

## GENERAL COMMENTS

In this contribution, the authors describe the operational implementation of a very high-resolution coastal ROMS-based model, nested to CMEMS-IBI regional system, in order to monitor water quality within Alfacs Bay (NW Mediterranean Sea). 1-year validation exercise is presented along with two numerical simulations to analyze the impact of proposed interventions.

This work deals with an interesting topic. I particularly appreciate the development of tailored CMEMS downstream services in coastal and port-approach areas with subsequent societal benefits. The new version of the manuscript has successfully addressed all the issues previously raised and my overall impression is that the quality of the manuscript has been significantly improved in sections 2.2 (Observations) and 2.4 (Validation). Some figures along with the conclusions and future prospects have been also properly amended. In summary, I believe that the paper **is already acceptable for its immediate publication in Ocean Science** although I would like to add one very minor remark:

### - Section 2.4: Validation

As previous step to validate your model, you must be sure that the parent system is consistent and accurate enough, able to provide coherent open boundary conditions to the nested system you are implementing. In this context, the CMEMS-IBI was previously validated in Ebro Delta area using a multi-platform approach:

Lorente P., Piedracoba S., Sotillo M.G., Aznar R., Amo-Baladrón, A., Pascual, A., Soto-Navarro J., Álvarez-Fanjul, E. Ocean model skill assessment in the NW Mediterranean using multi-sensor data. *Journal of Operational Oceanography*, doi: 10.1080/1755876X.2016.1215224.

Please add this reference in the paragraph where you also cited the validation of CMEMS-IBI carried out in Sotillo et al., (2015).