EARTH OBSERVATION SYMPOSIUM (B1)
International Cooperation in Earth Observation Missions (1)

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DISCUSSION ON THE APPLICATION MECHANISM FOR REMOTE SENSING SATELLITE TO INTERNATIONAL DISASTER RELIEF AND MONITORING

Abstract

As the modern technology's development and the earth becoming a globe, major disaster has shown its more frequent, more destructive and more influential trend. How to do the disaster management and emergency response effectively and how to foreshow and warn the coming disaster is a big challenge to us.

In the disaster relief and monitoring field, there are four typical mechanisms by using remote sensing satellite technology, including United Nations Platform for Space-based Information for Disaster Management and Emergency Response(UN-SPIDER), UNITAR'S OPERATIONAL SATELLITE APPLICATIONS PROGRAMME (UNOSAT), International Charter 'space and major disaster'(Charter) and Asia Sentinel.

UN-SPIDER is a United Nations programme, to ensure that all countries and international and regional organizations have access to and develop the capacity to use all types of space-based information to support the full disaster management cycle. UNOSAT is a technology-intensive programme delivering imagery analysis and satellite solutions to relief and development organizations within and outside the UN system to help make a difference in critical areas such as humanitarian relief, human security, strategic territorial and development planning. Charter is an international collaboration among Space Agencies to support relief efforts with space-based data information in the event of emergencies caused by major disasters. Asia Sentinel is created to provide a platform for news, analysis and opinion on national and regional issues in Asia. It is independent of all governments and major media enterprises.

This paper focuses on the common ground and differences among the typical four mechanisms and analyzes their advantages and disadvantages. A new and general mechanism is put forward to apply to the modern disaster management and emergency response.