We are thankful for the general comments of appreciation of our work. Regarding the questions that are raised regarding the (1) validation using water levels, and (2) data assimilation, our reply is:

(1) We have done several validation experiments with water levels provided by the Spanish and Portuguese authorities. Though this process has not been finished yet, from our early comparisons it seems that the role that the strait of Gibraltar plays is not totally solved by the model. Since the main focus is on the Portuguese coast, this is a minor problem. More validations are to come with new data from the IH (the Portuguese hydrographic institute in its Portuguese acronym) stations and that will results in a more robust validation methodology. In fact, it is planned for the near future the im-
plementation of an operational validation system that will automatically validate model results;

(2) The Mercator solution that we use as lateral boundary condition is in itself a model with real time assimilation, so we don’t find the need of adding any extra assimilation scheme to our model in addition to the hydrodynamic and atmospheric forcing.

Interactive comment on Ocean Sci. Discuss., 9, 1651, 2012.