



*Supplement of*

## **Spatial and temporal changes of the ozone sensitivity in China based on satellite and ground-based observations**

**Wannan Wang et al.**

*Correspondence to:* Ronald van der A ([ronald.van.der.a@knmi.nl](mailto:ronald.van.der.a@knmi.nl))

The copyright of individual parts of the supplement might differ from the article licence.

Table S1. Initial mixing ratio in the mixed-layer.

Species	O <sub>3</sub>	NO	CH <sub>4</sub>	isoprene	CO	H <sub>2</sub> O <sub>2</sub>
Units (ppb)	30	0	1724	0	105	0.1

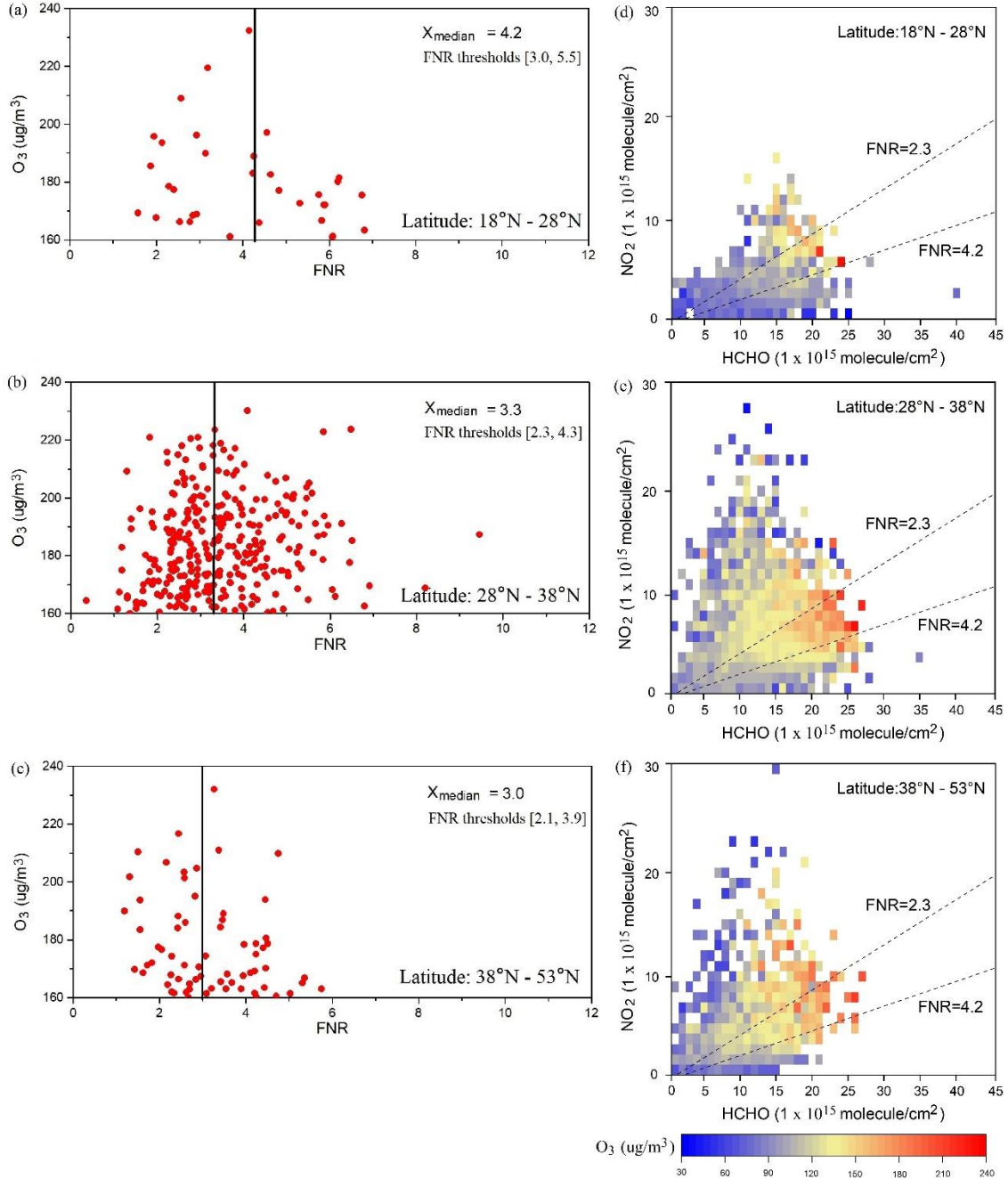


Figure S1. (a) Derived FNR thresholds in 8°N-28°N. (b) same as (a), but in 28°N-38°N. (c) same as (a), but in 38°N-53°N. (d) The monthly mean in-situ O<sub>3</sub> concentrations versus NO<sub>2</sub> columns and

HCHO columns from OMI in 8°N-28°N. (e) same as (d), but in 28°N-38°N. (e) same as (d), but in 38°N-53°N.

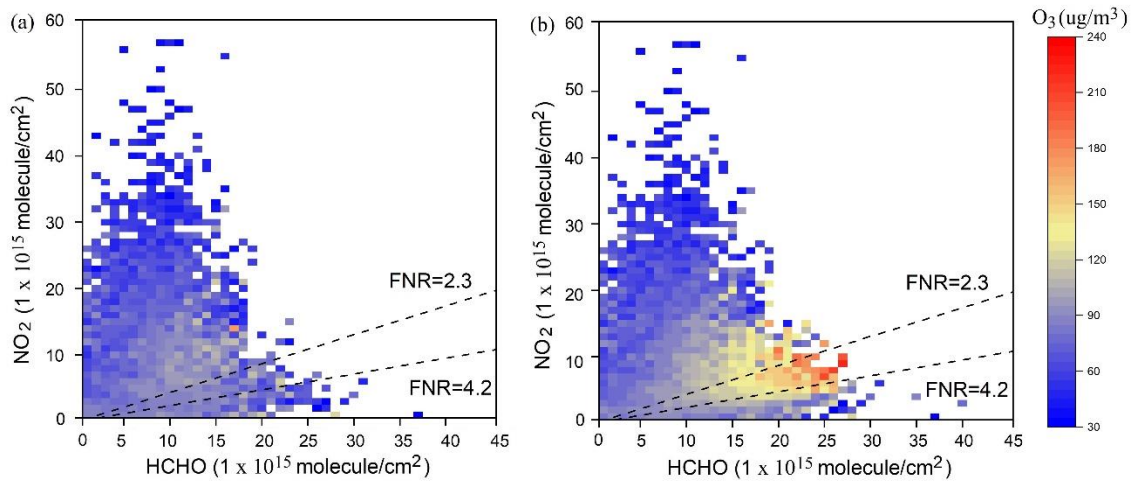


Figure S2. (a) The 360 cities' monthly mean in-situ  $O_3$  concentrations versus  $NO_2$  columns and HCHO columns from OMI observations in winter (Dec-Jan-Feb) during 2016-2019. (b) same as (a), but for all seasons.

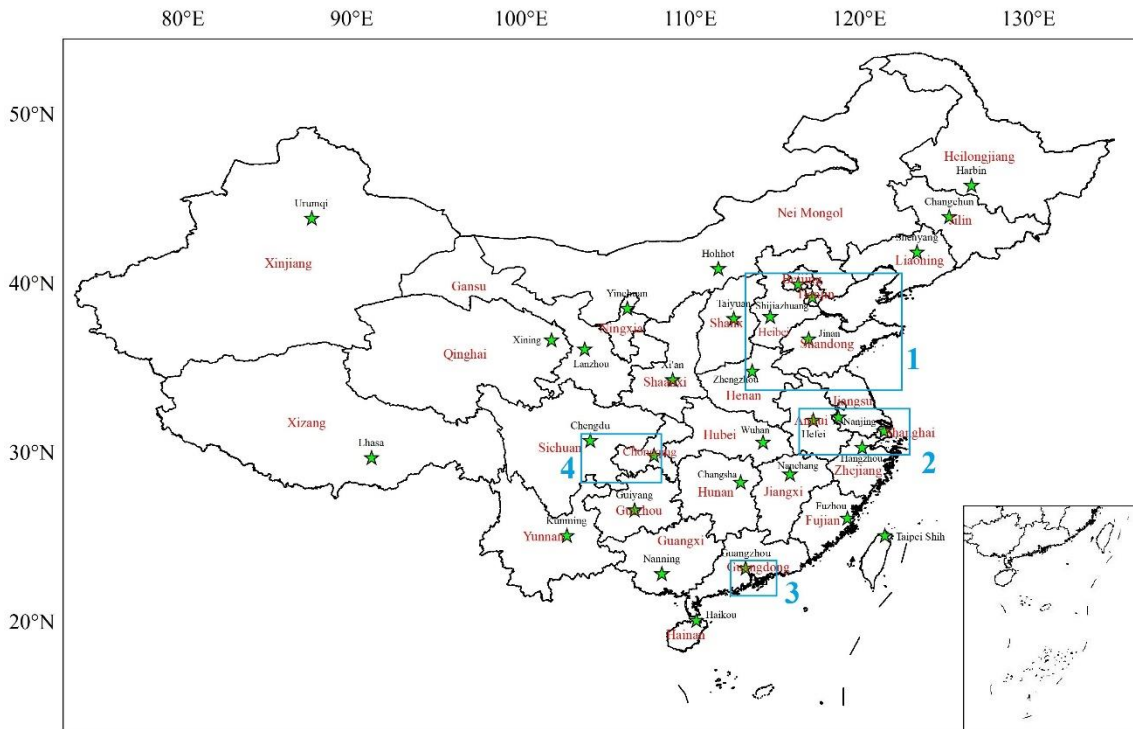


Figure S3. China provincial administrative division map. Red texts represent the provinces. Green stars represent the location of provincial capital city of each province. Black texts represent city

names. The blue frames 1, 2, 3, and 4 represent the North China Plain (NCP), the Yangtze River Delta (YRD), the Pearl River Delta (PRD) and the Sichuan Basin respectively.

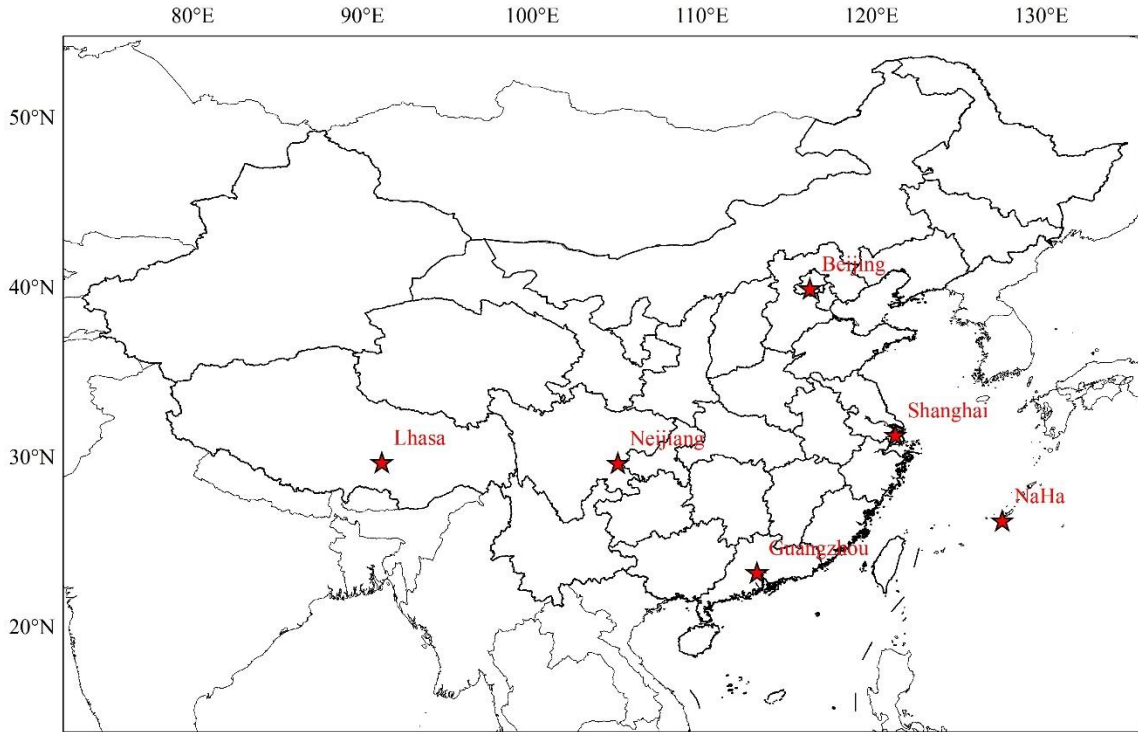


Figure S4. Location of the six cities (Beijing, Shanghai, Guangzhou, Neijiang, Lhasa and NaHa).