Dear authors,

the two reviewers provided excellent review reports, so I don't want to add too much on these. But I have one comment and one suggestion that you might take into account when updating your manuscript according to the comments of the reviewers. It relates to your choice of displaying in Fig. 12 only the average pump correction factors for serial numbers superior to 24000. In the text, lines 327-331, the following explanation is given: "The pump motor specifications were changed from the ozone sensor (serial number 24000 or later) delivered to JMA in 2013. As a result, air pressure dependence was seen in the motor speed, and the stability of the speed was not good. We thought that the effect was affecting the pump efficiency. Therefore, the measurement results of sensors with serial number 24000 and above are used to calculate the representative data of JMA." However, in Fig. 16, where the variation of the motor speed and pump stroke is shown as a function of serial number, the variability (standard deviations) of those measurements for serial numbers below 24000 seems to be lower than for serial numbers higher than 24000, which seems to contradict a lower stability of the speed for the lower serial numbers. Can you comment on that?

Also, as you referred to the paper by Stauffer et al. 2020 (and follow-up study available at https://www.essoar.org/doi/10.1002/essoar.10511590.1, accepted with doi 10.1029/2022EA002459), who noted a drop in total column ozone in a number of En-Sci ozonesonde sites around S/N 25500, you might provide an additional figure+table (similar to Fig. 12, can be e.g. in an appendix, or as supplementary material) in which you show the pump correction factors for (i) the entire time period, (ii) serial numbers lower than 24000, (iii) serial numbers higher than 24000. This would be very valuable information for the ozonesonde community.

Please take this comment and suggestion in consideration.

With kind regards,

Roeland Van Malderen