

## Late Quaternary activity of the Iida-Matsukawa fault in the southern Ina valley, Japan

# aiming lin[1], Nobuyuki Matsushima[2], Tadashi Maruyama[3]

[1] Institute of Geosciences, Shizuoka Univ, [2] Nature Assoc. Ina Valley, [3] Institute of Geosciences, Shizuoka Univ.

Geological and topographical investigations show that the Iida-Matsukawa fault striking northwest and extending for about 15 km in the southern Kiso Range, central Japan, is presently active with a horizontal slip rate of 1 mm/y. It is inferred that the Kiso Range is displaced about 2 km sinistrally and 500 m vertically. Many valleys were systematically sinistrally-deflected or bent at the fault trace. There is a linear relation of  $D=aL$  between the offset (D) and the length (L) of upper valley channel from the deflected point, where coefficient a is limited in a range of 0.08~0.3. The analysis of foliated cataclastic rocks show that the fault formed before the Quaternary and moved as a sinistral strike-slip fault with a normal displacement component since it formed.

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