

We are very grateful to the detailed comments !

In line 105 you now mention that you have used the truncation and illumination correction by Anderson and Ogren (1998). This correction is specifically for TSI nephelometers only (with different angles and wavelengths, etc.). Since you are using an Ecotech nephelometer, you need to use a different approach (see e.g. correction by Müller et al., <https://amt.copernicus.org/articles/4/1291/2011/>). I assume that your overall results won't change much but small changes to the numbers and fits will happen.

Reply: In this paper, we did use the approach applied by Müller et al. (2011). Because the approach applied by Müller et al. (2011) was based on the research by Anderson and Ogren (1998), we only quoted the latter paper, but we should have quoted both. The sentence in line 105 has been revised as "The truncation and illumination correction of the scattering coefficients has been done following Müller et al. (2011) that was developed specifically for Ecotech nephelometers originated from Anderson and Ogren (1998) for TSI nephelometers".

In addition, one minor details: In line 53 (or 51), you need to define gamma or write it in a more general way (e.g., "scattering enhancement") since it is not clear to the reader at this point what gamma is.

Reply: Thank you for your suggestion. We have revised " γ " as "scattering enhancement".

Reference:

Anderson, T. L. and Ogren, J. A.: Determining aerosol radiative properties using the TSI 3563 integrating nephelometer, *Aerosol Sci. Tech.*, 29, 57–69, <https://doi.org/10.1080/02786829808965551>, 1998.

Müller, T., Laborde, M., Kassell, G., Wiedensohler, A.: Design and performance of a three-wavelength LED-based total scatter and backscatter integrating nephelometer, *Atmos. Meas. Tech.*, 4, 1291–1303, <https://doi.org/10.5194/amt-4-1291-2011>, 2011.