**Comparative analysis of the rainfall retrieval algorithms from remotely sensed data**

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**Abstract**

Present study deals with the comparative analysis of the two different rainfall retrieval algorithms developed for the remotely sensed microwave estimates. For this purpose remotely sensed brightness temperature estimates of vertical polarization corresponding to 19 GHz, 22 GHz and 85 GHz are utilized. Basically, the information registered at the satellite sensor due to the scattering of the microwave frequencies from the ice crystals present in the rain bearing clouds is used for the development of the rainfall retrieval algorithms. Scattering based approach is best suited for the land region and convective precipitation. The results of the present study would be utilized to find out the best suited rainfall retrieval algorithm for the tropical region during Indian summer monsoon season.

**Keywords:** *Retrieval, brightness temperature; vertical polarization; scattering; convective precipitation*