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PHOTOELECTRIC OBSERVATIONS OF AT Cam AND AZ Cam

B,V light curves of the eclipsing binary systems AT Cam and AZ Cam (BD +82°0263) were observed photoelectrically in December 1981 and January 1982 with the 60 cm telescope at Peking Astronomical Observatory.

The comparison star and check star are given in Table I.

Table I

Comparison star and check star

	BD No.	R.A.(1981)	Dec.(1981)
Comp. star of AT Cam		5 ^h 36 ^m 21 ^s	67°01'37"
Check star of AT Cam		5 38 41.5	66 59 02
Comp. star of AZ Cam	82°0264		
Check star of AZ Cam	82°0261		

All the observations for these binaries were corrected for differential extinction. The Kwee and Van Woerden's method was used to determine the times of minimum light. Table II lists the times of minimum light of AT Cam and AZ Cam.

Table II

The times of minimum light of AT Cam and AZ Cam

Star	JD Hel. 2400000 +	m.e.	Filter	rem.
AT Cam	44959.2884	0.0005	V	I
	44959.2875	0.0006	B	I
	44983.0155	0.0004	V	I
	44983.0220	0.0004	B	I
AZ Cam	44985.1908	0.0005	V	I
	44985.1908	0.0005	B	I
	44987.1744	0.0005	V	II
	44987.1688	0.0005	B	II

The B light curves are shown in the accompanying diagrams (Fig.1 and Fig.2). These light curves of AT Cam and AZ Cam are similar, the primary and secondary minima have practically the same depth.

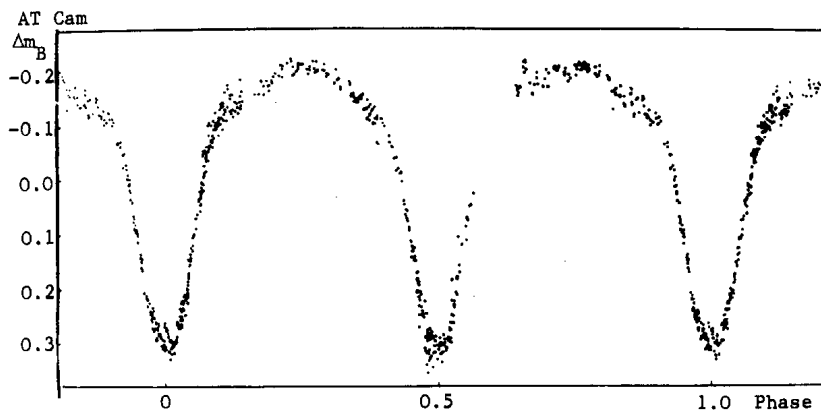


Figure 1: B light curve of AT Cam

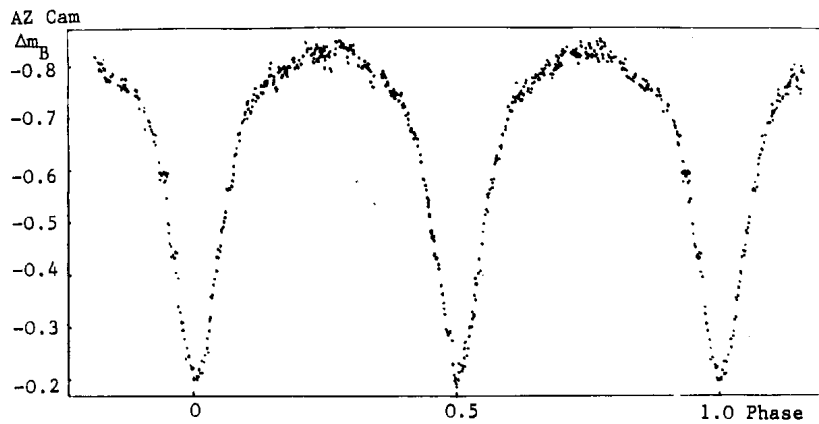


Figure 2: B light curve of AZ Cam

On the basis of earlier and our observations we have computed the new elements of AZ Cam, obtaining:

$$\text{JD Hel. Min I} = 2444985.908 + 1.3192299 \cdot E$$

The probable errors obtained from a least squares solution for these quantities were ± 0.0005 for the initial epoch and ± 0.0000004 for the period.

These light curves should be analysed in more detail subsequently.

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