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.

Anonymous Referee #1

Received and published: 16 August 2014

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. 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.

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

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

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.

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

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.

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.

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.

Interactive comment on Biogeosciences Discuss., 11, 11293, 2014.