Recent Minima of 266 Eclipsing Binary Stars

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Abstract This paper continues the publication of times of minima for eclipsing binary stars from CCD observations reported to the AAVSO Eclipsing Binaries Section. Times of minima from observations received from February 2018 through August 2018 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. This list will be web-archived and made available through the AAVSO ftp site at ftp://ftp.aavso.org/public/datasets/gsamj462eb.txt. This list, along with the 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 Woerden (1956). The standard error is included when available. Column F indicates the filter used. A "C" indicates a clear 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), DV Cep (Frank and Lichtenknecker 1987), Z Dra (Danielkiewicz-Krośniak and Kurpińska-Winiarska 1996), DF Hya (Samolyk 1992b), DK Hya (Samolyk 1990), and GU Ori (Samolyk 1985).

The light elements used for FS Aqr, IR Cnc, TY CMi, AP CMi, BH CMi, CZ CMi, V728 Her, V899 Her, V1033 Her, V1034 Her, WZ Leo, V351 Peg, DS Psc, DZ Psc, GR Psc, V1123 Tau, V1128 Tau, BD Vir, HT Vir, and MS Vir are from (Kreiner 2018).

The light elements used for DD Aqr, V1542 Aql, XY Boo, GH Boo, GM Boo, IK Boo, CW CMi, CX CMi, BD CrB, V1065 Her, V1092 Her, V1097 Her, V470 Hya, V474 Hya, XX Leo, CE Leo, GU Leo, GV Leo, HI Leo, V2610 Oph, V1853 Ori, V2783 Ori, KV Peg, VZ Psc, ET Psc, V1370 Tau, QT UMa, IR Vir, and NN Vir are from (Paschke 2014).

The light elements used for V359 Aur, V337 Gem, and HO Psc are from (Nelson 2014).

The light elements used for V380 Gem, V388 Gem, EU Hya, V409 Hya, and V391 Vir are from the AAVSO VSX site (Watson *et al.* 2014). O–C values listed in this paper can be directly compared with values published in the AAVSO EB monographs.

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

Star	JD (min) Hel. 2400000 +	Cycle	O–C (day)	F	Observer	Error (day)
TW And	58343.7882	4687	–0.0639	V	G. Samolyk	0.0001
WZ And	58327.8114	25092	0.0809	V	G. Samolyk	0.0002
AB And	58124.6052	66332	–0.0442	V	S. Cook	0.0009
AB And	58303.8253	66872	–0.0458	V	G. Samolyk	0.0001
AB And	58333.8615	66962.5	–0.0459	V	R. Sabo	0.0001
AD And	58337.7607	19606	–0.0458	V	G. Samolyk	0.0003
BD And	58131.6036	50052	0.0177	V	S. Cook	0.0007
DS And	58327.8453	21954.5	0.0049	V	G. Samolyk	0.0002
QR And	58340.7813	34130	0.1540	V	K. Menzies	0.0003
RY Aqr	58360.3891	8917	–0.1436	V	T. Arranz	0.0001
CX Aqr	58014.7140	38780	0.0142	C	G. Frey	0.0001
CZ Aqr	58361.7546	17375	–0.0651	V	G. Samolyk	0.0001
DD Aqr	58015.7211	14132	0.0007	C	G. Frey	0.0001
EX Aqr	58054.6926	6245	0.0182	C	G. Frey	0.0002
FS Aqr	58016.6720	21051	–0.0012	C	G. Frey	0.0001
KO Aql	58361.6238	5752	0.1070	V	G. Samolyk	0.0001
OO Aql	58306.8405	38859.5	0.0714	V	G. Samolyk	0.0001
OO Aql	58349.4106	38943.5	0.0712	V	T. Arranz	0.0001
OO Aql	58350.4244	38945.5	0.0715	V	T. Arranz	0.0001
V342 Aql	58327.7582	5606	–0.1073	V	G. Samolyk	0.0002
V346 Aql	58343.4355	14846	–0.0136	V	T. Arranz	0.0001
V417 Aql	58018.7106	40532.5	0.0610	C	G. Frey	0.0001
V609 Aql	58019.6905	35972	–0.0707	C	G. Frey	0.0002
V724 Aql	58039.6972	5848	–0.0168	C	G. Frey	0.0002
V1542 Aql	58020.7212	14151	0.0140	C	G. Frey	0.0002
RX Ari	58103.6117	19138	0.0597	C	G. Frey	0.0004
SS Ari	58154.5701	47110.5	–0.3864	V	G. Samolyk	0.0002
SX Aur	58158.6693	14872	0.0211	SG	G. Conrad	0.0002
TT Aur	58143.6822	27688.5	–0.0072	SG	G. Conrad	0.0002
AP Aur	58191.6212	27658.5	1.6824	V	G. Samolyk	0.0001
EP Aur	58176.5530	53920	0.0196	V	K. Menzies	0.0001
EP Aur	58199.6011	53959	0.0184	V	G. Samolyk	0.0001
HP Aur	58162.6346	10828	0.0658	V	K. Menzies	0.0001
V459 Aur	58151.7053	1044	0.0068	V	S. Cook	0.0008
TU Boo	58231.7121	77602.5	–0.1583	V	G. Samolyk	0.0001
TY Boo	58192.8325	74767.5	0.0668	V	G. Samolyk	0.0001
TY Boo	58204.8834	74805.5	0.0661	V	K. Menzies	0.0001
TY Boo	58238.6604	74912	0.0669	V	G. Samolyk	0.0001
TY Boo	58254.6756	74962.5	0.0661	V	G. Samolyk	0.0001
TY Boo	58255.4689	74965	0.0666	V	T. Arranz	0.0001
TY Boo	58255.6270	74965.5	0.0661	V	T. Arranz	0.0001
TY Boo	58297.6489	75098	0.0659	V	G. Samolyk	0.0001
TY Boo	58305.7315	75123.5	0.0613	V	S. Cook	0.0008
TZ Boo	58195.8711	62467.5	0.0621	V	G. Samolyk	0.0001
TZ Boo	58237.6225	62608	0.0622	V	G. Samolyk	0.0001
TZ Boo	58237.7716	62608.5	0.0627	V	G. Samolyk	0.0001
TZ Boo	58254.4122	62664.5	0.0623	V	T. Arranz	0.0001
TZ Boo	58254.5600	62665	0.0615	V	T. Arranz	0.0001
TZ Boo	58301.6603	62823.5	0.0616	V	G. Samolyk	0.0002
UW Boo	58204.7923	15726	–0.0027	V	K. Menzies	0.0001
VW Boo	58187.9018	78915.5	–0.2764	V	G. Samolyk	0.0002
VW Boo	58287.6841	79207	–0.2819	V	S. Cook	0.0005
VW Boo	58306.6849	79262.5	–0.2802	V	G. Samolyk	0.0001
XY Boo	57876.7248	48366	0.0144	C	G. Frey	0.0002
AC Boo	58290.7122	92256.5	0.3755	V	S. Cook	0.0008
AD Boo	58307.6396	16312	0.0360	V	G. Samolyk	0.0003
ET Boo	58274.7352	5104	–0.0111	V	S. Cook	0.0004
GH Boo	57878.7036	10036	–0.0021	C	G. Frey	0.0002
GM Boo	57875.7457	16267	0.0229	C	G. Frey	0.0001
IK Boo	57862.6917	14780	–0.0183	C	G. Frey	0.0002
SV Cam	58238.6724	26378	0.0581	V	G. Samolyk	0.0002
AL Cam	58086.9379	23846	–0.0222	V	G. Samolyk	0.0001
AL Cam	58243.6795	23964	–0.0239	V	G. Samolyk	0.0001
CD Cam	58195.6558	7109.5	–0.0108	V	G. Samolyk	0.0002
WY Cnc	58213.4692	38416	–0.0451	V	T. Arranz	0.0001
IR Cnc	58162.7375	7889	–0.0121	V	K. Menzies	0.0004
BI CVn	58304.7281	36286.5	–0.3434	V	S. Cook	0.0003
R CMa	58170.6803	12220	0.1264	R	G. Samolyk	0.0002
RT CMa	58161.7611	24376	–0.7722	V	G. Samolyk	0.0001
TU CMa	58165.7289	27654	–0.0107	V	G. Samolyk	0.0001
TZ CMa	58162.7573	16238	–0.1738	V	G. Samolyk	0.0001
TZ CMa	58164.6165	16239	–0.2261	V	G. Samolyk	0.0001
TY CMi	57815.7079	4091	–0.0096	C	G. Frey	0.0001
XZ CMi	58152.7161	27139	0.0034	V	K. Menzies	0.0001
XZ CMi	58181.6573	27189	0.0041	V	G. Samolyk	0.0001
YY CMi	58212.6364	27595	0.0158	V	S. Cook	0.0008
AC CMi	57785.6371	6696	0.0038	C	G. Frey	0.0001
AC CMi	58203.6374	7178	0.0056	V	G. Samolyk	0.0001
AK CMi	58226.3925	26727	–0.0220	V	T. Arranz	0.0001
AP CMi	57789.6888	2445	–0.0325	C	G. Frey	0.0004
BH CMi	57784.7066	9449	0.0022	C	G. Frey	0.0002
CW CMi	57799.6922	17794.5	–0.0401	C	G. Frey	0.0002
CX CMi	57813.6770	5225	0.0233	C	G. Frey	0.0002
CZ CMi	57771.6755	12363	–0.0120	C	G. Frey	0.0002
TY Cap	58323.4376	9505	0.0953	V	T. Arranz	0.0002
RZ Cas	58341.7753	12668	0.0800	V	G. Samolyk	0.0001
TV Cas	58343.7098	7581	–0.0308	V	G. Samolyk	0.0002
CW Cas	58341.6617	52403.5	–0.1182	V	G. Samolyk	0.0002
IR Cas	58326.8214	23451	0.0141	V	G. Samolyk	0.0001
IS Cas	58306.8265	16036	0.0707	V	G. Samolyk	0.0001
OR Cas	58306.8290	11316	–0.0325	V	G. Samolyk	0.0001
OX Cas	58148.6421	6780.5	0.0184	V	S. Cook	0.0009
PV Cas	58330.7305	10342	–0.0332	V	G. Samolyk	0.0002
V375 Cas	58316.8609	16068	0.2668	V	G. Samolyk	0.0002
U Cep	58228.6497	5490	0.2158	V	G. Samolyk	0.0002
SU Cep	58302.6749	35475	0.0059	V	G. Samolyk	0.0001
SU Cep	58335.5766	35511.5	0.0064	V	T. Arranz	0.0001
SU Cep	58341.4344	35518	0.0051	V	T. Arranz	0.0001
VW Cep	58154.4408	50293	–0.2485	TG	A. Nemes	0.0005
VW Cep	58168.3527	50343	–0.2523	TG	A. Nemes	0.0005
WW Cep	58302.8357	21696	0.3551	V	G. Samolyk	0.0001
WZ Cep	58326.7799	72551.5	–0.1894	V	G. Samolyk	0.0002
WZ Cep	58361.6332	72635	–0.1929	V	G. Samolyk	0.0002
XX Cep	58302.8260	5760	0.0226	V	G. Samolyk	0.0001
DK Cep	58356.5613	25120	0.0295	V	T. Arranz	0.0001
DL Cep	58307.6896	14941	0.0650	V	G. Samolyk	0.0001
DL Cep	58356.6037	14971	0.0646	V	T. Arranz	0.0001
DV Cep	58237.8481	9875	–0.0060	V	G. Samolyk	0.0002
DV Cep	58308.7296	9936	–0.0050	V	G. Samolyk	0.0001
EG Cep	58216.8696	28685	0.0099	V	G. Samolyk	0.0002
EG Cep	58299.6524	28837	0.0102	V	G. Samolyk	0.0001
EK Cep	58046.6729	4301	0.0129	V	G. Samolyk	0.0001
EK Cep	58077.6664	4308	0.0119	V	S. Cook	0.0005
TT Cet	58067.6978	52519	–0.0816	C	G. Frey	0.0001
TT Cet	58136.7062	52661	–0.0790	V	S. Cook	0.0004
VV Cet	58056.7051	51165	0.1377	C	G. Frey	0.0001
RW Com	58191.6113	76551.5	0.0103	V	G. Samolyk	0.0003
RW Com	58191.7298	76552	0.0102	V	G. Samolyk	0.0001
RW Com	58214.6326	76648.5	0.0091	V	K. Menzies	0.0001
RZ Com	58243.6451	69145.5	0.0559	V	G. Samolyk	0.0001
RZ Com	58254.6466	69178	0.0560	V	N. Simmons	0.0001
SS Com	58246.6139	80532.5	0.9402	V	G. Samolyk	0.0002
CC Com	58134.8703	84288.5	–0.0282	V	B. Harris	0.0001
CC Com	58152.8560	84370	–0.0284	V	K. Menzies	0.0001
CC Com	58199.5312	84581.5	–0.0284	V	T. Arranz	0.0001
CC Com	58199.6416	84582	–0.0283	V	T. Arranz	0.0001
CC Com	58228.4407	84712.5	–0.0288	V	T. Arranz	0.0001
CC Com	58231.4204	84726	–0.0284	V	T. Arranz	0.0001
CC Com	58253.7086	84827	–0.0295	V	S. Cook	0.0002
U CrB	58191.7878	12005	0.1390	C	G. Samolyk	0.0001
U CrB	58288.4517	12033	0.1413	V	T. Arranz	0.0001
RW CrB	58216.8436	24043	0.0041	V	G. Samolyk	0.0002

Table continued on following pages

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

Star	JD (min) Hel. 2400000 +	Cycle	O–C (day)	F	Observer	Error (day)
RW CrB	58257.5229	24099	0.0044	V	T. Arranz	0.0001
TW CrB	58238.6979	34541	0.0582	V	G. Samolyk	0.0001
BD CrB	58213.6218	19599	0.0176	V	T. Arranz	0.0004
BD CrB	58251.4533	19705	0.0207	V	T. Arranz	0.0004
W Crv	58192.8094	47786.5	0.0188	V	G. Samolyk	0.0001
RV Crv	58246.7056	23041	–0.1140	V	S. Cook	0.0004
RV Crv	58246.7193	23041	–0.1003	V	G. Samolyk	0.0003
RV Crv	58255.6865	23053	–0.1002	V	G. Samolyk	0.0001
SX Crv	58246.7414	54416	–0.9203	V	G. Samolyk	0.0002
SX Crv	58255.6067	54444	–0.9209	V	G. Samolyk	0.0003
V Crt	58166.8686	23887	0.0000	V	G. Samolyk	0.0002
V Crt	58242.6893	23995	0.0008	V	S. Cook	0.0003
V Crt	58254.6227	24012	–0.0004	V	G. Samolyk	0.0002
SW Cyg	58243.8402	3581	–0.3703	V	G. Samolyk	0.0001
SW Cyg	58344.4460	3603	–0.3735	V	T. Arranz	0.0002
WW Cyg	58320.5269	5408	0.1461	V	T. Arranz	0.0001
ZZ Cyg	58301.8061	21160	–0.0748	V	G. Samolyk	0.0001
ZZ Cyg	58324.4374	21196	–0.0737	V	T. Arranz	0.0001
ZZ Cyg	58363.4111	21258	–0.0742	V	T. Arranz	0.0001
AE Cyg	58314.7609	14165	–0.0045	V	G. Samolyk	0.0001
BR Cyg	58297.7932	12576	0.0010	V	G. Samolyk	0.0001
BR Cyg	58344.4321	12611	0.0002	V	T. Arranz	0.0001
CG Cyg	58322.8236	29942	0.0777	V	G. Samolyk	0.0001
CG Cyg	58340.4957	29970	0.0778	V	T. Arranz	0.0001
DK Cyg	58333.5404	43200	0.1248	V	T. Arranz	0.0001
DK Cyg	58347.4268	43229.5	0.1259	V	T. Arranz	0.0001
DK Cyg	58347.6629	43230	0.1266	V	T. Arranz	0.0002
KR Cyg	58265.8611	34502	0.0241	V	G. Samolyk	0.0001
KV Cyg	58065.6276	10073	0.0561	V	G. Samolyk	0.0002
KV Cyg	58326.8159	10165	0.0570	V	G. Samolyk	0.0003
KV Cyg	58332.4948	10167	0.0579	V	T. Arranz	0.0001
KV Cyg	58349.5299	10173	0.0590	V	T. Arranz	0.0001
V346 Cyg	58343.7096	8259	0.1936	V	G. Samolyk	0.0002
V387 Cyg	58301.7063	47325	0.0207	V	G. Samolyk	0.0001
V387 Cyg	58333.7367	47375	0.0213	V	R. Sabo	0.0001
V388 Cyg	58299.8300	19029	–0.1262	V	G. Samolyk	0.0001
V388 Cyg	58319.5872	19052	–0.1268	V	T. Arranz	0.0001
V388 Cyg	58343.6417	19080	–0.1254	V	G. Samolyk	0.0001
V401 Cyg	58254.8101	24745	0.0952	V	G. Samolyk	0.0001
V401 Cyg	58306.6717	24834	0.0946	V	G. Samolyk	0.0002
V456 Cyg	58299.7861	15023	0.0527	V	G. Samolyk	0.0002
V456 Cyg	58326.5213	15053	0.0521	V	T. Arranz	0.0001
V466 Cyg	58314.5659	21228	0.0077	V	T. Arranz	0.0001
V466 Cyg	58316.6531	21229.5	0.0075	V	G. Samolyk	0.0001
V466 Cyg	58330.5687	21239.5	0.0075	V	T. Arranz	0.0001
V466 Cyg	58335.4389	21243	0.0072	V	T. Arranz	0.0001
V477 Cyg	58275.8628	6002	–0.0387	V	G. Samolyk	0.0001
V477 Cyg	58323.5074	6022.5	–0.5074	V	T. Arranz	0.0004
V548 Cyg	58302.6555	7670	0.0226	V	G. Samolyk	0.0001
V704 Cyg	58330.7008	35730	0.0379	V	G. Samolyk	0.0002
V704 Cyg	58345.5389	35756	0.0377	V	T. Arranz	0.0003
V836 Cyg	58342.5544	20644	0.0226	V	T. Arranz	0.0002
V836 Cyg	58361.5043	20673	0.0236	V	T. Arranz	0.0001
V1034 Cyg	58254.7974	15678	0.0142	V	G. Samolyk	0.0002
TT Del	58341.8359	4566	–0.1125	V	G. Samolyk	0.0004
TY Del	58360.7875	12930	0.0718	V	G. Samolyk	0.0001
YY Del	58337.5816	19390	0.0118	V	T. Arranz	0.0002
FZ Del	58340.4392	34494	–0.0252	V	T. Arranz	0.0001
Z Dra	58181.7692	6142	–0.0019	V	G. Samolyk	0.0001
Z Dra	58192.6283	6150	–0.0022	B	G. Lubcke	0.0001
Z Dra	58192.6285	6150	–0.0021	V	G. Lubcke	0.0001
Z Dra	58192.6286	6150	–0.0020	Ic	G. Lubcke	0.0001
RZ Dra	58228.7627	25507	0.0692	V	G. Samolyk	0.0001
RZ Dra	58265.6716	25574	0.0695	V	G. Samolyk	0.0001
RZ Dra	58303.6816	25643	0.0692	V	G. Samolyk	0.0001
RZ Dra	58318.5560	25670	0.0701	V	T. Arranz	0.0001
RZ Dra	58329.5722	25690	0.0688	V	T. Arranz	0.0001
TW Dra	58226.6241	5020	–0.0428	V	T. Arranz	0.0001
UZ Dra	58238.8027	5111	0.0031	V	G. Samolyk	0.0002
AI Dra	58228.8958	12460	0.0389	V	G. Samolyk	0.0002
AI Dra	58263.6603	12489	0.0378	V	G. Samolyk	0.0002
BH Dra	58195.8149	10002	–0.0035	V	G. Samolyk	0.0001
SX Gem	58204.5390	28659	–0.0589	V	K. Menzies	0.0001
AF Gem	58171.4849	24937	–0.0709	V	T. Arranz	0.0001
AF Gem	58192.6252	24954	–0.0701	V	G. Samolyk	0.0001
EG Gem	57772.6495	23895	0.3127	C	G. Frey	0.0001
V337 Gem	57825.7226	2253.5	0.1454	C	G. Frey	0.0005
V380 Gem	58176.6355	19497	0.0217	V	K. Menzies	0.0001
V388 Gem	57788.7514	10298	0.0120	C	G. Frey	0.0001
SZ Her	58200.8781	19969	–0.0316	V	G. Samolyk	0.0001
SZ Her	58287.5960	20075	–0.0321	V	T. Arranz	0.0001
SZ Her	58327.6824	20124	–0.0326	V	G. Samolyk	0.0001
TT Her	58243.8469	20007	0.0452	V	G. Samolyk	0.0002
TT Her	58310.4281	20080	0.0449	V	L. Corp	0.0002
TU Her	58311.5729	6286	–0.2542	V	T. Arranz	0.0001
TU Her	58327.4408	6293	–0.2553	V	T. Arranz	0.0001
UX Her	58275.7323	12011	0.1416	V	G. Samolyk	0.0001
UX Her	58317.5526	12038	0.1430	V	T. Arranz	0.0001
UX Her	58331.4925	12047	0.1433	V	T. Arranz	0.0001
AK Her	57914.7301	37313	0.0193	C	G. Frey	0.0002
AK Her	58308.4310	38247	0.0187	V	L. Corp	0.0001
AK Her	58312.4376	38256.5	0.0208	V	L. Corp	0.0001
AK Her	58322.7610	38281	0.0170	V	S. Cook	0.0003
CC Her	57901.7202	10515	0.3072	C	G. Frey	0.0001
CC Her	58246.7969	10714	0.3168	V	G. Samolyk	0.0001
CC Her	58300.5519	10745	0.3176	V	T. Arranz	0.0001
CT Her	58210.8871	8782	0.0116	V	G. Samolyk	0.0002
HS Her	58323.7399	8039	–0.0341	V	S. Cook	0.0005
LT Her	58361.5859	16241	–0.1613	V	G. Samolyk	0.0002
V728 Her	58228.8001	12155	0.0172	V	G. Samolyk	0.0001
V728 Her	58271.6887	12246	0.0180	V	N. Simmons	0.0001
V899 Her	57910.7414	12846	–0.0072	C	G. Frey	0.0003
V1033 Her	57924.7447	18200	–0.0029	C	G. Frey	0.0002
V1034 Her	57911.6953	6637	–0.0037	C	G. Frey	0.0002
V1065 Her	57923.7363	16658	–0.0105	C	G. Frey	0.0002
V1092 Her	57915.7188	14294	–0.0210	C	G. Frey	0.0004
V1097 Her	57918.7120	15118	0.0050	C	G. Frey	0.0001
WY Hya	58217.7129	24646	0.0412	V	S. Cook	0.0009
AV Hya	58154.7670	31433	–0.1161	V	G. Samolyk	0.0001
AV Hya	58232.6740	31547	–0.1174	V	S. Cook	0.0008
AV Hya	58235.4077	31551	–0.1173	V	T. Arranz	0.0001
DF Hya	58162.5793	46505	0.0070	V	G. Samolyk	0.0001
DF Hya	58195.6403	46605	0.0074	V	G. Samolyk	0.0002
DF Hya	58199.4419	46616.5	0.0071	V	T. Arranz	0.0001
DF Hya	58200.4336	46619.5	0.0070	V	T. Arranz	0.0001
DF Hya	58231.6753	46714	0.0065	V	S. Cook	0.0004
DF Hya	58237.6276	46732	0.0079	V	G. Samolyk	0.0001
DI Hya	58234.7094	43989	–0.0406	V	S. Cook	0.0008
DK Hya	58199.6693	29422	0.0005	V	G. Samolyk	0.0001
DK Hya	58205.4095	29433	–0.0005	V	T. Arranz	0.0001
DK Hya	58236.7238	29493	–0.0014	V	S. Cook	0.0006
EU Hya	57826.6412	30455	–0.0337	C	G. Frey	0.0002
V409 Hya	57809.7205	9857	0.0631	C	G. Frey	0.0001
V470 Hya	57807.7494	12914	0.0100	C	G. Frey	0.0002
V474 Hya	57800.7375	10630	–0.0146	C	G. Frey	0.0001
SW Lac	58337.7551	40728.5	–0.0738	V	G. Samolyk	0.0003
VX Lac	58301.8377	12139	0.0866	V	G. Samolyk	0.0001
AR Lac	58341.7165	8445	–0.0526	V	G. Samolyk	0.0002
CM Lac	58359.5198	19526	–0.0044	V	T. Arranz	0.0001
DG Lac	58361.7733	6278	–0.2342	V	G. Samolyk	0.0002
Y Leo	58203.5484	7572	–0.0669	V	K. Menzies	0.0001
UU Leo	58249.3687	7651	0.2151	V	T. Arranz	0.0001

Table continued on following pages

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

Star	JD (min) Hel. 2400000 +	Cycle	O–C (day)	F	Observer	Error (day)
UV Leo	57830.7082	32312	0.0425	C	G. Frey	0.0004
UV Leo	58262.7725	33032	0.0457	V	N, Krumm	0.0002
VZ Leo	57839.7120	24475	–0.0533	C	G. Frey	0.0007
VZ Leo	58238.6220	24841	–0.0489	V	G. Samolyk	0.0003
WZ Leo	57827.7007	3783	–0.0015	C	G. Frey	0.0001
WZ Leo	58210.7266	4055	–0.0007	V	G. Samolyk	0.0002
XX Leo	57837.7249	9419	–0.0150	C	G. Frey	0.0003
XY Leo	58212.7337	46245	0.1820	V	S. Cook	0.0008
XY Leo	58216.7046	46259	0.1755	V	G. Samolyk	0.0003
XZ Leo	58216.7184	27046	0.0769	V	G. Samolyk	0.0003
AM Leo	58256.7106	43093	0.0142	V	S. Cook	0.0006
CE Leo	57832.7013	33461	–0.0095	C	G. Frey	0.0001
GU Leo	57881.7277	15523	0.0042	C	G. Frey	0.0003
GV Leo	57808.7121	18949	–0.0396	C	G. Frey	0.0001
HI Leo	57865.7105	16448	0.0146	C	G. Frey	0.0001
T LMi	58216.6484	4245	–0.1314	V	G. Samolyk	0.0001
Z Lep	58158.7243	30929	–0.1979	V	G. Samolyk	0.0001
Z Lep	58170.6491	30941	–0.1977	V	G. Samolyk	0.0001
SS Lib	58299.6580	11922	0.1823	V	G. Samolyk	0.0001
RY Lyn	58234.6202	10695	–0.0195	V	G. Samolyk	0.0002
UZ Lyr	58322.6716	7737	–0.0468	V	G. Samolyk	0.0001
UZ Lyr	58343.4752	7748	–0.0472	V	T. Arranz	0.0001
EW Lyr	58238.8389	16287	0.2904	V	G. Samolyk	0.0001
EW Lyr	58289.5074	16313	0.2921	V	T. Arranz	0.0001
EW Lyr	58316.7901	16327	0.2927	V	G. Samolyk	0.0001
FL Lyr	58275.8174	9207	–0.0027	V	G. Samolyk	0.0001
FL Lyr	58332.4498	9233	–0.0023	V	T. Arranz	0.0001
RU Mon	58151.6832	4577.5	–0.7000	V	G. Samolyk	0.0001
RU Mon	58157.6271	4579	–0.1333	V	G. Samolyk	0.0001
RW Mon	58200.3552	12864	–0.0877	V	T. Arranz	0.0001
AT Mon	58154.7150	15548	0.0120	V	G. Samolyk	0.0001
BO Mon	58160.6498	6585	–0.0163	V	G. Samolyk	0.0001
BO Mon	58227.4067	6615	–0.0160	V	T. Arranz	0.0001
U Oph	58215.9048	8227	–0.0085	V	N. Simmons	0.0002
SX Oph	58305.6934	12071	–0.0038	V	G. Samolyk	0.0002
V508 Oph	58253.5756	38200	–0.0267	V	T. Arranz	0.0001
V508 Oph	58290.4694	38307	–0.0257	V	L. Corp	0.0002
V508 Oph	58306.6738	38354	–0.0265	V	G. Samolyk	0.0001
V839 Oph	58288.4977	43618.5	0.3224	V	T. Arranz	0.0002
V839 Oph	58322.6506	43702	0.3242	V	G. Samolyk	0.0001
V839 Oph	58325.5135	43709	0.3242	V	T. Arranz	0.0001
V1010 Oph	58255.8441	29207	–0.1979	V	G. Samolyk	0.0001
V1010 Oph	58316.6942	29299	–0.1990	V	G. Samolyk	0.0001
V2610 Oph	58292.4598	13886	–0.0358	V	L. Corp	0.0003
EQ Ori	58174.3239	15312	–0.0439	V	T. Arranz	0.0001
FL Ori	58161.6287	8262	0.0423	V	G. Samolyk	0.0001
FZ Ori	58173.3537	35373.5	–0.0306	V	T. Arranz	0.0001
GU Ori	58151.6338	32042.5	–0.0651	V	G. Samolyk	0.0002
GU Ori	58174.4621	32091	–0.0649	V	T. Arranz	0.0001
GU Ori	58175.4032	32093	–0.0651	V	T. Arranz	0.0001
V1853 Ori	57781.6782	9700	0.0004	C	G. Frey	0.0002
V2783 Ori	57782.7478	1147	0.0098	C	G. Frey	0.0001
U Peg	58307.8509	58157.5	–0.1689	V	G. Samolyk	0.0001
AQ Peg	58351.5126	3087	0.5797	V	T. Arranz	0.0001
BB Peg	58361.7591	40380	–0.0291	V	G. Samolyk	0.0001
BX Peg	58319.7607	50369	–0.1317	V	K. Menzies	0.0001
BX Peg	58341.6337	50447	–0.1315	V	G. Samolyk	0.0001
DI Peg	58017.7402	18012	0.0080	C	G. Frey	0.0001
DI Peg	58136.6148	18179	0.0092	V	S. Cook	0.0005
DK Peg	58041.7259	7667	0.1596	C	G. Frey	0.0002
EE Peg	58042.6613	4748	0.0085	C	G. Frey	0.0002
KV Peg	58025.7141	22419	–0.0227	C	G. Frey	0.0003
V351 Peg	58021.7245	16049	0.0374	C	G. Frey	0.0002
RT Per	58162.5201	29181	0.1111	V	K. Menzies	0.0001
IU Per	58131.7243	14609	0.0086	V	S. Cook	0.0007
KW Per	58155.6616	16914	0.0176	V	S. Cook	0.0003
VZ Psc	58035.6670	54365.5	–0.0011	C	G. Frey	0.0002
DS Psc	58040.7109	16177	–0.0032	C	G. Frey	0.0001
DZ Psc	58046.6741	15149	0.0160	C	G. Frey	0.0001
ET Psc	58043.7108	12329	–0.0043	C	G. Frey	0.0001
GR Psc	58050.6777	13317	–0.0011	C	G. Frey	0.0001
HO Psc	58049.6397	2245	0.0005	C	G. Frey	0.0002
UZ Pup	58197.6931	17090	–0.0122	V	S. Cook	0.0002
AV Pup	58203.6405	48577	0.2348	V	G. Samolyk	0.0001
U Sge	58316.5124	12183	0.0157	V	T. Arranz	0.0001
V505 Sgr	58324.7322	11720	–0.1132	V	G. Samolyk	0.0001
V1968 Sgr	58303.7969	36366	–0.0180	V	G. Samolyk	0.0003
RS Sct	58327.7116	39131	0.0428	V	G. Samolyk	0.0002
AO Ser	58195.9169	27364	–0.0107	V	G. Samolyk	0.0001
AO Ser	58234.6070	27408	–0.0119	V	T. Arranz	0.0001
AO Ser	58242.5219	27417	–0.0111	V	T. Arranz	0.0001
AO Ser	58336.6112	27524	–0.0120	V	K. Menzies	0.0001
CC Ser	58162.9264	40077.5	1.1179	V	G. Samolyk	0.0001
CC Ser	58238.7838	40224.5	1.1224	V	G. Samolyk	0.0002
Y Sex	58218.7034	39189	–0.0203	V	S. Cook	0.0011
Y Sex	58234.6571	39227	–0.0199	V	G. Samolyk	0.0001
RZ Tau	58096.6741	49125	0.0875	C	G. Frey	0.0001
RZ Tau	58151.5433	49257	0.0876	V	G. Samolyk	0.0002
RZ Tau	58195.6062	49363	0.0890	V	G. Samolyk	0.0001
AM Tau	58154.6023	6312	–0.0756	V	G. Samolyk	0.0001
EQ Tau	58143.6404	52528	–0.0376	V	S. Cook	0.0001
HU Tau	58124.6782	8194	0.0366	V	S. Cook	0.0007
V1123 Tau	58175.3331	14190	0.0104	V	L. Corp	0.0003
V1128 Tau	57783.6824	17302	–0.0004	C	G. Frey	0.0009
V1370 Tau	58152.6077	22620	0.0022	V	K. Menzies	0.0001
W UMa	58199.6325	37268	–0.1080	V	G. Samolyk	0.0002
W UMa	58199.8002	37268.5	–0.1071	V	G. Samolyk	0.0001
W UMa	58218.6490	37325	–0.1088	V	G. Conrad	0.0002
TY UMa	58137.8465	52476.5	0.4052	V	B. Harris	0.0001
TY UMa	58151.8522	52516	0.4066	V	G. Samolyk	0.0002
TY UMa	58174.5428	52580	0.4067	V	T. Arranz	0.0001
TY UMa	58195.6386	52639.5	0.4075	V	N. Simmons	0.0001
TY UMa	58195.6390	52639.5	0.4079	V	G. Lubcke	0.0002
TY UMa	58195.6392	52639.5	0.4080	Ic	G. Lubcke	0.0001
TY UMa	58195.6392	52639.5	0.4080	B	G. Lubcke	0.0003
TY UMa	58237.6536	52758	0.4096	V	G. Samolyk	0.0002
TY UMa	58258.7501	52817.5	0.4111	V	N, Krumm	0.0001
TY UMa	58280.7328	52879.5	0.4124	V	S. Cook	0.0003
UX UMa	58154.8923	105364	–0.0008	V	G. Samolyk	0.0001
UX UMa	58192.6529	105556	–0.0011	V	G. Samolyk	0.0001
UX UMa	58193.6362	105561	–0.0011	V	G. Lubcke	0.0004
UX UMa	58228.6435	105739	–0.0014	V	G. Samolyk	0.0001
UX UMa	58246.7377	105831	–0.0009	V	K. Menzies	0.0001
VV UMa	58175.7277	17982	–0.0760	V	G. Lubcke	0.0001
VV UMa	58175.7277	17982	–0.0759	B	G. Lubcke	0.0002
VV UMa	58175.7278	17982	–0.0758	Ic	G. Lubcke	0.0002
VV UMa	58176.7555	17983.5	–0.0793	B	G. Lubcke	0.0032
VV UMa	58176.7581	17983.5	–0.0767	Ic	G. Lubcke	0.0003
VV UMa	58176.7598	17983.5	–0.0749	V	G. Lubcke	0.0007
VV UMa	58209.4097	18031	–0.0756	V	T. Arranz	0.0001
XZ UMa	58183.6836	9830	–0.1480	V	S. Cook	0.0003
XZ UMa	58216.6868	9857	–0.1474	V	G. Samolyk	0.0001
XZ UMa	58226.4649	9865	–0.1479	V	T. Arranz	0.0001
ZZ UMa	58210.6188	9681	–0.0013	V	G. Samolyk	0.0002
ZZ UMa	58272.6965	9708	–0.0036	V	S. Cook	0.0003
AF UMa	58226.6889	5978	0.6251	V	S. Cook	0.0009
QT UMa	58176.6860	13964	0.0094	V	K. Menzies	0.0001
W UMi	58195.7957	14410	–0.2083	V	N. Simmons	0.0001
W UMi	58275.7480	14457	–0.2104	V	G. Samolyk	0.0003
RU UMi	58200.7862	31632	–0.0152	V	G. Samolyk	0.0001
AG Vir	57858.6938	19336	–0.0157	C	G. Frey	0.0002
AG Vir	58243.6411	19935	–0.0162	V	G. Samolyk	0.0002

Table continued on next page

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

Star	JD (min) Hel. 2400000 +	Cycle	O–C (day)	F	Observer	Error (day)	Star	JD (min) Hel. 2400000 +	Cycle	O–C (day)	F	Observer	Error (day)
AH Vir	58230.4192	30466.5	0.2957	V	L. Corp	0.0001	IR Vir	57864.6857	21763.5	–0.0100	C	G. Frey	0.0001
AH Vir	58275.6544	30577.5	0.2960	V	G. Samolyk	0.0001	MS Vir	57912.6932	17324	–0.0021	C	G. Frey	0.0003
AK Vir	58249.5036	13131	–0.0411	V	T. Arranz	0.0001	NN Vir	57877.7568	19508	0.0067	C	G. Frey	0.0002
AW Vir	57871.7013	36297	0.0290	C	G. Frey	0.0003	V391 Vir	57874.6918	18670	0.0041	C	G. Frey	0.0001
AW Vir	58168.8835	37136.5	0.0308	V	G. Samolyk	0.0001	Z Vul	58305.5297	6256	–0.0151	V	T. Arranz	0.0001
AW Vir	58265.7007	37410	0.0298	V	S. Cook	0.0005	AW Vul	58342.6867	14951	–0.0333	V	G. Samolyk	0.0002
AZ Vir	57890.7405	39793	–0.0232	C	G. Frey	0.0001	AX Vul	58336.7517	6659	–0.0385	V	K. Menzies	0.0001
AZ Vir	58216.8054	40725.5	–0.0210	V	G. Samolyk	0.0001	AY Vul	58006.6773	6351	–0.1493	V	G. Samolyk	0.0003
BD Vir	58270.7149	6173	0.1830	V	S. Cook	0.0006	AY Vul	58305.8074	6475	–0.1626	V	G. Samolyk	0.0002
BF Vir	57895.7265	18460	0.1203	C	G. Frey	0.0001	BE Vul	58307.6524	11724	0.1075	V	G. Samolyk	0.0001
BH Vir	57896.7093	17954	–0.0126	C	G. Frey	0.0001	BE Vul	58363.5268	11760	0.1084	V	T. Arranz	0.0001
BH Vir	58158.9246	18275	–0.0131	V	G. Samolyk	0.0001	BO Vul	58337.7232	11485	–0.0133	V	G. Samolyk	0.0001
BH Vir	58214.4720	18343	–0.0129	V	T. Arranz	0.0001	BS Vul	58343.6562	31666	–0.0344	V	G. Samolyk	0.0001
BH Vir	58271.6536	18413	–0.0124	V	G. Samolyk	0.0001	BT Vul	58327.7528	20089	0.0060	V	R. Sabo	0.0002
DL Vir	58269.6930	14803	0.1176	V	S. Cook	0.0008	BU Vul	58263.8411	43463	0.0153	V	G. Samolyk	0.0001
HT Vir	57902.7294	13252	0.0000	C	G. Frey	0.0001	CD Vul	58307.8016	17564	–0.0006	V	G. Samolyk	0.0001
HT Vir	58295.7238	14216	–0.0018	V	S. Cook	0.0008							