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Interactive comment on "Microphysical features of typhoon and non-typhoon rainfall observed in Taiwan, an island in the northwest Pacific" *by* Jayalakshmi Janapati et al.

Anonymous Referee #2

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The paper "Microphysical features of typhoon and non-typhoon rainfall observed in Taiwan, an island in the northwest Pacific", by Janapati and co-workers, presents a study based on disdrometric data, aiming to describe precipitation characteristics in case of rain produced by Typhoons over Taiwan.

A large Joss-Waldvogel (2009-2017) disdrometer dataset is separated in Typhoon and no-Typhoon samples, that are analysed to highlight similarity and differences between the two subsets, also considering other data such as reanalysis and weather radar data.

The subject is interesting and the Authors did a significant work in processing such a

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Discussion paper

large amount of data. However, I think that the manuscript should go under a major revision, for a number of reasons that I list below.

First, the writing is extremely poor: in many cases the reader cannot understand the text. I suggest a deep language revision of the manuscript.

Second, the J-W disdrometer has a number of known deficiencies (see Tokay A, Kruger A, Krajewski WF. Comparison of drop size distribution measurements by impact and optical disdrometers. J Appl Meteor 2001;40:2083–97 among many others), especially in case of heavy rain, that should be reported and discussed in detail.

The analysis of CAPE, water vapour and temperature profiles seems a bit out of context here. The paper deals with precipitation microphysical structure, and these environmental quantities are not so relevant to the whole analysis. I suggest to drop this part of the work.

The conclusions are very weak and should be more deep, reporting main results, and not simply saying "...relations were different for TY and NTY rainfall". There is a recent paper by Bao and co-workers (Distinct Raindrop Size Distributions of Convective InnerâĂŘand OuterâĂŘRainband Rain in Typhoon Maria (2018), Journal of Geophysical Research: Atmospheres, 125, e2020JD032482. https://doi.org/10.1029/2020JD032482) that can be useful to comment some result.

Please, put the right units for all the entries in the tables.

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