

I reviewed the previous versions of this paper. I appreciate the authors' continued work to improve clarity. This version of the paper is even more improved. However, a few more revisions are needed. These are quite minor; I would be happy to review again, but this might not be necessary, at the Editor's discretion. Additionally, the production office will need to do some copy-editing of the accepted manuscript prior to publication.

A) We appreciate deeply the reviewer's comments and suggestions again, which were very helpful in improving the final quality of our manuscript.

Line 141: aerosol height is not an AOP; this text should be changed. A similar comment applies to fine mode fraction (unless the authors are talking about optical depth fraction rather than mass or volume fraction, but the paper is not explicit).

A) Thank you for your comment. We revised the sentence in lines 140-143. Yes, we meant (optical) fine mode fraction in this manuscript.

Lines 302-311: Figure 2 still does not convince me that dAOD follows a Gaussian distribution. All the data sets show systematic deviations from the theoretical line in this figure. It is fine for the authors to say they are assuming it is Gaussian but then acknowledge that is a limited approximation. But don't say "it is Gaussian" pointing to the figure while the results clearly show it is not! This text needs to be corrected.

A) Thank you for your comment. We corrected the wording 'follow Gaussian distribution' to 'assume to follow the Gaussian distribution' in lines 315-316.'

Figure 3 and lines 424-425: is the y axis just the mean AOD bias for retrievals in that bin? This should be clearer; "Gaussian center" is not very obvious to me. If so I would just say "mean AOD bias" or similar in the figure and text.

A) Thank you for your suggestion. We corrected all the words 'Gaussian center' to 'mean AOD bias'.

Figure 8: caption says "Same as Figure8", I think this should be "Same as Figure 7".

A) Sorry for confusion. We corrected the 'Figure 8' to 'Figure 7' in the Figure 8 caption.