



Enrique ALVAREZ FANJUL  
Technical Coordinator  
OceanPrediction DCC



**MERCATOR  
OCEAN**  
INTERNATIONAL

Towards delivering as one



**unesco**

Intergovernmental  
Oceanographic  
Commission



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

Connecting the world around Ocean Prediction: *A vision for the Decade and Beyond* – 8 April 2024

# 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



**unesco**

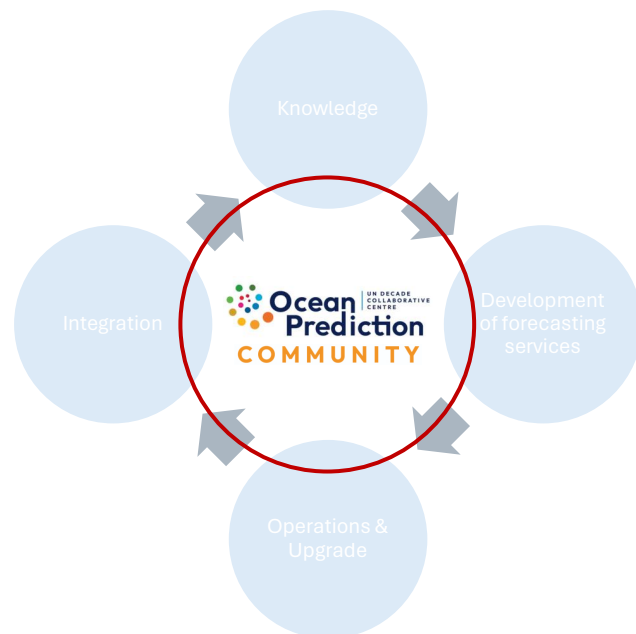
Intergovernmental  
Oceanographic  
Commission



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

# Building a community with our Regional Teams

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



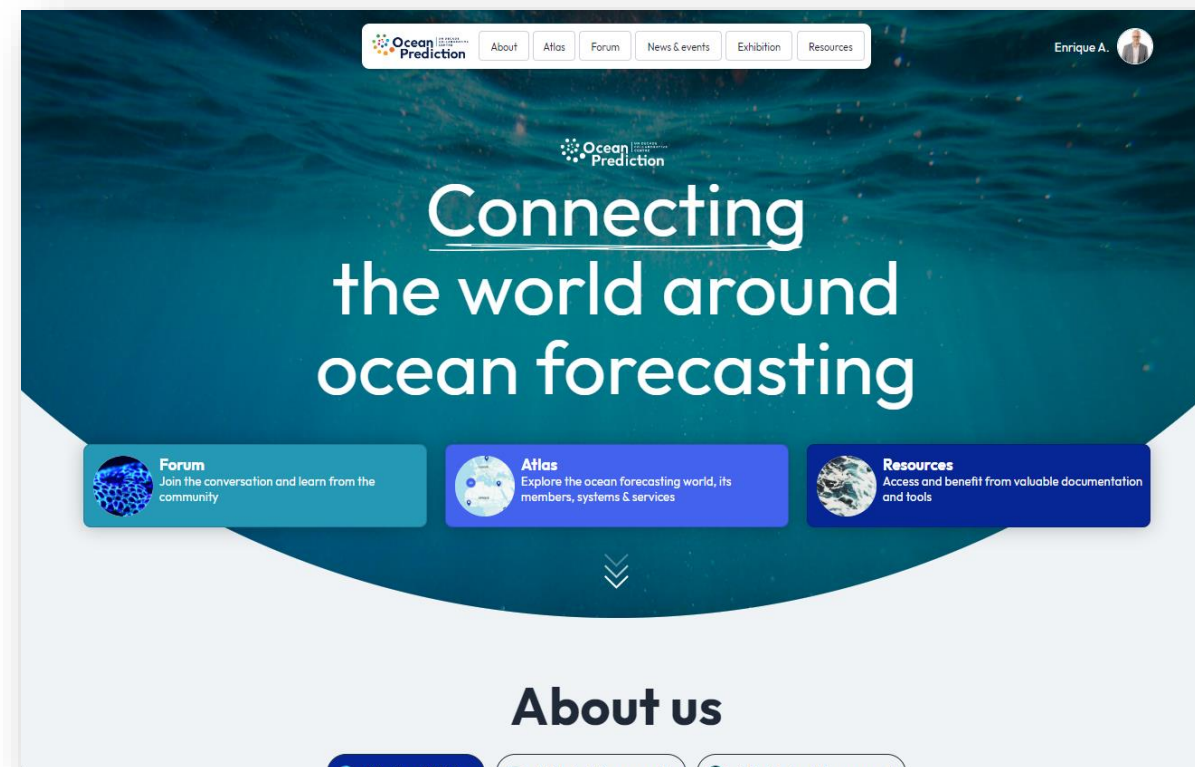
The web



The Forum



The Atlas



unesco

Intergovernmental  
Oceanographic  
Commission

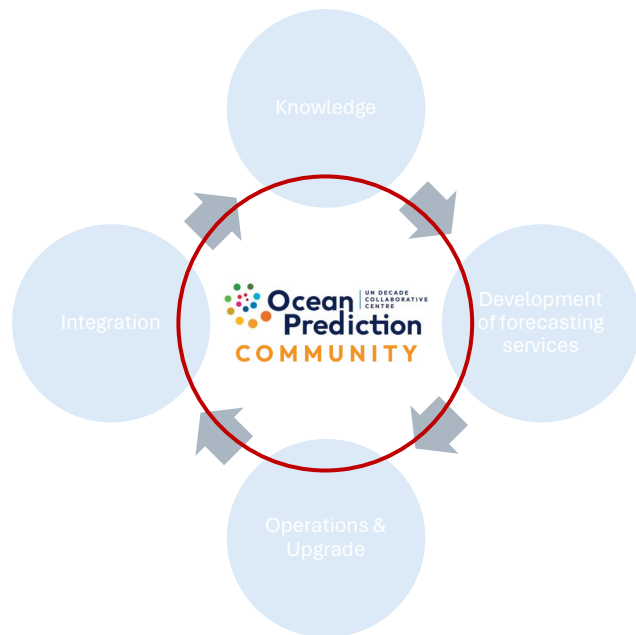


2021  
2030 United Nations Decade  
of Ocean Science  
for Sustainable Development

Connecting the world around Ocean Prediction: *A vision for the Decade and Beyond* – 8 April 2024

# Building a community with our Regional Teams

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



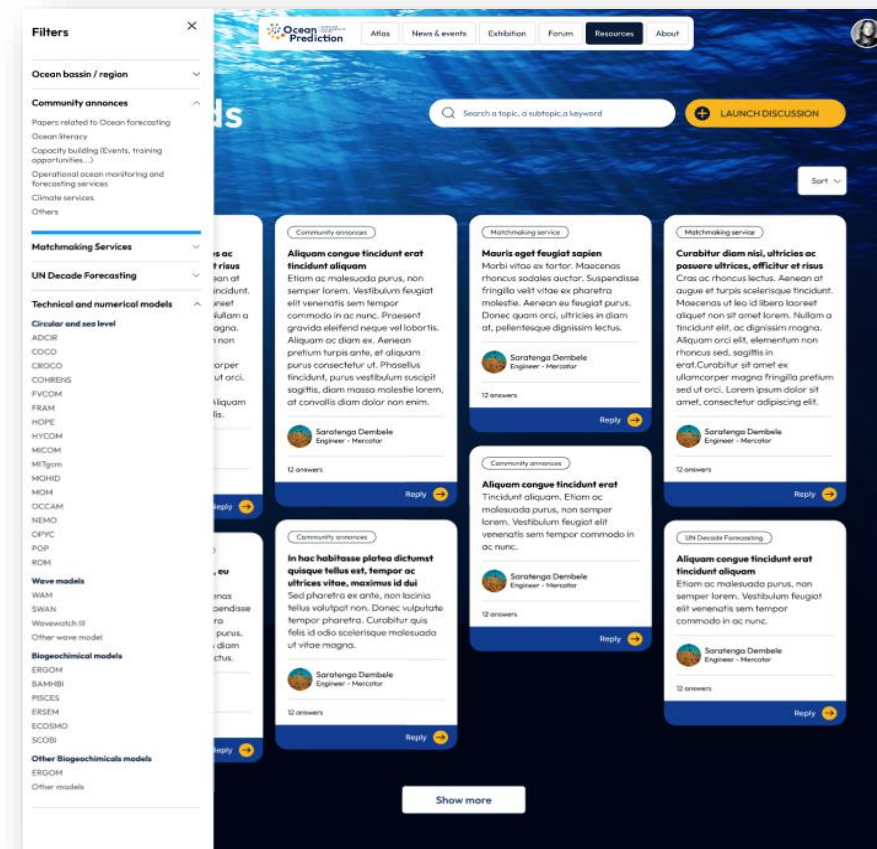
The web



The Forum



The Atlas



unesco

Intergovernmental  
Oceanographic  
Commission

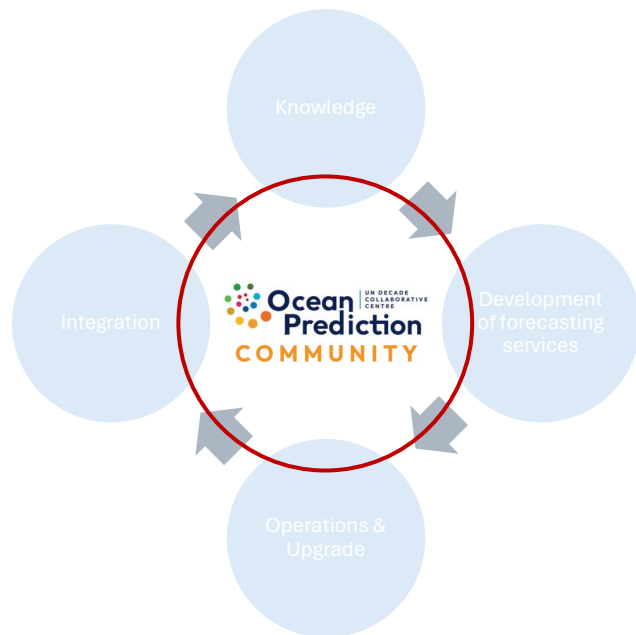


2021 United Nations Decade  
2030 of Ocean Science  
for Sustainable Development

Connecting the world around Ocean Prediction: *A vision for the Decade and Beyond* – 8 April 2024

# Building a community with our Regional Teams

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



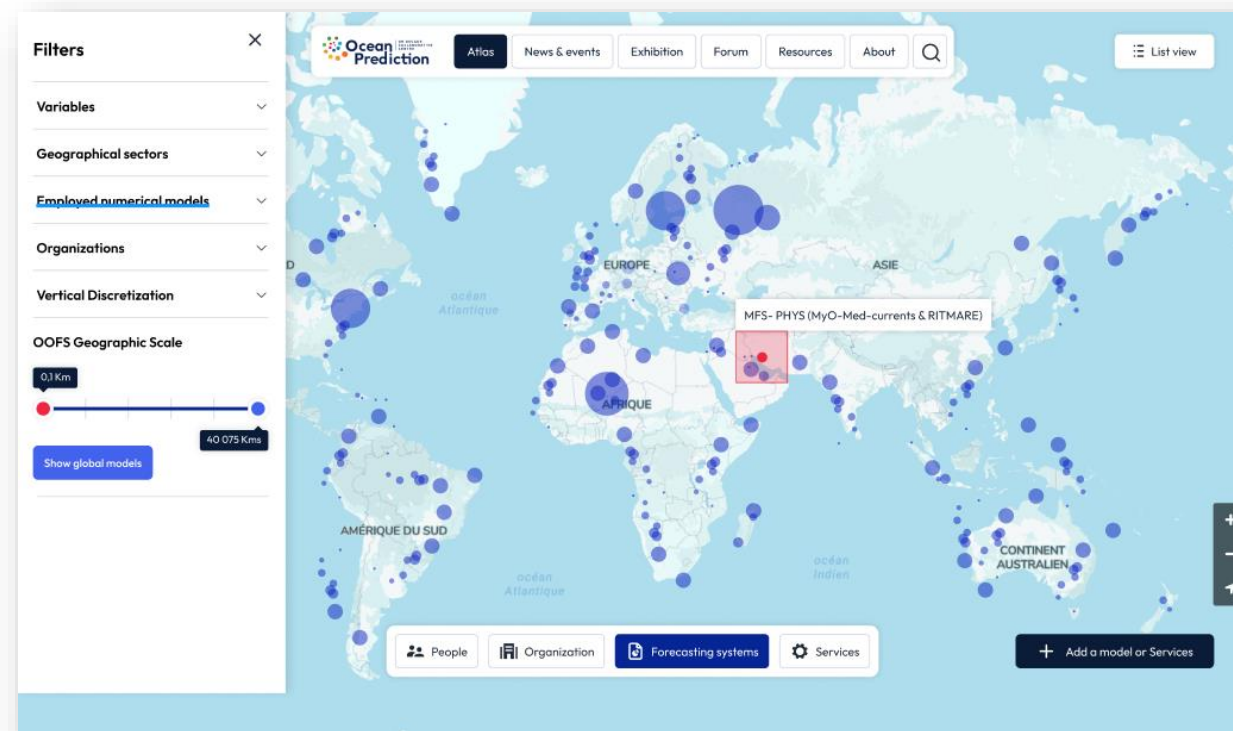
The web



The Forum



The Atlas



unesco

Intergovernmental  
Oceanographic  
Commission



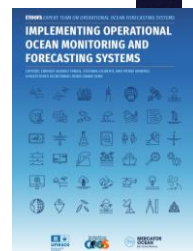
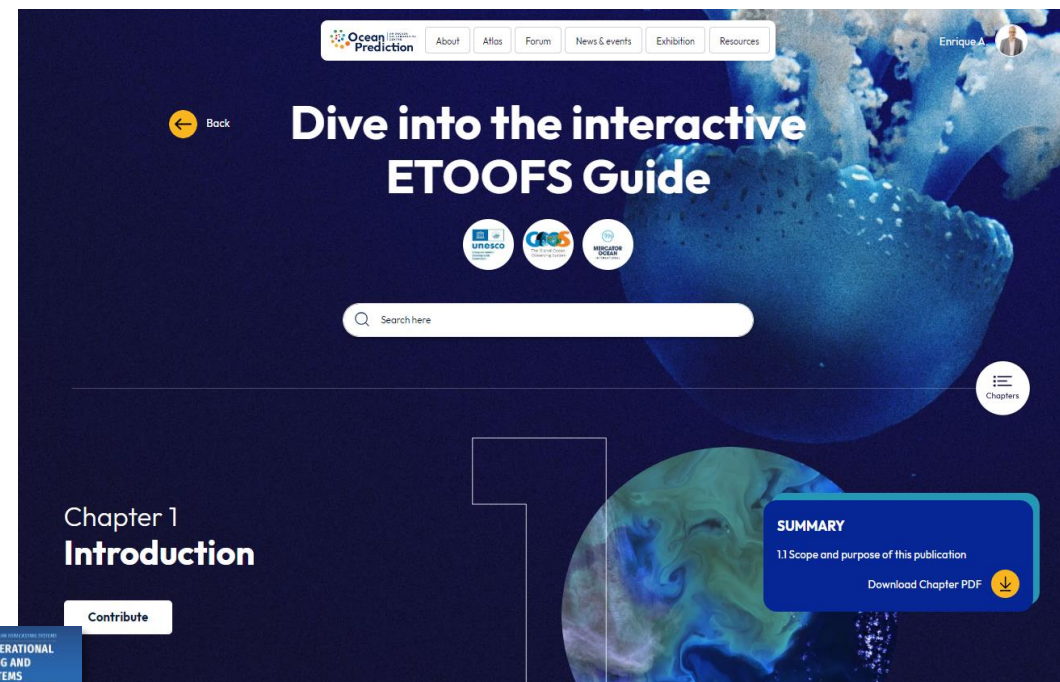
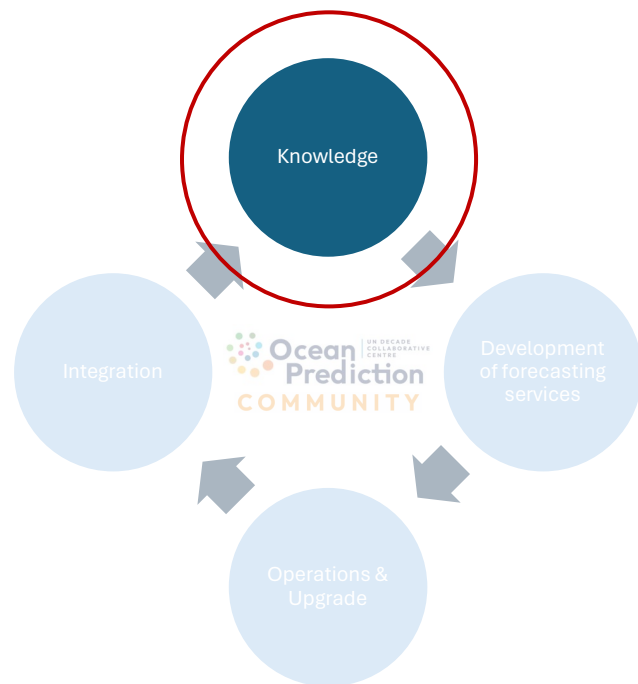
2021  
2030 United Nations Decade  
of Ocean Science  
for Sustainable Development

Connecting the world around Ocean Prediction: *A vision for the Decade and Beyond* – 8 April 2024

# Building our shared knowledge



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



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



unesco

Intergovernmental  
Oceanographic  
Commission



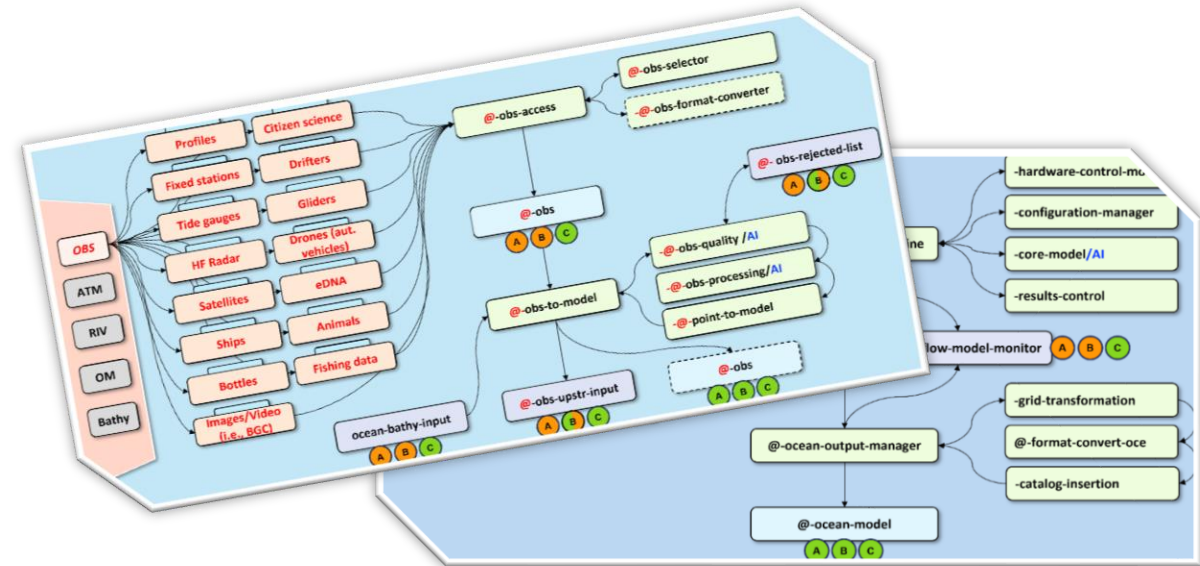
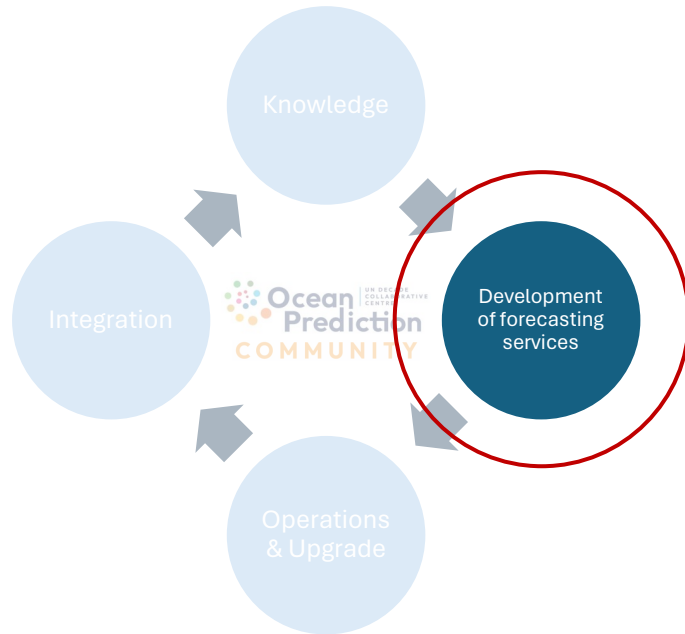
2021  
2030 United Nations Decade  
of Ocean Science  
for Sustainable Development

Connecting the world around Ocean Prediction: *A vision for the Decade and Beyond* – 8 April 2024

# 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



**unesco**

Intergovernmental  
Oceanographic  
Commission

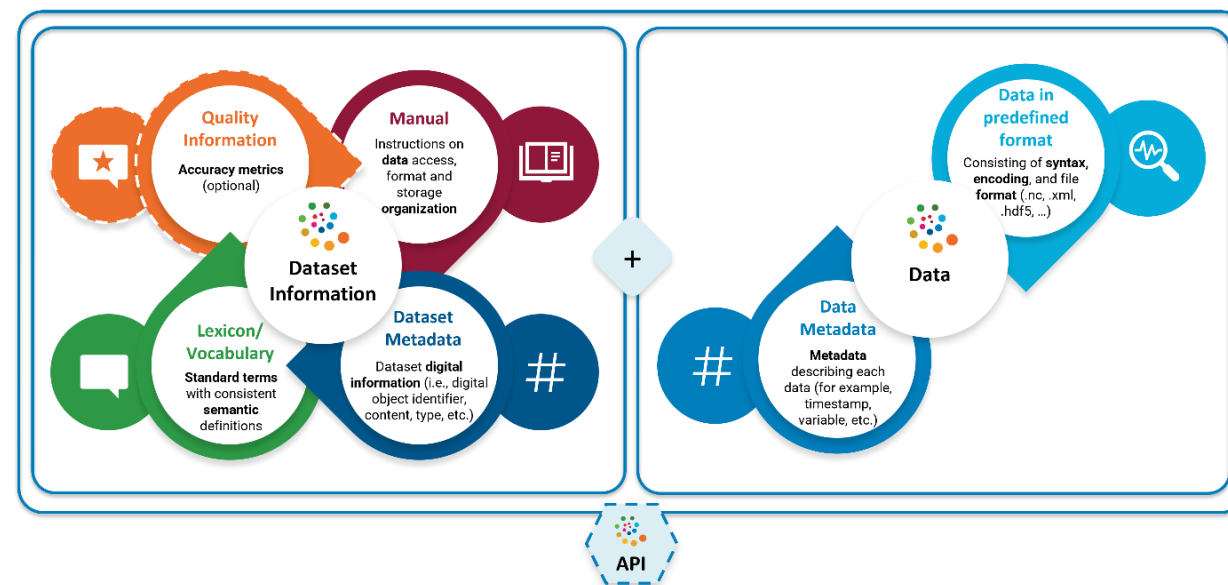
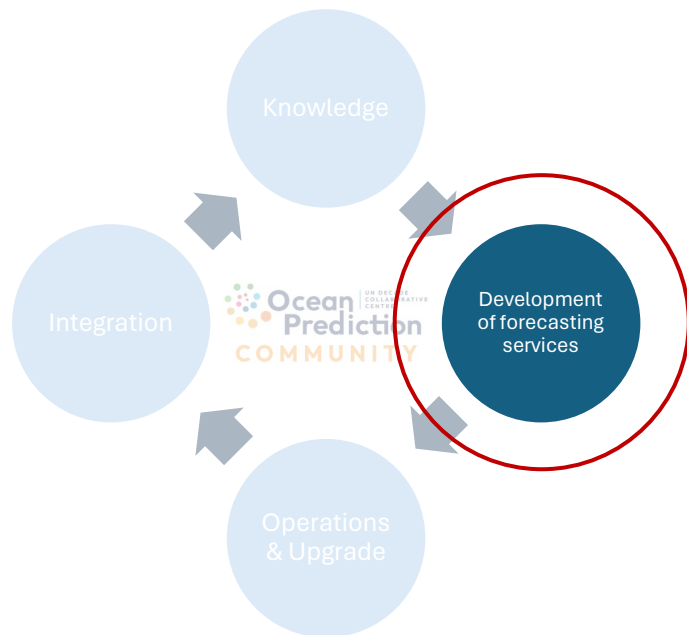


**2021  
2030** United Nations Decade  
of Ocean Science  
for Sustainable Development

# 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



**unesco**

Intergovernmental  
Oceanographic  
Commission

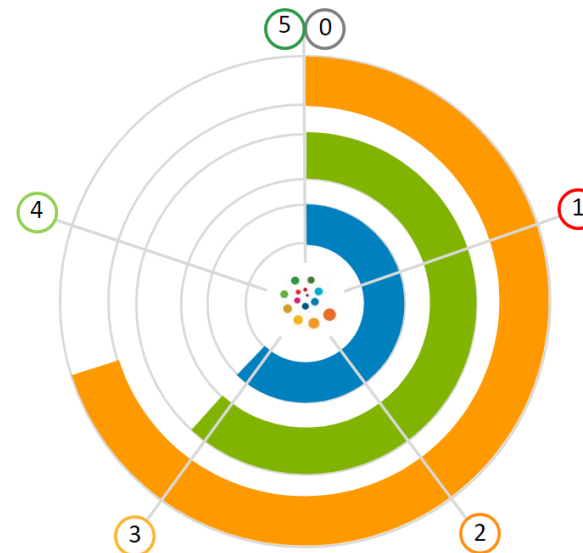
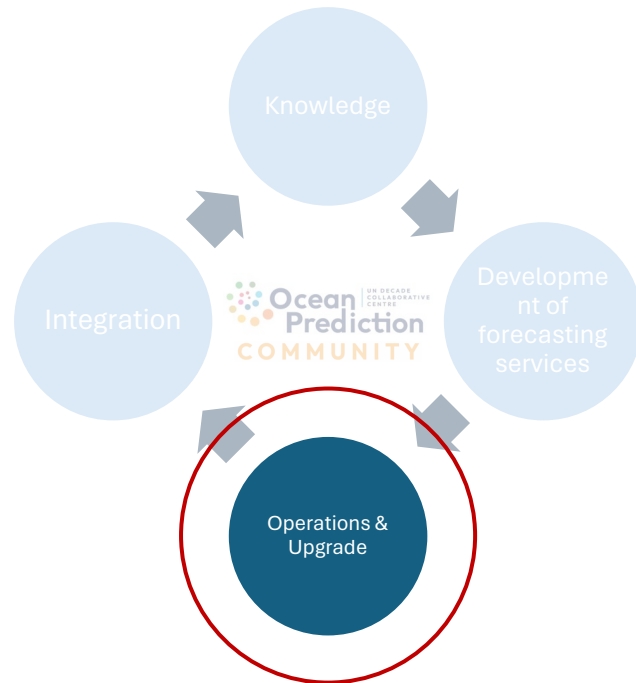
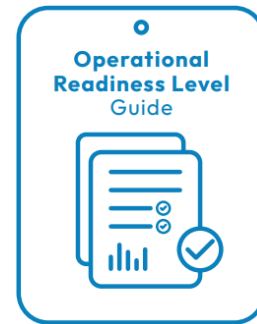


**2021  
2030** United Nations Decade  
of Ocean Science  
for Sustainable Development

# 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

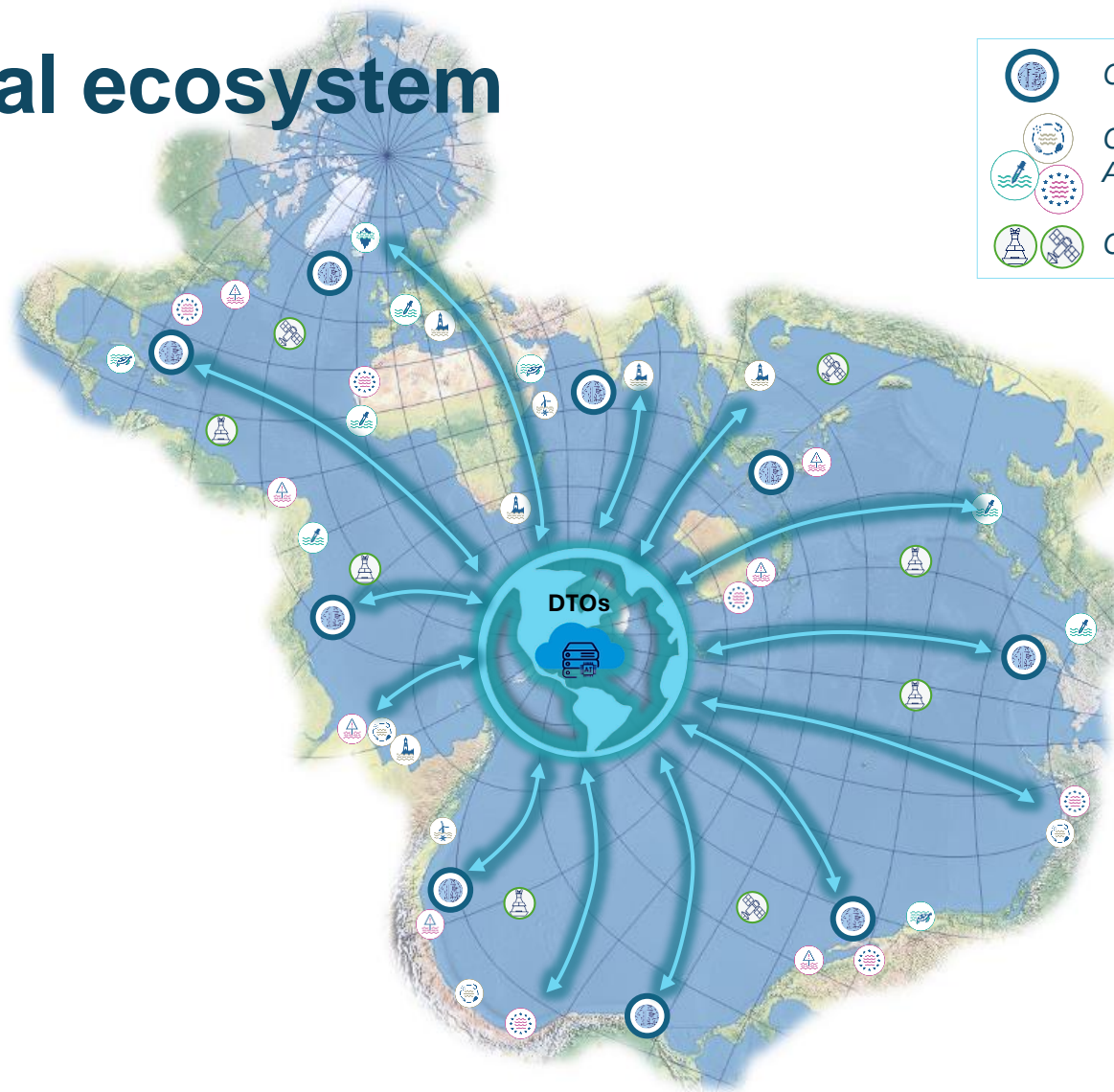
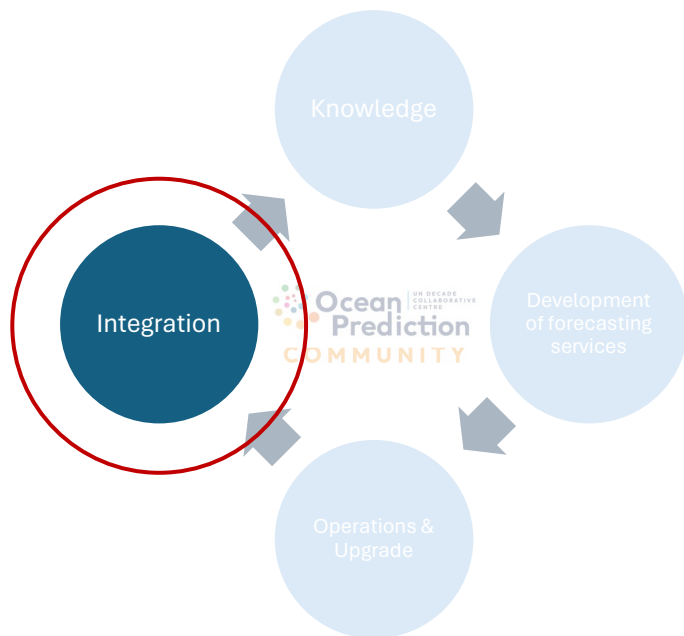





**unesco**  
Intergovernmental  
Oceanographic  
Commission



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

# One ocean, one digital ecosystem



-  Ocean Forecasting Systems
-  Ocean Forecasting Applications
-  Ocean Observations



unesco

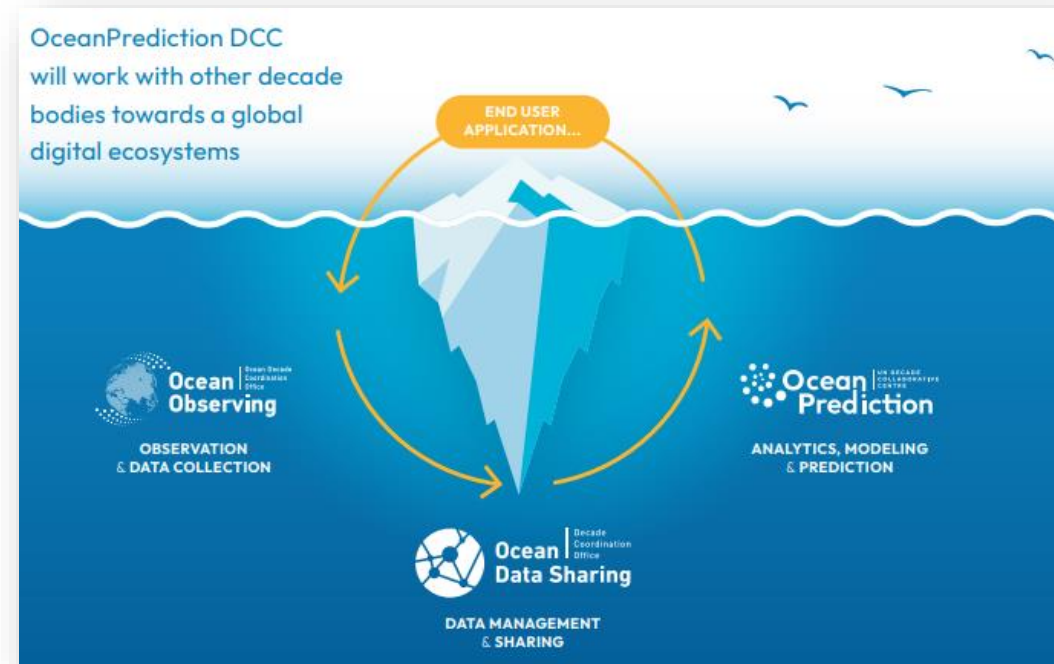
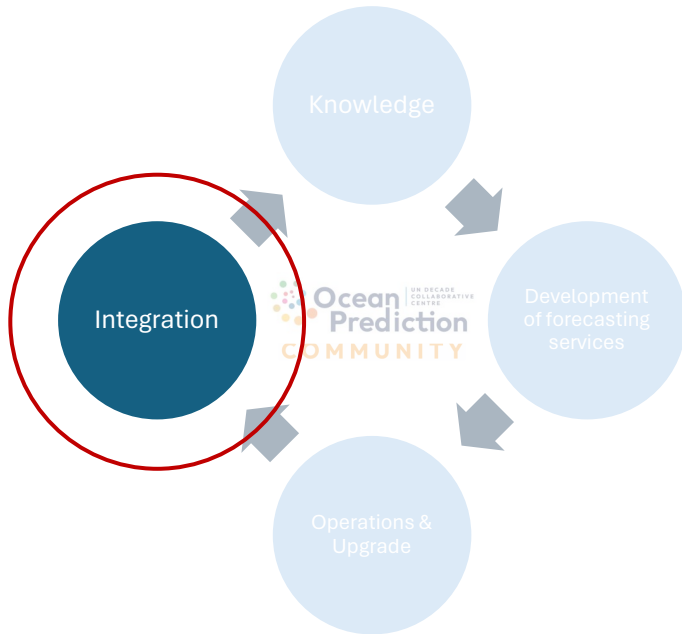
Intergovernmental  
Oceanographic  
Commission



2021 United Nations Decade  
2030 of Ocean Science  
for Sustainable Development

Connecting the world around Ocean Prediction: *A vision for the Decade and Beyond* – 8 April 2024

# One ocean, one digital ecosystem



Ocean Prediction Capacity of the Future  
**ForeSea**


**DITTO**  
 Digital Twins of the Ocean


**Ocean best practices**


**CoastPredict**  
 with The Global Ocean Observing System


**GEMS OCEAN**

⋮



**unesco**

Intergovernmental  
Oceanographic  
Commission



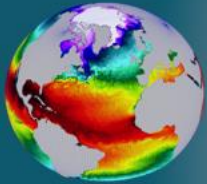
**2021**  
**2030** United Nations Decade  
 of Ocean Science  
 for Sustainable Development

# 2024 OCEAN DECADE CONFERENCE

Connecting the world  
around Ocean Prediction:

*A vision for the Decade and Beyond*

As part of the Ocean Decade Week (8-12 April 2024)



## Conclusions

- OceanPrediction DCC will work in close collaboration with Decade partners to promote Ocean Forecasting and its applications during the Decade
- A community is organized around the Regional Teams
- The first results of this effort are visible:
  - Architecture
  - ORL
  - Atlas
  - Forum
  - ... more to come
- Register at <https://www.unoceanprediction.org/en>



**unesco**

Intergovernmental  
Oceanographic  
Commission



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