面向农业移动管理的信息获取技术 GPS-based Information Collection Technology for Agriculture Mobile Management

吴才聪 傅成 苏怀洪 郑立华 冀荣华 胡永光

北京大学

关键词： 精细农业 移动终端 信息获取 现场管理 增强现实

摘 要： 基于移动终端、嵌入式GIS和无线通讯等技术，设计了面向田间交互管理的农业移动管理系统技术框架，研究了农田信息无线采集与传输、基于位置的图像获取、GPS虚拟差分数据获取和无线数据传输等技术，开发了农业移动管理系统原型。移动终端具有GPS定位与导航、GPS照相、照片编辑与查看、专题图制作、属性信息查询、农田网格划分等功能。初步应用试验表明，该原型系统可应用于农田移动管理。 The technical frame of agriculture mobile management system for interactive management in the field was designed based on the mobile terminal, embedded GIS, and wireless communication. The related technologies of wireless collection for field information, image capturing based on GPS location, differential data collection from GPS virtual reference stations, and wireless communication for field information were developed. The prototype of the agriculture mobile system was also developed for experiments. The mobile terminal has the functions of GPS positioning and navigation, images capturing based on GPS, image editing and viewing, thematic map making, properties indexing, field grid making, and so on. The prototype system was experimented for information collection and site management in 2008. The result shows that it is practical in agriculture mobile management.

查看全文（请使用Adobe Acrobat 6.0版本浏览） 返回首页 引用本文