The authors would like to thank the anonymous referees for taking the time to review our revised submission and for their helpful comments and suggestions. We hope the following responses as well as the updated manuscript adequately address these comments.

Reviewer 1, Comment 1:

(None)

Author Response:

Thank you very much for reviewing our manuscript.

Reviewer 2, Comment 1:

Thank you for resubmitting your article. And apologies for the delay. As indicating in the previous round of revisions, I think the paper is well-written and provides a very interesting approach.

However, it would really be very valuable to the academic community if you would provide (at least) a minimal working example of the model you are presenting. It is not really anymore of this day and age to not make code (and data) publicly available. As such, I would ask and urge you to make the code publicily available to the academic community. Reproducibility of your work should be a key aim of each academic.

Author Response:

Thank you for pointing this out again. We have now made it explicit in the manuscript by updating the data availability statement:

"Relevant data is available to researchers upon direct request to the corresponding author of this article."

Reviewer 2, Comment 2:

Besides that, it would be nice to elaborate still a bit more on the validation. I understand that you did not model a specific event, but you can still compare your results with (anecdotal) evidence of previous similar events. How do the results compare to similar flood events that have happened in the past?

Author Response:

Thank you very much for your comment. We have added the following text in Line 487:

"The magnitude and severity of recently observed floods in the region (Ahadzie et al., 2022; Amoako and Boamah, 2015) are well within the ranges presented in this work."