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THE MAXIMUM TIMES AND NEW LIGHT ELEMENTS
 OF κ BOOTIS

During the intermediate and narrow band photometry of some Delta Scuti type variables, κ Boo was also observed at Ege University Observatory with the 48 cm Cassegrain telescope on six nights in June 1980 and twelve times of maxima were obtained. These times of maxima are given in the following table. Since the period of 0^d.069 given by Millis (1966) does not agree with the new observations, the new period of 0^d.0762927 has been derived using the times of maxima and the cycle numbers, and utilized.

Table
 The maximum times of κ Boo

JD Hel.	O-C(I)	O-C(II)	E	Filter
2444 401.3670	0 ^d .0000	0 ^d .0061	1	b
.3580	- .0090	- .0029	1	y
.4435	.0002	.0063	2	b
.4385	.0048	.0013	2	y
404.3285	- .0139	- .0059	40	u
.3290	- .0134	- .0054	40	v
.3285	- .0139	- .0059	40	b
.3315	- .0109	- .0029	40	y
408.3770	- .0089	.0018	93	v
.3785	- .0074	.0033	93	b
.3800	- .0054	.0048	93	y
416.3035	- .0169	- .0009	197	y

The O-C(I) residuals are the deviations from the light elements,

$$\text{Max.} = \text{JD Hel.2444 401.2907} + 0^{\text{d}}.0762927 \text{ E.}$$

The least squares solution has been applied to these residuals and cycle numbers(E), and the new light elements were derived as follows,

$$\text{Max.} = \text{JD Hel.2444 401.2847} + 0^{\text{d}}.076242 \text{ E.}$$

$\begin{array}{cc} \underline{+18} & \underline{+24} \end{array}$

The O-C(II) residuals indicate the deviations from these new light elements. The period we obtained is ten per cent longer than that of Millis.

The light curves and physical parameters of the star will soon be published elsewhere.

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Reference:

Millis, R.L. 1966, I.B.V.S. No. 137.