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Title: Responses of lower trophic-level organisms to typhoon passage on the outer shelf of the East China Sea: an incubation experiment

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The authors performed a series of incubation experiments for trying to understand the responses of phytoplankton to a typhoon event. However, in contrast with previous limited *in situ* data (e.g. [1, 2]), no new information was provided by this work. Therefore, I do not recommend this manuscript as a publication in this excellent journal "Biogeosciences". Besides, all of my concerns for this manuscript are listed as the following.

General comments

1. I am wondering why the authors chose the sampling site, where located at the shelf break, to conduct the incubation experiments? Is there any previous study to point out what kind of hydrographic conditions, upwelling or vertical mixing, occurred here after a typhoon passage?
2. The authors conducted all incubations on board for a long period (at least 6 days). How to avoid the bottle effects?
3. The major effect of upwelling induced by typhoon passage is to bring abundant nutrients from deep layer to surface and then facilitate surface phytoplankton species to thrive [2]. Actually, the phytoplankton or "seeds" prevailed in the deeper waters are incapable of growing in the surface waters. For example, the low-light ecotype *Prochlorococcus* dominate in the bottom of euphotic zone, while the high-light ones thrive in the surface water [3, 4].
4. As the life cycle of copepods usually up to several weeks, their effects on diatom consumption were difficult to be elucidated in these stimulating incubations. However, based on previous studies, copepod's grazing is one of the major effects to eliminate diatom bloom induced by typhoon passage and should not be neglected in this study.

Specific comments

1. The authors applied several methods, such as pigment analysis, microscopic observation, and flow cytometric enumeration, to determine abundance and composition of phytoplankton in their incubation experiments. However, most data of phytoplankton composition were presented by the results of pigment analysis. I can't find any detailed phytoplankton abundance and composition data obtained from microscopic observation and flow cytometry.

2. Page 6612, line 15~21. The chl *a* concentrations of picophytoplankton described here are not consistent with the Figure 2. Please check it.
3. Page 6613, line 3~6. Please describe how the “apparent growth rate” to be determined?
4. Page 6614, line 16~18 & Figure 7. Please describe how to get diatom-specific chl *a* concentration?
5. Page 6615, line 1~6. Copepods appeared in the typhoon-induced bloom should come from neighbor waters, not grow up in the same water mass [2].

References

1. Chen Y-LL, Chen H-Y, Jan S, Tuo S-H (2009) Phytoplankton productivity enhancement and assemblage change in the upstream Kuroshio after typhoons. *Marine Ecology Progress Series* 385: 111-126
2. Chung C-C, Gong G-C, Hung C-C (2012) Effect of Typhoon Morakot on microphytoplankton population dynamics in the subtropical Northwest Pacific. *Mar Ecol Prog Ser* 448: 39-49
3. Llabrés M, Agustí S, Alonso-Laita P, Herndl GJ (2010) *Synechococcus* and *Prochlorococcus* cell death induced by UV radiation and the penetration of lethal UVR in the Mediterranean Sea. *Mar Ecol Prog Ser* 399: 27-37
4. Partensky F, Garczarek L (2010) *Prochlorococcus*: Advantages and Limits of Minimalism. *Annual Review of Marine Science* 2: 305-331