EFFECTIVE FORENSIC SATELLITE SURVEILLANCE

Robert Kelly, Data Base Manager,
The Earth Technology Corporation,
3777 Long Beach Boulevard, Long Beach,
California, 90807, USA

ABSTRACT

Satellite imaging has applications ranging from routine earth surveillance to covert surveillance. Forensic use of satellite data evokes consideration of delicate legal issues and will dictate the design of a surveillance program. In this paper a forensic satellite surveillance program which was developed and implemented in the American Southwest is described. The legal precedent of remote sensing evidence, data reliability, spatial resolution, image processing and data base are discussed. A geographic information system supplies the graphic data and subsequently the satellite data is integrated for evidence extraction and water law enforcement. The resulting litigations have relevance to similar and future resource monitoring activities and the evolution of forensic satellite surveillance.