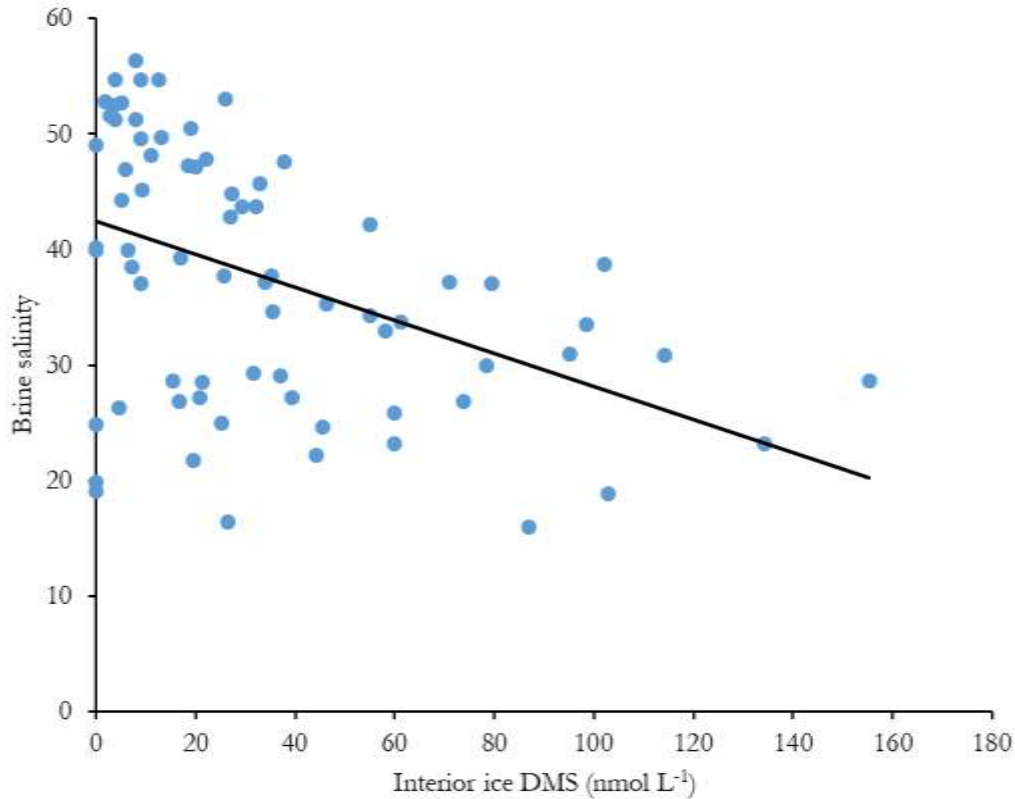


Figure S2. Relationship between brine salinity and the corresponding bulk-ice DMS concentration in interior ice.

Each data point represents the brine salinity and corresponding bulk-ice DMS concentration (nmol L^{-1}) for a given 0.1-m interior ice section sampled during the study. All of the data points obtained during the successive days of sampling are represented here, i.e., every 0.1-m ice section of each vertical ice profile sampled, except for the bottommost 0.1 m of sea ice. Primary producers aggregate in large colonies in the bottommost 0.1 m of sea ice and become the predominant control



of sea-ice DMS concentrations. This plot shows that, in interior sea ice, bulk-ice DMS concentration and brine salinity were negatively and significantly correlated ($r_s = -0.44$; $p < 0.05$; $n = 74$) throughout the sampling campaign. The non-parametric Spearman's Rho test was used to measure the strength of the association between interior ice DMS and brine salinity as the data were non-normally distributed.