

## ***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***

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We as the authors gratefully acknowledge the comments posted by this referee. In response to the specific comments made we respond as follows:

The research does have a strong UK focus, largely due to the work being case study based, and we agree that more explicit discussion of the implications at European and global scale would benefit the reach of the work. With regards the applicability of the technique we see no reason why this could not be carried out in other countries very easily, with the data gleaned from direct visual survey of the buildings.

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With regards the listing terms used we agree that greater explanation of the sourcing and meaning of these terms is required, and these will be included in the revised manuscript. This is extended to other geographical terms, for example m.a.m.s.l. which describes meters above mean sea level.

The scale of the attributes for each parameter, which is between 3 and 5, is dictated by the nature of possible responses, such as for example there being three listing categories used in the UK, and so is not arbitrarily assigned. Rather it is designed through each parameter individually, which leads to the non-standard number of responses.

We acknowledge that greater explicitness is required between the use of the terms risk, vulnerability, hazard and exposure, and will review the manuscript to this effect.

With regards the query over the use of a log-normal distribution, we feel that having reviewed a number of possible functions used for vulnerability analysis that this best suits our data set. Having experimented with standard cumulative distributions, along with a number of power based functions, we found that the log-normal distribution provided the clearest fragility measure from the data. We would be happy to include this rationale in any revised manuscript if requested.

Best regards

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