



Preliminary observation on seismicity of northwestern Korean Peninsula

Geunyoung Kim, Il-young Che, Jeong-Soo Jeon, and Myung-Soon Jun

Korea Institute of Geoscience and Mineral Resources, Earthquake Research Centre, Daejeon, Korea, Republic Of
(gandalf@kigam.re.kr)

Seismological bulletin of modern era shows relatively fewer seismicity in the Peninsula. Based on the bulletin, it has been widely believed that Korean peninsula belongs tectonically stable continental region. The inference has been valid, though recent observation, which is based on dense digital seismic network in southern Korean Peninsula, shows that small-magnitude earthquakes happened repeatedly at some areas. However, the old inference is now being undermined by both old earthquake records from historical documents and repeated damaging earthquakes in recent years. Two damaging earthquakes of southeastern part of Korean Peninsula brought home to us the reliability of historical seismicity. It is found that a number of seismic events have happened near to Pyeongyang in northwestern part of Korean Peninsula, area of high historical seismicity. Many of the events are categorized to be earthquakes from seismic discrimination, which is concordant with the historical records.