

## ***Interactive comment on “Quantifying uncertainty in urban flooding analysis caused by the combined effect of climate and land use change scenarios” by I.-W. Jung et al.***

**Anonymous Referee #1**

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This paper investigates the quantification of uncertainty in urban flooding analysis caused by the combined effect of climate and land use change scenarios for two catchments in the US exhibiting two different rates of urbanization.

This is a very interesting paper but with quite long sections in some places. For example the methodology section is very long. Many methods are presented in detail; it is however very well written and structured but I wonder if the different subsections could be shortened? For instance, some paragraphs such as the first paragraph in section 2.5 and 2.7 could be substantially shortened or even omitted.

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More specific comments are given below.

- Line 4, 5373: please put ‘is expected to help’
- Line 23, 5373: please write out ‘PRMS’
- Line 21, 5378: This sentence is not really clear, as one expects the most sensitive parameters to be the most important. The authors might consider reformulating this to something like: ‘We consider these parameters most important as they have been shown to be the most sensitive in previous studies’
- Line 5, 5379: This NE value of 0.6 is quite low for daily flows; how might this affect the final result and conclusions of the study?
- First few lines in section 2.5: Is this description of natural variability really needed here?
- Section 2.8 is rather vague and might thus not be clear to every reader
- Line 23, 5382: please replace ‘closeness’ with ‘fit’
- Lines 15-20, 5384: This statement is of course very debatable
- Lines 26-28, 5384: This might be an anticipated result; the authors might want to state this somehow
- Lines 1-5, 5386: This is a rather interesting finding
- I particularly appreciate section 3.5
- The conclusion (section 4) is quite long; please consider shortening

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