

Response to Referee 2 Comments

Dear reviewer,

We appreciate the time and effort you and the other reviewers expended in providing valuable feedback on our work. We considered and addressed all the reviewer's suggestions. Changes to the manuscript have been marked.

Regarding the suggested citation for tidal distortion around Cape Canaveral, we thank Juan Felipe Paniagua-Arroyave for sharing their work and have included it in our introduction. As we receive and summarize all the comments, we will upload the corrected version to the reviewers and editors.

Point 1: The manuscript compares coastal sea level setup associated with three different tropical cyclones that were similar in their intensities and trajectories, yet resulting in different coastal hazard along the South Atlantic Bight. As for other reviewer, for me the manuscript is also too technical and therefore hard to follow. Also, I am supporting other comments of other reviewers, so will not repeat them here.

Response 1: We have modified the writing and the structure of the manuscript to improve this part according to the reviewer's comment.

Point 2: In addition, what seems as a weakness to me is the model evaluation, which is performed integrally over a prolonged (10 days) interval with just one measure coming out of it ('skill'). However, such a defined skill cannot say anything about model performance during extreme conditions (i.e., during the close passage of a hurricane) as is largely determined by a background conditions to which models are normally performing better. From figures, I see (and not easy to see in figures) substantial underestimations and overestimations for some stations for peak sea level values. Therefore, I would like to see model verification during extreme η_0 and TWL values (using max values, or using q-q plots, tails of pdfs, or similar) with model performance validated during extreme conditions. Such an evaluation might also use estimates of 'maximum consecutive duration' from both model and observations, to see if the model can reproduce persistence in coastal flooding as well.

Response 2: We have, accordingly, utilized the correlation coefficients to quantify the model performance on the peak water level components and the maximum consecutive duration (see Fig. 2).

Along with the above remarks, all grammar and spelling mistakes identified by the reviewers have been fixed. Regarding our application, we eagerly await your response and look forward to answering any additional inquiries and comments you might have. We appreciate the reviewer's comments and thank you for the feedback.

Sincerely,

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