



## **Comparison and Validation of VLBI derived Polar Motion Estimates**

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For a rigorous combination of Very Long Baseline Interferometry (VLBI) and Global Positioning System (GPS) data, they should not be subject to systematic differences. Nevertheless, such systematic differences are present between the official polar motion time series of the International VLBI Service for Geodesy & Astrometry (IVS) and the International GNSS Service (IGS). At first glance, this is not astonishing since these solutions were not computed with homogenized models and parameterization. However, such differences also exist between VLBI and GPS solutions where a detailed adaption of the different software packages has been performed. In a careful analysis of VLBI sessions we try to relate these systematic differences in polar motion to various possible causes. We therefore examine the VLBI solution setup and the data itself regarding network changes, analysis options and observation schedules.