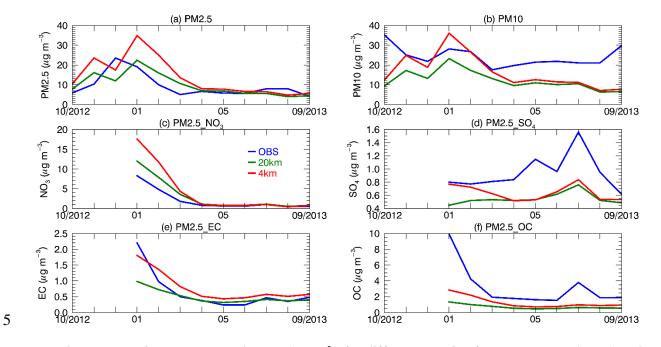


Supplementary Figure 1. Aerosol mass ($\mu g m^{-3}$) for different species from EPA CSN (OBS), 20km and 4km simulations at Bakersfield, CA. PM2.5_NO₃ represents NO₃ with diameter $\leq 2.5 \mu m$. Similar definition for SO₄, EC and OC in the figures.



6 Supplementary Figure 2. Aerosol mass (µg m⁻³) for different species from EPA CSN (OBS), 20km

7 and 4km simulations at Modesto, CA.