1. General Comments:

This paper conducted a good study with cross-fields data. It analyzed data in multi-fields of meteorology, oceanography, and marine biology and discussed the impacts of various scales of meteorological and oceanic parameters on primary productivity.

The data set and analysis methods of this study were well described in written. However, the figures which representing the data set are not easy to be viewed. This defect hampers readers to be convinced with visual presentations (figures). Therefore, improvements in technical aspect are required. The suggestions of technical improvements are listed in Sec. 3.

Besides, there a few scientific problems must be clarified or addressed before this paper is accepted. The comments or questions are stated in Sec. 2.

2. Specific Comments:

2.1. p21580, ln4 & p21597 (Fig. 2)

…*The near surface winds show a maximum (20-30 knots) off the Vietnam coast aligned in the northeast-southwest direction.*…

Q: Don't see such large wind (20-30 knots) in the figures.

2.2. p21579, ln21 ~ p21580, ln20 (Sec. 3.1)

Comment: Suggest adding mslp/wind figures of December and February to demonstrate and support the discussions in this section.

2.3. p21583, ln2 ~ ln3

…*November is the month of maximum tropical depression/storm frequency in the South China Sea between 8–18°N and 107-115°E.*…

Q: Is there any reference to support this statement?

2.4. p21583, ln2 ~ ln4

…*November is the month of maximum tropical depression/storm frequency in the South China Sea between 8–18°N and 107-115°E The associated wind flow has thus contributed to the development of the cyclonic counter current.*…

Comment: Even most tropical depressions/storms occur in this area during monsoon season, the weather systems are moving while the cyclonic current looks stationary at position around (7°N, 109°E) in whole season. Therefore, the relationship of wind associated weather systems and cyclonic current proposed here is questionable. Suggest considering if there is any possibility that it is affected the seafloor topography (Figure 1) of Sunda Shelf.

2.5. p21586, ln1 ~ ln4

…Our preliminary analysis using the recent 30 yr base period of ERA-interim wind data (1981–2010) reveals that there is an average of 4 to 5 "cold surges" in each winter monsoon season over the SCS and 1 or 2 of them can be classified as strong cases (not shown). …

Comment: Here states number of cold surges (and strong cold surges) but there is no clear definition of cold surge in this paper. Please describe your definition quantitatively (e.g. surface northerly wind exceeds X m/s); or list the references you adopted to define it.

2.6. p21586, ln4 ~ ln6

…In general, strong cold surges are associated with La Niña while weak surges are linked with El Niño. However, in El Niño years, the total number of Borneo vortex occurrences can be higher due to more easterly "surges".

Comment: If these conclusions are obtained based on author's study, please describe more detailed or use a diagram to show it. If they are cited from other researches, please point out the references (e.g. Zhang, et al., 1997)

2.7. p21587, ln25 ~ p21588, ln2

…Years in this period can be classified based on the Southern Oscillation Index (SOI) (refer http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensocycle/soi.shtml). The years 2004 and 2006 were weak El Niño years and 2002 was a moderate one. For La Niña years, 2000 was weak in intensity and in 2007 a moderate event was observed.…

Comment: Please demonstrate by figures, precisely define or list references to present "weak" and "moderate" EL Nino/La Nina years.

2.8. p21588, ln3 ~

Comment: In this section, please indicate what levels of El Nino/La Nina years were counted. Modulated only or both modulated and weak years?

2.9. p21588, ln9 & p21603 (Figure 8)

Figure 8a shows that the axis tilt of the positive mslp anomaly in the SCS during El Niño years changes to southeast in December from northeast in November…

Comment: If Fig. 8a is December MSLP anomaly of El Nino years then no information can support the changes from November to December. If the changes are desired to be examined, the MSLP difference (like 6a shown) in El Nino years should be taken rather than anomaly in December.
Same as in La Nina years (p21589, ln2~ln3 and p21605, fig 10b)

2.10. p21589, ln8 ~ ln9 & p21606 (Figure 11)

…*An increase can be seen in December (Fig. 11b), which…*

Comment: Fig. 11b does not support this statement except at coastal area of Sabah. Please double check it.

3. Technical Corrections:

3.1. p21577, ln13

…*are available at 6 hourly intervals…*

=> …are available at 6-hour intervals…

3.2. p21578, ln3

…*clusters are fully developed due to cloud top radiational cooling (Gray,1977) and the interaction of…*

=> …clusters are fully developed due to cloud top radiational cooling (Gray and Jacobson, 1977) and the interaction of…

3.3. p21582, ln18

…the SCS through the Bashi *Strait*…

=> …the SCS through the Bashi Channel…

(or is it actually meant "Luzon Strait"?)

3.4. p21582, ln26

…is channeled into the Straits of Malacca and one other is swinging back…

=> …is channeled into the Strait of Malacca and the other is swinging back…

3.5.

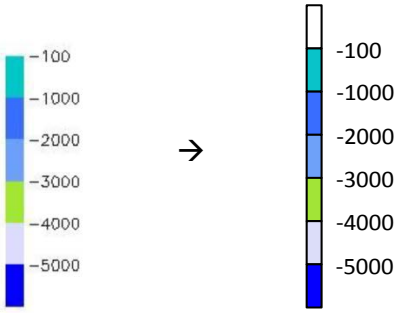
Please consistently use either "Ocean Color" or "Ocean Colour" throughout the paper. (e.g. p21576, ln26; p21577, ln20; p21594, ln16)

3.6. p21587, ln 26
…*on the Southern Oscillation Index (SOI) (refer http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensocycle/soi.shtml)...*

=> …on the Southern Oscillation Index (SOI) (refer to http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensocycle/soi.shtml)...

3.7. p21596 (Fig. 1)

Apply boarder on the color bar may make the white color visible. It is essential since white color area in the seafloor topography figure (Fig. 1) is important and meaningful. For example:



3.8. The colors in grayscale-like figures, e.g. Fig. 4, left; Fig. 12 (b), etc., are ambiguous. For example, in Fig. 4 (left), colors of value 6-8 and value > 10 are similar while the color of 8-10 is lighter. This kind of color setting makes shaded contours ambiguous. Better use dark to light (or light to dark) color settings.

3.9. Generally, the figures are hard to be read, especially in the print out version. Suggest enlarging the figures and their labels to make them more readable.