

Review of amt-2022-291

This is a review of " **Retrieval of Microphysical Parameters of Monsoonal rain Using X-band Dual-polarization Radar: Their Seasonal Dependence and Evaluation**" by Kumar Abhijeet, T. Narayana Rao, N. Rama Rao, and K. Amar Jyothi, submitted to Atmospheric Measurement Technique

This paper deals with an interesting topic which is relevant to the community using Doppler radars for the estimation of rainfall and retrieving rain microphysical parameters thereby unravelling the structure of mesoscale convective systems.

The manuscript discusses different approaches for retrieving microphysical parameters from DROP-X radar and compared the results with a surface-based disdrometer. The manuscript is written well, and easy to follow. I strongly feel that the results are worth publishing in Atmospheric Measurement Technique (AMT). This topic is important to a variety of disciplines and scientists, I strongly recommend the paper for publication in AMT after addressing the following minor comments/suggestions.

Minor comments and Suggestions:

Page 2: line 47: remove; after Ryzhkov and Zrnic, 2019;

Page 3: Line 92: Include Lavanya et al. 2019

Page 6: line 188: 70 mmhr-1 (space between mm hr-1)

Page 6: Include details of standard error bars in the Figure1 caption.

Page 6: Figure 1 caption: Correct "seasonal" with "Seasonal"

Page 13: Table 4: Replace PMON with PRE

Page 18: Captions of Figure 7 and Figure 8 are interchanged.
Accordingly please correct them in the text.

Page 17: line 467: I think the authors are referring to Figure 8. (Dm, shape and slope parameters are shown) (Please see my above comment)