

Photometry of magnetic CVs on Zeiss-1000 telescope of SAO RAS

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Abstract. Cataclysmic variables (CVs) are close binary systems where the primary component is a white dwarf and the secondary is a red dwarf on the Main Sequence which fills its Roche lobe. The distance between the components is comparable with their size, thus the orbital period of such systems is less than a few hours and features the gap from 2 to 3 hours, caused by evolution of CVs. Unusual types of CVs are magnetic CVs, polars and intermediate polars. They are different because the white dwarf has strong magnetic fields of an order of 10 MGs in polars and less than 10 MGs in intermediate polars. Objects like these were searched for and monitored by the Zeiss-1000 telescope of SAO RAS.

We present results of photometric observations of magnetic CVs and those used as candidates. The candidates were observed a few times and their classification was made by inspection of light curves. New polars were monitored during a number of sets of the observations to define their orbital period. Obtained ephemerides were used in further spectroscopic and polarimetric research. For the last two years we have observed 12 objects, 4 of which were magnetic CVs.