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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "On the occurrence of rainstorm damage based on home insurance and weather data" *by* M. H. Spekkers et al.

Anonymous Referee #2

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The subject addressed by the article is original and relevant for publication in Natural Hazards and Earth System Sciences. The paper titled 'On the occurrence of rainstorm damage based on home insurance and weather data' is a continuation of the work already presented by the same author in previous papers and further explores the data originating from the home insurance database for the City of Rotterdam. As a whole, the paper provides a good explanation of the methodology, illustrates the results properly, and reaches worthwhile conclusions. The recommendations given in the paper refer to the statistical treatment of the data. The paper would benefit from a discussion on the value and relevance of the data for pluvial flood risk management.

General comments

Abstract: The method, relevant results and conclusions of this research are sufficiently discussed in the abstract.

Introduction: It presents a good overview of previous work done in the field and illustrates the opportunities that insurance data represent for the characterization of damages due to rain events. It also presents a good outline of the remainder of the paper.

Methods: This section is well explained. Section 2.1 and 2.2 fit better in the Results chapter, considering that they are a description of the case study and the raw data taken for the work. Other sections under methods are clear.

Results: The results are presented in a logical sense. They are presented and explained in an adequate manner with the use of tables and figures that help to the reader to have a proper understanding of the paper.

Discussion: This section reflects a good understanding of the use of insurance data and emphasizes the scientific contribution of the paper. It is also well illustrated with the use of figures.

Conclusion/Recommendations: The authors have related their results to earlier research. They also show how the analysis of insurance data benefit the characterization of damages and the relation with different rainfall events. The recommendations are related to the statistical treatment of the data and not connected with the potential added value of the data for pluvial flood risk management.

Specific comments

P5289 L7-13: Rainfall events are presented in different way. In order to have a good comparison, I suggest to present the return period and/or the intensity of the events for both of the cases (if these data are available).

P5295 L5-10: A validation process is mentioned as a reason to discard data corresponding to the 3 rain events; however, the validation is not mentioned in previous

sections as a part of the modelling process.

P5297 L4-11: The paragraph fits better in section 4 (Discussion). In fact, similar and more explained sentence is written in L25 and following in the same page; therefore, I would suggest to remove L4-11.

P5299 L26: It is mentioned that the hypothesis of different processes could not be tested using the available database, because there is no explanation of what characteristics the database should have to prove the hypothesis.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 5287, 2014.