

# COPERNICUS MARINE 8<sup>th</sup> GENERAL ASSEMBLY

## ● International landscape

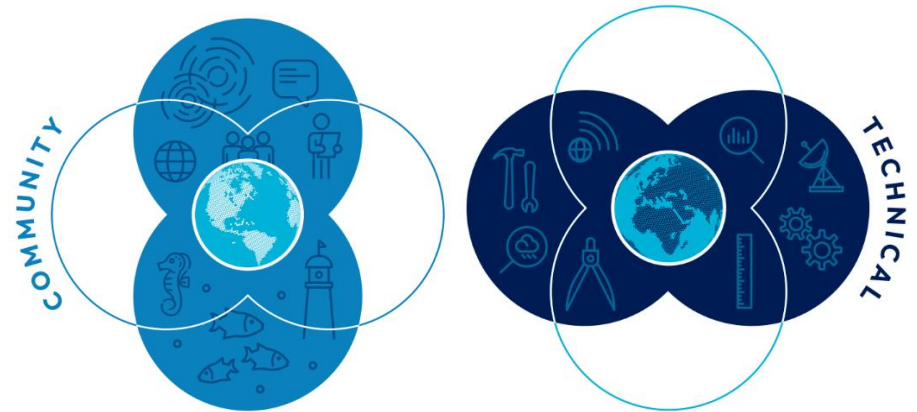
Enrique Alvarez Fanjul

Marie Drevillon

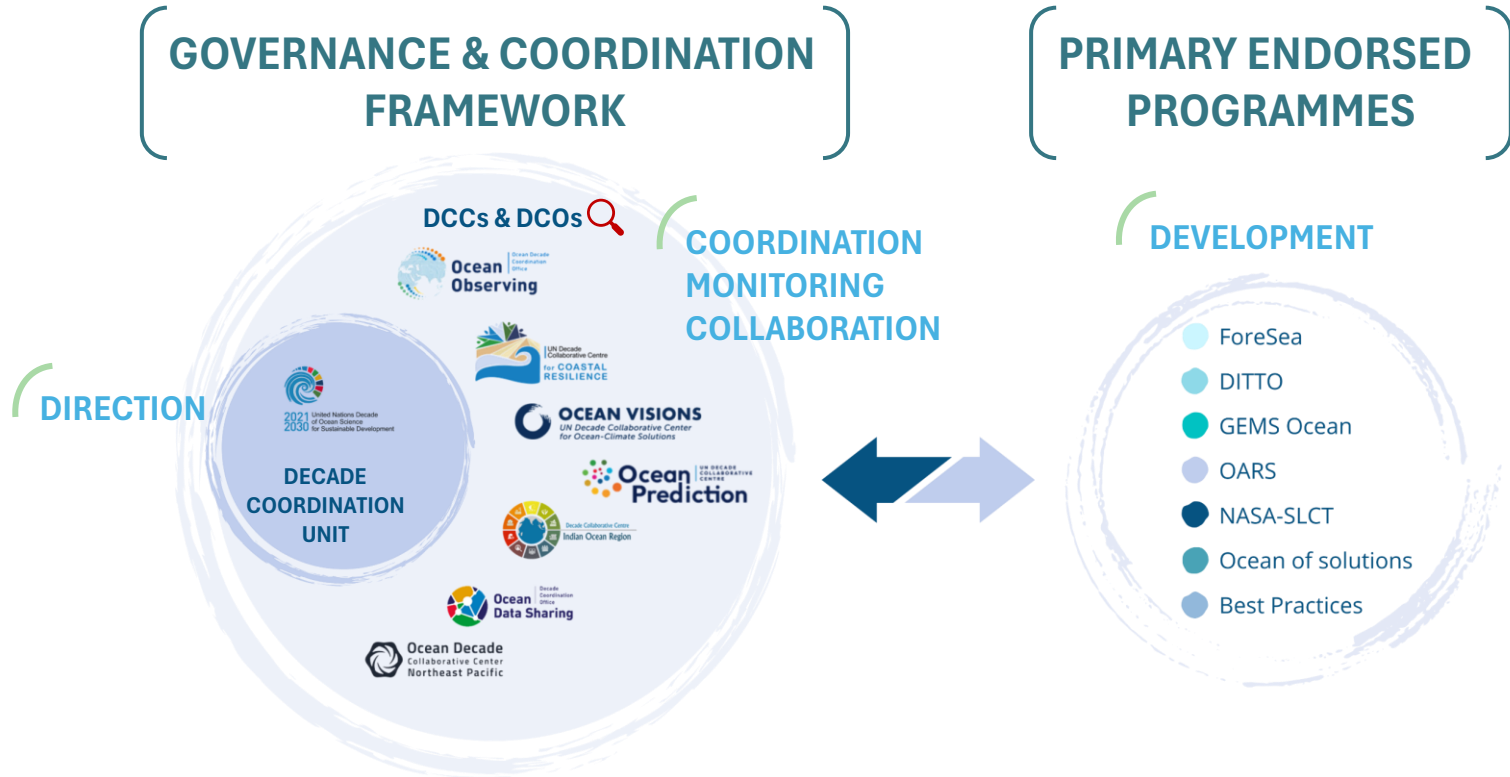
## What is OceanPrediction DCC?

**Vision:** A predicted ocean based on a shared and coordinated global effort in the framework of the UN Ocean Decade.

**Mission:** To galvanize and coordinate efforts towards the **co-development and integration of worldwide ocean prediction activities**, serving Decade objectives and in close collaboration with the Decade endorsed actions and other stakeholders.



# OceanPrediction DCC in the framework of the Decade



# The ocean forecasting we need

- OceanPrediction DCC is promoting collaboration towards the ocean forecasting we need.
- A virtuous loop implemented by our community
- OceanPrediction DCC is building the assets to make it possible



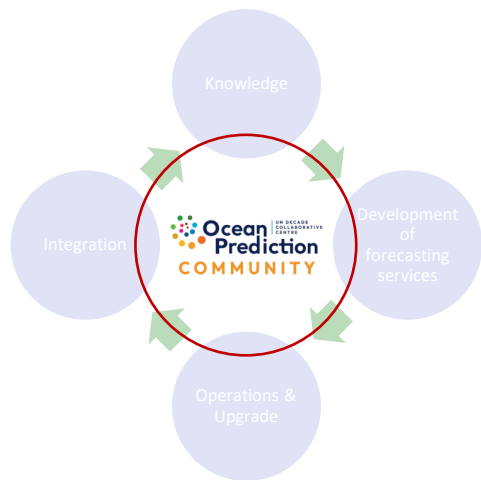
# OceanPrediction community: 9 regional teams



# Building a community with our Regional Teams



<https://www.unoceanprediction.org/en>



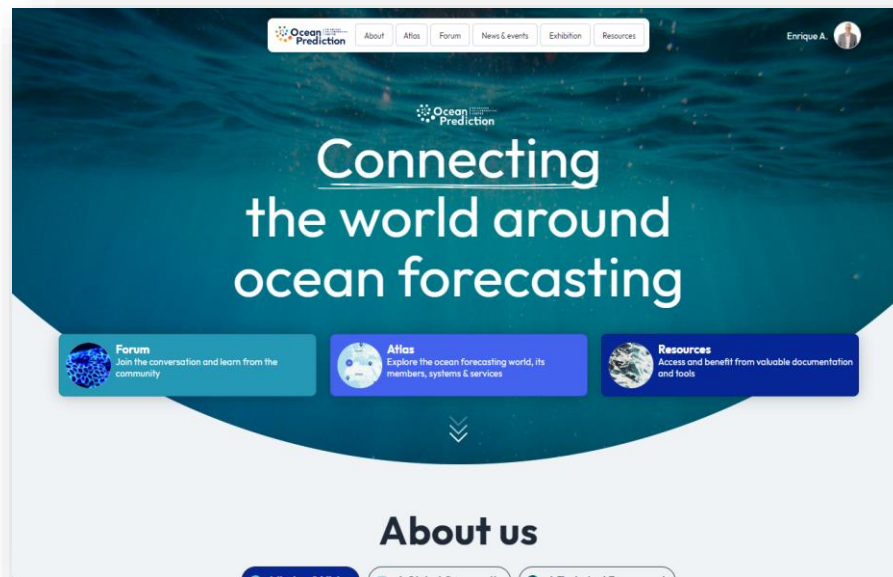
The web



The Forum



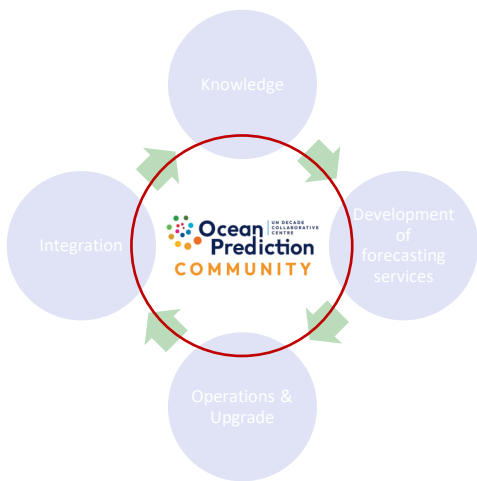
The Atlas



# Building a community with our Regional Teams



<https://www.unoceanprediction.org/en>



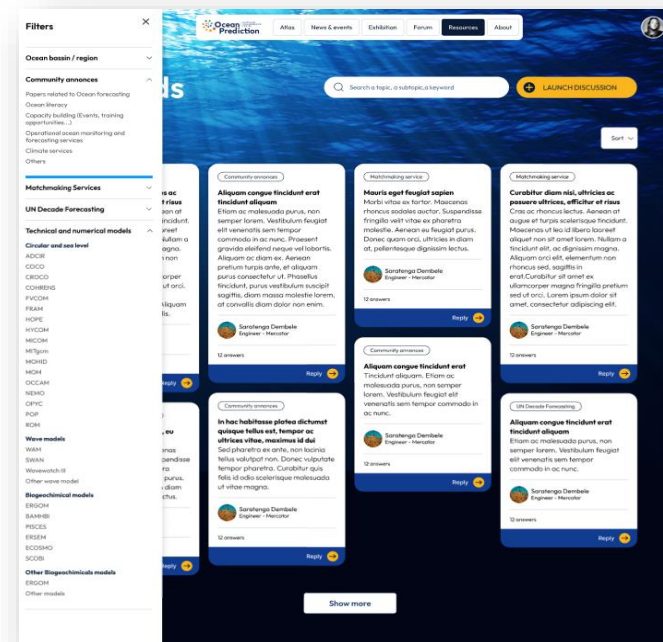
The web



The Forum



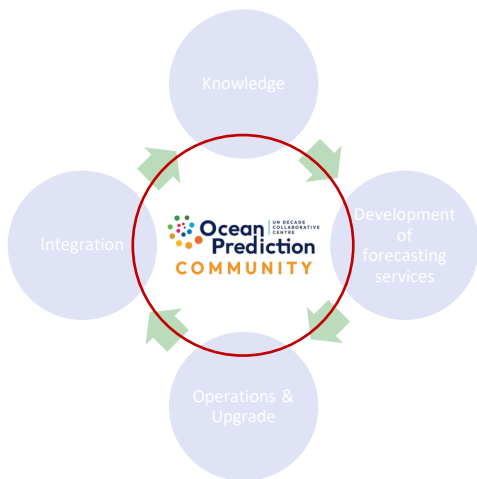
The Atlas



# Building a community with our Regional Teams



<https://www.unoceanprediction.org/en>



The web



The Forum



The Atlas

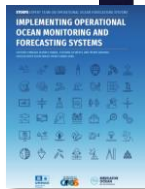
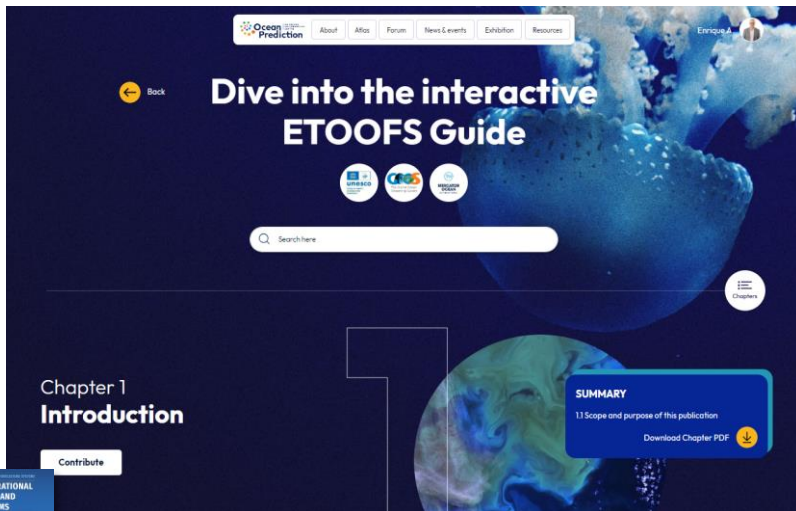
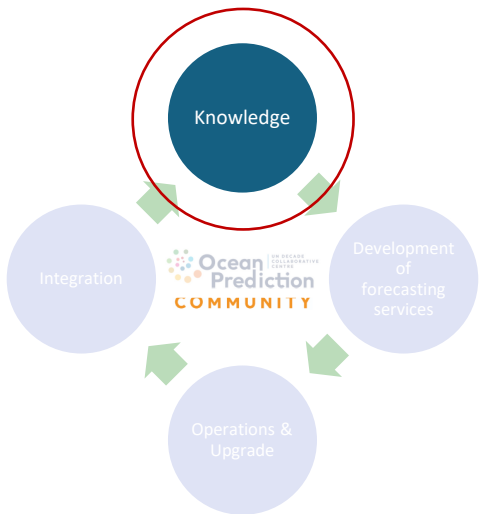
The screenshot shows the Ocean Prediction website interface. The top navigation bar includes the logo and links for About, Atlas, Forum, News & events, Exhibition, and Resources. A user profile for Enrique A. is visible. The main content area features a 'Filters' panel on the left and a map on the right. The 'Filters' panel includes an 'OOFS Geographic Scale' slider set to 100 m, with a range from 0.100 to 40075 kms. Other filter categories include 'Type of system', 'Variables solved', 'Main application of the system', and 'Managing organizations'. The map displays various regions with purple circles of varying sizes, indicating data points or model outputs. A 'List view' button is located in the top right corner of the map area.



# Building our shared knowledge



<https://www.unoceanprediction.org/en/resources/etoofs-guide>

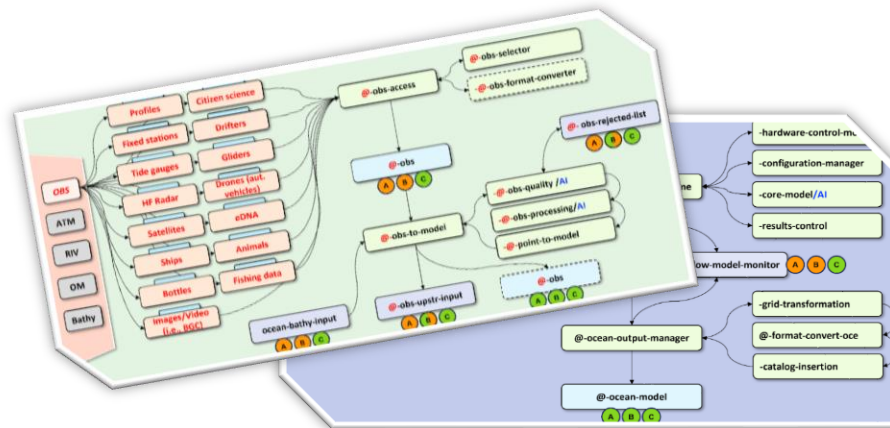
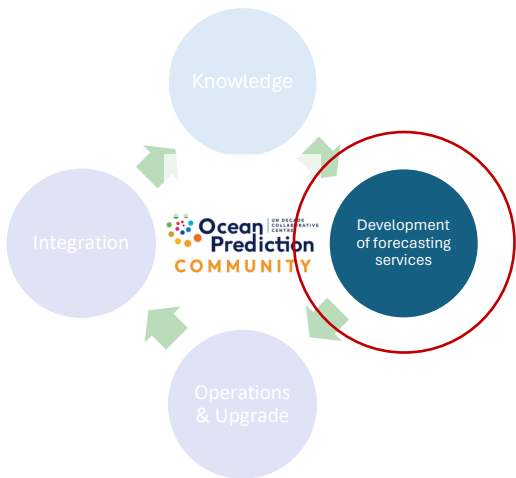


- A community compilation of our shared knowledge
- Now available on wiki format

# Building robust Ocean forecasting services



<https://www.unoceanprediction.org/en/resources/architecture>

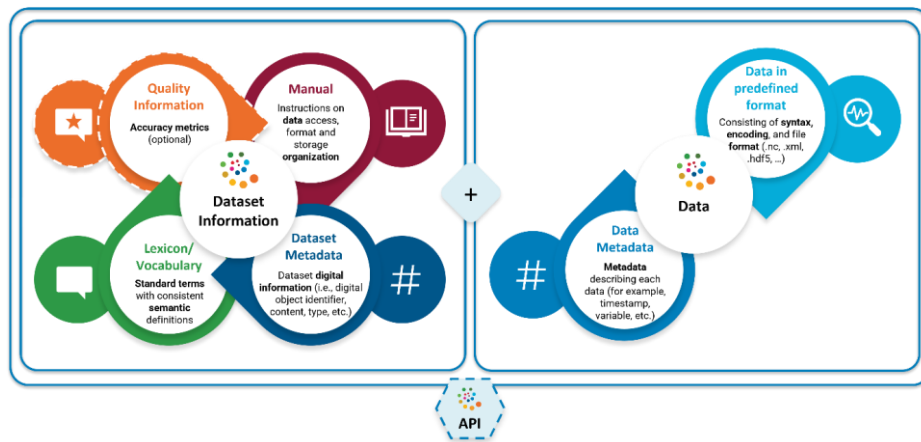
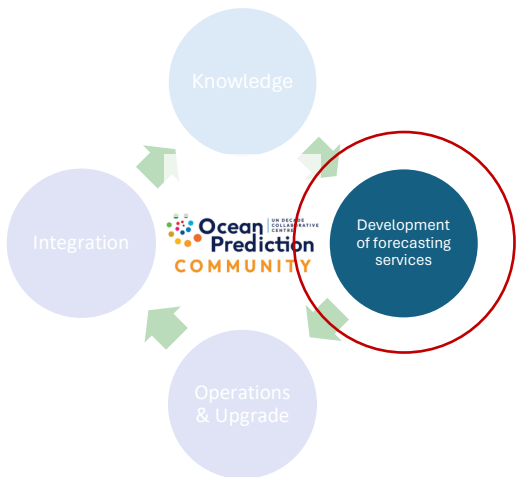


- A community product to be delivered soon by OceanPrediction DCC
- A practical Guide on how to “wire” a Forecasting System
- A definition of the tools and data standards to be developed during the Decade

# Building robust Ocean forecasting services

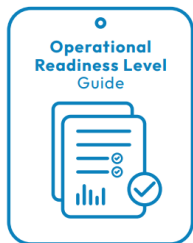


<https://www.unoceanprediction.org/en/resources/architecture>

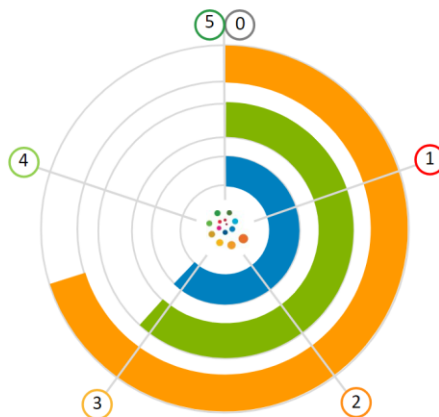


- A community product to be delivered soon by OceanPrediction DCC
- A practical Guide on how to “wire” a Forecasting System
- A definition of the tools and data standards to be developed during the Decade

# Operating and improving Ocean forecasting services



<https://www.unoceanprediction.org/en/resources/orl>



## #1: Production

The first digit - #1 - reflects the reliability of the service, focusing on operational aspects rather than product quality.

## #2: System Validation

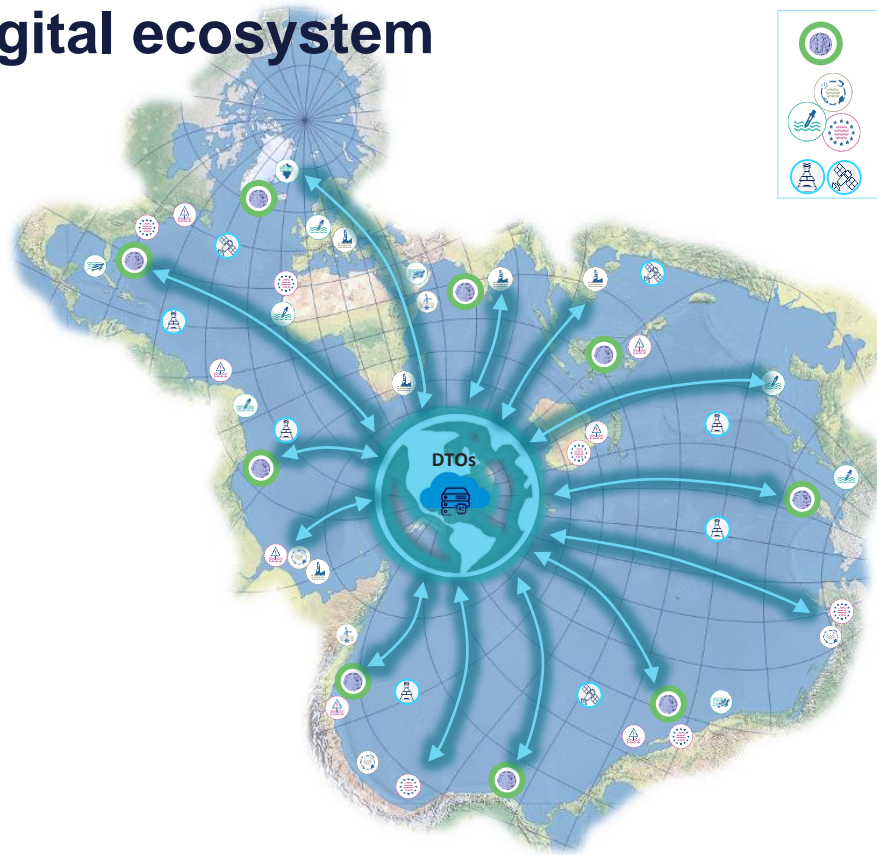
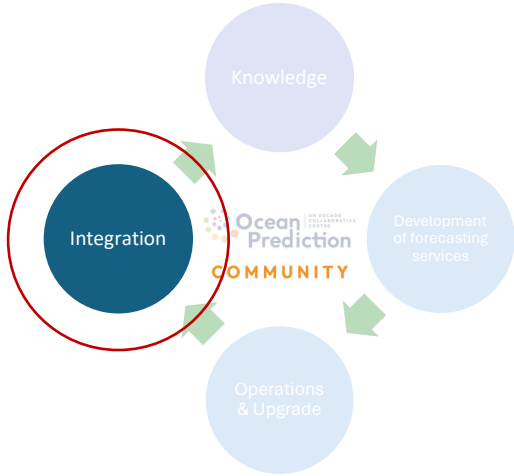
The second digit - #2 - monitors the level of validation for the service.

## #3: Product Dissemination

The third digit - #3 - assesses the various degrees of product dissemination achievable by the system.

- A mechanism to introduce best practices
- A way to promote the evolution of the ocean forecasting
- A mechanism to endorse services to join common frameworks

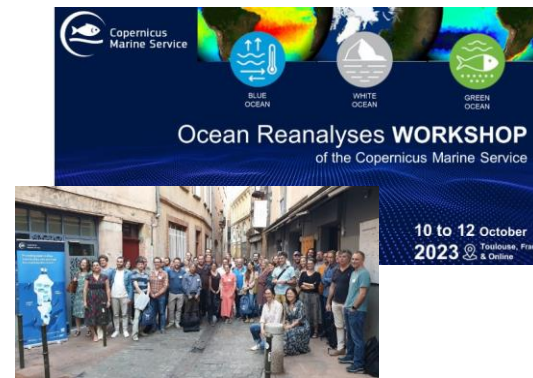
# One ocean, one digital ecosystem



# Ocean reanalyses

## *International intercomparison exercise*

Step 1 : **2023 Workshop + summary published in BAMS**  
*Gathering users and developers to shape together the next-generation ocean reanalyses: Ocean reanalyses workshop of the European Copernicus Marine Service*  
<https://doi.org/10.1175/BAMS-D-24-0034.1>



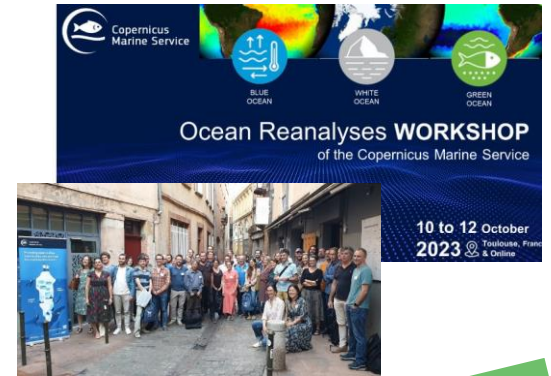
Step 2 : **2024 terms of reference of the intercomparison exercise are defined**  
Participants, list of diagnostics/metrics  
Usage of marine data store and EDITO developments  
Connection with international producers at **ICR6** (Tokyo) and **OP'24** (Paris)

Step 3 : **2025 kick off intercomparison exercise**

# Ocean reanalyses

## *International intercomparison exercise*

Step 1 : **2023 Workshop + summary published in BAMS**  
*Gathering users and developers to shape together the next-generation ocean reanalyses: Ocean reanalyses workshop of the European Copernicus Marine Service*  
<https://doi.org/10.1175/BAMS-D-24-0034.1>



Step 2 : **2024 terms of reference of the intercomparison exercise are defined**  
Participants, list of diagnostics/metrics  
Usage of marine data store and EDITO developments  
Connection with international producers at **ICR6** (Tokyo) and

June-September 2024:  
exchanges (online) between  
Copernicus Marine producers  
to revise the list of metrics for  
intercomparison

Step 3 : **2025 kick off intercomparison exercise**

# OceanPredict Symposium OP'24 Paris UNESCO

The poster for the OceanPredict Symposium OP'24 in Paris, France, is set against a background of a globe with a color gradient from blue to orange. A white stick figure stands next to a whiteboard, pointing at a map of Europe. A briefcase sits on the floor next to the figure. The text on the poster includes the Ocean Predict logo, the event title 'SYMPOSIUM OP'24', the subtitle 'ADVANCING OCEAN PREDICTION SCIENCE FOR SOCIETAL BENEFITS', the dates '18 - 22 Nov. 2024', and the location 'Paris, France'. A 'Pre-register now!' button is present. In the top right, it says 'SAVE THE DATE OP'24'. At the bottom, it says 'Call for abstracts now OPEN!'. Logos for UNESCO and the 2021-2030 United Nations Decade of Ocean Science for Sustainable Development are also included.

Ocean Predict

SYMPOSIUM OP'24

ADVANCING OCEAN PREDICTION SCIENCE FOR SOCIETAL BENEFITS

18 - 22 Nov. 2024

Paris, France

Pre-register now!

SAVE THE DATE OP'24

Call for abstracts now OPEN!

UNESCO

2021-2030 United Nations Decade of Ocean Science for Sustainable Development

Co-sponsored by Copernicus Marine

- Copernicus marine service producers meet the **international ocean prediction community**
- Exchanges on modeling, data assimilation, machine learning forecasting, services, use cases....
- **Visibility of Copernicus marine service activities** in the UN decade of Ocean Science and Sustainable Development



# OceanPredict Symposium OP'24 Paris UNESCO



The poster features a dark background with a glowing Earth. A white stick figure stands next to a whiteboard, pointing at a map of Europe. A briefcase sits on the floor next to the whiteboard. The text is arranged in a clean, modern layout with orange and white accents.

**Ocean Predict**

**SAVE THE DATE OP'24**

**SYMPOSIUM OP'24**

ADVANCING OCEAN PREDICTION SCIENCE FOR SOCIETAL BENEFITS

18 - 22 Nov. 2024

Paris, France

Pre-register now!

Call for abstracts now OPEN!

Abstract submission until June 17<sup>th</sup>

In partnership with **unesco** Environmental Observatory Consortium

2021-2030 United Nations Decade of Ocean Science for Sustainable Development

Co-sponsored by Copernicus Marine

- Copernicus marine service producers meet the **international ocean prediction community**
- Exchanges on modeling, data assimilation, machine learning forecasting, services, use cases....
- **Visibility of Copernicus marine service activities** in the UN decade of Ocean Science and Sustainable Development

## Conclusions

- OceanPrediction DCC works in close collaboration with Decade partners to promote Ocean Forecasting and its applications
- A community is organized around the Regional Teams
- The first results of this effort are visible: Architecture, ORL, Atlas, Forum... more to come
- Ocean reanalysis producers are gathering around a new intercomparison exercise

Register at <https://www.unoceanprediction.org/en>

Contribute to **OceanPredict Symposium OP'24**