Dear editor,

We really appreciate the time and effort of you. Your comments definitely help us to improve our paper, and we will make the corrections according to the comments in the revised manuscript.

The following is a point-by-point response to the specific comments:

At four locations in the paper Reviewer #2 requests an explanation for "mean Doppler errors for 5 dBZe" and other similar text. Please edit the text at these locations to provide clarification, not simply to say that you mean that you select only situations where the echo intensity is 5 dBZe, but to explain whether you are referring to the mean error (i.e. the bias) in Doppler velocity, or the root-mean-squared error in Doppler velocity. Similarly for SDdiff.

RESPONSE:
We admit that our statement was unclear. We changed our statements in L16, L24, L53, L59, L152, L154, L158, L159, L181, L186, L192, L212, L265, L268, L275, L277, L300, L301, and L303 of the revised manuscript.

At one point you added the line "Note the black dashed and solid lines in Fig. 3." which is meaningless: what is the reader supposed to note about these lines? Please state what the black lines show.

RESPONSE:
We changed our statement as below in L179 of the revised manuscript.

"The black lines in Fig. 3 are the result for H22, the dashed lines denote the SD_{diff}, and the lines indicate the SD_{diff} with unfolding correction (using the same method as in Eq. (7)). "

The data availability statement says the data are available by email. Please place the data in a public repository and refer to that instead. Perhaps the data are the same as https://doi.org/10.5281/zenodo.7835229, in which case please cite that (Roh et al. 2023).

RESPONSE:
Accordingly, we changed our statement and added the following information in the "Data availability" section.

"The NICAM/J-Sim data with two orbits is available in the repository (https://doi.org/10.5281/zenodo.7835229). We also will give a full data set if you request."

Thank you very much.