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**PHOTOELECTRIC MINIMA OF ECLIPSING BINARIES**

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The following table contains the unpublished photoelectric times of minima of eclipsing binaries observed at Mt. Suhora Observatory of Cracow Pedagogical University. The observations were made using a double channel photometer (Kreiner et al. 1993) and the triple channel photometer, attached to the 0.6/7.5 m Cassegrain telescope. They were reduced in an usual way and left in the instrumental system (near to the UBVRI). The times of minima were determined using Kwee and van Woerden (1956) method.

The  $O - C$  values were computed using elements given in the database (Kreiner, 2004), which can be accessed at the following web page: <http://www.as.ap.krakow.pl/ephem>. Entries in all columns are self-explanatory.

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References:

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Kreiner, J.M., 2004, *Acta Astron.*, **54**, 207  
Kwee, K.K., van Woerden, H., 1956, *BAN*, **12**, 327

Times of minima

Star	Filters	HJD 2400000 +	Error	$O - C$	Type	Observer
AB And	U,B,V,R	52901.4818	$\pm 0.0001$	-0.0001	Sec.	AB
	U,B,V,R	52902.3114	$\pm 0.0001$	-0.0002	Pri.	AB
	U,B,V,R	52902.4776	$\pm 0.0001$	0.0001	Sec.	AB
BX And	B,V,R	52954.2701	$\pm 0.0002$	0.0018	Pri.	MS
	B,V,R	52955.4887	$\pm 0.0001$	0.0002	Pri.	MS
	B,V,R	52956.4056	$\pm 0.0002$	0.0019	Sec.	MD
	B,V,R	52976.5368	$\pm 0.0003$	-0.0006	Sec.	MD
	B,V,R	52993.3155	$\pm 0.0002$	0.0000	Pri.	MD
	CN And	B,V,R,I	52506.3661	$\pm 0.0004$	-0.0026	Sec.
B,V,R,I		52516.5514	$\pm 0.0004$	0.0014	Sec.	MD
B,V,R,I		52521.4085	$\pm 0.0009$	-0.0008	Pri.	MD
GZ And	V,R,I	52230.3337	$\pm 0.0001$	-0.0004	Sec.	SZ
	V,R,I	52230.4869	$\pm 0.0004$	0.0003	Pri.	SZ
V376 And	U,B,V,R	52697.3649	$\pm 0.0001$	0.0014	Sec.	MD
	B,V,R,I	53304.3583	$\pm 0.0006$	0.0049	Sec.	SZ
	B,V,R,I	53305.5504	$\pm 0.0002$	-0.0010	Pri.	SZ
	B,V,R,I	53306.3455	$\pm 0.0002$	-0.0045	Pri.	SZ
XY Boo	B,V,R	52044.4808	$\pm 0.0004$	0.0020	Sec.	MD
	B,V,R	52046.5184	$\pm 0.0009$	0.0014	Pri.	MD
	B,V,R	52055.4094	$\pm 0.0005$	-0.0014	Pri.	MD
	B,V,R	52417.4621	$\pm 0.0008$	-0.0007	Pri.	MD
EF Boo	B,V,R,I	52320.6642	$\pm 0.0003$	-0.0016	Pri.	AB
	B,V,R,I	52382.4813	$\pm 0.0004$	-0.0001	Pri.	MD
ET Boo	U,B,V,R	52622.5768	$\pm 0.0003$	0.0008	Sec.	MD
	U,B,V,R	52658.6976	$\pm 0.0002$	-0.0007	Sec.	DM
	U,B,V,R	52659.6590	$\pm 0.0010$	-0.0069	Pri.	DM
	U,B,V,R	52660.6332	$\pm 0.0001$	-0.0003	Sec.	DM
	U,B,V,R	52696.4321	$\pm 0.0003$	-0.0012	Pri.	MD
	U,B,V,R	52767.3887	$\pm 0.0002$	0.0009	Pri.	MD
	AO Cam	B,V,R	52203.5230	$\pm 0.0002$	0.0017	Pri.
V,R,I		52271.4806	$\pm 0.0005$	-0.0010	Pri.	AB
B,V,R		52311.5656	$\pm 0.0005$	0.0007	Sec.	MD
B,V,R		52547.4491	$\pm 0.0002$	0.0028	Sec.	SZ
B,V,R		52547.6132	$\pm 0.0008$	0.0019	Pri.	SZ
B,V,R		52548.2730	$\pm 0.0005$	0.0019	Pri.	SZ
B,V,R		52548.6021	$\pm 0.0003$	0.0011	Pri.	SZ
B,V,R		52591.3246	$\pm 0.0004$	0.0010	Sec.	SZ
DN Cam	B,V,R,I	52644.4279	$\pm 0.0007$	0.0013	Pri.	AB
	B,V,R,I	52644.6770	$\pm 0.0002$	0.0012	Sec.	AB
	B,V,R,I	52645.1754	$\pm 0.0007$	0.0013	Sec.	AB
	B,V,R	52645.4229	$\pm 0.0006$	-0.0004	Pri.	AB
	B,V,R,I	52645.6727	$\pm 0.0004$	0.0003	Sec.	AB
FN Cam	U,B,V,R	53056.5149	$\pm 0.0002$	0.0063	Sec.	WO
BH CMi	B,V,R,I	51242.3369	$\pm 0.0008$	0.0033	Sec.	MD
	B,V,R,I	51256.3148	$\pm 0.0006$	0.0000	Sec.	MD
	I	51556.6288	$\pm 0.0004$	-0.0022	Sec.	MD
	B,V,R,I	51557.4683	$\pm 0.0006$	-0.0016	Pri.	MD
YY Cnc	B,V,R	52720.3790	$\pm 0.0004$	0.0038	Sec.	MD
DK Cyg	B,V,R	52145.5380	$\pm 0.0004$	0.0013	Sec.	SZ
	B,V,R	52147.4211	$\pm 0.0003$	0.0016	Sec.	WO
	B,V,R	52517.3871	$\pm 0.0005$	0.0007	Sec.	MD
	B,V,R	52528.4468	$\pm 0.0003$	-0.0009	Pri.	MD
	B,V,R	52531.5058	$\pm 0.0003$	-0.0014	Sec.	MD
	B,V,R	52888.5307	$\pm 0.0001$	0.0007	Pri.	MD
	U,B,V,R	52909.4757	$\pm 0.0001$	-0.0003	Sec.	MD

## Times of minima (cont.)

Star	Filters	HJD 2400000 +	Error	$O - C$	Type	Observer
V2150 Cyg	B,V,R	52137.4133	$\pm 0.0005$	-0.0046	Sec.	SZ
	B,V,R,	52139.4956	$\pm 0.0005$	0.0062	Pri.	SZ
	B,V,R,I	52182.3866	$\pm 0.0005$	-0.0127	Sec.	AB
	B,V,R,I	52195.4146	$\pm 0.0002$	-0.0056	Sec.	MD
	V,R	52477.4291	$\pm 0.0010$	-0.0124	Pri.	DM, SZ
	V,R	52482.4624	$\pm 0.0010$	-0.0099	Sec.	DM, SZ
LS Del	V,R	52134.4983	$\pm 0.0002$	-0.0003	Sec.	SZ
	V,R	52136.5000	$\pm 0.0002$	0.0003	Pri.	SZ
EF Dra	B,V,R	52509.4210	$\pm 0.0006$	-0.0039	Sec.	MD
	B,V,R	52510.4854	$\pm 0.0009$	0.0005	Pri.	MD
	B,V,R	52511.3349	$\pm 0.0005$	0.0019	Pri.	MD
FU Dra	B,V,R	52511.5439	$\pm 0.0006$	-0.0011	Sec.	MD
	B,V,R,I	52333.4576	$\pm 0.0002$	-0.0009	Sec.	SZ
	B,V,R,I	52338.5190	$\pm 0.0003$	-0.0003	Pri.	SZ
	B,V,R,I	52347.4142	$\pm 0.0003$	0.0001	Pri.	SZ
GM Dra	B,V,R,I	52347.5678	$\pm 0.0003$	0.0004	Sec.	SZ
	U,B,V,R	52776.4847	$\pm 0.0002$	0.0169	Pri.	MS
	U,B,V,R	52784.4271	$\pm 0.0002$	-0.0012	Sec.	MS
	U,B,V,R	52790.5250	$\pm 0.0002$	-0.0008	Sec.	MS
	U,B,V,R	52793.4048	$\pm 0.0001$	-0.0003	Pri.	MS
	U,B,V,R	52795.4361	$\pm 0.0001$	-0.0015	Pri.	MD
QW Gem	U,B,V,R	52803.4017	$\pm 0.0003$	0.0035	Sec.	MD
	B,V,R,I	51927.3928	$\pm 0.0004$	-0.0008	Sec.	WO
	B,V,R,I	51927.5723	$\pm 0.0004$	-0.0004	Pri.	WO
UX Her	B,V,R,I	51784.4029	$\pm 0.0003$	-0.0014	Pri.	MD
V857 Her	B,V,R	53218.4940	$\pm 0.0003$	-0.0005	Pri.	MD
V899 Her	B,V,R,I	52438.5093	$\pm 0.0009$	-0.0029	Pri.	MD
FG Hya	B,V,R	53387.4199	$\pm 0.0001$	0.0014	Sec.	MS
	B,V,R	53387.5812	$\pm 0.0002$	-0.0012	Pri.	MS
	V	53410.5292	$\pm 0.0002$	-0.0023	Pri.	WO
	V	53410.3672	$\pm 0.0002$	-0.0004	Sec.	WO
	U,B,V,R	52903.2835	$\pm 0.0002$	0.0002	Pri.	AB
SW Lac	U,B,V,R	52903.6037	$\pm 0.0001$	-0.0003	Pri.	AB
	U,B,V,R	52904.4061	$\pm 0.0001$	0.0003	Sec.	AB
	U,B,V,R	52904.5657	$\pm 0.0001$	-0.0004	Pri.	AB
	B,V,R,I	51968.2551	$\pm 0.0002$	-0.0004	Pri.	WO
AP Leo	B,V,R,I	52003.5352	$\pm 0.0004$	-0.0016	Pri.	MD
	B,V,R,I	52321.5705	$\pm 0.0002$	0.0011	Pri.	AB
	B,V,R,I	52344.3796	$\pm 0.0005$	0.0013	Pri.	MD
	B,V,R,I	52344.5932	$\pm 0.0005$	-0.0002	Sec.	MD
	B,V,R,I	52345.4540	$\pm 0.0003$	-0.0002	Sec.	MD
	B,V,R	52347.3933	$\pm 0.0003$	0.0026	Pri.	AB
	B,R,I	52347.6042	$\pm 0.0004$	-0.0017	Sec.	AB
	B,V,R,I	52351.4795	$\pm 0.0003$	0.0004	Sec.	AB
	B,V,R,I	52364.3906	$\pm 0.0003$	0.0008	Sec.	AB
	U,B,V,R	52704.5261	$\pm 0.0003$	-0.0025	Pri.	WO
EX Leo	B,V,R	53431.4367	$\pm 0.0001$	0.0039	Pri.	SZ
	B,V	53431.6400	$\pm 0.0025$	0.0029	Sec.	SZ
	B,V,R	53432.4569	$\pm 0.0002$	0.0026	Sec.	SZ
	B,V,R	53433.4799	$\pm 0.0002$	0.0041	Pri.	WO
	V	53411.6310	$\pm 0.0001$	0.0027	Pri.	WO
RT LMi	V	53411.4442	$\pm 0.0001$	0.0033	Sec.	WO

## Times of minima (cont.)

Star	Filters	HJD 2400000+	Error	$O - C$	Type	Observer
UV Lyn	B,V,R,I	51979.4050	$\pm 0.0003$	0.0015	Pri.	SZ
	B,V,R,I	51980.4435	$\pm 0.0002$	0.0026	Sec.	SZ
	B,R,I	51999.3224	$\pm 0.0004$	-0.0003	Pri.	AB
	B,V,R,I	52001.3976	$\pm 0.0004$	0.0000	Pri.	AB
	U,B,V,R	53078.4872	$\pm 0.0002$	-0.0014	Sec.	MD
	U,B,V,R	53095.5065	$\pm 0.0002$	0.0036	Sec.	MD
	U,B,V,R	53096.3308	$\pm 0.0001$	-0.0021	Sec.	MD
	U,B,V,R	53097.3700	$\pm 0.0001$	-0.0004	Pri.	MD
V753 Mon	U,B,V,R	53098.4072	$\pm 0.0001$	-0.0006	Sec.	MD
	B,V,R,I	52284.5531	$\pm 0.0003$	-0.0001	Pri.	MD
	B,R	52291.3228	$\pm 0.0004$	-0.0009	Pri.	GS
BB Peg	B,V	52321.4517	$\pm 0.0004$	-0.0004	Sec.	AB
	V	52201.2508	$\pm 0.0001$	0.0005	Sec.	SZ
KS Peg	V	52201.4305	$\pm 0.0001$	-0.0007	Pri.	SZ
	V	52203.2386	$\pm 0.0002$	-0.0001	Pri.	SZ
	V	52203.4188	$\pm 0.0002$	-0.0006	Sec.	SZ
	B,R,I	52207.3962	$\pm 0.0004$	0.0003	Sec.	MD
	B,V,R	53284.3112	$\pm 0.0002$	-0.0004	Sec.	MD
	B,V,R	53285.3957	$\pm 0.0002$	-0.0004	Sec.	MD
	B,V,R,I	53283.3193	$\pm 0.0008$	0.0001	Pri.	MD
	V357 Peg	U,B,V,R	52931.2500	$\pm 0.0002$	0.0007	Pri.
V592 Per	U,B,V,R	52931.5379	$\pm 0.0002$	-0.0006	Sec.	MD
	B,V,R,I	53399.3395	$\pm 0.0003$		Pri.	MD
OU Ser	U,B,V,R	52745.4867	$\pm 0.0001$	-0.0031	Pri.	MS, AB
	U,B,V,R	52746.5306	$\pm 0.0002$	0.0021	Sec.	MS, AB
	U,B,V,R	52764.4808	$\pm 0.0002$	-0.0019	Pri.	AB
	U,B,V,R	52765.5212	$\pm 0.0001$	-0.0002	Sec.	MD
	U,B,V,R	52766.4107	$\pm 0.0001$	-0.0010	Sec.	MD
	V1130 Tau	U,B,V,R	52620.4744	$\pm 0.0001$	-0.0010	Sec.
W UMa	U,B,V,R	52957.5984	$\pm 0.0001$	0.0010	Sec.	MD
	U,B,V,R	52978.3678	$\pm 0.0002$	-0.0001	Sec.	MD
	B,V,R,I	51952.3401	$\pm 0.0002$	-0.0004	Pri.	DM
HN UMa	B,V,R,I	51956.5122	$\pm 0.0002$	0.0013	Sec.	DM
	U,B,V,R	52292.6296	$\pm 0.0006$	-0.0031	Sec.	AB
HX UMa	U,B,V,R	52293.5934	$\pm 0.0002$	0.0044	Pri.	AB
	U,B,V,R	52698.3003	$\pm 0.0002$	-0.0006	Pri.	MD
	U,B,V,R	52698.4835	$\pm 0.0003$	-0.0086	Sec.	MD
	B,V,R,I	51966.4236	$\pm 0.0004$	-0.0030	Sec.	WO
II UMa	B,V,R,I	51968.5070	$\pm 0.0003$	-0.0049	Pri.	WO
	B,V,R	52649.7056	$\pm 0.0007$	-0.0022	Sec.	AB
HT Vir	B,V,R	53140.5051	$\pm 0.0001$	0.0007	Sec.	MD
ER Vul	B,V,R,I	51389.4743	$\pm 0.0002$	-0.0005	Pri.	DM
	B,V,R,I	51390.5200	$\pm 0.0003$	-0.0019	Sec.	DM