

Interactive comment on “Optical characterization of an eddy-induced diatom bloom west of the island of Hawaii” by F. Nencioli et al.

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The reviewer expressed several appropriate concerns that have been addressed in the new version of the paper as follows:

1.Objective of the paper: The paper has been modified (abstract, introduction and conclusions) to better address its objective: the identification of optical parameters that are sensitive to the variations in ecological community, that would allow in situ continuous observation of bulk particle composition in open ocean waters.

2.Coordination from other data: no water samples were collected during transect 4, when the optical measurements were collected. Therefore, it is no possible to present quantitative relationships between the measured optical properties and other proper-

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ties derived from the analyses of water samples. We remarked this aspect more explicitly in the text (pages 12 and 13). However, it was possible to qualitatively correlate the vertical variations of optical properties to the ecological structure at the center of the eddy reconstructed using data collected during the previous transect. We added a new figure (Figure 7) to better clarify this aspect.

3.Ag: Correction of the measured cpg with reconstructed spectral profiles of ag is now fully discussed in the text. Few more paragraphs (pages 9 and 10) and a new two panel figure (figure 4) have been added to the Instruments and Methods section.

4.Figure 2: the figure has been modified as suggested by the reviewer.

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