

## Interactive comment on "Using rainfall thresholds and ensemble precipitation forecasts to issue and improve urban inundation alerts" by T.-H. Yang et al.

## **Anonymous Referee #2**

Received and published: 16 September 2016

In fact, the authors raised an essential point of research in their manuscript which is considered as (from my point of view) the highest priority for the hydrologists. I go through the paper several times in order to put my hand on how the authors introduced their contribution, I found that, the contribution is presented but not clear enough for me. Actually, while reading, there are several questions have been raised and also the difficulties in following the abbreviations reported in the text, so, first I recommend the authors to prepare a list of abbreviations at the beginning of the manuscript to easy following the manuscript. In addition, to avoid any duplication in the comments, I go through the first reviewer's report, I totally agreed with his comments and I am sure if the authors consider them, the manuscript will be in excellent shape for the readers.

C1

However, I am highlighting hereafter some other comments as well. 1- The formulation of the rainfall threshold is not clear, showing comprehensive details on how they form it is essential for the readers 2- The introduction section is really very long, I suggest to shorten it to be direct to the point, to let the readers captured your idea in short way. Unless, the authors could split this section into several representative sub-sections. 3-The title of section 4-1 is not understandable 4- In section 4-2,, at the beginning the authors start with the following statement "To decrease the uncertainty of numerical weather predictions and improve the performance of inundation alert forecasting, this study developed a hybrid real-time observed and forecasted rainfall model to improve the accuracy of early warning notifications.". This section supposed to be results and discussion section, but I did not see before that how the authors develop this hybrid real-time observation model. 5- Presentation of figures 5 and 6 are not of good quality. Figure 5 could be improved and increasing its scale. Figure 6, its notation is wrong (a, b) is repeated... and c the number 15 is appear which is not understandable for what. 6- Adding a paragraph at the end of discussion section showing the limitations of the proposed method would be very helpful for readers 7- The conclusion section is also very long and include several parts that consider as a discussion issue and not consider as conclusion, better to re-write this section to be direct to the point and reflect the objective of the study

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2016-340, 2016.