



Ocean circulation modelling in the Canary Archipelago within the ESEOO project framework

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The ESEOO Project has as a main objective the development and implementation of a Spanish Operational Oceanography System to be used in emergency situations at sea. Within this project, an important effort is being carried out in order to establish forecast systems, based on numerical modelling, to provide predictions of oceanographic variables such as surface currents, density, salinity, which are determinant in the tracking and forecasting of oil spill trajectories or drifting object tracking. The implementation for the Canary Archipelago domain (named ESEOOCAN) is based on the ROMS-AGRIF regional oceanic model. The spatial resolution is enhanced at Gran Canaria through the use of a nested domain. Preliminary results show the 72-hour evolution of the Canary Current in the ESEOOCAN domain (33N-24N, 20W-10W). The model uses COADS monthly climatology surface fluxes data (0.5° resolution) and TPXO.6 from the Oregon State University global model of ocean tides for tidal modelling.