

Interactive comment on “Citizen observations contributing to flood modelling: opportunities and challenges” by Thaine Herman Assumpção et al.

Anonymous Referee #2

Received and published: 30 October 2017

This paper present an interesting and fairly complete review on the use of crowdsourcing for flood modelling purposes. The effort to try and characterise the reliability and uncertainty associated to different types of data and different methods of involving citizens in collected them is worth highlighting. I would limit my review to three general comments: (1) There is no mention in the paper of the diversity of models that are used for flood modelling, and whether they are more or less suited for integrating the different types of citizen observations. Arguably, one of the challenges for hydrologists could be to design models specifically for that purpose. At least, it would have been interesting to have some information of the kind of models used in the studies analysed in the paper. (2) the question of time is only very briefly discussed, while in flood modelling, and particularly for real time flood forecasting, this is an critical issue: models not

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only require the highest water level or the maximal flooded area extension (which are, I guess, when most of the observations are done), but high resolution data during the rising part of the hydrograph. What have been done to collect this information, and/or what type of participatory approach should be organised to do so? (3) In the same line, rainfall is almost absent in the discussion. As far as I know, crowdsourcing have also been used to obtain spatially distributed rainfall, and many extreme storm events are characterised by a high spatial variability of rainfall, so I suspect that this type of citizen observation could be useful.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2017-456>, 2017.

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