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PHOTOELECTRIC MINIMA OF ECLIPSING BINARIES

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

The Table gives besides the heliocentric minima three different O-C's: 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: Bz = S. Bozkurt, Izmir; Dn = H. Dönmez, Izmir; En = C. Endres, Nürnberg; Gd = N. Güdür, Izmir; Gl = O. Gülmen, Izmir; GÖ = G. Görz, Nürnberg; Gp = G. Grampp, Nürnberg; Gr = R. Gröbel, Nürnberg; Hl = H. Sengonca, Izmir; HÖ = D. Hölzl, Nürnberg; Hk = W. Huck; Hs = H. Karacan, Izmir; Hu = R. Hufnagl; Ib = C. Ibanoğlu, Izmir; Ki = A. Kizilirmak, Izmir; Me = M. Meier, Nürnberg; Od = O. Demircan, Izmir; Pl = E. Pohl, Nürnberg; Ra = K. Raschok, Nürnberg; Rk = R. Akinci, Izmir; Ro = B. Roth, Nürnberg; Sc = H. Schöppner, Nürnberg; Wg = G. Weigelt, Nürnberg; Wu = J. Wunner, Nürnberg; Zk = Z. Hasan, Izmir.

Remarks: 1) B filter, 2) V filter, 3) Min II, 4) O - C calculated with elements from SAC 43 (Ibanoğlu). O-C (I): CCVS, Moscow 1969/70, O-C (II): SAC 42, Krakow 1971, O-C (III): new elements:

KP Aql IBVS 502 (1970) Ibanoğlu and Gülmen = SAC 43

i Boo IBVS 209 (1967) Pohl

VZ CVn AJ 73 (1968) Harris

RZ Cas Scientific Reports of the Faculty of Science, Ege

University No. 120, Astronomy No. 12(1971)A.Kizilirmak

PV Cas IBVS 386 (1969) Pohl = SAC 43

VW Cep IBVS 369 (1969) Ibanoğlu and Kurutaç = SAC 43

AK Her IBVS 369 (1969) Ibanoğlu and Kurutaç

The (O-C)'s for secondary minima were calculated on the sup-
 position that they are symmetric between primary minima (if
 not special data are given). The sign = between O-C (I) and
 O-C (II) indicates, that the elements (I) and (II) are equal.
 The sign: means that the time of minimum is uncertain.

Star	Min (hel.)	O-C (I)	O-C (II)	O-C (III)	Obs.	Inst. cm	Re- marks
	244...						
RT And	1300.3803:	-0.0017:	-0.0056:		Hk/Hu	34	
AB And	233.3337	+0.0186	+0.0034		Rk/Zk	48	
BX And	186.4006	+0.0024 =	+0.0024		Hl/Rk	"	
KO Aql	148.560	+0.071	+0.099		Hö/Hk/Me	34	
KP Aql	125.549	+0.036 =	+0.036	0.000	G1/Ib	48	1)
	.548	+0.035 =	+0.035	-0.001	G1/Ib	"	2)
	.157.536	+0.032 =	+0.032	-0.004	Hs/Rk	"	1)
	.536	+0.032 =	+0.032	-0.004	Hs/Rk	"	2)
	238.359	+0.036 =	+0.036	0.000	Hs/Rk	"	
OO Aql	161.3518	-0.0230	+0.0021		Gd/Rk	"	3)
	179.3457	-0.0203	+0.0050		H1/Hs	"	
	182.3845	-0.0223	+0.0031		H1/Rk	"	
	187.4531	-0.0216	+0.0038		H1	"	
V007 Aql	168.401	-0.015 =	-0.015		Gd/H1	"	
V008 Aql	159.4178	-0.0082	-0.0086		Hö/P1	34	
	210.3100	-0.0088	-0.0092		Hs/Rk	48	
Ww Bar	024.3382	+0.0015	+0.0011		En/Hu	34	2) 3)
i Boo	138.406	+0.010	+0.011	+0.007	Gr/Hk/Hu	"	2) 3)
	139.345	+0.011	+0.012	+0.009	G1	48	
	141.4886:	+0.0125:	+0.0135:	+0.0103:	Me/Wu	34	2)
	047.3915	-0.0217		-0.0014	Gd/Ki	48	
	090.3582	-0.0206		-0.0003	Hs/Ib	"	1)
	.3584	-0.0204		-0.0001	Hs/Ib	"	2)
	103.4156	-0.0214		-0.0011	Gd/Ib	"	1) 3)
	.4159	-0.0211		-0.0008	Gd/Ib	"	2) 3)
	111.420	-0.020		0.0000	Hs/Ib	"	1)
	.421	-0.019		+0.001	Hs/Ib	"	2)
	116.4719	-0.0233		-0.0029	Hs/Ib	"	1)
	.4733	-0.0219		-0.0015	Hs/Ib	"	2)
	119.4225	-0.0213		-0.0009	Hs/Ib	"	1) 3)
	.4225	-0.0213		-0.0009	Hs/Ib	"	2) 3)
	125.318	-0.023		-0.003	G1/Ib	"	1) 3)
	.320	-0.021		-0.001	G1/Ib	"	2) 3)
R Cma	0964.466	+0.009	-0.003		Hu/Me/Ro	34	2)
RZ Cas	1162.406	-0.004	-0.007	+0.003	Bz/Ib	48	
	199.4583	-0.0040	-0.0079	-0.0030	H1/Rk	"	
TV Cas	0899.3175	-0.0049	+0.0020		Hs/Od	"	
TW Cas	904.2934	-0.0111	-0.0129		Hs/Rk	"	
	964.282	-0.012	-0.014		Me/Ro	34	
	1201.3842	-0.0121	-0.0143		Hö/Hu/Wg	"	
DO Cas	200.3499	+0.0015 =	+0.0015		H1/Rk	48	
PV Cas	152.4924	+0.0274	-0.0360	-0.0107	Dn/Gd	"	1) 3)
	.4924	+0.0274	-0.0360	-0.0002	Gd/Ib	"	2) 3) 4)
	181.4102	+0.0626	-0.0010	-0.0037	Dn/Rk	"	
	195.4140	+0.0627	-0.0009	-0.0037	Dn/Rk	"	
U Cep	203.3925	+0.0186	+0.0344		Rk	"	
VW Cep	0903.3557	-0.0675	-0.0166	+0.0004	G1/Hs	"	2) 3)
	1140.4822:	-0.0678:	-0.0162:	+0.0034:	Gp/Hu/Me	34	
	207.277:	-0.069:	-0.017:	+0.003:	H1/Hs	48	
	217.298:	-0.068:	-0.016:	+0.004:	Rk	"	
	248.328	-0.070	-0.018	+0.003	Gp/Hö/Hu	34	3)
ZZ Cep	173.342	0.000	0.000		Gd/H1	48	

Star	Min (hel.)	O-C (I)	O-C (II)	O-C (III)	Obs.	Inst.	Re- marks
	244...					cm	
Y Cyg	1160.4962:	-0.0079:	+0.0287:		Hk/Hu	34	
	169.4850	-0.0083	+0.0286		Gd/Hl	48	
	253.388:	-0.005:	+0.035:		Hö/Hu	34	
KR Cyg	174.3323	-0.0089	+0.0085		Gd/Hl	48	
V548 Cyg	176.3699	-0.0524	-0.0130		Hl/Rk	"	
	223.3051	-0.0539	-0.0145		Bz/Ib	"	
TY Del	127.4965	+0.0020	+0.0179		Bz/Gl	"	
TZ Dra	131.3522	+0.0054	+0.0057		Gd/Hs	"	
Ai Dra	137.3594	+0.0058	+0.0066		Rk	"	
S Equ	222.3021	-0.0031	-0.0019		Gd/Hs	"	
RX Her	202.4311	+0.0001	-0.0005		Gr/Hk/Wg	34	
TT Her	163.3664	-0.0090 =	-0.0090		Ib/Hs	48	
UX Her	097.321:	-0.037:	-0.002:		Hs/Ib	"	
AK Her	126.3280	-0.0174 =	-0.0174	+0.0001	Gd/Rk	"	
	188.292	-0.018 =	-0.018	0.000	Hl/Ib	"	
	246.253	-0.016 =	-0.016	+0.002	Ib/Rk	"	3)
EZ Hya	0981.5289	-0.0464 =	-0.0464		Hs/Ib	"	1)
	.5297	-0.0456 =	-0.0456		Hs/Ib	"	2)
SW Lac	1167.4277	-0.0256	-0.0280		Hl/Rk	"	3)
	172.4009	-0.0237	-0.0261		Hl/Rk	"	2)
	172.4013	-0.0233	-0.0257		Hl/Rk	"	1)
	249.3737	-0.0257	-0.0280		En/Hu	34	
UV Leo	060.395	-0.006	+0.005		Hö/Sc	"	3)
AM Leo	0977.342:	-0.023: =	-0.023:		Gd/Ki	48	3)
TZ Lyr	1126.5167	+0.0168	+0.0052		Gd/Rk	"	
	135.5070	+0.0171	+0.0055		Hs/Ib	"	
U Oph	135.4868:	-0.0087:	-0.0025:		En/Gr/Hk	34	2)
	204.258	-0.009	-0.002		Gl/Hl	48	
V566 Oph	136.3852	-0.0013 =	-0.0013		Hs/Rk	"	3)
	139.4564	-0.0025 =	-0.0025		Gl	"	
U Peg	185.3804	-0.0063	-0.0063		Hl/Rk	"	3)
	198.311	-0.006 =	-0.006		Bz/Ib	"	
8 Per	260.256	-0.040	-0.001		Hu/Pl	34	2)
UV Psc	163.4933	+0.0141 =	+0.0141		Hs/Ib	48	
V505 Sgr	155.4669	-0.0290	-0.0027		Gl/Ib	"	1)
	.4669	-0.0290	-0.0027		Gl/Ib	"	2)
RS Sct	156.5006	+0.0156	+0.0207		Gd/Ib	"	
	188.382	+0.014	+0.019		Hl/Ib	"	
X Tri	0981.3066	-0.0203 =	-0.0203		Hö/Hu	34	
W UMA	1055.4444	-0.0593	-0.0017		En/Gö/Hu	"	
	079.468	-0.058	0.000		Hs/Rk	48	
	133.3481	-0.0621	-0.0026		Rk	"	3)
TX UMA	0985.3034:	-0.0038	-0.0035:		Me/Ra	34	
AH Vir	1059.366	+0.005 =	+0.005		Hu/Me	"	
DR Vul	124.459	+0.016	-0.010		Gd/Hs	48	
	177.4097	+0.0551	+0.0464		Gd/Hs	"	3)
	240.434:	+0.056:	+0.047:		En/Gö/Hu	34	3)

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