



Earth Orientation from the IERS Rapid Service / Prediction Center: Improvements with the use of atmospheric and ocean angular momentum data

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Near real-time estimates of Earth orientation parameters (EOP) and their short-term predictions can be enhanced by the use of Atmospheric Angular Momentum (AAM) and Ocean Angular Momentum (OAM) analysis and forecast data sets. Comparisons of current angular momentum forecast and analysis data sets may be used to estimate the level of possible error reduction in Earth orientation predictions beyond existing operational methods, for both UT1 and polar motion parameters. In addition, the correlations of a number of AAM and OAM data sets, with the EOPs, will be presented. Considerations for maintaining consistency, evaluating possible systematic errors in OAM and AAM data and improving the operational use of these sets will be discussed.