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SGD21-02

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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 a new precise positioning techniques which deal with multiple GNSS constellations, GPS, QZSS, GLONASS, and Galileo, in order to mainly encourage effective surveys at places where are currently difficult to carry out them by only GPS satellites. This project is composed of 1)Development of suitable analysis methods with multi-GNSS, 2)Evaluation of the methods, and 3)Standardization of the precise positioning techniques.

In FY 2012, we examined analysis methods to reduce Inter Frequency Bias and Inter System Bias. We will release the prototype of new software by integrating and expanding those ideas. In addition, we obtained multi-GNSS data using three kinds of GNSS receivers and compared baseline solutions with/without QZSS under various elevation cutoff angles.

This presentation shows results of FY 2012 and future plans from FY 2013.