

GNSS continuous observation network in southern Niigata Prefecture

YOSHIMI, Masayuki^{1*}, Yuki Matsuura², Toshiyuki Mori³

¹Geological Survey of Japan, AIST, ²Hitahchi Zosen Corp., ³GEOSURF Corp.

Continuous GNSS observation network is deployed in southern Niigata prefecture expanding an area of 50km to 15km. This is comprises of 30 GNSS stations (Leica GR10 with AR10 anntenna) attached on buildings or fixed on the ground.

GPS data of the network are analysed combined with 21 of the GEONET stations (GPS Earth Observation Network) and far stations of IGS (international GNSS service). GPS 24 hour data are analyzed everyday by means of Bernese GPS software (version 5.0) (Hugentobler et al., 2001), using the IGS precise ephemerides and Earth orientation parameters. Troposphere delays are estimated at each station for every one-hour period. Also, GPS/GLONASS analysis is conducted.

This research is funded and supported by Japan Nuclear Energy Safety Organization (JNES).

Keywords: GPS, crust deformation

