Supplementary Materials

Enhancement of photosynthetic carbon assimilation efficiency of phytoplankton assemblage in the future coastal ocean

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Fig. S1. Experimental conditions of seawater *p*CO2 (A), pH (B) and temperature (C) during the experiment period under the present (green), acidification (blue), and greenhouse (red) conditions. Error bars represent the standard deviation from the mean of replicate enclosures (n=3) (source: Kim *et al.*, 2010).



Fig. S2. Nutrients concentration (nitrate + nitrite, A; phosphate, B; and silicate, C) during the experiment period under the present (green), acidification (blue), and greenhouse (red) conditions. Error bars represent the standard deviation from the mean of replicate enclosures (n=3) (source: Kim *et al.*, 2011).



Fig. S3. The autotrophic phytoplankton taxonomic composition during the experiment period under the present (green), acidification (blue), and greenhouse (red) conditions. Error bars represent the standard deviation from the mean of replicate enclosures (n=3) (source: Kim *et al.*, 2010).



Fig. S4. The grazing rate during the experiment period under the present (green), acidification (blue), and greenhouse (red) conditions. Error bars represent the standard deviation from the mean of replicate enclosures (n=3) (source: Kim et al. 2010).



Fig. S5. Photosynthetic parameters from LCs (top and opened) and P-I curves (bottom and closed) of phytoplankton community during the experimental period in the present (green), acidification (blue), and greenhouse (red) conditions (data from Tables 1, 2).Error bars represent the standard deviation from the mean of replicate enclosures.

References

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