



First Results of the Earth Orientation Parameters Prediction Comparison Campaign

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Within the IERS the Institute of Geodesy and Geophysics of the Vienna University of Technology organizes the Earth Orientation Parameters Prediction Comparison Campaign (EOP PCC) as an effort to determine the current state of the art in Earth Orientation Parameter (EOP) predictions. The precise relationship between the celestial (ICRF) and terrestrial reference frame (ITRF) is needed to perform many advanced geodetic and astronomical tasks. For this transformation the EOP derived from VLBI, SLR, GPS, DORIS observations are used. For some tasks also real-time and even future EOP data are needed. The main idea of the campaign is to compare the various methods, models, techniques and strategies that can be applied to EOP prediction. Each predicted time series is evaluated by the same statistical methods and – what is different to many previous studies – the predictions have to be submitted before any EOP observations are taken in order to match the conditions under which predictions are made. There are three categories of prediction (ultra short-term, short-term and medium-term). Since October 2005, nine participating groups submit prediction results for any of the EOP: the x_p , y_p pole coordinates, UT1-UTC differences between Earth rotation time and clock time, length of day (LOD), and dX, dY (or dPsi, dEpsilon) celestial pole offsets. First results of the EOP PCC will be presented and compared with respect to different input data (e.g. IERS C04 data, EOP observations by space geodesy, atmospheric angular momentum data) and the various prediction techniques.