

Analysis of the seasonal parameters estimated in the ITRF2014 processing

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Annual and semi-annual periodic coordinate variations have been estimated simultaneously with positions and velocities of geodetic sites in the first step of the ITRF2014 processing. Four datasets are available corresponding to the four geodetic techniques, namely Global Navigation Satellite Systems, Very Long Baseline Interferometry, Satellite Laser Ranging and Doppler Orbitography and Radiopositioning Integrated by Satellites. At sites where stations of several techniques are operating, the seasonal parameters are worth comparing. Indeed, within a co-location site, nearby instruments are supposed to measure the same physical ground motion. As a consequence, any discrepancy between techniques could be interpreted as technique-specific errors if annual and semi-annual ground motions are computed over the same period. Thus, the aim of this paper is to evaluate the level of agreement of seasonal parameters estimated by different techniques at co-location sites.