

# **An Experiment to Color EROS Panchromatic Image**

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## **ABSTRACT**

Traditionally, the color transformation method such as IHS or LAB transformation is usually used as a fusion technique to color higher spatial resolution panchromatic image from lower spatial resolution multi-spectral image. However, the analysis indicates that the success of this image fusion technique depends heavily on a small proportion of spatial resolution between multi-spectral and panchromatic images. For example, a relatively high proportion of spatial resolution will over-resample the image, and consequently smooth down the color variation and feature sharpness of the resultant image. In this study, we develop a segmentation technique to color high spatial resolution panchromatic image. The experiment shows that the proposed approach is able to color EROS panchromatic image (2m resolution) from SPOT multi-spectral composite image (10m resolution) with color and sharpness preserved in the final product.

**KEY WORDS:** Color Transformation, Unsupervised Classification, Image Fusion

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