



European Ocean Observing System for Digital Twin Ocean

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**European Global Ocean Observing System
(EuroGOOS)**

Learn more here:

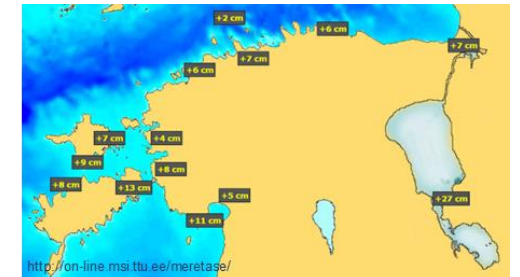
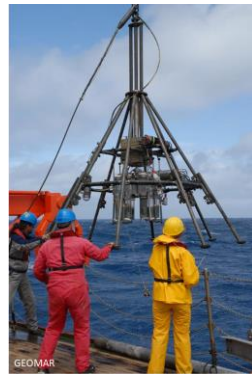
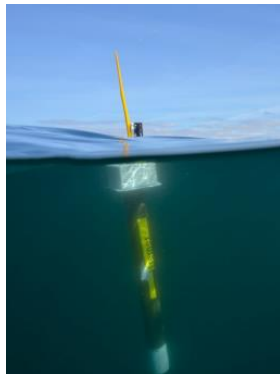


ATHENS 7-9 DECEMBER 2022





Observations

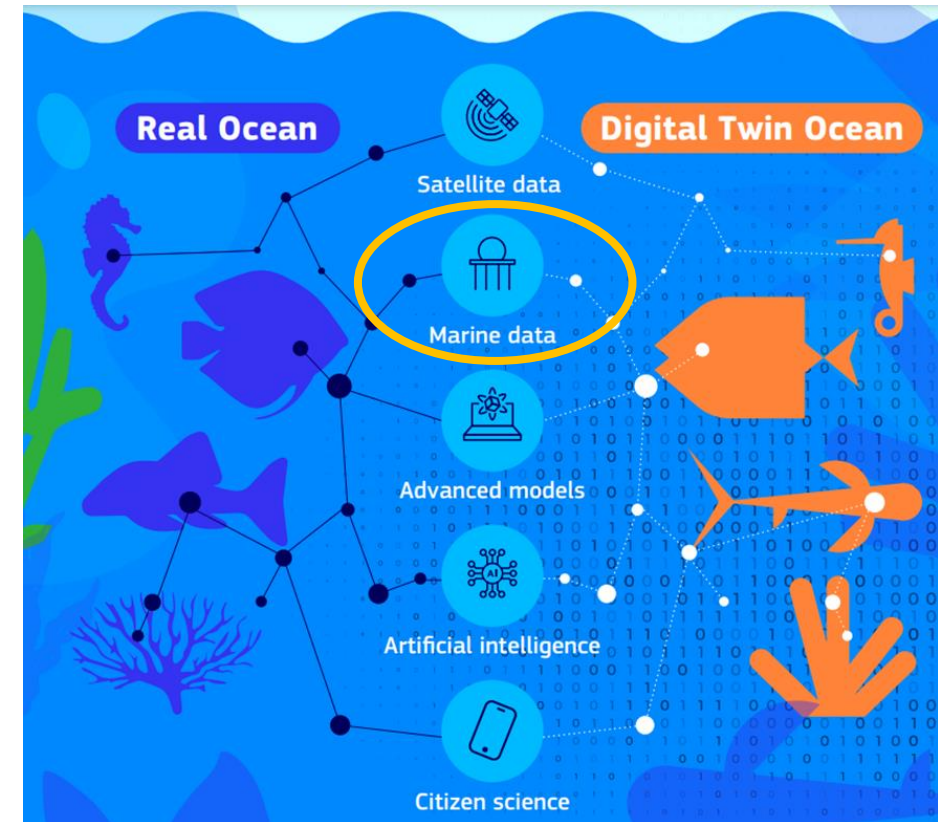




European Digital Twin of the Ocean

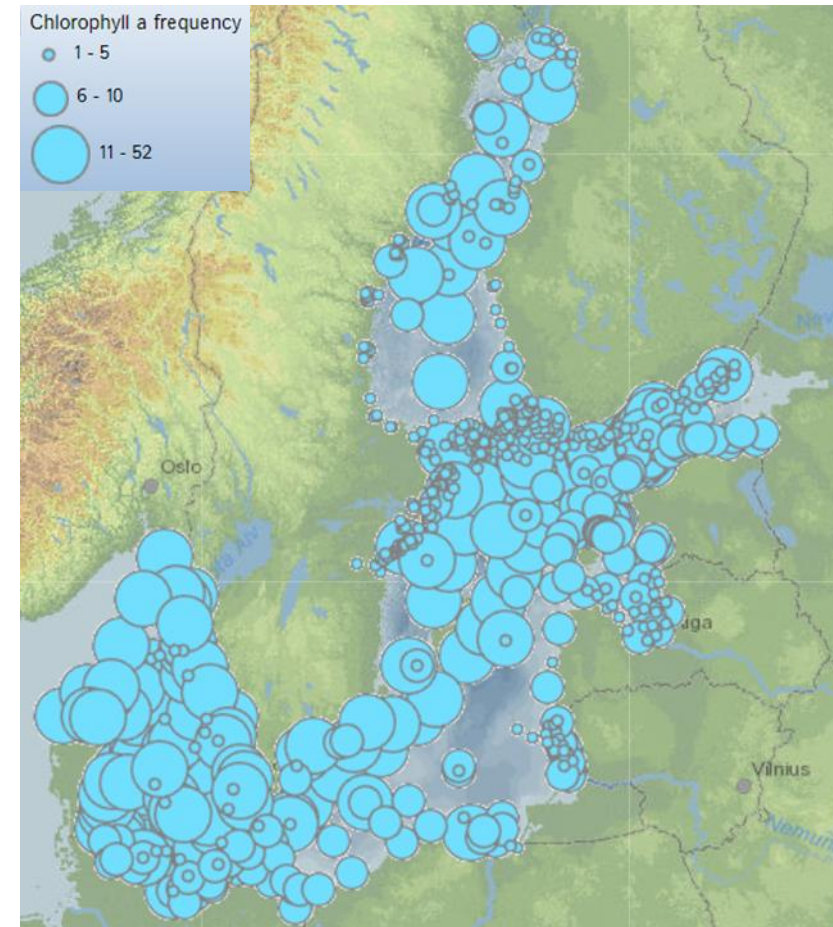
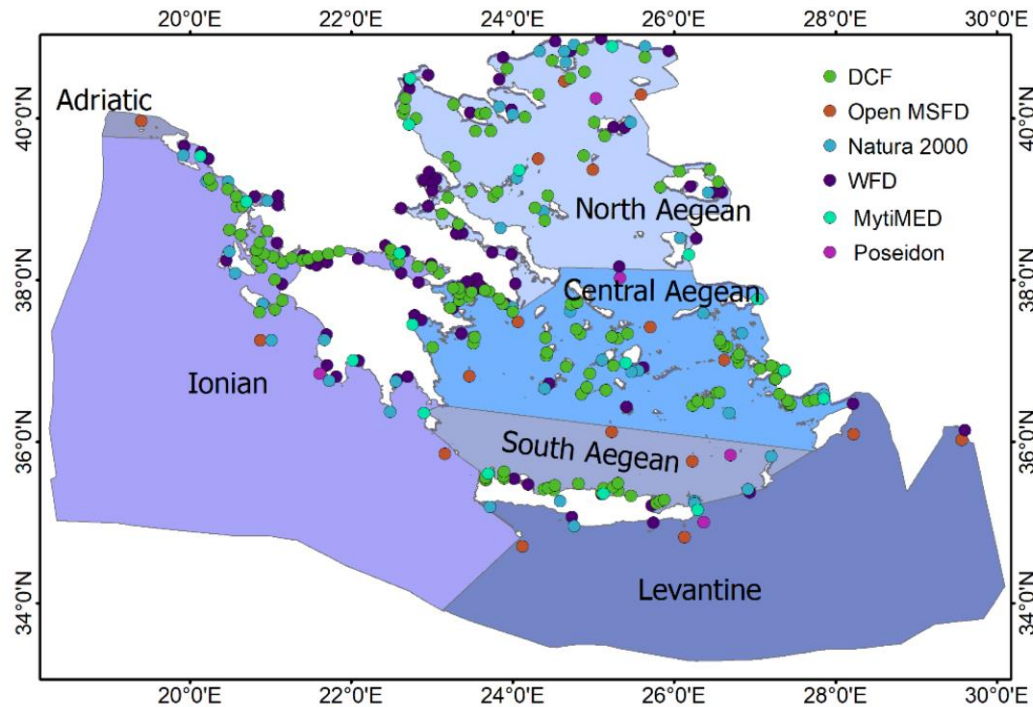
A digital representation of ocean processes

- digital space providing access to vast amounts of **data**, models, artificial intelligence and other tools, to allow the replication of the properties and behaviours of marine systems and their interaction
- use of **real-time and historical data** to represent the past and present, and create models to simulate future / what-if scenarios



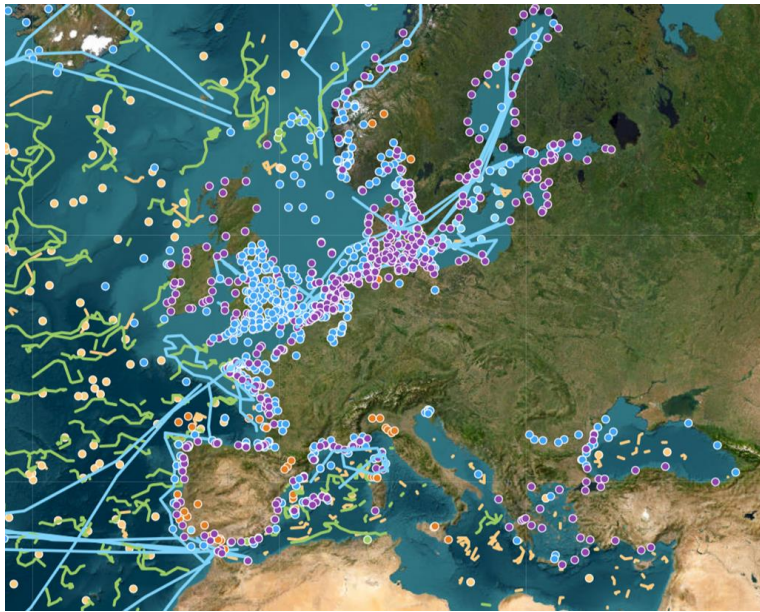


Ocean observations – national, regional, global





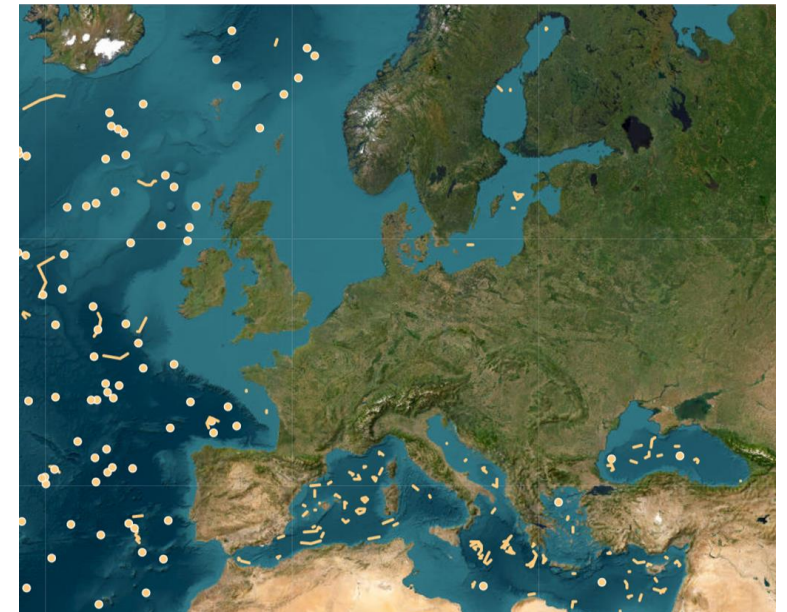
Ocean observations – national, regional, global



All platforms



CTD



Profilers

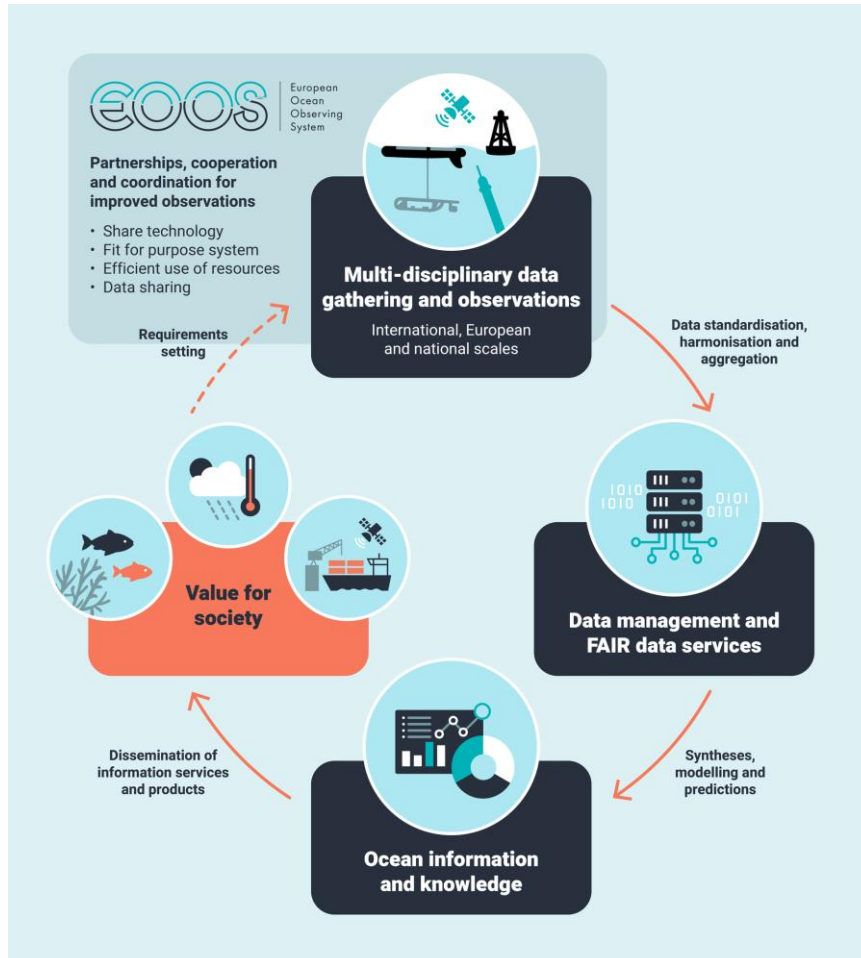
Stations spatio-temporal coverage follows the national priorities

Research vessel data stream to data aggregators is not operational

Argo profiling float array is decreased in deployments across the last 4 years



European Ocean Observing System



EOOS is the infrastructure, platforms, sensors and people that gather essential data and information about Europe's ocean, seas and coastal waters

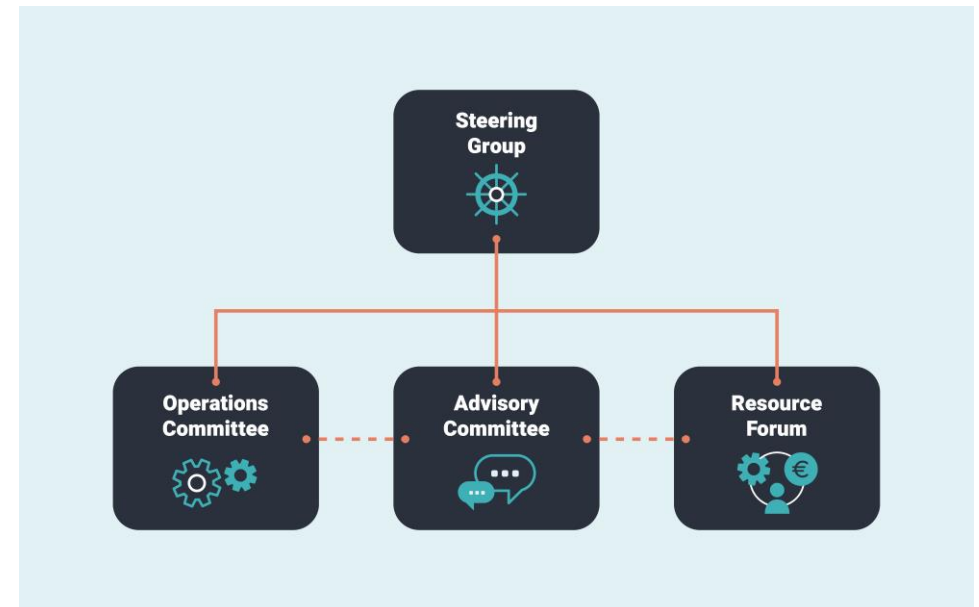
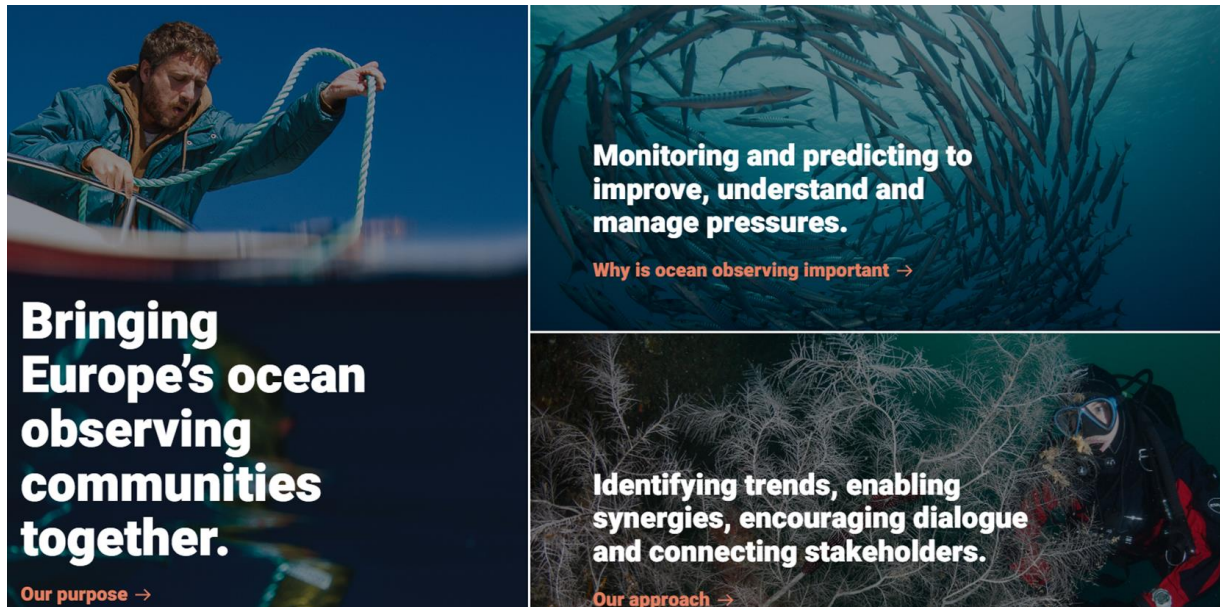
EOOS Framework offers a collaborative structure for key European actors in ocean observation to align and develop the components of a fully functioning and complete EOOS, and the resources needed to sustain it



European Ocean Observing System



Ocean observing implementers
Ocean observing funders
European GOOS NFPs





E00S Strategy 2023-2027



“Advancing E00S – the foundation of European ocean knowledge”



Vision:

A European Ocean Observing System that is sustained and meets the specific needs of users

Mission:

To coordinate and integrate European communities and organisations operating, supporting and maintaining ocean observing infrastructures and activities, fostering collaboration and innovation



EOOS Strategy 2023-2027

Objectives:

Unite the European ocean observing community through the EOOS Framework, to collaboratively design and work towards a sustained multi-platform, multi-network and multi-thematic EOOS that meets the specific needs of users

Engage with European providers of services and products derived from ocean observations to improve collaboration across the marine knowledge value chain

Advise governance, funding and policymaking to implement recommendations towards a sustained EOOS





Advancing European Ocean Observing System European Ocean Observing System

To advance the transition from disconnected ocean observing activities to a joined-up, efficient, and more cost-effective EOOS we need to:

Co-designing EOOS in collaboration with stakeholders:

- understand user and stakeholder needs and priorities
- identify gaps between the current state of ocean observing in Europe and the optimal European Ocean Observing System

Improve the visibility of ocean observing activities to improve collaboration

Promote best practices and open data sharing

Foster innovation in ocean observing

Reduce and overcome organisational and regulatory barriers to integration of ocean observing





Thank you!



EuroGOOS
European Global Ocean
Observing System



European
Ocean
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