

遥感应用

基于POS数据的OMIS影像几何校正

摘要:

介绍了基于POS数据对OMIS影像做几何校正的原理和方法,不同于传统使用地面控制点对影像的纠正,该方法不需要地面控制点,这显著地提高了航空摄影后处理的工作效率,具有良好的应用前景。该处理流程主要分为两个部分:利用POS数据计算影像外方位元素和建立共线方程对OMIS影像做几何校正。实验证明,该方法对摆扫型成像方式的几何畸变校正是可行的,校正结果满足使用要求。

关键词: POS 几何校正 摆扫型成像 外方位元素

Geometric Correction of OMIS Image Based on POS Data

Abstract:

The paper introduces the principle and method of geometric correction of OMIS image based on POS data, the method does not need ground control points in compare with the traditional ones, which significantly improves the efficiency of aerophotograph post processing and has a good application perspective. The processing flow mainly includes two parts: firstly calculate exterior orientation using POS data; secondly rectify OMIS image by establishing collinear equation. The experiment proves that the rectification algorithm works very well and the results meet usage requirement.

Keywords: POS geometric correction whiskbroom imaging mode exterior orientation

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