

The authors thank the reviewers for reading the paper again. Below is our response to the minor comments (original comments in blue color and italics and our responses below them).

**# Anonymous Referee #1**

***Received: 01 Feb 2025***

*1. General Comment #2: Thanks for making your own section of limitations. However, the author has duplicated this statement in the manuscript since the last paragraph of the discussion, which is the limitation in section 2.7, is still in the revised version. Please keep only one. Also, I still think that the authors could include more limitations that are not mentioned in this section (see my original comment in the first revision).*

Change made. We removed the duplicate part in section 4.

*2. Specific Comment #16: The authors did not fully understand my request. I do appreciate your detailed response to the boundary conditions. However, the reader would benefit from having a visual representation of the boundaries within the domain. For example, where within the ocean/shoreline in the domain the model is forced with the coastal conditions?*

Thanks for the reviewer's comment. We already provided the visual representation of the boundaries in Figure. 2a. We have made an addition to clarify this, pointing again to the Figure after explaining the boundaries (Line 169 of the manuscript).

The authors thank the reviewers for reading the paper again. Below is our response to the minor comments (original comments in blue color and italics and our responses below them).

**# Anonymous Referee #2**

**Received: 02 Feb 2025**

*1. Regarding my earlier comment on the idealized storm tracks and timing, I appreciate the authors' response and the addition of a brief discussion on the associated uncertainty. However, I recommend expanding the discussion on atmospheric uncertainties. For example, Xu et al. (2025) compared different atmospheric forcing products and demonstrated that such uncertainties could be substantial relative to model structure. Similarly, Feng et al. (2024) conducted multiple atmospheric simulations for the same hurricane to account for this variability. See the references below. These uncertainties could significantly impact simulation accuracy, even with the authors' improved modeling approaches (also see my previous comment 7). If the authors choose not to conduct a more in-depth uncertainty evaluation, I suggest elaborating further on this topic in the discussion.*

We followed some of your suggestions and added additional discussion on this topic in the Section 4 (discussion).

*2. Additionally, I previously requested a wider spatial extent and more detailed zoomed-in views for Figure 14 (now Figure 11). While the authors have made revisions, there is still room for improvement. Specifically, in the overall view (Figure 11a), the zoomed-in region is clearly outlined, but the other details remain difficult to discern due to the small size of the dots. Enhancing their visibility would improve the figure's clarity and usefulness.*

We improved the visibility of the Figure. 11a by just showing the differences greater than 5 cm. However, we retained the original dot sizes, as increasing them created a misleading impression of excessive flooding that was not accurate.