



Better Scheduling of the IVS-Intensives for Improved UT1 Estimates

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The IVS VLBI sessions are a daily series of 1-hour sessions specifically scheduled to provide rapid estimates of UT1. Typically, these sessions observe a few strong sources many during the hour. The failure of a single source, perhaps because of an outdated flux model, can result in a dramatic reduction in the number of observations. In 2009 John Gipson of the NASA Goddard VLBI proposed an alternative scheduling strategy which emphasized scheduling many sources which sample a larger part of the sky. Because there are more sources, these schedules are more robust against the failure of a single source. In addition, compared to the standard strategy, the sky distribution is better. However, because these sources are weaker the number of observations is reduced. In 2009 and 2010 the Goddard VLBI group scheduled, and the IVS network ran, a series of special 24 hour R&D VLBI sessions where the Kokee-Wetzell baseline was scheduled for alternating 1 hour periods using either the standard strategy or the new strategy. Based on a preliminary analysis of these sessions, beginning in August 2010, USNO began using the new strategy every-other-day. We report on an analysis of the R&D sessions, as well as using the alternative strategy in the operational intensives.