

Interactive comment on "Field-obtained carbon and nitrogen uptake rates of phytoplankton in the Laptev and East Siberian seas" by Sang Heon Lee et al.

Anonymous Referee #2

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The manuscript "Field-obtained carbon and nitrogen uptake rates of phytoplankton in the Laptev and East Siberian seas" by Lee et al. compared their measurements of nitrate, chl-a, and primary production rates in the Laptev and E. Siberian Seas with those from other studies. Due to short period of observations at each location and time, the comparisons are still quite rough for annual primary production estimate, but do provide a reference for these understudied regions compared to other parts of the Arctic Ocean. I recommend publish it with some revisions. One suggestion is to add more discussion and figures showing some vertical profiles of the nitrate and chl-a concentration in the upper ($100\sim50\%$) and lower ($50\sim1\%$) photic depth, because there are large differences between them as described in the paper. The vertical differences

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of nutrient and chl-a might be another factor that affected the spatial differences of primary production among stations. Other minor revisions: Line 16 'Field-measured' change to 'Field measurements of '. Add the year and month of the measurement in this sentence. Line 78 remove 'Field-measured'

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