

Interactive comment on “Going beyond the Flood Insurance Rate Map: insights from flood hazard map co-production” by Adam Luke et al.

F. Dottori (Referee)

francesco.dottori@ec.europa.eu

Received and published: 30 December 2017

This work addresses important topics that are definitely of interest for the readers of NHESS. Generally speaking, the article is well written, the methodology is sound and presented with the necessary detail and the findings are well presented.

My only (moderate) remark is the lack of a discussion regarding the uncertainty of flood hazard maps and how uncertainty can be communicated to end-users. At page 20, lines 10-12, the Authors state that "... flood probabilities and corresponding frequency are inherently uncertain...". While I fully agree with such a statement, the same can be said for all the hazard variables included in flood hazard maps. To give an example: even if the use of historical flood events as reference may reduce uncertainty,

C1

not all the original boundary conditions may be determined with precision (e.g. river channel morphology or rainfall distribution). Please note that this is not a criticism to the methodology, which is in my opinion up to the current state of the art. However, it would be interesting to know how the accuracy (and the uncertainty) of the hazard maps is perceived by end-users: For instance, what is the precision assumed by end users for the numerical variables (e.g. +/- 10 cm for flood depths)? Does this value agree with the precision expected by the Authors? How did the Authors communicated the assumptions used for flood simulations? If these topics were not addressed within the focus groups, maybe the authors could still include them in the discussion.

Minor comments

Section 2: what is the extent of the two areas analyzed in the paper? Does the extent correspond to the areas shown in Figure 1A and 1C, or are these just a sample of the areas?

Page 21, line 1: This is not completely correct. Even if pluvial flood hazard is not explicitly mentioned in the EU Floods Directive, several European countries did include pluvial floods in their national risk assessment, as it was considered a relevant component of the overall flood risk. For more details, please see the reports regarding the status of the implementation of the Floods Directive and available here: http://ec.europa.eu/environment/water/flood_risk/overview.htm

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2017-384>, 2017.

C2