

Interactive comment on “Effects of prescribed CMIP6 ozone on simulating the Southern Hemisphere atmospheric circulation response to ozone depletion” by Ioana Ivanciu et al.

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Dear Referee #1,

We thank you for your comments and suggestions. We will address all your comments in the response to all reviewers once the interactive discussion is completed. At this time, we would like to point out that there has been a misunderstanding regarding the simulations of Haase et al. (2020). The simulations they use, in which the ozone field from an interactive chemistry simulation is prescribed to a simulation in which the interactive chemistry is turned off are performed with the CESM1-WACCM model, not with FOCI. Therefore, these simulations are not directly comparable to the ones presented

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in our manuscript and we would have to perform an ensemble of three additional simulations in order to assess the differences in dynamics when the background ozone climatology stays the same in Chem ON and Chem OFF. Performing the additional three simulations is not feasible at this time, as they require a large amount of computing time and storage space, which needs to be planned for in advance. Therefore, we unfortunately cannot extend our analysis in the way you suggested.

Best regards,

Ioana Ivanciu

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