



High resolution wave forecast and verification on the Catalan coast

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In the frame of the Icoast project, that aims to develop an integrated alert system tool for coastal risks, a very detailed wave forecast near shore is needed. The wave module Tomawac of the Telemac Modelling System (Hervouet and Bates, 2000) has been implemented in the whole Catalan coast (NE Spain) on a non-structured grid up to a 100 m. horizontal resolution. The wave forecast model has been running twice daily for six months. Verification results of Tomawac model against buoys and the Meteorological Service of Catalonia (SMC) operative wave forecast model (WAM cycle 4.5.3), at a coarser grid, are presented. The effect of taking into account tides, wind, currents or neither inside the Tomawac module are studied for different test cases. A methodology to connect different non-structured grids in a single domain is also presented.