

Reviewer #1 Evaluations:

Recommendation: Publish in present form

Significant: Yes, the paper is a significant contribution and worthy of prompt publication.

Supported: Yes

Referencing: Yes

Quality: Yes, it is well-written, logically organized, and the figures and tables are appropriate.

Data: Yes

Accurate Key Points: Yes

Reviewer #1 (Formal Review for Authors (shown to authors)):

The authors addressed all of my concerns. They revised the manuscript, which now provides a better perspective of our current knowledge. I list only a few minor comments below.

Thank you for your valuable comments. Our responses to your comments are presented in bold.

0. Not sure what the policy is in AGU advances, but I would remove references for manuscripts that have not undergone a peer review process.

AGU Advances policy is that anything is citable with a DOI.

1. line 31: "reducing uncertainties"; which uncertainties? Sounds vague currently.

The abstract is restricted to 100 words so unfortunately we cannot expand upon the text in the abstract. The main text discusses initial condition, structural and forcing uncertainties.

2. lines 57-58: similar to the NH, in the SH, the storm track response is seasonally dependent, and you do not see a strengthening in both seasons.

Climate models project a strengthening of the SH storm tracks in all months of the year (Fig. 2 in O’Gorman 2010). In contrast climate models project a weakening of the storm tracks in NH summertime and a strengthening in NH wintertime (Fig. 2 in O’Gorman 2010).

3. line 93: remove "where"

The text was removed (see line 94).

4. line 112: I believe the reference here is Kang et al. 2024b, and not Kang et al. 2024

The reference was corrected.

5. Table 1 under "Extratropical cyclone activity" the reference should be for Kang et al. 2024b, and not Kang et al. 2024

The reference was corrected.