

General Comments:

This is a fantastic study, and I recall hearing the associated talk at the AMS conference earlier this year! Although the results cannot be applied to operational microwave links, the study still demonstrates that the potential is there if microwave link operators ever wish to share some of their data.

General figure comment: The way the figures are organized makes them take up a lot of space on screen/paper resulting in a lot of unnecessary white space. The white space makes the figures break up the text significantly more than normal. I'm not sure if the journal editors will organize the figures better but I recommend some reorienting of the plot frames to minimize white space.

The way the results are presented and discussed – i.e., a multitude of acronyms and organization on plots – makes interpreting the results and following the discussion a bit cumbersome. At the very least, sub-section headings would be helpful that remind the reader what the plethora of non-standard acronyms mean. I leave it up to the authors to decide how best to achieve this clarity, but due to the myriad of techniques being compared, some more nuanced form of organization is necessary.

The authors seem to focus their scintillometry references to EU-based sources (Specifically in the paragraph starting on Line 337). There are many studies performed in the U.S. and China post Ward et al. 2015 that help to paint a more thorough picture of how well scintillometry works over generally heterogenous terrain. I won't provide specific examples, but I strongly encourage the authors to include references outside of their realm of influence – we are no longer in the pre-internet era where it was nearly impossible to know if someone on the opposite side of the world is performing similar research. Science should not be limited by political borders, and more global citations will lead to better dissemination of knowledge and more efficient scientific progress.

Specific comments:

Line 57: "...i.e. the spectral noise correction method" – a reference here would be useful or at the very least a description on what the correction entails. Right now the study has very minimal data QC notes

Line 189: "the Nokia CML vibrates during higher wind speeds" – Do you have any information on the beamwidth of the Nokia link? You mention vibration and link to the other paper in review but their handling of the vibrations is the same single sentence. I have no problem with the cutoff above 8 m s^{-1} . I am more interested in whether these commercial icrowave links are less sensitive to vibrations than the RPG system.

Line 190: "Additionally, we remove rainy intervals or those following a rain event within an hour..." – How do you determine the 1-hour cutoff? Radomes do get wet and require a drying off time. In my experience, this is strongly dependent on precipitation amount and

can take upwards of 6 hours to dry following strong precipitation. Perhaps a better metric would be when the average signal has returned to XX% of the pre-rainfall signal strength.

Section 3.3 – Acronyms should not be used in section headings unless they are known ubiquitously, like TKE and MOST.

Figure 6 – Description of the frames should be in the caption. It is not unheard of for readers to skim through figures first and with the large number of accronyms used in this manuscript the definitions of the acronyms used in this, and other, figures gets lost without a reminder for the reader in the caption. This comment applies to all figures.

Technical corrections:

I have nothing to add here at the moment