Interactive comment on “The potential of urban rainfall monitoring with crowdsourced automatic weather stations in Amsterdam” by L. de Vos et al.

Anonymous Referee #1

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The paper discusses the advantages of crowdsourced weather station data (rainfall measurement) to obtain rainfall information suitable for hydrology studies in urban areas, i.e., rainfall measurements that the need to have high temporal and spatial resolutions. The paper is, to the best of my knowledge, the first attempt to quantify the errors of rainfall data made available from local, distributed and crowdsourced weather stations, which makes it an interesting study. In the paper the crowdsourced rainfall data are compared with dedicated rain gauges and rainfall radar data as these are the common rainfall data sources used in urban hydrology.

Here some suggestions: (1) Some sentences are too vague and need to be rephrased to convey a clear message: e.g., what do authors mean by “... return time of less than a few years...”? (2) The structure of the manuscript deserves to be revised. See for example: (a) the order figure numbers appear in the manuscript is cumbersome and
makes the manuscript confusing (why Fig. 5 appears earlier than Fig. 3?) (3) Lines 18-24 in Page 12 are not conclusions. The authors may want to move these sentences to another section of the manuscript. Also, lines 29-33 page 12 are not conclusions. (4) Figure 5 does not show “. . . a dedicated experimental set-up . . .” (page 6, lines 2-3), i.e. the text does not match what is seen in the Figure. The authors may want to adjust the text of the Figure. (5) Figure 1. The “black dot” KNMI radar product is not visible in the plot (only in the legend). Authors may want to adjust the plot/or legend. (6) There is room for improving the English language; incomplete sentences (e.g., Page 5, line 6) and minor typos (e.g., “criterium” should read “criterion” in Page 11, line 19) can be found in the manuscript; “CV” is only defined in Fig. 10 legend.