

Supporting information for:

Integrated Impacts of Nitrous Acid and Nitryl Chloride on Ozone: New Module Developments for Reactive Nitrogen in WRF-Chem and Applications in summertime over China

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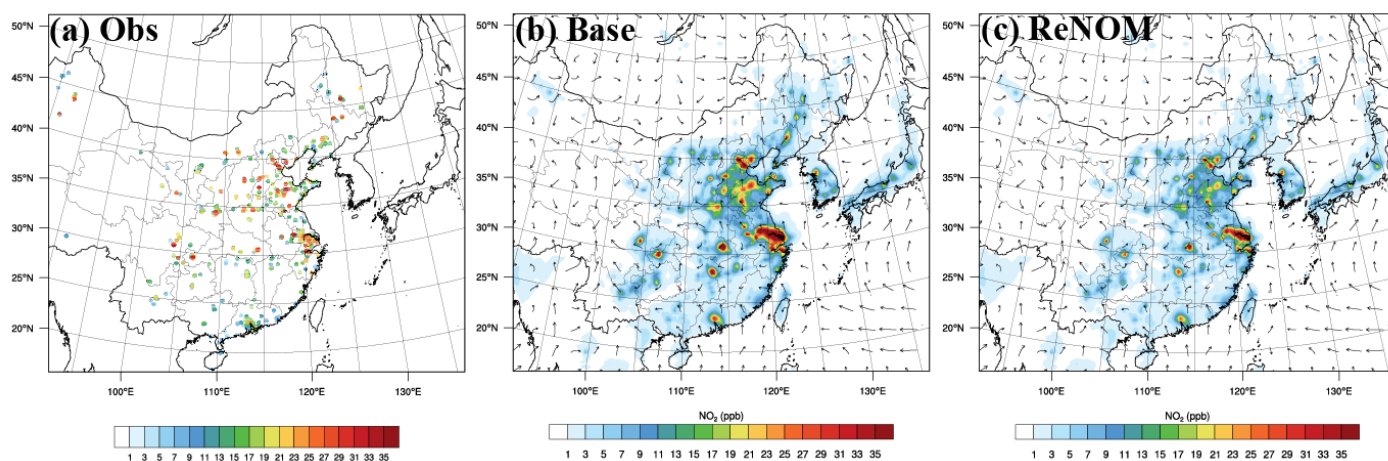


Figure S1. Spatial distributions of the (a) observed daily-averaged NO₂ concentration and modeled ones in (b) the Base case and (c) ReNOM case during the simulation period.

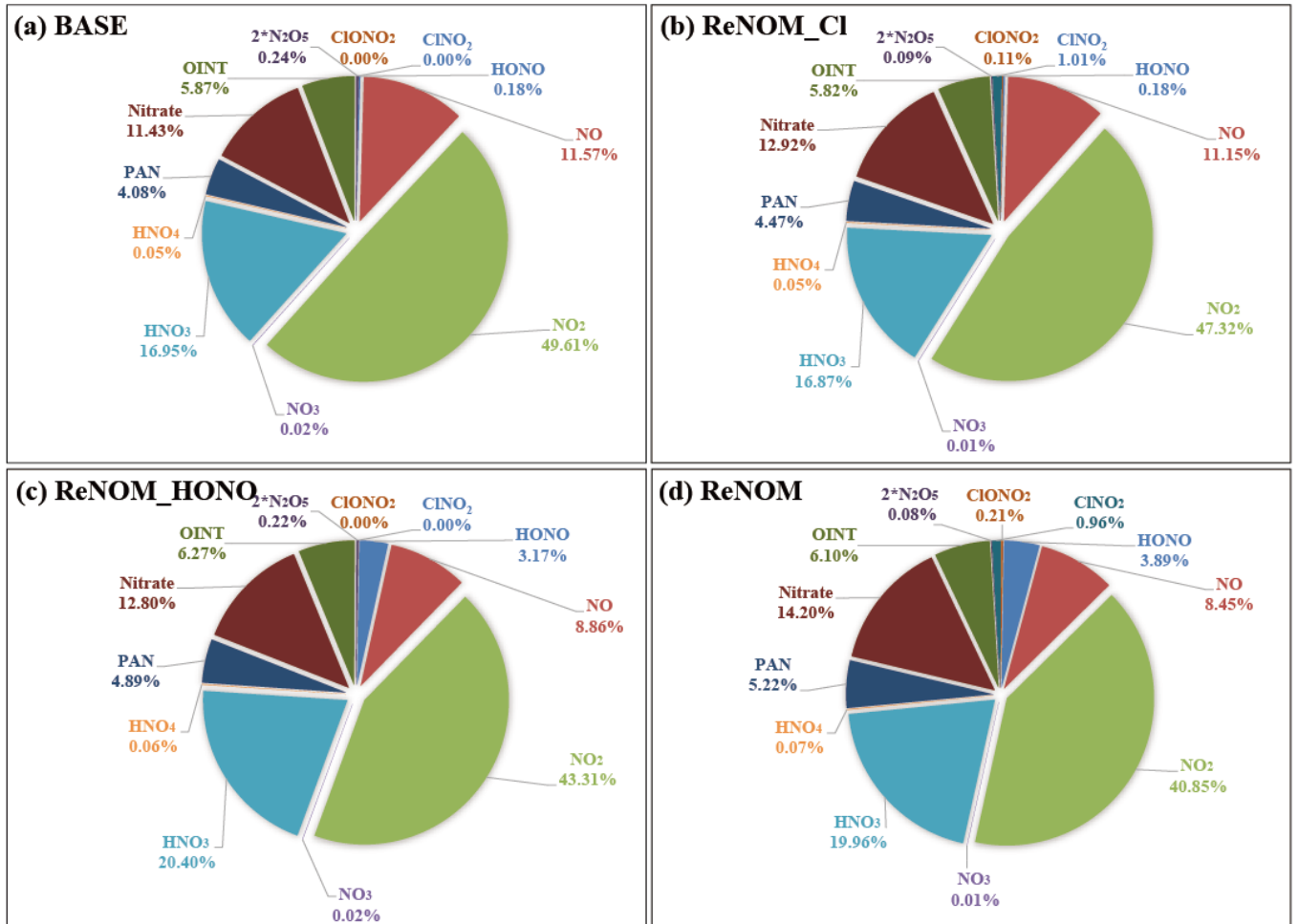


Figure S2. Regional averages of NO_y partitioning over eastern China in (a) BASE case, (b) ReNOM_Cl case, (c) ReNOM_HONO case, and (d) ReNOM case.

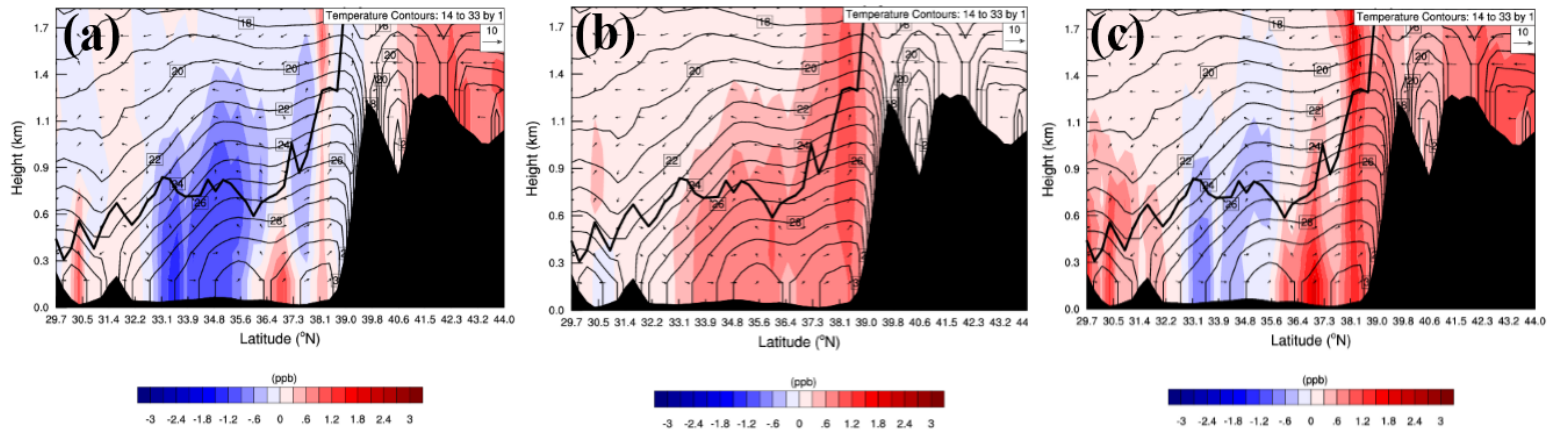


Figure S3. Vertical distributions of daytime ozone enhancements in (a) ReNOM_HONO case, (b) ReNOM_Cl case, and (c) ReNOM case in the domain intercepting the northern China and central China. Vectors present the average v-w wind components (m s^{-1}), dash lines the temperature ($^{\circ}\text{C}$), and black line the simulated planetary boundary layer height during daytime.