Phase Delay Solution of Geodetic VLBI

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http://vldb.gsi.go.jp/sokuchi/vlbi/

   The technique using group delay is common for geodesy VLBI solution. We obtained the good result using phase delay between Tsukuba 32-m and mobile 3.8-m (about 300m distance) at Geographical Survey Institute (GSI) in Tsukuba Ibaraki.

   GSI is performing geodesy VLBI observation using Tsukuba 32-m VLBI station as reference for the purposes, such as Japanese geodetic reference frame readjustment and the monitor of crustal movement. It is carried out by the technique using group delay with CALC/SOLVE system to analyze the VLBI data.

   However, it has some difficulties to get the results, such as the data acquisition of many channels, bandwidth synthesis, etc. It is known from before to be able to obtain the result by the only single channel as well as to attain higher accuracy using phase delay like GPS analysis.

   This time, we reports the analysis using phase delay is performed since the good result was obtained although it is under a limited condition.