

Recent Minima of 244 Eclipsing Binary Stars

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Abstract This paper continues the publication of times of minima for eclipsing binary stars. Times of minima determined from observations received by the AAVSO Eclipsing Binaries Section from February 2020 through July 2020 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. These observations were reduced by the observers or the writer using the method of Kwee and van Woerden (1956).

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), DV Cep (Frank and Lichtenknecker 1987), Z Dra (Danielkiewicz-Krosniak and Kurpińska-Winiarska 1996), DF Hya (Samolyk 1992), DK Hya (Samolyk 1990), EF Ori (Baldwin and Samolyk 2005), GU Ori (Samolyk 1985).

The light elements used for EK Aqr, HV Aqr, IN Boo, LM Boo, EH Cnc, CX CMa, BM CMi, AV CrB, LS Del, MR Del, V728 Her, WZ Leo, XY LMi, HI Mon, V2612 Oph, V351 Peg, DS Psc, DV Psc, DZ Psc, AS Ser, V1123 Tau, BS UMa, HT Vir, and PY Vir are from Kreiner (2004).

The light elements used for XX Ant, BV Ant, DD Aqr, GK Aqr, AH Aur, XY Boo, DN Boo, IK Boo, IL Boo, FV CVn, CW CMi, V1297 Cas, V2181 Cyg, V1065 Her, V1097 Her, V1167 Her, V470 Hya, XX Leo, GV Leo, HI Leo, VW LMi, AE LMi, V502 Oph, V2610 Oph, SW Pyx, GR Vir, and IR Vir are from Paschke (2014).

The light elements used for V407 Peg are from Nelson (2014).

The light elements used for NY Boo, V804 Cep, V425 Dra, V409 Hya, EV Lyr, and SU Pyx 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 *Observed Minima Timings of Eclipsing Binaries* monographs. The standard error is included when available. Column F indicates the filter used. A “C” indicates a clear filter.

This list will be web-archived and made available through the AAVSO ftp site at <ftp://ftp.aavso.org/public/datasets/gsamj482eb244.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>.

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

<i>Star</i>	<i>JD (min)</i> <i>Hel.</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</i> <i>(day)</i>	<i>Star</i>	<i>JD (min)</i> <i>Hel.</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</i> <i>(day)</i>
RT And	59055.6757	28483	-0.0126	V	G. Samolyk	0.0001	RU Cnc	58988.4709	3572	-0.1622	V	S. Cook	0.0018
WZ And	58884.3422	25892	0.0856	V	T. Arranz	0.0002	TU Cnc	58957.5267	3040	-0.0187	V	S. Cook	0.0008
BX And	58890.6157	36652	-0.1094	V	G. Samolyk	0.0002	WY Cnc	58904.3328	39249	-0.0477	V	X. Miret	0.0002
XX Ant	58944.7797	23088.5	-0.0013	V	S. Cook	0.0050	WY Cnc	58904.3330	39249	-0.0476	V	L. Corp	0.0004
BV Ant	58993.6791	1543	-0.0925	V	S. Cook	0.0009	WY Cnc	58923.4080	39272	-0.0481	V	T. Arranz	0.0001
SU Aqr	58763.6999	22422	0.0054	C	G. Frey	0.0003	XZ Cnc	58903.3440	8086	0.0198	V	X. Miret	0.0005
CX Aqr	59058.8609	40658	0.0190	V	G. Samolyk	0.0001	XZ Cnc	58923.3536	8114	0.0186	V	T. Arranz	0.0001
CZ Aqr	59058.8545	18183	-0.0705	V	G. Samolyk	0.0001	EH Cnc	58900.3679	15310	-0.0092	V	X. Miret	0.0005
DD Aqr	58762.6853	15168	-0.0020	C	G. Frey	0.0002	FV CVn	58936.4796	18680	-0.0106	V	G. Coates	0.0001
EK Aqr	58787.6787	20512.5	0.0259	C	G. Frey	0.0003	R CMa	58930.6321	12889	0.1340	V	G. Samolyk	0.0002
GK Aqr	58768.6994	37030	0.0269	C	G. Frey	0.0003	RT CMa	58904.3778	24950	-0.7806	V	T. Arranz	0.0001
HV Aqr	59049.4640	17490	0.0033	V	L. Corp	0.0007	TZ CMa	58898.6074	16623	-0.2305	V	G. Samolyk	0.0002
HV Aqr	59057.5115	17511.5	0.0000	V	L. Corp	0.0004	TZ CMa	58904.3943	16626	-0.1779	V	T. Arranz	0.0002
KO Aql	59054.7251	5994	0.1070	V	G. Samolyk	0.0003	CX CMa	58956.6698	6763	0.0049	V	S. Cook	0.0004
KP Aql	59006.8428	5526.5	-0.0244	V	G. Samolyk	0.0001	XZ CMi	58908.6436	28445	0.0057	V	G. Samolyk	0.0001
OO Aql	58947.9314	40124.5	0.0748	V	R. Sabo	0.0001	XZ CMi	58930.6381	28483	0.0054	V	G. Samolyk	0.0001
OO Aql	59014.8282	40256.5	0.0756	V	G. Samolyk	0.0001	XZ CMi	58932.3750	28486	0.0059	V	T. Arranz	0.0001
OO Aql	59044.4764	40315	0.0766	V	L. Corp	0.0002	YY CMi	58933.5988	28254	0.0192	V	G. Samolyk	0.0002
OO Aql	59063.4798	40352.5	0.0755	V	T. Arranz	0.0001	AC CMi	58915.6219	7999	0.0052	V	G. Samolyk	0.0002
V343 Aql	59015.8152	16574	-0.0519	V	G. Samolyk	0.0002	AK CMi	58915.6531	27945	-0.0245	V	G. Samolyk	0.0001
V343 Aql	59050.8634	16593	-0.0512	V	G. Samolyk	0.0002	AK CMi	58943.3812	27994	-0.0254	V	T. Arranz	0.0001
RY Aur	58912.6192	7567	0.0225	V	G. Samolyk	0.0001	AK CMi	58945.6448	27998	-0.0254	V	G. Samolyk	0.0001
TT Aur	58886.6781	28246	-0.0111	V	G. Samolyk	0.0002	BH CMi	58539.6919	10799	0.0018	C	G. Frey	0.0002
AH Aur	58907.3917	68015.5	-0.0229	V	T. Arranz	0.0002	CW CMi	58540.6864	20160.5	-0.0622	C	G. Frey	0.0001
AP Aur	58915.6052	28930	1.7856	V	G. Samolyk	0.0002	AB Cas	58891.5590	11835	0.1449	V	G. Samolyk	0.0001
AP Aur	58916.4622	28931.5	1.7886	V	T. Arranz	0.0003	IR Cas	59055.8381	24522	0.0167	V	G. Samolyk	0.0001
AP Aur	58934.3985	28963	1.7916	V	T. Arranz	0.0002	V364 Cas	59047.8215	16016.5	-0.0251	V	G. Samolyk	0.0002
CL Aur	58922.4047	28058	0.1880	V	T. Arranz	0.0001	V1297 Cas	59024.4912	6092	-0.0017	V	S. Dufoer	0.0003
EP Aur	58894.6290	55135	0.0209	V	G. Samolyk	0.0002	SU Cep	59041.8243	36295	0.0064	V	G. Samolyk	0.0001
EP Aur	58896.4028	55138	0.0217	V	T. Arranz	0.0002	WZ Cep	59047.6829	74278.5	-0.2175	V	G. Samolyk	0.0002
HP Aur	58894.6812	11342.5	0.0750	V	G. Samolyk	0.0002	ZZ Cep	59018.8019	14516	-0.0179	V	G. Samolyk	0.0002
HP Aur	58904.6447	11349.5	0.0788	V	S. Cook	0.0008	DK Cep	59044.7240	25818	0.0296	V	G. Samolyk	0.0001
HP Aur	58905.3521	11350	0.0748	V	T. Arranz	0.0001	DV Cep	59011.7242	10541	-0.0052	V	G. Samolyk	0.0002
SS Boo	58973.8654	5032	7.5311	V	G. Samolyk	0.0001	DV Cep	59033.7999	10560	-0.0070	V	G. Samolyk	0.0006
TU Boo	58924.8680	79740	-0.1654	V	G. Samolyk	0.0003	EG Cep	59014.7379	30150	0.0072	V	G. Samolyk	0.0004
TU Boo	58956.6477	79838	-0.1658	TG	G. Conrad	0.0005	V804 Cep	59023.3782	21993.5	-0.0185	V	A. Beck	0.0005
TY Boo	58891.8194	76971.5	0.0602	V	G. Samolyk	0.0003	TT Cet	58811.6935	54050	-0.0854	C	G. Frey	0.0002
TY Boo	58949.6985	77154	0.0599	V	G. Samolyk	0.0001	RW Com	58886.9219	79481	0.0161	V	G. Samolyk	0.0002
TY Boo	58955.7250	77173	0.0605	TG	G. Conrad	0.0003	RW Com	58943.4106	79719	0.0165	V	X. Miret	0.0001
TY Boo	59006.6267	77333.5	0.0600	V	G. Samolyk	0.0003	RZ Com	58908.8109	71110.5	0.0573	V	G. Samolyk	0.0001
TY Boo	59021.3730	77380	0.0590	V	T. Arranz	0.0004	RZ Com	58973.6354	71302	0.0579	V	G. Samolyk	0.0001
TY Boo	59021.5313	77380.5	0.0587	V	T. Arranz	0.0001	RZ Com	58996.4844	71369.5	0.0578	V	T. Arranz	0.0002
TZ Boo	58893.9004	64816.5	0.0578	V	G. Samolyk	0.0001	RZ Com	59008.6707	71405.5	0.0579	V	G. Samolyk	0.0001
TZ Boo	58941.8929	64978	0.0587	V	G. Samolyk	0.0002	SS Com	58893.9168	82100.5	0.9854	V	G. Samolyk	0.0002
TZ Boo	59033.4174	65286	0.0573	V	T. Arranz	0.0001	SS Com	58900.9357	82117.5	0.9869	V	K. Menzies	0.0005
VW Boo	58898.8899	80992.5	-0.2980	V	G. Samolyk	0.0001	SS Com	58972.7661	82291.5	0.9915	V	G. Samolyk	0.0003
VW Boo	58957.7678	81164.5	-0.3000	V	G. Samolyk	0.0001	CC Com	58908.8129	87795.5	-0.0324	V	G. Samolyk	0.0001
VW Boo	59017.6722	81339.5	-0.3025	V	G. Samolyk	0.0002	CC Com	58954.3837	88002	-0.0333	V	X. Miret	0.0002
XY Boo	58599.7012	50317	0.0204	C	G. Frey	0.0001	CC Com	58966.6325	88057.5	-0.0326	V	G. Samolyk	0.0002
ZZ Boo	57494.6882	3792	0.0758	V	N. Simmons	0.0003	CC Com	58989.3625	88160.5	-0.0333	V	T. Arranz	0.0004
ZZ Boo	58949.7882	4083.5	0.0824	V	G. Samolyk	0.0003	CC Com	58989.4721	88161	-0.0340	V	T. Arranz	0.0001
AD Boo	58970.6929	16953	0.0380	V	G. Samolyk	0.0001	CC Com	59012.6442	88266	-0.0340	V	G. Samolyk	0.0001
AD Boo	59000.6901	16982	0.0375	V	G. Samolyk	0.0004	U CrB	58985.8031	12235	0.1480	V	G. Samolyk	0.0002
AQ Boo	58978.4144	19446	-0.0163	V	X. Miret	0.0001	RW CrB	58949.7925	25052	0.0039	V	G. Samolyk	0.0001
AQ Boo	58989.4087	19479	-0.0155	V	X. Miret	0.0002	TW CrB	58970.6693	35784	0.0601	V	G. Samolyk	0.0001
DN Boo	58605.6888	8280	0.0050	C	G. Frey	0.0003	AV CrB	58253.8362	18669.5	0.0028	V	V. Petriew	0.0001
IK Boo	58601.6839	17218	-0.0279	C	G. Frey	0.0002	AV CrB	58254.7609	18672.5	0.0030	V	V. Petriew	0.0002
IK Boo	58956.6305	18389	-0.0324	TG	G. Conrad	0.0006	AV CrB	58254.9130	18673	0.0010	V	V. Petriew	0.0003
IL Boo	58601.6839	20618.5	-0.0624	C	G. Frey	0.0002	W Crv	58901.8340	49613.5	0.0197	V	G. Samolyk	0.0003
IN Boo	59062.3523	22964	-0.0023	V	A. Beck	0.0001	V Crt	58949.6374	25002	-0.0015	V	G. Samolyk	0.0002
LM Boo	58907.5255	19539	0.0012	V	G. Coates	0.0001	V Crt	58982.6334	25049	-0.0012	V	G. Samolyk	0.0002
NY Boo	59062.3895	23427	0.0452	V	A. Beck	0.0003	Z Crt	58953.8204	9092	-0.0521	V	S. Cook	0.0014
i Boo	58999.7226	71493.5	0.1362	V	N. Simmons	0.0002	RV Crt	58972.7166	14041	0.1016	V	S. Cook	0.0011
SV Cam	58990.6878	27646	0.0608	V	G. Samolyk	0.0002	ZZ Cyg	59000.8228	22272	-0.0796	V	G. Samolyk	0.0001
AL Cam	58959.6520	24503	-0.0231	V	G. Samolyk	0.0001	ZZ Cyg	59058.6551	22364	-0.0800	V	G. Samolyk	0.0001
CD Cam	58908.6348	8042.5	-0.0157	V	G. Samolyk	0.0006	AE Cyg	58972.8392	14844	-0.0043	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.

<i>Star</i>	<i>JD (min)</i> <i>Hel.</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</i> <i>(day)</i>	<i>Star</i>	<i>JD (min)</i> <i>Hel.</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</i> <i>(day)</i>
BR Cyg	59014.7129	13114	0.0012	V	G. Samolyk	0.0001	WY Hya	58912.5983	25616.5	0.0423	V	G. Samolyk	0.0001
BR Cyg	59058.6878	13147	0.0015	V	G. Samolyk	0.0001	AV Hya	58912.6574	32542	-0.1232	V	G. Samolyk	0.0002
DK Cyg	58970.8628	44554	0.1322	V	G. Samolyk	0.0001	AV Hya	58953.6632	32602	-0.1217	V	G. Samolyk	0.0004
KR Cyg	59035.7977	35413	0.0275	V	G. Samolyk	0.0004	DF Hya	58907.6074	48758.5	0.0162	V	G. Samolyk	0.0001
V387 Cyg	58960.8787	48354	0.0194	V	G. Samolyk	0.0001	DF Hya	58907.7726	48759	0.0161	V	G. Samolyk	0.0001
V387 Cyg	58985.8619	48393	0.0193	V	G. Samolyk	0.0001	DF Hya	58918.3528	48791	0.0170	V	T. Arranz	0.0001
V387 Cyg	59055.6865	48502	0.0189	V	G. Samolyk	0.0002	DF Hya	58933.3949	48836.5	0.0165	V	T. Arranz	0.0001
V388 Cyg	59006.8051	19852	-0.1387	V	G. Samolyk	0.0001	DF Hya	58944.6347	48870.5	0.0157	V	G. Samolyk	0.0003
V401 Cyg	59025.7540	26068	0.0979	V	G. Samolyk	0.0003	DI Hya	58941.6307	45139	-0.0394	V	G. Samolyk	0.0003
V456 Cyg	58970.8541	15776	0.0530	V	G. Samolyk	0.0001	DK Hya	58943.4058	30847	0.0000	V	T. Arranz	0.0001
V466 Cyg	58981.8219	21707.5	0.0077	V	G. Samolyk	0.0001	GK Hya	58938.7630	12258	-0.1834	V	S. Cook	0.0014
V466 Cyg	59041.6593	21750.5	0.0077	V	G. Samolyk	0.0001	V409 Hya	58543.6388	11411	0.0723	C	G. Frey	0.0003
V477 Cyg	59008.8216	6314.5	-0.5144	V	G. Samolyk	0.0004	V409 Hya	58551.6644	11428	0.0693	C	G. Frey	0.0002
V477 Cyg	59012.8146	6316	-0.0419	V	G. Samolyk	0.0001	V470 Hya	58912.6782	15708.5	0.0187	V	G. Samolyk	0.0005
V488 Cyg	59035.7369	53238	-0.2652	V	G. Samolyk	0.0005	AR Lac	59047.7342	8801	-0.0512	V	G. Samolyk	0.0002
V548 Cyg	59033.7745	8075	0.0222	V	G. Samolyk	0.0004	Y Leo	58933.6237	8005	-0.0738	V	G. Samolyk	0.0001
V704 Cyg	59017.8299	36934	0.0394	V	G. Samolyk	0.0003	RT Leo	58960.9038	4715	-0.0100	V	S. Cook	0.0012
V1034 Cyg	59016.8144	16458	0.0250	V	K. Menzies	0.0004	UU Leo	58924.6393	8053	0.2298	V	G. Samolyk	0.0002
V2181 Cyg	59035.7194	14437	-0.009	V	G. Samolyk	0.0011	UU Leo	58936.3977	8060	0.2300	V	T. Arranz	0.0002
YY Del	59018.8493	20249	0.0133	V	G. Samolyk	0.0002	UV Leo	58902.4648	34098	0.0476	V	L. Corp	0.0002
LS Del	59049.5004	18000	-0.0076	V	L. Corp	0.0009	UV Leo	58902.4649	34098	0.0477	V	X. Miret	0.0007
MR Del	59035.5118	12527	-0.0125	V	L. Corp	0.0002	UV Leo	58924.6685	34135	0.0482	V	G. Samolyk	0.0003
Z Dra	58891.7049	6665	-0.0050	V	G. Samolyk	0.0001	UV Leo	58978.6751	34225	0.0472	V	G. Samolyk	0.0001
Z Dra	58944.6451	6704	-0.0048	V	G. Samolyk	0.0001	UZ Leo	58902.5424	30907.5	0.0116	V	L. Corp	0.0007
Z Dra	58982.6531	6732	-0.0050	V	G. Samolyk	0.0001	VZ Leo	58542.7083	25120	-0.0464	C	G. Frey	0.0001
RZ Dra	58901.9332	26729	0.0719	V	G. Samolyk	0.0001	VZ Leo	58966.6856	25509	-0.0426	V	G. Samolyk	0.0005
RZ Dra	58949.8596	26816	0.0723	V	G. Samolyk	0.0001	VZ Leo	58975.4056	25517	-0.0418	V	T. Arranz	0.0002
RZ Dra	59012.6596	26930	0.0727	V	G. Samolyk	0.0001	VZ Leo	59002.6507	25542	-0.0444	V	S. Cook	0.0015
TW Dra	59057.4311	5316	-0.0626	V	T. Arranz	0.0001	WZ Leo	58907.7764	4550	-0.0003	V	G. Samolyk	0.0002
UZ Dra	59011.7317	5348	0.0035	V	G. Samolyk	0.0001	XX Leo	58983.6465	10599	-0.0279	V	S. Cook	0.0006
AI Dra	58981.7536	13088	0.0411	V	G. Samolyk	0.0001	XY Leo	58959.6316	48874	0.1891	V	G. Samolyk	0.0002
AI Dra	59017.7178	13118	0.0409	V	N. Simmons	0.0001	GV Leo	58653.7026	22117	-0.0529	C	G. Frey	0.0002
BH Dra	58991.7623	10440	-0.0066	V	K. Menzies	0.0003	HI Leo	58567.7223	18701	0.0164	C	G. Frey	0.0001
V425 Dra	58996.6974	814	-0.0157	V	S. Cook	0.0009	T LMi	58941.4190	4485	-0.1332	V	T. Arranz	0.0001
TZ Eri	58895.3822	6324	0.3622	V	T. Arranz	0.0001	VW LMi	58936.3763	21853.5	0.0341	V	T. Arranz	0.0001
YY Eri	58890.5568	53838.5	0.1700	V	G. Samolyk	0.0002	XY LMi	58911.4426	14675	-0.0091	V	G. Coates	0.0002
YY Eri	58901.3262	53872	0.1693	V	T. Arranz	0.0001	AE LMi	58901.3906	14038	0.0157	V	X. Miret	0.0005
RW Gem	58863.7728	14155	0.0049	V	G. Samolyk	0.0003	RR Lep	58885.3756	31142	-0.0452	V	T. Arranz	0.0002
WW Gem	58907.5809	26598	0.0269	V	G. Samolyk	0.0003	RR Lep	58896.3596	31154	-0.0463	V	T. Arranz	0.0003
AF Gem	58897.6946	25521	-0.0672	V	S. Cook	0.0008	SS Lib	59018.6596	12422	0.1847	V	G. Samolyk	0.0003
AF Gem	58901.4254	25524	-0.0669	V	T. Arranz	0.0001	RY Lyn	58930.5917	11180	-0.0171	V	G. Samolyk	0.0001
AF Gem	58916.3477	25536	-0.0667	V	T. Arranz	0.0001	UZ Lyr	59018.6533	8105	-0.0534	V	G. Samolyk	0.0002
AY Gem	58962.6008	7313	-0.0662	V	S. Cook	0.0007	UZ Lyr	59056.4767	8125	-0.0555	V	T. Arranz	0.0001
SZ Her	59001.7920	20948	-0.0359	V	G. Samolyk	0.0001	EV Lyr	58058.3065	3380	0.0015	V	T. Arranz	0.0001
SZ Her	59048.4236	21005	-0.0359	V	T. Arranz	0.0001	EW Lyr	59006.6500	16681	0.3046	V	G. Samolyk	0.0001
TT Her	58990.8358	20826	0.0443	V	K. Menzies	0.0003	EW Lyr	59043.6766	16700	0.3055	V	G. Samolyk	0.0001
TU Her	58966.7198	6575	-0.2705	V	G. Samolyk	0.0004	FL Lyr	58972.8279	9527	-0.0016	V	G. Samolyk	0.0002
TU Her	59032.4603	6604	-0.2730	V	T. Arranz	0.0003	RU Mon	58893.6862	4784.5	-0.7401	V	G. Samolyk	0.0002
UX Her	59006.8099	12483	0.1630	V	G. Samolyk	0.0001	TU Mon	58954.7136	4929	-0.0739	V	S. Cook	0.0011
UX Her	59042.4337	12506	0.1633	V	T. Arranz	0.0001	AT Mon	58917.6259	15924	0.0114	V	G. Samolyk	0.0003
UX Her	59059.4720	12517	0.1643	V	T. Arranz	0.0001	BB Mon	58917.3756	43996	-0.0036	V	T. Arranz	0.0002
AK Her	58658.7166	39078	0.0195	C	G. Frey	0.0002	BO Mon	58901.6563	6918	-0.0078	V	G. Samolyk	0.0001
AK Her	59042.5145	39988.5	0.0216	V	L. Corp	0.0003	HI Mon	58945.6026	4093.5	-0.0059	V	S. Cook	0.0007
CC Her	58638.6944	10940	0.3290	C	G. Frey	0.0003	U Oph	58985.8099	8686	-0.0053	V	G. Samolyk	0.0005
CC Her	58976.8400	11135	0.3434	V	G. Samolyk	0.0002	SX Oph	59046.4217	12430	-0.0015	V	T. Arranz	0.0002
CC Her	59044.4698	11174	0.3470	V	T. Arranz	0.0001	SX Oph	59054.6742	12434	-0.0022	V	G. Samolyk	0.0002
CT Her	59014.7548	9232	0.0106	V	G. Samolyk	0.0002	V456 Oph	58671.7130	16510	0.0276	C	G. Frey	0.0001
CT Her	59034.4053	9243	0.0110	V	T. Arranz	0.0002	V501 Oph	58985.8199	29004	-0.0085	V	G. Samolyk	0.0002
CT Her	59050.4828	9252	0.0112	V	T. Arranz	0.0003	V501 Oph	59050.6715	29071	-0.0096	V	G. Samolyk	0.0001
HS Her	59019.6455	8464	-0.0383	V	G. Samolyk	0.0007	V502 Oph	58999.4265	23157.5	-0.0019	V	L. Corp	0.0004
V728 Her	59043.6754	13884	0.0257	V	G. Samolyk	0.0005	V502 Oph	59001.4696	23162	0.0009	V	L. Corp	0.0009
V1065 Her	58655.7359	18498	-0.0144	C	G. Frey	0.0002	V508 Oph	59011.7730	40399	-0.0272	V	G. Samolyk	0.0001
V1097 Her	58657.7369	17166	0.0131	C	G. Frey	0.0002	V508 Oph	59047.4593	40502.5	-0.0269	V	T. Arranz	0.0001
V1167 Her	58998.3898	17471.5	-0.0135	V	X. Miret	0.0002	V508 Oph	59058.4931	40534.5	-0.0265	V	T. Arranz	0.0001
SY Hya	58949.5267	7856	-0.169	V	S. Cook	0.0006	V839 Oph	59051.4963	45484	0.3403	V	T. Arranz	0.0001
TY Hya	58967.6081	5254	-0.160	V	S. Cook	0.0019	V1010 Oph	59025.7265	30371	-0.2155	V	G. Samolyk	0.0001

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

<i>Star</i>	<i>JD (min) Hel. 2400000+</i>	<i>Cycle</i>	<i>O-C (day)</i>	<i>F</i>	<i>Observer</i>	<i>Standard Error (day)</i>	<i>Star</i>	<i>JD (min) Hel. 2400000+</i>	<i>Cycle</i>	<i>O-C (day)</i>	<i>F</i>	<i>Observer</i>	<i>Standard Error (day)</i>
V2610 Oph	59042.4691	15644.5	-0.0479	V	L. Corp	0.0008	CT Tau	58917.6030	20265	-0.0720	V	G. Samolyk	0.0002
V2612 Oph	59057.4558	17472	-0.0097	V	L. Corp	0.0009	EQ Tau	58908.5950	54769	-0.0449	V	G. Samolyk	0.0002
EF Ori	58891.5514	4039	0.0114	V	G. Samolyk	0.0003	HU Tau	58891.6788	8567	0.0374	V	G. Samolyk	0.0003
ER Ori	58899.3261	40795.5	0.1494	V	T. Arranz	0.0001	V781 Tau	58883.3189	43514	-0.0488	R	L. Corp	0.0005
ER Ori	58903.3497	40805	0.1507	V	T. Arranz	0.0001	V1123 Tau	58805.6573	15766	0.0171	C	G. Frey	0.0027
ET Ori	58890.5659	33868	-0.0040	V	G. Samolyk	0.0002	W UMa	58901.5925	39372	-0.1213	V	G. Samolyk	0.0001
ET Ori	58894.3696	33872	-0.0040	V	T. Arranz	0.0001	W UMa	58901.7587	39372.5	-0.1219	V	G. Samolyk	0.0003
FH Ori	58911.6122	15346	-0.4762	V	G. Samolyk	0.0002	W UMa	58901.9259	39373	-0.1215	V	G. Samolyk	0.0002
FL Ori	58884.3803	8728	0.0414	V	T. Arranz	0.0001	W UMa	58971.6550	39582	-0.1226	TG	G. Conrad	0.0001
FT Ori	58893.3677	5569	0.0235	V	T. Arranz	0.0001	TX UMa	58911.6383	4542	0.2629	V	G. Samolyk	0.0001
FT Ori	58915.4205	5576	0.0234	V	T. Arranz	0.0001	TY UMa	58911.6646	54659	0.4428	V	G. Samolyk	0.0002
FZ Ori	58900.3361	37191	-0.0238	V	T. Arranz	0.0002	TY UMa	58933.6458	54721	0.4426	TG	G. Conrad	0.0005
FZ Ori	58902.3380	37196	-0.0219	V	T. Arranz	0.0001	TY UMa	58988.4250	54875.5	0.4456	V	T. Arranz	0.0001
GU Ori	58891.5380	33614.5	-0.0715	V	G. Samolyk	0.0003	TY UMa	58998.7087	54904.5	0.4476	V	S. Cook	0.0004
GU Ori	58898.3643	33629	-0.0700	V	T. Arranz	0.0001	UX UMa	58898.8985	109147	-0.0021	V	G. Samolyk	0.0001
GU Ori	58902.3640	33637.5	-0.0711	V	T. Arranz	0.0002	UX UMa	58941.5765	109364	-0.0018	V	G. Samolyk	0.0002
U Peg	59068.4625	60187	-0.1762	V	L. Corp	0.0005	UX UMa	58941.7729	109365	-0.0020	V	G. Samolyk	0.0002
TY Peg	58772.7208	5925	-0.4667	C	G. Frey	0.0001	UX UMa	59005.4941	109689	-0.0023	V	T. Arranz	0.0005
BB Peg	59055.8370	42300	-0.0352	V	G. Samolyk	0.0003	VV UMa	58971.6962	19140	-0.0935	TG	G. Conrad	0.0004
BN Peg	58747.6667	34840	-0.0016	C	G. Frey	0.0002	XZ UMa	58935.4024	10445	-0.1560	V	T. Arranz	0.0002
BO Peg	58774.6754	22677	-0.0610	C	G. Frey	0.0001	XZ UMa	58975.7385	10478	-0.1565	TG	G. Conrad	0.0004
BX Peg	59013.7960	52844	-0.1379	V	K. Menzies	0.0006	BS UMa	58940.4271	14736.5	-0.0069	V	G. Coates	0.0001
DI Peg	58783.6616	19088	0.0145	C	G. Frey	0.0002	W UMi	59015.7385	14892	-0.2235	V	G. Samolyk	0.0003
DK Peg	58777.6827	8118	0.1693	C	G. Frey	0.0003	RU UMi	58924.6609	33011	-0.0137	V	G. Samolyk	0.0001
V351 Peg	58749.7009	17276	0.0520	C	G. Frey	0.0002	VV Vir	58966.7963	62191	-0.0514	V	G. Samolyk	0.0004
V407 Peg	57748.5327	1284.5	0.0809	V	K. Menzies	0.0002	VV Vir	58990.4405	62244	-0.0524	V	T. Arranz	0.0001
V407 Peg	58708.6766	2792	0.1259	C	G. Frey	0.0003	AG Vir	58953.7694	21040	-0.0170	V	G. Samolyk	0.0002
XZ Per	58903.6003	13369	-0.0737	V	K. Menzies	0.0001	AH Vir	58949.7043	32231.5	0.3062	V	G. Samolyk	0.0003
UV Psc	58810.6517	17890	-0.0231	C	G. Frey	0.0001	AK Vir	58941.7881	13711	-0.0434	V	G. Samolyk	0.0002
DS Psc	58775.7004	18323	-0.0011	C	G. Frey	0.0002	AW Vir	58953.6950	39353.5	0.0310	V	G. Samolyk	0.0004
DV Psc	58780.6807	20356	0.0116	C	G. Frey	0.0002	AW Vir	58998.4768	39480	0.0322	V	T. Arranz	0.0001
DZ Psc	58779.6956	17151	0.0291	C	G. Frey	0.0003	AW Vir	59006.6191	39503	0.0326	V	G. Samolyk	0.0004
UZ Pup	58933.3285	18015.5	-0.0116	V	T. Arranz	0.0002	AW Vir	59015.6463	39528.5	0.0329	V	G. Samolyk	0.0001
AV Pup	58895.7504	49821	0.2591	V	G. Samolyk	0.0002	AX Vir	58955.8307	44675	0.0287	V	G. Samolyk	0.0001
SU Pyx	58963.6312	2446	-0.0816	V	S. Cook	0.0011	AZ Vir	58899.8774	42679	-0.0198	V	K. Menzies	0.0001
SW Pyx	58974.6691	3926	0.0207	V	S. Cook	0.0019	AZ Vir	58955.8241	42839	-0.0195	V	G. Samolyk	0.0002
TV Pyx	58963.6312	37941.5	0.0910	V	S. Cook	0.0011	AZ Vir	58990.4417	42938	-0.0188	V	T. Arranz	0.0001
U Sge	59053.4965	12401	0.0248	V	T. Arranz	0.0001	BH Vir	58641.6946	18866	-0.0142	C	G. Frey	0.0002
V1968 Sgr	59055.7319	37701	-0.0216	V	G. Samolyk	0.0004	BH Vir	58957.8249	19253	-0.0132	V	G. Samolyk	0.0002
RS Sct	59043.6800	40328	0.0372	V	G. Samolyk	0.0001	BH Vir	58999.4832	19304	-0.0154	V	L. Corp	0.0003
AO Ser	59030.4172	28313	-0.0112	V	T. Arranz	0.0001	GR Vir	58640.7012	38978	0.0217	C	G. Frey	0.0004
AO Ser	59050.6425	28336	-0.0108	V	G. Samolyk	0.0001	GR Vir	59023.4178	40081	0.0270	V	T. Arranz	0.0001
AS Ser	58992.4405	13925	-0.0002	V	X. Miret	0.0001	HT Vir	58252.7164	14110.5	0.0003	C	G. Frey	0.0001
CC Ser	58949.8839	41602.5	1.1660	V	G. Samolyk	0.0003	IR Vir	58600.6783	23756	-0.0070	C	G. Frey	0.0001
CC Ser	58956.8507	41616	1.1667	V	K. Menzies	0.0002	PY Vir	58994.3857	20865	0.0083	V	L. Corp	0.0003
CC Ser	59015.6774	41730	1.1687	V	G. Samolyk	0.0003	AW Vul	59012.8457	15782	-0.0355	V	G. Samolyk	0.0001
CC Ser	59041.4806	41780	1.1716	V	T. Arranz	0.0002	BE Vul	59041.7665	12197	0.1048	V	G. Samolyk	0.0001
RZ Tau	58900.5982	51059	0.0967	V	G. Samolyk	0.0001	BO Vul	59018.7791	11835	-0.0115	V	G. Samolyk	0.0001
AM Tau	58898.5893	6676	-0.0777	V	G. Samolyk	0.0001	BS Vul	59033.8132	33116	-0.0360	V	G. Samolyk	0.0002
AQ Tau	58913.5967	24063	0.5247	V	G. Samolyk	0.0003	BT Vul	59054.6965	20726	0.0053	V	G. Samolyk	0.0001
CT Tau	58909.6009	20253	-0.0722	V	K. Menzies	0.0001	BU Vul	59041.6521	44830	0.0129	V	G. Samolyk	0.0001