

# Supporting Information for ”Seasonal transformation and spatial variability of water masses within MacKenzie polynya, Prydz Bay”

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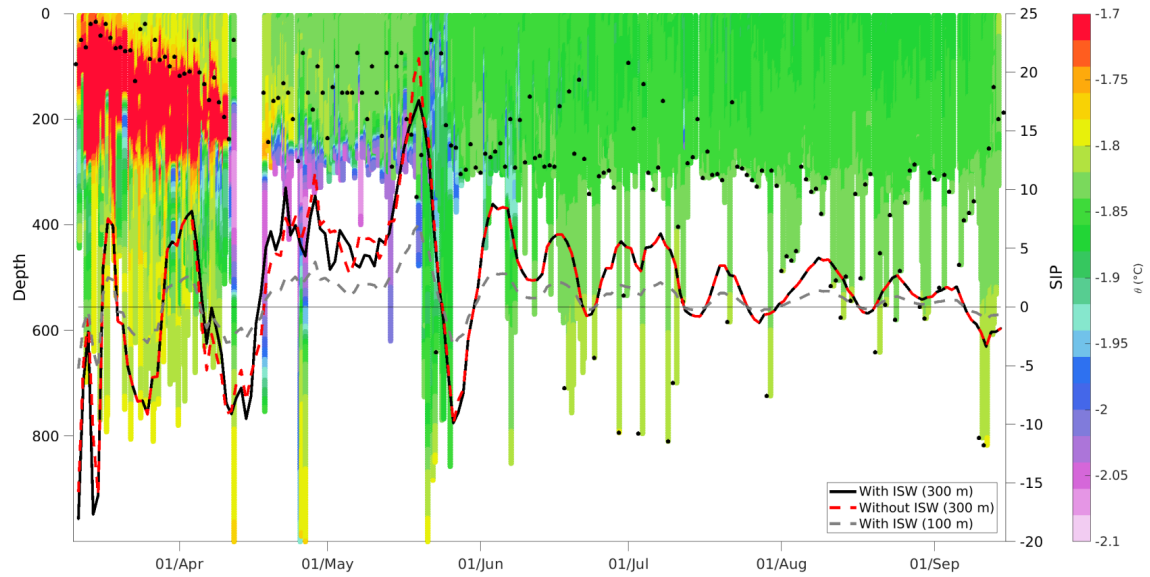
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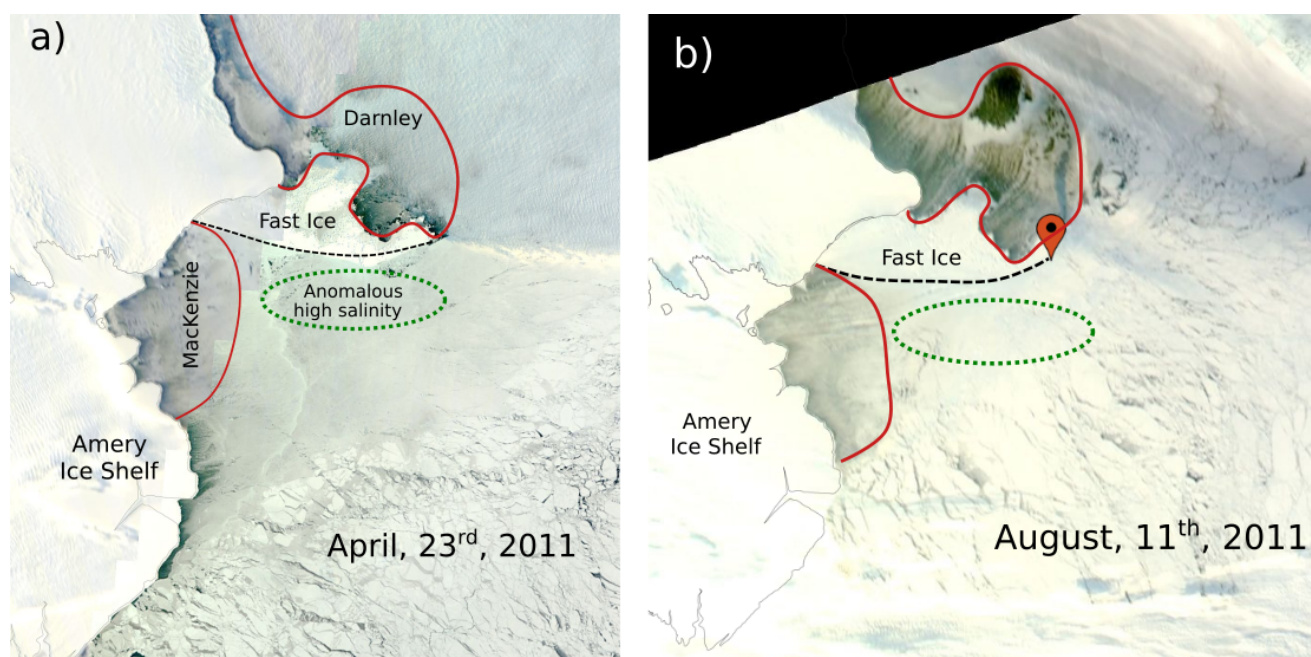
## Contents of this file

1. Figures S1 to S2

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**Figure S1.** Temperature and SIP for MacKenzie polynya (MP) in 2013 as showed in the manuscript. We include here three ways of computing SIP as indicated in the legend. The solid black line is the SIP as computed with a reference depth of 300 m, the one showed in the main manuscript. The red dashed line shows the SIP after removing all the sample points with ISW characteristics. The dashed grey line represents the SIP taking 100 m as a reference depth.



**Figure S2.** MODIS reflectance image for (a) the 23rd of April, 2011 and (b) the 11st . This is the closest date available to the period of anomalous high salinity observed in Figure 8 of the manuscript. It can be observed that the area between the two polynyas is closed, so local convection in an open area is discarded as a cause of the anomalous high salinity