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# International VLBI Service for Geodesy and Astrometry: Delivering high-quality products and embarking on observations of the next generation

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## Abstract

© 2016 Springer-Verlag Berlin Heidelberg The International VLBI Service for Geodesy and Astrometry (IVS) regularly produces high-quality Earth orientation parameters from observing sessions employing extensive networks or individual baselines. The master schedule is designed according to the telescope days committed by the stations and by the need for dense sampling of the Earth orientation parameters (EOP). In the pre-2011 era, the network constellations with their number of telescopes participating were limited by the playback and baseline capabilities of the hardware (Mark4) correlators. This limitation was overcome by the advent of software correlators, which can now accommodate many more playback units in a flexible configuration. In this paper, we describe the current operations of the IVS with special emphasis on the quality of the polar motion results since these are the only EOP components which can be validated against independent benchmarks. The polar motion results provided by the IVS have improved continuously over the years, now providing an agreement with IGS results at the level of 20–25 (Formula presented.) as in a WRMS sense. At the end of the paper, an outlook is given for the realization of the VLBI Global Observing System.

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## Keywords

Polar motion, Product quality, VLBI, VLBI Global Observing System