

Dear Authors, It is great the effort done in improvement this work through its revisions and in my opinion most of comments of Reviewers have been addressed. Anyway, I retain that this work requires further improvements. First, language and text have to be improved. In this respect, I have noticed that several sentences do not appear sufficiently connected among them, with sentences and concepts that do not appear derived from the previous arguments. Moreover, several typos remain (for example lines 137, 146, 160). Second, I agree with the comment of Reviewer 1 on the quality of the datasets: only two meteorological events have been used for the training datasets, and the 17281 datasets are largely unbalanced towards stratiform data. I understand that this work deal of a prototype algorithm, and in this respect I could be acceptable so few events, anyway this limitation has to be clearly and extensively reported in the text (including §2.3.2, abstract and conclusions), and the indicated unbalance justified in some extent. Finally, I retain answers to Reviewers acceptable, but not fully addressed in the text. In other words, answers give a detailed justification to the points indicated by Reviews but the revised text in most cases addresses the point in a sentence not sufficiently complete. My general comment is to take answers to Reviewers and insert them in the text as much as possible “as is”. In particular, I retain necessary the justifications for the following points:

- The selection of the datasets, as previously indicated;
- The explanation for the 11 mm/hour value, citing the two formulas and the threshold of 40 dBZ with its reference;
- The sentences on the QPE accuracy have to be revised according to the answer to Reviewer (in my opinion much clear than the sentence in the text), and the paper of Kirsch et al. 2019 have to be included in references;
- The justifications on the ρ_{HV} values have to be absolutely inserted in the text, in particular points 1 and 2 of the answer to Reviewer that I suggest to include as much as possible “as is”. On the other hand, I agree that the following discussion in the answer on the small differences using different thresholds have to be reported in the text but in a much more compact form. Anyway, the discussion on the ρ_{HV} , in the revised text is only in conclusions and in a form too concise, while it is absolutely necessary address properly this point , as done in the answer to the Reviewer;
- The sentence “In this work, we only use bright band [...] to remove bright band signature” of the answer, has to be addressed better in the text;
- When presenting the two principal study cases, it is necessary explicitly declare that small circle areas will be used for further analysis, reporting the justification of the answer to the Reviewer;
- Even if obvious, the values of the statistical parameters of the pure stratiform case have to be reported for symmetry with the other two cases, as declared in the answer but not done;
- Finally, also the justification respect the Zdr calibration bias have to be included in the text.

All the Best.