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PHOTOELECTRIC MINIMA AND LIGHT CURVES OF BS DRACONIS

The variability of the system was discovered by Strohmeier (1962). The light elements were obtained by him as follow:

Hel.Min.J.D. 2426 444.475+1^{d}.682 000·E.

The first spectroscopic observations were made and analyzed by Fitzgerald (1964). The system shows double line spectra. Both of the components have the same spectral type and line intensities. Fitzgerald also showed that the period of the system should be twice that of given by Strohmeier.

Photoelectric observations of BS Dra in B,V, colours were made with the 48 cm Cassegrain telescope at the Ege University Observatory on 21 nights between May 1972 and May 1973. The photometer was furnished with a 1P21 photomultiplier tube and standard Johnson B,V filters. In the observations BD +73°881 was used as comparison star. Four primary and three secondary minima were obtained and are given in the following Table.

Times of Minima

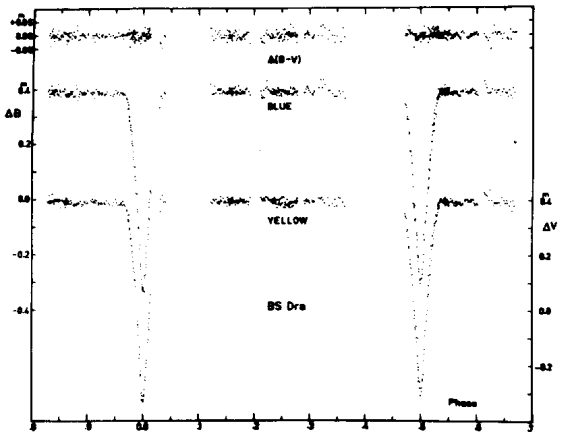
Hel.Min.	Min.	O-C_I	O-C_{II}	Filter
2441 461.4252	I	+.0542	+.0010	B,V
471.5166	I	+.0536	+.0004	B
.5163	I	+.0533	+,0001	V
488.3335	I	+.0505	-.0028	B
.3345	I	+.0515	-.0018	V
493.3817	II	+.0527	-.0006	B
.3838	II	+.0548	+.0015	V
594.304	II	+.055	+.001	B,V
826.4196	II	+.0546	-.0002	B,V
42 302.4277	I	+.0567	-.0001	B
.4280	I	+.0570	+.0002	V

C_I and C_{II} values were obtained with the elements of Strohmeier and the new elements obtained by us:

Hel.Min.J.D. 2441 461.4242$\pm$2+3^{d}.3640145$\pm$21·E.

The light and colour curves are shown in the Figure. The phases of the observations were calculated with the above new light elements. All the observations were corrected for dif-

ferential extinction. The star varies about $0^{m}.720$ at the primary and $0^{m}.700$ at the secondary minimum in both colour. A detailed analysis of this system will be published elsewhere.



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