Source process of the 1944 Tonankai earthquake inferred from JMA strong motion records

Masayuki Kikuchi [1], Misao Nakamura [2], Makoto Yamada [3], Kazumitsu Yoshikawa [4]

[1] ERI, Univ. Tokyo, [2] ISDP, [3] RISE, Waseda Univ, [4] Japan Meteorological Agency

The Tonankai earthquake (Mj 7.9) of December 7, 1944 is investigated using low gain strong motion data at four observatories of Japan Meteorological Agency. A few subevents are identified during the first 30 sec. The sum of the seismic moment for this duration is 5 x10**19 Nm, which is only 1/25 of the total seismic moment obtained by long-period surface waves and geodetic data. This suggests that the moment release occurred mainly after 30 sec of the initial break.