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Interactive
comment

Interactive comment on "Diversity II water quality parameters for 300 lakes worldwide from ENVISAT (2002–2012)" *by* Daniel Odermatt et al.

Anonymous Referee #2

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General comments This manuscript reports a valuable dataset (Diversity II water quality dataset) that was mainly generated from ENVISAT/MERIS data for evaluating water quality in more than 300 lakes worldwide. It can be considered that the dataset will be very useful to a wide range of users, especially in some lakes where in situ water quality data are unavailable. However, since the present manuscript lacked accuracy and available data frequency assessments for the dataset, it is hard to win users' confidence in their applications. Therefore, it is suggested that the authors can provide this kinds of information in their manuscript.

Specific comments Page 1, line 12. "The Diversity II water quality dataset consists of several monthly, yearly and . . .". It will become better if the authors can provide a summary for availability (or temporal frequency) of each water quality parameter.

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For example, in how many lakes and in a given year users can obtain water quality parameters in every month, or in every two month, and so on. This information can help users to judge the dataset is suitable for their applications or not.

Page 2, lines 19-20, the authors wrote that "The Diversity II water quality dataset is produced with the most suitable retrieval methods identified through these investigations." Nevertheless, it is better to provide several indices such as RMSE, NMAE (normalized mean absolute error), and so on for assessing accuracy of the dataset.

Page 8, Table 1. It is suggested that the authors include atmospherically corrected remote-sensing-reflectance in their dataset because it can make users flexibly choose different retrieval algorithm (e.g., OC4E, two- or three-band models) to estimate water quality parameters according to characteristics of their lake.

Technical corrections Page 9, line 25. "Generally maximum and minimum turbidity occur around August and February, respectively..." should be "February and August, respectively...", right?

Page 9, line 29. "...from both the MPH (Figure 8, top)..." should be "(Figure 8, bottom)", right?

Page 10, section 6. It is better to separate discussion and conclusions into different section. In addition, the section of conclusions should be the last one. However, if this is the style of the journal, please ignore this comment.

Page 11, line 25. Please explain "SWBD".