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PHOTOELECTRIC MINIMA OF ECLIPSING BINARIES

The following Table gives photoelectric minima obtained during the year 1977 at the Ege University Observatory, Izmir (Turkey) and the Nürnberg Observatory (Germany). Minima of eclipsing binaries observed at both observatories 1960-1976 were published in Astr.Nachr. 288, 69 (1964); 289, 191 (1966); 291, 111 (1968); IBVS 456 (1970), 530 (1971), 647 (1972), 937 (1974), 1053 (1975), 1163 (1976) and 1358 (1977).

The Table gives the heliocentric minima, two different O-C's, the number of measurements, the type of filter, UBV or by (intermediate band photometry of Strömgren), the abbreviations of the names of the observers and the type of the instruments used (Izmir: 48 cm Cassegrain, Nürnberg: 34 cm Cassegrain, both with phototube 1P21).

Abbreviations of the observers' names:

Ad = A. Durgut	Kt = M. Kurutac
Be = G. Besold	Me = T. Mertelmeier
Bl = A. Blenner	Nc = N. Damla
Bo = G. Bode	Rd = E. Roderer
Eb = J. Ebersberger	Si = B. Schieweck
Er = A.Y. Ertan	Sn = S. Evren
Es = E. Hamzaoglu	Sr = C. Sezer
Gr = R. Gröbel	Tm = O. Tümer
He = W. Hetterich	Tn = Z. Tunca
Ib = C. Ibanoglu	

Remarks:

O-C (I) : GCVS, Moscow 1969/70 or First or Second or Third Supplement to the Third Edition of the GCVS. Moscow 1971, 1974 and 1976

O-C (II) : SAC 49, Krakow 1977

The (O-C)'s for secondary minima (Min II) were calculated on the supposition that they are symmetric between primary minima (if no special data are given).

m: only the elements I or the elements II give secondary minimum.

The sign = between O-C (I) and O-C (II) indicates that the elements (I) and (II) are equal.

Star	Min.hel. 2443	O-C(I)	O-C(II)	n	Filt.	Obs.	Instr.	Rem.
RT And	381.5065	-0.0140	-0.0170	18	-	Gr	34	
AB And	481.4057	+0.0039	+0.0040	28	V	Gr	"	Min II
OO Aql	370.4473	+0.0008	+0.0139(m)	35	V	Gr	"	
RX Ari	398.4376	+0.0040	-	16	b	Tm	48	
WW Aur	477.3949	-0.0004	-0.0033	18	V	Bo/Eb	34	
BF Aur	389.5005	+0.0069	-0.0019	14	b	Tm	48	
	389.5026	+0.0090	+0.0002	15	y	Tm	"	
	408.4991	+0.0069	-0.0019	24	b	Tm	"	
TV Cas	442.3897	-0.0150	-0.0170	11	b,y	Sr/Tm/Nc	"	
DO Cas	408.3972	-0.0042	+0.0012	32	b	Tm/Sn	"	
	425.5148	-0.0033	+0.0021	24	V	Tm	"	
	425.5155	-0.0026	+0.0028	24	b	Tm	"	
	501.5126	-0.0035	+0.0020	62	B,V	Tm/Sn	"	
	502.1960	-0.0048	+0.0007	26	V	Tm/Kt/Es	"	
	502.1967	-0.0041	+0.0014	26	B	Tm/Kt/Es	"	
VW Cep	312.4522	-0.0085	+0.0010	18	V	Gr/Si	34	
	378.4148	-0.0068	+0.0032	20	y	Tm/Es/Sn	48	
EG Cep	288.5002	+0.0016	+0.0129	24	V	Bo/Eb/Gr	34	Min II
836 Cyg	393.4388	+0.0033	+0.0018	35	V	Gr	"	Min II
AI Dra	242.4739	+0.0042=	+0.0042	25	B	Er/Tn/Tm/Sn	48	
	242.4749	+0.0032=	+0.0032	25	V	Er/Tn/Tm/Sn	"	
	386.3335	-0.0025=	-0.0025	26	y	Er/Tm/Sn	"	
BS Dra	291.4469	-0.0008	+0.0053	25	V	Be/Eb/Rd	34	
	333.4971	-0.0008	+0.0055	12	V	Gr/Eb	"	Min II
YY Eri	398.5500	-0.0098	+0.0034	12	b	Tm	48	Min II
AK Her	266.3964	-0.0043=	-0.0043	14	B	Er/Sn	"	
	266.3971	-0.0036=	-0.0036	14	V	Er/Sn	"	
DI Her	296.4789	+0.0074	+0.0062	26	V	Eb/He	34	Min II
SW Lac	398.4899	-0.0265=	-0.0265	22	V	Gr	"	
CM Lac	368.4957	+0.0004=	+0.0004	16	V	Gr	"	
	389.3542	-0.0020=	-0.0020	43	y	Tm	48	
UV Leo	266.3058	-0.0069	+0.0055	18	B	Er/Sn	"	Min II
	266.3065	-0.0062	+0.0062	18	V	Er/Sn	"	Min II
AM Leo	218.3973	-0.0031	-0.0123	19	V	Bo/Eb	34	
502 Oph	238.525	-0.004	+0.001	25	B	Er/Tm/Sn	48	
	238.524	-0.005	+0.000	25	V	Er/Tm/Sn	"	
	292.4761	-0.0069	-0.0013	23	V	Be/He/Rd	34	

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RT And	381.5065	-0.0140	-0.0170	18	-	Gr	34	
AB And	481.4057	+0.0039	+0.0040	28	V	Gr	"	Min II
OO Aql	370.4473	+0.0008	+0.0139(m)	35	V	Gr	"	
RX Ari	398.4376	+0.0040	-	16	b	Tm	48	
WW Aur	477.3949	-0.0004	-0.0033	18	V	Bo/Eb	34	
BF Aur	389.5005	+0.0069	-0.0019	14	b	Tm	48	
	389.5026	+0.0090	+0.0002	15	y	Tm	"	
	408.4991	+0.0069	-0.0019	24	b	Tm	"	
TV Cas	442.3897	-0.0150	-0.0170	11	b,y	Sr/Tm/Nc	"	
DO Cas	408.3972	-0.0042	+0.0012	32	b	Tm/Sn	"	
	425.5148	-0.0033	+0.0021	24	V	Tm	"	
	425.5155	-0.0026	+0.0028	24	b	Tm	"	
	501.5126	-0.0035	+0.0020	62	B,V	Tm/Sn	"	
	502.1960	-0.0048	+0.0007	26	V	Tm/Kt/Es	"	
	502.1967	-0.0041	+0.0014	26	B	Tm/Kt/Es	"	
VW Cep	312.4522	-0.0085	+0.0010	18	V	Gr/Si	34	
	378.4148	-0.0068	+0.0032	20	y	Tm/Es/Sn	48	
EG Cep	288.5002	+0.0016	+0.0129	24	V	Bo/Eb/Gr	34	Min II
836 Cyg	393.4388	+0.0033	+0.0018	35	V	Gr	"	Min II
AI Dra	242.4739	+0.0042=	+0.0042	25	B	Er/Tn/Tm/Sn	48	
	242.4749	+0.0032=	+0.0032	25	V	Er/Tn/Tm/Sn	"	
	386.3335	-0.0025=	-0.0025	26	y	Er/Tm/Sn	"	
BS Dra	291.4469	-0.0008	+0.0053	25	V	Be/Eb/Rd	34	
	333.4971	-0.0008	+0.0055	12	V	Gr/Eb	"	Min II
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AK Her	266.3964	-0.0043=	-0.0043	14	B	Er/Sn	"	
	266.3971	-0.0036=	-0.0036	14	V	Er/Sn	"	
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CM Lac	368.4957	+0.0004=	+0.0004	16	V	Gr	"	
	389.3542	-0.0020=	-0.0020	43	y	Tm	48	
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	266.3065	-0.0062	+0.0062	18	V	Er/Sn	"	Min II
AM Leo	218.3973	-0.0031	-0.0123	19	V	Bo/Eb	34	
502 Oph	238.525	-0.004	+0.001	25	B	Er/Tm/Sn	48	
	238.524	-0.005	+0.000	25	V	Er/Tm/Sn	"	
	292.4761	-0.0069	-0.0013	23	V	Be/He/Rd	34	

Star	Min.hel. 2443	O-C(I)	O-C(II)	n	Filt.	Obs.	Instr.	Rem.
566 Oph	281.5037	+0.0355	+0.0141	24	V	Bl/Gr/Si	34	
IZ Per	386.4696	+0.0193	+0.0193	35	y	Er/Tm/Sn	48	
ß Per	442.2895	+0.0002	-0.0070	25	B	Sr/Tm/Nc	"	
HU Tau	400.5010	-0.0081	+0.0070	17	b,y	Tm/Ad	"	Min II
471 Tau	460.4160	-0.0010	-	18	B	Ib	"	
	462.5008	-0.0010	-	13	B	Kt	"	
	463.5432	-0.0010	-	48	B	Kt	"	
W UMa	250.4456	+0.0039	-0.0076	20	V	Me/Si	34	
	273.2998	+0.0040	-0.0076	11	B,V	Er/Sn	48	Min II
	499.3410	+0.0061	-0.0064	13	V	Be/Eb	34	
W UMi	392.4936	-0.0250	-0.0278	21	b	Tm/Sn	48	
DR Vul	268.5528	+0.0509	+0.0483	24	B	Tn/Tm	"	Min II
	268.5535	+0.0516	+0.0490	24	V	Tn/Tm	"	Min II

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