

General comment

In my opinion the reviewed paper, submitted by O. Q. Gutiérrez et al., could be published.

I suggest only minor amendments as indicated below.

Specific Comments

Page 1569

Line 14: In the text you use the acronyms NAS for Northern Adriatic Sea. Please specify it here.

Line 16: I suggest to use σ_0 instead of Sigma0

Page 1570

Line 1-5: The sentence is not clearly formulated. Please revise.

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Line 10: The CMOD-IFR2 is used to estimate wind field from NRCS. I suggest to adopt CMOD-5 (H. Hersbach, CMOD5. An improved geophysical model function for ERS C-band scatterometry, ECMWF Technical Memorandum 395, Reading, England, pp. 1-50, 2003) or CMOD-5.h (Soisuvarn, S., Jelenak, Z., Chang, P. S., Alsweiss, S. O., & Zhu, Q. (2013). CMOD5. H—A high wind geophysical model function for C-band vertically polarized satellite scatterometer measurements. Geoscience and Remote Sensing, IEEE Transactions on, 51(6), 3744-3760.) which are optimized for high wind speeds. In particular, the last one has been developed for wind field retrieval in case of extreme events (such as Bora).

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Line 14: “Thus the estimation of wind fields obtained by means of a Bayesian approach...”. Please report reference of the cited approach.

Figure 2: Please provide units in the legend of the figure.

Figure 6: This figure is useful to give, for some cases, qualitative comparison between wave fields obtained using both Reanalysis and SAR wind forcing in terms of spatial distribution. It could be also useful to report in addition a scatterplot (and relevant statistic) of significant wave height for a quantitative comparison.

Figure 7: I suggest to use σ_0 instead of Sigma0