## Response to Referee Comments 2 (RC2) on ACP-2022-543 "Dependency of vertical velocity variance on meteorological conditions in the convective boundary layer" - by Noviana Dewani et al.

## 1 Referee Comments 2:

My concerns are largely assuaged by the changes the authors made. I appreciate the effort they made in quantifying the similarity between the two Doppler lidar systems, the new emphasis on absolute measures of humidity instead of relying on only relative ones, and the investigation into soil moisture. I feel that the revised paper meets my expectations for publication, and have only notices a few small items for correction.

We thank the referee for taking the time to give some input and feedback to help us improve the quality of the manuscript. The changes made to the attached manuscript are according to the comments below.

Line 22: height, not heigh We thank the reviewer to point this out. We made the correction on the revised manuscript.

Line 103: acceleration, not acceleration We thank the reviewer to point this out. We made the correction on the revised manuscript.

Fig 14: Can you put r values in the corner of the panels? I can see that RH appears to have stronger correlations than other parameters, but it would be good to know how much. Right now the text merely says "good correlation" which can be very subjective.

We put the coefficient correlation between two parameters on the Fig. 14 and add in text line 216 : "and the coefficient correlation indicates the correlation between two parameters.".

Line 250: Comma not needed after although. We thank the reviewer to point this out. We made the correction on the revised manuscript.