

Interactive comment on “Co-existence of wind seas and swells along the west coast of India during non-monsoon season” by R. Rashmi et al.

Anonymous Referee #1

Received and published: 12 November 2012

This paper presents a case study of the wave field in three positions along the west coast of India during the non-monsoon period. The study presents a qualitative view of the wave field based on the dominance of wind seas (swells) vs. swells (wind seas), using wave buoy and wind observations (in situ and remote sensing).

I consider the paper interesting, relatively well written, and useful for the wave climate community.

Suggestions:

Throughout the all text it is not clear that we are in the presence of a “case study” limited in time. The authors try to pass the idea that this is a climate study and that in the non-monsoon period the wave field wind sea vs. swell partition is as presented.

C1258

This is not true, and the authors should make this clear, particularly in the abstract and in the conclusions.

The usual partition between wind sea and swell is done via wave age (see Semedo et al. 2011, for example). The authors should mention the merits of their partition scheme compared to the more “conventional” wave age one.

Page 3098, line 25 – Add references after “... season”. This is an important statement, therefore reference(s) should be added. Suggest “Alves (2006) and/or Semedo et al. (2011).”

Page 3102, line 7 – erase “to”

Page 3102, suggestion – it should be mentioned that the wind observations were made in land. The positions and distances to the wave buoys should be made available, and a table like table 1 should be added.

Page 3104, suggestion – The paragraph after equation (6) is a bit confusing; I recommend it to be re-written.

Page 3105, line 23-24 – Add “the” after “but”, add “the” after “pattern of”, and replace “wave” with “waves”.

Page 3106, line 6 – Add “them” after “classifying”.

Page 3106, line 12 – Replace “dominated” with “dominant” (twice).

Page 3106, line 25 – Add “the” before “majority”.

Page 3106, line 28 – Add “the” between “is” and “spectral”.

Page 3107, line 10 – When the authors mention that “Off Goa, during late pre-monsoon season, we find that wind seas grow when the wind and the wind sea are in the same direction”. This is a redundancy: wind seas are always aligned, by definition, with the wind.

C1259

Page 3107 – When referring to the figures, for example on this page to figure 4., the authors should be clear to which panel they refer to; figure 4. Has 15 panels, and they are not well identified (see caption comments below).

Page 3108, line 8 – Add “to the” between “and” and “disappearance”.

Page 3109, first full sentence stating with “Young...” – This sentence is a bit confusing; re-write.

Page 3111, very last sentence: is “No. xxxx” correct?

Figures captions miss labels (a, b, c, etc.); without them it results hard to read or understand them and to relate them to the text, and vice-versa.

References:

Alves, J. H. G. M., 2006: Numerical modeling of ocean swell contributions to the global wind-wave climate. *Ocean Modell.*, 11, 98–122.

Semedo, A., K. Suselj, A. Rutgersson, A. Sterl, 2011: A Global View on the Wind Sea and Swell Climate and Variability from ERA-40. *Journal of Climate*, 2011, 24:1461-1479.

Interactive comment on *Ocean Sci. Discuss.*, 9, 3097, 2012.