 0 timeseries

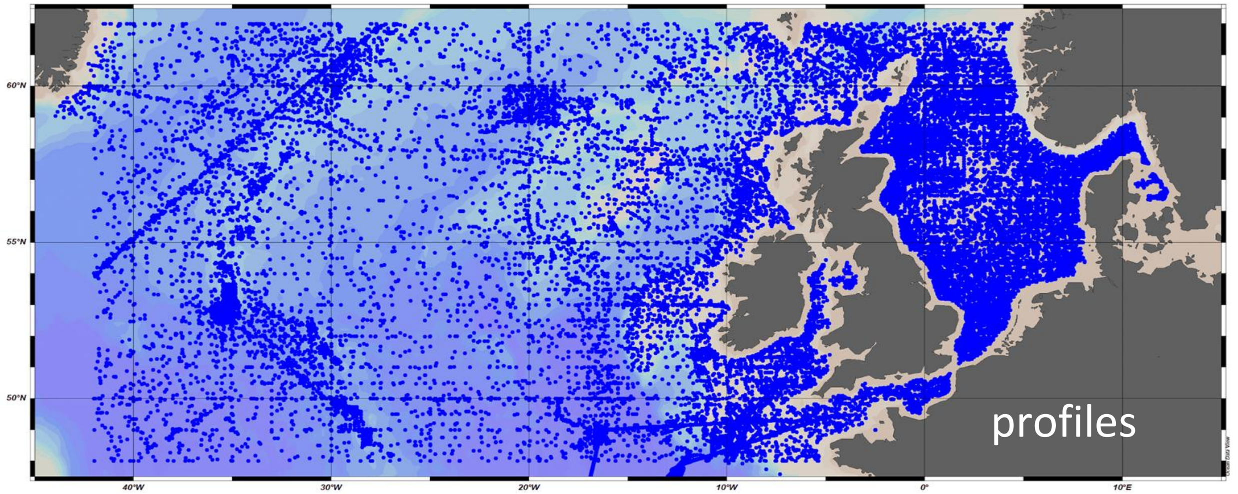
- 2% restricted

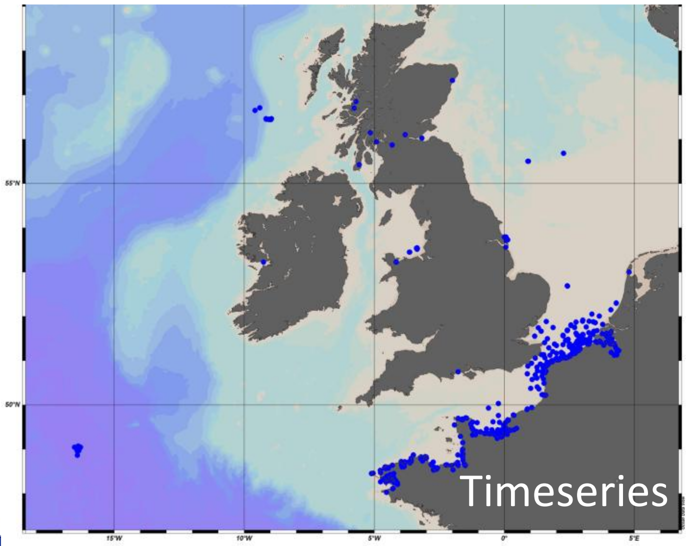


North Sea data

Total CDI: 3.321.403 VP & 12.191 timeseries

- <1% restricted



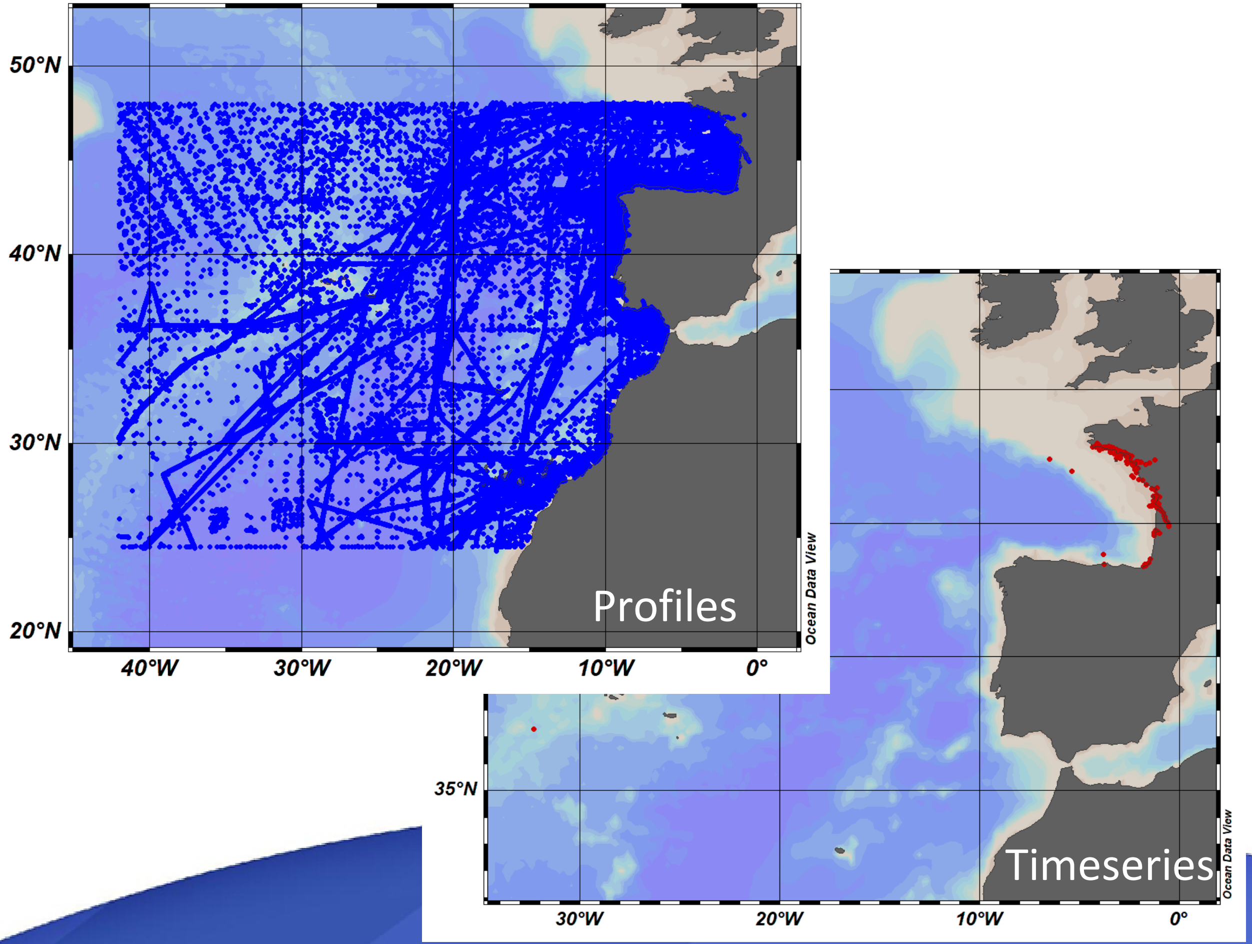


Euthrophication data (2)

Atlantic data

Total CDI: 49.325 VP & 556 timeseries

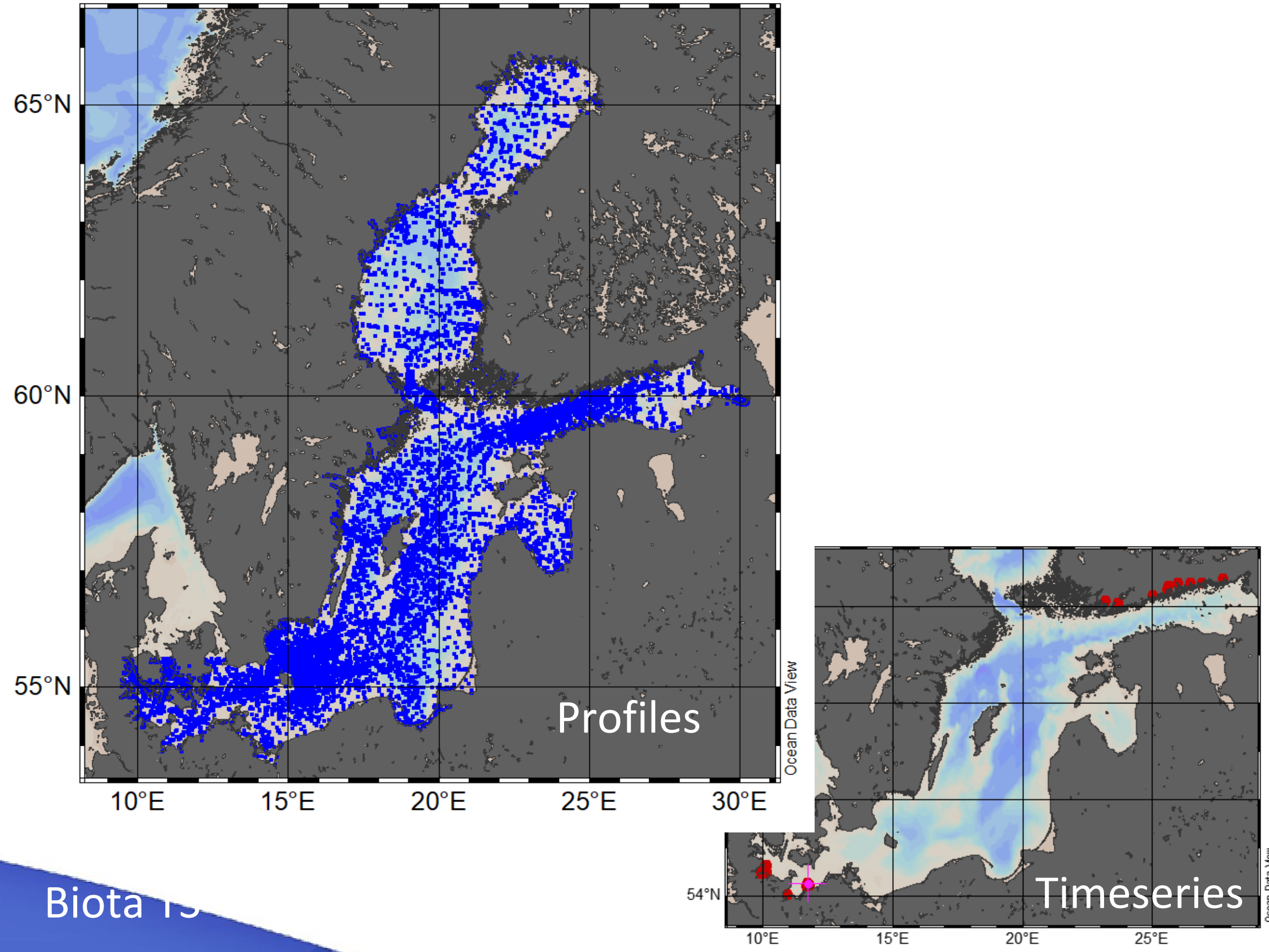
- 30% restricted



Baltic Sea data

Total CDI: 210.747 VP & 157 timeseries

- 2% restricted

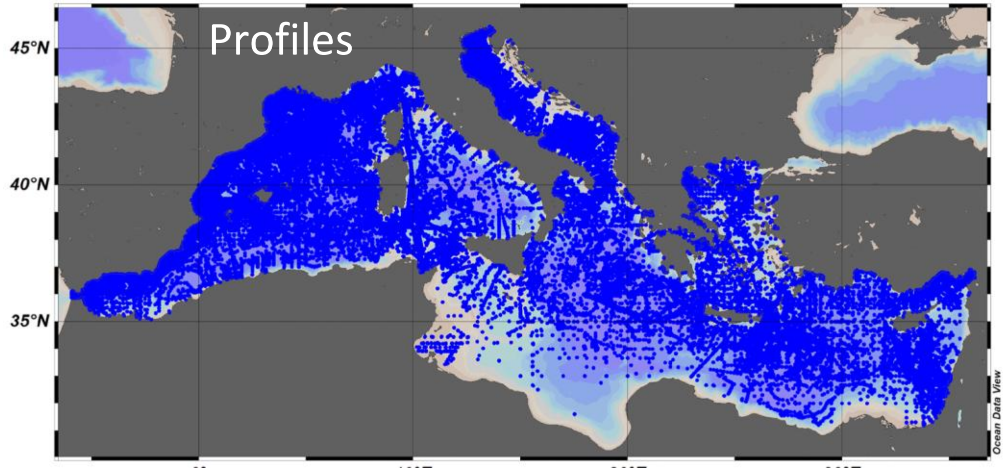


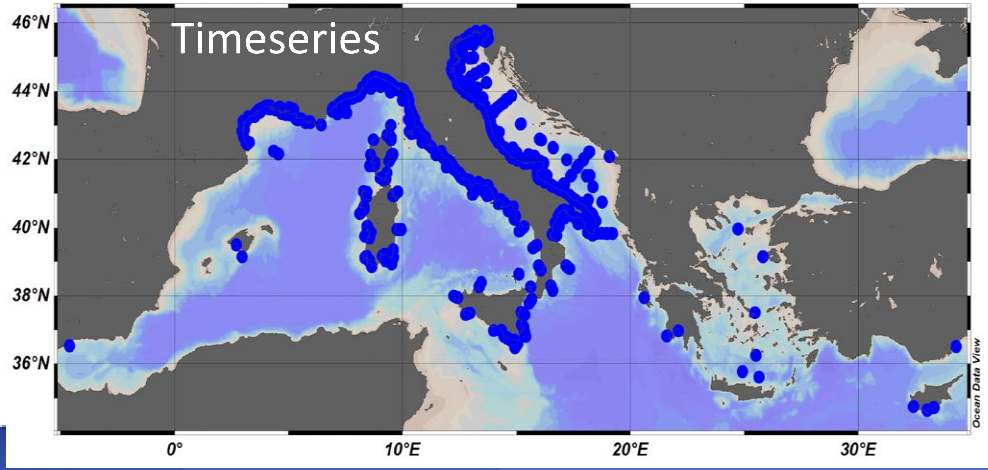
Euthrophication data (3)

Mediterranean Sea data

Total CDI: 264.569 VP & 13.707 timeseries

- 21,1% restricted

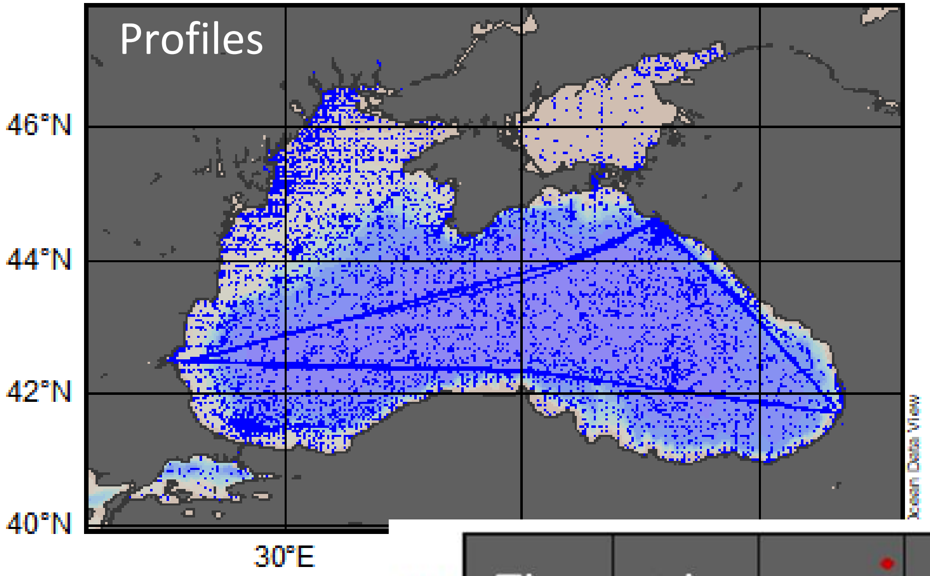


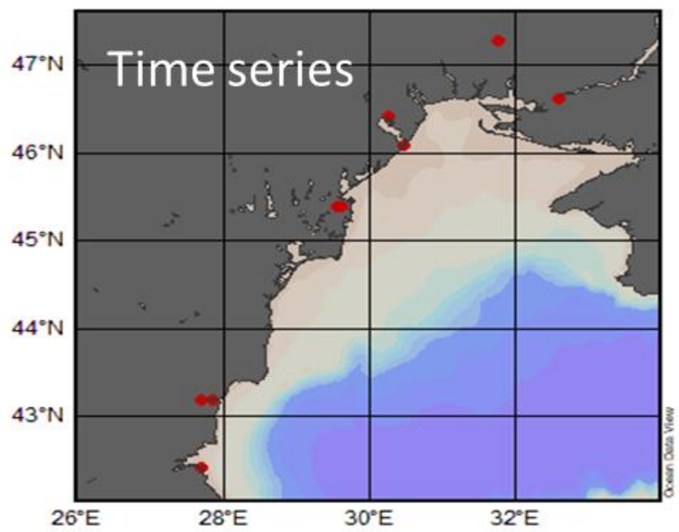


Black Sea data

Total CDI: 74.541 VP & 11 timeseries

- 11% restricted



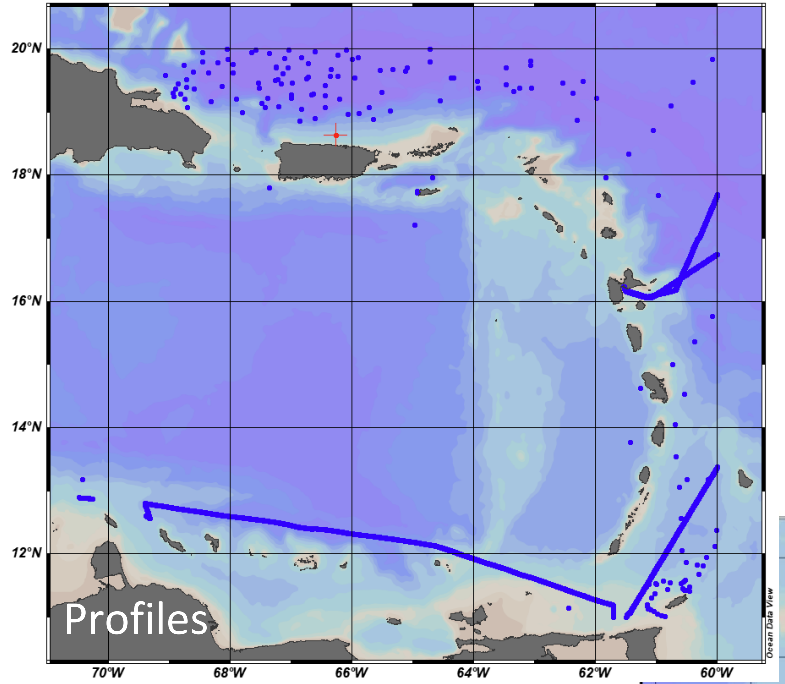


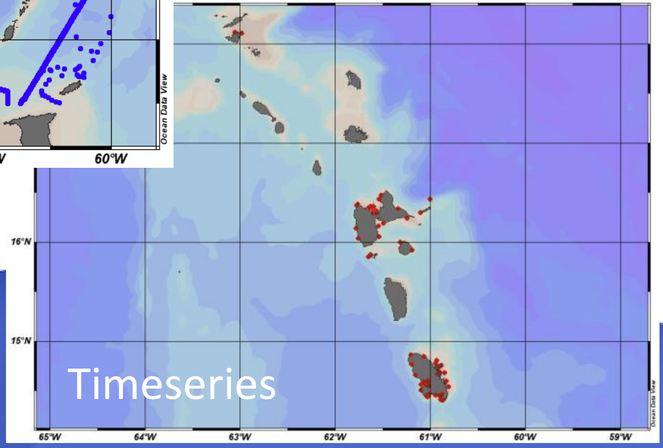
Eutrophication data (4)

Caribbean data

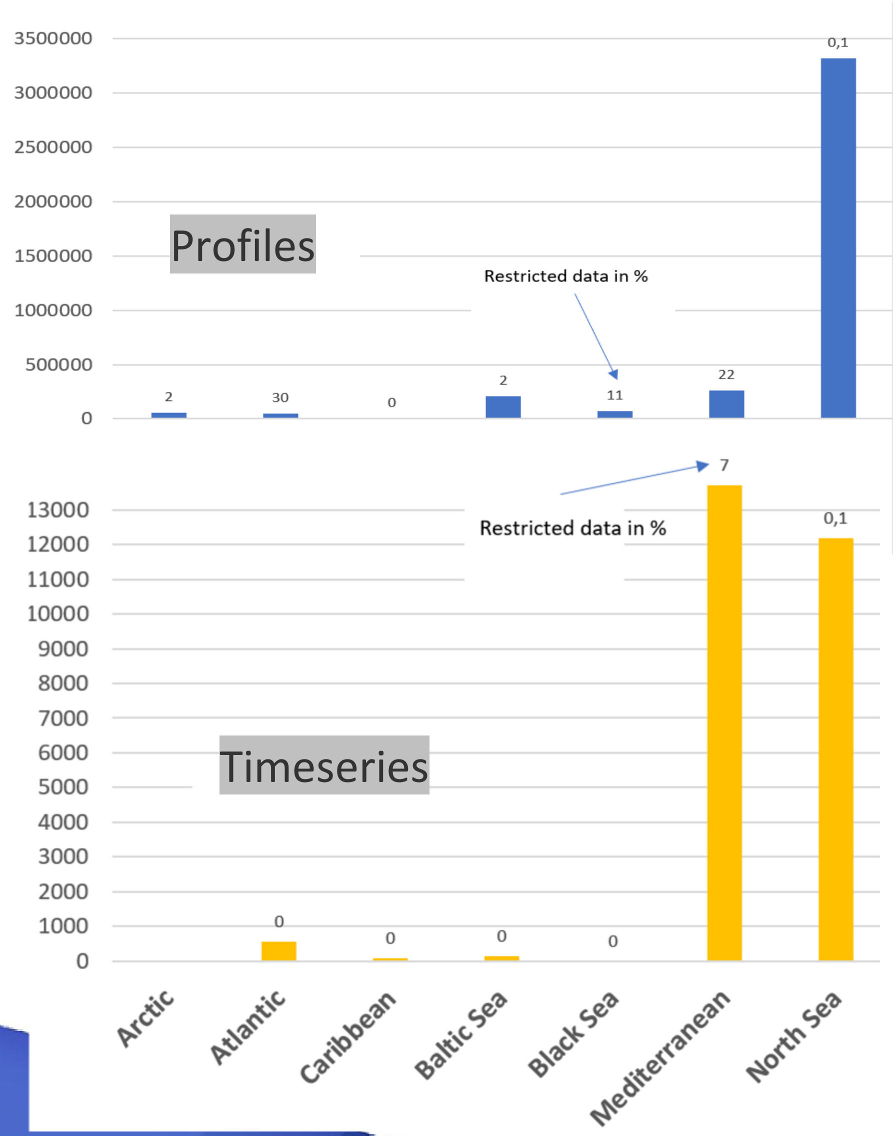
Total CDI: 175 VP & 93 timeseries

- 0% restricted





Number of CDIs per region



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