



AMS

American Meteorological Society

Supplemental Material

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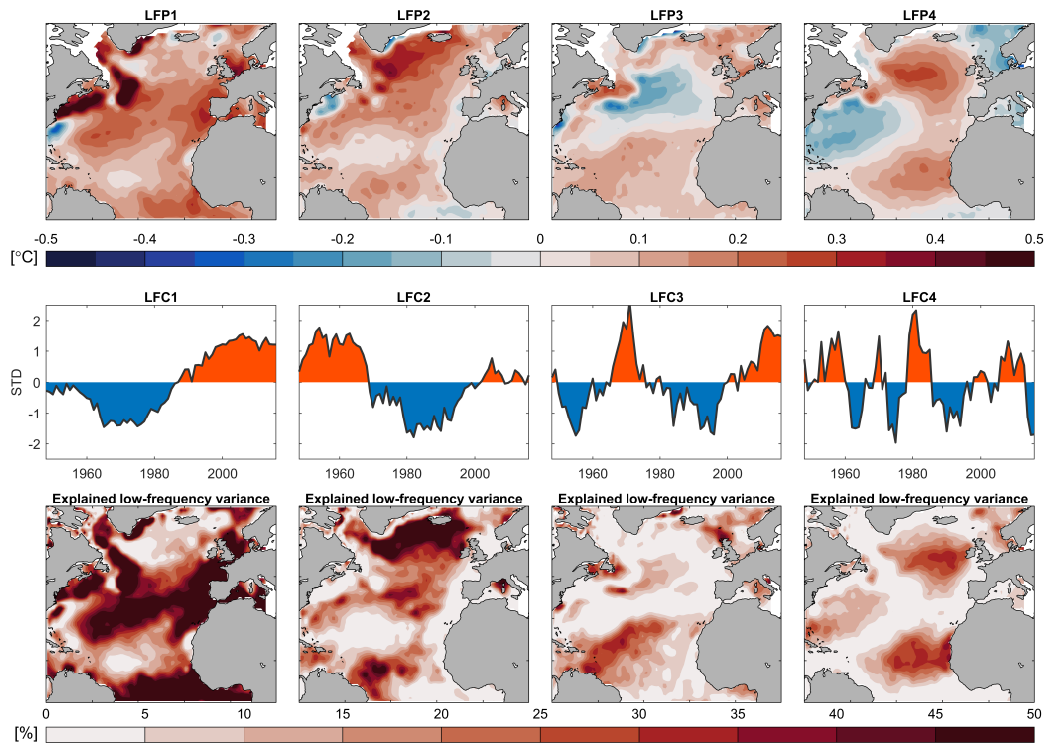


Figure S1: The four leading observed (HadISST) low-frequency patterns (LFPs) and corresponding time series (components; LFCs) in the North Atlantic. The ratio of low-frequency to total variance is 0.99, 0.96, 0.91, and 0.81, respectively. The lower panels show the explained low-frequency (>10 years) variance of each LFC.

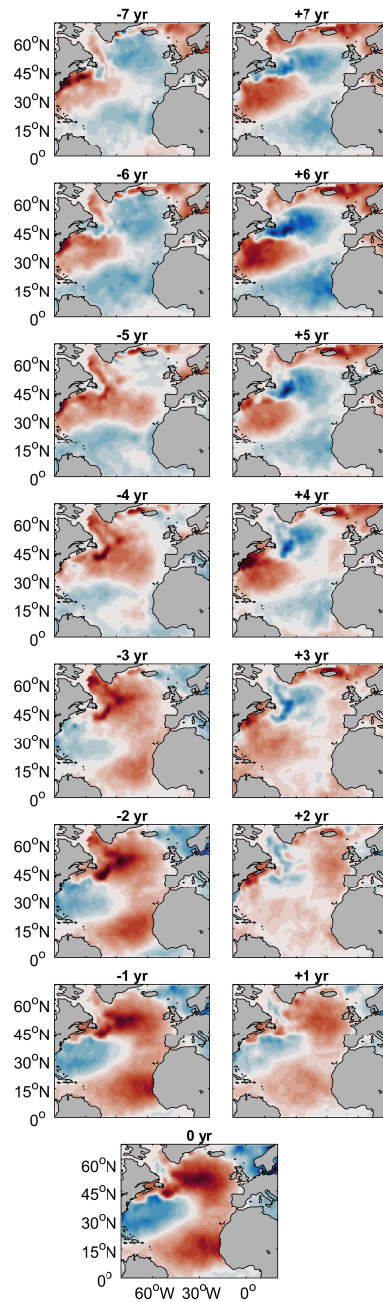


Figure S2: Observed winter SST regressed onto the ADV index. The ADV index leads for positive values of the lag (in years). Units are $^{\circ}\text{C}$ per standard deviation of the ADV index.

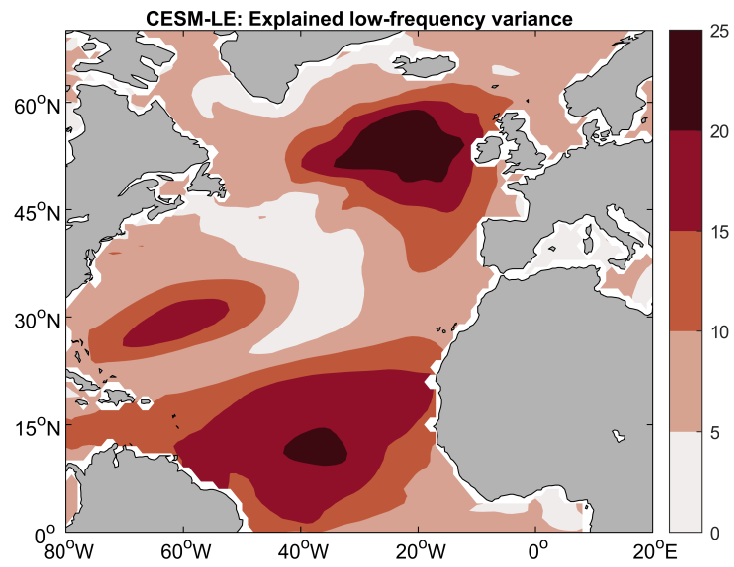


Figure S3: Explained low-frequency (>10 years) variance (in %) of the ADV in CESM-LE.

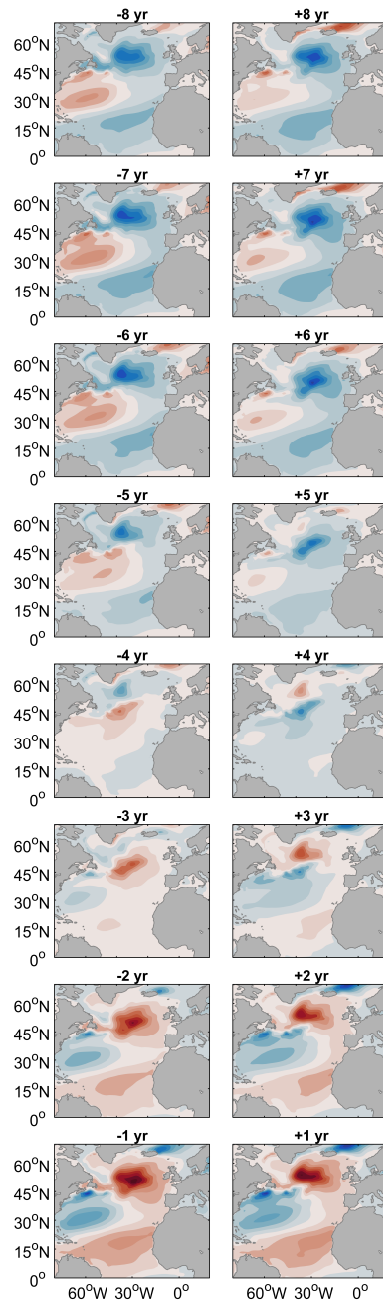


Figure S4: Winter SST regressed onto the ADV index in CESM-LE. The ADV index leads for positive values of the lag (in years). Units are $^{\circ}\text{C}$ per standard deviation of the ADV index.

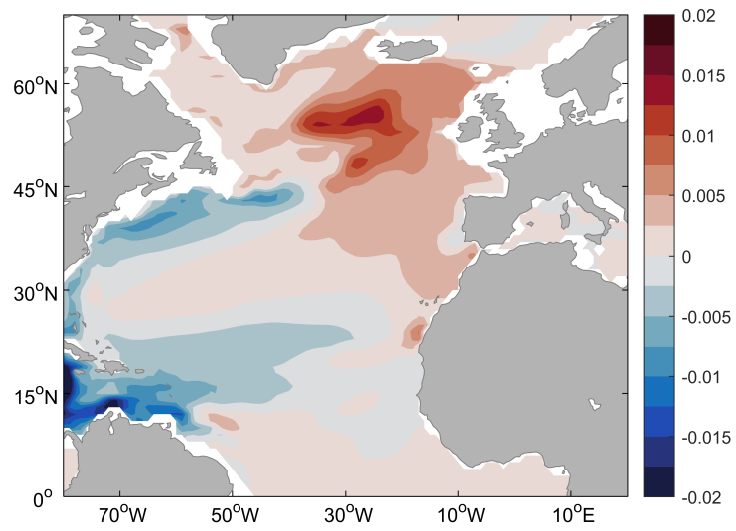


Figure S5: Winter salinity at 400 m regressed onto the ADV index in CESM-LE.

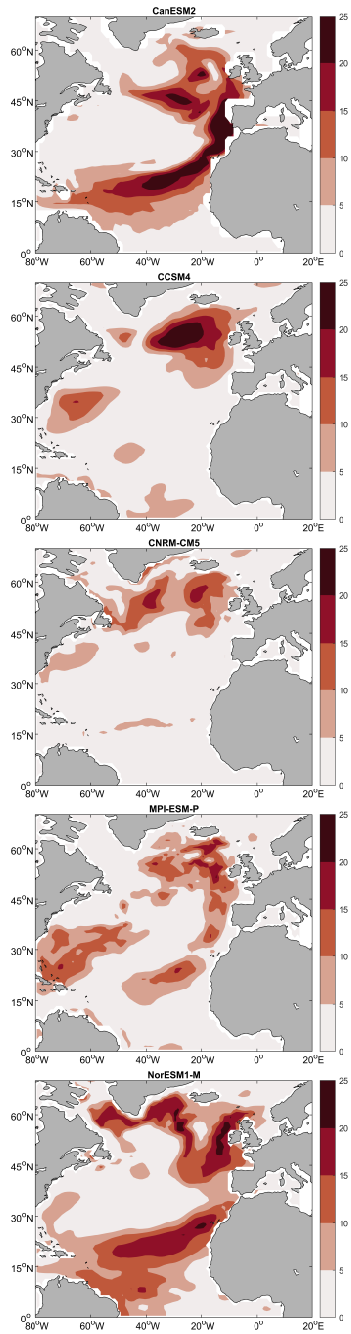


Figure S6: Explained low-frequency (>10 years) variance (in %) of the ADV in CMIP5 pre-industrial control simulations.