Geophysical Research Abstracts Vol. 18, EGU2016-5889, 2016 EGU General Assembly 2016 © Author(s) 2016. CC Attribution 3.0 License.



Consistency of IVS nutation time series

César Gattano, Sébastien Lambert, and Christian Bizouard SYRTE, Paris Observatory, PSL Research University, CNRS, France (sebastien.lambert@obspm.fr)

We give a review of the various VLBI-derived nutation time series provided by the different operational analysis centers of the IVS and three combination centers (IVS, IERS EOP Center, and Rapid Service/Prediction Center). We focus on the stability of small nutation amplitudes, including the free core nutation and other atmospherically-driven nutations, that are of interest for improving Earth models. We discuss the possible origins of the differences (software packaged, inversion methods, analysis configuration including a priori and estimation strategy) and the consequences for scientific exploitation of the data, especially in terms of nutation modeling and inference of the Earth's internal structure.