

Comparison between the composition of Holocene marine sediments and the damage rates of wooden houses due to the Kanto Earthquake

Susumu Tanabe[1]; Toshimichi Nakanishi[1]; Yoshiro Ishihara[2]; Katsumi Kimura[3]; Fujio Kumon[4]; Takaharu Tawara[5]

[1] GSJ, AIST; [2] Fukuoka Univ.; [3] GSJ,AIST; [4] Environmental Sci., Shinshu Univ.; [5] Mountain and Environmental Science., Shinshu Univ.

On the basis of a comparison between the stratigraphy of the post-LGM incised-valley fills under the Paleo Okutokyo Bay area and the damage rate of wooden houses due to the Kanto Earthquake of 1923 (Kaizuka and Matsuda, 1982), we have clarified following features.

(1) Highly damaged area locates on the eastern margin of the Musashino and Omiya Uplands where the unconsolidated valley fills distribute less than 30m. The damages rates are further less in the axis of the valley where the valley fills thicken more than 50m.

(2) Holocene marine sediments which distribute shallower than TP-30m consist of soft mud under the highly damaged area where as those consists of sand under the less damaged area.

(3) The uppermost 20m of the core sediments obtained from the extremely damaged area are characterized by an upward-shallowing Holocene marine clay with high water and terrestrial organic-matter contents.