Reply on RC1
Matthew Preisser et al.

Author comment on "Intersecting near-real time fluvial and pluvial inundation estimates with sociodemographic vulnerability to quantify a household flood impact index" by Matthew Preisser et al., EGUsphere, https://doi.org/10.5194/egusphere-2022-52-AC1, 2022

We thank the reviewer for taking the time to review our paper and for the minor comments to both improve the clarity of our work as well as its presentation and organization. We have made the following adjustments to the manuscript based on your suggestions:

(R1.1) The sections of Introduction and Background are long-winded. For example, section 2.3 can be removed; it could be just mentioned that the hydrodynamic models are time-consuming and highly data required in the introduction. The paragraph on ‘depression’ in the introduction could be moved to methodology section.

The paragraph on depressions (originally starting at line 33) was eliminated, and pertinent information that defines depressions was incorporated elsewhere in the introduction (new line 34) and in the methodology section (new line 96). Section 2.3 on recent advancements on compound flood mapping was significantly reduced. We believe that acknowledging recent advancements in this area is still important for establishing the context in which our model was developed.

(R1.2) Figure 7, 8 and table 3 needs to be explained in detail in the text.

Table 3 is discussed in more detail in the paragraph that begins at new line 338. Figure 7 is expanded upon in the results section to better describe what is being shown (please refer to line 453 in the new draft). Figure 8 is also briefly expanded upon in the results section to better describe what is being shown (please refer to line 456 in the new draft).

(R1.3) In the discussion, it would be better to stress that how this methodology can be applied to other area and what could be the limitations.

This expansion was added into the conclusion section (please refer to line 614 in the new draft).