



# Ocean Observing

Diving deeper: propelling ocean knowledge and its sustainable management

As a source of oxygen, food, and employment, the ocean supports billions of people and is also the planet's largest carbon sink. This Results Pack highlights 13 EU-funded projects whose research activities are essential for the sustainable management of the ocean.



The ocean covers more than 70 % of the Earth's surface and contains nearly 80 % of all life. Sustainable management of the global ocean is therefore key to successful biodiversity conservation, climate action, food security, renewable energy, and human health. Monitoring and protecting marine habitats are essential to both human well-being and the world we live in, yet the majority of the global ocean is currently poorly observed or unexplored.

To fill these gaps in scientific knowledge, understand the present state of the ocean, and predict the conditions affecting it in the future requires accurate, reliable data on the relationship between climate change, biodiversity, and ecosystem services.

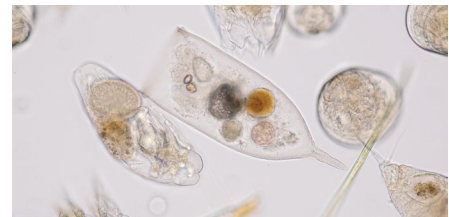
## 13 EU-funded projects

The 13 projects in this Results Pack show how ocean observing is essential for the sustainable management of the ocean. The projects address the entire knowledge value chain, including sensing technologies and platforms, ocean observing systems, and data sharing. Their results cover ocean observing from the physical, geochemical, and biological perspectives, and address both coastal and ocean zones, in addition to highlighting the role of the marine research infrastructures.

### AtlantECO

Atlantic ECOSystems assessment, forecasting & sustainability  
Coordinated in Italy

AtlantECO used a combination of cutting-edge techniques to shed light on oceanic ecosystems and their dynamics.



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### Blue-Cloud 2026

A federated European FAIR and Open Research Ecosystem for oceans, seas, coastal and inland waters  
Coordinated in Italy

Blue-Cloud 2026 connected data on the marine and coastal environment with the Blue Economy.



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### EDITO-Infra

EU Public Infrastructure for the European Digital Twin Ocean  
Coordinated in France

EDITO-Infra is building the EU Public Infrastructure backbone for the European Digital Twin of the Ocean.



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### Euro-Argo RISE

Euro-Argo Research Infrastructure Sustainability and Enhancement  
Coordinated in France

Euro-Argo RISE made it possible for scientists to build more accurate weather models and better understand long-term climate trends.



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### EurofleetsPlus

An alliance of European marine research infrastructure to meet the evolving needs of the research and industrial communities  
Coordinated in Ireland

EurofleetsPlus brought remotely operated vehicles (ROVs) and autonomous underwater vehicles (AUVs) to the European research fleet.



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## EuroSea

Improving and Integrating European Ocean Observing and Forecasting Systems for Sustainable use of the Oceans  
Coordinated in Germany

EuroSea upgraded and integrated European national ocean observation and forecasting systems into an international network.

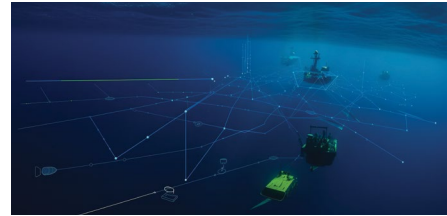


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## GROOM II

Gliders for Research, Ocean Observations and Management:  
Infrastructure and Innovation  
Coordinated in France

GROOM II designed a sustainable marine research network at European level that increases accessibility to underwater gliders.

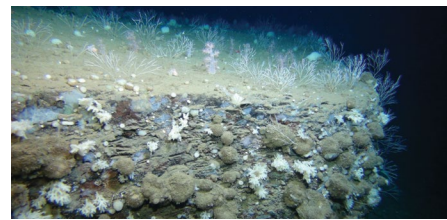


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## iAtlantic

Integrated Assessment of Atlantic Marine Ecosystems in Space and Time  
Coordinated in the United Kingdom

iAtlantic investigated factors controlling the distribution, stability, and vulnerability of deep-sea ecosystems.

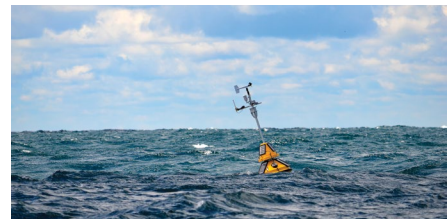


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## JERICO-S3

Joint European Research Infrastructure of Coastal Observatories:  
Science, Service, Sustainability  
Coordinated in France

JERICO-S3 improved observation of European coastal ecosystems and cooperation with other European research infrastructures.



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## MaCoBioS

Marine Coastal Ecosystems Biodiversity and Services in a Changing World  
Coordinated in the United Kingdom

MaCoBioS explored the ability of nature-based solutions to mitigate human impacts on marine and coastal ecosystems.

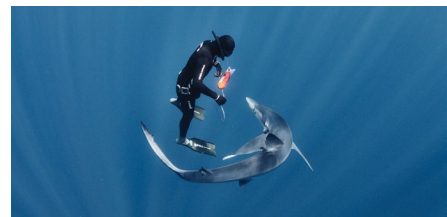


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## NAUTILOS

New Approach to Underwater Technologies for Innovative, Low-cost Ocean obServation  
Coordinated in Italy

NAUTILOS developed a new generation of cost-effective sensors and samplers, filling important gaps in existing ocean observation technology.



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## SO-CHIC

Southern Ocean Carbon and Heat Impact on Climate  
Coordinated in France

SO-CHIC used a combination of observation and modelling to study heat and carbon budgets in the Southern Ocean.

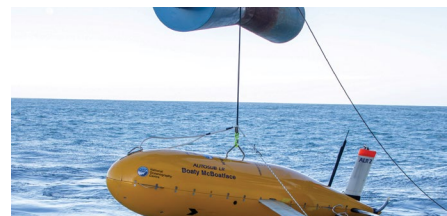


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## TechOceanS

Technologies for Ocean Sensing  
Coordinated in the United Kingdom

TechOceanS created remote sensing technologies to capture important ocean data.



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## *EU initiatives for ocean sustainability*

Observing our ocean and waters and monitoring their health is a crucial step towards being able to anticipate and address the challenges associated with their long-term sustainability. To that end, several EU initiatives are working towards building a more robust community focused on increasing ocean knowledge.

The goal of the [EU Mission Restore our Ocean and Waters](#) is to protect and bring back the health of our ocean and waters by 2030 through research and innovation, stakeholder engagement, including with citizens, and invest in the blue economy. Under the Mission, the EU is developing the [European Digital Twin of the Ocean](#) (European DTO), a digital replica to help scientists understand and predict the impact of human activities and climate change.

This powerful tool collates data from European assets like the [Marine Observation and Data Network](#) and the [Copernicus Earth Observation](#) programme and feeds it into state-of-the-art computer models to simulate the ocean under different scenarios. By building a digital replica, researchers can study the ocean's past, present, and future, which can help inform EU policy and foster new connections between science, business, and society.

In addition, the European DTO is bringing together researchers from different fields into a single cutting-edge virtual environment. Connecting the physical, biological, and socioeconomic dimensions of the ocean will revolutionise work practices and help make informed, science-based decisions.

### Learn more about

European Ocean Observing System: [bit.ly/3NOcnhc](https://bit.ly/3NOcnhc)  
The European Green Deal: [bit.ly/3LkXpyH](https://bit.ly/3LkXpyH)  
Maritime Forum: [bit.ly/3H1MTsW](https://bit.ly/3H1MTsW)

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