



Recent Progress and Development on Multi-parameters Remote Sensing Application in Earthquake Monitoring in China

Xuhui Shen, Xuemin Zhang, Shunying Hong, Feng Jing, and Shufan Zhao

Institute of Earthquake Science, CEA, Lab. for Earthquake Observation from Space, Beijing, China (shenxh@seis.ac.cn)

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. Focusing on advancing earthquake monitoring capability searching for the way of earthquake prediction, satellite electromagnetism, satellite infrared and D-InSAR technology were developed systematically and some remarkable progress were achieved by statistical research on historical earthquakes and summarized initially the space precursory characters, which laid the foundation for gradually promoting the practical use.

On the basis of these works, argumentation on the first space-based platform has been finished in earthquake stereoscope observation system in China, and integrated earthquake remote sensing application system has been designed comprehensively.

To develop the space-based earthquake observational system has become a major trend of technological development in earthquake monitoring and prediction. We shall pay more emphasis on the construction of the space segment of China earthquake stereoscope observation system and Imminent major scientific projects such as earthquake deformation observation system and application research combined INSAR, satellite gravity and GNSS with the goal of medium and long term earthquake monitoring and forecasting, infrared observation and technical system and application research with the goal of medium and short term earthquake monitoring and forecasting, and satellite-based electromagnetic observation and technical system and application system with the goal of short term and imminent earthquake monitoring.