

Interactive comment on “Projected impact on wave-driven harbour agitation due to climate change – application to the Catalan ports” by J. P. Sierra et al.

Anonymous Referee #1

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The methodology used in this work is poor for several reasons, the discussion is very hard to read because it is not concise and well structured at all, and the inter model variability and the inter harbor variability are so large, that the only conclusion is that no conclusions can be given.

In regard with the methodology it is not mentioned which is the spatial resolution of the SWAN model application used by the previous Casas-Prat and Sierra (2013) study, that is used for this work, and it is very hard to understand why a higher resolution application is not implemented for this work, instead of propagate the previous of the results. The only explanation given by the authors is the lack of high resolution bathymetries,

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but with digitalized nautical charts, a very high resolution bathymetry can be obtained. Is the usual way to develop a high resolution SWAN model application.

On the other hand the method to associate a peak period to each wave situation it is not well justified.

The section 4.1 is really hard to follow. It should be much more concise. A port by port, case by case description is tedious and don't give much information

Finally, as it has been said, the inter model variability is too large and not well explained. It is almost impossible to get any conclusion.

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