

Second Response to Reviewers:

“Marine and Continental Stratocumulus Cloud Microphysical Properties Obtained from Routine ARM Cimel Sunphotometer Observations”

Sookdar et al. (2025) egusphere 2025-694

General Comments from the Authors:

We thank the Reviewers and the Editor for their continued efforts. For this response, we have again combined all replies into a single document. Author replies are in blue font.

Anonymous Referee #1

1. Final sentence of the abstract: The authors did reword that sentence, but I do not think it was toned down to reflect the limited extent of this island-effect analysis, and hence, the drawn conclusions. I believe that a simple change of "is" --> "could be" would do the trick, such that the sentence would read:

“Additional sensitivity tests for island influences on marine Sc properties suggest that while island-influenced winds may promote larger cloud LWP or thickness, the influence could be within retrieval method uncertainty and/or collocated instrument variability.”

Fixed.

2. Relative errors: I appreciate the authors for implementing relative errors in the figures and discussion. I think that a sign change is required (in the figure and where relevant in the text) since errors are typically calculated as deviations of the tested method from the reference, so in the SPHOT TropOE case, it should be: SPHOT minus TropOE divided by TropOE instead of the current TropOE minus SPHOT divided by TropOE.

Good catch. In this case, it was the figure caption that was an author typo; the plot/relative error was correct (appropriate sign). We have fixed the text of the caption for Figure 7.

Anonymous Referee #2

- L119-L121: "... since there was interest on the part of the authors ..." - meaning is unclear. May rephrase the sentence to something like: "As LWP properties during sub cloud precipitation conditions are of high interest due to ..."

We have revised this sentence along the lines of the reviewer request.