Supplement of

Impacts of meteorology and emissions on surface ozone increases over Central Eastern China between 2003 and 2015

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Figure S1. Locations of rural/regional background sites (red triangle) and the capital of each province in Central Eastern China (green dot). The blue rectangle represents the Central Eastern China region.

Figure S2. Comparison of observed and simulated monthly-mean concentrations of surface O$_3$ at the six rural/regional background sites in July 2004.
**Figure S3.** Time series of observed and simulated O$_3$ concentrations at Mt Tai in July 2003.

**Figure S4.** Time series of observed and simulated O$_3$ concentrations in July 2015 at nine representative surface stations.
**Figure S5.** Monthly-mean geopotential heights at 850 hPa in July of 2003 and 2015 from MERRA-2 meteorological field.

**Figure S6.** The mean wind fields at 850 hPa and surface in July of 2003 and 2015 based on the GEOS-Chem results.
Figure S7. The mean temperature and relative humidity on surface layer in July of 2003 and 2015 based on the GEOS-Chem results.