

## ***Interactive comment on “A combined quality-control methodology in Ebro Delta (NE Spain) high frequency radar system” by P. Lorente et al.***

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The manuscript by Lorente et al. is focused on the performance of a network of high frequency (HF) radar systems deployed along the eastern coast of Spain. Data from three radar sites for a full year in 2014 are analyzed. HF radar observations of ocean surface currents are increasingly important components of ocean observing systems. Descriptions of these observations in new regions over long time frames are of interest both to the local scientists and marine resource managers and to other users of HF radar systems. As the data set here is extensive and the analyses and interpretations reasonable, I recommend the manuscript for publication.

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The manuscript could, of course, be improved in a few areas. Although the background sections are thorough and well cited, they also have a good deal of redundant information with the data sections. Whole paragraphs are repeated in the two sections (and in some cases again in the summary and concluding remarks section). The introduction and/or data sections should be shortened.

In several places within the text as well as in the title, the authors suggest that the main point of the manuscript is to describe some new type of quality control for HF radar observations. I think that this is misleading as the manuscript really is a balanced look at the performance of the particular HF radar network using previously described methods. The authors highlight the variability over the 12-month record of radar-specific parameters, such as the signal-to-noise ratio (SNR) on the monopole receive antenna elements. The study does not, however, utilize these quality indices on a point-by-point basis. Neither does it show through any type of comparison that use of the SNR-based quality metrics can improve the results. Because of this, I recommend a change in the title and a diminished focus on quality control.

The discussion of EOF results would be strengthened if a local wind time series were added to the EOF mode time series shown in Figure 11. Is the mode-2 variability really correlated with variability of the Mistral wind?

Minor Comments:

Page 3, Line 3: "jet which" should be "jet, which"

Page 3, Line 10: "dynamic" should be "dynamics"

Page 3, Line 19: "a 13.5 MHz" should be "a network of 13.5 MHz" and Line 20: "radar able" should be "radar systems able"

Page 4, Line 11: "failure problems" should be "failures"

Page 8, Line 11: "measurements accuracy" should be "measurement accuracy"

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