



## **The Seismicity in Sichuan Province of China before and after the Wenchuan Earthquake of May 12, 2008**

Zhixian Yang and Yuntai Chen

Institute of Geophysics, China Earthquake Administration, Beijing 100081, China (chenyt@cea-igp.ac.cn)

The double-difference earthquake location algorithm was applied to the relocation of earthquakes occurred in Sichuan Province, China during the period from 2000 to 2008. The relocated seismicity of the region and different seismic belts of Sichuan Province using seismic data from 2000 to 2008 was compared with seismicity pattern imaged by using data from 1992 to 1999 the authors published in 2005. The result indicated that major conclusion can be confirmed by using the new data. The both of relocated results by using data from 1992 to 1999 and from 2000 to 2008 respectively imaged a close correlation between the relocated epicenters and tectonic structure of major fault systems expressed at the surface. The new focal depths confirmed that most earthquakes in this region occur at seismogenic layer depths of 20-30 km. The relocated seismicity of different seismic belts of this region still confirmed the images of epicenters and focal depths we mentioned before obtained by using data from 1992 to 1999. The authors discussed relationship between the seismicity pattern and the Wenchuan earthquake of May 12, 2008.