

Holocene activity of the Median Tectonic Line active fault system in the Tokushima Plain

Toshimichi Nakanishi[1], Keiji Takemura[2], Atsumasa Okada[3], Michio Morino[4], Hiroyuki Kitagawa[5], Masanobu Nakamura[6], Yuuji Tazawa[6], Kouya Ogino[7], Hiroshi Matsumoto[6], Masanori Hirose[6]

[1] Earth and Planetary Sci., Kyoto Univ, [2] Dept.Geophysics, Grad. Sci., Kyoto Univ., [3] Earth and Planetary Sci., Kyoto Univ., [4] OYO Corporation, [5] IHAS, [6] Physics, Kyoto Univ, [7] Nuclear Engineering, Kyoto Univ

It is important to reveal the activity of active fault for providing the large earthquake disaster. The activity of active fault has been reported to the trenching studies. In this article, the aim is to report the activity of Median Tectonic Line active fault system, to analyze closely the drilling cores. The drilling cores are obtained across the Naruto-South fault in the Tokushima area at the east margin of the Shikoku Island. On the all cores analyze the lithofacies and susceptibility. And two cores, at the no deformation zone analyze the grain size (10cm interval), sand contents (20cm interval). To investigate continuous development of stratum, we performed radiocarbon dating (38 samples) at the Kyoto University AMS system.

It is important to reveal the activity of active fault for providing the large earthquake disaster. The activity of active fault has been reported to the trenching studies. In this article, the aim is to report the activity of Median Tectonic Line active fault system, to analyze closely the drilling cores. The drilling cores are obtained across the Naruto-South fault in the Tokushima area at the east margin of the Shikoku Island.

On the all cores analyze the lithofacies and susceptibility. And two cores, at the no deformation zone analyze the grain size (10cm interval), sand contents (20cm interval). To investigate continuous development of stratum, we performed radiocarbon dating (38 samples) at the Kyoto University AMS system.

Core samples are classified into seven units, which are isochronous surface and whose depositional surface are almost parallel, by the total thirty-six correlative horizons which mentioned above. Six event deposits and after-event deposits, which exist only footwalls of faults, are recognized between these correlative horizons.

At least six events are recognized in the Naruto-South fault by this study. The average vertical slip rate is estimated at about 1.3mm/yr. To reveal continuous development of stratum, age of each events become clearer.