

Source process and strong motions of the 1978 Miyagi-ken-oki earthquake

Kenichi Kato[1], Masayuki Takemura[2], Tomonori Ikeura[3]

[1] Kobori Research Complex, Kajima Corporation, [2] Kobori Res. Comp., Kajima Corp., [3] KaTRI

Source process and strong motions of the 1978 Miyagi-ken-oki earthquake are investigated. In this region, large events with JMA magnitude 7.5 were periodically occurred with an interval of 40 years, and the next event is anticipated in the near future. We collected and digitized the strong motion records obtained by JMA 50-52 type seismograph at 11 stations surrounding the focal region of the 1978 event. Since the amplitude of JMA 50-52 type seismograph at three stations close to the epicenter is saturated after the onset of S-waves, we also collected the strong motion records obtained by SMAC type seismograph. Using the dataset, we estimate the source process of the 1978 event, and discuss its effects on strong motions.