

Author response to Referee #1 (second round, RC2; essd-2026-364)

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We sincerely thank the referee for the kind comments and for taking the time to read our response. We fully agree that making the implications of this additional validation explicit in the main text will help readers understand the characteristics and appropriate use of the dataset more accurately, and will strengthen the accuracy and rigour of the paper; we are grateful for this suggestion.

Thank you for your response. It is very useful information.

Have you incorporated this information in the main document? I think it is important to note that this dataset might not be useful for inner core research. If nothing else a sentence or two should refer back to the supplement and its implications.

Yes. We are already incorporating the full assessment from our response (AC1) into the revised manuscript, so that it becomes part of the paper rather than remaining only in the discussion. Concretely, the radius-resolved error, RMW and wavenumber-1 results, together with their figures, will be added to the paper, as a new technical-validation subsection in the main text and, where more appropriate, as a supplement, and will be cited from the main text. We will also add a short “Known limitations and suitability for use” paragraph to the technical-validation section and conclusions, stating plainly what the dataset is and is not suited for in the inner core and directing the reader to this assessment.

We fully agree that the limitations deserve clear emphasis, and we will give them due prominence. In particular, we will note that the exact radius of maximum wind and the per-case wavenumber-1 asymmetry are the least certain quantities, especially for intense, small-eye storms whose RMW falls below the ~ 25 km CYGNSS footprint, so that for detailed inner-core studies of such storms the dataset has limited applicability and these uncertainties should be taken into account.

Under the ESSD interactive-review procedure, the revised manuscript is submitted after the open discussion closes. At that point we will upload both the revised main text and a new Supplement published alongside it, in which the corresponding figures and statistics will be provided. We are already incorporating the changes outlined above into the main text, and we will submit the revised version as soon as possible after the discussion closes.

We thank the referee once again for this careful and constructive review, which has genuinely improved the rigour and professional quality of our paper.