

SSS026-P05

Room:Convention Hall

Time:May 27 14:00-16:30

Seismic activity of the December 2, 2010 Sapporo earthquake(MJMA4.6)

Masayoshi Ichiyanagi^{1*}, Teruhiro Yamaguchi¹, Ryosuke Azuma¹, Masamitsu Takada¹, Kazunori Kuroi¹, Takuji Yamada¹, Jun'ichi Miyamura¹, Hiroaki Takahashi¹

¹ISV, Hokkaido University

Shallow seismic activity including felt earthquakes had started in southern Sapporo region since October 22, 2010. Largest earthquake with M4.6 occurred on December 2, 2010. JMA issued earthquake early warning for this event. This activity indicated foreshock, mainshock and aftershock sequence. One temporal seismic station with mobile-phone realtime telemetering system was installed just after foreshock occurrence, and two more stations were deployed just same day of largest event. Precise hypocenters of 86 earthquakes by using above dense network were determined. Aftershock distribution concentrated on an eastward dipping plain with 60 degrees, which is agree with one of nodal plains of focal mechanism determined by P-wave polarities in this study. Foreshocks were distributed on deeper extend of aftershock region. Geometry of total hypocenter distribution is consistent with an estimated active fault beneath Sapporo urban region.

Keywords: Hokkaido, Aftershock Distribution, Active fault