

Interactive comment on “Potential of INSAT-3D Sounder Derived Total Precipitable Water Product for Weather Forecast” by Shailesh Parihar et al.

S. Nath (Referee)

saulnov07@gmail.com

Received and published: 8 July 2018

Paper entitled: ‘Potential of INSAT-3D Sounder Derived Total Precipitable Water Product for Weather Forecast’, this study showed validation of the INSAT-3D satellite derived product total precipitable water (TPW) dataset with radiosonde (RS), NOAA derived TPW, rain measured by rain gauges and one case study using Global Navigation Satellite System (GNSS). This work has done with different temporal scales and area with statistics. Study represents the capability of INSAT-3D sounder derived product and benefits for weather forecasting. Interesting to see that applying of GSICS correction to the sounder retrievals has impacted in the improvement of TPW products. INSAT-3D is geostationary satellite with first time sounder payload facility, keep in mind with this regard, this paper work is contiguous idea within the scope of Atmospheric

C1

Measurement Technique Journal. I recommend for publication but the following points have to illustrate my concern: 1. Give full abbreviation of IMDPS in abstract and PB section 2.2. 2. In section 2.4, Is GISCS is providing any coefficients? Author should provide clear information about this. 3. In section 3., Has 50km square area been considered? 4. In section 4.1, comparison of INSAT-3D and RS at daily, monthly and subdivional scale then why is not promising over northern Indian region as comparison of southern region of India? 5. In section 4.2, Comparison of spatially distributed INSAT-3D TPW with Actual Rainfall observation, there should be more detail about the figure 6 that how it has constructed? 6. In section 4.3, A case study of INSAT-3D TPW with ground base GNSS TPW has been showed. For the justice of this research (prior to the event INSAT-3D TPW can be considered as a precursor for mesoscale activity), author should give other case study too. It is strongly recommended that author should give one more case study of similar weather event.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2018-8, 2018.

C2