

## **Remote sensing change detection technique for snow cover area on himalayan region**

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### **Abstract**

Remote sensing is a valuable method to monitor large area of Himalayan region and to perform change detection on different set of images to calculate area under snow because as daily changing atmospheric condition may effect on snow area of Himalayan region. The major task is to remove shadow and to get high spectral resolution image. So we proposed technique slope matching for removing shadow and done pan sharpening to get high resolution image. After that we calculate area under snow and perform accuracy assessment with change detection to two different images. The experimental result shows that the effect of slope matching and pan sharpening is a valuable method for finding snow area with topographic correction in which overall accuracy of 95% ( Kappa coefficient 0.84) as compared to un topographic correction and un sharpening image in which overall accuracy is 90% (Kappa coefficient 0.78)