

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

Anonymous Referee #2

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The authors did simultaneous measurements of waves during storm events with land-based X-band radars and wave buoy. Final target of this work seems to give some insight to Small Scale Storm Variation (SSSV) from the results of the measurements.

Radar and buoy measurements described in this work are both established methods (or tools), and there is no novelty and merit from this part.

The description of the two events is not shown in details. Are they induced by a similar weather system, or by a quite different situation? This must be an important information to discuss SSSV.

The reviewer was expected to learn about SSSV, but the description on this is very few. The authors should explain processes in a SSSV, and whether they are detectable from their deployment: two radars and a buoy. The authors claim that Eq. (5) can be used

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as an index to discuss SSSV, but the background of this idea is not shown.

One of the advantages of radar measurement is to collect spatial distribution of backscatter from the wave field. The authors should try to assess spatial variability from their data to discuss SSSV.

(Overall) The authors should describe more on SSSV:

- what are the variations in a small scale storm
- are the variations detectable from the deployment: two radars and a buoy
- how to detect variations from the measured data

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