

Dear editor,

We would like to thank you and the reviewers for your valuable and constructive suggestions, which help to substantially improve the quality of the study. We have addressed the following editorial comments in the revised manuscript.

If you have any further suggestions/comments, please kindly let us know.

Sincerely,
Wei-Lei Wang

Assistant Project Scientist
Earth System Sciences
University of California, Irvine
Irvine, CA 92697
cell: 631.988.2397
weilei.wang@gmail.com
weileiw@uci.edu

L14: Remove “(Lana et al., 2011)” from the abstract.
Done. Thank you.

L24: Remove the parentheses for e.g. Stefels et al., 2007, that is, not (DMSP; (Stefels et al, 2007)), but (DMSP; Stefels., 2007).
Done. Thank you.

L28 chlorophyll a (Chl a; a proxy for phytoplankton biomass). The “a” should be italic.
Done. Thank you.

L 39 and hereafter: “Chl-a” is sometimes used, instead of “Chl a”. Please amend it throughout the manuscript including the figure 6 legend.
We think that the rule of using/not using the hyphen between Chl and *a* is that if Chl *a* appears before a noun then a hyphen is used (e.g., Chl-*a* concentration), otherwise, a hyphen is not used.

If the journal has a different rule, we would like to follow it. Please kindly let us know.

L.95: fluorometric method
Done. Thank you.

L111: not mg/m³, but mg m⁻³;
Done. Thank you.

L160: The data were
Done. Thank you.

L370 and hereafter: N. hemisphere? In the text, northern (or southern) is not abbreviated.
Please check these throughout the text.
To keep them consistent, we have spelled out all such abbreviations.

L399: Revolve a space immediately after “ocean”.
The space has been removed. Thank you.

L476-606: For the abbreviation of journal names, please follow the Caltech Library as mentioned in the BG manuscript preparation.
Thank you. We have updated the abbreviations for journal names according to Caltech Library.

Table A1: Please amend the format of References: for example, not “(Kettle et al., 1999)”, but “Kettle et al. (1999)”.
Done. Thank you.