Reviewer:

The article has been rewritten for clarity and is substantially more clear. Useful information is provided about the statistics of Greenland fogs, and important feature for understanding the radiation balance over the Greenland ice sheet. It is commendable the effort required to obtain these difficult measurements. I only have one minor suggestion which is that Figure 3 looks weird, and I think would look much more sensible if it were plotted on a log-linear scale. Negative exponentials drop of more quickly than power-laws, which is what seems to be the case in the data. Also, it looks like the binning is linear rather than logarithmic, so that would need to be corrected in any case.

From the author:

We have updated Figure 3 to use a log-linear scale. The binning was in fact logarithmic, although finely resolved. We have also adjusted the marker size to make the data more visually distinct for the new scale in both the plot and the legend. The revised figure is shown at the bottom of the page.

We have also made the following updates to the Acknowledgements and References:

- We have included an acknowledgement to the two anonymous referees who reviewed the manuscript.
- We have updated the DOIs associated with the data set.
- We have replaced “doi:” with “https://doi.org/” for in the References section.
- We have updated Edwards-Opperman et al. (2017) in review with the full citation information for the published article (Edwards-Opperman et al., 2018).
- We have added DOI information missing from the Reference list for Hoch et al. (2007) and Houghton (1985).