

Drilling study of the Katata Fault, southern part of the Biwako-seigan active fault system, Kinki district

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The Katata fault is one of the active faults belonging to the Biwako-seigan active fault system, which have distinct flexure scarps. We carried out arrayed drillings and stratigraphical drillings for reconstruction of paleoseismicity and environmental changes at the footwall side of this fault.

1. Arrayed drillings

Nine arrayed drillings were done on about 80 meters breadth flexure zone of Holocene terrace. These drillings show cumulative deformation of late Quaternary deposit. About 700 and 4,700 yr.B.P. ¹⁴C dating obtained from the lowest terrace deposit and its covering cultivated soil, 30,000yr.B.P. from their unconformable underlain humic layer

2. Stratigraphical drillings

Two 10 meters depth stratigraphical drillings were done near the Katata-inner lake and Katata post office. In the Katata-inner Lake drilling, ¹⁴C dating from humic clay at the depth of 10 meters is about 5,800 yr B.P. These dating and depth suggest late Holocene subsidence in the footwall side of the Katata fault. Several upward-fining sedimentary units from sand to humic soil are observed in the same core upper than that horizon. We will report their dating at the day.