EMODnet Thematic Lot n° V - Biology

EASME/EMFF/2022/3.5.2/Lot V/SI2.895681

Start date of the project: 10/05/2023 (24 months)

Centralisation Phase

Phase V annual meeting [D1.4.1]

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.

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Document info

Title (and reference)	Phase V annual meeting minutes
WP title (and reference number)	WP1- Coordination
Task (and reference number)	Task 8: Monitor quality/performance and deal with user
Authors [affiliation]	Joana Beja, Leen Vandepitte, Ruben Perez-Perez, Benjamin Weigel, Marina Lipizer and Bart Vanhoorne
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Phase V annual meeting minutes

A year into Phase V, the EMODnet Biology consortium had its annual meeting in April 16th-17th in Constanta, Romania. The meeting was held as a hybrid event with about 20 partners attending in presence and another 17 online.

The consortium was represented by at least one person per organisation, which contributed to fruitful and varied discussions. The sections that follow summarise the information on participants, agenda and WP presentations, followed by the main topics of discussion.

1 Participants

The list of participants that attended the meeting is included in the table below:

Name	Organisation
Joana Beja	Flanders Marine Institute (VLIZ)
Salvador Fernandez	Flanders Marine Institute (VLIZ)
Ruben Perez Perez	Flanders Marine Institute (VLIZ)
Bart Vanhoorne	Flanders Marine Institute (VLIZ)
Benjamin Weigel	Institut National de Recherche pour l'Agriculture, L'Alimentation et l'Environnement (INRAE)
Marina Lipizer	Istituto Nazionale di Oceanografia e di Geofisica Sperimentale Trieste (OGS)
Nikola Holokov	Istituto Nazionale di Oceanografia e di Geofisica Sperimentale Trieste (OGS)
Oliver Williams	Centre for Environment, Fisheries and Aquaculture Science (CEFAS)
Dimitra Mavraki	Hellenic Centre for Marine Research (HCMR)
Carlos Pinto	International Council for Exploration of the Sea (ICES)
Alejandro Isla	Instituto Español de Oceanografía (IEO)
Camino Fernández de la Hoz	Instituto de Hidráulica Ambiental de la Universidad de Cantabria (IH Cantabria)
Elvira Ramos	Instituto de Hidráulica Ambiental de la Universidad de Cantabria (IH Cantabria)
Samuel Sainz	Instituto de Hidráulica Ambiental de la Universidad de Cantabria (IH Cantabria)
Felien Festjens	Institute for Agricultural and Fisheries Research (ILVO)
Gert Van Hoey	Institute for Agricultural and Fisheries Research (ILVO)
Arnfinn Morvik	Havforskningsinstituttet Institute of Marine Research (IMR)
Lisa Benedetti	International Ocean Data Exchanged (IODE-UNESCO)
Henrique Niza	Instituto Português do Mar e da Atmosfera (IPMA)
Antonina dos Santos	Instituto Português do Mar e da Atmosfera (IPMA)
Chloe Figueroa	Marine Biological Association (MBA)
Peter Tijsse	Marine Information Service (MARIS)
Elena Bisinicu	National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)

Name	Organisation
Elena Pantea	National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)
Harcota George	National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)
Gheorghe Sarbu	National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)
Laura Boicenco	National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)
Oana Vlas	National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)
Olivier Beauchard	Royal Netherlands Institute for Sea Research (NIOZ)
Astrid Wittmann	Pangaea- University of Bremen
Willem Stolte	Stichting Deltares
Tom Webb	University of Sheffield
Anders Torstensson	Swedish Meteorological and Hydrological Institute (SMHI)
Maria Pia Birkett	Swedish Meteorological and Hydrological Institute (SMHI)
Henrik Nygard	Suomen ympäristökeskus - Finnish Environment Institute (SYKE)
Sirpa Lehtinen	Suomen ympäristökeskus - Finnish Environment Institute (SYKE)
Charles Troupin	Université Liège

Figure 1. EMODnet Biology Phase V annual meeting group photo (in situ participants only)

2 Agenda

The meeting took place over two days, at NIMRD in Constanta. All Work Package leads had a 30-minute slot to present the WP objectives, expectations, deliverables and deadlines. There were various slots for Q&A from the participants and also a 1.5h slot for WP breakouts and well as a report on the status of the work by the various partners. The agenda is included in the table below.

Time	Item
April 16th	
09:00-09:30	Registration
09:30-10:00	Welcome / WP1
10:00-10:30	WP2
10:30-11:00	WP3
11:00-11:30	Coffee break
11:30-12:00	WP4
12:00-12:30	WP5
12:30-12:40	Q&A
12:40-13:00	Partner's feedback (5min pitch) VLIZ, INRAE, OGS
13:00-14:00	Lunch break
14:00-14:30	Partner's feedback (5min pitch) Aarhus, CEFAS, Deltares, HCMR, ICES
14:30-16:00	WP breakouts
16:00-16:30	Coffee break
16:00-17:00	Breakout group reporting (20 min per WP)
17:00-17:30	Q&A
19:00	Group dinner
April 17th	
Time	**What**
09:00-09:30	Welcome
09:30-10:00	Partner's feedback (5min pitch) IEO, IH Cantabria, ILVO, IMR, IODE
10:00-10:15	Q&A
10:30-12:00	Visit to Dolphinarium
12:30-13:30	Lunch
13:30-14:00	Partner's feedback (5min pitch) IPMA, MARIS, MBA, NIMRD, NIOZ

14:00-14:15	Q&A
14:15-14:45	Partner's feedback (5min pitch) Pangaea, SMHI, SYKE, UkrSCES, ULg, U Sheffield
14:45-15:00	Close meeting
15:00-16:00	Coordination Board meeting

3 Work Packages presentations

Biology

EMODnet Biology annual meeting

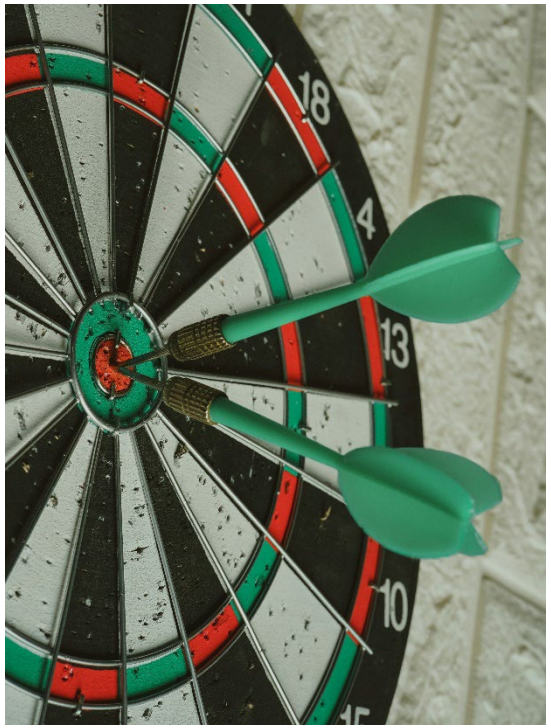
WP1 status update

Joana Beja, VLIZ

16-17 April 2025 (Constanta, Romania)

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.

WP1 Objectives



- General project coordination and supervision
- Budget Management
- Responsibility to deliver the reporting deliverables to the Commission
- Organisation of project meetings
- Liaise with external organisations on behalf of the project consortium
- Operate the helpdesk

WP1 Deliverables

- D1.1.1 Quarterly Progress reports
  - ☑ 15 Jul 2023
  - ☑ 15 Oct 2023
  - ☑ 15 Jan 2024
  - ☑ 15 Apr 2024
  - ☐ 15 Jul 2024
  - ☐ 15 Oct 2024
  - ☐ 15 Jan 2025
  - ☐ 15 Apr 2025
  - ☐ 15 Jul 2025
- D1.1.2 Interim report 10 May 2024
- D1.1.3 Final Report 10 May 2025

Photo by Eden Constantino on Unsplash

WP1 Deliverables

- D1.2.1 Update of EMODnet Biology data products via the EMODnet CP catalogue
  - ☐ 10 May 2024
  - ☐ 10 May 2025
- D1.3.1 Monitoring user feedback via EMODnet JIRA
- D1.3.2 Operation of the EMODnet CP helpdesk
- D1.4.1 Minutes from the three project meetings (kick off, annual and final)
  - ☑ 08 Jul 2023
  - ☐ 10 Jun 2024
  - ☐ 10 Jun 2025
- D1.5.1 Participation in the EMODnet Steering Committee meetings

☑ D1.5.2 Participation in the EMODnet Open Conference

- D1.6.1 Appropriate mechanisms and guidelines for handover 10 May 2025

WP1 Partners

Organisation	WP	Who	Logo
VLIZ	1 2 5	Joana Beja Leen Vandepitte Bart Vanhoorne	
INRAE	3	Benjamin Weigel	
OGS	4	Marina Lipizer	

EMODnet Biology information

Where to find published documents

- Reports: https://emodnet.ec.europa.eu/en/reports
  - select Biology in the EMODnet component and interim, final, quarterly in the Publication type
- Deliverables: https://emodnet.ec.europa.eu/en/reports
  - select Biology in the EMODnet component and the Deliverables in the Publication type
- Use cases: https://emodnet.ec.europa.eu/en/use-cases
  - select Biology in the EMODnet component
- Informative material
- Static page: https://emodnet.ec.europa.eu/en/biology

Photo by Thea on Unsplash

Events attended in 2023

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- Documents for EMODnet (co-)organised events can be found in: https://maritime-forum.ec.europa.eu/theme/marine-knowledge/emodnet_en

- Events/meetings/workshops attended:
  - May: Green Deal Data Space Webinar on Biodiversity, UN Global Compact Working Meeting on Net Biodiversity Positive Offshore Renewables, EMODnet Technical Working Group meeting, EMODnet Steering Committee meeting, Digital Ocean Forum

  - June: EMODnet Ocean Decade Coordination and Implementation Group, MSFD ENM Meeting (CD1C1 Incidental bycatch Threshold Values)

  - July: Green Deal Data Space Stakeholder Forum

Events attended in 2023

(Page 2/2)

- Events/meetings/workshops attended:
  - September: EMODnet Ocean Decade Coordination and Implementation Group, EMODnet achievements and way forward, G7 FSOI-GOOS Plankton workshop
  - October: EMODnet-Copernicus Marine Services Coordination meeting, EMODnet Technical Working group meeting
  - November: EMODnet Biology collaboration with JRC for MSFD, EuropaBON workshop on co-design for the European Biodiversity Monitoring Coordination Centre, EMODnet Open Conference
  - December: MSFD ENM Meeting (D1C1 Incidental bycatch Threshold Values), EMODnet Steering Committee
  - January: EMODnet future evolution and governance
  - February: EMODnet for Mission Ocean and Horizon Europe

Events attended in 2024

- Events/meetings/workshops attended:
  - March: VLIZ Marine Science Day, EMODnet Technical Working Group meeting, Iliad Webinar, NECCTON workshop on biodiversity data products
  - April: EMODnet Steering Committee meeting

Planned

- May: IMDIS
- June: Digital Ocean Forum

Other contributions to EMODnet Biology activities

Requested from consortium

- Please provide your input for published publications in the project's Google document 'EMODnet Biology Reporting-Partners Input
https://docs.google.com/document/d/1lGCcl0NZxgyvMDnJPLRZTRbGWR_mtxoev3Yn4UFlVvs/edit?usp=drive_link

- Organising Workshops/Training? We can boost the outreach

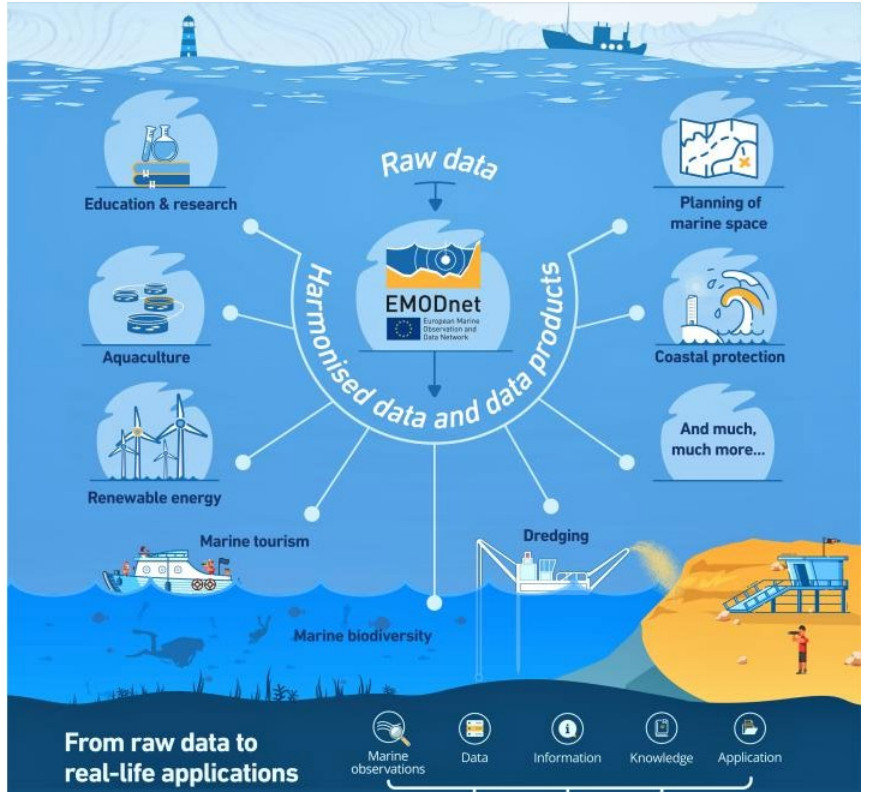
- Attending Events/Meetings wearing the EMODnet Biology hat -> information can be added to project's Google Drive document 'Meetings/Events attended/held
https://docs.google.com/document/d/1K4h7i5-GJqFXc5Il0rjwMvrUD45Ws5M2vE6tcmsIS8E/edit?usp=sharing
(until end of May 2024)

EMODnet evaluation

- https://maritime-forum.ec.europa.eu/evaluation-european-marine-observation-and-data-network-emodnet_en

As illustrated in the figure above, there is a considerable EU-added value of having open and free access data on EU ocean and seas and beyond, saving a lot of time, efforts and costs to its users. EMODnet allows to value raw data on seas and oceans thanks to harmonization, quality control and the creation of data products. This enables the use of the data for many different purposes in many different domains such as environmental protection and sustainable blue economy.

The action has also demonstrated that it could adapt over the years to support new policies. In a context where environmental and climate policy will continue to evolve, of the digitalization of knowledge and tools with e.g. Destination Earth and the Digital Twin of the Ocean, there is an increasing need for in-situ data, reduced operational costs and less delays for those who use marine data. EMODnet remains therefore very relevant. Among lessons learned and considerations for the future evolutions of EMODnet, we see that, in addition of the current bottom-up approach, adding a top-down dimension could be beneficial. In particular, we could reinforce the access to data which contribute to EU policies and initiatives (MSFD, MSP, DTO, CMEMS). This evaluation is intended to be the basis for a new strategy, which we will develop in the year to come.



EMODnet call to action

https://emodnet.ec.europa.eu/sites/emodnet.ec.europa.eu/files/public/EMODnet_Call_to_action_Final.pdf

To continue delivering on the aforementioned, and expand services to address the needs of the Green and Digital Transitions, EMODnet requires community and political action to ensure sustainability and resources appropriate for a fully functioning, operational service of the European Commission. **We, the EMODnet community, call on:**

EMODnet partners, associated partners and collaborators:

- To collectively deliver an ***EMODnet Vision to 2035,*** enabling a full and expanded function of EMODnet, fit for the European and Global ocean data ecosystem;
- To fully engage with EMODnet's contributions to ***EU marine data spaces and the EU Digital Twin Ocean***, in close collaboration with Copernicus Marine Service;
- To further support the EC in its ***EC Ocean Observation Initiative and work towards a sustained and optimised marine data and ocean knowledge value-chain***[11] ;

EU agencies and authorities:

- To take forward the conclusions of the recent EMODnet evaluation and to assess the appropriate resources for EMODnet, ***ensuring it can operate at full functioning levels to meet current and emerging user needs and requirements;***
- To assess how EMODnet can further strengthen its service for EU Policy, ***through enhancing its role in the regulatory monitoring data pipeline, including for European Directives and Ocean assessments;***

Regional marine data services and regional initiatives: To further optimise the marine data flow from Regional Sea Conventions, International Council for the Exploration of the Sea (ICES) and others into EMODnet, and the use of EMODnet data and data products in Regional Assessments;

EU Member States and Associated Countries: To work with EMODnet, in collaboration with European actors e.g., JPI Oceans, European Marine Board, EuroGOOS, Research Infrastructures and EOOS governance structures to establish EMODnet National networks, increasing National visibility and uptake;

Europe's marine and maritime community: To share *in situ* marine data and data products with EMODnet as a long-term EC marine data service, and fully utilise EMODnet for their marine knowledge needs e.g., EU Horizon Europe and EU Mission Restore our Ocean and Waters, also establishing EMODnet as a core pillar of ocean knowledge for ocean, water and climate literacy, in collaboration with the European Atlas of the Seas[12] and EU4Ocean for ocean, water and climate literacy;

Global and regional ocean data and information services: To continue to expand the data provision to EMODnet, including the deep ocean, to optimise the harvesting of EMODnet in global repositories and catalogues, including the Global Earth Observation System of Systems (GEOSS)[13], the IODE IOC/UNESCO Ocean Data and Information System (ODIS)[14], the IOC/UNESCO Ocean Biodiversity Information System (OBIS)[15] and the GOOS/IODE Ocean Best Practices System (OBPS)[16] and to foster EMODnet and other regional data service collaboration to deliver global ocean data interoperability, data sharing and stewardship for OceanData2030[17] and the UN Ocean Decade.

Payments

- First payment is done upon approval of the Interim Report

- VLIZ will send you an email when you can submit your invoices.
  This will likely happen in September

- CINEA must approve submitted documents and pay within 60 days of report submission.

If CINEA has remarks, they will send them to VLIZ and the time limit for payment gets suspended. VLIZ has 30 days to make amendments or submit additional information or new report version. CINEA reviews and gives approval within remaining time (60 - x days)

- Non-compliance with proposed work/contract might result in payment being suspended or decreased

Photo by Diane Helentjaris on Unsplash

WP1 Status Update

- We are on schedule

- Interested in receiving key EMODnet information? Sign up via https://ec.europa.eu/eusurvey/runner/EMODnetConsentForm

- EMODnet Vision 2035 Drafting Group (EMODnet-VDG)
  - 24 people: 2 representatives from each thematic lot (and Ingestion)+ 1 for EMODnet CP + 3 for SBCP + 3 for AP
  - EMODnet Biology representatives: Joana Beja and Marina Lipizer
  - Do feel free to share any concerns, input with us so we can raise it in the drafting group, as/when appropriate

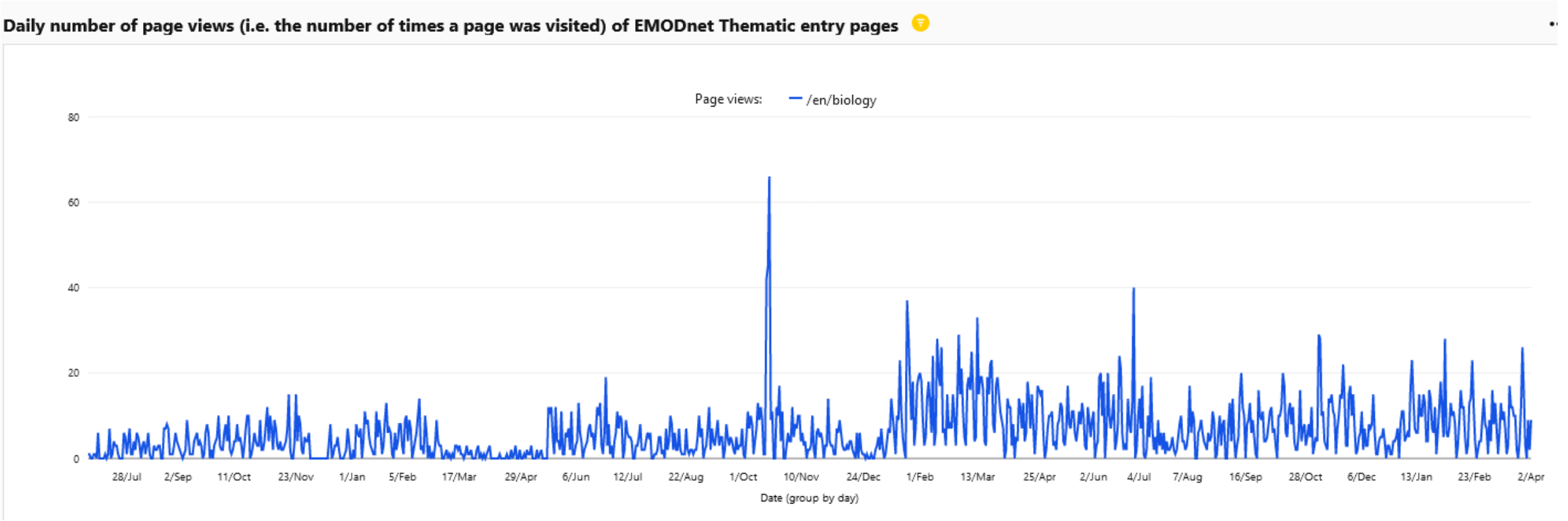
A few metrics

Most visited use cases since tracking was implemented in the CP

	Use case	# Sessions
2	Distribution of reef-building benthos in the North Sea	161
10	EMODnet Biology datasets enriched with standardized associated media information	97
14	Holistic, standards-based access and interoperability for marine biodiversity data	75
20	Linking peer-reviewed publications with standardised eDNA derived occurrence data	38

A few metrics

Page views since 2021-07-01

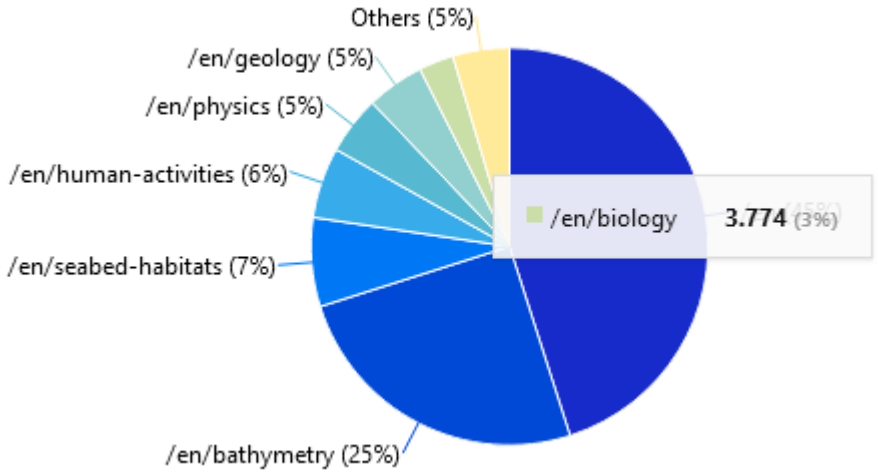


A few metrics

Metrics evolution for static pages

	Date	# Visitors	#Pageviews	#Unique Pageviews	% Returning visitors
CP Portal home page	2021-07-01 to 2024-04-02	60.020	10.7443	87.693	23.96%
Biology static page	2021-07-01 to 2024-04-02	3.774	6.121	4.940	34.66%
CP Portal home page	2023-02-01 to 2024-04-02	29.589	53.790	44.246	27.77%
Biology static page	2023-02-01 to 2024-04-02	2.304	3.867	2.967	31.86%

Quarterly # visitors to EMODnet home page and thematic entry pages



Where do we see EMODnet Biology evolving in the next 2 years?

Biology

EMODnet Biology annual meeting

WP2 status update

Ruben Perez Perez, Flanders Marine Institute
Leen Vandepitte, Flanders Marine Institute

16-17 April 2025 (Constanta, Romania)

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.

WP2 Partners

- Lead: VLIZ;
- Partners: OGS;
- Subcontractors: Aarhus, Deltares, HCMR, ICES, IEO, IH Cantabria, ILVO, IMR, IPMA, MARIS, MBA, NIMRD, NIOZ, Pangea, SMHI, SYKE, Ifremer, Cefas

WP2 Objectives

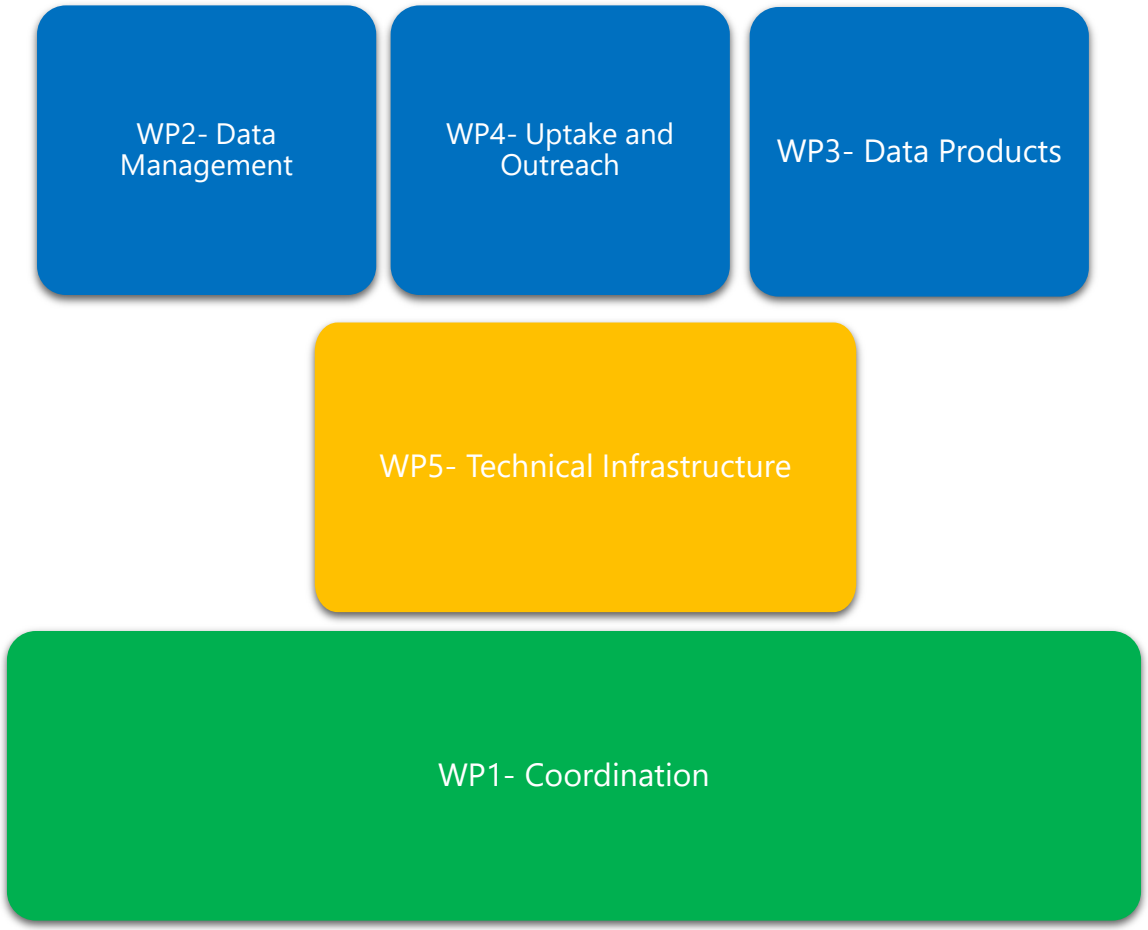
Task 1: Maintain and improve a common method of access to data held in repositories which will be addressed through the planning of various actions.

- European seas: Water column, seabed & coastline
  - Arctic, Atlantic, Baltic, Black, Mediterranean & North Sea
  - Barents Sea
  - Jurisdictional waters of Member States, UK & Norway for the Northeast Atlantic
    - *Celtic Seas*
    - *Iberian coast*
    - *Bay of Biscay*
    - *Macaronesia*
    - *Norwegian Sea*
    - *Caribbean Sea*
- European projects
  - *Horizon2020*
  - *Horizon Europe*
  - *Mission Ocean*

=> active support towards data sharing through EMODnet

- *Also: f*ocus on under-represented areas & species groups

WP2 Objectives



WP2 Deliverables

#	Description	Due	Responsible
D2.1.1	Maintenance of adequate mechanisms to ensure data are interoperable	M0-M24	VLIZ
D2.1.2	Report on the standardisation and integration of datasets published during the Phase	M24	VLIZ
D.2.2.1	Summary on consortium data flows	M6 ✓	VLIZ
D2.3.1	Plan to optimise procedures to make restricted data available to users	M0-M24	all
D2.4.1	Workshop on use of Zooniverse for data digitisation through citizen science	M6 ✓	HCMR + VLIZ
D2.4.2	Data training workshop for Mediterranean organisations	M6 ✓	HCMR + VLIZ
D2.4.3	Report on the availability of data following the workshops	M22	HCMR
D2.5.1	Guidance for data management practices applied to omics data	M0-M24	VLIZ

WP2 Deliverables

Support to data providers

(Meta)data management

- Helpdesk at bio@emodnet.eu (proactive)
- Data Forum at MicrosoftT Team ”project_EMODnet-Biology”
- Monthly Data Laundry Q/A Sessions

Resources

- OceanTeacher training course
- Biocheck tool

Data providers commitment

Expected activities

- Quality delivery of all proposed new and updated datasets following the agreed data format and quality standard.
- Proactive communication and reponsiveness towards data delivery within the agreed deadlines.

Reminder

- Data delivery is only completed upon its acceptance by the EMODnet Bio DMT
- WP2 budget allocation depends on delivery of the proposed data.

WP2 Status Update

Partner	New	Updates	Delivered
Aarhus	-	1	0
Deltares	5	-	1
ICES	1	7	0
IEO	2	2	2
IFREMER	13	-	0
IHCantabria	1	2	0
ILVO	2	7	4
IMR	-	5	4
IPMA	-	5	0
NIMRD	2	-	2
NIOZ	3	-	0
OGS	4	4	0
SMHI	2	12	3
SYKE	-	3	2
UniHB	5	-	0
VLIZ	1 + *TBD*	*TBD*	34
MBA	1 + *TBD*	*TBD*	7
HCMR	6 + *TBD*	*TBD*	3
MARIS	-	-	-

Proposed datasets for Phase V - AT LEAST:

⇒ 48 new datasets

⇒ 48 updates of datasets

Currently delivered

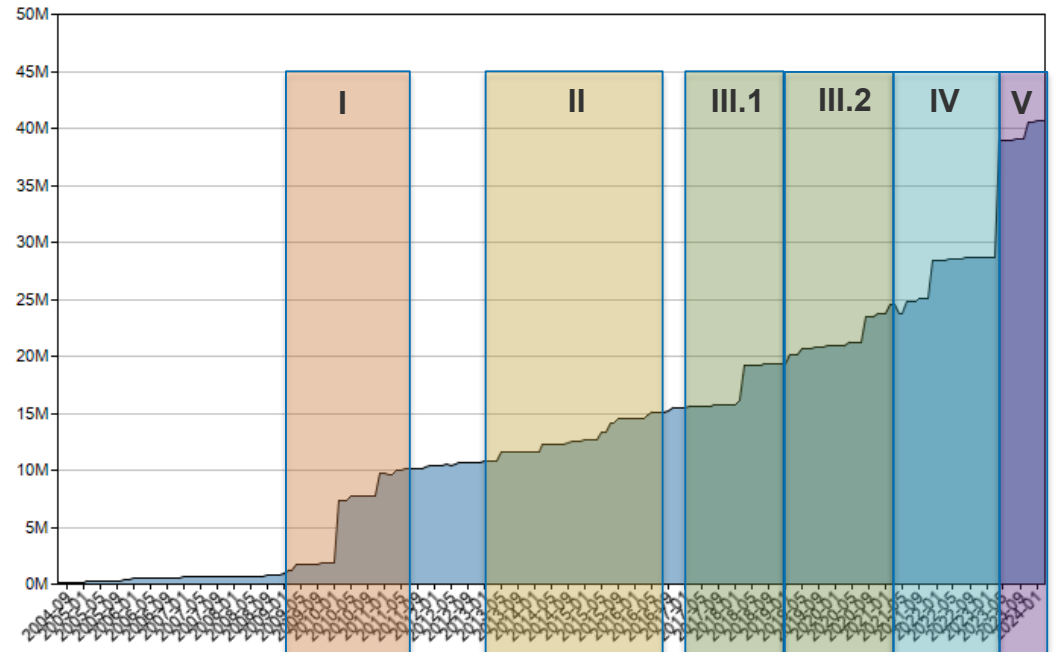
⇒ 20% of proposed datasets

Covering:

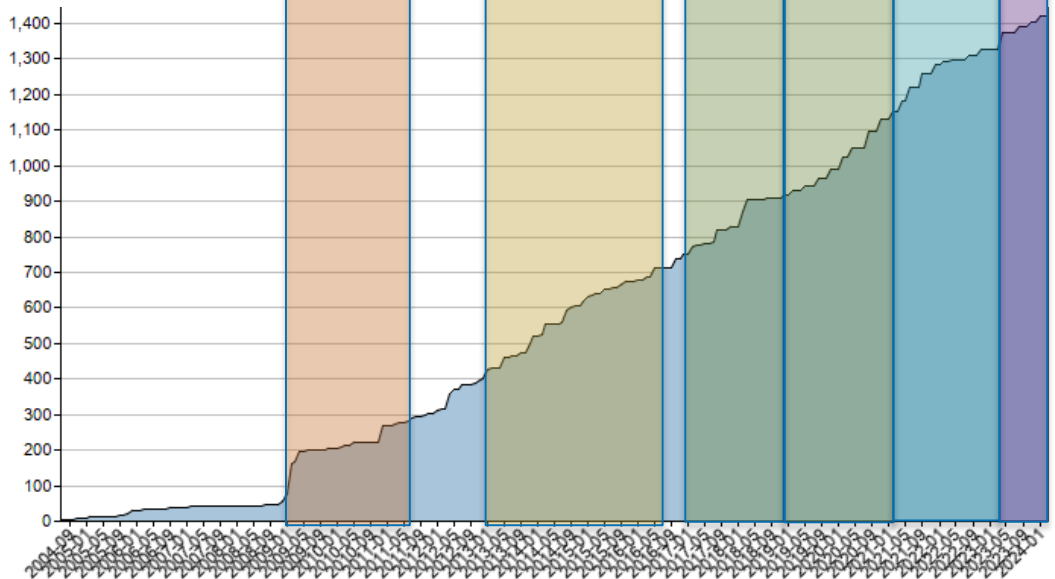
- All functional groups
- All geographic regions

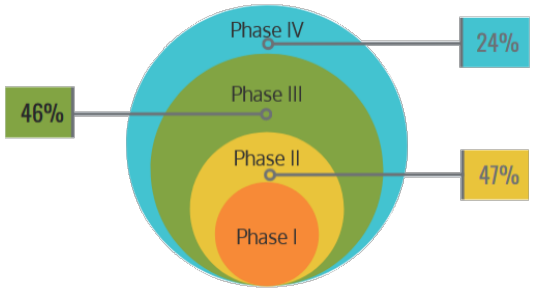
WP2 Status Update

Occurrence records



Datasets





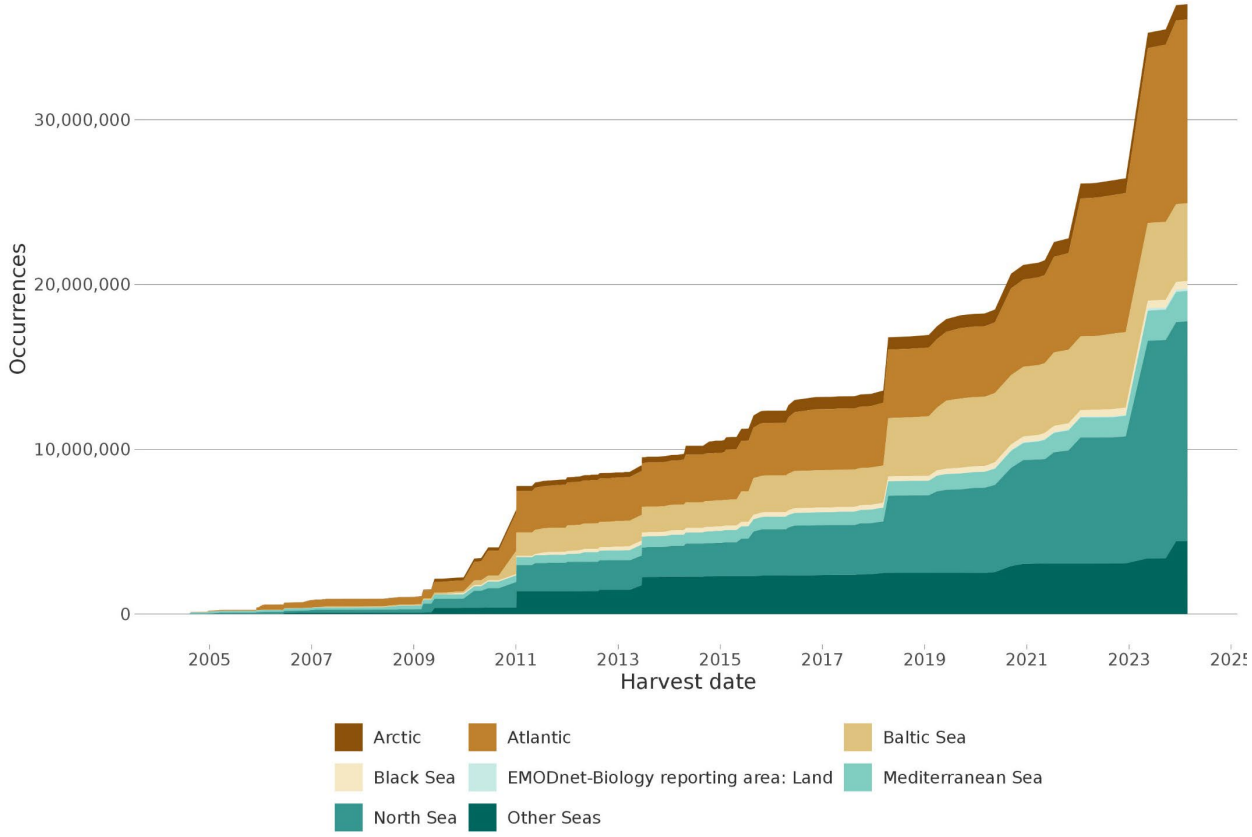
EMODnet Bio I: 5/2009 – 5/2011
EMODnet Bio II: 9/2013 – 9/2016
EMODnet Bio III - (1): 4/2017 – 4/2019
EMODnet Bio III - (2): 4/2019 – 4/2021
EMODnet Bio IV: 4/2021 – 4/2023
EMODnet Bio V: 5/2023 – 5/2025

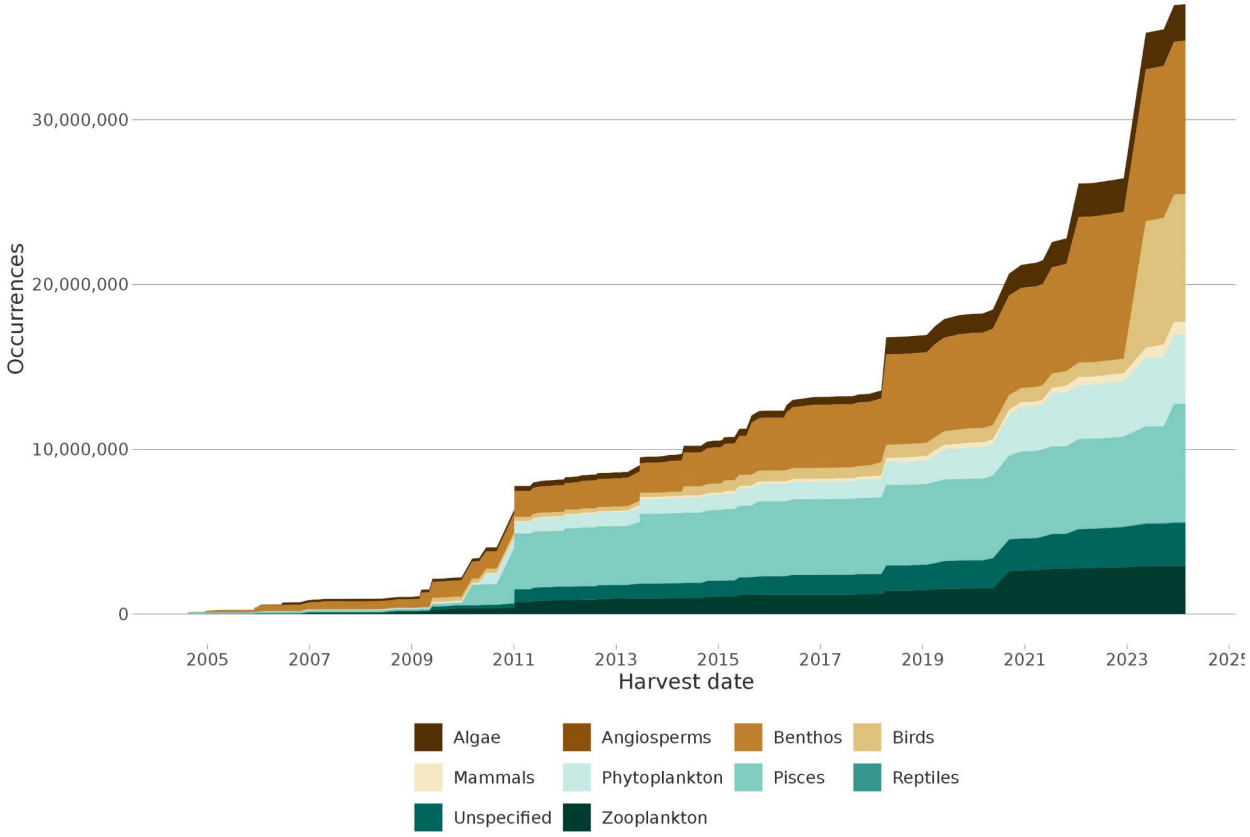
End of:	Bio III (1)	Bio III (2)	Bio IV	
(April-May)	**2019**	**2021**	**2023**	**2024**
Datasets	899	1,077	1,280	1322
Mill. Occ. rec.	24.8	26,1	35.68	37.15
% QC'd	87%	86%	86%	80%
Mill. eMoF rec.	-	30.7	92.1	45.39
Species names	80.202	98,024	103,613	105,682
Acc species names	62.220	75,658	73,029	73,718

!!! More than just EMODnet Biology datasets… !!!

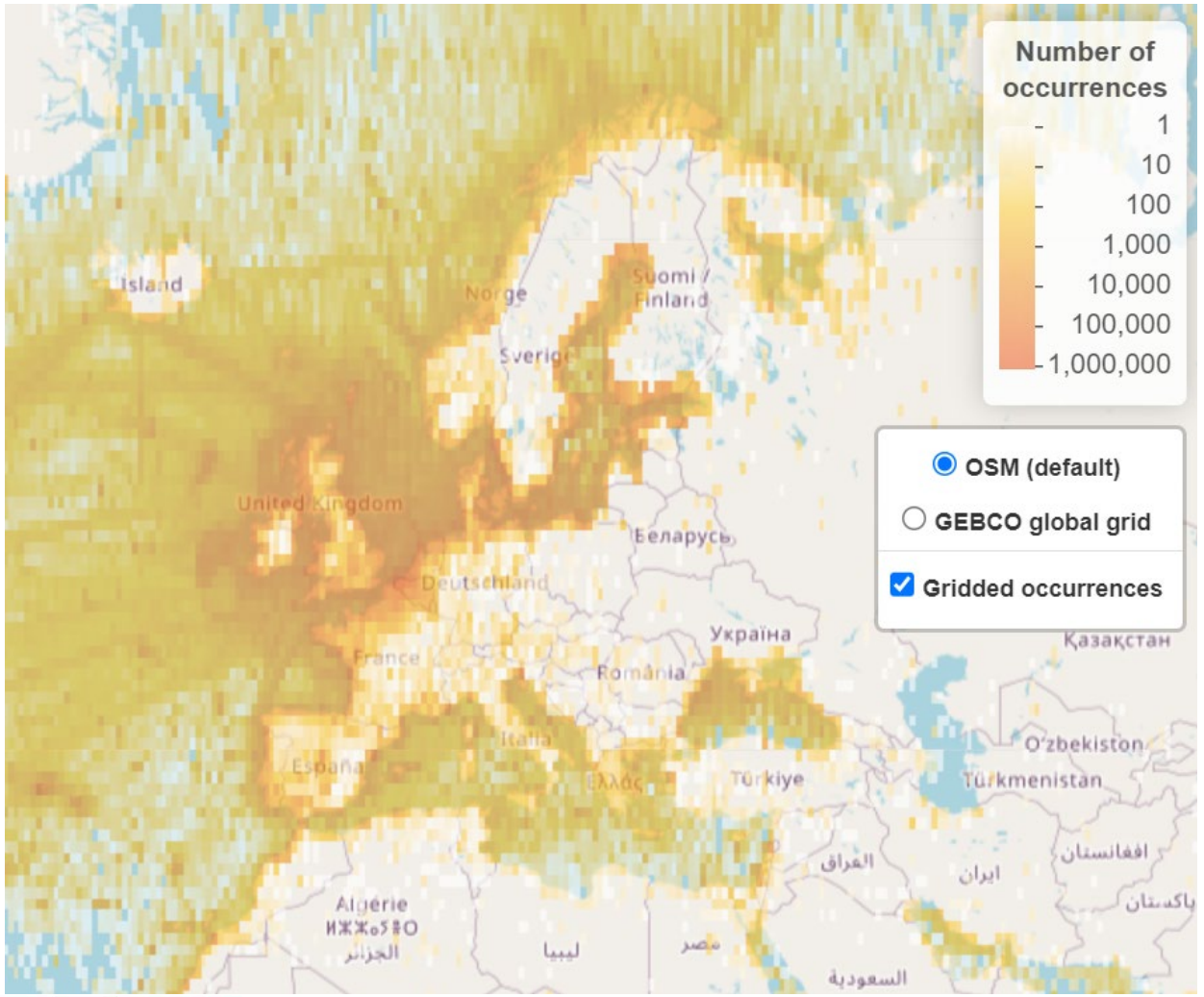
WP2 Status Update

Evolution of the available occurrence records in EMODnet Biology





WP2 Status Update



WP2 Break out

Feedback on Data Laundry Q/A sessions

Feedback and Demo on Microsoft Team

Progress status with partners

Biology

EMODnet Biology annual meeting

WP3 status update

Benjamin Weigel INRAE

16-17 April 2024 (Constanta, Romania)

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.

WP3

Overview

- **Objectives**
- **Deliverables**
- **Partners**
- **Status Update**

WP3 Objectives

- **Maximize uptake of existing and new data products by end-users**
  - raising awareness of existing products
  - provide training materials in form of tutorials to manipulate and visualize EMODnet products using the existing R packages developed in Phase III and IV
  - co-creation of data product needs with stakeholders (e.g., RSCs, environmental agencies of member states)

- **Products targeting species migration routes**
  - identify and contact experts and relevant stakeholders
  - assessing data sources of existing external products and indicators and the possibility of hosting these external products in EMODnet Biology
  - Liaison with external entities and experts

- **Continue creating distribution maps**
  - Data products targeting groups of species, as well as presence/absence maps, both of which can be queried, subset and downloaded via the EMODnet Central Portal viewer

WP3 Deliverables

- **3.1.1 Internal WP3 and WP4 Workshop** (M4)

  Cross WP communication and knowledge exchange to achieve best possible outcomes for this phase

  → to facilitate cross-WP collaboration and awareness of previous work done by WP3 and WP4

  → to discuss the best possible ways of how EMODnet can support Regional Sea Convention (RSC) needs in the future.

  → precursor for RSC workshop of WP4 (M12)

- **3.2.1 Quarterly community calls** (M3-M24)

  Space for discussion of WP internal progress, challenges, feedback, sharing information

  → each community call produces one summary report (meeting-minutes)

  3.3.1 Liaison with external entities targeting seabird and cetacean migration outputs (M0-M24)

  → data products should now be especially linked to temporal changes of species distributions due to coastal infrastructure considering cetaceans and migratory sea birds

  3.3.2 Data product creation (M0-~~M24~~ **M19**)

WP3 Partners

INRAE

Benjamin Weigel

VLIZ

Joana Beja
Salvador Fernandez

OGS

Marina Lipizer

Deltares

Willem Stolte
Luuk van der Heijden

IH cantabria
INSTITUTO DE HIDRÁULICA AMBIENTAL
UNIVERSIDAD DE CANTABRIA

Elvira Ramos Manzanos

NIOZ Royal Netherlands Institute for Sea Research

Karline Soetaert

LIÈGE université

Alexander Barth
Charles Troupin

SMHI

Anders Torstensson

University of Sheffield

Tom Webb

Cefas

Murray Thompson
Elena Couce
Oliver Williams

Anna Krystalli
Maëlle Salmon

R

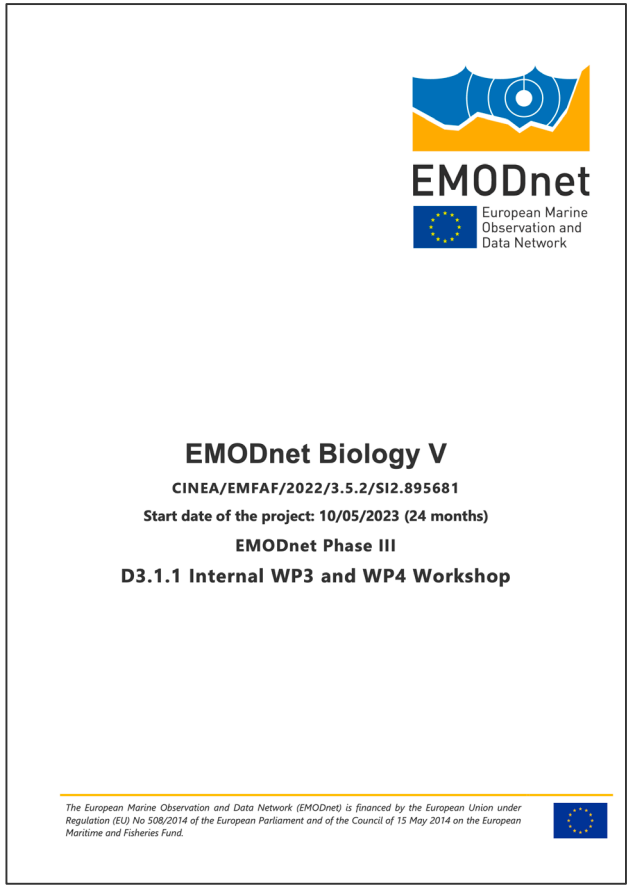
WP3 Status Update

Deliverables

3.1.1 Internal WP3 and WP4 Workshop (M4)

Delivered: September 2023

Report is available on EMODnet webpage



WP3 Status Update

Deliverables

3.2.1 Quarterly community calls (M3-M24)

Four delivered to date:

June, September, December 2023

March 2024

Reports are available in the Drive

Next Call, 7th of May

3.3.1 Liaison with external entities targeting seabird and cetacean migration outputs (M0-M24)

Efforts are undergoing to establish collaboration with seabird and mammal experts, e.g. by offering to host any existing products that address the impact of coastal human infrastructures in migrating species.

WP internal: ongoing investigation of possibility to create seabird sensitivity maps for wind parks in the North Sea.

WP3 Status Update

Deliverables ongoing

3.3.2 Data product creation (M0-~~M24~~ M19)

Overall good progress, with some products being almost ready/ in testing/ evaluation phase

→ R package **Bfiat:** tools for assessment of bottom fishing on benthic ecosystems
→ **DIVAnd translation to R**: Generating presence probability maps with DIVAnd called from R

Majority of products still under development

→ Macrophyte CTI
→ Expanding phytoplankton distribution maps and addition of zooplankton distribution maps
→ Linking seabed habitat maps to benthic species distribution
→ Extending work on reef building species distribution
→ Produce fish trait distribution maps
→ Mapping of Eurostat Fish catches
→ EMODnet R package WFS, rOpenScience review and publication on CRAN
→ EMODnet R package WCS, rOpenScience review and publication on CRAN
→ Development of 3 modular tutorials showcasing data and providing training for the use of the EMODnetWFS, EMODnetWCS R packages

WP3 Status Update

Metadata of biology products in the CP catalogue

PROVIDED BY

- EMODnet Biology dataproducts at VLIZ (45)
- EMODnet Bathymetry (467)
- EMODnet Ingestion (1499)
- EMOD-PACE products (central portal) (22)
- EMODnet Human Activities (48)
- EMODnet Biology datasets (1321)
- EMODnet Chemistry (384)
- EMODnet Seabed Habitats (1447)
- EMODnet Physics (134)
- EMOD-PACE data coverage (geodab) (7)
- EMODnet Geology (187)
- EMODnet Biology dataproducts at CP (8)

7 less

Still some minor issues that are being fixed

- The information is not being read by IMIS (catalogue system at VLIZ), therefore some of information and provenance is still missing
- The R packages do not have metadata records in the EMODnet catalogue
- There are a number of older products (those available via VLIZ) for which we do not metadata records. Updates are in progress

WP3 Status Update

Future aims and initiatives

- **All data products with associated DOI**

- **As standard practice for future products we aim to adopt the CF Standard Names**

  → Improves Metadata

  → Beneficial for EDITO infrastructure

  → Improves our products and what we expose

Cross-thematic-lot products

During the EMODnet Jamboree 2023 initiatives have started to create cross-lot products

In preparation

Biology and Seafloor habitat lots

→ A product that matches European habitats map to the benthos presence/absence product.
→ Enables us to produce species lists for each individual habitat polygon, and summaries of species for different habitat types

Ongoing planning for phase continuation (2025-2027)

Biology and Geology lots

Initial ideas and possibilities

→ Product relating **biodiversity** to **geodiversity** within the same areas
→ Product that relates benthic species with information on substrate fractions revealing species-specific substrate preferences

Biology

EMODnet Biology annual meeting

WP4 Uptake and Outreach Status update

Marina Lipizer, OGS

16-17 April 2025 (Constanta, Romania)

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.

WP4 Partners

AARHUS UNIVERSITY

INSTITUTO ESPAÑOL DE OCEANOGRAFIA 1914

IPMA Instituto Português do Mar e da Atmosfera

Deltares

hcmr ΕΛΚΕΘΕ

IH cantabria INSTITUTO DE HIDRÁULICA AMBIENTAL UNIVERSIDAD DE CANTABRIA

HAVFORSKNINGS INSTITUTTET

INCDM

INRAE la science pour la vie, l'humain, la terre

Université de Liège ulg

UkrSCES

SMHI

SYKE

MARIS

NIOZ

PANGAEA.

WP4 Objectives, actions & tasks

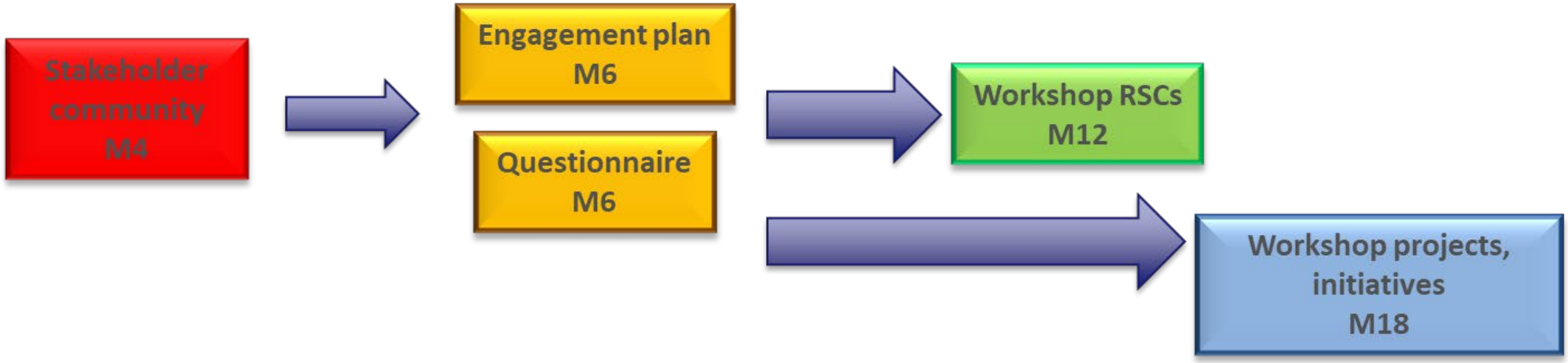
❖**WP Objectives:** to **promote** EMODnet Biology data (WP2), products (WP3) and services (WP5) and **engage** relevant actors (e.g. RSC) and contribute to **implementation** of EU legislation

❖**WP actions & Tasks**

- ❑**Action 4.1** Provide and update content to the EMODnet Central Portal (for **Task 5**: **Contributing static content to dedicated spaces in the Central Portal**)
- ❑**Action 4.2** Interaction with the RSCs and ICES (for **Task 6**: **Ensure the involvement of Regional Sea Conventions RSC**)
- ❑**Action 4.3** Liaison with relevant EU initiatives, projects and parties (**Task 7: Contribute to the implementation of the EU legislation and broader initiatives for open data**)
- ❑**Action 4.4** Ensure compatibility with INSPIRE Directive (**Task 7: Contribute to the implementation of the EU legislation and broader initiatives for open data**)

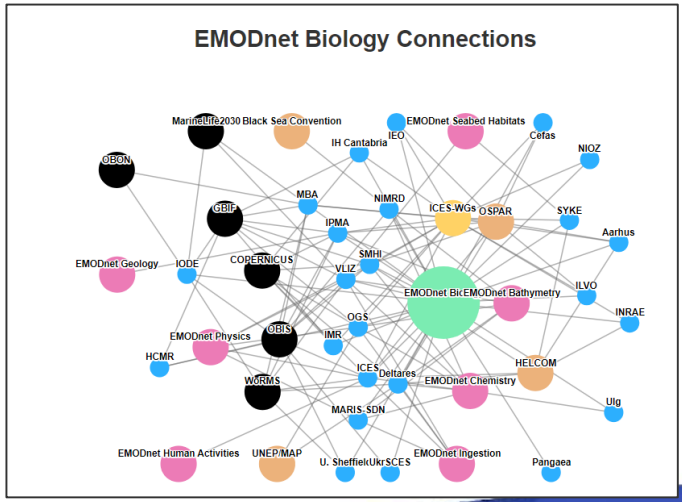
WP4 Objectives, actions & tasks

❖**WP Objectives:** to **promote** EMODnet Biology data (WP2), products (WP3) and services (WP5) and **engage** relevant actors (e.g. RSC) and contribute to **implementation** of EU legislation



WP4 Deliverables

Task	Action	Deliverable	Participants	Deadline	Status
Task 5: Contributing static content to dedicated spaces in the Central Portal	4.1 Provide and update content to the EMODnet Central Portal	4.1.1 Update connectivity maps and identification of stakeholder community	VLIZ, INRAE, OGS, Aarhus, CEFAS, Deltares, HCMR, ICES, IEO, IH Cantabria, ILVO, IMR, IPMA, MARIS, MBA, NIMRD, NIOZ, Pangea, SMHI, SYKE, UkrSCES, U Liège, U. Sheffield	2023-09-10	done
		4.1.2 Informative material based 4.2.2 published in the EMODnet CP	OGS, VLIZ, ILVO, MBA, NIMRD, SYKE, UkrSCES	2024-05-10	next
		4.1.3 Informative material based on the 4.2.3 outcomes	OGS, VLIZ, ILVO, MBA, NIMRD, SYKE, UkrSCES	2024-07-10	
		4.1.4 Informative material based on the 4.3.1 outcomes	OGS, VLIZ	2025-05-10	
		4.1.5 Publication of four Use Cases	OGS, ILVO, NIMRD, SYKE, UkrSCES, IODE	2023-11-10	done
				2024-05-10	next
				2024-11-10	
				2025-05-10	
		4.1.6 Publication of written documents	VLIZ		



EMODnet Biology Stakeholder inventory — *mandatory fields — in green highly desidered fields

Date of information delivery	Contacting partner*	Stakeholder information: Institution role	Type of Institution	Stakeholder Role	Geograph. Relevance	Geographic focus	Additional information	Organization Name*
10/6/2023	OGS	Regional Sea conve	International Instituti	Coordinators	sea-basin	Mediterranean		UNEP-MAP-PAP/RAC
10/6/2023	OGS	NGO	Network		sea-basin	Mediterranean		MedPAN
27/7/2023	NIMRD	Regional Sea conve	International Instituti	Coordinators	sea-basin	Black Sea		Commission on the Protection of the Against Pollution (Bucharest Convent
27/7/2023	NIMRD	NGO	Network	Lobbyists	sea-basin	Black Sea		Black Sea NGO Network (BSNN)
27/7/2023	NIMRD	Observing system/r	National Institution	Experts/providers	national	Black Sea		Institute of Oceanology, Bulgarian Ac
27/7/2023	NIRMD	Data infrastructure	National Institution	Coordinators	national	Black Sea		Institute of Marine Sciences, Middle
27/7/2023	NIMRD	Experts	NGO	Lobbyists	international	Black Sea		International Center for Black Sea St
27/7/2023	NIMRD	Regional Sea conve	International Instituti	Funders/sponsors	international	Black Sea		General Fisheries Commission for the
27/7/2023	NIMRD	NGO	NGO	Experts/providers	national	Black Sea		Mare Nostrum NGO

Living document to be updated

Use Cases

Biology

10 Jan 2024

Facts and figures on the importance of UNESCO World Heritage Marine Sites for marine biodiversity

UNESCO and IUCN used EMODnet Biology data to compile an assessment on the status and trends of species within UNESCO World Heritage Sites.

SOCIETY (CIVIL SOCIETY, CITIZENS, ETC.)

Continue reading

WP4 Deliverables

Task	Action	Deliverable	Participants	Deadline	Status
Task 5: Contributing static content to dedicated spaces in the Central Portal	4.1 Provide and update content to the EMODnet Central Portal	4.1.1 Update connectivity maps and identification of stakeholder community	VLIZ, INRAE, OGS, Aarhus, CEFAS, Deltares, HCMR, ICES, IEO, IH Cantabria, ILVO, IMR, IPMA, MARIS, MBA, NIMRD, NIOZ, Pangea, SMHI, SYKE, UkrSCES, U Liège, U. Sheffield	2023-09-10	done
		4.1.2 Informative material based 4.2.2 published in the EMODnet CP	OGS, VLIZ, ILVO, MBA, NIMRD, SYKE, UkrSCES	2024-05-10	next
		4.1.3 Informative material based on the 4.2.3 outcomes	OGS, VLIZ, ILVO, MBA, NIMRD, SYKE, UkrSCES	2024-07-10	
		4.1.4 Informative material based on the 4.3.1 outcomes	OGS, VLIZ	2025-05-10	
		4.1.5 Publication of four Use Cases	OGS, ILVO, NIMRD, SYKE, UkrSCES, IODE	2023-11-10	done
				2024-05-10	next
				2024-11-10	
				2025-05-10	
		4.1.6 Publication of written documents	VLIZ		

Topics of Next Use cases?

10/5/2024!

10/11/2024

WP4 Deliverables

Task	Action	Deliverable	Participants:	Deadline	Status
Task 6: Ensure the involvement of Regional Sea Conventions (RSC)	4.2 Interaction with the RSCs and ICES	**4.2.1 Engagement plan for each RSC**	**OGS**, ILVO, NIMRD, SYKE, UkrSCES	**2023-11-10**	done
		4.2.2 Questionnaire to inform about what data & products EMODnet Biology offers and to collect stakeholder needs	**OGS**, ILVO, MBA, NIMRD, SYKE, UkrSCES,	**2023-11-10**	done
		4.2.3 Workshop with RSCs to understand major needs	**OGS,** ILVO, NIMRD, SYKE, UkrSCES	**2024-05-10**	ongoing
		4.2.4 Report on progress for the publication of fisheries survey data	**VLIZ,** ICES	**2025-05-10**	

2 Engagement Plan

Stakeholder engagement will follow a multi-step approach which will consist in:

- Identification in the stakeholder community of interest
- Collection of information through a dedicated questionnaire
- Organization of one or more workshops dedicated to experts from RSCs,
- Sharing of workshop outcomes to the larger community through EMODnet website

Questionnaire: sent to 70 stakeholders, 25 answers collected

EMODnet Biology stakeholder questionnaire Outcomes

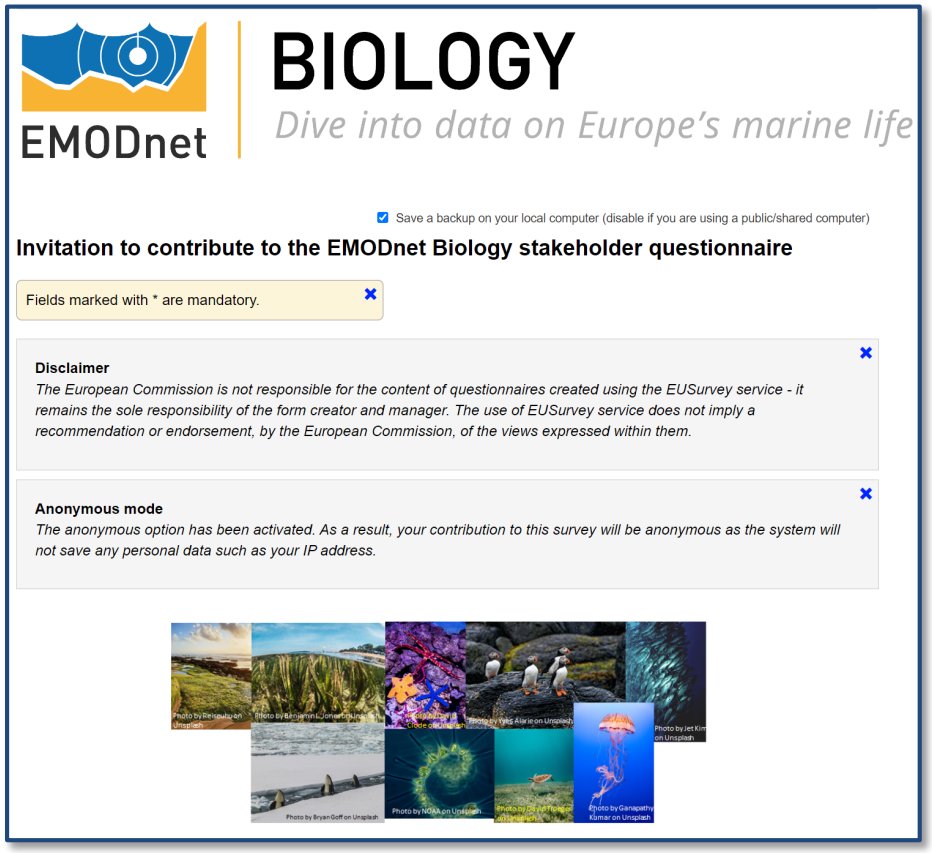
Designed to collect information on how EMODnet Biology can support the assessment of marine ecosystem status and on what are the major needs in terms of data and products.

Distributed in October 2023 to more than 70 stakeholders from all EU basins, from research, governmental administrations and international organizations. Closed 31 December 2023

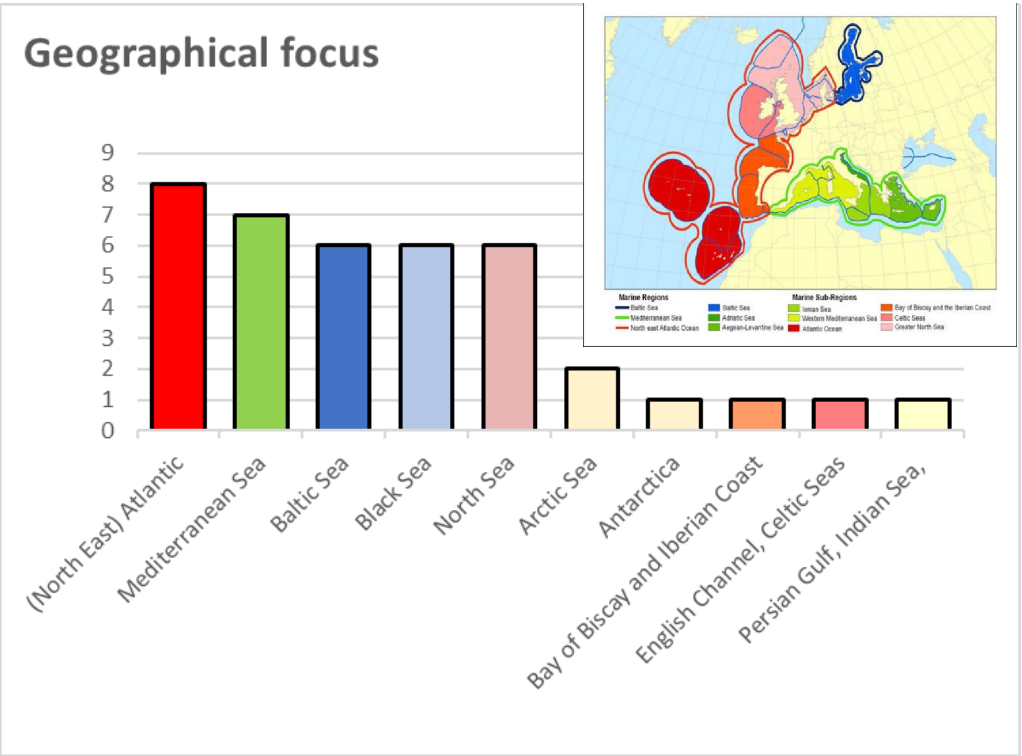
Main target: experts involved in Quality Status Reports for EU sea basins

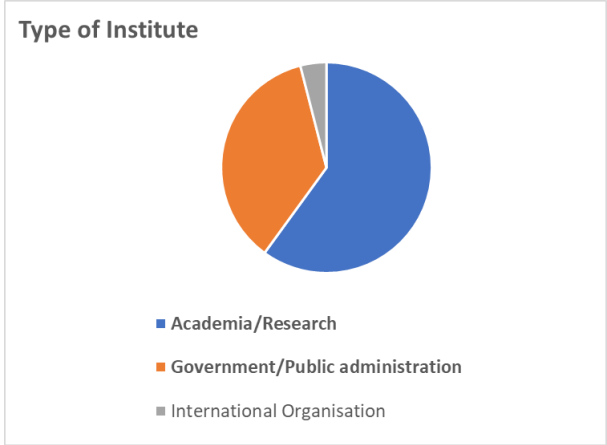
Answers were received from representatives of all RSCs
From 11 countries:

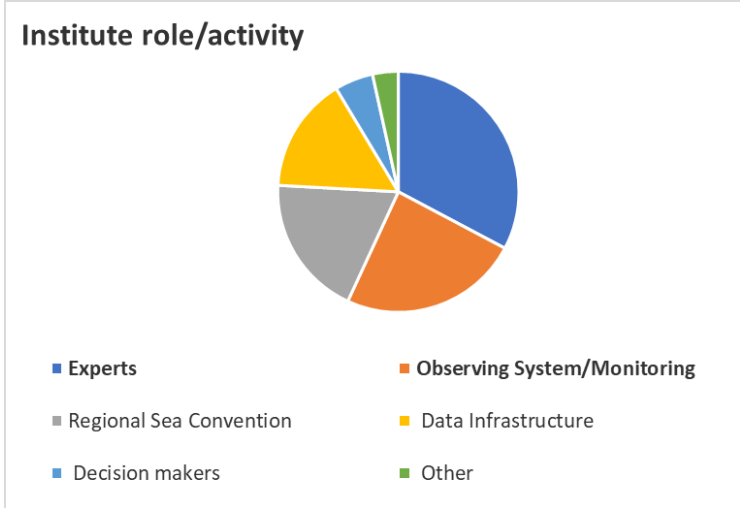
North of Europe: Sweden, Finland, Germany, Uk, Belgium
South of Europe: Portugal, Spain, Italy, Greece, Bulgaria, Ukraine



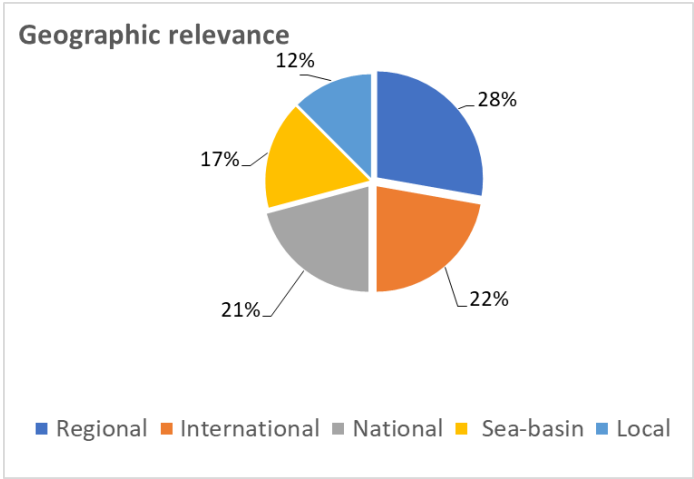
Stakeholders profile







⇒ All EU sea basins and Regional Sea Conventions experts



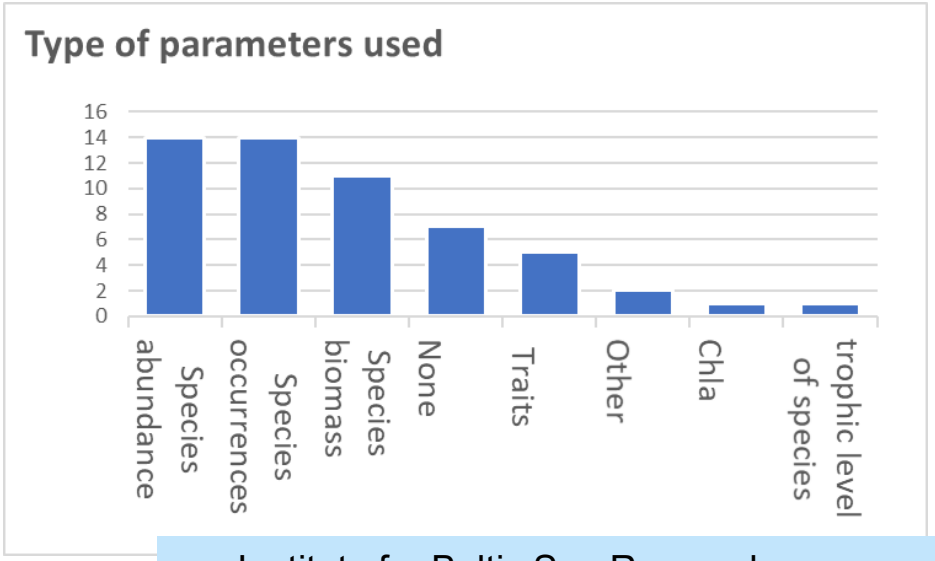
Respondents

Institute name	Type of Institute	Geographical focus (select all that apply)
University of Plymouth	Academia/Research	(North East) Atlantic
IPMA	Government/Public administration	(North East) Atlantic
Spanish Institute of Oceanography	Academia/Research	(North East) Atlantic; Mediterranean Sea
AZTI	Academia/Research	(North East) Atlantic; Mediterranean Sea; Other
ILVO	Academia/Research	(North East) Atlantic; North Sea
ICES	Government/Public administration	Arctic Sea; (North East) Atlantic; Baltic Sea; North Sea
OSPAR Commission Secretariat	Government/Public administration	Arctic Sea; (North East) Atlantic; North Sea; Other
The Swedish Agency for Marine and Water Management	Government/Public administration	Baltic Sea
HELCOM - Baltic Marine Environment Protection Commission	Government/Public administration	Baltic Sea
Institute for Baltic Sea Research	Academia/Research	Baltic Sea
Finnish Environment Institute	Academia/Research	Baltic Sea
German Environment Agency	Government/Public administration	Baltic Sea; North Sea
University of Bucharest	Academia/Research	Black Sea
Ovidius University of Constanta	Academia/Research	Black Sea
National Institute for Marine Research and Development "Grigore Antipa"	Academia/Research	Black Sea
Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences	Academia/Research	Black Sea
Black Sea Commission's Permanent Secretariat	Government/Public administration	Black Sea
Ukrainian Scientific Center of Ecology of the Sea	Academia/Research	Black Sea; Other
University of Palermo	Academia/Research	Mediterranean Sea
Plan Bleu	Government/Public administration	Mediterranean Sea
INFO/RAC - Regional Activity Centre for Information and Communication of UNEP/MAP	Other	Mediterranean Sea
Hellenic Centre for Marine Research	Academia/Research	Mediterranean Sea
nationalpark authority Schleswig-Holstein (LKN-SH)	Government/Public administration	North Sea

Use of EMODnet Biology

Data:

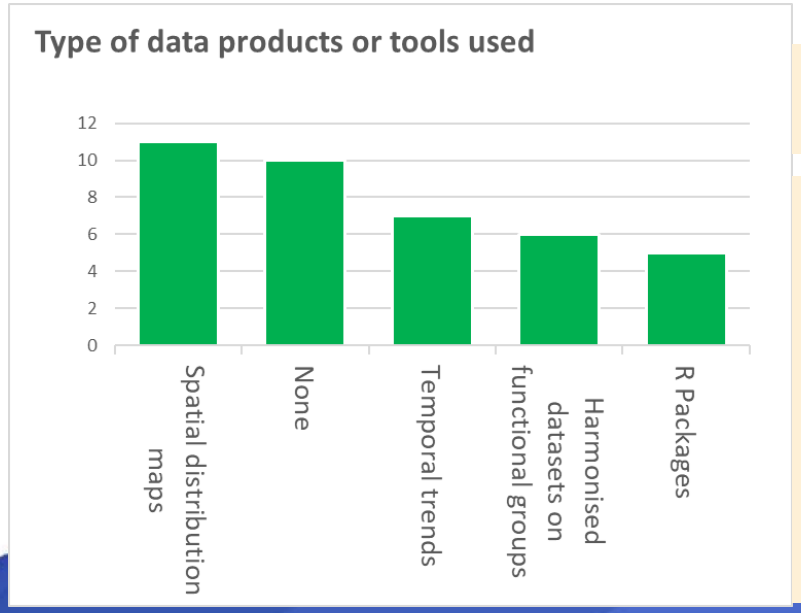
	Yes	No	No but intend to do so
Have EMODnet Biology data been used in your assessments/work	9	9	7
Have you ever submitted data to be published via EMODnet Biology/EurOBIS?	8	13	4
Have you ever used data products from EMODnet Biology?	9	16	



Mostly for Academia/Research

- Institute for Baltic Sea Research
- Plan Bleu
- Hellenic Centre for Marine Research
- University of Palermo
- AZTI
- Ukrainian Scientific Center of Ecology of the Sea
- University of Bucharest
- ILVO

Products:

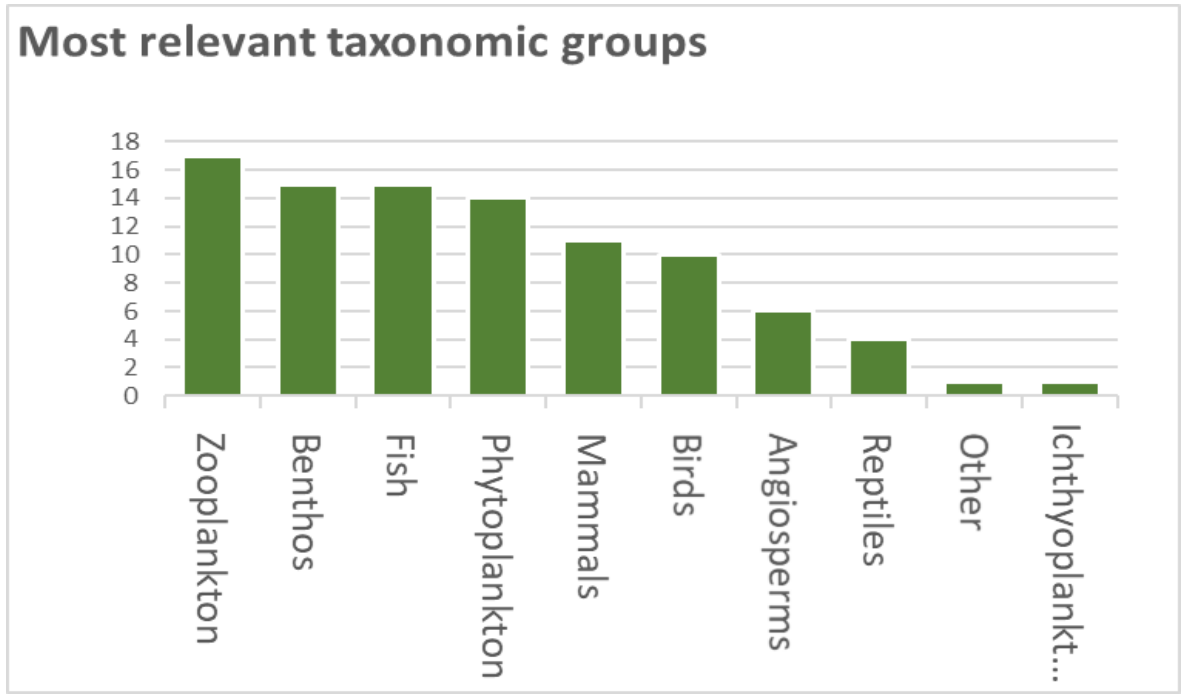


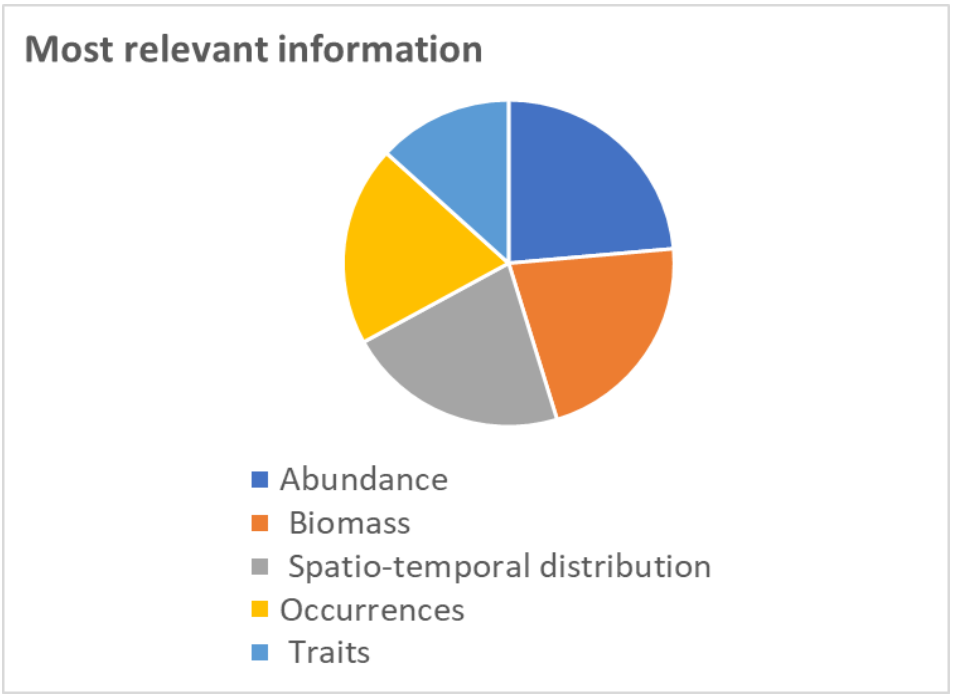
Academia/Research (7)
Government/Public administration (2)

- Finnish Environment Institute
- Institute for Baltic Sea Research
- Plan Bleu
- Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences
- HELLENIC CENTRE FOR MARINE RESEARCH
- University of Palermo
- AZTI
- University of Bucharest
- ICES

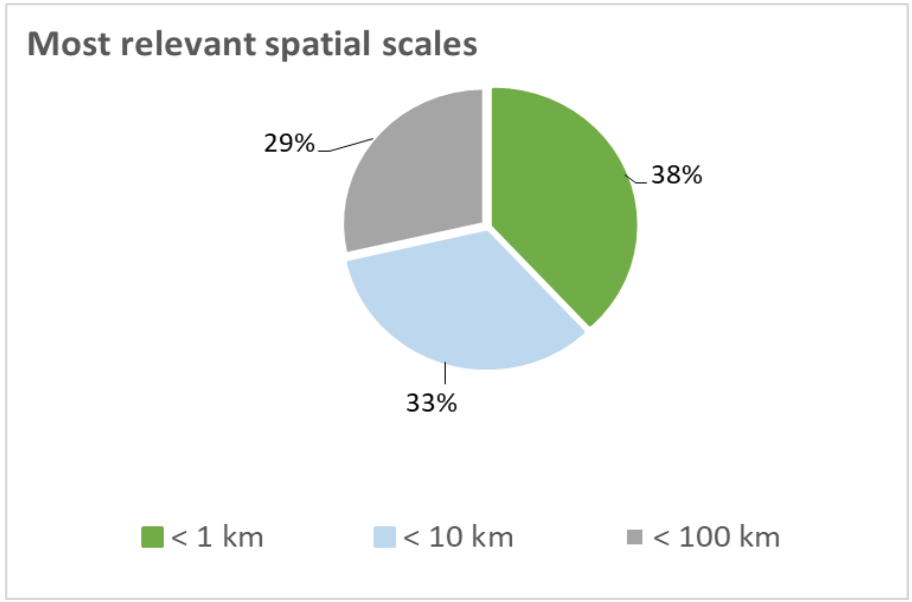
Stakeholder needs

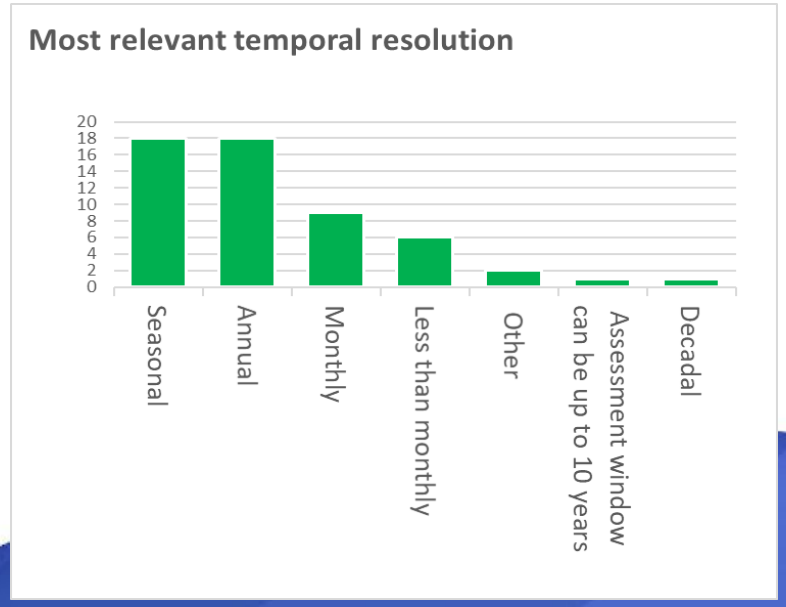
Which taxonomic group do you consider most relevant for your work and what type of information?



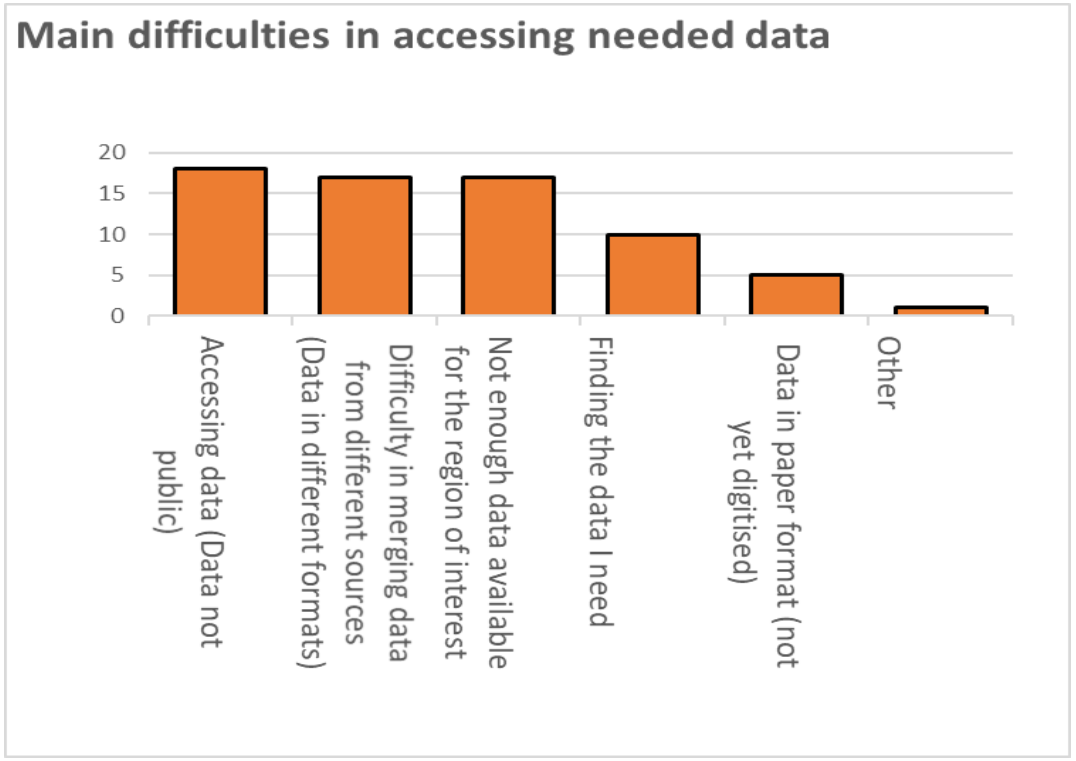


Scales and resolution

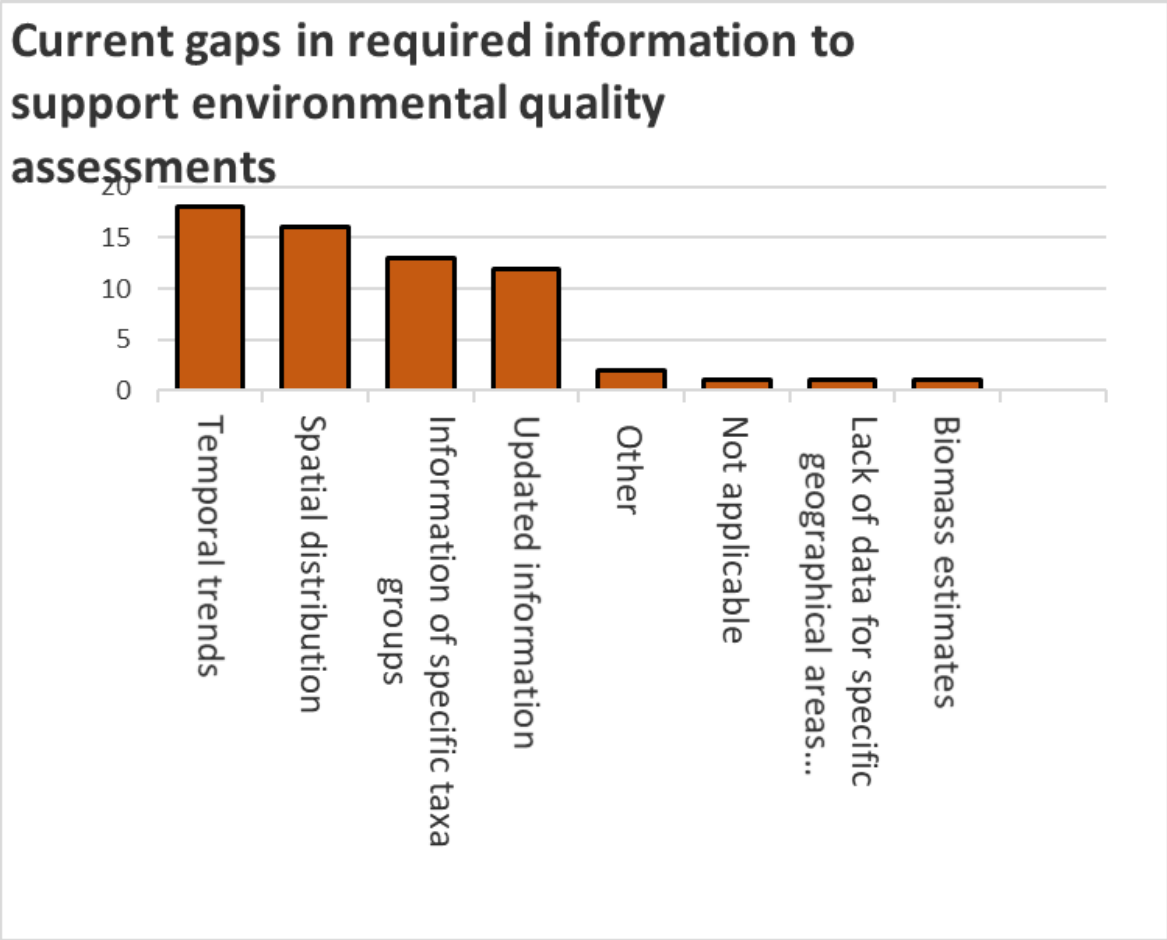




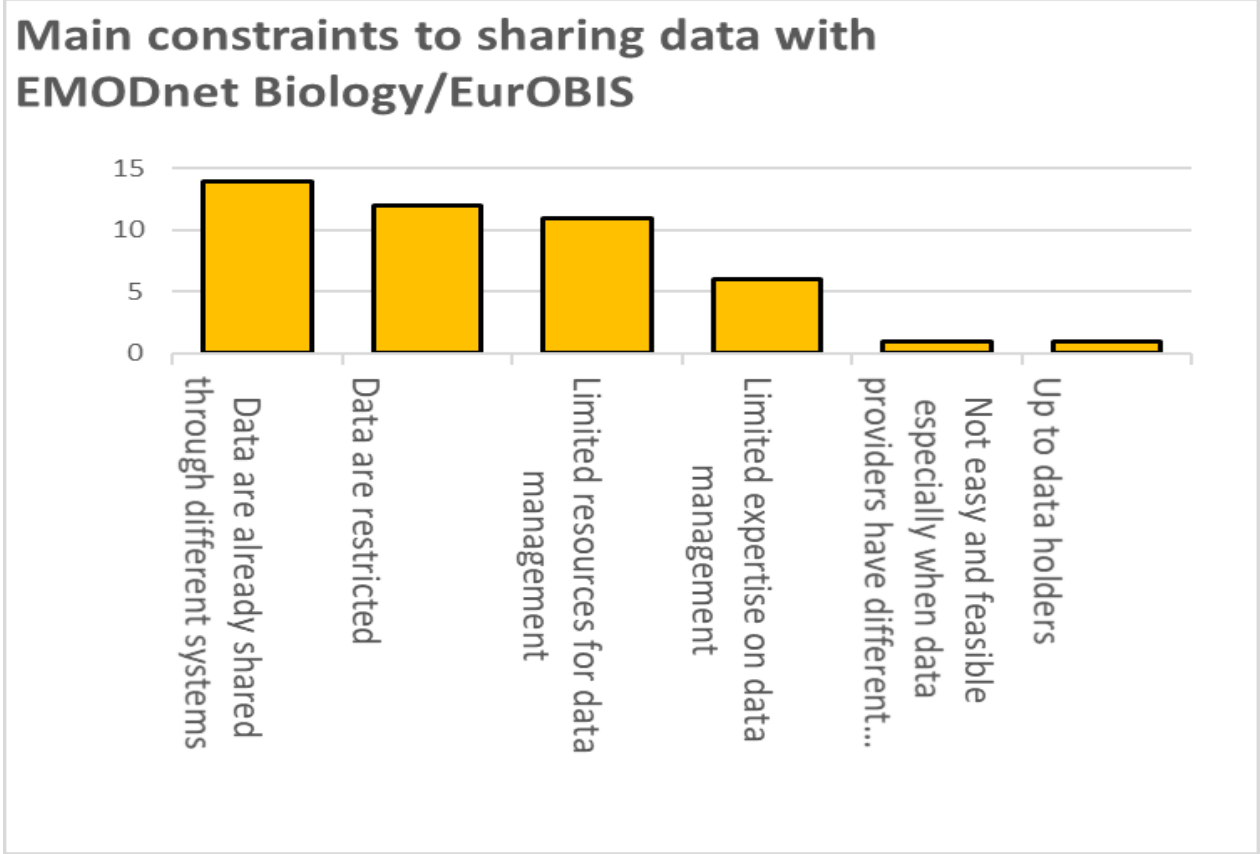
Data accessibility



Gaps and difficulties



Data sharing



These results will be shared during the workshop on Friday, dedicated to RSC experts

Additional material to facilitate dialogue with RSC:

Leaflets targeted to RSC: EMODnet data & products

Communication

In this section you will find thematic-specific communication material, and a

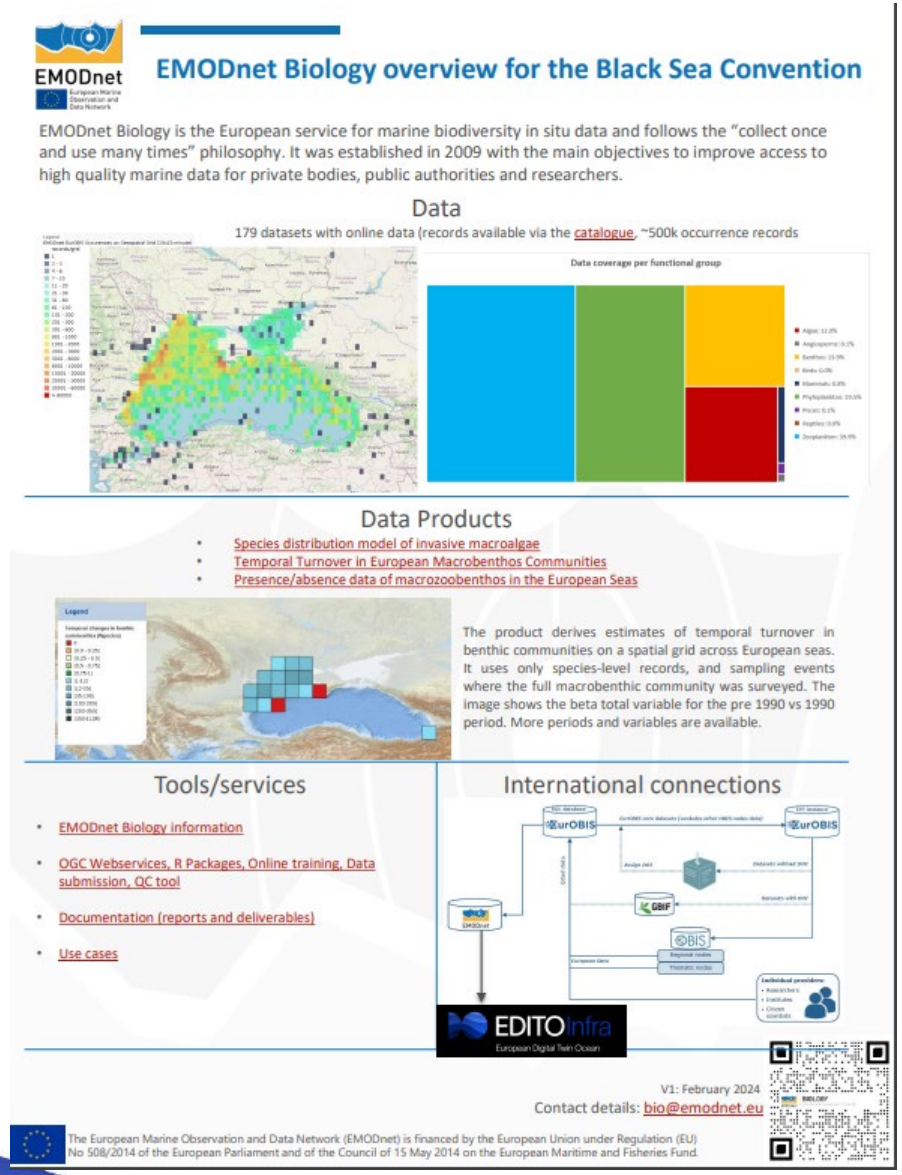
Leaflets

EMODnet Biology for Black Sea Commission
English (0,5 MB - PDF)

EMODnet Biology for HELCOM
English
(0,5 MB - PDF)
Download

EMODnet Biology for OSPAR
English
(0,5 MB - PDF)
Download

EMODnet Biology for UNEP-MAP
English
(0,5 MB - PDF)
Download



WP4 Deliverables

Task	Action	Deliverable	Participants:	Deadline	Status
Task 7: Contribute to the implementation of the EU legislation and broader initiatives for open data	4.3 Liaison with relevant EU initiatives, projects and parties	4.3.1 Workshop with representatives of major recent and current European Research Projects and initiatives to share experience and knowledge in biodiversity monitoring and assessment and in data, tools and services	**VLIZ,** INRAE, OGS, Aarhus, CEFAS, Deltares, HCMR, ICES, IEO, IH Cantabria, ILVO, IMR, IPMA, MARIS, MBA, NIMRD, NIOZ, Pangea, SMHI, SYKE, UkrSCES, Ulg, U. Sheffield, UkrSCES	**2024-11-10**	
		4.3.2 Participation in TG DATA meetings	**VLIZ,** ICES		
	4.4 Ensure compatibility with INSPIRE Directive	4.4.1 Ensure compatibility with INSPIRE Directive (data, metadata, data products)	**VLIZ**		
		4.4.2 Report on the activities to support EU Member States regarding their reporting obligations	**OGS**, VLIZ,	**2025-05-10**	

Next activities!

WP4 – Next actions:

Action	Deliverable	Participants:	Internal deadline	Deadline	Status
4.1 Provide and update content to the EMODnet Central Portal	**4.1.2 Informative material based on 4.2.2 (questionnaire) published in the EMODnet CP**	**OGS**, VLIZ, ILVO, MBA, NIMRD, SYKE, UkrSCES	01/04/2024	**2024-05-10**	next
	4.1.3 Informative material based on the 4.2.3 (RSC workshop) outcomes	**OGS,**VLIZ, ILVO, MBA, NIMRD, SYKE, UkrSCES	01/06/2024	**2024-07-10**	
	4.1.4 Informative material based on the 4.3.1 outcomes	**OGS,**VLIZ	01/04/2025	**2025-05-10**	
	4.1.5 Publication of four Use Cases	**OGS** ILVO, NIMRD, SYKE UkrSCES, IODE		**2024-05-10**	next
				2024-1110	
				2025-05-10	
	4.1.6 Publication of written documents	**VLIZ**		continuous	

Shall we send it to all invited stakeholders?

- 4.1.2 – 4.1.3 – 4.1.4 (Informative material): OGS prepares an initial draft to be integrated by partners;
  - 4.1.2: All involved partners to revise and send to OGS – **Deadline: April 26, 2024**
  - OGS: finalizes the deliverables
- 4.1.5: Use case 2?

Need confirmation on the «form»: synthetic document?

WP4 – Next actions:

Action	Deliverable	Participants:	Internal deadline	Deadline	Status
4.2 Interaction with the RSCs and ICES	*4.2.3 Workshop with RSCs to understand majo needs*	*OGS, ILVO, NIMRD, SYKE UkrSCES*		*2024-05-10*	*ongoing*
	4.2.4 Report on progress for the publication of fisheries survey data	**VLIZ,** ICES	1/4/2025	**2025-05-10**	
4.3 Liaison with relevant EU initiatives, projects and parties	4.3.1 Workshop with representatives of major recent and current European Research Projects and initiatives to share experience and knowledge in biodiversity monitoring and assessment and in data, tools and services	**VLIZ,** INRAE, OGS, Aarhus, CEFAS, Deltares, HCMR, ICES, IEO, IH Cantabria, ILVO, IMR, IPMA, MARIS, MBA, NIMRD, NIOZ, Pangea, SMHI, SYKE, UkrSCES, Ulg, U. Sheffield, UkrSCES		**2024-1110**	
	4.3.2 Participation in TG DATA meetings	**VLIZ,** ICES	M0 - M24	continuous	
4.4 Ensure compatibility with INSPIRE Directive	4.4.1 Ensure compatibility with INSPIRE Directive (data, metadata, data products)	**VLIZ**	M0 - M24	continuous	
	4.4.2 Report on the activities to support EU Member States regarding their reporting obligations	**OGS,** VLIZ,	01/04/2025	**2025-05-10**	

What is the status?

Start organization!

What is the status?

Additional proposal:

Paper on “The role of EMODnet Biology to support EU policy implementation”

Based on: outcomes from questionnaire, from workshop discussion, from material collected to link MSFD descriptors and EMODnet data & products

Biology

EMODnet Biology annual meeting

WP5 status update

Bart Vanhoorne (VLIZ)

16-17 April 2024 (Constanta, Romania)

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.

5.1 Extend interoperability and data types (Lead: VLIZ, Subcontractor: MARIS)

Item	Summary	Details
New data types	Integration of omics and image data.	- Using (DwC) standard extensions - Investigate how to store and track remotely linked large data blobs - Needs to link up to initiatives like the OBIS eDNA EMO-BON and eDNAQuaPlan
Alignment with other projects	Incorporation and implementation of other projects' outputs in EMODnet Biology	DTO Bio Flow, MAREGRAPH, ARMS (EMOBON), tracking data (ETN), plankton images, acoustics and developing a data model and ontology for the EurOBIS database
Interoperability	Set of agreed standards and techniques for extending the interoperable exchange of information within and outside EMODnet	- Extending OGC standards with semantically annotated data and metadata - Link with i.e. Ocean InfoHub - Using the knowledge gathered within other projects, e.g. ENVRI, EOSC Life, FAIR Ease, EOSC interoperability framework, Open Data Directive, …

5.2 Implement m2m connections to data and products (Lead: VLIZ)

- Maintain & **upgrade OGC stack** (EMODnet standard)
- New **API endpoints for new data types (images, eDNA)**, so they can easily be queried via the EMODnet Central Portal and external machines
- Find ways to **represent new data types** (i.e. on geoviewer)
- **Client packages** (R, Python) will be further developed and maintained, so users can easily access the data without barriers (i.e. no login, registration, form, …): FAIR

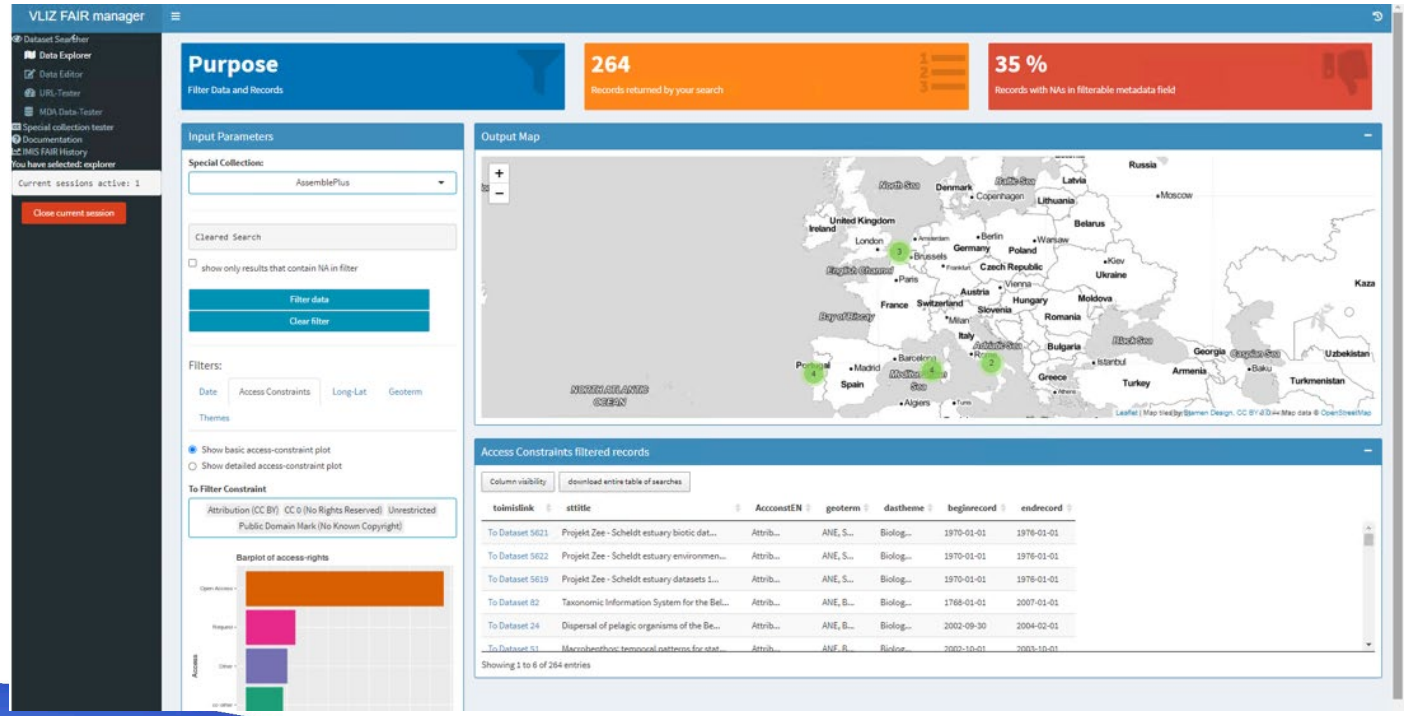
5.3 Technical Infrastructure maintenance and operational management (Lead: VLIZ)

- The main objective of this task is to keep the current **infrastructure and services operational**
- New **microservices tech**. (i.e. Docker), using modern pipelines (i.e. CI/) + test framework (s)
- Futher **develop the IPT harvest system** that is flexible and quicker in dealing with new data types (images, omics + possible others)
- Tuning of the procedures and debugging of the code used to reformat the data from **BIO-ODV to DwC**

5.4 Contribute data, data products and content to EMODnet Central portal (Lead: VLIZ)

- Improve automated **synchronizing metadata** (from IMIS) to the EMODnet CP catalogue (GeoNetwork) and share with others e.g. the EU Open Data Portal, EOSC, EDITO-Infra, …)

- Via the **EOSC FAIR checker**, ensure FAIRness of existing metadata is improved



5.4 Contribute data, data products and content to EMODnet Central portal (Lead: VLIZ)

- **INSPIRE compliance** will be maintained and improved (Central Portal checker)

- **Expand data filters Central Portal (CP) geoviewer** to accommodate for more options. (i.e. the available seabed habitat point data, data source, species attributes, etc.)

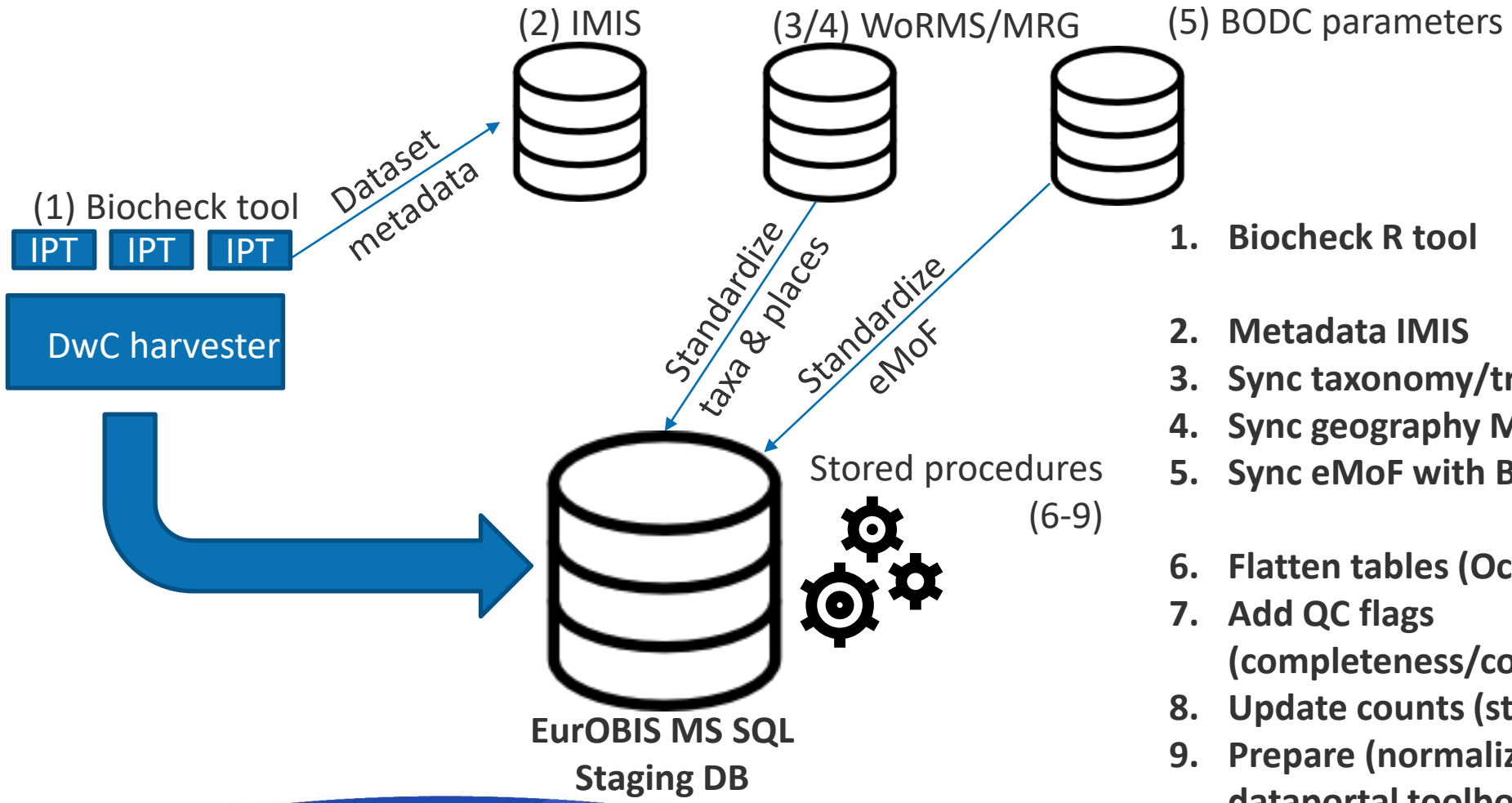
Filters, development in progress

- Traits
- Dataset source

Overview deliverables (12)

Task	Action	Deliverable	Consortium Organisation	Timeline
Task 3: Develop procedures for machine-to-machine connections to data and data products	5.1: Extend interoperability and data types	5.1.1 Streamlining semantic interoperability	**VLIZ**, MARIS	M0-M20
		5.1.2 Integration of omics data into the data model		M16
		5.1.3 List of agreed standards and techniques		M24
	5.2: Procedures for machine-to-machine connections to data and data products	5.2.1 M2M communication plan and solutions, including new data types	VLIZ	M0-M24
Task 4: Contribute data, data products and content to EMODnet Central Portal that allows users to find, view and download data and data products	5.3: EMODnet Biology Technical Infrastructure maintenance and operational management	5.3.1 Operational web services	VLIZ	M0-M24
		5.3.2 Technology stack upgrades: microservices, CI/CD & testing		M24
		5.3.3 Technical maintenance of procedures for ingestion of data from the data providers		M0-M24
		5.3.4 Development and implementation of procedures to publish omics data		M24
	5.4: Contribute data, data products and content to EMODnet Central Portal that allows users to find, view and download data and data products	5.4.1 Synchronisation of all data and data products metadata to the EMODnet CP catalogue (GeoNetwork)	VLIZ	M0-M24
		5.4.2 All data and products available through the EMODnet CP		M2-M24
		5.4.3 Participation in the EMODnet TWG meetings		M0-M24
		5.4.4 Maintenance and development of API used to query EMODnet Biology layers available via the EMODnet CP viewer		M0-M24

Reminder: harvest & standardization process (1/2)



1. **Biocheck R tool**

2. **Metadata IMIS**
3. **Sync taxonomy/traits WoRMS**
4. **Sync geography MarineRegions**
5. **Sync eMoF with BODC parameters**

6. **Flatten tables (Occurrence/Event)**
7. **Add QC flags (completeness/correctness fields)**
8. **Update counts (stats)**
9. **Prepare (normalize) tables dataportal toolbox**

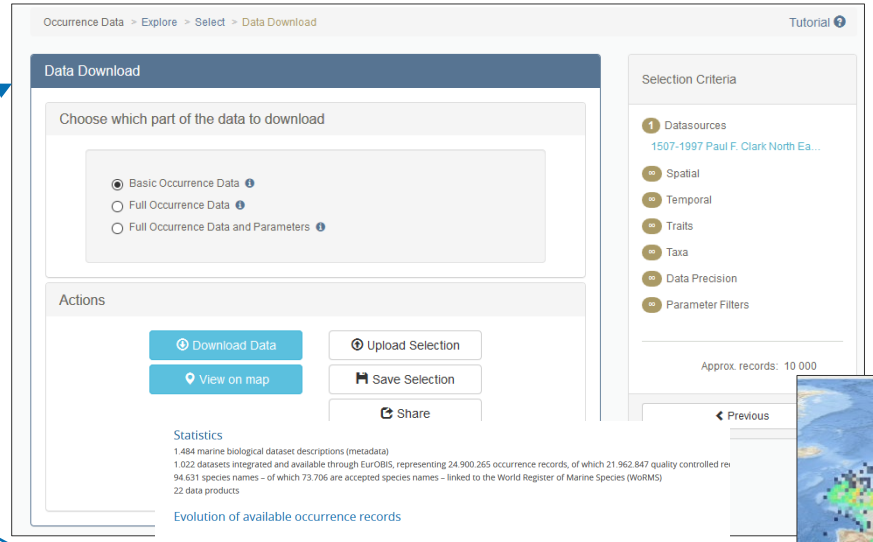
Reminder: migration to production/PostgreSQL (2/2)

EurOBIS
Staging DB

(1)

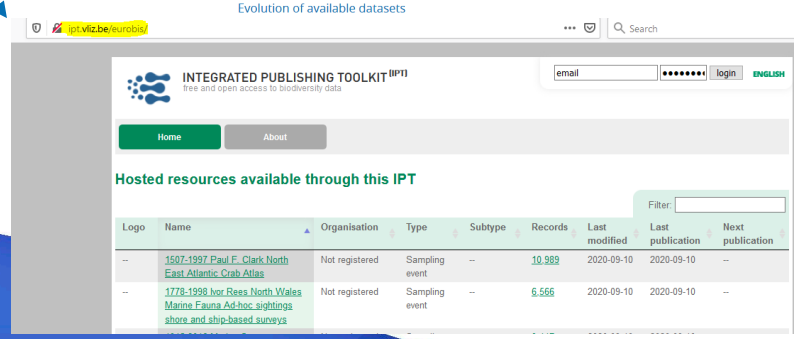
PostgreSQL

1. Migrate MS SQL to PostgreSQL
   (Geoserver => Dataportal => Central Portal viewer filter)
2. Update statistics & graphs
3. Bulk export to IPT (OBIS/GBIF)
4. Update IMIS metadata URLs
5. Update reporting tool



(1)

(2)



(3)

Work done during Y1 (1/3)

Based on QR23

- **Infrastructure upgrades**
  - Dataportal toolbox: major upgrade Symfony framework 4->6
  - Dataportal test framework re-activated (ensure filter & Geoserver functionality)
  - Webserver upgrade PHP 7.4->8.2
  - Geoserver upgrade to 2.25.0 (14 Apr)
  - Central Portal machine operating system upgraded to Ubuntu 22.04 (hosting # bio products, Tomcat high risk security issue)

- **Procedural improvements**
  - Dataportal download queue monitor service
  - Stored procedures in Git version control (easier for changes, debug, rollback)

- **Improved performance**
  - Query optimizations & tech updates: decreased harvesting & indexing time by 2-3h

Work done during Y1 (2/3)

- **Continue work on**
  - Fitness for use labels (later to be used in CP filter)
  - New database architecture (to cope w/ new data types and big data, i.e. biologging, absences)

- **Richer metadata**
  - Plan to provide much more extensive metadata, via IMIS + INSPIRE view & WEBDAV harvest
  - Replace “poor”/legacy (CP) metadata harvest from GeoServer, BlueCoud 2026

- **Provide “true” machine to machine webservice**
  - Linked Open Data Stream (LDES) feed on BODC NERC Vocab Server (NVS) SKOS terms available per collection.
  - OGC webservice described in DCAT (Blue Cloud 2026, ..)

11

Work done during Y1 (3/3)

- **New data/types**
  - EMODnet Seabed Habitats: possibility to store habitats via eMoF only, thus without Occurrence records
  - eDNA field structure in EurOBIS has been agreed upon: # “minimum” core fields (easy querying) + extension. Compliant with (GBIF) DwC extension

- **EU Digital Twin Ocean**
  - Tests to develop cloud native format (Zarr, Parquet). Possible alignment with GBIF/ B-Cubed hackathon

4 Partners presentations

Biology

EMODnet Biology annual meeting

VLIZ status update

VLIZ

16-17 April 2025 (Constanta, Romania)

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.

Activities within WP2

- Dataset submissions to EMODnet Biology
  - Belgian recreational fisheries monitoring https://www.vliz.be/en/imis?module=dataset&dasid=8165
  - LifeWatch observatory data: Permanent Cetacean passive acoustic sensor network in the Belgian Part of the North Sea https://www.vliz.be/en/imis?module=dataset&dasid=5531
  - LifeWatch observatory data: phytoplankton observations by imaging flow cytometry (FlowCam) in the Belgian Part of the North Sea http://www.vliz.be/imis?module=dataset&dasid=4688

- Biocheck QC validation tool improvements
  - Maintenance and new quality checks https://github.com/EMODnet/EMODnetBiocheck/commits/master/?since=2023-05-10&until=2024-04-09
  - Video tutorial https://drive.google.com/file/d/1kRAZc7ef33W0MMJsvLc0zQvfWwWf5RpG/view?usp=sharing

Activities within WP3

- Publishing (external) data products

Name	Who	Status
Habitat suitability and biomass of commercial **fish** species from the Atlantic Ocean	AZTI	In progress
Density of **Loggerhead Turtles** in the Mediterranean Sea	US Navy	In progress
Modelled projections of habitat for commercial **fish** around North-western Europe under climate change, 2020 to 2060	CEFAS	In progress
Modelled projections of habitat for **fish** species feeding guilds around North-western Europe under climate change, 2010 to 2095	CEFAS	In progress
Plankton Genomics Output	Ifremer	Waiting
Distribution maps of **cetacean and seabird** populations in the North-East Atlantic	Bangor University	Waiting

- Publish data products in EDITO
  - Standardization of variable names.
  - Transforming data products to Zarr
  - Participation on B-Cubed Hackathon (GBIF project)
  - Phytoplankton Blue-Cloud demostrator migration to EDITO
    - Reproducing Movebank cetacean migration product of Blue-Cloud hackathon : https://gis4-wildlife.github.io/PhytoplanktonGallery-BlueCloud/

- DIVAnd for R
  - Attempt to put in a package: https://github.com/salvafern/divandr

Activities within WP4

- Update static content
  - https://emodnet.ec.europa.eu/en/biology
- Submission news items to EMODnet newsletter
- Announcement of consortium partner's organised events
- Deliverables publication
  - https://emodnet.ec.europa.eu/en/reports (select Biology from the EMODnet component and Publication type = Deliverable
- Setup of stakeholder survey in the Europa domain
- Contributing to the organisation of the RSC workshop

Biology

EMODnet Biology annual meeting

INRAE status update

Benjamin Weigel, INRAE, EABX, France

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP1

Member of the Coordination Board

- Providing status **reports and updates of WP3**
- Drafting of **Quarterly Progress Reports** concerning WP3 activities
  - to date: QR25, QR26, QR27, QR28
- Drafting **Interim Report** concerning WP3 activities
- Drafting **Final Report** concerning WP3 activities

Activities within WP3

WP lead

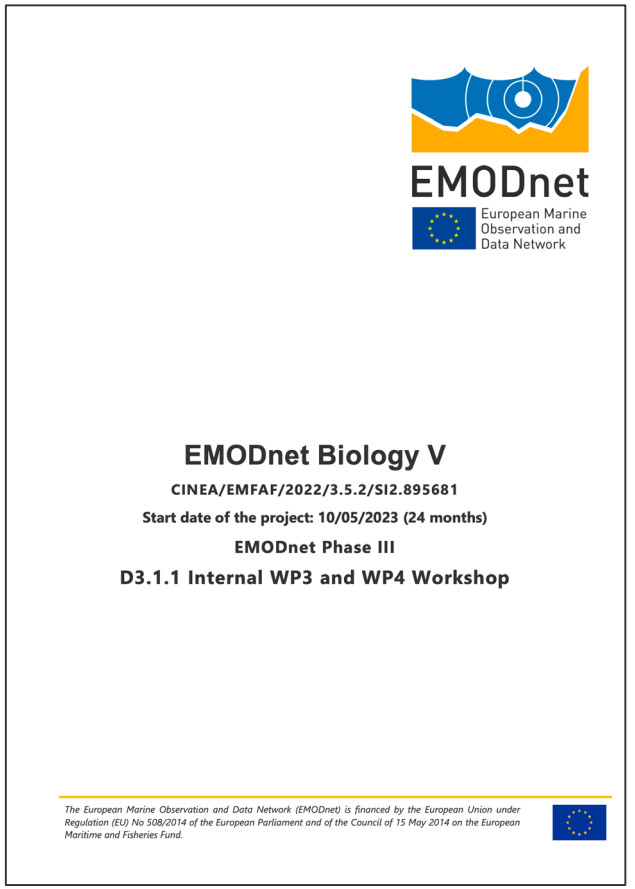
- **coordinating WP** activities, tasks, and deliverables
- organizing, hosting and reporting of WP **Community Calls**
- **representing WP3** (e.g. EMODnet Jamboree)

Activities within WP3

- Joint organisation and hosting (with WP4 lead) of

  Deliverable 3.1.1 Internal WP3 and WP4 Workshop

- Writing and publication of Deliverable



Activities within WP4

Contribution to deliverables:

- **4.2.2 Questionnaire to inform about what data & products EMODnet Biology offers and to collect stakeholder needs**
  - Participation in preparation meetings and contributing to questionnaire creation

- **4.2.3 Workshop with RSCs to understand major needs**
  - Participation in planning meetings
  - Participation and presentation in RSC workshop

Biology

EMODnet Biology annual meeting

National Institute for Oceanography and Applied Geophysics (OGS) status update

Nikola Holodkov, OGS
Marina Lipizer, OGS

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2 - Data Management

OGS Data contribution so far

Datasets

- **Macrozoobenthos-North Adriatic-Gulf of Trieste, C1-LTER time-series 2014-2018**
- **Microzooplankton-North Adriatic-Gulf of Trieste, C1-LTER time-series 1987-1990**
- **Microzooplankton-North Adriatic-Gulf of Trieste, C1-LTER time-series 1998-2010**
- **Relative abundance of potentially pathogenic bacteria in treated wastewater and coastal water**, Adriatic Sea time-series 2019-2020

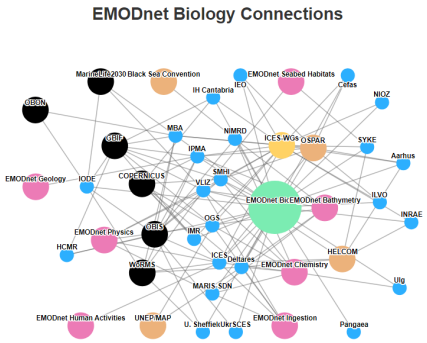
Next Steps:

Citizen science

- **Gelatinous** validated sightings reported in the Mediterranean Sea from 2021-2022 by avvistAPP users
- **Dolphins** validated sightings reported in the Mediterranean Sea from 2021-2022 by avvistAPP users
- **Sea turtles** validated sightings reported in the Mediterranean Sea from 2021-2022 by avvistAPP users

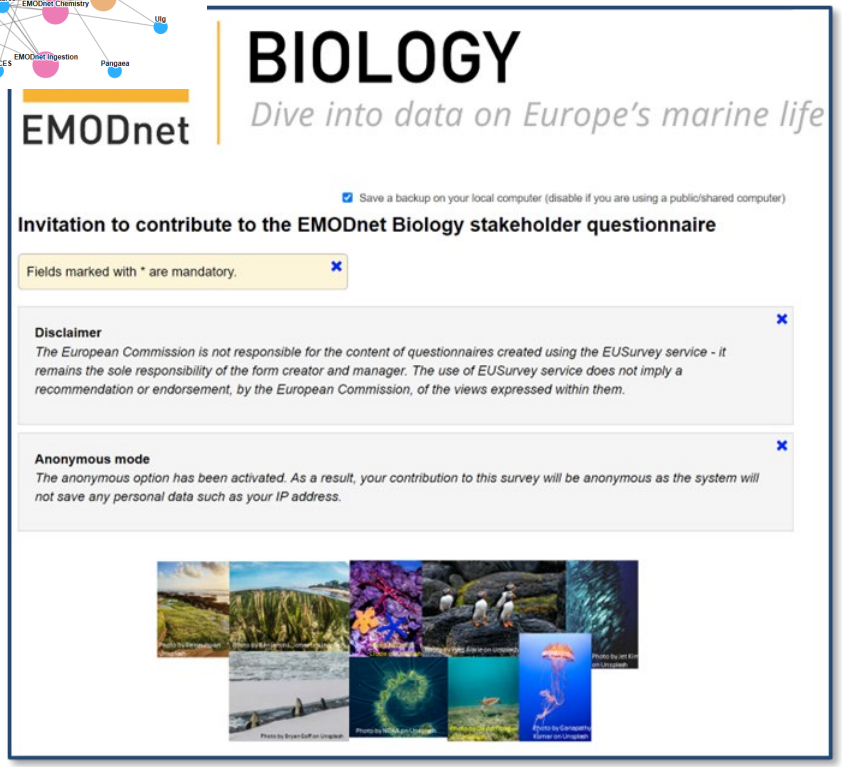
avvistAPP: how citizens can contribute to the monitoring of marine animals with smartphones
https://doi.org/10.13120/h127-9v54

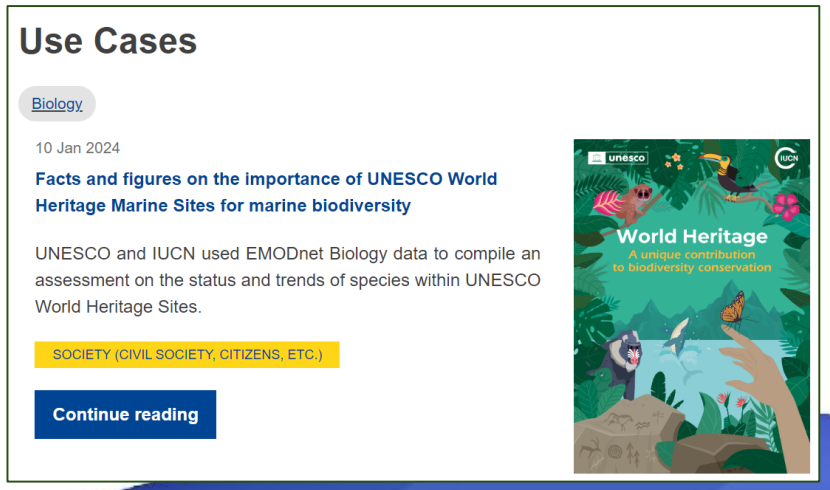
Activities within WP4 - Uptake and Outreach

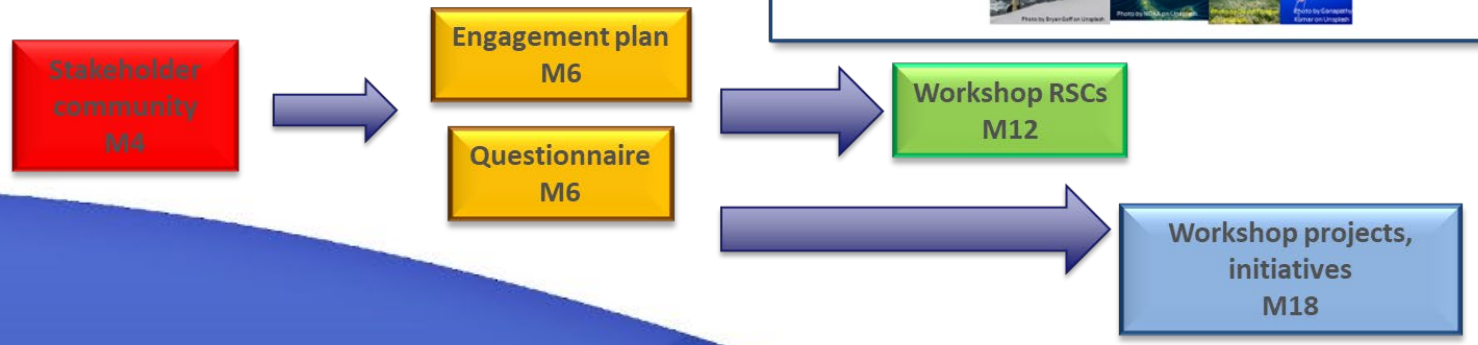


Done or in progress:

1. Connectivity map update
2. Stakeholder mapping for questionnaire, for workshops
3. Definition of Engagement plan
4. Questionnaire: sent to 70 stakeholders, 25 answers collected, results processed and to be presented at the RSC workshop on April 18, 2024
5. RSC workshop: April 18, 2024
6. Publication of Use case: 1







Biology

EMODnet Biology annual meeting

Cefas status update

Oliver Williams, Senior Data Manager

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2

Oliver Williams (Cefas contact)

Core datasets identified for publishing to OBIS (via DASSH)

- Mace and the Phytoplankton Taxonomy Team (2024). SmartBuoy Marine Observational Network - UK Waters Phytoplankton Data 2020-2023. Cefas, UK. V1. doi: https://doi.org/10.14466/CefasDataHub.147 (continuation)
- Cefas Zooplankton Surveys for the UK Marine Natural Capital Programme (in prep)

Working towards a 'business as usual' approach to enable

- Future publishing of all Cefas biodiversity data in Darwin Core format to enable DASSH > OBIS > EMODnet Biology
- Groundwork requires more standardised biodiversity data and data systems within Cefas (as part of our new Digital, Data and Technology Strategy).
- As part of the MEDIN standards WG - Pushing for imminent publication of the Data & Data Product Definitions as published in 'Supporting the Essential' to the NERC vocab server. Watch this space!

Outreach to the UK DNA community

'Biodiversity data derived from DNA, How do we make it FAIR?' - poster presentation to the UK DNA Working Group in April 2024. MEDIN, EMODnet Biology, Darwin Core DNA Extension & OBIS / GBIF all highlighted as central to our approach.
Poster will be published imminently

Activities within WP3

Murray Thompson and Elena Couce (Cefas contacts)

OSPAR COMMISSION

Pilot Assessment of Feeding Guilds

- assigning species(fish) trait information (body size)
- produce fish size distribution maps (among others)
- re-use data within OBIS (derived from ICES data)

Couce and Thompson (2023). Modelled projections of habitat for fish species feeding guilds around North-western Europe under climate change, 2010 to 2095. Cefas, UK. V1. doi: https://doi.org/10.14466/CefasDataHub.139

Biology

EMODnet Biology annual meeting

Deltares status update

Willem Stolte & Luuk van der Heijden, Deltares, The Netherlands

16-17 April 2025 (Constanta, Romania)

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Activities within WP2

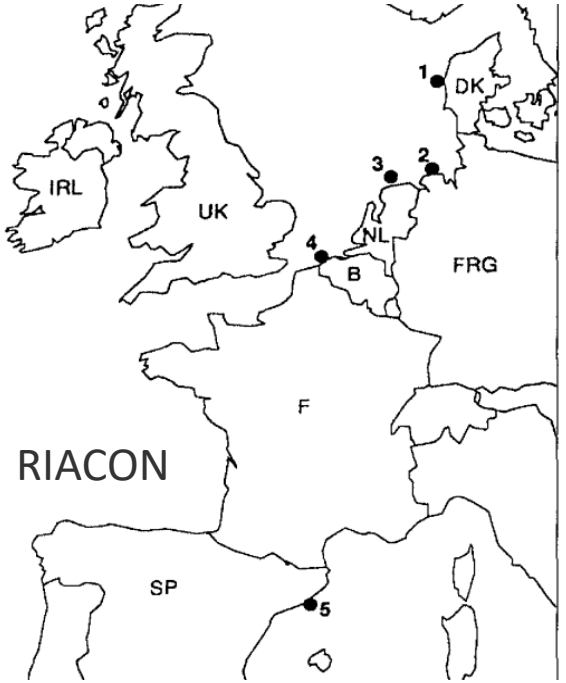
Biological datasets

Exisiting datasets Dutch EEZ (North Sea and Wadden Sea)

1. **Long term phytoplankton – update (to 2022) and extension (also estuaries)**
2. Long term macrobenthos – New dataset including estuaries. To be transformed to OBIS

New datasets (project monitoring)

3. Natuurlijk Veilig: benthos – in progress
4. Natuurlijk Veilig: RIACON - started
5. Natuurlijk Veilig: Castricum & Egmond - finished
6. Benthos Zuid-Westelijke Delta – now included in (2)
7. Benthos Waddenzee – now included in (2)



Activities within WP3

Habitat suitability maps of reef-forming species

- *Sabellaria spinulosa*
- *Modiolus modiolus*
- *Lanice conchilega*
- *Ostrea edulis*

www.ospar.org

https://en.wikipedia.org/wiki/Modiolus_modiolus

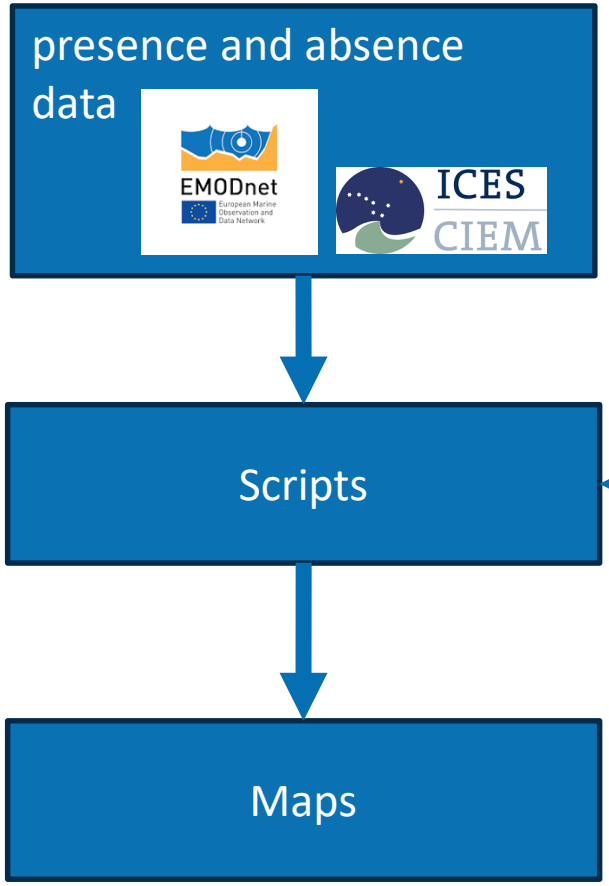
https://en.wikipedia.org/wiki/Lanice_conchilega

https://www.cabidigitallibrary.org/doi/10.1079/cabicompendium.71177

Full report:
P.M.J.Herman, and F.F. van Rees. 2022. “Mapping Reef Forming North Sea Species.” Delft. https://pub.kennisbank.deltares.nl/Details/fullCatalogue/1000020826.

Activities within WP3

Habitat suitability maps of reef-forming species



Environmental layer	Source
Depth at 178 m resolution	EMODnet
Bathymetric Position Index 5 km	vdReijden2018
Bathymetric Position Index 10 km	vdReijden2018
Bathymetric Position Index 75 km	vdReijden2018
Bottom shear stress from currents	DCSM-FM
Mean Salinity	Copernicus
Mean Temperature	Copernicus
Temperature Difference over the year	Copernicus
Fraction gravel in sediment	Stephens2015
Fraction Mud in sediment	Stephens2015
Fraction Sand in sediment	Stephens2015
Intensity beam trawling for plaice	vdReijden2018
Intensity beam trawling for sole	vdReijden2018
Intensity otter trawling for mixed species	vdReijden2018

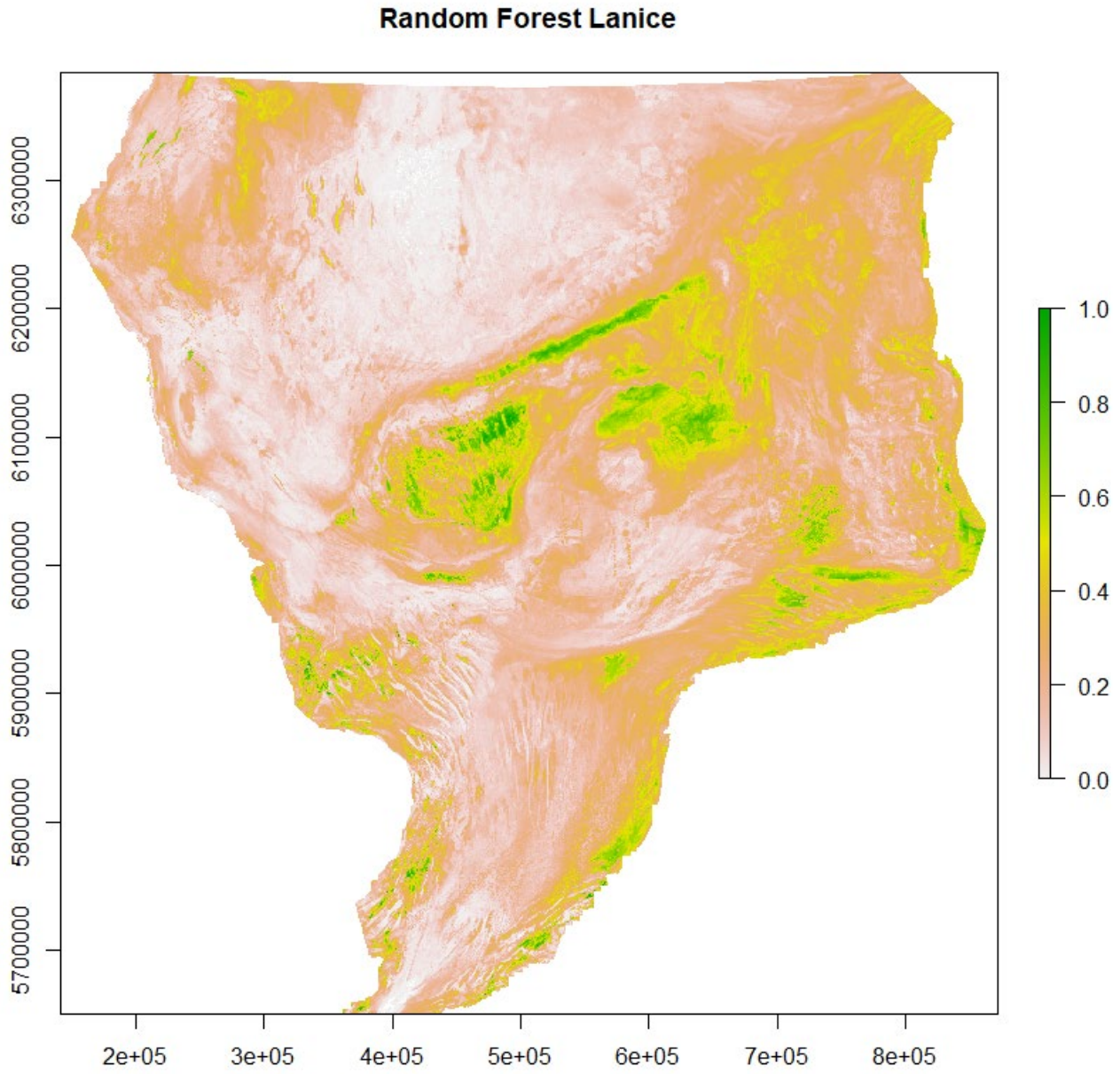
Activities within WP3

Habitat suitability maps of reef-forming species

Status
- Scripts made suitable for EMODnet Biology
- Make correct output format
- check license of environmental layer from DCSM

Planning of this product
- upload to EMODnet

Development ideas
- Other areas?



Activities within WP3

Other ideas for products

Existing products to be added to EMODnet map viewer

- Wind farm sensitivity maps for birds in the North Sea (and underlying products).
  Owner: Wageningen Marine Research, Netherlands

Status: maps need to be **updated**, budget is perhaps limiting

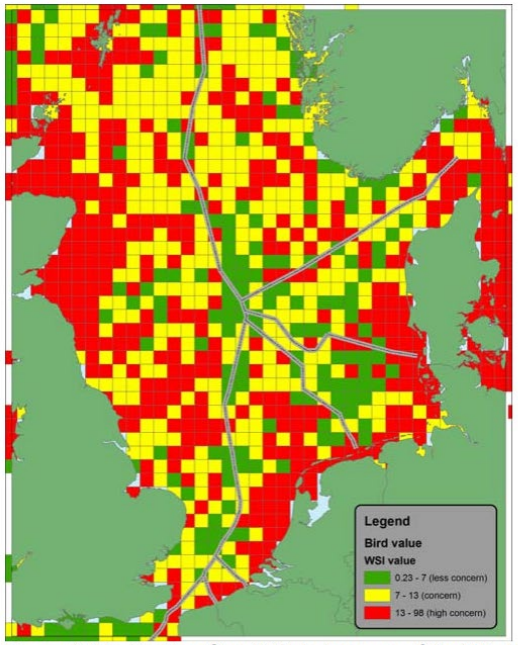
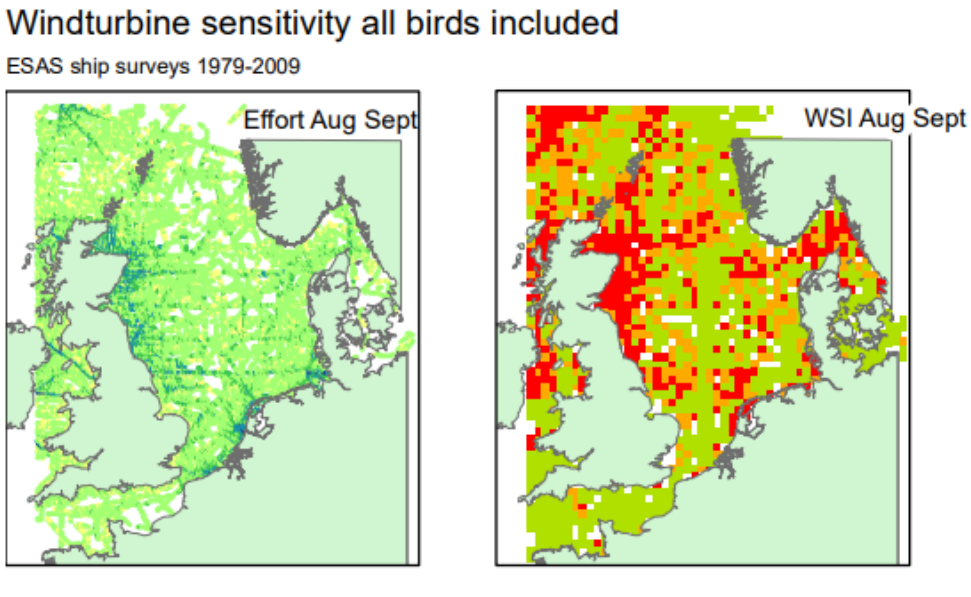


Figure 9 Windturbine Sensitiviy Index map of the Windspeed study area for Birds. Details on this map can be found in Appendix 1 (Leopold and Dijkman, 2010) to this report



Wal, J T Van der, et al. 2010. “Spatial Deployment of Offshore Wind Energy in Europe (WINDSPEED). Calculation Rules for the DSS.”

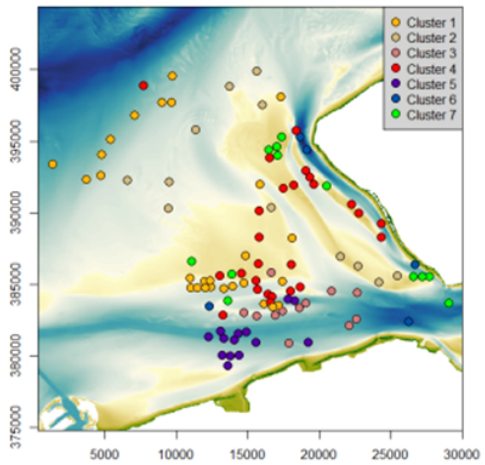
Activities within WP3

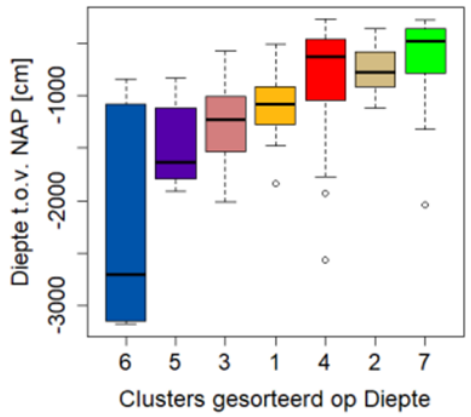
Other ideas for products

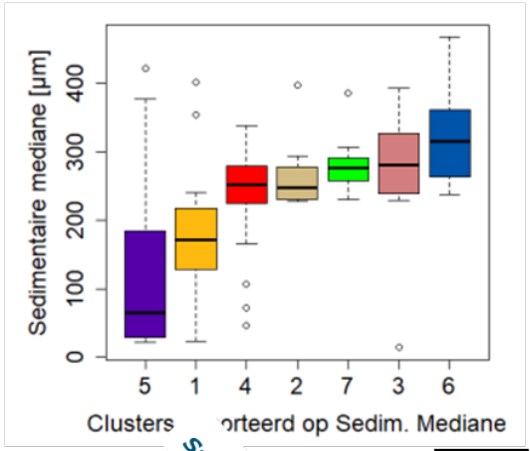
Benthic community cluster analysis (BCCA) Cluster analysis of macrobenthic species and comparison with existing habitat maps – under negotiation

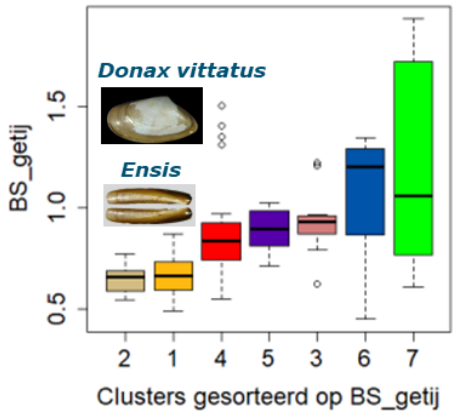
Example from Vlakte van de Raan, Dutch coast.

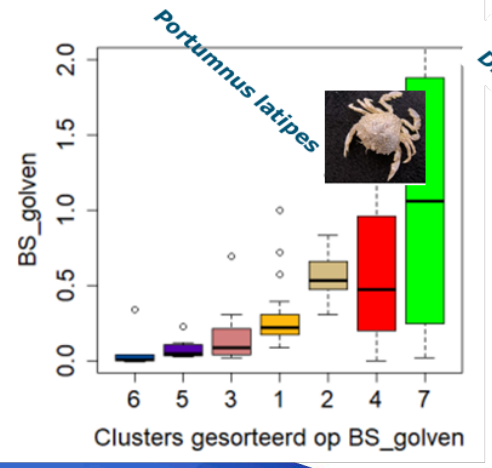
[credits to V. Escaravage, WMR, for figures]

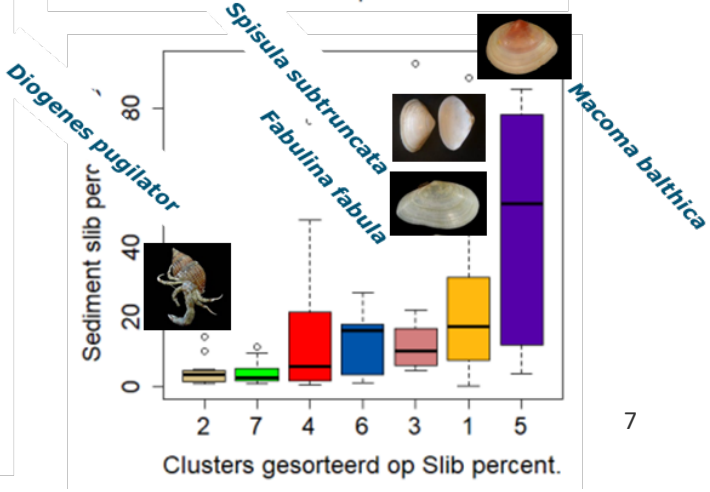












Activities within WP4

Uptake and outreach

Regular knowledge exchange with other projects/programmes/institutes in The Netherlands

- Offshore wind ecological programme (WOZEP)
- The 'Nature Strengthening and Species Protection Monitoring Survey' (MONS) – North Sea Agreement
- North Sea Energy Program (https://north-sea-energy.eu/nl/home/)
- National Marine Information and Data Centre
- Ministry of Infrastructure and Water Management

EMODnet

European Marine Observation and Data Network

Biology

EMODnet Biology annual meeting

HCMR status update

Dimitra MAVRAKI, HCMR

16-17 April 2025 (Constanta, Romania)

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.

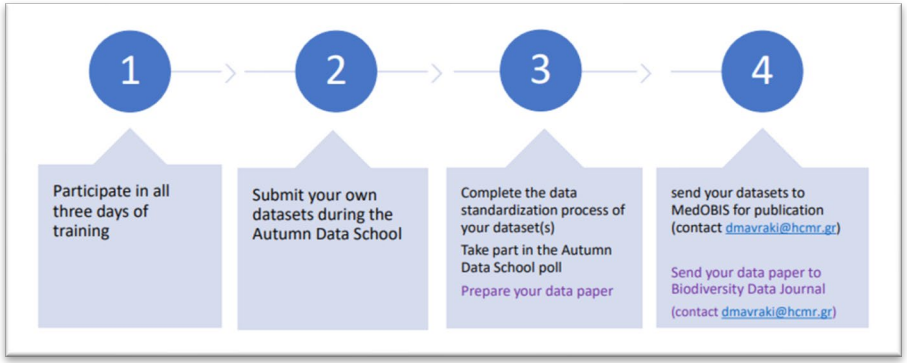
Activities within WP2

Autumn Data School

- Co-organised by EMODnet and LifeWatchERIC, 13-15 November 2023, Lecce Italy

  13-14 November, **DATAthon meeting**, in presence

  15 November, **Citizen Science meeting**, online participation possible



- Main objectives of Autumn Data School:

✓ *bringing together **Researchers from the Mediterranean Region** and start creating a steady communication and data collaboration channel between them;*

✓ ***sharing best practices** on data standardization and data publication on Research Infrastructures and finally*

✓ ***covering the data gap that exists for the specific Marine Region**, by welcoming Researchers to bring and share during this 3 full-day Workshop their own marine biogeographic datasets.*

- 7 trainers (HCMR, VLIZ, LifeWatch ERIC) and 38 registered participants.

Citizen Science

Historical Data Rescue

Dataset 1: Zoologische Ergebnisse VII, Mollusken I. Gesammelt von S.M. Schiff "Pola" 1890-1894, Dr. Rudolf Sturany.

Date *: 1890 - 1894*

Area covered: *Ionian Sea, Adriatic Sea, Aegean Sea, Libyan and Egyptian Coasts*

Taxa: *116 distinct taxa of mollusca*

Dataset 2: Campagne de la Melita, 1892. Mollusques recueillis sur les côtes de la Tunisie et de l' Algérie par Ph. Dautzenberg. Mémoires de la Société zoologique de France pour l' année 1895

Date : *1892*

Area covered: *coasts and lakes of Tunisia and Algeria*

Taxa: *158 distinct taxa of mollusca*

Autumn Data School Poll

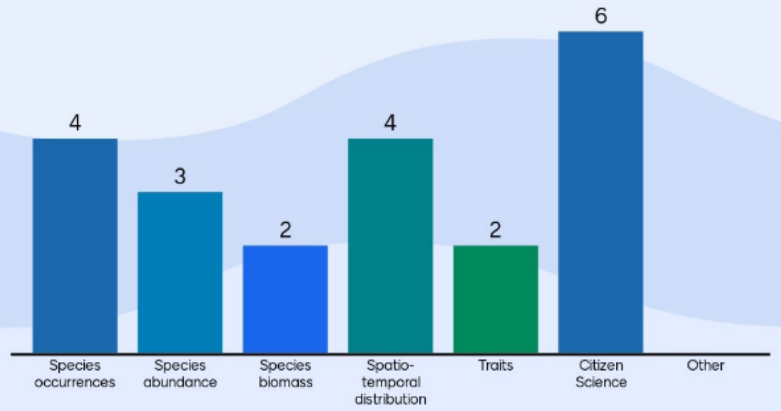
Poll results

STAKEHOLDER PROFILE

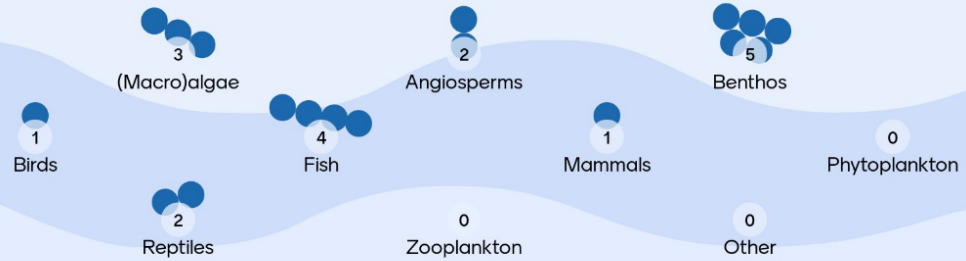
Institute Name

TunSea – Association TunSea pour la Science Participative	University Algiers 1	Faculty of Sciences of Sfax	Notre Grand Bleu
TunSea – Association TunSea pour la Science Participative	TunSea - Association pour la science participative	National Institute of Marine Sciences and Technologies (INSTM)	

What type of data do you collect?(select all that apply)



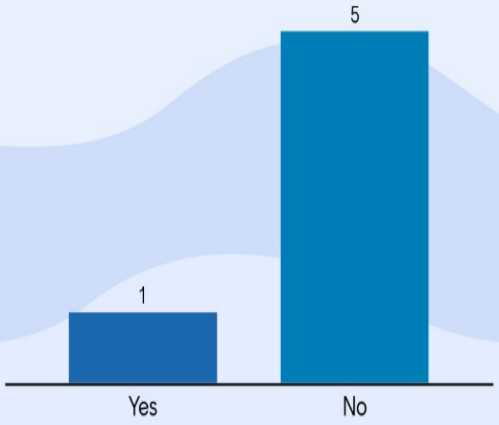
Which taxonomic group do you consider most relevant for your work? (select all that apply)



Autumn Data School Poll

Poll results

Before the Autumn Data School were you familiar with EMODnet?



Do you have practical recommendations on how such collaboration could be established ?

Thank you for the oppurtiny, this was very helpful in term of analyse of Data base, i recommend to organize this kind of training for North Africa in north Africa	collaboration between Mediterranean institut of research and Red Sea instiute for sampling missions	conventionbetween different research institute	I think we need more training to know how to create databases and analyze them in a specific way because protocols are a little bit different from one another.
Yes, more trainings and more exchanges	no	It is essential to establish a scientific community focused on the Mediterranean Sea. Sharing data proves invaluable for shaping a sustainable future for the region	Hosting the event in the southern Mediterranean facilitates accessibility for many researchers who face visa restrictions when traveling to Europe, ensuring broader participation

Activities within WP2

Data submission to EMODnet Biology

- **Biodiversity of the upper-mesophotic octocoral habitats at Sporades Archipelago (Aegean Sea)**
http://ipt.medobis.eu/resource?r=uppermesophotic

- **Quantitative data of a molluscan community living in Posidonia oceanica at the south coast of Crete, Greece** ***(metadata only)***
http://ipt.medobis.eu/resource?r=posidoniaoceanica_crete

- **Molluscs from two rocky shores of the North coast of Crete, collected for the NaGISA project 2007-2008** ***(ready for publishing, waiting to add a new device in the field DEVICE CATALOGUE, of NERC Vocabulary Server (NVS))***

- **more datasets are expecting the coming months in the framework of the MARBEFES project** (*eg.* Copepoda & Cladocera in the Gulf of Herakleion, 2014; Macrobenthic fauna from the continental shelf of Heraklion Gulf 2010; Macrobenthic fauna from the continental shelf of Heraklion Gulf 2014-2015 etc)

Activities within WP2

Other activities related to EMODnet Biology

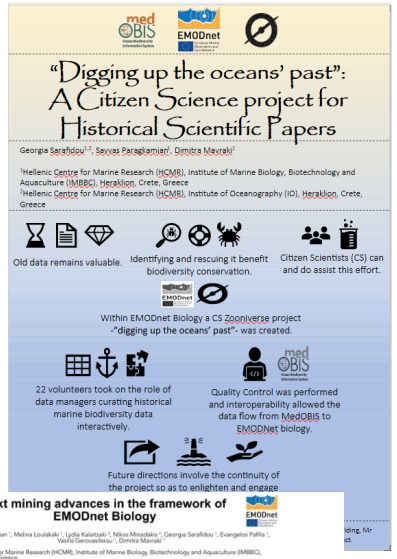
- **Data Management Training**

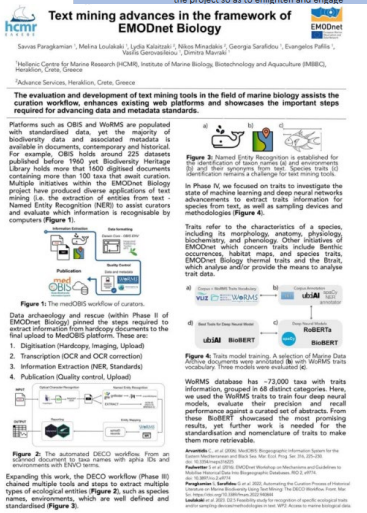
MBON and LifeWatchERIC online seminar on Data Management, 18th of December 2023

MBON workshop , 12 February 2024, Bologna, Italy

- **publications**

EMODnet Open Conference 2023 (2 posters: “Digging up the oceans’ past”: A Citizen Science project for Historical Scientific Papers”; and “Text mining advances in the framework of EMODnet Biology”)





5th International Congress on Applied Ichthyology, Oceanography, and Aquatic Environment (HydroMediT 2024) (2 posters awaiting approval: “EMODnet Biology: An EU service available for the Mediterranean Region”, “Citizen Science Platforms facilitating the rescue and standardisation process for historical marine biodiversity data”)

Biology

EMODnet Biology annual meeting

IEO-CSIC status update

- Rafael González-Quirós (IEO-CSIC, Gijón)

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2

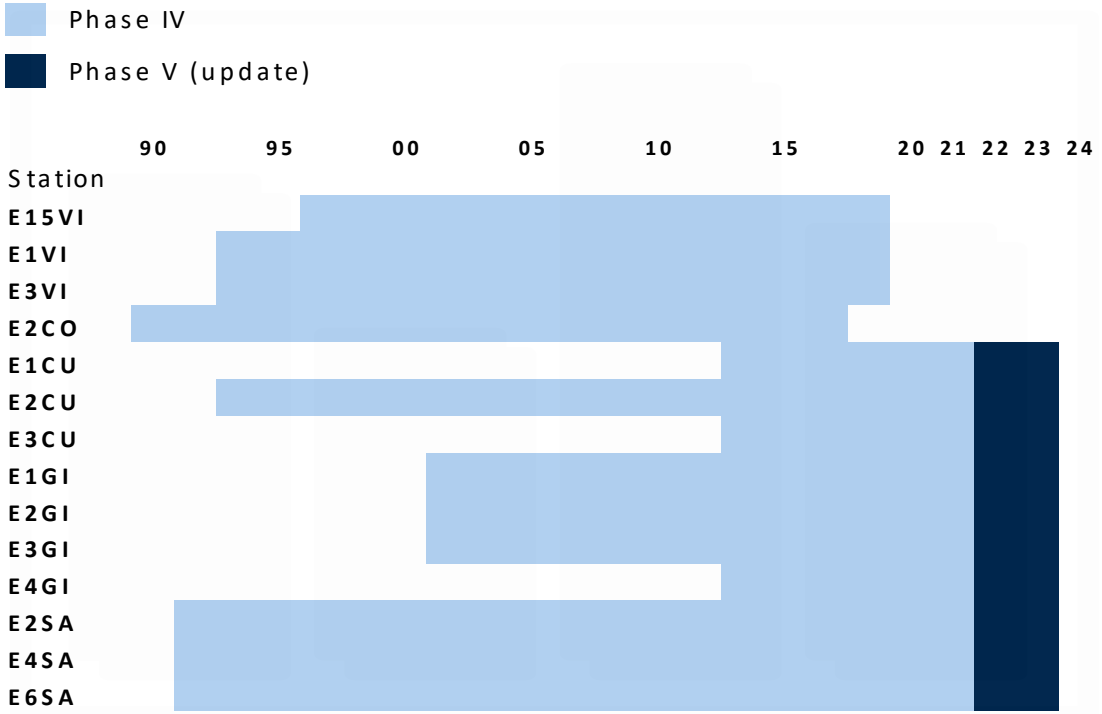
Datasets provided

Datasets that will be delivered to EMODnet Biology (new) and/or will receive additional records (updates) during Phase V

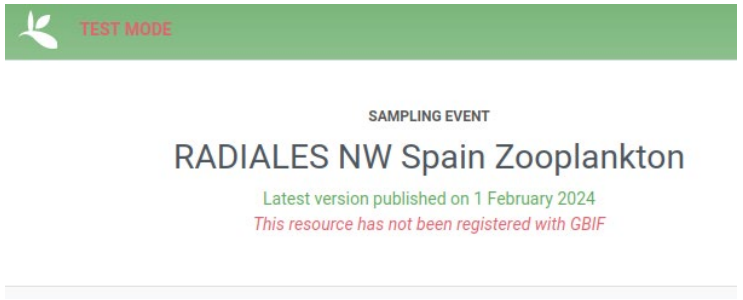
Dataset	Parameter	# records	Time coverage	Geographic coverage	Status
RADIALES NW Spain Zooplankton	Abundance and biomass	> 500	2021-2023	Cantabrian Sea (Southern Bay of Biscay)	Update
RADIALES NW Spain Ichthyoplankton	Abundance	~ 50000	2001-2019	Cantabrian Sea (Southern Bay of Biscay)	New
FAMOSO Zooplankton	Abundance and biomass	> 500	2009	Gul of Lion (NW Mediterranean)	New

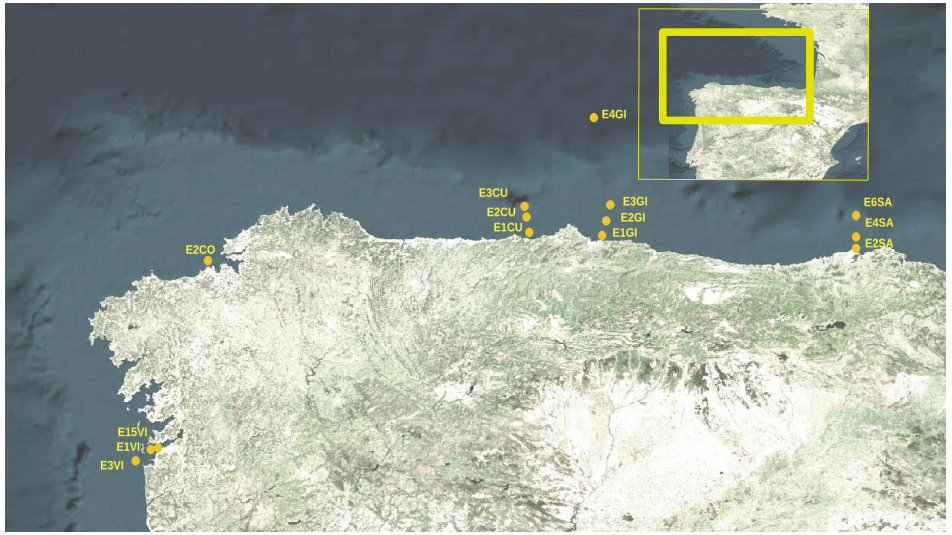
Activities within WP2

RADIALES NW Spain Zooplankton



https://ipt.vliz.be/ieo/resource?r=radiales_zoopl_test





Activities within WP2

FAMOSO Zooplankton

- Zooplankton biomass (160 records)
- Zooplankton abundance major groups (456 records)

https://ipt.vliz.be/ieo/resource?r=famoso

SAMPLING EVENT

FAMOSO Zooplankton

Latest version published on 31 January 2024

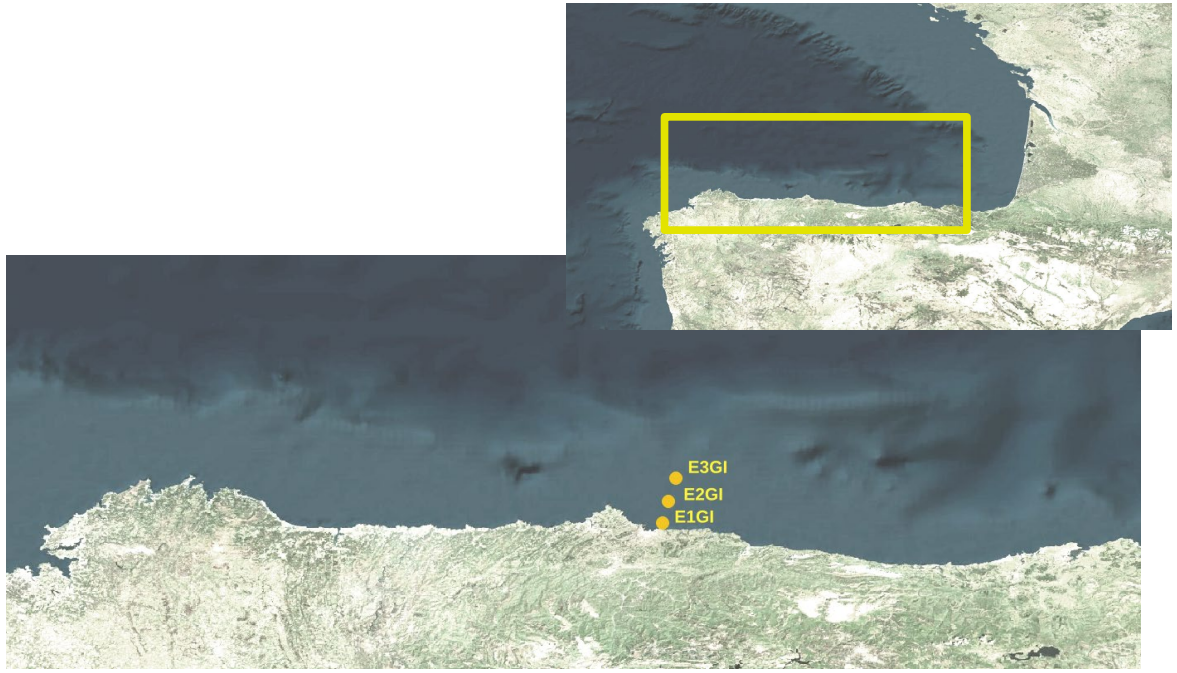
This resource has not been registered with GBIF

Activities within WP2

RADIALES NW Spain Ichthyoplankton

(pending to be delivered)

- Time coverage: 2001 - 2019
- Bongo net 335 µm
- > 130 species



Biology

EMODnet Biology annual meeting

IHCantabria status update

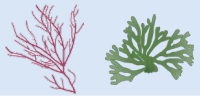
Elvira Ramos, IHCantabria - Instituto de Hidráulica Ambiental de la Universidad de Cantabria, Santander, Spain

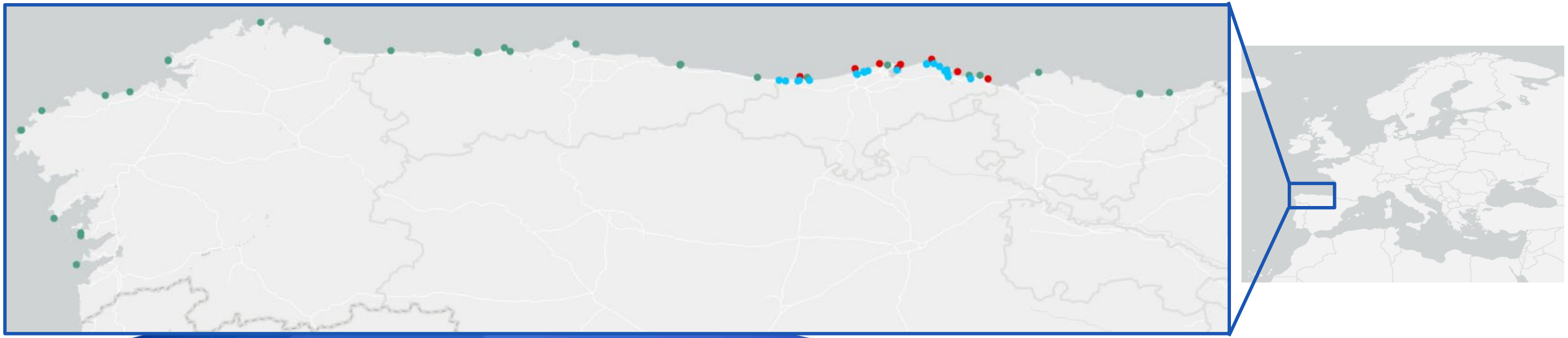
16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2

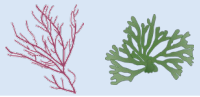
Data management

	Dataset	Status	Geographic coverage	Temporal range	# records
	Littoral Monitoring Network of Cantabria (Fishes)	New	Cantabria (N Spain) Atlantic region	2009 - 2023	769
	Littoral Monitoring Network of Cantabria (Macroinvertebrates)	Update		2022 - 2023	783
	Cover of Intertidal Macroalgae along the N and NW Coast of the Iberian Peninsula	Update	N and NW Coast of the Iberian Peninsula	2023	>5000



Activities within WP2

Data management

	Dataset	Status	Geographic coverage	Temporal range	# records
	Littoral Monitoring Network of Cantabria (Fishes)	New	Cantabria (N Spain) Atlantic region	2009 - 2023	769
	Littoral Monitoring Network of Cantabria (Macroinvertebrates)	Update		2022 - 2023	783
	Cover of Intertidal Macroalgae along the N and NW Coast of the Iberian Peninsula	Update	N and NW Coast of the Iberian Peninsula	2023	>5000

SAMPLING EVENT

Littoral Monitoring Network of Cantabria (Fishes)

Latest version published on 26 March 2024

This resource has not been registered with GBIF

Download the latest version of this resource data as a Darwin Core Archive (DwC-A) or the resource metadata as EML or RTF:

Data as a DwC-A file	download 108 records in English (17 KB) - Update frequency: unknown
Metadata as an EML file	download in English (13 KB)
Metadata as an RTF file	download in English (9 KB)

Publication date: 26 M
Published by: No orga
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How to cite

SAMPLING EVENT

Littoral Monitoring Network of Cantabria (Invertebrates)

Latest version published on 8 April 2024

This resource has not been registered with GBIF

Download the latest version of this resource data as a Darwin Core Archive (DwC-A) or the resource metadata as EML or RTF:

Data as a DwC-A file	download 39 records in English (14 KB) - Update frequency: unknown
Metadata as an EML file	download in English (9 KB)
Metadata as an RTF file	download in English (6 KB)

Home: Link
Publication date: 8 April 2024
Published by: No organisation
License: CC-BY-NC 4.0
How to cite

Activities within WP3

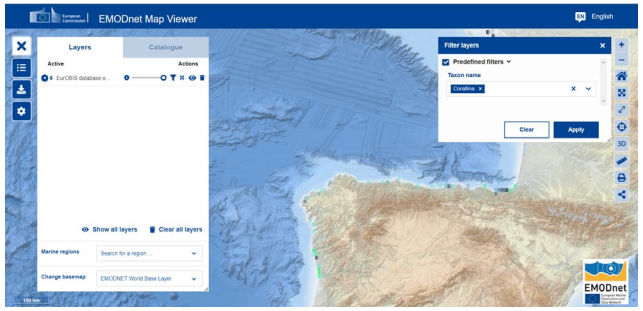
Data product: Community temperature index (CTI)

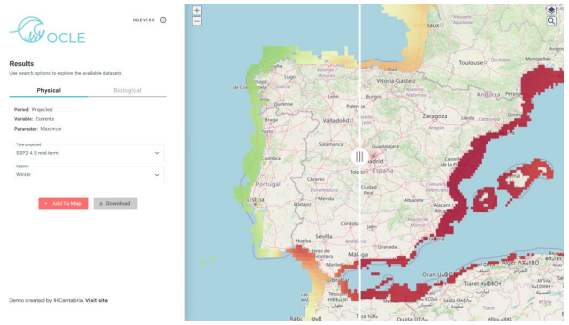
- Ocean community warming responses explained by macroalgae thermal affinities.

INITIAL DATA

Intertidal macroalgae
(2011 – 2017)

SST
(Historical period)

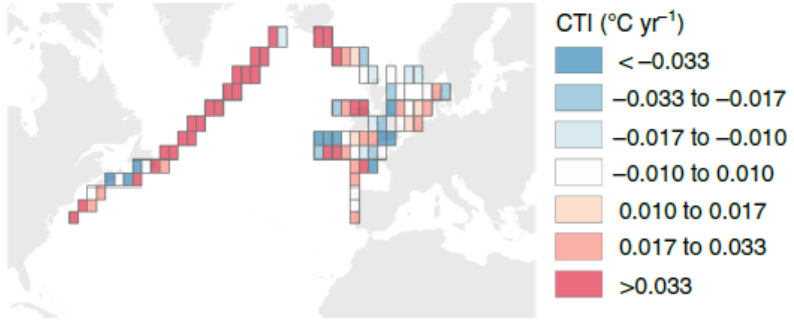




METHODOLOGY

$$CTI = \sum_{i=1}^{i=n} \frac{STI_i w_i}{\sum w_i}$$

EXPECTED RESULT



Burrows et al. (2018)

Activities within WP4

Uptake and outreach

- Update connectivity maps and identification of stakeholder community.
- Workshop targeting the Regional Sea Conventions.

Biology

EMODnet Biology annual meeting

ILVO status update

Gert Van Hoey

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2

ILVO data

- Update / finalization extraction scripts ILVO datasets (by autumn harvest 2023): DONE

    Data with abundance, biomass, length, stage, …

- ILVO Datasets to be delivered:

    - Update of the macrobenthic and epi-fish datasets (7 datasets): DONE (next update by spring 2025)
    - Addition of genomic based dataset: IN PROGRESS

Activities within WP2

ILVO data

- Addition of genomic based dataset (2): IN PROGRESS
    - COI metabarcoding of bulk macrobenthos samples in function of aggregate extraction
    - 16S metabarcoding data of sediment in function of sand extraction
- GBIF upload of genomic datasets (eDNA fish):
    - We have a script for it (cf excel to GBIF template): same template for emodnet
    - Can be extracted from GBIF? Extra dataset…

Activities within WP2

ILVO data

TEST

Get data | How-to | Tools | Community | About | Login

DATASET | METRICS | ACTIVITY | DOWNLOAD | 94,281 OCCURRENCES

This dataset contains eDNA metabarcoding data of fish species detected in 17 locations in the Belgian Part of the North Sea (BPNS). The seawater samples were collected during a field campaigns in 2022. The fish species were identified using 12S eDNA metabarcoding. The dataset includes amplicon sequence variants and their associated metadata.

[This dataset was processed using the GBIF eDNA converter tool.]

Publication date: March 19, 2024

Metadata last modified: March 19, 2024

Hosted by: GBIF eDNA Test organisation

Licence: CC BY 4.0

How to cite | DOI 10.21373/dknhem

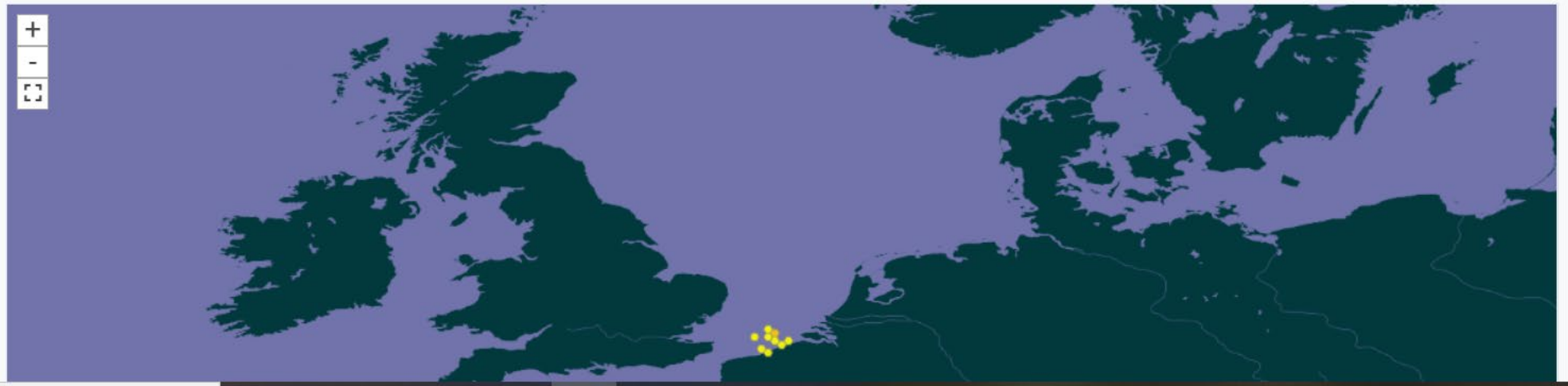
94,281 Occurrences

60% With taxon match

100% With coordinates

100% With year

94,281 GEOREFERENCED RECORDS



Type here to search

ENG 10:33 AM 16-Apr-24

Activities within WP4

Outreach

- Facilitating link EMODNET- biology and OSPAR work
  - OSPAR QSR 2023 published
  - Prep for QSR2028 will start slowly…

- Contributing to organization workshop regional sea convention – EMODNET: 18 April 2024

Biology

EMODnet Biology annual meeting

IMR status update

Arnfinn Morvik, Institute of Marine Research

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2

- **DATASETS WITH REGULAR UPDATES**
  - All datasets updated by end of April 2024:
  - MAREANO Beamtrawl until May 2021
  - MAREANO Grab until May 2021
  - MAREANO RPSledge until May 2021
  - Red King Crab extended to include 2023
  - IMR Fish database 2000 – 2023
    - The IMR fish database is planned to change from occurrence to event core

Activities within WP2

- **DATASETS WITH IRREGULAR UPDATES**
- Datasets to be updated Q3/Q4 2024:
  - Northern Shrimp

Biology

EMODnet Biology annual meeting

IPMA status update

Antonina dos Santos, Partner
Henrique Niza, Partner

16-17 April 2025 (Constanta, Romania)

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.

Activities within WP2

Overview of the datasets that are delivered to EMODnet Biology

- Plankton Diversity Along the Portuguese Coast in the 1970s **(New)**
  - Event - 7430 records
  - Occurrence - 460805 records
  - ExtendedMeasurementOrFact - 19251 records
  - Time Coverage – October 1970 to February 1974

Activities within WP2

Overview of the datasets that will be delivered to EMODnet Biology

- Phytoplankton Data Surveys and Monitoring along the Portuguese Continental Coast between 1985 and 1995

  (Work in progress)

  - Event - 3643 records
  - Occurrence - 360880 records
  - ExtendedMeasurementOrFact – ??? records
  - Time Coverage - August and November ’85; January and March ‘86; April and August ‘87; May ‘88; July and December ‘89; July ‘90; July and September ‘91; July and October ‘92; November ‘93; July and October ‘94; February, October and November '95

- Zooplankton data from MedEX survey from Summer 2010 off Southern coast of Portugal **(New)**

  - Event - ??? records
  - Occurrence - ??? Records
  - ExtendedMeasurementOrFact – ??? Records

Activities within WP2

Overview of the datasets that will receive updates on EMODnet Biology

- Mesopelagic Crustaceans of the North Western Portuguese Coast between 1998 and 2000 **(Metadata)**
- Zooplankton and Ichthyoplankton of the North Western Portuguese Coast in May 2002 **(Metadata)**
- Zooplankton of the South and South-Western Portuguese Coast in Winter 2006-07 **(Metadata)**
- Assessment of Zooplankton in the area of Prestige oil tanker accident **(Metadata)**
- Plankton Production season off Portuguese coast from 1986 to 1987 **(Metadata)**

And others…

Biology

EMODnet
European Marine Observation and Data Network

EMODnet Biology annual meeting

ULiège status update

Charles TROUPIN

16-17 April 2025 (Constanta, Romania)

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.

Activities within WP3

What's our initial goal?

1. Allow users to directly call DIVAnd (Julia code) from a R session
2. Generate presence density maps with DIVAnd (called from R)
3. Compare results obtained with different methods

Activities within WP3

What's our initial goal?

Technical aspect

Documentation
Testing
Compatibility issues
Creation of a new library

Scientific aspect

Providing a new tool to community
Application to real datasets
Comparison with existing methods

Activities within WP3

What has been done so far?

https://github.com/gher-uliege/EMODnet-Biology-PhaseV

- ✓ Create and improve the documentation of the installation procedure (`README.md`)
- ✓ Test installation under Windows (✓ working) and Linux (✗ failing) using Conda (✗ also failing)
- ✓ Perform simple 1D and 2D interpolations with DIVAnd in R
- ✓ Perform density map from observations (turtles) with DIVAnd in R

Activities within WP3

What has been done so far?

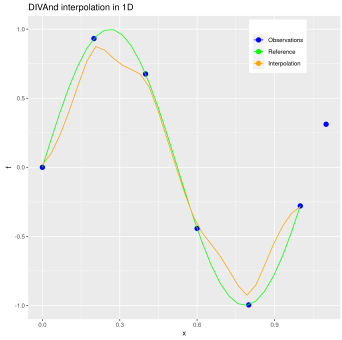
Under development (with Salvador Fernández, VLIZ):
create a R package for DIVAnd

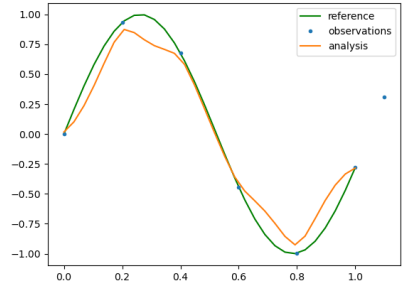
(to hide all the dirty stuff from users)

Activities within WP3

What has been done so far?

Results for the 1D test with R and with Julia





(spoiler: they are the same)

Activities within WP3

What are the next steps?

Technical aspect:

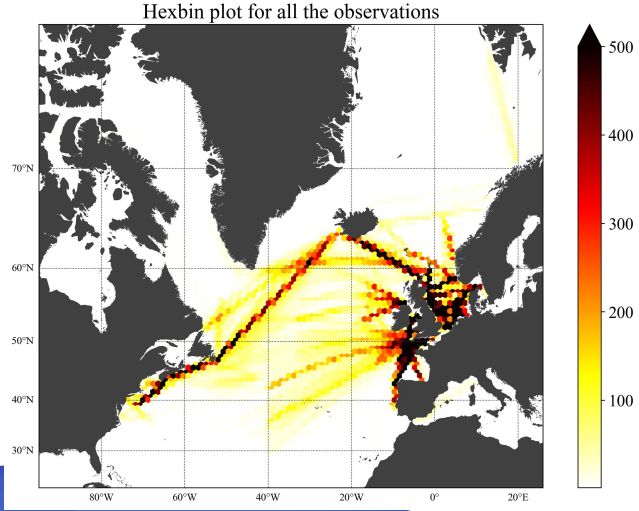
1. fix library issues (if possible)
2. finish writing R module

Scientific aspect:

3. Apply method on birds data: *European Seabirds At Sea (ESAS)* https://www.vliz.be/en/imis?module=dataset&dasid=3117
4. Compare DIVAnd with other method(s)

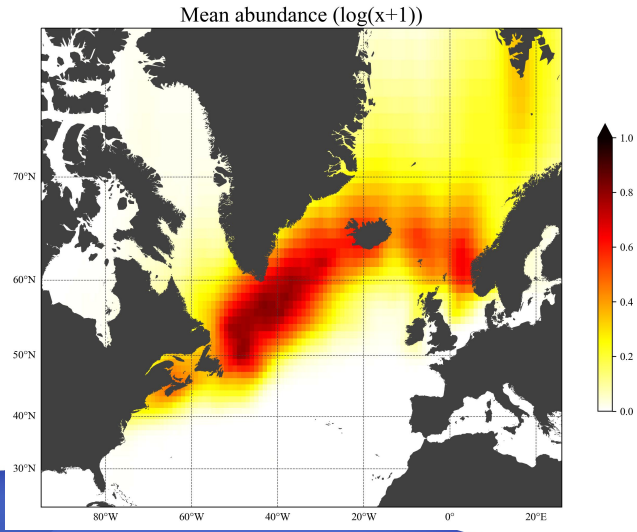
Activities within WP3

Side project: gridding of CPR data using a neural network



Activities within WP3

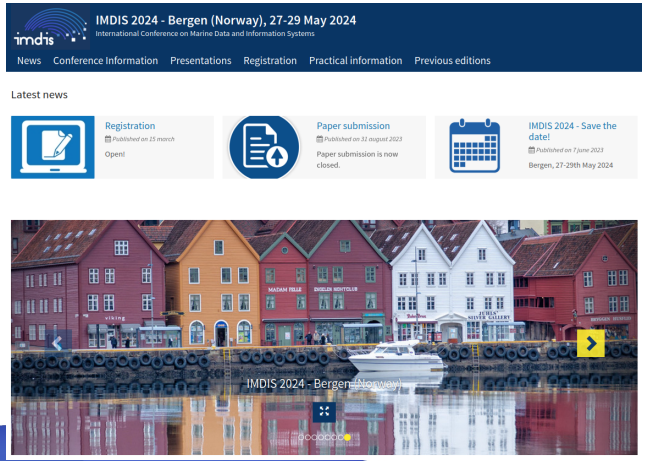
Side project: gridding of CPR data using a neural network



Activities within WP3

Side project: gridding of CPR data using a neural network

More details: IMDIS conference



Biology

EMODnet Biology annual meeting

MARIS status update

Peter Thijsse, MARIS

16-17 April 2025 (Constanta, Romania)

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.

Activities within WP2

Data management, supporting actions 2.1, expanding data flow

- Maintenance of the API to facilitate the flow of SeaDataNet BioODV datasets to EMODnet Biology system (ready, in use by VLIZ)

- This facilitates expansion of the amount of data published by partners (and non-partners) via SeaDataNet CDI (continuous progress)
  - Could e.g. be increased after work in Data Ingestion or other initiatives.
  - Also restricted data, released for EMODnet Bio products could be released this way.

Activities within WP5

Technical infrastructure - Supporting work in Action 5.1: Extend interoperability and data types

- **Part of working group with VLIZ and BODC to increase the use of vocabularies, and map existing vocabs (in EuroBIS/DarwinCore) to other vocabularies**
  - Make use of gained FAIR-EASE experience.
  - MARIS will work on expanding Linked Data (RDF) services for SeaDataNets EDMO (organisations) and EDMERP (projects) with LDES feeds. (BODC will do the same for SeaDataNets NERC Vocabulary Services)
  - Series of meetings taken place for knowledge exchange and starting actions
  - Examples now available, actions will be completed in next months.

- Additional action worth mentioning: Ongoing discussions with the EMBRC EMO-BON team to develop data flow (linked to BC2026 and FAIR-EASE actions)

Biology

EMODnet Biology annual meeting

Marine Biological Association status update

Chloe Figueroa Ashforth, Senior Data Officer

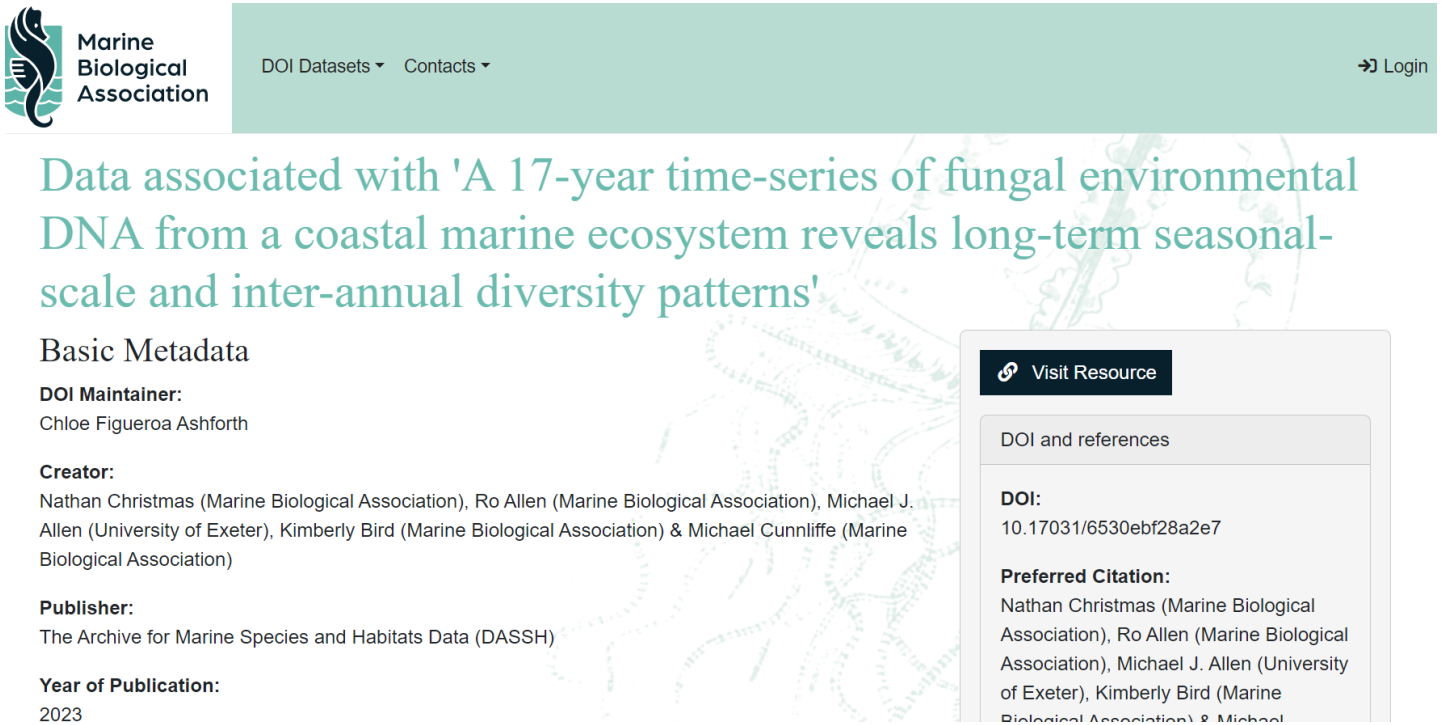
16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2

The Marine Biological Association (MBA)

- Published eDNA dataset to EMODnet
  - **Data associated with 'A 17-year time-series of fungal environmental DNA from a coastal marine ecosystem reveals long-term seasonal-scale and inter-annual diversity patterns', DOI:** 10.17031/6530ebf28a2e7



Activities within WP4

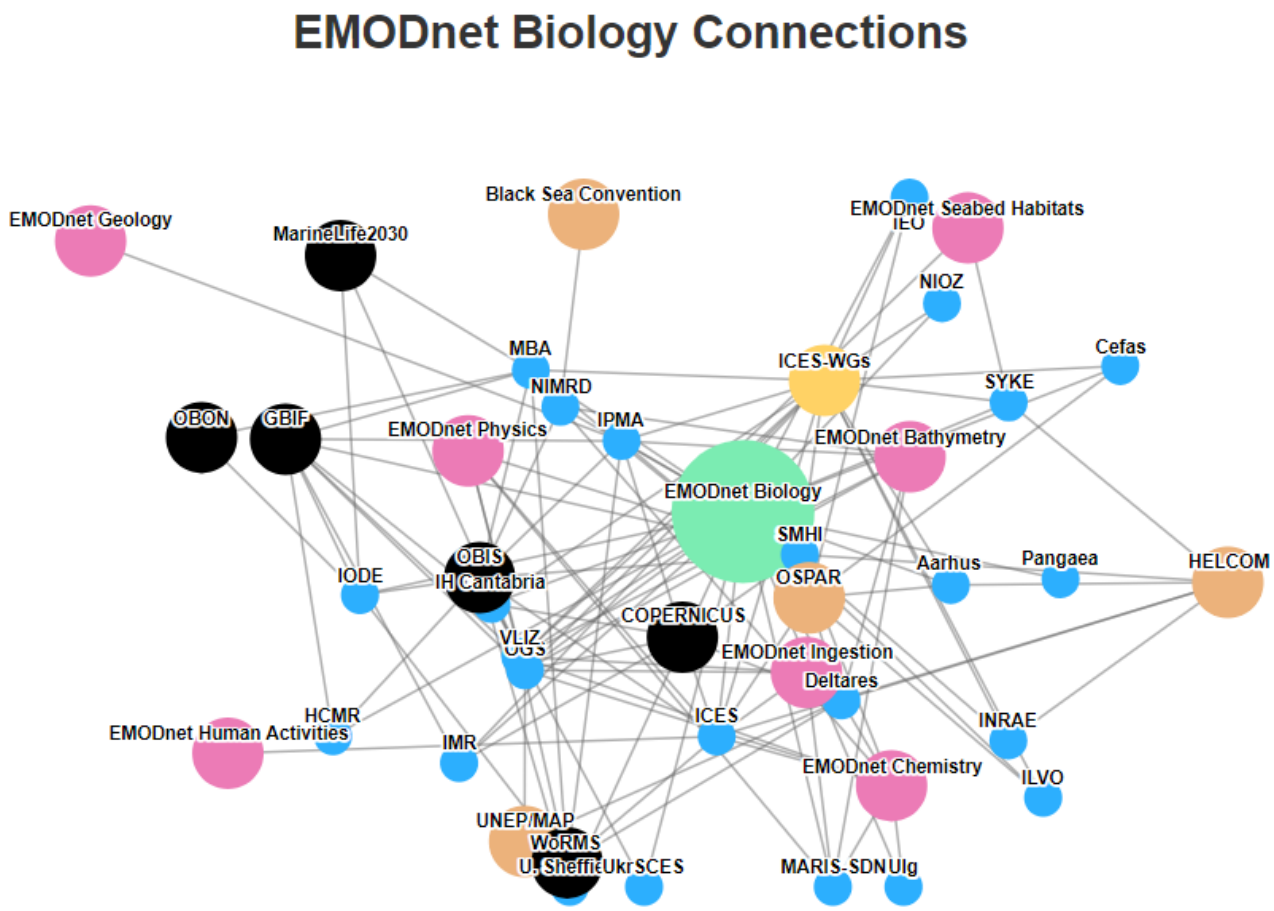
The Marine Biological Association (MBA)

- 4.1 Connectivity map published
- https://emodnet.ec.europa.eu/en/biology

- 4.1 Publication of use cases
- https://emodnet.ec.europa.eu/en/use-case/linking-peer-reviewed-publications-standardised-edna-derived-occurrence-data

- 4.2 Participation in organising questionnaire and workshop with RSCs to understand major needs

- 4.3 Liaison with relevant EU initiatives, projects and parties:
- MARCO BOLO and DTO Bioflow participation



Biology

EMODnet Biology annual meeting

National Institute for Marine Research and Development “Grigore Antipa”, Constanta, Romania

Elena Daniela Pantea, NIMRD

16-17 April 2024 (Constanta, Romania)

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.

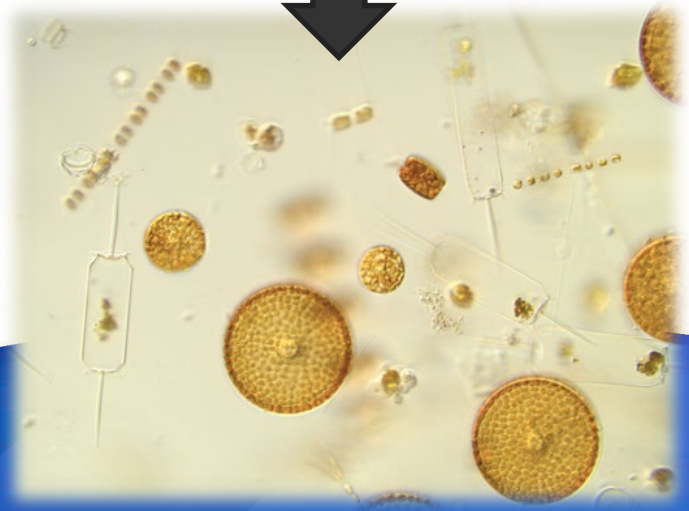
Activities within WP2

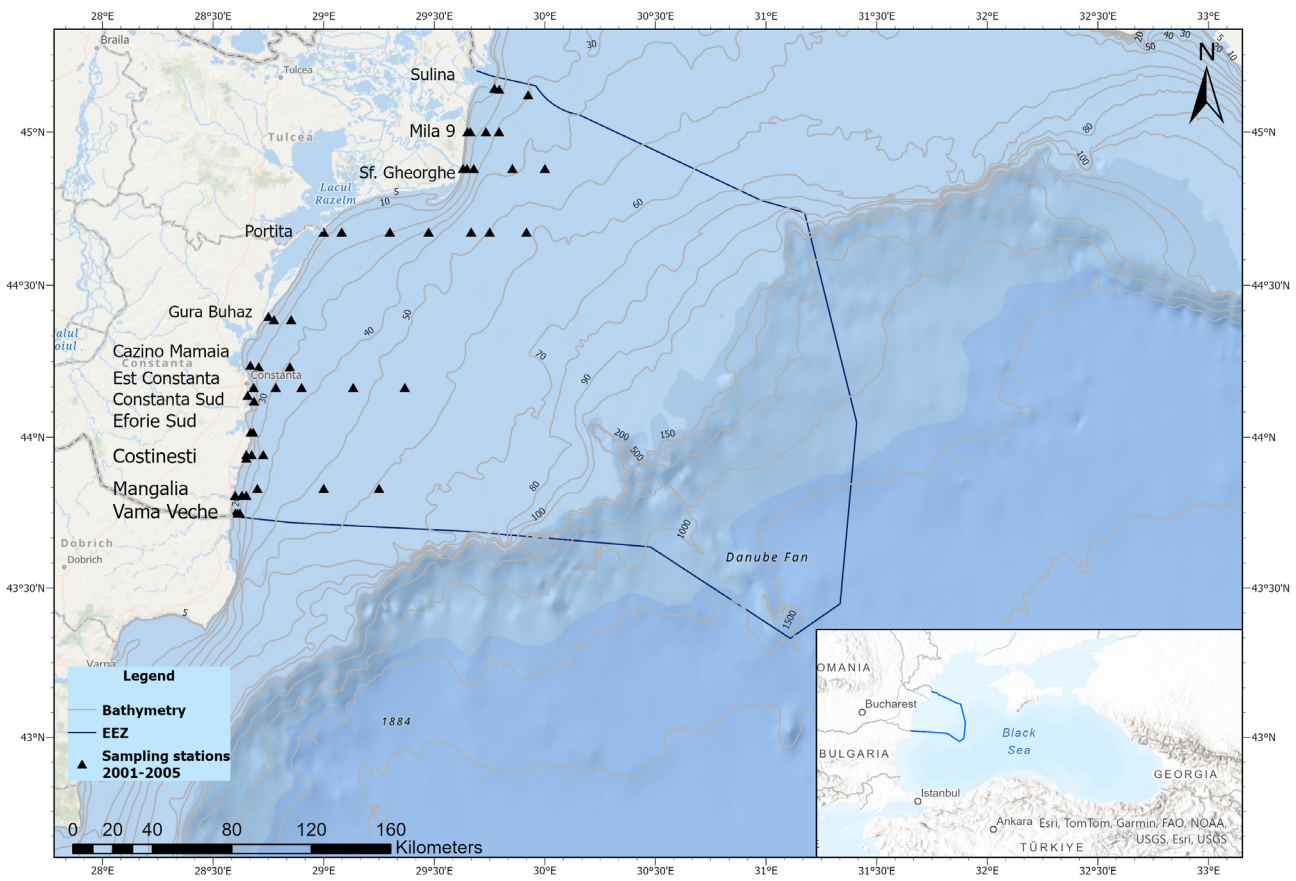
Black Sea Phytoplankton Data
Team: E. Pantea, O. Vlas, L. Boicenco

Dataset: Romanian Black Sea Phytoplankton data from 2001 to 2005

- The dataset covers **5 years**
- **990 samples** were collected from **55 stations**
- The total number of records for this dataset is **18011**

Data source: microscopic identification of samples.





Type of data: abundance (cells/L) and **biomass (mg/m³) data** for each individual phytoplankton taxa.

Activities within WP2

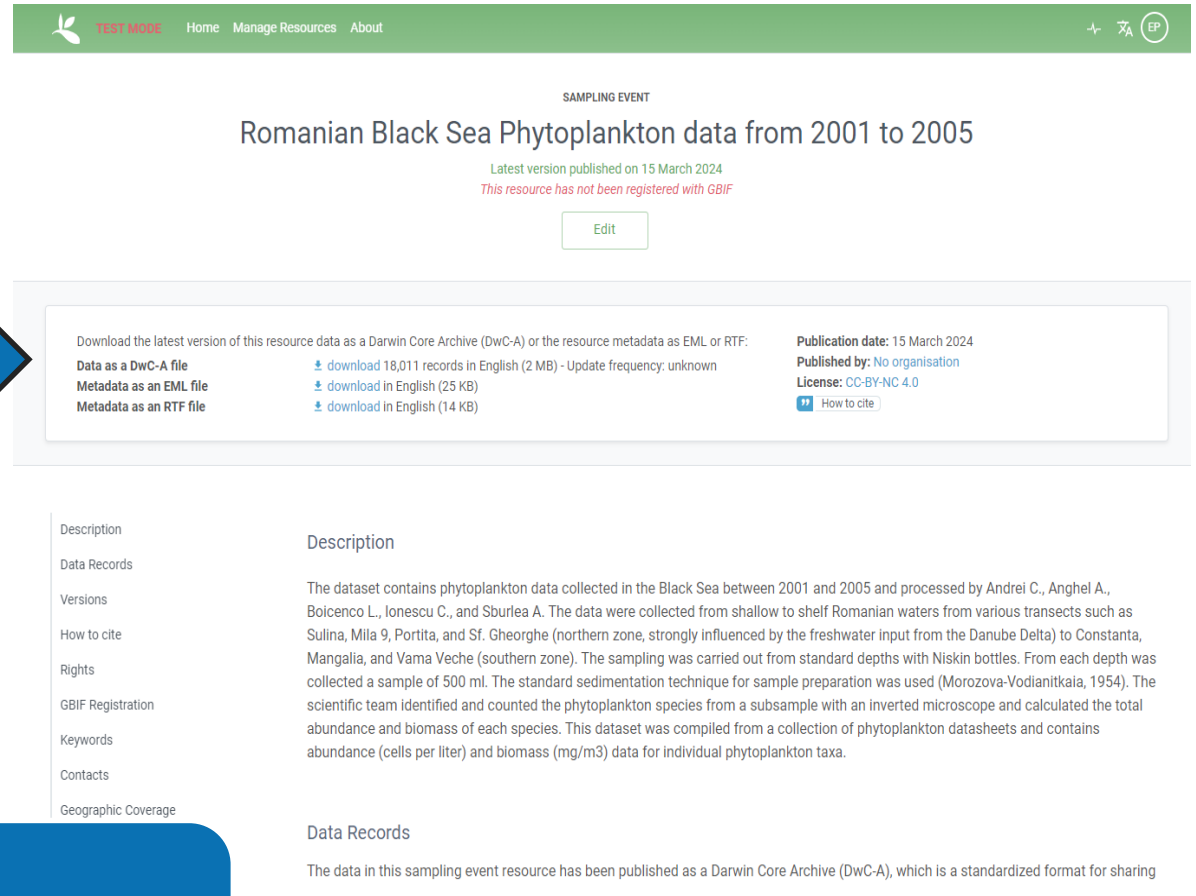
Black Sea Phytoplankton Data

Team: E. Pantea, O. Vlas, L. Boicenco

Romanian Black Sea Phytoplankton data from 2001 to 2005

Latest version published 15 March 2024

https://ipt.vliz.be/upload/resource?r=ro_black_sea_fpk_2001_2005



Brief description of work carried out:

- Dataset formatted according to Darwin Core terms
- IPT resource of the dataset created and published
- Metadata file created
- Quality check done (Biocheck Tool) and errors corrected.

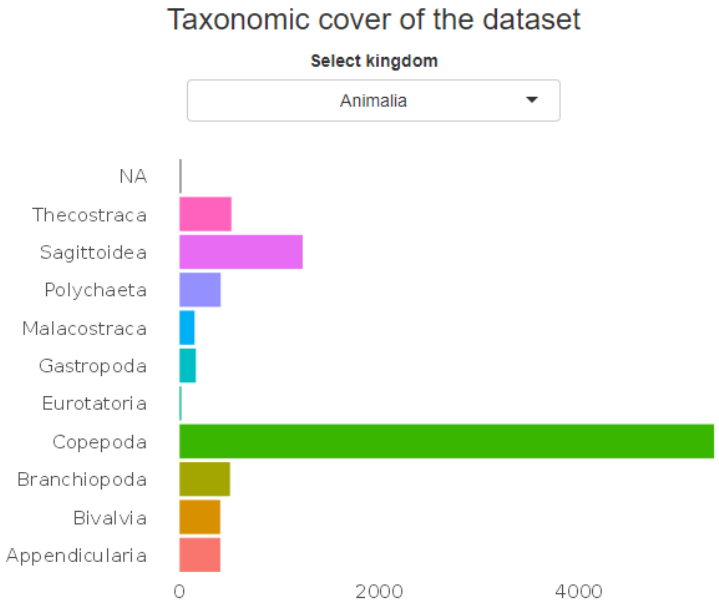
Acknowledgment: In the process of publishing the dataset, we received support from VLIZ (Ruben Perez)

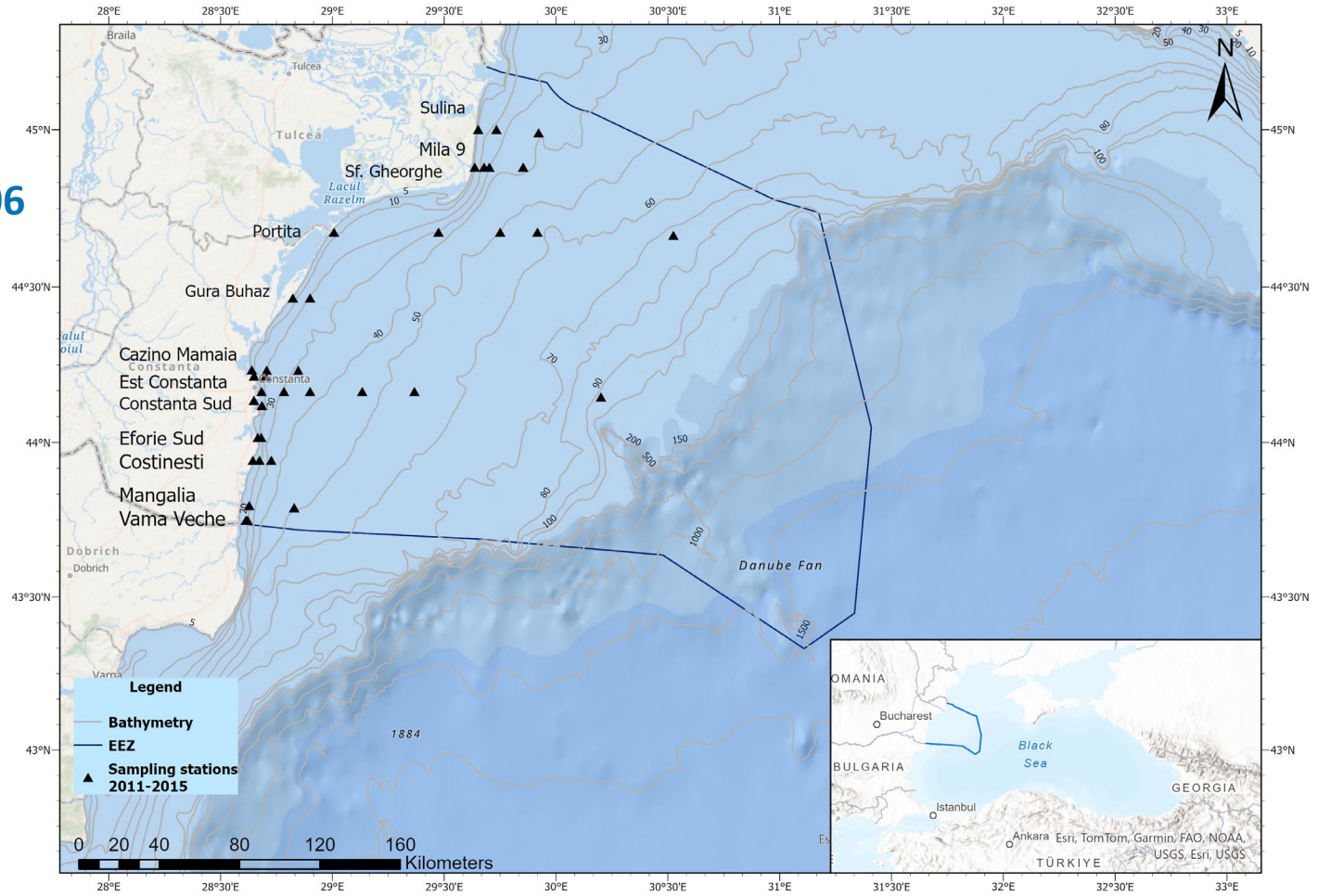
Activities within WP2

Black Sea Zooplankton Data 2011 to 2015

Zooplankton team: G. E. Harcotă, E. Bișinicu, C. Tabarcea, F. Timofte

- The dataset covers **5 years**
- **257 samples** were collected from **43 stations**
- The total number of records for this dataset is **9406**





Activities within WP2

Black Sea Zooplankton Data 2011 to 2015

Zooplankton team: G. E. Harcotă, E. Bișinicu, C. Tabarcea, F. Timofte

Romanian Black Sea

Zooplankton data set

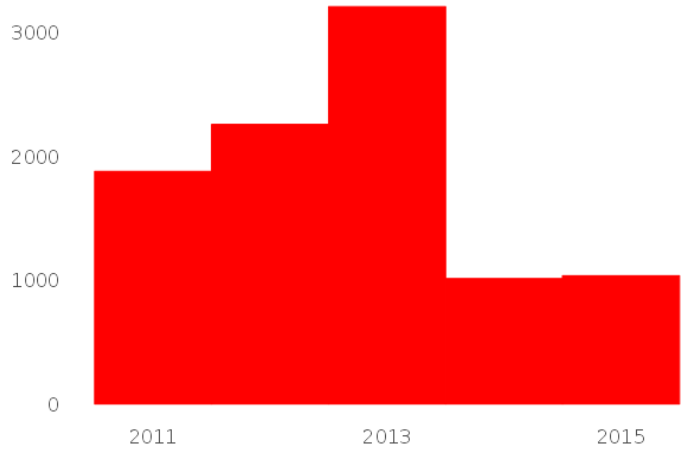
2011 to 2015

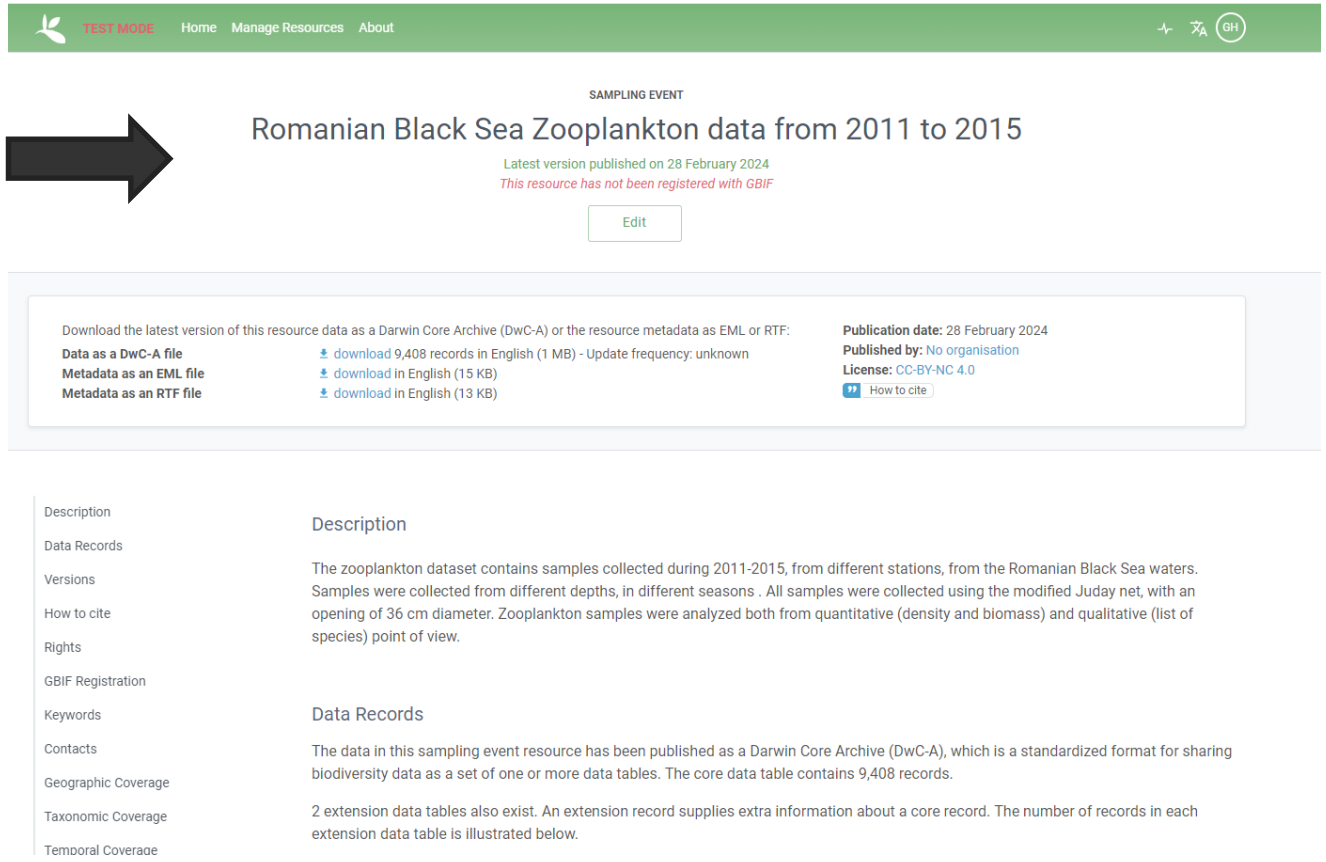
Latest version published

28 February 2024

https://ipt.vliz.be/upload/resource?r=ro_black_sea_zpk_2011_2015

Temporal cover of the dataset



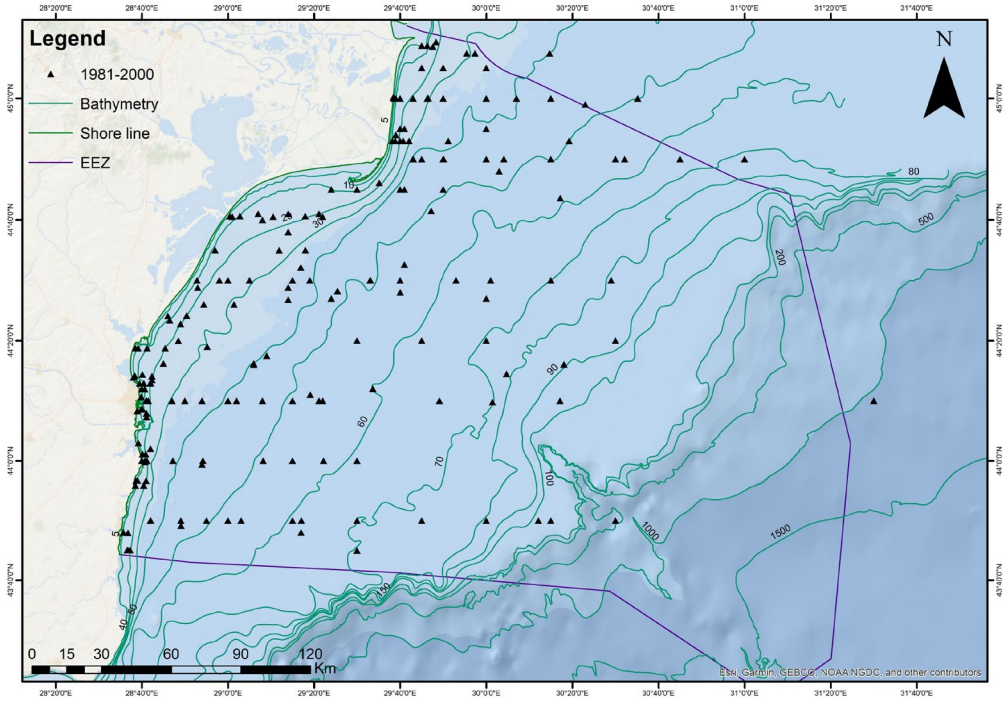


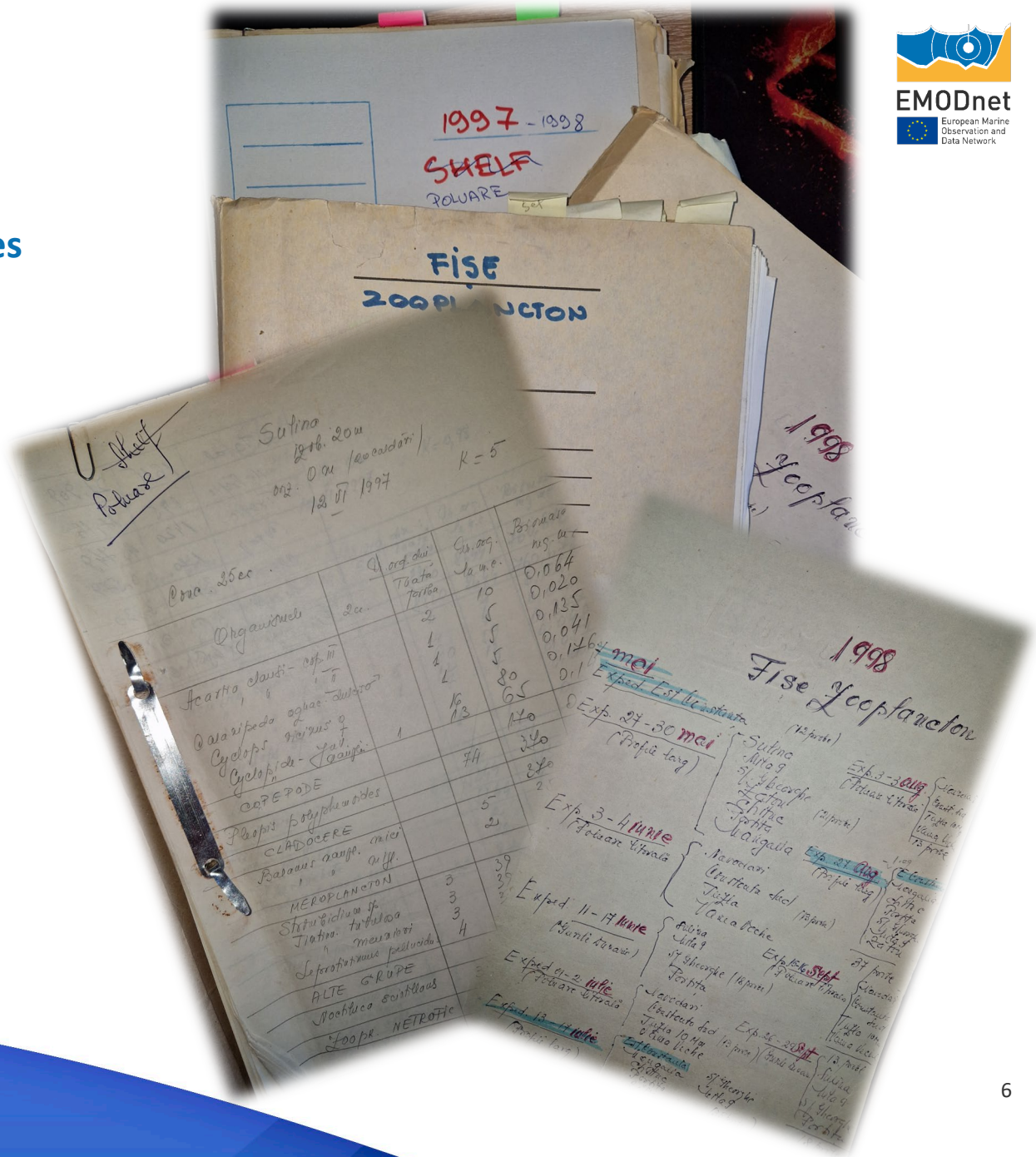
Activities within WP2

Problem solved

1981-2000 → **Missing coordinates**

- ✓ The coordinates problem was solved by searching for the missing coordinates in the institute's archives.
- ✓ This consisted of identifying the stations, data, and areas where the samples were collected.





Biology

EMODnet Biology annual meeting

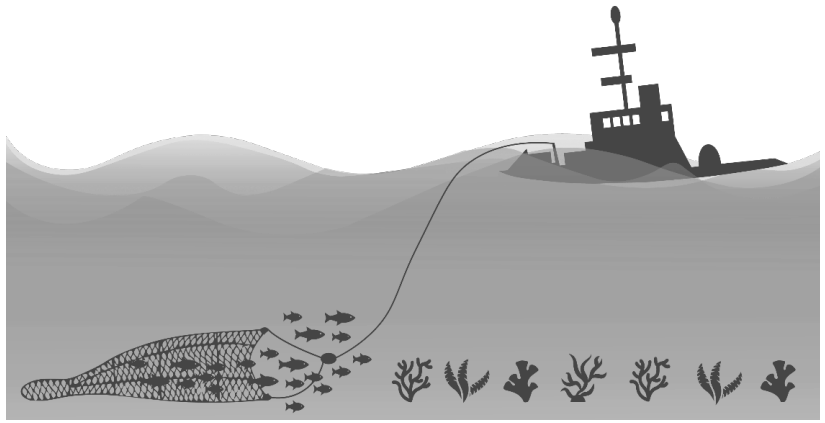
NIOZ status update

Karline Soetaert

16-17 April 2024 (Constanta, Romania)

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.

BENTHOS SENSITIVITY TO BOTTOM TRAWLING AND POTENTIAL RECOVERABILITY



Macrozoobenthos

- Dominant biomass
- Fuels the foodweb
- Major ecosystem functions on the sea floor

Activities within WP3 – NIOZ

BENTHOS SENSITIVITY TO BOTTOM TRAWLING AND POTENTIAL RECOVERABILITY

- External collaboration since 2021
  ICES Working Group on Fisheries Benthic Impact and Trade-offs (WGFBIT)

ICES International Council for the Exploration of the Sea

CIEM Conseil International pour l'Exploration de la Mer

Activities within WP3 – NIOZ

BENTHOS SENSITIVITY TO BOTTOM TRAWLING AND POTENTIAL RECOVERABILITY

- External collaboration since 2021
  ICES Working Group on Fisheries Benthic Impact and Trade-offs (WGFBIT)

- Olivier Beauchard
  Response & effect Trait data

ICES International Council for the Exploration of the Sea
CIEM Conseil International pour l'Exploration de la Mer

Trawling-induced change in benthic effect trait composition – A multiple case study

Olivier Beauchard[1*] Clare Bradshaw[2] Stefan Bolam[3] Justin Tiano[4] Clément Garcia[3] Emil De Borger[1,5]
Pascal Laffargue[6] Mats Blomqvist[7] Irini Tsikopoulou[8] Nadia K. Papadopoulou[8] Christopher J. Smith[8]
Jolien Claes[9] Karline Soetaert[1] Marija Sciberras[9]

[1] Department of Estuarine and Delta Systems, Netherlands Institute for Sea Research and Utrecht University, Yerseke, Netherlands
[2] Department of Ecology, Environment and Plant Sciences, Stockholm University, Stockholm, Sweden
[3] The Centre for Environment, Fisheries and Aquaculture Science, Lowestoft, United Kingdom
[4] Wageningen Marine Research, Wageningen University & Research, IJmuiden, Netherlands
[5] Ghent University, Department of Biology, Marine Biology Research Group, Ghent, Belgium
[6] Unité mixte de recherche Dynamique et durabilité des écosystèmes (DECOD), Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER), Laboratoire Ecologie et Modèles pour l'Halieutique (EMH), Nantes, France
[7] Hafok AB, Stenhamra, Sweden
[8] Hellenic Centre for Marine Research, Institute of Marine Biological Resources and Inland Waters, Heraklion, Crete, Greece
[9] The Lyell Centre, Heriot-Watt University, Edinburgh, United Kingdom

Introduction: The importance of the response-effect trait dichotomy in marine benthic ecology has garnered recent attention. Response traits, characterising species responses to environmental variations, have been a dominant focus in the development of ecological indicators for ecosystem health assessment. In contrast,

BENTHOS SENSITIVITY TO BOTTOM TRAWLING AND POTENTIAL RECOVERABILITY

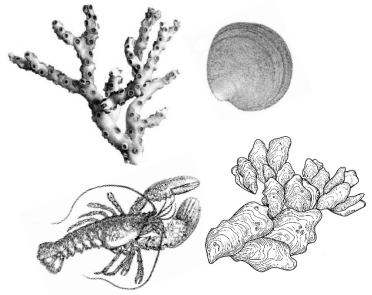
Impact depends on 2 processes

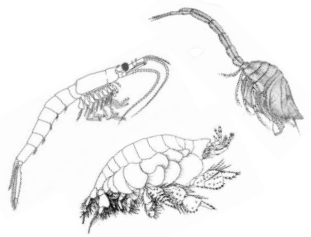
Population growth

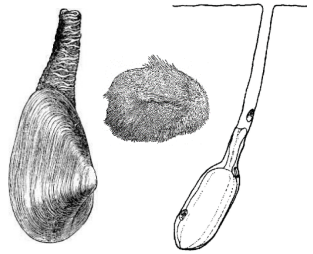
– +

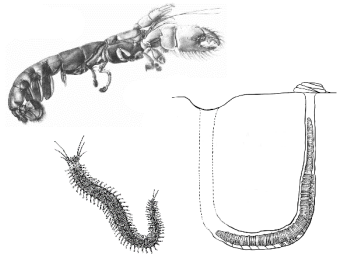
Burying depth

– +









BENTHOS SENSITIVITY TO BOTTOM TRAWLING AND POTENTIAL RECOVERABILITY

Application of the «depletion-recovery approach» (Pitcher et al. 2016)

- *r* (intrinsic rate of natural increase) as a function of life span
- *K* (carrying capacity) as initial abundance
- Implementation of burrowing depth

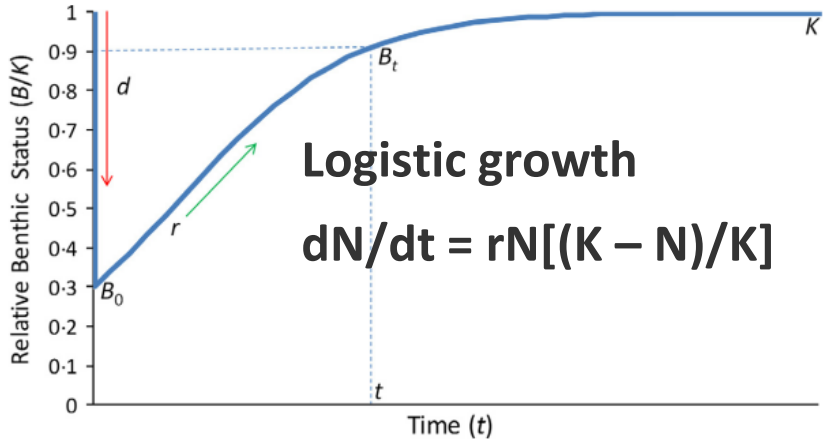


Fig. 1. Schematic representation of a trawl impact and recovery experiment, with changes in abundance (B) as a proportion of carrying capacity (K) described with the logistic equation. Abundance is depleted from K to B_0 by experimental trawling at time 0 depending on depletion rate d and number of trawls T, i.e. $B_0 = (1 - d)^T$. Recovery follows at rate r so that abundance is B_t after time t, eventually approaching K asymptotically.

BENTHOS SENSITIVITY TO BOTTOM TRAWLING AND POTENTIAL RECOVERABILITY

Application of the «depletion-recovery approach» (Pitcher et al. 2016)

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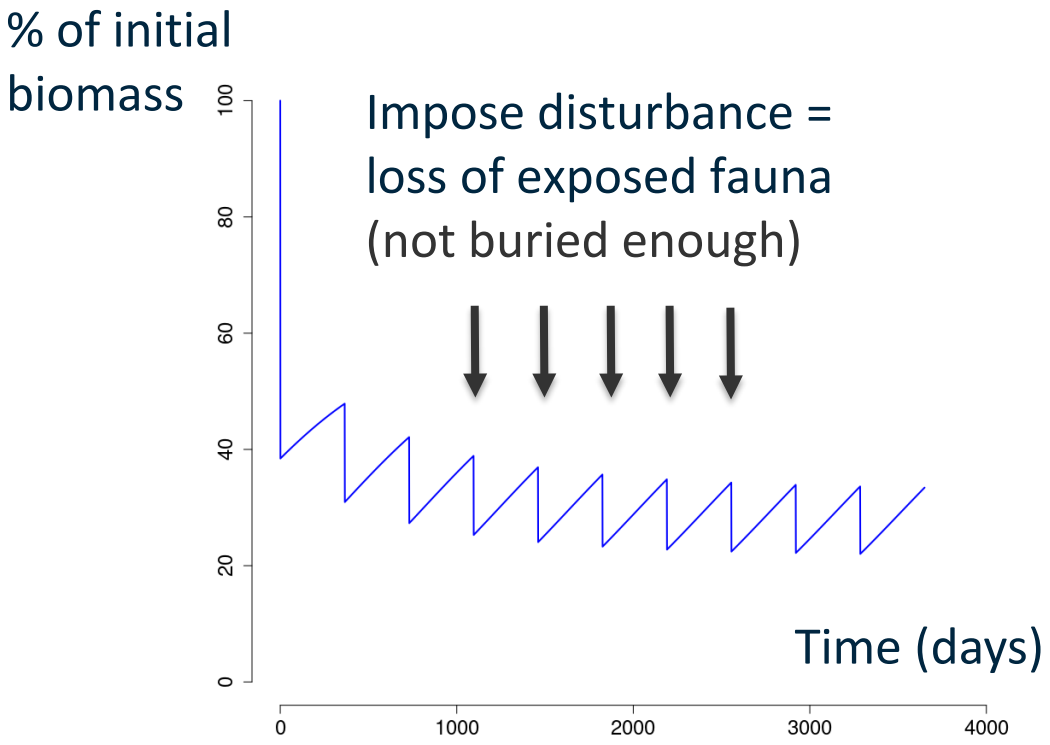


Activities within WP3 – NIOZ

BENTHOS SENSITIVITY TO BOTTOM TRAWLING AND POTENTIAL RECOVERABILITY

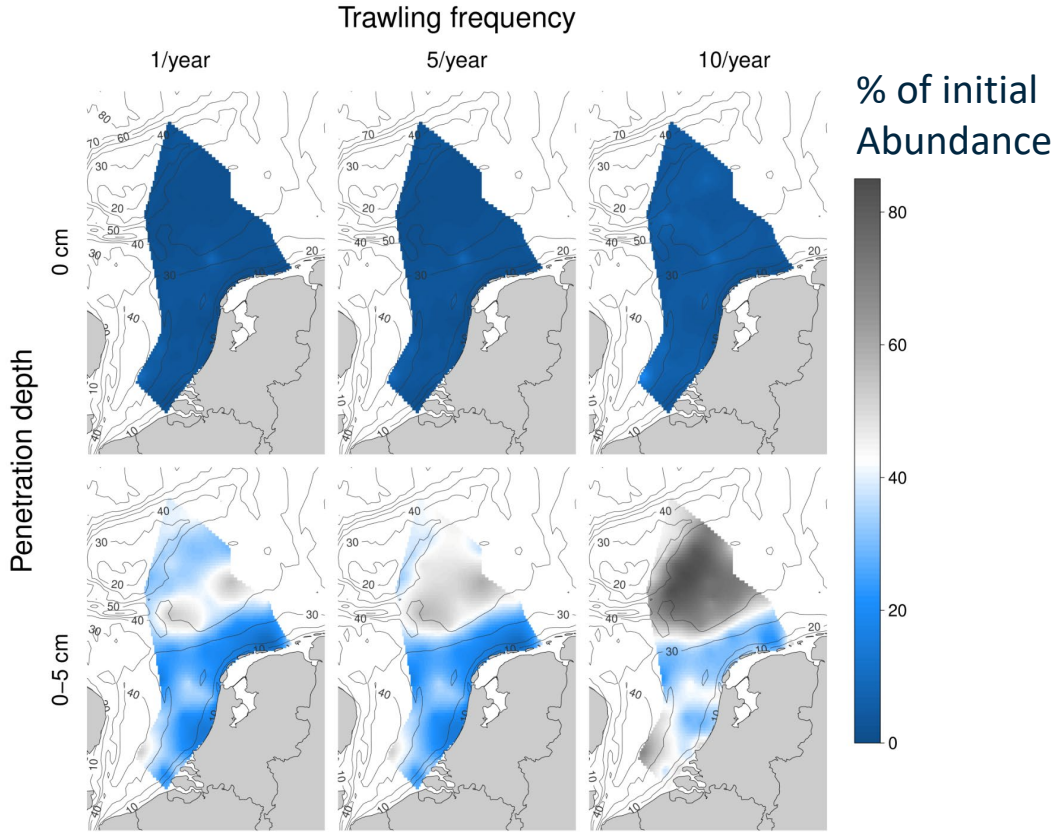
Application of the «depletion-recovery approach» (Pitcher et al. 2016)

Application to North Sea data sets
Delivery of

- Occurrence data
- Trait data
- R Scripts

Predictions for

- Total abundance
- Bioturbation
- Irrigation



Biology

EMODnet Biology annual meeting

IODE - EMODnet Biology Use Cases WP4 (T4.1.5)

Lisa Benedetti, OBIS Secretariat, IODE, UNESCO-IOC

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP4 (OBIS, IODE)

EMODnet Biology Use Cases (T4.1.5) – Publication of 4 Use Cases

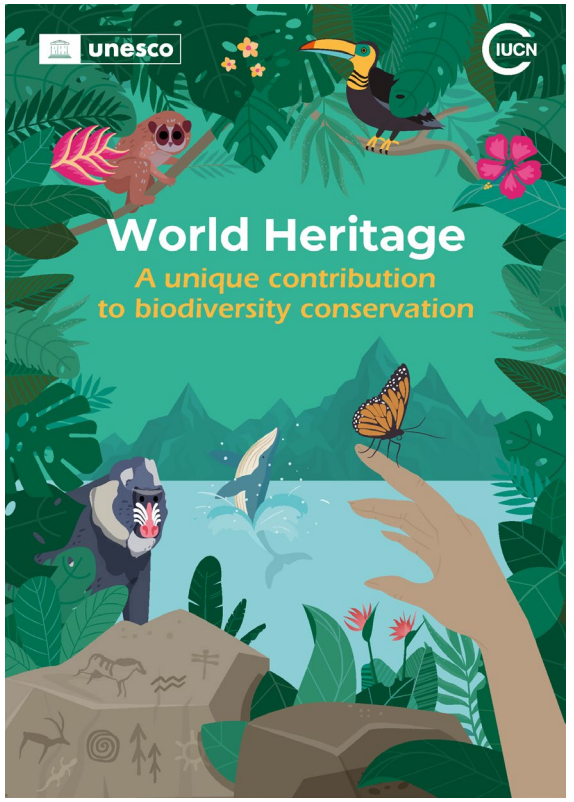
1. **10 Nov 2023 (completed)**

Facts and figures on the importance of UNESCO World Heritage Marine Sites for marine biodiversity

Users: UNESCO, IUCN, VLIZ

Summary: Access to EMODnet Biology data, products and services contributed to providing insights and generating a global picture of species richness in marine areas under the UNESCO World Heritage Sites.

Link: https://emodnet.ec.europa.eu/en/use-case/facts-and-figures-importance-unesco-world-heritage-marine-sites-marine-biodiversity



Activities within WP4 (OBIS, IODE)

EMODnet Biology Use Cases x 4 (T4.1.5)

2. 10 May 2024 (under development)

EU Horizon MARCO-BOLO and MPA Europe projects are developing a use case where EMODnet Biology data, products and services are being used to produce habitat suitability/distribution models with a focus on the harbour porpoise.

3. 10 Nov 2024

4. 10 May 2025

Options for next use cases to demonstrate usefulness of EMODnet data, products, & services:

- **EMODnet seagrass coverage data product – reporting to MSFD**
- **ICES joint cetacean programme – value of publishing data via EMODnet, tied to a product**
- **Black Sea project**
- **Windfarms**

Feel free to suggest others during Q&A or after: l.benedetti@unesco.org / joana.beja@vliz.be

Example use case:
https://emodnet.ec.europa.eu/en/use-case/distribution-reef-building-benthos-north-sea

Biology

EMODnet Biology annual meeting

University of Bremen (PANGAEA) status update

Astrid Wittmann, University of Bremen

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2

Converting from PANGAEA to EurOBIS data model

- Contribute five published PANGAEA datasets, ca. 287,000 records in total
  - Four datasets on Atlantic top predators, ca. 286,000 records
  - One global dataset on seagrasses, ca. 1000 records
- Metadata (eml.xmls) submitted
- Semi-automatic approach using pangaeapy Darwin Core Archive exporter previously developed for GBIF
- PANGAEA uses
  - WoRMS taxonomy
  - BODC NERC device categories L05 and L22
- Challenges
  - Replacing common names with taxonomic terms
  - Manual assignment of other BODC terms in EMOF table

Biology

EMODnet Biology annual meeting

SMHI status update

Anders Torstensson, Mikael Hedblom, Lisa Sundqvist, SMHI

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP2

Progress update on the mobilization of data from SHARK (SMHI)

Description of dataset	records	Coverage	Status	On GBIF
SHARK - National and regional marine environmental monitoring of Picoplankton in Sweden since 2002	2 921	Baltic Sea and Skagerrak	Update	2024-01-17
SHARK - National environmental monitoring of Grey seal in Sweden since 1989	26 685	Baltic Sea and Skagerrak	Update	
SHARK - National environmental monitoring of Harbour seal in Sweden since 1988	21 708	Baltic Sea and Skagerrak	Update	
SHARK - National marine environmental monitoring of Bacterioplankton in Sweden since 1989	1 864	Baltic Sea	Update	2023-06-21
SHARK - National marine environmental monitoring of Phytoplankton in Sweden since 1983	12 799	Baltic Sea and Skagerrak	Update	
SHARK - National marine environmental monitoring of Ringed seal in Sweden since 1995	23 621	Baltic Sea	Update	
SHARK - National marine environmental monitoring of Zoobenthos in Sweden since 1971	41 538	Baltic Sea and Skagerrak	Update	
SHARK - National marine environmental monitoring of zooplankton in Sweden since 1979	6 659	Baltic Sea and Skagerrak	Update	2024-03-28
SHARK - Regional marine environmental monitoring, recipient control and monitoring projects of Phytoplankton in Sweden since 1985	21 128	Baltic Sea and Skagerrak	Update	
SHARK - Regional marine environmental monitoring, recipient control and monitoring projects of Zoobenthos in Sweden since 1972	63 866	Baltic Sea and Skagerrak	Update	
SHARK - Regional marine environmental monitoring and monitoring projects of Epibenthos in Sweden since 1994	73 383	Baltic Sea and Skagerrak	Update	2024-04-12
SHARK - National marine environmental monitoring of Epibenthos in Sweden since 1992	54 811	Baltic Sea and Skagerrak	Update	2024-04-12
SHARK - National environmental monitoring of Harbour Porpoise in Sweden since 2015	6 509	Baltic Sea	New	2024-02-15
SHARK - National environmental monitoring of Jellyfish in Sweden since 2007	352	Baltic Sea and Skagerrak	New	2024-02-07

Metadata for all datasets have been updated during Phase V

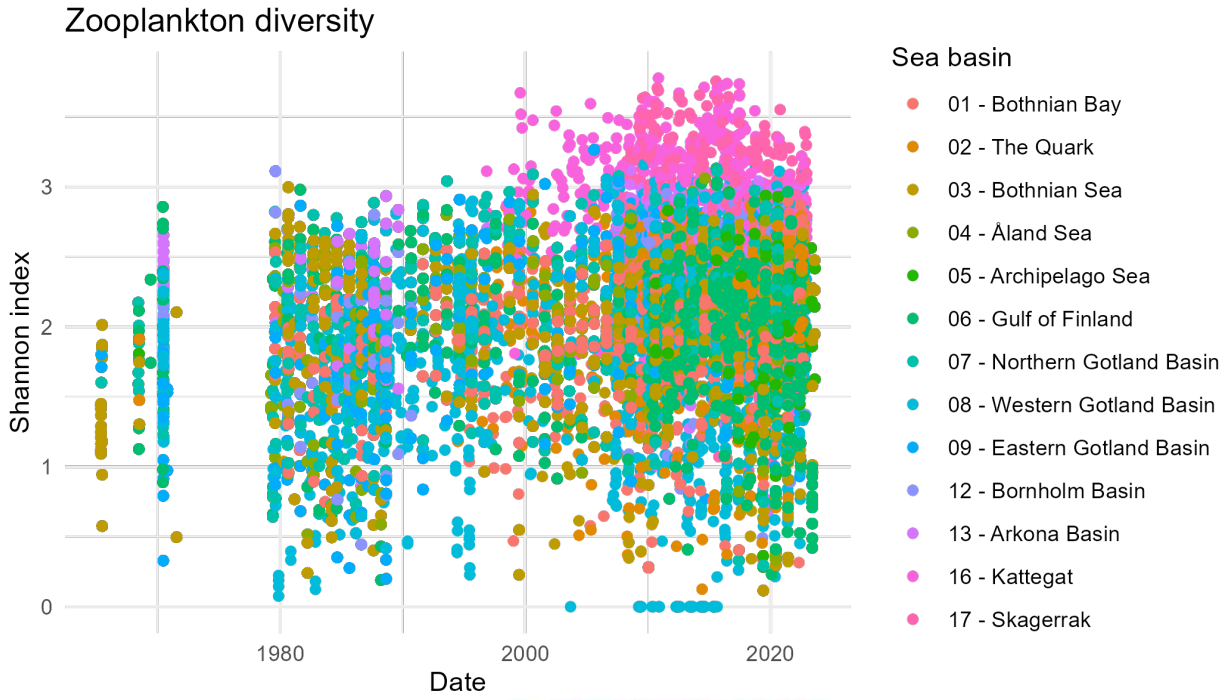
Complete
No new data
In progress

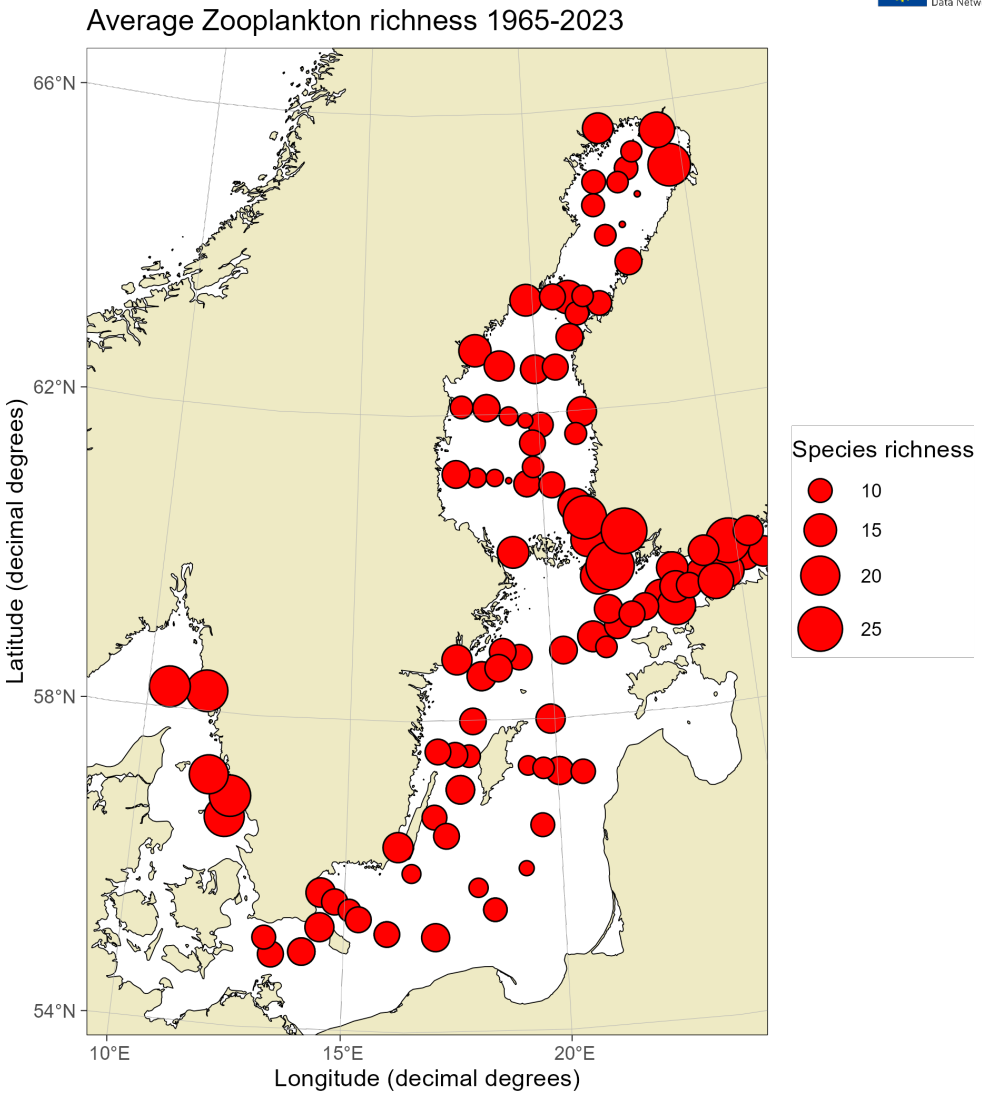
Activities within WP3

Zooplankton alpha diversity in the greater Baltic Sea area

Datasets:

- SHARK - National marine environmental monitoring of zooplankton in Sweden since 1979
- Finnish Baltic Sea zooplankton monitoring





Biology

EMODnet Biology annual meeting

Finnish Environment Institute (Syke) status update

Sirpa Lehtinen & Henrik Nygård, Syke

Suomen ympäristökeskus
Finlands miljöcentral
Finnish Environment Institute

16-17 April 2025 (Constanta, Romania)

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.

Activities within WP2

Dataset updates in Phase V

- Zoobenthic data, dataset ”Finnish Baltic Sea benthic monitoring, POHJE database”
  - Update submitted in January 2024
    - Temporal coverage: 1964-2023, Geographical coverage: Baltic Sea
    - Now including >124 000 occurrences, >386 000 eMoF records
- Zooplankton data, dataset ”Finnish Baltic Sea zooplankton monitoring”
  - Update submitted in February 2024
    - Temporal coverage: 1964-2023, Geographical coverage: Baltic Sea
    - Now including >59 000 occurrences, >390 000 eMoF records
    - ZPLANK database & API finalised during 2023 → easier to access data
- Phytoplankton data, dataset ”Finnish Baltic Sea phytoplankton monitoring, KPLANK database”
  - Phase V update not yet submitted
    - Temporal coverage: currently 1963-2021 (until 2023 when updated), Geographic coverage: Baltic Sea
    - Currently including >296 000 occurrences, >918 000 eMoF records
    - ~15 000-20 000 new occurrence records foreseen when updated

Activities within WP4

Uptake and Outreach

- Syke functions as contact point towards HELCOM (Baltic Sea RSC)

Tasks (so far):

- Gathering contact information and contacting relevant working groups and expert groups in HELCOM and the Baltic Sea region
- Participated in preparing the questionnaire to RSCs
- Participated in RSC workshop preparations
- Support task leads with deliverables

Biology

EMODnet Biology annual meeting

University of Sheffield status update

Tom Webb, TUOS

16-17 April 2024 (Constanta, Romania)

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.

Activities within WP4

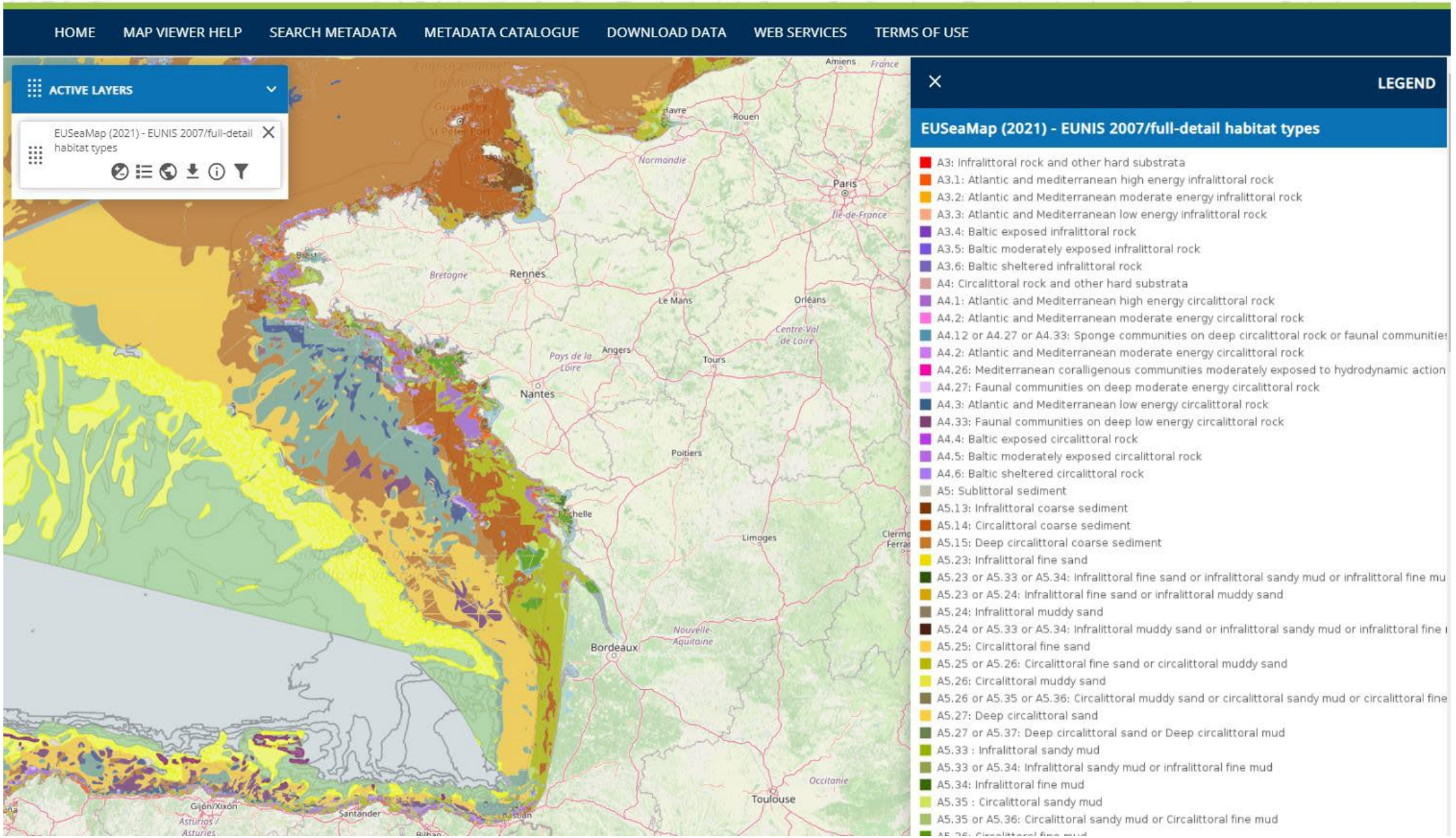
Interactions with RSC

- Participation in WP3 / 4 Internal Workshop September 2023
- Participation in EMODnet / RSC workshop April 2024

Activities within WP3

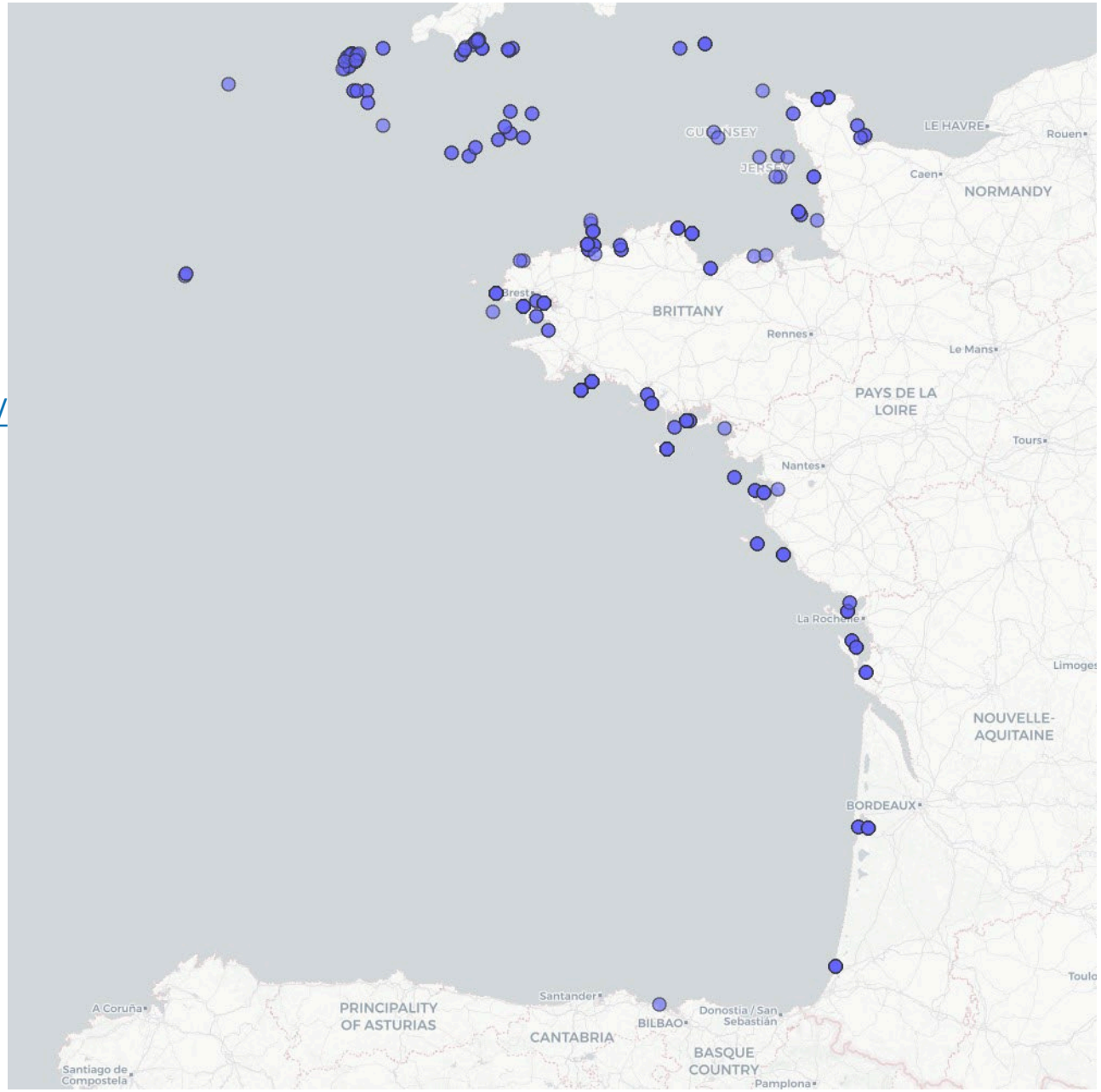
Seabed habitats and benthic invertebrates: concept

- In Phase III we developed a product that linked benthic species presence-absence data to seabed habitat maps
- This resulted in summaries of habitat affinities for >3200 benthic taxa
- Subsequent discussions with EMODnet Seabed Habitats revealed a desire to reverse this process
- This would provide information on the benthic species composition of different habitat types
- I will develop this product in the current Phase



EUSeaMap 2021 in EUNIS 2007 – Bay of Biscay, France. ©EMODnet

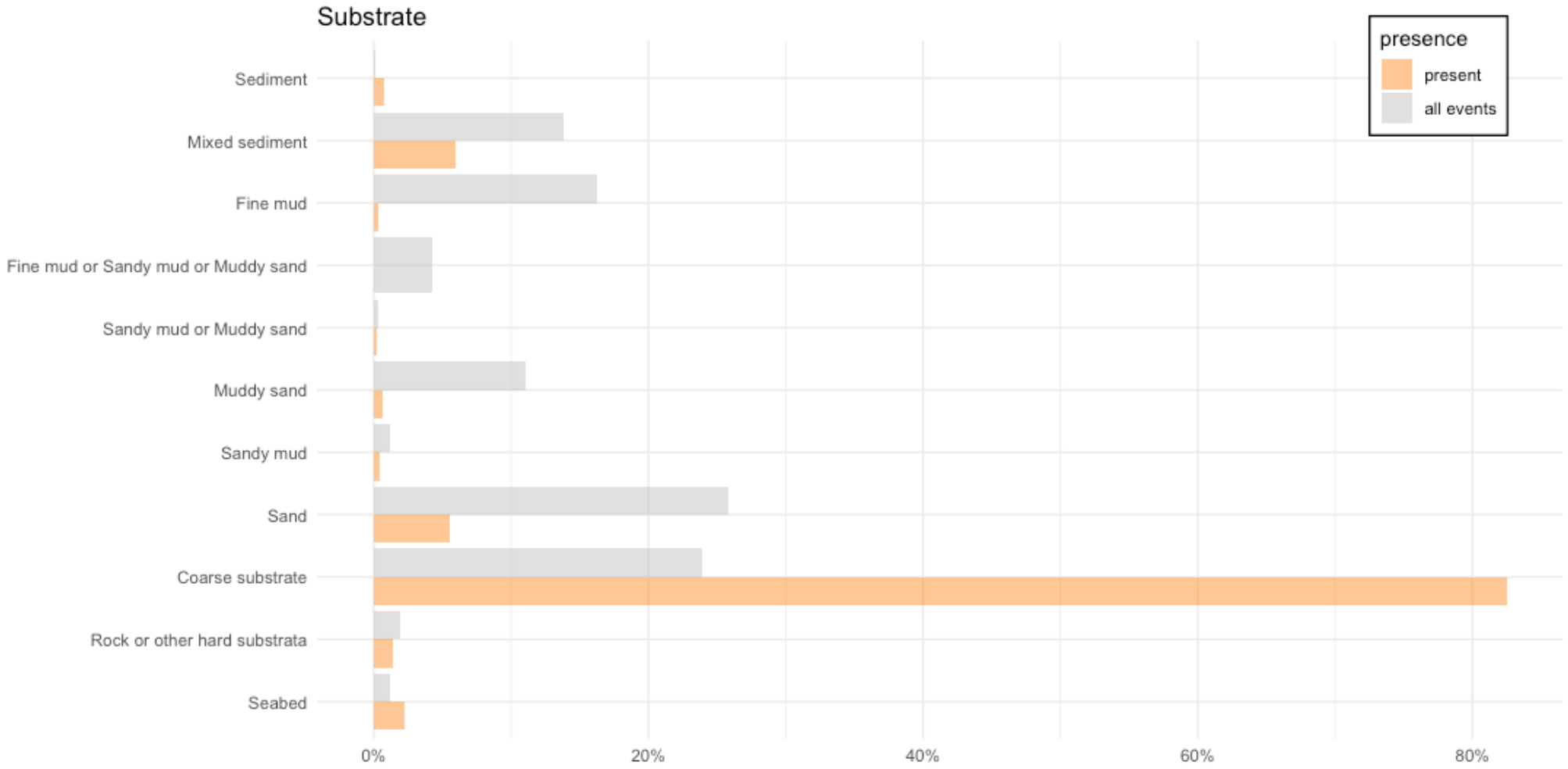
Amphipholis squamata source: https://www.marlin.ac.uk/species/detail/2071
Copyright: Marco Faasse



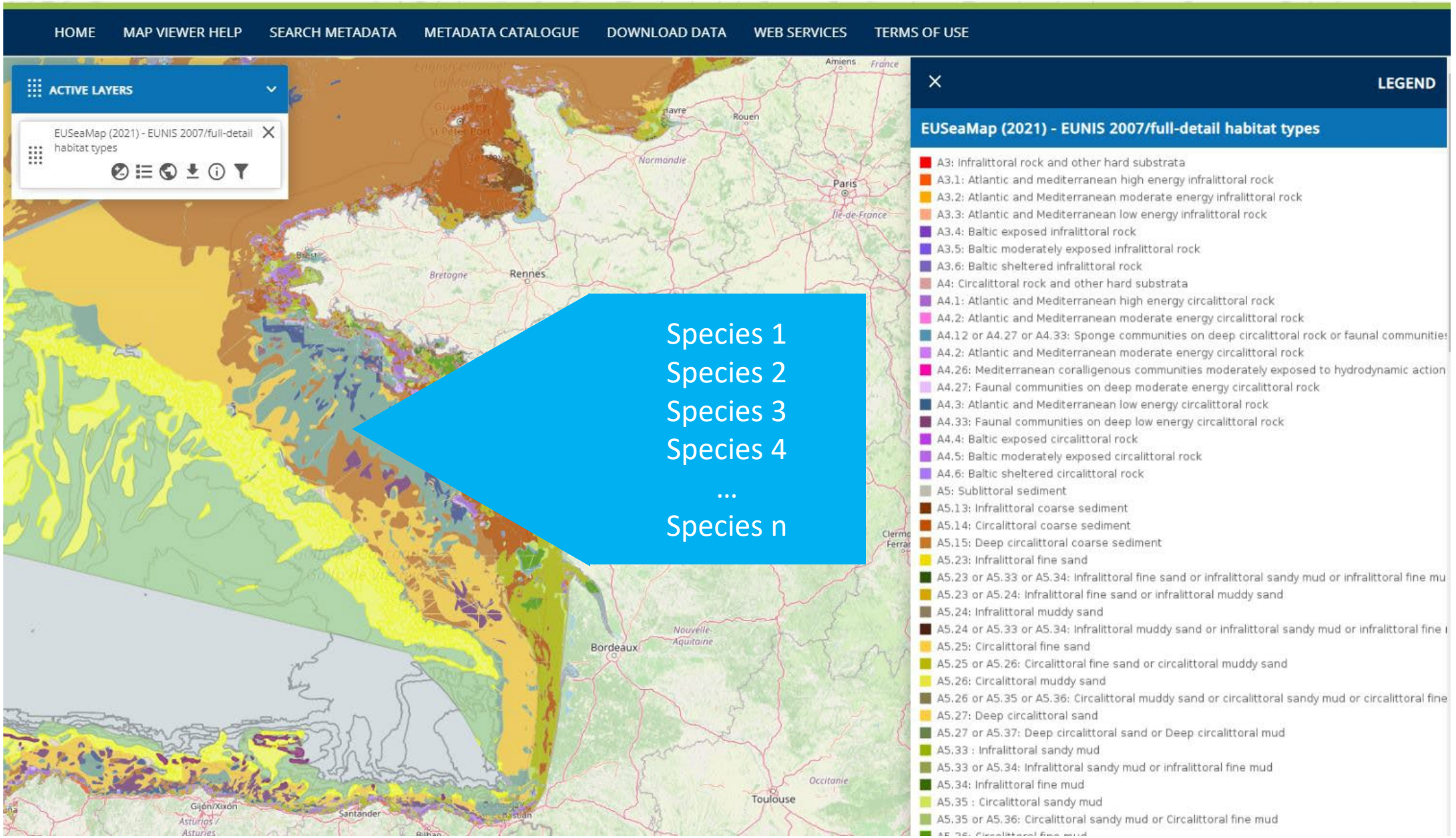
Occurrences of *Amphipholis squamata* from EurOBIS

Amphipholis squamata (Aphia ID: 125064)

6304 occurrences matched to habitat
Habitat preference from Biotic: Gravel / shingle



Amphipholis squamata habitat affinities



EUSeaMap 2021 in EUNIS 2007 – Bay of Biscay, France. ©EMODnet

Activities within WP3

Seabed habitats and benthic invertebrates: progress

- ✓ Design the product architecture – full product (spatial dataset) + summary map(s)
- ❑ Update Phase III code to use newer R packages (e.g. `raster` → `terra`)
- ❑ Update access to seabed habitat maps (e.g. using `EMODnetWFS`) and benthic presence-absence data
- ❑ Create and publish summary maps of species richness by habitat polygon
- ❑ Create and publish full data product – due end of 2024

5 Main topics discussed

WP2 Data Management

Clarified that data would ideally be delivered asap so WP3 can pick it up, but in general WP3 can work with older data and later improve with more data.

Report on the difficulty to grab cetacean migration data: either does not exist or relevant stakeholders do not want / are not ready to share. ICES migration data (Joint Cetacean Programme) will flow to EMODnet Biology but we must build data products showcasing the effects on migrating patterns due to coastal infrastructures.

Currently omics data are being publish in the EurOBIS IPT where they can be harvested by OBIS and GBIF. Inclusion in the database and publication via EMODnet Biology is pending database developments.

WP3 Data products

The complexity of the products creation is now always visible to users/stakeholders. Previously whenever a product was published we were releasing news message/item. We will/should keep doing it. Templates on how to make data products GitHub repos exist. We need to make that visible. The paper we are working on should explain some of the complexity. Although it still misses on showing statistics on how much data is used to generate data products. We should showcase these statistics as well.

There was a suggestion to explore the use of the Biodiversity Data Journal (BDJ) to publish data papers on the creation of the data products.

WP4 Update and Outreach

For the November workshop there was a suggestion to create a matrix with the Horizon/Mission Ocean projects, obtain contacts for the PI but also data people/data Work Package. The idea is to use this workshop to provide some training on how to get the data ready for submission to EMODnet Biology

WP5 Technical infrastructure

Are we working on interoperability with Bio ODV? Yes - MARIS is one of the partners - we republish through EMODnet Biology - lot of work for reformatting to DwC, some steps must be manual. This process is done by VLIZ

Can we add statistics on abundance and biomass progress? Alongside the stats for occurrence records we are able to extract this information, yes.

Several partners requested data usage information. We currently cannot provide anything from the EMODnet Biology side, but we might be able to extract this information from OBIS, which is a portal which tends to have a higher usage than the EMODnet one.