

Interactive comment on “Simulation of storm surge inundation under different typhoon intensity scenarios: Case study of Pingyang County, China” by Xianwu Shi et al.

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This study proposed a deterministic method for storm surge inundation simulation under different typhoon intensity scenarios using a numerical model. Several key parameters of typhoon activities (e.g., typhoon track, radius of maximum wind speed) as well as astronomical tide and upstream flood runoff were considered to represent the compound effect of different processes during typhoon-induced storm surge. The proposed method could provide reference for the establishment of a technical system for the assessment and zonation of storm surge risk in the coastal counties of China. Following are some suggestions for the authors which might be helpful to improve the

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study:

1. What kind of data were used in this study? and the data source?
2. It would be better for the understanding the methodology if a technique flow chart could be provided.
3. It would be better if river networks and DEM could be added in the map of study area.
4. This study validated the numerical model in terms of the high tide level and the maximum storm surge at six tidal stations. However, a validation for the inundation simulation is absent, is it possible using historical flood records and marks?
5. The advantage of the proposed method should be further discussed.

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