

# Variable Star Bulletin

## Visual and CCD minima of eclipsing binaries during 2006

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Following table is summary of minima of eclipsing binary reported from VSOLJ members.

star	min.	O-C	E	color	n	obs.	inst.
RT And	2453946.252	-0.013	20359	v	16	Hsk	28SC
RT And	2453960.095	-0.006	20381	v	14	Mdy	10B
TW And	2453746.927	-0.032	3572	v	18	Hsk	28SC
WZ And	2453764.945	+0.033	18533	v	14	Hsk	28SC
XZ And	2454017.986	+0.161	22133	v	10	Hsk	28SC
XZ And	2454032.915	+0.159	22144	v	16	Hsk	28SC
S Ant	2453798.085	+0.084	28778	v	17	Mdy	5B
S Ant	2454073.297	*1 +0.073	29202.5	v	22	Kit	7B
S Ant	2454074.270	+0.074	29204	v	22	Kit	7B
S Ant	2454076.230	+0.089	29207	v	21	Kit	8B,12B
S Ant	2454097.279	*1 +0.066	29239.5	v	31	Kit	8B
S Ant	2454099.236	*1 +0.078	29242.5	v	31	Kit	8B
OO Aql	2453962.106	*1 +0.035	30286.5	v	37	Kit	12B
V343 Aql	2453980.0562	-0.0447	13844	Ic	135	Njh	20SC+CV-04
V417 Aql	2453971.0014	*1 +0.0804	29596.5	Ic	97	Njh	20SC+CV-04
V417 Aql	2453973.0367	+0.0800	29602	Ic	129	Njh	20SC+CV-04
V609 Aql	2453920.2048	*1 -0.0346	30825.5	Ic	118	Njh	20SC+CV-04
V609 Aql	2453950.0749	-0.0357	30863	Ic	150	Njh	20SC+CV-04
V688 Aql	2453933.2156	+0.0231	5242	Ic	139	Njh	20SC+CV-04
V688 Aql	2453972.0954	+0.0057	5252	Ic	186	Njh	20SC+CV-04
V724 Aql	2453907.2227	+0.0403	33020	Ic	145	Njh	20SC+CV-04
V724 Aql	2453953.0291	*1 +0.0462	33108.5	Ic	140	Njh	20SC+CV-04
V829 Aql	2453981.9931	-0.0378	9378	Ic	99	Njh	20SC+CV-04
V1168 Aql	2453999.0122	+0.0090	20235	Ic	113	Njh	20SC+CV-04
V1331 Aql	2453984.0281	*1 -0.1344	8337.5	Ic	168	Njh	20SC+CV-04
ST Aqr	2453953.2234	-0.0383	16283	Ic	137	Njh	20SC+CV-04
CW Aqr	2453973.1938	-0.0077	51170	Ic	100	Njh	20SC+CV-04
CX Aqr	2453943.2209	+0.0080	31457	Ic	170	Njh	20SC+CV-04
CX Aqr	2453945.1672	*1 +0.0084	31460.5	Ic	177	Njh	20SC+CV-04
CX Aqr	2454059.976	+0.006	31667	v	18	Hsk	28SC
CZ Aqr	2454035.943	-0.028	12361	v	12	Hsk	28SC
CZ Aqr	2454063.9739	*1 -0.0368	12393.5	Ic	177	Njh	20SC+CV-04

star	min.		O-C	E	n	obs.	inst.	
DD Aqr	2453983.1126		-0.3030	15750	Ic	128	Njh	20SC+CV-04
EE Aqr	2454023.9912		+0.0102	25924	V	82	Nga	20SC+SV-04LE
EK Aqr	2454016.1333		+0.1634	23311	V	223	Njh	25SC+CV-04
EK Aqr	2454059.9562	*1	+0.1575	23382.5	Ic	139	Njh	20SC+CV-04
EL Aqr	2453972.2687		-0.0002	30090	Ic	90	Njh	20SC+CV-04
EL Aqr	2454023.0604	*1	+0.0028	30195.5	V	90	Nga	20SC+SV-04LE
HS Aqr	2453982.1447				Ic	122	Njh	20SC+CV-04
HV Aqr	2454060.9594	*d	+0.0033	13954	Ic	139	Njh	20SC+CV-04
SS Ari	2454006.2797		-0.0312	36892	Ic	84	Njh	20SC+CV-04
SS Ari	2454080.9777		-0.0347	37075.5	Ic	177	Njh	20SC+CV-04
SS Ari	2454087.8814	*1	-0.0329	37092.5	Ic	312	Njh	20SC+CV-04
SS Ari	2454088.0831		-0.0342	37093	Ic	312	Njh	20SC+CV-04
WW Aur	2453744.1242		+0.0016	8237	V	392	Mhh	ST-7E+200mm(TelephotoLens)
WW Aur	2454047.130		+0.005	8357	v	26	Kit	3.5B
WW Aur	2454052.175		+0.000	8359	v	29	Kit	5B
WW Aur	2454057.212		-0.013	8361	v	32	Kit	5B
WW Aur	2454071.127	*1	+0.014	8366.5	v	23	Kit	3.5B
IM Aur	2454036.15		-0.09	10840	v	13	Mdy	10B
IY Aur	2453814.9846		-0.1134	5620	Ic	150	Njh	20SC+CV-04
KO Aur	2453743.2520	*2	-0.0119	1576	V	138	Njh	25SC+CV-04
V363 Aur	2453744.1829	*4	-0.0010	28596	C	283	Njh	25SC+CV-04
VW Boo	2454097.2498		+0.0301	66965	Ic	167	Kis	25SC+E47+
FI Boo	2453834.1347	*1*F	-0.0045	27354.5	V	189	Njh	25SC+CV-04
FI Boo	2453867.1058	*1*F	+0.0118	27523.5	V	134	Njh	25SC+CV-04
FP Boo	2453754.3251	*7	-0.0678	8203	V	132	Njh	25SC+CV-04
BF Cap	2453950.0873	*1*M	-0.0132	10231.5	V	62	Nga	20SC+SV-04LE
RZ Cas	2453763.960		+0.061	8838	v	20	Hsk	5F
RZ Cas	2453961.159		+0.044	9003	v	28	Tkc	
RZ Cas	2453961.161		+0.046	9003	v	34	Ymd	
RZ Cas	2453961.167		+0.052	9003	v	28	Wsy	
RZ Cas	2453961.169		+0.054	9003	v	35	Tnr	
RZ Cas	2453961.170		+0.055	9003	v	32	Ysj	
RZ Cas	2453961.172		+0.057	9003	v	30	Miu	
RZ Cas	2453961.173		+0.058	9003	v	32	Wai	
RZ Cas	2453961.176		+0.061	9003	v	33	Tzt	
RZ Cas	2453998.224		+0.056	9034	v	43	Kit	7B
RZ Cas	2454028.104		+0.056	9059	v	29	Ysj	
RZ Cas	2454028.106		+0.057	9059	v	29	Ymd	
RZ Cas	2454028.11		+0.06	9059	v	14	Mdy	5B
RZ Cas	2454034.085		+0.060	9064	v	31	Mdy	5B
RZ Cas	2454040.058		+0.057	9069	v	35	Tnr	
RZ Cas	2454040.060		+0.059	9069	v	35	Ysj	
RZ Cas	2454040.063		+0.061	9069	v	28	Ibk	
RZ Cas	2454040.064		+0.063	9069	v	37	Tkc	
RZ Cas	2454040.065		+0.063	9069	v	35	Ymd	
RZ Cas	2454040.079		+0.078	9069	v	34	Osy	
TV Cas	2453737.908		-0.027	5040	v	13	Hsk	28SC
TV Cas	2454006.188		-0.011	5188	v	33	Kit	7B
TV Cas	2454026.113		-0.025	5199	v	42	Kit	12B
IV Cas	2454047.0437		-0.0590	13210	Ic	205	Kis	20SC+ST-9XE
IV Cas	2454045.0464		-0.0592	13210	V	455	Mhh	20L+ST-7E
IV Cas	2454047.0440		-0.0587	13212	B	279	Njh	25SC+CV-04
IV Cas	2454045.0455		-0.0601	13212	V	201	Kis	20SC+ST-9XE
V523 Cas	2454018.0946		+0.0714	54763.5	V	618	Mhh	20L+ST-7E
V523 Cas	2454018.2110		+0.0710	54764	V	618	Mhh	20L+ST-7E
V959 Cas	2453997.1597	*R	-0.0958	2498.5	V	157	Njh	28SC+CV-04

star	min.		O-C	E		n	obs.	inst.
RW Cet	2453767.948		-0.017	11832	v	17	Hsk	28SC
RW Cet	2453993.2228		-0.0140	12063	Ic	68	Njh	20SC+CV-04
TT Cet	2453983.2622		-0.0528	44114	Ic	127	Njh	20SC+CV-04
TW Cet	2454098.9336	*1	-0.0242	37006.5	V	76	Nga	20SC+SV-04LE
TX Cet	2453982.2566	*1	+0.0101	14712.5	Ic	103	Njh	20SC+CV-04
VV Cet	2453952.2597		+0.1106	43308	V	189	Mhh	20L+ST-7E
VV Cet	2453997.1935		+0.1188	43394	Ic	88	Njh	20SC+CV-04
VY Cet	2454017.1317		+0.0089	54541	V	73	Nga	20SC+SV-04LE
XY Cet	2454070.074		+0.006	5645	v	33	Kit	12B
AA Cet	2453738.9123		-0.0176	23258	V	45	Nga	20SC+SV-04LE
AA Cet	2454024.156		-0.016	23790	v	23	Kit	7B
AA Cet	2454052.010		-0.043	23842	v	24	Kit	5B
DY Cet	2454048.0599	*W	-0.0244	12586	V	145	Nga	20SC+SV-04LE
R CMa	2453738.1925		+0.0784	8318	V	436	Mhh	ST-7E+200mm(TelephotoLens)
R CMa	2454048.292		+0.066	8591	v	20	Kit	5B
R CMa	2454064.195		+0.066	8605	v	22	Kit	5B
R CMa	2454073.309		+0.092	8613	v	22	Kit	3.5B
R CMa	2454089.189		+0.069	8627	v	34	Kit	3.5B
R CMa	2454097.160		+0.089	8634	v	29	Kit	3.5B
CX CMa	2453762.0903		-0.0560	26887	V	163	Nga	20SC+SV-04LE
XZ CMi	2453760.1166		-0.0108	19550	V	269	Nga	20SC+SV-04LE
YY CMi	2453739.1907		+0.0166	23506	V	49	Nga	20SC+SV-04LE
YY CMi	2453817.9519		+0.0084	23578	Ic	135	Njh	20SC+CV-04
YY CMi	2454088.180		+0.014	23825	v	27	Kit	12B
YY CMi	2454099.119		+0.012	23835	v	33	Kit	12B
AK CMi	2453742.2236		-0.0191	18803	B	203	Njh	25SC+CV-04
AK CMi	2453769.951		-0.021	18852	v	19	Hsk	28SC
AK CMi	2454088.2680	*1	-0.0210	19414.5	Ic	195	Njh	20SC+CV-04
AK CMi	2454098.1726		-0.0196	19432	V	222	Nga	20SC+CV-04
AM CMi	2453759.0926	*1	+0.1633	27977.5	V	335	Nga	20SC+SV-04LE
TX Cnc	2454092.2577	*1	+0.0337	41999.5	Ic	152	Njh	20SC+CV-04
WX Cnc	2453814.1014		+0.0165	23023	Ic	98	Njh	20SC+CV-04
WY Cnc	2454097.3144		-0.0305	33453	V	220	Mhh	20L+ST-7E
FF Cnc	2454099.2512	*j	-0.2165	1115	Ic	193	Njh	20SC+CV-04
RW Com	2453808.0401	*1	-0.0194	58082.5	B	236	Njh	25SC+CV-04
RW Com	2453808.1583		-0.0199	58083	B	236	Njh	25SC+CV-04
RW Com	2453895.9774		-0.0188	58453	Ic	74	Njh	20SC+CV-04
LP Com	2454097.3217	*1*h	-0.0105	6302.5	V	122	Njh	25SC+CV-04
TW CrB	2453747.3379		+0.0346	26914	Rc	93	Njh	25SC+CV-04
V Crt	2453843.0229		-0.0054	17728	Ic	99	Njh	20SC+CV-04
V Crt	2453851.0972	*1	-0.0045	17739.5	Ic	99	Njh	20SC+CV-04
W Crv	2453809.2411		+0.0175	36491	Ic	179	Njh	20SC+CV-04
W Crv	2453815.0598		+0.0150	36506	V	89	Nga	20SC+SV-04LE
W Crv	2453856.0033	*1	+0.0160	36611.5	Ic	95	Njh	20SC+CV-04
RV Crv	2453818.1783	*1	-0.0518	17114.5	Ic	148	Njh	20SC+CV-04
SX Crv	2453797.2376		-0.0686	40361	Ic	215	Njh	CV-04+135mm(TelephotoLens)
SX Crv	2453799.2954	*1	-0.0690	40367.5	Ic	261	Njh	CV-04+135mm(TelephotoLens)
SX Crv	2453809.1114	*1	-0.0688	40398.5	V	71	Nga	20SC+SV-04LE
DF CVn	2453831.0040	*D	+0.0379	9972	V	237	Njh	25SC+CV-04
DF CVn	2453831.1674	*1*D	+0.0379	9972.5	V	237	Njh	25SC+CV-04
DF CVn	2454101.3465	*D	+0.0424	10799	V	481	Mhh	20L+ST-7E
WZ Cyg	2453887.1776		+0.0587	22348	Rc	261	Mhh	20L+ST-7E
ZZ Cyg	2454037.931		-0.045	14377	v	19	Hsk	28SC
BR Cyg	2454022.915		-0.011	9368	v	14	Hsk	28SC
GO Cyg	2453957.1577	*1	+0.0649	27901.5	Ic	187	Njh	20SC+CV-04
V387 Cyg	2454035.971		+0.017	40666	v	19	Hsk	28SC
V2213 Cyg	2453962.1384	*O	+0.0051	16753	C	180	Njh	25SC+CV-04

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TY Del	2453980.987		+0.045	9253	v	15	Hsk 28SC
YY Del	2453981.1234		+0.0091	13897	Ic	93	Njh 20SC+CV-04
EX Del	2453942.1784	*1	-0.0182	60718.5	Ic	169	Njh 20SC+CV-04
FZ Del	2453981.0648		-0.0383	28928	V	141	Nga 20SC+SV-04LE
GG Del	2453997.0498		-0.0235	44805	Ic	156	Njh 20SC+CV-04
MR Del	2453952.1730	*N	-0.0035	10450	Ic	286	Njh 20SC+CV-04
AI Dra	2453781.2764		+0.0217	8750	V	373	Mhh ST-7E+200mm(TelephotoLens)
AI Dra	2453877.18		+0.02	8830	v	16	Mdy 5B
TZ Eri	2453763.935		+0.258	4355	v	29	Hsk 28SC
WX Eri	2453761.913		+0.008	31861	v	19	Hsk 28SC
WX Eri	2454052.1289	*1	+0.0215	32213.5	V	198	Nga 20SC+CV-04
YY Eri	2454016.172		+0.119	38677	v	44	Kit 12B
YY Eri	2454018.269	*1	+0.126	38683.5	v	27	Kit 12B
YY Eri	2454023.2462		+0.1201	38699	V	554	Mhh 20L+ST-7E
YY Eri	2454023.248		+0.122	38699	v	30	Kit 12B
YY Eri	2454024.210		+0.119	38702	v	45	Kit 12B
YY Eri	2454047.037		+0.120	38773	v	60	Kit 12B
YY Eri	2454047.198	*1	+0.121	38773.5	v	60	Kit 12B
YY Eri	2454048.166	*1	+0.124	38776.5	v	48	Kit 12B
YY Eri	2454093.007		+0.117	38916	v	22	Imm 7B
YY Eri	2454093.0114		+0.1211	38916	Ic	326	Njh 20SC+CV-04
AS Eri	2453764.916		-0.005	9469	v	32	Kit 12B
AS Eri	2454097.9306		-0.0097	9594	V	199	Nga 20SC+SV-04LE
BL Eri	2454087.0934	*1	+0.1717	59718.5	Ic	86	Njh 20SC+CV-04
BL Eri	2454101.0598		+0.1954	59752	V	208	Mhh 20L+ST-7E
BV Eri	2454023.2301		-0.1247	20828	V	190	Nga 20SC+SV-04LE
CD Eri	2454075.0912		+0.0090	8400	V	85	Nga 20SC+SV-04LE
AE For	2454047.1000	*1*V	-0.1566	6040.5	V	140	Nga 20SC+SV-04LE
SX Gem	2453764.923		-0.058	25411	v	14	Hsk 28SC
AC Gem	2453740.919		+0.150	9207	v	12	Hsk 28SC
AF Gem	2453771.973		-0.067	21399	v	20	Hsk 28SC
AY Gem	2453743.916		-0.063	5604	v	13	Hsk 28SC
EY Gem	2454056.3216		-0.2183	27419	V	120	Njh 25SC+CV-04
GW Gem	2453764.957		+0.025	42641	v	13	Hsk 28SC
LO Gem	2454057.2970	*1*c	+0.0130	11926.5	V	145	Njh 25SC+CV-04
QT Gem	2453812.0165	*1*9	+0.0271	3278.5	Ic	223	Njh CV-04+135mm(TelephotoLens)
SZ Her	2454008.957		-0.017	14845	v	18	Hsk 28SC
CC Her	2453980.990		+0.164	8254	v	18	Hsk 28SC
VZ Hya	2453846.9875		+0.0037	4680	Ic	85	Njh 20SC+CV-04
WY Hya	2453809.9606		+0.0249	18490	Ic	183	Njh 20SC+CV-04
WY Hya	2453853.9952	*1	+0.0251	18551.5	Ic	83	Njh 20SC+CV-04
AV Hya	2454093.3129		-0.0871	25490	V	241	Mhh 20L+ST-7E
AV Hya	2454098.0992		-0.0847	25497	Ic	171	Kis 25SC+E47+
AF Hya	2453850.9809		+0.0487	47679	Ic	85	Njh 20SC+CV-04
DF Hya	2453777.0817	*1	+0.0093	68478.5	V	264	Nga 20SC+SV-04LE
DF Hya	2454099.2552		+0.0152	69453	V	399	Mhh 20L+ST-7E
DI Hya	2453857.9681		-0.0239	36869	Ic	89	Njh 20SC+CV-04
DK Hya	2453780.0488		-0.2114	43303	V	60	Nga 20SC+SV-04LE
DK Hya	2453833.0264	*1	-0.2118	43404.5	Ic	150	Njh 20SC+CV-04
DK Hya	2453849.9886		-0.2130	43437	Ic	116	Njh 20SC+CV-04
EU Hya	2453776.0757		-0.0239	25250	V	214	Nga 20SC+SV-04LE
EZ Hya	2453800.0208		-0.1125	25226	V	111	Nga 20SC+SV-04LE
EZ Hya	2453819.1355	*1	-0.1123	25268.5	Ic	109	Njh 20SC+CV-04
FG Hya	2453764.0943	*1	-0.0786	26830.5	V	203	Nga 20SC+SV-04LE
FG Hya	2453774.0928		-0.0790	26861	V	229	Nga 20SC+SV-04LE
FG Hya	2453775.0773		-0.0780	26864	V	221	Nga 20SC+SV-04LE
FG Hya	2453799.0056		-0.0814	26937	V	98	Nga 20SC+SV-04LE

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FG Hya	2453829.0034	*1	-0.0802	27028.5	Ic	128	Njh	20SC+CV-04
HS Hya	2453820.1331		-0.0117	7937	Ic	229	Njh	20SC+CV-04
HS Hya	2453824.0550	*1	-0.0099	7939.5	Ic	166	Njh	20SC+CV-04
HS Hya	2453842.0919		-0.0054	7951	Ic	123	Njh	20SC+CV-04
VX Lac	2454005.976		+0.053	8141	v	16	Hsk	28SC
AR Lac	2453915.133		-0.151	6213	v	39	Tha	8B
AR Lac	2453925.051		-0.149	6218	v	28	Tha	8B
AR Lac	2453957.016		+0.084	6234	v	21	Tha	8B
AR Lac	2453959.014		+0.099	6235	v	16	Tha	8B
AR Lac	2454038.131		-0.111	6275	v	28	Tcy	5B
AR Lac	2454043.06	*1	-0.14	6277.5	v	25	Tha	8B
AR Lac	2454048.981	*1	-0.169	6280.5	v	16	Tha	8B
UV Leo	2453741.114		+0.026	25497	v	38	Kit	12B
UV Leo	2454055.259	*1	+0.027	26020.5	v	40	Kit	12B
UV Leo	2454073.260	*1	+0.025	26050.5	v	32	Kit	12B
UV Leo	2454076.267	*1	+0.032	26055.5	v	28	Kit	12B
UZ Leo	2453799.2132		+0.1708	22650	V	389	Mhh	20L+ST-7E
XX Leo	2453748.3037		-0.3240	23255	V	141	Njh	25SC+CV-04
XX Leo	2454100.3456		-0.2479	23617.5	Ic	117	Njh	20SC+CV-04
XY Leo	2453784.2114		-0.1220	30658	Ic	131	Njh	CV-04+135mm(TelephotoLens)
XZ Leo	2454097.2729		+0.0420	18600	Ic	155	Njh	20SC+CV-04
AL Leo	2454093.3566	*1	+0.6844	6750.5	Ic	120	Njh	20SC+CV-04
AM Leo	2453810.0734		+0.0102	30937	V	93	Nga	20SC+SV-04LE
AP Leo	2453744.3284		-0.0394	33014	V	137	Njh	25SC+CV-04
AP Leo	2454072.259		-0.041	33776	v	34	Kit	12B
AP Leo	2454092.269	*1	-0.043	33822.5	v	30	Kit	12B
AP Leo	2454099.1590	*1	-0.0387	33838.5	Ic	257	Kis	25SC+E47+
BL Leo	2454101.3034		-0.0218	33528	V	183	Njh	25SC+CV-04
BW Leo	2454100.3000	*1	+0.0431	47413.5	C	167	Njh	25SC+CV-04
EX Leo	2453812.2477	*A	-0.0209	13001	Ic	231	Njh	CV-04+135mm(TelephotoLens)
RR Lep	2453737.0276		-0.0261	25518	V	80	Njh	25SC+CV-04
VZ Lib	2453858.2414	*1	+0.0357	25315.5	Ic	144	Njh	20SC+CV-04
VZ Lib	2453860.0311	*1	+0.0341	25320.5	V	52	Nga	20SC+CV-04
VW LMi	2453886.0001	*K	+0.0290	11278	Ic	122	Njh	20SC+CV-04
SX Lyn	2453767.956		-0.006	4118	v	13	Hsk	28SC
SX Lyn	2453767.959		+0.002	9415	v	16	Hsk	28SC
UU Lyn	2453746.2415		-0.0061	19366	V	189	Njh	25SC+CV-04
RW Mon	2453743.936		-0.059	10526	v	18	Hsk	28SC
AO Mon	2454100.1971		+0.7424	7169	Ic	277	Njh	20SC+CV-04
BB Mon	2453808.9978		-0.0054	37024	Ic	97	Njh	20SC+CV-04
DD Mon	2453814.0025		+0.1441	41359	Ic	122	Njh	20SC+CV-04
HI Mon	2454052.2779	*1	-0.0052	15076.5	V	92	Njh	25SC+CV-04
HM Mon	2454054.2865		-0.0019	23115	V	176	Njh	25SC+CV-04
NS Mon	2454097.1080	*i	+0.0090	2866	Ic	155	Njh	20SC+CV-04
V635 Mon	2453798.0367		+0.0415	13353	Ic	239	Njh	CV-04+135mm(TelephotoLens)
ER Ori	2453743.068	*1	+0.041	28617.5	v	35	Kit	12B
ER Ori	2453800.0199		+0.0455	28752	Ic	109	Njh	CV-04+135mm(TelephotoLens)
ER Ori	2454052.153	*1	+0.045	29347.5	v	59	Kit	12B
ER Ori	2454060.199	*1	+0.046	29366.5	v	44	Kit	12B
ER Ori	2454064.008	*1	+0.044	29375.5	v	78	Kit	12B
ER Ori	2454064.0110	*1	+0.0475	39375.5	V	142	Kis	25SC+E47+
ER Ori	2454064.223		+0.048	29376	v	78	Kit	12B
ER Ori	2454065.066		+0.044	29378	v	38	Kit	12B
ER Ori	2454091.111	*1	+0.050	29439.5	v	12	Mdy	10B
FL Ori	2453759.971		+0.040	5424	v	18	Hsk	28SC
FT Ori	2454073.2216		+0.0121	4039	Ic	206	Njh	20SC+CV-04
FZ Ori	2454048.2611	*1	-0.0614	25060.5	V	106	Njh	25SC+CV-04

star	min.		O-C	E		n	obs.	inst.
FZ Ori	2454089.0623	*1	-0.0588	25162.5	V	169	Nga	20SC+SV-04LE
GG Ori	2454101.0809	*1	-3.2361	3092.5	V	381	Njh	25SC+CV-04
V1353 Ori	2454047.2630	*k	-0.0130	4620	V	144	Njh	25SC+CV-04
V1353 Ori	2454101.0109	*k	-0.0113	4734	Ic	381	Njh	20SC+CV-04
V1353 Ori	2454101.2467	*1*k	-0.0112	4734.5	Ic	381	Njh	20SC+CV-04
V1363 Ori	2454074.2131	*1*f	+0.0998	12905.5	Ic	160	Njh	20SC+CV-04
WZ Oph	2453851.2130		+0.0034	4351	Ic	130	Njh	20SC+CV-04
WZ Oph	2453982.9931	*1	+0.0031	4382.5	Ic	114	Njh	20SC+CV-04
V502 Oph	2453894.075		-0.107	28055	v	17	Tha	8B
V508 Oph	2453914.0368		-0.0118	25614	Ic	165	Njh	20SC+CV-04
V839 Oph	2453954.0549		+0.2074	33021	Ic	115	Njh	20SC+CV-04
V2203 Oph	2453886.2255	*1*J	-0.0331	24337.5	Ic	173	Njh	20SC+CV-04
Y Psc	2453742.946		+0.009	2153	v	24	Hsk	28SC
SX Psc	2453999.2034		+0.0000	9695	Ic	162	Njh	20SC+CV-04
VZ Psc	2453954.1575		-0.0701	38754	V	295	Kis	25SC+AP-7
VZ Psc	2453955.2032		-0.0692	38758	V	292	Kis	25SC+AP-7
DV Psc	2454088.9299	*g	+0.0499	7139.5	Ic	140	Njh	20SC+CV-04
AT Peg	2453962.1482		+0.0212	7628	Ic	198	Njh	20SC+CV-04
BO Peg	2453950.1759		-0.0255	14365	Ic	111	Njh	20SC+CV-04
BO Peg	2453984.1318	*1	-0.0247	14423.5	Ic	77	Njh	20SC+CV-04
BX Peg	2453951.1360		-0.0807	34790	V	436	Mhh	20L+ST-7E
BX Peg	2453951.2770	*1	-0.0799	34790.5	V	436	Mhh	20L+ST-7E
CW Peg	2453951.2291		+0.0465	3379	Ic	163	Njh	20SC+CV-04
DI Peg	2453993.1031		-0.0169	12358	Ic	65	Njh	20SC+CV-04
DI Peg	2454032.967		-0.015	12414	v	13	Hsk	28SC
EE Peg	2453982.0694		+0.0076	3203	V	182	Nga	20SC+CV-04
EE Peg	2454003.083		-0.004	3211	v	19	Mdy	5B
IP Peg	2453942.1201	*L	-0.0021	52632	C	327	Njh	25SC+CV-04
IP Peg	2453942.2778	*L	-0.0026	52633	C	327	Njh	25SC+CV-04
IP Peg	2453944.1764	*L	-0.0025	52645	C	281	Njh	25SC+CV-04
IP Peg	2453945.1279	*L	-0.0002	52651	C	357	Njh	25SC+CV-04
IP Peg	2453945.2855	*L	-0.0008	52652	C	357	Njh	25SC+CV-04
IP Peg	2453946.2345	*L	-0.0011	52658	C	316	Njh	25SC+CV-04
IP Peg	2453950.1908	*L	+0.0001	52683	C	212	Njh	25SC+CV-04
IP Peg	2453951.1401	*L	+0.0001	52689	C	282	Njh	25SC+CV-04
IP Peg	2453952.2483	*L	+0.0009	52696	C	174	Njh	25SC+CV-04
IP Peg	2453954.1460	*L	-0.0001	52708	C	261	Njh	25SC+CV-04
IP Peg	2453957.1533	*L	+0.0015	52727	C	337	Njh	25SC+CV-04
IP Peg	2453972.1811	*L	-0.0003	52822	C	382	Njh	25SC+CV-04
Z Per	2454024.1483		-0.2079	2737	V	759	Mhh	20L+ST-7E
RT Per	2453737.943		+0.060	23972	v	12	Hsk	28SC
RT Per	2453771.917		+0.058	24012	v	15	Hsk	28SC
RT Per	2453967.278		+0.057	24242	v	20	Hsk	28SC
beta Per	2453948.152		+0.058	2897	v	9	Tha	2.5B
beta Per	2454016.985		+0.076	2921	v	19	Kit	N,3.5B
beta Per	2454057.127		+0.075	2935	v	35	Kit	N
beta Per	2454080.067		+0.077	2943	v	25	Kit	N
UV Psc	2454023.0942		-0.1526	12330	V	163	Nga	20SC+SV-04LE
UV Psc	2454040.0240	*1	-0.0133	12349.5	V	172	Nga	20SC+SV-04LE
VZ Psc	2454099.9343	*1	+0.0952	39311.5	Ic	109	Njh	20SC+CV-04
AQ Psc	2454006.1433	*1*S	+0.0798	19854.5	Ic	207	Njh	20SC+CV-04
DV Psc	2454088.9299	*1*X	+0.0498	7139.5	Ic	140	Njh	20SC+CV-04
TY Pup	2453778.9938		+0.1724	23640	V	203	Nga	20SC+SV-04LE
AV Pup	2453743.2333	*1	-0.0272	40560.5	V	398	Mhh	20L+ST-7E
AV Pup	2453761.0689	*1	-0.2489	40592.5	V	70	Nga	20SC+SV-04LE
KX Pup	2453743.1020		-0.0377	5616	V	201	Njh	25SC+CV-04

star	min.		O-C	E		n	obs.	inst.
U Sct	2453954.0302	*1	-0.0316	9932.5	V	102	Nga	20SC+SV-04LE
RS Sct	2453951.0377		-0.0147	14323	V	120	Nga	20SC+SV-04LE
ER Sct	2454006.0110		+0.2491	19595.5	Ic	188	Njh	20SC+CV-04
AO Ser	2453957.0271	*1	-0.0061	22543.5	Ic	121	Njh	20SC+CV-04
AQ Ser	2453907.0552	*1	+0.5809	15155.5	Ic	155	Njh	20SC+CV-04
AS Ser	2453824.2419		-0.0314	54709	Ic	66	Njh	20SC+CV-04
AS Ser	2453828.1990	*1	-0.0348	54717.5	Ic	129	Njh	20SC+CV-04
AS Ser	2453828.1994	*1	-0.0344	54717.5	V	217	Njh	25SC+CV-04
AS Ser	2453876.2233	*1	-0.0020	54820.5	Ic	185	Njh	20SC+CV-04
AS Ser	2453880.1871		+0.0013	54829	Ic	144	Njh	20SC+CV-04
AS Ser	2453887.1803		+0.0055	54844	Ic	123	Njh	20SC+CV-04
AS Ser	2453906.0639	*1	+0.0186	54884.5	Ic	119	Njh	20SC+CV-04
AS Ser	2453916.0873		-0.2143	54906	Ic	140	Njh	20SC+CV-04
AS Ser	2453944.0606		+0.0415	54966	Ic	133	Njh	20SC+CV-04
AS Ser	2453944.9935		+0.0425	54968	Ic	135	Njh	20SC+CV-04
AS Ser	2453951.9868		+0.0467	54983	Ic	62	Njh	20SC+CV-04
AS Ser	2453962.0136	*1	+0.0559	55004.5	Ic	109	Njh	20SC+CV-04
CC Ser	2453920.0687	*1*1	+0.0078	9996.5	Ic	125	Njh	20SC+CV-04
CC Ser	2453942.0008	*1	+0.0084	10039	Ic	121	Njh	20SC+CV-04
Y Sex	2453812.0566	*1	+0.0029	28692.5	V	111	Nga	20SC+SV-04LE
Y Sex	2453816.0437		+0.0017	28702	V	119	Nga	20SC+SV-04LE
V505 Sgr	2454017.981		-0.029	8079	v	9	Hsk	5F
V525 Sgr	2453946.140		-0.016	34439	v	14	Mdy	10B
CD Tau	2454082.089		+0.004	3628	v	32	Kit	5B
GR Tau	2454027.2506		-0.0324	21994	V	433	Mhh	20L+ST-7E
GR Tau	2454090.0055		-0.0360	22140	Ic	146	Njh	20SC+CV-04
GR Tau	2454091.9511	*1	-0.0247	22144.5	Ic	599	Njh	20SC+CV-04
GR Tau	2454092.1584		-0.0323	22145	Ic	599	Njh	20SC+CV-04
HU Tau	2454049.08		+0.02	6212	v	16	Tha	8B
lambda Tau	2453743.10		-0.04	8155	v	9	Kit	3.5B
lambda Tau	2454075.17		-0.02	8239	v	16	Kit	3.5B
lambda Tau	2454087.06		+0.01	8242	v	15	Kit	3.5B
lambda Tau	2454094.93		-0.02	8244	v	9	Kit	3.5B
X Tri	2453988.1407		-0.0694	11822	C	40	Fuy	10R+ST-7
X Tri	2454002.2189	*1	-0.0785	11836.5	C	127	Fuy	10R+ST-7
W UMa	2453742.2909		-0.0527	23908	Rc	215	Njh	25SC+CV-04
W UMa	2453750.2969		-0.0540	23932	B	189	Njh	25SC+CV-04
W UMa	2453820.033		-0.048	24141	v	18	Oht	5B
TX UMa	2453802.077		+0.183	2874	v	17	Mdy	10B
TX UMa	2453805.129		+0.172	2875	v	21	Mdy	10B
UX UMa	2454099.3360		+0.0013	84743	C	150	Njh	25SC+CV-04
XZ UMa	2453769.953		-0.081	6219	v	19	Hsk	28SC
DW UMa	2453743.32255	*3	+0.00239	55007	CR	464	Mhh	25L+ST-7XME
EQ UMa	2454015.2800	*T	-0.1225	14822	C	133	Njh	25SC+CV-04
II UMa	2453761.2818	*1*8	+0.0087	6375.5	V	343	Njh	25SC+CV-04
II UMa	2453809.1465	*1*8	+0.0106	6433.5	Rc	334	Njh	25SC+CV-04
IW UMa	2453754.1442	*6	+0.0081	6535	V	93	Njh	25SC+CV-04
UW Vir	2453752.346		-0.046	5195	v	17	Hsk	28SC
VV Vir	2453829.1120		-0.0361	50675	Ic	149	Njh	20SC+CV-04
VV Vir	2453842.2731	*1	-0.0360	50704.5	Ic	150	Njh	20SC+CV-04
AG Vir	2453815.1490		-0.0020	13044	Ic	154	Njh	20SC+CV-04
AK Vir	2453815.2762		-0.0515	9416	Ic	97	Njh	20SC+CV-04
AW Vir	2453814.1764		+0.0171	24835	V	289	Mhh	20L+ST-7E
AW Vir	2453815.2383		+0.0171	24838	V	94	Njh	25SC+CV-04
AX Vir	2453847.0407		+0.0092	37403	V	128	Nga	20SC+SV-04LE
AZ Vir	2453851.0600		-0.0227	28240	V	80	Nga	20SC+SV-04LE

star	min.		O-C	E	n	obs.	inst.
BF Vir	2453799.2377		+0.0767	12065	V	168	Nga 20SC+SV-04LE
BH Vir	2453876.076		-0.004	13032	v	16	Hsk 28SC
CG Vir	2453814.2805		-0.2909	23798	Ic	93	Njh 20SC+CV-04
CG Vir	2453867.1211	*1	-0.2942	23854.5	Ic	208	Njh 20SC+CV-04
CX Vir	2453875.9956	*1	+0.0112	37239.5	Ic	106	Njh 20SC+CV-04
DM Vir	2453879.9798		-0.0021	2205	Ic	141	Njh 20SC+CV-04
DM Vir	2453907.9972		-0.0013	2211	Ic	164	Njh 20SC+CV-04
FQ Vir	2453834.1264	*G	+0.0006	1779	Ic	220	Njh 20SC+CV-04
FQ Vir	2453847.2471	*1*G	+0.0032	1796.5	Ic	179	Njh 20SC+CV-04
GR Vir	2453846.1555	*1*I	-0.0331	23576.5	Ic	94	Njh 20SC+CV-04
GR Vir	2453854.1363	*1*I	+0.0936	23599.5	Ic	176	Njh 20SC+CV-04
GR Vir	2453861.0808	*1*I	-0.0279	23619.5	Ic	338	Njh 20SC+CV-04
GR Vir	2453877.0415	*1*I	-0.0282	23665.5	Ic	364	Njh 20SC+CV-04
GR Vir	2453877.2173	*I	-0.0259	23666	Ic	364	Njh 20SC+CV-04
HT Vir	2453798.2851		+0.0168	12996	Ic	315	Njh CV-04+135mm(TelephotoLens)
HT Vir	2453834.1591		+0.0157	13084	V	107	Nga 20SC+CV-04
HW Vir	2453829.0238	*E	-0.0042	69384	V	104	Nga 20SC+CV-04
HW Vir	2453829.0824	*1*E	-0.0039	69384.5	V	104	Nga 20SC+CV-04
HW Vir	2453829.1407	*E	-0.0040	69385	V	104	Nga 20SC+CV-04
LV Vir	2453850.1795	*1*H	+0.0704	13066.5	Ic	232	Njh 20SC+CV-04
MS Vir	2453826.1559	*1*B	-0.0486	17046.5	Ic	177	Njh 20SC+CV-04
MS Vir	2453833.1856	*B	-0.0488	17069	Ic	185	Njh 20SC+CV-04
NY Vir	2453814.17644	*C	-0.00062	35547	V	329	Mhh 25L+ST-7XME
NY Vir	2453814.22682	*1*C	-0.00074	35547.5	V	329	Mhh 25L+ST-7XME
NY Vir	2453814.27739	*C	-0.00068	35548	V	329	Mhh 25L+ST-7XME
BE Vul	2454037.922		+0.050	8973	v	16	Hsk 28SC
BU Vul	2454029.965		+0.016	36022	v	11	Hsk 28SC
BU Vul	2454033.950		+0.018	36029	v	24	Hsk 28SC
MisV1278	2453980.0830	*1*P	+0.0008	261.5	V	85	Njh 25SC+CV-04
MisV1288	2453747.2495	*1*5	-0.0049	1408.5	V	97	Njh 25SC+CV-04
MisV1293	2453982.1905	*Q	+0.0024	577	V	147	Njh 25SC+CV-04
MisV1332	2454048.0757	*Z	+0.0042	285	V	227	Njh 25SC+CV-04
GSC2484-592	2453776.9617				V	382	SEi 15R+ST-9E
GSC2484-592	2453776.9607				Ic	118	Kis 6cm Refr.+DSIpro
GSC2484-592	2453776.9626				V	388	Njh 25SC+CV-04
GSC2484-592	2454089.162				v	15	Kit 7B
ASAS001229-1052.5	2454044.9549	*U	-0.0251	2619	V	43	Nga 20SC+SV-04LE
ASAS024507-1807.9	2454049.0602	*a	+0.0184	5974	V	103	Nga 20SC+SV-04LE
ASAS043559-0450.1	2454071.1562	*1*e	+0.0367	3773.5	V	105	Nga 20SC+SV-04LE
ASAS233002-1154.5	2454051.9315	*b	-0.0144	4896	V	145	Nga 20SC+SV-04LE
ASAS022014-0252.0	2454080.9263	*m	-0.0089	3383	V	196	Kis 25SC+E47+



## Observers

Fuy	Yoshinaka Furuya
Hsk	Kenji Hirosawa
Ibk	Mami Ibaraki
Imm	Mitsunori Iwamoto
Kis	Seiichiro Kiyota
Kit	Kiyotaka Kanai
Mdy	Maeda Yutaka
Mhh	Hiroyuki Maehara
Miu	Tomoka Miura
Nga	Kazuo Nagai
Njh	Kazuhiro Nakajima
Oht	Tomohito Ohshima
Osy	Yuto Osada
SEi	Seikei high school
Tcy	Yukiko Tsuchiyama
Tha	Atsuko Takahashi
Tkc	Chizuto Takatuka
Tnr	Mitsuru Tanaka
Tzt	Toshiharu Takizawa
Wai	Ikumi Watanabe
Wsy	Yuki Watase
Ymd	Kenji Yamada
Ysj	Takuzi Yamashita

## Remarks

- \*1 secondary minimum
- \*2 min =  $2447512.0677 + 3.9538047 \times E$  (IBVS3410)
- \*3 min =  $2446229.00696 + 0.13660649 \times E$  (Dhillon et al. (1994))
- \*4 min =  $2444557.9514 + 0.32124187 \times E$  (astro-ph/0406431)
- \*5 min =  $2453285.2664 + 0.3280 \times E$  (IBVS5700)
- \*6 min =  $2448691.3670 + 0.7747160 \times E$  (IBVS4402)
- \*7 min =  $2448500.4780 + 0.640487 \times E$  (Hipparcos)
- \*8 min =  $2448500.0830 + 0.825220 \times E$  (Hipparcos)
- \*9 min =  $2448501.3112 + 1.619850 \times E$  (Hipparcos)
- \*A min =  $2448500.0080 + 0.408604 \times E$  (Hipparcos)
- \*B min =  $2448500.1960 + 0.312440 \times E$  (Hipparcos)
- \*C min =  $2450223.36134 + 0.101015999 \times E$  (Kilkenny et al. 2000)
- \*D min =  $2450571.219 + 0.326890 \times E$  (IBVS5021)
- \*E min =  $2445730.5565 + 0.116719582 \times E$  (Cakirli & Devlen 1999)
- \*F min =  $2448500.039 + 0.194999 \times E$  (Hipparcos)
- \*G min =  $2452500.581 + 0.7496036 \times E$  (<http://www.as.ap.krakow.pl/ephem/vir.htm>)
- \*H min =  $2448500.1744 + 0.409439 \times E$  (Hipparcos)
- \*I min =  $2445665.6415 + 0.34697886 \times E$  (IBVS5300)
- \*J min =  $2442812.645 + 0.4550021 \times E$  (IBVS3709)
- \*K min =  $2448500.1960 + 0.477547 \times E$  (Hipparcos)
- \*L min =  $2445615.4156 + 0.15820616 \times E$  (Baptista et al. 2002)
- \*M min =  $2448500.0260 + 0.532676 \times E$  (Hipparcos)
- \*N min =  $248500.5160 + 0.521690 \times E$  (Hipparcos)
- \*O min =  $2451029.5207 + 0.17505 \times E$  (IBVS4671)
- \*P min =  $2453687.0714 + 1.1205 \times E$  (IBVS5700)
- \*Q min =  $2453341.1411 + 1.1110 \times E$  (IBVS5700)
- \*R min =  $2451335.8533 + 1.0652 \times E$  (IBVS5721)
- \*S min =  $2444562.4691 + 0.475640 \times E$  (IBVS 5463)
- \*T min =  $2448706.7253 + 0.358162 \times E$  (IBVS 3759)

\*U min = 2452053.44 + 0.76042 x E (ASAS catalog)  
\*V min = 2448500.6581 + 0.918235 x E (Hipparcos)  
\*W min = 2448500.2510 + 0.440794 x E (Hipparcos)  
\*X min = 2451886.073 + 0.308538 x E (ASAS3 Cataloge)  
\*Z min = 2453292.1090 + 2.6525 x E (IBVS5700)  
\*a min = 2451868.95 + 0.36493 x E (ASAS catalog)  
\*b min = 2451870.68 + 0.44552 x E (ASAS catalog)  
\*c min = 2427368.371 + 2.2377825 x E (IBVS5020)  
\*d min = 2448835.77422 + 0.37445764 x E (IBVS4951)  
\*e min = 2451869.32 + 0.58349 x E (ASAS catalog)  
\*f min = 2448500.0343 + 0.431915 x E (Hipparcos)  
\*g min = 2451886.073 + 0.308538 x E (ASAS3 Cataloge)  
\*h min = 2451967.4962 + 0.3379351 x E (IBVS5052)  
\*i min = 2449002.4539 + 1.77761517 x E (Cracow 2004)  
\*j min = 2452624.2 + 1.32311 x E (ASAS3 Cataloge)  
\*k min = 2451869.14 + 0.471458 x E (ASAS3 Cataloge)  
\*l min = 2448761.513 + 0.5160354 x E (Cracow2004)  
\*m min = 2451904.11 + 0.64346 x E (ASAS3 Cataloge)

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