

---

COMMISSION 27 OF THE I. A. U.  
INFORMATION BULLETIN ON VARIABLE STARS  
NUMBER 333

Konkoly Observatory  
Budapest  
1969 March 5

PHOTOELECTRIC OBSERVATIONS OF AD LEO,  
DURING THE 1969, 10-24 FEBRUARY INTERNATIONAL PATROL

The photoelectric observations of the flare star AD Leo (BD +20°2465,  $m_V=9.4$ ,  $m_B=10.9$ ) carried out at Catania Observatory during the planned period are reported.

Two cassegrain reflectors of 91 cm and 30 cm apertures, the former working at  $\lambda_{eq}=4300 \text{ \AA}$  and the latter at  $\lambda_{eq}=5150 \text{ \AA}$ , were employed.

The characteristics of our observations and the obtained data are given in Tables I and II.

Few measurements of the comparison star BD +20°2475 ( $m_V=8.91$ ,  $m_B=9.16$ ), which was occasionally checked with BD +21°2193 ( $m_V=7.73$ ,  $m_B=9.07$ ), were performed.

Taking into account the overlapping coverages of the two telescopes, we obtained a combined total coverage (CTC) of 25.47 hours. The four flares observed during the latter period are drawn in Fig.1.

Catania Astrophysical Observatory  
February 26, 1969

S.CRISTALDI  
M.NARBONE  
M.RODONO

Tab.I

N Feb.	Tl	L	Detailed Coverage (UT)	TC	$\Delta m_{lim}$	CTC
08-09	91	B	01 <sup>h</sup> 31 <sup>m</sup> -0255; 0258-0327; 0331-0452.	194 <sup>m</sup>	-0.015	194 <sup>m</sup>
13-14	91	B	2008-2142; 2147-2225.	132	-0.035	132
14-15	91	B	1902-1948.	46	-0.034	
	30	V	1916-1927; 1932-1948.	27	-0.025	46
15-16	91	B	2025-2035; 2037-2205; 2212-2307; 2313-008; 0013-0044.	239	-0.020	
	30	V	1945-2032; 2053-2231; 2238-2330; 2339-2349.	177	-0.025	272
17-18	91	B	1938-1957; 1959-2035; 2041-2056; 2104-2134; 2136-2147; 2153-2210; 2213-0040; 0045-0139; 0142-0151; 0201-0220; 0224-0349.	442	-0.030	442
21-22	91	B	1911-2036; 2038-2134; 2141-0124; 0128-0300.	442	-0.018	442

Tab.II

Tab.II

Observed Flares

N Feb.	CTC	Nr	Tl	L	$t_b$	$t_{max}$	$t_e$	$\Delta m_{lim}$	$\frac{I_{o+F}-I_o}{I_o}$	P
13-14	132 <sup>m</sup>	1	91	B	21 <sup>h</sup> 26 <sup>m</sup> 9	21 <sup>h</sup> 29 <sup>m</sup> 1	?	-0.035	0.147	?
14-15	46	2	91	B	19 08.0	19 08.8	19 <sup>h</sup> 10 <sup>m</sup> 6	-0.034	0.126	0 <sup>m</sup> 188
		3	91	B	19 10.6	19 12.2	19 17.0	-0.034	0.149	0.502
15-16	272	4	91	B	20 54.4	20 55.2	21 10;0	-0.020	0.222	0.574
		5	91	B	23 25.4	23 25.65	23 31.0	-0.020	0.142	0.092

