

Source process of the Sep. 30, 1999 Oaxaca, Mexico, earthquake and its relationship to the stress change due to past earthquake

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We investigate the source process of September 30, 1999 Oaxaca, Mexico, earthquake that is located in subducting plate using joint inversion of teleseismic body wave and near-field strong ground motion. Then we examine the possibility of stress interaction between the past large inter-plate thrust earthquake of November 29, 1978 and 1999 Oaxaca earthquake. It is shown that the 1999 Oaxaca earthquake took place where the change of Coulomb failure stress associated with the 1978 earthquake was positive.

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