Characteristics of the seismic activity in the Hida mountain ranges and their relation to tectonics

Kiyoshi Ito[1], Yoshimi Iwaoka[2], Hiroo Wada[3], Shiro Ohmi[4], Ichiro Kawasaki[5]

[1] Disas. prev. Res. Inst, Kyoto Univ., [2] Earth Sci.,Toyama Univ, [3] Kamitakara Obs., Disas. Prev. Res. Inst., Kyoto Univ., [4] D.P.R.I., Kyoto Univ., [5] Earth Sci, Toyama Univ.

Characteristics of the seismic activity in the Hida Mountain regions have been well understood from the detailed analyses of the 1998 earthquake swarms and long-term earthquake data in the region. The seismicity shows swarm activity in the volcanic area, indicating frequent migration of swarms with shallow and relatively small events. The largest event is of M5.4 for the past 30years. Most earthquakes have strike-slip mechanism with maximum pressure axis of NW-SE direction. The fault planes determined moderate-sized events and their aftershocks had strikes of N-S or EW directions. A model of tectonic movement is presented to explain the seismic activity.