

Post-seismic deformation of the 2005 West Off Fukuoka Prefecture Earthquake derived from GPS observation (2)

Yuhki Kohno[1]; Takeshi Matsushima[2]; Shigeru Nakao[3]; Hiroaki Takahashi[4]; Masayoshi Ichiyanagi[5]

[1] Grad. Sch. Sci., Kyushu Univ.; [2] SEVO, Kyushu Univ.; [3] Kagoshima Univ.; [4] Inst. Seismo. Volcano., Hokkaido Univ; [5] Institute of Seismology and Volcanology, Hokkaido Univ

The 2005 West Off Fukuoka Prefecture Earthquake (MJMA =7.0) occurred in Genkai-nada on March 20, 2005. Kyushu University, Kagoshima University, and Hokkaido University installed GPS sites from March 20, 2005. We have installed 13 GPS sites until January 2006. Post-seismic deformation is seemed to almost finish (Kohno et al., 2005), however, we will still keep observing to pay attention to Kego active fault which runs southeast adjoining the hypocentral area of 2005 earthquake. Strain in Kego fault was increased due to the earthquake, evaluation of Long-term probability (30 years) of the Kego active fault increased 6.5 percent in maximum. It means the Kego active fault becomes the most dangerous active fault in Kyushu Island. Few earthquakes occur in the southeast part of this fault, it is very important to estimate deformation in the area. In this study, we will show the coordinate of each day using our GPS and GSI observation data, analyzed using BERNESSE GPS software version 5.0. Moreover, we will evaluate deformation induced by pre-slip of Kego fault in order to predict a destructive earthquake.