

***Interactive comment on “Does the GPM mission improve the systematic error component in satellite rainfall estimates over TRMM, an evaluation at a pan-India scale?” by Harsh Beria et al.***

**A. KUMAR**

ashishsnh647@gmail.com

Received and published: 11 September 2016

Dear Authors,

Personally, I am not very much convinced with the assumption that, the IMD gridded observed rainfall data is reliable for evaluation in entire Indian river basin. Since Rain gauges are not available in several grids during study period 2000-2014. If you see your cited reference (Pai et al ., 2014), there were about 2000-2500 gauges for all India during 2006-2010, which indicate an average rain gauge density of 0.4-0.5 gauge per 0.25° grid pixel. Hence, a misleading conclusion can arrive due to the errors in

C1

observed datasets especially in terms of POD and FAR. Please justify otherwise, I would suggest you please take those grids wherever, at least one rain gauges station is available.

My second concern is about interpolation of IMERG (0.1 degree by 0.1 degree) data to 0.25 degree by 0.25 degree (as IMD resolution). How you interpolated the cases such as "if a grid is showing hit event and another adjacent grid is showing false event"/ "if a grid is showing miss event and another adjacent grid is showing false event"/ "if a grid is showing miss event and another adjacent grid is showing hit event"? Please explain

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2016-221, 2016.

C2