Answers to the editor 14/11/2022. In bold letters.

Comment on amt-2022-111
Comments to the author:

- Of course, atmospheric turbulence occurs on the horizontal and vertical scale, however and importantly, relevant scale length differs strongly in the two dimensions. And the difference is roughly determined by the slope of the isentropic surfaces of typically 1:1000 (but in strongly baroclinic conditions also 1:100). Thus, always specify on which dimension you talk about. The described variability (scale or scale length) occurs on horizontal scales. Thus, always add "horizontal" (starting in the abstract), but add "vertical" if you deal with e.g. LIDAR measurements (e.g. on p.2, l.24f). Writing that there are "two categories of scale lengths" (p.2, l.24) thus is misleading. Please improve!
It has been emphasized in all the text the difference between horizontal and vertical comparisons. In particular in the abstract and the title. Please, see track changes for a full view.

- On p.3, bottom, or in the caption of Figure 1, please explain how the pictures are inferred or better refer to section 3, e.g. section 3.1. You simply write "structure function from radiosonde comparisons" (p.3, l.31). Again, write that you deal here with horizontal scales.
Paragraph extended and, hopefully, better explained

- In section 2.2 you come up with many equations that fall from the tree. Please add relevant citations.
Included

- P.6, l.4, wrong grammar.
Modified

- P.9, l.30. "Validity time" is a wrong designation. Same on p.13, l.10 and l.13
Changed to "valid time"

- I have to admit that I found at least 20 instances where the English spelling or even grammar is not appropriate or even wrong … it's not my job as editor to improve this. Please ask a native speaker to check the paper.
Many parts of the paper re-written. By a native speaker. Hopefully it will improve somewhat.

Many many thanks to the editor for supporting this review and making the final paper a much more readable and understandable version!!!