Parc de Levesville, 23

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March 2005

LIST OF VISUAL MAXIMA OF RR LYRAE STARS

ABSTRACT

154 instants of maximum light have been determined for 65 RR Lyrae variable stars from visual estimates. They are listed with the O-C relative to the most probable cycle number.

RESUME

154 instants de maxima de 65 étoiles variables du type RR Lyrae ont été déterminés à partir d'estimations visuelles. Ils sont listés avec l'O-C relatif au numéro de cycle le plus vraisemblable.

RIASSUNTO

154 massimi di 65 stelle variabili del tipo RR Lyrae sono stati determinati sulla base di stime visuali . Questi instanti di massimo sono raccolti in una lista con l'O-C relativo al numero di ciclo piú probabile.

RESUMEN

154 instantes de máximos de 65 estrellas variables del tipo RR Lyrae han sido determinados a partir de estimaciones visuales. Aparecen listados con los O-C relativos al número de ciclo más probable.

OBSERVATIONS

Most of the observations cover a time interval going from September 2003 (JD 2452650) to January 2005 (JD 2453390) and were selected from lists issued by GEOS as Notes Circulaires.

The observers are : Roland Boninsegna (BNN), Michel Dumont (DMT), Carlo Pampaloni (PMP) and Jacqueline Vandenbroere (VBR).

The instants of maximum were determined from direct visual estimates of the variable stars (vis). The O-C's were calculated from the GCVS 85 ephemerides whenever possible. They appear in notes when new or better ephemerides were used and after correction by a non linear relation.

The cycle numbers were chosen using the most probable solution extending the GEOS Circulars RR 14,15,16, 17 and 19 lists. The GEOS database (http://webast.ast.obs-mip.fr/people/leborgne/dbRR/index.htm) was examined to avoid any unlikelihood. No complete bibliography research was made for some of the stars.

LIST

STARS	OBS.	MODE	JD HEL.	E(GC 85)	O-C (GC 85)	NOTES
XX And	VBR	vis	52896.455	19106	+0.211	
AT And	VBR	vis	52896.373	17106	+0.009	
DR And	VBR	vis	52901.435	27847	- 0.031	
DR And	VBR	vis	53258.446	28481	- 0.037	
OV And	VBR	vis	53329.281	13951	+0.145	
OV And	VBR	vis	53353.281	14002	+0.146	
AA Aql	VBR	vis	52887.347	78886	+0.030	
TZ Aur	VBR	vis	53349.505	85395	+0.019	+0.007 (O-C eph. GEOS Circular RR 12)
TZ Aur	VBR	vis	53360.477	85423	+0.024	+0.012 idem
TZ Aur	VBR	vis	53353.429	85405	+0.026	+0.014 idem
BH Aur	VBR	vis	53300.536	23129	- 0.007	
BH Aur	VBR	vis	53349.358	23236	+0.013	
RS Boo	DMT	vis	52751.437	29101	+0.006	
RS Boo	DMT	vis	52797.475	29223	+0.008	

RS Boo	DMT	vis	52814.456	29268	+0.010	

STARS	OBS.	MODE	JD HEL.	E (GC 85)	O-C (GC 85)	NOTES
RS Boo	DMT	vis	52834.454	29321	+0.008	
RS Boo	DMT	vis	53094.443	30010	+0.011	
RS Boo	DMT	vis	53111.421	30055	+0.008	
RS Boo	DMT	vis	53140.468	30132	+0.001	
RS Boo	DMT	vis	53163.491	30193	+0.014	
RS Boo	DMT	vis	53169.522	30208	- 0.000	
SW Boo	VBR	vis	53120.419	20543	+0.251	
SW Boo	VBR	vis	53143.525	20588	+0.248	
SZ Boo	VBR	vis	52712.588	47956	+0.011	
SZ Boo	VBR	vis	52733.513	47996	+0.023	
UY Boo	VBR	vis	52695.531	16686	- 0.020	
UY Boo	VBR	vis	52725.459	16732	- 0.031	
UY Boo	VBR	vis	52736.531	16749	- 0.024	
CM Boo	VBR	vis	53055.590	28164	- 0.079	
AH Cam	VBR	vis	52695.334	37875	+0.053	
AH Cam	VBR	vis	52696.425	37878	+0.038	
AH Cam	VBR	vis	52912.500	38464	+0.033	
SS Cnc	VBR	vis	53386.585	82507	+0.046	
EZ Cnc	VBR	vis	53056.341	12721	- 0.028	
Z CVn	VBR	vis	53081.524	21642	+0.202	
RU CVn	VBR	vis	52729.465	31829	+0.186	
RU CVn	VBR	vis	52737.490	31843	+0.186	
RX CVn	VBR	vis	53110.403	25081	- 0.018	
RX CVn	BNN	vis	53111.495	25083	- 0.006	
RZ CVn	VBR	vis	53081.472	22449	- 0.189	
ST CVn	VBR	vis	52763.505	37603	- 0.041	
ST CVn	VBR	vis	53092.518	38603	- 0.073	
ST CVn	VBR	vis	53095.508	38606	- 0.070	
SW CVn	VBR	vis	53111.518	30692	+0.246	
SW CVn	VBR	vis	53142.426	30762	+0.238	
HU Cas	VBR	vis	52877.522	52096	- 0.011	
HU Cas	VBR	vis	52887.411	52120	- 0.001	
S Com	VBR	vis	53055.655	21141	- 0.100	
S Com	VBR	vis	53111.397	21236	- 0.084	
S Com	VBR	vis	53142.478	21289	- 0.092	
NSV 7366 CrB	VBR	vis	53110.536	3585	+0.004	Eph. GEOS Circular RR 20
V 759 Cyg	VBR	vis	52840.510	42544	- 0.059	
V 759 Cyg	VBR	vis	52872.553	42633	- 0.061	
V 894 Cyg	VBR	vis	52887.426	27809	+0.082	
V 894 Cyg	VBR	vis	52903.425	27837	+0.082	
RW Dra	VBR	vis	52739.478	30168	+0.167	
RW Dra	VBR	vis	53092.466	30965	+0.151	
VZ Dra	VBR	vis	52817.533	29456	- 0.148	+0.020 (O-C with eph. GEOS RR 9)
VZ Dra	VBR	vis	52900.360	29714	- 0.147	+0.022 idem
VZ Dra	VBR	vis	52928.311	29801	- 0.126	+0.044 idem
VZ Dra	VBR	vis	53168.456	30549	- 0.112	+0.062 idem
VZ Dra	VBR	vis	53176.460	30574	- 0.133	+0.041 idem
VZ Dra	VBR	vis	53203.444	30658	- 0.116	+0.059 idem
WY Dra	VBR	vis	52712.647	23955	+0.047	
WY Dra	VBR	vis	52807.465	24116	+0.046	
BD Dra	VBR	vis	52652.371	18467	- 0.084	
BD Dra	VBR	vis	52903.330	18893	- 0.070	
BD Dra	VBR	vis	52907.437	18900	- 0.087	
BT Dra	VBR	vis	52820.483	37518	- 0.023	
BT Dra	VBR	vis	52833.446	37540	- 0.009	
RR Gem	VBR	vis	53360.439	30212	- 0.313	
RR Gem	VBR	vis	53383.472	30270	- 0.325	

RR Gem	VBR	vis	53384.283	30272	- 0.308	
TW Her	VBR	vis	52763.582	78124	- 0.011	

STARS	OBS.	MODE	JD HEL.	E(GC 85)	O-C (GC 85)	NOTES	
TW Her	VBR	vis	52815.529	78254	- 0.011		
VZ Her	VBR	vis	52815.574	36397	+0.061		
VZ Her	VBR	vis	52834.513	36440	+0.066		
DL Her	VBR	vis	52820.490	24698	+0.037		
DL Her	VBR	vis	52852.433	24752	+0.032		
CQ Lac	VBR	vis	52908.507	28824	+0.088		
CQ Lac	VBR	vis	52936.412	28869	+0.091		
PW Lac	VBR	vis	53215.481	30636	+0.133		
PW Lac	VBR	vis	53253.392	30710	+0.130		
PW Lac	VBR	vis	53255.442	30714	+0.130		
PW Lac	VBR	vis	53257.495	30718	+0.134		
RR Leo	VBR	vis	53386.564	22306	+0.077		
V LMi	VBR	vis	53056.442	61638	+0.040		
TW Lyn	VBR	vis	52991.514	16538	+0.056		
RR Lyr	PMP	vis	52795.408	17416	- 0.580	+0.030 (O-C with eph GCVS 74)	
RR Lyr	PMP	vis	52850.418	17513	- 0.570	+0.057	idem
RR Lyr	DMT	vis	52753.463	17342	- 0.577	+0.030	idem
RR Lyr	DMT	vis	52774.458	17379	- 0.556	+0.052	idem
RR Lyr	DMT	vis	52850.416	17513	- 0.559	+0.055	idem
RR Lyr	DMT	vis	52876.466	17559	- 0.585	+0.031	idem
RR Lyr	DMT	vis	52897.450	17596	- 0.575	+0.042	idem
RR Lyr	DMT	vis	52901.402	17603	- 0.590	+0.027	idem
RR Lyr	DMT	vis	53151.432	18044	- 0.548	+0.084	idem
RR Lyr	DMT	vis	53185.418	18104	- 0.576	+0.061	idem
RR Lyr	DMT	vis	53214.398	18156	- 0.505	+0.132	idem
RR Lyr	DMT	vis	53232.449	18187	- 0.594	+0.045	idem
RR Lyr	DMT	vis	53236.431	18194	- 0.580	+0.059	idem
RR Lyr	DMT	vis	53249.444	18217	- 0.605	+0.035	idem
EZ Lyr	VBR	vis	52817.563	35988	- 0.107		
EZ Lyr	VBR	vis	52835.417	36022	- 0.111		
IO Lyr	VBR	vis	52853.483	22932	- 0.028		
NQ Lyr	VBR	vis	52877.411	59588	+0.001		
V 784 Oph	VBR	vis	52852.442	33203	+0.043		
V 784 Oph	VBR	vis	53182.481	34080	+0.088		
V 784 Oph	VBR	vis	53254.337	34271	+0.076		
V 816 Oph	VBR	vis	52885.335	43431	- 0.058		
CM Ori	VBR	vis	53081.309	42357	- 0.032		
CM Ori	VBR	vis	53353.510	42773	- 0.039		
AO Peg	VBR	vis	52876.513	50000	+0.040		
AV Peg	VBR	vis	52852.560	23214	+0.085		
BT Peg	VBR	vis	52500.545	28815	+0.054		
BT Peg	VBR	vis	52504.466	28822	+0.073		
BT Peg	VBR	vis	52533.400	28874	+0.055		
BT Peg	VBR	vis	52848.532	29440	+0.055		
BT Peg	VBR	vis	52886.435	29508	+0.097		
BT Peg	VBR	vis	52896.435	29526	+0.075		
BT Peg	VBR	vis	52901.447	29535	+0.077		
CG Peg	VBR	vis	52817.535	29360	- 0.039		
CG Peg	VBR	vis	52852.573	29435	- 0.035		
ES Peg	VBR	vis	52876.499	27800	+0.143		
TU Per	VBR	vis	52929.372	23319	- 0.205		
TU Per	VBR	vis	52991.306	23422	- 0.193		
AR Per	VBR	vis	53300.556	61247	+0.043	- 0.001 (O-C with non linear term of GCVS 85)	
AR Per	VBR	vis	53349.504	61362	+0.044	+0.009	idem
AR Per	VBR	vis	53353.338	61371	+0.058	+0.013	idem

AT Ser	VBR	vis	53094.587	15131	+0.013	
AT Ser	VBR	vis	53112.483	15155	- 0.008	
BH Ser	VBR	vis	52816.503	26082	+0.073	
BH Ser	VBR	vis	53081.597	26692	+0.089	

STARS	OBS.	MODE	JD HEL.	E(GC 85)	O-C (GC 85)	NOTES
BR Tau	VBR	vis	53383.296	43257	+0.022	
BR Tau	VBR	vis	53386.424	43265	+0.026	
RV UMa	VBR	vis	52807.479	16519	+0.085	
SX UMa	VBR	vis	52683.511	24662	+0.039	
SX UMa	VBR	vis	52721.597	24786	+0.042	
BF UMa	VBR	vis	53081.430	25520	+0.068	
BF UMa	VBR	vis	53107.475	25572	+0.060	
UV Vir	VBR	vis	53093.492	22315	+0.028	
UV Vir	VBR	vis	53110.507	22344	+0.018	
UV Vir	VBR	vis	53120.497	22361	+0.027	
BB Vir	VBR	vis	53092.564	28611	+0.246	
BB Vir	VBR	vis	53110.466	28649	+0.246	
BB Vir	VBR	vis	53111.405	28651	+0.243	
CE Vul	VBR	vis	52901.308	42444	- 0.061	
CE Vul	VBR	vis	52902.433	42447	- 0.047	
CE Vul	VBR	vis	52908.366	42463	- 0.042	
CE Vul	VBR	vis	52928.355	42517	- 0.059	
FH Vul	VBR	vis	52840.478	41471	- 0.087	
FH Vul	VBR	vis	52853.457	41503	- 0.081	
FK Vul	VBR	vis	52826.559	38590	+0.035	
FK Vul	VBR	vis	52853.485	38652	+0.049	

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- P.N. Kholopov et al., 1985, General Catalogue of Variable Stars, fourth edition

Erratum : the two maxima of S Com (HJD 52684.526 and 52694.487) published en GEOS RR 19 are erroneous and they are to be disregarded.

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