Comment on acp-2021-708
Youwen Sun

This is an interesting study presenting direct measurements of ozone response to emissions perturbations in California. I am not a referee of this paper. I post my comments to anticipate a better study.

1. Both NO2 and O3 in maintext and supplement should be expressed using subscript;

2. "Trend" is usually used for the variability of long term scale, at least, for year-scale. I don't think we can call the diurnal, seasonal, or even 1-3 years of change rates (variability) as "trend";

3. Line 67-69, "that lower NOx concentrations are associated with higher O3 concentrations on weekends", I would say "....higher O3 concentrations on weekends are associated with lower NOx concentrations ..... ". Same revision for the subsequent sentence.

4. The HCHO/NO2 is a time and region dependent indicator. Especially the change regime threshold is trick stuff. Please double check the comparison between the TROPOMI-based and ground-based values.