

RC2: '[Comment on essd-2026-181](#)', Anonymous Referee #2, 30 Jun 2026

Summary

The authors present a new open-source storm catalogue of named storms and showed how this catalogue can be used in risk assessment.

General

The manuscript is well written. Also, the newly derived storm catalogue is of interest for the scientific but also the stakeholder community, e.g. insurance companies. Thus, I recommend minor revision prior to possible publication in ESSD.

We thank the reviewer for their comments and constructive suggestions. We have worked on an improved version of the manuscript based on the reviewers' comments and we provide detailed replies to their comments below.

Major comment

I think the literature review in the introduction is a bit short. H. Dacre initiated a storm atlas (Dacre et al. 2012, BAMS). What is the difference between your catalogue and the storm atlas by Dacre? In Line 37 you mention several naming partnerships, but the author team stays rather vague. You need to explain this in more details, what are the differences, which partnerships exist and what are their aims?

Thanks for these comments and questions. The revised manuscript now includes a more developed section in the introduction that explains that the catalogue we present is unique as a collection or atlas of named storm events, whereas other collections such as the Dacre et al. atlas mentioned above include a much larger and less restrictive extratropical cyclones collection. What makes our catalogue relevant in this context is that for the first time it allows to more objectively establish if, for example, the named storms are stronger than other extratropical cyclones in the space of the metrics included.

Minor comments

L20 and elsewhere: Please use "Method" instead of "Methodology" throughout the manuscript.

Thanks for the comment. We have checked that in the five instances of the use of methodology/methodologies in the manuscript the term is used correctly, as it refers to an overarching selection of methods.

L33 and L55: Compound extreme events associated with cyclone activity are presented in Messmer and Simmonds (2021, WACE) and could be cited here.

Thanks for the reference. It has now been reviewed and included in the edited manuscript.

L72 Please cite the tracking method here. How does this tracking method compare to others, e.g. Neu et al. (2013, BAMS)

The tracking method and named storm identification are covered in their own section, 2.3. A paragraph caveating the potential sensitivities to the tracking algorithm has been included in that section of the revised manuscript.

L87: please change to “ However, we consider them”

Done.

L149: Comma after “In this paper”

Done.

L199-202: How sensitive is the choice of 98th and 99th percentile to your results presented later, why are different thresholds used? How is the sensitivity testing performed? You need to be explicit wrt the criteria used.

Thanks for the questions. The 98th percentile was chosen for the meteorological hazard metrics first. This was identified as a suitable percentile by visual comparison of the exceedance footprints generated from 95/98/99th percentile thresholds (example footprint figures shown in bottom right panel of figure “b”s in the catalogue). The 98th percentile was ultimately chosen as it generated a wider distribution of footprint values across storms, rather than too many storms getting similarly high (with the 95th) or low (with the 99th) exceedance area values. This enables better comparison of storms with hazard metric rankings and will facilitate future work on storm clustering. Using the 98th percentile was then initially taken forward into calculating the coastal metrics, but visual inspection of coastal exceedance footprint figures (example shown in bottom left panel of figure “c”s in the catalogue) and further reading suggested the 99th percentile to be more suitable for generating a distribution of these metrics across storms, and also following precedent set by Woodworth et al. (2007) who used the 99th percentile for identifying extreme high waters. The text has been updated in section 2.5 of the manuscript for more clarity on how the percentiles were selected.

Figures: The labels are too small in all figures, so please revise all figures.

Thanks for the comment. All figures have been edited in the revised manuscript to avoid the use of acronyms, enlarge fonts and improve readability.

Discussion: Please discuss also other storm catalogues/ storm atlas and the storm naming partnerships in more details.

Additional discussion points have in incorporated in the revised manuscript. The existence of other naming partnerships (covering different regions of the World) is mentioned in the introduction. The existence of other storm atlases is discussed in the introduction and the discussion sections.