Interactive comment on “A new approach to flood loss estimation and vulnerability assessment for historic buildings in England” by V. Stephenson and D. D’Ayala

Anonymous Referee #3

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The vulnerability assessment of historic buildings is still inadequately considered within flood risk analysis. Therefore a more specific approach and investigation of such structures is crucial as many cities, like in the UK, for instance, provide a lot of these building types. Since normal flood loss approaches like stage-damage curves are not sufficient for these buildings (as water depth is not the most important variable for example) the study at hand covers a new and challenging field of research within the flood risk community.

Nevertheless, the title of this article is a little bit misleading as this study deals mainly with the appraisal of the (structural) vulnerability assessment of historic buildings and not with flood losses so far. This may be investigated in future but is not done yet.

Concerning the text, I have the feeling that sometimes the information is very scarce and not clear for the international community. For example it is assumed that the (international) reader knows the listed status of the buildings in the UK as well as the location of counties etc. Here a simple but more detailed explanation would simplify the comprehensibility for people who are not from the UK.

Even the information in the captions of the tables and figures is expandable. Thus the reader can also understand the figures etc. without going back to the text to fully comprehend the meaning of the illustrations etc.

Another but definitely more important point is that nothing is mentioned about the uncertainty of the developed vulnerability functions. For me it is not clear how well these functions describe the large variability of the single descriptors. It is argued that the collected data spread notably but the reader has no hint how large this variability really is. The inclusion of the data points in the relevant figures as well as a determination of an uncertainty band, for instance, could give a hint about the data distribution and fit of the vulnerability curves. This fact should definitely be included and discussed in the revised manuscript!

All my (embedded) comments can be found in the pdf attached.

Please also note the supplement to this comment: