

Comments:

The paper is well presented and the results reported are convincing. I have only a single concern in the methodology part regarding the evaluation of the satellite product with the gridded gauge data, which is also raised by another reviewer. The inclusion of gridbox values to calculate the basin scale statistics should be strictly based on an appropriate criterion for eg, only include those grid boxes that have 2 gauge values atleast (again see Hegerl et al. 2015) so that the reduction in the systematic error is not biased by any spatial infilling or interpolation techniques used in deriving the gauge product. It would be useful to report these gauge values per basin in a table or as a map in the supplementary document.

Introduction

Line 1: It is not just the developing part of the world, which lacks temporally and spatially continuous long-term rainfall data. Rewrite the introduction part with a few sentences in relation to the recommendations in Hegerl et al. 2015.

Reference:

Hegerl G. C., Black E., Allan R. P., Ingram W. J., Polson D., Trenberth K. E., Chadwick R. S., Arkin P. A., Balan Sarojini B., Becker A., Dai A., Durack P., Easterling D., Fowler H., Kendon E., Huffman G. J., Liu C., Marsh R., New M., Osborn T. J., Skliris N., Stott P. A., Vidale P. L., Wijffels S. E., Wilcox L. J., Willett K. & Zhang, X. Challenges in quantifying changes in the global watercycle. Bull. Am. Meteorol. Soc. doi:10.1175/bams-d-13-00212.1 (2014).