

Time Series Analysis of ILRS SLR Weekly Solutions

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As post ITRF2005 activities, the IERS ITRF Product Center is regularly analyzing time series of station positions and EOPs of the 4 techniques. These activities are important in order (1) to study the temporal behavior of both the stations and the frame physical parameters as the origin and the scale and (2) to monitor and evaluate the quality of the EOPs and their consistency with the ITRF2005 overtime. In this paper we present pertinent results of our analysis of the ILRS SLR routine time series of station positions and EOPs. Particular results will be shown to illustrate the SLR potential allowing to infer geocenter motion and station local displacements. Preliminary in progress investigations will be discussed in terms of the network effect on the estimated timeseries of the Helmert parameters, especially the scale as well as the translations that are considered as the components of the apparent geocenter motion.