Earthquake Monitoring and case study by using Multi-parameters Remote Sensing information in China

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In the last ten years, a few national research plans and scientific projects on remote sensing application in Earthquake monitoring research are implemented in China and some progress were achieved on EQ-related ionospheric and RS precursors extracting and distinguishing by statistical research, case study and real-time monitoring experiments on historical or recent earthquakes. The LAI coupling models were computed and checked also, which laid the foundation for gradually promoting the practical use.

Focusing to advance earthquake monitoring capability and to search for the way of earthquake prediction, the prototype data processing and application platform of satellite-based EQ monitoring system, which integrate mainly GNSS, electromagnetism, infrared RS and D-InSAR technologies were developed systematically. and integrated earthquake remote sensing application system has been designed comprehensively.

On the basis of these works, the first space-based platform in earthquake stereoscope observation system in China, which named as China Seismo-Electromagnetic Satellite (CSES) now is on his phase of electrical model and qualifying model. According to the schedule, the 1st CSES will be launched before the end of 2016 and 2nd CSES will come into review soon.

Keywords: Earthquake monitoring, China Seismo-Electromagnetic Satellite, LAI coupling, remote sensing application