

Interactive comment on “A Statistical Comparison of Cirrus Particle Size Distributions Measured Using the 2D Stereo Probe During the TC⁴, SPartICus, and MACPEX Flight Campaigns with Historical Cirrus Datasets” by M. Christian Schwartz

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Review: Minor revisions I agree with the previous reviewers in general. This is a pretty clean cut topic for this paper which adds statistical consistency to a long standing problem in ice measurement. Further, looking at the references, this is clearly one paper in a long series originating with the author's days at Utah and beyond. While the topic is clean cut, the paper is nevertheless difficult to follow at times, and the author could do much to improve readability, and hopefully in time, his h-index. Indeed, it is

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overly terse at times. One previous reviewer noted that the introduction could use a bit of background. I certainly concur with that. Even though this has been reviewed in several other papers, it is good for a paper to be complete. Not only to be tied in more completely with the previous literature base, but also with the author's current line of thought. I would also say the final results and discussion could also be worked on. For example, the author states to the effect that old data is still usable, provided previously described caveats are respected. Actually going through the paper several times, it was not clear what all of these are. Even though the smaller ice sizes can be mitigated for the bulk moments, what does this mean for say a forward optical model? Perhaps a separate conclusions, or discussion and conclusions as distinct from results, be provided that provides a bulletined list of what are the key take away points-sort of a recipe card. I would also suggest that figure captions be more verbose spelling out variables when convenient. Similarly, laying out in a bulletining form or table the different instruments and processing would help.

Other than these comments, my opinion matches those of the previous reviews: the paper oscillates between very formal writing, and conversational vernacular (e.g., jibes, right off the bat, etc); a diagram laying out the steps; . One point that requires emphasis as pointed out by reviewer 3 is the lack of data provider documentation in the acknowledgements. Indeed, by downloading data from the NASA servers not only did the author agree to acknowledge where the data came from, but actually offer coauthorship to the data providers. Often for this sort of thing they will simply ask for acknowledgement, but the offer does need to be made.

Be well.

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