

## Supplement

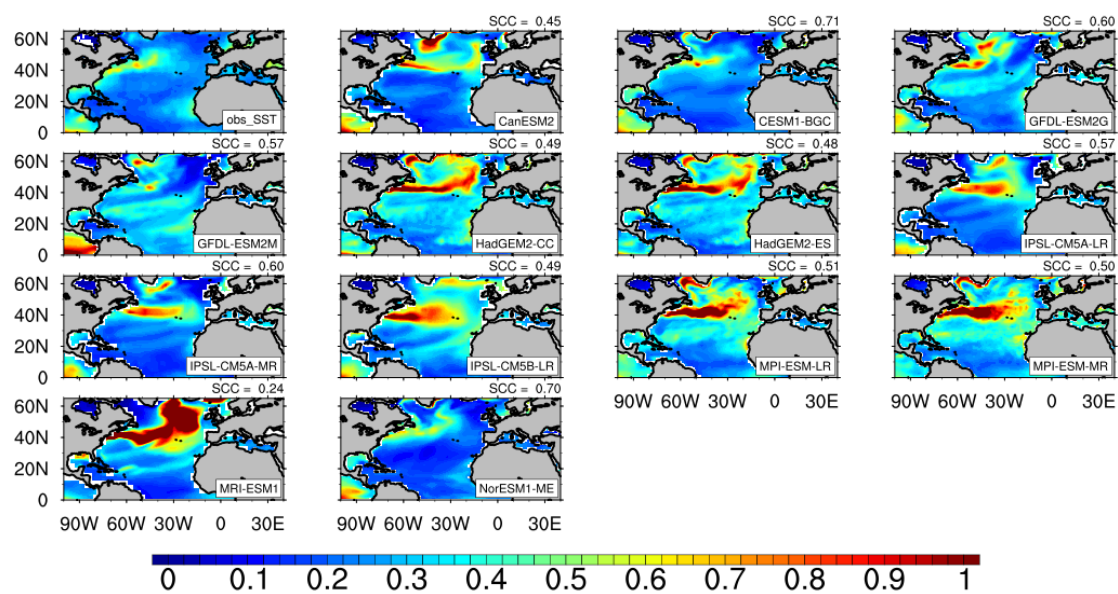
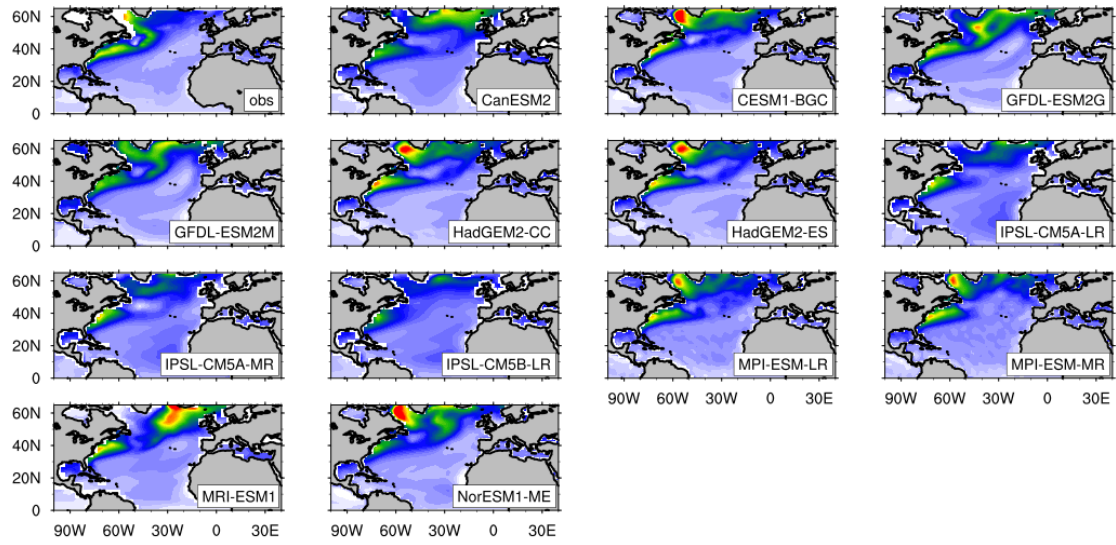


Figure S1 The observed and simulated magnitude of the SST interannual variability (°C, 1SD). The time periods for the observation and models range from 1981 to 2017 and 1969 to 2005, respectively.

(a)



(b)

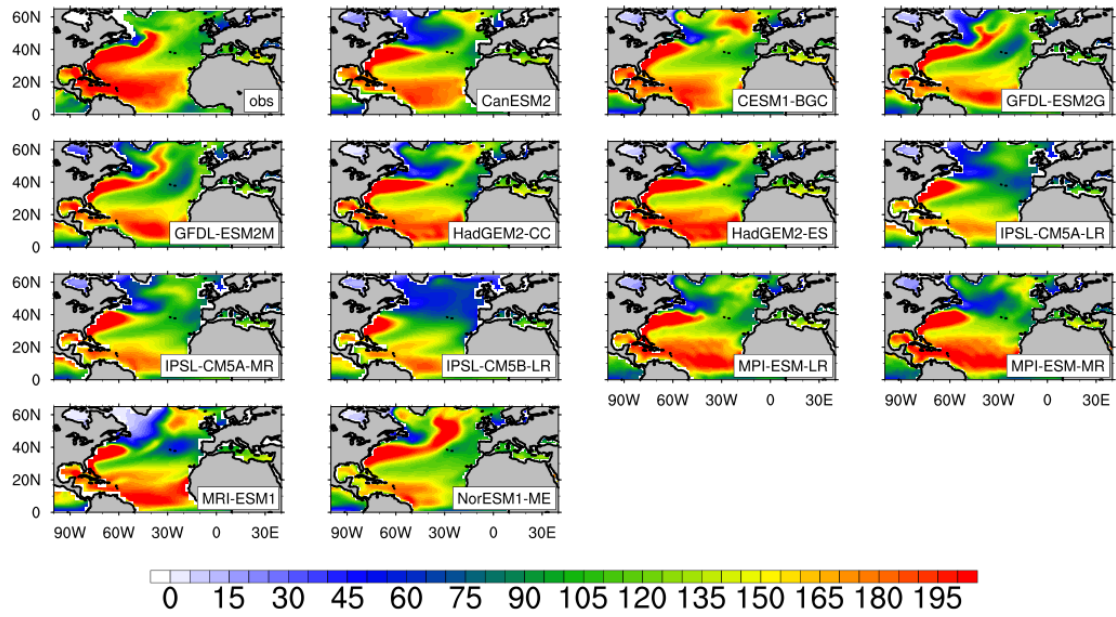


Figure S2 The observed and simulated multi-year mean sensible (a) / latent heat flux (b) ( $\text{W/m}^2$ ) in winter. The time periods for the observation and models range from 1902 to 2010 and 1897 to 2005, respectively.