

Ozone pollution is an important issue in atmospheric environment study. Focusing this scientific issue, this manuscript presented an interesting finding on the O₃ pollution in Shanghai, a megacity in China and its response to O₃ precursor emission change based on the 2005-2016 measurements and modeling experiments of September, 2019, which could improve our understanding a very complex process O₃ pollution. This manuscript falls within the scope of ACP. I'd like to suggest the minor revisions before it is published as follows:

- 1) The manuscript analyzed the ozone concentration variation based on the measurement of 2006-2015 in Shanghai with the simulation in September 2009. Please clarify the connection between the measurement and model analyses of the ozone variation and the limitations in conclusions from modeling study.
- 2) It is better to add the discussions in the measurement analyse on the interannual variations in seasonal cycle (monthly change) of daytime/ nighttime O₃ concentrations over 2005-2016.
- 3) Lines 201-212: Please present the resolution of emission used in WRF-Chem modeling.
- 4) Please clarify which year the meteorology is used in the modeling experiment of 2020 ozone.