

$$MFB = \frac{2}{N} \left(\sum_1^N \frac{Model - Obs}{Model + Obs} \right) \times 100\% \quad \text{Equation 1}$$

$$MFE = \frac{2}{N} \left(\sum_1^N \frac{|Model - Obs|}{Model + Obs} \right) \times 100\% \quad \text{Equation 2}$$

$$NMB = \frac{\sum_1^N |Model - Obs|}{\sum_1^N Obs} \times 100\% \quad \text{Equation 3}$$

$$NME = \frac{\sum_1^N |Model - Obs|}{\sum_1^N Obs} \times 100\% \quad \text{Equation 4}$$

$$MNB = \frac{1}{N} \sum_1^N \frac{(Model - Obs)}{Obs} \times 100\% \quad \text{Equation 5}$$

$$MNE = \frac{1}{N} \sum_1^N \frac{|Model - Obs|}{Obs} \times 100\% \quad \text{Equation 6}$$

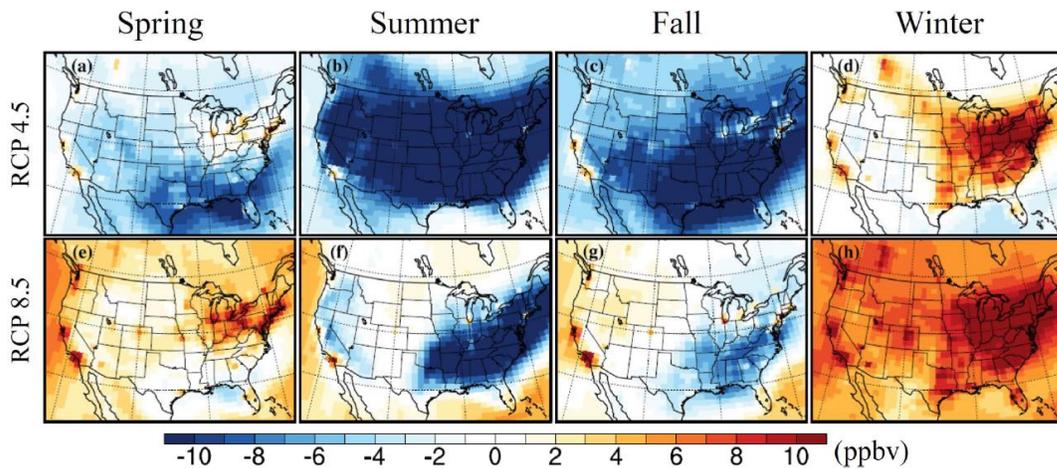
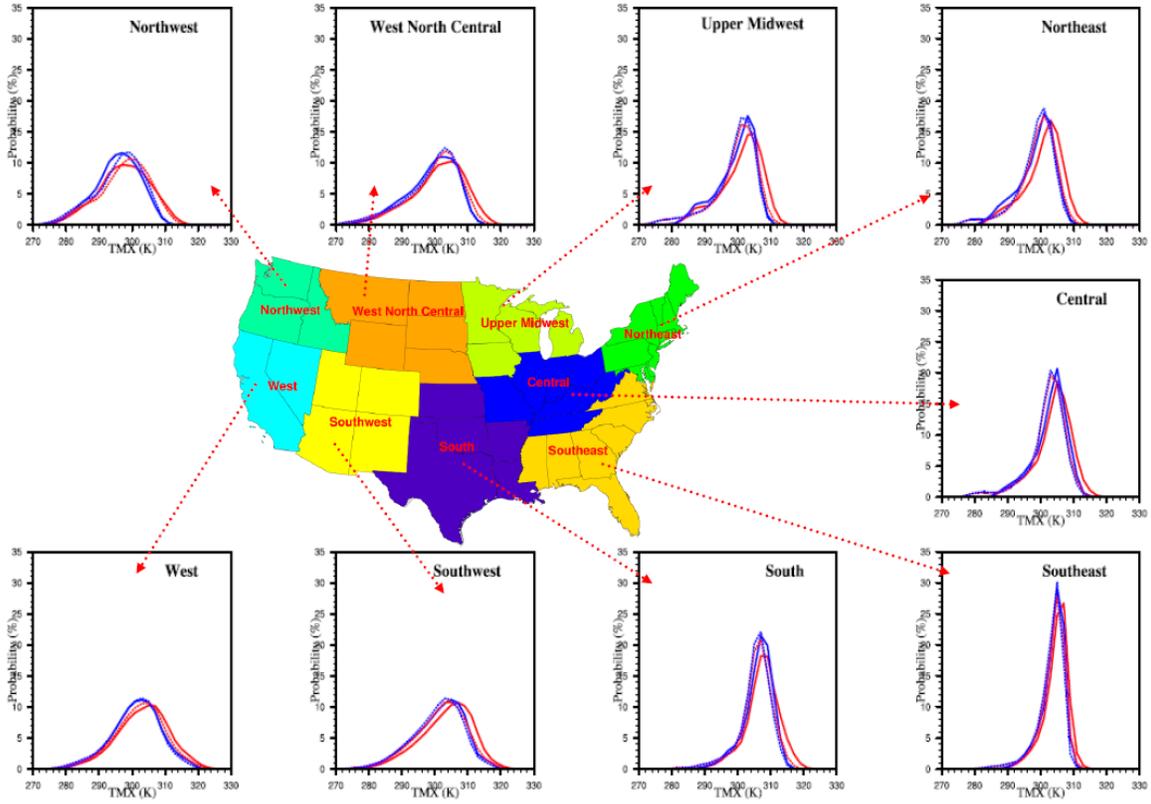


Fig. S1. Seasonal mean ozone changes from CAM-Chem outputs under future climate (2057-2059 minus 2001-2004) for RCP 4.5 (a-d), RCP 8.5(e-h), RCP 8.5 with present (2001-2004) boundary conditions (i-l)



— RCP 4.5-NOHW
 — RCP 4.5-ALL
 — RCP 8.5-NOHW
 — RCP 8.5-ALL

Fig. S2. Distributions of daily maximum temperature (TMX) during the entire period and non-heat wave period for RCP 4.5 and RCP 8.5 from June to October.