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图形、图像、模式识别

多源遥感影像多项式配准精度影响因素分析

邬建伟，秦艳平

武汉大学 遥感信息工程学院，武汉 430079

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摘要 影响遥感影像配准精度的因素众多，基于多项式配准模型在遥感影像配准中的应用，针对地形起伏、控制点分布、多项式配准模型次数、配准影像的多源异质性等影响多源遥感影像配准精度的因素，采用TM、SPOT和SAR等多源遥感影像进行了广泛的多项式配准实验分析，总结得出了上述各因素对多源遥感影像多项式配准精度的影响规律，为多源遥感影像的多项式配准实践提供一定的指导。

关键词 影像配准 多项式模型 多源遥感影像 配准精度 地面控制点

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Analysis on accuracy factors of multi-source remote sensing image registration by polynomial model

WU Jian-wei，QIN Yan-ping

School of Remote Sensing and Information Engineering，Wuhan University，Wuhan 430079，China

Abstract

There are many factors affecting the registration accuracy.According to the application of polynomial registration model in remote sensing image registration，this paper analyzes the following factors such as the terrain relief，the distribution of the control points，the degree of the polynomial，the image heterogeneity and so on.Finally，the multi-source images such as TM，SPOT and SAR images are used to conduct the registration experiment，and the influence rules of the above factors on multi-source image registration is concluded，which is helpful for the practical multi-source remote sensing image registration based on polynomial model.

Key words image registration polynomial model multi-source remote sensing image registration accuracy ground control point

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通讯作者 邬建伟 jianwei_wu@163.com