2014 ITRS Realization of DGFI: DTRF2014

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A new realization of the International Terrestrial Reference System is in preparation and will be finished in 2015. As the predecessor ITRF2008, the new realization ITRF2014 will contain station positions and velocities as well as consistently estimated Earth Orientation Parameters (EOP). It is expected that the ITRF2014 will be much more accurate and stable than ITRF2008 because: (i) six more years of observation data of the four space geodetic techniques, new observing stations and improved models are available (ii) in ITRF2014 for the first time non-tidal loading effects caused by atmosphere will be considered.

Three ITRS Combination Centres of the IERS are each in charge with the computation of this new realization. This paper presents the latest results of the DGFI realization DTRF2014. It demonstrates shortly the combination strategy applied by DGFI and its characteristics. It discusses the analysis results of the individual techniques, in particular the datum parameters and station position time series. And it finally presents the latest results of the combination of the four space geodetic techniques and the outcomes of TRF and EOP validation procedures.