

SSS032-06

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## Late Holocene fault scarps and activity of the Kozu-Matsuda fault

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We show new evidence for active tectonics of Tokyo metropolitan area by use of actively deforming landforms, Quaternary stratigraphy, and shallow to deep seismic reflection data tied with these stratigraphic constraints, resolving otherwise elusive blind thrust structures beneath highly urbanized areas. At the leading edge of the subducting Philippine Sea plate beneath the Kanto region, most significant active structures are recognized as active folding and/or faulting of Holocene and late Pleistocene fluvial and marine deposits above emergent splay thrust faults extending from a subduction megathrust that generated the 1923 Kanto earthquake (M7.9). In particular, fault scarps above the splay fault are interpreted as formed during historic earthquakes based on stratigraphy and trench excavations.