Seismic reflection profiling across the Itoigawa-Shizuoka Tectonic Line at Fujimi, central Japan

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The Itoigaea-Shizuoka Tectonic Line (ISTL) in Central Japan is a fault zone with a very high slip rate in Pliocene-Quaternary time. Our seismic reflection and gravity surveys across the southern segment of ISTL at Fujimi have revealed its geometry to a depth about 6 km. South-dipping strong reflectors were observed to a depth about 4 km, and are interpreted as the fault plane of ISTL and its subsidiary faults. The master fault was found to be of fairly low angle, in spite of the surface geologic observations that late Quaternary movements on this fault zone as a whole is dominantly strike slip.