Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2016-518-RC1, 2016 © Author(s) 2016. CC-BY 3.0 License.



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Interactive comment

Interactive comment on "Identifying urban areas prone to flash floods using GIS – preliminary results" by Marzena Wicht and Katarzyna Osinska-Skotak

Anonymous Referee #1

Received and published: 28 November 2016

General comments:

This paper aims to create an easy-to-use methodology for identifying the urban areas that are particularly vulnerable to pluvial floods. Such an attempt is of significance to both scientific understanding of and practical management of pluvial flooding. However, the current version of this paper is not convincing in terms of scientific significance, scientific quality, and presentation quality, although the authors indeed developed a sound proposal and may achieve the accomplishment in the near future. A reject decision is therefore suggested and simultaneously authors are encouraged to continue improving this work.

Specific comments:

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Discussion paper



- 1. The methodology and results were not calibrated and validated. As authors mentioned, calibration and validation are expensive and difficult; however, they are still indispensable for a convincing research. If it is difficult to obtain the in-situ measurements, hydrological/hydraulic model results, and aerial photograph, household survey based on questionnaire may be an alternative tool to calibrate and validate the study.
- 2. I do not think the spatial variation in precipitation is a big problem for a study area of 327 ha. In contrast, a short-interval precipitation (one hour or less) should be applied for identifying urban flooding areas.
- 3. As the clarified aims of this paper is a new methodology, I suggest possible revisions should be focused on the methodology part. It was difficult to find the strong points of the methodology based on the current version.
- 4. I suggest a clarified and well-structured presentation in future revision. For example, the Result section contained too many points that should be in Discussion section. It is nice to see 10 figures in a paper; however most of these figure only depicted very general information.

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