

A list of minima and maxima timings

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Abstract

The list contains minima of eclipsing and maxima of pulsating stars, it continues the list published in OEJV 0048.

Instruments used

The following telescopes and observatories have been used:

Asas All Sky Automated Survey
 Tarot automated telescope, description in OEJV 0070
 50 cm + ST-7 (50 cm mirror, primary focus) observatory Hakos IAS, Namibia
 C11 + ST-8 Celestron 11, observatory Hakos Farm-2, Namibia
 C11 + ST-7 Celestron 11, observatory Hakos IAS, Namibia
 Takahashi 160 mm with StarLight Xpress, observatory Hakos IAS, Namibia
 Cryocam 80A 280 mm Newton, observatory in Eggerberg, Switzerland
 Hakos Farm 120 mm refractor with Starlight Xpress, observatory Hakos Farm
 OEJV 0048 Corrected maximum times already published.

Coordinates

The coordinates of well identified stars are given in the GCVS and NSV and will not be repeated here. Coordinates are all J2000. The following stars identified by Guide Star Catalog have been observed:

GSC 03627-01580 And 23:10:12.46 +47:34:14.9
 GSC 04833-01925 CMi 07:57:17.00 -00:05:00.0
 GSC 06686-00470 Hya 12:26:18.00 -25:46:18.0
 GSC 05591-01066 Lib 15:00:00.00 -14:17:00.0
 GSC 02850-01075 Vir 02:53:07.52 +40:58:54.6

SvkV is a list of variable stars detected in Slovakia.

SvkV001 Peg 21:39:43.38 +26:34:46.5
 SvkV002 Peg 21:38:22.26 +26:37:39.0

The detection of the SvkV stars has been announced in IBVS 5700. The following synonyms are given:

SvkV001 = GSC2.2 N033031026576 = APM EO0286-0080691 = USNO-B1.0 1165-0560940
 = USNO-A2.0 1125-18642461

SvkV002 = GSC2.2 N033031028158 = APM EO0286-0076868 = USNO-B1.0 1166-0562907
 = USNO-A2.0 1125-18616895

We (Radek Dreveny, Anton Paschke Friedhelm Hund) maintain our own list of newly detected variable stars. Observations of the following stars are reported here.

RafV001 Aps 15:31:55.9 -78:23:05
 RafV002 Aps 16:10:19.3 -76:52:04
 RafV009 Aps 14:37:59.1 -72:52:45
 RafV061 Aps 15:49:40.0 -76:25:18
 RafV118 Aps 15:38:28.0 -75:41:55
 RafV120 Aps 15:15:29.0 -77:46:40
 RafV121 Aps 15:19:44.0 -77:38:40

RafV122	Aps	15:16:51.0	-77:37:20
RafV123	Aps	14:51:58.0	-72:36:40
RafV124	Aps	14:40:02.0	-72:43:08
RafV056	Ara	17:13:18.0	-61:10:36
RafV057	Ara	17:13:01.3	-61:09:50
RafV113	Cen	11:22:18.0	-62:38:32
RafV119	Cen	14:23:32.0	-59:50:25
RafV125	Cen	11:23:25.0	-62:38:40
RafV126	CrA	18:53:51.3	-38:41:50
RafV127	CrA	18:55:04.8	-38:33:40
RafV065	Cru	12:39:30.2	-63:51:25
RafV117	Equ	21:17:32.5	+10:05:17
RafV080	Cru	12:38:22.0	-63:54:20
RafV128	Oph	17:15:38.7	-08:05:30
RafV129	Sco	17:34:18.5	-34:06:50
RafV130	Sco	17:34:30.2	-34:26:17
RafV063	Ser	15:23:29.0	+02:50:30
RafV064	Ser	15:23:27.5	+02:33:30
RafV115	Tuc	00:01:04.0	-66:57:42

Coordinates of most RafV stars are determined by visual comparison of ccd image and ESO Digital Sky Survey

Elements

Only elements found or changed by the observations reported here are listed. The columns are: starname, constellation, kind, epoch, period.

Kind: **p** stands for minimum (eclipsing stars),
R stands for maximum (RR Lyrae and HADS stars)

TW	Aps	R	54259.660	0.14937
UW	Aps	R	52402.510	0.503485
AL	Aps	p	36733.517	7.432415
AN	Aps	p	36761.257	1.045547
AU	Aps	R	36694.433	0.5671193
EV	Aps	R	36725.405	0.2833543
OT	Aps	p	48501.600	2.426577
RafV001	Aps	p	53544.493	0.304568
RafV002	Aps	p	53545.560	0.295466
RafV009	Aps	R	53546.442	0.160524
RafV061	Aps	R	54287.632	0.0638629
RafV123	Aps	p	54286.280	0.3994
RafV124	Aps	R	54289.240	0.075
HH	Aqr	R	51429.442	0.574433
RafV056	Ara	p	53926.381	1.0226
RafV057	Ara	p	53152.391	0.243909
GQ	Car	p	24001.220	0.6837115
RafV113	Cen	p	54255.350	0.9935
TU	Cha	p	36728.253	0.5570476
WW	CrA	R	31287.228	0.559474
VZ	Cru	p	24775.902	1.1258132
RafV065	Cru	p	54285.487	0.40236
RafV080	Cru	p	54282.340	0.8508
RT	Equ	R	50007.431	0.444733
RafV117	Equ	p	54268.515	0.2
V	Ind	R	40118.393	0.4796025

Y	Oct	R	28378.650	0.6465564
RY	Oct	R	27987.453	0.5634595
RafV128	Oph	p	54278.377	0.336
NSV 07748	Oph	p	54268.320	0.4712
V 440	Sgr	R	41509.450	0.4774815
V 675	Sgr	R	28387.244	0.642291
RafV129	Sco	p	54276.275	0.3905
RafV130	Sco	p	54276.379	0.4508
RafV064	Ser	p	54271.210	0.884
RafV115	Tuc	p	54275.632	0.3372
G2850.1075	Vir	p	51259.608	0.354316

Minima and Maxima timings

The table contains the following columns:

- 1) Star Name. As taken from GCVS, NSV, GSC or the list mentioned above.
- 2) Constellation
- 3) Kind of extremum. p = primary, s = secondary, R = maximum (RR Lyrae star)
- 4) Julian heliocentric time observed
- 5) Error estimated
- 6) Number of measurements (ccd images) used
- 7) Color. ccd = unfiltered ccd, V = Johnson, I = Cousin, -Ir = infrared block
- 8) Observer
- 9) Instrument, see list above

CZ	And	p	2453931.501	+-0.010	98	V	Klotz Alain	Tarot
CZ	And	p	2453931.503	+-0.010	97	I	Klotz Alain	Tarot
V 404	And	p	2454000.436	+-0.007	150	ccd	Paschke Anton	Cryocam 80A
GSC 03627-01580	And	p	2454090.332	+-0.010	364	ccd	Paschke Anton	Cryocam 80A
RS	Aps	R	2454276.325	+-0.005	667	ccd	Paschke Anton	50 cm + ST-7
SY	Aps	p	2454289.287	+-0.003	288	ccd	Paschke Anton	50 cm + ST-7
TW	Aps	R	2454259.359	+-0.003	157	ccd	Paschke Anton	50 cm + ST-7
TW	Aps	R	2454259.511	+-0.002	168	ccd	Paschke Anton	50 cm + ST-7
TW	Aps	R	2454259.659	+-0.002	116	ccd	Paschke Anton	50 cm + ST-7
TW	Aps	R	2454263.538	+-0.003	223	ccd	Paschke Anton	50 cm + ST-7
TW	Aps	R	2454263.695	+-0.003	106	ccd	Paschke Anton	50 cm + ST-7
TW	Aps	R	2454280.423	+-0.003	205	ccd	Paschke Anton	50 cm + ST-7
UU	Aps	p	2454287.414	+-0.002	340	ccd	Paschke Anton	50 cm + ST-7
UW	Aps	R	2453918.506			ccd	Paschke Anton	OEJV 0048
UW	Aps	R	2454279.503	+-0.005	427	ccd	Paschke Anton	50 cm + ST-7
ZZ	Aps	R	2454283.295	+-0.005	701	ccd	Paschke Anton	Takahashi
AA	Aps	R	2454277.579	+-0.004	600	ccd	Paschke Anton	50 cm + ST-7
AD	Aps	R	2454257.514	+-0.003	591	ccd	Paschke Anton	50 cm + ST-7
AE	Aps	R	2454286.603	+-0.007	771	ccd	Paschke Anton	50 cm + ST-7
AF	Aps	p	2454280.575	+-0.002	232	ccd	Paschke Anton	50 cm + ST-7
AL	Aps	p	2454266.589	+-0.005	590	ccd	Paschke Anton	Takahashi
AN	Aps	p	2454282.524	+-0.007	478	ccd	Paschke Anton	50 cm + ST-7
AU	Aps	R	2454287.612	+-0.008	328	ccd	Paschke Anton	50 cm + ST-7
EV	Aps	R	2454280.620	+-0.010	230	ccd	Paschke Anton	Takahashi
OT	Aps	p	2454286.561	+-0.010	710	ccd	Paschke Anton	Takahashi
PS	Aps	p	2454286.319	+-0.020	460	ccd	Paschke Anton	Takahashi
NSV 06592	Aps	p	2454278.313	+-0.004	427	ccd	Paschke Anton	50 cm + ST-7
RafV001	Aps	p	2454280.632	+-0.008	234	ccd	Paschke Anton	50 cm + ST-7
RafV002	Aps	s	2453200.308	+-0.003	0	ccd	Hund Friedhelm	Hakos Farm
RafV002	Aps	s	2453964.384	+-0.002	0	-Ir	Hund Friedhelm	Hakos Farm
RafV002	Aps	s	2453967.340	+-0.002	0	-Ir	Hund Friedhelm	Hakos Farm
RafV002	Aps	p	2453967.484	+-0.003	0	-Ir	Hund Friedhelm	Hakos Farm
RafV009	Aps	R	2454289.256	+-0.004	0	ccd	Paschke Anton	50 cm + ST-7

RafV061	Aps R	2451914.870	+0.005	127	ccd	Paschke Anton	Asas
RafV061	Aps R	2453927.320	+0.003	61	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453927.381	+0.003	44	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453927.445	+0.004	34	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453927.511	+0.003	36	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453927.576	+0.002	76	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453927.633	+0.005	20	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453930.257	+0.002	58	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453930.320	+0.002	71	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453932.236	+0.002	74	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453932.297	+0.002	86	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2453932.362	+0.002	111	ccd	Paschke Anton	Hakos IAS
RafV061	Aps R	2454287.568	+0.001	120	ccd	Paschke Anton	50 cm + ST-7
RafV061	Aps R	2454287.632	+0.001	120	ccd	Paschke Anton	50 cm + ST-7
RafV118	Aps p	2454266.596	+0.007	382	ccd	Paschke Anton	Takahashi
RafV120	Aps p	2454283.325	+0.010	700	ccd	Paschke Anton	Takahashi
RafV121	Aps p	2454283.320	+0.020	560	ccd	Paschke Anton	Takahashi
RafV122	Aps p	2454283.330	+0.020	615	ccd	Paschke Anton	Takahashi
RafV123	Aps p	2454286.280	+0.003	135	ccd	Paschke Anton	50 cm + ST-7
RafV123	Aps p	2454287.479	+0.004	167	ccd	Paschke Anton	50 cm + ST-7
RafV124	Aps R	2454289.240	+0.005	50	ccd	Paschke Anton	Takahashi
RafV124	Aps R	2454289.316	+0.005	50	ccd	Paschke Anton	Takahashi
AO	Aqr s	2454278.629	+0.003	292	ccd	Paschke Anton	Takahashi
CY	Aqr R	2454092.251	+0.002	55	ccd	Paschke Anton	Cryocam 80A
CY	Aqr R	2454092.311	+0.002	78	ccd	Paschke Anton	Cryocam 80A
HH	Aqr R	2453922.475			ccd	Paschke Anton	OEJV 0048
HH	Aqr R	2453926.503			ccd	Paschke Anton	OEJV 0048
HH	Aqr R	2454274.610	+0.007	758	ccd	Paschke Anton	Takahashi
HH	Aqr R	2454289.538	+0.007	556	ccd	Paschke Anton	Takahashi
CV	Ara R	2454253.549	+0.003	510	ccd	Paschke Anton	50 cm + ST-7
CV	Ara R	2454283.613	+0.004	333	ccd	Paschke Anton	50 cm + ST-7
FU	Ara p	2454252.645	+0.004	365	ccd	Paschke Anton	50 cm + ST-7
V 620	Ara p	2454290.370	+0.003	420	ccd	Paschke Anton	Takahashi
RafV056	Ara s	2454253.558	+0.000	180	ccd	Paschke Anton	50 cm + ST-7
RafV057	Ara s	2453927.175	+0.005	571	ccd	Paschke Anton	Hakos IAS
RafV057	Ara s	2454253.519	+0.002	92	ccd	Paschke Anton	50 cm + ST-7
RafV057	Ara p	2454253.640	+0.003	94	ccd	Paschke Anton	50 cm + ST-7
RafV057	Ara s	2454283.518	+0.010	74	ccd	Paschke Anton	50 cm + ST-7
RafV057	Ara p	2454283.644	+0.008	157	ccd	Paschke Anton	50 cm + ST-7
SV	Boo R	2454200.462	+0.007	213	ccd	Paschke Anton	Cryocam 80A
AQ	Boo p	2454202.378	+0.003	71	ccd	Paschke Anton	Cryocam 80A
AQ	Boo s	2454202.543	+0.003	83	ccd	Paschke Anton	Cryocam 80A
DG	Boo R	2454313.435	+0.008	119	ccd	Paschke Anton	Cryocam 80A
GV	Boo p	2454239.435	+0.008	110	ccd	Paschke Anton	Cryocam 80A
GV	Boo p	2454263.341	+0.005	305	ccd	Paschke Anton	Takahashi
RW	CMi p	2454092.461	+0.005	363	ccd	Paschke Anton	Cryocam 80A
AC	CMi p	2454043.593	+0.003	168	ccd	Paschke Anton	Cryocam 80A
AG	CMi p	2454070.515	+0.005	350	ccd	Paschke Anton	Cryocam 80A
GSC 04833-01925	CMi p	2454084.480	+0.007	384	ccd	Paschke Anton	Cryocam 80A
GL	Car s	2454267.308	+0.004	339	V	Paschke Anton	C11 + ST-7
GL	Car s	2454284.261	+0.005	411	ccd	Paschke Anton	50 cm + ST-7
GQ	Car p	2454253.405	+0.003	56	ccd	Hund Friedhelm	C11 + ST-8
MM	Cas p	2454070.314	+0.007	352	ccd	Paschke Anton	Cryocam 80A
GT	Cas p	2454351.487	+0.008	257	ccd	Paschke Anton	Cryocam 80A

SV	Cen p	2454254.275	+/-0.005	700	ccd	Paschke Anton	50 cm + ST-7
BD	Cen p	2454271.361	+/-0.003	298	V	Paschke Anton	C11 + ST-7
BH	Cen s	2454252.324	+/-0.002	35	ccd	Hund Friedhelm	C11 + ST-8
RafV113	Cen p	2454255.350	+/-0.020	509	ccd	Paschke Anton	50 cm + ST-7
RafV119	Cen p	2454271.418	+/-0.010	279	ccd	Paschke Anton	C11 + ST-7
RafV125	Cen p	2454255.272	+/-0.020	318	ccd	Paschke Anton	50 cm + ST-7
WZ	Cet p	2454067.320	+/-0.010	417	ccd	Paschke Anton	Cryocam 80A
RV	Cha R	2454283.322	+/-0.005	159	ccd	Paschke Anton	50 cm + ST-7
TU	Cha p	2454280.266	+/-0.004	198	ccd	Paschke Anton	50 cm + ST-7
TX	Cha p	2454251.460	+/-0.005	347	ccd	Paschke Anton	50 cm + ST-7
RR	Cir p	2454252.449	+/-0.002	247	ccd	Paschke Anton	50 cm + ST-7
RX	Cir R	2454283.432	+/-0.003	209	ccd	Paschke Anton	50 cm + ST-7
BB	Cir p	2454282.517	+/-0.005	602	ccd	Paschke Anton	Takahashi
CL	Cir p	2454270.440	+/-0.010	987	ccd	Paschke Anton	Takahashi
RW	Com p	2454260.303	+/-0.001	122	ccd	Paschke Anton	Takahashi
RW	Com s	2454260.421	+/-0.002	114	ccd	Paschke Anton	Takahashi
NSV 05740	Com p	2454261.385	+/-0.004	270	ccd	Paschke Anton	Takahashi
WW	CrA R	2454267.616	+/-0.006	402	ccd	Paschke Anton	Takahashi
CV	CrA R	2454277.281	+/-0.003	285	ccd	Paschke Anton	Takahashi
V 359	CrA p	2454278.558	+/-0.004	567	ccd	Paschke Anton	50 cm + ST-7
V 454	CrA p	2454269.408	+/-0.007	357	ccd	Paschke Anton	Takahashi
RafV126	CrA p	2454277.332	+/-0.007	268	ccd	Paschke Anton	Takahashi
RafV127	CrA R	2454277.272	+/-0.010	259	ccd	Paschke Anton	Takahashi
RV	CrB R	2454205.440	+/-0.005	435	ccd	Paschke Anton	Cryocam 80A
Z	Crv p	2454260.292	+/-0.001	220	ccd	Paschke Anton	Hakos 50 cm
RZ	Crv p	2454263.340	+/-0.004	386	ccd	Paschke Anton	50 cm + ST-7
RZ	Crv R	2454263.466	+/-0.004	174	ccd	Paschke Anton	50 cm + ST-7
VZ	Cru s	2454251.382	+/-0.001	67	ccd	Hund Friedhelm	C11 + ST-8
VZ	Cru s	2454259.262	+/-0.001	207	ccd	Paschke Anton	50 cm + ST-7
VZ	Cru p	2454282.341	+/-0.001	100	ccd	Paschke Anton	50 cm + ST-7
ZZ	Cru p	2454251.417	+/-0.003	68	ccd	Hund Friedhelm	C11 + ST-8
AI	Cru p	2454251.411	+/-0.004	66	ccd	Hund Friedhelm	C11 + ST-8
RafV065	Cru s	2454251.487	+/-0.010	60	ccd	Hund Friedhelm	C11 + ST-8
RafV065	Cru s	2454258.327	+/-0.004	205	ccd	Paschke Anton	50 cm + ST-7
RafV065	Cru p	2454284.280	+/-0.005	191	ccd	Paschke Anton	50 cm + ST-7
RafV065	Cru s	2454285.286	+/-0.004	220	ccd	Paschke Anton	50 cm + ST-7
RafV065	Cru p	2454288.303	+/-0.000	0	ccd	Paschke Anton	50 cm + ST-7
RafV080	Cru p	2454282.340	+/-0.010	632	ccd	Paschke Anton	50 cm + ST-7
RafV080	Cru p	2454288.291	+/-0.000	0	ccd	Paschke Anton	50 cm + ST-7
EW	Del p	2454289.678	+/-0.000	0	ccd	Paschke Anton	50 cm + ST-7
EX	Del s	2453979.418	+/-0.005	204	ccd	Paschke Anton	Cryocam 80A
EX	Del p	2453979.584	+/-0.005	163	ccd	Paschke Anton	Cryocam 80A
EX	Del s	2454295.506	+/-0.005	92	ccd	Paschke Anton	Cryocam 80A
RT	Equ R	2454296.445	+/-0.010	120	ccd	Paschke Anton	Cryocam 80A
RZ	Equ p	2454268.607	+/-0.003	357	ccd	Paschke Anton	Takahashi
RafV117	Equ p	2454268.515	+/-0.015	0	ccd	Paschke Anton	Takahashi
BQ	Eri p	2450480.460	+/-0.007	130	ccd	Paschke Anton	Cryocam 80A
BQ	Eri p	2454067.575	+/-0.005	435	ccd	Paschke Anton	Cryocam 80A

AV	Hya p	2454092.629	+0.005	262	ccd	Paschke	Anton	Cryocam 80A
GSC 06686-00470	Hya p	2454252.301	+0.003	354	ccd	Paschke	Anton	50 cm + ST-7
V	Ind R	2454271.462	+0.007	188	ccd	Paschke	Anton	Takahashi
V	Ind R	2454281.536	+0.005	60	ccd	Paschke	Anton	Takahashi
GSC 05591-01066	Lib R	2454287.252	+0.002	56	ccd	Paschke	Anton	Takahashi
GSC 05591-01066	Lib R	2454287.418	+0.002	71	ccd	Paschke	Anton	Takahashi
Y	Oct R	2454263.532	+0.003	150	ccd	Paschke	Anton	Takahashi
RY	Oct R	2454283.545	+0.010	170	ccd	Paschke	Anton	Takahashi
NSV 06150	Oct p	2454260.607	+0.002	170	ccd	Paschke	Anton	Takahashi
SW	Oph p	2453560.390	+0.003	101	ccd	Paschke	Anton	Cryocam 80A
SW	Oph p	2454262.428	+0.005	200	ccd	Paschke	Anton	Takahashi
SZ	Oph p	2454278.355	+0.005	301	ccd	Paschke	Anton	Takahashi
XZ	Oph R	2454273.282	+0.005	160	ccd	Paschke	Anton	C11 + ST-7
V 423	Oph p	2454273.531	+0.005	180	ccd	Paschke	Anton	C11 + ST-7
V 423	Oph p	2454285.566	+0.007	305	ccd	Paschke	Anton	Takahashi
V 448	Oph p	2454277.503	+0.003	203	ccd	Paschke	Anton	Takahashi
V 487	Oph p	2453931.230	+0.020	110	ccd	Paschke	Anton	C11 + ST-7
V 509	Oph p	2454284.480	+0.003	223	ccd	Paschke	Anton	50 cm + ST-7
V 709	Oph p	2454289.325	+0.007	430	ccd	Paschke	Anton	Takahashi
V 710	Oph R	2454262.346	+0.015	798	ccd	Paschke	Anton	Takahashi
V2298	Oph R	2454289.392	+0.010	200	ccd	Paschke	Anton	50 cm + ST-7
RafV128	Oph p	2454278.377	+0.010	277	ccd	Paschke	Anton	Takahashi
NSV 07748	Oph p	2454268.320	+0.010	720	ccd	Paschke	Anton	Takahashi
EG	Ori p	2454025.545	+0.007	130	ccd	Paschke	Anton	Cryocam 80A
ZZ	Peg p	2454025.383	+0.005	500	ccd	Paschke	Anton	Cryocam 80A
BX	Peg p	2454279.647	+0.001	116	ccd	Paschke	Anton	Takahashi
SvkV001	Peg p	2454279.641	+0.007	320	ccd	Paschke	Anton	Takahashi
SvkV002	Peg p	2454284.661	+0.005	101	ccd	Paschke	Anton	50 cm + ST-7
YY	Sgr p	2454265.483	+0.010	199	ccd	Paschke	Anton	Takahashi
V 440	Sgr R	2454271.582	+0.003	160	ccd	Paschke	Anton	C11 + ST-7
V 675	Sgr R	2454287.627	+0.006	200	ccd	Paschke	Anton	Takahashi
V 487	Sco R	2454276.359	+0.005	400	ccd	Paschke	Anton	Takahashi
V 487	Sco R	2454276.669	+0.010	304	ccd	Paschke	Anton	Takahashi
RafV129	Sco p	2454276.275	+0.005	160	ccd	Paschke	Anton	Takahashi
RafV129	Sco p	2454276.662	+0.005	160	ccd	Paschke	Anton	Takahashi
RafV130	Sco p	2454276.379	+0.005	240	ccd	Paschke	Anton	Takahashi
RafV130	Sco s	2454276.599	+0.007	305	ccd	Paschke	Anton	Takahashi
CX	Ser s	2454271.297	+0.007	454	ccd	Paschke	Anton	Takahashi
CX	Ser s	2454274.289	+0.008	480	ccd	Paschke	Anton	Takahashi
CX	Ser s	2454280.273	+0.015	582	ccd	Paschke	Anton	Takahashi
CX	Ser s	2454281.274	+0.020	415	ccd	Paschke	Anton	Takahashi
CX	Ser s	2454285.258	+0.009	630	ccd	Paschke	Anton	Takahashi
CX	Ser s	2454288.251	+0.010	271	ccd	Paschke	Anton	Takahashi
RafV063	Ser R	2454271.284	+0.003	306	ccd	Paschke	Anton	Takahashi
RafV063	Ser R	2454274.230	+0.005	181	ccd	Paschke	Anton	Takahashi
RafV063	Ser R	2454275.405	+0.003	296	ccd	Paschke	Anton	Takahashi
RafV063	Ser R	2454281.285	+0.010	94	ccd	Paschke	Anton	Takahashi
RafV063	Ser R	2454285.424	+0.008	263	ccd	Paschke	Anton	Takahashi
RafV063	Ser R	2454288.358	+0.007	220	ccd	Paschke	Anton	Takahashi
RafV064	Ser s	2454274.310	+0.015	468	ccd	Paschke	Anton	Takahashi
RafV064	Ser p	2454285.354	+0.005	493	ccd	Paschke	Anton	Takahashi

TY	Tau p	2454084.303	+/-0.004	217	ccd	Paschke Anton	Cryocam 80A
MN	TrA p	2454265.270	+/-0.015	262	ccd	Paschke Anton	Takahashi
NSV 00001	Tuc p	2454275.607	+/-0.001	165	ccd	Paschke Anton	Takahashi
NSV 00001	Tuc p	2454290.630	+/-0.005	160	ccd	Paschke Anton	Takahashi
RafV115	Tuc p	2454275.632	+/-0.002	600	ccd	Paschke Anton	Takahashi
GSC 02850-01075	Vir s	2453898.381	+/-0.003	33	ccd	Paschke Anton	Cryocam 80A
GSC 02850-01075	Vir s	2454257.298	+/-0.003	274	ccd	Paschke Anton	50 cm + ST-7
V0014	SMC p	2454282.581	+/-0.000	130	ccd	Paschke Anton	Takahashi

There is no column with O-C values. They depend on the elements. For several stars no period is known yet, or it will become better known soon. Such information will be better maintained in the referred databases.

Remarks

- **CZ And** was omitted in OEJV 0070 for technical reasons.
- **UW Aps** one maximum in OEJV 0048 was wrong due to the summer time tickmark in the (Greenwich time zone) country settings of the MS-Windows operating system.
- **HH Aqr** two maxima in OEJV 0048 have been wrong due to typing mistake.
- **RZ Crv** The star is catalogued as EW, his period is 0.663756 (GCVS). It was observed in two nights. As comparison was used the star at coordinates 12:50:29 -18:24:48. The data from 2007/06/11 show an slightly asymmetric lightcurve. RZ Crv should probably be reclassified to RRc and his period should be halved. The data (differential magnitudes in unfiltered ccd) are attached. Due to the period a longer timespan of observation is needed to obtain a complete lightcurve.
- **V0014 SMC** is a EW star in the foreground of the Small Magellan Cloud.

References

- Samus N.N. et al. 2006 General Catalog of Variable Stars, 4th edition electronic version <http://www.sai.msu.ru/groups/cluster/gcvs/>
- Motl David, 2006, C-Munipack <http://integral.physics.muni.cz/cmunipack/index.html>
- Observatory IAS Hakos <http://www.ias-observatory.org/>
- O-C GATE <http://var.astro.cz/ocgate/>
- RafV catalog <http://var.astro.cz/newrafv.php?lang=en>
- ESO Online Digitised Sky Survey <http://arch-http.hq.eso.org/dss/dss>