

The Western Tottori Prefecture Earthquake in 2000 and the Earthquakes in the North Hyogo Prefecture

Tetsuo Hashimoto[1], Shigeki Aoki[2], Hiroshi Ueno[3], Jun Takenaka[4], Koji Nakamura[4], Noritake Nishide[5], Nobuo Hamada[4], Kazumitsu Yoshikawa[6]

[1] Seismo.Volcano.Dep.,JMA, [2] Seismological and Volcanological Department, Japan Meteorological Agency, [3] SVD/JMA, [4] JMA, [5] Seismological and Volcanological Department / JMA, [6] Japan Meteorological Agency

The Western Tottori Prefecture Earthquake (depth of 11km) of M7.3 occurred on October 6, 2000. Although an earthquake of M2.1 had occurred before half a day near the main shock, the M2.5 or larger earthquake indicated seismic quiescence from the middle of 1999. Moreover, seismic activity continued intermittently from 1989 in this source region. Beneath this earthquake, the low frequency earthquakes occurred on June 14, 2000 (the depth of 33km, M1.7), also in 1994 and 1999. These phenomena may suggest the continuous ductile deformation in the lower crust. After micro earthquakes began to occur from December, 2000 in the northern part of Hyogo Prefecture estimated that crustal deformation is small, the earthquake of M5.4 occurred on January 12, 2001.