

2020-113

Abstract

- TKE not defined on first use (always define acronyms on first use)
- LLJ repeated a huge number of times – can this be reduced?
- Can you speak to the importance of LLJ? Why do we care?

Introduction

- Lower-tropospheric doesn't mean much to many people, can you describe things in a bit more of a general way? WES is a domain journal not a discipline journal, so you want to make sure the article is accessible to a broader wind audience that may not be meteorologists
- Same comment goes to why do we care about LLJ for wind? Make sure this is described so that the reader has sufficient context
- Generally the first paragraph has a lot of jargon that is very specific to the meteorological community and not the broader wind community – could be helpful to provide again more plain description, use “in other words, ...” to give layman definitions of the key concepts
- On. This same point, it might even be nice to have a few simple graphics illustrating a LLJ or a situation where one is / is not present to contrast
- Lines 49 to 54 speak to the importance of the work – this should be elevated and extended
- After line 72, the paper jumps right to a description of the approach in the paper, but will the paper remedy the limitations around standard characterization that was highlighted in lines 55 to 72? I think it can be strengthened how this paper will address the shortcomings in the earlier work – its in the actual results but doesn't come through super strong
- It may also be helpful to have a paper roadmap as a last paragraph (its sort of there but not really)

Methodology

- Maybe provide a brief description of WRF for the general wind community
- Figure 2 would actually make a nice graphic for the introduction similar to what I mentioned above

Results

- I like figure 7 but I think it would be easier to see actually if it were two separate figures side-by-side so the y-axis could provide an exact description of the content (rather than having it in the caption)
- Figure 8 is a bit hard to digest – there is a lot of information being shared here but the flow is a bit hard to follow in this section moving from the discussion of figure 7 to discussion of figure 8
- You may consider even sub-sectioning section 3.2
- It would be good (since there isn't a separate discussion section) to add a paragraph after figure 9 to summarize the key insights from the analysis in section 3.2

- Can you explain better why you chose the variable threshold of 20% for section 3.3 work? Maybe link it back to the discussion in prior 3.2? It goes back to the usefulness of a transition paragraph between sections 3.2 and 3.3
- Do you think you would expect the same or similar results in section 3.3 if you used different criteria?
- Again, consider a summary / key point / transition paragraph after figure 11 for end of section 3.3

Conclusions

- Conclusions are largely descriptive and repetitive of paper content – can they be more succinct and speak more clearly to the key findings and contribution of the work? what recommendations would you make based on the work in terms of LLJ characterization and identification? What future work remains to be done / where would you go from here?