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PHOTOELECTRIC OBSERVATIONS OF R CrB DURING THE RECENT LIGHT MINIMUM

The photoelectric observations of R CrB were made with the 34 cm telescope at Kavalur observatory during February and March 1986 and with the 51 cm telescope at Leh site survey observatory during April and May 1986, altogether on 17 nights. During this time the star underwent a minimum and recovered close to its normal brightness. This fading followed the deep minimum of the star which started in August 1985.

All the observations were obtained using standard UBV filters and an uncooled 1P21 photomultiplier. The star BD +28^o 2475 (V=7.45, B-V=0.44, U-B=0.02) was used as the comparison.

The nightly means of individual differential magnitudes (variable-comparison) have been converted to standard V and B-V and are shown in the figure (filled circles) against the corresponding J.D.. The published V magnitudes of the star obtained during this period (IAU Circ, No. 4192, 4199, 4214) are also plotted (open circles) along with our observations. The B-V variation follows the variation in V and becomes reddest at the time of minimum. Comparison with the colours at maximum light shows that the ratio of total to selective absorption ($\Delta V / \Delta(B-V)$) during the decline seems quite high (≈ 7).

Table : Photoelectric Observations of R CrB

J.D. 2440000+	V	B-V	J.D. 2440000+	V	B-V
6484.445	7.33	0.68	6500.489	7.48	0.83
6485.434	7.33	0.68	6502.477	7.44	0.78
6486.495	7.35	0.70	6526.267	6.28	0.69
6487.427	7.34	0.70	6540.334	6.12	0.63
6488.477	7.35	0.70	6541.209	6.11	0.64
6489.406	7.39	0.71	6542.361	6.10	0.64
6490.443	7.44	0.71	6550.275	6.04	0.66
6492.450	7.48	0.74	6551.202	6.06	0.63
6493.456	7.51	0.74			

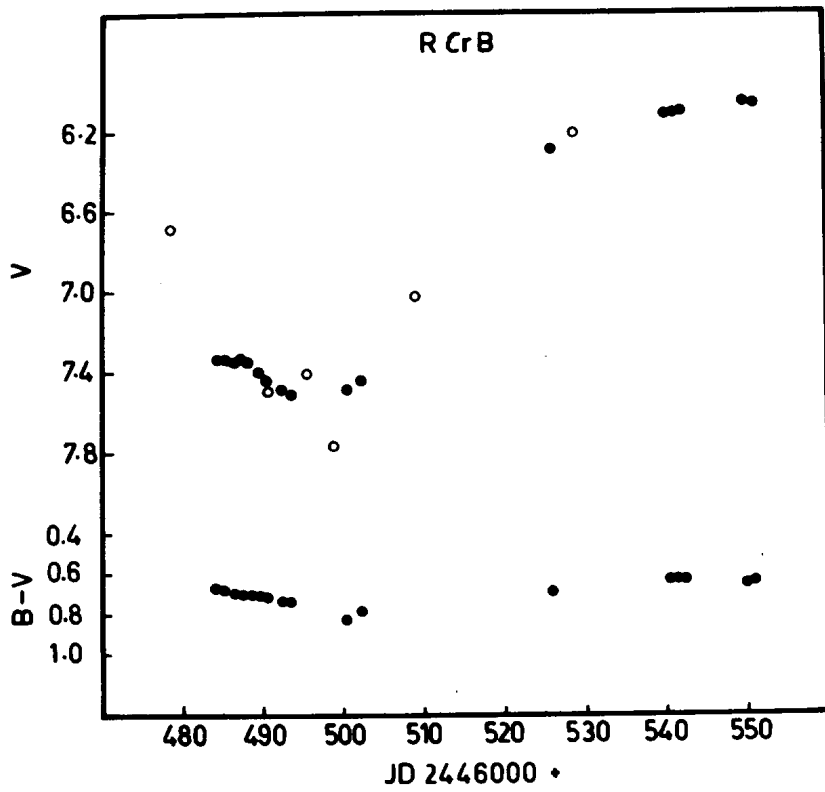


Figure 1

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ERRATUM

Figure 1 of the No. 2891 issue of the IBVS was in error. The correct version of this figure is given below.

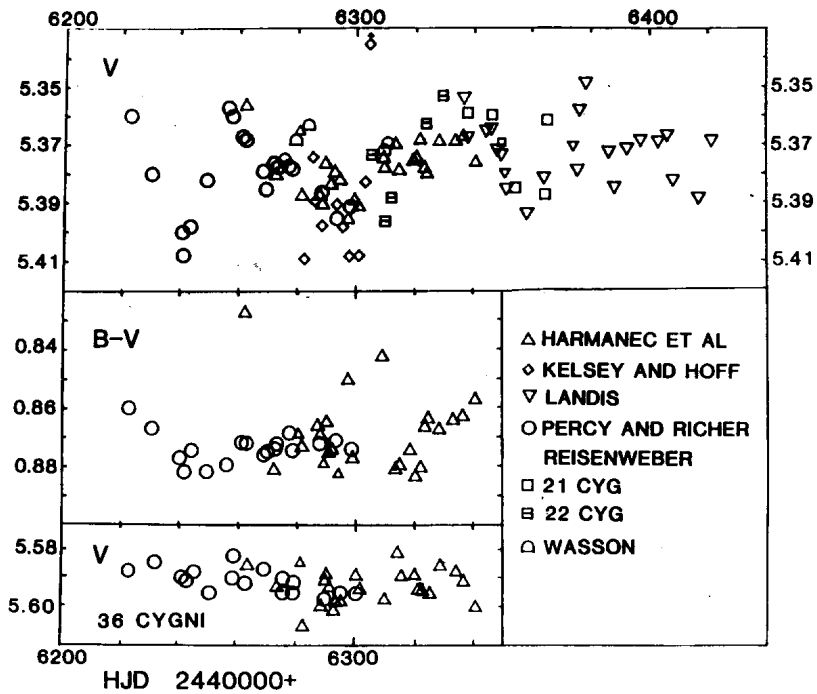


Figure 1: The light and colour curves of 27 Cyg (upper and middle panel) and the light curve of the comparison star 36 Cyg (lower panel). The constancy of the latter shows that the primary comparison star 22 Cyg is also constant. Slightly smaller symbols represent points of slightly lower accuracy.