

Thank you for your accommodations of my comments. The impact this manuscript can have is much increased with the addition of the new section, though in reality, the method of focus is likely to not be used without co-located sonic anemometers.

Comments on the new Section 4.1:

- Why the Kristensen model? Do you use isotropic or anisotropic, horizontally-homogenous?
- What do other models look like? That fit doesn't look great, but maybe that's the best there is?
- What kind of sensitivity/variability and error are introduced based on the choice of model and parameters? What kind of spread in time scales do you get?

Pages 5, line 5: what was the last date of data used?

Figure 6 caption: misspelling "variability"

Page 14, line 9: "likely contributes an additional error for this lidar"

Page 14 line 17: "the inherent uncertainty in the sonic anemometers' retrievals of  $\epsilon$ "

Page 17 line 5: spectral models can be fit

Add theoretical slope line to new Fig 9