

Timing of the latest faulting in the Uemachi fault zone: Pit excavation surveys at Isonokami-cho, Kishiwada City

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We have conducted tectonic-geomorphological and paleoseismological studies on the Uemachi fault zone in order to reveal timing of faulting, for estimating seismic risk of the Osaka metropolitan area. We reported paleoseismological evidence for the most recent faulting of the Uemachi fault zone. The timing of the most recent event was estimated to be after 2420 +/- 40 yBP. Coseismic uplift along the fault zone would cause dam-up of the old Yodo and Yamato River to rapidly raise water level of the old Kawachi Lake. That could account for simultaneous submergence of archaeological sites near the lake at the end of the middle Yayoi period. Based on our excavated pits at Isonokami-cho, Kishiwada City, the latest faulting event occurred between 2200-2300 yBP and the Edo era. This timing is consistent with that in our previous studies.

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