

Impact of grid spacing, convective parameterization and cloud microphysics in ICON simulations of a warm conveyor belt- Letter accompanying the corrected manuscript

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We again thank the reviewer for their valuable suggestions which helped in improving our manuscript to its final form and recommending its acceptance. This letter accompanies our manuscript after incorporating technical correction as suggested by Referee #2. Here, after having incorporated the changes, we point more explicitly to the changes in the text. The reviewers' comments are in bold, our answers are in normal font.

Referee#2

Many thanks to the authors for considering my comments and revising the manuscript accordingly. I am satisfied with the revisions and I am happy for the manuscript to be accepted in its current form, after one small remaining comment is addressed, concerning Figure 6.

My concern is that a quantity called "height" cannot have "hPa" as units, even though I appreciate the need for consistency with the reference cited. I suggest to rename the quantity as "mean ascent ΔP " or similar (or even just "mean ascent") and then explain in the text that this quantity is analogous/equivalent to that described in the reference cited.

Thank you for appreciating our effort we put in revision and recommending its acceptance.

We agree that the term 'height' is a bit misleading in this context. Therefore, as suggested, we have renamed the quantity as 'mean ascent'. The title of Figure 6c is modified accordingly. Also, in the corresponding text, all the instances of 'mean ascent height' are now changed to 'mean ascent' including a modification in line- 223, where mean ascent is defined. As suggested, in line 224, we have mentioned that this quantity is equivalent to that used by Oertel et al. (2019) in their Table 1.