

COMMISSIONS 27 AND 42 OF THE IAU
INFORMATION BULLETIN ON VARIABLE STARS

Number 3825

Konkoly Observatory

Budapest

8 January 1993

HU ISSN 0324 - 0676

PHOTOGRAPHIC PHOTOMETRY OF V 350 Cep

V350 Cep was discovered by Gyulbudaghian and Sarkissian (1977) as a star of about 17^m in U- and pg-lights, and 16^m.5 in V-light. On the red reproduction of the Palomar Sky Survey Atlas the star is about 21^m but on the blue reproduction it is below the limit. The star is located near the emission nebula NGC 7129. The spectral observations of V350 Cep have shown that the star is a strong H_α-emission star (Gyulbudaghian, Glushkov and Denisyuk, 1978, Magakian and Amirkhanian, 1979, Semkov and Tsvetkov, 1986).

The photographic observations in the UVW system were made with the 50/70/172 cm Schmidt telescope of the National Astronomical Observatory of the Bulgarian Academy of Sciences during the period September 1984–August 1992. The plates taken on J.D. 2444493.4, 2444495.4 and 2444497.4 were obtained with the 100/130/210 cm Schmidt telescope of the Byurakan Astrophysical Observatory of the Armenian Academy of Sciences by M. Tsvetkov. We used the photometric standards in the open cluster NGC 7142 (Hoag et al., 1961).

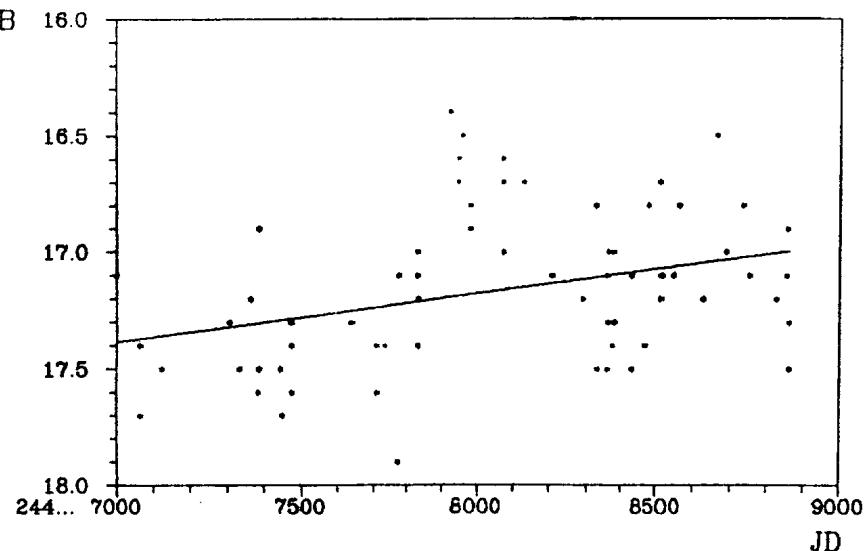


Figure 1. Light curve of V350 Cep during observational period
July 1987–August 1992 in B-light

Table 1. Photometric behaviour of V350 Cep in the period 1980-1992

J.D. 244...	U mag	B mag	V mag	J.D. 244...	U mag	B mag	V mag
4493.4	-	17.2	-	8071.5	-	16.7	-
4495.4	-	-	16.3	8072.4	-	17.0:	15.3
4497.4	16.7	-	-	8129.4	-	16.7	-
5960.3	16.9	-	-	8207.3	-	17.1	-
5961.3	-	17.4	-	8291.3	-	17.2	-
6564.5	-	16.5	15.0	8328.7	-	16.8	-
6712.4	-	-	15.6	8329.6	-	-	15.9
7000.4	-	-	15.3	8330.5	-	17.5	16.1
7001.4	-	17.1	-	8363.4	-	17.5	16.0:
7002.4	-	-	15.5	8364.5	-	17.1	-
7065.3	-	17.7	-	8366.5	-	17.3	-
7065.4	17.0	17.4	16.6	8367.5	-	17.0	16.0
7123.4	-	17.5	-	8379.5	-	17.4	-
7305.5	-	17.3	-	8382.5	-	17.0	-
7334.5	-	17.5	-	8385.4	-	17.3	-
7362.4	-	17.2	-	8430.5	16.9	17.1	-
7384.4	-	17.6	16.0	8431.5	-	17.5	-
7385.4	15.9	17.5	16.1	8469.3	-	17.4	-
7386.4	-	16.9:	-	8478.4	-	16.8	-
7388.5	-	17.5	-	8511.4	17.3:	16.7	15.5
7443.3	16.6	17.5	-	8513.3	16.3	17.2	-
7448.4	-	17.7:	-	8515.4	-	17.1	-
7474.3	-	17.3	16.2	8547.4	16.3	17.1	-
7475.2	-	17.6	-	8563.3	-	16.8	15.7
7644.4	-	17.3	-	8629.2	-	17.2	15.6
7707.4	-	17.4	-	8663.6	-	16.5	-
7707.5	-	17.6:	-	8687.6	16.1	17.0	16.0
7733.3	-	17.4	-	8694.5	-	-	15.6
7774.3	16.8	17.9:	16.1	8719.5	-	-	14.8
7777.4	-	17.1	-	8734.4	-	-	15.9
7829.3	17.0	17.1	-	8735.4	-	16.8	-
7830.3	16.7	17.4	-	8753.5	-	17.1	15.8
7831.3	-	17.2	15.9	8825.4	-	-	16.0
7924.3	16.3	-	-	8828.4	-	17.2	-
7926.6	-	16.4	15.5	8855.4	-	17.1	16.4
7947.6	-	16.7	-	8857.4	-	16.9	15.8
7948.6	16.6	16.6	-	8860.4	16.9	17.5:	-
7956.6	-	16.5	-	8861.4	-	17.3	15.8
7979.5	-	16.8	-	8862.4	-	17.5:	-
8071.4	-	16.6	-				

The previous photometric observations of V350 Cep (Gyulbudaghian and Sarkissian, 1978 and Hakverdian and Gyulbudaghian, 1978) did not show noticeable photometric changes after the first observed rise. Our photographic observations suggest that during the last five years a definite increase of brightness in B light is observed (Figure 1). A similar brightness increase is visible also in V light and the B-V colour index has not noticeable changes (Figure 2).

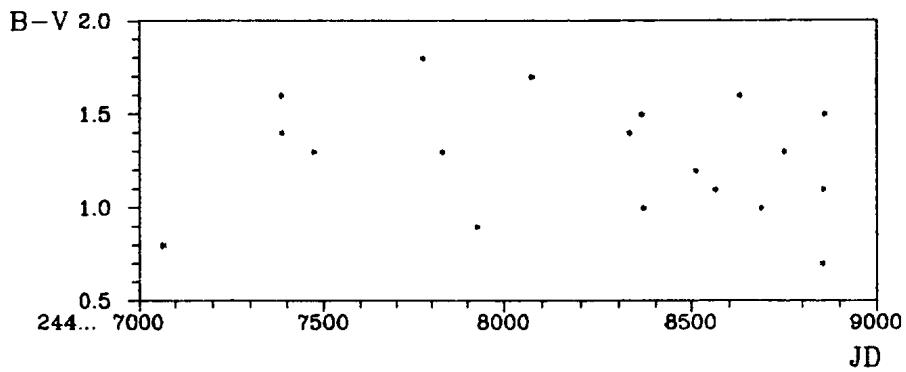


Figure 2. The B-V colour index of V350 Cep during observational period
July 1987–August 1992

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