

Recent Maxima of 55 Short Period Pulsating Stars

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Abstract This paper contains times of maxima for 55 short period pulsating stars (primarily RR Lyrae and δ Scuti stars). This represents the CCD observations received by the AAVSO Short Period Pulsator (SPP) section in 2011 along with some earlier data.

1. Recent observations

The accompanying list contains times of maxima calculated from CCD observations made by participants in the AAVSO's Short Period Pulsator (SPP) Section. This list will be web-archived and made available through the AAVSO ftp site at <ftp://ftp.aavso.org/public/datasets/jsamog402.txt>. These observations were reduced by the writer using the PERANSO program (Vanmunster 2007). Column F indicates the filter used. The error estimate is included.

RR Lyr stars in this list, along with data from earlier AAVSO publications, are included in the GEOS database at: http://rr-lyr.ast.obs-mip.fr/dbrr/dbrr-V1.0_0.php. This database does not include δ Scuti stars.

The linear elements in the *General Catalogue of Variable Stars* (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: VY CrB (Antipin 1996), AH Leo (Schmidt *et al.* 1995), VY LMi (Henden and Vidal-Sainz 1997), and GW UMA (Hintz *et al.* 2001).

References

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Kholopov, P. N., *et al.* 1985, *General Catalogue of Variable Stars*, 4th ed., Moscow.
Schmidt, E. G., Chab, J. R., and Reiswig, D. E. 1995, *Astron. J.*, **109**, 1239.
Vanmunster, T. 2007, PERANSO period analysis software, <http://www.peranso.com>

Table 1. Recent times of maxima of stars in the AAVSO RR Lyrae program.

<i>Star</i>	<i>JD(max)</i> <i>Hel.</i> 2400000 +	<i>Cycle</i>	<i>O-C</i>	<i>F</i>	<i>Observer</i>	<i>Error</i>
SW And	55786.7504	85137	-0.3869	V	R. Sabo	0.0009
SW And	55793.8288	85153	-0.3850	V	R. Sabo	0.0014
SW And	55815.9392	85203	-0.3886	V	R. Sabo	0.0014
SW And	55827.8846	85230	-0.3847	V	R. Sabo	0.0023
SW And	55844.6873	85268	-0.3887	V	K. Menzies	0.0006
SW And	55852.6494	85286	-0.3876	V	R. Sabo	0.0015
SW And	55874.7608	85336	-0.3902	V	R. Sabo	0.0012
XX And	55796.8764	23120	-0.4746	V	R. Sabo	0.0020
XX And	55833.7370	23171	-0.4741	V	R. Sabo	0.0015
ZZ And	55891.6583	56017	0.0266	V	K. Menzies	0.0009
AT And	55808.8146	21827	-0.0041	V	R. Sabo	0.0025
AT And	55832.8716	21866	-0.0068	V	R. Sabo	0.0020
AT And	55847.6745	21890	-0.0099	V	R. Sabo	0.0026
AT And	55868.6556	21924	-0.0039	V	R. Sabo	0.0026
AT And	55889.6287	21958	-0.0059	V	N. Simmons	0.0020
DM And	55857.7959	31949	0.0667	V	K. Menzies	0.0018
SW Aqr	55777.9087	66798	-0.0022	V	R. Sabo	0.0007
SW Aqr	55790.7716	66826	0.0002	V	R. Sabo	0.0009
SW Aqr	55806.8453	66861	-0.0017	V	R. Sabo	0.0010
SW Aqr	55836.7000	66926	-0.0017	V	R. Sabo	0.0010
AA Aqr	55824.7823	57607	-0.1347	V	R. Sabo	0.0015
TZ Aur	55844.8578	91766	0.0127	V	K. Menzies	0.0006
TZ Aur	55844.8597	91766	0.0146	V	G. Samolyk	0.0011
TZ Aur	55869.9259	91830	0.0136	V	R. Sabo	0.0009
BH Aur	55596.4980	28163	-0.0010	V	K. Menzies	0.0012
BH Aur	55835.9501	28688	0.0039	V	R. Sabo	0.0014
BH Aur	55872.8920	28769	0.0025	V	K. Menzies	0.0009
BH Aur	55919.8685	28872	0.0018	V	R. Sabo	0.0012
NU Aur	55575.6370	30616	0.2937	V	K. Menzies	0.0020
NU Aur	55576.7099	30618	0.2878	V	K. Menzies	0.0023
NU Aur	55589.6434	30642	0.2753	V	K. Menzies	0.0031
NU Aur	55857.7213	31139	0.2631	V	K. Menzies	0.0013
RS Boo	55683.7390	36872	0.0069	V	K. Menzies	0.0015
RS Boo	55762.6015	37081	0.0055	V	K. Menzies	0.0006
ST Boo	54957.6753	57491	0.0754	V	R. Poklar	0.0018
ST Boo	55748.6354	58762	0.1041	V	K. Menzies	0.0015
ST Boo	55759.8333	58780	0.1007	V	R. Sabo	0.0013
ST Boo	55791.5561	58831	0.0867	V	K. Menzies	0.0010

Table continued on following pages

Table 1. Recent times of maxima of stars in the AAVSO RR Lyrae program, cont.

<i>Star</i>	<i>JD(max)</i>	<i>Cycle</i>	<i>O-C</i>	<i>F</i>	<i>Observer</i>	<i>Error</i>
	<i>Hel.</i> 2400000 +					
SZ Boo	55624.6954	53526	0.0118	V	K. Menzies	0.0020
TV Boo	55666.7388	99364	0.0756	V	R. Poklar	0.0014
TV Boo	55743.6272	99610	0.0744	V	K. Menzies	0.0021
TW Boo	55746.7935	54212	-0.0665	V	R. Sabo	0.0008
UU Boo	55647.6959	42815	0.2347	V	K. Menzies	0.0014
UY Cam	55905.759	76170	-0.095	V	G. Samolyk	0.004
RW Cnc	55596.5712	29314	-0.3343	V	K. Menzies	0.0024
RW Cnc	55906.8342	29881	-0.3331	V	G. Samolyk	0.0015
TT Cnc	55615.7041	27813	0.1189	V	R. Poklar	0.0012
TT Cnc	55914.8750	28344	0.0982	V	K. Menzies	0.0012
RR Cet	55826.8102	40948	0.0099	V	R. Sabo	0.0020
RR Cet	55852.8042	40995	0.0116	V	R. Sabo	0.0013
RR Cet	55913.6401	41105	0.0144	V	R. Sabo	0.0020
RU Cet	55897.6386	27412	0.1202	V	R. Sabo	0.0037
RZ Cet	55875.7351	43025	-0.1840	V	R. Sabo	0.0025
RZ Cet	55896.6656	43066	-0.1885	V	R. Poklar	0.0021
TU Com	55628.6952	57760	0.1216	V	K. Menzies	0.0023
TU Com	55648.5661	57803	0.1347	V	K. Menzies	0.0018
TU Com	55719.6807	57957	0.1307	V	K. Menzies	0.0019
VY CrB	55760.8200	30207	-0.1321	V	R. Sabo	0.0019
XX Cyg	55798.6319	84108	0.0025	V	K. Menzies	0.0004
XZ Cyg	55740.7980	24895	-2.1385	V	N. Simmons	0.0011
DM Cyg	55772.7961	31416	0.0683	V	R. Sabo	0.0010
DM Cyg	55785.8154	31447	0.0720	V	R. Sabo	0.0015
DM Cyg	55797.5700	31475	0.0705	V	K. Menzies	0.0008
DM Cyg	55803.8663	31490	0.0689	V	R. Sabo	0.0011
DM Cyg	55809.7499	31504	0.0745	V	R. Sabo	0.0012
DM Cyg	55825.6998	31542	0.0697	V	R. Sabo	0.0012
DM Cyg	55835.7749	31566	0.0681	V	R. Sabo	0.0011
DM Cyg	55852.5725	31606	0.0713	V	K. Menzies	0.0009
DM Cyg	55862.6500	31630	0.0722	V	R. Sabo	0.0013
DM Cyg	55875.6641	31661	0.0706	V	R. Sabo	0.0009
RW Dra	55754.8872	36976	0.1972	V	R. Sabo	0.0008
RW Dra	55767.7599	37005	0.2253	V	R. Sabo	0.0006
RW Dra	55814.7015	37111	0.2177	V	R. Sabo	0.0006
RW Dra	55825.7456	37136	0.1889	V	R. Sabo	0.0009
RW Dra	55829.7266	37145	0.1836	V	R. Sabo	0.0013
RW Dra	55833.7180	37154	0.1888	V	R. Sabo	0.0013

Table continued on following pages

Table 1. Recent times of maxima of stars in the AAVSO RR Lyrae program, cont.

<i>Star</i>	<i>JD(max)</i> <i>Hel.</i> 2400000 +	<i>Cycle</i>	<i>O-C</i>	<i>F</i>	<i>Observer</i>	<i>Error</i>
RW Dra	55865.6079	37226	0.1887	V	R. Sabo	0.0013
RW Dra	55873.5769	37244	0.1852	V	R. Sabo	0.0009
XZ Dra	55733.7791	28973	-0.1425	V	K. Menzies	0.0013
XZ Dra	55794.7806	29101	-0.1326	V	K. Menzies	0.0007
XZ Dra	55847.6739	29212	-0.1305	V	R. Sabo	0.0017
XZ Dra	55874.8360	29269	-0.1287	V	R. Sabo	0.0024
RR Gem	55563.3943	35757	-0.4458	V	M. Martinengo	0.0009
RR Gem	55575.7103	35788	-0.4465	V	R. Poklar	0.0008
RR Gem	55584.4513	35810	-0.4463	V	M. Martinengo	0.0008
RR Gem	55586.4336	35815	-0.4505	V	A. Marchini	0.0005
RR Gem	55596.7671	35841	-0.4471	V	G. Samolyk	0.0008
RR Gem	55603.5197	35858	-0.4488	V	K. Menzies	0.0009
RR Gem	55603.5198	35858	-0.4487	V	N. Simmons	0.0009
RR Gem	55833.9453	36438	-0.4633	V	R. Sabo	0.0010
RR Gem	55862.9464	36511	-0.4659	V	R. Sabo	0.0010
RR Gem	55868.9045	36526	-0.4675	V	R. Sabo	0.0009
RR Gem	55901.8832	36609	-0.4656	V	R. Sabo	0.0010
RR Gem	55915.7883	36644	-0.4663	V	R. Sabo	0.0012
GQ Gem	55578.7200	44258	-0.1941	V	K. Menzies	0.0019
GQ Gem	55605.5376	44305	-0.1932	V	K. Menzies	0.0023
TW Her	55741.7979	85577	-0.0142	V	R. Sabo	0.0007
TW Her	55761.7789	85627	-0.0132	V	R. Sabo	0.0006
TW Her	55775.7646	85662	-0.0135	V	R. Sabo	0.0006
TW Her	55797.7417	85717	-0.0144	V	R. Sabo	0.0010
TW Her	55823.7159	85782	-0.0142	V	R. Sabo	0.0006
TW Her	55872.4671	85904	-0.0142	V	K. Menzies	0.0005
VX Her	55767.7440	74702	0.0009	V	R. Sabo	0.0010
VX Her	55798.7055	74770	-0.0030	V	R. Sabo	0.0009
VZ Her	55751.6914	43065	0.0728	V	N. Simmons	0.0010
AR Her	55757.8655	30434	-1.3137	V	R. Sabo	0.0023
AR Her	55798.7326	30521	-1.3390	V	R. Sabo	0.0010
AR Her	55806.7177	30538	-1.3444	V	R. Sabo	0.0012
DL Her	55785.7309	29710	0.0390	V	R. Sabo	0.0016
DY Her	55745.7557	150078	-0.0270	V	R. Sabo	0.0007
DY Her	55761.8064	150186	-0.0285	V	R. Sabo	0.0011
DY Her	55777.7105	150293	-0.0279	V	R. Sabo	0.0006
LS Her	55786.6014	120367	0.0228	V	K. Menzies	0.0020
SZ Hya	55611.7238	27795	-0.2801	V	G. Samolyk	0.0021

Table continued on following pages

Table 1. Recent times of maxima of stars in the AAVSO RR Lyrae program, cont.

<i>Star</i>	<i>JD(max)</i>	<i>Cycle</i>	<i>O-C</i>	<i>F</i>	<i>Observer</i>	<i>Error</i>
	<i>Hel.</i> 2400000 +					
SZ Hya	55624.6736	27819	-0.2241	V	R. Poklar	0.0010
SZ Hya	55639.6686	27847	-0.2718	V	G. Samolyk	0.0026
SZ Hya	55653.6876	27873	-0.2211	V	R. Poklar	0.0012
UU Hya	55649.7164	30868	0.0036	V	R. Poklar	0.0011
DH Hya	55648.7256	50046	0.0777	V	R. Poklar	0.0009
RR Leo	55604.6817	27209	0.1104	V	R. Poklar	0.0009
RR Leo	55666.6594	27346	0.1102	V	K. Menzies	0.0013
RR Leo	55905.9802	27875	0.1150	V	G. Samolyk	0.0014
TV Leo	55635.7908	27635	0.1192	V	G. Samolyk	0.0014
TV Leo	55664.7188	27678	0.1145	V	R. Poklar	0.0018
WW Leo	55567.8683	34313	0.0446	V	K. Menzies	0.0027
WW Leo	55648.6415	34447	0.0365	V	G. Samolyk	0.0018
WW Leo	55648.6480	34447	0.0430	V	K. Menzies	0.0039
AA Leo	54196.5951	24388	-0.0751	V	G. Lubcke	0.0013
AH Leo	55576.8477	14856	0.0293	V	K. Menzies	0.0018
VY LMi	55565.8731	9652	0.0049	V	K. Menzies	0.0011
VY LMi	55603.7593	9724	0.0086	V	K. Menzies	0.0024
SZ Lyn	55838.8355	146965	0.0227	V	G. Samolyk	0.0014
SZ Lyn	55875.8397	147272	0.0227	V	R. Sabo	0.0008
SZ Lyn	55890.9069	147397	0.0231	V	G. Samolyk	0.0007
SZ Lyn	55921.7637	147653	0.0229	V	N. Simmons	0.0008
SZ Lyn	55921.8832	147654	0.0219	V	N. Simmons	0.0010
RZ Lyr	55747.6734	28488	-0.0232	V	G. Samolyk	0.0013
RZ Lyr	55756.8719	28506	-0.0271	V	R. Sabo	0.0012
RZ Lyr	55770.6657	28533	-0.0368	V	K. Menzies	0.0019
RZ Lyr	55771.6878	28535	-0.0372	V	R. Sabo	0.0007
RZ Lyr	55777.8244	28547	-0.0355	V	R. Sabo	0.0009
RZ Lyr	55793.6703	28578	-0.0381	V	R. Sabo	0.0012
RZ Lyr	55816.6874	28623	-0.0270	V	R. Sabo	0.0017
RZ Lyr	55837.6507	28664	-0.0246	V	R. Sabo	0.0008
RZ Lyr	55862.7012	28713	-0.0250	V	R. Sabo	0.0017
CX Lyr	55745.7667	36772	1.1336	V	R. Sabo	0.0025
AV Peg	55744.8970	30623	0.1366	V	R. Sabo	0.0015
AV Peg	55760.9014	30664	0.1356	V	R. Sabo	0.0011
AV Peg	55771.8337	30692	0.1374	V	R. Sabo	0.0011
AV Peg	55792.9147	30746	0.1382	V	R. Sabo	0.0010
AV Peg	55798.7691	30761	0.1370	V	K. Menzies	0.0009
AV Peg	55807.7492	30784	0.1384	V	R. Sabo	0.0010

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Table 1. Recent times of maxima of stars in the AAVSO RR Lyrae program, cont.

<i>Star</i>	<i>JD(max)</i> <i>Hel.</i> 2400000 +	<i>Cycle</i>	<i>O-C</i>	<i>F</i>	<i>Observer</i>	<i>Error</i>
AV Peg	55823.7558	30825	0.1397	V	R. Sabo	0.0013
AV Peg	55832.7326	30848	0.1379	V	R. Sabo	0.0010
AV Peg	55864.7437	30930	0.1382	V	R. Sabo	0.0008
AV Peg	55868.6454	30940	0.1362	V	K. Menzies	0.0012
AV Peg	55872.5512	30950	0.1382	V	K. Menzies	0.0006
BH Peg	53952.8716	22758	-0.1271	V	G. Samolyk	0.0027
BH Peg	54372.7303	23413	-0.1188	V	G. Samolyk	0.0023
BH Peg	55759.8356	25577	-0.1224	V	R. Sabo	0.0017
BH Peg	55825.8398	25680	-0.1404	V	R. Sabo	0.0017
BH Peg	55834.8125	25694	-0.1416	V	R. Sabo	0.0024
RV UMa	54219.6391	19536	0.1079	V	G. Lubcke	0.0013
RV UMa	55607.9182	22502	0.1211	V	G. Samolyk	0.0017
RV UMa	55634.6024	22559	0.1259	V	N. Simmons	0.0011
RV UMa	55634.6039	22559	0.1274	V	G. Samolyk	0.0015
RV UMa	55763.7830	22835	0.1219	V	R. Sabo	0.0013
RV UMa	55807.7821	22929	0.1234	V	R. Sabo	0.0024
AE UMa	55584.5518	232282	0.0002	V	G. Samolyk	0.0006
AE UMa	55584.6348	232283	-0.0028	V	G. Samolyk	0.0007
AE UMa	55584.7285	232284	0.0049	V	G. Samolyk	0.0011
AE UMa	55584.8102	232285	0.0006	V	G. Samolyk	0.0006
AE UMa	55584.8936	232286	-0.0020	V	G. Samolyk	0.0005
AE UMa	55584.9814	232287	-0.0003	V	G. Samolyk	0.0008
AE UMa	55890.7752	235842	0.0029	V	G. Samolyk	0.0004
AE UMa	55890.8557	235843	-0.0026	V	G. Samolyk	0.0007
AE UMa	55890.9446	235844	0.0003	V	G. Samolyk	0.0007
AE UMa	55907.7213	236039	0.0037	V	G. Samolyk	0.0009
AE UMa	55907.8063	236040	0.0026	V	G. Samolyk	0.0006
AE UMa	55907.8872	236041	-0.0025	V	G. Samolyk	0.0007
GW UMa	55921.7701	19301	0.0021	V	G. Samolyk	0.0013
GW UMa	55921.9671	19302	-0.0041	V	G. Samolyk	0.0011