

COMMISSION 27 OF THE I. A. U.  
INFORMATION BULLETIN ON VARIABLE STARS  
Number 1112

Konkoly Observatory  
Budapest  
1976 March 8

OBSERVATIONS OF YZ CANIS MINORIS - NOVEMBER  
AND DECEMBER 1975

During November and December 1975, observations were carried out at Boyden Observatory of the flare star YZ Canis Minoris (R.A.  $7^{\text{h}}42^{\text{m}}$  decl.  $3^{\circ}39'$  (1968.0), visual magnitude 11.6).

The 41 cm Nishimura reflector was used for this work, with a Johnson B. filter and a cooled EMI6256A photomultiplier tube as the detector.

The total monitoring time was  $33^{\text{h}}46^{\text{m}}12^{\text{s}}$ . During this time nine flares were recorded. Of particular interest is the flare event which occurred on the 7th December. The  $\frac{I_0+f-I_0}{I_0}$  value was particularly large, viz. 16.30. This was preceded by a flare of  $\frac{I_0+f-I_0}{I_0}$  value 2.72 a few minutes earlier. This activity was undoubtedly a single event in that the slow decay continued for the rest of the night.

A.H. JARRETT and J.B. GIBSON  
Boyden Observatory, Department  
of Astronomy, University of the  
Orange Free State, Bloemfontein.  
Republic of South Africa.

YZ CMI - NOVEMBER AND DECEMBER 1975

Date	Total Hours	Rise	Max. (U.T.)	Ends	Comments	$\frac{I_{off-I_0}}{I_0}$	Air Mass Max.
27th	1h44m42s						
NOV.							
<u>Monitoring Times (U.T.)</u>							
22h13m06s - 22h33m30s							
22 35 42 - 24 00 00							
28th	3h13m00s	22h23m56s	22h23m57s	22h24m18s	Flare	0.46±0.07	1.7438
		22 43 11	22 43 15	22 45 42	Flare	0.98±0.14	1.6017
<u>Monitoring Times (U.T.)</u>							
00h00m00s - 00h20m24s							
00 27 36 - 02 10 12							
22 07 12 - 23 17 12							
29th	1h50m48s	22 14 00	22 14 18	22 14 42	Slow flare	0.40±0.11	1.7935
<u>Monitoring Times (U.T.)</u>							
22h05m00s - 23h08m42s							
23 12 54 - 24 00 00							
30th	2h35m48s						
<u>Monitoring Times (U.T.)</u>							
00h00m00s - 00h20m54s							
00 22 06 - 01 25 42							
01 33 12 - 02 17 54							
22 07 00 - 22 33 36							
1st	1h09m36s						
Dec.							
<u>Monitoring Times (U.T.)</u>							
22h48m54s - 22h52m30s							
22 54 00 - 24 00 00							
2nd	3h56m06s	00h36m15s	00h36m28s	00h37m48s	Probably a flare	0.63±0.06	1.2067
<u>Monitoring Times (U.T.)</u>							
00h00m00s - 01h01m18s							
01 07 54 - 02 09 54							
22 07 12 - 24 00 00							

Table (cont.)

Date	Total Hours	Rise	Max. U.T.	Ends	Comments	Lo <sub>f</sub> -I <sub>o</sub>	Air Mass Max.
3rd	3h53m48s	00h20m51s 01 53 18 22 22 24	00h21m09s 01 53 47 22 22 26	00h22m00s 01 57 00 22 22 39	Flare Slow flare Possibly a flare	0.58±0.11 0.53±0.11 0.41±0.09	1.2194 1.2073 1.6092
<u>Monitoring Times (U.T.)</u>							
00h00m00s	00h39m06s						
00 42 18	- 01 02 48						
01 06 54	- 02 08 00						
22 06 54	- 24 00 00						
4th	2h01m54s						
<u>Monitoring Times (U.T.)</u>							
00h00m00s	00h01m48s						
00 03 48	- 01 01 36						
01 05 42	- 02 08 00						
6th	1h24m30s	23 03 41	23 03 42	23 03 52	Probably a spike	0.67±0.09	1.3564
<u>Monitoring Times (U.T.)</u>							
22h35m30s	24h00m00s						
7th	4h06m48s	00 35 00 00 36 52 01 28 12 01 30 54	00 36 02 00 38 05 01 29 18 01 31 18	- - 01 29 48 01 31 48	Flare Flare Slow flare Slow flare	2.72±0.14 16.30±0.12 1.44±0.11 1.11±0.11	1.1926 1.1916 1.1996 1.2012
<u>Monitoring Times (U.T.)</u>							
00h00m00s	01h14m36s						
01 19 30	- 02 18 00						
22 06 18	- 24 00 00						
8th	4h00m24s	23 14 04	23 14 05	23 14 18	Possibly a small flare	0.40±0.08	1.3023
<u>Monitoring Times (U.T.)</u>							
00h00m00s	00h43m48s						
00 48 06	- 02 10 00						
22 05 18	- 24 00 00						
9th	3h48m48s	02 00 48 02 01 14	02 00 50 02 01 20	02 00 54 02 01 42	Possibly a small flare Possibly a flare	0.41±0.06 0.64±0.11	1.2503 1.2511

Table (cont.)

Date	Total Hours	Rise	Max. U.T.	Ends	Comments	$\frac{I_{of}-I_o}{I_o}$	Air Mass Max.
------	-------------	------	-----------	------	----------	--------------------------	---------------

Monitoring Times (U.T.)

00<sup>h</sup>00<sup>m</sup>00<sup>s</sup> - 00<sup>h</sup>35<sup>m</sup>12<sup>s</sup>  
 00 39 06 - 02 08 06  
 22 13 24 - 23 58 00