

Interactive comment on “Brief communication: Post-event analysis of loss of life due to hurricane Harvey” by Sebastiaan N. Jonkman et al.

Anonymous Referee #3

Received and published: 12 February 2018

This brief communication analyses flood-related fatalities due to Hurricane Harvey, based on a database developed by two of the authors of the article. Data were collected from a number of different media and official sources, and include information such as location, circumstances and cause of death. The manuscript briefly introduces the event, the database construction methodology, and finally describes and discusses the main findings.

This is a very relevant and potentially useful piece of work. The database itself is thorough and impeccably organized, and the manuscript is well structured and written. Given that this is a brief communication, intended to be short and concise, I think the authors have done a great job, and this is certainly a worthy contribution for NHES. In my opinion, no major changes are required.

C1

The only minor issue I have is with some of the statements made in the Discussion section, P4 L26-31. Here the authors state that some of the findings may be used as a basis for policy recommendations, which in principle is fine. However, the following statements feel too vague, not supported by facts, and therefore unscientific. Specifically: “Better identification and communication of ‘high-risk’ areas for drowning and low-water crossings is required. During future events, preventive closure of floodable roads and underpasses could be considered. Also, preventive evacuation could be considered of selected areas where particularly dangerous flood conditions are expected.” All of this is more or less common sense; nothing is ever perfect and can always be improved. However, are these recommendations relative to this specific case study? If so, the reader is left in the dark regarding whether some of these measures were or not in place in the affected municipalities (or if they were or not “considered”), as well as the whys and why nots. Just looking at the causes of death without taking into account the actual local context seems unsuitable as a basis for policy recommendations. Regarding evacuation, it would also seem that the authors slightly contradict themselves, as in P2 L10-11 the following is stated: “No large-scale mandatory evacuation was ordered before or during Harvey, as the risks of evacuating millions of people were considered too high. Instead, people were advised to shelter at home and to prepare themselves. However several local evacuations were ordered during the event for areas with specific risks and circumstances, e.g. downstream of Addicks and Barker Reservoirs in the Buffalo Bayou watershed.” From these statements, it appears that local authorities did in fact consider the evacuation of selected areas. There might have been a reason for other areas not having been evacuated that we do not know about. What I feel is that this paragraph opens a can of worms, and the policy recommendations issue cannot be fully addressed within this type of short manuscript. On the other hand, I recognize that this is something that might be interesting to mention. In my opinion, if this paragraph is to be included, it should be reworked to address the above concerns.

Specific comments:

C2

P2 L16: "victim" should read "victims"

P2 L16: Here I'd suggest replacing "circumstances of death (location, time of recovery, cause and circumstances of death)" with simply "location, time of recovery, cause and circumstances of death", to avoid repeating "circumstances of death" outside and inside the parentheses, which sounds incorrect.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2017-436>, 2018.