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CCD TIMES OF MINIMA OF FAINT ECLIPSING BINARIES IN 2000

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Observatory and telescope:	
16'' Newtonian telescope (f/1750 mm) at N. Copernicus Observatory and Planetarium in Brno	

Detector:	CCD camera SBIG ST-7, Peltier cooling, KAF1600 chip, 9' × 13' FOV, 255 × 382 pixels.
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Method of data reduction:	
Reduction of the CCD frames was made with a software package Munidos ¹ .	

Method of minimum determination:	
The minima times were computed using several procedures written by A. Gaspani (1995) based on artificial neural networks.	

Observed star(s):							
Star name	GCVS type	Coordinates (J2000)		Comp. star	Ephemeris		Source
		RA	Dec		E 2400000+	P [day]	
TT And	EA/SD:	23 13 23	+46 08 52	3623.2539 ²	34237.413	2.765142	1
FL And	EA/SD	01 08 01	+36 53 22	2290.0121	38238.465	0.905644	1
KN And	E	02 36 09	+38 09 22	2832.2197	28593.2862	2.2621777	2
EX Aqr	EB	21 15 15	+02 28 45	0532.0746	37882.531	0.8893836	1
V616 Aql	EA/SD:	19 31 36	+10 49 06	1059.1942	28332.448	1.69058	1
V770 Aql	EA/SD:	20 03 09	+09 50 15	1076.0483	28746.408	1.59289	1
V784 Aql	EW/KW	20 07 07	+13 29 59	1084.1623	52141.4624	0.587694	3
V1075 Aql	EA/SD:	20 00 17	+15 34 11	1617.2360	27635.457	0.880981	1
V1299 Aql	EA/SD:	20 05 03	+14 58 19	0975.17815756	39237.559	1.791745	1
MO Aur	E	05 45 21	+31 54 31	2409.0241	49004.449	5.2666871	4
TY Boo	EW/KW	15 00 47	+35 07 54	2568.0991	34480.425	0.3171477	1
AC Boo	EW/KW	14 56 28	+46 21 44	3474.0835	25776.431	0.35242943	1
AR Boo	EW/KW:	13 48 10	+24 55 28	0199.0233	50182.4799	0.3448733	5
CK Boo	EW/KW	14 35 04	+09 06 54	0910.0654	47982.43008	0.355157901	3
SW Cnc	EA/SD:	09 08 59	+09 35 41	0812.0192	30495.651	1.799211	1
WX Cnc	EA/DM:	08 46 51	+32 51 06	2487.0106	25620.377	1.2245888	1
RV CVn	EW/SD:	13 40 18	+28 18 22	2004.0793	44375.4430	0.2695671	1
TU CMi	EW/KW	07 37 06	+07 50 47	0765.1531	25245.604	0.43344	1
AG CMi	EA/SD	07 08 36	+06 14 26	0175.3085	34698.677	1.6645438	1
AL Cas	EW	02 13 50	+70 09 01	4315.0452	44490.366	0.50055583	1
MM Cas	EA/SD	00 54 31	+54 26 16	3672.0189	35401.483	1.15847	1

¹Hroch, F., Novák, R., 1997, MUNIDOS, <http://munipack.astronomy.cz/>

²The names of the comparison stars are from the GSC and USNO A2.0 respectively

Observed star(s):							
Star name	GCVS type	Coordinates (J2000)		Comp. star	Ephemeris		Source
		RA	Dec		E 2400000+	P [day]	
MT Cas	EW/KW	00 14 45	+54 39 41	3657.1980 ²	44941.5925	0.31387768	1
V360 Cas	EA/SD	23 34 43	+55 54 36	4004.0715	31346.424	1.500590	1
V361 Cas	EA/KE:	23 41 58	+56 08 39	4004.1027	30319.344	1.228985	1
V702 Cas	EA/SD	23 00 37	+54 39 44	3989.1874	40150.474	2.478783	6
TV Cep	EA/SD	22 09 54	+63 07 05	4267.1774	21366.623	3.857082	1
IM Cep	EB	23 13 09	+62 41 56	4283.0363	29931.265	0.921589	1
LP Cep	EA/SD	21 19 50	+60 42 28	4248.1072	30517.465	0.6930642	1
CN Com	EB	12 19 38	+16 31 21	1445.1516	37668.520	0.73544	1
DD Com	EW/KW	12 28 46	+21 43 25	1447.1638	37779.410	0.2692061	1
EQ Com	EB	12 58 52	+18 00 49	1453.0621	37705.584	0.361867	1
W Crv	EB/KW:	12 07 36	-13 09 30	5525.0351	39647.766	0.38808083	1
QS Cyg	E/KE	19 57 40	+38 48 21	3137.1978	23730.358	1.044000	1
QT Cyg	EA/SD	19 58 07	+38 49 29	3137.1978	33408.553	3.33558992	1
QU Cyg	E	19 58 28	+38 13 30	3137.3455	24026.509	0.3469103	1
QX Cyg	E/DW	19 58 35	+38 14 36	1275.12938182	23352.335	0.89961	1
V454 Cyg	EB/SD	20 15 57	+37 30 29	2684.0631	28725.469	2.3168937	1
V505 Cyg	EB	20 29 29	+32 47 47	2689.1334	50320.361	0.6676618	7
V526 Cyg	EA/SD:	21 10 18	+45 56 11	3588.2806	33762.414	1.2334603	1
V704 Cyg	EW	21 28 12	+45 37 38	3590.0282	37939.409	0.570704	1
V706 Cyg	EB	21 35 55	+40 50 34	3187.1613	40116.429	0.46625592	1
V711 Cyg	EA/SD	21 51 16	+48 02 48	1350.15107073	32802.447	0.826757	1
V787 Cyg	EA	20 16 16	+47 59 49	3576.0603	16457.424	1.5285151	1
V824 Cyg	EB	20 02 31	+36 13 57	2682.2736	32806.1065	0.644194765	1
V880 Cyg	EA/KE:	19 31 27	+33 39 20	1200.11885216	33857.404	1.0600316	1
V906 Cyg	EW/KW	19 34 57	+34 38 40	1200.12133312	31962.5859	0.365166713	1
V907 Cyg	EW/KW	19 35 30	+29 45 48	2150.1562	39029.450	0.426056	1
V931 Cyg	EW/KW	19 39 14	+29 46 09	2150.1262	34134.4975	0.34149157	1
V947 Cyg	EW/KW	19 42 15	+31 35 39	2656.1237	35044.474	0.42924466	1
V1019 Cyg	EA/SD	19 58 38	+30 23 24	2670.1411	33542.334	2.2793125	1
V1414 Cyg	LB	22 01 20	+47 36 11	3609.2600	29112.380	0.703126	1
V1580 Cyg	M	19 44 10	+45 27 29	1350.10973430	42653.610	1.811443	1
V1787 Cyg	EA	20 37 47	+55 16 29	3954.0991	45449.6	0.7396	8
V2240 Cyg	EW	20 15 56	+37 27 16	2684.0631	51652.5305	0.40419022	9
FH Del	EA/SD:	20 28 12	+19 26 60	1050.17756220	29791.410	0.678036	1
RZ Dra	EB/SD:	18 23 06	+58 54 15	3916.0868	44177.5555	0.5508738	1
TW Dra	EA/SD	15 33 51	+63 54 24	4184.0387	44136.295	2.8068470	1
AK Dra	EA	18 16 44	+53 14 47	3904.1131	26828.530	2.218237	1
AR Dra	EA/SD:	12 16 37	+64 51 26	4158.0442	42868.9114	0.6758375	1
VV Eri	EA/SD:	03 21 24	-10 17 04	5298.1053	27342.522	1.557586	1
AV Gem	EA/SD	06 42 01	+13 24 45	0758.1933	27832.6099	1.2216548	1
BT Gem	EA/SD:	06 11 42	+23 20 16	1877.1565	28453.64	1.2369358	1
CW Gem	EA/SD	06 40 06	+21 52 12	1341.0981	28126.45	1.678148	1
EL Gem	EA/KE:	06 29 05	+20 48 60	1340.2169	28192.26	1.4283286	1
FT Gem	EW	06 57 20	+13 40 58	0760.0050	30328.723	0.587612	1
KQ Gem	EB/KW	06 43 50	+15 53 56	1330.1192	29231.515	0.4079925	1
KV Gem	RRC:	06 47 12	+15 43 17	1330.0101	52234.6975	0.358519	3
V342 Her	EB/SD:	18 24 06	+25 04 41	1125.09447033	35693.440	0.851730	1
V719 Her	RRC:	17 09 52	+42 56 07	3084.0570	41598.278	0.335870	1
V789 Her	EW/KW	17 05 43	+42 31 02	3080.1094	51679.4219	0.3200554	3
GN Hya	EA	08 48 12	+02 05 53	0216.1653	25646.517	2.2495444	1
EL Lac	EA/SD	22 08 52	+42 16 21	3206.2024	25502.578	2.806792	1
GH Lac	EA	22 39 35	+47 14 40	3624.0346	25423.506	0.532645	1
HX Lac	EW	22 06 09	+49 32 09	3613.2498	25243.115	0.5274659	1
KO Lac	EA/SD	22 14 31	+53 29 02	3982.2126	33206.445	1.0260728	1
LU Lac	EW/KW	22 21 42	+51 22 04	3619.3885	33513.5649	0.29880135	1
NR Lac	EB	22 29 21	+49 41 59	3615.0868	33873.638	0.6048038	1
RW Leo	EA/SD	10 39 40	+08 59 39	0839.0530	43324.73087	1.6825565	1

²The names of the comparison stars are from the GSC and USNO A2.0 respectively

Observed star(s):							
Star name	GCVS type	Coordinates (J2000)		Comp. star	Ephemeris		Source
		RA	Dec		E 2400000+	P [day]	
BL Leo	EW/KW	11 45 33	+24 46 20	1985.0975 ²	44648.756	0.2819306	1
BW Leo	EW/KW	11 32 09	+17 19 26	1438.1475	38111.429	0.337221	1
Z Lep	E	05 10 09	-14 52 19	5342.0269	27424.311	0.993715	1
AH Lyn	EA	08 42 18	+37 11 08	2490.0592	37647.022	1.016412	10
DT Lyr	EA/SD:	19 03 23	+29 53 18	2134.0166	25493.355	0.787904	1
KT Lyr	EB	18 32 48	+33 01 19	2628.0663	29752.38	0.581550	1
MN Lyr	EB/KE	18 42 48	+35 05 02	2645.0811	29373.57	0.544076	1
PY Lyr	EW/KW	19 20 26	+28 56 47	2136.1185	51663.5696	0.3857770	3
V361 Lyr	E	19 02 31	+46 58 27	3545.2244	44523.307	0.309616	1
V412 Lyr	EA/KE	19 06 50	+29 16 44	2134.1428	38260.393	0.931469	1
V417 Lyr	EW/KW	19 08 40	+30 43 22	2640.0718	39376.33	0.300660	1
V429 Lyr	EA/SD	19 13 37	+34 29 19	1200.10838787	39330.455	1.067594	1
V431 Lyr	EW/KW	19 14 00	+33 35 32	1200.10864421	39998.468	0.446367	1
V563 Lyr	EW	18 45 07	+40 11 12	3122.2865	50700.3444	0.577639	11
VX Mon	EA/SD	06 31 00	+09 18 21	0733.2665	25300.34	1.62967	1
BH Mon	EA	06 56 37	+09 19 31	0748.0557	26297.576	2.324668	1
CP Mon	EA/SD	07 00 11	+04 09 45	0170.1838	25981.575	1.8836801	1
GU Mon	EW	06 44 47	+00 13 15	0147.1646	30345.347	0.89668149	1
V396 Mon	EW/KW	06 38 37	+03 36 18	0151.0295	34769.4175	0.39634498	1
V524 Mon	EW/KW	06 59 01	+02 12 56	0153.0998	34446.4420	0.28361714	1
V532 Mon	EW:/KW:	07 04 30	-00 21 03	4814.1217	34769.3467	0.46698470	1
V981 Oph	EA/SD	17 48 50	+11 24 36	1002.0623	36069.259	1.4285133	1
CQ Ori	EA	06 23 34	+13 56 41	0744.1012	38455.21	2.74016	1
DZ Ori	EA/SD:	06 09 29	+15 39 19	1314.1355	25243.53	1.83614	1
EG Ori	EA/SD	06 11 06	+16 19 12	1314.0765	25245.41	1.163166	1
GU Ori	EA	06 10 05	+12 49 22	0738.0513	43069.8875	0.47068240	2
OS Ori	EA/SD	05 36 20	+08 49 55	0701.0379	45386.349	2.383525	1
CH Per	EA/SD	02 04 36	+53 53 10	3685.1951	43755.511	1.314649	1
EQ Per	EA/SD	02 56 19	+52 11 05	1350.02871659	29187.37	1.48579	1
FW Per	EA/SD:	04 27 43	+52 28 53	3732.0889	28429.375	0.7912215	1
II Per	EB/KW	04 29 37	+44 25 32	2891.2911	30257.550	0.479854	1
PS Per	EA/SD:	02 39 33	+45 38 12	3296.1840	24527.250	0.7021775	1
V434 Per	EW/KE:	03 21 41	+40 17 38	2865.1814	38709.473	0.536098	1
V Sge	E+NL	20 20 15	+21 06 08	1643.1984	37889.9154	0.514195	1
AP Tau	EA	04 54 45	+26 55 24	1840.0511	39414.438	0.9719728	1
V Tri	EB/SD	01 31 47	+30 21 49	2293.1021	24474.305	0.5852057	1
RS Tri	EA/DM	01 34 49	+29 35 21	1755.1433	37940.490	1.9089234	1
RV Tri	EA/SD	02 13 18	+37 01 01	2321.1715	46033.308	0.75366648	1
ST Tri	EB/SD:	02 41 34	+35 43 30	2336.0603	39025.468	0.4790536	1
23360281 Tri	EW	02 41 41	+35 42 54	2336.0603	51550.3118	0.3739783	3
AX Vir	EB/KE	13 27 45	+03 52 28	0303.0397	27570.444	0.7025262	1
BH Vir	EA/DW/RS:	13 58 25	-01 39 40	4968.0476	43230.609	0.81687161	1
RR Vul	EA	20 54 48	+27 55 11	2179.0613	35035.437	5.05070	1
FF Vul	E/KW	20 23 10	+25 43 42	2160.0239	51796.495	0.44497799	10

Source(s) of the ephemeris:

1: Kholopov et al., 1985; 2: Kreiner, J.M. et al., 2000; 3: Zejda, M., 2002;
4: Williams, D. B., 1996; 5: Wolf, M., Borovička, J., Šarounová, L., Šafář, J., Šafářová, E., 1998; 6: Häussler, K., 1990; 7: Danielkiewicz-Krosniak, E., 2001;
8: Locher, K., 1983; 9: this paper 10: Kinman, T.D., Mahaffey, C.T., Wirtanen, C.A., 1982; 11: Beltraminelli, N., Dalmazio, D., Remis, J., Manna, A., 1999;

²The names of the comparison stars are from the GSC and USNO A2.0 respectively

Times of minima:						
Star name	Time of min. HJD 2400000+	Error	Type	Filter	$O - C$ [day]	Rem.
TT And	51848.5437	0.0019	I	-	-0.0587	normal min.
FL And	51848.5405	0.0067	I	-	0.0575	normal min.
	51799.6383	0.0030	I	-	0.0600	normal min.
KN And	51848.4852	0.0028	I	-	0.0122	
EX Aqr	51777.4040	0.0097	I	-	0.0330	
V616 Aql	51799.3961	0.0012	I	-	0.0071	
V770 Aql	51778.3205	0.0033	I	-	0.3160	normal min.
V784 Aql	51679.5399	0.0029	I	-	0.0050	normal min.
	51776.5081	0.0023	I	-	0.0037	
	51799.4286	0.0020	I	-	0.0041	
V1075 Aql	51781.3608	0.0073	I	-	-0.0234	
V1299 Aql	51799.4439	0.0021	I	-	-0.0393	
MO Aur	51569.3341	0.0030	I	-	0.0085	normal min.
TY Boo	51679.4228	0.0032	I	-	0.0780	normal min.
AC Boo	51635.5901	0.0032	I	-	0.0021	
	51626.4275	0.0015	I	-	0.0027	
	51694.4485	0.0048	I	-	0.0048	normal min.
AR Boo	51580.5980	0.0033	I	-	0.0017	normal min.
	51626.4677	0.0015	I	-	0.0033	
CK Boo	51657.4190	0.0067	II	V	-0.0075	normal min.
	51772.3100	0.0049	I	V	-0.0100	normal min.
SW Cnc	51580.5470	0.0016	I	-	-0.0577	
WX Cnc	51580.4459	0.0038	I	-	0.0109	normal min.
RV CVn	51626.5506	0.0030	I	-	0.0222	normal min.
TU CMi	51876.5038	0.0049	I	-	-0.0872	
AG CMi	51580.4073	0.0024	I	-	-0.0729	normal min.
AL Cas	51772.4435	0.0015	I	-	-0.0087	
	51771.4436	0.0056	I	-	-0.0075	normal min.
MM Cas	51776.5201	0.0024	I	-	0.0637	
	51841.3964	0.0021	I	-	0.0656	
MT Cas	51550.2943	0.0030	I	-	0.0072	
V360 Cas	51550.2690	0.0015	I	-	-0.0988	
	51841.3881	0.0020	I	-	-0.0941	normal min.
V361 Cas	51778.4792	0.0090	I	-	-0.1719	normal min.
V702 Cas	51778.4784	0.0054	I	-	0.0333	normal min.
TV Cep	51841.4931	0.0052	I	-	0.0652	
IM Cep	51848.3939	0.0027	I	-	-0.1007	normal min.
LP Cep	51841.6151	0.0017	I	-	-0.0492	
CN Com	51657.3741	0.0018	I	-	0.0499	
DD Com	51672.3839	0.0045	I	-	0.0547	normal min.
EQ Com	51657.3984	0.0017	I	-	0.0322	
W Crv	51576.6059	0.0035	I	-	0.0113	normal min.
QS Cyg	51777.3971	0.0064	I	-	-0.0209	
QT Cyg	51777.4874	0.0156	I	-	-0.1593	
QU Cyg	51626.6168	0.0010	I	-	-0.0757	
	51777.3512	0.0081	I	-	0.0997	normal min.
	51776.4819	0.0049	I	-	-0.0758	
	51777.5212	0.0028	I	-	-0.0772	
QX Cyg	51697.4865	0.0023	I	-	0.2396	
	51777.5490	0.0070	I	-	0.2368	normal min.
	51776.6348	0.0075	I	-	0.2222	normal min.
V454 Cyg	51697.4653	0.0020	I	-	-0.0047	
	51799.4096	0.0019	I	-	-0.0038	
V505 Cyg	51697.4104	0.0016	I	-	-0.0031	normal min.
V526 Cyg	51778.3956	0.0083	I	-	0.0605	
V704 Cyg	51626.6336	0.0027	I	-	0.0306	normal min.
	51799.5586	0.0024	I	-	0.0323	

Times of minima:						
Star name	Time of min. HJD 2400000+	Error	Type	Filter	$O - C$ [day]	Rem.
V706 Cyg	51776.5246	0.0028	I	-	-0.0324	
	51778.3897	0.0023	I	-	-0.0324	
	51721.5085	0.0015	I	-	-0.0303	
	51841.3359	0.0046	I	-	-0.0307	
V711 Cyg	51694.4125	0.0022	I	-	-0.2587	
	51626.6167	0.0067	I	-	-0.2604	normal min.
	51799.4063	0.0018	I	-	-0.2630	
	51814.2834	0.0034	I	-	-0.2676	normal min.
V787 Cyg	51781.4110	0.0015	I	-	0.0030	
V824 Cyg	51841.4358	0.0054	I	-	0.0182	normal min.
V880 Cyg	51799.4968	0.0064	I	-	-0.0021	
V906 Cyg	51635.6309	0.0032	I	-	0.0535	normal min.
V907 Cyg	51635.6427	0.0081	I	-	0.0478	normal min.
V931 Cyg	51635.6161	0.0022	I	-	0.0171	normal min.
V947 Cyg	51694.4158	0.0060	I	-	-0.0293	normal min.
V1019 Cyg	51781.4849	0.0094	I	-	0.0923	normal min.
V1414 Cyg	51778.3919	0.0020	I	-	0.0422	type err.
	51799.4907	0.0048	I	-	0.0472	
V1580 Cyg	51799.5206	0.0102	I	-	-0.0651	type err.
V1787 Cyg	51777.5538	0.0074	I	-	-0.0638	normal min.
V2240 Cyg	51778.4336	0.0120	II	-	-0.0022	
	51799.4447	0.0019	II	-	-0.0089	
FH Del	51697.4503	0.0105	I	-	0.0532	normal min.;DH
RZ Dra	51777.4460	0.0029	I	-	0.0356	
TW Dra	51675.5165	0.0024	I	V	0.0305	
AK Dra	51679.5661	0.0075	I	R	0.1270	normal min.
AR Dra	51697.3809	0.0087	I	-	0.0042	normal min.
VV Eri	51569.3073	0.0019	I	-	0.0927	
AV Gem	51608.4327	0.0036	I	-	-0.0229	
BT Gem	51626.3896	0.0018	I	-	-0.0057	
	51841.6168	0.0039	I	-	-0.0053	normal min.
CW Gem	51850.4584	0.0024	I	-	0.0301	normal min.
EL Gem	51876.6010	0.0091	I	-	-0.2038	normal min.
FT Gem	51608.4915	0.0102	I	-	-0.0125	normal min.
KQ Gem	51569.4548	0.0020	I	-	-0.0576	
KV Gem	51550.2765	0.0013	I	-	-0.0082	type err.
	51569.2791	0.0024	I	-	-0.0071	normal min.
	51576.4544	0.0034	I	-	-0.0022	normal min.
	51569.4579	0.0016	II	-	-0.0076	
	51841.5778	0.0033	II	-	-0.0036	
	51876.5337	0.0021	I	-	-0.0033	
	51909.5178	0.0023	I	-	-0.0030	normal min.
V342 Her	51657.4195	0.0040	I	V	0.0041	normal min.
V719 Her	51675.4359	0.0031	I	-	0.0503	type err.
	51672.4321	0.0029	I	-	0.0693	
	51697.4908	0.0027	I	-	-0.0622	
V789 Her	51675.4214	0.0090	II	R	0.0002	
	51672.5415	0.0016	II	R	0.0008	
	51679.4237	0.0019	I	R	0.0018	
	51814.3217	0.0027	II	R	-0.0036	
	51721.5116	0.0055	II	R	0.0024	
GN Hya	51608.4179	0.0022	I	-	-0.0910	normal min.
	51626.4182	0.0019	I	-	-0.0871	
EL Lac	51799.5457	0.0021	I	-	0.1335	
GH Lac	51776.5293	0.0030	I	-	-0.1207	
	51848.4313	0.0033	I	-	-0.1258	normal min.
	51841.5150	0.0024	I	-	-0.1177	normal min.

Times of minima:						
Star name	Time of min. HJD 2400000+	Error	Type	Filter	$O - C$ [day]	Rem.
HX Lac	51781.4402	0.0015	I	-	-0.0666	
KO Lac	51697.4261	0.0106	I	-	0.1232	normal min.
	51778.4849	0.0068	I	-	0.1222	normal min.
LU Lac	51841.4765	0.0063	I	-	0.0344	normal min.
NR Lac	51776.4977	0.0089	I	-	0.0624	
RW Leo	51626.4107	0.0023	I	-	-0.0539	
	51685.3088	0.0026	I	-	-0.0453	normal min.
BL Leo	51576.6248	0.0041	I	-	-0.0118	normal min.
	51635.5443	0.0023	I	-	-0.0158	normal min.
	51672.3383	0.0028	II	-	-0.0138	normal min.
BW Leo	51576.5847	0.0028	I	-	-0.0788	normal min.
	51672.3955	0.0022	I	-	-0.0388	
Z Lep	51576.4053	0.0035	I	-	-0.1488	normal min.
AH Lyn	51608.4526	0.0017	I	-	-0.0046	
DT Lyr	51675.5236	0.0020	I	R	0.1187	
KT Lyr	51635.5212	0.0034	I	-	-0.0038	normal min.
MN Lyr	51635.5648	0.0023	I	-	0.0371	
PY Lyr	51657.5855	0.0117	I	R	-0.0046	
	51776.4056	0.0020	I	-	-0.0038	
	51777.3679	0.0015	I	-	-0.0059	
	51777.5628	0.0022	II	-	-0.0039	
	51841.2185	0.0019	I	-	-0.0014	normal min.
V361 Lyr	51675.3972	0.0032	I	R	-0.0394	normal min.
	51697.5378	0.0030	II	R	-0.0363	normal min.
	51811.3154	0.0012	I	R	-0.0426	
	51811.4678	0.0046	II	R	-0.0450	
	51814.4105	0.0059	I	R	-0.0437	
	51841.3465	0.0063	I	R	-0.0443	
V412 Lyr	51675.5352	0.0019	I	R	0.1257	
V417 Lyr	51675.4694	0.0092	I	R	0.0408	
V429 Lyr	51679.4262	0.0087	I	-	0.1114	
	51694.3647	0.0080	I	-	0.1036	normal min.
V431 Lyr	51675.4504	0.0031	I	R	0.0217	
V563 Lyr	51635.5465	0.0015	I	-	0.0046	
	51657.4959	0.0087	I	-	0.0037	normal min.
	51757.4290	0.0049	I	-	0.0052	
VX Mon	51550.3668	0.0039	I	-	-0.6976	normal min.
BH Mon	51550.2904	0.0042	I	-	-0.1541	normal min.
CP Mon	51876.5447	0.0035	I	-	0.0194	
GU Mon	51876.5275	0.0049	I	-	0.0646	
V396 Mon	51841.5354	0.0078	I	-	-0.0458	
V524 Mon	51576.4718	0.0043	II	-	-0.0200	normal min.
	51876.5404	0.0027	II	-	-0.0184	
V532 Mon	51569.4149	0.0052	I	-	-0.1734	
V981 Oph	51814.3105	0.0015	I	-	-0.0221	normal min.
CQ Ori	51876.5181	0.0033	I	-	0.0044	
	51550.4470	0.0031	I	-	0.0124	normal min.
DZ Ori	51876.5394	0.0097	I	-	-0.2013	
EG Ori	51550.3378	0.0019	I	-	-0.0713	
GU Ori	51799.6057	0.0022	I	-	-0.0283	
	51626.3930	0.0039	I	-	-0.0299	normal min.
OS Ori	51576.3420	0.0025	I	-	-0.0214	
CH Per	51576.2907	0.0031	I	-	-0.0672	normal min.
EQ Per	51841.6172	0.0085	I	-	0.4071	
FW Per	51569.3362	0.0037	I	-	-0.1028	normal min.
	51626.3033	0.0013	I	-	-0.1036	

Times of minima:						
Star name	Time of min. HJD 2400000+	Error	Type	Filter	$O - C$ [day]	Rem.
II Per	51550.3045	0.0054	II	-	-0.0470	
	51569.2585	0.0072	I	-	-0.0472	normal min.
	51569.4964	0.0022	II	-	-0.0492	
PS Per	51876.4201	0.0017	I	-	0.0587	
	51841.3121	0.0058	I	-	0.0595	normal min.
V434 Per	51626.3446	0.0044	I	-	0.1264	normal min.
V Sge	51781.3817	0.0063	I	-	-0.0258	
AP Tau	51626.3206	0.0017	I	-	0.0163	
V Tri	51752.4989	0.0015	I	-	0.0006	
RS Tri	51772.5360	0.0076	I	-	-0.0130	
RV Tri	51772.4598	0.0014	I	-	-0.0184	
ST Tri	51550.2864	0.0031	I	-	-0.0380	
	51841.5494	0.0030	I	-	-0.0396	
23360281 Tri	51550.3066	0.0031	I	-	-0.0052	new var.
	51576.3157	0.0025	II	-	0.0124	
	51576.3169	0.0046	II	V	0.0136	
	51576.3173	0.0063	II	R	0.0140	
	51771.4704	0.0051	I	-	0.1374	
	51771.4723	0.0060	I	R	0.1393	
	51841.4510	0.0019	II	-	-0.0029	
	51841.6388	0.0014	I	-	-0.0021	
	51876.4423	0.0016	I	-	0.0214	
AX Vir	51675.5264	0.0061	I	-	0.0034	normal min.
BH Vir	51580.6642	0.0023	I	-	-0.0064	
RR Vul	51778.4495	0.0089	I	-	-0.0580	normal min.
FF Vul	51776.4708	0.0027	I	-	-0.0002	

Explanation of the remarks in the table:

DH = the second observer Hanžl, D.; new var. = variability of the star was discovered by author, more details will be published soon; normal min. = times of minima were obtained by superposition of two or more parts of light curve from different nights.; type err = the type of variable star given in GCVS is wrong, new details will be published soon.

Remarks:

The timings of minima presented in this fourth list were obtained from the CCD observations of the author (in one case together with D. Hanžl) in 2000. These observations are used especially to improve the light elements of stars given in catalogue BRKA of observing programme of eclipsing binaries of BRNO-Variable Star Section. The catalogue contains more than 1500 eclipsing binaries and it is updated at least one times per year. It is available on <http://var.astro.cz/brno>.

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