

Coring survey of the Urazoko Fault in Tsuruga Bay on the Sea of Japan

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We have conducted coring survey of F-39/40 fault, one of the two branch faults of the Urazoko fault system in the central part of Tsuruga Bay on the Sea of Japan, in order to reveal the Holocene faulting history of the fault system. In our presentation, main results of core observation, 14C dating and volcanic ash analyses are reported. We finally estimate about 2-meter vertical displacement of the Kikai-Akahoya volcanic ash horizon of 7300 years BP by the F-39/40 fault. The faulting history of the fault system is discussed in our oral presentation, integrating our high-resolution sonic survey and coring results with reexamination results of the existing survey data.

Keywords: Urazoko fault, Tsuruga Bay, Coring, Active fault

Table 1. Correlative horizons, their estimated ages and depth differences between the both sides of F-39/40 fault.

Correlative horizon	Stratigraphic unit	Estimated age in core DA-7 (cal yBP)	Depth (bsl, m) in core DA-7 (downthrown side)	Depth (bsl, m) in core UA-5 (upthrown side)	Depth difference between the both sides
1 K-Ah tephra	a	7300	38.6	36.7(erosion surface)	1.9
		7300	38.6	36.5 (estimated)	2.1 (estimated)
Z	b	8900	39.5	37.2	2.3
A		9100	40.1	37.7	2.4
2		9300	40.8	38.2	2.6
3		9400	41.3	38.6	2.7
B	c	9600	42.0	39.4	2.6
4	d	10200	≥ 42.9	39.5	≥ 3.4