

Seismic hazard maps for scenario earthquakes occurring on southeast part of Kego faults

Nobuyuki Morikawa[1]; Shigeki Senna[1]; Yuzuru Hayakawa[1]; Hiroyuki Fujiwara[1]

[1] NIED

Seismic hazard maps for scenario earthquakes occurring on southeast part of Kego faults are evaluated by applying a strong-motion prediction method 'Recipe' summarized by the Headquarters of Earthquake Research Promotion (HERP). Four source models are set based on the long-term evaluation by HERP. Used underground structure model is the same as our previous study on the 2005 west off Fukuoka earthquake (Morikawa et al., 2008).

For all four cases, most part of Fukuoka city, which locates just above on the fault plane, suffers seismic intensity of 6 upper or more in Japan Meteorological Agency scale. The area of seismic intensity 5 upper extends in most part of the Chikushi plain, which locates south of the fault. For the cases that the rupture start from northwest part of the fault, southeast region of the fault also suffers seismic intensity 6 upper or more. The calculated waveforms in such region are characterized by remarkable a velocity pulse with a dominant period of about 3 seconds.