



# EUROARGO

EUROPEAN RESEARCH  
INFRASTRUCTURE CONSORTIUM  
FOR OBSERVING THE OCEAN

## Euro-Argo ERIC


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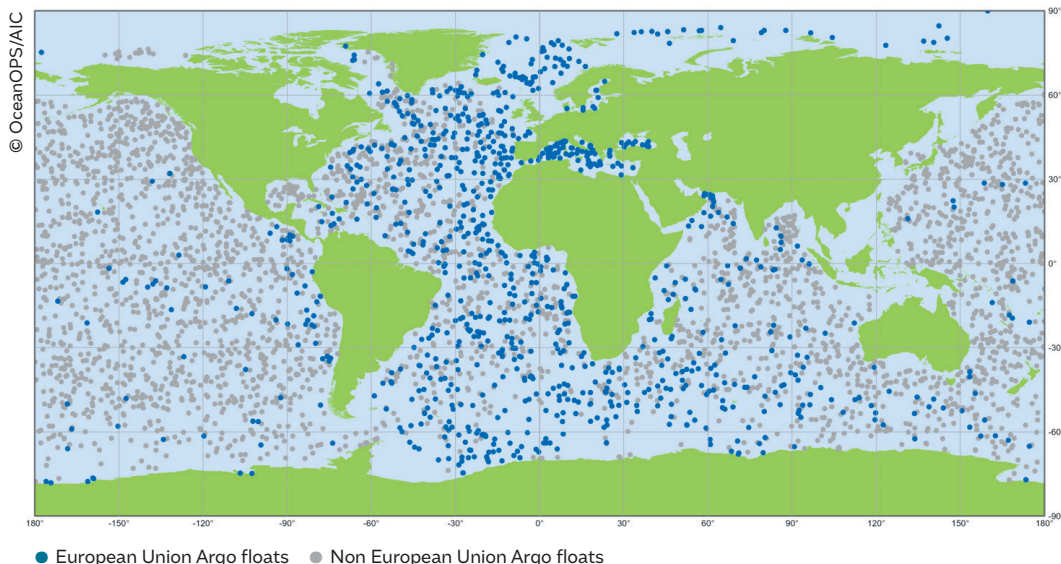
What is Euro-Argo ERIC?

- Euro-Argo ERIC is the **European Research Infrastructure Consortium** coordinating and strengthening the **European contribution to the Argo international programme**. It was created in 2014.
- Argo is a **global real-time in situ ocean observing network**. About **4,000 autonomous floats worldwide** report **temperature, salinity, deep ocean currents** and up to six **biogeochemical (BGC) parameters** in the water column down to a depth of 6,000 metres.
- Euro-Argo ERIC aims at providing, deploying and operating **25% of the global Argo floats network**, in order to better **understand and predict the ocean, its role in the climate system and its health**.

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Argo float deployment.



Locations of operational profiling floats in September 2025.

→ The Euro-Argo Office **federates and optimises the European Argo effort** through various **centralised activities**: floats procurement and deployment, floats testing, at sea monitoring, data management & access support and joint outreach & trainings.

→ The Office is also engaged in all aspects of the **scientific oversight** of procedures related to **data acquisition, technological developments, sampling strategy, network design**, etc. in coordination with the ERIC members.

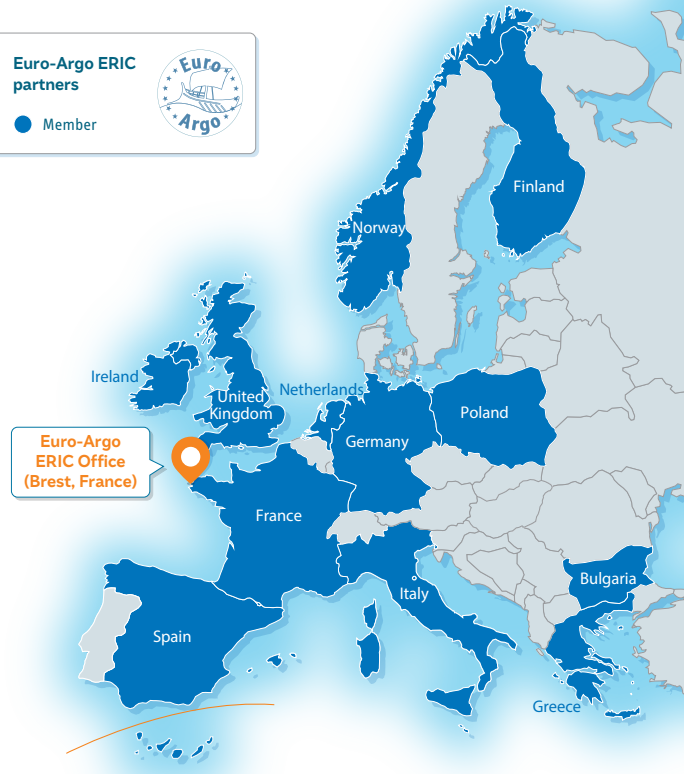
A BGC float tested at Ifremer facility, Brest (France)



© Olivier Dugomay/Ifremer

Euro-Argo ERIC partners

● Member



→ The members of the Euro-Argo ERIC are **countries**, signed into **partnership** by **ministries** or other **government representatives**.

→ The Euro-Argo ERIC comprises **12 countries**, with coordination managed by the **Euro-Argo ERIC Office**, hosted by **Ifremer (France)**.

How is the ERIC organised?

→ OneArgo is the new global, full-depth and multidisciplinary design of the Argo programme.

→ OneArgo consists of 3 missions: **Core-Argo**, **Deep-Argo** and **BGC-Argo**. It would revolutionise Europe's capacity to observe the ocean, from the surface to the abyss, and promote better scientific understanding for a **sustainable ocean and societal well-being**.

**OneArgo target by 2033: an international fleet of 4,700 floats**

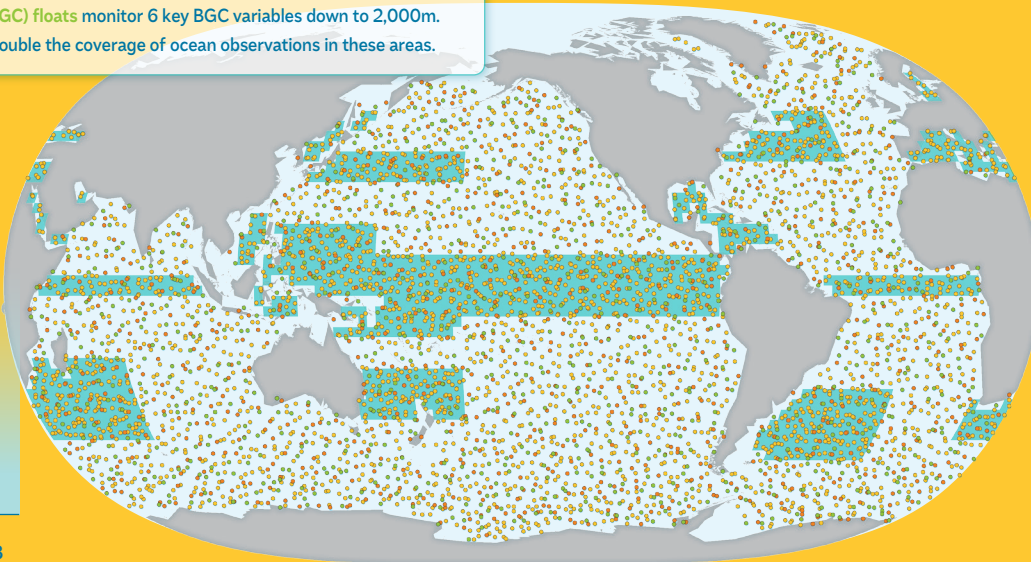
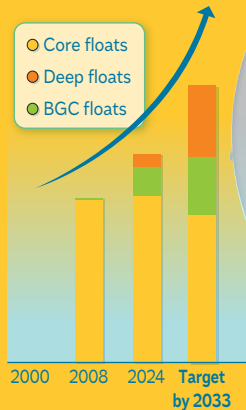
2,500 **Core floats** measure temperature and salinity down to 2,000m.

1,200 **Deep floats** extend temperature and salinity measurements down to the abyss.

1,000 **biogeochemical (BGC) floats** monitor 6 key BGC variables down to 2,000m.

OneArgo aims to double the coverage of ocean observations in these areas.

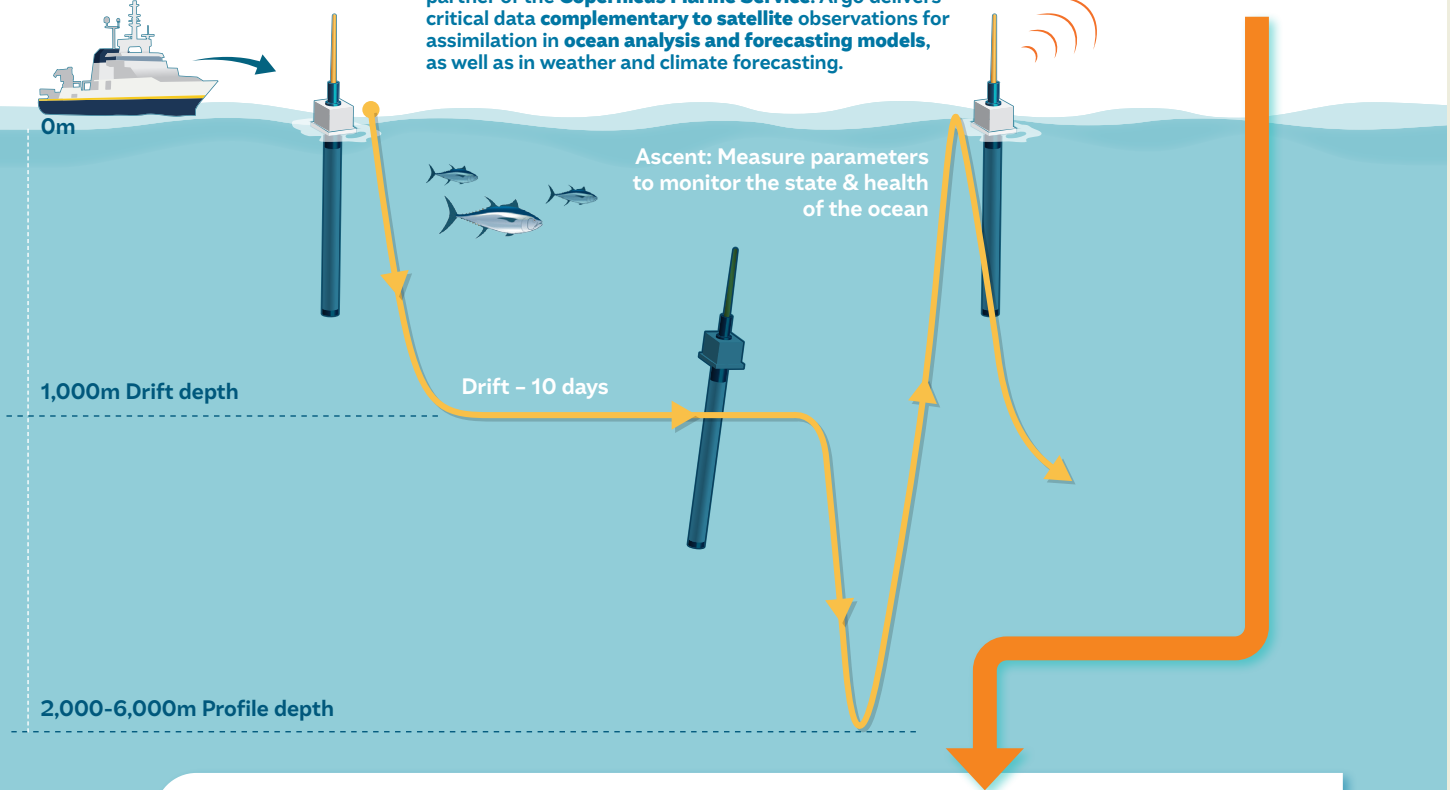
© OceanOPS/AIC



“Argo's efficient technology and open data system — which have proven so successful — can now be leveraged to close the major remaining gaps in ocean monitoring: the deep, polar, and living global ocean.”  
Susan Wijffels, Co-Chair of the Argo

What is OneArgo?

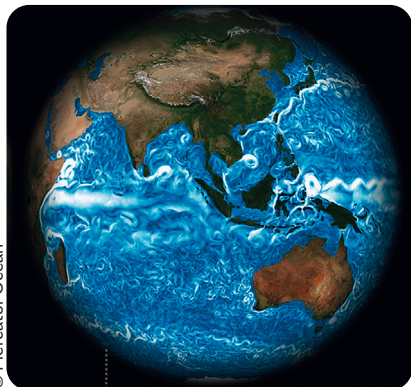
- Euro-Argo delivers **free and open quality-controlled data** to the **research and operational communities**.
- Argo being the most important in situ ocean observation system for operational oceanography, Euro-Argo is a key partner of the **Copernicus Marine Service**. Argo delivers critical data **complementary to satellite** observations for assimilation in **ocean analysis and forecasting models**, as well as in weather and climate forecasting.



The array of  $\approx 4,000$  Argo floats delivers free & open-source data in  $\sim 6$  hours, making Argo the most abundant source of subsurface global ocean information – temperature, salinity, ecosystem parameters and ocean currents – powering science, forecasts, and climate monitoring worldwide.



## For weather, climate and ocean prediction



© Mercator-Ocean

Argo provides **real-time ocean data** which feeds into the **forecasts** we rely on, including daily marine and weather forecasts, as well as long-term reanalyses relying on past data. Supporting Copernicus and the ECMWF, Argo improves models, enhances safety and climate services, and is a key pillar of the **Digital Twin of the Ocean (DTO)**.



## Climate change and variability

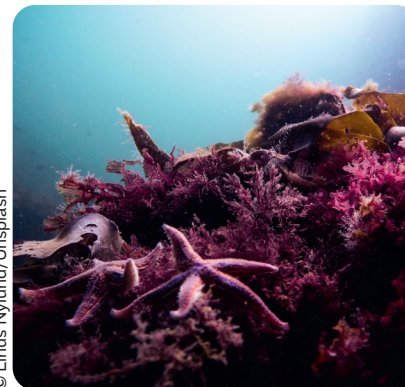


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Argo data are crucial for a better **understanding of ocean processes**. Argo measures changes in **ocean heat storage, salinity, and deep circulation processes**. This information is essential for improving our understanding of climate change and its consequences, such as **sea level rise and the risk of extreme events**. It provides vital data for **EU climate policy and climate change mitigation**.



## Ocean and ecosystem health



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Argo **biogeochemical (BGC)** sensors reveal the impact of **warming** on marine ecosystems and allow the monitoring of ocean **acidification, desoxygenation and nutrient pollution**. A comprehensive BGC network enhances our understanding of the **carbon cycle, biodiversity**, and the development of a sustainable **Blue Economy**.

## Positive impacts on the environment and society

The Argo programme contributes to 2 of the 17 Sustainable Development Goals (SDGs) adopted by all United Nations Member States in 2015. OneArgo would deliver essential data to guide ocean governance and address ongoing changes more effectively.

