
Improved IBP for Super-resolving Remote Sensing Images

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Abstract

The research on super-resolution (SR) image recovery has been carried out in the last two decades. With the fast development of computer technology, more and more efficient algorithms have been put forward in recent years. The Iteration Back Projection (IBP) method is one of the popular methods with SR. In this paper, a modified IBP is proposed for remote sensing image processing. This improved IBP can efficiently deal with local affine transformations within images for SR. Experiments and results are presented using both a synthetic set of images generated from a single Landsat ETM+ channel and a set of Advanced Land Observing Satellite (ALOS) imagery.

Keywords

Super-resolution, image registration, Landsat, ALOS, iteration back projection
