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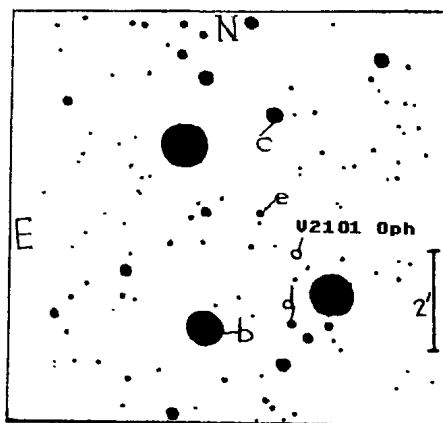
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V2101 OPH IS NOT A CATAclysmic VARIABLE

The star V2101 Oph, originally discovered by Woods (1926) and reanalyzed by Swope (1932) has been analyzed using photographic plates taken at the Crimean Astronomical Laboratory, between 1960 and 1991, on the 40 cm Astrograph in B light. The data were reduced at the Sternberg Astronomical Institute.

This star was previously classified as a dwarf nova, type U Geminorum (GCVS 4th Edition). After the reduction of data using the Deeming (1975) and Lafler-Kinman (1965) methods for determining the period, a best period of 240 days was found. The light curve of the star folded with the period of 240^d is shown in Figure 3. A better analysis, using windows of data shows increases and decreases of brightness near the star's maximum (Figure 2). A comparison of the POSS blue and red prints (-24 16^h54^m) shows that the star is clearly red, where on the blue print $m_B = 17.12$. On the POSS (-30 16^h54^m) the data is ambiguous (Samus, private communication); so it is not clear that the star is "bright blue" as stated by Vogt and Bateson (1982). Considering this, and that at the maximum, $m_{pg,R} = 12.5$ (Terzan and Ounnas, 1988) and $m_{pg,B} = 13.33$, we conclude that this star is a red, long period star (type Mira). Independent works have shown that the



	B
b	12.49
c	14.43
d	15.8
e	16.4

a.)

b.)

Figure 1. a.) Finding chart of V2101 Oph, b.) Magnitudes of the comparison stars

Table I. Photographic observations of V2101 Oph

J.D. 24...	B	J.D. 24...	B	J.D. 24...	B
37109.430	14.66	44819.300	16.72	46944.460	17.92
130.350	14.27	820.290	16.72	945.450	<15.5
138.320	13.88	45087.520	15.06	977.350	16.72
139.340	14.27	134.410	14.66	978.370	16.72
144.340	14.27	464.520	<16.7	47264.570	13.88
145.330	14.66	469.520	<16.7	329.410	17.12
40738.500	16.72:	494.430	<17.5	383.290	<16.7
745.440	<16.7	496.420	<16.7	620.560	<16.7
43989.520	16.72	.450	<16.7	626.540	<16.7
992.520	17.12	499.410	<16.7	681.460	<17.1
993.450	16.72	523.380	17.12	682.440	16.72
994.550	<15.5	546.320	<16.7	716.320	14.66
44015.450	17.52	552.300	<15.5	.340	14.57
020.440	<16.7	823.510	13.33	717.350	14.66
023.430	<16.7	.530	13.49	740.340	13.75
028.430	<15.5	824.520	13.33	48028.410	16.29
041.380	<16.7	825.520	13.49	029.430	16.29
406.380	13.88	826.530	13.49	033.450	16.29
409.410	13.88	846.420	14.27	034.460	16.40
410.390	13.88	849.460	13.88	035.410	16.72
430.360	14.66	852.460	14.66	037.390	16.72
435.340	14.86	873.390	17.12	389.500	17.12
438.360	15.06	875.400	<17.1	394.470	16.72
789.360	<15.5	876.360	16.72	418.420	14.86
811.320	<15.5	884.370	17.12	423.410	14.66
812.310	17.52	46204.470	<15.5	425.410	14.66
813.310	17.12	209.460	<16.7	426.410	13.88
815.300	<16.7	256.370	17.12	448.380	13.22
818.310	<16.7	589.420	16.29	454.340	13.75

color variations are not typical of U Gem, that the brightness increase reaches its maximum in B and decreases to R (Yakubov et al., 1992), and that its spectrum is a late type one with strong TiO bands fitting an M5 II-III type (Claudi and Bianchini, 1992) what reinforces our conclusion.

The magnitudes of the comparison stars were obtained by comparison with the standard sequence in the field of V2051 Oph (Meech, 1983) and are listed in Figure 1b. Figure 1a contains the finding chart of V2101 Oph. Table I lists the Julian Dates and the observed B magnitudes.

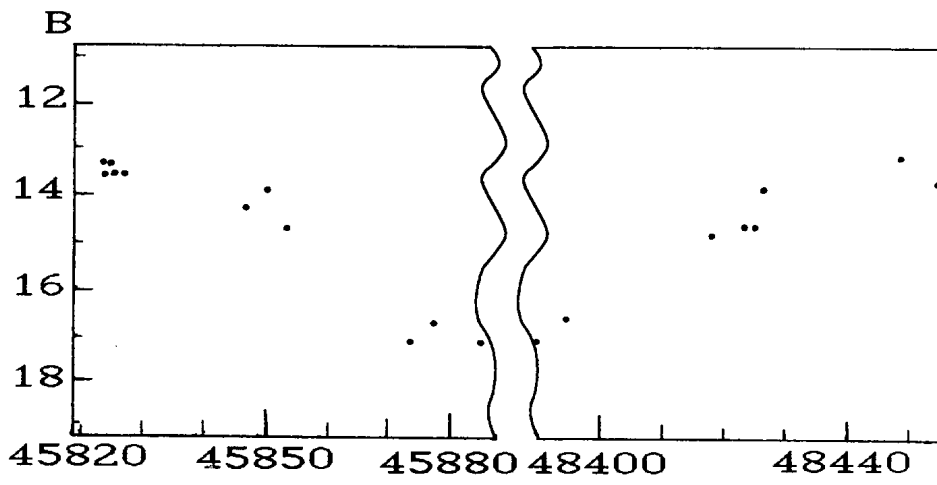


Figure 2. Variation of brightness around a maximum

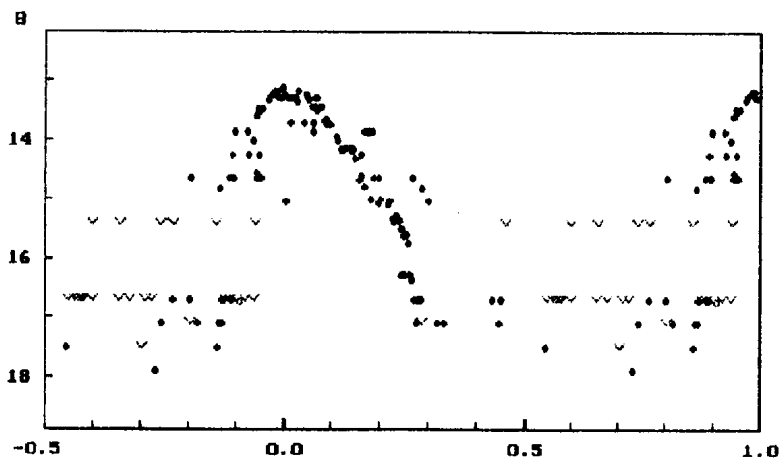


Figure 3. Light curve for P=240^d3 with the initial maximum at J.D. 2448450

Besides the data listed in Table I, data from Yakubov et al. (1992) obtained in 1991 were also used in order to find the light curve shown in Figure 3, where the different sets of data are marked with the same symbol.

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