Examining Quality of TRMM Monsoon Rainfall Over India

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With the introduction of earth observing satellites, remote sensing has become an important tool in supplying valuable information for various analysis. High resolution satellite data is capable of capturing the spatio-temporal variations and dynamics of the hydro-meteorological processes and variables and consequently, it has changed the water resources assessment and management methodologies significantly.

With technological advancements, satellite-based products have become economical and more accessible than real-time observed data. Therefore, the present study has been undertaken to explore the potential of high resolution space based product such as Tropical Rainfall Measuring Mission (TRMM) in capturing the Indian monsoon in different topographic conditions. Four homogeneous rainfall zones of India have been selected for this purpose to study the level of agreement qualitatively as well as quantitatively between the TRMM rainfall and the daily observed gridded rainfall dataset of India Meteorological Department (IMD).

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