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TIMES OF MINIMUM OF ECLIPSING BINARIES IN AND NEAR CENTAURUS

In 1982 and again in 1989 photometric light curves were obtained at Mt. John University Observatory in New Zealand for a close group of eclipsing binaries in and near the constellation of Centaurus. All data were obtained with the single channel photoelectric photometer on the 0.6 meter photoelectric telescope using the observatory's *uvby* filter set. During the course of these observations many primary and secondary minima were observed. The times of minimum determined from the observations are presented in Table I.

Table I. Determinations of Times of Minimum

STAR	HJD 2440000+	S.E.	MINIMUM
MP CEN	5049.090	0.006	II
	5064.052	0.003	II
	5093.989	0.007	II
	7609.993	0.001	I
	7624.955	0.001	I
	7627.948	0.001	I
MR CEN	7610.974	0.003	I
VZ CEN	7628.138	0.005	I
BF CEN	5064.953	0.008	II
	5087.100	0.009	II
	7628.128	0.005	II
	7665.064	0.002	II
LZ CEN	5064.007	0.007	I
	5086.072	0.012	I
	5088.816	0.010	I
	5092.965	0.006	II
	7612.142	0.003	I
LT CEN	5068.929	0.001	I
	5085.142	0.004	I
	5094.122	0.001	II
	7611.040	0.001	II
	7615.110	0.001	I
	7628.121	0.001	I
MN CEN	5049.104	0.009	II
	5084.004	0.004	II
	7611.897	0.003	I
AE CRU	5049.043	0.001	I

For each minimum in Table I the Heliocentric Julian Date listed is the average time of minimum for all four filters. The accompanying standard errors were determined using the time residuals of each filter from this average.

In planning the observing program for these stars the light elements from the Finding List of Wood et al. (1980) were used. The times of minimum in Table I are generally not close to the times predicted from these light elements. In most cases the epochs rather than the periods seemed to be at fault, since the O-C values for most of the stars were about the same in 1982 and 1989. However, we note that, in particular, the period for LT Cen appears to be longer than that given in the Finding List.

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Reference:

Wood, F.B., Oliver, J.P., Florkowski, D.R., and Koch, R.H., 1980, *A Finding List for Observers of Interacting Binary Stars*

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