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## Abstract

The evolution of satellite image technology is enabling the manipulation of a greater range of data contained in increasing types of satellite images. Efficient and effective utilization of transmission bandwidth and storage capacity have been a core area of research for remote sensing images. Hence image compression is required for multi-band satellite imagery. In addition, image quality is also an important factor after compression and reconstruction. The wavelet transform is anticipated to provide economical and informative mathematical representation of many objects of interest. In the proposed system, Kekres wavelet transform is used for compression of multispectral satellite image based on compressive sampling

method. The compressed image performance is analyzed using Compression Ratio (CR), Peak Signal to Noise Ratio (PSNR), Mean Square Error.

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### Index Terms

Computer Science

Image Processing

### Keywords

Compressive Sensing Incoherence measurement Matrix. Compression Ratio (cr) mean Square Error (mse)

peak Signal To Noise Ratio (psnr)

