Editor decision hess-2020-553 and hess-2020-554.

Unshielded precipitation gauge collection efficiency with wind speed and hydrometeor fall velocity. Part I and Part II.

Paper hess-2020-553 and its companion paper hess-2020-554 present a universal collection efficiency transfer function based on wind speed and hydrometeor fall velocity. The transfer function is developed based on CFD modeling experiments in part I and validated based on experimental results in part II.

The three reviewers who evaluated part I express conflicting views, two reviewers doubting the novelty of the paper, while the third reviewer is quite supportive. I believe the author response sufficiently explains the novelty of their contribution, as well as the added value of the function they propose for field application. However, I agree with the recommendation that the two parts of the paper be merged.

There are several reasons to do this. First, combining the two papers has the advantage of making both modelling and experimental results more directly accessible to the reader. Second, there is quite a bit of overlap between part I and II, in the Introduction as well Methods sections (and the overlap would grow given that reviewers recommended more explanation on the CFD modelling and transfer function in part II). Third, the authors can be more critical about what figures and information is essential to present to support the main storyline of the manuscript, especially in part I. Parts of the information provided in Methods and Results and some of the figures that show overlap in content can be moved to Supporting Information, where it is still accessible to the reader. In summary, merging the two parts has the advantage of bringing all the relevant information of this study together, in a much more condensed form.

Furthermore, please revise the manuscript to address the remaining review comments related to Part I and Part II, along the lines you suggested in your author replies.