

# Visual Times of Maxima for Short Period Pulsating Stars III

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**Abstract** This compilation contains 524 times of maxima of 9 short period pulsating stars (primarily RR Lyrae stars; RW Cnc, TT Cnc, VZ Cnc, RR Cet, XZ Cyg, DM Cyg, RW Dra, XZ Dra, RR Gem). These were reduced from a portion of the visual observations made from 1966 to 2014 that are included in the AAVSO International Database.

## 1. Observations

This paper is the third in a series to publish of times of maxima derived from visual observations reported to the AAVSO International Database as part of the AAVSO RR Lyr Committee legacy program. The goal of this project is to fill some historical gaps in the O–C history for these stars. This list contains times of maxima for RR Lyr stars located in the constellations Cancer, Cetus, Cygnus, Draco, and Gemini (RW Cnc, TT Cnc, VZ Cnc, RR Cet, XZ Cyg, DM Cyg, RW Dra, XZ Dra, RR Gem). This list will be web-archived and made available through the AAVSO ftp site at <ftp://ftp.aavso.org/public/datasets/gsamj461vismax3.txt>.

These observations were reduced by the writer using the PERANSO program (Vanmunster 2007). The linear elements in the *General Catalogue of Variable Stars* (Kholopov et al. 1985) were used to compute the O–C values for all stars listed.

Figures 1, and 2 are O–C plots for two of the stars listed.

## References

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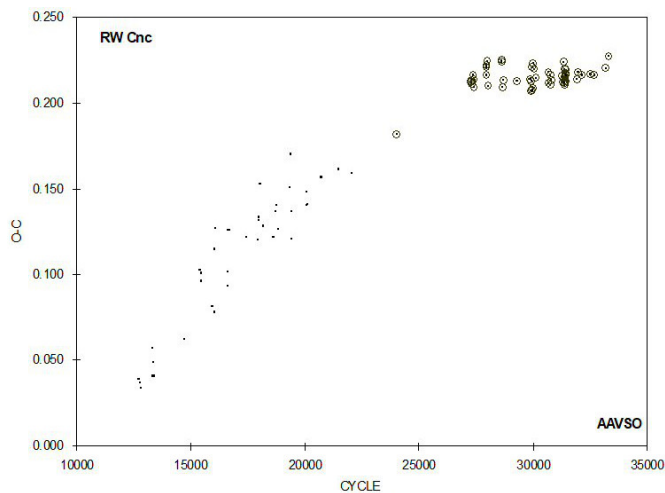


Figure 1. O–C plot for RW Cnc. The circled times of maxima are from CCD papers published in *JAAVSO* (Samolyk 2010–2016).

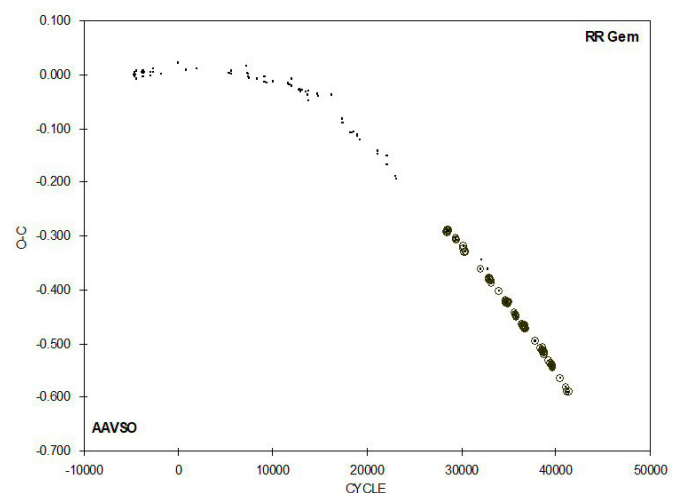


Figure 1. O–C plot for RR Gem. The circled times of maxima are from CCD papers published in *JAAVSO* (Samolyk 2010–2016).

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

<i>Star</i>	<i>JD (max)</i> <i>Hel.</i> <i>2400000+</i>	<i>Cycle</i>	<i>O-C</i> <i>(day)</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>Observer</i>	<i>Error</i> <i>(day)</i>
RW Cnc	46527.668	12740	0.039	M. Baldwin	0.008	TT Cnc	43219.685	5813	-0.013	M. Baldwin	0.006
RW Cnc	46550.649	12782	0.037	M. Baldwin	0.007	TT Cnc	43223.649	5820	0.006	M. Baldwin	0.009
RW Cnc	46556.665	12793	0.034	M. Baldwin	0.006	TT Cnc	43227.590	5827	0.003	M. Baldwin	0.005
RW Cnc	46829.724	13292	0.041	M. Baldwin	0.006	TT Cnc	43228.715	5829	0.001	M. Baldwin	0.005
RW Cnc	46845.609	13321	0.057	M. Baldwin	0.005	TT Cnc	43241.674	5852	0.001	M. Baldwin	0.004
RW Cnc	46858.734	13345	0.049	M. Baldwin	0.006	TT Cnc	43960.622	7128	-0.012	M. Baldwin	0.008
RW Cnc	46887.727	13398	0.041	P. Atwood	0.008	TT Cnc	44227.699	7602	-0.010	M. Baldwin	0.005
RW Cnc	47617.712	14732	0.062	R. Hill	0.012	TT Cnc	44316.728	7760	-0.006	M. Heifner	0.004
RW Cnc	47976.715	15388	0.102	M. Baldwin	0.008	TT Cnc	45026.680	9020	-0.001	M. Heifner	0.006
RW Cnc	47999.691	15430	0.096	M. Baldwin	0.009	TT Cnc	45052.585	9066	-0.014	G. Chaple	0.003
RW Cnc	48005.715	15441	0.101	M. Baldwin	0.005	TT Cnc	45079.639	9114	-0.006	G. Chaple	0.004
RW Cnc	48284.767	15951	0.082	R. Hill	0.006	TT Cnc	46150.755	11015	-0.007	M. Baldwin	0.005
RW Cnc	48318.690	16013	0.078	R. Hill	0.007	TT Cnc	46518.728	11668	0.033	M. Baldwin	0.006
RW Cnc	48335.689	16044	0.115	M. Baldwin	0.009	TT Cnc	46527.740	11684	0.030	M. Baldwin	0.008
RW Cnc	48353.759	16077	0.127	M. Baldwin	0.008	TT Cnc	46531.659	11691	0.005	M. Heifner	0.004
RW Cnc	48644.836	16609	0.093	R. Hill	0.006	TT Cnc	46531.688	11691	0.034	M. Baldwin	0.005
RW Cnc	48648.674	16616	0.102	M. Baldwin	0.003	TT Cnc	46544.616	11714	0.003	M. Baldwin	0.008
RW Cnc	48655.812	16629	0.126	M. Baldwin	0.007	TT Cnc	46553.641	11730	0.013	M. Baldwin	0.009
RW Cnc	48683.719	16680	0.126	M. Baldwin	0.008	TT Cnc	46793.692	12156	0.034	M. Baldwin	0.006
RW Cnc	49095.756	17433	0.122	M. Baldwin	0.004	TT Cnc	46833.679	12227	0.016	M. Baldwin	0.006
RW Cnc	49374.826	17943	0.120	R. Hill	0.009	TT Cnc	46850.566	12257	0.000	M. Baldwin	0.006
RW Cnc	49397.820	17985	0.132	M. Baldwin	0.006	TT Cnc	46877.647	12305	0.035	M. Baldwin	0.007
RW Cnc	49401.652	17992	0.133	M. Baldwin	0.006	TT Cnc	47232.614	12935	0.029	M. Baldwin	0.007
RW Cnc	49430.673	18045	0.153	M. Baldwin	0.005	TT Cnc	47241.637	12951	0.037	M. Baldwin	0.004
RW Cnc	49488.651	18151	0.128	M. Baldwin	0.006	TT Cnc	47268.654	12999	0.008	M. Baldwin	0.006
RW Cnc	49749.659	18628	0.122	M. Baldwin	0.006	TT Cnc	47596.618	13581	0.045	M. Baldwin	0.006
RW Cnc	49801.658	18723	0.137	M. Baldwin	0.003	TT Cnc	47921.728	14158	0.044	M. Baldwin	0.009
RW Cnc	49813.700	18745	0.140	M. Baldwin	0.006	TT Cnc	47942.570	14195	0.039	M. Baldwin	0.005
RW Cnc	49859.651	18829	0.127	M. Baldwin	0.003	TT Cnc	47978.613	14259	0.021	M. Baldwin	0.007
RW Cnc	50138.747	19339	0.151	M. Baldwin	0.007	TT Cnc	48658.739	15466	0.064	M. Baldwin	0.008
RW Cnc	50154.635	19368	0.170	M. Baldwin	0.008	TT Cnc	48675.624	15496	0.045	M. Baldwin	0.006
RW Cnc	50185.775	19425	0.121	R. Hill	0.005	TT Cnc	49843.660	17569	0.050	M. Baldwin	0.006
RW Cnc	50190.716	19434	0.137	M. Baldwin	0.003	TT Cnc	50842.637	19342	0.032	M. Baldwin	0.006
RW Cnc	50539.840	20072	0.148	M. Baldwin	0.006	TT Cnc	50896.773	19438	0.077	R. Hill	0.006
RW Cnc	50543.663	20079	0.140	G. Chaple	0.005	TT Cnc	51606.723	20698	0.080	R. Hill	0.003
RW Cnc	50573.760	20134	0.141	M. Baldwin	0.006	VZ Cnc	51212.646	63439	0.006	R. Berg	0.006
RW Cnc	50902.642	20735	0.157	M. Baldwin	0.003	VZ Cnc	51214.596	63450	-0.006	R. Berg	0.007
RW Cnc	51308.668	21477	0.161	M. Baldwin	0.003	VZ Cnc	51224.768	63507	0.000	R. Berg	0.005
RW Cnc	51633.702	22071	0.159	R. Berg	0.007	VZ Cnc	51253.646	63669	-0.017	R. Berg	0.008
TT Cnc	39139.763	-1428	0.002	M. Baldwin	0.007	VZ Cnc	51257.604	63691	0.017	R. Berg	0.009
TT Cnc	39140.902	-1426	0.014	M. Baldwin	0.010	VZ Cnc	51261.672	63714	-0.018	R. Berg	0.009
TT Cnc	39148.773	-1412	-0.003	M. Baldwin	0.006	VZ Cnc	51587.383	65540	0.001	S. Foglia	0.005
TT Cnc	39152.707	-1405	-0.014	M. Baldwin	0.003	VZ Cnc	51594.356	65579	0.018	S. Foglia	0.009
TT Cnc	39169.613	-1375	-0.011	M. Baldwin	0.004	VZ Cnc	51620.385	65725	0.006	S. Foglia	0.007
TT Cnc	39178.625	-1359	-0.014	M. Baldwin	0.007	VZ Cnc	51627.694	65766	0.002	R. Berg	0.005
TT Cnc	39200.617	-1320	0.003	M. Baldwin	0.008	VZ Cnc	51633.581	65799	0.003	R. Berg	0.006
TT Cnc	39477.841	-828	0.010	M. Baldwin	0.008	VZ Cnc	51634.648	65805	0.000	R. Berg	0.004
TT Cnc	39530.769	-734	-0.026	M. Baldwin	0.007	VZ Cnc	51639.643	65833	0.001	R. Berg	0.004
TT Cnc	39533.589	-729	-0.023	M. Baldwin	0.009	VZ Cnc	51943.401	67536	0.005	S. Foglia	0.004
TT Cnc	39556.716	-688	0.002	M. Baldwin	0.004	VZ Cnc	52024.373	67990	0.000	S. Foglia	0.005
TT Cnc	39582.642	-642	0.010	M. Baldwin	0.006	RR Cet	39169.582	10828	-0.011	M. Baldwin	0.004
TT Cnc	39894.746	-88	-0.037	M. Baldwin	0.005	RR Cet	39174.560	10837	-0.010	M. Baldwin	0.004
TT Cnc	39916.758	-49	0.000	M. Baldwin	0.008	RR Cet	39472.650	11376	-0.002	M. Baldwin	0.005
TT Cnc	39920.697	-42	-0.005	M. Baldwin	0.005	RR Cet	39477.630	11385	0.001	M. Baldwin	0.005
TT Cnc	40293.717	620	0.011	M. Baldwin	0.006	RR Cet	39492.561	11412	0.000	M. Baldwin	0.006
TT Cnc	40306.667	643	0.002	T. Cragg	0.003	RR Cet	40156.741	12613	-0.007	M. Baldwin	0.006
TT Cnc	40333.671	691	-0.040	T. Cragg	0.008	RR Cet	40186.612	12667	0.001	M. Baldwin	0.005
TT Cnc	41765.384	3232	-0.051	M. Baldwin	0.008	RR Cet	40203.758	12698	0.003	M. Baldwin	0.005
TT Cnc	42464.647	4473	-0.029	M. Baldwin	0.008	RR Cet	40208.736	12707	0.003	M. Baldwin	0.006
TT Cnc	42477.618	4496	-0.018	M. Baldwin	0.008	RR Cet	40525.614	13280	-0.004	L. Hazel	0.007
TT Cnc	42491.720	4521	-0.002	M. Baldwin	0.007	RR Cet	40562.674	13347	0.003	M. Baldwin	0.005
TT Cnc	42504.698	4544	0.017	M. Baldwin	0.009	RR Cet	42360.558	16598	-0.007	M. Baldwin	0.006
TT Cnc	42508.632	4551	0.007	M. Baldwin	0.007	RR Cet	42386.557	16645	0.000	M. Baldwin	0.006
TT Cnc	42832.588	5126	-0.021	M. Baldwin	0.006	RR Cet	42387.658	16647	-0.005	M. Baldwin	0.006
TT Cnc	42845.581	5149	0.013	M. Baldwin	0.009	RR Cet	42669.700	17157	-0.008	M. Baldwin	0.006
TT Cnc	43144.758	5680	-0.002	M. Baldwin	0.004	RR Cet	42689.618	17193	0.001	M. Baldwin	0.009

Table continued on following pages

Table 1. Recent times of minima 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>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>Observer</i>	<i>Error</i> <i>(day)</i>
RR Cet	42725.564	17258	0.000	M. Baldwin	0.007	DM Cyg	40147.646	-5799	0.008	M. Baldwin	0.006
RR Cet	43080.606	17900	-0.002	M. Baldwin	0.006	DM Cyg	40178.708	-5725	0.000	M. Baldwin	0.005
RR Cet	43096.647	17929	0.001	M. Baldwin	0.005	DM Cyg	40442.809	-5096	0.010	M. Baldwin	0.004
RR Cet	43101.624	17938	0.001	M. Baldwin	0.005	DM Cyg	40471.777	-5027	0.007	M. Baldwin	0.005
RR Cet	43420.717	18515	-0.003	M. Baldwin	0.006	DM Cyg	40472.612	-5025	0.002	L. Hazel	0.005
RR Cet	43446.707	18562	-0.005	M. Baldwin	0.005	DM Cyg	40524.670	-4901	-0.002	L. Hazel	0.009
RR Cet	43466.621	18598	0.000	M. Baldwin	0.004	DM Cyg	40566.664	-4801	0.006	M. Baldwin	0.003
RR Cet	43755.850	19121	-0.005	M. Baldwin	0.006	DM Cyg	41989.578	-1412	0.014	M. Baldwin	0.009
RR Cet	43780.741	19166	0.000	M. Baldwin	0.007	DM Cyg	42240.635	-814	-0.005	H. Smith	0.008
RR Cet	43815.586	19229	0.004	M. Baldwin	0.005	DM Cyg	42271.718	-740	0.008	H. Smith	0.007
RR Cet	43841.570	19276	-0.004	M. Baldwin	0.009	DM Cyg	42274.652	-733	0.003	H. Smith	0.003
RR Cet	44145.734	19826	-0.006	M. Baldwin	0.004	DM Cyg	42303.635	-664	0.016	M. Baldwin	0.007
RR Cet	44196.616	19918	-0.002	M. Baldwin	0.004	DM Cyg	42308.670	-652	0.013	M. Baldwin	0.005
RR Cet	44222.615	19965	0.004	M. Baldwin	0.008	DM Cyg	42569.818	-30	0.008	M. Baldwin	0.005
RR Cet	44227.593	19974	0.005	M. Baldwin	0.007	DM Cyg	42572.762	-23	0.013	M. Baldwin	0.007
RR Cet	44253.583	20021	0.003	M. Baldwin	0.009	DM Cyg	42598.784	39	0.003	M. Baldwin	0.005
RR Cet	44623.552	20690	-0.004	G. Hanson	0.003	DM Cyg	42632.797	120	0.008	M. Baldwin	0.003
RR Cet	44875.737	21146	0.000	M. Baldwin	0.009	DM Cyg	42637.840	132	0.012	M. Baldwin	0.003
RR Cet	45672.638	22587	-0.013	G. Chaple	0.008	DM Cyg	42658.833	182	0.012	M. Baldwin	0.003
RR Cet	45677.618	22596	-0.010	G. Chaple	0.004	DM Cyg	42662.607	191	0.008	M. Baldwin	0.007
RR Cet	46058.666	23285	0.002	M. Baldwin	0.009	DM Cyg	42669.750	208	0.013	M. Baldwin	0.004
RR Cet	46078.571	23321	-0.002	M. Baldwin	0.006	DM Cyg	42688.639	253	0.008	M. Baldwin	0.005
RR Cet	46735.576	24509	0.005	M. Baldwin	0.004	DM Cyg	42725.589	341	0.011	M. Baldwin	0.007
RR Cet	46736.665	24511	-0.012	M. Baldwin	0.006	DM Cyg	42986.736	963	0.005	M. Baldwin	0.007
RR Cet	46787.554	24603	-0.001	M. Baldwin	0.006	DM Cyg	42994.720	982	0.011	M. Baldwin	0.007
RR Cet	46793.632	24614	-0.007	M. Baldwin	0.005	DM Cyg	43036.705	1082	0.010	M. Baldwin	0.006
RR Cet	47086.742	25144	-0.002	M. Baldwin	0.005	DM Cyg	43044.674	1101	0.002	M. Baldwin	0.004
RR Cet	47111.628	25189	-0.002	M. Baldwin	0.006	DM Cyg	43337.738	1799	0.004	M. Baldwin	0.007
RR Cet	47121.583	25207	-0.001	M. Baldwin	0.009	DM Cyg	43340.674	1806	0.001	M. Baldwin	0.007
RR Cet	47425.749	25757	-0.001	M. Baldwin	0.009	DM Cyg	43350.755	1830	0.005	M. Baldwin	0.008
RR Cet	47861.540	26545	0.004	M. Baldwin	0.005	DM Cyg	43374.687	1887	0.005	M. Baldwin	0.008
RR Cet	48211.612	27178	0.009	M. Baldwin	0.007	DM Cyg	43395.689	1937	0.014	M. Baldwin	0.007
RR Cet	48571.623	27829	-0.001	M. Baldwin	0.005	DM Cyg	43398.617	1944	0.003	M. Baldwin	0.005
RR Cet	51882.594	33816	-0.010	R. Berg	0.007	DM Cyg	44131.705	3690	0.016	M. Heifner	0.006
RR Cet	54093.618	37814	0.008	R. Harvan	0.004	DM Cyg	44165.708	3771	0.010	M. Heifner	0.006
RR Cet	54350.776	38279	0.008	R. Harvan	0.005	DM Cyg	44171.585	3785	0.009	M. Heifner	0.005
RR Cet	54387.820	38346	-0.001	R. Harvan	0.003	DM Cyg	44192.573	3835	0.004	M. Heifner	0.006
RR Cet	54411.614	38389	0.013	R. Harvan	0.005	DM Cyg	44408.808	4350	0.011	G. Hanson	0.002
XZ Cyg	52634.658	18238	-1.457	R. Huziak	0.004	DM Cyg	44435.677	4414	0.009	M. Heifner	0.005
XZ Cyg	52641.655	18253	-1.460	R. Huziak	0.003	DM Cyg	44463.806	4481	0.007	G. Samolyk	0.006
XZ Cyg	52653.787	18279	-1.462	R. Huziak	0.003	DM Cyg	44463.808	4481	0.009	G. Hanson	0.004
XZ Cyg	52655.664	18283	-1.452	R. Huziak	0.002	DM Cyg	44485.651	4533	0.020	G. Samolyk	0.005
XZ Cyg	52661.713	18296	-1.470	R. Huziak	0.007	DM Cyg	44493.622	4552	0.013	G. Samolyk	0.003
XZ Cyg	52668.723	18311	-1.461	R. Huziak	0.002	DM Cyg	44503.705	4576	0.020	M. Heifner	0.003
XZ Cyg	52772.790	18534	-1.468	R. Huziak	0.004	DM Cyg	44506.632	4583	0.008	M. Heifner	0.003
XZ Cyg	52779.778	18549	-1.480	R. Hill	0.005	DM Cyg	44543.589	4671	0.017	G. Hanson	0.003
XZ Cyg	52779.787	18549	-1.471	R. Huziak	0.003	DM Cyg	44577.588	4752	0.007	M. Heifner	0.004
XZ Cyg	52806.846	18607	-1.481	R. Huziak	0.002	DM Cyg	44820.691	5331	0.011	M. Heifner	0.005
XZ Cyg	52820.845	18637	-1.483	R. Huziak	0.003	DM Cyg	44841.682	5381	0.009	M. Heifner	0.003
XZ Cyg	52848.841	18697	-1.489	R. Huziak	0.002	DM Cyg	44875.687	5462	0.006	M. Heifner	0.003
XZ Cyg	52877.748	18759	-1.517	R. Huziak	0.008	DM Cyg	44915.577	5557	0.009	G. Samolyk	0.004
XZ Cyg	52883.835	18772	-1.497	R. Huziak	0.004	DM Cyg	45258.620	6374	0.026	M. Heifner	0.006
XZ Cyg	52884.756	18774	-1.510	R. Huziak	0.003	DM Cyg	45593.668	7172	0.026	M. Heifner	0.005
XZ Cyg	52885.692	18776	-1.507	R. Huziak	0.004	DM Cyg	45614.664	7222	0.029	M. Heifner	0.006
XZ Cyg	52886.657	18778	-1.476	R. Huziak	0.009	DM Cyg	46311.614	8882	0.011	M. Baldwin	0.006
XZ Cyg	52988.338	18996	-1.535	S. Foglia	0.005	DM Cyg	46329.684	8925	0.027	M. Baldwin	0.004
XZ Cyg	53573.464	20250	-1.651	B. Wilson	0.004	DM Cyg	46355.703	8987	0.015	M. Baldwin	0.004
XZ Cyg	53620.592	20351	-1.660	G. Chaple	0.005	DM Cyg	46358.638	8994	0.011	M. Heifner	0.003
XZ Cyg	53630.367	20372	-1.685	B. Wilson	0.004	DM Cyg	46672.695	9742	0.013	M. Baldwin	0.006
XZ Cyg	53637.371	20387	-1.682	B. Wilson	0.003	DM Cyg	46682.786	9766	0.027	M. Baldwin	0.004
DM Cyg	39772.707	-6692	0.004	M. Baldwin	0.003	DM Cyg	46701.671	9811	0.019	M. Baldwin	0.007
DM Cyg	39801.687	-6623	0.014	M. Baldwin	0.005	DM Cyg	46712.585	9837	0.016	M. Baldwin	0.004
DM Cyg	39851.641	-6504	0.004	M. Baldwin	0.005	DM Cyg	46725.599	9868	0.015	M. Baldwin	0.005
DM Cyg	40070.804	-5982	0.001	M. Baldwin	0.004	DM Cyg	46735.685	9892	0.024	M. Baldwin	0.003
DM Cyg	40099.779	-5913	0.005	M. Baldwin	0.003	DM Cyg	46759.613	9949	0.020	G. Samolyk	0.004
DM Cyg	40128.752	-5844	0.008	M. Baldwin	0.005	DM Cyg	46983.805	10483	0.007	R. Hill	0.004

Table continued on following pages

Table 1. Recent times of minima 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>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>Observer</i>	<i>Error</i> <i>(day)</i>
DM Cyg	46997.676	10516	0.022	M. Baldwin	0.005	RW Dra	46210.764	15428	0.050	M. Baldwin	0.007
DM Cyg	47002.709	10528	0.017	M. Baldwin	0.005	RW Dra	46233.813	15480	0.067	M. Baldwin	0.009
DM Cyg	47023.694	10578	0.009	M. Baldwin	0.008	RW Dra	46254.633	15527	0.070	M. Baldwin	0.003
DM Cyg	47039.671	10616	0.031	M. Baldwin	0.005	RW Dra	46264.795	15550	0.045	M. Baldwin	0.006
DM Cyg	47065.694	10678	0.023	M. Baldwin	0.003	RW Dra	46269.703	15561	0.081	M. Baldwin	0.009
DM Cyg	47105.569	10773	0.011	G. Samolyk	0.005	RW Dra	46273.678	15570	0.069	M. Baldwin	0.006
DM Cyg	47358.739	11376	0.006	M. Baldwin	0.003	RW Dra	46289.607	15606	0.053	M. Baldwin	0.004
DM Cyg	47382.691	11433	0.026	M. Baldwin	0.006	RW Dra	46324.626	15685	0.082	M. Baldwin	0.004
DM Cyg	47390.659	11452	0.016	M. Baldwin	0.005	RW Dra	46327.714	15692	0.069	M. Baldwin	0.005
DM Cyg	47406.630	11490	0.033	M. Baldwin	0.009	RW Dra	46355.614	15755	0.066	M. Baldwin	0.004
DM Cyg	47419.642	11521	0.029	M. Baldwin	0.006	RW Dra	46514.594	16114	0.038	M. Baldwin	0.008
DM Cyg	47477.582	11659	0.028	M. Baldwin	0.003	RW Dra	46521.727	16130	0.085	M. Baldwin	0.008
DM Cyg	47479.675	11664	0.022	M. Baldwin	0.007	RW Dra	46556.680	16209	0.047	M. Baldwin	0.007
DM Cyg	47717.723	12231	0.009	M. Baldwin	0.006	RW Dra	46560.685	16218	0.066	M. Baldwin	0.004
DM Cyg	47733.687	12269	0.019	M. Baldwin	0.004	RW Dra	46712.576	16561	0.037	M. Baldwin	0.003
DM Cyg	47749.641	12307	0.018	M. Baldwin	0.008	RW Dra	46724.558	16588	0.060	M. Baldwin	0.004
DM Cyg	47764.754	12343	0.016	R. Hill	0.008	RW Dra	46732.548	16606	0.077	M. Baldwin	0.004
DM Cyg	47767.686	12350	0.009	M. Heifner	0.004	RW Dra	46735.646	16613	0.075	M. Baldwin	0.002
DM Cyg	47793.728	12412	0.020	M. Baldwin	0.006	RW Dra	46944.709	17085	0.081	M. Baldwin	0.005
DM Cyg	47796.676	12419	0.029	M. Baldwin	0.003	RW Dra	46948.691	17094	0.077	M. Baldwin	0.005
DM Cyg	47862.592	12576	0.027	M. Baldwin	0.004	RW Dra	46974.819	17153	0.073	M. Baldwin	0.003
DM Cyg	48150.628	13262	0.039	M. Baldwin	0.007	RW Dra	46979.710	17164	0.092	M. Baldwin	0.005
DM Cyg	48160.692	13286	0.026	M. Baldwin	0.004	RW Dra	47001.804	17214	0.040	M. Baldwin	0.003
DM Cyg	48176.638	13324	0.017	G. Samolyk	0.004	RW Dra	47022.663	17261	0.082	M. Baldwin	0.004
DM Cyg	48208.558	13400	0.028	M. Baldwin	0.005	RW Dra	47025.754	17268	0.072	M. Baldwin	0.003
DM Cyg	48213.597	13412	0.029	M. Baldwin	0.005	RW Dra	47037.713	17295	0.072	M. Baldwin	0.003
DM Cyg	48234.588	13462	0.027	M. Baldwin	0.004	RW Dra	47081.540	17394	0.051	M. Baldwin	0.002
DM Cyg	48237.516	13469	0.016	G. Samolyk	0.004	RW Dra	47231.731	17733	0.093	M. Baldwin	0.004
DM Cyg	48237.520	13469	0.020	M. Baldwin	0.004	RW Dra	47242.778	17758	0.067	M. Baldwin	0.004
DM Cyg	48469.703	14022	0.020	M. Baldwin	0.005	RW Dra	47340.646	17979	0.050	M. Baldwin	0.005
DM Cyg	48506.643	14110	0.012	M. Baldwin	0.004	RW Dra	47658.691	18697	0.081	M. Baldwin	0.005
DM Cyg	48530.586	14167	0.023	M. Baldwin	0.005	RW Dra	47670.636	18724	0.067	M. Baldwin	0.007
DM Cyg	48535.624	14179	0.023	M. Baldwin	0.006	RW Dra	47674.629	18733	0.074	M. Baldwin	0.004
DM Cyg	48543.608	14198	0.030	M. Baldwin	0.004	RW Dra	47684.833	18756	0.091	M. Baldwin	0.003
DM Cyg	48864.802	14963	0.031	M. Baldwin	0.005	RW Dra	47736.655	18873	0.091	M. Baldwin	0.005
DM Cyg	48894.617	15034	0.036	M. Baldwin	0.006	RW Dra	47747.700	18898	0.064	M. Baldwin	0.003
DM Cyg	49160.794	15668	0.022	M. Baldwin	0.005	RW Dra	47810.623	19040	0.092	M. Baldwin	0.002
DM Cyg	49203.624	15770	0.026	G. Samolyk	0.005	RW Dra	47837.609	19101	0.060	M. Baldwin	0.004
DM Cyg	49208.661	15782	0.024	M. Baldwin	0.007	RW Dra	47999.727	19467	0.071	M. Baldwin	0.008
DM Cyg	49250.651	15882	0.028	M. Baldwin	0.006	RW Dra	48007.704	19485	0.075	M. Baldwin	0.005
DM Cyg	49625.582	16775	0.024	G. Samolyk	0.007	RW Dra	48061.765	19607	0.100	M. Baldwin	0.004
DM Cyg	49722.579	17006	0.034	M. Baldwin	0.005	RW Dra	48159.598	19828	0.049	M. Baldwin	0.006
DM Cyg	49928.721	17497	0.025	M. Baldwin	0.008	RW Dra	48179.582	19873	0.101	M. Baldwin	0.005
DM Cyg	49954.769	17559	0.041	M. Baldwin	0.006	RW Dra	48190.652	19898	0.099	M. Baldwin	0.003
DM Cyg	49957.707	17566	0.040	M. Baldwin	0.004	RW Dra	48202.582	19925	0.070	M. Baldwin	0.005
DM Cyg	49989.598	17642	0.022	G. Samolyk	0.003	RW Dra	48379.749	20325	0.070	M. Baldwin	0.006
DM Cyg	50284.771	18345	0.033	G. Samolyk	0.002	RW Dra	48414.737	20404	0.068	M. Baldwin	0.005
DM Cyg	50313.755	18414	0.047	G. Samolyk	0.003	RW Dra	48452.824	20490	0.064	M. Baldwin	0.005
DM Cyg	50337.683	18471	0.043	M. Baldwin	0.005	RW Dra	48480.753	20553	0.089	M. Baldwin	0.004
DM Cyg	50373.782	18557	0.034	M. Baldwin	0.003	RW Dra	48484.737	20562	0.087	M. Baldwin	0.004
DM Cyg	50403.590	18628	0.032	G. Chaple	0.005	RW Dra	48508.668	20616	0.100	M. Baldwin	0.004
DM Cyg	50928.850	19879	0.047	M. Baldwin	0.007	RW Dra	48752.710	21167	0.095	M. Baldwin	0.004
DM Cyg	51012.823	20079	0.048	G. Samolyk	0.003	RW Dra	49089.784	21928	0.109	M. Baldwin	0.005
DM Cyg	51076.645	20231	0.051	G. Samolyk	0.007	RW Dra	49121.643	22000	0.078	M. Baldwin	0.005
DM Cyg	51100.551	20288	0.025	R. Berg	0.003	RW Dra	49124.750	22007	0.085	M. Baldwin	0.004
DM Cyg	51110.638	20312	0.036	R. Berg	0.005	RW Dra	49213.794	22208	0.102	M. Baldwin	0.006
DM Cyg	51129.530	20357	0.034	G. Chaple	0.005	RW Dra	49430.843	22698	0.122	M. Baldwin	0.005
DM Cyg	51395.727	20991	0.040	R. Berg	0.006	RW Dra	49457.834	22759	0.095	M. Baldwin	0.003
DM Cyg	51411.678	21029	0.036	M. Baldwin	0.005	RW Dra	49474.695	22797	0.125	M. Baldwin	0.004
DM Cyg	51424.702	21060	0.044	M. Baldwin	0.003	RW Dra	49614.604	23113	0.072	M. Baldwin	0.003
DM Cyg	51429.731	21072	0.035	R. Berg	0.006	RW Dra	49653.591	23201	0.083	M. Baldwin	0.006
DM Cyg	51437.712	21091	0.039	M. Baldwin	0.003	RW Dra	49868.854	23687	0.088	M. Baldwin	0.005
DM Cyg	52165.761	22825	0.050	R. Berg	0.007	RW Dra	49873.735	23698	0.097	M. Baldwin	0.003
DM Cyg	52200.600	22908	0.041	R. Berg	0.007	RW Dra	49900.750	23759	0.094	M. Baldwin	0.005
DM Cyg	52210.675	22932	0.039	R. Berg	0.007	RW Dra	49920.697	23804	0.110	M. Baldwin	0.005
DM Cyg	52548.670	23737	0.047	R. Berg	0.005	RW Dra	49958.790	23890	0.112	M. Baldwin	0.006

Table continued on following page



Table 1. Recent times of minima 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>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>Observer</i>	<i>Error</i> <i>(day)</i>
RW Dra	50218.785	24477	0.115	R. Hill	0.005	RR Gem	39612.622	-4391	0.008	M. Baldwin	0.003
RW Dra	50579.767	25292	0.119	M. Baldwin	0.003	RR Gem	39826.769	-3852	0.004	M. Baldwin	0.002
RW Dra	50928.804	26080	0.138	M. Baldwin	0.003	RR Gem	39890.727	-3691	-0.005	M. Baldwin	0.006
RW Dra	50948.714	26125	0.116	M. Baldwin	0.005	RR Gem	39892.721	-3686	0.003	M. Baldwin	0.006
RW Dra	50990.800	26220	0.125	R. Hill	0.006	RR Gem	39894.711	-3681	0.006	M. Baldwin	0.005
RW Dra	51045.749	26344	0.153	M. Baldwin	0.003	RR Gem	39915.768	-3628	0.006	M. Baldwin	0.005
RW Dra	51429.743	27211	0.138	M. Baldwin	0.003	RR Gem	40184.739	-2951	-0.002	M. Baldwin	0.003
RW Dra	52380.708	29358	0.160	M. Baldwin	0.004	RR Gem	40211.763	-2883	0.004	M. Baldwin	0.005
RW Dra	52496.774	29620	0.181	M. Baldwin	0.005	RR Gem	40323.805	-2601	0.005	M. Baldwin	0.004
RW Dra	52523.752	29681	0.142	M. Baldwin	0.004	RR Gem	40327.784	-2591	0.011	M. Baldwin	0.005
RW Dra	52794.815	30293	0.139	R. Hill	0.008	RR Gem	40657.543	-1761	0.002	J. Bortle	0.003
XZ Dra	46017.665	8582	-0.006	M. Baldwin	0.005	RR Gem	41380.669	59	0.023	G. Samolyk	0.007
XZ Dra	46018.628	8584	0.004	M. Baldwin	0.005	RR Gem	41693.735	847	0.008	T. Cragg	0.004
XZ Dra	46028.625	8605	-0.006	M. Baldwin	0.004	RR Gem	42142.698	1977	0.010	T. Cragg	0.005
XZ Dra	46176.821	8916	0.000	M. Baldwin	0.005	RR Gem	43520.565	5445	0.004	M. Baldwin	0.004
XZ Dra	46205.874	8977	-0.014	M. Baldwin	0.009	RR Gem	43578.575	5591	0.006	M. Baldwin	0.004
XZ Dra	46269.735	9111	-0.003	M. Baldwin	0.007	RR Gem	43599.627	5644	0.001	M. Baldwin	0.005
XZ Dra	46279.742	9132	-0.003	M. Baldwin	0.006	RR Gem	44216.665	7197	0.016	M. Heifner	0.005
XZ Dra	46311.681	9199	0.011	M. Baldwin	0.005	RR Gem	44259.562	7305	0.003	M. Baldwin	0.004
XZ Dra	46521.803	9640	-0.002	M. Baldwin	0.003	RR Gem	44291.737	7386	-0.004	M. Heifner	0.004
XZ Dra	46523.710	9644	-0.001	M. Baldwin	0.003	RR Gem	44297.703	7401	0.002	M. Heifner	0.004
XZ Dra	46531.803	9661	-0.009	M. Baldwin	0.004	RR Gem	44340.604	7509	-0.006	M. Baldwin	0.004
XZ Dra	46532.765	9663	0.000	M. Baldwin	0.006	RR Gem	44659.643	8312	-0.008	M. Heifner	0.004
XZ Dra	46534.678	9667	0.008	M. Baldwin	0.003	RR Gem	44988.611	9140	-0.013	G. Chaple	0.005
XZ Dra	46584.704	9772	0.001	M. Baldwin	0.003	RR Gem	45011.663	9198	-0.005	M. Heifner	0.004
XZ Dra	46968.762	10578	0.003	R. Hill	0.006	RR Gem	45079.593	9369	-0.015	G. Chaple	0.004
XZ Dra	46969.705	10580	-0.007	R. Hill	0.008	RR Gem	45371.619	10104	-0.012	G. Chaple	0.003
XZ Dra	46979.699	10601	-0.020	M. Baldwin	0.009	RR Gem	45375.590	10114	-0.014	G. Chaple	0.003
XZ Dra	47019.738	10685	-0.006	M. Baldwin	0.005	RR Gem	45993.803	11670	-0.017	M. Baldwin	0.003
XZ Dra	47037.847	10723	-0.004	M. Baldwin	0.005	RR Gem	46005.723	11700	-0.016	M. Baldwin	0.004
XZ Dra	47039.747	10727	-0.010	M. Baldwin	0.004	RR Gem	46038.697	11783	-0.019	M. Baldwin	0.004
XZ Dra	47040.711	10729	0.001	M. Baldwin	0.006	RR Gem	46112.595	11969	-0.021	M. Baldwin	0.005
XZ Dra	47081.683	10815	-0.006	M. Baldwin	0.006	RR Gem	46114.594	11974	-0.008	M. Baldwin	0.004
XZ Dra	47082.640	10817	-0.002	M. Baldwin	0.008	RR Gem	46458.645	12840	-0.028	M. Heifner	0.004
XZ Dra	47083.588	10819	-0.007	M. Baldwin	0.005	RR Gem	46493.610	12928	-0.026	M. Heifner	0.003
XZ Dra	47678.735	12068	-0.005	R. Hill	0.009	RR Gem	46514.661	12981	-0.033	M. Baldwin	0.004
XZ Dra	47769.738	12259	-0.013	M. Baldwin	0.005	RR Gem	46518.638	12991	-0.029	M. Baldwin	0.004
XZ Dra	48004.670	12752	0.006	M. Baldwin	0.007	RR Gem	46520.622	12996	-0.032	M. Baldwin	0.003
XZ Dra	48178.565	13117	-0.020	M. Baldwin	0.004	RR Gem	46553.602	13079	-0.028	M. Baldwin	0.003
XZ Dra	48188.577	13138	-0.015	M. Baldwin	0.003	RR Gem	46744.704	13560	-0.033	M. Baldwin	0.002
XZ Dra	48208.584	13180	-0.020	M. Baldwin	0.008	RR Gem	46793.568	13683	-0.038	M. Baldwin	0.003
XZ Dra	48209.537	13182	-0.020	M. Baldwin	0.005	RR Gem	46831.699	13779	-0.049	M. Baldwin	0.005
XZ Dra	48219.539	13203	-0.025	M. Baldwin	0.006	RR Gem	46845.623	13814	-0.031	M. Baldwin	0.004
XZ Dra	48531.654	13858	-0.015	M. Baldwin	0.008	RR Gem	47226.639	14773	-0.035	M. Baldwin	0.005
XZ Dra	49117.743	15088	-0.018	M. Baldwin	0.005	RR Gem	47236.568	14798	-0.039	M. Baldwin	0.003
XZ Dra	49188.747	15237	-0.012	M. Baldwin	0.004	RR Gem	47807.903	16236	-0.037	G. Samolyk	0.004
XZ Dra	49198.742	15258	-0.023	M. Baldwin	0.005	RR Gem	48245.693	17338	-0.083	M. Baldwin	0.004
XZ Dra	49483.704	15856	-0.006	M. Baldwin	0.008	RR Gem	48261.579	17378	-0.090	M. Baldwin	0.005
XZ Dra	49534.666	15963	-0.030	M. Baldwin	0.005	RR Gem	48290.582	17451	-0.090	M. Baldwin	0.004
XZ Dra	49929.689	16792	-0.023	M. Baldwin	0.004	RR Gem	48636.622	18322	-0.108	R. Hill	0.004
XZ Dra	50545.811	18085	-0.011	M. Baldwin	0.006	RR Gem	48673.571	18415	-0.109	M. Baldwin	0.003
XZ Dra	50690.670	18389	-0.007	M. Baldwin	0.005	RR Gem	48719.661	18531	-0.107	R. Hill	0.006
XZ Dra	50990.838	19019	-0.032	R. Hill	0.007	RR Gem	48896.856	18977	-0.112	M. Baldwin	0.006
XZ Dra	50992.756	19023	-0.020	R. Hill	0.006	RR Gem	48898.841	18982	-0.114	M. Baldwin	0.006
XZ Dra	51812.776	20744	-0.052	R. Hill	0.005	RR Gem	49013.657	19271	-0.121	M. Baldwin	0.005
XZ Dra	52513.689	22215	-0.066	R. Berg	0.007	RR Gem	49746.668	21116	-0.148	R. Hill	0.005
RR Gem	39494.612	-4688	-0.001	M. Baldwin	0.006	RR Gem	49754.620	21136	-0.142	G. Samolyk	0.005
RR Gem	39500.578	-4673	0.005	M. Baldwin	0.005	RR Gem	50129.671	22080	-0.152	R. Hill	0.005
RR Gem	39525.605	-4610	0.002	M. Baldwin	0.004	RR Gem	50160.646	22158	-0.167	R. Hill	0.005
RR Gem	39530.765	-4597	-0.003	M. Baldwin	0.003	RR Gem	50516.615	23054	-0.189	G. Chaple	0.005
RR Gem	39532.751	-4592	-0.004	M. Baldwin	0.003	RR Gem	50543.627	23122	-0.194	G. Chaple	0.005
RR Gem	39556.593	-4532	0.000	M. Baldwin	0.003	RR Gem	54142.713	32181	-0.344	R. Harvan	0.004
RR Gem	39567.718	-4504	0.000	M. Baldwin	0.005	RR Gem	54387.837	32798	-0.361	R. Harvan	0.004
RR Gem	39598.701	-4426	-0.007	M. Baldwin	0.003						