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Atmospheric Measurement Techniques Discussions

Interactive comment on "Evaporation from weighing precipitation gauges: impacts on automated gauge measurements and quality assurance methods" *by* R. D. Leeper and J. Kochendorfer

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Thank you for your comment Dr. Yang,

The authors have recently submitted the revised manuscript.

In addition, we agree that there is a potential for overlap between the present manuscript and the other two other recently accepted articles on related subjects from the same lead author. In full acknowledgment of this potential issue, throughout the cre-

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Interactive Discussion

Discussion Paper

ation of the current manuscript we were perhaps overly-cautious in limiting the overlap between these manuscripts where possible. This led to the reviewers rightly demanding a better description of the algorithms used in the current manuscript.

The recently accepted Leeper et al. (2015a) manuscript compares collocated members of two networks (USCRN and COOP) that will be used extensively in future U.S. climate assessments; focusing on both temperature and precipitation. An unexpected result from this comparison was the wet COOP bias for precipitation. Gauge evaporation was presumed to be one of the many contributions to the size and direction of network differences; however, gauge evaporation was never fully explored.

Preliminary results from this study resulted in the development of a new approach to quantifying precipitation from USCRN gauges. This is described in Leeper et al. (2015b) where the two precipitation algorithms were quantitatively compared. While gauge evaporation is considered, it was only simulated using a precipitation generator. This manuscript describes a follow up study with the primary focus on gauge evaporation from the Geonor gauge and its impact of USCRN reported precipitation. The authors are willing to share drafts of these manuscripts if needed.

Interactive comment on Atmos. Meas. Tech. Discuss., 7, 12851, 2014.