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PHOTOGRAPHIC OBSERVATIONS OF ECLIPSING VARIABLES

Var.	Min.helioc. J.D. 244...	n	O-C_M	O-C_K
RT And[1]	1605.412	8	-0^d.007	-0^d.006
	1717.372	9	+0.003	+0.004
WY Cnc	1765.4225	10	-0.0018	-0.0082
AB Cas	1570.390	10	+0.007	+0.022
ZZ Cyg	1596.396	9	-0.031	-0.016
	1601.425	8	-0.031	-0.016
BR Cyg	1595.415	13	-0.008	-0.008
TY Del	1594.407	10	-0.007	+0.008
UV Leo	1766.401	11	0.000	+0.012
	1772.403	11	+0.001	+0.013
ET Ori	1741.398	16	+0.001	+0.001
RT Per	1597.402	12	-0.051	-0.030
X Tri	1593.371	13	-0.025	-0.022
AW Vul	1602.4035	9	-0.0145	-0.0117
BE Vul	1573.406	10	+0.010	+0.001

[1] Last plate (.453) disturbed by clouds. C_M from GCVS 1969/70, C_K from SAC 44 (1973). n= number of plates. Each plate has been observed in four positions, each turned 90°.

RR Lyr-star	Max.helioc.	n	O-C_M	O-C_K
S Com	1395.504	13	-0^d.025	-0^d.014

New elements and 3 earlier maxima give the following epochs and O-C: Max.= J.D. 2438851.480 + 0^d.5865852·E;

Obs.max.	38851.482	n= 8	Ep.=	O	O-C= +0^d.002
	39918.477	14		1819	-0.001
	41063.488	10		3771	-0.005
	41395.504	13		4337	+0.004

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INSTANTANEOUS ELEMENTS OF 4 ECLIPSING STARS

AB CASSIOPEIAE

(I) Min.= J.D. 2425404.419 + $1^d.366851 \cdot E$; $\sigma = \pm 0^d.006$
T = J.D. 2425404 to 2426693 ; n=12

(II) Min.= J.D. 2432673.391 + $1^d.3668729 \cdot E$; $\sigma = \pm 0^d.0037$
T = J.D. 2432673 to 2436540 ; n=44

(III) Min.= J.D. 2436868.325 + $1^d.3668813 \cdot E$; $\sigma = \pm 0^d.0038$
T = J.D. 2436868 to 2441570 ; n=72

(Mean min.=J.D.2425404.388 + $1^d.3668708 \cdot E$; $\sigma = \pm 0^d.015$)

ZZ CYGNI

(I) Min.= J.D. 2417442.419 + $0^d.6286185 \cdot E$; $\sigma = \pm 0^d.0033$
T = J.D. 2417442 to 2425763 ; n=42

(II) Min.= J.D. 2427955.422 + $0^d.6286167 \cdot E$; $\sigma = \pm 0^d.0026$
T = J.D. 2427955 to 2435240 ; n=25

(III) Min.= J.D. 2438920 to 2441601 ; $\sigma = \pm 0^d.0021$
T = J.D. 2438920 to 2441601 ; n=22

(Mean min.=J.D.2415020.372 + $0^d.6286167$; $\sigma = \pm 0^d.0065$)

AB VULPECULAE

(I) Min.= J.D. 2426319.342 + $0^d.8064522 \cdot E$; $\sigma = \pm 0^d.0029$
T = J.D. 2426319 to 2437940 ; n=26

(II) Min.= J.D. 2439376.598 + $0^d.8064498 \cdot E$; $\sigma = \pm 0^d.0030$
T = J.D. 2439376 to 2441602 ; n=6

(Mean min.=J.D.2426319.342 + $0^d.8064512 \cdot E$; $\sigma = \pm 0^d.0064$)

BO VULPECULAE

(I) Min.= J.D. 2432379.773 + $1^d.945910 \cdot E$; $\sigma = \pm 0^d.0069$
T = J.D. 2432379 to 2435742 ; n=17

(II) Min.= J.D. 2435969.431 + $1^d.945866 \cdot E$; $\sigma = \pm 0^d.0019$
T = J.D. 2435969 to 2441276 ; n=15

Mean elements of BO Vul are unfit. The large scattering of the minima computed by (I) is caused by the method of Ashbrook (n=12), who has set single photographic observations into the mean light-curve of Nassau.

σ is the scattering (m.e.) of the observed minima, T is the time-interval, for which the instantaneous elements are valid and n is the number of minima used for the calculation. Mean elements have been given in parentheses.

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