

Atmos. Chem. Phys. Discuss., author comment AC2 https://doi.org/10.5194/acp-2021-543-AC2, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

## Reply on RC2

Abhinna K. Behera et al.

Author comment on "On the cross-tropopause transport of water by tropical convective overshoots: a mesoscale modelling study constrained by in situ observations during the TRO-Pico field campaign in Brazil" by Abhinna K. Behera et al., Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2021-543-AC2, 2021

We greatly appreciate the reviewer's helpful and informative suggestions, which prompted us to revise our article. We appreciate your opinion of our English skills as well. To be honest, we are unable to undertake additional sensitivity tests to evaluate the differences between REF and NU21 runs due to the time and computational cost of these simulations, which necessitates additional time to analyse. Otherwise, we reran the simulations with a 30-second time resolution, which is critical for answering several of reviewer-1's questions. Here is where we record our point-by-point response to the reviewer's comments. The original comments of the reviewer are listed. Italic and boldface typefaces are utilised in the typesets. Each remark is met with a response from us. The phrase "adjusted" is always included in the response when any changes are made to the original version of the manuscript. The line numbers, page numbers, figure numbers, and table numbers refer to the original version of the document unless otherwise stated. The corrected version of the manuscript is also attached.

P.S.-: Please find the attachment.