

COMMISSION 27 OF THE I. A. U.  
INFORMATION BULLETIN ON VARIABLE STARS

Number 3405

Konkoly Observatory  
Budapest  
14 December 1989  
HU ISSN 0374 - 0676

REMARK ON THE TWO DWARF NOVAE V 632 CYGNI AND V 630 CYGNI

The two dwarf novae V 630 and V 632 Cygni were discovered by Hoffmeister (1949) on Sonneberg plates taken with the 40 cm astrograph. He already recognized the type of variability, which was confirmed later by Rohlfs (1951).

V 632 Cygni

Only the following three eruptions described by Hoffmeister and Rohlfs are mentioned in the literature:

J.D. 242 9244 (13<sup>m</sup>.9),  
242 9571 (12.8), and  
242 9794 (pg. brightness indefinite).

Scattered observations by members of the AAVSO, AFOEV and SVSO obviously did not result in detecting further maxima, and Romano (1966) found only fluctuations in minimum light. Unfortunately the star is situated beyond the edge of our post-war astrographic plates. A sample of 110 far reaching sky patrol exposures of the years 1962 to 1965 (limiting magnitude 14<sup>m</sup>.5) did not show any maximum. According to the POSS charts 806 the star is blue in minimum.

All findings and the statistical considerations pursuant to the paper of Wenzel and Richter (1986) point to a cycle length of 100 days or longer.

It should be noted that the remark of Darsenius (1966) concerning the existing charts for this star is not correct: In reality the map of Hoffmeister (1957) is quite good, whereas that of Brun and Petit (1957) shows the variable at a (wrong) position 6 mm to the right (west) of the exact one and without any star of the near surroundings. Furthermore, in the listings of observations of the AFOEV in Bull. 38; 42; 43 the star has been given the wrong position 2031+39 instead of 2131+39.

V 630 Cygni

When checking 117 astrograph plates of the years 1961 to 1989 (centred at rho Cygni) for the small possibility of containing, contrary to expecta-

tion, V 632 Cygni at the edge of the field, I noticed the following 6 eruptions of the nearby V 630 Cygni, in addition to those given by Rohlfs (1951) from former Sonneberg plates:

J.D.	brightness	number of plates
243 8204.5	14 <sup>m</sup> .0	4
8290.6	14.7	3
9776.5	15.2	1
244 0839.4	15.1	1
3044.5	15.6	1
4117.5	14.4	2

The first eruption seems to have been a supermaximum: it lasted 4 days at least. The minimum brightness is below 16<sup>m</sup>.3.

Romano (1966) derived from his dense series of photographic observations a cycle length of 40 days. Our observations do not grossly contradict this result.

W. WENZEL

Sternwarte Sonneberg  
Zentralinstitut für Astrophysik  
der Akademie der Wissenschaften  
der DDR

References:

- Brun, A., Petit, M.: 1957, *Perem. Zvezdy* 12, No.1, 18.  
 Darsenius, G.: 1966, *Astron. Notes Univ. Gothenburg* 9, 30.  
 Hoffmeister, C.: 1949, *Astron. Nachr. - Astron. Abh.* 12, No.1.  
 Hoffmeister, C.: 1957, *Mitt. Veränderl. Sterne* 1, 309.  
 Rohlfs, E.: 1951, *Veröff. Sternw. Sonneberg* 1, No.5.  
 Romano, G.: 1966, *Publ. Oss. Astron. Padova* 132 = *Mem. Soc. Astron. Italiana* 37, fasc.3.  
 Wenzel, W., Richter, G.A.: 1986, *Astron. Nachr.* 307, 209.