VLBI ASTROMETRY OF THE HIPPARCOS LINK RADIO STARS

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The VLBI extrgalactic reference frame contains 280 radio sources distributed evenly in both hemispheres. The average internal astrometric accuracy of this frame has reached 1 milliarcsecond. The link between this stable VLBI reference frame and the rotating HIPPARCOS frame is important to unify the radio and optical coordinates systems. We are determining the tie between the two frames by conducting VLBI observations of optically bright radio emitting stars which are common objects to both frames. We are presently monitoring 12 such radio stars with a high-sensitivity and high-accuracy VLBI technique for differential astrometry. We present several tests as an assessment of this astrometric accuracy.

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