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Interactive comment on "Investigation of suitable sites for Wave Energy Converters around Sicily (Italy)" *by* C. Iuppa et al.

Anonymous Referee #2

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The manuscript is an original work that proposes to investigate, by means of an high resolution third generation wave model (SWAN), the suitable sites for harvesting wave energy along the cost of Sicily.

This work addresses an interesting oceanographic issue; however, I considers that it could be suitable for publication on Ocean Science only after the following remarks are taken into account. - The English writing is very rough. For the most part I can understand the meaning, but the phrasing is distracting.I would recommend a deep editorial revision to be made by a native English speaker before it is re-submitted.

- There is a substantial lack of informations about the model setting.

- It is not clear to me which methods was used to merge the two bathymetric database.

It would be necessary also to show the final bathymetry used in this study.

- As for the bathymetry, it would be good to show, at least in same places of the domain, the model grid. More in general, what is the ratio between the grid size along the boundaries and the distance between two ECMWF consecutive input data? How the ratio has been chosen? What is the impact of the ratio on the obtained results?

- I suggest to change the title of paragraph 2 from "Wave propagation" in "Numerical simulation e validation".

- I must confess that this paragraph "Setting up the computation grid" is not clearly depicted. For example the sentence: "The computational domain was defined in terms of the ECMWF grid points" should be rephrased. More in general, the entire paragraph should be deeply revised. Moreover, from the paragraph it is not clearly indicated how the simulation was performed. I guess the authors propagate only some sea-states. If this is the case, the authors should indicate it clearly in the manuscript.

As for the previous paragraph, a substantial revision is needed for the paragraph "Validation of the output data". It is not clear to me why the authors did not compare the model simulation against buoys data. Such a comparison would be good to show the potential improvement of the SWAN simulation. Moreover, such a comparison allow the authors to compare also the propagation direction.

- Figure 1: the caption does not really explain the Figure

Interactive comment on Ocean Sci. Discuss., 12, 315, 2015.