



CONTEXT-BASED PREDICTIVE LOSSLESS CODING FOR HYPERSPPECTRAL IMAGES (WedAmPO3)

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★ Abstract :

A cluster-based lossless compression algorithm for hyperspectral images is presented. Clustering is carried out on the original data according to the vectors spectra, and it is used to set up multiple contexts for predictive lossless coding. Low-order predictions are performed using adaptive Linear Least Squares (LLS) estimations which exploit the additional information provided by clustering. Prediction errors are then entropy-coded using an adaptive arithmetic coder also driven by data clusters.