Remote sensing plays a vital role in overseeing the transformations on the earth surface. Unsupervised clustering has a indispensable role in an immense range of applications like remote sensing, motion detection, environmental monitoring, medical diagnosis, damage assessment, agricultural surveys, surveillance etc In this paper, a novel method for unsupervised classification in multitemporal optical image based on DWT Feature Extraction and K-means clustering is proposed. After preprocessing the optical image is feature extracted using the discrete wavelet transform. On the feature extracted image feature reduction is performed using energy based selection. Finally different K means clustering is performed and analyzed using Matlab and ground truth data for improving classification accuracy.
Performance Analysis of K-Means Clustering For Remotely Sensed Images

References

Algorithm for clustering in feature Space"; IEEE Transactions on Neural Networks"; vol 20.

Index Terms

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Image Processing

Keywords

K-Means  multitemporal clusters centroids city block squared Euclidean