

1998 rupturing and paleoseismicity at northern Shizukuishi-bonchi Seien Fault Zone, Iwate, Japan

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We made trenches on Shinozaki earthquake fault, the surface rupture generated by the 1998 earthquake at Northern Iwate prefecture in order to clarify the underground structure and previous activities of this fault. Beneath the 1998 flexure scarplet, there is a fault zone dipping to the west with 1 m width. Ages of the fine sand layer, which covered gravel layer and was also deformed by this fault before 1998 event, and the layer which overlays fine sand with unconformity, show the previous event occurred at least once during c. 1,300 A.D. - c. 800 B.C. with 2-3 times larger displacement.