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Comment

Interactive comment on “Time-series measurements of biochemical and physical properties in the southwestern East/Japan Sea during the spring transition in 2010” by Y.-T. Son et al.

H. Liu (Editor)

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As the handling editor, I agree with the two reviewers' assessment that the paper at its current form should not be published in BG. It would be hard to improve the paper significantly unless new data are added.

As pointed out by both reviewers, the paper is based on a two and half months mooring data of fluorescence and DO, in addition to some meteorological and oceanographic parameters. The fluorescence data are poorly calibrated. Basically, what the authors

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observed has been well documented elsewhere. For example, the larger variation of fluorescence and DO in associate with diurnal or tidal scale during bloom can be well explained by the increased photosynthesis and respiration processes and photoacclimation of phytoplankton to light-dark cycle.

Based on the data collected from 30 m, it is not possible to say whether the bloom occurred only at subsurface layer, like the authors claimed, or rather the whole upper water column. However, judging from the fact that PAR at 20 m during bloom was halved as compared with the non-bloom period, it appears the bloom could be at the surface layer too. Further more, I do not understand how the nitrate probe overcame the problem of power supply, and started to work on May 7. Was the DO data temperature-normalized? Based on the apparent negative correlation between DO and temperature seen in Fig. 2 (e.g., the low DO and high T during 20-25 April) it seems that a great portion of the DO variation is simply due to temperature if it is not normalized. In the case mentioned here, it is clear that some warmer water mass passed through the mooring site during those days.

Overall, I believe the data collected from routine monitoring would become very valuable only when sufficient coverages in both spatial and time scale be accumulated and the occurrence of a phenomenon be repeatedly observed.

Interactive comment on Biogeosciences Discuss., 10, 7831, 2013.

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