



Presence and future of a coastal forecasting system in the Balearic Sea

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A prediction system of the Balearic Sea is in operation since summer 2007. The system comprises Western Mediterranean basin scale forecasts of the Mediterranean Forecasting System (MFS), sub-basin scale high-resolution (1km) forecasts utilizing the Harvard Ocean Prediction System (HOPS), and wind forecasts of the Spanish National Institute of Meteorology (INM). In addition, a Lagrangian tool (GNOME) is available which allows to compute trajectories based on the velocity fields predicted by MFS or HOPS. The forecast range of both MFS and HOPS is four days starting one day prior to the actual date. HOPS is initialised and one-way nested in MFS and driven by INM atmospheric forcing. Presently, HOPS is capable to assimilate in near-real time temperature, salinity, and velocity data from ongoing sea trials and gliders. Concrete near future plannings comprehend the assimilation of on-line oceanographic data from moorings, autonomous underwater vehicles, and Lagrangian drifters. All forecasts are displayed on a web page and updated every day.