

Dear Dr. Schmidt,

Thank you for guiding the review of our manuscript entitled " Evaluation of the hyperspectral radiometer (HSR1) at the ARM SGP site" (doi: 10.5194/amt-2023-115).

We are now submitting a further revised manuscript in which we have addressed your comments and suggestions, which helped to further improve the manuscript. The point-by-point responses are included below with your comments in black and our replies in blue. The page and line numbers correspond to the change accepted version of the manuscript (i.e., "clean").

Thank you for your consideration of this manuscript.

Sincerely,  
Dr. Kelly Balmes

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Dear authors,  
thank you very much for submitting this revised version. I only have some technical changes at this point.

Thanks for the positive review. We appreciate your efforts to review and facilitate the review of this paper. See our replies below.

\* Figure 3 (caption): "Heavy blue line" --> "The heavy blue line"

Thank you for catching this. We have revised the caption of Figure 3 (P. 8, L137) from "Heavy blue line" to "The heavy blue line."

\* Line 555 in track-change manuscript: "The exception is the MFRSR AODs compared to the SASHe with larger regression slopes and positive bias slopes." This is a bit unclear. I think somewhere a "that" or "where" is missing. Also, please make sure that it is clear what the exception is from (I believe it relates to the previous sentence).

We have revised the text to (P. 22, L407-409): "The exception is the MFRSR AODs compared to the SASHe where the regression slopes are larger than 1 instead of near 1 and the bias regression slopes are positive instead of negative."

\* Line 816: The HSR1 and SASHe derived AODs vary slightly more compared to each other --> do you mean differ instead of vary, or really vary? Vary from each other does not seem to make as much sense as differ from each other.

Thank you for the suggestion. We have revised the text (P. 32, L599) by changing “vary” to “differ.”

\* Line 880: in diffuse irradiance, that is wavelength dependent --> either remove comma (recommended), or replace 'that' with 'which'

Thank you for the suggestion. We have revised the text by removing the comma (P. 34, L656).

Regarding figures A1, 1: for the next revision, please check if your figures containing maps/aerial images and photos require a copyright statement/image credit and add it to the figures (or captions) ([https://publications.copernicus.org/for\\_authors/manuscript\\_preparation.html#mapsaerials](https://publications.copernicus.org/for_authors/manuscript_preparation.html#mapsaerials), [https://publications.copernicus.org/for\\_authors/manuscript\\_preparation.html#figurestable](https://publications.copernicus.org/for_authors/manuscript_preparation.html#figurestable) -> Reproduction and reuse of figures and tables). If these figures were entirely created by the authors, there is no need to add a copyright statement or credit. In that case it is important that you confirm this explicitly by email.

We have added in a reference to Google Earth for the map image in the caption for Figure 1. In addition, Figure A1 is made by an author (Connor Flynn). We will confirm this by email explicitly.