

## ***Interactive comment on “In situ autonomous optical radiometry measurements for satellite ocean color validation in the Western Black Sea” by G. Zibordi et al.***

**Anonymous Referee #2**

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The manuscript by Zibordi et al. examines the applicability of the Gloria site, in the Western Black Sea, as validation site for ocean color primary products (i.e. water-leaving radiance and aerosol optical thickness). Authors acquired a radiometric dataset for comparison with satellite ocean color data. The paper is clear and well written. The data are well described, as well as the matchup analysis that are explained very meticulously. I find very interesting the climatological analysis that underlines the particular location of the Gloria site, which is influenced by two seasonal cycles, and the applicability of the satellite ocean color data for climatological studies in the Black Sea. I think the paper should be considered for publication.

Comments

C1286

In order to help the reader to better understand the application of the band-shift correction, I would suggest the authors to more clearly specify the bands of the BiOMaP data set used to develop the regional algorithms for the Black Sea.

The analysis of the inter-annual climatology is conducted on the Lwn spectral ratios (i.e.  $Lwn(547)/Lwn(488)$ ). The authors underline the relationship between these ratios and the chlorophyll a. Authors should add some comments to better justify the use of these ratios instead of the chlorophyll a

Minor issues

Page 3013 – Lines 10-11: Rrs ratios of the equation 11 and the regression (in line 11) are inconsistent. Please verify which is the exact band ratio.

Page 3017 – Line 17: substitute  $\tau$  with  $\alpha$

Page 3017 – Line 18: substitute  $\tau$  with  $\alpha$

Page 3018 – Line 3: substitute  $\tau$  with  $\alpha$

Page 3020 – Line 1: substitute  $\tau$  with  $\alpha$

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Interactive comment on Ocean Sci. Discuss., 11, 3003, 2014.

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