

What is the cause(s) of ozone trends in three megacity clusters in eastern China during 2015–2020?

Tingting Hu¹, Yu Lin¹, Run Liu^{1,2}, Yuepeng Xu¹, Boguang Wang^{1,2}, Yuanhang Zhang³, Shaw Chen Liu^{1,2}

¹Institute for Environmental and Climate Research, Jinan University, Guangzhou, 511443, China

5 ²Guangdong-Hongkong-Macau Joint Laboratory of Collaborative Innovation for Environmental Quality, Guangzhou, 511443, China

³State Key Joint Laboratory of Environmental Simulation and Pollution Control, College of Environmental Sciences and Engineering, Peking University, Beijing, 100871, China

Correspondence to: Run Liu (liurun@jnu.edu.cn), Shaw Chen Liu (shawliu@jnu.edu.cn)

10 Supplementary Figures

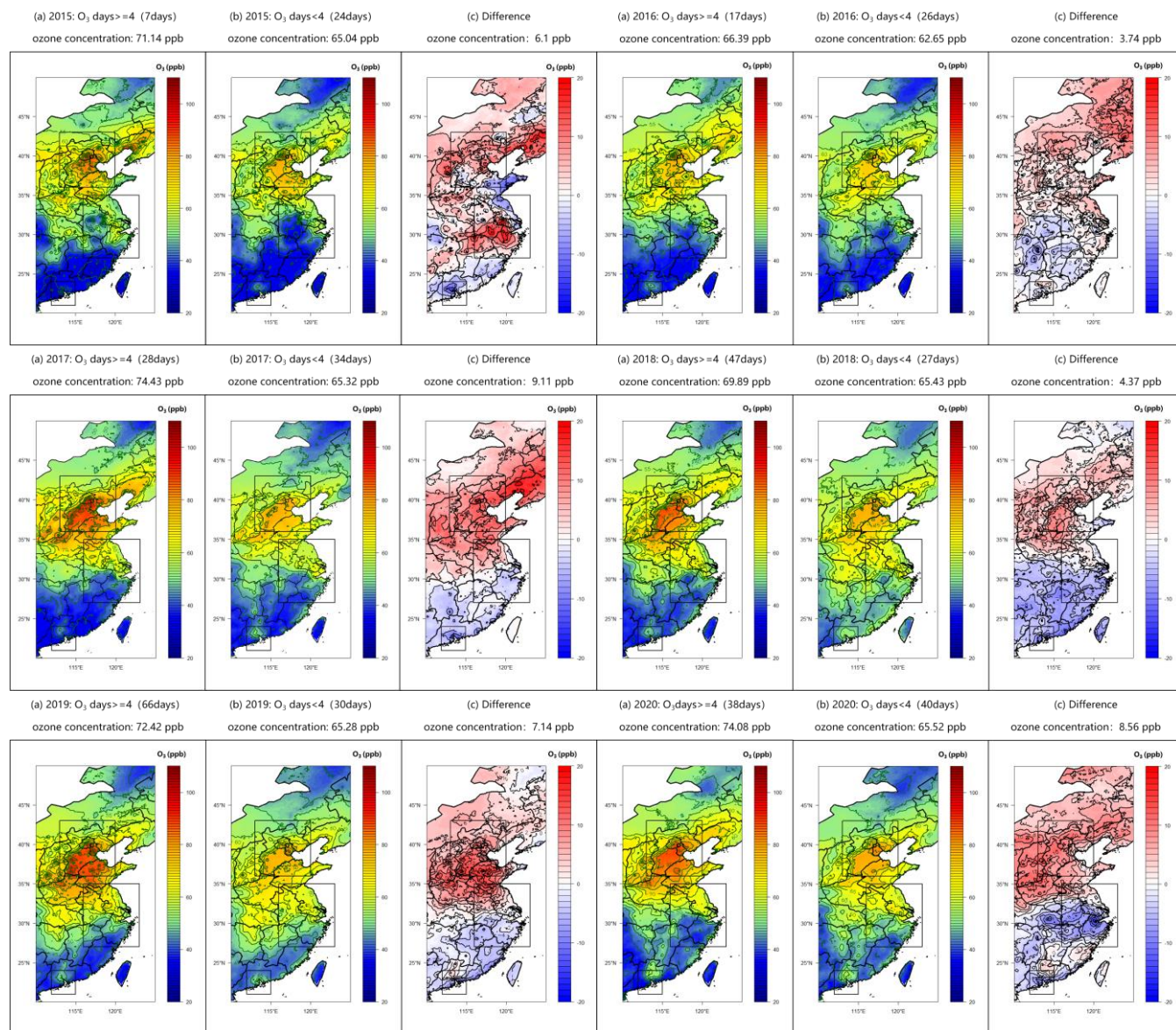


Figure S1. Spatial distribution of daily mean MDA8 O₃ (in ppb) of O₃-exceeding days in BTH for O₃ episodes with four or more consecutive O₃-exceeding days (a), episodes with less than four consecutive O₃-exceeding days (b) and their difference (c) in 2015–2020.

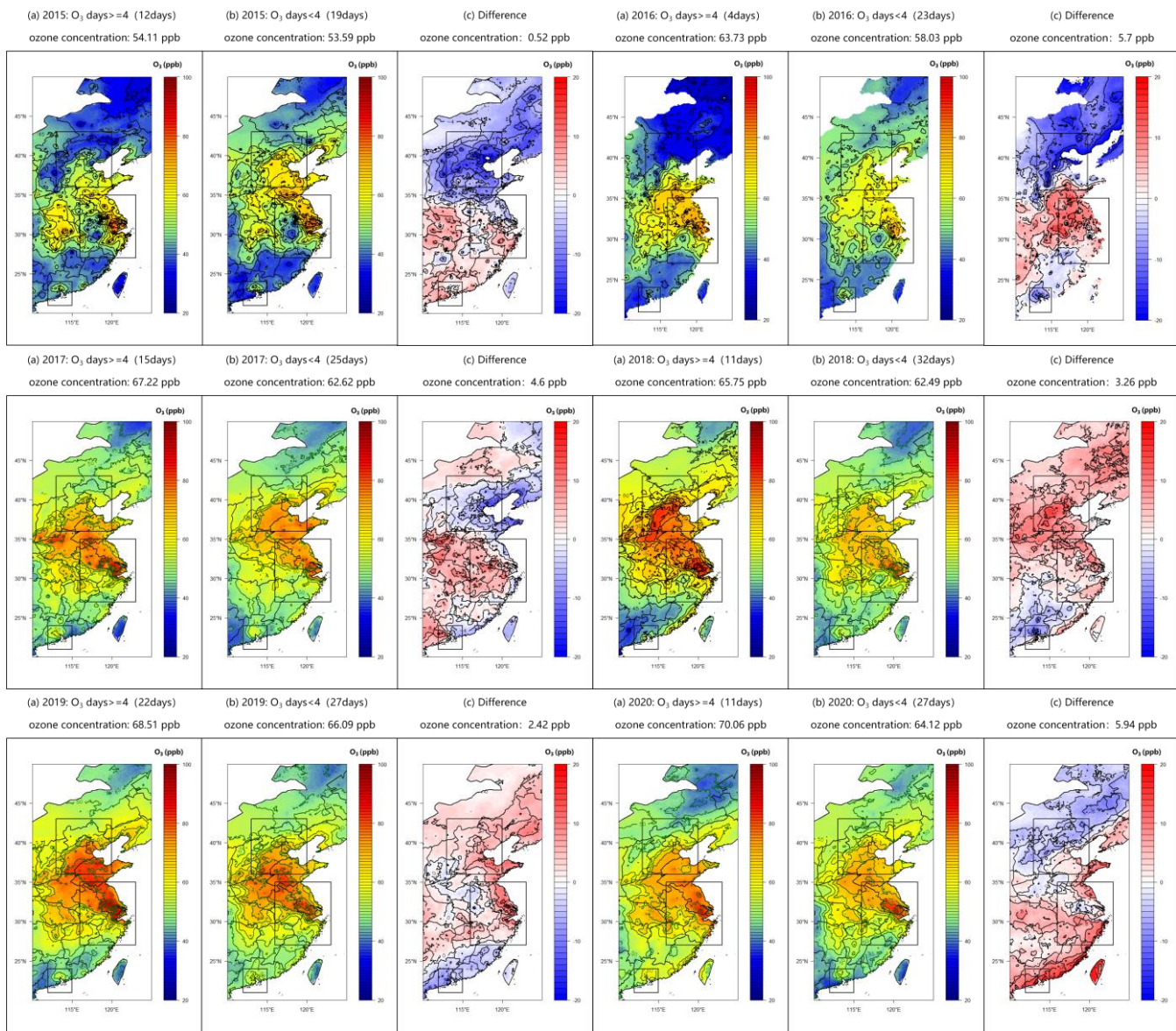


Figure S2. Same as Figure S1, but for YRD.

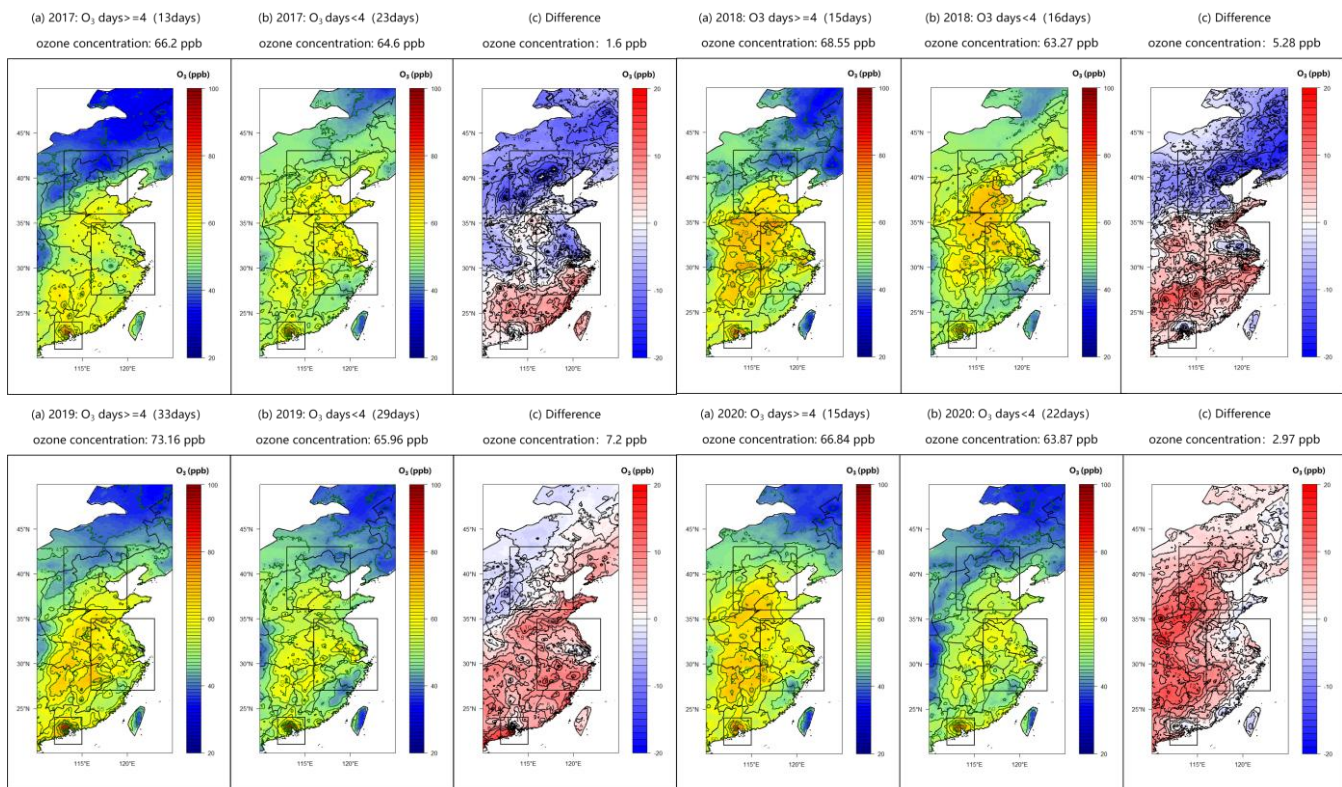
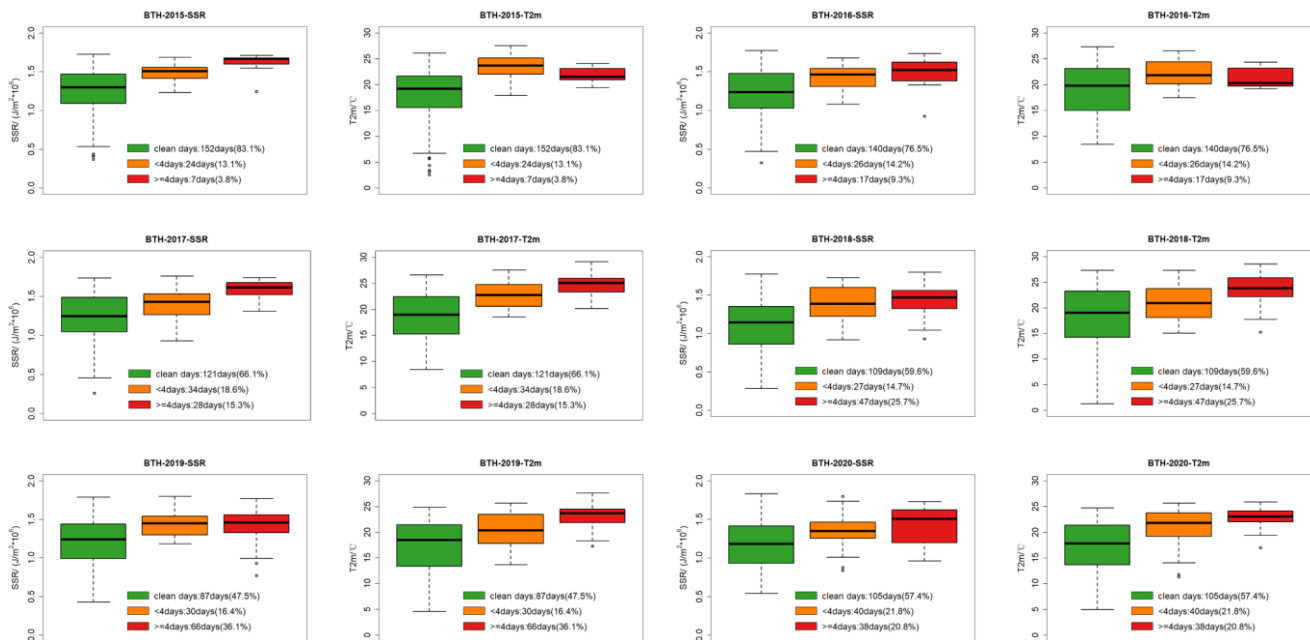


Figure S3. Same as Figure S1, but for PRD.



20 **Figure S4.** Surface solar radiation (SSR) and temperature (T2m) in BTH in 2015–2020 for episodes with four or more consecutive O_3 -exceeding days (red), clean days (non- O_3 -exceeding days) (green) and episodes with less than four consecutive O_3 -exceeding days (orange).

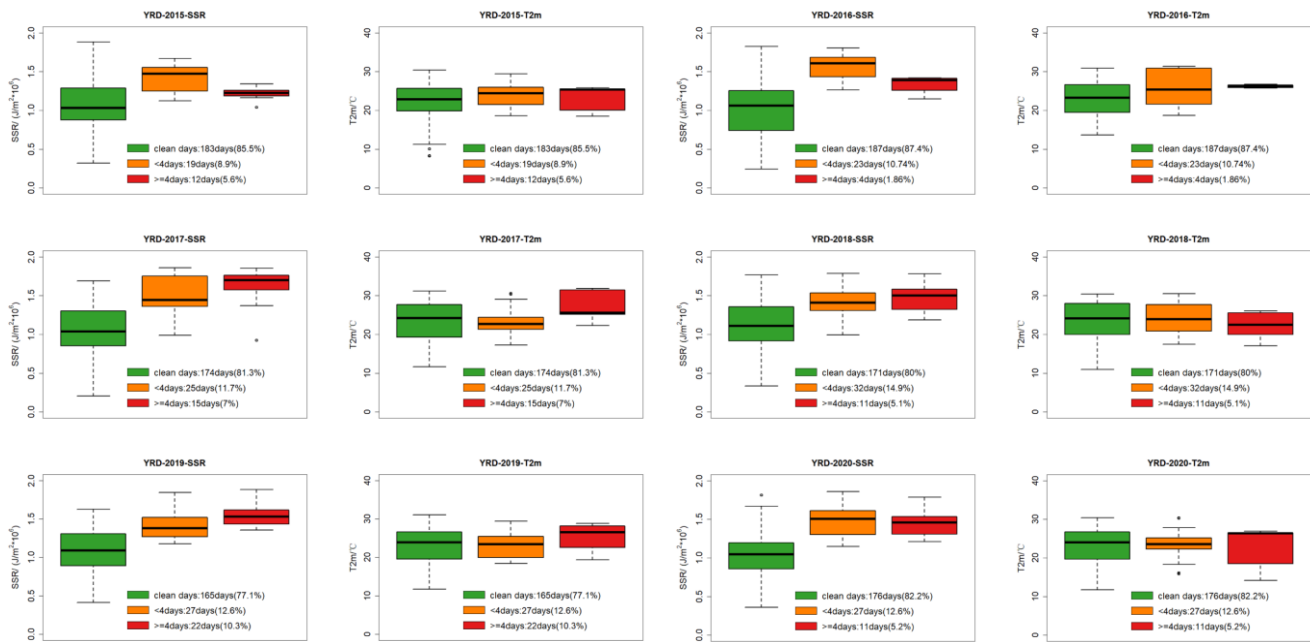


Figure S5. Same as Figure S4, but for YRD.

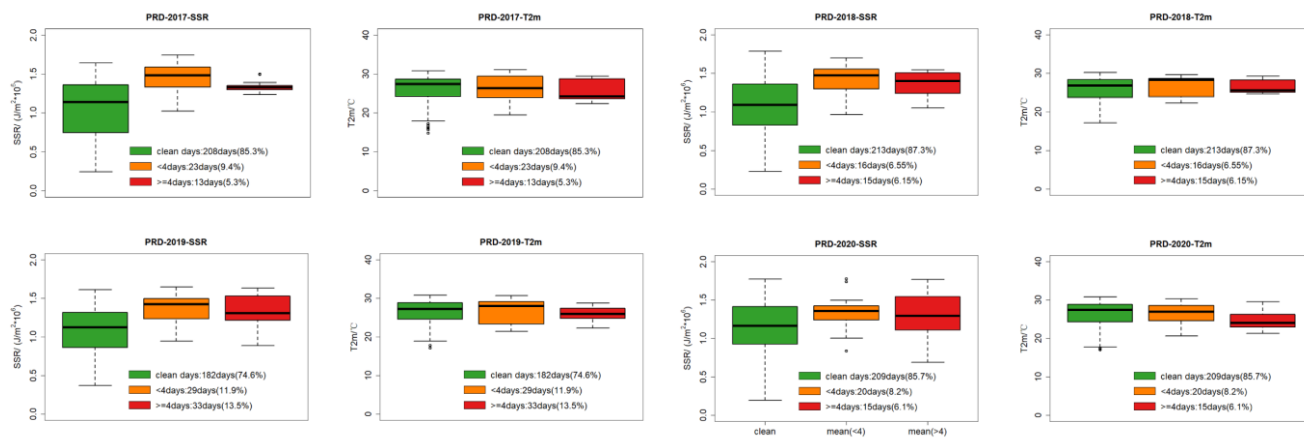


Figure S6. Same as Figure S4, but for PRD.