

**THE NEED TO SIMULTANEOUSLY CORRECTING AND NORMALIZING  
SPECTRAL RADIANCES OF MULTITEMPORAL IMAGES FOR LAND COVER  
CHANGE STUDY OF MOUNTAIN TOPOGAPHY**

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**ABSTRACT:** Spectral radiation normalization of multi-temporal optical satellite imageries is an important step in studying land cover changes. For undulant topographic terrain, we need simultaneously to correct image radiance caused by high height differences using DEM and normalize multi-temporal images over time. This paper first presents the results of radiometric correction caused by undulant mountain terrain and normalized multi-temporal images. After correcting and normalizing derived the CV index showed the normalized image quality better than the original image to 57% and 95%, respectively. Image classification M4\_CH after conducting simultaneous correction and normalization is with visual quantity different dominantly from the remaining image classification. The statistical tables (quantitative) related with land cover change analysis confirm that it is the need to conduct simultaneous spectral correction and normalization of radiation spectrum for mountainous terrain in Vietnam.

Key word: correcting, radiance, spectral, Spot 5 satellite image.