

Recent Maxima of 74 Short Period Pulsating Stars

Gerard Samolyk

P.O. Box 20677, Greenfield, WI 53220; gsamolyk@wi.rr.com

Received January 12, 2016; accepted January 15, 2016

Abstract This paper contains times of maxima for 74 short period pulsating stars (primarily RR Lyrae and δ Scuti stars). These maxima represent the CCD observations received by the AAVSO Short Period Pulsator (SPP) section in 2015.

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/gsamoj441.txt>. 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. These observations were reduced by the writer using the PERANSO program (Vanmunster 2007). Column F indicates the filter used.

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: RZ Cap and DG Hya (Samolyk 2010), and VY LMi (Henden and Vidal-Sainz 1997).

References

Henden, A. A., and Vidal-Sainz, J. 1997, *Inf. Bull. Var. Stars.*, No. 4535, 1.
 Kholopov, P. N., *et al.* 1985, *General Catalogue of Variable Stars*, 4th ed., Moscow.
 Samolyk, G., 2010, *J. Amer. Assoc. Var. Stars*, **38**, 12 .
 Vanmunster, T. 2007, PERANSO period analysis software (<http://www.peranso.com>).

Table 1. Recent times of maxima of stars in the AAVSO Short Period Pulsator program.

<i>Star</i>	<i>JD (max)</i>	<i>Cycle</i>	<i>O–C</i>	<i>F</i>	<i>Observer</i>	<i>Error</i>	<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>							<i>Hel.</i>					
	2400000+							2400000+					
SW And	57026.4074	87940	-0.4393	V	T. Arranz	0.0008	AC And	57288.5955	47267	0.0555	V	T. Arranz	0.0027
SW And	57244.8804	88434	-0.4523	V	R. Sabo	0.0012	AC And	57293.6090	47277	-0.1823	V	T. Arranz	0.0008
SW And	57249.7483	88445	-0.4495	V	K. Menzies	0.0009	AC And	57298.4451	47286	-0.0723	V	T. Arranz	0.0025
SW And	57274.5161	88501	-0.4493	V	T. Arranz	0.0007	AC And	57306.3076	47301	-0.0867	V	T. Arranz	0.0007
SW And	57285.5713	88526	-0.4511	V	T. Arranz	0.0006	AC And	57310.5470	47309	-0.0484	V	T. Arranz	0.0016
SW And	57289.5515	88535	-0.4514	V	T. Arranz	0.0006	AC And	57353.4432	47391	-0.2126	V	T. Arranz	0.0008
SW And	57292.6472	88542	-0.4517	V	T. Arranz	0.0007	AT And	57233.8809	24137	-0.0109	V	R. Sabo	0.0021
SW And	57296.6273	88551	-0.4521	V	T. Arranz	0.0007	AT And	57284.4737	24219	-0.0051	V	T. Arranz	0.0013
SW And	57297.5130	88553	-0.4510	V	T. Arranz	0.0006	AT And	57287.5537	24224	-0.0097	V	T. Arranz	0.0010
SW And	57309.4535	88580	-0.4520	V	T. Arranz	0.0006	AT And	57305.4448	24253	-0.0091	V	T. Arranz	0.0014
SW And	57311.6642	88585	-0.4527	V	T. Arranz	0.0007	AT And	57334.4434	24300	-0.0055	V	T. Arranz	0.0011
SW And	57314.7610	88592	-0.4519	V	N. Simmons	0.0007	AT And	57355.4153	24334	-0.0087	V	T. Arranz	0.0011
SW And	57334.6620	88637	-0.4534	V	G. Samolyk	0.0009	DY And	57331.7137	35251	-0.1721	V	K. Menzies	0.0016
SW And	57340.4117	88650	-0.4534	V	T. Arranz	0.0006	SW Aqr	57321.6261	70159	-0.0028	V	G. Samolyk	0.0008
SW And	57347.3755	88666	-0.5660	V	T. Arranz	0.0005	SW Aqr	57321.6264	70159	-0.0025	V	N. Simmons	0.0008
SW And	57351.3525	88675	-0.5696	V	T. Arranz	0.0005	TZ Aqr	57256.8294	34503	0.0125	V	G. Samolyk	0.0015
SW And	57356.3330	88686	-0.4541	V	T. Arranz	0.0007	YZ Aqr	57307.6553	39757	0.0698	V	G. Samolyk	0.0012
SW And	57360.3139	88695	-0.4537	V	T. Arranz	0.0006	AA Aqr	57336.6354	60090	-0.1557	V	G. Samolyk	0.0013
XX And	57283.5870	25176	0.2678	V	T. Arranz	0.0011	BO Aqr	57314.6034	22612	0.2028	V	G. Samolyk	0.0015
XX And	57291.5388	25187	0.2694	V	T. Arranz	0.0011	BR Aqr	57279.7933	40765	-0.2028	V	G. Samolyk	0.001
XX And	57304.5466	25205	0.2677	V	T. Arranz	0.0008	CY Aqr	57285.3473	376434	0.0139	V	T. Arranz	0.0002
XX And	57309.6072	25212	0.2691	V	T. Arranz	0.0009	CY Aqr	57285.4083	376435	0.0139	V	T. Arranz	0.0002
XX And	57335.6281	25248	0.2711	V	N. Simmons	0.0011	CY Aqr	57287.3616	376467	0.0139	V	T. Arranz	0.0002
XX And	57335.6282	25248	0.2712	B	N. Simmons	0.0012	CY Aqr	57297.6160	376635	0.0140	V	G. Samolyk	0.0005
XX And	57359.4753	25281	0.2676	V	T. Arranz	0.0011	CY Aqr	57297.6773	376636	0.0142	V	G. Samolyk	0.0005
ZZ And	57335.6639	58621	0.0294	V	R. Sabo	0.0019	CY Aqr	57312.5702	376880	0.0138	V	G. Samolyk	0.0006
AC And	57229.5789	47155	-0.1469	V	T. Arranz	0.0007	CY Aqr	57312.6315	376881	0.0140	V	G. Samolyk	0.0004
AC And	57239.5589	47174	-0.1443	V	T. Arranz	0.0014	CY Aqr	57312.6929	376882	0.0144	V	G. Samolyk	0.0004
AC And	57251.5989	47197	-0.1823	V	T. Arranz	0.0008	CY Aqr	57312.7536	376883	0.0140	V	G. Samolyk	0.0005
AC And	57261.5954	47216	-0.1632	V	T. Arranz	0.0009	CY Aqr	57334.5440	377240	0.0137	V	G. Samolyk	0.0005

Table continued on following pages

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>F</i>	<i>Observer</i>	<i>Error</i>	<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> <i>2400000+</i>	<i>Cycle</i>	<i>O-C</i>	<i>F</i>	<i>Observer</i>	<i>Error</i>
CY Aqr	57334.6052	377241	0.0139	V	G. Samolyk	0.0005	RR Cet	57335.4765	43676	0.0155	V	T. Arranz	0.0006
CY Aqr	57334.6665	377242	0.0141	V	G. Samolyk	0.0005	RV Cet	57320.7192	29206	0.2482	V	G. Samolyk	0.0014
DN Aqr	57280.7810	45531	0.0476	V	G. Samolyk	0.0025	RZ Cet	56619.6737	44482	-0.2052	V	N. Simmons	0.0012
SY Ari	55963.5040	35043	-0.0618	V	K. Menzies	0.0013	RZ Cet	57278.8652	45773	-0.2122	V	R. Sabo	0.0023
SY Ari	57341.6633	37475	-0.0719	V	K. Menzies	0.0015	UU Cet	57335.6180	26609	-0.1673	V	G. Samolyk	0.0018
TZ Aur	57072.3690	94900	0.0156	V	T. Arranz	0.0009	XX Cyg	57205.6816	94541	0.0045	V	G. Samolyk	0.0006
TZ Aur	57079.4174	94918	0.0139	V	T. Arranz	0.0006	XX Cyg	57205.8164	94542	0.0044	V	G. Samolyk	0.0006
TZ Aur	57081.3750	94923	0.0131	V	T. Arranz	0.0004	XX Cyg	57223.6182	94674	0.0040	V	G. Samolyk	0.0006
TZ Aur	57082.5508	94926	0.0139	V	K. Menzies	0.0006	XX Cyg	57223.7545	94675	0.0054	V	G. Samolyk	0.0007
TZ Aur	57090.3848	94946	0.0144	V	T. Arranz	0.0006	XX Cyg	57223.8871	94676	0.0032	V	G. Samolyk	0.0009
TZ Aur	57092.3445	94951	0.0157	V	T. Arranz	0.0006	XX Cyg	57233.7324	94749	0.0033	V	R. Sabo	0.0005
TZ Aur	57330.8739	95560	0.0153	V	G. Samolyk	0.0007	XX Cyg	57257.6044	94926	0.0042	V	N. Simmons	0.0008
BH Aur	56563.8698	30284	0.0043	V	N. Simmons	0.0011	XX Cyg	57271.7641	95031	0.0030	V	K. Menzies	0.0004
BH Aur	57021.3313	31287	0.0077	V	T. Arranz	0.0014	XX Cyg	57348.6377	95601	0.0035	V	R. Sabo	0.0006
BH Aur	57063.2880	31379	0.0042	V	T. Arranz	0.0009	XZ Cyg	53798.8304	20733	-1.7007	V	H. Smith	0.0014
BH Aur	57073.3237	31401	0.0059	V	T. Arranz	0.0008	XZ Cyg	53890.7413	20930	-1.7297	V	H. Smith	0.0011
BH Aur	57081.5323	31419	0.0049	V	K. Menzies	0.0011	XZ Cyg	54226.7001	21650	-1.7949	V	H. Smith	0.0009
BH Aur	57088.3743	31434	0.0055	V	T. Arranz	0.0008	XZ Cyg	54232.7615	21663	-1.8006	V	H. Smith	0.0013
BH Aur	57098.4077	31456	0.0050	V	T. Arranz	0.0008	XZ Cyg	54248.6236	21697	-1.8063	V	H. Smith	0.002
BH Aur	57109.3525	31480	0.0036	V	T. Arranz	0.0005	XZ Cyg	54260.7615	21723	-1.8026	V	H. Smith	0.0012
BH Aur	57303.6476	31906	0.0044	V	T. Arranz	0.0007	XZ Cyg	54266.8329	21736	-1.7983	V	H. Smith	0.0015
BH Aur	57311.8584	31924	0.0056	V	R. Sabo	0.0012	XZ Cyg	54300.4115	21808	-1.8221	V	H. Smith	0.0019
BH Aur	57333.7509	31972	0.0058	V	N. Simmons	0.0011	XZ Cyg	57201.7276	28026	-2.4466	V	G. Samolyk	0.0015
BH Aur	57334.6571	31974	-0.0002	V	T. Arranz	0.0008	XZ Cyg	57210.5945	28045	-2.4470	V	T. Arranz	0.0006
BH Aur	57335.5732	31976	0.0038	V	T. Arranz	0.0007	XZ Cyg	57212.4630	28049	-2.4453	V	T. Arranz	0.0007
RS Boo	57090.8236	40601	-0.0055	V	G. Samolyk	0.0014	XZ Cyg	57218.5247	28062	-2.4507	V	T. Arranz	0.0005
RS Boo	57093.8382	40609	-0.0096	V	K. Menzies	0.0007	XZ Cyg	57223.6572	28073	-2.4519	V	G. Samolyk	0.0006
RS Boo	57143.6490	40741	-0.0076	V	N. Simmons	0.0009	XZ Cyg	57226.4542	28079	-2.4551	V	T. Arranz	0.0008
RS Boo	57204.4047	40902	-0.0034	V	T. Arranz	0.0007	XZ Cyg	57227.8534	28082	-2.4560	V	G. Samolyk	0.0009
RS Boo	57207.4251	40910	-0.0018	V	T. Arranz	0.0007	XZ Cyg	57231.5857	28090	-2.4573	V	T. Arranz	0.0005
RS Boo	57210.4400	40918	-0.0056	V	T. Arranz	0.0008	XZ Cyg	57232.5192	28092	-2.4572	V	T. Arranz	0.0006
RS Boo	57227.4185	40963	-0.0073	V	T. Arranz	0.0006	XZ Cyg	57235.7835	28099	-2.4598	V	G. Samolyk	0.0009
ST Boo	57090.9171	60919	0.1047	V	G. Samolyk	0.0015	XZ Cyg	57236.7179	28101	-2.4588	V	K. Menzies	0.0013
ST Boo	57194.8291	61086	0.0942	V	R. Sabo	0.0014	XZ Cyg	57245.5791	28120	-2.4649	V	T. Arranz	0.0005
ST Boo	57208.5146	61108	0.0893	V	T. Arranz	0.001	XZ Cyg	57250.7162	28131	-2.4615	V	G. Samolyk	0.0011
ST Boo	57213.4900	61116	0.0864	V	T. Arranz	0.0007	XZ Cyg	57256.7827	28144	-2.4621	V	G. Samolyk	0.0012
ST Boo	57223.4445	61132	0.0842	V	T. Arranz	0.0008	XZ Cyg	57258.6521	28148	-2.4595	V	G. Samolyk	0.0008
ST Boo	57244.6013	61166	0.0831	V	K. Menzies	0.0014	XZ Cyg	57261.4535	28154	-2.4583	V	T. Arranz	0.0005
ST Boo	57246.4672	61169	0.0822	V	T. Arranz	0.0012	XZ Cyg	57276.3848	28186	-2.4614	V	T. Arranz	0.0005
SW Boo	57096.8545	28286	0.4387	V	G. Samolyk	0.0015	XZ Cyg	57279.6457	28193	-2.4674	V	H. Smith	0.0006
SZ Boo	57039.9653	56233	0.0085	V	K. Menzies	0.0008	XZ Cyg	57280.5783	28195	-2.4682	V	H. Smith	0.0006
SZ Boo	57125.7074	56397	0.0081	V	K. Menzies	0.0008	XZ Cyg	57289.4390	28214	-2.4748	V	T. Arranz	0.0006
TV Boo	57140.8047	104080	0.1115	V	G. Samolyk	0.0014	XZ Cyg	57290.3716	28216	-2.4756	V	T. Arranz	0.0006
TV Boo	57211.4308	104306	0.0992	V	T. Arranz	0.0014	XZ Cyg	57304.3747	28246	-2.4735	V	T. Arranz	0.0006
TW Boo	57116.8461	56786	-0.0850	V	G. Samolyk	0.0010	XZ Cyg	57311.3809	28261	-2.4678	V	T. Arranz	0.0005
UU Boo	57050.0340	45884	0.2838	V	R. Sabo	0.0007	XZ Cyg	57321.6419	28283	-2.4742	V	H. Smith	0.0007
UU Boo	57208.5924	46231	0.2908	V	K. Menzies	0.0009	DM Cyg	57209.5699	34838	0.0812	V	T. Arranz	0.0007
UY Boo	57139.7294	23513	0.9168	V	G. Samolyk	0.0011	DM Cyg	57214.6090	34850	0.0820	V	T. Arranz	0.0006
UY Cam	57329.9001	81503	-0.0907	V	G. Samolyk	0.0022	DM Cyg	57225.5278	34876	0.0844	V	T. Arranz	0.0007
RW Cnc	57043.9135	31958	0.2139	V	K. Menzies	0.0008	DM Cyg	57227.6242	34881	0.0815	V	T. Arranz	0.0006
RW Cnc	57053.7670	31976	0.2178	V	G. Samolyk	0.0011	DM Cyg	57228.4655	34883	0.0831	V	T. Arranz	0.0007
RW Cnc	57159.3749	32169	0.2163	V	T. Arranz	0.0006	DM Cyg	57230.5628	34888	0.0811	V	T. Arranz	0.0006
RW Cnc	57350.8953	32519	0.2170	V	K. Menzies	0.0007	DM Cyg	57237.7006	34905	0.0813	V	R. Sabo	0.0012
TT Cnc	57094.7530	30438	0.1132	V	R. Sabo	0.0015	DM Cyg	57240.6384	34912	0.0801	V	T. Arranz	0.0007
VZ Cnc	57053.7121	96187	0.0179	V	G. Samolyk	0.0007	DM Cyg	57241.4780	34914	0.0800	V	T. Arranz	0.0008
VZ Cnc	57348.8965	97842	0.0104	V	R. Sabo	0.0018	DM Cyg	57243.5797	34919	0.0824	V	T. Arranz	0.0008
KV Cnc	57149.3802	8741	-0.0950	V	T. Arranz	0.0007	DM Cyg	57253.6521	34943	0.0781	V	T. Arranz	0.0006
KV Cnc	57150.3919	8743	-0.0873	V	T. Arranz	0.0008	DM Cyg	57262.4737	34964	0.0827	V	T. Arranz	0.0009
KV Cnc	57154.4195	8751	-0.0757	V	T. Arranz	0.0008	DM Cyg	57267.5116	34976	0.0822	V	T. Arranz	0.0007
SS CVn	57087.8880	36499	-0.3550	V	G. Samolyk	0.0011	RW Dra	57093.8790	39999	0.2509	V	K. Menzies	0.0015
SS CVn	57114.6769	36555	-0.3633	V	K. Menzies	0.0010	RW Dra	57211.6904	40265	0.2464	V	G. Samolyk	0.0015
RV Cap	57313.6517	52330	-0.0543	V	G. Samolyk	0.0009	RW Dra	57217.4575	40278	0.2556	V	T. Arranz	0.0007
RZ Cap	57256.7768	14643	0.0006	V	G. Samolyk	0.0011	RW Dra	57225.4238	40296	0.2494	V	T. Arranz	0.0005
VW Cap	57278.6022	101409	0.2099	V	G. Samolyk	0.0025	RW Dra	57240.4432	40330	0.2096	V	T. Arranz	0.001
YZ Cap	57255.7569	49463	0.0469	V	G. Samolyk	0.0015	RW Dra	57260.4147	40375	0.2498	V	T. Arranz	0.0006
RR Cet	57276.8555	43570	0.0154	V	R. Sabo	0.0018	XZ Dra	57195.6846	32041	-0.1298	V	G. Samolyk	0.0012

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>F</i>	<i>Observer</i>	<i>Error</i>	<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> <i>2400000+</i>	<i>Cycle</i>	<i>O-C</i>	<i>F</i>	<i>Observer</i>	<i>Error</i>
SV Eri	57333.8932	30514	1.0009	V	G. Samolyk	0.0012	DH Hya	57095.6902	53005	0.0966	V	G. Samolyk	0.0011
BB Eri	57327.8652	31178	0.2944	V	G. Samolyk	0.0012	RR Leo	57095.8028	30505	0.1432	V	R. Sabo	0.0009
RR Gem	57050.4368	39500	-0.5369	V	T. Arranz	0.0008	TV Leo	57116.7444	29836	0.1242	V	G. Samolyk	0.0013
RR Gem	57064.3378	39535	-0.5418	V	T. Arranz	0.0006	TV Leo	57383.8704	30233	0.1277	V	R. Sabo	0.0021
RR Gem	57087.3830	39593	-0.5406	V	T. Arranz	0.0007	WW Leo	57044.8399	36763	0.0452	V	R. Sabo	0.0017
RR Gem	57089.3723	39598	-0.5378	V	T. Arranz	0.0006	WW Leo	57096.6866	36849	0.0472	V	N. Simmons	0.0020
RR Gem	57091.3561	39603	-0.5406	V	T. Arranz	0.0006	AA Leo	57044.9719	29146	-0.1021	V	R. Sabo	0.0017
RR Gem	57095.3305	39613	-0.5393	V	T. Arranz	0.0005	VY LMi	57045.9326	12465	0.0157	V	K. Menzies	0.0017
RR Gem	57112.4120	39656	-0.5422	V	T. Arranz	0.0006	U Lep	57355.7773	27522	0.0433	V	G. Samolyk	0.0010
RR Gem	57114.3959	39661	-0.5448	V	T. Arranz	0.0004	SZ Lyn	57036.5928	156902	0.0245	V	K. Menzies	0.0008
RR Gem	57116.3838	39666	-0.5435	V	T. Arranz	0.0004	SZ Lyn	57084.4463	157299	0.0257	V	T. Arranz	0.0005
RR Gem	57118.3738	39671	-0.5400	V	T. Arranz	0.0006	SZ Lyn	57093.6076	157375	0.0263	V	N. Simmons	0.0008
RR Gem	57120.3579	39676	-0.5425	V	T. Arranz	0.0006	SZ Lyn	57314.9153	159211	0.0319	V	G. Samolyk	0.0005
GQ Gem	57045.6439	46829	-0.2056	V	K. Menzies	0.0019	SZ Lyn	57327.8136	159318	0.0330	V	G. Samolyk	0.0006
TW Her	57130.8053	89053	-0.0168	V	K. Menzies	0.0006	SZ Lyn	57327.9344	159319	0.0332	V	G. Samolyk	0.0008
TW Her	57202.7356	89233	-0.0145	V	R. Sabo	0.0009	SZ Lyn	57355.6584	159549	0.0342	V	G. Samolyk	0.0008
TW Her	57312.6225	89508	-0.0176	V	R. Sabo	0.0008	SZ Lyn	57355.7787	159550	0.0340	V	G. Samolyk	0.0005
VX Her	57195.7508	77838	-0.0415	V	G. Samolyk	0.001	SZ Lyn	57355.8989	159551	0.0336	V	G. Samolyk	0.0006
VX Her	57211.6878	77873	-0.0425	V	G. Samolyk	0.0008	RR Lyr	57213.8016	25210	-0.3539	V	G. Samolyk	0.0010
VX Her	57239.4646	77934	-0.0435	V	T. Arranz	0.0007	RZ Lyr	57206.7296	31342	-0.0526	V	G. Samolyk	0.0012
VZ Her	57201.6964	46358	0.0781	V	G. Samolyk	0.0007	RZ Lyr	57316.6549	31557	-0.0444	V	R. Sabo	0.0015
VZ Her	57272.5885	46519	0.0774	V	K. Menzies	0.0007	ST Oph	57197.8713	63886	-0.0246	V	G. Samolyk	0.0009
AR Her	57096.8378	33282	-0.9811	V	G. Samolyk	0.0015	AV Peg	57224.8378	34414	0.1669	V	R. Sabo	0.0009
AR Her	57184.7471	33469	-0.9670	V	G. Samolyk	0.0011	AV Peg	57263.4847	34513	0.1667	V	T. Arranz	0.0006
AR Her	57193.6641	33488	-0.9806	V	G. Samolyk	0.0015	AV Peg	57278.7097	34552	0.1671	V	R. Sabo	0.0009
AR Her	57201.6891	33505	-0.9460	V	G. Samolyk	0.0011	AV Peg	57283.3942	34564	0.1671	V	T. Arranz	0.0005
AR Her	57203.5673	33509	-0.9480	V	T. Arranz	0.0009	AV Peg	57294.7165	34593	0.1685	V	R. Sabo	0.0010
AR Her	57204.5093	33511	-0.9460	V	T. Arranz	0.0009	AV Peg	57310.3308	34633	0.1678	V	T. Arranz	0.0005
AR Her	57206.3878	33515	-0.9476	V	T. Arranz	0.0007	AV Peg	57350.5415	34736	0.1699	V	K. Menzies	0.0010
AR Her	57229.4190	33564	-0.9478	V	T. Arranz	0.0011	BH Peg	57286.6817	27959	-0.1216	V	R. Sabo	0.0015
AR Her	57237.4091	33581	-0.9482	V	T. Arranz	0.0009	BH Peg	57309.7505	27995	-0.1285	V	R. Sabo	0.0014
DL Her	57129.9107	31982	0.0403	V	R. Sabo	0.0015	BH Peg	57311.6848	27998	-0.1172	V	R. Sabo	0.0012
DL Her	57214.5242	32125	0.0510	V	T. Arranz	0.0009	DY Peg	57305.5786	175568	-0.0160	V	N. Simmons	0.0004
DL Her	57220.4483	32135	0.0588	V	T. Arranz	0.0009	DY Peg	57305.6516	175569	-0.0159	V	N. Simmons	0.0005
DL Her	57225.7685	32144	0.0544	V	R. Sabo	0.0012	DY Peg	57312.5796	175664	-0.0159	V	N. Simmons	0.0004
DL Her	57236.4040	32162	0.0406	V	T. Arranz	0.0008	DY Peg	57312.6522	175665	-0.0162	V	N. Simmons	0.0004
DL Her	57252.3911	32189	0.0537	V	T. Arranz	0.0012	DY Peg	57312.7259	175666	-0.0154	V	N. Simmons	0.0007
DY Her	56451.7530	154828	-0.0286	V	N. Simmons	0.0007	DF Ser	57206.6925	62816	0.1002	V	G. Samolyk	0.0010
DY Her	57094.8793	159155	-0.0302	V	K. Menzies	0.0011	RV UMa	57053.7658	25591	0.1313	V	G. Samolyk	0.0017
DY Her	57170.6811	159665	-0.0304	V	N. Simmons	0.0007	RV UMa	57080.9148	25649	0.1329	V	G. Samolyk	0.0012
DY Her	57202.4865	159879	-0.0321	V	T. Arranz	0.0004	RV UMa	57169.3803	25838	0.1350	V	T. Arranz	0.0007
DY Her	57229.6869	160062	-0.0312	V	G. Samolyk	0.0005	RV UMa	57176.3991	25853	0.1329	V	T. Arranz	0.0007
LS Her	57050.0299	125841	0.0099	V	R. Sabo	0.0019	RV UMa	57190.4408	25883	0.1328	V	T. Arranz	0.0007
SZ Hya	57089.7044	30546	-0.2474	V	G. Samolyk	0.0009	RV UMa	57191.3797	25885	0.1356	V	T. Arranz	0.0006
UU Hya	57096.6364	33630	-0.0009	V	G. Samolyk	0.0016	RV UMa	57198.3963	25900	0.1313	V	T. Arranz	0.0008
DG Hya	57081.8064	6241	0.0127	V	G. Samolyk	0.0017							