



Key Performance Indicators of the ITRF2014 Products

Zuheir Altamimi (1), Paul Rebischung (1), Laurent Métivier (1), and Xavier Collilieux (2)

(1) IGN LAREG, Univ Paris Diderot, Sorbonne Paris Cité, Paris, France (zuheir.altamimi@ign.fr), (2) IGN SGN, Saint-Mandé, France

The ITRF2014 was constructed with two main innovations, namely modeling the annual and semi-annual signals present in the station position time series, and Post-Seismic Deformations (PSD) for sites subject to major Earthquakes. In addition, a rigorous and improved combination strategy was applied, following the Least Squares adjustment principles, such as iteratively rejecting or down-weighting outliers whose normalized residuals exceed a threshold of 3-sigma. In order to evaluate the precision and accuracy of the ITRF2014 products, we explore some key performance indicators of its main products. These indicators include the performance of the seasonal signals and PSD models, the level of consistency of the four techniques, upon not only the ITRF2014 defining parameters (origin, scale, orientation), but also upon tie and velocity discrepancies at co-location sites, as well as polar motion components. A particular emphasis will be given to show evidences regarding the level of frame scale agreement between VLBI and SLR solutions.