

The authors would like to thank Reviewer 2 for their comments on this paper. These comments have been reproduced here in black font color, and author responses are included in red.

The authors have a great dataset illustrating phenomena in the boundary layer as measured by a RPAS. I would like to see a rewrite with more emphasis on that aspect as opposed to it reading like a data report see some examples below.

Line 20 This reads more like a data report or experimental field notes than an article on the uniqueness of RPAS for scientific discovery.

Earth System Science Data is a journal that focuses on the dissemination of information about original datasets so that the data can be used by the broader scientific community, rather than the interpretation of these results. The authors believe that this article honors that spirit and was not meant to be an article on the novelty of using RPAS for scientific discovery. It very much is our field notes so that people can understand the strengths and limitations of our dataset.

Line 55 Is it important to know that the carbon fiber blades were switched out??

Yes, because it is an alteration of the platform's typical operating conditions that we have used or will use in other deployments of the CopterSonde RPAS. However, we have made the importance of this clearer based on this remark and feedback contained in the Open Discussion comments in lines 63-66.

Line 185 Why do we need to know that binary data was converted to JSON to CSV??

This information is relevant because the JSON format allows for the varying sampling rates for each data stream to coexist in the same file, whereas the conversion to CSV with a common time vector markedly simplifies reading and processing the data at this stage. This has been emphasized in the text in lines 149-154.

Figure 3 Temperature contours are plotted to the nearest .001 °C. I highly doubt that the authors have that kind of accuracy and if they do not the resolution of that parameterized back to the accuracy or precision. Figure 5 would indicate that the precision is ~10C. Table 4 would indicate +/- 0.5 °C

For Figures 3 and 4, the contours appearing like they had an accuracy of 0.001 was actually an artifact of the plotting script. This has been corrected to reflect the correct accuracies as specified in Table 4 (now Table 2).

Figure 5 would indicate that the precision is \square 1 0C. Table 4 would indicate +/- 0.5 0C

Figure 5 (now Figure 4) has been updated so that the minor tick marks for temperature are every 0.5 °C to be closer to the posted accuracy in Table 4 (now Table 2).