

The International Terrestrial Reference Frame: preparation for ITRF2013

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After a brief description of the International Terrestrial Reference Frame (ITRF) and its history, the paper focuses on the preparation for the ITRF2013. It is intended to be the next version of the ITRF to be released by mid-2014. It will be constructed upon reprocessed solutions provided by the Technique Centers of the four geodetic techniques (VLBI, SLR, GPS, DORIS), and local ties at co-location sites. To that end, we operate preparatory analyses and enhancement of the CATREF combination software targeted towards an improved ITRF2013 solution. Selected results of these preliminary analyses will be presented and discussed, focusing on the accuracy of the combined reference frame, including: impact of estimating the seasonal signals (e.g. annual and semi-annual); applying non-tidal atmospheric loading corrections on station positions, velocities and Earth Orientation Parameters.