

Interactive comment on “In situ determination of the remote sensing reflectance: an inter-comparison” by G. Zibordi et al.

Anonymous Referee #3

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General Comments:

The paper deals with an inter-comparison of determined remote sensing reflectance using different types of radiometers at a Northern Adriatic test site. The Abstract and Introduction and Inter-comparison chapters are written to the point and cover the scientific exercise well. Derived parameters of dedicated optical instruments are compared and evaluated. The exercise gives the ocean colour community insight in the instrument- dependent errors of above- and in water optical measurements and therefore should be published.

Major comments: Chapters 3.1 and 3.2 shows lots of parameters and formulas and this makes the reader wonder if they really want to know. If possible, condense 3.1 and 3.2. Chapter 3.3 is too detailed (12 pages!!!) and therefore too comprehensive! My

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advice would be: a short description of the compared systems followed by a simple extra table, following table 1 (i.e. 1a and 1b) with a concise summing of all parameters tested instrument (optical parameter(s), spectral band(s), FOVs, sampling frequency, etc. ...). This would greatly enhance the readability of the paper. In methods: I miss here a description of the actual deployment of the instruments during inter-calibration. Are the instruments next to each other, how far apart? Especially the deployment of the WHISPER, as this is reference instrument. How far apart were the individual instruments from the reference? One point need clarification: The water type where the inter-calibration took place is a case 1 type. What about bottom reflection. Please explain.

Minor comments: Confusing: in Measurement systems and methods chapter 3.2: The naming of the parameters. Especially, after naming Mueller et al. 2002 in the references. Mueller et al. use L_{sfc} and L_{sky} instead of resp. L_T and L_i . The authors use FAFOV instead of FOV (field of view or field of vision, nomenclature). In Summary and conclusions, line 12: All optical sensors involved. ..., except one. ... Please name.

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