

Funded by
the European Union



DTO-BioFlow

Integration of biodiversity monitoring
data into the Digital Twin Ocean

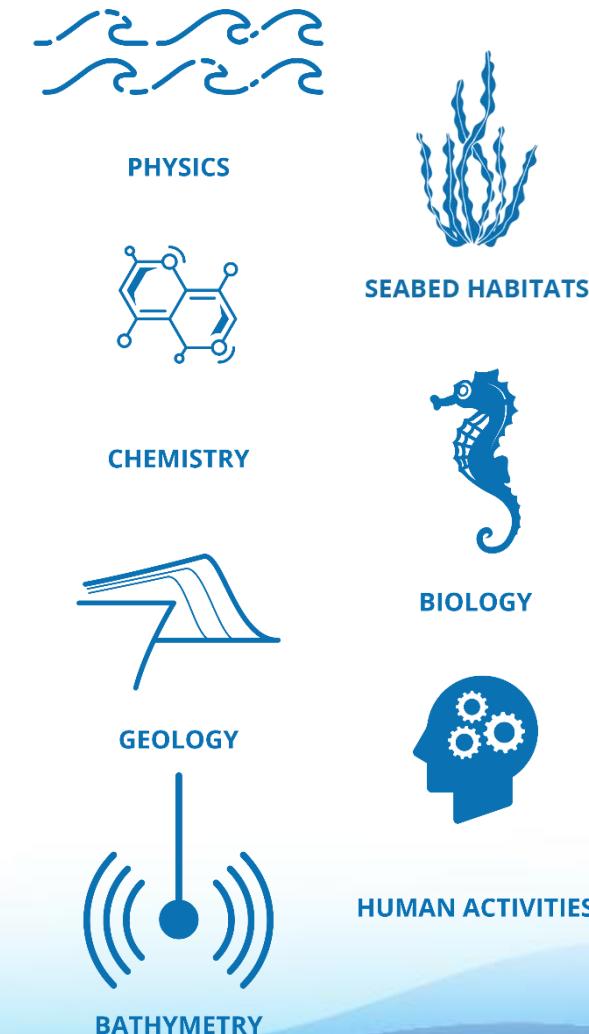
Data training workshop

Introduction to EMODnet Biology and
EurOBIS

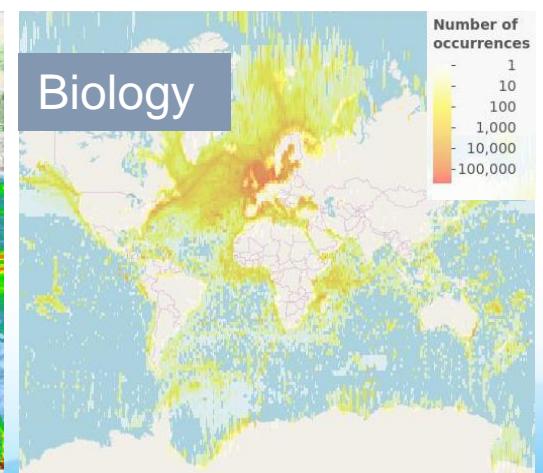
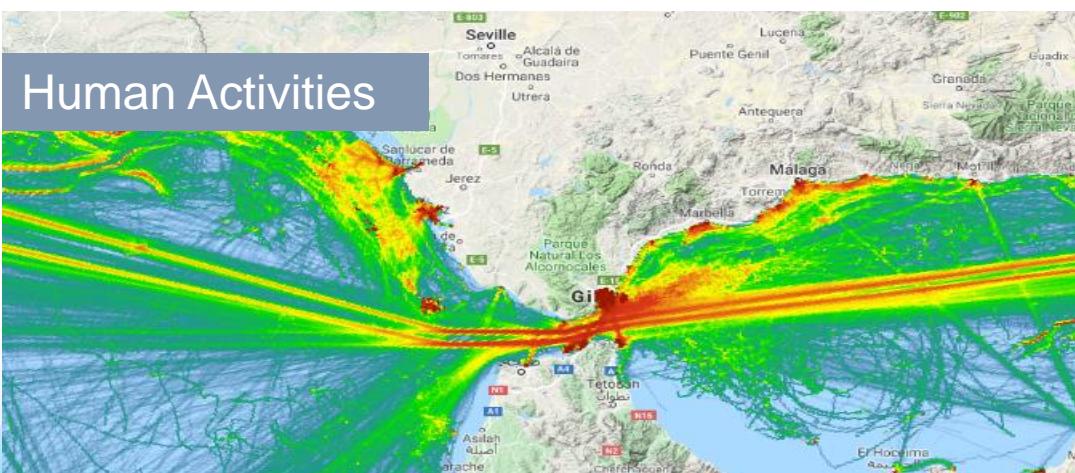
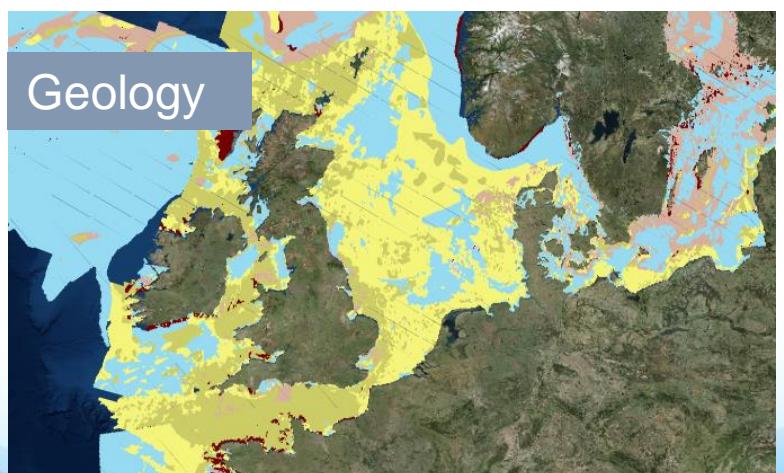
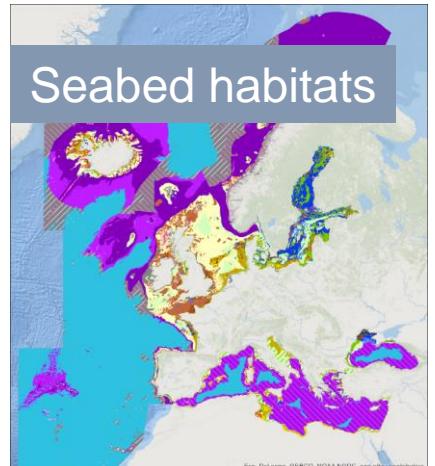
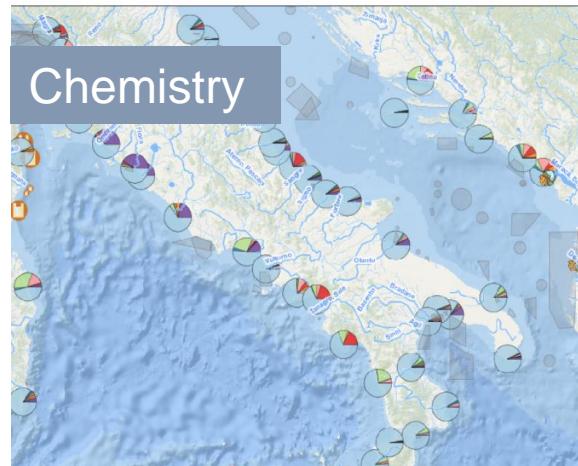
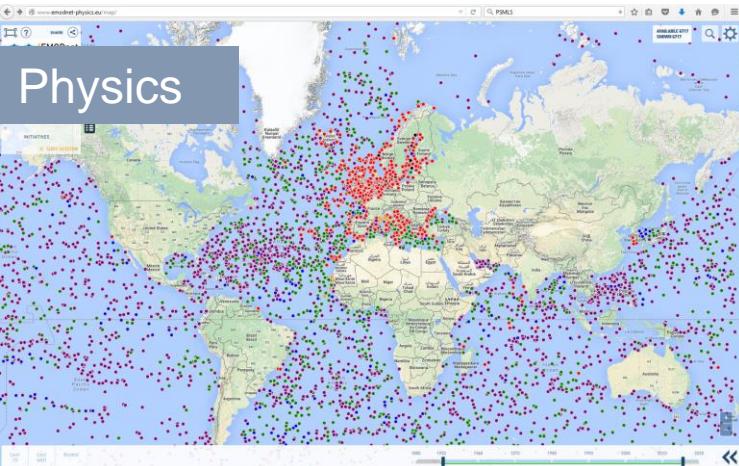
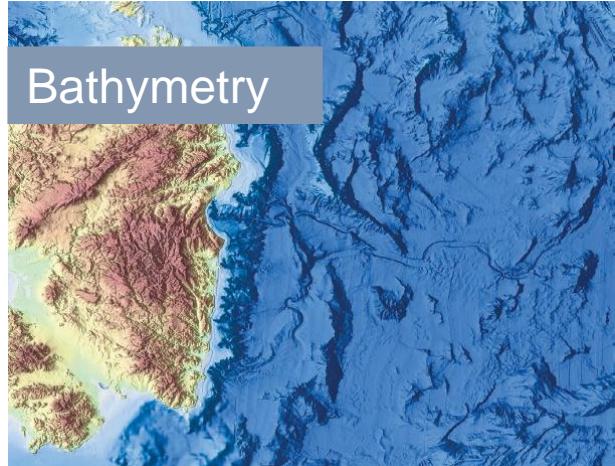
Joana Beja VLIZ (joana.beja@vliz.be)
Ruben Perez Perez (ruben.perez@vliz.be)

Context: EMODnet

- European Marine Observation and Data Network
- Mission
 - Observe 
 - Standardise 
 - Disseminate 
- *Collect once, use many times*



Context: EMODnet



Concept: EMODnet Biology

Focus on European Seas but we accept data from anywhere in the world's oceans

Target primarily data from 9 sub-themes

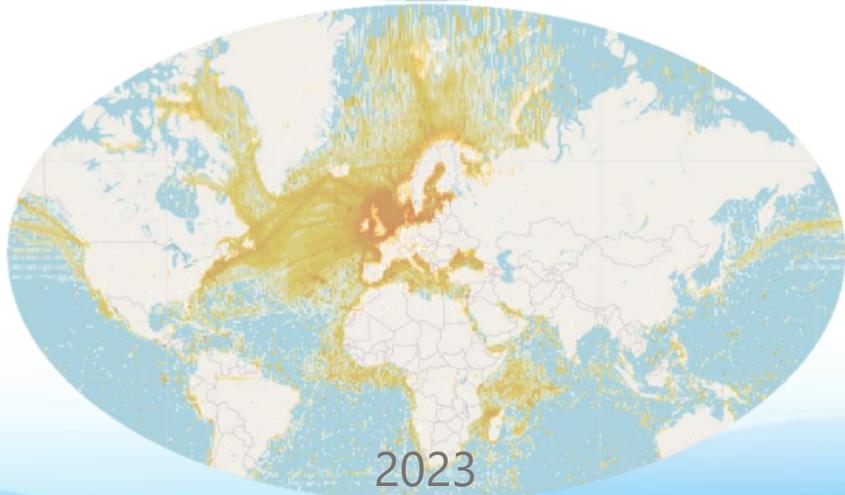


Data types: Observations, acoustic, tracking, imaging, ... and **genomics**

Concept: EMODnet Biology



2009



2023

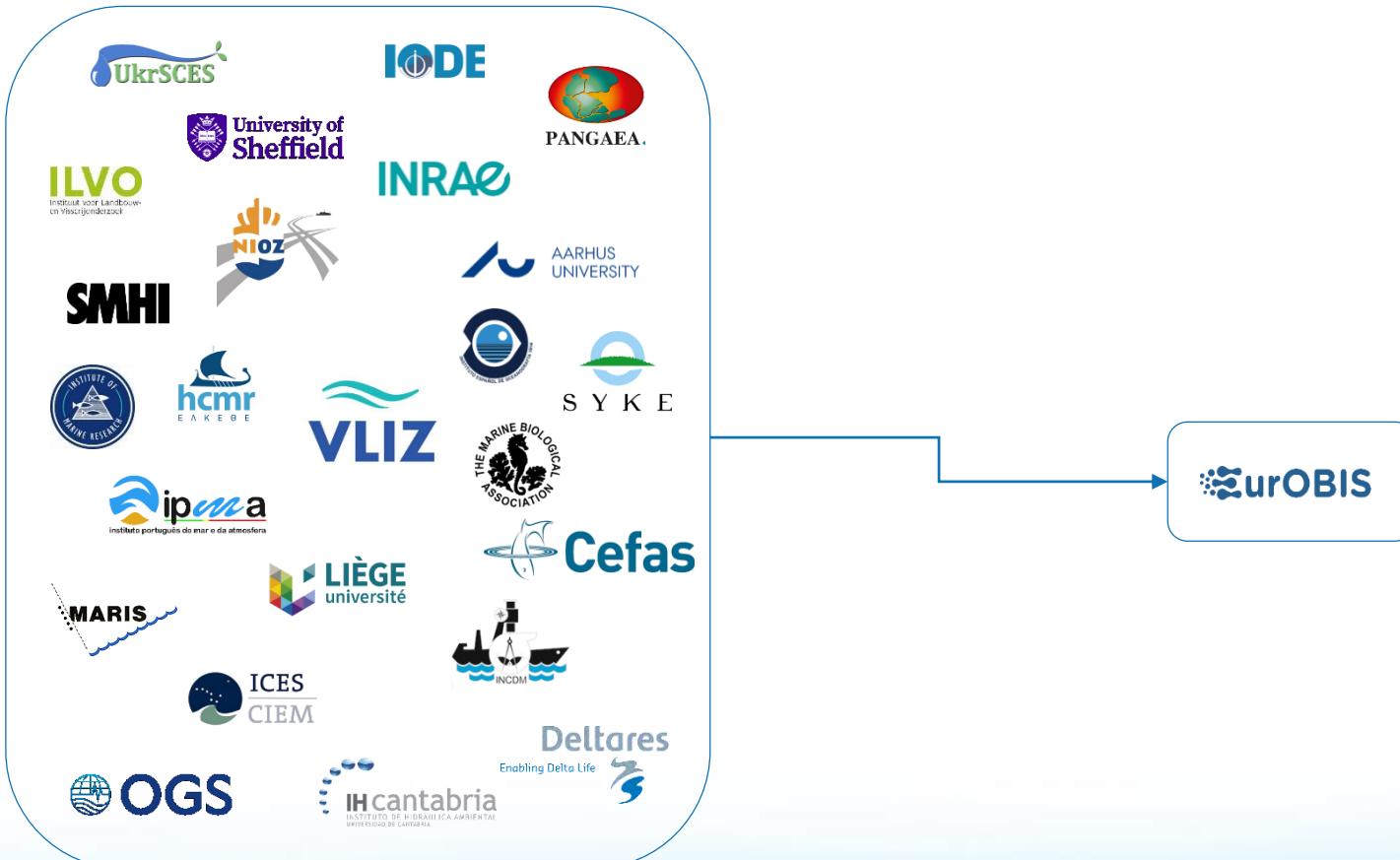


- 1300+ datasets
- 35M+ occurrence records
- 90M+ measurements or facts



Concept: The data mobilizer

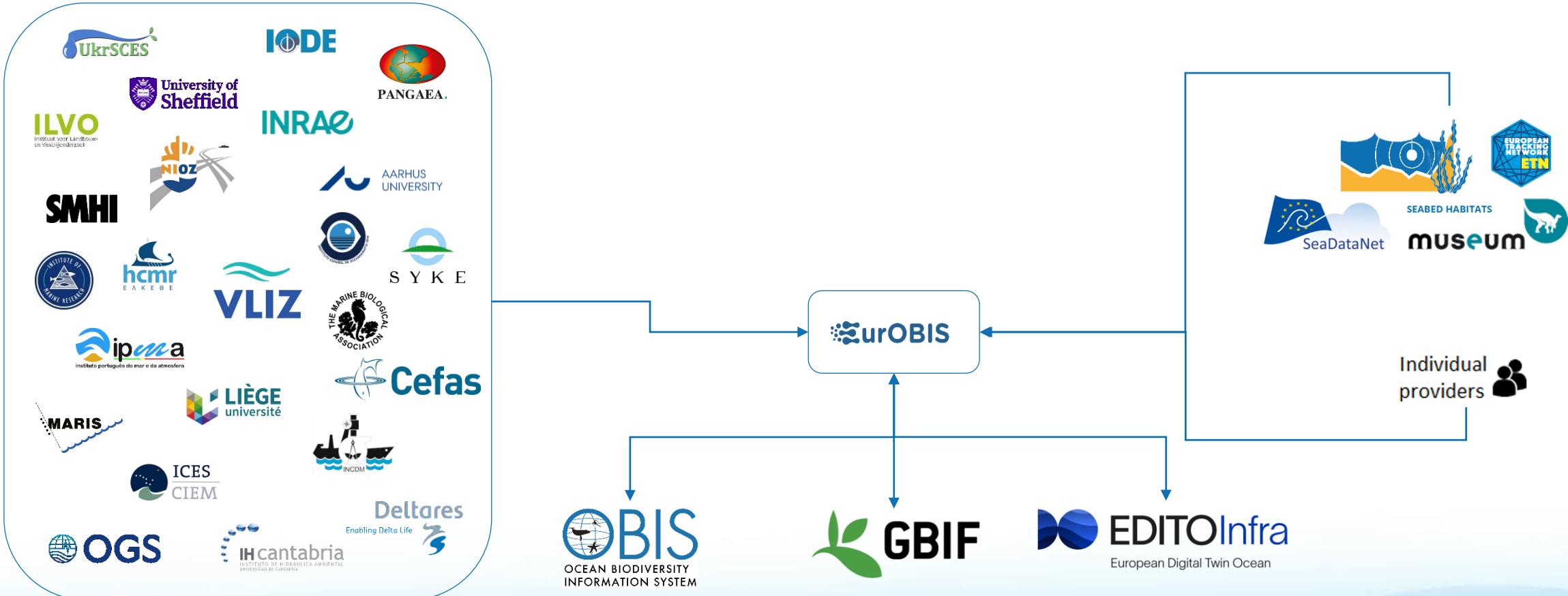
- Data flow powered by EMODnet Biology





Concept: The data mobilizer

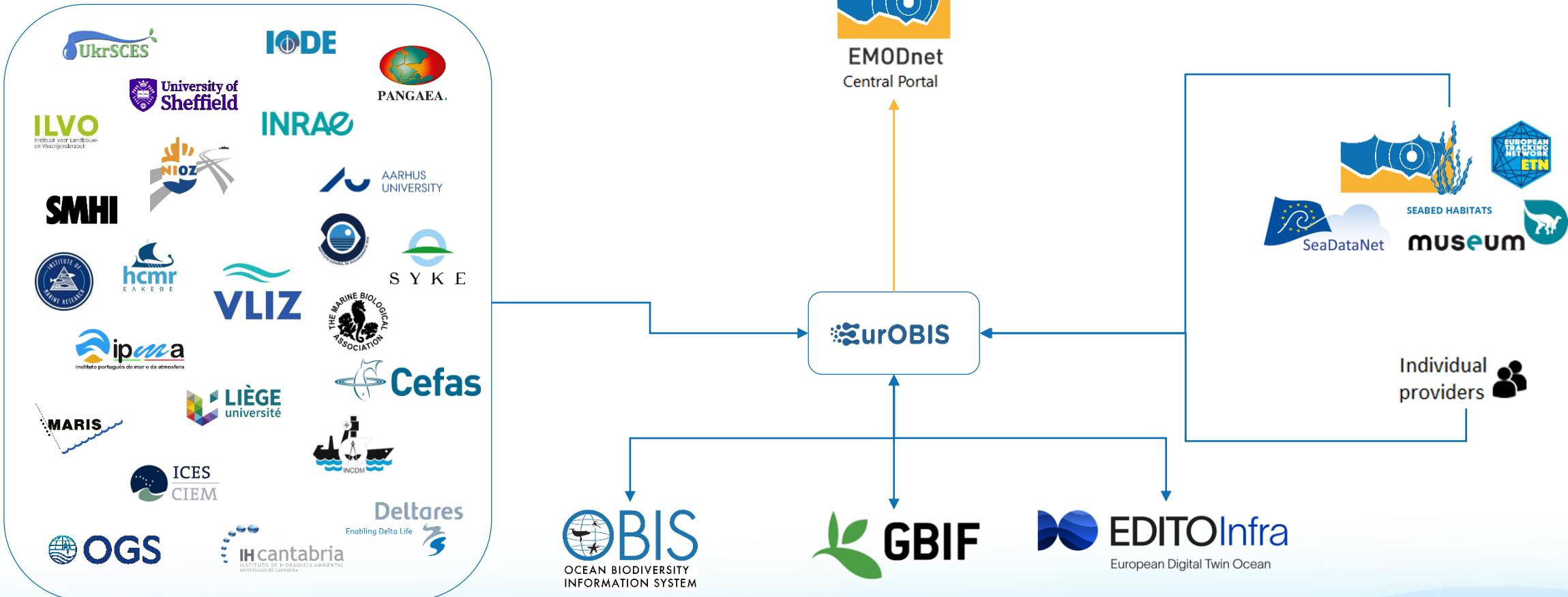
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Concept: The data mobilizer

- Data flow powered by EMODnet Biology



Method: The standards

(Meta)data standards

≡ Ecological Metadata Language



≡ Darwin Core



≡ OBIS ENV- Data



Method: The standards

(Meta)data standards

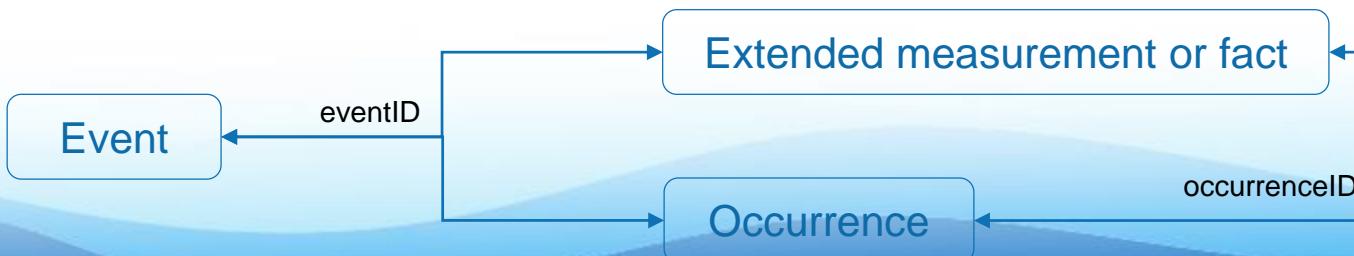
≡ Ecological Metadata Language



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≡ OBIS ENV- Data



- Organisms quantifications, facts and biometrics
- Sampling methodologies
- Environmental data



Method: The standards

(Meta)data standards

≡ Ecological Metadata Language



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≡ OBIS ENV- Data



Controlled vocabularies

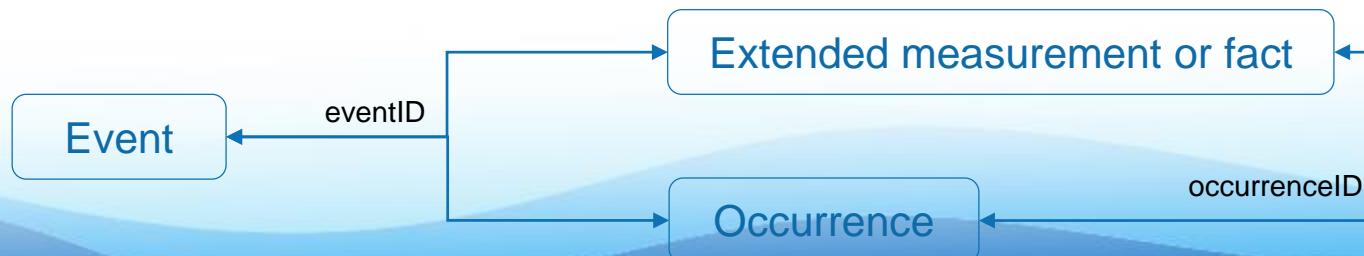
- WoRMS – taxonomy



- Marine Regions – geography

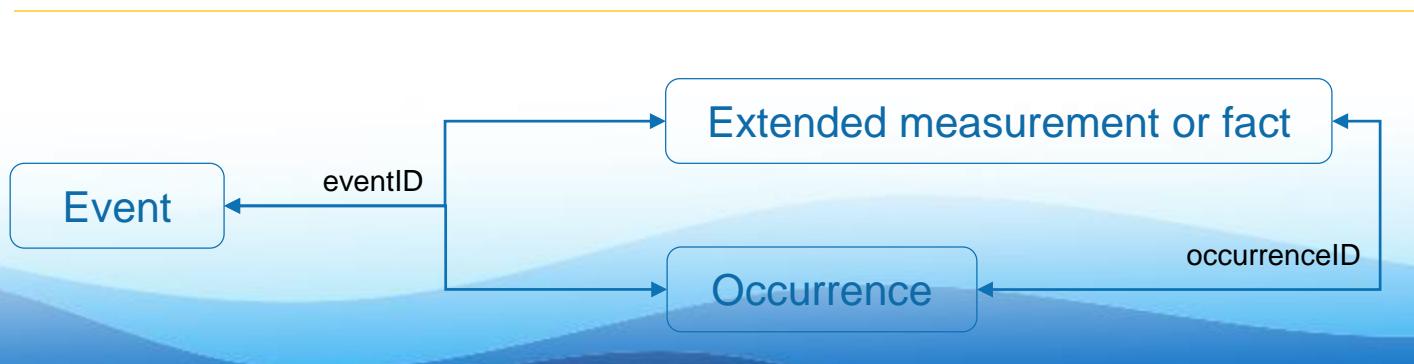
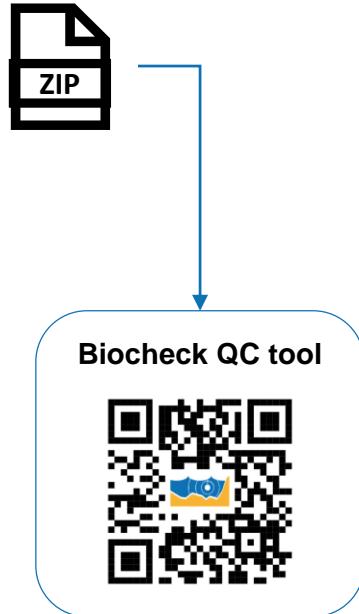


- BODC - parameters



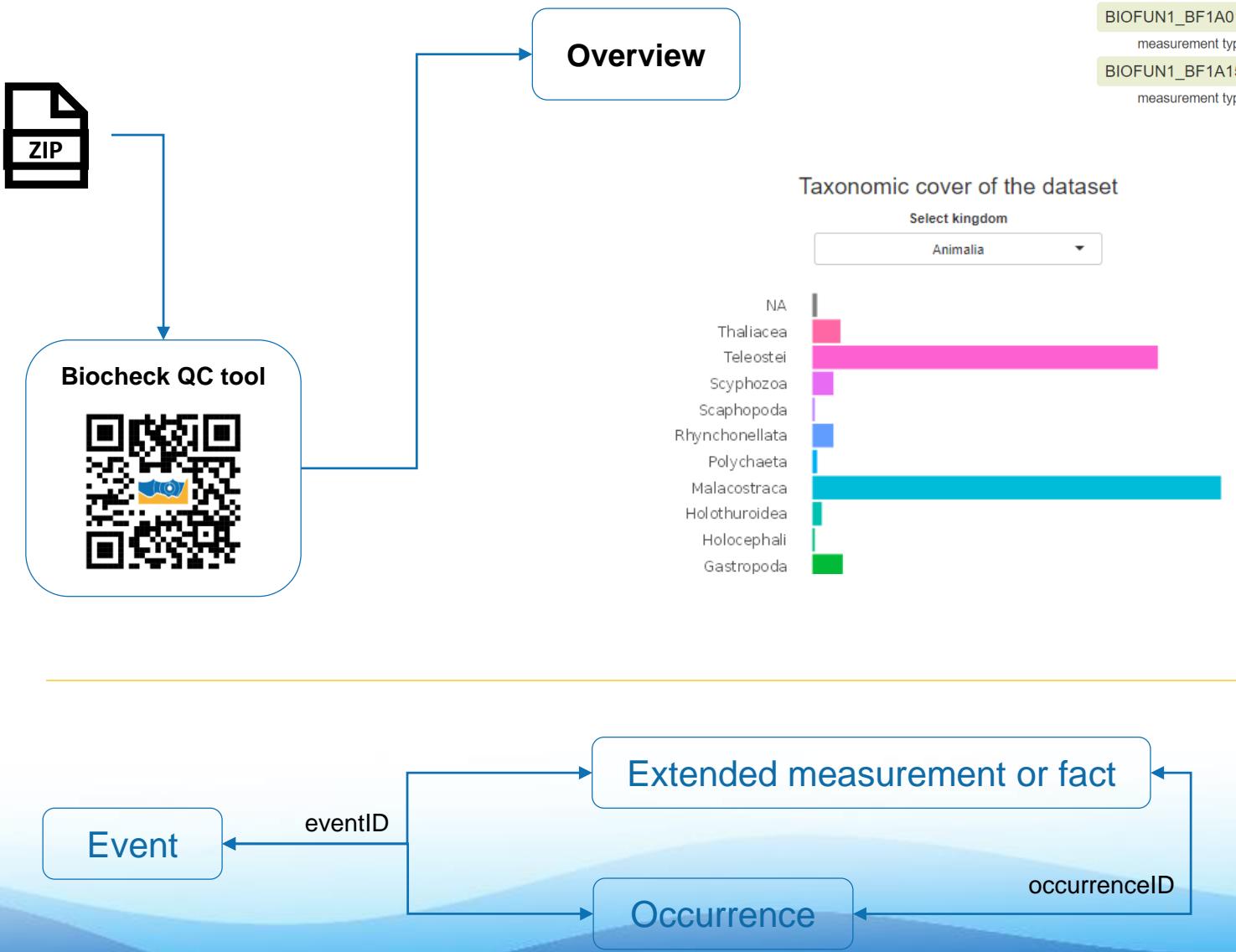
- Organisms quantifications, facts and biometrics
- Sampling methodologies
- Environmental data

Services: The QC





Services: The QC



BIOFUN1 1

event type: Cruise

BF1A01 1

event type: Sample

measurement types: Gear, sampling net horizontal opening, sampling net mesh size

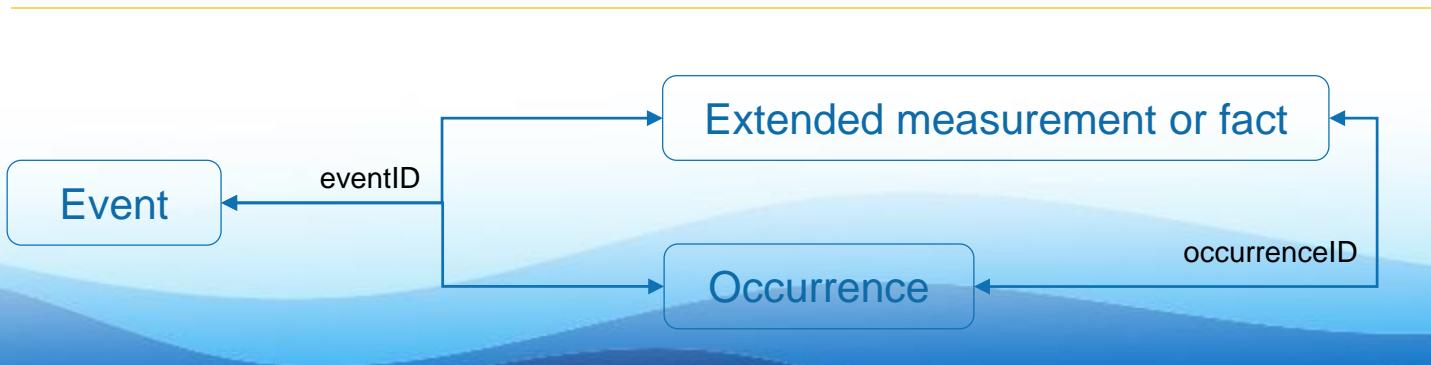
BIOFUN1_BF1A01_249 15

measurement types: Abundance, ObservedIndividualCount, Wet Weight

BIOFUN1_BF1A15_390

measurement types: Abundance, Abundance per something, Observed

Geographical cover of the dataset





Services: The QC

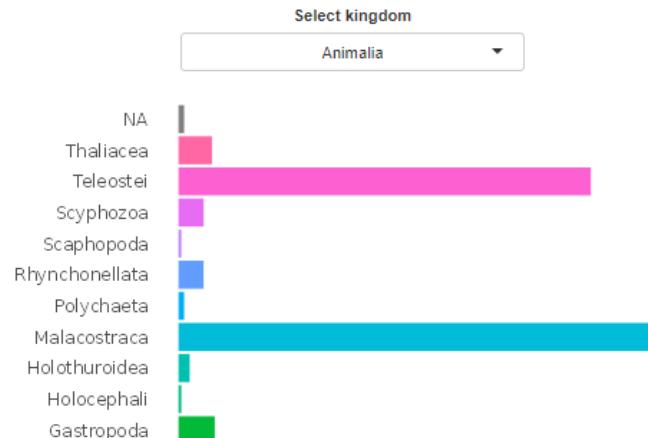


Overview

Biocheck QC tool



Taxonomic cover of the dataset



Geographical cover of the dataset



Issues

- Format and integrity
- Taxonomy
- Biogeography
- Parameters

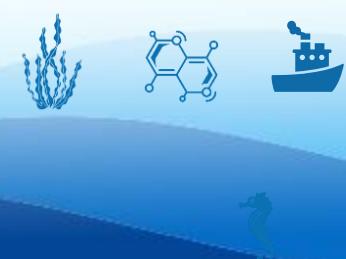
Event

eventID

Extended measurement or fact

occurrenceID

Occurrence



Services: Data search and access

Data catalogue

European Ocean Biodiversity Information System

[About](#) **Data access & services** [Providers](#) [Statistics](#) [How](#)

available through EurOBIS: Datasets [1366] [simple search](#)

Search in all fields: Title

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:

[show full list](#) [help](#)



Services: Data search and access

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[About](#) [Data access & services](#) [Providers](#) [Statistics](#) [How](#)

available through EuroBIS: Datasets [1366] [simple search](#)

Search in all fields:

Theme:

Data type:

Data origin:

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Person:

Word in abstract:

Begin date: before [MM/YYYY]

End date: before [MM/YYYY]

Archived:

Thesaurus term: [search]

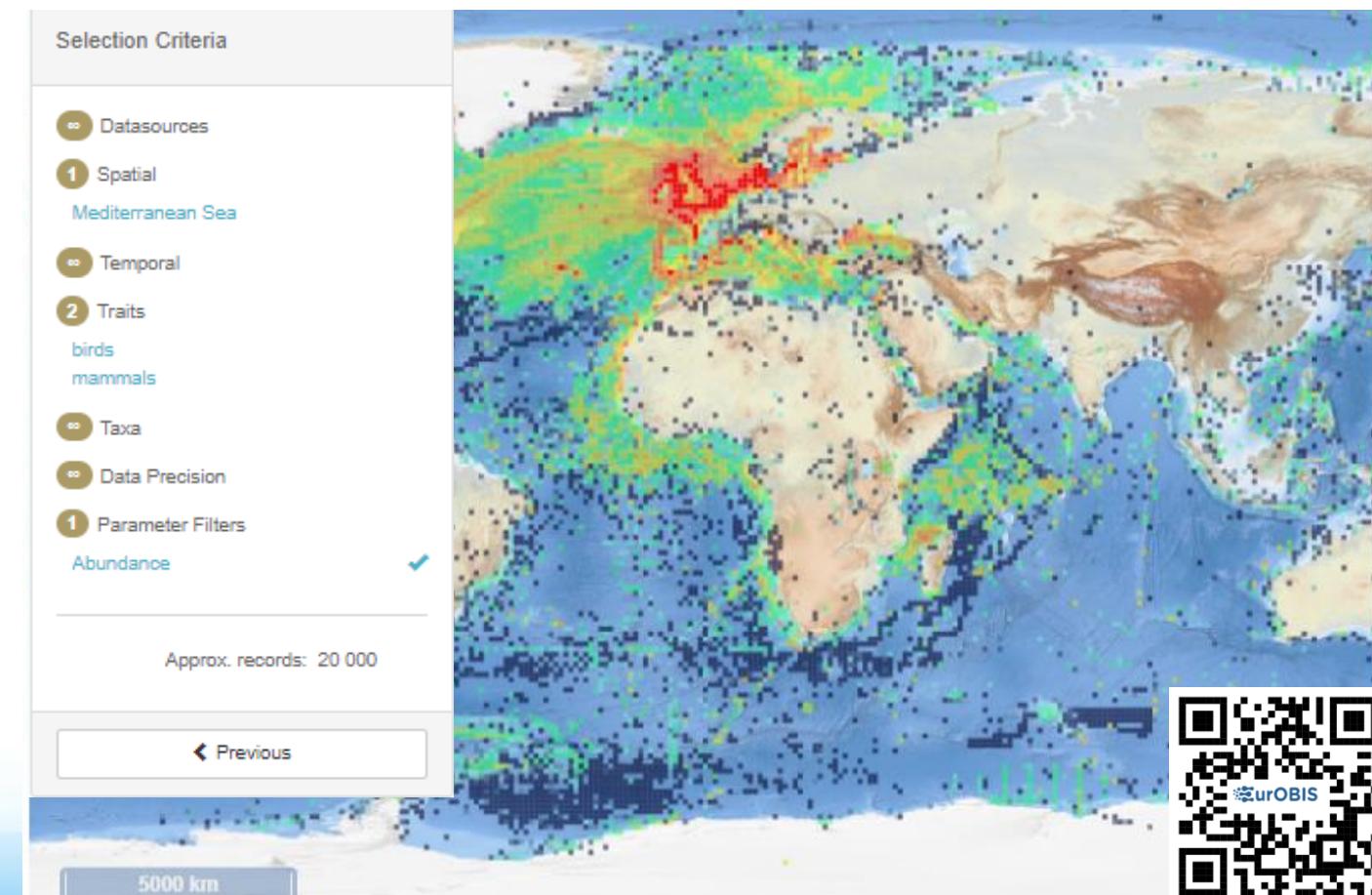
Taxonomic term: [search]

Geographical term: [search]

author:

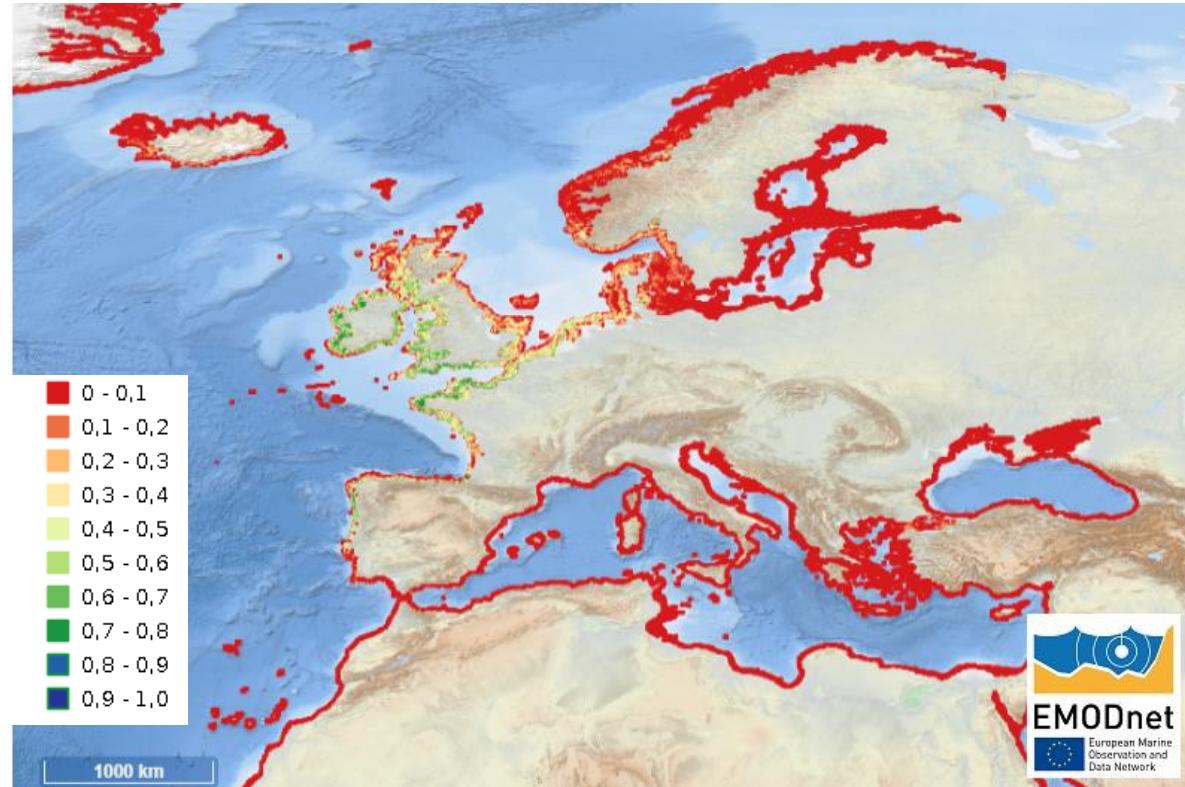
year:

[show full list](#) [help](#)

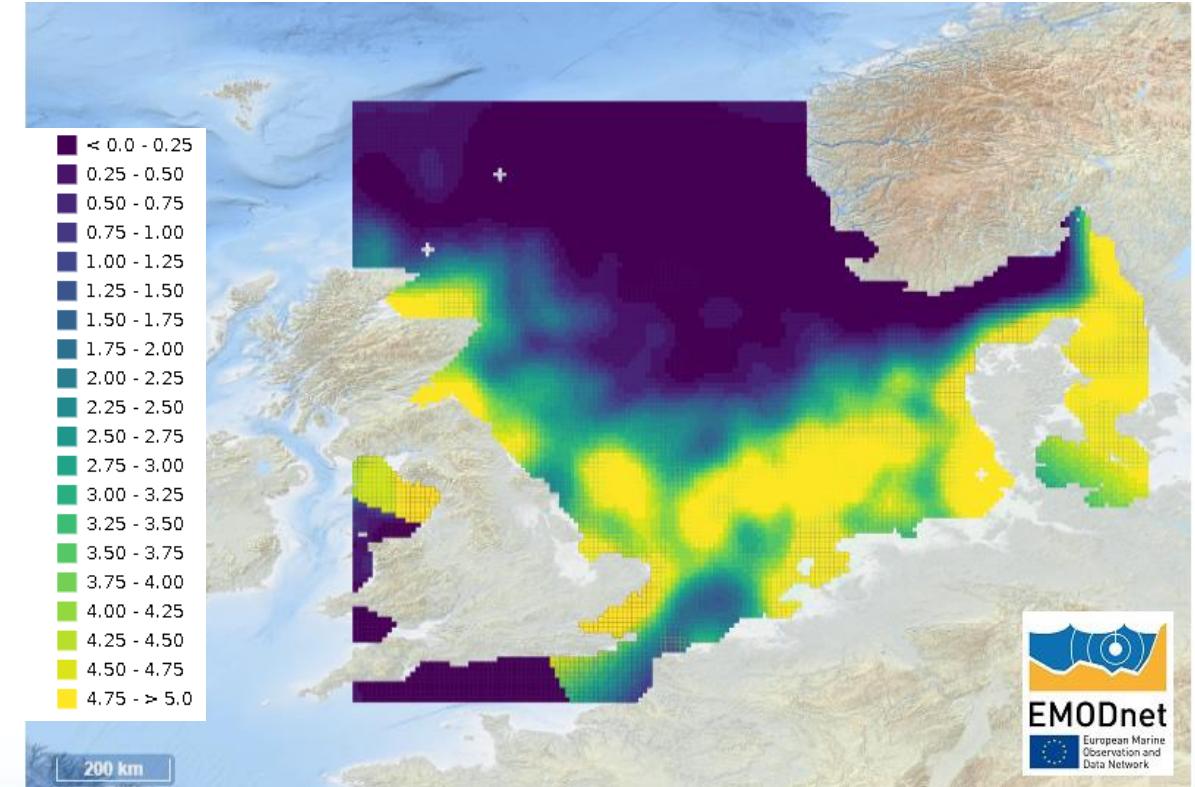


Services: Data products

Habitat Suitability Maps for *Asparagopsis armata*, *Caulerpa Taxifolia*, *Sargassum muticum* and *Undaria pinnatifida*



Relative abundance by taxon - *Sprattus sprattus* (European sprat)

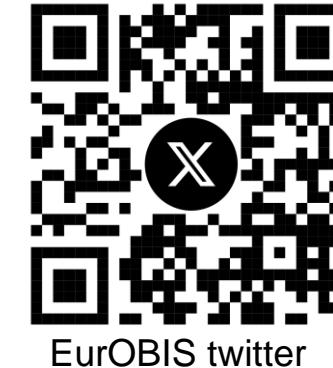
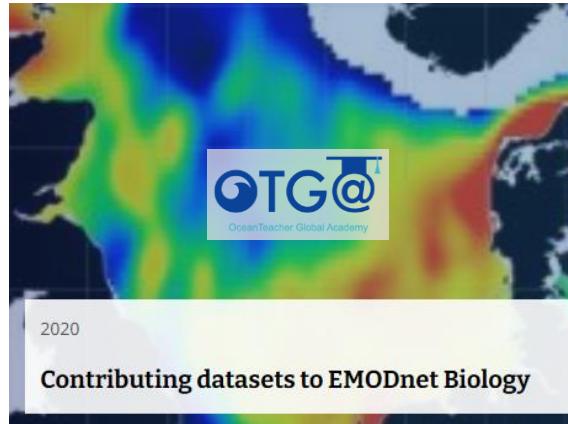


EMODnet Biology Data products catalogue



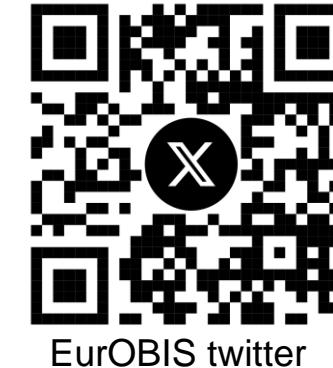
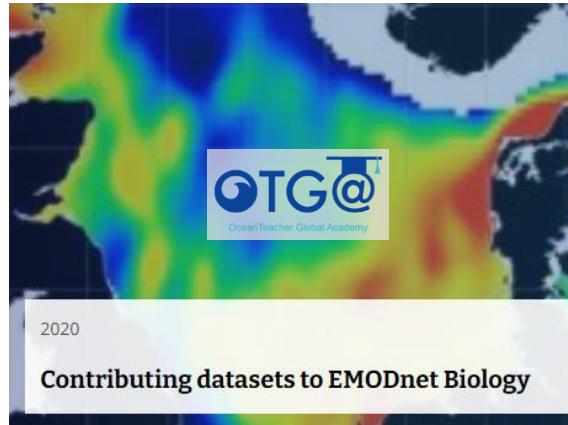
Initiatives

Training, Networking and Outreach

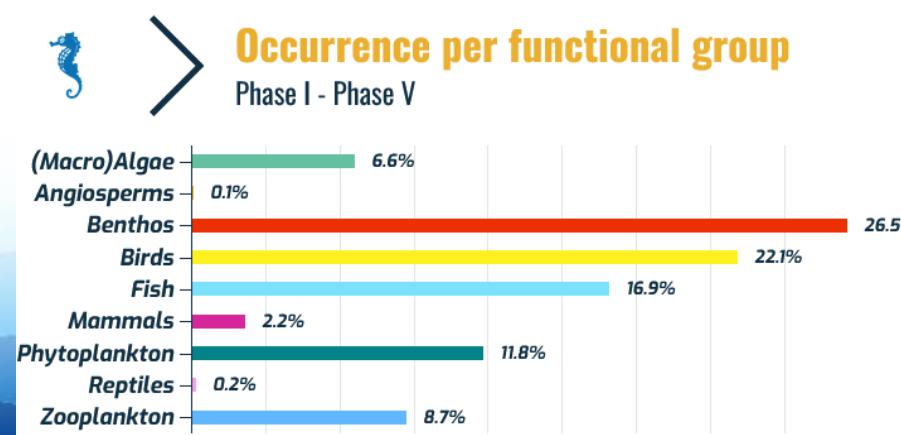


Initiatives

Training, Networking and Outreach



- Data search and Gap analysis



EMODnet Biology (VLIZ team)

Joana Beja
(Coordinator)



Leen Vandepitte
(WP2 data
management
lead)



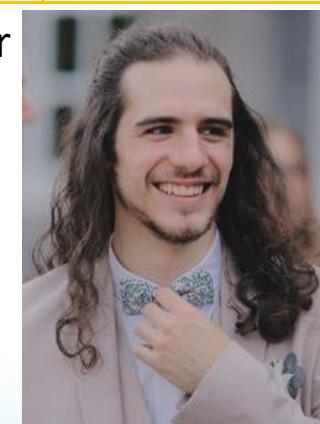
Ruben Perez
(data manager)

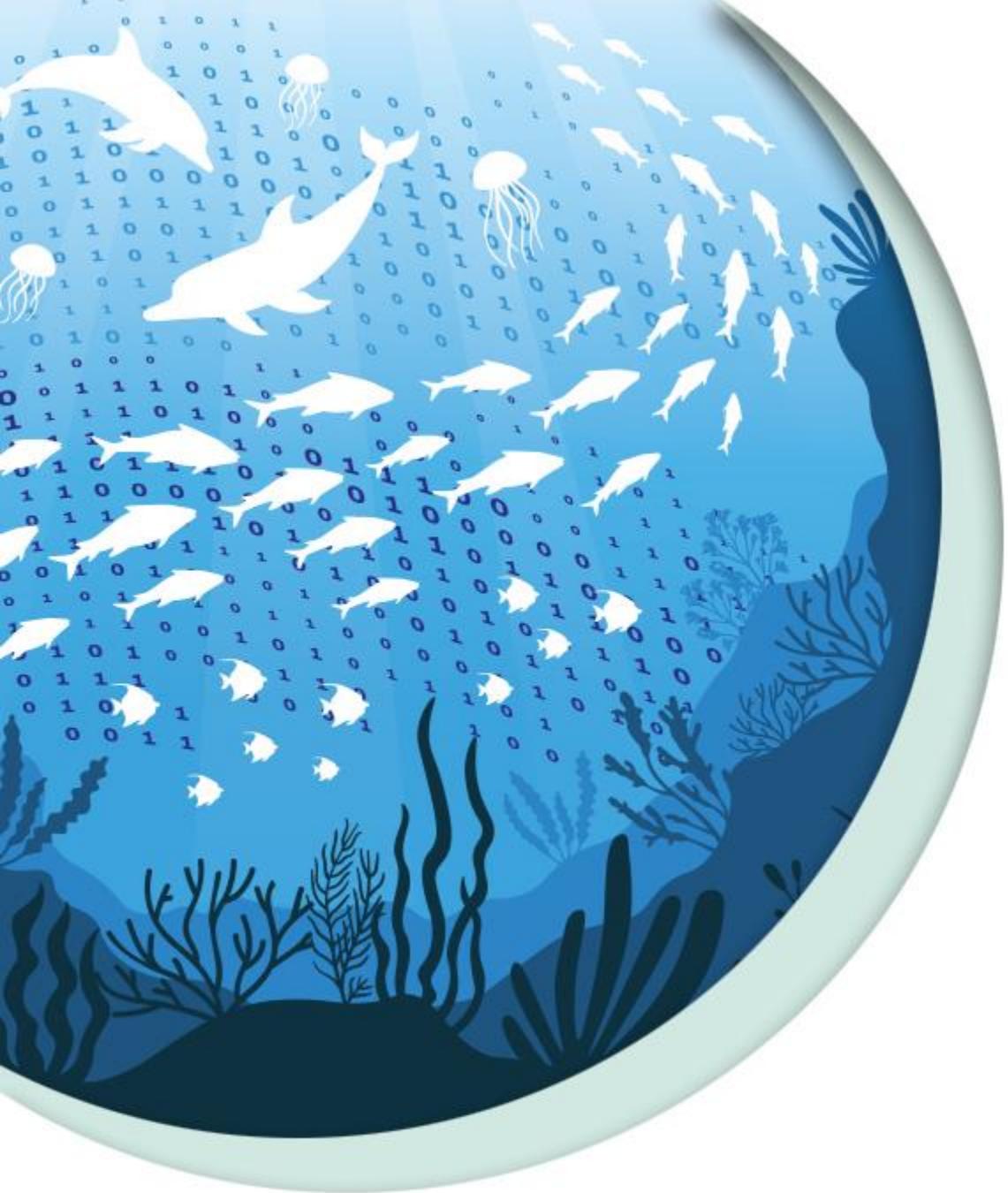


Lynn Delgat
(data manager)



Cyril Radermecker
(data manager)





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THANKS!