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## **NHESSD**

Interactive comment

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

## **Anonymous Referee #2**

Received and published: 22 January 2018

General comments: This short manuscript provides an assessment of flood-related deaths due to Hurricane Harvey. The mortality data are gathered from government and media sources, revealing the general location, or circumstance, of death, as well as age and gender of the victims. Additional spatial analysis determines the proportion of fatalities that occurred within FEMA-derived flood zones; interestingly, many of the victims were recovered outside of standard delineations of the 100 and 500-year flood zones.

Broadly, this is a well written manuscript on a significant impact marker from Harvey. I have no major issues with the structure of the manuscript, or methods used. My only minor issue is related to the lack of injection of prior literature/findings on specific vulnerabilities such as age and gender (see

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http://www.ilankelman.org/disasterdeaths.html for a robust list); also, more discussion on flood/hurricane evacuation literature could be provided. Alas, this is a short communication so I'm not sure how much more should be expected.

Specific comments: Page 3, line 1; Page 4, lines 1-5: A word of caution should be presented here regarding the use of FEMA-designated zones. When were these data valid for? Though the data were acquired in 2017, how long ago where the zones mapped and approved by FEMA? Are these the regulatory zones in NFIP or the same data that is presented in HAZUS? A reference to recent research on the differing delineations of these zones could be provided to make sure that the reader appreciates that the Federal zones are often thought of as "conservative"; see: https://link.springer.com/article/10.1007/s11069-017-2806-6

Page 3, line 15: The parenthetical about victims is confusing.

Page 3, line 23: Rewrite and incorporate this very short sentence here with the next line.

Figures: Percent(s) between Fig. 1 and 3 are off a bit.

In defining direct and indirect deaths, you may want to examine the NOAA Storm Data directive: http://www.nws.noaa.gov/directives/sym/pd01016005curr.pdf

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

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