

# Variable Star Bulletin

## CCD and DSLR maxima of RR Lyrase stars in 2012

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Following table is summary of maxima of RR Lyrase stars observed by Kenji Hirosawa, VSOLJ.

star	max. HJD	O-C	err	E	band	n	inst.
CI And	2456275.0064	-0.0065	0.002	9971	V	101	20cmSC+ST8XME
DR And	2456196.2262	-0.0878	0.002	6350	V	131	20cmSC+ST8XME
SW And	2456255.9900	+0.0021	0.002	5699	cG	170	13cmR+EosKissX3
SW And	2456259.0861	+0.0023	0.002	5706	cG	170	13cmR+EosKissX3
XX And	2456263.0493	-0.0054	0.003	3598	cG	65	13cmR+EosKissX3
ZZ And	2456219.9316	+0.0185	0.003	5218	V	119	25cmL+ST402ME
AA Aql	2456158.9930	+0.0379	0.002	87929	cG	170	13cmR+EosKissX3
BN Aqr	2456208.0889	-0.0572	0.003	7042	V	80	25cmL+ST402ME
BO Aqr	2456249.9660	+0.0317	0.003	4794	V	136	16cmL+ST402ME
CP Aqr	2456231.9718	+0.0089	0.002	8928	V	84	16cmL+ST402ME
SW Aqr	2456262.9332	+0.0235	0.002	7329	V	110	16cmL+ST402ME
TZ Aqr	2456258.9572	+0.0265	0.003	5841	V	133	16cmL+ST402ME
CI Ari	2456183.1925	-0.0431	0.002	7227	V	137	20cmSC+ST8XME
CI Ari	2456220.0684	-0.0457	0.002	7308	V	106	20cmSC+ST8XME
SY Ari	2456244.0041	-0.0199	0.003	4689	V	101	20cmSC+ST8XME
BH Aur	2456286.1075	+0.0012	0.003	5549	cG	75	16cmL+EosKissX4
TZ Aur	2456221.2562	-0.0008	0.002	6306	cG	147	13cmR+EosKissX3
TZ Aur	2456263.1678	+0.0016	0.002	6413	cG	99	13cmR+EosKissX3
RS Boo	2456005.2191	-0.0133	0.003	19889	cG	163	13cmR+EosKissX3
RS Boo	2456035.0288	-0.0133	0.002	19968	cG	139	13cmR+EosKissX3
TV Boo	2456000.2598	+0.0107	0.005	15010	cG	120	13cmR+EosKissX3
TW Boo	2455985.2514	-0.0338	0.002	8314	cG	130	13cmR+EosKissX3
AH Cam	2455977.9850	-0.1401	0.002	46778	V	120	16cmL+ST8XME
AH Cam	2456250.0881	-0.1632	0.002	47516	cG	150	13cmR+EosKissX3
AH Cam	2456281.0621	-0.1628	0.002	47600	cG	150	13cmR+EosKissX3
RZ Cam	2456213.1438	+0.0516	0.002	34955	V	119	25cmL+ST402ME
RZ Cam	2456275.1271	+0.0570	0.003	35084	V	76	20cmSC+ST8XME
RR Cet	2456159.1798	+0.0096	0.002	41549	cG	163	13cmR+EosKissX3
RU Cet	2456220.0904	+0.1181	0.002	27962	cG	87	13cmR+EosKissX3
RV Cet	2456244.0766	+0.2226	0.003	27479	cG	115	13cmR+EosKissX3

star	max. HJD	O-C	err	E	band	n	inst.
RZ Cet	2455934.9647	-0.1853	0.002	43141	cG	176	13cmR+EosKissX3
RZ Cet	2456230.0890	-0.1939	0.002	43719	cG	121	13cmR+EosKissX3
AA CMi	2456256.2764	+0.0762	0.002	41316	cG	139	13cmR+EosKissX3
AL CMi	2455975.9850	-0.0720	0.004	35202	cG	148	13cmR+EosKissX3
AL CMi	2456256.2080	-0.0535	0.003	35711	V	109	20cmSC+ST8XME
AQ Cnc	2456256.2838	-0.0849	0.002	42396	V	129	16cmL+ST402ME
KV Cnc	2456281.2848	-0.2324	0.002	7012	V	128	16cmL+ST402ME
RW Cnc	2455997.1217	+0.2137	0.002	30045	cG	91	13cmR+EosKissX3
SS Cnc	2455970.0842	+0.0578	0.002	89540	V	127	16cmL+ST8XME
TT Cnc	2455956.0247	+0.1161	0.005	28417	V	119	16cmL+ST8XME
TT Cnc	2455999.9508	+0.0931	0.004	28495	V	164	16cmL+ST8XME
TT Cnc	2456220.2856	+0.1192	0.002	28886	cG	113	13cmR+EosKissX3
RY Com	2456025.1749	-0.1203	0.004	35028	V	150	16cmL+ST8XME
S Com	2456005.0278	-0.1052	0.002	26169	V	139	16cmL+ST8XME
S Com	2456032.0129	-0.1033	0.003	26215	cG	139	13cmR+EosKissX3
S Com	2456281.3124	-0.1048	0.002	26640	cG	126	13cmR+EosKissX3
RR CVn	2456005.2427	+0.0161	0.002	22081	C	164	16cmL+ST8XME
RU CVn	2456014.2031	+0.2309	0.002	37559	V	168	16cmL+ST8XME
RZ CVn	2456000.2765	-0.1462	0.002	27593	V	108	16cmL+ST8XME
RZ CVn	2456032.0551	-0.1427	0.002	27649	cG	112	16cmL+EosKissX4
UZ CVn	2456275.2908	+0.2466	0.004	42775	V	142	16cmL+ST402ME
W CVn	2456025.1766	-0.1456	0.002	62750	cG	189	13cmR+EosKissX3
Z CVn	2456286.3621	+0.0196	0.006	26544	cG	115	16cmL+EosKissX4
DM Cyg	2456219.9515	+0.0729	0.002	32481	cG	162	13cmR+EosKissX3
UY Cyg	2456277.9295	+0.0620	0.004	60360	cG	97	13cmR+EosKissX3
XZ Cyg	2456164.0118	+0.1119	0.003	25797	cG	97	13cmR+EosKissX3
XZ Cyg	2456220.9383	+0.1010	0.002	25919	cG	97	13cmR+EosKissX3
BV Del	2456208.0198	+0.0229	0.003	72454	V	107	20cmSC+ST8XME
CK Del	2456195.9602	+0.0721	0.002	48776	V	171	20cmSC+ST8XME
DX Del	2456147.1906	+0.0663	0.003	35504	cG	148	13cmR+EosKissX3
RV Del	2456182.9748	-0.2424	0.003	60267	C	135	25cmL+ST402ME
SX Del	2456207.9744	-0.0217	0.003	7812	V	100	25cmL+ST402ME
SU Dra	2455997.0380	+0.0592	0.002	18314	V	170	16cmL+ST8XME
SW Dra	2455956.2937	+0.0628	0.002	52191	cG	186	13cmR+EosKissX3
XZ Dra	2456059.2487	-0.1203	0.002	29656	cG	94	13cmR+EosKissX3
BB Eri	2456230.2105	+0.2632	0.003	29252	V	60	20cmSC+ST8XME
SV Eri	2456263.0878	+0.1762	0.005	29015	V	107	16cmL+ST402ME
GI Gem	2456215.2427	+0.0667	0.002	59706	V	102	25cmL+ST402ME
RR Gem	2455976.9676	-0.0756	0.002	36797	cG	177	13cmR+EosKissX3
RR Gem	2456250.3010	-0.0919	0.002	37485	V	75	20cmSC+ST8XME
SZ Gem	2456215.2761	-0.0668	0.002	57911	cG	118	13cmR+EosKissX3
AR Her	2456089.1931	+0.0543	0.002	31136	cG	140	13cmR+EosKissX3
EP Her	2456139.0374	-0.0794	0.002	65984	V	122	20cmSC+ST8XME
EP Her	2456156.0635	-0.0822	0.002	66024	V	107	20cmSC+ST8XME
TW Her	2456089.0513	-0.0133	0.002	86446	cG	140	13cmR+EosKissX3
VZ Her	2456032.1791	+0.0716	0.002	43702	cG	193	13cmR+EosKissX3
DD Hya	2456230.2553	-0.1940	0.004	28967	V	33	25cmL+ST402ME
DD Hya	2456250.3298	-0.1906	0.004	29007	V	79	16cmL+ST402ME
DH Hya	2456014.0112	+0.0816	0.003	50793	cG	151	13cmR+EosKissX3
SZ Hya	2456275.2501	-0.2455	0.002	29030	cG	147	13cmR+EosKissX3
UU Hya	2455976.0840	+0.0102	0.002	31491	V	154	16cmL+ST8XME
WZ Hya	2456286.3017	-0.0097	0.003	30981	cG	69	13cmR+EosKissX3
PW Lac	2456195.9718	+0.1856	0.003	36453	V	173	25cmL+ST402ME
RR Leo	2455976.1036	+0.1174	0.002	28030	cG	135	13cmR+EosKissX3
RR Leo	2456000.9883	+0.1205	0.002	28085	cG	147	13cmR+EosKissX3
RR Leo	2456250.2570	+0.1204	0.002	28636	cG	137	13cmR+EosKissX3
RR Leo	2456259.3091	+0.1247	0.002	28656	V	142	16cmL+ST402ME

star	max. HJD	O-C	err	E	band	n	inst.
RX Leo	2456281.2948	+0.1008	0.004	30570	V	103	20cmSC+ST8XME
SS Leo	2456025.0199	-0.0802	0.003	22741	cG	173	13cmR+EosKissX3
ST Leo	2456008.0235	-0.0180	0.002	58757	cG	184	13cmR+EosKissX3
ST Leo	2456263.2610	-0.0241	0.002	59291	V	125	16cmL+ST402ME
TV Lib	2455997.2721	-0.0082	0.002	133445	cG	126	13cmR+EosKissX3
V LMi	2456005.0194	+0.0343	0.002	67059	cG	160	13cmR+EosKissX3
X LMi	2455977.0250	+0.2461	0.004	24516	V	154	16cmL+ST8XME
Y LMi	2455996.9751	+0.2029	0.002	38974	cG	160	13cmR+EosKissX3
RW Lyn	2456008.0307	-0.1684	0.002	60226	V	168	16cmL+ST8XME
RW Lyn	2456019.0002	-0.1674	0.004	60248	V	116	16cmL+ST8XME
RW Lyn	2456263.2871	-0.1783	0.002	60738	V	72	20cmSC+ST8XME
TT Lyn	2456001.0157	-0.0442	0.002	32388	V	113	16cmL+ST8XME
TT Lyn	2456263.2869	-0.0466	0.003	32827	cG	105	13cmR+EosKissX3
CN Lyr	2456163.0305	+0.0209	0.003	28384	cG	179	13cmR+EosKissX3
IO Lyr	2456139.0335	-0.0376	0.002	28625	cG	159	13cmR+EosKissX3
KX Lyr	2456008.2676	+0.0018	0.002	37145	cG	133	13cmR+EosKissX3
KX Lyr	2456107.0316	+0.0032	0.003	37369	cG	123	13cmR+EosKissX3
KX Lyr	2456148.0243	-0.0081	0.003	37462	cG	119	13cmR+EosKissX3
RR Lyr	2456008.2830	-0.1448	0.004	23083	cG	107	CanonKissX4(100mm)
ST Oph	2456070.1804	-0.0236	0.002	61382	cG	137	13cmR+EosKissX3
CM Ori	2455971.9786	-0.0112	0.005	46764	C	90	16cmL+ST8XME
CM Ori	2456250.0870	-0.0137	0.002	47188	V	129	20cmSC+ST8XME
V964 Ori	2456259.1107	+0.0398	0.003	49061	V	160	16cmL+ST402ME
AO Peg	2456230.0111	+0.0360	0.003	56128	V	77	20cmSC+ST8XME
AV Peg	2456139.1805	+0.1416	0.003	31633	cG	97	13cmR+EosKissX3
AV Peg	2456262.9285	+0.1408	0.004	31950	cG	81	13cmR+EosKissX3
BF Peg	2456292.8920	-0.0813	0.004	26888	V	83	20cmSC+ST8XME
CG Peg	2456127.1877	-0.0600	0.003	36445	cG	120	13cmR+EosKissX3
CG Peg	2456229.9595	-0.0586	0.003	36665	cG	145	13cmR+EosKissX3
CG Peg	2456258.9212	-0.0595	0.002	36727	cG	147	13cmR+EosKissX3
CV Peg	2456183.1678	-0.0688	0.002	55853	C	77	25cmL+ST402ME
DZ Peg	2456221.0866	+0.1654	0.003	36766	V	106	25cmL+ST402ME
ES Peg	2456159.1865	+0.1641	0.002	33894	V	114	20cmSC+ST8XME
ET Peg	2456179.9844	-0.0585	0.002	35061	C	114	25cmL+ST402ME
ET Peg	2456229.9479	-0.0581	0.003	35163	V	106	25cmL+ST402ME
IY Peg	2456258.9449	-0.0174	0.002	20962	V	116	20cmSC+ST8XME
VV Peg	2456139.1777	-0.0203	0.002	34296	V	90	20cmSC+ST8XME
VV Peg	2456274.9515	-0.0181	0.002	34574	cG	121	13cmR+EosKissX3
AR Per	2455956.0008	+0.0630	0.002	67487	cG	191	13cmR+EosKissX3
AR Per	2456163.2400	+0.0598	0.002	67974	cG	113	13cmR+EosKissX3
TU Per	2456208.1425	-0.2457	0.003	28721	V	67	20cmSC+ST8XME
FR Psc	2456230.1192	+0.0039	0.002	5527	V	114	25cmL+ST402ME
RY Psc	2456220.1122	+0.0920	0.002	25559	V	87	25cmL+ST402ME
AN Ser	2456060.1576	+0.0029	0.002	79206	cG	162	13cmR+EosKissX3
AV Ser	2456018.2231	+0.1552	0.002	56762	cG	126	13cmR+EosKissX3
CS Ser	2456041.2200	+0.0235	0.002	47200	cG	155	13cmR+EosKissX3
BR Tau	2456256.1066	+0.0228	0.002	50612	V	203	16cmL+ST402ME
SS Tau	2455969.9775	+0.1072	0.002	45785	cG	141	13cmR+EosKissX3
SS Tau	2456244.0769	+0.1100	0.002	46526	V	105	16cmL+ST402ME
SS Tau	2456281.0617	+0.1047	0.002	46626	V	155	16cmL+ST402ME
U Tri	2456196.2328	-0.0530	0.002	82942	V	111	25cmL+ST402ME
U Tri	2456274.9490	-0.0534	0.002	83118	V	117	16cmL+ST402ME
AB UMa	2456000.0212	+0.1305	0.004	32977	cG	154	13cmR+EosKissX3
RV UMa	2455976.2879	+0.1276	0.002	23289	cG	142	13cmR+EosKissX3
TU UMa	2456035.1218	-0.0579	0.004	23677	cG	252	16cmL+EosKissX4
TU UMa	2456259.3006	-0.0579	0.002	24079	cG	157	13cmR+EosKissX3
AS Vir	2456000.1681	+0.1353	0.004	30438	V	109	16cmL+ST8XME
AT Vir	2456000.1262	-0.3310	0.002	31043	cG	95	13cmR+EosKissX3
AV Vir	2455989.3080	+0.0223	0.004	22102	V	62	16cmL+ST8XME

star	max. HJD	O-C	err	E	band	n	inst.
BB Vir	2456008.2289	-0.1764	0.002	34801	V	135	16cmL+ST8XME
BC Vir	2455989.3344	+0.2025	0.004	63890	cG	79	13cmR+EosKissX3
ST Vir	2456014.1974	-0.0482	0.002	37188	cG	203	13cmR+EosKissX3
UU Vir	2455985.2794	+0.0003	0.002	29831	V	101	16cmL+ST8XME
V476 Vir	2456035.2116	+0.0303	0.003	1771	cG	186	13cmR+EosKissX3
BN Vul	2456126.1731	+0.0726	0.002	17834	cG	156	13cmR+EosKissX3
BN Vul	2456231.9287	+0.0732	0.002	18012	cG	100	13cmR+EosKissX3
FH Vul	2456147.0174	-0.1405	0.002	49627	V	155	20cmSC+ST8XME
A180121	2456159.0655		0.002		V	113	20cmSC+ST8XME
A180121	2456182.9890		0.003		V	108	20cmSC+ST8XME

Remarks

A180121 = ASAS180121+2250.6

The O-C's were calculated from the GCVS ephemerides except following 2 stars.

SX Del MAX = 2451416.5450 + 0.613345E (GEOS)

IY Peg MAX = 2444819.4350 + 0.5457269 (GEOS)

cG magnitude means G plane of DSLR camera.

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VSOLJ

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