Referee Report:

Overview for the second review

The reviewer pays respect to the authors' efforts in thorough revision and recognizes that the manuscript has been largely improved. The reviewer thinks that the manuscript will almost meet the criterion for publication in Atmospheric Measurement Techniques. However, there are 3 parts with room for improvement, listed below:

Minor comments:

ll. 119–121 (old l. 116 in my previous review):
I still feel a sense of incongruity in the phrase "in numbers". I found (missed in the first review) that you have already mentioned that these are "quantitative" indicators, so you can omit "expressed in numbers".

> We agree that the omission of this phrase will benefit the clarity of the sentence. We have changed:
>
> "Quantitative indicators based on various forms of quality indicator can also be used, describing the quality of the observations expressed in numbers, most often in the range from 0.0 (completely unreliable measurement) to 1.0 (perfect measurement)…"
>
> → "Quantitative indicators describing the quality of the observations can also be used, most often as a quality index (QI) ranging from 0.0 (completely unreliable measurement) to 1.0 (perfect measurement) …"

ll. 206–208 (old l. 193)
There is still no definition for G (Gh and Guh); I wanted to say that you should explain that G shows precipitation (amount).

Many readers can guess that the G (Gh and Guh) means "precipitation amount" observed by the heated and the unheated gauges, respectively, at the same station. However, you should clearly give a definition for all the variables appearing in the paper.

> Yes, you are right… We have added the new sentence defining these values into line 154 as these denotations appear for the first time in Fig. 2:
>
> „The following denotations are introduced for the precipitation values they measure: G_h is the 10-min precipitation amount observed by the heated sensor, and G_{uh} is the analogical value observed by the unheated one."

ll. 524–527 (old ll. 495–496)
I confirmed a paragraph in lines 524–527 in the new manuscript and I understood what you mean. However, it may be difficult for readers to understand it from this sentence structure. If you feel the necessity, please reconsider it.

> Indeed, after a long time we can see that this passage may be confusing. We have completely revised it:

"Pairs of simultaneous measurements from two sensors are verified for the last 12 time steps, observations with poor quality are not taken into account. If the number of quality-verified pairs (for previous time steps with $QI > 0.0$, and for the current one passing the previous checks, i.e. GEC, RC and RCC) is high enough (at least 9), the cumulative sums are calculated:"

→ "Pairs of simultaneous measurements from two sensors are verified for the last 12 time steps, excluding observations of poor quality (which QI is 0.0 for previous time steps and for the current time step failed GEC, RC or RCC check). If the number of the pairs is high enough (at least 9), the cumulative sums are calculated:"

We would like to thank the Reviewer very much once again for such insightful and precise comments and for his great patience with our paper!