

遥感应用

基于时间序列的MODIS遥感数据的辐射定标

摘要:

针对基于统计量的辐射相对定标的不足之处,提出了一种基于小波提升分解的小波变换算法,以解决时间序列上的MODIS遥感图像的辐射定标问题。该方法使用不同年限获取的MODIS卫星影像分别进行提升小波分解,对低频信号进行灰度辐射定标后再与高频信号重构,通过提升小波逆变换得到结果图像,实验结果表明效果较好。

关键词: 辐射定标 小波提升变换 相对辐射校正

A Study on Radiometric Calibration of Multi temporal |MODIS Remote Sensing Data

Abstract:

A wavelet transform algorithm is put forward in this paper based on wavelet lifting transform by comparing several kinds of relative radiometric calibration methods, and a gap of relative radiometric calibration method is supplied that is a traditional popular method based on statistical data. Multi temporal MODIS remotely sensed data were decomposed, using wavelet lifting transform, to get low frequency and high frequency sub images. Reconstruction is carried out after radiometric calibration of low frequency sub image. Finally, the composite image is obtained by reversing transform to work low frequency sub image and original high frequency sub image. Experimental results show that the above method is better than others.

Keywords: radiometric calibration wavelet lifting transform relative radiometric correction

收稿日期 2009-02-23 修回日期 2009-06-24 网络版发布日期

DOI: 10.3969/j.issn.1000-3177.2010.

基金项目:

云南省省院省校科技合作项目(2005YX27); 云南省教育厅项目(07C10429)

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