

IGS Contribution to ITRF2004

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The IGS responded to the IERS call for participation by providing a time series of weekly SINEX files for the realization of ITRF2004. Including the pilot project phase, IGS official products have been available since 99/02/28 (GPS week 0999). Recombined weekly files were provided to IERS. These recombined weekly solutions include several minor corrections to the official products. They also cover a longer time period, from 96/01/21 (GPS week 0837) up to 05/07/30 (GPS week 1333). The characteristics of the weekly solutions also evolved in time, with an increase in the number of stations involved and the addition in 1999 of daily ERP's and weekly apparent geocenter estimates.

Due to various geophysical events and equipment hardware changes, discontinuities in the station coordinates time series do occur from time to time. In collaboration with several individuals/agencies, a table containing all known discontinuities was prepared and continues to be updated from time to time. The discontinuity information is also provided for the upcoming ITRF realization. A cumulative solution combining the IGS weekly solutions and discontinuity table was also recently provided. It can be used as a quality control for the GPS component of the upcoming ITRF.

An IGS working group on reprocessing of the global network measurements accumulated since the early days of IGS has been formed to investigate, define the scope, issues, requirements, etc... A status of the activities will be presented.