

Interactive comment on “The Mediterranean Ocean Colour Observing System: system development and product validation” by G. Volpe et al.

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We are certainly aware that SeaDAS version 6.2 addressed some calibration issue recognized for MODIS Aqua starting in mid-2010. On the other hand the Cal/Val activity presented in this paper is aimed to address the product quality as delivered by the current version of the GOS OCOS processing chain, which still uses SeaDAS 6.1. This was probably not well explained in the text, and so, the revised manuscript will certainly states it more explicitly. The Reviewer highlighted an important point, the best solution of which, namely the system upgrade to the latest SeaDAS version, involves the entire OCTAC processing chain, not only GOS OCOS's

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(an OCTAC sub-system); not an immediate process, as each change must be arranged and tested with all project partners to prevent undesired failures of the system, and to account for users needs. Having said that, we think the Reviewer, with his/her comment, offered an important opportunity for improving the overall quality and relevance of the paper. Following his/her recommendations the revised version of this manuscript will include both the offline and the online validation analyses with both SeaDAS versions (6.1 and the latest available version). The reviewer suggested the use of SeaDAS 6.3, however, on the fourth of June, 2012, NASA delivered a new SeaDAS version (6.4) which reflects the latest NASA reprocessing (R2012, http://oceancolor.gsfc.nasa.gov/forum/oceancolor/topic_show.pl?tid=4495), addressing the calibration issue also for the last period. We thus plan to add/modify relevant figures and tables using this last version. In particular, the revised manuscript will have:

- Figure 4 with an extra line per panel indicating the SeaDAS 6.4-derived MODIS CHL.
- A new Figure 5 to address Reviewer #1 issue about the Case2 water influence on the matchup dataset.
- A new Figure 6 about the online validation which will include both SeaDAS versions (6.1 and 6.4).
- Figure 7 exactly the same as former Figure 6, and a new Figure 8 using SeaDAS 6.4.
- A new Table 2 to explicitly describe all statistical parameters used in the offline validation.
- Table 3 exactly the same as former Table 2.
- Table 4 as a modified version of the former Table 3 to include statistics about SeaDAS 6.4
- Table 5 as a modified version of the former Table 4 to include statistics about SeaDAS 6.4

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As for the former Table 5, we do not expect significant changes to occur as this table only refers to SeaWiFS which is not supposed to change using SeaDAS 6.4. This because in principle the calibration scheme adopted for MODIS in SeaDAS 6.4 is exactly the same as the one used for SeaWiFS within previous SeaDAS versions. Thus the former table 5 is not planned to be updated.

All minor issues, including the acronyms definition, the difference between RPD and APD (see table 2), and the difference between OCTAC and GOS OCOS will all be addressed by adding relevant information as appropriate.

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