Atmos. Chem. Phys. Discuss.,
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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Investigation of the α-pinene photooxidation by OH in the atmospheric simulation chamber SAPHIR" *by* Michael Rolletter et al.

Anonymous Referee #1

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The present work describes an atmospheric simulation chamber work in SAPHIR concern on the photooxidation of the most abundant monoterpene, α-pinene, by the hydroxyl radical (OH) at atmospheric concentrations. As a result, the organic oxidation products were found to be formaldehyde, acetone, and pinonaldehyde. However, the author found a quite different pinonaldehyde yield compared with previous study and MCM. They suggest adjusting the initial RO2 distribution to reduce the model-measurement gap of pinonaldehyde. The results are interesting and I would suggest the publication of this article with minor revision, otherwise I recommend publication as is: - Page 4 line 25, how the RH was maintained as 70% during the experiment? If not, how much it decreased when the experiment finish? - Page 5 line 31 and Table 2,

"PTR-MS" changed to "PTR-TOF-MS"

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