
[EJ] Evening Poster | S (Solid Earth Sciences) | S-SS Seismology

[S-SS09]Crustal Deformation

convener:Tadafumi Ochi(Institute of Earthquake and Volcano Geology, Geological Survey of Japan, The National Institute of Advanced Industrial Science and Technology), Mako Ohzono(Institute of Seismology and Volcanology, Graduate School of Science, Hokkaido University)

Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

Study of crustal deformation plays an extremely important role in the investigation of wide scale earth dynamics those are earthquake and volcanic activity, plate motion and so on. In our session, we discuss the study related to crustal deformation, such as development of observation instrument, observed crustal deformation, analysis method, and simulation study.

[SSS09-P01]A next-generation GNSS Integrated Analysis System

*Hiroshi Munekane¹ (1.Geospatial Information Authority of Japan)

Keywords:GNSS, kinematic analysis, Precise Point Positioning

The Geospatial Information Authority of Japan (GSI) routinely operate the system called "GPS integrated analysis system" which is aimed at analyzing GNSS data obtained by non-GSI GNSS stations to estimate coordinates which are consistent with the GSI's routine analysis solutions (Hatanaka et al., 2011). We developed a candidate of a new GNSS integrated analysis system based on the prototype system for PPP kinematic positioning of Japanese GEONET stations (Munekane, 2017). The new candidate system has potential advantages over the current system in that 1) kinematic time series are also provided, and 2) maintenance is easier. In this presentation, we compare the coordinate time series from the new and current system and discuss the quality of the time series. We also present kinematic GNSS time series taken at such events as earthquakes or magma intrusion, and discuss a potential impact of kinematic GNSS time series in understanding these events.