Ocean Sci. Discuss.,
https://doi.org/10.5194/os-2017-16-AC1, 2017
© Author(s) 2017. This work is distributed under
the Creative Commons Attribution 3.0 License.

Ocean Science
Discussions

Interactive comment on "Observation on dominance of swells over wind-seas in the coastal waters of Gulf of Mannar, India" *by* M. M. Amrutha and V. Sanil Kumar

M. M. Amrutha and V. Sanil Kumar

sanil@nio.org

Received and published: 9 August 2017

- In my opinion, authors must include more details about the validation of the wave modeling using WW3 in the study area to unsure the produced dataset by the numerical modeling is accurate.

Reply: Thanks for the suggestion. Now we have added the details about the validation of WW3 model results. Added a figure (Fig. 1) showing the comparison of model results with measured buoy data. Model parameters considered are added under Section 2.2. Comparison of model output with measured data are now presented as section 2.4.

- P2 L28 and P3 L3: the spatial resolution of wave model is different.

Reply: Now corrected.

- It is stated that "even though the study area is in a gulf region, the monthly mean wave spectrum is swell dominated in all the months with the exception of December and January ....". However, the study area is a gulf, but its opening is exactly toward the south west and the winds are also blowing from the south west during the summer monsoon.

Reply: Now we have modified these statements.

- P1 L7: "coastal gulf" is not a common phrase in coastal engineering, I think.

Reply: Corrected as "coastal regions of the gulfs"

All the corrections are indicated in the attached revised manuscript in track change mode.

Please also note the supplement to this comment:
https://www.ocean-sci-discuss.net/os-2017-16/os-2017-16-AC1-supplement.pdf

Interactive comment on Ocean Sci. Discuss., https://doi.org/10.5194/os-2017-16, 2017.

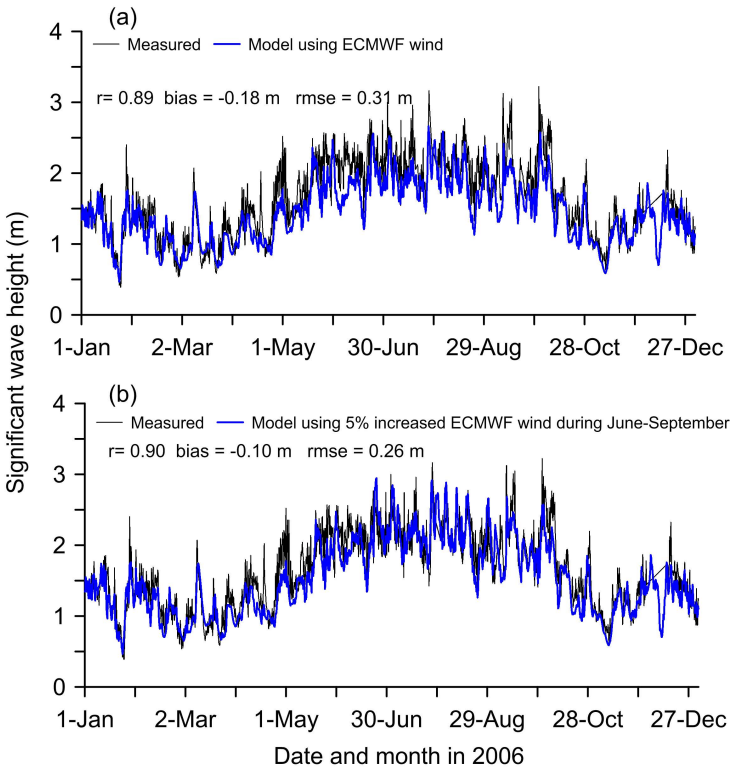

Fig. 1. Time history of simulated significant wave height through numerical model forced by (a) ECMWF wind and (b) ECMWF wind speed increased by 5% during June-September and its comparison with measured data