

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

Number 2895

Konkoly Observatory
 Budapest
 14 May 1986
 HU ISSN 0374-0676

BEHAVIOUR OF THE X-RAY BINARY V 1727 CYGNI = 4U 2129+47 IN 1985

In monitoring the behaviour of V 1727 Cyg the star was inspected on 60 blue-sensitive plates (ORWO-ZU21+GG13+BG12) from 35 nights obtained with the Schmidt camera 50/70/172 cm of Sonneberg Observatory covering the time interval between 22 March 1985 and 31 December 1985. The individual estimates, which are summarized in Table I, are linked to the sequence of comparison stars given by Wenzel (1983). On most of the plates the star is below the limiting magnitude. The object is visible only on 19 plates. There, its brightness varies between $m_B = 18^m0$ and $m_B = 18^m4$. The behaviour given here characterizes the low or inactive state of the star which probably started near 7 September 1983 (Wenzel, 1983).

The observations listed in Table I are shown in Figure 1. They are reduced to one common epoch by means of the elements:

$$\text{Min(he1.)} = 244\,4403.743 + 0^d2182579 \cdot E$$

given by McClintock et al. (1982). The arrows indicate "fainter than" observations.

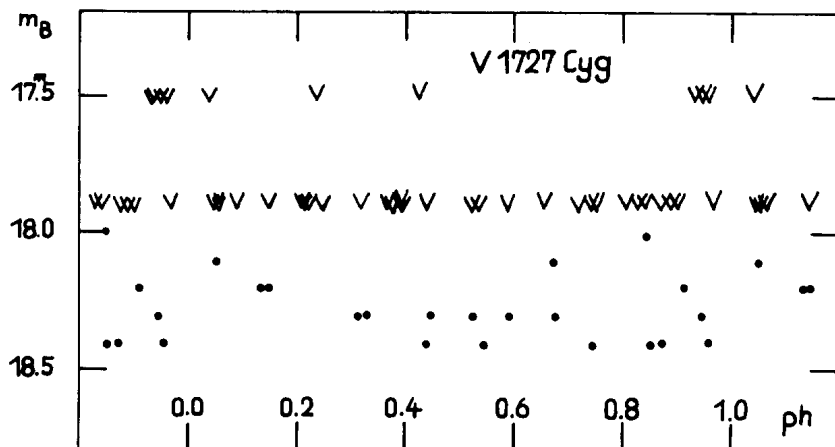


Figure 1

Table I

J.D. hel.	m_B	Rem.	J.D. hel.	m_B	Rem.
244....			244....		
6147.591	18 ^m .0:		6296.469	> 17.9	iv
6147.610	> 17.5	iv	6296.488	> 17.9	iv
6173.569	> 17.9	iv	6298.490	> 17.9	iv
6173.587	> 17.5	iv	6298.509	> 17.9	iv
6175.550	> 17.5	iv	6299.477	> 17.9	iv
6175.569	> 17.5	iv	6299.497	> 17.9	iv
6177.558	> 17.9	iv	6320.477	> 17.9	iv
6177.575	> 17.9	iv	6320.496	> 17.9	iv
6200.496	> 17.9	iv	6321.486	> 17.9	iv
6200.515	18.3		6321.505	18.1	
6210.502	> 17.9	iv	6327.441	18.4	
6260.475	18.1		6327.459	18.4	
6260.495	18.2		6328.438	18.4	
6260.514	> 17.5	iv	6328.458	> 17.9	iv
6261.517	> 17.9	iv	6351.376	> 17.9	iv
6261.536	18.2		6355.383	> 17.9	iv
6264.521	18.3		6358.324	> 17.9	iv
6264.540	18.3		6360.371	18.4	
6270.548	> 17.9	iv	6373.271	18.4	
6271.520	> 17.9	iv	6373.291	18.3	
6271.538	> 17.9	iv	6374.273	18.3	
6272.516	> 17.9	iv	6374.295	18.4	
6272.536	18.3		6385.293	> 17.5	iv
6272.554	> 17.9	iv	6386.294	> 17.9	iv
6288.411	> 17.9	iv	6387.318	> 17.9	iv
6288.430	18.2		6404.233	> 17.9	iv
6291.434	> 17.9	iv	6404.253	> 17.9	iv
6292.423	> 17.5	iv	6405.250	> 17.9	iv
6292.443	18.3		6431.225	> 17.9	iv
6293.505	> 17.9	iv	6431.238	> 17.9	iv

iv = invisible

W. GÖTZ
 Akademie der Wissenschaften
 der DDR, Zentralinstitut für
 Astrophysik, Sternwarte Sonneberg
 DDR

References:

- Wenzel, W., 1983, I.B.V.S., No. 2452
 McClintock et al., 1982, Astrophys. J. 258,245