Merging SPOT Panchromatic Data with Multispectral Data(Xs) Using Wavelete and Comparing with IHS Method"

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Reliable and highly-automated Techniques are of importance in data processing.

Nowaday, data combination from various sources has been realized more and more because of different data collection methods and efficient sensors.

Aerial and satellite imagery,ground data,radar images,and existing data can all be utilized in an open-designed environment to give a soloution to part of a complicated problem.

Therefore,data fusion has become a focal in geomatics fields. This includes raster and vector data integration, data fusion of different sensors, and classification of multispectral satellite imagery.

In this paper,methods of merging raster data from various sensors are investigated. Attentions have been paied to combination of data from two sensors which have good spectral and spatial resolution. Therefore,the output image has high quality from both perspectives. Different methode of data merging such as IHS(Cylindrical,Hexcone,Brovey) and Wavelet Transformation with various basis vectors have been applied to panchromatic and multispectral images.

Data merging methods are assessed on the basis of factors including output image quality, and classification results.