



CODE's reprocessed subdaily ERP series

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The Center for Orbit Determination in Europe (CODE) is one of the global analysis centers of the International GNSS Service (IGS). It is a consortium of Astronomisches Institut, Universität Bern (AIUB, Switzerland), Bundesamt für Landestopographie (swisstopo, Switzerland), Bundesamt für Kartographie und Geodäsie (BKG, Germany), and Institut für Astronomische und Physikalische Geodäsie (IAPG) of Technische Universität München (TUM, Germany).

In the framework of the IGS reprocessing campaign, a time series of subdaily Earth rotation parameters (ERPs) with hourly resolution was generated. This time series is analyzed in the time and spectral domain. A subdaily ERP model is estimated and evaluated by comparisons with other models. Subtracting this model from the ERP time series allows for an analysis of the residual signals. Subdaily ERP time series based on Very Long Baseline Interferometry (VLBI) solutions computed by Institut für Geodäsie und Geoinformation (IGG Bonn) provide an independent validation of the GPS-derived results.