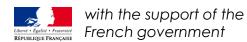


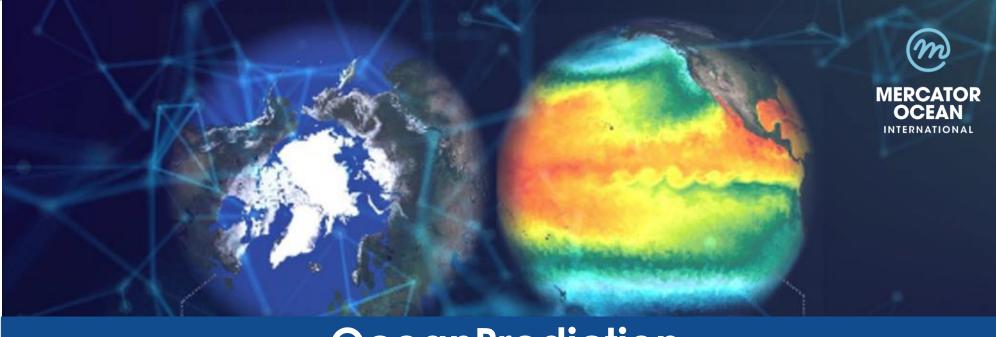




Supported and hosted by



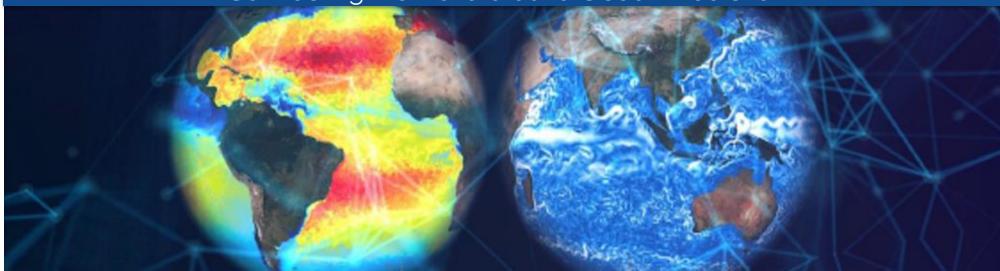




# OceanPrediction

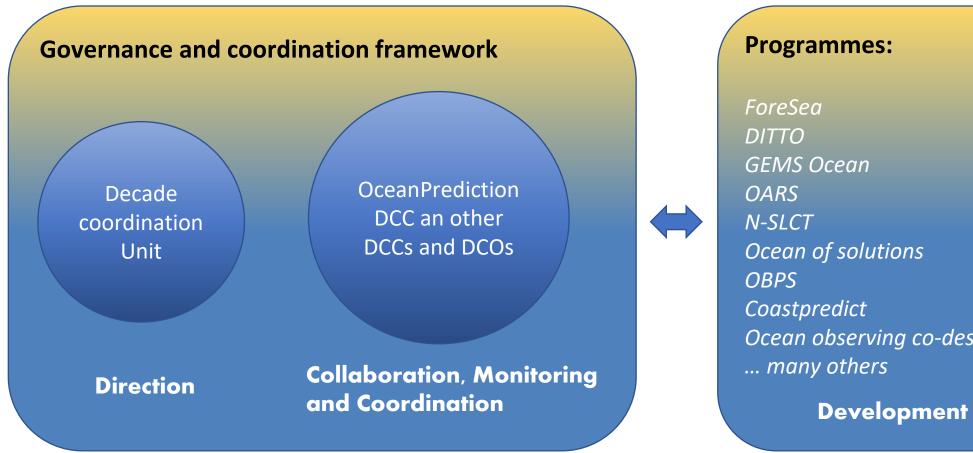
Decade Collaborative Centre

Connecting the world around Ocean Prediction





### OceanPrediction DCC in the framework of the decade



### **Programmes:**

GEMS Ocean Ocean of solutions Coastpredict Ocean observing co-design ... many others

mercator-ocean.eu



## The OceanPrediction DCC voyage

# 2020: THE OCEAN FORECAST WE HAVE



### OceanPrediction DCC VESSEL

Captain: UN Ocean Decade
Chief engineer: Decade actions and DTO
Crew: OceanPrediction DCC community
Navigator: OceanPrediction DCC





- Useful but partially disconnected services
- Poor presence in developing countries

# 2030: THE OCEAN FORECAST WE WANT



- Connected community and services
- Many robust systems worldwide

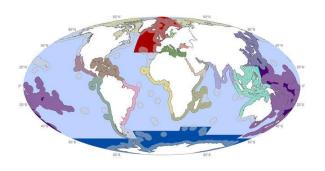
mercator-ocean.eu



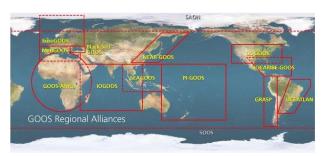
### Pillars (1/2): A global and transversal community

# Oceanprediction DCC regional teams: Promoting the implementation and use of ocean forecasting systems worldwide

#### UNEP regional seas



### GOOS regional alliances



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

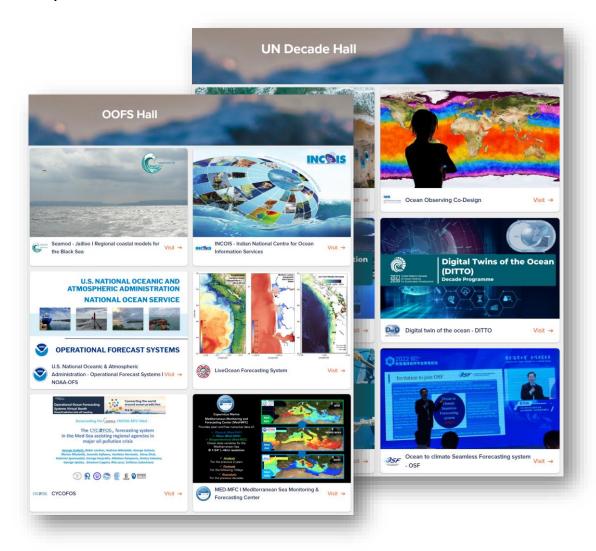
### "Boots on the ground" work:

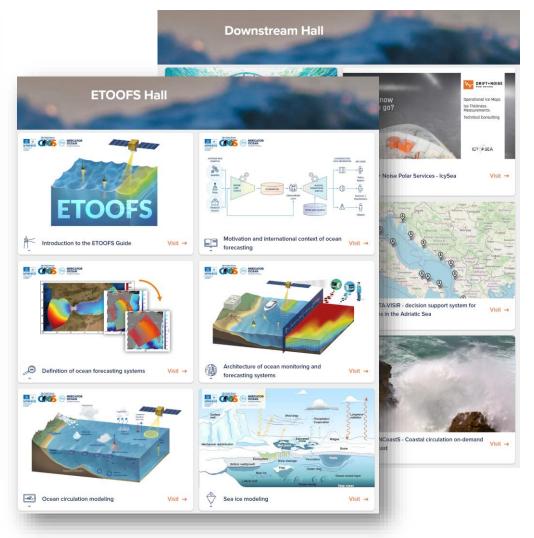
- Identify and attract a wide community: Scientist, users, private sector, ONGs, etc...
- Support decade actions related to ocean forecasting
- Identify gaps and ways forward
- Capacity building
- Advocate for implementation of Best Practices, Standards and Tools
- ...



## Community being built at kick-off event platform

### One example: the virtual halls







# Pillars (2/2): A technical joint global framework



GAPS: SYSTEMS
TECHNICALLY
DISCONNECTED

**During development:** new systems require a development from scratch. "Core" services disconnected

**During exploitation:** No possibility to use common tools for OOFS validation, dissemination and exploitation

OPPORTUNITY

**PROBLEM** 

**The decade as game changer:** a new scenario for ocean forecasting will be possible by harnessing UN Decade and Digital Twin opportunities

TOWARDS A

An "Ocean Forecasting Co-design Team": will design a new architecture (standards, tools, best practices, etc.) in cooperation with related Decade programmes

**Results to inspire:** Decade programmes development targets

mercator-ocean.eu 7



### **Conclusions**

- OceanPrediction DCC: a key element for the ocean prediction we need
  - Builds an active community of users, scientists and policymakers (with additional focus on developing countries)
  - Harnesses the Decade framework and arrival of the Digital Twin of the Ocean, to join and deliver together worldwide
- Substantial benefits expected
  - A connected community
  - New and better OOFS
  - A technologically linked worldwide ocean forecasting framework
- Significant challenge!
  - Only possible through collaboration with Decade programmes and other relevant actors



