

Seismotectonics around the northwest edge of the Philippine Sea plate

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<http://www.sci.yamaguchi-u.ac.jp/geo/index.html>

We determine from the first motion of P-wave the mechanism solutions of the microearthquakes with magnitudes less than M 6.0 and focal depths less than 100km, which were selected from all the earthquakes having occurred in Yamaguchi Prefecture region in 21 years from 1977 to 1998. Most of the earthquakes occurring at depths of 0-30km show P-axes of E-W direction in which the recent motion of the Philippine Sea plate is reflected, and those of 60-90km show P-axes of NW-SE to NNW-SSE direction which mean the recent motion of the Eurasian plate. On the other hand, there are earthquakes caused under tensile stress of NE-SW to NNE-SSW direction among the earthquakes of occurring at depths of 30-60km. This means that the Philippine Sea plate may be now being torn by a pull of the sinking slab.