Interactive comment on “Seasonality of CO$_2$ in coastal oceans altered by increasing anthropogenic nutrient delivery from large rivers: evidence from the Changjiang-East China Sea system” by W.-C. Chou et al.

Anonymous Referee #3

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This manuscript constitutes a reasonably interesting piece of work that fits well in the scope of this journal. This paper is an interesting article dealing with seasonality of CO$_2$ in the highly anthropogenic ocean system (East China Sea) through hydrographic surveys. Especially, the result that the difference of pCO$_2$ seasonality between the inner shelf near the Changjiang Estuary and the outer shelf of the ECS can be determined by the increasing eutrophication is very important for many scientists studying the global carbon cycle in coastal oceans. It is generally well written, the tables and figures are useful, and their inclusion justified, and the conclusions drawn from the results of the study are appropriate. Overall, I think that this paper is interesting for readers and should be acceptable for publication.

Specific comments:

1. Is it possible statistical analysis of pCO$_2$ values between 1990s and 2000s.

2. Figure 1, 2: Figs 1 and 2 were so complicated to make out. Is it possible to draw a line between the inner shelf near the Changjiang Estuary and the outer shelf of the ECS.

3. Figure 6: What do the dashed line in the second figure of conceptual diagram mean?