<u>Reply to RC1</u>

The revision and responses are largely satisfactory. I still feel that the writing (English and wording) needs to be improved.

Thanks for suggestion. The manuscript has been edited carefully by two native-English-speaking professional editors from ELSS, Inc. (https://www.elss.co.jp/en). The edited words and phrases were everywhere and thus we do not highlight them in the revised manuscript. However, please note that these revisions are all for English writing.

Methods:

Please add a "Data analysis" section in M&M to explain the objectives and procedures of statistical analyses, for example the regression and ANOVA analyses in Figure 5-7, and others.

Thanks for nice suggestion. We added the following description.

2.5 Data analysis

To quantify the sensitivity of phytoplankton growth rates to nutrient supply rates, we calculated the slopes of linear regressions of growth rates for the size-fractionated chlorophyll a concentrations versus the logarithms of the enriched nitrate concentrations. We then computed the Pearson correlation coefficient of these slopes to nitrate + nitrite and phosphate concentrations and microzooplankton biomass at the beginning of each incubation. A one-way analysis of variance (ANOVA) with a post-hoc Tukey honestly significant difference test was used to compare maximum growth rates, mortality rates, and net growth rates among the three size fractions.

Line 131: I think you mean:

"In addition, for evaluating nutrient limitation on phytoplankton growth, extra triplicate non-diluted bottles (100%) for EXPb were conducted without nutrient amendment." Is my understanding correct?

Yes, you are right. We revised the phrase as you mentioned as highlighted in yellow at line 135 to 136.

Line 173: Please explain how to calculate "95 percent confidence intervals of the vertical profiles".

Thanks for comments. We described "95 percent confidence intervals obtained by a bootstrap process" in the Figure 2 caption.

Line 207: Should be "SI figure 2".

Thanks for notice. Yes. The style should likely be Fig S2 based on the author instruction. We corrected it.

Discussion

The first paragraph seems just repeating the Introduction.

No. We wanted to emphasize the topographic features are very specific at the Tokara Strait and important for nutrients supply in the surface layers. So, we keep this paragraph.