

## Timing of latest faulting event on the Suzuka and Nunobiki faults and estimation on fault segmentation

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North-south trending active faults run the eastern margin of Suzuka and Nunobiki Range, central Japan. These faults (Suzuka Fault and Nunobiki Fault) usually occurs on the geologic and geomorphic boundary between the ranges and piedmont (boundary fault), but often dislocates a series of fluvial terraces away from the boundary (frontal fault). The purpose of this presentation is to determine the timing of the latest event on these faults and discuss the possible segmentation based on the trenching results and the vertical slip rate.

Latest faulting occurred at ca. 3000 - 2800 yr bp at Ugagawa, on the frontal Suzuka Fault. Timing of the latest events for other two sites does not show discrepancy with this age. On the Nunobiki Fault the latest event occurred at ca. 10,000 yr bp at Katano and Yamaguchi sites, and is very much older than the latest activity on the Suzuka Fault.

Vertical slip rate on Suzuka Fault is 0.4 m/ka at central part and shows unimodal distribution. In contrast, Nunobiki Fault the maximum slip rate is 0.2 m/ka and divided into two, separated by some part which has no activity during the last 10,000 years. Thus, the north-south trending active fault can be segmented at least three, each of them has different timing of the latest activity and slip rate.