

Atmos. Meas. Tech. Discuss., author comment AC1 https://doi.org/10.5194/amt-2021-309-AC1, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on RC1

Ze Chen et al.

Author comment on "Turbulence parameters measured by the Beijing mesosphere-stratosphere-troposphere radar in the troposphere and lower stratosphere with three models: comparison and analyses" by Ze Chen et al., Atmos. Meas. Tech. Discuss., https://doi.org/10.5194/amt-2021-309-AC1, 2022

Dear Editors and Reviewers:

Thank you for your letter and for the Reviewers' comments concerning our manuscript entitled "Turbulence parameters measured by the Beijing Mesosphere–Stratosphere–Troposphere radar in the troposphere/lower stratosphere with three models: Comparison and analyses" (ID: amt-2021-309). Those comments are valuable and helpful for revising and improving our paper and the important guiding significance to our research. We appreciate for Editors' and Reviewers' warm work earnestly and hope that the correction will meet with approval.

We have studied each comment carefully and have made corrections as far as possible. We recalculated the turbulence parameters and reorganized the overall manuscript, by taking $c_1=0.27$ for the D-H model and using one-way and two way half power half width of radar beam correctly. These changes do not affect the structure of the article. Revised portions are marked in red in the paper. For details of the revised manuscript, please refer to the document "Author's track-changes" and uploaded manuscript. The main corrections in the paper and the responses to the Reviewers' comments are in "authors response.pdf"

Please also note the supplement to this comment: <u>https://amt.copernicus.org/preprints/amt-2021-309/amt-2021-309-AC1-supplement.pdf</u>