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PHOTOMETRIC OBSERVATIONS OF YZ CANIS MINORIS AND AD LEONIS

YZ CMi

The flare star YZ Canis Minoris was monitored at Boyden Observatory for a total time of 10^h49^m during the recent International Co-operative period from the 16th January to 2nd February, 1971. Unfortunately adverse weather conditions prevented extensive observations. During the brief runs that were possible, no flare activity was detected with the 40cm aperture Nishimura Reflector.

Monitoring Table of YZ Canis Minoris

Date 1971	U.T.	Total Hours per Night	
Jan			
21	$20^h49^m - 22^h26^m$	1^h37^m	
22	18 35 - 22 12	3 37	No flare activity
25	20 56 - 21 41	0 45	observed
27	18 31 - 23 21	4 50	
	Total	10^h49^m	

AD Leo

During the recent International Co-operative period from the 18th February to 4th March, 1971, observations were carried out from Boyden Observatory on the flare star AD Leo. The 40cm aperture Nishimura Reflector was used with an EMI 6256 cooled photomultiplier tube along with a Johnson B Filter.

The table gives details of the monitoring and it will be seen that three low intensity flares were recorded during the period.

The total monitoring time was 38^h52^m. Flare No.1 is particularly interesting in that it had a relatively long duration of 15^m2 with a fairly gradual decline after a flash phase. This is similar in features to other long duration flares from AD Leo previously reported at Boyden (A.H. Jarrett and J.P. Eksteen, 1969, 1970).

Monitoring Table of AD Leo

Date 1971	U.T.	Total Hours per Night	Flare No.	U.T. of Flare	Duration	Δm
Feb.						
17	$19^h09^m - 20^h40^m$	1^h31^m	1	$19^h54^m.8$	$15^m.2$	0.21
18	19 44 - 21 45	2 01				
21	18 25 - 22 28	4 03				
23	18 24 - 21 35	3 11				
24	18 08 - 23 08	5 00				
25	18 14 - 21 29	3 15				
28	18 06 - 22 14	4 59	2	$19^h38^m.0$	6.0	0.15
	22 32 - 23 23					
March						
1	18 02 - 22 40	4 38	3	21 59.6	1.4	0.18
2	18 27 - 23 16	4 49				
3	19 15 - 22 54	3 39				
4	21 21 - 23 07	1 46				
	Total	38^h52^m				

25th May, 1971.

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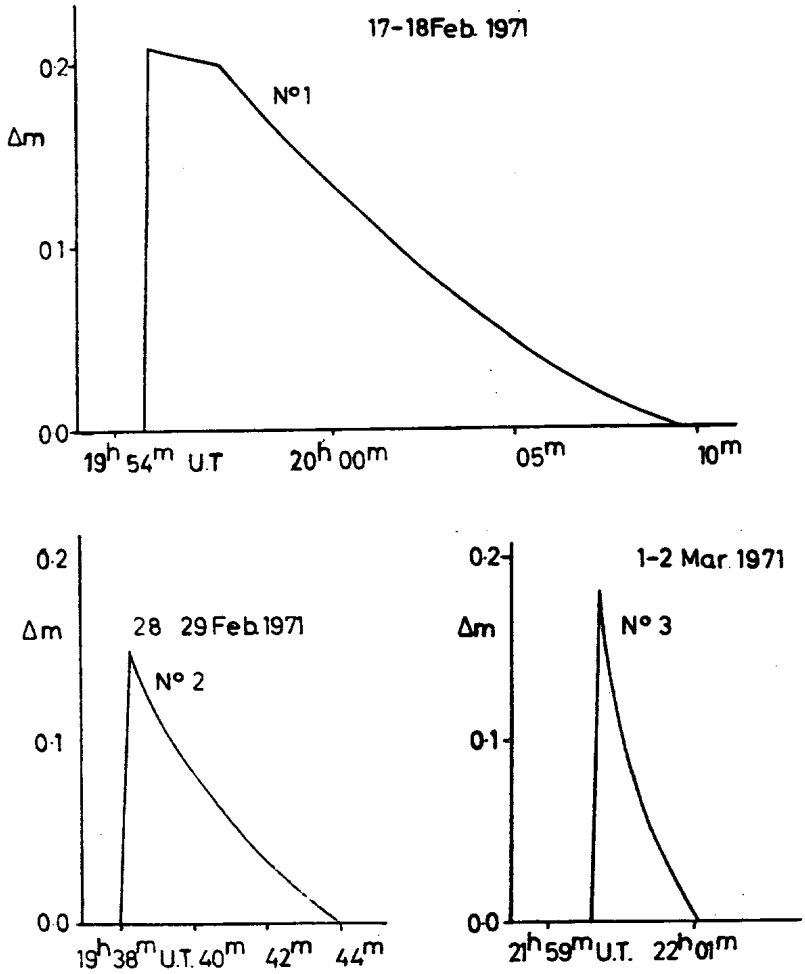
References:

Jarrett, A.H. and Eksteen, J.P. 1969 MNASSA 28, 70.
Jarrett, A.H. and Eksteen, J.P. 1970 MNASSA 29, 78.

AD Leo


17-18Feb. 1971
N°1
Δm
0·2
0·1
0·0
19h 54m U.T
20h 00m
05m
10m
28 29Feb.1971
N° 2
19h38m U.T. 40m
42m
44m
1-2 Mar. 1971
N° 3
21h59m U.T.
22h01m