

ABOUT THREE CATAclySMIC VARIABLE STARS

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ABSTRACT. In order to detect the new outbursts of the three cataclysmic variable TV Crv, NSV 1775, NSV 895, their positions was scanned on the plates of the Odessa collection of the sky service obtained for the period 1958 - 1988. The new outbursts were detected for stars TV Crv, NSV 1725.

Key words: Stars: cataclysmic; stars: individual: TV Crv, NSV 1775, NSV 895.

1. TV Crv

The variable star type U Gem TV Crv was discovered by C.W. Tombaugh, about what was informed by Levy (1990). For the star 11 outbursts are revealed (Levy, 1990), in which the light of the variable reaches 12^m . In a quiet condition the star has the light of 17^m - 18^m . Hudec R.(1992) reviewed 107 plates of the Bamberg observatory taken in 1964-1967 and episodically in 1971-1974, but did not find new outbursts of the star.

In order to detect the outbursts of this variable its position was scanned on more than 316 plates of the Odessa collection of the sky service obtained for the period 1958 - 1988. On two plates, taken on the 23rd and 24th, April, 1963, the outburst of the variable was detected. The Julian dates of photos are 2438143.324 and 2438144.377. At the outburst the variable reached $12.^m1$ photographic magnitude.

The outbursts of the same brightness could be detected still more for 85 plates of the Odessa collection, on other plates the limiting stellar magnitude is more feeble $12.^m5$. It should be noted, that our photos of the given area of the sky nonuniformly cover the whole period of observations. So in 1961 there are 10 plates for the season of observations including 54 calendar days in succession, in 1962 - 11 plates for the season per 101 calendar days, in 1963 - 7 plates for the season per 78 calendar days. For other years there are only incidental photos from 1 up to 5 per year. Therefore it is difficult to draw a conclusion about outbursts of activity of the given star throughout all the period of observations.

2. NSV 1725

NSV 1725 = SVS 852 = CSV 441 -is the star presumably of UC type, discovered by Faddeyeva (Parenago, 1938). About 400 photos of the Odessa collection were reviewed, obtained for period 1958-1988. Two outbursts are revealed, stellar light in which reaches $10.^m5$ in pg-magnitude. Julian dates of photos are 2436574.306 and 2436855.612. Thus it confirms that this star is variable and refers to U Gem type.

3. NSV 895

NSV 895 = SVS 918 is the star found T. Hvan on the photos of the Moscow collection (Kholopov, 1953), presumably of UG type or nova, for which the outbursts on two plates reach $11.^m7$. At a minimum the star is more feeble $17.^m2$ in pg-magnitude (Kholopov, 1953). About 800 plates of the Odessa collection for period 1958-1988 were reviewed. In about 440 plates from the above, it would be possible confidently to determine an outburst (limiting stellar magnitude 13^m - 15^m). New outbursts are not revealed. It is most probable that the star is of nova type.

References

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