

Comments on “The Named Storms Catalogue: unlocking learnings from past events”

This work is really interesting, and I appreciate the efforts of the authors in bringing forward a naming convention for mid-latitudes that has historically been reserved for tropical cyclones.

I feel that the document should be a bit more accessible to the reader, as currently it reads more as a technical report. Though I realize that the nature of this study does require the display of a lot of important data, my review is primarily to provide suggestions that can enhance the communication of this important information.

My comments listed below are by line number, with the more substantive comments listed with an asterisk.

1. Line 17: Generally, the abstract should be a self-contained document, without any citations. I suggest that this citation for the catalogue be inserted in the body of the text, soon after the beginning of the Introduction, just after line 25.
2. *Abstract and the study, in general: I appreciate that extratropical cyclones are typically crucial to the production of extreme weather, most notably with respect to wind and rain and snow. Nevertheless, in North America, many extreme precipitation events are associated with surface fronts that are placed in deformation zones between two synoptic-scale anticyclones, with no surface cyclone. This is not intended to denigrate the importance of the work. I simply offer this as an opportunity for future work.
3. *Table prior to line 85: This table needs a caption with the date conventions and acronyms defined. This information belongs in the caption, and not exclusively in the text. In fact, this table should be identified as Table 1.
4. *110: I am assuming this is the relative vorticity. Also, the numbers that are shown in the subsequent tables are stated as units of sec^{-1} . That is fine, except that you should indicate the units as “ 10^{-5} sec^{-1} ”
5. *Table 2, at the top of page 7, referring to “Maximum vorticity”: See comment 4. The units should be in 10^{-5} sec^{-1} . It is also preferable to use exponents rather than “1/s”
6. 186: What is “Section 0”?
7. *212: How credible is the ERA 5 in its representation of 10-m winds and rainfall amounts?
8. Table 2: Units should all be expressed in exponents and not with slashes.
9. Figure 2 caption should include the explanation of nomenclatures, such as “15-16”, etc, “SON”, etc. Yes, I know what you mean but not all readers necessarily would know.
10. *240-242: How do you define “meteorologically weaker systems” and more particularly, how do you objectively quantify “increased exposure of the population” for the summer?
11. Figure 5 is very nice!

12. *Figures 6 and 7: These swarm plots are really difficult to see and appreciate. There is considerable empty space in each panel, suggesting that the font sizes could be increased for improved readability.
13. *Figure 8: As for the previous comment, consider increasing the font sizes of the text in each panel.
14. *panels b, c, and d of Figure 9: Consider increasing the font sizes.
15. *Caption for Table 3: I am assuming the vorticity values are all in units of 10^{-5} sec^{-1} .
16. *Tables 3 and 4: Here is where I suggest that the units from Table 1 be repeated here in the captions. It is too unwieldy to constantly go back to Table 1 for reference.
17. *Figure 10: See comment #14.
18. *Figure 11: See comment #14.
19. *Figure 12: Consider increasing the font sizes in each panel. Also, each panel should be labeled as a, b, c, and d. Panel a lacks the shading contrast needed to discern the differing maximum wind gusts.