

A SIMPLE CLOUD DETECTION METHOD FOR GF-1 WFV IMAGERY

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ABSTRACT:

Identification of clouds in optical images is often a necessary step toward their use. However, aimed at the cloud detection methods used on GF-1 is relatively less. In order to meet the requirement of accurate cloud detection in GF-1 WFV imagery, a new method based on the combination of band operation and spatial texture feature(BOTF) is proposed in this paper. First of all, the BOTF algorithm minimize interference of highlight surface and cloud regions by the band operation, and then distinguish between cloud area and non-cloud area with spatial texture feature. Finally, the cloud mask can be acquired by threshold segmentation method. The method was validated using scenes. The results indicate that the BOTF performs well under normal conditions, and the average overall accuracy of BOTF cloud detection is better than 90%. **The proposed method can meet the needs of routine work.**

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