Interactive comment on “Improving uncertainty estimation in urban hydrological modeling by statistically describing bias” by D. Del Giudice et al.

Anonymous Referee #1

Received and published: 13 June 2013

The paper is well written and structured. In my opinion, it provides a coherent and statistically sounding methodology for estimating uncertainty components in model predictions, along with useful discussion and indications for its general application. I just have a few minor remarks and comments:

1) Figures should be numbered according to their order of appearance in the text (Figures 4 and 5 are mentioned before Figure 3).

2) Figure 4, caption: “The observation errors, being very small for this scale (..), the last two uncertainty bands overlap and only the intermediate grey is visible”. This sentence
is not much clear, please rephrase.

3) Section 3.1. I would suggest to add a basic description of the calibration and validation rainfall events (e.g. duration, total precipitation and peak intensity).

4) Section 5.2. It would be interesting to add some discussion on how physical parameters of the catchment (e.g. size, percentage of impervious areas) could influence uncertainty estimation.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 5121, 2013.