Atmospheric Measurement Techniques Discussions

Atmos. Meas. Tech. Discuss., referee comment RC3
https://doi.org/10.5194/amt-2022-209-RC3, 2022

Comment on amt-2022-209

Anonymous Referee #3

Referee comment on "Raindrop size distribution (DSD) during the passage of tropical cyclone Nivar: effect of measuring principle and wind on DSDs and retrieved rain integral and polarimetric parameters from impact and laser disdrometers" by Basivi Radhakrishna, Atmos. Meas. Tech. Discuss., https://doi.org/10.5194/amt-2022-209-RC3, 2022

The manuscript describes the observations during the cyclone overpass by three disdrometers that could help to know the characteristics of cyclonic DSDs and disparities in the observations. The quantification of errors is highly essential as they surface DSD measurements are used as reference datasets to calibrate radars. The manuscript is well written and easy to follow. However there are certain portions that needs to be improved before publishing in AMT.

The author compares at certain portions JWD with LPM and PARSIVEL and other times in vice versa. As suggested by Tokay et al. and the references therein, it could be good to keep JWD as reference and compare other two disdrometers with JWD will improve the readability of the manuscript.

Can the author show ZDR differences at different diameters at X-band? Although a reference is mentioned, but it could be good to provide the information in the manuscript.