New particle formation leads to enhanced cloud condensation nuclei concentrations at Antarctic Peninsula

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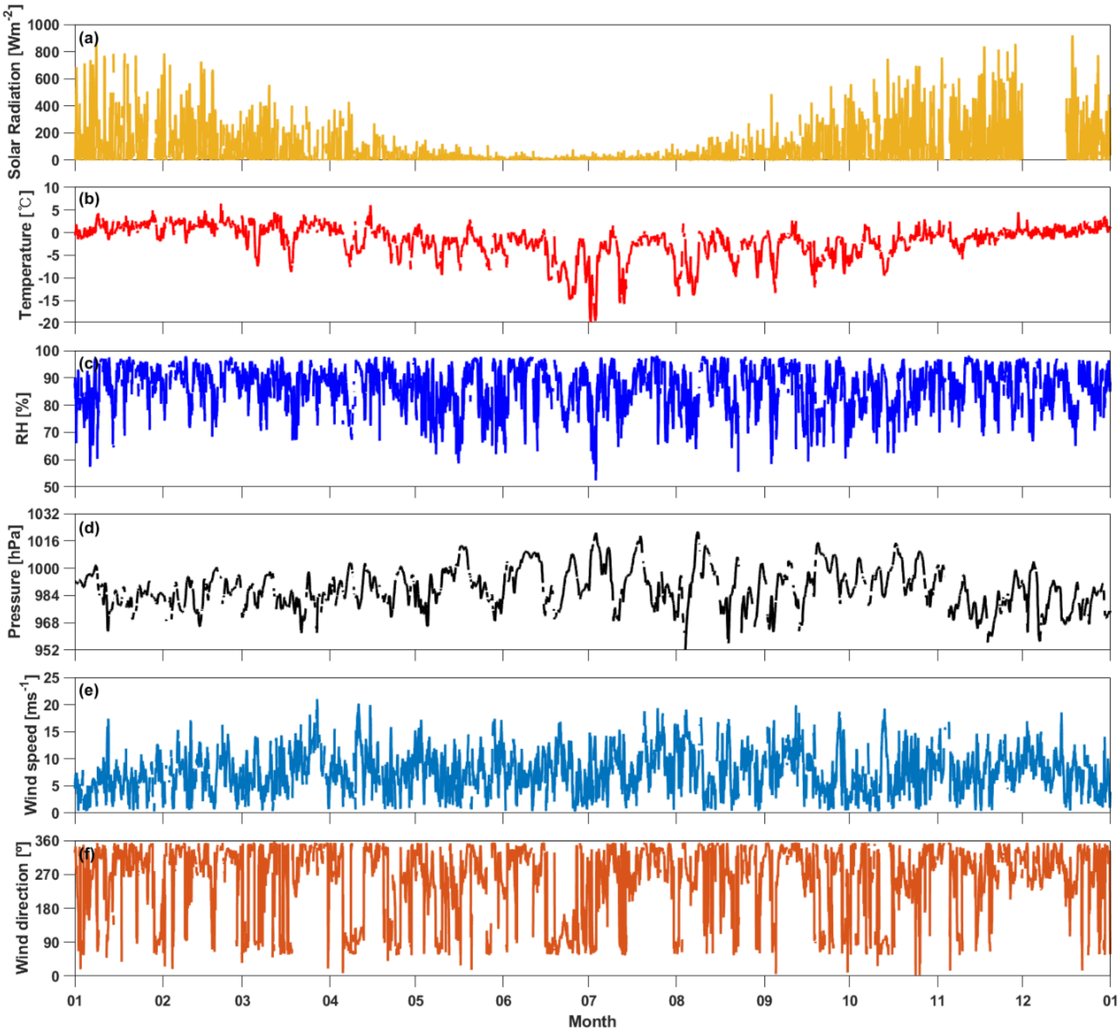

Figure S1. Time series of the 1 h average meteorological parameters: (a) solar radiation, (b) temperature, (c) relative humidity, (e) air pressure, (f) wind speed, (g) wind direction, throughout the studied periods (January 2018 – December 2018).

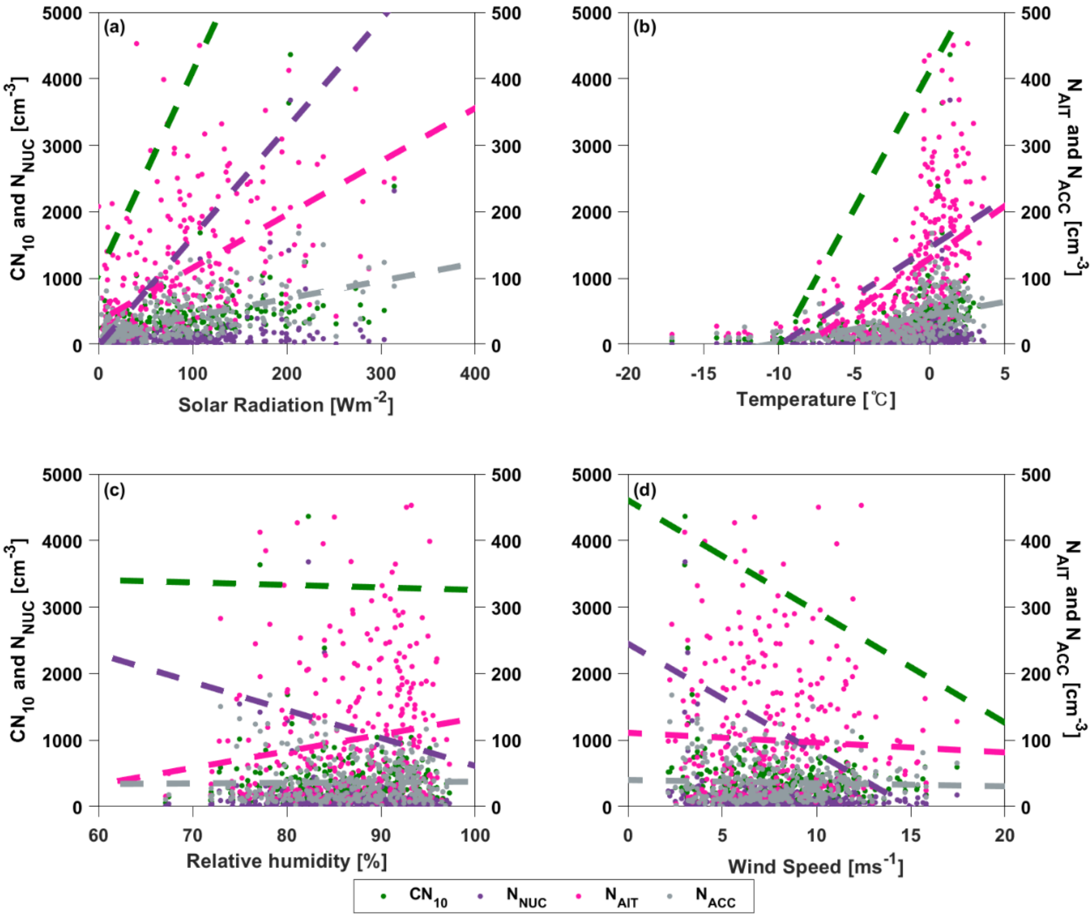

Figure S2. Relationships between size-segregated particle number concentrations and meteorological parameters such as (a) solar radiation, (b) temperature, (c) relative humidity, (d) wind speed.

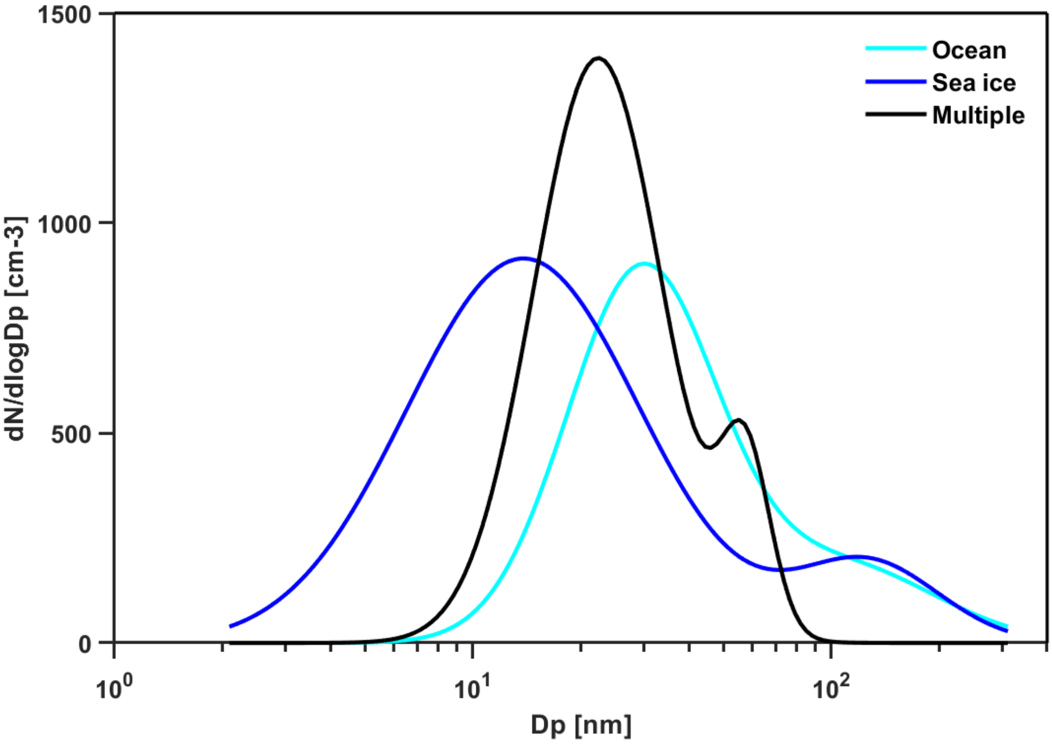

Figure S3. Average size distributions of aerosol particles ranging between 2.5 to 560 nm in diameter for ocean, sea ice, and multiple air masses.

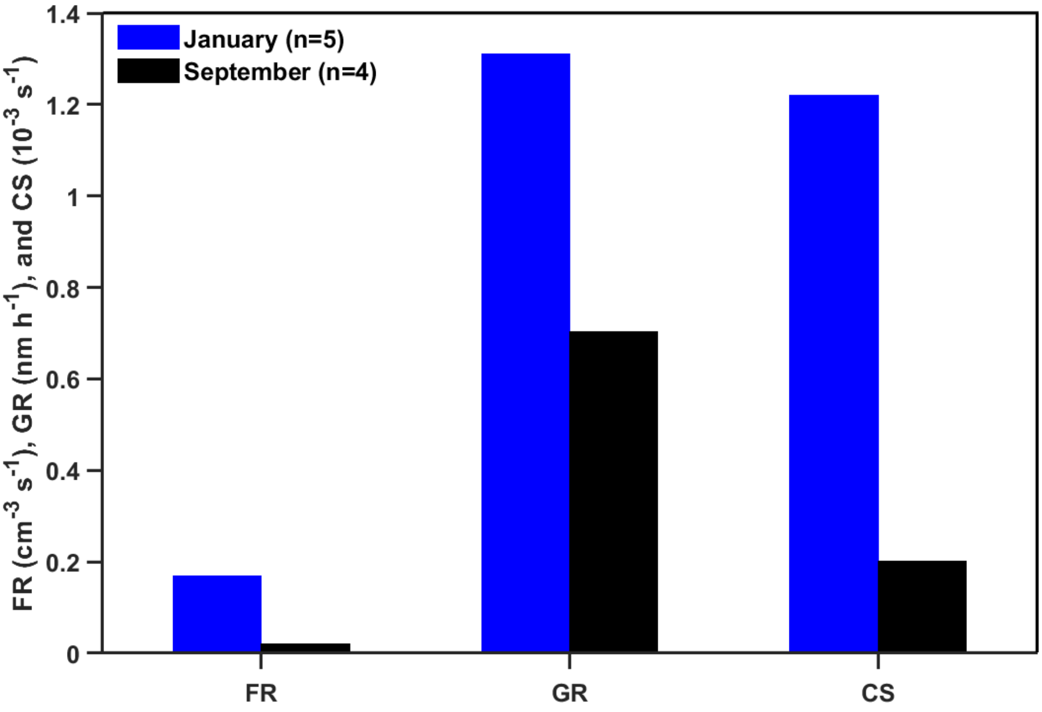

Figure S4. Comparison of mean values of formation rage (FR), growth rate (GR) and condensation sink (CS) for Antarctic sea ice NPF cases observed between January and September.