Recent rupture history on the eastern marginal active fault of Takada Plain, Niigata Pref., Northeast Japan (2)

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The recent activity of the eastern marginal active fault of Takada Plain, Niigata Prefecture, is investigated on the basis of geoslicing surveys. There are convincing evidences of three faulting events for the past 5,500 years. The most recent faulting occurred after the 16th century. The timing of the penultimate one is bracketed to be between A.D. 800 and BC 2,900. The age of the oldest event could be constrained between 2,900 and 3,500 B.C. The calculated average recurrence interval is 2,300-2,600 yrs. The ground surface has been vertically dislocated 1.2-1.5 m by single reverse slip associated with these past faulting events. In concert with historic records, the results show that the most recent faulting event corresponds to the destructive Kambun Earthquake in 1666.