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THE GEOS RR Lyr SURVEY

Thirteenth List of Maxima of RR Lyr Stars Observed by the Automated Telescopes TAROT

(GEOS Circular RR 46)

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We present here the thirteenth list of light maxima of RR Lyrae stars from the GEOS RR Lyr Survey (Le Borgne et al., 2007), a GEOS program (<http://geos.webs.upv.es/>, Boninsegna et al., 2002) of observations of RR Lyr stars using the automatic telescopes TAROT (<http://tarot.obs-hp.fr>, Klotz et al., 2009). The present list contains 656 maxima observed between January and December 2010 (Table 1).

A description of the present list may be found in the former lists (for example Le Borgne et al., 2008). The data are also available in the GEOS RR Lyr web database (http://rr-lyr.ast.obs-mip.fr/dbrr/dbrr-V1.0_0.php). The $O - C$'s are computed with the GCVS elements (Kholopov et al., 1985) when available. Otherwise, the reference of the elements, if exists, is given as a footnote of Table 1.

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Table 1: maxima of RR Lyrae stars

Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.	Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.
SW And	55481.591±0.004	-0.816	84448.	C	TY Aps	55294.870±0.003	0.042	31032.	LS
SW And	55497.512±0.001	-0.817	84484.	C	VX Aps	55327.891±0.002	0.180	43519.	LS
SW And	55510.341±0.002	-0.814	84513.	C	VX Aps	55346.797±0.004	0.187	43558.	LS
SW And	55524.492±0.002	-0.816	84545.	C	VX Aps	55447.618±0.002	0.216	43766.	LS
SW And	55540.412±0.004	-0.818	84581.	C	XZ Aps	55285.644±0.003	0.087	45231.	LS
XX And	55198.434±0.002	0.240	22291.	C	XZ Aps	55342.614±0.004	0.076	45328.	LS
XX And	55414.542±0.003	0.247	22590.	C	XZ Aps	55403.685±0.005	0.054	45432.	LS
XX And	55432.608±0.002	0.244	22615.	C	BS Aps	55312.567±0.003	0.010	30714.	LS
XX And	55451.401±0.002	0.246	22641.	C	BS Aps	55414.526±0.006	0.022	30889.	LS
XX And	55461.521±0.004	0.247	22655.	C	BS Aps	55418.603±0.005	0.021	30896.	LS
XX And	55471.637±0.002	0.245	22669.	C	BS Aps	55432.593±0.005	0.030	30920.	LS
XX And	55497.655±0.004	0.244	22705.	C	EX Aps	55354.532±0.002	0.015	58120.	LS
XX And	55505.608±0.002	0.247	22716.	C	EX Aps	55396.522±0.004	0.015	58209.	LS
XX And	55511.389±0.003	0.246	22724.	C	EX Aps	55402.651±0.003	0.010	58222.	LS
XX And	55513.556±0.002	0.245	22727.	C	EX Aps	55404.542±0.002	0.014	58226.	LS
XX And	55524.397±0.003	0.244	22742.	C	EX Aps	55411.622±0.002	0.017	58241.	LS
XX And	55526.565±0.002	0.244	22745.	C	EX Aps	55446.528±0.002	0.010	58315.	LS
XX And	55527.288±0.002	0.244	22746.	C	SW Aqr	55388.879±0.003	-0.002	65951.	LS
XX And	55542.468±0.002	0.247	22767.	C	SW Aqr	55409.548±0.002	-0.001	65996.	C
AT And	55403.503±0.005	-0.003	21170.	C	SW Aqr	55420.571±0.003	-0.002	66020.	C
AT And	55416.459±0.003	-0.002	21191.	C	SW Aqr	55423.787±0.004	-0.001	66027.	LS
AT And	55429.416±0.004	-0.000	21212.	C	SW Aqr	55445.374±0.002	-0.001	66074.	C
AT And	55442.373±0.005	0.002	21233.	C	SW Aqr	55453.642±0.002	-0.001	66092.	LS
AT And	55450.389±0.003	-0.002	21246.	C	SX Aqr	55401.557±0.003	-0.124	29130.	C
AT And	55458.414±0.007	0.003	21259.	C	SX Aqr	55423.521±0.002	-0.124	29171.	C
AT And	55469.513±0.003	-0.003	21277.	C	SX Aqr	55426.736±0.002	-0.123	29177.	LS
AT And	55511.463±0.004	-0.003	21345.	C	SX Aqr	55444.416±0.002	-0.122	29210.	C
AT And	55513.317±0.004	0.000	21348.	C	TZ Aqr	55424.440±0.003	0.014	31295.	C
AT And	55527.501±0.003	-0.005	21371.	C	TZ Aqr	55425.584±0.003	0.016	31297.	C
AT And	55532.443±0.005	0.002	21379.	C	TZ Aqr	55440.433±0.003	0.014	31323.	C
AT And	55534.288±0.003	-0.004	21382.	C	TZ Aqr	55452.427±0.002	0.013	31344.	C
AT And	55542.308±0.002	-0.004	21395.	C	YZ Aqr	55395.754±0.003	0.061	36293.	LS
CI And	55199.402±0.002	0.117	40190.	C	YZ Aqr	55396.854±0.003	0.057	36295.	LS
CI And	55415.590±0.002	0.121	40636.	C	YZ Aqr	55426.659±0.003	0.057	36349.	LS
CI And	55417.528±0.002	0.120	40640.	C	YZ Aqr	55448.739±0.002	0.060	36389.	LS
CI And	55431.586±0.002	0.121	40669.	C	YZ Aqr	55453.706±0.002	0.060	36398.	LS
CI And	55449.516±0.002	0.117	40706.	C	AA Aqr	55388.822±0.005	-0.130	56891.	LS
CI And	55453.392±0.002	0.115	40714.	C	AA Aqr	55391.870±0.003	-0.126	56896.	LS
CI And	55455.341±0.006	0.125	40718.	C	AA Aqr	55416.835±0.004	-0.126	56937.	LS
CI And	55462.603±0.003	0.116	40733.	C	AA Aqr	55427.792±0.003	-0.129	56955.	LS
CI And	55488.291±0.002	0.114	40786.	C	AA Aqr	55482.594±0.003	-0.127	57045.	LS
CI And	55525.621±0.002	0.121	40863.	C	BN Aqr	55422.791±0.002	0.618	37368.	LS
CI And	55526.588±0.002	0.118	40865.	C	BN Aqr	55424.669±0.002	0.617	37372.	LS
CI And	55527.557±0.002	0.118	40867.	C	BO Aqr	55424.748±0.002	0.160	19889.	LS
CI And	55533.378±0.002	0.123	40879.	C	BO Aqr	55426.836±0.004	0.166	19892.	LS
CI And	55534.349±0.002	0.124	40881.	C	BO Aqr	55449.737±0.004	0.164	19925.	LS
NX And ¹	55198.485±0.003	0.002	25549.	C	BR Aqr	55417.848±0.003	-0.170	36901.	LS
NX And ¹	55430.491±0.005	0.007	25907.	C	BR Aqr	55426.521±0.002	-0.170	36919.	C
NX And ¹	55505.663±0.003	0.006	26023.	C	BR Aqr	55454.468±0.002	-0.172	36977.	C
NX And ¹	55511.491±0.003	0.001	26032.	C	BR Aqr	55495.425±0.002	-0.175	37062.	C
NX And ¹	55524.454±0.003	0.004	26052.	C	BR Aqr	55523.374±0.003	-0.175	37120.	C
WY Ant	55211.712±0.002	0.227	25362.	LS	CP Aqr	55415.457±0.001	-0.122	37831.	C
WY Ant	55238.703±0.002	0.225	25409.	LS	CP Aqr	55416.385±0.003	-0.121	37833.	C
WY Ant	55299.589±0.003	0.232	25515.	LS	CP Aqr	55437.699±0.002	-0.124	37879.	LS
BN Ant	55239.682±0.002			LS	CP Aqr	55451.603±0.003	-0.122	37909.	LS
TY Aps	55248.712±0.003	0.040	30940.	LS	CP Aqr	55454.384±0.002	-0.121	37915.	C

Table 1 (cont.): maxima of RR Lyrae stars

Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.	Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.
CP Aqr	55464.579±0.002	-0.121	37937.	LS	RV Cap	55445.693±0.004	-0.025	48158.	LS
CP Aqr	55473.382±0.002	-0.123	37956.	C	RV Cap	55454.656±0.005	-0.017	48178.	LS
DN Aqr	55427.682±0.005	0.045	42607.	LS	RV Cap	55463.592±0.004	-0.036	48198.	LS
DN Aqr	55444.781±0.005	0.033	42634.	LS	IU Car	55478.769±0.005	0.217	18698.	LS
DN Aqr	55455.561±0.005	0.039	42651.	LS	IU Car	55501.621±0.003	0.217	18729.	LS
DN Aqr	55505.623±0.003	0.035	42730.	LS	IU Car	55506.778±0.004	0.214	18736.	LS
OX Aqr	55484.616±0.003			LS	IU Car	55509.734±0.006	0.221	18740.	LS
OX Aqr	55494.667±0.004			LS	IU Car	55526.711±0.005	0.244	18763.	LS
AA Aql	55409.734±0.002	0.039	85858.	LS	IU Car	55540.694±0.006	0.221	18782.	LS
AA Aql	55414.434±0.002	0.036	85871.	C	IU Car	55557.624±0.005	0.197	18805.	LS
AA Aql	55437.590±0.002	0.038	85935.	LS	V363 Cas	55408.603±0.003	0.642	35250.	C
V341 Aql	55437.562±0.005	0.041	24638.	LS	V363 Cas	55426.640±0.003	0.643	35283.	C
IN Ara	55414.682±0.005	0.117	44604.	LS	V363 Cas	55430.479±0.005	0.656	35290.	C
MS Ara	55338.760±0.005	0.413	52101.	LS	V363 Cas	55431.553±0.005	0.637	35292.	C
MS Ara	55418.554±0.004	0.414	52253.	LS	V363 Cas	55453.420±0.004	0.643	35332.	C
MS Ara	55439.549±0.003	0.410	52293.	LS	V363 Cas	55454.522±0.005	0.652	35334.	C
X Ari	55454.558±0.005	0.379	27445.	C	V363 Cas	55455.608±0.003	0.645	35336.	C
X Ari	55514.464±0.002	0.380	27537.	C	V363 Cas	55488.411±0.004	0.656	35396.	C
X Ari	55525.533±0.002	0.380	27554.	C	V363 Cas	55489.504±0.005	0.655	35398.	C
X Ari	55527.486±0.002	0.379	27557.	C	V363 Cas	55490.594±0.005	0.652	35400.	C
X Ari	55529.443±0.002	0.383	27560.	C	V363 Cas	55496.615±0.004	0.661	35411.	C
X Ari	55557.442±0.002	0.383	27603.	C	V363 Cas	55495.508±0.006	0.648	35409.	C
TZ Aur	55240.505±0.002	0.014	90223.	C	V363 Cas	55523.404±0.005	0.670	35460.	C
TZ Aur	55284.371±0.003	0.012	90335.	C	V363 Cas	55525.585±0.005	0.665	35464.	C
TZ Aur	55489.609±0.002	0.013	90859.	C	BI Cen	55202.807±0.002	0.057	40850.	LS
TZ Aur	55505.670±0.002	0.015	90900.	C	BI Cen	55359.612±0.002	0.061	41196.	LS
TZ Aur	55506.452±0.002	0.014	90902.	C	V499 Cen	55300.586±0.004	0.032	27195.	LS
TZ Aur	55507.626±0.002	0.013	90905.	C	RR Cet	55453.518±0.002	0.012	40273.	C
TZ Aur	55534.652±0.001	0.014	90974.	C	RR Cet	55454.621±0.002	0.009	40275.	C
TZ Aur	55542.487±0.004	0.015	90994.	C	RR Cet	55474.530±0.004	0.009	40311.	C
TZ Aur	55545.619±0.001	0.013	91002.	C	RR Cet	55504.392±0.002	0.007	40365.	C
TZ Aur	55547.577±0.002	0.013	91007.	C	RR Cet	55505.497±0.002	0.006	40367.	C
TZ Aur	55548.360±0.002	0.013	91009.	C	RR Cet	55524.300±0.004	0.006	40401.	C
TW Boo	55270.416±0.003	-0.060	53317.	C	RU Cet	55443.843±0.003	0.105	26638.	LS
V Cae	55543.830±0.004	-0.184	37179.	LS	RU Cet	55486.642±0.005	0.106	26711.	LS
AH Cam	55454.440±0.002	-0.451	45359.	C	RU Cet	55503.648±0.006	0.110	26740.	LS
AH Cam	55461.438±0.002	-0.459	45378.	C	RU Cet	55513.622±0.005	0.117	26757.	LS
AH Cam	55462.547±0.002	-0.456	45381.	C	RV Cet	55499.750±0.005	0.239	26285.	LS
AH Cam	55488.350±0.003	-0.464	45451.	C	RX Cet	55451.698±0.007	0.296	26714.	LS
AH Cam	55489.448±0.002	-0.473	45454.	C	RX Cet	55455.716±0.005	0.298	26721.	LS
AH Cam	55490.548±0.002	-0.479	45457.	C	RX Cet	55478.660±0.005	0.295	26761.	LS
AH Cam	55507.526±0.003	-0.463	45503.	C	RZ Cet	55445.817±0.004	-0.168	42183.	LS
AH Cam	55529.654±0.002	-0.458	45563.	C	RZ Cet	55446.833±0.003	-0.173	42185.	LS
AH Cam	55534.418±0.002	-0.488	45576.	C	RZ Cet	55455.519±0.004	-0.167	42202.	C
AH Cam	55541.439±0.002	-0.473	45595.	C	RZ Cet	55477.468±0.005	-0.175	42245.	C
TT Cnc	55547.504±0.003	0.096	27692.	C	RZ Cet	55485.641±0.004	-0.171	42261.	LS
W CVn	55230.651±0.002	-0.138	61310.	C	RZ Cet	55486.660±0.004	-0.174	42263.	LS
RU CVn	55343.501±0.002	0.225	36389.	C	RZ Cet	55504.531±0.005	-0.174	42298.	C
RZ CVn	55269.442±0.002	-0.155	26305.	C	RZ Cet	55507.599±0.003	-0.170	42304.	LS
UZ CVn	55231.416±0.003	0.255	41279.	C	RZ Cet	55524.444±0.005	-0.175	42337.	C
AA CMi	55242.651±0.002	0.066	39188.	LS	RZ Cet	55525.469±0.004	-0.171	42339.	C
AA CMi	55504.631±0.002	0.069	39738.	C	RZ Cet	55541.302±0.005	-0.167	42370.	C
AA CMi	55506.538±0.002	0.070	39742.	C	UU Cet	55413.768±0.005	-0.134	23438.	LS
AA CMi	55533.690±0.002	0.072	39799.	C	UU Cet	55453.758±0.005	-0.146	23504.	LS
AL CMi	55519.612±0.002	0.470	34372.	C	UU Cet	55481.648±0.005	-0.136	23550.	LS
RV Cap	55423.753±0.003	-0.026	48109.	LS	RT Col	55535.647±0.003	-0.280	51727.	LS

Table 1 (cont.): maxima of RR Lyrae stars

Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.	Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.
RT Col	55544.767±0.005	-0.282	51744.	LS	VW Dor	55517.585±0.002	-0.139	30035.	LS
RW Col	55243.583±0.003	0.107	51839.	LS	RW Dra	55404.545±0.005	0.202	36185.	C
RW Col	55519.667±0.005	-0.069	52361.	LS	RW Dra	55408.520±0.002	0.191	36194.	C
RW Col	55544.768±0.005	0.158	52408.	LS	SW Dra	55225.405±0.003	0.061	50908.	C
RW Col	55562.771±0.005	0.167	52442.	LS	SW Dra	55229.392±0.003	0.060	50915.	C
RX Col	55216.707±0.003	0.117	44448.	LS	SW Dra	55231.669±0.003	0.058	50919.	C
RX Col	55526.684±0.005	0.003	44970.	LS	SW Dra	55282.372±0.002	0.061	51008.	C
RX Col	55533.798±0.005	-0.011	44982.	LS	XZ Dra	55404.528±0.004	-0.134	28282.	C
RX Col	55552.789±0.005	-0.030	45014.	LS	XZ Dra	55414.528±0.002	-0.141	28303.	C
RY Col	55525.641±0.006	-0.209	44304.	LS	XZ Dra	55424.537±0.002	-0.138	28324.	C
RY Col	55546.714±0.005	-0.206	44348.	LS	XZ Dra	55427.397±0.002	-0.137	28330.	C
AV Col	55505.784±0.002			LS	XZ Dra	55443.610±0.002	-0.125	28364.	C
AV Col	55528.751±0.002			LS	BC Dra	55224.426±0.006	0.091	17991.	C
S Com	55199.641±0.003	-0.103	24796.	C	BC Dra	55398.565±0.005	0.093	18233.	C
S Com	55225.453±0.003	-0.101	24840.	C	BC Dra	55455.406±0.006	0.087	18312.	C
S Com	55235.426±0.002	-0.100	24857.	C	BC Dra	55462.611±0.010	0.097	18322.	C
S Com	55548.665±0.004	-0.100	25391.	C	BC Dra	55473.403±0.004	0.095	18337.	C
ST Com	55272.523±0.003	-0.032	20116.	C	BC Dra	55488.515±0.005	0.096	18358.	C
WW CrA	55367.567±0.002	-0.020	43041.	LS	BC Dra	55506.500±0.004	0.091	18383.	C
V413 CrA	55365.800±0.003	0.052	23527.	LS	BC Dra	55511.550±0.005	0.104	18390.	C
W Crt	55301.644±0.003	-0.023	38002.	LS	BC Dra	55514.423±0.005	0.099	18394.	C
UY Cyg	55414.441±0.002	0.059	58820.	C	BC Dra	55519.456±0.006	0.095	18401.	C
UY Cyg	55429.581±0.003	0.060	58847.	C	BC Dra	55532.404±0.006	0.091	18419.	C
UY Cyg	55438.551±0.002	0.059	58863.	C	BC Dra	55557.598±0.005	0.099	18454.	C
UY Cyg	55474.444±0.003	0.066	58927.	C	BD Dra	55251.441±0.002	0.668	22878.	C
UY Cyg	55496.304±0.003	0.059	58966.	C	BD Dra	55287.358±0.003	0.653	22939.	C
UY Cyg	55497.425±0.002	0.059	58968.	C	BD Dra	55404.548±0.005	0.622	23138.	C
UY Cyg	55506.395±0.002	0.057	58984.	C	BD Dra	55414.595±0.002	0.655	23155.	C
XZ Cyg ²	55374.533±0.001	0.001	14582.	C	BD Dra	55424.590±0.005	0.636	23172.	C
XZ Cyg ²	55403.460±0.003	-0.001	14644.	C	BD Dra	55430.474±0.004	0.630	23182.	C
XZ Cyg ²	55429.590±0.001	-0.001	14700.	C	BD Dra	55463.487±0.002	0.656	23238.	C
XZ Cyg ²	55430.526±0.002	0.002	14702.	C	BD Dra	55473.473±0.004	0.628	23255.	C
XZ Cyg ²	55431.452±0.002	-0.005	14704.	C	BD Dra	55490.588±0.002	0.660	23284.	C
XZ Cyg ²	55443.585±0.002	-0.003	14730.	C	BD Dra	55506.475±0.004	0.643	23311.	C
XZ Cyg ²	55458.508±0.002	-0.011	14762.	C	BD Dra	55513.554±0.002	0.653	23323.	C
DM Cyg	55438.586±0.002	0.067	30620.	C	BD Dra	55519.438±0.003	0.647	23333.	C
DM Cyg	55451.604±0.002	0.069	30651.	C	BD Dra	55523.526±0.006	0.611	23340.	C
DM Cyg	55471.342±0.003	0.074	30698.	C	BD Dra	55532.394±0.003	0.644	23355.	C
DM Cyg	55510.384±0.002	0.069	30791.	C	BD Dra	55542.408±0.002	0.644	23372.	C
V939 Cyg ³	55374.543±0.002	0.061	14414.	C	BD Dra	55557.709±0.002	0.629	23398.	C
V939 Cyg ³	55429.594±0.004	0.082	14556.	C	BK Dra	55402.538±0.004	-0.160	50465.	C
V939 Cyg ³	55443.542±0.005	0.079	14592.	C	BK Dra	55408.459±0.001	-0.160	50475.	C
DX Del	55398.561±0.002	0.062	33920.	C	BK Dra	55415.560±0.002	-0.163	50487.	C
DX Del	55416.520±0.003	0.061	33958.	C	BK Dra	55418.522±0.002	-0.162	50492.	C
DX Del	55442.513±0.002	0.060	34013.	C	BK Dra	55431.549±0.003	-0.161	50514.	C
DX Del	55453.388±0.002	0.065	34036.	C	BK Dra	55444.578±0.003	-0.158	50536.	C
DX Del	55479.380±0.004	0.063	34091.	C	RX Eri	55486.728±0.005	-0.009	57547.	LS
RT Dor	55494.744±0.004	-0.059	51213.	LS	RX Eri	55506.694±0.003	-0.010	57581.	LS
RT Dor	55525.655±0.006	-0.050	51277.	LS	RX Eri	55526.659±0.004	-0.011	57615.	LS
RT Dor	55527.578±0.005	-0.058	51281.	LS	RX Eri	55540.753±0.004	-0.011	57639.	LS
VW Dor	55198.624±0.002	-0.129	29476.	LS	SV Eri	55480.720±0.007	0.843	27918.	LS
VW Dor	55199.765±0.003	-0.130	29478.	LS	SV Eri	55485.726±0.005	0.853	27925.	LS
VW Dor	55490.767±0.003	-0.139	29988.	LS	SV Eri	55500.715±0.006	0.852	27946.	LS
VW Dor	55494.764±0.003	-0.136	29995.	LS	BB Eri	55544.622±0.005	0.262	28049.	LS
VW Dor	55502.752±0.003	-0.136	30009.	LS	BK Eri	55535.553±0.006	-0.022	32152.	LS
VW Dor	55505.597±0.002	-0.145	30014.	LS	RX For	55497.691±0.004	-0.048	26228.	LS

Table 1 (cont.): maxima of RR Lyrae stars

Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.	Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.
RX For	55503.670±0.002	-0.042	26238.	LS	RR Leo	55524.606±0.002	0.108	27032.	C
SS For	55430.761±0.002	-0.141	33833.	LS	RR Leo	55533.654±0.001	0.108	27052.	C
SW For	55517.759±0.006	0.442	26344.	LS	ST Leo	55216.481±0.003	-0.019	57101.	C
SX For	55446.759±0.005	0.047	26908.	LS	ST Leo	55261.411±0.002	-0.019	57195.	C
SX For	55500.637±0.003	0.050	26997.	LS	ST Leo	55548.679±0.002	-0.020	57796.	C
SX For	55543.621±0.005	0.055	27068.	LS	TV Leo	55294.649±0.003	0.114	27128.	LS
RR Gem	55228.481±0.002	-0.426	34914.	C	V LMi	55235.372±0.002	0.032	65644.	C
RR Gem	55504.598±0.002	-0.440	35609.	C	V LMi	55517.667±0.002	0.033	66163.	C
RR Gem	55533.597±0.002	-0.445	35682.	C	V LMi	55523.650±0.002	0.033	66174.	C
RR Gem	55541.544±0.001	-0.444	35702.	C	V LMi	55534.531±0.002	0.036	66194.	C
SZ Gem	55203.488±0.002	-0.060	55892.	C	V LMi	55535.612±0.003	0.029	66196.	C
SZ Gem	55495.648±0.003	-0.063	56475.	C	V LMi	55542.687±0.001	0.032	66209.	C
GI Gem	55220.468±0.002	0.069	57410.	C	U Lep	55506.687±0.002	0.047	24342.	LS
GI Gem	55233.465±0.001	0.068	57440.	C	U Lep	55531.686±0.003	0.043	24385.	LS
GI Gem	55545.416±0.002	0.068	58160.	C	U Lep	55556.696±0.005	0.049	24428.	LS
RW Gru	55411.665±0.002	-0.129	38254.	LS	AO Lep	55529.728±0.005			LS
RW Gru	55449.623±0.005	-0.142	38323.	LS	AO Lep	55533.645±0.005			LS
TW Her	55398.544±0.004	-0.012	84718.	C	TV Lib	55376.602±0.002	-0.004	131143.	LS
TW Her	55404.536±0.004	-0.014	84733.	C	VY Lib	55377.604±0.002	-0.037	26657.	LS
TW Her	55420.521±0.003	-0.013	84773.	C	AZ Lib	55292.847±0.004	0.188	41924.	LS
VZ Her	55429.368±0.002	0.069	42333.	C	AZ Lib	55390.551±0.005	0.185	42074.	LS
VZ Her	55432.451±0.002	0.070	42340.	C	TT Lyn	55519.488±0.003	-0.040	31582.	C
AR Her	55292.545±0.001	-1.307	29444.	C	TW Lyn	55488.518±0.003	0.061	21720.	C
AR Her	55403.473±0.004	-1.305	29680.	C	TW Lyn	55517.430±0.002	0.061	21780.	C
DL Her	55348.527±0.003	0.048	28971.	C	TW Lyn	55541.521±0.004	0.059	21830.	C
V593 Her	55377.562±0.005	-0.121	31366.	C	TW Lyn	55546.336±0.003	0.056	21840.	C
UU Hor	55490.701±0.003	0.169	47800.	LS	RZ Lyr	55399.525±0.003	-0.016	27807.	C
UU Hor	55497.785±0.002	0.172	47811.	LS	RZ Lyr	55417.405±0.002	-0.029	27842.	C
SZ Hya	55224.453±0.002	-0.201	27074.	C	RZ Lyr	55462.405±0.002	-0.018	27930.	C
SZ Hya	55248.624±0.003	-0.206	27119.	LS	RZ Lyr	55463.427±0.002	-0.019	27932.	C
SZ Hya	55291.591±0.003	-0.218	27199.	LS	AW Lyr	55462.461±0.002	-0.037	60571.	C
SZ Hya	55545.705±0.001	-0.219	27672.	C	AW Lyr	55474.400±0.002	-0.037	60595.	C
UU Hya	55233.775±0.003	0.023	30074.	LS	CN Lyr	55418.428±0.003	0.020	26574.	C
UV Hya	54813.557±0.004	-0.013	28408.	C	CN Lyr	55427.479±0.003	0.021	26596.	C
WZ Hya	55243.671±0.002	-0.011	29042.	LS	CN Lyr	55432.414±0.004	0.019	26608.	C
WZ Hya	55249.591±0.004	-0.006	29053.	LS	CN Lyr	55441.461±0.005	0.016	26630.	C
XX Hya	55294.581±0.003	0.044	30452.	LS	CN Lyr	55462.444±0.003	0.019	26681.	C
BI Hya	55239.720±0.002	0.237	51928.	LS	CN Lyr	55474.374±0.004	0.018	26710.	C
BI Hya	55327.639±0.002	0.237	52095.	LS	CR Lyr	55418.456±0.003	-0.032	52002.	C
DG Hya	55237.677±0.005	-0.047	42378.	LS	IK Lyr	55405.498±0.005	-0.134	63134.	C
DH Hya	55249.698±0.003	0.073	49230.	LS	IO Lyr	55405.511±0.002	-0.037	27354.	C
ET Hya	55215.467±0.002	0.149	28145.	C	IO Lyr	55423.403±0.002	-0.036	27385.	C
ET Hya	55245.630±0.003	0.149	28189.	LS	IO Lyr	55449.372±0.002	-0.037	27430.	C
ET Hya	55247.689±0.004	0.151	28192.	LS	MM Lyr	54688.397±0.008	-0.034	52340.	C
ET Hya	55248.373±0.003	0.150	28193.	C	MM Lyr	54711.366±0.010	0.205	52387.	C
ET Hya	55533.553±0.002	0.154	28609.	C	MM Lyr	55395.382±0.006	-0.107	53802.	C
ET Hya	55548.634±0.002	0.154	28631.	C	Z Mic	55436.575±0.005	-0.118	23579.	LS
FX Hya	55309.566±0.002	-0.022	50478.	LS	Z Mic	55443.605±0.005	-0.131	23591.	LS
FX Hya	55362.571±0.002	-0.021	50605.	LS	Z Mic	55453.586±0.005	-0.128	23608.	LS
GO Hya	55216.391±0.004	-0.070	46457.	C	EM Mus	55242.814±0.002	-0.176	35752.	LS
GO Hya	55513.593±0.005	-0.084	46924.	C	EM Mus	55281.597±0.002	-0.179	35835.	LS
GO Hya	55543.522±0.005	-0.067	46971.	C	Y Oct	55292.882±0.004	-0.282	41623.	LS
TW Hyi	55541.579±0.004	0.003	23803.	LS	Y Oct	55313.579±0.004	-0.277	41655.	LS
V Ind	55439.774±0.003	0.367	31946.	LS	RV Oct	55231.826±0.003	0.134	70234.	LS
RR Leo	55297.499±0.002	0.103	26530.	C	RV Oct	55402.604±0.002	0.134	70533.	LS
RR Leo	55519.627±0.002	0.106	27021.	C	RY Oct	55346.771±0.006	0.081	48555.	LS

Table 1 (cont.): maxima of RR Lyrae stars

Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.	Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.
RY Oct	55399.734±0.003	0.078	48649.	LS	BH Peg	55426.515±0.003	-0.127	25057.	C
RY Oct	55411.558±0.003	0.069	48670.	LS	BH Peg	55449.588±0.003	-0.129	25093.	C
RY Oct	55435.776±0.002	0.058	48713.	LS	BH Peg	55469.466±0.006	-0.122	25124.	C
RY Oct	55436.903±0.002	0.058	48715.	LS	BH Peg	55471.386±0.003	-0.125	25127.	C
RY Oct	55457.749±0.004	0.055	48752.	LS	BH Peg	55496.390±0.005	-0.120	25166.	C
RY Oct	55479.721±0.005	0.052	48791.	LS	BH Peg	55498.315±0.005	-0.118	25169.	C
RY Oct	55501.709±0.006	0.065	48830.	LS	BH Peg	55507.291±0.005	-0.116	25183.	C
RY Oct	55531.571±0.005	0.063	48883.	LS	BH Peg	55523.331±0.006	-0.101	25208.	C
SS Oct	55486.604±0.004	-0.013	44170.	LS	BT Peg	55401.367±0.003	0.097	34025.	C
SS Oct	55494.688±0.004	-0.013	44183.	LS	BT Peg	55427.529±0.004	0.091	34072.	C
SS Oct	55509.607±0.003	-0.018	44207.	LS	BT Peg	55519.396±0.003	0.090	34237.	C
UV Oct	55312.592±0.002	-0.198	38672.	LS	CG Peg	55418.548±0.003	-0.051	34928.	C
UV Oct	55426.541±0.002	-0.200	38882.	LS	CG Peg	55439.565±0.002	-0.055	34973.	C
UV Oct	55427.629±0.002	-0.198	38884.	LS	CG Peg	55441.437±0.002	-0.052	34977.	C
UV Oct	55428.713±0.003	-0.199	38886.	LS	CG Peg	55453.579±0.002	-0.055	35003.	C
UV Oct	55446.610±0.002	-0.208	38919.	LS	CG Peg	55469.463±0.002	-0.054	35037.	C
UW Oct	55430.659±0.003	-0.023	47455.	LS	CG Peg	55505.434±0.002	-0.053	35114.	C
UW Oct	55437.795±0.002	0.001	47471.	LS	CG Peg	55527.388±0.002	-0.054	35161.	C
UW Oct	55455.552±0.005	-0.021	47511.	LS	DZ Peg	55417.571±0.002	0.166	35443.	C
UW Oct	55458.675±0.004	-0.010	47518.	LS	DZ Peg	55439.429±0.003	0.160	35479.	C
UW Oct	55490.677±0.003	-0.011	47590.	LS	DZ Peg	55451.578±0.002	0.162	35499.	C
UW Oct	55502.679±0.005	-0.010	47617.	LS	DZ Peg	55468.583±0.002	0.161	35527.	C
UW Oct	55511.563±0.004	-0.016	47637.	LS	DZ Peg	55473.447±0.004	0.166	35535.	C
AR Oct	55536.659±0.002	0.076	47498.	LS	DZ Peg	55496.517±0.002	0.157	35573.	C
DY Oct	55533.686±0.003			LS	DZ Peg	55498.346±0.003	0.164	35576.	C
DY Oct	55542.619±0.003			LS	DZ Peg	55504.419±0.003	0.164	35586.	C
DZ Oct	55548.599±0.005			LS	DZ Peg	55535.397±0.005	0.167	35637.	C
V445 Oph	55391.552±0.005	0.039	70142.	LS	AR Per	55198.520±0.002	0.059	65707.	C
V445 Oph	55404.649±0.005	0.034	70175.	LS	AR Per	55199.370±0.002	0.058	65709.	C
V455 Oph	55381.418±0.003	-0.295	29848.	C	AR Per	55233.412±0.002	0.056	65789.	C
CM Ori	55541.698±0.005	-0.007	46108.	LS	AR Per	55432.573±0.003	0.060	66257.	C
CM Ori	55543.658±0.005	-0.015	46111.	LS	AR Per	55449.594±0.002	0.059	66297.	C
V964 Ori	55505.693±0.002	-0.431	47569.	LS	AR Per	55464.489±0.002	0.060	66332.	C
WY Pav	55438.649±0.005	0.067	48541.	LS	AR Per	55483.639±0.002	0.060	66377.	C
BN Pav	55416.621±0.002	-0.134	47746.	LS	AR Per	55489.596±0.002	0.060	66391.	C
BP Pav	55416.774±0.002	0.021	50395.	LS	AR Per	55490.447±0.002	0.060	66393.	C
BP Pav	55423.627±0.002	-0.112	50408.	LS	AR Per	55506.617±0.002	0.059	66431.	C
BP Pav	55490.575±0.003	0.198	50532.	LS	AR Per	55509.598±0.002	0.061	66438.	C
DN Pav	55353.896±0.003	0.110	30250.	LS	AR Per	55510.449±0.002	0.061	66440.	C
DN Pav	55436.805±0.002	0.105	30427.	LS	AR Per	55511.301±0.004	0.062	66442.	C
DN Pav	55438.683±0.003	0.109	30431.	LS	AR Per	55533.427±0.001	0.059	66494.	C
DN Pav	55439.617±0.003	0.106	30433.	LS	AR Per	55535.556±0.002	0.060	66499.	C
DN Pav	55444.773±0.002	0.109	30444.	LS	AR Per	55540.662±0.002	0.060	66511.	C
DN Pav	55462.581±0.002	0.117	30482.	LS	U Pic	55482.721±0.003	0.072	31374.	LS
DN Pav	55499.579±0.002	0.108	30561.	LS	U Pic	55489.762±0.003	0.067	31390.	LS
DN Pav	55506.608±0.002	0.110	30576.	LS	U Pic	55516.626±0.004	0.069	31451.	LS
VV Peg	55427.598±0.001	-0.020	32839.	C	U Pic	55519.711±0.002	0.071	31458.	LS
VV Peg	55451.529±0.001	-0.020	32888.	C	RY Psc	55446.704±0.005	0.591	24098.	LS
VV Peg	55471.553±0.002	-0.020	32929.	C	RY Psc	55455.708±0.005	0.590	24115.	LS
VV Peg	55495.483±0.004	-0.021	32978.	C	XX Pup	55210.629±0.002	0.494	25981.	LS
VV Peg	55496.458±0.003	-0.023	32980.	C	XX Pup	55560.774±0.003	0.508	26658.	LS
AV Peg	55439.617±0.002	0.130	29841.	C	BB Pup	55560.749±0.003	0.131	34856.	LS
AV Peg	55440.399±0.002	0.131	29843.	C	HH Pup	55240.611±0.003	0.010	42842.	LS
AV Peg	55441.569±0.002	0.130	29846.	C	HH Pup	55522.729±0.003	0.009	43564.	LS
AV Peg	55450.548±0.002	0.130	29869.	C	HH Pup	55531.718±0.003	0.011	43587.	LS
AV Peg	55495.444±0.002	0.133	29984.	C	HH Pup	55547.737±0.003	0.010	43628.	LS

Table 1 (cont.): maxima of RR Lyrae stars

Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.	Variable star	Maximum HJD 24. . .	$O - C$ (days)	E	Obs.
HH Pup	55556.724±0.005	0.010	43651.	LS	YY Tuc	55447.802±0.003	0.052	21343.	LS
HH Pup	55560.635±0.003	0.013	43661.	LS	YY Tuc	55449.702±0.003	0.047	21346.	LS
V440 Sgr	55425.672±0.003	0.106	29145.	LS	YY Tuc	55496.690±0.003	0.043	21420.	LS
V440 Sgr	55435.705±0.004	0.112	29166.	LS	AE Tuc	55203.639±0.002	0.103	50512.	LS
V675 Sgr	55353.835±0.005	0.075	41985.	LS	AE Tuc	55432.874±0.002	0.195	51065.	LS
V1130 Sgr	55410.547±0.002	0.042	49379.	LS	AE Tuc	55437.849±0.002	0.198	51077.	LS
V1130 Sgr	55436.679±0.002	0.043	49425.	LS	AE Tuc	55462.724±0.003	-0.203	51138.	LS
V1130 Sgr	55448.606±0.002	0.041	49446.	LS	AE Tuc	55484.689±0.002	-0.199	51191.	LS
V1646 Sgr	55342.782±0.003	0.169	38605.	LS	AE Tuc	55489.663±0.003	-0.198	51203.	LS
V1646 Sgr	55392.871±0.002	0.169	38697.	LS	AE Tuc	55525.730±0.002	-0.180	51290.	LS
V1646 Sgr	55438.601±0.002	0.166	38781.	LS	AG Tuc	55559.629±0.003	0.057	26166.	LS
V1646 Sgr	55439.695±0.002	0.171	38783.	LS	TU UMa	55240.483±0.003	-0.033	22252.	C
V1646 Sgr	55444.593±0.004	0.169	38792.	LS	TU UMa	55545.511±0.003	-0.044	22799.	C
V494 Sco	55416.555±0.002	-0.262	33441.	LS	TU UMa	55546.626±0.003	-0.045	22801.	C
V494 Sco	55436.641±0.002	-0.261	33488.	LS	AB UMa	55319.485±0.007	0.114	31842.	C
RU Scl	55494.703±0.002	0.435	49401.	LS	AB UMa	55557.532±0.007	0.129	32239.	C
RU Scl	55503.587±0.005	0.439	49419.	LS	EX UMa	55203.467±0.004	0.026	11404.	C
UZ Scl	55505.662±0.002	0.034	36501.	LS	EX UMa	55228.440±0.003	0.029	11450.	C
VW Scl	55424.822±0.003	-0.009	54051.	LS	EX UMa	55297.378±0.005	0.027	11577.	C
VW Scl	55483.573±0.002	-0.014	54166.	LS	EX UMa	55513.435±0.005	0.037	11975.	C
VW Scl	55485.616±0.002	-0.014	54170.	LS	EX UMa	55534.601±0.004	0.033	12014.	C
VX Scl	55428.831±0.005	-1.649	21678.	LS	EX UMa	55540.567±0.004	0.027	12025.	C
VX Scl	55444.755±0.005	-1.659	21703.	LS	EX UMa	55541.661±0.004	0.036	12027.	C
AE Scl	55447.715±0.005	0.257	25868.	LS	EX UMa	55545.447±0.003	0.022	12034.	C
AE Scl	55485.678±0.002	0.264	25937.	LS	EX UMa	55547.634±0.005	0.038	12038.	C
VY Ser	55364.606±0.004	0.037	33804.	LS	KT UMa	55252.389±0.007	0.046	9862.	C
HY Tel	55410.603±0.003	-0.175	66306.	LS	KT UMa	55289.399±0.005	0.046	9921.	C
HY Tel	55435.572±0.002	-0.161	66368.	LS	KT UMa	55541.585±0.006	0.057	10323.	C
HY Tel	55449.672±0.003	-0.149	66403.	LS	KT UMa	55543.453±0.005	0.043	10326.	C
RW TrA	55366.889±0.004	-0.176	37102.	LS	KT UMa	55548.481±0.006	0.053	10334.	C
RW TrA	55367.638±0.005	-0.175	37104.	LS	AF Vel	55226.691±0.005	-0.209	26156.	LS
RW TrA	55403.546±0.004	-0.175	37200.	LS	AF Vel	55235.659±0.002	-0.206	26173.	LS
RW TrA	55410.651±0.002	-0.177	37219.	LS	AF Vel	55237.768±0.005	-0.207	26177.	LS
RW TrA	55449.548±0.003	-0.181	37323.	LS	AF Vel	55244.621±0.002	-0.210	26190.	LS
W Tuc	55213.624±0.003	0.172	28549.	LS	AF Vel	55311.598±0.005	-0.213	26317.	LS
W Tuc	55390.878±0.004	0.171	28825.	LS	ST Vir	55365.532±0.004	-0.016	35609.	LS
W Tuc	55430.704±0.003	0.178	28887.	LS	UV Vir	55267.452±0.003	0.022	26018.	C
W Tuc	55435.845±0.004	0.182	28895.	LS	AS Vir	55280.696±0.002	0.114	29138.	LS
W Tuc	55457.673±0.004	0.174	28929.	LS	AT Vir	55282.451±0.002	-0.299	29678.	C
W Tuc	55489.791±0.005	0.180	28979.	LS	BB Vir	55270.474±0.002	0.277	33234.	C
W Tuc	55504.557±0.005	0.175	29002.	LS	BB Vir	55290.734±0.003	0.280	33277.	LS
W Tuc	55525.759±0.006	0.183	29035.	LS	DO Vir	55301.657±0.003	0.216	53899.	LS
W Tuc	55534.739±0.005	0.172	29049.	LS	SV Vol	55199.716±0.002	0.099	35554.	LS
W Tuc	55545.664±0.004	0.179	29066.	LS	SV Vol	55524.792±0.005	0.044	36413.	LS
YY Tuc	55416.690±0.003	0.056	21294.	LS	BN Vul	55408.462±0.002	0.070	16626.	C
YY Tuc	55426.845±0.002	0.050	21310.	LS	BN Vul	55443.515±0.002	0.069	16685.	C
YY Tuc	55428.756±0.004	0.056	21313.	LS	BN Vul	55449.455±0.002	0.068	16695.	C
YY Tuc	55437.641±0.003	0.051	21327.	LS	BN Vul	55474.415±0.003	0.075	16737.	C

* C = Calern, LS = La Silla

1 Meinunger, 1984

2 Baldwin and Samolyk, 2003

3 Agerer and Moschner, 1996