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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 NO_x concentrations are associated with higher O₃ concentrations on weekends", I would say "....higher O₃ concentrations on weekends are associated with lower NO_x concentrations ". Same revision for the subsequent 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.