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**CHROMOSPHERIC INACTIVITY OF  $\delta$  CORONAE BOREALIS IN 1991-93**

$\delta$  CrB (HR 5889) is a chromospherically active giant of spectral type G5 III-IV. In 1985/86 (Fermie 1987) it showed a sinusoidal variability of about 0.06 mag in V and period about 45 days. This variability persisted in 1987 and 1988, but the period increased at the remarkable rate of some 10 days per year and was accompanied by changes in the amplitude and overall light level (Fermie 1989, 1990). In 1989 the activity ceased, but returned in 1990 with a period of 61 days and amplitude 0.04 mag (Fermie 1991). These effects were interpreted as due to a large spot or spot group drifting in the photosphere of  $\delta$  CrB.

I have continued to monitor  $\delta$  CrB by means of a program with the Automatic Photoelectric Telescope Service, and since the last reported observations to JD 2448145 have accumulated another 353 nights of UBV photometry through the 1991, 92, and 93 seasons. Plots of these data show that through most of this interval  $\delta$  CrB showed no significant variability, although between JD 2448710 and 2448810 (April - August 1992) there was a weak 0.02 mag variation of period  $49 \pm 2$  days. As Table 1 shows, there was no detectable change in the overall light level during these three seasons. (Cf Fig.3 of Fermie 1990.)

Table 1  
MEAN SEASONAL VALUES

Year	<V>	s.e.
1991.289	4.632	$\pm 0.001$
1992.316	4.634	$\pm 0.002$
1993.327	4.633	$\pm 0.001$

It is of some interest that the standard deviations of the V magnitudes in each of the three seasons were 0.008, 0.020, and 0.008 mag respectively. The second value (1992) no doubt reflects the presence of some variability, but the 0.008 mag for 1991 and 1993 sets an upper limit for the average observational error of the APT data at this apparent magnitude.

I do not propose publishing the individual data, but will gladly supply them to anyone who wants them. Contact me at [fermie@astro.utoronto.ca](mailto:fermie@astro.utoronto.ca) on the Internet.

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References:

- Fermie, J.D. 1987, PASP, 99, 183  
\_\_\_\_\_ 1989, PASP, 101, 175  
\_\_\_\_\_ 1990, PASP, 102, 783  
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**ERRATUM**

Upon Prof. Bidelman's suspicion, it turned out that the new variable star reported in IBVS No. 3612 had been misidentified. The new small amplitude variable is HD 111829 (instead of HD 111828, as stated in the discovery note).

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