Summary of the Earth Orientation Parameters Prediction Comparison Campaign

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The precise transformation between the celestial (ICRF) and terrestrial (ITRF) reference frames is needed for many advanced geodetic and astronomical tasks. To perform this transformation for the time moment of observation the precise EOP data and their predictions have to be known. This paper presents the current status of the Earth Orientation Parameters Prediction Comparison Campaign (EOP PCC), which started in October 2005 under the umbrella of the IERS (International Earth rotation and Reference systems Service). The ultra-short term, short term and medium term EOP predictions submitted since then by different groups/algorithms were evaluated by means of the same statistical analysis. The mean prediction errors of the EOP for each group/algorithm were computed with respect to IERS C04 data to show the performance in each prediction category. It has been foreseen to terminate the EOP PCC in March 2008 however its achievements will be very useful for the IERS Working Group on Prediction, which is going to find the best prediction algorithm for computing operational predictions of EOP. This paper fully summarizes the ultra-short and short term categories taking into the account a few thousands of the predictions which have been collected since the beginning of the EOP PCC. The overall summary including the medium term predictions will be performed after collecting all the necessary EOP observed data. Our main attention will be focused on different prediction techniques used in different categories.