

Interactive comment on “Reconstituting past flood events: the contribution of citizen science” by Bocar Sy et al.

Anonymous Referee #2

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General comments

The paper presents a project of citizen science aiming at documenting past flood events in Dakar, Sénégal, for which no information about the extend, water levels of past events were available. The paper presents a methodology that is of interest for other countries, in particular developing countries for which this kind of information is rarely available. The method allows gathering information that is relevant for flood prevention and preparedness. However, the method requires knowledge of the local culture and social conventions to be put in practice and is relatively time consuming as it is based on participatory approaches and mapping. A comparison with flooding extend estimated using remote sensing data is also provided. The paper is well presented and written and clearly illustrates the added value of the approach, in particular in providing

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information about water level that cannot be obtained using remote sensing data. Additionally, the participatory approach allows the local communities to be better informed about flood prevention. The paper is of interest for the readers of Hydrology and Earth System Sciences, in particular in the context of socio-hydrology.

Specific comments 1/ p.4, lines 119-121. The authors mention that they had to organize a training of the neighborhood chiefs so that they learn to read and draw map. Did they encountered some situations where this training was not successful and if yes, what did they do? 2/ p.5, stage 2: using their methodology, the authors obtain two information about water levels: the first one from the mapping after the training, the second one after the field survey. How did they resolve possible conflicting results. Which source of information did they consider as the most reliable? 3/ p.5 line 145. Would it be possible that local representative could be reluctant to contradict the neighborhood chiefs by giving information that could differ from the one provided by the neighborhood chiefs? Or did the authors only informed local representatives of the location where they had to provide a water level value? 4/ p.6; the section about remote sensing is quite vague about the methods really put in practice. It could be useful to provide more detailed information on the methods. 5/ p.8 line 232. How did the authors verify that the way to use and produce maps had been properly understood?

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