

European Pavilion
**Digital
Ocean**
Nice | France
2 - 13 JUNE 2025

The European Ocean Observing System (EOOS) Framework within the ocean observing landscape

9 June 2025



Inspire
the EU and policies



Sheila Heymans

European Marine Board



Agenda



European
Ocean
Observing
System



| | |
|-------------|--|
| 15:05-15:10 | Inga Lips, Outgoing EOOS Chair: The European Ocean Observing System (EOOS) Framework within the ocean observing landscape |
| 15:10-15:15 | Fabrizio Dortenzio, CRNS, FrOOS: National coordination and integration at the French Ocean Observing System |
| 15:15-15:40 | Moderated discussion: re ocean observations fit for the implementation of the EU Oceans Pact? |
| | Inga Lips, Outgoing EOOS Chair |
| | Fabrizio Dortenzio, CRNS, FrOOS |
| | Zoi Konstantinou, DG MARE |
| 15:40 | Closing remarks |

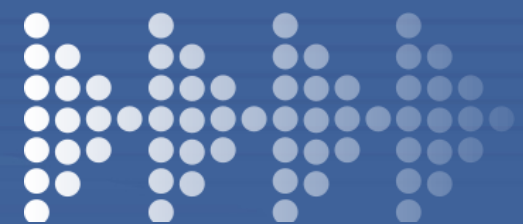


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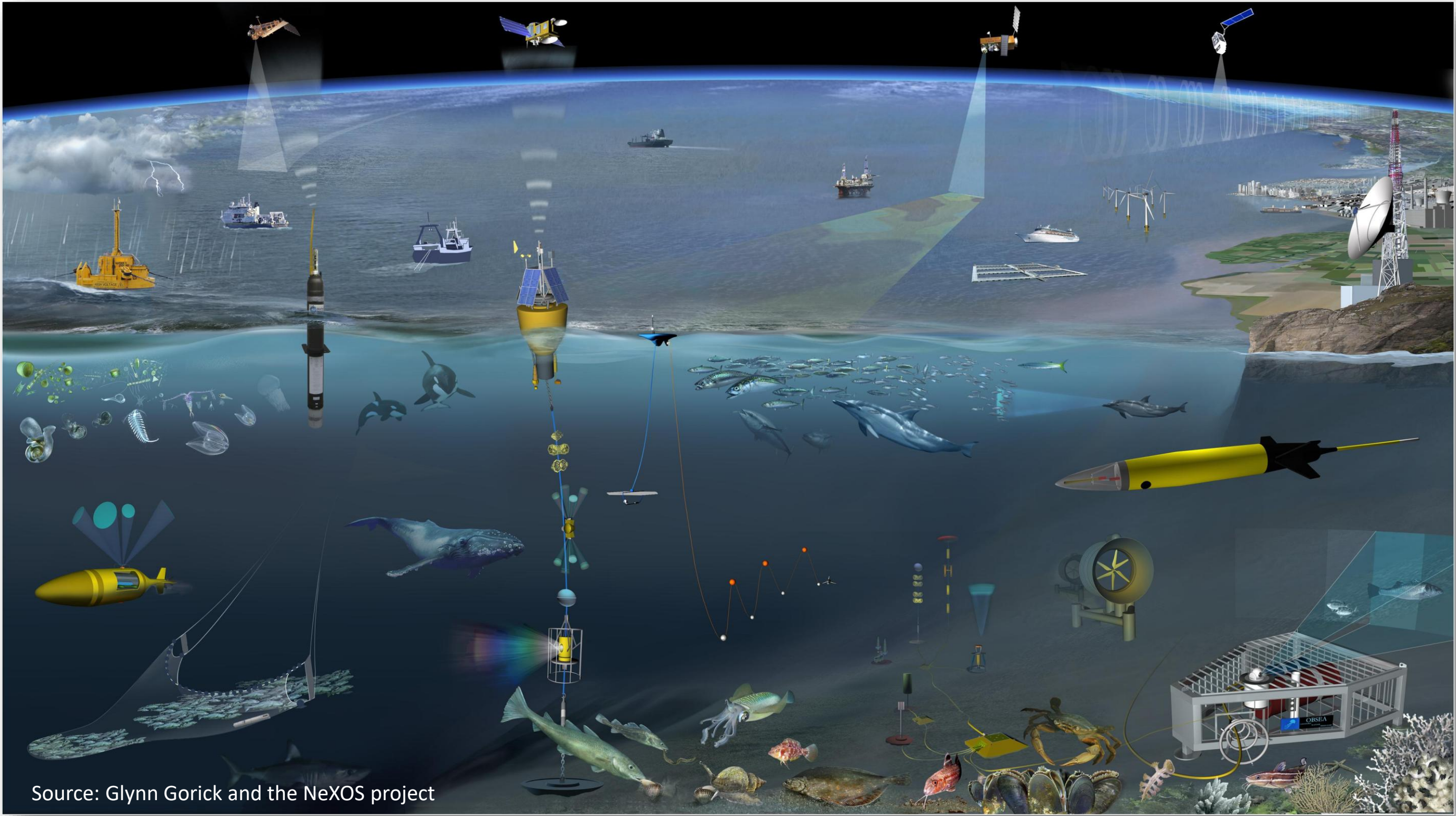


Lips, Inga

EOOS / L4M Consulting Ltd.



Ocean Observations



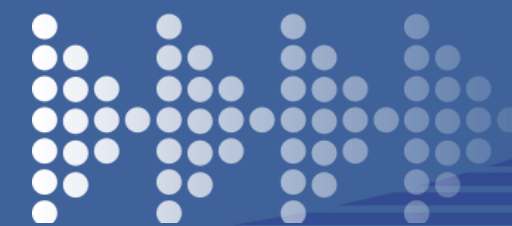
Source: Glynn Gorick and the NeXOS project



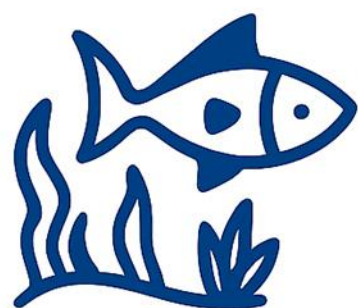
Ocean Observations - Impact



European
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Blue Economy



Fisheries Management

Monitoring fish stocks and habitats



Maritime Navigation

Providing real-time data on ocean conditions



Renewable Energy

Identifying suitable sites for offshore wind and wave energy installations



Coastal Development

Assessing impacts of sea-level rise and erosion

Assessment and Forecasts



Weather Forecasting

Improving the accuracy of weather and storm predictions



Climate Monitoring

Tracking changes in ocean temperature, salinity, and current to understand climate variability



Marine Ecosystem Health

Assessing the state of marine biodiversity and habitats



Early warning systems for natural hazards

Protect human health

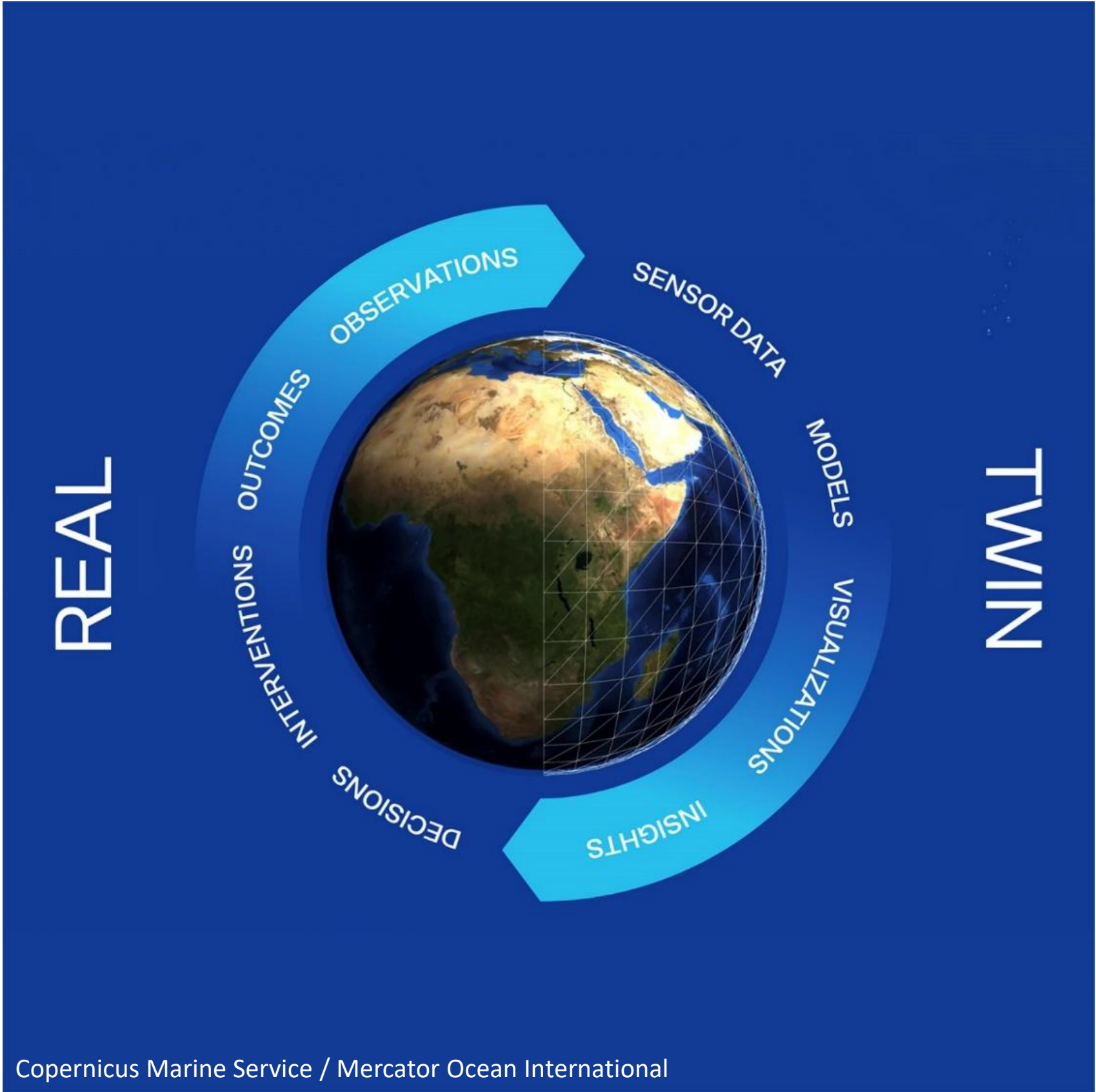
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Ocean Observations for DTO



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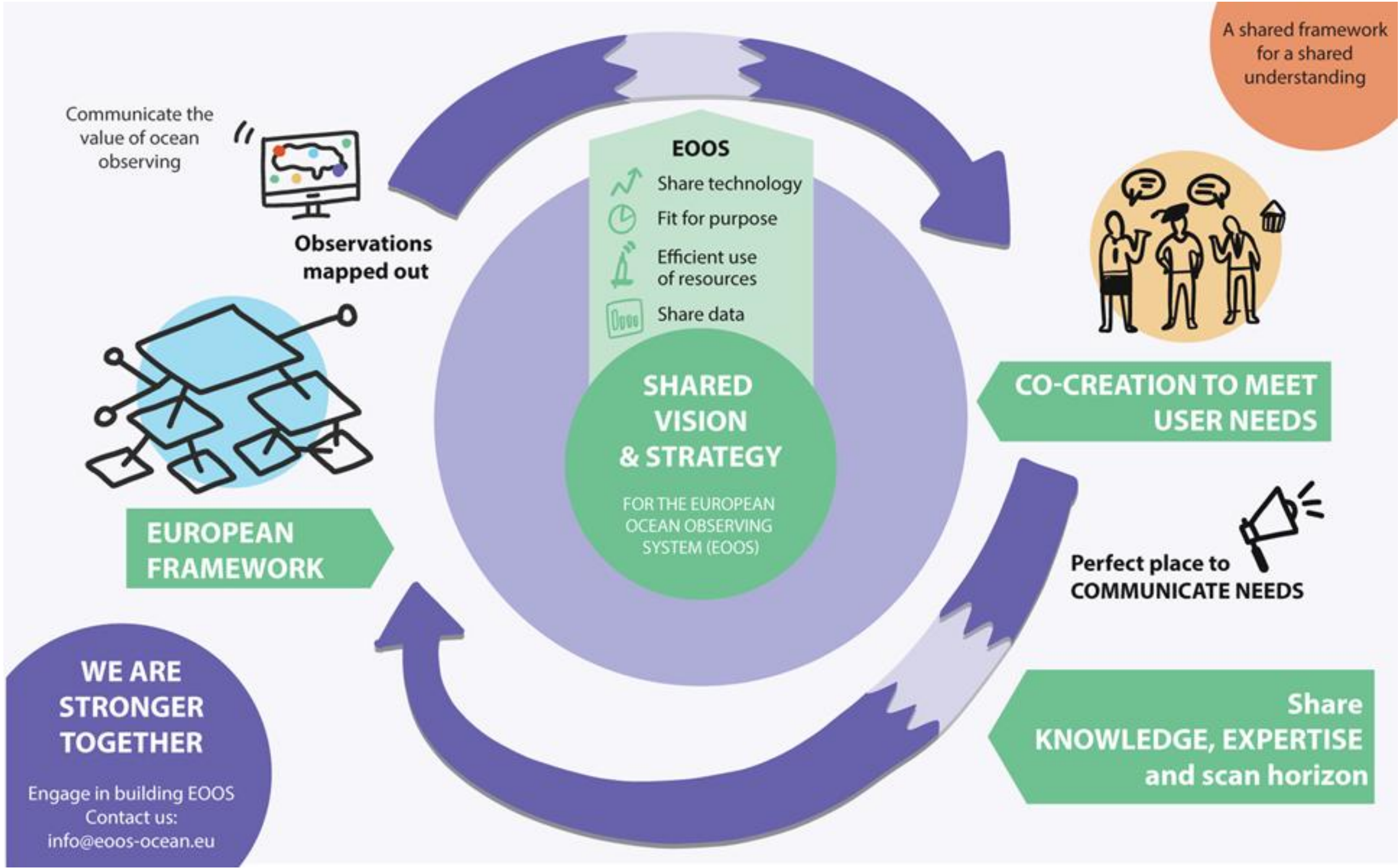
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An icon showing a hand holding a shield with a checkmark inside, symbolizing protection, security, or successful implementation.

European Ocean Observing System Framework



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European Ocean Observing System - EOOS



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The EOOS aims to enhance coordination and collaboration in Europe's ocean observing efforts

Better coordinated observing efforts



Maximise the value and benefit of ocean observations at the national, regional, European and Global levels



SUSTAINED ALIGNMENT OF NATIONAL EFFORTS AND ACTIVITIES WILL STRENGTHEN THE OCEAN OBSERVATION VALUE CHAIN

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Towards EOOS Implementation!

“Individually, we are one drop, but together, we are an ocean.”

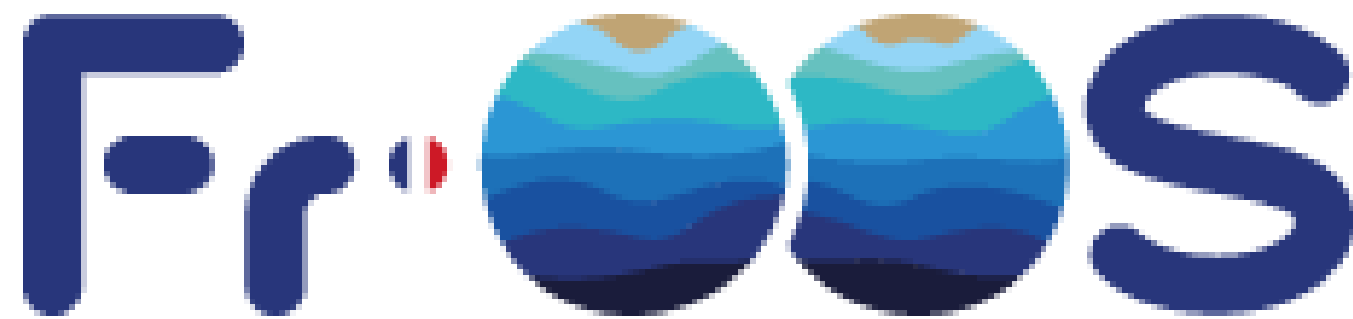
Ryunosuke Satoro

<https://www.eoos-ocean.eu/>





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Fabrizio D'Ortenzio

CNRS, FRANCE

&

The Fr-OOS executive board
The Fr-OOS Community and
colleagues



Introduction and context

"Observation is the essential foundation of all scientific knowledge »
— Pierre-Simone Laplace

Historically, **ocean observation** has been a **core activity** of the French oceanographic research community.

French oceanographers have been — and continue to be — strongly engaged in:

- the **collection** of in situ data, its long-term storage in high-quality **databases**, and its subsequent valorization and **scientific exploitation**;
- building synergies and scientific collaboration with the **remote sensing** and **modelling** communities;
- the establishment and consolidation of **European Research Infrastructures** for marine sciences;
- the participation to the **international** and **global structures of coordination**

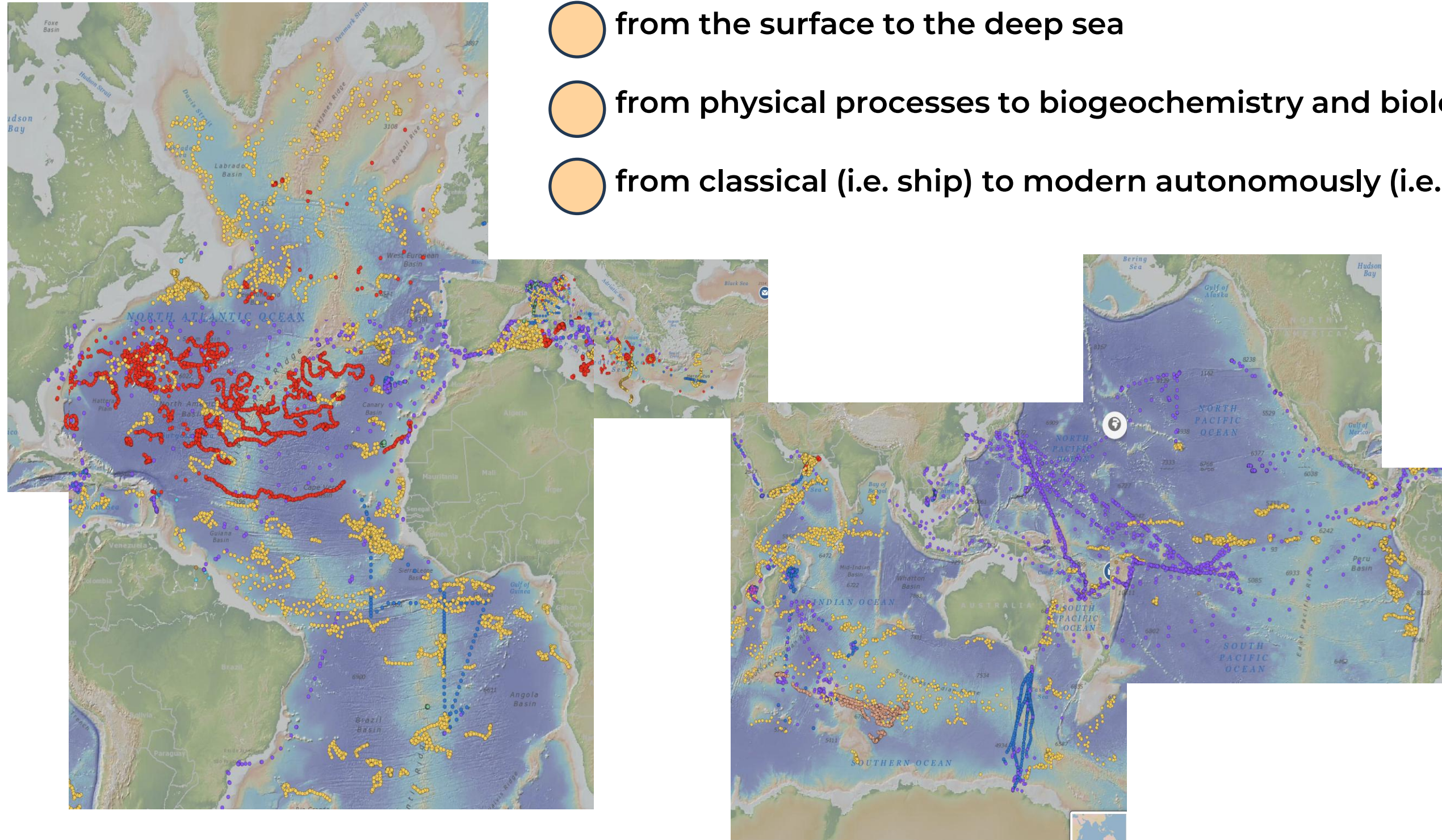


The long term ocean observation in France



The present day French Ocean observation system encompass a wide range of themes/regions/EOVs

- from the open sea to the coastline
- from the surface to the deep sea
- from physical processes to biogeochemistry and biology
- from classical (i.e. ship) to modern autonomously (i.e. gliders) platforms



The French Ocean Observing System

The **French Ocean Observing System** was established in 2023 to **support** this dynamic, **strengthen** individual components, and **promote** cross-component interactions.



French node of the Euro-Argo
ERIC and Argo international
program



French node of ERIC EMSO



Tide gauge network: sea
level observations



National coastal observatory for
in situ sea states

Coastal and littoral
research
infrastructure



Open ocean in-situ



Meteorologicals
buoys



Environmental and
biological resources
monitoring networks



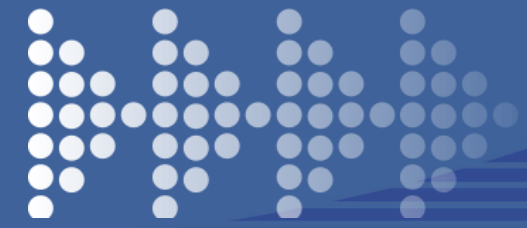
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The French Ocean Observing System

Fr-OOS sets four main **ambition**:

- **STRENGTHEN** national observation systems to ensure their scientific and technological excellence, guarantee their relevance to scientific and societal expectations, enhance their resilience to hazards and future changes, and contribute to European and international systems;
- **INNOVATE**, acting on two levels: first, by continuously adapting existing networks to technological advances and new scientific and societal challenges; second, by expanding their scope of action, whether through integrating new parameters, developing more efficient sampling strategies, or extending coverage to different oceanic regions;
- **REINFORCE THE ENTIRE VALUE CHAIN** of ocean observation, from data acquisition to transforming data into actionable knowledge for decision-making;
- **RAISE AWARENESS OF THE IMPORTANCE OF OCEAN OBSERVATION**, both among decision-makers and the general public.



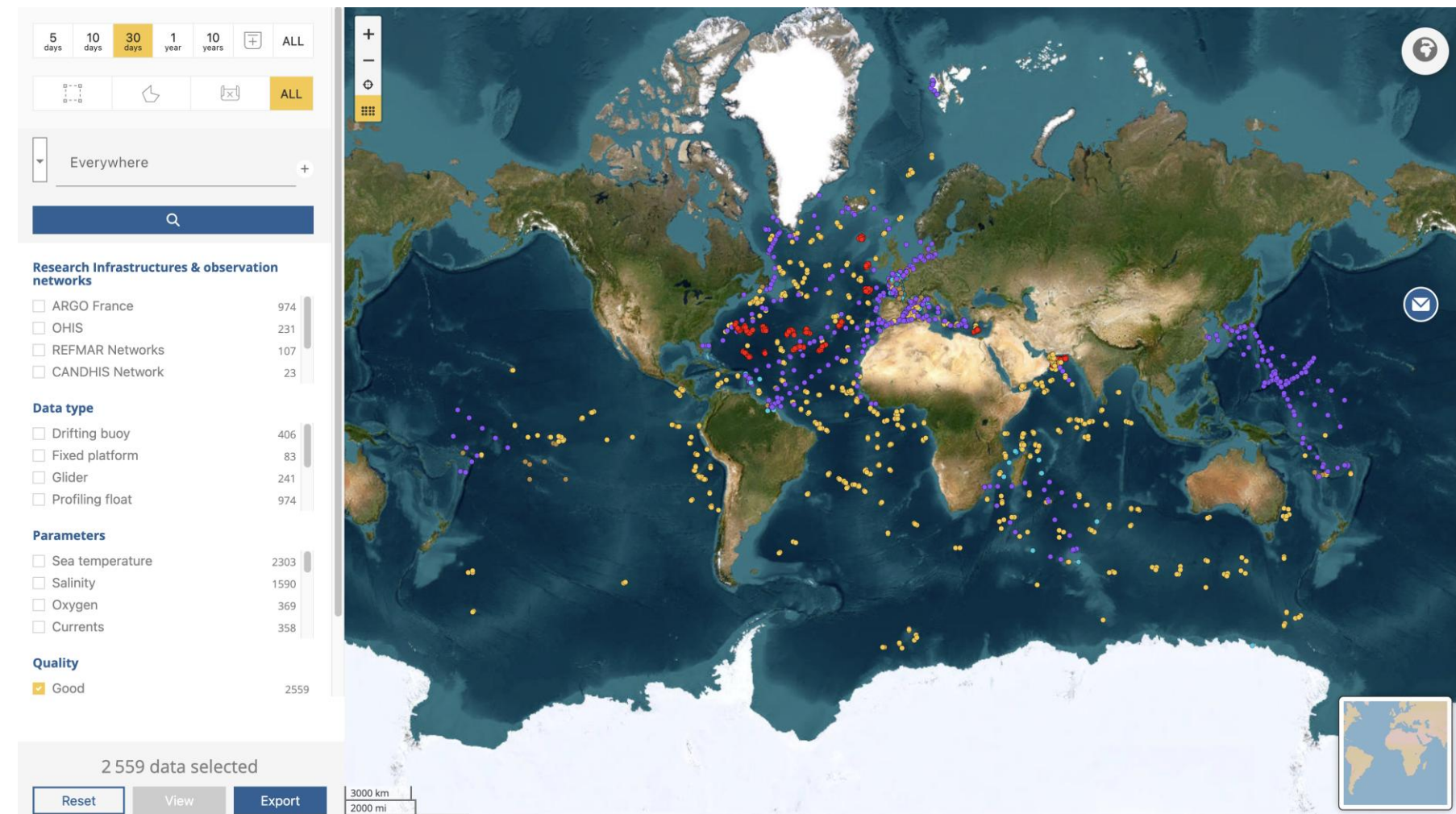
The French Ocean Observing System

Two important **2025 deliverables**:



A document for the **national strategy** of the ocean observation

A Data **DashBoard**



The French Ocean Observing System

Two important **events around Fr-OOS @ UNOC:**



**Observing the Ocean : The role of France
with the French Ocean Observing
System (Fr-OOS)**

Jun 4, 2025 – 04:30 pm - 6:00 PM

INSPIRE Area

Monitoring

Online

Onsite

Last week at the Digital
Pavillon @ Baleine

10th Juin 6pm at
Villefranche-sur-mer



SIDE-EVENTS

STATION IMEV

TOWARDS A GLOBAL, SUSTAINABLE OCEAN OBSERVATION SYSTEM SERVING SOCIO-ECOSYSTEMS

10-06-25 18:00

This event addresses the urgent need for integrated ocean observing systems to assess the impacts of...

biodiversity

climate
change

excess
CO₂

excess
heat

extreme
events

marine
ecosystems

socio-
ecosystems

weather



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Thank for you attention

<https://www.froos.fr>

<https://data-selection.odatis-ocean.fr/froos>

Ifremer



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Fraternité*



IRD
Institut de Recherche
pour le Développement
FRANCE



SHOM
L'océan en référence





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Moderated discussion on the coordination of ocean observations in Europe and EOOS is fit for the implementation of the EU Oceans Pact



Inga LIPS

EOOS / L4M Consulting Ltd.



Zoi KONSTANTINO

DG MARE



Pierre-Yves Le TRAON

Mercator Ocean International





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