

Drilling Survey and GPR Profiling on the Chino Fault in the Middle ISTL Active Fault System, Central Japan

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The 150-km-long Itoigawa-Shizuoka Tectonic Line active fault system (ISTL) in central Japan is one of the most active fault systems in Japan. The Chino fault is located in the middle part of the ISTL. The fault is characterized by a left-lateral high-average slip rate reaching 10 mm/yr, which is one of the most highest slip rates reported on active faults onshore in Japan. Along the linear fault traces of the Chino fault, terrace risers and river channels are systematically deflected by left-lateral slip, and fault scarps caused by vertical component of slip are identified in late Quaternary terrace surfaces. We carried out drilling surveys and ground penetrating radar profiling at Sakamuro, Chino City, for estimating activity of the Chino fault. Details of our results will be reported in the presentation.

Keywords: active fault, drilling survey, ground penetrating radar profiling, ISTL