

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

Anonymous Referee #1

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The paper entitled ‘Potential of INSAT-3D Sounder Derived Total Precipitable Water 1 Product for Weather Forecast’ by Parihar et al. deals with the validation of INSAT-3D derived TPW dataset with other datasets at different temporal scales. With the limitations in deriving the TPW, the authors also showed its potential in predicting the thunderstorms by considering a case study. There is nothing new in the authors findings as INSAT-3d datasets are already validated against with different other datasets at different temporal scales. Also many existing articles are available that shows the importance of water vapor in predicting the storms. The authors neither show any improvements in the retrieval of INSAT-3D TPW nor show its applicability in statistical sense. Thus, I recommend ‘Rejection’ in its present form. Major concerns: 1) The motivation to the work is not clear as Ratnam et al. (2016) as already compared INSAT-3D

C1

datasets with other datasets. 2) How come one time RS observation serve as a representative of daily mean? 3) INSAT-3D PWV measurements are available only during cloud free conditions then how the authors compared rainfall vs. pwv? 4) Literature survey is very poor 5) With one case study the authors are claimed that high TPW values can be used as a precursor to forecast thunderstorm. Is it true for all the thunderstorm cases as well as all high TPW will lead to thunderstorms? 6) The English is also very poor and difficult to follow.

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C2