Geophysical Research Abstracts Vol. 19, EGU2017-7247-1, 2017 EGU General Assembly 2017 © Author(s) 2017. CC Attribution 3.0 License.



Seasonal station variations in the Vienna VLBI terrestrial reference frame VieTRF16a

Hana Krásná (1), Johannes Böhm (1), and Matthias Madzak (2)

(1) TU Wien, Department of Geodesy and Geoinformation, Vienna, Austria, (2) Federal Office of Metrology and Surveying (BEV), Vienna, Austria

The special analysis center of the International Very Long Baseline Interferometry (VLBI) Service for Geodesy and Astrometry (IVS) at TU Wien (VIE) routinely analyses the VLBI measurements and estimates its own Terrestrial Reference Frame (TRF) solutions. We present our latest solution VieTRF16a (1979.0 – 2016.5) computed with the software VieVS version 3.0. Several recent updates of the software have been applied, e.g., the estimation of annual and semi-annual station variations as global parameters. The VieTRF16a is determined in the form of the conventional model (station position and its linear velocity) simultaneously with the celestial reference frame and Earth orientation parameters. In this work, we concentrate on the seasonal station variations in the residual time series and compare our TRF with the three combined TRF solutions ITRF2014, DTRF2014 and JTRF2014.