Construction of web tool for GNSS data for volcano monitoring

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Japan Meteolorogical Agency(JMA) updated the volcano monitoring information system (VOIS) in August 2017 and started to analize GNSS data by this system. Because conventional GNSS data analysis system had stored the baseline length and height difference data, it was difficult to use data between two stations that were not stored. JMA reviewed the store method of analized GNSS data and started to store the coodinates data of each station similar to the date coodinates data published by the Geographical Survey Institute (F3). By reviewed this store method, it is possible to use the baseline length and height difference data between arbitrary two stations, three component displacement data (north-south, east-west, up-down) of each station with reference to an arbitrary station.

JMA developed a web tool which for volcano monitoring that can display multiple time series graphs using this GNSS coodinates data. Specifically, it can display graphs in the following four ways.
・Three component displacement data of each station without setteing reference station (north-south, east-west, up-down)
・Three component displacement data of each station with reference to an arbitrary station (north-south, east-west, up-down)
・Baseline length and horizontal distance, height difference data of each station with reference to an arbitrary station
・Baseline length and horizontal distance between arbitrary two stations, areal strain of arbitrary three stations, stacked data by adding multiple baseline length.

This presentation introduces this web tool.

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