



## **Comparison of different models of geophysical excitation in nutation**

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Celestial pole offsets caused by the excitations of geophysical fluids (atmosphere, ocean) and geomagnetic fields (geomagnetic jerks) are computed for a non-rigid Earth model to account for the realistic Earth's response by using the integration of the broad-band Liouville equations. The results are compared with the celestial pole offsets observed by Very Long-Baseline Interferometry. In our previous study we demonstrated that the application of a synthetic excitation in the epoch of the geomagnetic jerks improves significantly the agreement between the integrated and observed celestial pole offsets. In the presented study we focus on the analysis of differences between the integrated series excited by different models of geophysical fluids, the U.S. model NCEP/NCAR and the European models ERA supplemented with the ocean model OMCT provided by GFZ Potsdam.