Supplementary information for “Southerly winds and rapid sea ice reductions along the Sea of Okhotsk coast of Hokkaido”

Meteorology and Atmospheric Physics

by Youichi Kamae* and Mone Yokota

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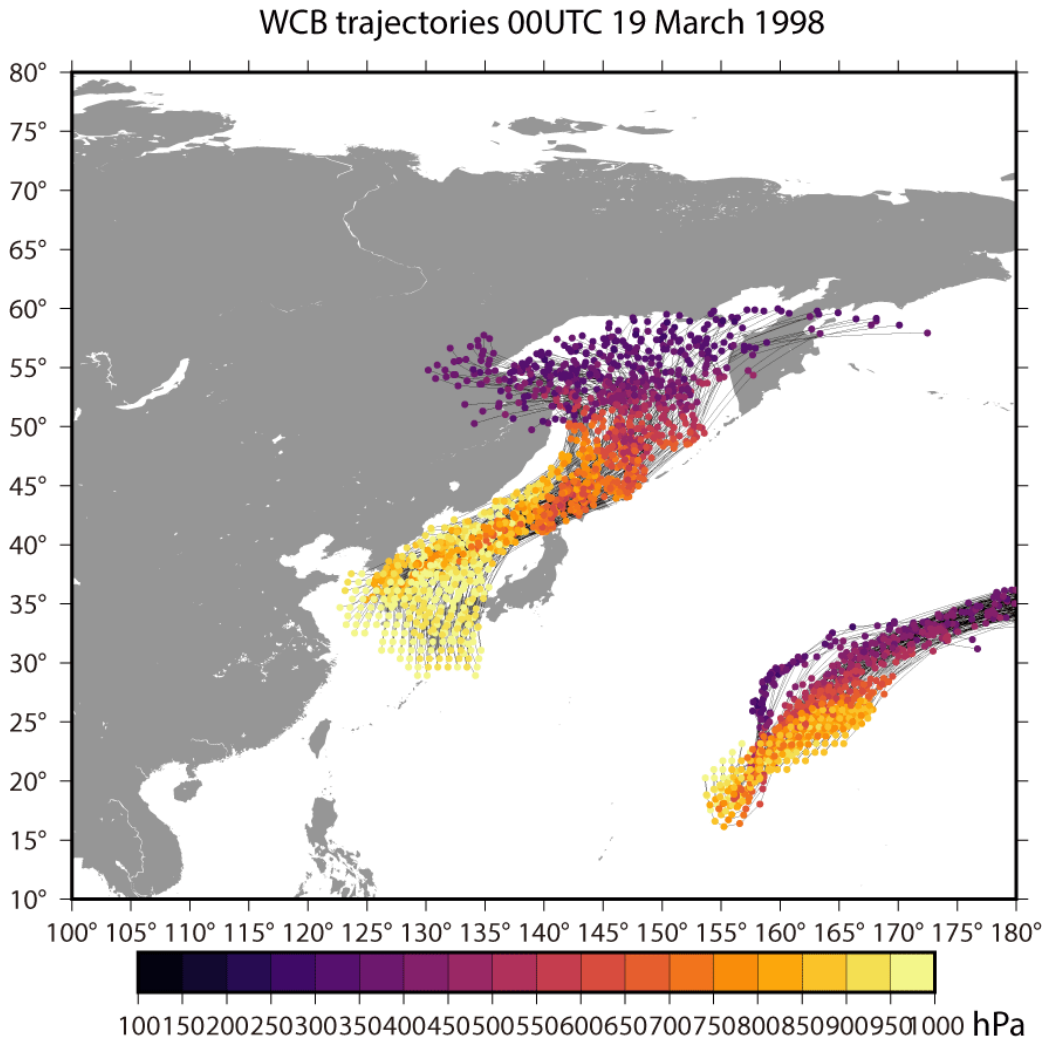

Figure S1 An example of trajectory analyses on rapid reduction events (RRE) of sea ice concentration (SIC) in the southern Sea of Okhotsk (SSO). Tracks indicate trajectories that were started from starting points in the lower troposphere (790–1030 hPa) over 20°–80°N, 110°–180°E at 00UTC 19 March 1998. Colored plots indicate air pressure of air parcels. Only trajectories that meet the thresholds of warm conveyor belt (WCB; rapid

ascents from the lower troposphere of more than 600 hPa within 48 hours) are shown.

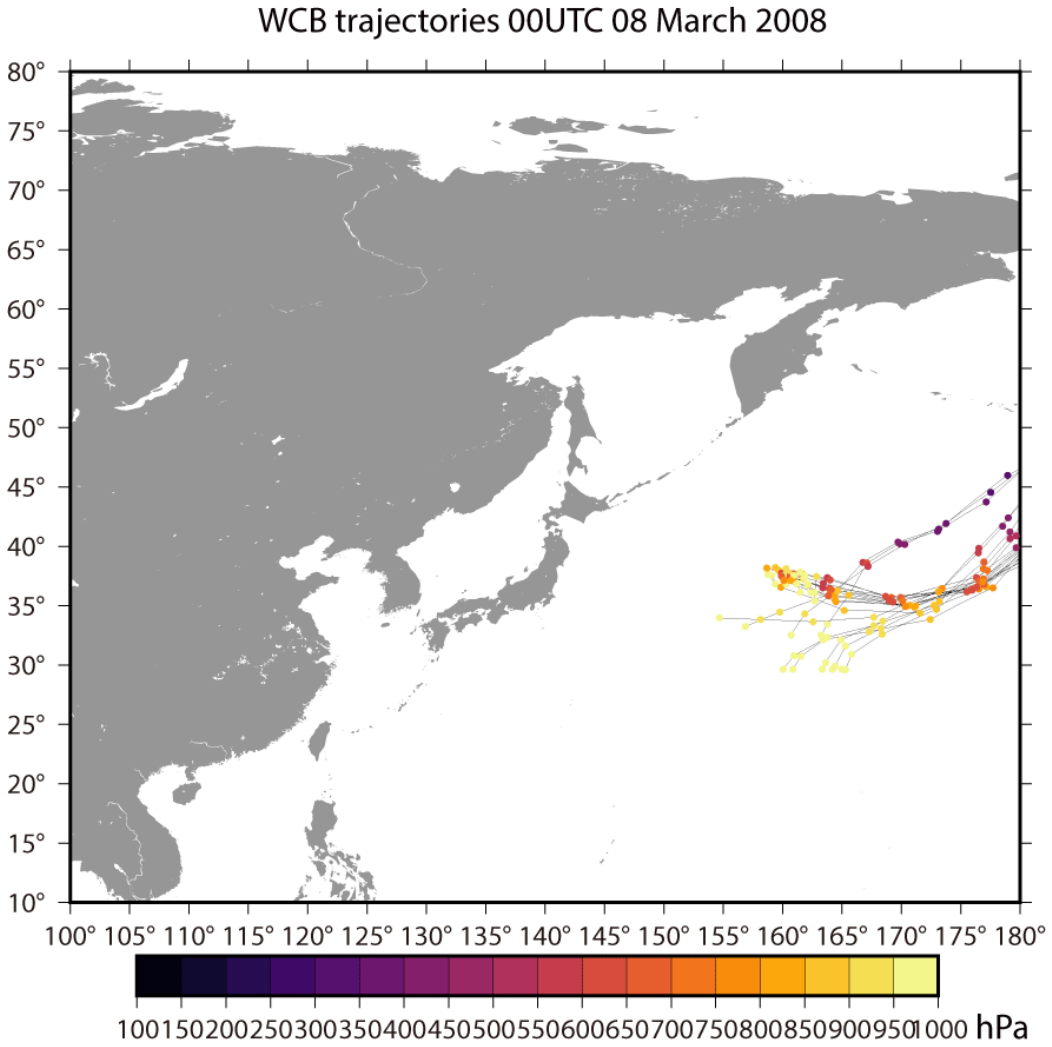

Figure S2 Similar to Fig. S1, but for trajectories that were started at 00UTC 08 March 2008.

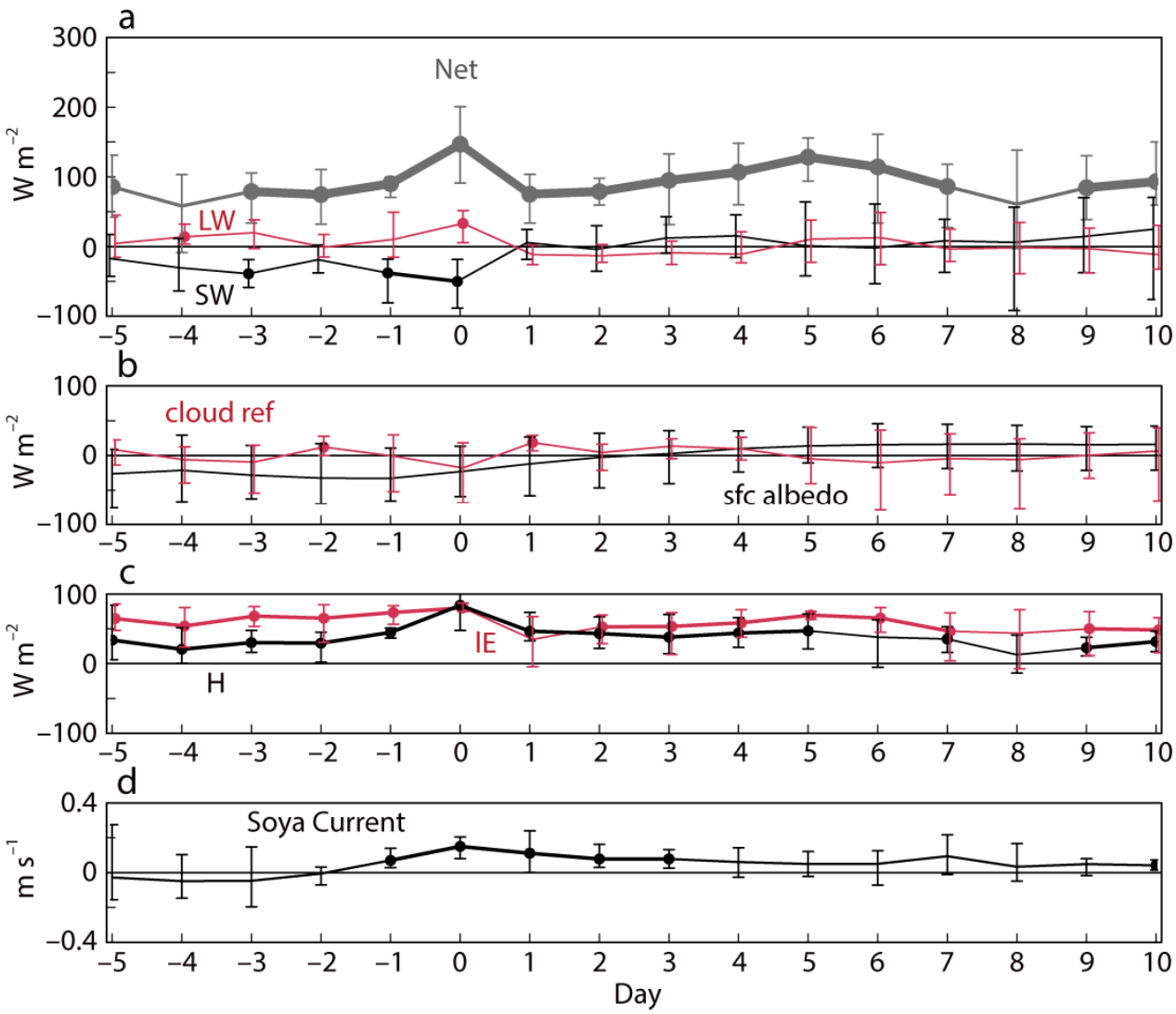

Figure S3 Similar to Fig. 9, but for time series of anomalies compared with their climatologies (1993–2019).

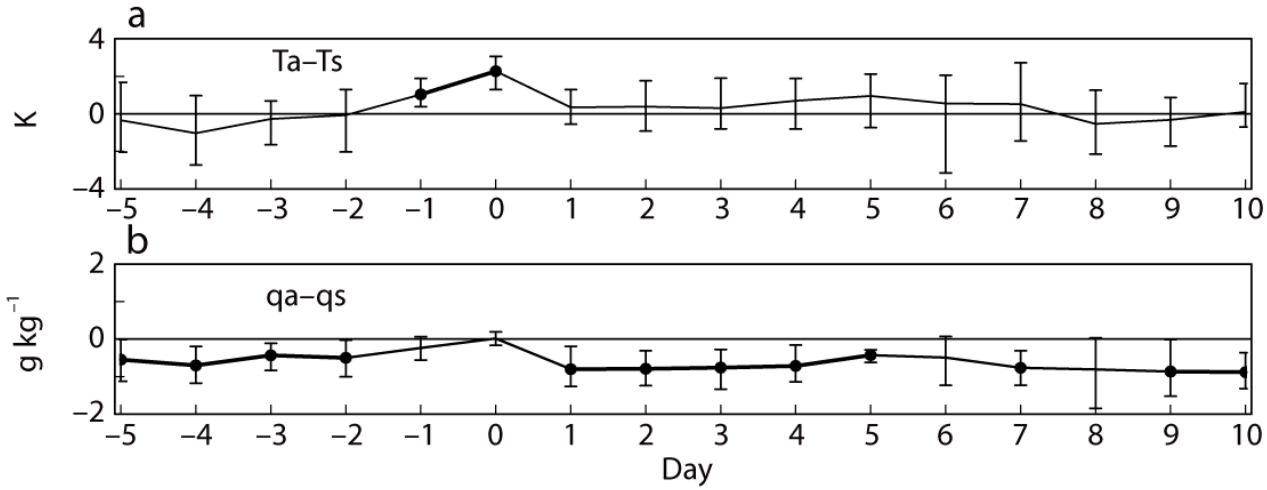

Figure S4 Similar to Fig. 9, but for (a) difference between 2 m air temperature (Ta; K) and surface skin temperature (Ts) and (b) difference between 2 m specific humidity (qa; g kg^{-1}) and specific humidity at saturation for Ts (qs).