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PHOTOELECTRIC MINIMA AND LIGHT CURVES
 OF THE ECLIPSING VARIABLE DO CASSIOPEIAE

The variability of DO Cas (BD +59^o529, HD 16506) was discovered by Hoffmeister (1947). Photoelectric light curves were obtained by Schneller and Daene (1952), Winkler (1966) and Gleim and Winkler (1969), Cester (1977). Mannino (1958) obtained spectroscopic elements. The photographic magnitude of the star varies from 8^m.60 to 9^m.25. DO Cas was classified as a typical β Lyr type eclipsing variable by Hoffmeister (1947). The light elements were obtained by him as follow:

$$\text{Hel Min J.D. } 2428\ 865.450 + 0^d.684655 \cdot E.$$

Photoelectric observations of DO Cas in B,V colours were made with the 48 cm Cassegrain telescope at the Ege University Observatory on 5 nights between September 1977 and January 1978. The photometer was furnished with a 1P21 photomultiplier tube and standard Johnson B,V filters. In the observations BD +59^o548 was used as comparison star. 5 primary minima were obtained and are given in the following Table.

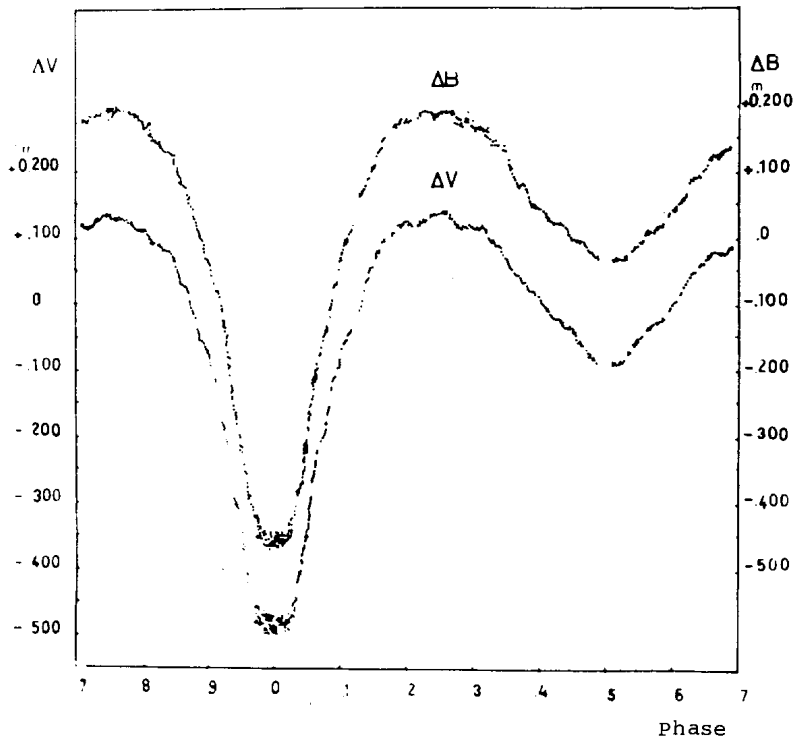
Times of Minima							
Hel	Min		Min (O-C) _I	(O-C) _{II}	(O-C) _{III}	n	Fil
2443	408.3972	I	-0.0041	+0.0011	-0.0009	32	b
	425.5148	I	-0.0032	+0.0021	0	24	v
	.5155	I	-0.0025	+0.0028	+0.0007	24	b
	501.5126	I	-0.0035	+0.0020	-0.0001	62	B,V
	502.1960	I	-0.0047	+0.0008	-0.0014	26	V
	.1967	I	-0.0040	+0.0015	-0.0007	26	B
	512.4677	I	-0.0030	+0.0024	+0.0003	47	B,V

(O-C)_I values GCVS 1974., (O-C)_{II} values SAC 1977., (O-C)_{III} values were obtained with the elements of Cester (1977).

$$\text{Hel Min J.D. } 2433\ 926.4573 + 0^d.6846661 \cdot E.$$

The light curve is shown in the Figure where the individual

magnitude differences between the variable and the comparison star BD +59°548 have been plotted against the phases which were calculated with the elements given by Cester.



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