Characteristics of Spatial Distribution for Peak Ground Acceleration in 3 Aug 2014 Ms6.5 Ludian Earthquake, Yuanan, China

Chen kun (1) and Yu YanXiang (2)
(1) Institute of Geophysics, China Earthquake Administration, Beijing, China(chenkun-6620@163.com), (2) Institute of Geophysics, China Earthquake Administration, Beijing, China(yuyx@cea-igp.ac.cn)

Considering the geological context, focal mechanism solutions, aftershock distribution and attenuation characteristics of the ground motion in western China, shakemaps of PGA (Peak Ground Acceleration) for The Ludian Ms6.5 earthquake on 3 Aug 2014 was acquired, in which the Mothed of rapid generation ShakeMaps considering site effects was used, and the peak ground acceleration of 62 stations for this earthquake was used as interpolation. Then, distribution of PGA was amended by using PGA observations to correct system bias of theoretical estimates in the area without PGA observations. The results show that the attenuation of ground motion with distance for this earthquake was faster than that of Wang Su-Yun in 2000; the result of bias-corrected was more consistent with attenuation law of this earthquake. After adjusting, for the area with PGA greater than 40 cm / s2 was nearly 8000 km2, which was is reduced by about 40%. 