Summary

The ITRF96 solution described in this Technical Note represents a new generation of realization of the International Terrestrial Reference System (ITRS). It is achieved by combining simultaneously station positions and velocities using full variance-covariance information provided, in SINEX format, by the IERS analysis centers. Moreover, a rigorous weighting scheme is used, based on the analysis and estimation of the variance components using Helmert method.

The reference frame definition (origin, scale, orientation and time evolution) is achieved in such a way that ITRF96 is in the same system as the ITRF94. In addition, station velocities are constrained to be the same for all points within each site.

The ITRF96 contains more than 500 stations located on 290 sites. Figure 1 shows the coverage of these sites.

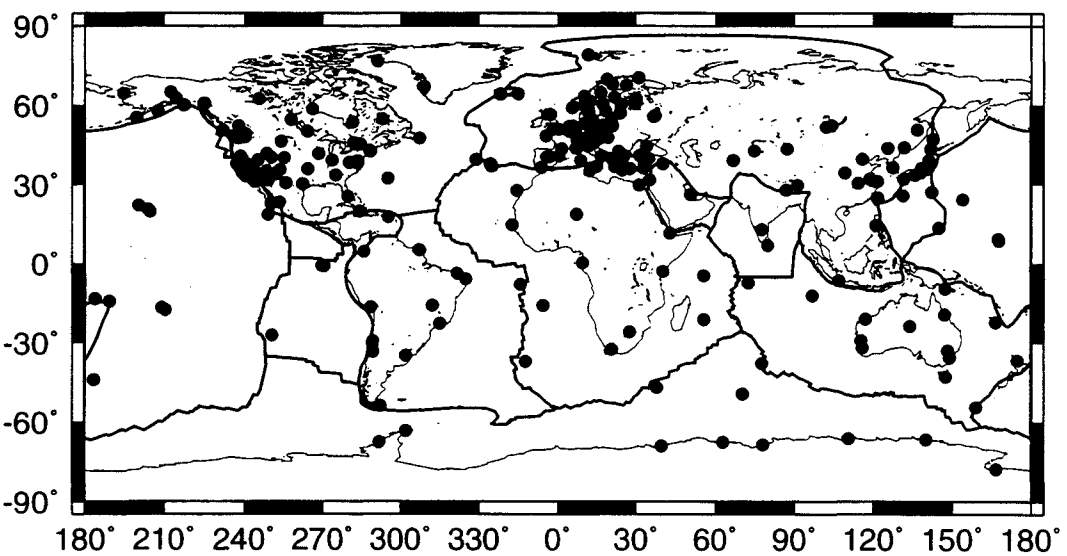

Figure 1. ITRF96 Sites