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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Precipitation stable isotopic signatures of tropical cyclones in Metropolitan Manila, Philippines show significant negative isotopic excursions" *by* Dominik Jackisch et al.

Anonymous Referee #1

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In the manuscript, the authors attempted to discuss how a 19-month precipitation isotope dataset could be used by government agencies for mitigation and adaptation polices related to typhoons. The authors also suggested that this study could have possible implications for paleoclimate studies. The study is very ambitious. However, the 19-month dataset is difficult to provide substantial contributions to the hazards related to (1) precipitation processes during typhoon, (2) spatiotemporal isotope characteristics in the region, and (3) paleoclimate studies. The main problem of the paper is lack of scientific significance. By providing an extensive literature review in the introduction,

the authors tried to suggest that their 19-month isotope datasets could be useful for

(a) studying typhoon mechanisms

(b) showing spatiotemporal precipitation isotope signatures

(c) providing baseline data for paleoclimatology in the region

However, the above topics involve diverse spatial and temporal scales. It is very difficult to justify that the 19-month observations can inform all of them. In page 7, the authors provide excellent descriptions which summarise what the data could really tell us. The data can only tell us that the precipitation isotope values during typhoons were depleted. However, it is not really something very new. We did not learn anything about typhoon mechanisms apart form that the typhoon rainfalls were clearly depleted of the heavier isotopes. Turning to learning new spatiotemporal signatures of the regions, the daily data set is just not able to capture the typhoon dynamics. In Figure 4, we can see clear that we cannot expect that 3-5 data points for a typhoon event can tell us much about typhoon dynamics. Overall, we did not see many substantial results related to typhoon processes here, because of the limitation of the data. Moreover, the work does not have strong materials related to hazard, although the authors tried to frame the work about hazard mitigation and adaptation policies (Page 2 Ln 40). This paper is more suitable to be a data paper instead of a research paper. Perhaps, the authors should think about submitting this paper to Earth System Science Data (ESSD)

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