



SAR Image Compression using Forward Biorthogonal Wavelet Transform Coupled with SPIHT Algorithm

S.N. Rathnam

rathnam769@gmail.com

V. N. V. Sathya Prakash

prakashvvn@gmail.com

Abstract: SAR image compression is very important in reducing the costs of data storage and transmission in relatively slow channels. We propose synthetic aperture radar (SAR) complex image compression schemes based on FWT53_FFT with the set partitioning in hierarchical trees (SPIHT) algorithm. The FWT53_FFT (Forward biorthogonal 5/3 wavelet transform) encodes the real images converted by fast Fourier transform (FFT). The performance analysis is observed by changing in BPP(Bit per pixel) for a given image and based on varying BPP peak signal-to-noise ratio (PSNR) and (Mean square Error) MSE.

Keywords: FWT, FFT, BPP, PSNR, MSE, SPHIT.