



A Forecasting System for the Tyrrhenian Sea circulation

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A forecasting system for the Tyrrhenian Sea circulation has been developed, within the framework of the PRIMI (PRogetto pilota Inquinamento Marino da Idrocarburi) project. The system uses a high resolution ocean module (horizontal grid spacing of about 2 km and 40 sigma levels), nested in a coarser resolution operational model of the whole Mediterranean Sea circulation. The latter model provides the initial sea state and the lateral conditions at the three open boundaries, while the surface forcing (momentum, heat and salt fluxes) is derived from ECMWF data.

The system has just gone operational, providing weekly forecasts since November 2008. Although the assessment of the system skill is still under way, analysis of the first forecasts shows favourable comparison with satellite (SST and Chlorophyll) data. Examples are given in which the high resolution ocean module reproduces fine scale dynamics not resolved by the coarser model.