

REVIEW REPORT

Review of hess-2020-345-manuscript-version3

By Jayalakshmi Janapati, Balaji Kumar Seela, Pay-Liam Lin, Meng-Tze Lee , Everette Joseph

Manuscript Title – Microphysical features of typhoon and non-typhoon rainfall observed in Taiwan, an island in the northwest Pacific

GENERAL COMMENTS

The manuscript mainly analyzed RSD data collected in north Taiwan during Typhoon and non typhoon events. Furthermore, a brief analysis of additional data (reanalysis, remote-sensing, and ground-based datasets) is also provided. The manuscript is well written and easy to follow. I suggest the publication on Hydrology and Earth System Sciences after addressing my minor comments.

SPECIFIC COMMENTS:

- Lines 192-194: the sentence need to be further explained. Please add some details
- Figure 5: check the y-label of Figure 5c & d
- Lines 221-224: Please explain better the separation criterion for typhoon and non typhoon events, so that it can be easily applied also to other researchers
- Lines 231-232: please write the equation! It will be more clear to the reader
- Line 251: Why the Authors did not use the C1-C7 rain classes in Figure 8 as in Figure 6 and Figure 7?
- Lines 274-276: Why the Authors did not use the Bringi et al. method described and analyzed in the previous section? Please use that method or eliminate it and include Me et al. method in the analysis reported in the previous section of the manuscript or justify why you analyzed your data with respect to the Bringi et al. method and then you used the Ma et al method for classification.
- Line 298: “is due the presence” instead of “is due the presence”
- Line 303: please see Adirosi et al. (2018) for the effects of different disdrometer types on the Z-R relation
- Line 357: please specify the meaning of CER

REFERENCE

Adirosi, E., Roberto, N., Montopoli, M., Gorgucci, E., & Baldini, L. (2018). Influence of disdrometer type on weather radar algorithms from measured DSD: Application to Italian climatology. *Atmosphere*, 9(9), 360.