

We would like to thank the referee for his valuable input into the manuscript. We carefully revised the manuscript accordingly. Here are the answers to the specific comments:

Ocean color observations are demonstrated to be useful in investigating small-scale processes in the South China Sea. It is true that conventional satellite observations, such as altimetry products may not resolve such proposes with adequate spatial resolutions (along-track data may have high resolutions, but merged grid data generally have low resolutions). In contrast, the high-resolution ocean color data products have their advantages. The authors provide a good example by examining the propagation process of small-scale cyclonic eddies in the western South China Sea. They also try to make a perspective explanation about the underlying physical processes that influence the formation of the small-scale eddies. Overall, I think it is a good contribution to the marine remote sensing and applied oceanography community. The paper is also concise and easy to read. I would suggest it be accepted for publication after some minor revisions in both text and figures.

Specific comments listed as follows:

P13516, L5, “the order of” can be removed from the sentence.

Reply: We have removed "the order of" in the revised manuscript.

P13519, L12, “NOAA” should be mentioned here.

Reply: We have added " National Oceanic and Atmospheric Administration (NOAA)" here and also added it in the acknowledgements sections.

P13519, L15-17, the sentence should be rewritten: “where tauy is the wind stress parallel to the coastline, positive northward. It is replaced with the meridional direction wind stress since the most significant offshore transport perpendicular to the Vietnam coast is approximately in the zonal direction.”

Reply: Thanks a lot. We have rewritten the sentence.

P13522, L1, “to” should be removed from the sentence.

Reply: We have removed "to" in this sentence.

P13522, L14, “tends” should be changed to “tend”.

Reply: We have changed "tends" to "tend". Thanks a lot.

Figure 3, better use the same lat and lon limits for the three panels on the right (Figures 3b, 3d, 3f). Currently, the high chlorophyll plume in Figure 3f appears to have much larger size than those in Figures 3b & 3d, which may not be true.

Reply: We checked the figure 3, and found that we used the same lat and lon limits for figures 3b, 3d, 3f. The mistake is that we plotted the inconsistent red boxes in figures

3c and 3e in the initial manuscript. We have redrawn the figure 3 in the revised manuscript. It is shown that there is a significant phytoplankton increase in figure 3f. This may be due to a lag between nutrients input and phytoplankton growth.

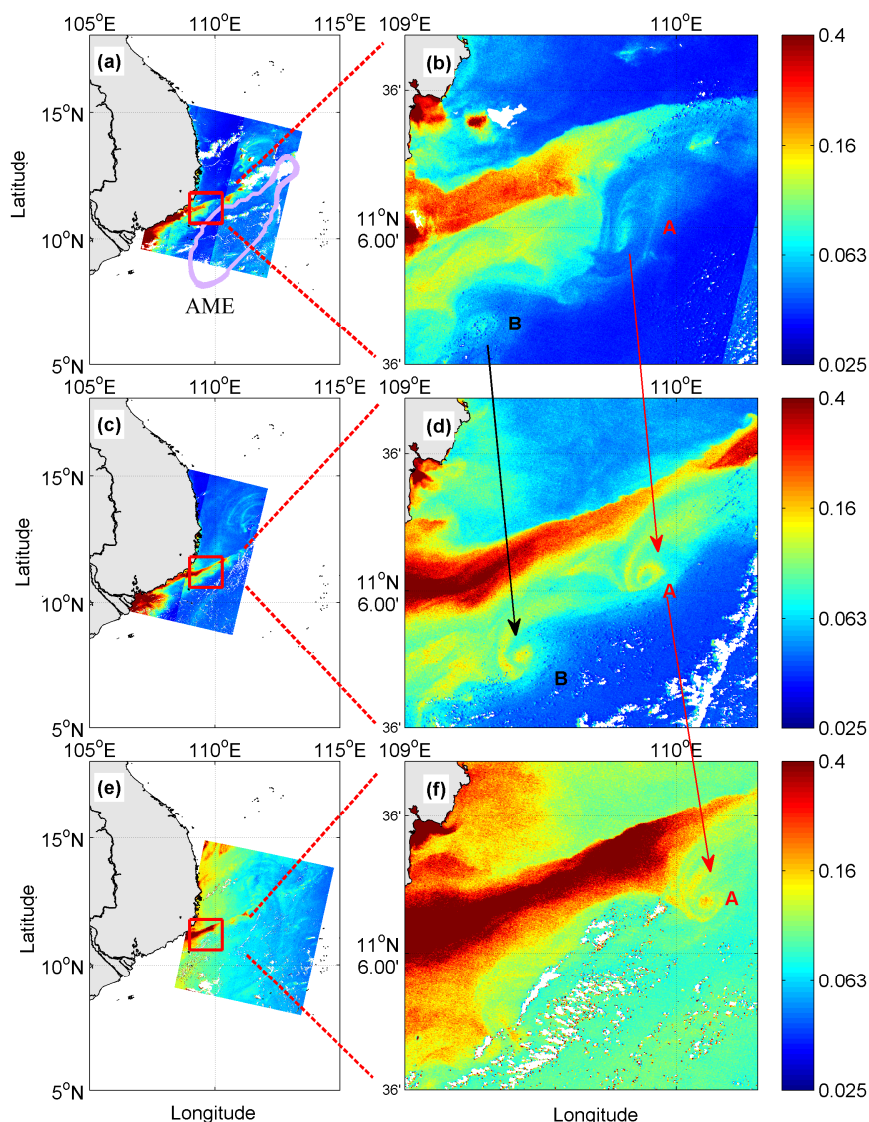


Figure 3. Daily 300 m MERIS chlorophyll (unit: mg m^{-3}) on (a) 9 July 2008, (b) 12 July 2008, (c) 13 July 2008. The cloud covered area is masked by the white color. ‘A’ and ‘B’ indicate two small cyclonic eddies respectively. The pink circle in (a) denotes the anticyclonic mesoscale eddy (AME) on 9 July 2008, which is derived from AVISO MSLA data following the method of Chelton et al. (2011).

Figure 5, it is not clear which mesoscale anticyclonic eddy is referred to in the figure caption. Better to specify it in Figures 2 and/or 3.

Reply: We have specified the anticyclonic mesoscale eddy (AME) in Figure 3(a) (shown above).

Thank you again for reviewing our manuscript.