Establishment of Remote Sensing Goundstation System

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This papers describes the key elements of a remote sensing groundstation system which is to be used by Satellite Technology Research Center(SaTReC) of KAIST. The system consists of 13m antenna and associated receiving system, data processing system, value-added product generation system and data distribution system. SaTReC groundstation system has been designed for acquisition, reception, recording, and processing data from KITSAT-3 and earth observation satellites such as SPOT, JERS, ERS, RADARSAT. Satellite data will be processed by precision product generation system using spacecraft model and radiometric and geometric correction algorithms. Users can search archived images through catalogue and browsing system which can be connected via internet and request to process in their requirements. The system will elaborate remote sensing experts to enlarge their research areas. In addition to providing key features of the system, this paper also includes survey of currently available earth observation satellites and new trends of remote sensing groundstation and its processing system.