Interactive comment on “Integration between X-Band Radar and Buoy Sea State Monitoring” by Giovanni Ludeno et al.

Anonymous Referee #1

Received and published: 7 September 2016

Review of "Integration between X-Band Radar and Buoy Sea State Monitoring"
by Ludeno et al.

General Comment:

In the manuscript, the authors reported the wave observation results obtained from X-band radar, buoy and a model. The technology has been mature for a long time. Thus, the originality of the presented work is little. In addition, the writing is poor.

Technical comments:

The title indicates integration of wave information from radar and buoy. However, it only contains simple comparison of all the sources obtained.

Another claimed contribution the manuscript is the confirmation of the consistency and
repeatability of the two X-band radars employed. This didn’t provide any new technical contribution to the readers but confidence of the radar products.

On the second page, it is said “it is somewhat surprising that so few experiments are reported in the literature of combined application of two or more systems.” This is not true, there many publications presenting the results of two or more systems.

Are the two calibration scale factors same for the two radar systems?

How the buoy wave data is linearly transformed should be explained.

The scatter plots of wave heights over time are not meaningful.

Editorial comments:

The manuscript is very poor-written. There are too many grammar mistakes and broken sentences. E.g.,

“begin the wave number” on page 3; “an U=(Ux, Uy) dis” on page 3; “An equalization step is implemented using the spectral Modulation Transfer Function (MTF), is to move from the filtered radar image spectrum ... by minimizing the electromagnetic modulation effect.” On page 4 is broken. . .