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Sea ice dynamics in the Bransfield Strait, Antarctic Peninsula, during the past 240 years: a multi-proxy intercomparison study

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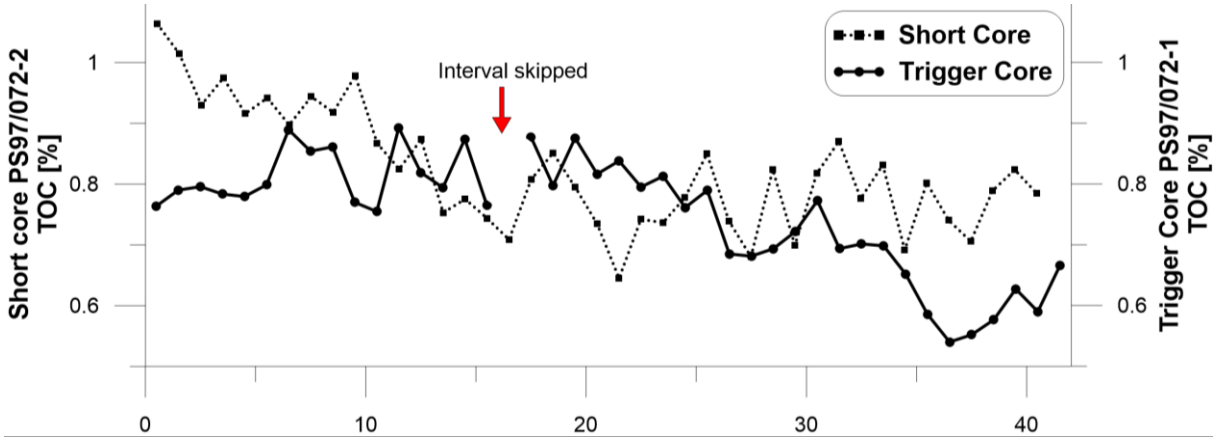
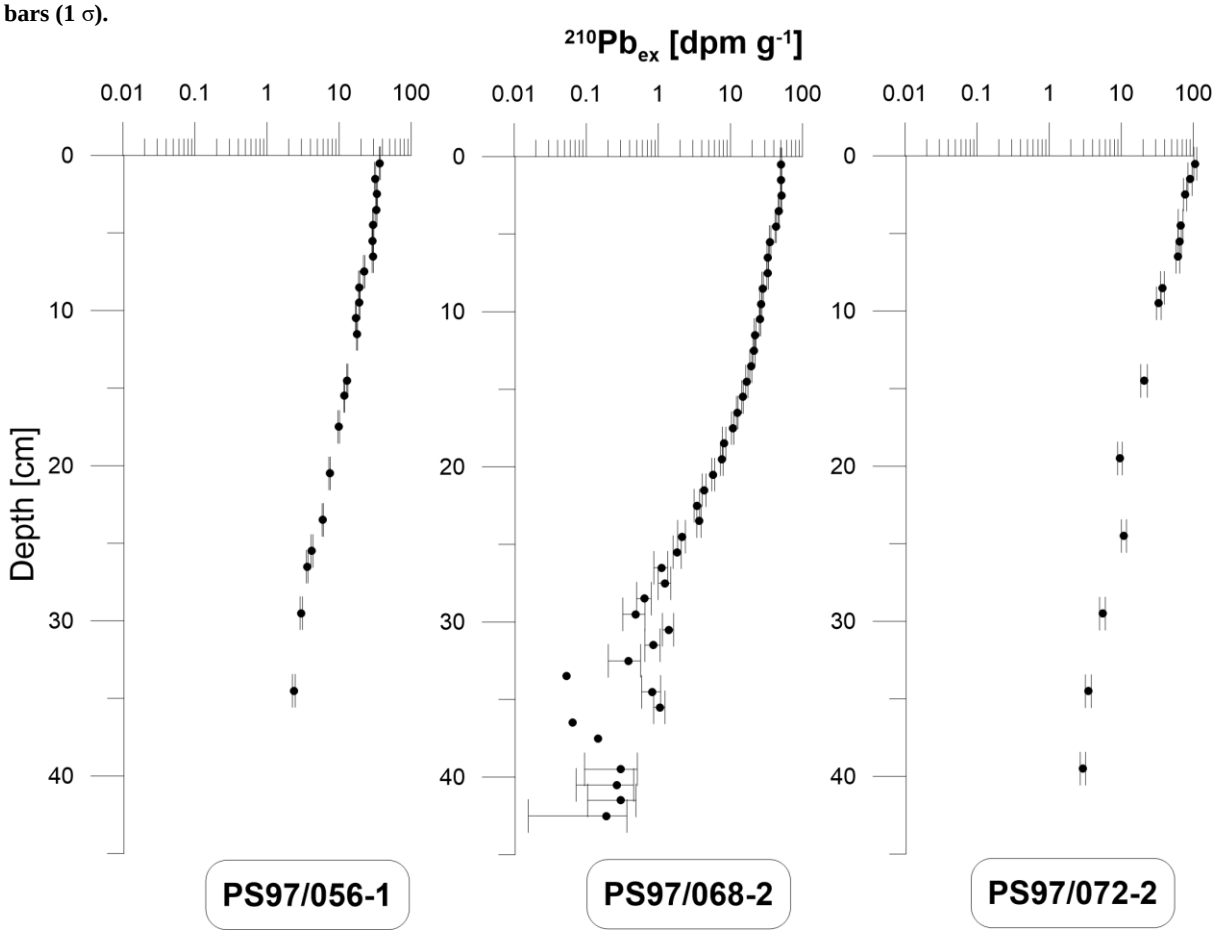
Supplementary figures

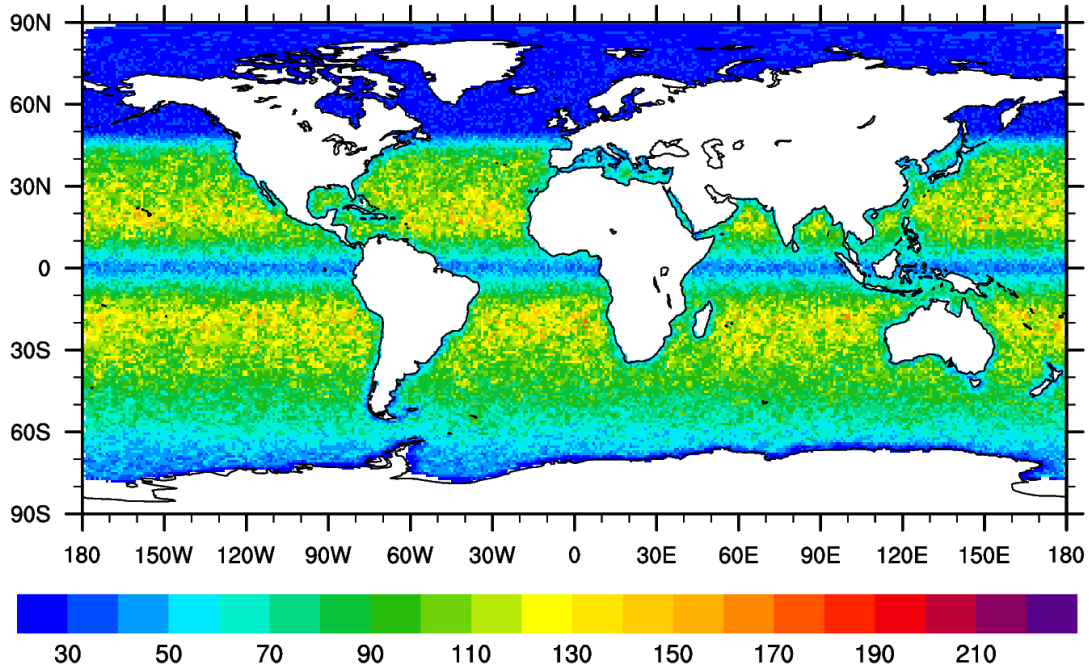
S1: Correlation of the core PS97/072-2 with the trigger core PS97/072-1 based on their TOC contents. At 16 cm depth of the short core one interval of the trigger core was skipped and shifted 1 cm further down to make the curve fit.



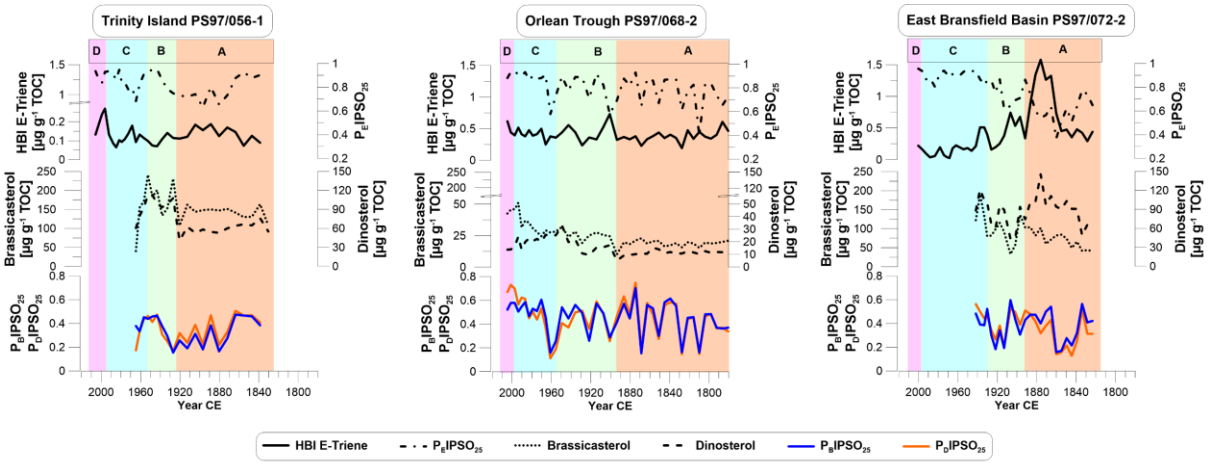
S2: Excess ^{210}Pb activity from the sediment cores with depth in dpm (disintegration per minute) per gram with error bars (1 σ).



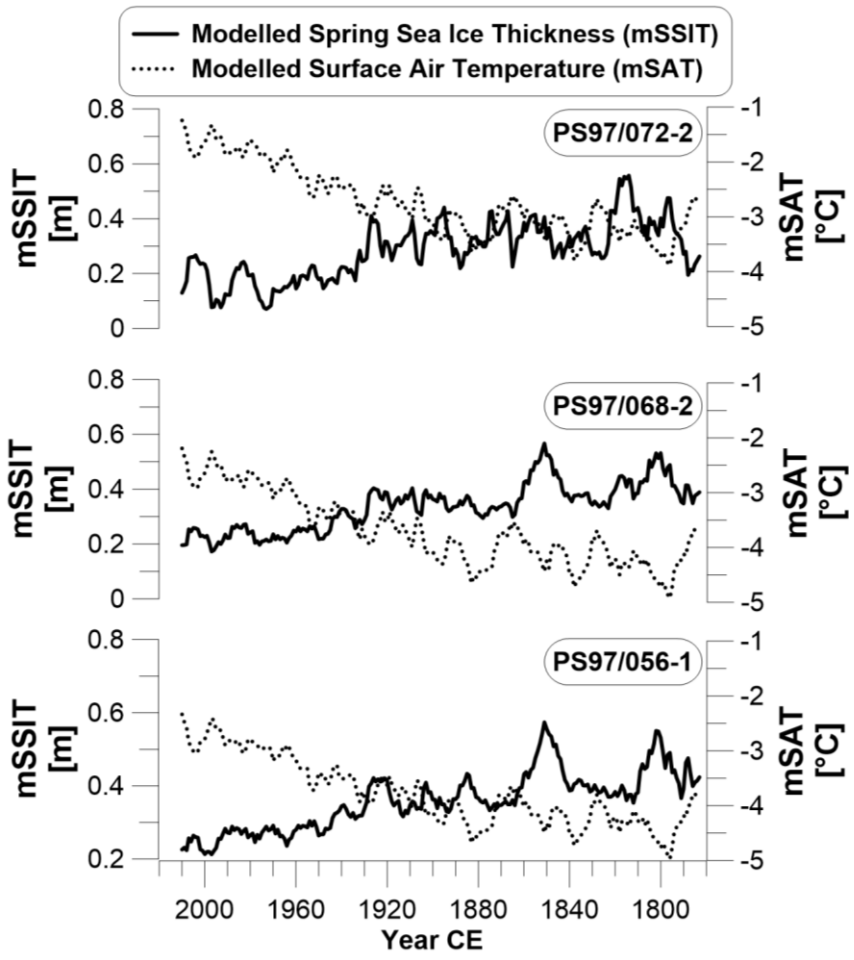
S3: The resolution of the ocean model in AWI-ESM2.



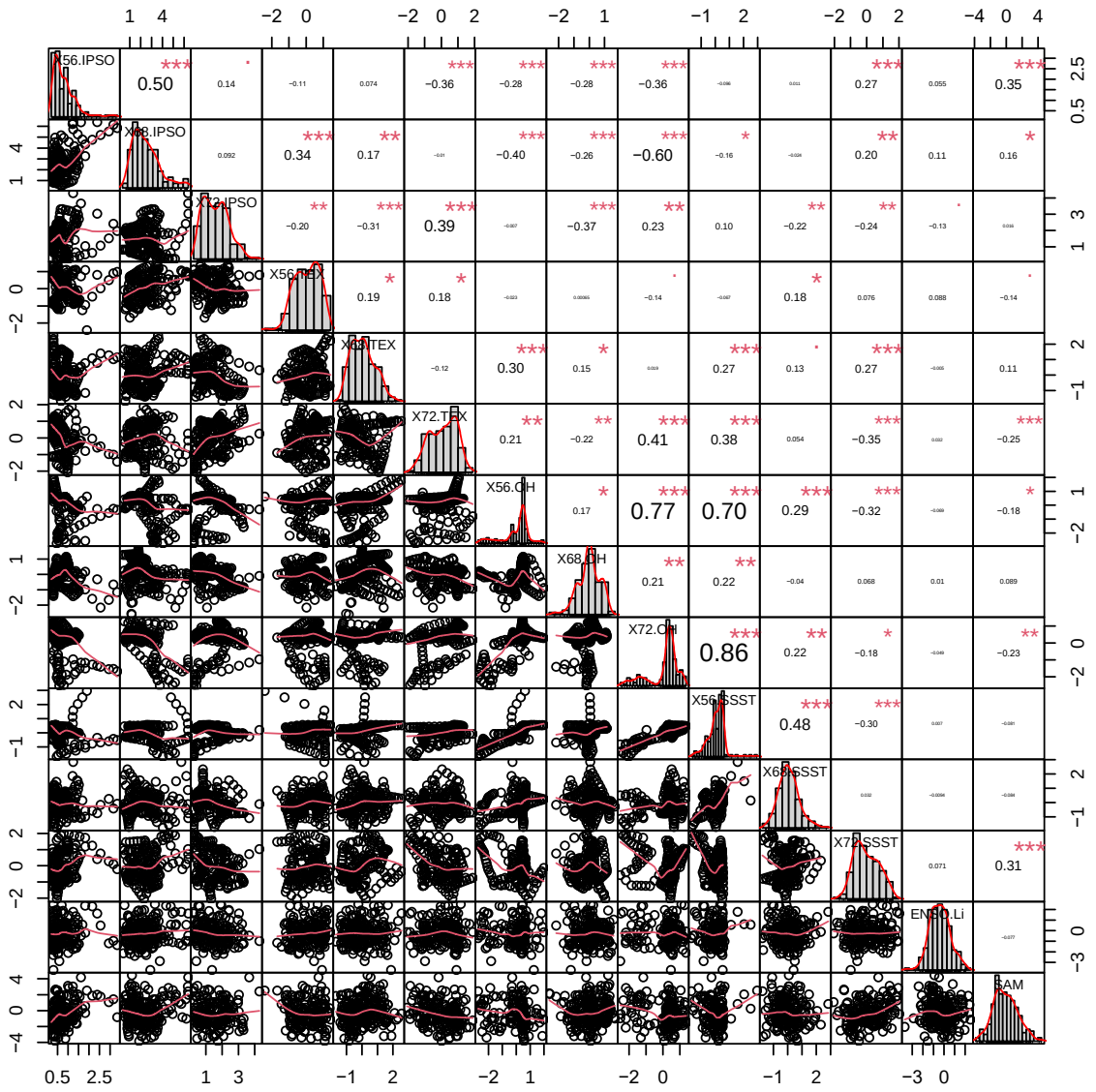
S4: Additional analytical biomarker results from all three core sites including (from top to bottom) HBI E-trienes, the sea ice index P_EIPSO_{25}, brassicasterol and dinosterol (Kanazawa et al., 1971; Volkman, 2003) **with their according sea ice indices P_BIPSO_{25} and P_DIPSO_{25}, respectively. Vertical coloured bars denote the environmental units A to D described in section 4.5.**



S5: Additional numerical model data from spring sea ice thickness (mSSIT, 10 year running mean) and surface air temperature (mSAT, 10 year running mean) from all three core sites.



S6: The Pearson´s correlation test on $IPSO_{25}$ and all temperature biomarker estimations reveal very low correlation of ENSO (Li et al., 2013) and SAM records (Abram et al., 2014). All data is resampled on an annual interval. Each significance level is associated to a symbol (p-values are 0.001 = "*"; 0.01 = "**"; 0.05 = "*"; 0.1 = "."; 0/1 = " "). The test was done with the software R (R Core Team, 2017) and the package PerformanceAnalytics (Peterson et al., 2020).**



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