

# A next-generation GNSS Integrated Analysis System

\*Hiroshi Munekane<sup>1</sup>

1. Geospatial Information Authority of Japan

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.

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