

Crustal Movements Observed at the Muroto Geophysical Observatory, Kochi, Shikoku, Japan (1996-2002)

Makoto Omura[1], Shigeru Nakao[2], Yasuhiro Hirata[3]

[1] Dept. of Environmental Science, Kochi Women's Univ., [2] ERI, Univ of Tokyo, [3] ERI, Univ. of Tokyo

Continuous observation of crustal movements have been carried on at the Muroto Geophysical Observatory (Lat. 33.2447 N, Lon. 134.1808 E, h = 10m, ERI, University of Tokyo) at Kochi, Shikoku, Japan. The observatory was established to monitor the crustal activities around the Nankai Trough where great earthquakes (M8) occurred in about every hundred years historically.

Ground strains and tilts observed during a period between January 1996 and December 2002 were preliminarily analyzed. Secular movements were estimated. (1)Secular strain change had compressive axis in NNW and its rate was about 8 micro-strain/yr. (2)Secular tilt change showed NW-down tilt and its rate was about 23 micro-rad/yr. The azimuth of maximum down was inconsistent with that inferred from leveling data in the region.