

Interactive comment on “Satellite observations of the small-scale cyclonic eddies in the western South China Sea” by F. Liu et al.

Anonymous Referee #1

Received and published: 10 October 2014

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.

C5829

Specific comments listed as follows:

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

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

P13519, L15-17, the sentence should be rewritten: “where τ_y 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.”

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

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

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.

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.

Interactive comment on Biogeosciences Discuss., 11, 13515, 2014.

C5830