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ИЗВЕСТИЯ КРЫМСКОЙ АСТРОФИЗИЧЕСКОЙ ОБСЕРВАТОРИИ

## УДК 520.82 CCD observations and photometric classification of stars at the Moletai Observatory

K. Zdanavicius, J. Zdanavicius and V. Straizys

Институт теоретической физики и астрономии, Litva, Вильнюс, KZ@mserv.itpa.lt

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In 2002 a VersArray 1300B CCD camera made by Princeton Instruments was bought for the Moletai Observatory. It contains 1340x1300 pixels of 20x20 micrometers size. The area of the chip is 26.8x26.0 mm. The chip is back-illuminated with Unichrom UV-enhancement coating and liquidnitrogen cooling. The quantum efficiency at 300 nm is about 40%, and at 500-650 nm it is more than 90%. Read-noise of the system is less than 5 electrons rms at a scan rate of 100 kHz. The camera is used on the 165 cm Ritchey-Chretien telescope with a focal reducer (field diameter is 17') and on the 35/51 cm Maksutov camera (field size is 1.13x1.22 sq. deg., 3.38 arcsec in 1 pixel). The camera is used both for photometric multicolor observations and for the asteroid search.

As an example, we describe the CCD investigation of an area in Camelopardalis (l = 146, b = +2.6). Photometric classification and interstellar extinction in the area is based on the results of multicolor photometry of 1376 stars brighter than V = 15.5 obtained with the CCD camera at the Maksutov telescope in the Vilnius seven-color photometric system [Baltic Astronomy 14,1-40,2005].