

## Recent Minima of 155 Eclipsing Binary Stars

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**Abstract** The AAVSO's publication of times of minima for eclipsing binary stars has shifted from the recent publication series, *Observed Minima Timings of Eclipsing Binaries*, Number 1–12, back to the *JAAVSO*. Times of minima from observations made in the past eight months are presented. New light elements for AC CMi have been calculated from recent AAVSO observations:

$$\begin{aligned} \text{Min(JD)} = & 2451978.7504 + 0.867216691 \text{ E} \\ & \pm 0.0004 \pm 0.00000024 \end{aligned}$$

### 1. Background

From 1974 to 1978, the AAVSO Eclipsing Binary Committee published times of minima in the *JAAVSO*. A large increase in observing activity, starting in the mid-1970s, overwhelmed the manual reduction process in place at that time. During the late 1980s, a computer-aided reduction process was developed and the observations were digitized. By this time there was a large backlog of unpublished times of minima.

In *Observed Minima Timings of Eclipsing Binaries*, Number 1–12, published from 1993 to 2007, almost 15,000 times of minima were published by the committee. As a result of this work, all of the legacy data have been reduced and published. The publication of times of minima has now returned to the *JAAVSO*. During these years, the method used to observe eclipsing binary stars has changed from almost 100% visual to almost 100% CCD.

### 2. Recent Observations

The accompanying list contains times of minima calculated from recent CCD observations made by participants in the AAVSO's eclipsing binary program. This list will be web-archived and available through the AAVSO ftp site at: <ftp://ftp.aavso.org/public/datasets/jsamoj362.txt>. 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.

The linear elements in the 1985 *General Catalogue of Variable Stars* (GCVS; Khlopov *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), CW Cas (Samolyk 1992a), Z Dra (Danielkiewicz-Krośniak and Kurpińska-Winiarska 1996), DF Hya (Samolyk 1992b), EF Ori (Baldwin and Samolyk 2005), GU Ori (Samolyk 1985), IP Peg (Baldwin and Samolyk 2000). O-C values listed in this paper can be directly compared with values published in the *Observed Minima Timings* series.

In the case of AC CMi, the linear elements were calculated by linear regression using the times of minima listed in this publication. The following light elements are used:

$$\begin{aligned} \text{Min (JD)} = & 2451978.7504 + 0.867216691 E \\ & \pm 0.0004 \pm 0.00000024 \end{aligned} \quad (1)$$

The number of observations used for determination of each time of minimum is given under  $N$  in Table 1 when available.

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## References

- Baldwin, M. E., and Samolyk, G. 2000, *Observed Minima Timings of Eclipsing Binaries No. 6*, AAVSO, Cambridge, MA.
- Baldwin, M. E., and Samolyk, G. 2005, *Observed Minima Timings of Eclipsing Binaries No. 10*, AAVSO, Cambridge, MA.
- Baldwin, M. E., and Samolyk, G. 2007, *Observed Minima Timings of Eclipsing Binaries No. 12*, AAVSO, Cambridge, MA.
- Kholopov, P.N., et al. 1985, *General Catalogue of Variable Stars*, 4th ed., Moscow.
- Danielkiewicz-Krośniak, E., Kurpińska-Winiarska, M., eds. 1996, *Rocznik Astronomiczny* (SAC 68), **68**, 1.
- Kwee, K. K., and van Worden, H. 1956, *Bull. Astron. Inst. Netherlands*, **12**, 327.
- Samolyk, G. 1985, *J. Amer. Assoc. Var. Star Obs.*, **14**, 12.
- Samolyk, G. 1992a, *J. Amer. Assoc. Var. Star Obs.*, **21**, 34.
- Samolyk, G. 1992b, *J. Amer. Assoc. Var. Star Obs.*, **21**, 111.

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

Star	$HJD(min)$ 2400000+	Cycle	$O-C$	$N$	Type	Observer	Standard Error
RT And	53722.3598	20003	-0.0063	64	CCD	I. Megson	n/a
RT And	54394.6834	21072	-0.0083	79	CCD	G. Samolyk	0.0001
UU And	54399.8636	8578	0.0765	75	CCD	J. Bialozynski	0.0003
WZ And	54380.6141	19418	0.0448	71	CCD	G. Samolyk	0.0002
WZ And	54423.7439	19480	0.0439	80	CCD	J. Bialozynski	0.0002
WZ And	54428.6134	19487	0.0437	49	CCD	K. Menzies	0.0001
XZ And	54381.7406	22401	0.1646	63	CCD	J. Bialozynski	0.0001
XZ And	54468.6076	22465	0.1658	60	CCD	J. Bialozynski	0.0001
XZ And	54476.7520	22471	0.1666	24	CCD	E. Wiley	0.0006
AB And	54372.7552	55027.5	-0.0194	50	CCD	G. Samolyk	0.0003
AB And	54420.5476	55171.5	-0.0194	87	CCD	G. Samolyk	0.0001
AB And	54442.6171	55238	-0.0208	62	CCD	J. Bialozynski	0.0001
AB And	54466.5134	55310	-0.0207	33	CCD	K. Menzies	0.0002
AD And	54372.7593	15585.5	-0.0469	62	CCD	G. Samolyk	0.0004
AD And	54414.6727	15628	-0.0469	62	CCD	G. Samolyk	0.0006
BX And	54468.5623	29404	-0.0469	107	CCD	G. Samolyk	0.0002
DS And	54338.8179	18007	0.0013	62	CCD	G. Samolyk	0.0005
DS And	54424.7122	18092	0.0015	80	CCD	J. Bialozynski	0.0003
RY Aqr	54401.6943	6904	-0.0847	90	CCD	J. Bialozynski	0.0002
CX Aqr	54384.6757	32251	0.0098	57	CCD	J. Bialozynski	0.0002

Table continued on following pages

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

Star	$HJD(min)$ 2400000.0+	Cycle	$O-C$	N	Type	Observer	Standard Error
CZ Aqr	54452.6427	12844	-0.0387	60	CCD	J. Bialozynski	0.0001
XZ Aql	54338.6676	5813	0.1474	106	CCD	G. Samolyk	0.0001
V343 Aql	54363.7318	14052	-0.0466	80	CCD	J. Bialozynski	0.0005
RX Ari	54388.7240	15530	0.0625	78	CCD	J. Bialozynski	0.0007
RX Ari	54451.5281	15591	0.0594	85	CCD	G. Samolyk	0.0003
SS Ari	54414.6971	37898.5	-0.2463	73	CCD	G. Samolyk	0.0003
RY Aur	54475.6830	5939	0.0229	120	CCD	J. Bialozynski	0.0004
SX Aur	54437.6653	11797	0.0137	74	CCD	R. Poklar	0.0007
TT Aur	54480.6554	24940	-0.0119	89	CCD	J. Bialozynski	0.0002
WW Aur	54477.6433	8527.5	0.0026	90	CCD	J. Bialozynski	0.0008
WW Aur	54506.6809	8539	0.0025	95	CCD	J. Bialozynski	0.0010
AP Aur	54429.6680	21051.5	1.1769	57	CCD	G. Samolyk	0.0004
AP Aur	54452.7241	21092	1.1759	80	CCD	R. Poklar	0.0003
AP Aur	54505.6773	21185	1.1830	59	CCD	K. Menzies	0.0002
AP Aur	54517.6343	21206	1.1844	104	CCD	G. Samolyk	0.0004
AP Aur	54522.7582	21215	1.1845	80	CCD	J. Bialozynski	0.0004
AR Aur	54475.6904	3887.5	-0.1196	100	CCD	J. Bialozynski	0.0008
AR Aur	54504.6330	3894.5	-0.1199	86	CCD	J. Bialozynski	0.0009
CL Aur	54483.6929	17291	0.1243	83	CCD	J. Bialozynski	0.0002
EM Aur	54476.6524	12889.5	-0.1853	75	CCD	J. Bialozynski	0.0006

Table continued on following pages

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

Star	$HJD(min)$ 2400000+	Cycle	$O-C$	$N$	Type	Observer	Standard Error
EP Aur	54520.5706	47734	0.0127	90	CCD	G. Samolyk	0.0001
HP Aur	54380.7840	8170	0.0527	63	CCD	G. Samolyk	0.0002
HP Aur	54447.6580	8217	0.0544	83	CCD	R. Poklar	0.0001
HP Aur	54506.7046	8258.5	0.0543	60	CCD	J. Bialozynski	0.0002
TU Boo	54520.7686	66159	-0.1258	94	CCD	G. Samolyk	0.0001
Y Cam	54366.6551	3450	0.3234	151	CCD	G. Samolyk	0.0003
Y Cam	54452.6082	3476	0.3302	162	CCD	G. Samolyk	0.0001
SV Cam	54338.6359	19802	0.0496	66	CCD	G. Samolyk	0.0002
SV Cam	54440.6454	19974	0.0510	65	CCD	R. Poklar	0.0001
AL Cam	54420.7275	21086	-0.0325	110	CCD	G. Samolyk	0.0001
CD Cam	54402.6350	2146	-0.0028	147	CCD	G. Samolyk	0.0006
CD Cam	54403.7855	2147.5	0.0014	150	CCD	G. Samolyk	0.0005
R CMa	54461.7911	8955	0.0829	79	CCD	J. Bialozynski	0.0007
RT CMa	54505.6560	21550	-0.6776	97	CCD	J. Bialozynski	0.0001
TU CMa	54485.7053	24391	-0.0095	80	CCD	J. Bialozynski	0.0002
TU CMa	54520.6678	24422	-0.0089	123	CCD	G. Samolyk	0.0003
TZ CMa	54494.6653	14319	-0.2010	79	CCD	J. Bialozynski	0.0003
TZ CMa	54517.6023	14331	-0.2013	111	CCD	G. Samolyk	0.0002
UU CMa	54505.6372	4573	-0.1070	88	CCD	J. Bialozynski	0.0001
XZ CMi	54487.6820	20807	-0.0090	59	CCD	J. Bialozynski	0.0003

Table continued on following pages

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

Star	$HJD(min)$ 2400000.0+	Cycle	$O-C$	N	Type	Observer	Standard Error
XZ CMi	54513.7296	20852	-0.0078	57	CCD	K. Menzies	0.0002
AC CMi	51978.7504	0	0.0000	44	CCD	C. Hesseltine	0.0003
AC CMi	52311.7600	384	-0.0016	67	CCD	G. Samolyk	0.0002
AC CMi	53393.6142	1631.5	-0.0002	39	CCD	G. Samolyk	0.0008
AC CMi	53438.7097	1683.5	0.0000	50	CCD	G. Samolyk	0.0002
AC CMi	54156.7652	2511.5	0.0001	75	CCD	J. Bialozynski	0.0003
AC CMi	54499.7505	2907	0.0012	100	CCD	J. Bialozynski	0.0002
AC CMi	54513.6249	2923	0.0001	65	CCD	K. Menzies	0.0001
AK CMi	54485.8144	20117	-0.0176	86	CCD	G. Samolyk	0.0002
AK CMi	54497.6981	20138	-0.0178	80	CCD	J. Bialozynski	0.0002
AK CMi	54513.5450	20166	-0.0160	56	CCD	G. Samolyk	0.0003
AM CMi	54504.6457	28709	0.1818	94	CCD	J. Bialozynski	0.0008
TY Cap	54384.7168	6738	0.0600	80	CCD	J. Bialozynski	0.0004
RZ Cas	54392.6560	9364	0.0568	73	CCD	J. Bialozynski	0.0002
TV Cas	54406.7609	5409	-0.0221	80	CCD	J. Bialozynski	0.0006
AB Cas	54372.6209	8529	0.0916	95	CCD	G. Samolyk	0.0002
AB Cas	54391.7572	8543	0.0916	80	CCD	J. Bialozynski	0.0002
CW Cas	54366.7774	39937.5	-0.0426	54	CCD	G. Samolyk	0.0001
DZ Cas	54401.7355	33084	-0.1742	89	CCD	J. Bialozynski	0.0005
DZ Cas	54449.6150	33145	-0.1731	79	CCD	J. Bialozynski	0.0006

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

Star	$HJD(min)_{2400000+}$	Cycle	$O-C$	$N$	Type	Observer	Standard Error
IR Cas	54380.8845	17654	0.0104	47	CCD	G. Samolyk	0.0002
IS Cas	54391.7616	13910	0.0611	98	CCD	J. Bialozynski	0.0006
IT Cas	54390.6820	6577	0.0599	98	CCD	J. Bialozynski	0.0001
MM Cas	54380.7837	16383	0.0867	85	CCD	J. Bialozynski	0.0002
OR Cas	54392.8142	8174	-0.0214	70	CCD	J. Bialozynski	0.0001
OX Cas	54389.7723	5270.5	0.0561	100	CCD	J. Bialozynski	0.0002
PV Cas	54381.6699	8086	-0.0338	64	CCD	J. Bialozynski	0.0003
V364 Cas	54394.7033	13001	-0.0218	94	CCD	H. Gerner	0.0002
V364 Cas	54469.5413	13049.5	-0.0226	95	CCD	G. Samolyk	0.0001
V375 Cas	54382.7823	13398	0.1243	67	CCD	J. Bialozynski	0.0009
V380 Cas	54389.7703	21178	-0.0623	100	CCD	J. Bialozynski	0.0002
U Cep	54386.8068	3949	0.1591	128	CCD	G. Samolyk	0.0001
SU Cep	54407.7197	31154	0.0048	80	CCD	J. Bialozynski	0.0004
WZ Cep	54338.8138	62998	-0.0746	70	CCD	G. Samolyk	0.0002
WZ Cep	54366.7809	63065	-0.0765	67	CCD	G. Samolyk	0.0002
XX Cep	54380.7457	4082	-0.0237	80	CCD	J. Bialozynski	0.0004
ZZ Cep	54409.6537	12364	-0.0125	94	CCD	J. Bialozynski	0.0004
DK Cep	54429.6990	21137	0.0324	37	CCD	G. Samolyk	0.0004
EG Cep	54394.7181	21667	0.0144	66	CCD	G. Samolyk	0.0001
EG Cep	54429.5738	21731	0.0143	58	CCD	G. Samolyk	0.0001

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

Star	HJD(min) 2400000+	Cycle	O-C	N	Type	Observer	Standard Error
EK Cep	54362.7465	3469	0.0100	89	CCD	J. Bialozynski	0.0001
SS Cet	54394.8250	4016	0.0084	103	CCD	G. Samolyk	0.0002
SS Cet	54409.6953	4021	0.0088	95	CCD	J. Bialozynski	0.0002
TT Cet	54380.7744	44932	-0.0531	60	CCD	G. Samolyk	0.0003
TT Cet	54419.6473	45012	-0.0567	69	CCD	R. Poklar	0.0002
TT Cet	54449.7768	45074	-0.0565	57	CCD	J. Bialozynski	0.0002
TW Cet	54390.7538	37927.5	-0.0246	60	CCD	J. Bialozynski	0.0001
TW Cet	54450.6386	38116.5	-0.0248	77	CCD	R. Poklar	0.0002
TX Cet	54416.7613	15299	0.0120	79	CCD	J. Bialozynski	0.0006
TX Cet	54448.6166	15342	0.0112	85	CCD	R. Poklar	0.0002
RW Com	54520.7893	61085.5	-0.0200	89	CCD	G. Samolyk	0.0002
W Crv	54519.8141	38322	0.0145	88	CCD	G. Samolyk	0.0002
ZZ Cyg	54378.6335	14919	-0.0522	n/a	CCD	R. Crumrine	0.0001
ZZ Cyg	54429.5529	15000	-0.0507	71	CCD	G. Samolyk	0.0002
CG Cyg	54394.5826	23718	0.0583	77	CCD	H. Gerner	0.0001
DK Cyg	54372.6314	34785	0.0768	92	CCD	G. Samolyk	0.0004
DK Cyg	54378.7494	34798	0.0758	57	CCD	J. Bialozynski	0.0002
DK Cyg	54380.6333	34802	0.0770	76	CCD	H. Gerner	0.0001
DK Cyg	54429.5880	34906	0.0799	63	CCD	G. Samolyk	0.0002
V387 Cyg	54378.6909	41201	0.0176	57	CCD	J. Bialozynski	0.0002

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

Star	$HJD(min)$ 2400000+	Cycle	$O-C$	$N$	Type	Observer	Standard Error
V704 Cyg	54394.5501	28833	0.0327	67	CCD	G. Samolyk	0.0002
TT Del	54379.7186	3186	-0.0855	95	CCD	J. Bialozynski	0.0003
FZ Del	54394.6016	29456	-0.0377	81	CCD	G. Samolyk	0.0001
Z Dra	54372.7747	3336	-0.0318	61	CCD	G. Samolyk	0.0001
S Equ	54406.6739	3437	0.0654	95	CCD	J. Bialozynski	0.0001
S Equ	54437.5986	3446	0.0652	80	CCD	J. Bialozynski	0.0002
TZ Eri	54480.6219	4630	0.2766	69	CCD	J. Bialozynski	0.0002
YY Eri	54394.7384	39854.5	0.1258	67	CCD	G. Samolyk	0.0002
YY Eri	54418.6894	39929	0.1255	25	CCD	J. Bialozynski	0.0003
YY Eri	54422.7084	39941.5	0.1258	59	CCD	J. Bialozynski	0.0003
YY Eri	54456.6265	40047	0.1263	62	CCD	R. Poklar	0.0002
YY Eri	54490.5453	40152.5	0.1274	101	CCD	G. Samolyk	0.0002
YY Eri	54517.5497	40236.5	0.1263	79	CCD	G. Samolyk	0.0002
RW Gem	54453.7710	12616	0.0033	100	CCD	J. Bialozynski	0.0006
RW Gem	54476.6932	12624	0.0015	100	CCD	J. Bialozynski	0.0006
RW Gem	54519.6755	12639	0.0014	135	CCD	G. Samolyk	0.0001
SX Gem	54516.7040	25961	-0.0598	99	CCD	J. Bialozynski	0.0002
TX Gem	54453.7593	12359	-0.0257	120	CCD	J. Bialozynski	0.0002
TX Gem	54495.7590	12374	-0.0262	120	CCD	J. Bialozynski	0.0003
WW Gem	54380.9063	22941	0.0271	57	CCD	G. Samolyk	0.0005

Table continued on following pages

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

Star	HJD(min) 2400000+	Cycle	<i>O-C</i>	<i>N</i>	Type	Observer	Standard Error
WW Gem	54421.7597	22974	0.0328	79	CCD	J. Bialozynski	0.0003
WW Gem	54483.6501	23024	0.0326	78	CCD	J. Bialozynski	0.0005
AF Gem	54485.7465	21973	-0.0650	80	CCD	J. Bialozynski	0.0001
AL Gem	54497.7243	20249	0.0643	79	CCD	J. Bialozynski	0.0001
SZ Her	54356.6452	15270	-0.0207	88	CCD	R. Baker	0.0006
AV Hya	54513.6047	26105	-0.0902	43	CCD	S. Diesso	0.0003
DF Hya	54519.6196	35486	-0.0139	75	CCD	G. Samolyk	0.0010
SW Lac	54380.6729	28390.5	-0.1015	79	CCD	G. Samolyk	0.0004
VX Lac	54460.4960	8564	0.0617	35	CCD	K. Menzies	0.0001
CO Lac	54370.8020	17401.5	0.0054	95	CCD	J. Bialozynski	0.0002
CO Lac	54380.8111	17408	-0.0099	103	CCD	G. Samolyk	0.0003
DG Lac	54396.6511	4481	-0.2148	80	CCD	J. Bialozynski	0.0005
UU Leo	54496.7665	5417	0.1540	69	CCD	J. Bialozynski	0.0001
UV Leo	54506.8273	26773	0.0312	139	CCD	G. Samolyk	0.0001
RR Lep	54454.7186	26302	-0.0307	78	CCD	R. Poklar	0.0006
RR Lep	54465.7039	26314	-0.0305	73	CCD	J. Bialozynski	0.0003
RR Lep	54487.6739	26338	-0.0308	60	CCD	J. Bialozynski	0.0007
RR Lep	54520.6271	26374	-0.0330	91	CCD	G. Samolyk	0.0003
RY Lyn	54513.6675	8102	-0.0483	80	CCD	J. Bialozynski	0.0001
EW Lyr	54366.6716	14300	0.2357	76	CCD	G. Samolyk	0.0001

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

Star	$HJD(min)$ 2400000+	Cycle	$O-C$	$N$	Type	Observer	Standard Error
RU Mon	54484.6855	3554.5	-0.4995	100	CCD	J. Bialozynski	0.0003
RW Mon	54458.7160	10901	-0.0641	94	CCD	J. Bialozynski	0.0001
RW Mon	54498.7434	10922	-0.0647	100	CCD	J. Bialozynski	0.0001
AT Mon	54516.6771	13755	0.0070	100	CCD	J. Bialozynski	0.0005
BB Mon	54508.7262	37979	-0.0043	80	CCD	J. Bialozynski	0.0004
EP Mon	54525.6917	18846	0.0363	100	CCD	J. Bialozynski	0.0004
EF Ori	54460.7330	1303	0.0010	118	CCD	J. Bialozynski	0.0005
EF Ori	54507.6981	1332	0.0022	116	CCD	J. Bialozynski	0.0004
EF Ori	54520.6529	1340	0.0014	127	CCD	G. Samolyk	0.0002
EQ Ori	54458.7284	13184	-0.0301	78	CCD	J. Bialozynski	0.0001
EQ Ori	54507.6179	13212	-0.0302	70	CCD	J. Bialozynski	0.0001
ER Ori	54394.9061	30157	0.0565	46	CCD	G. Samolyk	0.0002
ER Ori	54497.5854	30399.5	0.0616	35	CCD	K. Menzies	0.0003
ER Ori	54513.6747	30437.5	0.0618	66	CCD	J. Bialozynski	0.0002
ET Ori	54508.6581	29260	-0.0006	87	CCD	J. Bialozynski	0.0001
FH Ori	54514.7753	13302	-0.3420	100	CCD	J. Bialozynski	0.0001
FT Ori	54460.7240	4162	0.0134	80	CCD	J. Bialozynski	0.0001
FT Ori	54523.7326	4182	0.0137	80	CCD	J. Bialozynski	0.0001
FZ Ori	54495.6468	26179	-0.0607	63	CCD	R. Poklar	0.0002
GU Ori	54496.5837	24277	-0.0419	104	CCD	G. Samolyk	0.0002

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

Star	HJD(min) 2400000+	Cycle	<i>O-C</i>	<i>N</i>	Type	Observer	Standard Error
GU Ori	54520.5873	24328	-0.0431	127	CCD	G. Samolyk	0.0002
U Peg	54388.6222	47700	-0.1207	n/a	CCD	R. Sabo	0.0007
U Peg	54429.6620	47809.5	-0.1194	48	CCD	G. Samolyk	0.0003
U Peg	54440.5305	47838.5	-0.1196	91	CCD	G. Samolyk	0.0001
TY Peg	54338.6474	4491	-0.2966	55	CCD	G. Samolyk	0.0002
UX Peg	54385.7193	9038	-0.0081	84	CCD	J. Bialozynski	0.0001
AQ Peg	54339.8352:	2364	0.4698	103	CCD	C. Hesseltine	0.0009
BB Peg	54366.6477	29328.5	0.0000	42	CCD	G. Samolyk	0.0003
BG Peg	54372.6314	4528	-1.8028	115	CCD	G. Samolyk	0.0003
BX Peg	54386.6281	36343	-0.0821	55	CCD	G. Samolyk	0.0004
BX Peg	54420.5567	36464	-0.0845	67	CCD	G. Samolyk	0.0002
DI Peg	54394.5693	12922	-0.0154	58	CCD	G. Samolyk	0.0001
DI Peg	54416.6361	12953	-0.0149	45	CCD	J. Bialozynski	0.0001
GP Peg	54429.6149	13521	-0.0427	64	CCD	H. Gerner	0.0002
IP Peg	54413.4146	28107	-0.0023	43	CCD	F. Salvaggio	0.0003
V357 Peg	54061.5419	2699	0.0007	n/a	CCD	V. Petriew	0.0005
V357 Peg	54064.7235	2704.5	0.0008	n/a	CCD	V. Petriew	0.0003
V357 Peg	54375.3503	3241.5	-0.0005	550	CCD	F. Salvaggio	0.0001
Z Per	54482.5843	2887	-0.2179	55	CCD	K. Menzies	0.0001
Z Per	54485.6404	2888	-0.2181	110	CCD	G. Samolyk	0.0002

Table continued on following pages

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

Star	HJD(min) 2400000+	Cycle	<i>O-C</i>	<i>N</i>	Type	Observer	Standard Error
RT Per	54370.7444	24717	0.0584	65	CCD	J. Bialozynski	0.0002
RT Per	54466.7279	24830	0.0596	25	CCD	E. Wiley	0.0003
RV Per	54420.7123	6270	-0.0010	98	CCD	G. Samolyk	0.0001
ST Per	54372.7514	4507	0.2877	68	CCD	G. Samolyk	0.0003
XZ Per	54476.7360	9525	-0.0564	49	CCD	E. Wiley	0.0003
XZ Per	54521.6495	9564	-0.0566	80	CCD	J. Bialozynski	0.0001
KW Per	54387.7810	12868	0.0102	79	CCD	J. Bialozynski	0.0001
KW Per	54429.6882	12913	0.0108	89	CCD	R. Poklar	0.0002
KW Per	54524.6764	13015	0.0106	80	CCD	J. Bialozynski	0.0001
Y Psc	54405.7122	2329	-0.0001	83	CCD	G. Samolyk	0.0003
UZ Pup	54495.6795	12432.5	-0.0063	80	CCD	J. Bialozynski	0.0002
UZ Pup	54513.5632	12455	-0.0068	84	CCD	G. Samolyk	0.0002
UZ Pup	54518.7305	12461.5	-0.0060	80	CCD	J. Bialozynski	0.0002
UZ Pup	54520.7153	12464	-0.0083	104	CCD	S. Diesso	0.0003
UZ Pup	54520.7164	12464	-0.0072	82	CCD	J. Bialozynski	0.0002
RW Tau	54380.8931	3141	-0.2235	105	CCD	G. Samolyk	0.0001
RW Tau	54405.8130	3150	-0.2231	144	CCD	G. Samolyk	0.0001
RW Tau	54419.6567	3155	-0.2236	80	CCD	J. Bialozynski	0.0001
RW Tau	54466.7268	3172	-0.2237	24	CCD	E. Wiley	0.0004
RZ Tau	54366.7920	40152	0.0544	34	CCD	G. Samolyk	0.0003

Table continued on following pages

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

Star	$HJD(min)$ $2400000_+$	Cycle	$O-C$	$N$	Type	Observer	Standard Error
RZ Tau	54488.5830	40445	0.0528	107	CCD	G. Samolyk	0.0001
RZ Tau	54513.5233	40505	0.0526	64	CCD	K. Menzies	0.0001
TY Tau	54520.6348	30935	0.2474	40	CCD	J. Bialozynski	0.0002
AC Tau	54457.7937	4317	0.0358	125	CCD	J. Bialozynski	0.0002
AC Tau	54496.6175	4336	0.0359	30	CCD	J. Bialozynski	0.0009
AM Tau	54397.8894	4474	-0.0525	n/a	CCD	R. Sabo	0.0001
AN Tau	50437.559	13784	-0.027	13	CCD	S. Cook	n/a
AN Tau	54447.4029	16267	0.6660	79	CCD	F. Salvaggio	0.0003
AQ Tau	54498.6820	20432	0.5575	99	CCD	J. Bialozynski	0.0003
CT Tau	54399.8518	13490	-0.0479	94	CCD	J. Bialozynski	0.0002
EQ Tau	54338.8117	41381.5	-0.0254	81	CCD	G. Samolyk	0.0002
EQ Tau	54421.7588	41624.5	-0.0260	60	CCD	J. Bialozynski	0.0001
EQ Tau	54462.5502	41744	-0.0257	91	CCD	G. Samolyk	0.0001
HU Tau	54437.7187	6401	0.0224	119	CCD	J. Bialozynski	0.0003
HU Tau	54509.6881	6436	0.0213	105	CCD	J. Bialozynski	0.0005
V Tri	54435.6628	51198	-0.0036	28	CCD	K. Menzies	0.0001
V Tri	54435.6641	51198	-0.0023	53	CCD	G. Samolyk	0.0001
X Tri	54380.6403	12226	-0.0701	95	CCD	G. Samolyk	0.0001
X Tri	54411.7288	12258	-0.0707	80	CCD	J. Bialozynski	0.0002
X Tri	54448.6473	12296	-0.0705	71	CCD	G. Samolyk	0.0001

Table continued on following page

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

Star	HJD(min) 2400000+	Cycle	<i>O-C</i>	<i>N</i>	Type	Observer	Standard Error
RS Tri	54387.7467	8616	-0.0273	55	CCD	J. Bialozynski	0.0001
RS Tri	54452.6495	8650	-0.0279	78	CCD	J. Bialozynski	0.0001
RV Tri	54448.7214	11166	-0.0265	75	CCD	J. Bialozynski	0.0002
RV Tri	54491.6789	11223	-0.0280	34	CCD	E. Wiley	0.0005
RV Tri	54513.5351	11252	-0.0281	82	CCD	G. Samolyk	0.0002
W UMa	54405.8949	25897	-0.0537	76	CCD	G. Samolyk	0.0007
W UMa	54524.6648	26253	-0.0587	n/a	CCD	J. Bialozynski	0.0002
TY UMa	54505.8002	42232.5	0.2523	41	CCD	K. Menzies	0.0003
TY UMa	54521.5787	42277	0.2538	96	CCD	G. Samolyk	0.0003
UX UMa	54505.8560	86810	0.0018	33	CCD	K. Menzies	0.0001
UX UMa	54519.8194	86881	0.0015	50	CCD	G. Samolyk	0.0001
XZ UMa	54493.5538	6811	-0.0937	96	CCD	G. Samolyk	0.0001
XZ UMa	54521.6669	6834	-0.0940	60	CCD	J. Bialozynski	0.0001
AF UMa	54514.7606	5272	0.5306	160	CCD	J. Bialozynski	0.0002
AW Vul	54380.6128	10038	-0.0115	88	CCD	G. Samolyk	0.0001
AY Vul	54385.6722	4850	-0.0718	78	CCD	J. Bialozynski	0.0002
BE Vul	54388.6973	9199	0.0635	100	CCD	J. Bialozynski	0.0002
BE Vul	54399.5580	9206	0.0599	97	CCD	G. Samolyk	0.0001
BT Vul	54366.6433	16618	0.0017	108	CCD	G. Samolyk	0.0002
BU Vul	54382.7400	36642	0.0155	59	CCD	J. Bialozynski	0.0001
CD Vul	54338.6624	11759	-0.0001	79	CCD	G. Samolyk	0.0001