

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

G. Zibordi et al.

giuseppe.zibordi@jrc.it

Received and published: 14 June 2012

The Reviewer suggests a few Changes/Revisions. They are hereafter individually addressed (see the REPLY following each COMMENT).

MAJOR COMMENTS

COMMENT: 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 therefor too comprehensive! My 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. .

C570

..). This would greatly enhance the readability of the paper. REPLY: The manuscript is quite modular in its structure. It aims at supporting those readers interested in details and also those in the general inter-comparison exercise. It is believed that a reduction of section 3 would really take out much of the material necessary to duly present and discuss the inter-comparison results. However, in view of at least partially supporting the reviewer request, a new table summarizing the major features of the inter-compared systems has been added. Lists of symbols and acronyms have also been included.

COMMENT: 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 appart? 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. REPLY: Elements on the location of the inter-compared systems during the field activities have now been included. Additionally, the potential effects of bottom perturbations are are briefly quantified. Finally, the water type at the AAOT is also detailed.

MINOR COMMENTS

COMMENT: 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 Lsfc and Lsky instead of resp. LT and Li. The authors use FAFOV instead of FOV (field of view or field of vision, nomenclature). REPLY: The work of Mueller et al. is duly referenced for one of the inter-compared methods. However, the symbols used in the work result from the harmonization of the many different symbols currently used in literature and independently applied by the various co-authors. The inclusion of a list of symbols is now expected to make easier the reading of the text.

COMMENT: In Summary and conclusions, line 12: All optical sensors involved. . . , except one. . . Please name. REPLY: The system excluded from the immediate

C571

post-field calibration (but also consistently calibrated at a later stage) is made explicit in the main parts of the manuscript. The abstract and conclusions have been however revised to avoid misunderstandings or the need for unnecessary clarifications.

Interactive comment on Ocean Sci. Discuss., 9, 787, 2012.