

**Responses to Anonymous Referee #1's *Interactive comment on*  
"Biogeochemistry and ecosystems of continental margins in the  
western North Pacific Ocean and their interactions and responses to  
external forcing – an overview and synthesis" by K.-K. Liu et al.**

***General Comments***

This is a well-written review paper by a group of well-respected scientists, highlighting some key findings from a special issue on the biogeochemical condition and marine ecosystems in the major marginal seas of the western North Pacific Ocean. The authors have clearly laid out the connections, commonality and differences among those marginal seas. The key contributions from the individual papers in the special issue are well summarized with a reasonable amount of details (e.g. strength and weakness) presented in this review. I don't have any major concerns about this paper.

RESPONSE: We are grateful for the referee's appreciation of our work and for the specific comments, which are carefully heeded.

***Specific Comments***

Below are some minor comments; most of them are about small reorganization of the text.

1. Figure 1: There is a typo for "South China Sea" on the map. It is currently labeled as "South Chia Sea". Also, the authors mentioned 'Sulu Sea' and other places in the text, but not labeled on the map. I would suggest the authors to add labels for places that are mentioned in the text. This is important for readers who are not familiar with the region.

RESPONSE: Thanks for pointing out the typo. The suggestions concerning map labeling are good. We will make the changes accordingly.

2. P11296, L20, please add a reference for the residence time of 50 yrs.

RESPONSE: The residence time of the South China Sea basin water of ca 50 years is from the synthesis of Liu et al. (2010), who drew evidence from previous observations and modeling results. The reference will be provided.

3. P11296, L23, what is Fig. 1a?

RESPONSE: It should be Fig. 1. The error will be corrected.

4. P11304, Section 3.2. The last paragraph regarding ocean color data doesn't fit the overall theme of that section. It would probably be better to move it to section 3.5, where chlorophyll distribution is discussed.

RESPONSE: This is a good suggestion. Modifications will be made.

5. P11309, L3-15. This paragraph is about phytoplankton variability. I think it should also be moved to Section 3.5.

RESPONSE: This is a good suggestion. Modifications will be made.

6. The title of Section 3.4 should be 'Physical forcing and nutrient transport' because the whole section discussed mostly the nutrient transport and budget.

RESPONSE: Agree. The heading of Section 3.2 will be modified accordingly.

7. Section 3.5 discussed mostly the phytoplankton dynamics. Therefore, I would suggest changing the title to 'Phytoplankton responses to external forcing'. I understand that the last paragraph of Section 3.5 is about fish distribution, but this paragraph should be moved to Section 3.3, where the biota and their ecological characteristics along the continental margins are discussed.

RESPONSE: These are excellent suggestions and will be heeded during the revision.

8. I found the Section 4 ‘Summary and concluding remarks’ is a bit too long. I would suggest it to be shortened. The authors should just highlight (briefly) the key points being presented in the paper.

RESPONSE: Agree. We will make the summary more concise.

**References:**

Liu, K.-K., Tseng, C.-M., Wu, C.-R., and Lin, I.-I.: 8.6. The South China Sea, in: Carbon and Nutrient Fluxes in Continental Margins: A Global Synthesis, edited by: Liu, K.-K., Atkinson, L., Quiñones, R., and Talaue-McManus, L., IGBP Book Series, Springer, Berlin, 464-482, 2010.