



Euro-Argo: The European contribution to the global Argo ocean observations network

Claire Gourcuff and the Euro-Argo ERIC members Team
Euro-Argo ERIC Office, Brest, France (claire.gourcuff@euro-argo.eu)

The international Argo programme is a major element of the global in-situ ocean observing system. More than 3900 floats are now globally measuring temperature and salinity throughout the global oceans, down to 2,000 meters depth and delivering data both in real time for operational users and after careful scientific quality control for climate change research and monitoring. Argo is the single most important in-situ observing system for the Copernicus Marine Service. The Euro-Argo research infrastructure organizes and federates European contribution to Argo. A legal and governance framework (Euro-Argo ERIC) was set up in May 2014; it allows European countries to consolidate and improve their contribution to Argo international.

We will provide an overview of the development of Euro-Argo over the past years and present the now agreed Euro-Argo long term organization. The capability of the Euro-Argo infrastructure to organize Argo floats procurement, deployment and processing at European level and to conduct R&D driven by Copernicus needs will be highlighted. During the recent years, within the H2020 E-AIMS project, Euro-Argo carried R&D activities on new Argo floats, equipped with biogeochemical sensors or able to dive up to 4000m, from the floats design up to the analysis of their measurements. European Argo data centers were adapted so that they can handle the new data. Observing System Evaluations and Simulation Experiments were also conducted to provide robust recommendations for the next phase of Argo.

One of the main challenges for Euro-Argo is now to implement the next phase of Argo with an extension towards biogeochemistry (e.g. oxygen, biology), the polar oceans, the marginal seas and the deep ocean. Meeting such challenges is essential for the long term sustainability and evolution of the Copernicus Marine Service. We will present Euro-Argo strategy and provide some highlights on the implementation-plan for the years to come and the Argo extensions for the next decade.