

## Neotectonics of the Ushikubi Fault along the northern margin of Hida Highland, central Japan

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The Ushikubi Fault (UKF), 52 km long in a NE-SW trend, is the northernmost member of the Atotsugawa right-lateral strike-slip Fault System in the northern margin of the Hida Highland, Central Japan. Based on the result of trenching survey, most recent event of the UKF occurred about 700-1000 years ago (Miyashita et al., 2004, 2005).

The purpose of this study is to elucidate the geometry and activity of the UKF and to make clear the neotectonic history of the Hida Highland and the characteristics of the UKF.

We performed geomorphological and geological survey on the eastern UKF. Along the eastern UKF, fault lineament and right-lateral stream offsets are observable. The basement of the eastern UKF consists of Hida Metamorphic Rocks, Funatsu Granite Rocks and sedimentary rocks of Tetori Group. As the result of field survey, I found two new active fault's outcrops at Osore River and Wada River. Both outcrops contain the boundary fault of the Tetori Group and Quaternary system. In the edge of the northeastern extension of the UKF, I clarified that the UKF gets Quaternary Shomyodaki Pyroclastic Flows contact with the Hida Metamorphic Rocks in Kamegai Village. As for the geomorphology, the terraces that consist of the Shomyodaki Pyroclastic Flows have vertical offset about 60 m.

From the geomorphology and geology, the eastern UKF indicates a vertical displacement that the southeastern side is uplifted on the contrary to the western UKF. And the right-lateral offsets of major rivers and geologic boundaries in the eastern UKF are smaller than those in the western UKF.

From the quantity of the right-lateral offsets and displacement rate, start time of the present style activity on the UKF is estimated at about 0.6 Ma. It almost corresponds to the beginning of the activity of the Atotsugawa Fault and other active faults in the adjacent areas.