

We thank the anonymous referee for providing valuable insights into the manuscript.

The referee's primary concern is about the influence of spatial interpolation to obtain gridded precipitation values over India, which in turn was used to obtain basin wise statistics. The gridded product was developed and quality controlled by the India Meteorological Department (IMD) (Pai et al., 2014) and has been extensively used in different statistical and hydrologic evaluations at both basin (Bisht et al., 2017; Kneis et al., 2014) and grid scale (Bisht et al., 2017; Kneis et al., 2014). As requested by the referee, we will report the number of rain gauges used to obtain the gridded precipitation product, their spatial configuration and variation with time in the revised manuscript.

We will modify the introduction section of our manuscript in line with advice from anonymous referee 1 and recommendations from Hegerl et al. (2014).

### References:

- Bisht, D. S., Chatterjee, C., Raghuwanshi, N. S. and Sridhar, V.: Spatio-temporal trends of rainfall across Indian river basins, *Theor. Appl. Climatol.*, 1–18, doi:10.1007/s00704-017-2095-8, 2017.
- Hegerl, G. C., Black, E., Allan, R. P., Ingram, W. J., Polson, D., Trenberth, K. E., Chadwick, R. S., Arkin, P. A., Sarojini, B. B., Becker, A., Dai, A., Durack, P. J., Easterling, D., Fowler, H. J., Kendon, E. J., 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. M. and Zhang, X.: Challenges in Quantifying Changes in the Global Water Cycle, *Bull. Am. Meteorol. Soc.*, 96(7), 1097–1115, doi:10.1175/BAMS-D-13-00212.1, 2014.
- Kneis, D., Chatterjee, C. and Singh, R.: Evaluation of TRMM rainfall estimates over a large Indian river basin (Mahanadi), *Hydrol. Earth Syst. Sci.*, 18(7), 2493–2502 [online] Available from: <http://www.hydrol-earth-syst-sci-discuss.net/11/1169/2014/hessd-11-1169-2014.pdf>, 2014.
- Pai, D. S., Sridhar, L., Rajeevan, M., Sreejith, O. P., Satbhai, N. S. and Mukhopadhyay, B.: Development of a new high spatial resolution (0.25× 0.25) long period (1901–2010) daily gridded rainfall data set over India and its comparison with existing data sets over the region., *Mausam*, 65(1), 1–18, 2014.
- Prakash, S., Mitra, A. K., Momin, I. M., Gairola, R. M., Pai, D. S., Rajagopal, E. N. and Basu, S.: A review of recent evaluations of TRMM Multisatellite Precipitation Analysis (TMPA) research products against ground-based observations over Indian land and oceanic regions, *MAUSAM*, 66(3), 355–366 [online] Available from: [https://www.researchgate.net/profile/Satya\\_Prakash/publication/281115874\\_A\\_review\\_of\\_recent\\_evaluations\\_of\\_TRMM\\_Multisatellite\\_Precipitation\\_Analysis\\_\(TMPA\)\\_research\\_products\\_against\\_ground-based\\_observations\\_over\\_Indian\\_land\\_and\\_oceanic\\_regions/links/55e](https://www.researchgate.net/profile/Satya_Prakash/publication/281115874_A_review_of_recent_evaluations_of_TRMM_Multisatellite_Precipitation_Analysis_(TMPA)_research_products_against_ground-based_observations_over_Indian_land_and_oceanic_regions/links/55e), 2015.
- Prakash, S., Mitra, A. K., AghaKouchak, A., Liu, Z., Norouzi, H. and Pai, D. S.: A preliminary assessment of GPM-based multi-satellite precipitation estimates over a monsoon dominated region, *J. Hydrol.*, doi:10.1016/j.jhydrol.2016.01.029, 2016.
- Shah, H. L. and Mishra, V.: Uncertainty and Bias in Satellite-based Precipitation Estimates over Indian Sub-continental Basins: Implications for Real-time Streamflow Simulation and Flood Prediction, *J. Hydrometeorol.*, 17(2), 615–636, doi:10.1175/JHM-D-15-0115.1, 2016.