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PHOTOELECTRIC TIMES OF MINIMA
OF FOUR ECLIPSING BINARIES

We made differential photoelectric measurements during November and De-
cember of 1987 with the new 40 cm f/14 Cassegrain reflector at the Baja Ob-
servatory. The telescope was made in the Astronomical Observatory of the Odessa
University (USSR) and is connected with a Starlight-1 stellar photometer made
in USA, by the firm Thorn EMI. The latter is employed in the standard UBV system.
The transformation coefficients of our telescope-photometer system are as fol-
lows:

$\epsilon = -0.014 \pm 0.063$, $\quad \mu = 1.263 \pm 0.041$, $\quad \psi = 0.953 \pm 0.068$

The comparison stars were as follows:

for OO Aql : BD+8°4220,

RZ Cas : BD+69°171,

VW Cep : BD+75°765,

AG Per : BD+32°714

The times of minima were obtained by least-squares parabolic fitting to the
measured points near the centre of minima. Table I contains the Heliocentric
Julian Date, and the O-C residuals obtained by different ephemerides.

Table I

Star	N	Filter	J.D.Hel. -2 400 000	E	$O-C_I$	$O-C_{II}$
OO Aql	45	V	47058.3422	16664	-0.0032	+0.0313
OO Aql	65	V	47060.3709	16668	-0.0017	+0.0328
RZ Cas	45	B,V	47118.3364	24901	-0.0545	+0.0086
RZ Cas	39	B,V	47142.2418	24921	-0.0541	+0.0091
VW Cep	36	V	47142.4445	10725.5	-0.0318	
VW Cep	36	B	47142.4452	10725.5	-0.0311	
AG Per	49	V	47118.4458	2684	+0.0160	-0.0117

The value of N means the number of measured points used in the parabolic fit. Column E gives the number of cycles have elapsed since the epoch taken into account in the calculations of O-C . The O-C residuals $O-C_I$ and $O-C_{II}$ are computed using the following references:

Star	References for $O-C_I$	for $O-C_{II}$
OO Aql	GCVS 1987	Demircan and Güdür, 1981
RZ Cas	Parenago, 1952	Herceg and Friboes - Conde, 1974
VW Cep	SAC 58	
AG Per	SAC 58	Güdür, 1984

The first residual of OO Aql may be considered of less weight as compared with the second one. In the case of AG Per the $O-C_{II}$ value was calculated taking into account also a sinusoidal term (Güdür, 1984), but for the others it was done by only the linear term. AG Per has shown a slight fluctuation of the brightness near the light minimum, and so does, but more strongly, OO Aql and VW Cep. So, the uncertainties of their minima times are increased somewhat owing to this fact. RZ Cas seems to show a distinct period increase.

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