



OPST-7

February 14th

Update on OceanPrediction DCC Status



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Mercator Ocean International



Index

Preset status

- Updates on the status of the ocean forecasting co-design team
- Building the regional teams and the community
- OceanPrediction DCC in the framework of the Decade: present situation





The ocean Forecasting co-design team (1/2)

Rationale of the work



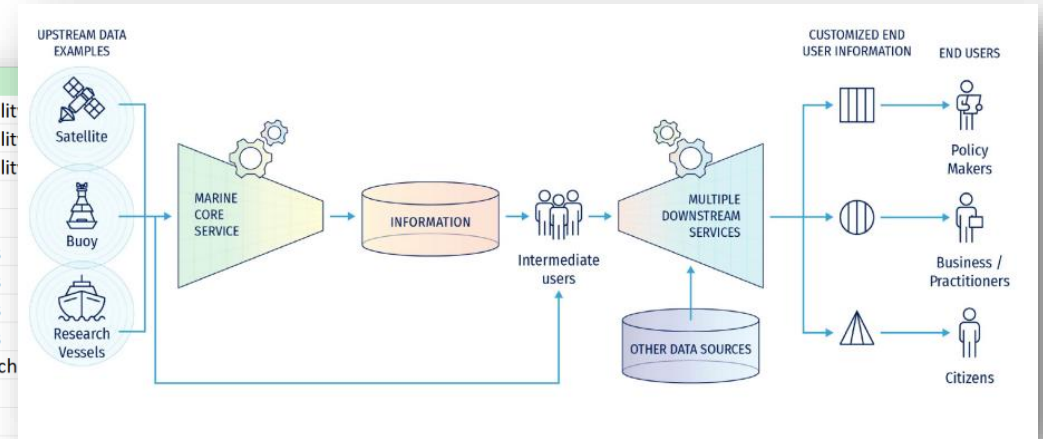


The ocean Forecasting co-design team (2/2)

Members and next steps

1. Refinement of objectives, work plan, and final composition of the Team
2. Mapping the current landscape:
3. Gap analysis
4. Interoperability and the role of digital twins.
5. Definition of architecture
6. ways forward

| name | Area of expertise | |
|------------------------|--------------------------------------|------------------------------|
| Alain Arnaud | Digital twins - interoperabilit | |
| Marina Tonani | Digital twins - interoperabilit | |
| John Siddorn | Digital twins - interoperabilit | |
| Pierre-Yves Le Traon | Ocean observing expert | |
| Antonio Novellino | Ocean observing expert | |
| Yann-Drillet | Ocean forecasting: physics | |
| Mike Bell | Ocean forecasting: physics | |
| Andreas Schiller | Ocean forecasting: physics | |
| John Wilkin | Ocean forecasting: physics | |
| katja Fennel | Ocean forecasting: Biogeoch | |
| Laurent Bertino | Ocean Forecasting: Ice | |
| Fabrice Arduin | Ocean Forecasting: Waves | |
| | Ocean forecasting : Climate | |
| Enrique Alvarez Fanjul | Connection with users | Mercator Ocean International |
| Joana Staneva | Coastal modeling | Hereon |
| Jennifer Veitch | Coastal modeling | SAEON |
| Mauro Cirano | Coastal modeling | UFRJ |
| Matt Martin | Data assimilation | Met Office |
| Andy Moore | Data assimilation | UCSC |
| Ibrahim Hoteit | Data assimilation | Kaust University |
| | ensemble modeling | |
| Pascal Matte | Coastal interaction (rivers...) | ECCC |
| Fabrice Hernandez | Model Intercomparisson | IRD |
| Marcos García Sotillo | OoFS validation techniques | Nologin |
| Erik van Doorn | Policy, insurances and legal aspects | Kiel University |
| Maria Hood | Capacity development | MOi |
| Cecile Thomas-Courcoux | Ocean literacy | MOi |
| | Supercomputing | |
| Patrick Heimbach | Artificial intelligence | Texas University |
| | Advanced data visualization | |
| Dr. Miyazawa | Cross-cutting | JAMSTEC |
| Eric Chassignet | Cross-cutting | COAPS |
| Wan Liying | Cross-cutting | NMEFC |
| Angelique Melet | Coastal + Climate | Mercator Ocean International |





Steps towards our community

Building with a regional approach



kick-off meeting

Starting the organization and launching the regional teams

Day 2 of Kick-off meeting devoted to the launch of the regional teams:



Gaining momentum

Initiating activity on the Kick-off meeting platform

Regions:

0. Global
1. West Pacific and East Asian seas
2. Indian seas
3. African seas
4. Mediterranean and Black Sea
5. North-East Atlantic
6. South and central America
7. North America
8. Arctic
9. Antarctic



Cruise phase

New web site and associated tools that will serve as focal point



About our community

Promoting ocean forecasting worldwide



A backbone collaboration structure to provide a collective voice to a wide ocean prediction community (from coastal to deep sea, nowcast to climate, Bio to physics, public to private, users to scientists), and centered on:

- Promoting the use of state-of-the-art tools, standards and best practices to deliver as one
- Implementing capacity development and ocean literacy activities
- Promoting Operational Ocean Forecasting Services (OOFS) as a key tool for Blue Economy and ocean policy
- Supporting the UN Ocean Decade implementation





Gaining momentum: The kickoff meeting (1/3)

Demonstrating the interest for the concept



- Massive participation: **1785 persons registered**
- ECOP participation
- Virtual halls for OOFs, services and others
- Keynote talks and a specific session on ocean literacy
- Initial meeting of the regional teams





Gaining momentum: The event platform (2/3)

The virtual halls



UN Decade Hall

OOFS Hall

Seamod - Jaillou I Regional coastal models for the Black Sea [Visit →](#)

INCOIS - Indian National Centre for Ocean Information Services [Visit →](#)

U.S. NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE

OPERATIONAL FORECAST SYSTEMS

CYCOFOS [Visit →](#)

LiveOcean Forecasting System [Visit →](#)

MED-MFC I Mediterranean Sea Monitoring & Forecasting Center [Visit →](#)

Ocean Observing Co-Design [Visit →](#)

Digital Twins of the Ocean (DITTO) Decade Programme

Ocean to climate Seamless Forecasting system - OSF [Visit →](#)

Downstream Hall

ETOOFS Hall

Introduction to the ETOOFS Guide [Visit →](#)

Motivation and international context of ocean forecasting [Visit →](#)

Definition of ocean forecasting systems [Visit →](#)

Architecture of ocean monitoring and forecasting systems [Visit →](#)

Ocean circulation modeling [Visit →](#)

Sea ice modeling [Visit →](#)

DRIFT+NOISE Operational Ice Maps [Visit →](#)

TA-VISIR - decision support system for the Adriatic Sea [Visit →](#)

MCOStS - Coastal circulation on-demand [Visit →](#)



Gaining momentum: The event platform (3/3)

Your ideas are needed! The Idealab



OceanPrediction IdeaLab

Why an IdeaLab?

We want to build OceanPrediction with you, to serve the community. Your input is crucial to tune future OceanPrediction DCC activities. After the kick-off meeting, we will do a report of these propositions.

Note: You can upvote ideas. You can only post one message with as many ideas as you want and an unlimited number of characters. If you need to, you can delete and post again.

IdeaLab: What kind of capacity building activities would be beneficial for your region?

OceanPrediction IdeaLab

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IdeaLab: What are the main advances required today to improve OOFS?

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IdeaLab: What do you expect from future Digital Ocean systems? (in comparison with current systems)





Cruise phase: The web and tools (1/4)

The Forum



Our web

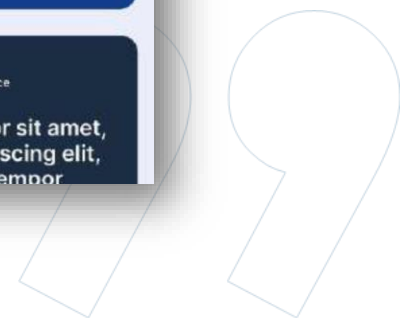
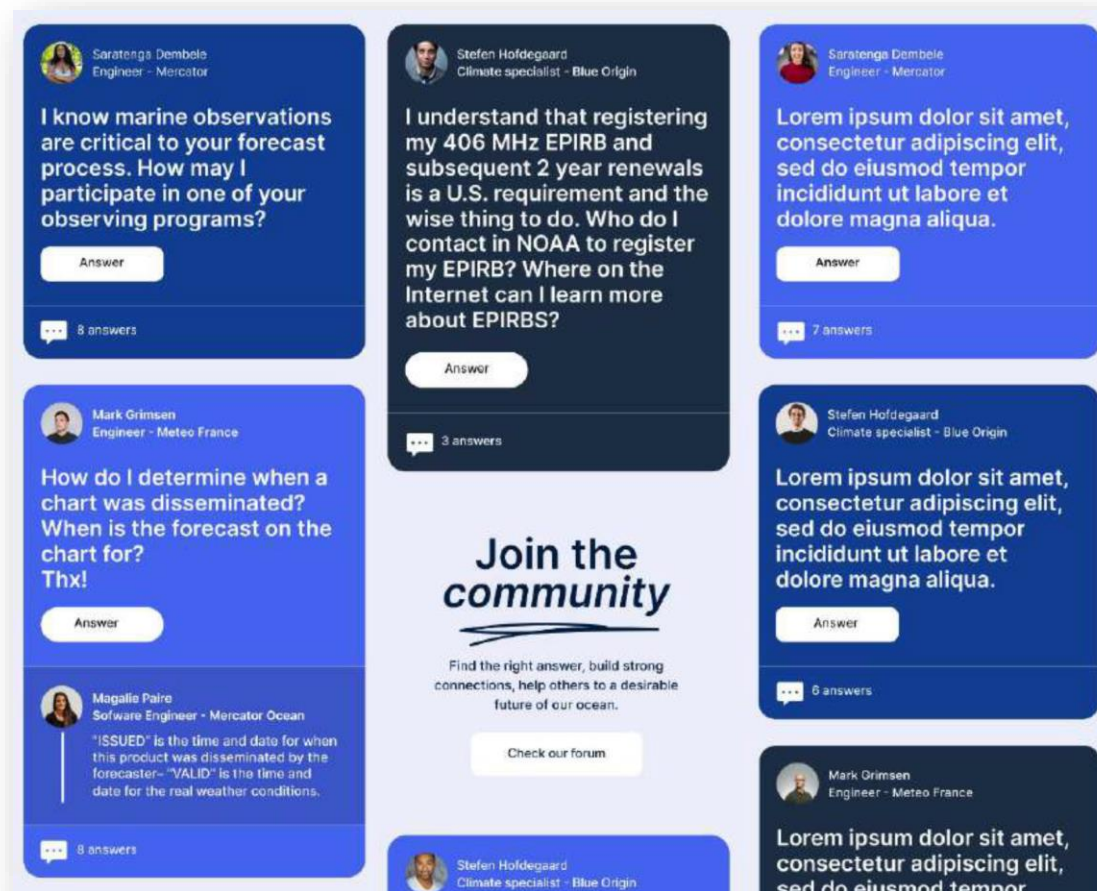


Forum

ETOOFS
wiki

Atlas

Tools



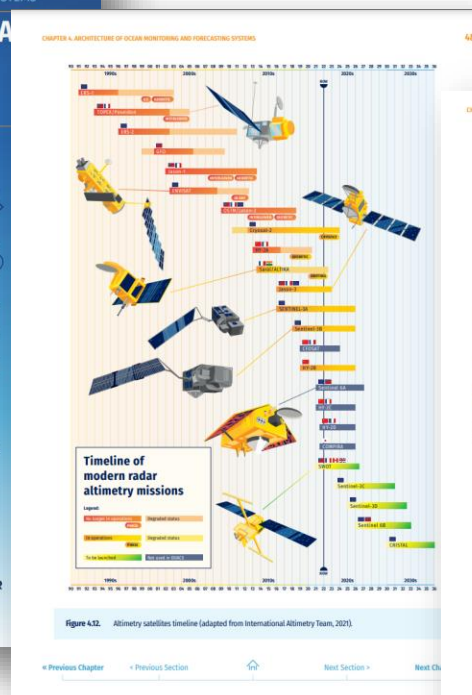
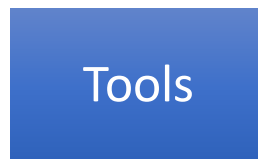
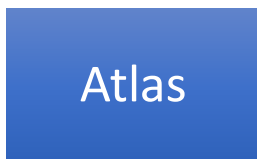


Cruise phase: The web and tools (2/4)

The ETOOFS wiki



Our web



<https://www.mercator-ocean.eu/en/guide-etoofs/>



Cruise phase: The web and tools (3/4)

The Atlas

Our web

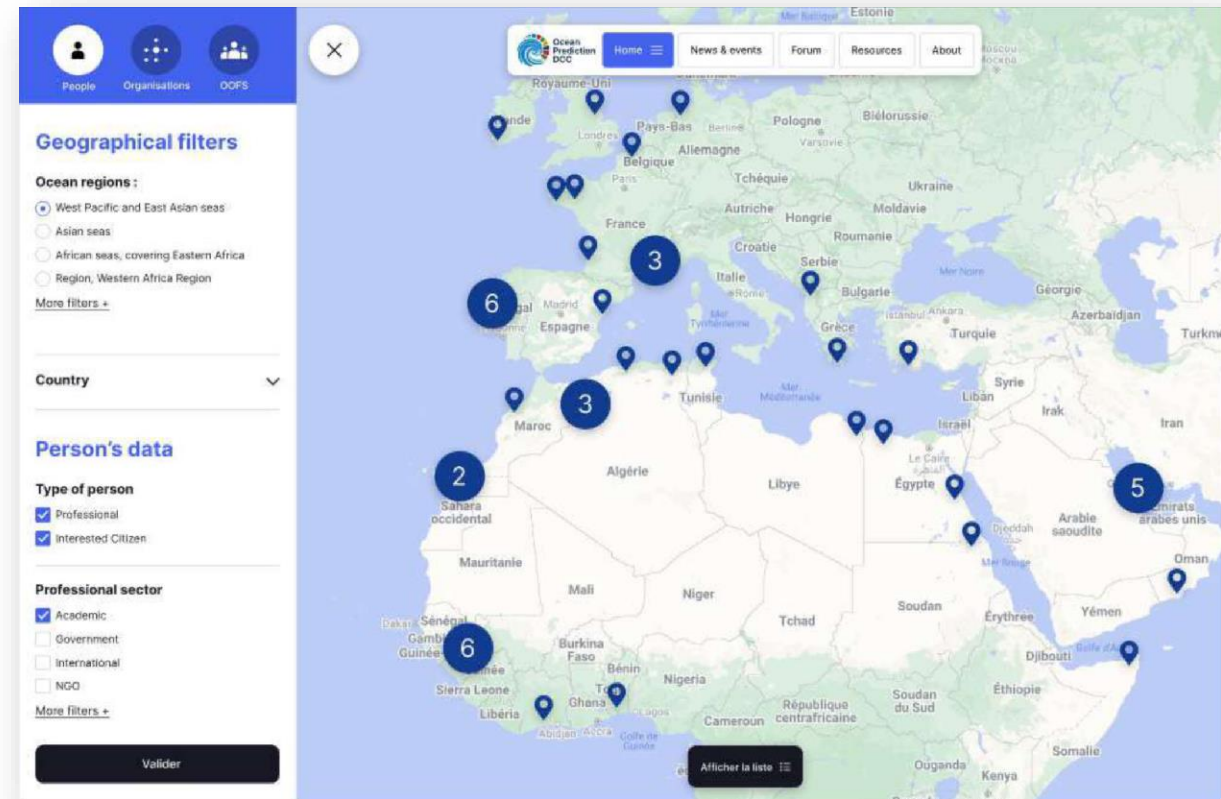


Forum

ETOOFS
wiki

Atlas

Tools





Cruise phase: The web and tools (4/4)

Additional Community tools



Our web



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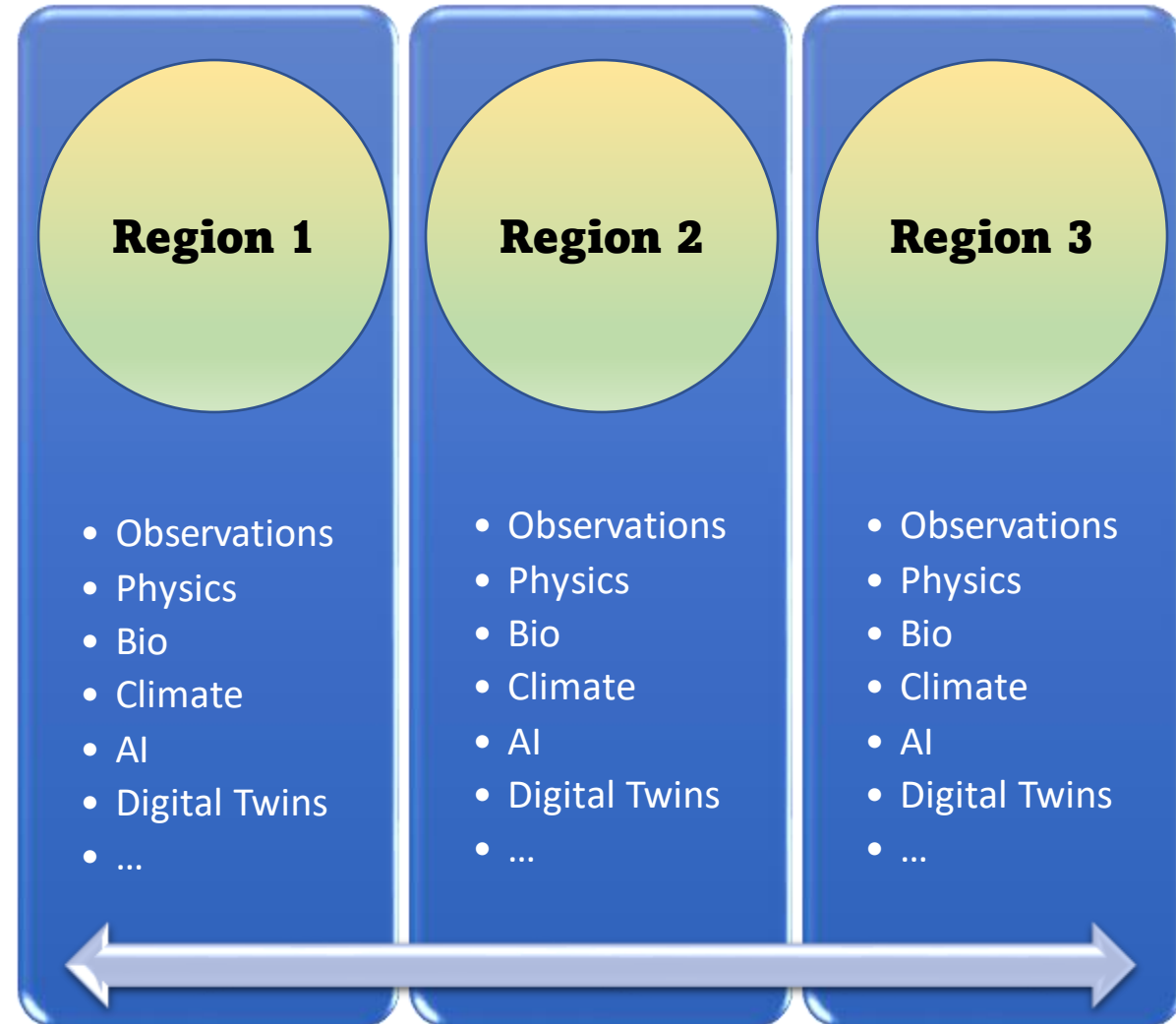




Organizing the Regional teams

Empowering the Teams

- Draft ToR available for discussion:
 - Regional focal point
 - Steering team
- ToR will be amended and approved democratically at each regional team.





Planned steps

We are GO for lift-off during 2023



- Kick-off meeting. Saying “hello world”
- Participation on the community via the event platform (January to July)
- First regional team meeting (one per region). Presentation and initial discussion of ToR. (February to April)
- Migration of activities and users to Oceanprediction DCC web page (July 2023)
- Contribution to capacity development and gap detection plans (August to December)
- Second regional team meeting (one per region). Approval of ToR Approval of capacity development and gap detection plans; (November or December).



The decade organization

Primary endorsed programmes



Ocean of Solutions





The decade organization

Ongoing collaboration with Oceanpredict/Foresea

- Permanent communication channels
- Strong collaboration at the Ocean forecasting co-design team
 - Many members of Foresea on the team
 - Direct participation on the “compilation team”
- Strong interest of in accelerating the development of the Operational readiness level concept
- Details on communications plan during “cruise phase” are still not defined at OceanPrediction DCC. Clear need of integration with OceanPredict activities





CONCLUSIONS



- Ocean Forecasting co-design team to start operations in March, with strong participation of Foresea
- Regional teams are being built as a key element of the community
- Foresea is on the initial set of primary Endorsed Programmes
- Details on communication plans to be defined
- Calendar for 2023 is clear and realistic so...

*Let's
Go*