BUSINESS INNOVATION SYMPOSIUM (E6)
Innovation, Entrepreneurship & Investment: The Microscopic Perspective (1)

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INTELLIGENT CITY MANAGEMENT - BASED ON LAND COVER FEATURE CHANGES DETECTED BY SATELLITE IMAGERY

Abstract

China is in the rapid development of urbanization. Urbanization brings great convenience to people in many ways. On the other hand, it also brings a series of problems, such as population explosion, environment pollution, farmland occupation, ecological system degradation. All these problems bring great challenges for city management, especially for the mega-city as Beijing, which requires timely spatial data in combination with other data for intelligent management.

Traditional methods of information acquisition become the constraints of city managementdue to long period and high cost. Therefore, it is very urgent to use new and intelligent information acquisition technology to carry out real-time monitoring and effective city management. Based on regular satellite imagery acquisition abilities and more than 10 years expertise in image analysis, processing and interpretation, more than 70 features are extracted from Satellite imagery to provide 100 Services for government departments in Beijing. These applications can be grouped into 6 categories:Agriculture, City Operation, Environment Protection,Forestry and City Green Monitoring,Water, Land Resources/Uses.

Based on guaranteed high resolution satellite imagery, 21AT provides updated, objective and independent land cover survey, and subsequent change surveillance of interested features and targeted areas. To integrate the changes with other geospatial data provides comprehensive analysis, statics and various government reports, consequently keeping city in order and running smoothly and efficiently. Intelligent City Monitor based on Beijing series small earth observation satellites is an innovative approach for land cover survey and monitoring; and is the enabler for intelligent city management.