

Thanks to the Editor for the positive feedback. We addressed the technical corrections as following addressed (in blue).

- Line 19: This reads as if trop. O<sub>3</sub> is just caused by anthropogenic emissions, which is not the case. Natural sources of O<sub>3</sub> precursors need to be added.  
We included the suggestion as follows: “The primary sources of tropospheric ozone precursors are both natural, e.g. wetland methane emissions, wildfires and lightning, and anthropogenic, e.g. vehicle emissions, industrial activities, and chemical solvents, making ozone a critical focus for air quality regulations and environmental health initiatives (Brown et al., 2013).”
- Line 28: Propose to reword to "and the limited information content of nadir observations for vertical profiles."  
We re-worded the sentence as follows: “However, distinguishing between stratospheric and tropospheric ozone is challenging due to the low amount of ozone in the troposphere in comparison to the stratosphere, and the limited information content of nadir observations for vertical profiles.”
- Line 70: "Satellite datasets are in this study" -> "In this study, satellite datasets are ..."  
Addressed as suggested.
- Line 173: "ruling out" is a too strong statement. Change to "no indications of TPH-related artifacts could be observed" or sth similar.  
We re-worded the sentence as follows: “Also in TPH anomalies no evident discontinuities have been found around 2020 (as shown Fig.~S4), without indications of TPH-related artifacts.”
- Fig. A1: The caption should relate this to Fig. 8 and point out what is different here.  
Right, we included this point in the caption: “Drift in DU/dec of the difference time series between satellite and HEGIFTOM sonde anomalies in the tropics, similarly to Fig. 8 but including the weighting from Eq. A1.”