Dear editor,

We appreciate your careful consideration of our manuscript and agree with the additional suggestions you have made. Please find our response to each comment in blue.

Comments to the Author:

Dear authors,

I am pleased to inform you that your paper is published in ACP after consideration of the following technical corrections:

- The acronyms of the satellite instruments should already be introduced in line 75 on page 2 (first occasion where these are mentioned).

The introduction of each satellite instrument now reads:

*"the following eleven instruments (Fig. 2): GOME (**Global Ozone Monitoring Experiment**), GOME-2A, GOME-2B, SCIAMACHY (**SCanning Imaging Absorption spectroMeter for Atmospheric CartograpHY**), SBUV (**Solar Backscatter Ultraviolet**), N7/TOMS (**Total Ozone Mapping Spectrometer on Nimbus-7**), M3/TOMS (**Meteor-3**), EP/TOMS (**Earth Probe**), OMI (**Ozone Monitoring Instrument**), OMPS-NM (**Ozone Mapping and Profiler Suite, Nadir Mapper**), and OMPS-NP (**Nadir Profiler**)."*

- Fig 4 caption: Why "larger"? This is not clear if I look at the figure and see lower values. Please be more clear here.

We apologize for the confusion. The caption has been rewritten to say *"The monthly Δ values with the automated Dobson in 2019 (red) **have larger magnitudes than Δs in** other years."*

- P10, L208: I would suggest to write this text part as follows: " .....with and average and an estimated training error of 1.8+/-6.2 Dobson Units (DU)...."

The change has been made in the text.

- P12, L230 and 233: Here a p-value is given. What is the meaning of this value. This should be clarified in the text.

We now discuss the meaning of the p-value and have added the following line: *"**A low p-value (p ≤ 0.05) for the regression indicates that the trend is unlikely to have occurred by chance**."*

- Figure 6 caption: "were refilled"? I would rather say you mean "were replaced"?

The caption has been changed to say *"**replaced**"* instead of *"filled."*

- In the manuscript you mention several times that the 2019/2020 data is inconsistent with the previous data record due to the switch from manual to automated operation. Why these data becomes different just due to the switch manual to automated is not clear and it would be good if you could give a reason. In the conclusion you mention "calibration issues". Is that the cause?

Yes, we now provide an explanation in the text, with the discussion of Figure 4: *"This indicates likely inconsistencies between the automated instrument and earlier data.* **Every Dobson instrument must be carefully calibrated to ensure accurate data; the calibration process for the automated instrument has not yet been completed.**"