

Recent Minima of 146 Eclipsing Binary Stars

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Abstract This paper continues the publication of times of minima for eclipsing binary stars from observations reported to the AAVSO Eclipsing Binary Section. Times of minima from observations made from October 2010 thru March 2011, along with a few unpublished times of minima from older data, are presented.

1. Recent Observations

The accompanying list contains times of minima calculated from recent CCD observations made by participants in the AAVSO's eclipsing binary program; the data used to determine these times of minimum are in the AAVSO International Database. This list will be web-archived and made available through the AAVSO ftp site at <ftp://ftp.aavso.org/public/datasets/gsamj392.txt>. This list, along with eclipsing binary data from earlier AAVSO publications, is also included in the Lichtenknecker database administrated by the Bundesdeutsche Arbeitsgemeinschaft für Veränderliche Sterne e. V. (BAV) at: <http://www.bav-astro.de/LkDB/index.php?lang=en>. These observations were reduced by the observers or the writer using the method of Kwee and Van Worden (1956). The standard error is included when available. Column F in Table 1 indicates the filter used. A blank indicates no filter.

The linear elements in the *General Catalogue of Variable Stars* (GCVS, Kholopov *et al.* 1985) were used to compute the O–C values for most stars. For a few exceptions where the GCVS elements are missing or are in significant error, light elements from another source are used: CD Cam (Baldwin and Samolyk 2007), AC CMi (Samolyk 2008), CW Cas (Samolyk 1992a), MR Del (Kreiner 2004, 2011), Z Dra (Danielkiewicz-Krośniak and Kurpińska-Winiarska 1996), DF Hya (Samolyk 1992b), DK Hya (Samolyk 1990), EF Ori (Baldwin and Samolyk 2005), GU Ori (Samolyk 1985), VY UMi (Otero and Dubovsky 2004), and HT Vir (Kreiner 2011). O–C values listed in this paper can be directly compared with values published in recent numbers of the AAVSO *Observed Minima Timings of Eclipsing Binaries* series.

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Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program.

<i>Star</i>	<i>HJD</i> 2400000+	<i>Cycle</i>	<i>O-C</i> (day)	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error (day)</i>
RT And	55516.6920	22856	-0.0100	V	R. Poklar	0.0001
TW And	55486.7378	3994	-0.0320	V	G. Samolyk	0.0001
WZ And	55578.5457	21140	0.0540	V	K. Menzies	0.0001
XZ And	54107.5655	22199	0.1597	V	G. Lubcke	0.0001
XZ And	54107.5656	22199	0.1598	I	G. Lubcke	0.0001
XZ And	55486.5740	23215	0.1737	V	G. Samolyk	0.0001
XZ And	55490.6459	23218	0.1738	V	K. Menzies	0.0001
AA And	50701.613:	22266	-0.073		S. Cook	
AA And	51436.593	23052	-0.081		S. Cook	
AA And	52471.7390	24159	-0.0916	V	S. Dvorak	0.0003
AB And	55466.6649	58323.5	-0.0262	V	N. Simmons	0.0003
AB And	55485.7484	58381	-0.0265	V	G. Samolyk	0.0002
AB And	55498.3605	58419	-0.0263	R	L. Corp	0.0002
AB And	55506.6572	58444	-0.0269	V	N. Simmons	0.0001
AB And	55527.5660	58507	-0.0273	V	K. Menzies	0.0002
AD And	54743.5596	15961.5	-0.0563	V	G. Lubcke	0.0002
AD And	54743.5599	15961.5	-0.0560	I	G. Lubcke	0.0005
AN And	50361.617	4431	-0.008		S. Cook	
BL And	50005.293	14675	-0.004		S. Cook	
BL And	52504.7146	18135	-0.0031	V	S. Dvorak	0.0004
BX And	55521.6166	31130	-0.0516	V	K. Menzies	0.0003
DS And	55472.6220	19129	0.0030	V	G. Samolyk	0.0002
EP And	52975.6594	25580	0.0663	V	S. Dvorak	0.0001

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>HJD</i> 2400000+	<i>Cycle</i>	<i>O-C</i> (day)	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error (day)</i>
EP And	53374.5089	26567	0.0616	V	S. Dvorak	0.0002
GZ And	50749.627	-5739	-0.002		S. Cook	
GZ And	53000.502	1640.5	0.001	V	S. Dvorak	0.002
GZ And	55614.3426	10210	-0.0010		C. F. Rivero	0.0004
RX Ari	55500.7173	16610	0.0597	V	R. Poklar	0.0002
SS Ari	55477.7559	40517	-0.2818	V	G. Samolyk	0.0001
SS Ari	55498.6653	40568.5	-0.2811	V	R. Poklar	0.0002
RY Aur	55486.8022	6310	0.0220	V	G. Samolyk	0.0001
SX Aur	55543.6794	12711	0.0145	V	R. Poklar	0.0001
SX Aur	55612.6544	12768	0.0149	V	G. Samolyk	0.0003
TT Aur	55478.8692	25689	-0.0166	V	K. Menzies	0.0001
TT Aur	55541.5097	25736	-0.0147	R	L. Corp	0.0003
WW Aur	55607.5887	8975	0.0019	V	G. Samolyk	0.0001
AP Aur	55584.6630	23080	1.3215	V	R. Poklar	0.0002
AP Aur	55647.5811	23190.5	1.3305	V	K. Menzies	0.0004
AR Aur	55639.6022	4169	-0.1245	V	G. Samolyk	0.0005
CL Aur	55477.9579	18090	0.1421	V	G. Samolyk	0.0006
CL Aur	55527.7325	18130	0.1421	V	K. Menzies	0.0004
CL Aur	55532.7114	18134	0.1436	V	R. Poklar	0.0001
EM Aur	55540.6776	13474	-1.1094	V	R. Poklar	0.0006
EM Aur	55540.6802	13474	-1.1068	V	K. Menzies	0.0005
EP Aur	55527.6501	49438	0.0146	V	K. Menzies	0.0002
EP Aur	55639.3476	49627	0.0116	V	C. F. Rivero	0.0001
HP Aur	55596.5852	9024.5	0.0600	V	G. Samolyk	0.0003
HU Aur	52279.6238	18162	-0.0238	V	S. Dvorak	0.0002
HU Aur	52372.5540	18228	-0.0223	V	S. Dvorak	0.0001
IM Aur	55541.6150	12047	-0.1064	R	L. Corp	0.0010
TU Boo	55629.6569	69578.5	-0.1362	V	K. Menzies	0.0004
TU Boo	55647.8175	69634.5	-0.1357	V	K. Menzies	0.0002
TZ Boo	55611.7557	53771.5	0.0674	V	G. Samolyk	0.0002
TZ Boo	55648.7537	53896	0.0687	V	K. Menzies	0.0003
UW Boo	55639.7611	13173	-0.0073	V	G. Samolyk	0.0001
AD Boo	55605.7757	13700	0.0285	V	K. Menzies	0.0004
AR Boo	55597.7114	45441	0.0416	R	L. Corp	0.0001
CK Boo	50554.656	21562	0.034		S. Cook	
CK Boo	53087.8032	28694.5	0.0728	V	S. Dvorak	0.0003
ET Boo	54623.8123	-556	-0.0007	R	R. Buchheim	0.0005
ET Boo	54623.8126	-556	-0.0005	V	R. Buchheim	0.0005

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>HJD</i> 2400000+	<i>Cycle</i>	<i>O-C</i> (day)	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error (day)</i>
ET Boo	54624.7791	-554.5	-0.0016	V	R. Buchheim	0.0005
ET Boo	54624.7803	-554.5	-0.0003	R	R. Buchheim	0.0005
SV Cam	55533.6751	21817	0.0528	V	R. Poklar	0.0001
AL Cam	55589.6607	21966	-0.0327	V	R. Poklar	0.0001
AS Cam	50188.635	2910	-0.005		S. Cook	
AS Cam	50562.597:	3019	-0.019		S. Cook	
AS Cam	50833.640	3098	-0.023		S. Cook	
AW Cam	50180.603	14834	-0.007		S. Cook	
AW Cam	50858.619	15713	-0.005		S. Cook	
AW Cam	51924.623	17095	-0.003		S. Cook	
CD Cam	55544.7090	3640.5	-0.0022	V	R. Poklar	0.0006
NR Cam	55616.3686	15736	0.0052		C. F. Rivero	0.0003
NR Cam	55638.3754	15822	0.0059	V	C. F. Rivero	0.0002
AD Cnc	52403.600	32578.5	-0.0178	V	S. Dvorak	0.010
AD Cnc	52645.9121	33435.5	-0.0123	V	S. Dvorak	0.0006
AD Cnc	53326.8873	35844	-0.0122	V	S. Dvorak	0.0003
SX CMa	55639.6093	16958	0.0357	V	G. Samolyk	0.0002
TU CMa	55588.6974	25369	-0.0098	V	R. Poklar	0.0002
TU CMa	55631.5533	25407	-0.0105	V	G. Samolyk	0.0004
UU CMa	55586.7133	5072	-0.1066	V	R. Poklar	0.0002
XZ CMi	54167.6029	20254	-0.0064	I	G. Lubcke	0.0004
XZ CMi	54167.6029	20254	-0.0064	V	G. Lubcke	0.0005
XZ CMi	55585.6890	22704	-0.0036	V	R. Poklar	0.0001
XZ CMi	55611.7354	22749	-0.0036	V	G. Samolyk	0.0002
YY CMi	55583.7056	25192	0.0143	V	R. Poklar	0.0003
AC CMi	55577.7013	4150	0.0016	V	R. Poklar	0.0002
AK CMi	55579.6905	22050	-0.0214	V	R. Poklar	0.0001
AK CMi	55641.3732	22159	-0.0215	V	C. F. Rivero	0.0001
AM CMi	55621.6882	29805	0.1965	V	R. Poklar	0.0005
TV Cas	52938.5642	4599	-0.0164	R	G. Lubcke	0.0001
TV Cas	54040.6301	5207	-0.0086	V	G. Lubcke	0.0001
TV Cas	54736.6526	5591	-0.0228	I	G. Lubcke	0.0001
TV Cas	54736.6526	5591	-0.0228	V	G. Lubcke	0.0001
TV Cas	55510.6300	6018	-0.0237	I	G. Lubcke	0.0001
TV Cas	55510.6303	6018	-0.0234	V	G. Lubcke	0.0006
TV Cas	55539.6310	6034	-0.0243	I	G. Lubcke	0.0003
TV Cas	55539.6319	6034	-0.0234	B	G. Lubcke	0.0003
TV Cas	55539.6329	6034	-0.0224	V	G. Lubcke	0.0003

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>HJD</i> 2400000+	<i>Cycle</i>	<i>O-C</i> (day)	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error (day)</i>
AB Cas	55527.6444	9374	0.1067	V	R. Poklar	0.0001
CW Cas	55492.6714	43468.5	-0.0577	V	K. Menzies	0.0003
CW Cas	55503.6704	43503	-0.0595	V	R. Poklar	0.0003
DN Cas	50842.660	4091	-0.028		S. Cook	
DN Cas	51466.618:	4361	-0.028		S. Cook	
DO Cas	50427.589	24101	-0.006		S. Cook	
DO Cas	50848.658	24716	-0.007		S. Cook	
DO Cas	54096.7199	29460	-0.0007	V	V. Petriew	0.0001
GT Cas	55478.6633	9411	0.1929	V	K. Menzies	0.0006
IR Cas	55519.6688	19327	0.0081	V	R. Poklar	0.0001
IT Cas	55485.6401	6858	0.0627	V	G. Samolyk	0.0003
OR Cas	55517.6889	9077	-0.0243	V	R. Poklar	0.0002
V364 Cas	55539.6582	13743	-0.0233	V	R. Poklar	0.0002
V380 Cas	55479.6565	21981	-0.0663	V	G. Samolyk	0.0002
SU Cep	55478.5844	32342	0.0050	V	G. Samolyk	0.0001
SU Cep	55486.6964	32351	0.0044	V	N. Simmons	0.0002
SU Cep	55523.6550	32392	0.0056	V	R. Poklar	0.0001
WZ Cep	55531.6427	65855.5	-0.1008	V	R. Poklar	0.0003
TT Cet	55486.8004	47208	-0.0641	V	G. Samolyk	0.0001
TT Cet	55508.6689	47253	-0.0636	V	R. Poklar	0.0001
TW Cet	55486.7429	41386.5	-0.0263	V	G. Samolyk	0.0001
TW Cet	55513.6749	41471.5	-0.0267	V	R. Poklar	0.0002
TX Cet	55514.6843	16781	0.0098	V	R. Poklar	0.0002
RW Com	55572.8347	65518	-0.0103	V	K. Menzies	0.0002
RW Com	55594.6706	65610	-0.0102	R	L. Corp	0.0001
RW Com	55596.8072	65619	-0.0097	V	K. Menzies	0.0002
RW Com	55628.6115	65753	-0.0098	V	K. Menzies	0.0001
RW Com	55637.3927	65790	-0.0104	V	C. F. Rivero	0.0001
RW Com	55642.3773	65811	-0.0100	V	C. F. Rivero	0.0002
RW Com	55646.4119	65828	-0.0103	V	C. F. Rivero	0.0003
RZ Com	55645.5991	61470.5	0.0438	V	G. Samolyk	0.0001
SS Com	55622.7055	74176.5	0.7371	V	K. Menzies	0.0003
SS Com	55640.6625	74220	0.7377	V	K. Menzies	0.0003
CC Com	55560.9109	72625	-0.0132	V	K. Menzies	0.0001
YY CrB	53823.7658	3515	0.0017	V	V. Petriew	0.0001
YY CrB	53835.8107	3547	-0.0031	V	V. Petriew	0.0008
YY CrB	53875.7299	3653	0.0013	V	V. Petriew	0.0002
AE Cyg	55485.7040	11246	-0.0040	V	C. Hesseltine	0.0003

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>HJD</i> 2400000+	<i>Cycle</i>	<i>O-C</i> (day)	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error (day)</i>
CG Cyg	55044.6620	24748	0.0624	V	H. Gerner	0.0001
MY Cyg	55479.6219	5401	-0.0017	V	G. Samolyk	0.0005
V346 Cyg	55479.6802	7215	0.1506	V	G. Samolyk	0.0002
V387 Cyg	55478.5986	42918	0.0213	V	G. Samolyk	0.0001
V387 Cyg	55487.5663	42932	0.0207	V	K. Menzies	0.0002
V704 Cyg	55485.7342	30745	0.0307	V	N. Simmons	0.0004
V836 Cyg	50977.9323	9373	0.0094	V	J. Roe	0.0003
V836 Cyg	50981.8506	9379	0.0073	V	J. Roe	0.0005
V836 Cyg	55477.3420	16259	0.0227	R	L. Corp	0.0006
YY Del	55485.6209	15794	0.0107	V	G. Samolyk	0.0001
FZ Del	55507.5453	30877	-0.0392	V	N. Simmons	0.0001
MR Del	54684.8884	4187.5	0.0012	V	R. Buchheim	0.0003
MR Del	54684.8886	4187.5	0.0014	B	R. Buchheim	0.0002
MR Del	54688.8002	4195	0.0003	B	R. Buchheim	0.0001
MR Del	54688.8002	4195	0.0003	V	R. Buchheim	0.0002
Z Dra	55570.7244	4218.5	-0.0191	B	G. Lubcke	0.0006
Z Dra	55570.7247	4218.5	-0.0188	V	G. Lubcke	0.0006
Z Dra	55625.6971	4259	-0.0225	V	R. Poklar	0.0001
Z Dra	55648.7737	4276	-0.0224	B	G. Lubcke	0.0001
Z Dra	55648.7737	4276	-0.0224	V	G. Lubcke	0.0001
Z Dra	55648.7737	4276	-0.0224	I	G. Lubcke	0.0001
S Equ	55485.6055	3751	0.0625	V	G. Samolyk	0.0001
TZ Eri	55478.7646	5013	0.2963	V	G. Samolyk	0.0002
YY Eri	55585.5665	43558.5	0.1396	V	G. Samolyk	0.0001
YY Eri	55600.3566	43604.5	0.1409	R	L. Corp	0.0002
SX Gem	55559.6336	26724	-0.0573	V	K. Menzies	0.0004
SX Gem	55574.6674	26735	-0.0592	V	R. Poklar	0.0002
SX Gem	55585.6037	26743	-0.0579	V	K. Menzies	0.0003
SX Gem	55611.5745	26762	-0.0578	V	N. Simmons	0.0003
WW Gem	55602.6179	23928	0.0193	V	G. Samolyk	0.0002
AL Gem	55521.7569	20985	0.0718	V	K. Menzies	0.0006
UX Her	55648.8303	10315	0.0857	V	K. Menzies	0.0002
LV Her	54647.7333	4427.5	-0.0132	V	R. Buchheim	0.0001
WY Hya	55634.7080	21038.5	0.0297	V	R. Poklar	0.0002
AV Hya	55646.6844	27763	-0.0979	V	R. Poklar	0.0002
DF Hya	55600.7008	38756	-0.0118	V	R. Poklar	0.0002
DF Hya	55611.7749	38789.5	-0.0129	V	G. Samolyk	0.0001
DF Hya	55614.4203	38797.5	-0.0124		C. F. Rivero	0.0002

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>HJD</i> 2400000+	<i>Cycle</i>	<i>O-C</i> (day)	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error (day)</i>
DF Hya	55631.6114	38849.5	-0.0127	V	G. Samolyk	0.0001
DK Hya	55639.6525	24517	0.0047	V	G. Samolyk	0.0002
VX Lac	55486.6520	9519	0.0757	V	G. Samolyk	0.0001
CO Lac	55486.5801	18125	-0.0036	V	G. Samolyk	0.0001
DG Lac	55486.6725	4975	-0.2211	V	C. Hesseltine	0.0002
UZ Leo	55625.5767	25605.5	-0.0912	R	L. Corp	0.0003
VZ Leo	55560.7093	22384	-0.0626	V	K. Menzies	0.0005
VZ Leo	55561.7948	22385	-0.0670	V	K. Menzies	0.0003
VZ Leo	55608.6646	22428	-0.0632	V	R. Poklar	0.0003
WZ Leo	55650.6549	17424	-2.4968	V	G. Samolyk	0.0002
RY Lyn	55651.6262	8895	-0.0351	V	G. Samolyk	0.0001
RU Mon	55606.6494	3867.5	-0.5621	V	G. Samolyk	0.0002
XZ Mon	55596.4164	28317	0.0212	R	L. Corp	0.0001
BB Mon	55591.6552	39457	-0.0042	V	R. Poklar	0.0002
BM Mon	55597.3744	22605	0.0489	R	L. Corp	0.0001
V456 Mon	55597.4760	14349	-0.1337	R	L. Corp	0.0001
V508 Oph	55646.6092	30639	-0.0199	V	C. F. Rivero	0.0002
EF Ori	55631.5972	2026	0.0048	V	G. Samolyk	0.0004
EQ Ori	55572.7029	13822	-0.0400	V	R. Poklar	0.0001
ER Ori	55548.7048	32882	0.0937	V	N. Simmons	0.0001
ER Ori	55589.5589	32978.5	0.0899	V	K. Menzies	0.0002
ER Ori	55611.5805	33030.5	0.0947	V	G. Samolyk	0.0001
ET Ori	55612.6918	30421	-0.0031	V	G. Samolyk	0.0002
FH Ori	55581.7207	13798	-0.3720	V	R. Poklar	0.0006
FT Ori	55528.7170	4501	0.0158	V	K. Menzies	0.0002
FT Ori	55569.6724	4514	0.0158	V	R. Poklar	0.0001
FZ Ori	55602.6160	28946.5	-0.0544	V	G. Samolyk	0.0001
FZ Ori	55631.6152	29019	-0.0542	V	G. Samolyk	0.0001
GU Ori	55566.6698	26550.5	-0.0491	V	R. Poklar	0.0002
GU Ori	55631.6244	26688.5	-0.0485	V	G. Samolyk	0.0002
U Peg	55502.6431	50672.5	-0.1376	V	R. Poklar	0.0002
U Peg	55511.6382	50696.5	-0.1373	V	N. Simmons	0.0002
U Peg	55541.4310	50776	-0.1396	R	L. Corp	0.0004
UX Peg	55491.6642	9754	-0.0090	V	G. Samolyk	0.0002
BG Peg	55479.6635	5095	-1.9629	V	C. Hesseltine	0.0003
Z Per	55472.8072	3211	-0.2383	V	G. Samolyk	0.0001
RT Per	55504.7051	26052	0.0697	V	R. Poklar	0.0001
ST Per	54102.6182	4405	0.2826	I	G. Lubcke	0.0003

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>HJD</i> 2400000+	<i>Cycle</i>	<i>O-C</i> (day)	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error (day)</i>
ST Per	54102.6185	4405	0.2829	V	G. Lubcke	0.0004
XZ Per	55501.6927	10415	-0.0541	V	R. Poklar	0.0002
IU Per	55506.6581	11546	0.0103	V	R. Poklar	0.0003
IU Per	55585.5061	11638	0.0120	V	K. Menzies	0.0002
IU Per	55602.6466	11658	0.0120	V	G. Samolyk	0.0001
KW Per	55528.5748	14093	0.0120	V	K. Menzies	0.0001
PS Per	55594.4557	44244	0.0644		C. F. Rivero	0.0003
PS Per	55598.3207	44249.5	0.0674		C. F. Rivero	0.0006
β Per	55602.6367	3474	0.1081	V	G. Samolyk	0.0002
UZ Pup	55607.6758	13831.5	-0.0069	V	R. Poklar	0.0002
AV Pup	55612.6958	43920	0.1603	V	G. Samolyk	0.0002
AV Pup	55622.7003	43938	0.1507	V	R. Poklar	0.0002
CK Sge	54664.8100	3597	-0.0385	R	R. Buchheim	0.0007
CK Sge	54681.8534	3604	-0.0395	R	R. Buchheim	0.0007
RW Tau	55521.6360	3553	-0.2409	V	R. Poklar	0.0001
RZ Tau	55525.7002	42940	0.0616	V	K. Menzies	0.0002
RZ Tau	55525.7002	42940	0.0616	V	R. Poklar	0.0001
RZ Tau	55545.6529	42988	0.0619	V	N. Simmons	0.0001
WY Tau	55477.7672	26092	0.0570	V	K. Menzies	0.0001
WY Tau	55570.5974	26226	0.0576	V	N. Simmons	0.0002
AM Tau	55595.6262	5060	-0.0564	V	G. Samolyk	0.0001
AQ Tau	55490.8540	21248	0.5518	V	K. Menzies	0.0003
AQ Tau	55607.5783	21344	0.5493	V	G. Samolyk	0.0003
CT Tau	55540.7910	15201	-0.0554	V	K. Menzies	0.0002
EQ Tau	55485.7443	44741.5	-0.0237	V	G. Samolyk	0.0002
EQ Tau	55511.6870	44817.5	-0.0235	V	R. Poklar	0.0002
EQ Tau	55539.6771	44899.5	-0.0240	V	N. Simmons	0.0001
TY UMa	55611.8276	45352	0.2965	V	G. Samolyk	0.0001
TY UMa	55639.6603	45430.5	0.2979	V	R. Poklar	0.0004
UX UMa	55612.7210	92438	0.0008	V	G. Samolyk	0.0001
VV UMa	53813.6399	11636	-0.0503	R	G. Lubcke	0.0001
VV UMa	54165.5750	12148	-0.0537	I	G. Lubcke	0.0003
VV UMa	54165.5785	12148	-0.0502	V	G. Lubcke	0.0001
VV UMa	54554.6355	12714	-0.0503	V	G. Lubcke	0.0005
VV UMa	54554.6370	12714	-0.0488	I	G. Lubcke	0.0023
VV UMa	55285.6625	13777.5	-0.0520	I	G. Lubcke	0.0026
VV UMa	55285.6645	13777.5	-0.0500	V	G. Lubcke	0.0015
VV UMa	55295.6327	13792	-0.0488	I	G. Lubcke	0.0002

Table continued on following page

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>HJD</i> <i>2400000+</i>	<i>Cycle</i>	<i>O-C</i> <i>(day)</i>	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error (day)</i>
VV UMa	55295.6329	13792	-0.0486	V	G. Lubcke	0.0001
VV UMa	55305.5993	13806.5	-0.0492	V	G. Lubcke	0.0006
VV UMa	55305.5997	13806.5	-0.0488	I	G. Lubcke	0.0002
VV UMa	55594.6425	14227	-0.0493	V	R. Poklar	0.0004
VV UMa	55605.6392	14243	-0.0506	V	K. Menzies	0.0003
ZZ UMa	55598.6593	8545	-0.0014	V	R. Poklar	0.0004
AF UMa	55592.5874	5477	0.5587	V	G. Samolyk	0.0008
AW UMa	55631.4286	24996.5	-0.0826	R	L. Corp	0.0006
VY UMi	55639.5253	13413	0.0221	V	C. F. Rivero	0.0018
AH Vir	55645.4516	24123.5	0.2338	R	L. Corp	0.0003
AZ Vir	55593.6159	33223.5	-0.0229	R	L. Corp	0.0001
AZ Vir	55631.5554	33332	-0.0220	R	L. Corp	0.0006
HT Vir	55631.5847	7681	-0.0023	R	L. Corp	0.0001
NY Vir	55595.5366	53181.5	-0.0065	R	L. Corp	0.0002
NY Vir	55595.5869	53182	-0.0067	R	L. Corp	0.0001