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RESEARCH ARTICLE

An Intelligent System for Mineral Identification using Unsupervised Learning Approach

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Abstract— KSOM is being used to identify classes of mineral in a hyperspectral data. To achieve this, Characterization map was obtained which was clustered using c-means clustering to obtain the characteristics cluster center. The network was trained using KSOM (an Unsupervised Neural Network) with the cluster centers used as input. The system was able to identify six classes of minerals and give the likely amount that is present in each group.

Keywords— KSO; Mineral; Hyperspectral data; Unsupervised learning; Cluster

Full Text: <http://www.ijcsmc.com/docs/papers/December2013/V2I12201353.pdf>