



The Copernicus Marine Environment Monitoring Service (CMEMS)

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The oceans provide essential services to society. They regulate climate, they provide food and energy, and many economic activities depend on our seas and oceans. But our oceans and marine ecosystems are under threat. They are impacted by the effects of climate change as well as from other human-induced pressures. More than ever, there is a need to continuously monitor the oceans. This is imperative to understanding and predicting the evolution of our weather and climate. This is also essential for a better and sustainable management of our oceans and seas. The Copernicus Marine Environment Monitoring Service (CMEMS) has been set up to answer these challenges. CMEMS provides a unique monitoring of the global ocean and European seas based on satellite and in situ observations and models. CMEMS monitors past (over the last 30 years) and current marine conditions and provide short-term forecasts. Mercator Ocean was tasked by the EU to implement the service. The organisation is based on a strong European partnership with more than 60 marine operational and research centres in Europe that are involved in the service and its evolution. An overview of CMEMS, its drivers, organization and initial achievements will be given. The essential role of in-situ and satellite upstream observations will be discussed as well as CMEMS Service Evolution Strategy, associated R&D priorities and future scientific challenges.