

The geodetic VLBI observation and the analysis by GSI

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<http://vlbldb.gsi.go.jp/sokuchi/vlbi/>

The Geographical Survey Institute (GSI) regularly carries out both domestic and international geodetic VLBI experiments. The international VLBI experiment is carried out weekly with GSI's Tsukuba 32-m VLBI antenna, participating in the sessions of the International VLBI Service (IVS) as an IVS network station. The domestic VLBI experiment, named JADE (Japanese Dynamic Earth observation by VLBI), is carried out weekly with 4 GSI VLBI stations (Tsukuba 32-m, Aira 10-m, Chichijima 10-m and Shintotsukawa 3.8-m), and also the other stations (NAO Mizusawa 10-m, VERA Mizusawa 20-m, Gifu 11-m, Tomakomai 11-m, Kashima 11-m and Yamaguchi 32-m) occasionally participate in it to maintain the geodetic reference system in Japan and to obtain their astrometry antenna's precise positions.

This time, GSI has performed global analyses and calculated VLBI station positions and velocities all over the world. This is including the stations above-mentioned. VLBI global analyses have been already performed by NASA/GSFC in the United States and BKG in Germany, and the results have been submitted to IVS and IERS (the International Earth Rotation and Reference Systems Service).

And also GSI has established the method working on the global analysis as a research project since 2002, and come to be able to steadily obtain the solutions. From fiscal year 2004, GSI is going to release the global solutions on a regular basis, performing VLBI global analyses as a routine work.