Slip distribution of 2000 Tottori-Ken-Seibu earthquake: Examination of two models for the use of short-period ranegs

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We have compared two kinds of models representing slip distribution of 2000 Tottori-Ken-Seibu earthquake. There are some trials to invert a fine slip distribution by using waveforms with period ranges (longer than 0.5s) shorter than those that have been commonly used (longer than 1-2s). However, to increase the resolution in space and time over the entire fault is not practical, mainly because of the increase in model parameters and the computational time. Thus we compare the following compromising models. One is a model inverted by using band-pass filtered (0.5s-10s) velocity waveforms with the fault geometry of the smallest rectangle that contains asperity regions. The rest is a model inverted by using the same data set with the fault geometry that contains the complete faults, but in this case, the subfault size is twice as large as that of the former.