

# **Validation of new IGS products generated with absolute antenna models**

***Gendt, Gerd; Nischan, Thomas***

**GFZ Potsdam, GERMANY**

At its last workshop the IGS has decided to switch to the absolute receiver antenna calibration, either obtained by robot field calibration, anechoic chamber measurements or conversion from relative calibration. After finalizing the compatible satellite antenna phase centre variation models by TUM and GFZ using data from 1994 to 2005 a complete antenna model was available for testing. Since June 2005 (GPS week 1325) six analysis centres are contributing to a test with the new antenna model in parallel to the routine IGS Final products.

The parallel test has the goals (1) to test and validate the implementation of the new model in the various software packages (2) to study the effects on the IGS products and (3) to generate a new compatible IGS Reference Frame. After successfully solving initial implementation problems starting week 1341 the parallel results were in the final stage for a comprehensive validation.

The paper summarizes the results for the internal quality/consistency of the new products (satellite orbits, clocks, ERP) among the analysis centers and also the consistency to the 'classical' results. The results for the station coordinates and the updated reference frame will be presented in a separate paper. The new orbits and clocks were also tested in parallel precise point positioning applications.