

FOCAT-DUSHANBE ASTROGRAPHIC CATALOG IN THE DECLINATION ZONE FROM -16 TO -30 DEGREES

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The work on the creation of the FOCAT-Dushanbe Photographic Catalog in the declination zone from -16° to -30° was started in 1983. Photographic observations were taken with the Zeiss astrograph ($D = 40$ cm, $F = 2$ m) whose aperture was reduced by applying a $D = 20$ cm diaphragm to improve the quality of stellar images. The field was reduced to $4^{\circ} \times 4^{\circ}$ for reference stars and to $3^{\circ} \times 3^{\circ}$ for program stars. Exposure time varied from 4 to 8 minutes to get images of stars down to 11.5 mag. For the reasons of economy, two neighboring sky areas were photographed on the same plate (Matveev 1984). The observations were made from 1983 to 1988. A total of 1200 plates were taken in 2400 sky areas resulting in a 4-fold overlap of the sky region mentioned above. Nine people took part in the plate measurements, but 75% of all the plates were measured by T. M. Loginova. The plate measurements were reduced by the authors in Bashkortostan on an IBM PC computer using the SRS Catalog (Smith et al. 1990) as a reference catalog. The preliminary version of the FOCAT-Dushanbe Catalog consists of measurements of 55 000 stars with a mean error of 0.28 arcsec.

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