

Offset streams across active faults in Chugoku region in the southwestern Japan

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Evaluation of slip rate of strike slip fault is difficult caused by absence of age information for references, such as streams and mountain ridges. Relationships between amount of stream offset (D) and length of stream upper than fault (L) were used as one of the methods to estimate it. In this study, data of D and L were gather from four active faults (Itsukaichi, Tsutsuga, Jifuku, and Ooharako) in Chugoku region in the southwestern part of Japan. These faults are right-lateral strike-slip faults with direction of northeast-southwest. Length of faults are 27 km, 58 km, 27 km, 42 km, respectively. Digital elevation model was used to measure amount of stream offset and length of stream. Results will be used for studies of slip rate of strike-slip faults, together with data of erosion rate around this region.

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