

# Abstract

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The satellite images are sometimes affected by the presence of Clouds, especially during rainy season. But the need of satellite image for the monsoon is also important for natural resource management. Thus cloud detection and cloud removal are one of the important steps while processing the satellite images. The scattering and absorption characteristics of clouds vary with the cloud type. The detection of clouded pixels in satellite images is important to isolate cloud-free pixels that are used to retrieving atmospheric information or surface geophysical parameters from cloudy ones.

The possibility for an accurate cloud mask from satellite data under a variety of conditions has been a research topic since introduction of first satellite for earth observing TIROS-1 in 1960. However, several researchers have attempted to develop various techniques for getting the most information from cloud covered data but no significant accuracy could be achieved. In view of this, an attempt has been made to propose an automated detection of cloud covered image and removing the clouded pixel from satellite imagery using the thresholds value for various spectral test.

The research work has been carried out using the MATLAB and Remote Sensing tool named 'EDRAS 8.4 & ENVI 4.5'.