Interactive comment on “Monthly measured primary and new productivities in the Ulleung Basin as a biological “hot spot” in the East/Japan Sea” by J. H. Kwak et al.

Anonymous Referee #2

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I raised the question about your PP values in September 2010, which didn’t mean your data were wrong. There was a significant increase in Chlorophyll a biomass in your results, which is also confirmed from MODIS image (Figure 1). That’s the autumn bloom, a typical phenomenon in temperate water. There usually has a coinstantaneous production peak, which is coupled with the growth of phytoplankton, but surprisingly not in your result. Sometimes, the low production rate in this period might be due to the fluctuation (especially the sunlight) or inter-annual variation. You should be careful when you talk about the big picture, which depends on the data you got (only once a month, and no data in October 2010). My suggestion is that you should discuss why you got a low production rate but the autumn bloom occurred.

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Fig. 1. Average concentration of MODIS Chlorophyll a of the Ulleung Basin (36.8N to 37.2N, 129.8E to 131E), between May 2010 and June 2011. (Dashed line represents the mean value in the logarithmic form)