



点云配准误差传播规律的研究

Research on Point Cloud Registration Error Propagation

投稿时间: 2008-10-9 最后修改时间: 2009-10-11

DOI: 稿件编号: 中图分类号: P215

中文关键词: [地面三维激光扫描](#) [点云配准](#) [配准误差](#) [误差传播模型](#)

英文关键词: [Terrestrial Laser Scanning](#) [Point Cloud Registration](#) [Registration Error](#) [Error Propagation](#)

作者	单位	E-mail
程效军	同济大学测量工程系	cxj@tongji

摘要点击次数: 52 全文下载次数: 65

中文摘要

点云配准存在误差,多站配准必然引起误差的传递,从而使得模型端点处的点位误差加大,研究和掌握点云配准误差的传播规律。本文引入摄影测量影像匹配的原理,对地面三维激光扫描仪在不同测站采集点云进行配准分析,并在此基础上深入探讨点云配准点云配准误差实验,验证了点云配准精度与点云模型累积误差的定量关系,从而可为点云配准的质量进行评估。

英文摘要

In multi-station registration of point clouds, error accumulation may increase point position error of model end point error propagation rules in order to evaluate point clouds data precision and registration quality. According to the registration problems about multi-station point clouds are analyzed. Based on this, error propagation rules are discussed. By experiments, the quantitative relationship between precision of point cloud registration is established. By experiments, the quantitative relationship between precision of point cloud registration and which can be used to evaluate registration quality of point clouds.