

Recent Maxima of 77 Short Period Pulsating Stars

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Abstract This paper contains times of maxima for 77 short period pulsating stars (primarily RR Lyrae and δ Scuti stars). These data were determined from the CCD observations received by the AAVSO Short Period Pulsator Section in 2019.

1. Recent observations

The accompanying list (Table 1) contains times of maxima calculated from CCD observations made by participants in the AAVSO's Short Period Pulsator (SPP) Section. These observations were reduced by the writer using the PERANSO program (Vanmunster 2007).

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: NT Cam (AAVSO VSX site, Watson *et al.* 2014), RZ Cap and DG Hya (Samolyk 2010), and V2416 Cyg (Samolyk 2018). The error estimate is included. Column F indicates the filter used.

Table 1 will be web-archived and made available through the AAVSO ftp site at <ftp:ftp.aavso.org/public/datasets/gsamj481spp77.txt>. The times of maximum for RR Lyr stars in Table 1, along with data from earlier AAVSO publications, are included in the GEOS database at: <http://rr-lyr.irap.omp.eu/dbrr/>.

In the case of LV UMa (Figure 1), the following light elements were calculated using a linear regression on the times of maxima listed in this paper:

$$\text{Time of maximum (JD)} = 2457040.8744 + 0.036999856 \cdot E \quad (1)$$

$$\pm 0.0009 \quad 0.000000023$$

Table 1. Recent times of maxima of stars in the AAVSO short period pulsator program.

<i>Star</i>	<i>JD (max) Hel. 2400000 +</i>	<i>Cycle</i>	<i>O–C (day)</i>	<i>F</i>	<i>Observer</i>	<i>Error (day)</i>	<i>Star</i>	<i>JD (max) Hel. 2400000 +</i>	<i>Cycle</i>	<i>O–C (day)</i>	<i>F</i>	<i>Observer</i>	<i>Error (day)</i>
SW And	58486.3076	91241	–0.5035	V	T. Arranz	0.0008	ZZ And	58803.5179	61268	0.0355	V	K. Menzies	0.0018
SW And	58497.3619	91266	–0.5062	V	T. Arranz	0.0007	AC And	58716.8670	14364	0.4626	V	G. Samolyk	0.0011
SW And	58696.8228	91717	–0.5134	V	G. Samolyk	0.0011	AC And	58732.5431	14386	0.4915	V	T. Arranz	0.0011
SW And	58752.5473	91843	–0.5161	V	T. Arranz	0.0007	AC And	58752.5019	14414	0.5355	V	T. Arranz	0.0019
SW And	58753.4312	91845	–0.5167	V	T. Arranz	0.0006	AC And	58757.3648	14421	0.4198	V	T. Arranz	0.0016
SW And	58755.6429	91850	–0.5164	V	T. Arranz	0.0006	AC And	58759.4823	14424	0.4035	V	T. Arranz	0.0021
SW And	58756.5278	91852	–0.5161	V	T. Arranz	0.0006	AC And	58764.5665	14431	0.5091	V	T. Arranz	0.0014
SW And	58757.4123	91854	–0.5162	V	T. Arranz	0.0005	AC And	58764.5671	14431	0.5097	V	G. Samolyk	0.0013
SW And	58759.6237	91859	–0.5161	V	T. Arranz	0.0008	AC And	58767.3571	14435	0.4547	V	T. Arranz	0.0019
SW And	58763.6035	91868	–0.5169	V	T. Arranz	0.0008	AC And	58769.4739	14438	0.4378	V	T. Arranz	0.0025
SW And	58765.3728	91872	–0.5167	V	T. Arranz	0.0006	AT And	58660.8096	26450	–0.0060	V	G. Samolyk	0.0016
SW And	58767.5834	91877	–0.5175	V	T. Arranz	0.0006	AT And	58697.8215	26510	–0.0090	V	K. Menzies	0.0025
SW And	58835.6926	92031	–0.5193	TG	G. Conrad	0.0015	AT And	58735.4573	26571	–0.0050	V	T. Arranz	0.0014
SW And	58846.3056	92055	–0.5210	V	T. Arranz	0.0007	AT And	58773.7018	26633	–0.0093	TG	G. Conrad	0.0025
XX And	58491.3159	26847	0.2861	V	T. Arranz	0.0015	AT And	58796.5331	26670	–0.0038	V	K. Menzies	0.0028
XX And	58716.8165	27159	0.2896	V	G. Samolyk	0.0015	DY And	58721.8293	37556	–0.1721	V	K. Menzies	0.0015
XX And	58803.5473	27279	0.2907	V	K. Menzies	0.0015	DY And	58825.5628	37728	–0.1695	V	K. Menzies	0.0019

Table continued on following pages

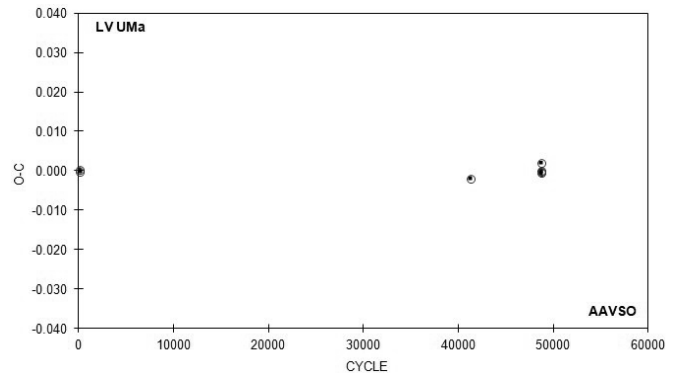


Figure 1. O–C plot for LV UMa using the light elements in Equation 1.

References

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Table 1. Recent times of maxima of stars in the AAVSO short period pulsator program, cont.

<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> 2400000+	<i>Cycle</i>	<i>O-C</i> <i>(day)</i>	<i>F</i>	<i>Observer</i>	<i>Error</i> <i>(day)</i>	<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> 2400000+	<i>Cycle</i>	<i>O-C</i> <i>(day)</i>	<i>F</i>	<i>Observer</i>	<i>Error</i> <i>(day)</i>
SW Aqr	58695.8633	73151	-0.0007	V	G. Samolyk	0.0012	SZ Boo	58582.8110	59184	0.0130	V	G. Samolyk	0.0011
SW Aqr	58738.5782	73244	-0.0010	V	T. Arranz	0.0009	TV Boo	58554.5299	108603	0.1307	V	T. Arranz	0.0018
TZ Aqr	58716.8037	37059	0.0141	V	G. Samolyk	0.0013	TV Boo	58557.6285	108613	0.1037	V	T. Arranz	0.0008
YZ Aqr	58747.6616	42366	0.0857	V	G. Samolyk	0.0017	TV Boo	58558.5646	108616	0.1022	V	T. Arranz	0.0009
BO Aqr	58802.6041	24756	0.2276	V	G. Samolyk	0.0018	TV Boo	58562.6563	108629	0.1306	V	T. Arranz	0.0015
BR Aqr	58786.5981	43892	-0.2320	V	G. Samolyk	0.0009	TV Boo	58563.5852	108632	0.1218	V	T. Arranz	0.0013
BR Aqr	58840.5692	44004	-0.2313	V	G. Samolyk	0.0012	TV Boo	58567.6274	108645	0.1007	V	T. Arranz	0.0011
CY Aqr	58724.6941	400015	0.0160	V	G. Samolyk	0.0003	TV Boo	58568.5700	108648	0.1057	V	T. Arranz	0.0019
CY Aqr	58724.7551	400016	0.0159	V	G. Samolyk	0.0003	TV Boo	58572.6602	108661	0.1326	V	T. Arranz	0.0012
CY Aqr	58724.8163	400017	0.0160	V	G. Samolyk	0.0004	TV Boo	58573.5946	108664	0.1293	V	T. Arranz	0.0014
CY Aqr	58724.8774	400018	0.0161	V	G. Samolyk	0.0004	TV Boo	58577.6381	108677	0.1095	V	T. Arranz	0.0011
CY Aqr	58753.3211	400484	0.0160	V	T. Arranz	0.0004	TV Boo	58605.4507	108766	0.1044	V	T. Arranz	0.0010
CY Aqr	58760.6461	400604	0.0163	V	G. Samolyk	0.0003	TV Boo	58609.5285	108779	0.1189	V	T. Arranz	0.0021
CY Aqr	58760.7073	400605	0.0165	V	G. Samolyk	0.0004	TV Boo	58614.5222	108795	0.1116	V	T. Arranz	0.0016
CY Aqr	58760.7679	400606	0.0160	V	G. Samolyk	0.0004	TV Boo	58615.4541	108798	0.1059	V	T. Arranz	0.0013
TZ Aur	58488.6658	98516	0.0170	V	G. Samolyk	0.0008	TV Boo	58616.3896	108801	0.1037	V	T. Arranz	0.0009
TZ Aur	58521.5675	98600	0.0181	V	T. Arranz	0.0008	TV Boo	58625.4529	108830	0.1028	V	T. Arranz	0.0009
TZ Aur	58533.3164	98630	0.0167	V	T. Arranz	0.0006	TV Boo	58630.4816	108846	0.1305	V	T. Arranz	0.0015
TZ Aur	58538.4076	98643	0.0162	V	T. Arranz	0.0008	TV Boo	58631.4200	108849	0.1312	V	T. Arranz	0.0014
TZ Aur	58540.3686	98648	0.0188	V	T. Arranz	0.0008	TV Boo	58634.5226	108859	0.1082	V	T. Arranz	0.0014
TZ Aur	58782.8129	99267	0.0165	V	G. Samolyk	0.0009	TV Boo	58635.4553	108862	0.1033	V	T. Arranz	0.0011
BH Aur	58486.7494	34500	0.0093	V	G. Samolyk	0.0009	TV Boo	58646.3942	108897	0.1026	V	T. Arranz	0.0009
BH Aur	58487.6641	34502	0.0118	TG	G. Conrad	0.0015	TV Boo	58650.4885	108910	0.1336	V	T. Arranz	0.0016
BH Aur	58489.4868	34506	0.0102	V	T. Arranz	0.0011	TV Boo	58651.4196	108913	0.1270	V	T. Arranz	0.0013
BH Aur	58750.8262	35079	0.0101	V	G. Samolyk	0.0009	TW Boo	58576.8510	59529	-0.1053	V	G. Samolyk	0.0011
BH Aur	58765.8772	35112	0.0101	V	G. Samolyk	0.0010	TW Boo	58618.3702	59607	-0.1035	V	T. Arranz	0.0008
BH Aur	58782.7500	35149	0.0076	TG	G. Conrad	0.0017	UU Boo	58488.9319	49033	0.3390	V	N. Simmons	0.0008
BH Aur	58814.6788	35219	0.0101	V	K. Menzies	0.0009	UU Boo	58590.8295	49256	0.3434	V	K. Menzies	0.0008
RS Boo	58535.6384	44430	-0.0216	V	T. Arranz	0.0006	UY Boo	58598.8066	25755	0.8185	V	G. Samolyk	0.0010
RS Boo	58541.6750	44446	-0.0224	V	T. Arranz	0.0006	UY Boo	58642.4266	25822	0.8325	V	T. Arranz	0.0021
RS Boo	58543.5623	44451	-0.0218	V	T. Arranz	0.0007	UY Cam	58493.6629	85861	-0.0985	V	G. Samolyk	0.0026
RS Boo	58554.8760	44481	-0.0283	V	G. Samolyk	0.0001	UY Cam	58493.9287	85862	-0.0997	V	G. Samolyk	0.0042
RS Boo	58558.6492	44491	-0.0285	V	T. Arranz	0.0006	UY Cam	58514.7618	85940	-0.0959	TG	G. Conrad	0.0031
RS Boo	58569.5932	44520	-0.0273	V	T. Arranz	0.0008	UY Cam	58548.6824	86067	-0.0897	TG	G. Conrad	0.0032
RS Boo	58572.6141	44528	-0.0251	V	T. Arranz	0.0007	UY Cam	58750.8281	86824	-0.0950	V	G. Samolyk	0.0027
RS Boo	58586.5782	44565	-0.0226	V	T. Arranz	0.0005	NT Cam	58507.6967	84359	0.0240	V	G. Conrad	0.0011
RS Boo	58594.5028	44586	-0.0221	V	T. Arranz	0.0006	NT Cam	58507.7778	84360	0.0226	V	G. Conrad	0.0023
RS Boo	58603.5572	44610	-0.0238	V	T. Arranz	0.0006	NT Cam	58507.8685	84361	0.0310	V	G. Conrad	0.0011
RS Boo	58606.5723	44618	-0.0274	V	T. Arranz	0.0006	RW Cnc	58529.5775	34673	0.2326	V	T. Arranz	0.0009
RS Boo	58608.4604	44623	-0.0260	V	T. Arranz	0.0006	RW Cnc	58540.5311	34693	0.2422	V	T. Arranz	0.0014
RS Boo	58609.5917	44626	-0.0267	V	T. Arranz	0.0006	RW Cnc	58551.4622	34713	0.2293	V	T. Arranz	0.0009
RS Boo	58617.5151	44647	-0.0274	V	T. Arranz	0.0006	RW Cnc	58557.4839	34724	0.2318	V	T. Arranz	0.0009
RS Boo	58628.4581	44676	-0.0273	V	T. Arranz	0.0005	RW Cnc	58562.4173	34733	0.2404	V	T. Arranz	0.0011
RS Boo	58631.4774	44684	-0.0267	V	T. Arranz	0.0006	RW Cnc	58573.3612	34753	0.2404	V	T. Arranz	0.0018
RS Boo	58634.4961	44692	-0.0267	V	T. Arranz	0.0006	RW Cnc	58585.3913	34775	0.2321	V	T. Arranz	0.0009
RS Boo	58642.4217	44713	-0.0252	V	T. Arranz	0.0007	RW Cnc	58586.4864	34777	0.2328	V	T. Arranz	0.0011
ST Boo	58530.9039	63233	0.1109	V	G. Samolyk	0.0009	TT Cnc	58518.6049	32965	0.1284	V	T. Arranz	0.0015
ST Boo	58567.6206	63292	0.1124	V	T. Arranz	0.0007	TT Cnc	58526.4944	32979	0.1296	V	T. Arranz	0.0015
ST Boo	58577.5785	63308	0.1137	V	T. Arranz	0.0007	TT Cnc	58535.5115	32995	0.1315	V	T. Arranz	0.0012
ST Boo	58585.6660	63321	0.1114	V	T. Arranz	0.0009	TT Cnc	58552.4218	33025	0.1384	V	T. Arranz	0.0009
ST Boo	58600.5983	63345	0.1087	V	T. Arranz	0.0008	TT Cnc	58565.3713	33048	0.1285	V	T. Arranz	0.0009
ST Boo	58605.5750	63353	0.1071	V	T. Arranz	0.0010	VZ Cnc	58493.8231	104261	0.0204	V	N. Simmons	0.0015
ST Boo	58615.5288	63369	0.1043	V	T. Arranz	0.0008	KV Cnc	58209.6143	10853	-0.0849	V	G. Samolyk	0.0015
ST Boo	58623.6140	63382	0.0997	V	T. Arranz	0.0009	KV Cnc	58210.6196	10855	-0.0836	V	G. Samolyk	0.0011
ST Boo	58625.4820	63385	0.1008	V	T. Arranz	0.0008	KV Cnc	58215.6385	10865	-0.0847	V	G. Samolyk	0.0010
ST Boo	58630.4560	63393	0.0965	V	T. Arranz	0.0009	KV Cnc	58554.5271	11540	-0.0461	V	T. Arranz	0.0034
ST Boo	58633.5660	63398	0.0950	V	T. Arranz	0.0007	KV Cnc	58594.6179	11620	-0.1153	V	G. Samolyk	0.0014
ST Boo	58635.4343	63401	0.0965	V	T. Arranz	0.0009	KV Cnc	58598.6396	11628	-0.1096	V	G. Samolyk	0.0015
ST Boo	58638.5423	63406	0.0930	V	T. Arranz	0.0008	SS CVn	58523.9042	39500	-0.3803	V	G. Samolyk	0.0015
ST Boo	58663.4283	63446	0.0874	V	T. Arranz	0.0009	RV Cap	58690.8487	55406	-0.1179	V	G. Samolyk	0.0011
SW Boo	58530.7109	31078	0.5246	V	T. Arranz	0.0009	RZ Cap	58688.7796	18214	0.0067	V	G. Samolyk	0.0018
SW Boo	58564.6062	31144	0.5271	V	T. Arranz	0.0009	VW Cap	58750.5996	106093	0.2134	V	G. Samolyk	0.0053
SW Boo	58565.6326	31146	0.5264	V	T. Arranz	0.0009	YZ Cap	58724.7574	54835	0.0402	V	G. Samolyk	0.0021
SW Boo	58601.5824	31216	0.5292	V	T. Arranz	0.0009	RR Cet	58782.7547	46293	0.0190	V	G. Samolyk	0.0011
SW Boo	58616.4785	31245	0.5330	V	T. Arranz	0.0008	RU Cet	58782.7381	32333	0.1359	V	G. Samolyk	0.0010
SZ Boo	58493.9310	59014	0.0123	V	G. Samolyk	0.0012	RV Cet	58730.8842	31468	0.2756	V	G. Samolyk	0.0021

Table continued on next page

Table 1. Recent times of maxima of stars in the AAVSO short period pulsator program, cont.

<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> <i>2400000+</i>	<i>Cycle</i>	<i>O-C</i> <i>(day)</i>	<i>F</i>	<i>Observer</i>	<i>Error</i> <i>(day)</i>	<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> <i>2400000+</i>	<i>Cycle</i>	<i>O-C</i> <i>(day)</i>	<i>F</i>	<i>Observer</i>	<i>Error</i> <i>(day)</i>
RX Cet	58764.8121	32489	0.3402	V	G. Samolyk	0.0007	RR Gem	58527.5161	43218	-0.6584	V	T. Arranz	0.0005
TY Cet	58849.6512	22932	-0.0185	V	G. Samolyk	0.0028	RR Gem	58529.5085	43223	-0.6526	V	T. Arranz	0.0006
UU Cet	58795.6527	29018	-0.1818	V	G. Samolyk	0.0016	RR Gem	58537.4547	43243	-0.6526	V	T. Arranz	0.0009
S Com	58566.6584	30536	-0.1162	TG	G. Conrad	0.0014	RR Gem	58550.5612	43276	-0.6573	V	K. Menzies	0.0006
XX Cyg	58645.6352	105218	0.0032	V	G. Samolyk	0.0005	RR Gem	58551.3567	43278	-0.6564	V	T. Arranz	0.0007
XX Cyg	58645.7712	105219	0.0044	V	G. Samolyk	0.0006	RR Gem	58553.3459	43283	-0.6538	V	T. Arranz	0.0009
XZ Cyg	58645.8523	31121	-2.7584	V	G. Samolyk	0.0008	RR Gem	58558.5084	43296	-0.6563	V	T. Arranz	0.0008
XZ Cyg	58660.7797	31153	-2.7654	V	G. Samolyk	0.0010	RR Gem	58566.4553	43316	-0.6556	V	T. Arranz	0.0009
XZ Cyg	58679.4337	31193	-2.7794	V	T. Arranz	0.0006	RR Gem	58568.4397	43321	-0.6578	V	T. Arranz	0.0006
XZ Cyg	58684.5659	31204	-2.7809	V	T. Arranz	0.0007	RR Gem	58570.4237	43326	-0.6604	V	T. Arranz	0.0006
XZ Cyg	58685.4999	31206	-2.7803	V	T. Arranz	0.0006	RR Gem	58572.4109	43331	-0.6597	V	T. Arranz	0.0006
XZ Cyg	58686.4348	31208	-2.7788	V	T. Arranz	0.0008	RR Gem	58576.3841	43341	-0.6596	V	T. Arranz	0.0006
XZ Cyg	58690.6399	31217	-2.7740	V	G. Samolyk	0.0011	GQ Gem	58489.7505	49360	-0.2117	V	K. Menzies	0.0019
XZ Cyg	58692.5048	31221	-2.7759	V	T. Arranz	0.0007	TW Her	58617.7149	92774	-0.0191	V	G. Samolyk	0.0007
XZ Cyg	58693.4373	31223	-2.7768	V	T. Arranz	0.0007	TW Her	58655.6762	92869	-0.0199	TG	G. Conrad	0.0009
XZ Cyg	58698.5696	31234	-2.7782	V	T. Arranz	0.0007	TW Her	58666.4669	92896	-0.0184	V	T. Arranz	0.0007
XZ Cyg	58699.5035	31236	-2.7777	V	T. Arranz	0.0007	TW Her	58682.4501	92936	-0.0192	V	T. Arranz	0.0007
XZ Cyg	58700.4387	31238	-2.7759	V	T. Arranz	0.0008	TW Her	58692.4405	92961	-0.0188	V	T. Arranz	0.0007
XZ Cyg	58707.4406	31253	-2.7745	V	T. Arranz	0.0007	TW Her	58694.4377	92966	-0.0196	V	T. Arranz	0.0006
XZ Cyg	58712.5700	31264	-2.7788	V	T. Arranz	0.0008	VX Her	58607.8138	80939	-0.0896	V	G. Samolyk	0.0006
XZ Cyg	58713.5021	31266	-2.7801	V	T. Arranz	0.0007	VX Her	58647.4307	81026	-0.0901	V	T. Arranz	0.0007
XZ Cyg	58797.4783	31446	-2.8099	V	K. Menzies	0.0009	VX Her	58657.4482	81048	-0.0908	V	T. Arranz	0.0006
XZ Cyg	58825.4843	31506	-2.8059	V	K. Menzies	0.0007	VX Her	58659.7241	81053	-0.0918	TG	G. Conrad	0.0011
DM Cyg	58672.7967	38323	0.0959	V	G. Samolyk	0.0013	VZ Her	58524.8936	49363	0.0900	V	K. Menzies	0.0006
DM Cyg	58675.7342	38330	0.0944	V	G. Samolyk	0.0009	VZ Her	58598.8697	49531	0.0910	V	G. Samolyk	0.0007
DM Cyg	58719.8183	38435	0.0932	TG	G. Conrad	0.0014	AR Her	58576.8644	36431	-1.0727	V	G. Samolyk	0.0009
DM Cyg	58729.4769	38458	0.0950	V	T. Arranz	0.0008	AR Her	58600.7949	36482	-1.1136	V	G. Samolyk	0.0019
DM Cyg	58750.4702	38508	0.0953	V	T. Arranz	0.0007	AR Her	58604.5818	36490	-1.0869	V	T. Arranz	0.0015
DM Cyg	58756.3489	38522	0.0960	V	T. Arranz	0.0009	AR Her	58614.4515	36511	-1.0878	V	T. Arranz	0.0009
DM Cyg	58758.4491	38527	0.0969	V	T. Arranz	0.0009	AR Her	58628.5133	36541	-1.1268	V	T. Arranz	0.0009
V2416 Cyg	58645.6336	90053	0.0000	V	G. Samolyk	0.0013	AR Her	58629.4523	36543	-1.1279	V	T. Arranz	0.0009
V2416 Cyg	58645.6896	90054	0.0001	V	G. Samolyk	0.0015	AR Her	58636.5462	36558	-1.0844	V	T. Arranz	0.0012
V2416 Cyg	58645.7467	90055	0.0013	V	G. Samolyk	0.0013	AR Her	58638.4341	36562	-1.0766	V	T. Arranz	0.0009
V2416 Cyg	58645.8019	90056	0.0006	V	G. Samolyk	0.0015	AR Her	58642.6647	36571	-1.0763	V	G. Samolyk	0.0011
V2416 Cyg	58645.8567	90057	-0.0005	V	G. Samolyk	0.0014	AR Her	58646.4136	36579	-1.0876	V	T. Arranz	0.0008
RW Dra	58608.6486	43419	0.2444	V	G. Samolyk	0.0016	AR Her	58675.5536	36641	-1.0893	V	T. Arranz	0.0011
RW Dra	58617.5269	43439	0.2643	V	T. Arranz	0.0011	DL Her	58607.8264	34480	0.0696	V	G. Samolyk	0.0017
RW Dra	58632.6034	43473	0.2817	V	T. Arranz	0.0007	DL Her	58651.5980	34554	0.0607	V	T. Arranz	0.0009
RW Dra	58633.4927	43475	0.2851	V	T. Arranz	0.0007	DL Her	58657.5065	34564	0.0529	V	T. Arranz	0.0009
RW Dra	58636.5881	43482	0.2801	V	T. Arranz	0.0007	DL Her	58663.4226	34574	0.0528	V	T. Arranz	0.0017
RW Dra	58660.4912	43536	0.2657	V	T. Arranz	0.0008	DY Her	58554.8817	168978	-0.0336	V	R. Sabo	0.0008
RW Dra	58668.4845	43554	0.2865	V	T. Arranz	0.0008	DY Her	58608.8336	169341	-0.0348	V	G. Samolyk	0.0007
RW Dra	58676.4579	43572	0.2874	V	T. Arranz	0.0007	SZ Hya	58533.7696	33234	-0.2839	V	G. Samolyk	0.0029
RW Dra	58684.4079	43590	0.2649	V	T. Arranz	0.0008	SZ Hya	58539.6924	33245	-0.2707	V	G. Samolyk	0.0009
RW Dra	58699.4630	43624	0.2608	V	T. Arranz	0.0011	SZ Hya	58546.6719	33258	-0.2753	V	G. Samolyk	0.0011
XZ Dra	58600.8965	34990	-0.1075	V	G. Samolyk	0.0016	SZ Hya	58553.6368	33271	-0.2946	V	G. Samolyk	0.0024
XZ Dra	58679.5213	35155	-0.1047	V	T. Arranz	0.0009	SZ Hya	58571.3831	33304	-0.2772	V	T. Arranz	0.0007
XZ Dra	58689.5225	35176	-0.1100	V	T. Arranz	0.0008	SZ Hya	58586.4212	33332	-0.2818	V	T. Arranz	0.0011
XZ Dra	58700.4856	35199	-0.1063	V	T. Arranz	0.0009	SZ Hya	58600.3970	33358	-0.2743	V	T. Arranz	0.0008
XZ Dra	58701.4359	35201	-0.1090	V	T. Arranz	0.0005	SZ Hya	58838.9297	33802	-0.2762	V	G. Samolyk	0.0015
XZ Dra	58709.5453	35218	-0.1000	V	T. Arranz	0.0007	UU Hya	58536.7642	36379	0.0127	V	G. Samolyk	0.0012
XZ Dra	58710.4978	35220	-0.1005	V	T. Arranz	0.0008	UU Hya	58561.3782	36426	0.0049	V	T. Arranz	0.0017
XZ Dra	58711.4512	35222	-0.1001	V	T. Arranz	0.0008	DG Hya	58508.8475	8133	0.0266	V	G. Samolyk	0.0017
XZ Dra	58712.4031	35224	-0.1012	V	T. Arranz	0.0007	DG Hya	58565.4188	8208	0.0297	V	T. Arranz	0.0015
XZ Dra	58730.5040	35262	-0.1072	V	T. Arranz	0.0011	DH Hya	58536.7866	55952	0.1153	V	G. Samolyk	0.0013
XZ Dra	58731.4561	35264	-0.1081	V	T. Arranz	0.0011	DH Hya	58576.3950	56033	0.1149	V	T. Arranz	0.0009
SV Eri	58504.5982	32154	1.0798	V	G. Samolyk	0.0021	RR Leo	58488.7563	33584	0.1777	V	N. Simmons	0.0007
BB Eri	58523.5443	33276	0.3275	V	G. Samolyk	0.0015	RR Leo	58530.8299	33677	0.1787	V	G. Samolyk	0.0008
BB Eri	58802.8001	33766	0.3332	V	G. Samolyk	0.0016	RR Leo	58537.6154	33692	0.1783	V	T. Arranz	0.0008
RR Gem	58488.5888	43120	-0.6493	V	T. Arranz	0.0009	RR Leo	58538.5196	33694	0.1777	V	T. Arranz	0.0007
RR Gem	58490.5723	43125	-0.6523	V	T. Arranz	0.0009	RR Leo	58542.5919	33703	0.1785	V	T. Arranz	0.0007
RR Gem	58493.7500	43133	-0.6531	V	G. Samolyk	0.0010	SS Leo	58255.4028	26302	-0.1087	V	T. Arranz	0.0011
RR Gem	58499.7054	43148	-0.6574	V	R. Sabo	0.0006	SS Leo	58542.8927	26761	-0.1108	V	G. Samolyk	0.0015
RR Gem	58520.3643	43200	-0.6586	V	T. Arranz	0.0005	SS Leo	58602.3949	26856	-0.1112	V	T. Arranz	0.0009
RR Gem	58522.3543	43205	-0.6552	V	T. Arranz	0.0007	SS Leo	58607.4042	26864	-0.1127	V	T. Arranz	0.0009
RR Gem	58526.3259	43215	-0.6567	V	T. Arranz	0.0005	SS Leo	58628.7011	26898	-0.1115	TG	G. Conrad	0.0015

Table continued on next page

Table 1. Recent times of maxima of stars in the AAVSO short period pulsator program, cont.

<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> 2400000+	<i>Cycle</i>	<i>O-C</i> <i>(day)</i>	<i>F</i>	<i>Observer</i>	<i>Error</i> <i>(day)</i>	<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> 2400000+	<i>Cycle</i>	<i>O-C</i> <i>(day)</i>	<i>F</i>	<i>Observer</i>	<i>Error</i> <i>(day)</i>
ST Leo	58542.7743	64060	-0.0180	V	G. Samolyk	0.0008	DY Peg	58725.6683	195041	-0.0201	V	G. Samolyk	0.0005
TV Leo	58593.6646	32031	0.1330	V	G. Samolyk	0.0013	DY Peg	58725.7411	195042	-0.0202	V	G. Samolyk	0.0004
TV Leo	58604.4259	32047	0.1286	V	T. Arranz	0.0011	DY Peg	58725.8149	195043	-0.0193	V	G. Samolyk	0.0005
WW Leo	58553.7721	39266	0.0557	V	G. Samolyk	0.0019	DY Peg	58725.8877	195044	-0.0194	V	G. Samolyk	0.0006
WW Leo	58563.4172	39282	0.0553	V	T. Arranz	0.0017	DY Peg	58760.6740	195521	-0.0189	V	G. Samolyk	0.0006
AA Leo	58539.8018	31643	-0.1155	V	G. Samolyk	0.0013	DY Peg	58760.7456	195522	-0.0202	V	G. Samolyk	0.0005
U Lep	58090.7627	28786	0.0428	V	G. Samolyk	0.0008	DF Ser	58617.7145	66039	0.1086	V	G. Samolyk	0.0010
U Lep	58839.7039	30074	0.0427	V	G. Samolyk	0.0012	RV UMa	58508.9687	28700	0.1357	V	G. Samolyk	0.0014
SZ Lyn	58487.7238	168941	0.0356	V	G. Samolyk	0.0006	RV UMa	58553.9010	28796	0.1342	V	G. Samolyk	0.0015
SZ Lyn	58523.5247	169238	0.0377	V	G. Samolyk	0.0009	RV UMa	58559.5171	28808	0.1336	V	T. Arranz	0.0008
SZ Lyn	58523.6440	169239	0.0364	V	G. Samolyk	0.0008	RV UMa	58562.7938	28815	0.1339	V	G. Samolyk	0.0011
SZ Lyn	58523.7652	169240	0.0371	V	G. Samolyk	0.0009	RV UMa	58567.4719	28825	0.1314	V	T. Arranz	0.0009
SZ Lyn	58551.6082	169471	0.0365	V	G. Samolyk	0.0007	RV UMa	58603.5177	28902	0.1366	V	T. Arranz	0.0009
SZ Lyn	58558.3589	169527	0.0373	V	T. Arranz	0.0006	RV UMa	58604.4544	28904	0.1372	V	T. Arranz	0.0009
SZ Lyn	58571.6179	169637	0.0375	TG	G. Conrad	0.0013	RV UMa	58618.4960	28934	0.1370	V	T. Arranz	0.0008
SZ Lyn	58788.9464	171440	0.0415	V	G. Samolyk	0.0009	RV UMa	58626.4524	28951	0.1363	V	T. Arranz	0.0007
RR Lyr	58617.7053	27687	-0.5817	V	G. Samolyk	0.0011	RV UMa	58632.5381	28964	0.1373	V	T. Arranz	0.0008
RR Lyr	58662.4808	27766	-0.5887	V	T. Arranz	0.0009	RV UMa	58656.4049	29015	0.1330	V	T. Arranz	0.0008
RR Lyr	58675.5186	27789	-0.5889	V	T. Arranz	0.0009	AE UMa	58531.4938	266542	-0.0021	V	T. Arranz	0.0004
RR Lyr	58704.4228	27840	-0.5949	V	T. Arranz	0.0009	AE UMa	58531.5839	266543	0.0020	V	T. Arranz	0.0005
RZ Lyr	58598.8245	34065	-0.0704	V	G. Samolyk	0.0008	AE UMa	58539.5862	266636	0.0047	V	T. Arranz	0.0005
RZ Lyr	58683.6881	34231	-0.0730	TG	G. Conrad	0.0019	AE UMa	58539.6667	266637	-0.0008	V	T. Arranz	0.0004
RZ Lyr	58697.4919	34258	-0.0728	V	T. Arranz	0.0007	LV UMa	57040.8748	0	0.0004	V	V. Petriew	0.0011
AV Peg	58695.8042	38182	0.2014	V	G. Samolyk	0.0008	LV UMa	57040.9114	1	0.0000	V	V. Petriew	0.0011
AV Peg	58720.3972	38245	0.2008	V	T. Arranz	0.0008	LV UMa	58562.6026	41128	-0.0018	V	G. Samolyk	0.0048
AV Peg	58750.4573	38322	0.2020	V	T. Arranz	0.0008	LV UMa	58838.8826	48595	0.0002	V	G. Samolyk	0.0028
AV Peg	58754.3623	38332	0.2033	V	T. Arranz	0.0007	LV UMa	58838.9215	48596	0.0021	V	G. Samolyk	0.0019
AV Peg	58770.3656	38373	0.2012	V	T. Arranz	0.0006	LV UMa	58838.9560	48597	-0.0004	V	G. Samolyk	0.0018
BH Peg	58845.5806	30391	-0.1177	V	G. Samolyk	0.0023	LV UMa	58838.9933	48598	-0.0001	V	G. Samolyk	0.0015
DY Peg	58725.5956	195040	-0.0198	V	G. Samolyk	0.0004							