



Diurnal and semidiurnal excitation of nutation and polar motion estimated from recent geophysical models

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A new consistent set of 20-year time series of atmospheric and ocean angular momenta AAM/OAM based on the ERA-Interim reanalysis fields and the corresponding simulation from the ocean model OMCT, are used to estimate the influence on nutation and diurnal/semidiurnal polar motion. Results are compared to the earlier estimates using the AAM series from the NCEP/NCAR reanalysis model and OAM series from the barotropic ocean model, derived by Brzezinski, Ponte and Ali (2004, JGR, Vol.109, B11407). The estimated geophysical contributions are also compared to the results obtained from the space geodetic observations of Earth rotation.