

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

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GSI is developing and standardizing a new precise positioning technique 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 technique.

In fiscal year 2011, we examined existed analysis methods which cope with both classic GPS signals (L1 and L2) and modernized signal (L5) or multi-GNSS signals. Then we designed basic outline of the new software by integrating and expanding those ideas. In addition, we carried out preliminary experiments by using real multi-GNSS signals.

This presentation shows a blueprint of the project, results of FY 2011 and future plans from FY 2012.