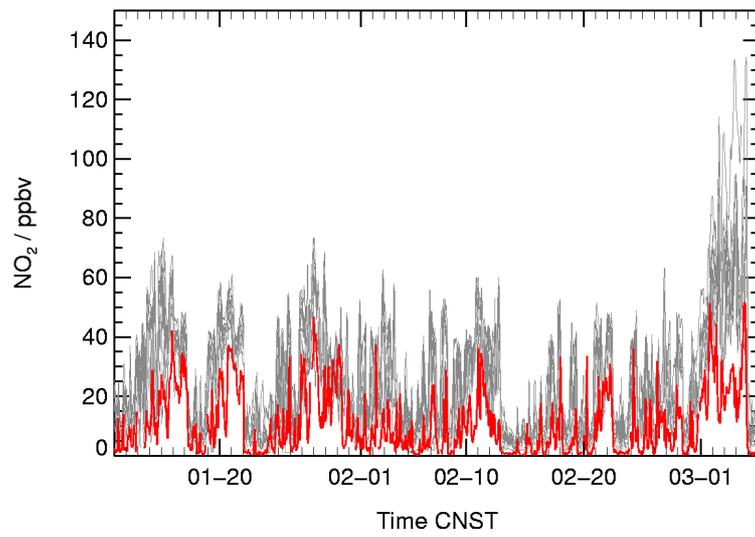
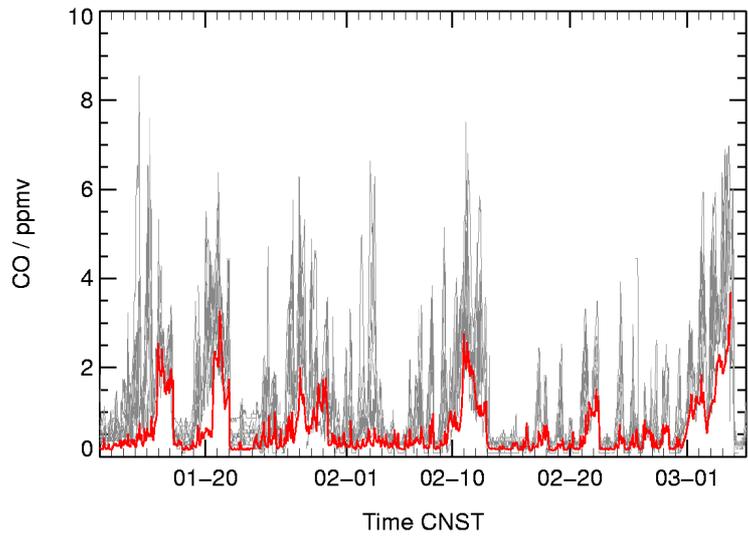
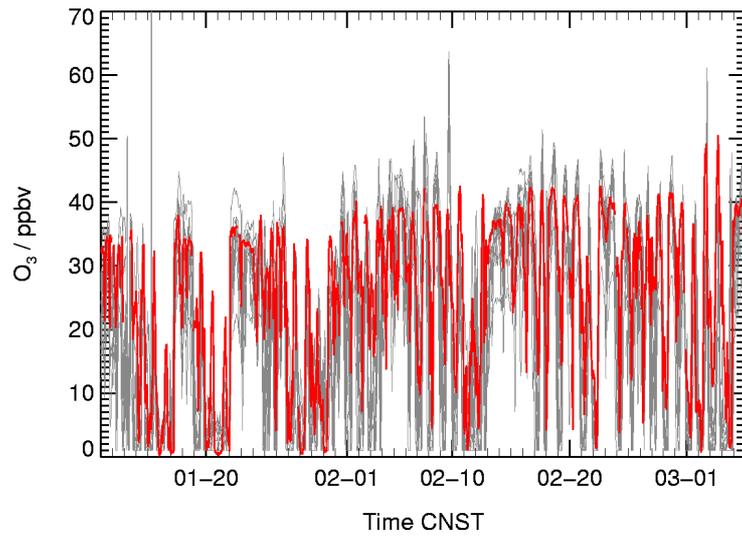


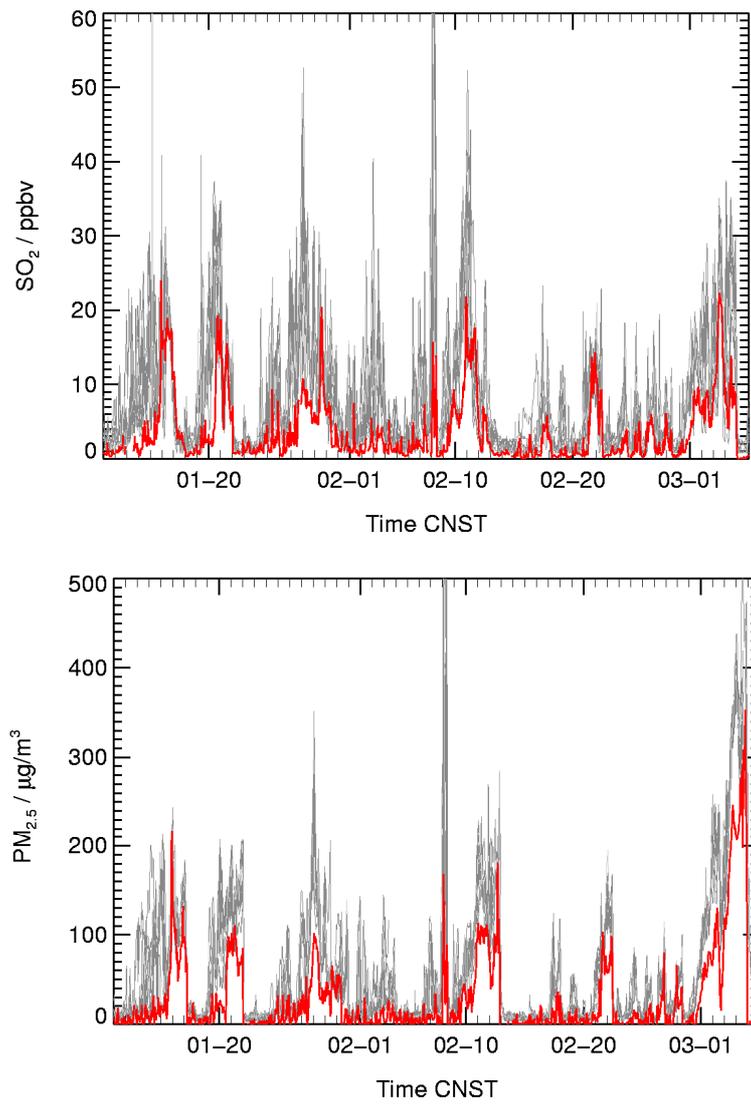
*Supplement of*

**Wintertime photochemistry in Beijing: Observations of RO<sub>x</sub> radical concentrations in the North China Plain during the BEST-ONE campaign**

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**Figure S1. Time series of measured CO, O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>2.5</sub> (Red: measurement at BEST-ONE site; Grey: measurements at 12 Environmental Protection Agency stations in Beijing urban areas)**

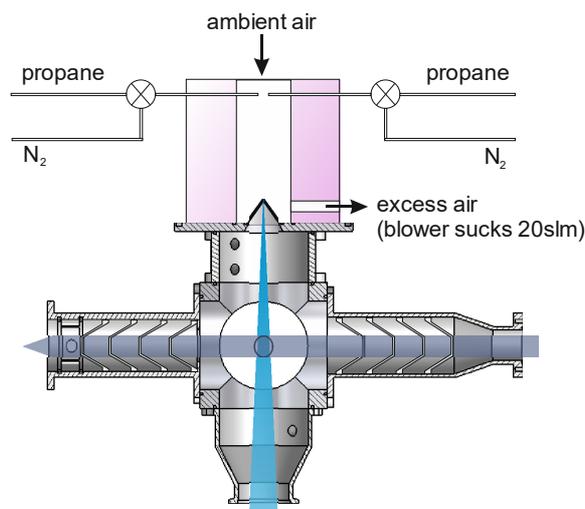


Figure S2. Schematic plot of the chemical modulation setup.

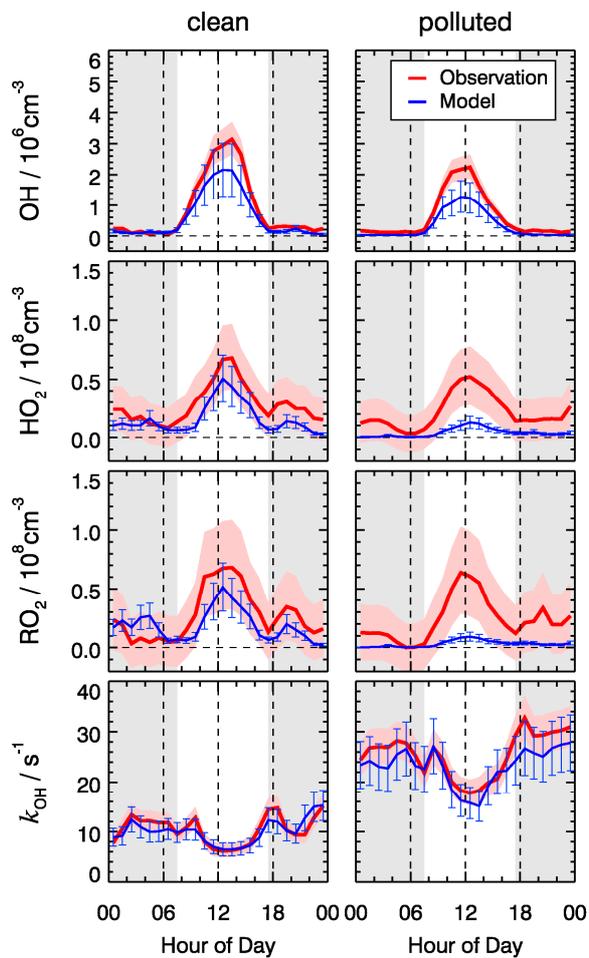


Figure S3. Measurement and model calculation comparison for clean (left) and polluted episodes (right). Thick lines give median values, colored areas give the 25 and 75% percentiles. The vertical bars denote the modelled uncertainty (40%).