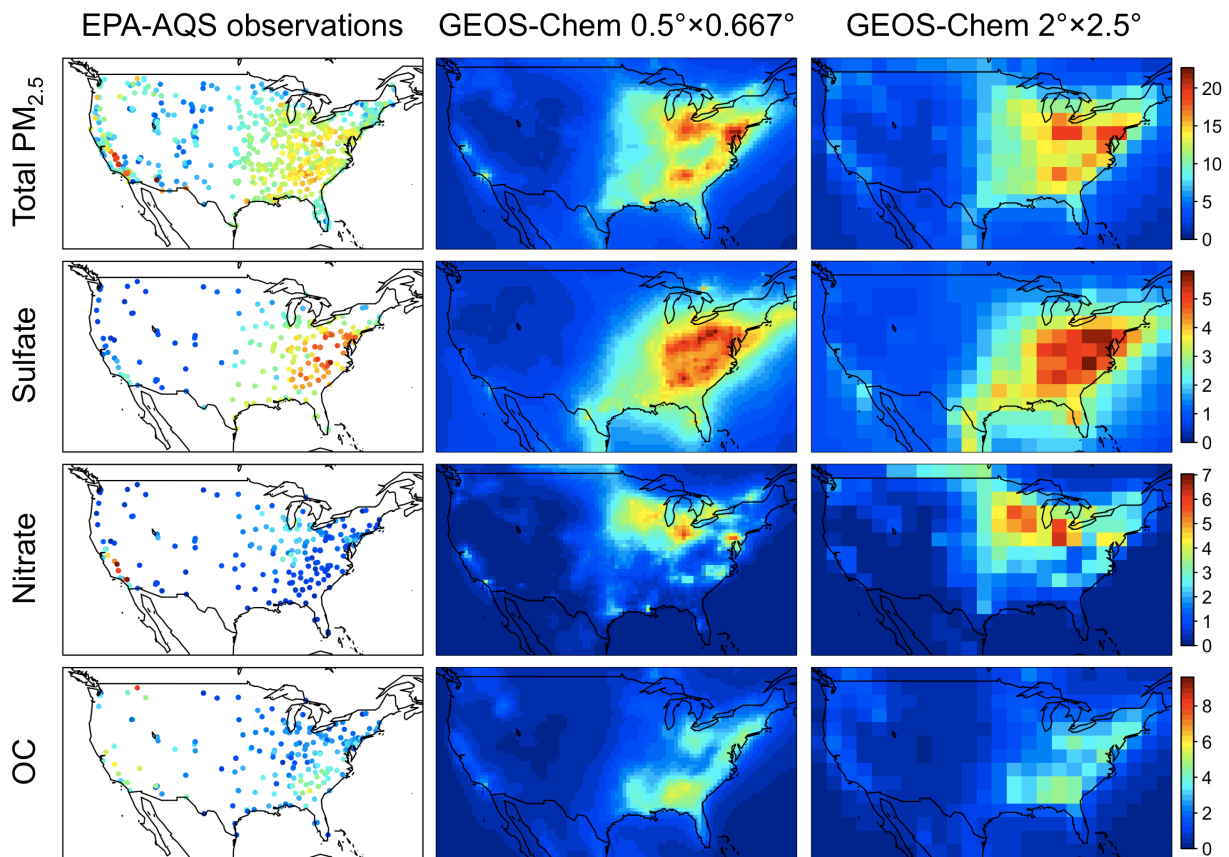


1 **Supplementary Materials**

2 **Meteorological modes of variability for fine particulate matter (PM<sub>2.5</sub>) air quality in the**  
3 **United States: implications for PM<sub>2.5</sub> sensitivity to climate change**

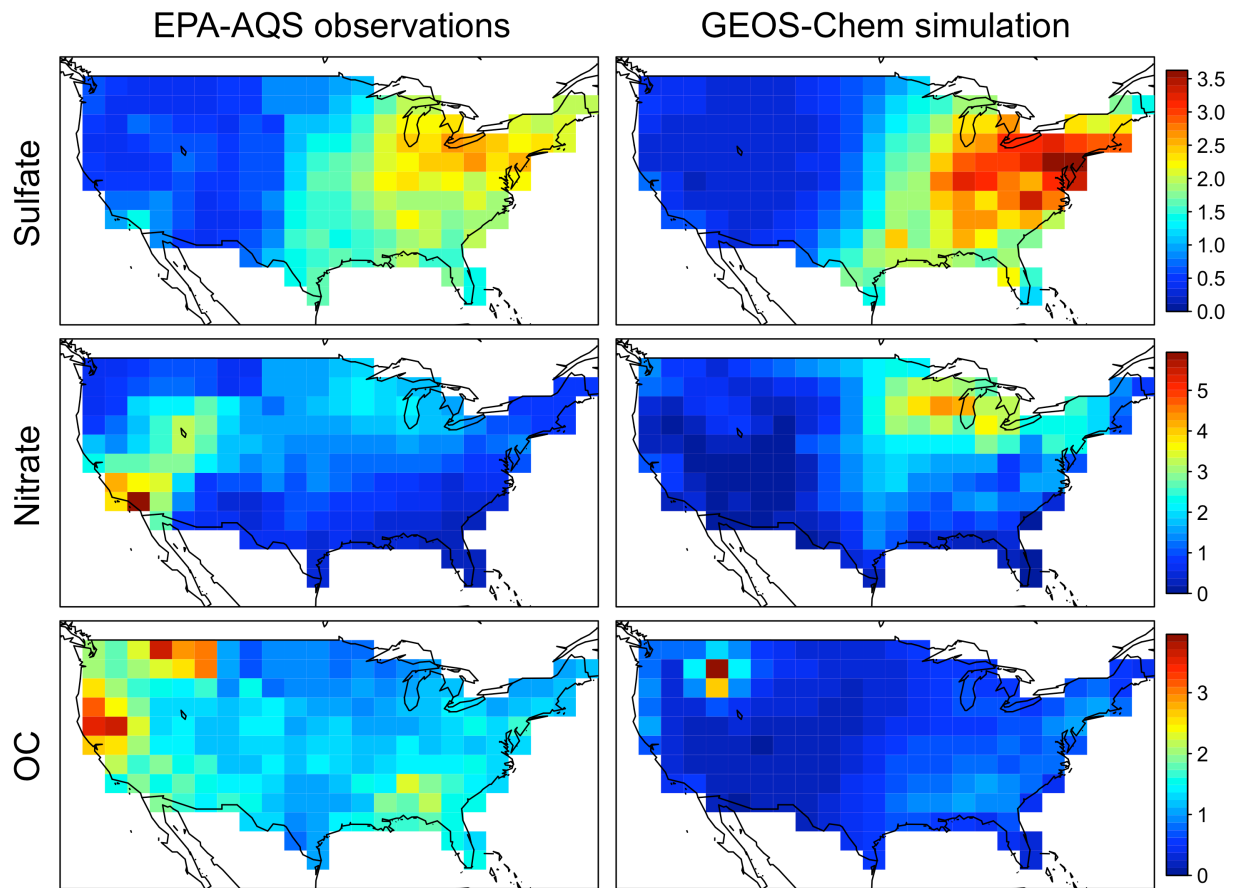
4 A. P. K. Tai, L. J. Mickey, D. J. Jacob, E. M. Leibensperger, L. Zhang, J. A. Fisher, H. O. T.  
5 Pye

6



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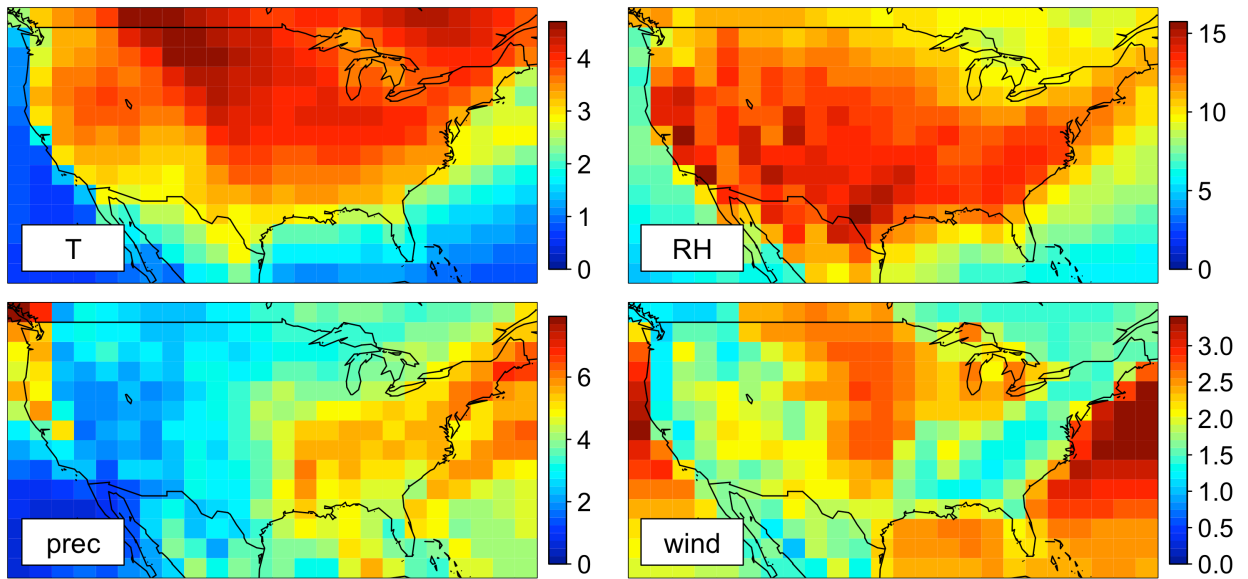
8 Annual mean observed (EPA-AQS) and simulated (GEOS-Chem) concentrations of total  
9 PM<sub>2.5</sub>, sulfate, nitrate and organic carbon (OC) for 2006. GEOS-Chem results are shown for  
10 simulations at 0.5°x0.667° and 2°x2.5° resolution. Concentrations are in units of  $\mu\text{g m}^{-3}$ .



1

2 Standard deviations of deseasonalized concentrations of sulfate, nitrate and organic carbon  
 3 (OC) for both observations (EPA-AQS) and simulations (GEOS-Chem).

4



1

2 Standard deviations of deseasonalized GEOS-5 meteorological variables: temperature (K),  
3 relative humidity (%), precipitation (mm d<sup>-1</sup>), and wind speed (m s<sup>-1</sup>).

4