

## Holocene activity of the Shibakawa fault in the Fujikawa-kako fault zone

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The Fujikawa-kako fault zone, located in the western side of the Mountain Fuji, strikes NNW-SSE and extends at least for about 20 km. This fault zone is the inland extension of the Nankai Trough, and is considered as a source fault of the Tokai large earthquake which has been altered for more than two decades in central Japan. To understand the seismic potentials for the Fujikawa-kako fault zone, quantitative assessment of recent activity is vital. The Shibakawa fault comprises the northwestern segment of the Fujikawa-kako fault zone, strikes N-S and extends for 7 km along the Shiba River. In this study, geological and geomorphological investigations are conducted to locate and characterize the recent faulting activity in Holocene. Based on the interpretation of aerial photos and field investigations, the fault scarps are recognized, which were developed on the Holocene terraces and fans along both the eastern and western sides of the Shiba River. Excavations and <sup>14</sup>C dating results show that 1) the fault is a thrust dipping east with moderate angle, 2) the Holocene alluvium and volcanic ashes have been displaced up to 8 m, and 3) the recent seismic faulting event probably occurred in the recent 1,500 years. The Holocene slip rate of the fault is estimated to be 0.86-1.2m/10kyr.