

Atmos. Meas. Tech. Discuss., author comment AC8 https://doi.org/10.5194/amt-2021-40-AC8, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

## **Reply on CC6**

Ryan Volz et al.

Author comment on "Four-dimensional mesospheric and lower thermospheric wind fields using Gaussian process regression on multistatic specular meteor radar observations" by Ryan Volz et al., Atmos. Meas. Tech. Discuss., https://doi.org/10.5194/amt-2021-40-AC8, 2021

Thanks for the contributions from this comment thread. The discussion here, along with related comments by the other reviewers, will feed into changes in the revised manuscript.

In regards to Vierinen et al. (2019), we think that GPR and the correlation function technique described in that paper are complementary, giving different views to the same information. Analyzing just the second-order statistics in that manner can give insight into how to improve the covariance model used for GPR. Extracting the full wind fields from GPR can give additional context to the higher-order measurements, like momentum transfer, produced by the correlation functions.