

A new Technique for Effectively Sharpening IKONOS Multispectral Images Automatic Image Fusion

[Leader]

Image fusion is an important technique for a variety of remote sensing applications. Most earth resource satellites, such as the SPOT, IRS, Landsat 7, IKONOS and QuickBird, provide both multispectral images at a lower spatial resolution and panchromatic images at a higher spatial resolution. Successful fusion results have been achieved with SPOT pan or IRS pan as high resolution inputs. However, existing techniques can hardly satisfy the fusion of the new satellite images from IKONOS, Landsat 7 and QuickBird. A new technique for effectively fusing IKONOS images has been developed. It is presented in this article. The fusion process is fully automated and the fused results are with highest quality.

By Dr. Yun Zhang, Department of Geodesy and Geomatics Engineering, University of New Brunswick, Canada