Source process of the slab earthquake in the southern part of Mie prefecture on Oct. 31,2000 estimated from waveform inversion

Makiko Yamauchi[1], Yasumaro Kakehi[2]

[1] Earth snd Planetary Sci. Kobe Univ, [2] Earth and Planetary Sci., Kobe Univ.

We estimate the source process of the earthquake in the southern part of Mie prefecture on October 31, 2000 (Mw = 5.5, depth = 43.6 km), which occured in the subducting Philippine Sea plate, from the waveform inversion of K-net data. This is the first case of analysis of slab earthquake of this scale. Accumlation of this kind of analyses will help us to understand the mechanism of slab earthquakes. The inversion result shows that the nodal plane with a higher dip angle of the two planes by Freesia project is preferred. The estimated total seismic moment is 3.9 x 10E+17 N*m. Two asperities are found at the northwest area of the rupture starting point.