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Supplement of

Projection of North Atlantic Oscillation and its effect on tracer transport

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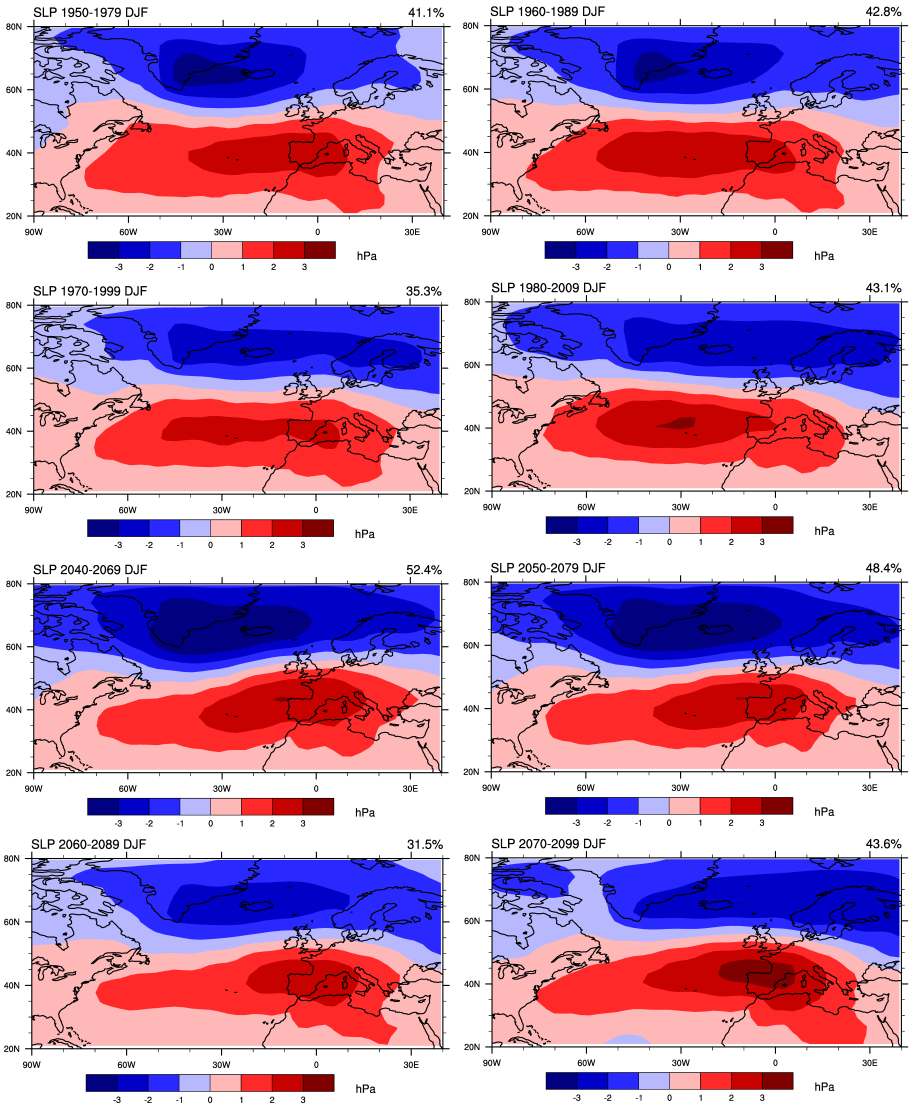

Figure S1. Leading empirical orthogonal function (EOF1) of winter mean sea level pressure (SLP) anomalies of the coupled simulation. From top to bottom and left to right, the leading EOFs correspond to the 30 years periods 1950-1979, 1960-1989, 1970-1999, 1980-2009 (past), and 2040-2069, 2050-2079, 2060-2089, 2070-2099 (future).

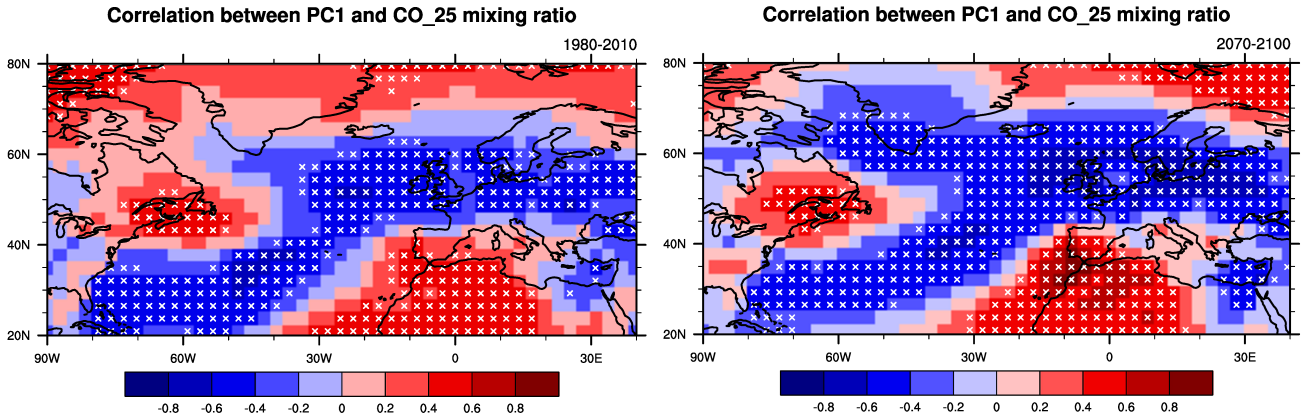

Figure S2. Correlation between the winter seasonal CO_25 mixing ratio anomalies at the surface level and the PC1 of SLP computed with the coupled simulation data for the recent past (*left*) and future (*right*) periods. Points marked with a white cross indicate local significance at the 95%.

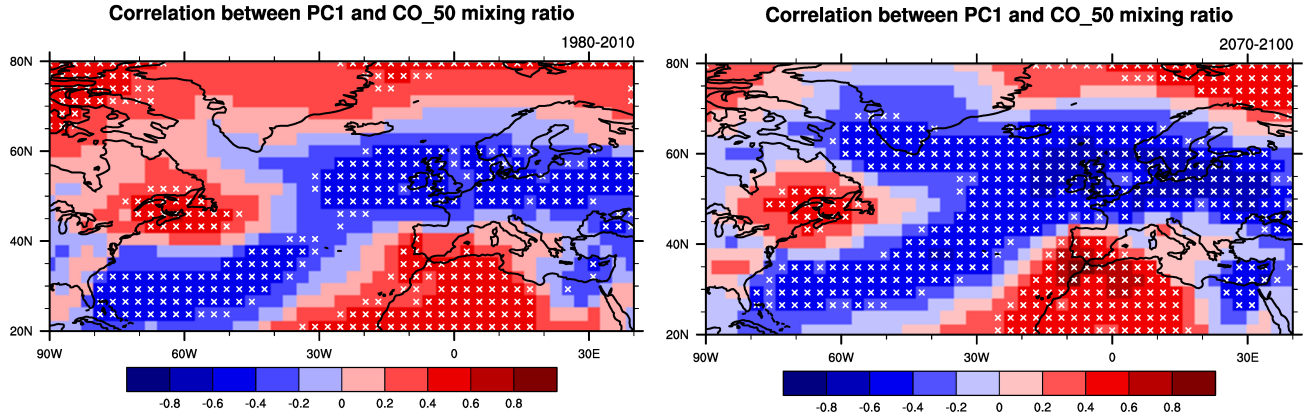

Figure S3. Correlation between the winter seasonal CO_50 mixing ratio anomalies at the surface level and the PC1 of SLP computed with the coupled simulation data for the recent past (*left*) and future (*right*) periods. Points marked with a white cross indicate local significance at the 95%.

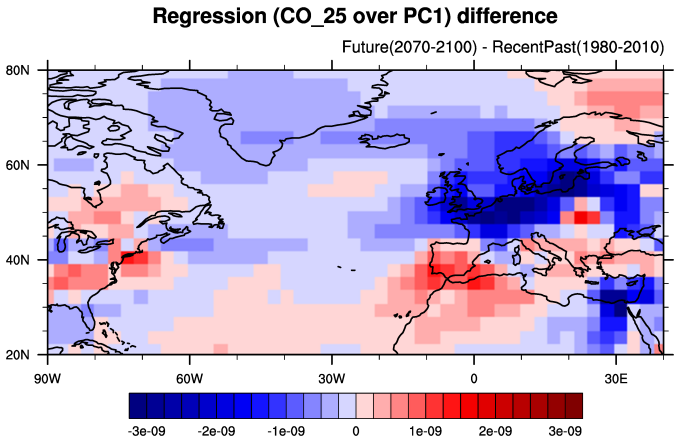

Figure S4. Difference between future and recent past regression of CO_25 mixing ratio at surface level against PC1.

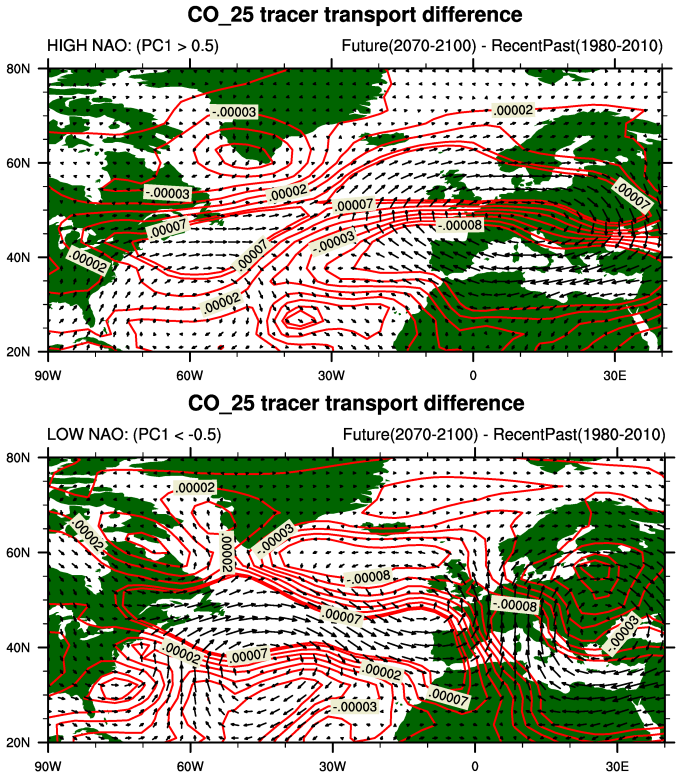

Figure S5. Differences between future and recent past temporal averages of vertically integrated CO_25 tracer transport vectors for winters with high NAO (PC1 > 0.5) (*top*) and low NAO (PC1 < -0.5) (*bottom*).