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CCD PHOTOMETRIC OBSERVATIONS OF THE CATACLYSMIC STAR USNO 1425.09823278

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Name of the object:
USNO 1425.09823278

Equatorial coordinates:	**Equinox:**
R.A.= $19^{\rm h}27^{\rm m}11\overset{\rm s}{.}6$ **DEC.**= $+54°17'51''$	2000.0

Observatory and telescope:
Ostrowik Station of the Warsaw University Observatory, 0.6 m Cassegrain

Detector:	CCD Camera with a Tektronix TK512 CCD

Filter(s):	R Cousins

Comparison star(s):	GSC 3921.0974

Check star(s):	GSC 3921.0860

Transformed to a standard system:	No

Availability of the data:
Through IBVS Web-site as 4654-t1.txt

Type of variability:	SU UMa type cataclysmic variable

Remarks:

The star was discovered by J.-y. Hu et al. (1997). The superhump period was determined by Vanmunster (1997) as equal to 0.0561 day. Our observations were made during a 6.2 h run on the night of September 4/5, 1997, when the R magnitude of the star was approximately 14.3. The effective exposure time was 120 s. The time of the superhump maximum representative for the whole observing run is:

$$\text{BJD Max} = 2450696.3895 \pm 0.0012.$$

It was obtained by the least squares fit to the individual pulse maximum times as visible in Fig. 2. In the fitting procedure the superhump period was fixed on the Vanmunster (1997) value.

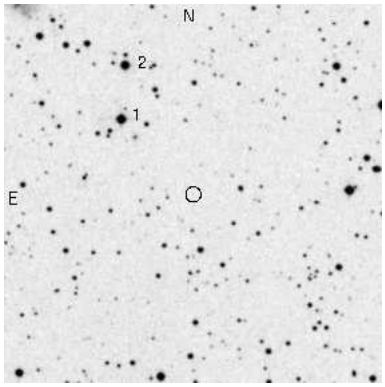

Figure 1. The Digitized Sky Survey finding chart for USNO 1425.09823278 covering a region 8 × 8 arcminutes centered on the position of the variable. The stars 1 and 2 are the comparison and check stars respectively. A rough mean R magnitude of the variable during our observations based on the USNO Catalogue magnitude of the comparison star was 14.3.

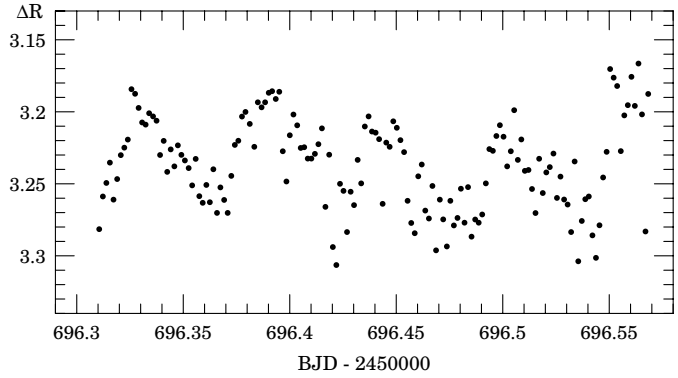

Figure 2. The light curve of USNO 1425.09823278 from 4/5 Sep 1997. ΔR denotes the difference of the magnitude of the variable and the magnitude corresponding to the sum of intensities of the comparison and check stars.

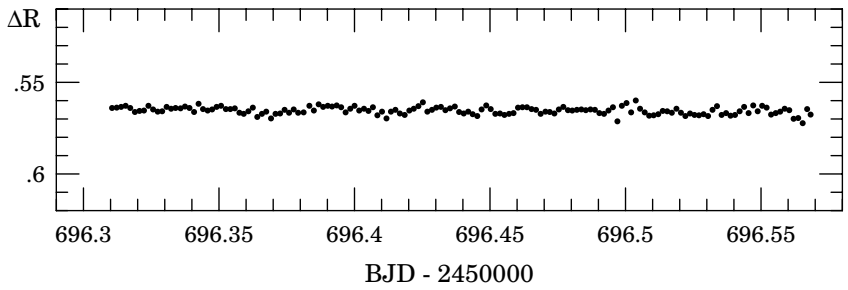

Figure 3. The behaviour of the comparison star during our observations. ΔR denotes the difference of the comparison star magnitude and the magnitude corresponding to the sum of intensities of the comparison and check stars.

References:

J.-y. Hu, Y.-l. Qiu, W.-d. Li, J.-y. Wei, 1997, IAU Circ. No. 6731
Vanmunster T., 1997, IAU Circ. No. 6740.