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ABSTRACT BOOK



COMPILED CATALOGUE OF REFERENCE STARS FOR CCD-OBSERVATIONS OF EXTRAGALACTIC RADIO SOURCES IN THE NORTHEN SKY

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Compiled catalogue of more than 12000 reference stars of 10-16 magnitudes was obtained for 190 fields with centers in ERS in the northern sky for realization of optical CCD-observations of faint astrometric extragalactic radio sources (ERS) with the purpose of their link to VLBI-observations (ICRS system).

Some differential catalogues of reference stars around extragalactic radio sources obtained from photographic and CCD-observations by different observatories were considered. Photographic observations of 74 ERS fields were made in Pulkovo Observatory, 115 ERS in the observatory of Kiev University, 188 ERS in Romanian National Observatory in Bucharest. 208 fields around ERS were obtained in Nikolaev Observatory at the telescope with CCD-camera.

Comparisons were made for positions of common stars of the compiled catalogue with the similar ones of stars up to + 30 of declination from the UCAC2 and from the CMC13 Carlsberg catalogue using of proper motions of stars from the UCAC2 catalogue. The mean exterior accuracy is about 50-80 mas for the majority of chosen fields of the compiled catalogue. The interior accuracy of positions on both coordinates is not worse than 100 mas. There are no systematic deviations or they are insignificant. Each position of star in the compiled catalogue is given: the epoch and equinox J2000.0 for stars with proper motions chosen from UCAC2, the rest positions are given at the epoch of observation.