

Supporting Information for

**Variations in and environmental controls of primary productivity in the Amundsen Sea**

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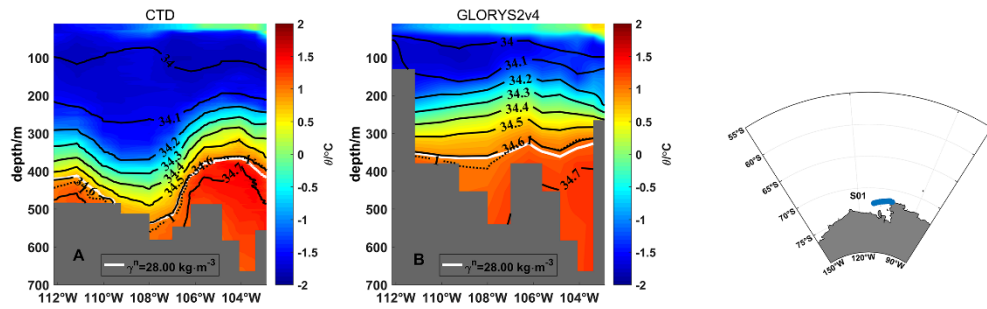
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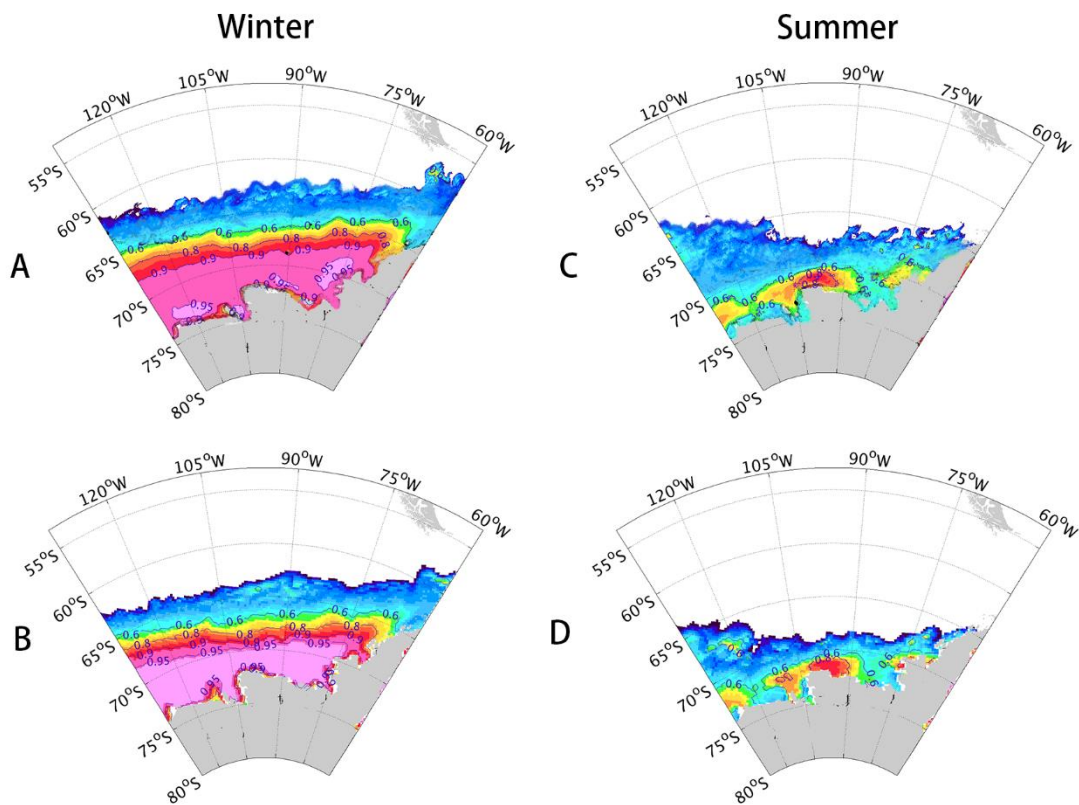
Figures S1 to S3

**Introduction**

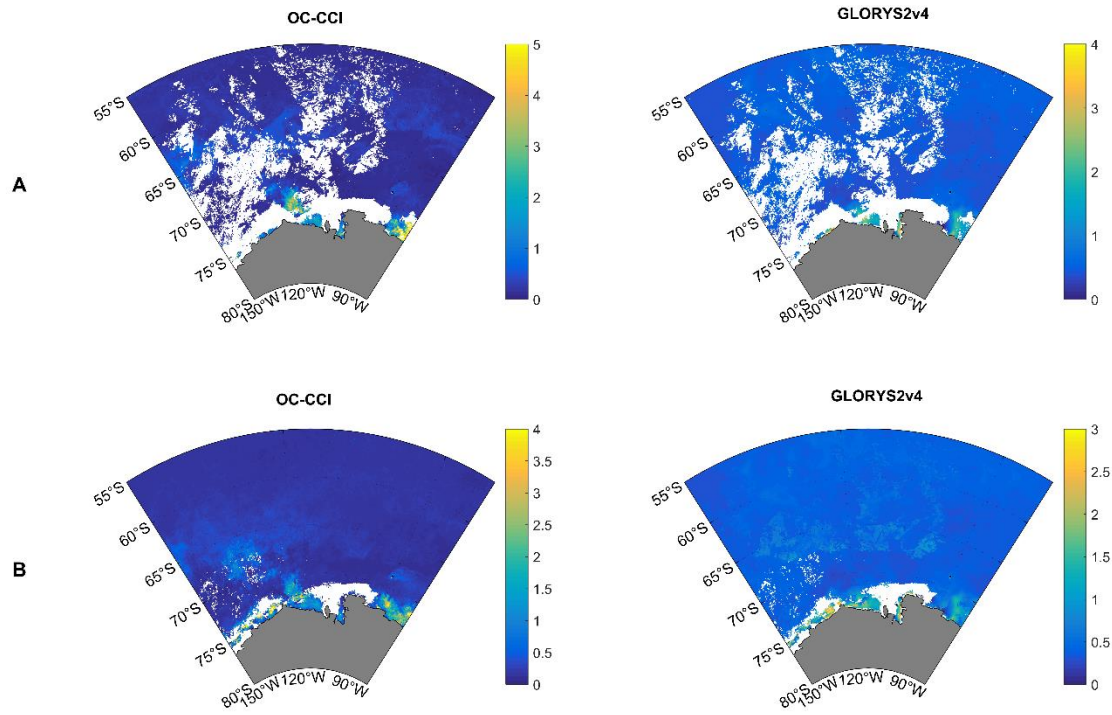
This document provides three supplementary Figures. They are referred in the main text as Figure S1-S3, respectively.



**Figure S1.** Temperature and salinity distribution of the S01 section in 2010.



**Figure S2.** Average sea ice concentration in winter (A and B) and summer (C and D) of the Amundsen Sea, GLORYS2v4 (A and C), CDR (B and D).



**Figure S3.** Surface chlorophyll concentrations at 201501 (A) and mean value of surface chlorophyll concentrations in 2015 (B) in the Amundsen Sea, OC-CCI (left), GLORYS2v4 (right).