

Development of a new precise positioning technique using multi-GNSS signals

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Geospatial Information Authority of Japan (GSI) is developing and standardizing new precise positioning techniques which deal with multiple GNSS constellations, GPS, QZSS, GLONASS, Galileo, and Beidou, in order to mainly encourage effective surveys at places where it is currently difficult to carry out them using only GPS satellites.

In FY 2014, we examined analysis methods to correct Inter System Bias and to using single/double differences between Beidou and other GNSS. Moreover, in case of using Beidou, we need to correct Inter-satellite-type Bias which is 1/2 cycle shift between GEO and MEO, IGSO. In addition, we obtained multi-GNSS data in five cities and evaluated the effects and problems using multi-GNSS signals.

This presentation shows results of FY 2014.

Keywords: GNSS, Geodetic Survey, Beidou