



Interactive comment on “A cross-scale study for compound flooding processes during Hurricane Florence” by Fei Ye et al.

Fei Ye et al.

feiye@vims.edu

Received and published: 15 March 2021

We found a minor problem with Fig. 13d and fixed it in the new Fig. 13 below. Specifically, a different run other than the baseline model was used to plot Fig. 13d in the original manuscript, which has been corrected. This does not change the conclusion that resolving small-scale flow routing features greatly improves the prediction of HWM elevation. The “Burnt Mill Creek” was mis-labeled as “Northeast Cape Fear River” in the original manuscript, which has been corrected. Lake Greenfield and more labels were also added for better illustration.

Fig. 13: Importance of resolving small-scale features on the order of a few meters in the watershed, illustrated by a comparison between a preliminary setup (a, b) and the

C1

baseline setup (c, d). To better resolve the Burnt Mill Creek, NC, more SMS feature arcs (cyan lines in (d)) are used in the baseline setup than in the preliminary setup (cyan lines in (b)), significantly reducing the HWM errors. See Fig. 2 for the location of this locally zoomed-in region. The base maps in (b) and (d) are provided by ESRI.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-389>, 2020.

C2

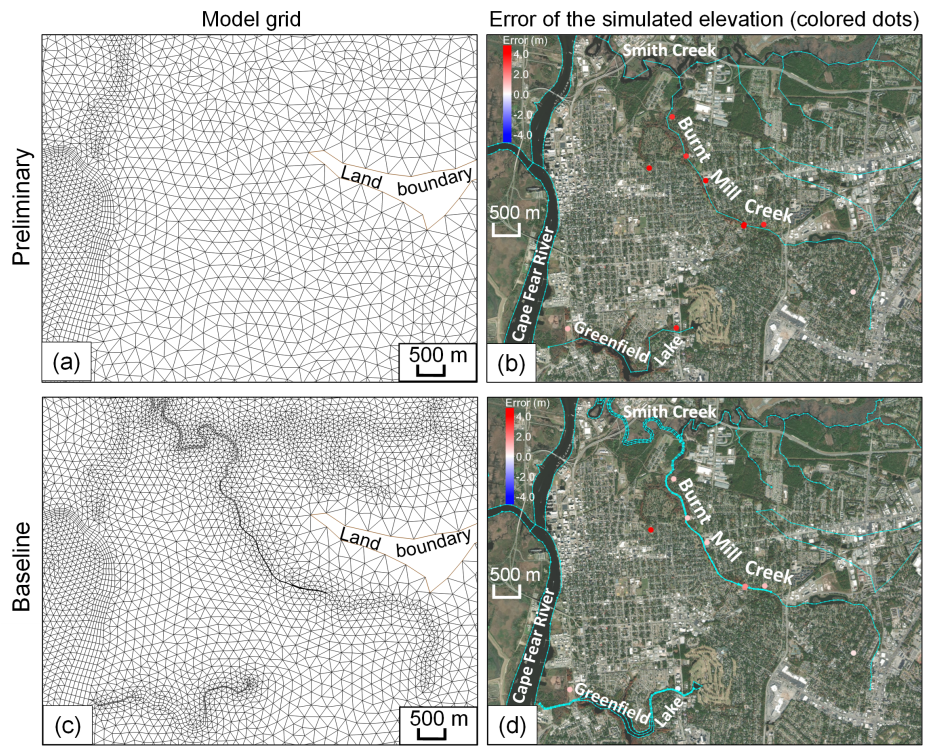


Fig. 1.