Revision of "Changes in tropical cyclone-associated precipitation of highly damaging Philippine typhoons using high-resolution PGW simulations and multiple-experiment approach"

Overall Summary

The manuscript by Delfino et al., explores the influence of global warming on three different tropical cyclones (TCs) in a past, present and future climates, imposed by different set-ups contemplating the role of SST, atmospheric temperature and relative humidity at different configurations and resolutions. This is a complete research going from the changes in precipitation rates and other characteristics of the TCs, to addressing possible reasons for the observed super Clausius-Clapeyron behavior in the Philippines. However, I would suggest major revisions to help clarify some aspects of the manuscript.

Major comments

1. In the experimental design please be more concise about the prescribed conditions. How are you defining pre-industrial and future conditions? What global warming level are you defining for the future? This sentence in line 110 *"Monthly mean deltas from CMIP6 (2070–2099 minus historical)"* is not clear enough as to what are those years referring to.
2. About the analysis done for the rainfall percentage change summarized in Fig 6. From the text, I understand that the change (%) is done for the difference between (Future – Current) and (Pre-industrial – Current) conditions. This arises an issue to me when comparing to the 7% / K reference. Since it is not clear in the text what is the difference in SSTs between Future and Current times, I can't tell if this change is equivalent to the reference. For instance, if the difference in SSTs between Future and current is 2K, the change in rainfall shown in Fig. 6 corresponds to X% / 2K. The same applies to the pre-industrial. Have they been scaled by the difference between scenarios, or are they absolute differences? Please specify it, in that case that they have not been scaled, the comparison to CC is not directly valid. I advise discussing it in more detail, since this is one of the main results.
3. Is there a reason why the 3Km simulation of BOPHA (Fig1b) has no change in precipitation in the pre-industrial setting? This differs largely from the difference seen in the 5Km simulation.
4. There are a lot of experiments, please include a table describing them.
5. Please revise the figures, many of the labels and text are too small to be read. Also, some are missing the subplot labels (a,b,c…)

Minor comments:

1. Disagree with lines 216-217, for Mangkhut the upper tail does increase in frequency, but there is a shift towards decreasing rates in the future (Fig 5).
2. Line 39: Typo. Tropical cyclones (TCs) are a major source
3. Line 46: Add citation to IPCC.
4. Line 47: Define CCS or leave as CC scaling.
5. Line 51: space missing before '. However'.
6. Lines 104-105: Cite CMIP6 and PWG method.
7. Line 110: define years set for historical period.
8. Line 112: '(3) SST, temperature, and humidity (FULL)'. Specify atmospheric temperature.
9. The text in Fig 1 is too small.
10. Line 150: What does CU and NoCU stand for in the experiments?
11. Line 168: Typo, there is a double dot.
12. Line 424: Typo, there is a double dot.
13. Please check the bibliography, some references are missing DOI.
14. References also have different formats in the bibliography.