

Source process and strong motions for the 1936 Kinkasan-oki earthquake by Wiechert seismograms

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Source process and strong motions for the great interplate earthquakes in Miyagi-ken-oki region are investigated. In this region, large events with JMA magnitude 7.5 were periodically occurred with an interval of about 40 years. We focused on the comparison of waveforms between the 1936 Kinkasan-oki and the 1978 Miyagi-ken-oki earthquakes. The former event was recorded by Wiechert seismograph, and the latter by JMA 59 type seismograph. We compare the feasible waveforms for both events at three stations: Asahikawa, Morioka, and Wajima. The polarity of on-set P-waves shows good agreement in both events, and the following two or three wavelets after the on-set also coincide. This indicates that both events have similar source process at the initial stage.