

Interactive comment on “Retrieval of convective available potential energy from INSAT-3D measurements: comparison with radiosonde data and its spatial-temporal variations” by Uriya Veerendra Murali Krishna et al.

Anonymous Referee #1

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1. The INSAT-3D is a new satellite and the basic datasets need to be validated before CAPE calculation. So I suggest the authors to provide some analysis on how the INSAT temperature, humidity etc. performs over the Indian region, by comparing with radiosonde or reanalysis data. Since India has a large latitudinal extent from near equator in South to subtropics in the North, it is essential to investigate whether INSAT data compares well everywhere or there is some spatial inhomogeneity.
2. The authors need to highlight the advantages of their present study i.e. what new can we extract about CAPE by using the INSAT data. The authors mention in abstract

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that "In this work, an attempt is made for the first time to estimate CAPE from high spatial and temporal resolution measurements of the INSAT-3D over the Indian region". But there are many other satellites available back from many years and there are several studies related to CAPE over Indian region. So the authors need to discuss the why their work is important and how better it is from the previous estimates.

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