

1.5-P18. Development of web-application system for waveform data observed by real-time seafloor seismic network, DONET

Mega-thrust earthquakes are anticipated to occur in the Nankai Trough, southwest Japan. In the source areas, we installed seafloor seismic network (DONET) in order to monitor seismicity, crustal deformations and tsunamis. DONET system consists of 20 stations, which is composed of strong-motion and broadband seismometers, quartz and differential pressure gauges, hydrophone, and thermometer. The stations are densely distributed with an average spatial interval of 15-20km and cover near coastal areas to the trench axis. We have developed two application using web-browser; monitoring waveform and downloading seismic data. Monitoring system can view the strong-motion and pressure gauge in real-time to promptly identify earthquake and tsunami for the use of disaster prevention officer of local government. After the 2011 Tohoku Earthquake, some local government need to organize regional disaster prevention plan. Obtaining and storing knowledge about seismological phenomenon is essential to provide plan, and getting information immediately is important for executing their scheme. Another system allows researchers to download strong-motion and broadband seismograph data. These event data are produced referring to catalogues from USGS and JMA, >M6 (far-filed) and >M4 (local-seismicity), respectively. These applications provide seismological information through the web-browsing technology and allow users to view and use DONET data easily.

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