## Comments to the author:

We are pleased to inform you that your manuscript has been accepted for publication in Biogeosciences. Thank you very much for your tremendous efforts in revising the manuscript. Before publishing this paper, please consider my technical suggestions below.

Thank you again for choosing the journal Biogeosciences.

Kind regards,

Koji Suzuki Associate Editor

Response: We appreciate the Associate Editor, Prof. Koji Suzuki, very much for his kind help in improving our paper. We have corrected our manuscript based on the suggestions below.

L16: the effects of SA

L20: the deep-water basin

L42: typhoons L45: of the ocean L57: the neutral

L66: the Taiwan Island -> the Island of Taiwan

L70: due to an increased supply

L110: was -> were

L119: collected with a 10 L

L136: the changes in carbonate systems

L177-178: the highest value in the South China Sea near the islands in the Philippines

L179–180, L311, and Fig. 2J: The unit of mean PAR intensity should be W m-2, not W m-2 s-1.

L229: responsible for the contrasts of the short-term

L258: in the deep-water basin

L260 and L261: the photosynthesis

L267: This was inconsistent with the study of Gao et al. (2012)

L272: picophytoplankton

L277: from the linear relationship

L282: changes in PP

L282: The decrease in salinity

L283: on the photosynthetic carbon fixation of the coccolithophore

L286: the effective quantum yield of microplankton community

L293: picophytoplankton

L294–295: nutrient uptake

L315: seasonal phytoplankton species succession

L322: changes in phytoplankton community structure may also modulate the

SA-induced variability.

L324–325: transport of nutrients L329: designed the research