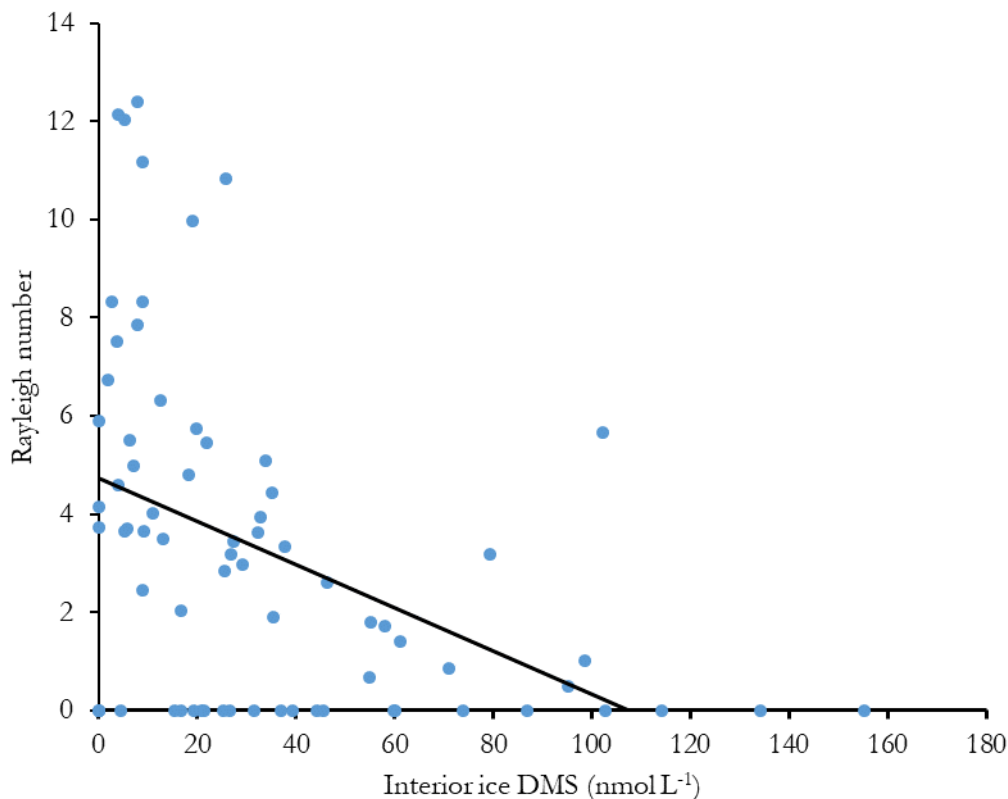


Figure S3. Relationship between the Rayleigh number calculated for the interior ice sections and the corresponding bulk-ice DMS concentration.



Each data point represents the Rayleigh number (calculated using the Notz and Worster, 2009 parametrization) and the corresponding bulk-ice DMS concentration (nmol L⁻¹) for each 0.1-m interior ice section sampled during the study. All of the data points obtained during the successive days of sampling are represented, 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 concentrations and calculated Rayleigh numbers were negatively and significantly correlated ($r_s = -0.47$; $p < 0.05$; $n = 65$) 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 Rayleigh number as the data were non-normally distributed.