Review of "An airborne in-situ dataset of cloud microphysical properties in supercooled large droplet icing conditions", by Menakay and coauthors, essd-2026-192.

Overall this is an excellent article, paving the way for many more articles using the SENS4ICE-EU data set. In addition, the discussions of the various probe measurements and error sources can be used by researchers using other studies. The campaign used the SAFIRE ATR 42 research aircraft, collecting data with a focus on supercooled liquid water regions, with some mixed-phase and ice-only regions. Southern France was chosen as the location of the measurements because of the relatively "clean" conditions and the presence of supercooled liquid water regions. A minimum altitude of 8000 feet was chosen as a safety measure, in case the aircraft iced up and had to shed the liquid water. Fifteen flights were conducted, and the flight conditions for each are well described.

Primary Comments

1. I did not find a discussion of the air motions. These are very important to understand the microphysical variations and the cause of the SLD.
2. A reference for the Robust Hotwire Probe would be helpful
3. Figure 3 is very helpful. It would be good to show where the horizontal and vertical winds are measured
4. Line 134 with a larger sample volume. I feel the following is extremely important as it will help other researchers. I suggest showing a figure with the size and the associated sample volume for each of the probes.
5. 225 Using 2D data analysis script. This needs to be discussed why the given script was chosen.
6. Figure 5 is very helpful.

Very minor. Line 214. artifacts

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