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Abstract

This paper elucidate a new approach for speckle reduction in polarimetric synthetic aperture radar ("PolSAR") images based on the stationary wavelet transform. Noisy wavelet coefficients are thresholded using an entropic thresholding technique. Principal Component Analysis and Sum of Squared Coefficients methods are used to detect significant coefficients based on the entire polarimetric covariance matrix.

Keywords : PolSAR, speckle filtering, wavelet, entropic thresholding.