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PHOTOGRAPHIC AND PHOTOELECTRIC OBSERVATIONS
 OF NOVA VULPECULAE 1984 NEAR MAXIMUM

The brightness of Nova Vul 1984 was estimated on plates of the Sonneberg Sky Patrol taken by H. Muth. On 29 and 30 July the brightness was about that of SAO 87162. The result is somewhat uncertain because of the bad position of the Nova on the plates. The brightness of SAO 87162 ($V=8.94$, $B-V=0.14$) was linked with the 60 cm-I-telescope at Sonneberg, on August 12, photoelectrically to SAO 87213 whose international UBV values are given by Blanco (Photoelectric Catalogue, 1970); all the other brightness differences determined photoelectrically are also relative to SAO 87213. During all the nights the difference between SAO 87211 and SAO 87213 was found to be constant within the observational error. 16 sec integrations and symmetric measurements were made. The weather conditions were sometimes very poor.

Table I

Photographic observations			
1984	J.D. - 2445900	m_{pg}	Field 20°
July 25.972	07.472	$>13^m.5$	19 ^h , 20 ^h
29.922	11.422	9.2	19
29.963	11.463	9.2	20
30.917	12.417	9.2	20
30.917	12.417	8.9	19

Table II

Photoelectric results								
1984	J.D. - 2445900	V		B-V		U-B		
July 30	12	$d.358$	$8^m.62$	$d.362$	$m.48$	$d.370$	$-m.64$	
	12	.421	8.56	.415	.46	.406	-.62	
31	13	.375	7.75	.379	.44	.386	-.55	
	13	.419	7.74	.422	.45:			
Aug. 03	16	.378	7.12	.382	.52	.390	-.39	
	12	25	.360	8.06	.364	.46	.374	-.74
	12	25	.443	8.06	.445	.43		

(in front of the brightness value the fraction of the Julian day is given)

Typical errors of the given mean values are 7, 10, 10 mmag for V, B-V and U-B, respectively.

The comparison of the photographic and photoelectric values on July 30 gives a good agreement despite the bad position of the Nova on the plates.

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