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PHOTOELECTRIC OBSERVATIONS OF THE NOVALIKE OBJECT IN VULPECULA

Photoelectric observations of the novalike object in Vulpecula were obtained on several nights during the period April to June 1979, on the 104-cm reflector of the Uttar Pradesh State Observatory, using UBV filters of Johnson and Morgan system and EMI 6094S photomultiplier cooled to -20°C . Standard d.c. technique for recording the observations was employed.

BD +21^o4165 and BD +21^o4167 were used as comparison stars. However, the final reductions of the observations have been carried out with respect to BD +21^o4165. Standard stars were also observed to obtain the transformation equations and UBV magnitudes of the comparison star. The standard deviations of the comparison star are $\pm 0^{\text{m}}.005$, $\pm 0^{\text{m}}.011$ and $\pm 0^{\text{m}}.011$ in V, (B-V) and (U-B) magnitudes, respectively. The magnitudes and colours of the novalike object and the comparison star are given in Table I. The light and colour curves of the object are plotted in Fig.1.

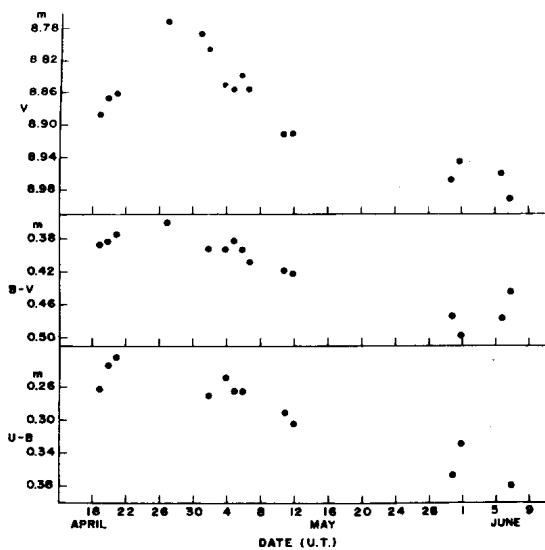
Table I

Magnitude and colours of the novalike object in Vulpecula and the comparison star BD+21^o4165

Date, U.T. 1979	V	B-V	U-B	No. of obs.
April 18.951	8 ^m .888	0 ^m .387	0 ^m .262	4
19.920	8.868	.383	.233	6
20.910	8.862	.374	.223	8
26.985	8.772	.360	-	2
30.961	8.788	-	-	2
May 1.929	8.807	.392	.269	7
3.931	8.852	.392	.247	6
4.928	8.857	.382	.264	6
5.928	8.840	.393	.264	8
6.784	8.857	.408	-	2
10.879	8.912	.418	.290	17
11.965	8.911	.422	.303	6

Table I (cont.)

Date, U.T. 1979	V	B-V	U-B	No. of obs.
May 30.860	8 ^m .967	0 ^m .473	0 ^m .366	3
31.867	8.945	.497	.328	6
June 5.817	8.960	.476	-	1
6.854	8.991	.444	.379	5
Comparison Star BD +21°4165	9.212	.521	.029	7



During the period of our observations the V light curve of the object shows a variation of 0^m.18. The novalike object attains its maximum brightness of 8^m.78 near 28 April 1979.

H.S. MAHRA
S.C. JOSHI
J.B. SRIVASTAVA
S.L. DHIR

Uttar Pradesh State Observatory
Manora Peak, Naini Tal-263129
India