

SOUTHERN HEMISPHERE VLBI ASTROMETRY

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Until relatively recently the number of radio source positions in the Southern sky measured to an accuracy significantly better than 1 arcsec was very small, with virtually no measurements south of -45 Declination. A program of VLBI astrometric observations is currently underway in the Southern Hemisphere with the aim of establishing an all-sky precision reference frame of extragalactic sources at the milliarcsecond level. Substantial progress has been made in the last few years towards raising the number and precision of Southern VLBI measurements towards the level obtained in Northern programs. Most of the measurements have been made on the 10,000 km baseline between Canberra, Australia and Hartebeesthoek, South Africa using dual-frequency wideband (Mark-III S/X) recording systems. A second important VLBI program to link the radio and optical frames in the South through radio stars will commence in 1991.