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Comment on acp-2021-708

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Community comment on "Direct measurements of ozone response to emissions perturbations in California" by Shenglun Wu et al., Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2021-708-CC1, 2021

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 subsquent sentence.

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