

Dear Yong, thank you for addressing my questions and comments. The revised sections make it clear on the strength of this paper.

Just one more note, in your following revised paragraph, you may like to update one of the references which reflect the ALH retrieval performance from HARP2 (Gao et al 2023, <https://doi.org/10.5194/amt-16-5863-2023>).

Lines 124-130: Meanwhile, polarization observations provide an additional dimension of information for aerosol vertical structure retrieval. Using data from the Research Scanning Polarimeter (RSP), Wu et al. (2016) found that polarization signals in the near-ultraviolet and blue spectral bands exhibit strong sensitivity to ALH. Recently, the NASA operational FastMAPOL product has provided aerosol properties, including ALH, from HARP2 multi-angle polarimetric observations (Gao et al., 2023). These developments demonstrate the potential of multi-angle polarimetric measurements for aerosol characterization.

Response:

Thank you for this valuable suggestion. We have incorporated the recommended reference and updated the relevant paragraph to mention the NASA operational FastMAPOL product and its demonstrated ability to retrieve aerosol properties, including ALH, from HARP2 measurements. The changes can be found in Lines 124–130 of the revised manuscript.