Interactive
Comment

Interactive comment on "CoastColour Round Robin datasets: a database to evaluate the performance of algorithms for the retrieval of water quality parameters in coastal waters" *by* B. Nechad et al.

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Dear editor: Here is a review of the manuscript "CoastColour Round Robin datasets: a database to evaluate the performance of algorithms for the retrieval of water quality parameters in coastal waters", by B. Nechad et al.

The manuscript describes three reference datasets assembled by the CoastColour Round Robin (CCRR) project (European Space Agency/ESA) intended for testing algorithms of water quality parameters in coastal areas. The authors also conducted

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an intercomparison of algorithms for the retrieval of in-water properties over coastal waters.

General comments: This is an excellent manuscript. It is very well written and documented. The datasets described will be useful to a specific community working with ocean color data.

As I mention below, most data seem to have been collected away from coastal zones. Clearly there are a few datasets from turbid coastal zones but it was difficult to understand how many or what fraciton of the data. The manuscript text (introducion, conclusions) gives the impression that the effort focused on turbid coastal zones. Perhaps this can be better clarified in the abstract, stating the percentage of which type of data really represents turbid or shallow environments.

I recommend acceptance with minimal changes.

Specific comments: ABSTRACT: The abstract could provide a brief summary of the performance of the algorithms for a few of the most important water quality parameters, both using in situ as well as satellite data. At the moment the abstract simply says that the authors assembled the data and did some comparisons but it doesn't summarize results.

The paper really contains more of a very detailed description of various data than a description and test for various water quality parameters. Perhaps thus the language in the Abstract can be refined some to emphasize algorithms less than stated now.

BODY:

P 177-15: why is the 709 nm band unique – explain Figures 1 and 4 (salinity) suggest most samples are actually from areas dominated by marine waters. Many (most) of the areas shown are not really coastal or Case II. Perhaps authors can clarify how many samples they have that can be classified as Case II. Authors should also state this in the abstract and in the last paragraph of the body, which read as if most of the data

are acutally from turbid coastal zones – it seems to me that actually most data are not from turbid coastal zones but rather a smaller number of the data – again, please qualify/quantify this for the reader in the abstract, introduction, and in the conclusions, perhaps also making it clearer in the body.

Can authors explain the extreme values ∼1000 mg/m3 in Chl a off California? Are these oceanic waters and was there a matchup to satellite data? It would be good to say something about the site.

Interactive comment on Earth Syst. Sci. Data Discuss., 8, 173, 2015.

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