



Ocean monitoring and reporting activities of the Copernicus Marine Environment Monitoring Service

Karina von Schuckmann and Pierre-Yves Le Traon

Mercator Ocean, Mercator Ocean, Ramonville-Saint-Agne, France (karina.von.schuckmann@mercator-ocean.fr)

COPERNICUS is the European Earth observation and monitoring programme, which aims to give the European Union autonomous and operational capability in space-based observation facilities (see the Sentinel missions) and in situ (measurements in the atmosphere, in the ocean and on the ground), and to operate six interlinked environmental monitoring services for the oceans, the atmosphere, territorial development, emergency situations, security and climate change. Mercator Ocean, the French center of global ocean analysis and forecast, has been entrusted by the EU to implement the Copernicus Marine Environment Monitoring Service (CMEMS) which provides an open and free access to regular and systematic information about the physical state and dynamics of the ocean and marine ecosystems for the global ocean and six European regional seas.

The CMEMS ocean monitoring and state-of-the-art ocean reporting (state, variability and change) for the global ocean and European seas is part of the production center service elements in order to establish a unique reference of value-added expert information at a regular frequency. This is achieved through two principal activities:

1. Annual release of the peer-reviewed CMEMS Ocean State Report containing a state-of-the-art value-added synthesis of the ocean state, variability and change from the past to present
2. Ocean Monitoring Indicators and related operational framework on the CMEMS web portal.

This activity is aiming to reach a wide audience from the scientific community, over climate and environmental service and agencies, environmental reporting bodies, decision maker to the general public. We will give here an overview on the CMEMS ocean monitoring and reporting activity, highlight main outcomes, and introduce future plans and developments.