

Interactive comment on “Ozone-vegetation feedback through dry deposition and isoprene emissions in a global chemistry-carbon-climate model” by Cheng Gong et al.

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Does your model account for the influence of soil water availability on ozone deposition? A recent paper by Lin et al. (2019) demonstrated a key role for water availability in modulating O₃ deposition variability on seasonal to interannual time scales via changes in stomatal conductance, with the effects on monthly mean daytime V_dO₃ variability as large as a factor of two. Their results are highly relevant to your literature review and discussions. It would be interesting to show if the effects of ozone damage on surface ozone discussed in your article differ substantially during dry versus wet years.

Reference:

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Lin, Meiyun, Sergey Malyshev, Elena Shevliakova, Fabien Paulot, Larry W Horowitz, S Fares, T N Mikkelsen, and L Zhang, October 2019: Sensitivity of ozone dry deposition to ecosystem-atmosphere interactions: A critical appraisal of observations and simulations. *Global Biogeochemical Cycles*, 33(10), DOI:10.1029/2018GB006157.

This comment is posted by Meiyun Lin, Princeton University (<https://www.gfdl.noaa.gov/meiyun-lin-homepage/>)

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2019-935>, 2019.

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