

Holocene faulting of the Urazoko Fault in Fukui Prefecture on the Sea of Japan

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We have evaluated the Holocene faulting and displacement of the Urazoko fault system in and around Tsuruga Bay on the Sea of Japan, based on our own high-resolution sonic survey and coring results, as well as existing survey data disclosed from the Japan Atomic Power Company (JAPC), complying with our request. We obtained important information about the age of faulting and vertical displacement of several key stratigraphic horizons such as the Kikai-Akahoya volcanic ash fall of ca.7300 years BP, at four points/areas along the fault system. Results obtained at each point/area are consistent, and we finally identified two faulting events after the fall of the Kikai-Akahoya volcanic ash. The vertical displacement per event is estimated to be around 2 meters, and the net slip may have attained 3 m because the fault system is considered to be a strike-slip-dominant fault based on the rake of slickenlines measured by JAPC on the fault plane at the excavation site.

Keywords: Active fault, Urazoko fault, Tsuruga Bay

