JCOMMOPS Integrated Monitoring System

Mathieu Belbéoch, JCOMMOPS (FRANCE), mbelbeoch@jcommops.org Long Jiang, JCOMMOPS (SWITZERLAND), ljiang@jcommops.org Martin Kramp, JCOMMOPS (FRANCE), mkramp@jcommops.org Anthonin Lizé, JCOMMOPS (FRANCE), alize@jcommops.org Emanuela Rusciano, JCOMMOPS (FRANCE), erusciano@jcommops.org

The Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology in situ Observations Programme Support Centre

JCOMMOPS operates within the JCOMM Observations Programme Area and its Observations Coordination Group (OCG), and monitors the status and performance of the following global ocean observing networks: Argo profiling floats, DBCP surface drifters, tropical and coastal moored buoys, tsunameter buoys, ice buoys, SOT (observations from volunteer ships), GO-SHIP hydrographic lines, OceanSITES multidisciplinary reference stations, GLOSS sea level tide gauges, and Ocean Gliders.

JCOMMOPS assists in the implementation and deployment of the observing networks, and in data and metadata exchange. It maintains and develops a consistent set of tools needed to monitor the status of the observing networks.

Overall JCOMMOPS is a centralized information and technical support facility, required for coordinating and harmonizing practices of global programmes on a day to day basis, where operators officially register platforms and cruises' metadata to.

One of the goals of the JCOMM OCG and JCOMMOPS is to provide an accurate and homogeneous status of individual and heterogeneous observing networks. JCOMMOPS then faces the challenge of gathering, adapting and analyzing input metadata sets from various sources while being able to deliver unified and accurate output products using core and shared pillars, such as common vocabularies.

The Centre has the responsibility to provide all marine platforms with unique identifiers and to deliver to WMO all metadata on marine instruments through a WIGOS compliant format.

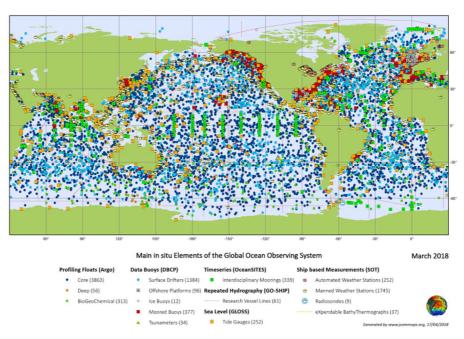


Figure 1: main in situ elements of the Global Ocean Observing System

A new metadata and monitoring system

Therefore, JCOMMOPS is releasing a new version of its information system, facilitating access to the observing networks' metadata and enabling users to interact with the whole system through a brand new web experience and set of monitoring tools.

The interactive web-based monitoring application was designed to adapt to the wide spectrum of required perspectives and user needs. This web application is set in motion thanks to a background architecture focusing and relying on interoperable and open data access.

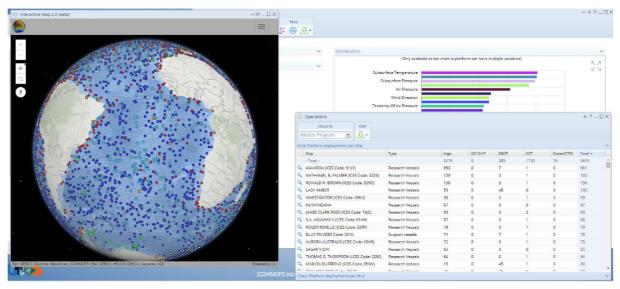


Figure 2: web monitoring tools

JCOMMOPS will provide a detailed review of its information system, including demonstration use cases of the web interface and available services, as well as future milestones and plans of continuous improvements.

While the metadata and monitoring golden standard is reached for a number of networks, further work is required within the implementing panels and data teams in order to enable a truely integrated Global Ocean Observing System.