

3.5.5 ITRS Centre

This report summarizes the activities of the IERS ITRS Centre during the year 2006.

ITRF2005 The ITRS Centre coordinated the activities of the ITRS Combination Centres as well as the interaction with the Technique and Analysis Centres that contributed to the ITRF2005 project. The ITRS Centre coordinated also the ITRF2005 evaluation process, before the official release of the ITRF2005 products in October 2006. A dedicated web site was constructed where all the results of the ITRF2005 are available to the users: <http://itrf.ensg.ign.fr/ITRF_solutions/2005/ITRF2005.php>

Maintenance of the IERS network

The ITRS centre assigns DOMES numbers to geodetic tracking stations or markers as unambiguous identifications of points in space, independently from the technique of their tracking instruments. The IERS network database, which contains the descriptions of the sites and points, is continuously updated as DOMES numbers are assigned. DOMES number requests can be submitted on line via the ITRF web site.

ITRF web site

The ITRF web site, available at <<http://itrf.ensg.ign.fr>>, provides an interface to consult the IERS network database. Site and point information can be requested on line; it contains approximate coordinates of the sites, the list of their points as well as their descriptions, their DOMES numbers and the list of ITRF versions in which they have been computed. Subsets of points can be selected and their ITRF coordinates can be requested at any time in any ITRF version if their coordinates are provided in the requested ITRF version.

The ITRF web site has been updated to include a cartographic server. The maps of the ITRF networks can be displayed depending of the measurement techniques and of the ITRF versions. Velocity vectors can be displayed as well as tectonic plates. Site information is now available with simple clicks and site selection has been simplified. The dynamical map can help users to familiarize with ITRF products and can be used for educational purpose. It can also be an interesting tool to select IERS sub-network depending on the measurement techniques, co-located hosted instruments or ITRF versions.

ITRF94, ITRF96, ITRF97, ITRF2000 and ITRF2005 solutions are available for download. ITRF2005 solution is now available as well as ITRF2005 combination coordinate residuals and position residual time series per technique. Local ties information has been updated for ITRF2005 processing and is also available for download in SINEX format or tables.

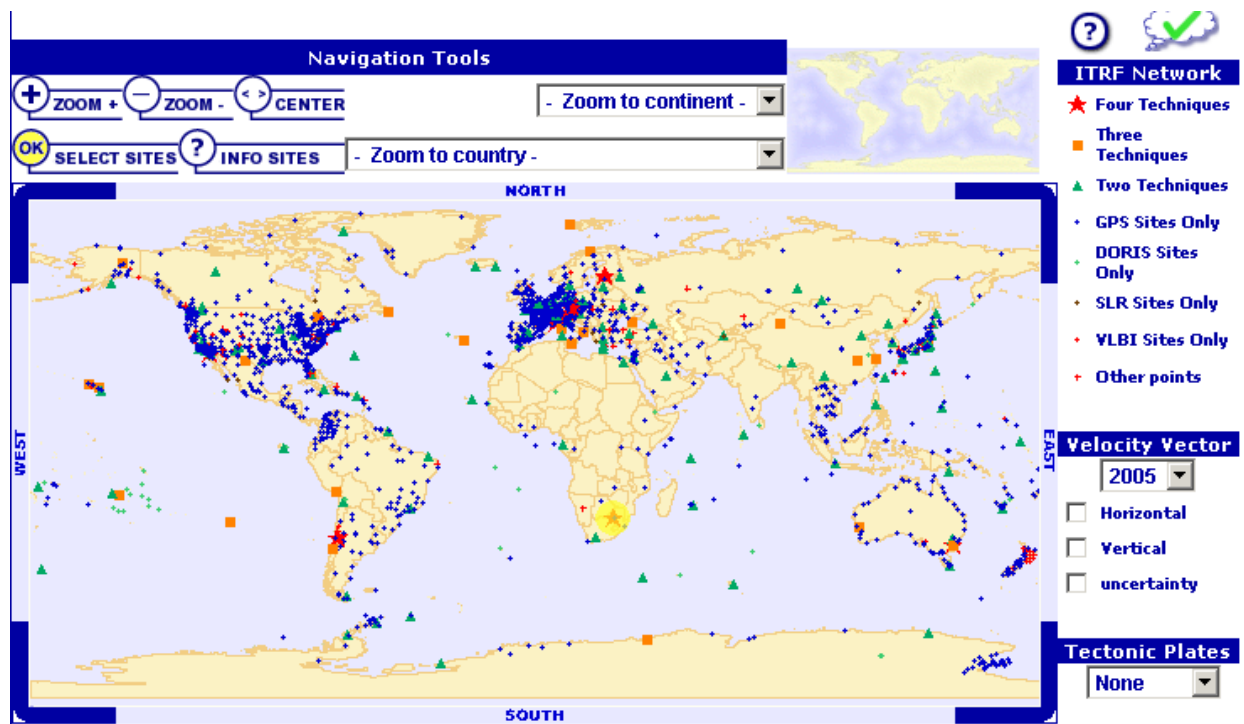


Fig. 1: ITRF web site dynamical map of the IERS network. <<http://itrf.ensg.ign.fr>>

Local ties of ITRF Co-location sites

The ITRS Centre has undertaken the initiative to animate the activity related to the reanalysis of available new and/or old surveys data of the ITRF co-location sites with the aim to generate SINEX files of local ties with full variance-covariance information. Starting with the available survey data at IGN, the ITRS Centre generated full SINEX files for approximately all DORIS co-located sites, using Geolab adjustment software. These SINEX files as well as other files made available by other groups (INA and CGS, Italy; BKG, Germany and Geoscience Australia) are posted at the ITRS web site. The local ties SINEX files used in the ITRF2005 computation are available at <http://itrf.ensg.ign.fr/local_surveys.php>.

Zuheir Altamimi, Xavier Collilieux, Bruno Garayt