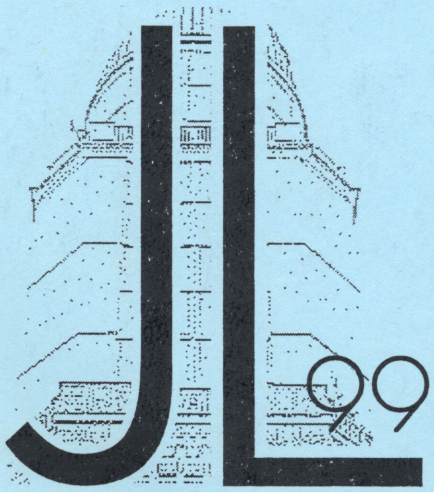
JOURNÉES 1999 & IX. LOHRMANN-KOLLOQUIUM

Motion of Celestial Bodies, Astrometry and Astronomical Reference Frames



BOOK OF ABSTRACTS

Lohrmann Observatory
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Densifying Hipparcos to Fainter Magnitudes in the Selected Fields Using the Nikolaev Telescope AMC

G.I. Pinigin, A.V. Shulga

Mykolayiv astronomical observatory, Nikolaev, Ukraine

Poster, B9

The principal peculiarities and technical possibilities of the Mykolayiv CCD Axial meridian circle (AMC) with computer control permit to use it efficiency for observation of stars coordinates with high accuracy, about 0."02-0."03. During 1996 - 1998 the observation of intermediate reference stars in the fields around the 190 north ERS for declination zone from +70 to -20 degrees and in the 12–14 magnitude range were made. The positions of these reference stars selected from the GSC were provided in the Hipparcos system for increasing of the optical/ radio reference frames linking combined accuracy and also, for reobservation and enlarging of HC. Components of the AMC star list were: intermediate reference stars from GSC in selected fields, about 13000; primary reference stars from HC, about 2000 stars. Future observation program for the AMC with new CCD (1024x1160) and original methods are discussed. It will be expected more high densification of the HC to faint stars up to 16.5.