

**Impact of changing Arctic sea ice extent, sea ice age, and snow depth on sea salt aerosol from blowing snow and the open ocean for 1980-2017**

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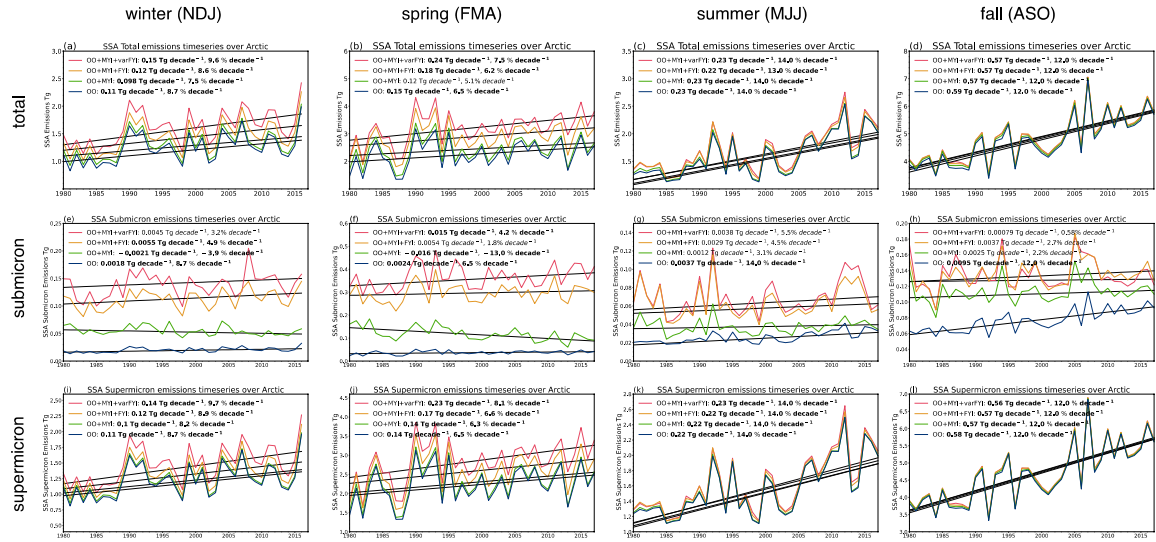
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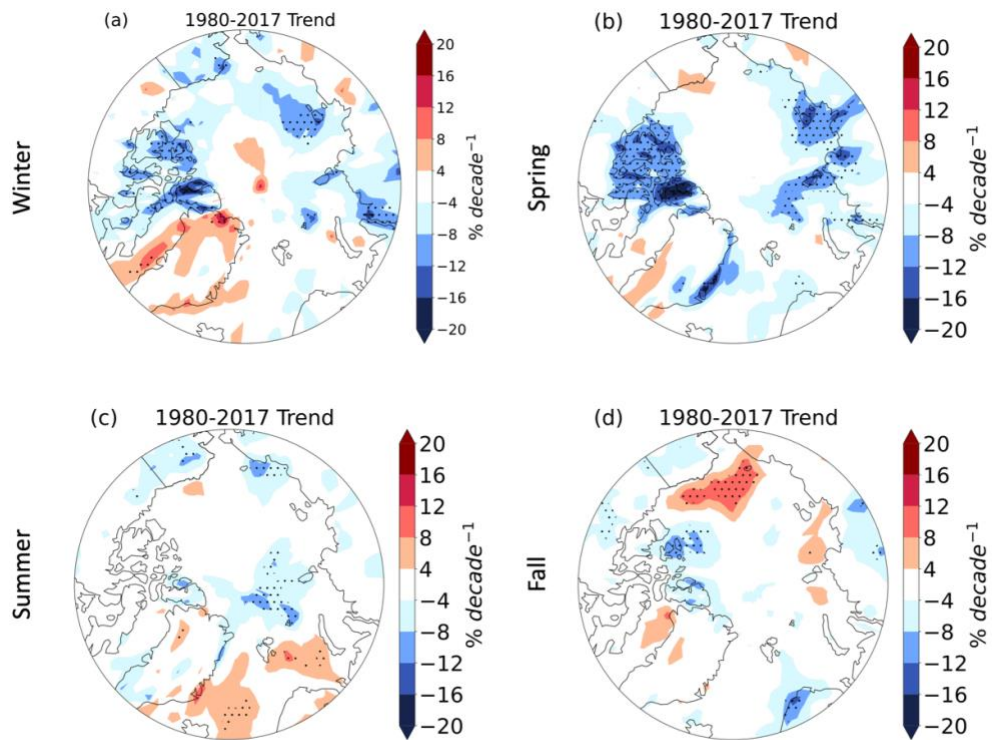
Figures S1 and S2

**Introduction**

Figure S1 shows the seasonally averaged timeseries of Arctic emissions of SSA, separating submicron and supermicron SSA. Figure S2 shows the trends in MERRA-2 10m surface windspeed cubed ( $u_{10m}^3$ ) for 1980-2017.



**Figure S1.** Seasonally averaged 1980-2017 timeseries of Arctic emissions for total (top row), submicron (middle row), and supermicron (bottom row) SSA for winter, spring, summer and fall. Four simulations are shown: OO (blue line), OO+MYI (green line), OO+MYI+FYI (orange line), OO+MYI+varFYI (red line).



**Figure S2.** Trends in MERRA-2 10m windspeed cubed ( $u_{10m}^3$ ) for 1980-2017. Black dots indicate statistically significant trends.