- Figure 1, flip the y axis: w should increase upwards
- Figure 1, the white contour does not "indicate the region" without some thinking on the reader's part; change to something like a hatching over the bad (¡50%) region.
- Figure 1, change title to "Skill scores for QSS approximation".
- Make the language easy for the reader: Instead of "filtered data points", define "warm cloudy updrafts" as those locations and times satisfying $T > 273$ K, $w > 1$ m/s, and LWC $> 10^{-4}$. As needed for space in figures, you could define the acronym WCU. For the top 10 percentiles of w among WCU, you could state explicitly in the text that you will refer to that as the "top-10% WCU".
- Figure 3 is still a headache. If necessary to show the purple curves, then split into two panels: one titled Polluted at the top and the other titled Unpolluted. Used solid curves in both panels.
- Figure 3, put the legend inside one of the panels and use labels of "WCU", "top-10% WCU", and "Fan et al."
- Figure 3, why include points with so few data? E.g., the orange and purple data points above 5 km and below 1 km? Pick an area fraction below which you will not plot the data (e.g., something around 10^{-4} or 10^{-5}) and state that in the text that you are doing that. Also, do not plot any data, yours or Fan's, above the 273 K isotherm.
- In the caption of Figure 3, "are reconstructed form [1]" is vague. Change to something like "digitized from Figure X of [1]".
- The caption of Figure 3 says that the "z interval width scales logarithmically with z", but that does not look consistent with the right panels in the v1.8 draft. It looks there like the spacing is fairly constant below 2 km (where a logarithmic scaling would have the largest changes in Δz) and then Δz doubles twice between 2 and 3 km.
- Figure 3 caption implies that all three curves are SSpred, but Fan's are not.
- Figure 3, change title to "Supersaturation in WRF simulations".
- SSpred is used in Figure 3 and 4 but is never defined. How is it different from SSQSS? Use consistent terminology throughout.
- Keep the color scheme consistent throughout the paper: use purple, orange, and grey only for the criteria of WCU, top-10% WCU, and Fan et al.
- Figure 4 is the key figure of the paper, but it is not explained. What kind of plane? Where and when did it fly? How many flights? How did they select clouds to fly through? What instruments did it carry? What data streams are you using to calculate SS? Over what duration in time are the data for your calculation collected? How fast was the plane moving? Over what distance are those data averaged? How are you presenting the data in Figure 4? What vertical grid are you using? Is the grid different for purple and orange?
- Figure 4, change title to "Supersaturation in HALO observations".

- Figure 5, what is being plotted here? All WCU? Or a mix of WCU and top-10% WCU? If WCU, color them all purple, get rid of the legend, and just put the labels right next to each curve; there is plenty of space. Or, regarding color, if every figure after Figure 4 is going to be using WCU, then pick a new pair of colors to denote HALO and WRF, and you could make WRF unpolluted solid and WRF polluted dashed. Carry that scheme throughout the remaining figures.
- Figure 5, remove parts of Fan curves above the 273-K isotherm. Recommend changing lowercase delta to uppercase for readability since the lowercase delta does not render well in this plot. Change title to something like "Maximum warm-phase invigoration".
- Figure 6, change the colors. If using two new colors for HALO and WRF, use those here. Use line types that match the polluted/unpolluted choice made earlier.
- Figure 7, remove CAIPEEX. Change color scheme.