

VLBA 10th Anniversary Meeting

EXTENDING THE ICRF TO HIGHER RADIO FREQUENCIES: ASTROMETRY

C.S. Jacobs, G.E. Lanyi, C.J. Naudet, O.J. Sovers, L.D. Zhang (JPL)
P. Charlot (Bordeaux Observatory)
D. Gordon, C. Ma (GSFC) and the KQ VLBI Survey Collaboration

Astrometric observations of AGNs at 24 and 43 GHz have been undertaken to extend the ICRF to higher radio frequencies. So far, three VLBA observing sessions have covered the full 24 hours of right ascension and declination down to -30 deg. The resulting catalog of 108 sources has median formal position uncertainties of approx. 200 micro-arcseconds at 24 GHz. The 43 GHz uncertainties are about 1.5 times larger. Group delay residuals were excellent at ~20 psec weighted RMS. Comparison will be made with the S/X-band ICRF to set bounds on systematic errors.