



The JTRF2014 Combined EOP Series

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KALREF, JPL's KALman filter and smoother for REference Frames, has been used to produce JTRF2014, a combined terrestrial reference frame determined from the input SINEX files submitted by the IVS, IGS, ILRS, and IDS for ITRF2014. Using a Kalman filter and smoother allows the reference frame to be determined sequentially as a time series. Incorporating process noise, determined from geophysical fluid loading models, allows the observed station positions to be smoothed between discontinuities caused by earthquakes and equipment changes. Non-linear and non-seasonal changes in station positions, such as postseismic displacements, are automatically included in the smoothed time series. Using Earth orientation parameters (EOPs) helps tie the technique-specific frames together and yields a combined EOP series that is automatically consistent with the combined reference frame. The resulting JTRF2014 combined EOP series is assessed here by comparing it to other combined EOP series and to models of atmospheric, oceanic, and hydrologic excitation. The results of this comparison will be presented.