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Interactive comment on "On the feasibility of the use of wind SAR to downscale waves on shallow water" *by* O. Q. Gutiérrez et al.

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Dear referee, thanks for precise review.

Concerning the referee major comment, an interesting question arised concerning boundary conditions used for wave modeling.

The authors agree with referee about the importance of boundary conditions, and want to remark that on the simulated cases "where wind sources show opposite direction, due to low resolution of the modeled winds" and "a good correlation was found on the downscaled waves" both sources of wind are less than 5 m s-1. Generally, such wind magnitude is not enough to be appreciated on waves generation at this scale on local areas like the study area. The authors consider that on different scenarios, where

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winds are significant, wind fields with higher spatial resolution increase the quality of amplitude and direction of waves. The main focus of the research study is, however, to show the incorporation of SAR wind fields to simulate waves by means of a downscaling methodology rather than to evaluate the accuracy of boundary conditions, whilst the latter play a major role.

The suggested additional language editing reported in the minor comments have been done on the manuscript, and are reported in the author's changes to manuscript in the attached supplement PDF marked in yellow color. The only rejected suggestions are those related to month names, which have been kept in capital letter at the beginning.

Please also note the supplement to this comment:
http://www.ocean-sci-discuss.net/12/C939/2015/osd-12-C939-2015-supplement.pdf

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Interactive comment on Ocean Sci. Discuss., 12, 1567, 2015.