



FixO³ : Early progress towards Open Ocean observatory Data Management Harmonisation

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Since 2002 there has been a sustained effort, supported as European framework projects, to harmonise both the technology and the data management of Open Ocean fixed observatories run by European nations.

FixO³ started in September 2013, and for 4 years will coordinate the convergence of data management best practice across a constellation of moorings in the Atlantic, in both hemispheres, and in the Mediterranean. To ensure the continued existence of these unique sources of oceanographic data as sustained observatories it is vital to improve access to the data collected, both in terms of methods of presentation, real-time availability, long-term archiving and quality assurance.

The data management component of FixO³ will improve access to marine observatory data by harmonizing data management standards and workflows covering the complete life cycle of data from real time data acquisition to long-term archiving. Legal and data policy aspects will be examined to identify transnational barriers to open-access to marine observatory data. A harmonised FixO³ data policy is being synthesised from the partner's existing policies, which will overcome the identified barriers, and provide a formal basis for data exchange between FixO³ infrastructures. Presently, the interpretation and implementation of accepted standards has considerable incompatibilities within the observatory community, and these different approaches will be unified into the FixO³ approach. Further, FixO³ aims to harmonise data management and standardisation efforts with other European and international marine data and observatory infrastructures. The FixO³ synthesis will build on the standards established in other European infrastructures such as EDMONET, SEADATANET, PANGAEA, EuroSITES (European contribution to JCOMM OceanSITES programme), and MyOcean (the Marine Core Service for GMES) infrastructures as well as relevant international infrastructures and data centres such as the ICOS Ocean Thematic Centre.

The data management efforts are central to FixO³. Combined with the procedural and technological harmonisation, tackled in separate work packages, the FixO³ network of observatories will efficiently and cost effectively provide a consistent resource of quality controlled accessible oceanographic data

The project website www.fixo3.eu is being developed as both a data showcase and single distribution point, and with database driven tools will enable the sharing of information between the observatories in the most smart and cost effective way. The network of knowledge built throughout the project will become a legacy resource that will ensure access to the unique ensemble data sets only achievable at these key observatories.