

Earth Syst. Sci. Data Discuss., referee comment RC1
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Comment on essd-2022-221

Anonymous Referee #1

Referee comment on "OpenMRG: Open data from Microwave links, Radar, and Gauges for rainfall quantification in Gothenburg, Sweden" by Jafet C. M. Andersson et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2022-221-RC1>, 2022

Review of OpenMRG: Open data from Microwave links, Radar, and Gauges for rainfall quantification in Gothenburg, Sweden, Anderson et al.

The paper presents an open-source dataset consisting of commercial microwave link (CML), radar and rain gauge data over Gothenburg, Sweden. Rainfall data from the three different sources are provided for a period of three summer months in 2015.

In general, the paper is well written and provides a good overview of the open-source dataset. There is a large potential in using multiple sources of rainfall data, especially in urban areas where the requirements for high resolution in space and time are important for urban runoff processes.

My only concern about the paper and the provided data is the access and direct usability of the data. The authors provide access to raw CML and radar data. For the radar data, the paper presents equations and standard parameters to convert the raw reflectivity data into rain rates. However, this is not the case for the CML data. Either the authors could provide CML data that has already converted into rain rates (such as a rainfall product) or provide information on algorithms or a literature review on how to perform the conversion. Also, methods on e.g. bias-adjustment of both CML and radar data could be provided.

By both supplying the raw data as well as directly applicable rainfall data, potential users could 1) use the data directly, e.g. in research in hydrological modeling, or 2) research further into conversion, bias adjustment and comparisons with other raw data conversion methods. Including both types of data would increase the number of potential users and create a basis for fundamental CML and radar research as well as an applicational leg.