



Evaluation of Ocean Syntheses: studying the evolution of the ocean state over the last decades with COST Action ES1402

Aida Alvera-Azcárate (1) and Keith Haines (2)

(1) University of Liege, Astrophysics, Geophysics and Oceanography, Liege, Belgium (a.alvera@ulg.ac.be), (2) University of Reading, Meteorology Department, UK

The COST Action ES1402 “Evaluation of Ocean Syntheses” (EOS) was initiated in 2014 in order to establish and consolidate a network of European scientists working on the generation and evaluation of ocean syntheses and reanalyses. Ocean syntheses are comprehensive estimations of the ocean state over the last decades (mainly temperature, salinity, sea level and currents) calculated by merging hydrodynamic ocean models and all available observations using data assimilation. Ocean reanalyses are used in operational estimations of the ocean state, for short-term predictions aiming at studying specific processes, for seasonal and decadal predictions, and for climate-related activities.

The main goals of the EOS Action are to improve the coordination of the European efforts in the evaluation of ocean syntheses, to optimize their use and value, to ease their access, to promote their improvement and to raise confidence in their quality. Through the activities organised by the network, several regional intercomparison initiatives of ocean reanalyses have been started (e.g. in the polar regions and the Atlantic Ocean).

The EOS COST Action (<http://eos-cost.eu/>) will be presented, with an overview of the events that have been organized and the main results that have been obtained through these activities. Suggestions for running a COST Action and lessons learned will be also presented.