

Interactive comment on “The accuracy of weather radar in heavy rain: a comparative study for Denmark, the Netherlands, Finland and Sweden” by Marc Schleiss et al.

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Some very good points were raised during the discussion and many valuable suggestions for improving the quality of the paper were made. A lot of work still needs to be done but the overall impression of the three referees seems to be rather positive. Given the nature of the comments, we are very confident that we will be able to address all issues in a satisfactory manner during revision. Below, please find the response to each of the comments made by the reviewers during the discussion and how we plan to address them during revision. The most important modifications that will be made during revision are:

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1. Introduction: - Following up on the comments made by referee 1, we will add more supporting material and more in-depth discussion about the link between radar rainfall measurements and their use in urban hydrology
2. Data section: - The revised paper will contain substantially more details about the different radar products and how they were generated. Same for the rain gauges.
3. Results section: - Additional analyses will be performed to study the spatial distribution of rain gauges, their distances to the radars and how these could explain the observed biases. - The current way of computing ARFs will be compared to an alternative method by Ciach and Krajewski (1999).
4. Results and Conclusion sections: - Parts of the results and conclusions will be rewritten to make a better and more clear distinction between representativeness errors (areal vs point) and overall accuracy of the radar products.
5. Figures - The figures will be updated according to the suggestions by referee 3.

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