Supplementary Figures

Mechanism of Seasonal Arctic Sea Ice Evolution and Arctic Amplification

Kwang-Yul Kim[1*], Benjamin D. Hamlington[2], Hanna Na[3], and Jinju Kim[1]

[1]School of Earth and Environmental Sciences, Seoul National University, Seoul 151-742, Republic of Korea
[2]Department of Ocean, Earth and Atmospheric Sciences, Old Dominion University, Norfork, Virginia 23529, United States of America
[3]Ocean Circulation and Climate Research Center, Korea Institute of Ocean Science and Technology, Ansan, 15627, Republic of Korea

Correspondence to: Kwang-Yul Kim (kwang56@snu.ac.kr)

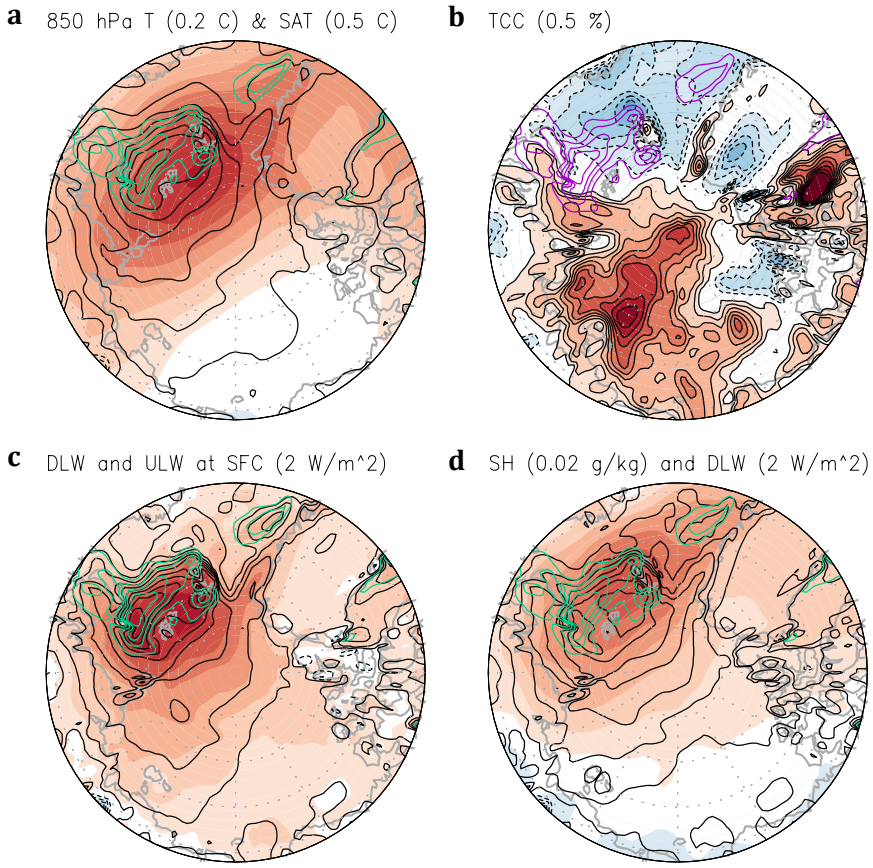

Figure S1. The DJF patterns of 850 hPa air temperature (shading) and 2 m air temperature (contour) (a), total cloud cover (b), downward (shade) and upward (contour) longwave radiation at surface (c), and 900-hPa specific humidity (shade) and downward longwave radiation at surface (contour) (d) for the warming mode. The green and purple contours in (a)-(d) represent the reduction of sea ice concentration.

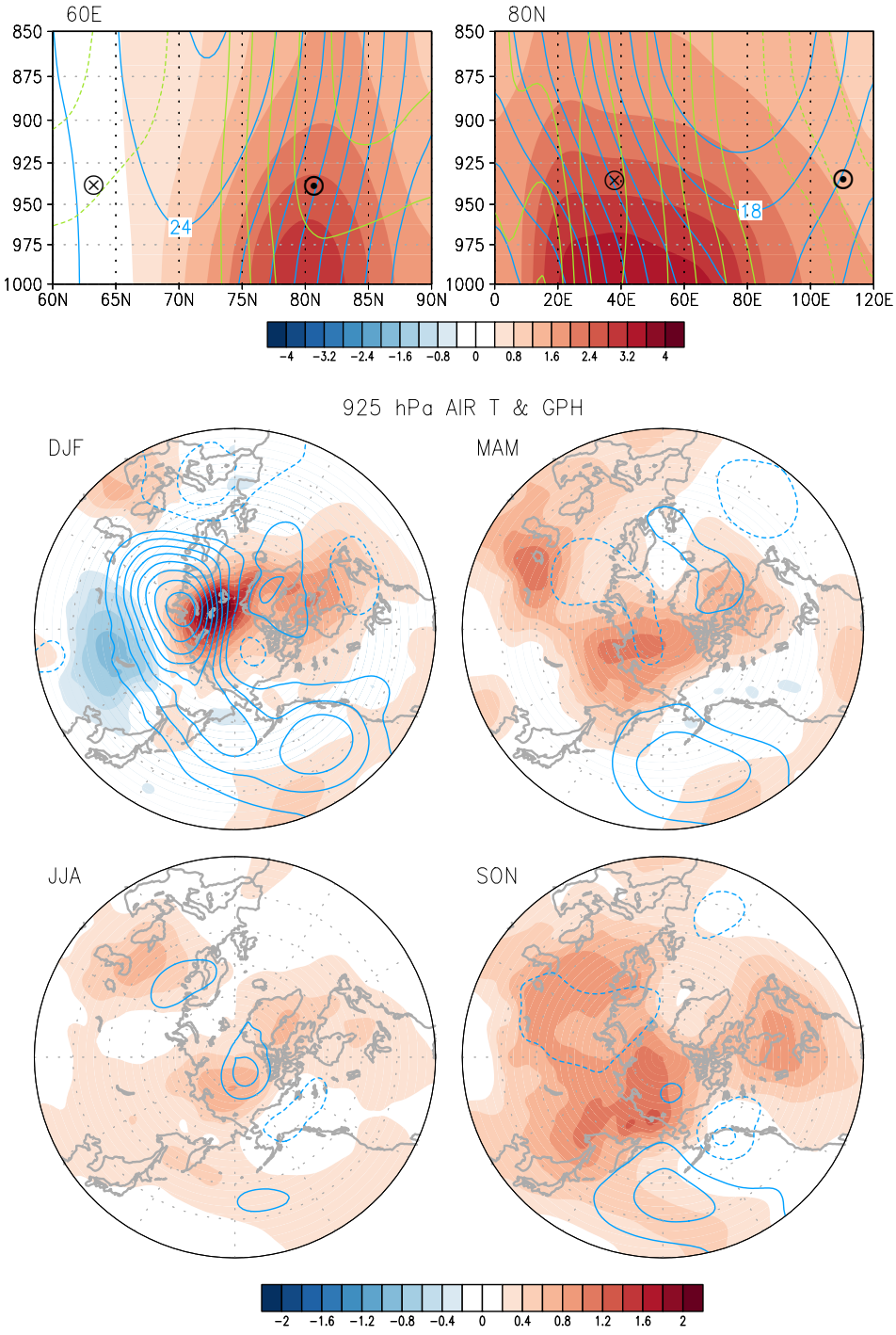

Figure S2. (upper panels) Vertical section of temperature (shading; 0.4 K), geopotential height (blue contours; 3 m), and zonal (left) and meridional (right) winds (yellow contours; 0.2 m s^{-1}). (lower panels) Air temperatures (shading; 0.2 K) and geopotential height (contours; 3 m) at 925 hPa level. The domain of the plot is 30°-90° N.