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LIST OF CCD AND VISUAL MAXIMA OF RR LYRAE STARS

ABSTRACT

148 instants of maximum light have been determined for 62 RR Lyrae variable stars from CCD measurements or from visual estimates. They are listed with the O-C relative to the most probable cycle number.

RESUME

148 instants de maxima de 62 étoiles variables du type RR Lyrae ont été déterminés à partir de mesures CCD ou d'estimations visuelles. Ils sont listés avec l'O-C relatif au numéro de cycle le plus vraisemblable.

RIASSUNTO

148 massimi di 62 stelle variabili del tipo RR Lyrae sono stati determinati sulla base di misure CCD o di stime visuali. Questi instanti di massimo sono raccolti in una lista con l'O-C relativo al numero di ciclo piú probabile.

RESUMEN

148 instantes de máximos de 62 estrellas variables del tipo RR Lyrae han sido determinados a partir de medidas CCD o 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 January 2005 (JD 2453400) to March 2009 (JD 2454900). The observers are : Michel Dumont (DMT), E. Kun and Konkoly team (KON), Graham Salmon (SAL) and Jacqueline Vandenbroere (VBR).

The maxima of KON were determined by VBR from the CCD V measurements published in Kun et al. (2008). The other times were determined by the observers from their CCD measurements or from their visual estimates (vis). The O-C are appearing in notes when new or better ephemerides were used and after correction by a non linear relation.

The O-C's curves published in Le Borgne et al. (2007) were examined to avoid any unlikelihood and the O-C relative to linear and non linear ephemerides of this paper were systematically noted LB 2007.

LIST

STARS	OBS.	MODE	HJD	ACC	E(GC 85)	O-C (G 85)	NOTES
SW And	SAL	CCD	53678.4930		80371	–0.740	+0.001 (with quadratic elements of LB 2007)
SW And	SAL	CCD	54359.5763		81911	–0.768	+0.001 idem
SW And	SAL	CCD	54379.4781		81956	–0.768	+0.001 idem
SW And	SAL	CCD	54383.4573		81965	–0.770	0.000 idem
SW And	SAL	CCD	54391.4184		81983	–0.770	0.000 idem
SW And	SAL	CCD	54731.5189		82752	–0.782	+0.002 idem
SW And	VBR	vis	54736.395	0.015	82763	–0.771	+0.013 idem
SW And	SAL	CCD	54771.3243		82842	–0.782	+0.003 idem
SW And	VBR	vis	54759.387	0.01	82815	–0.777	+0.007 idem
AT And	VBR	vis	54709.483	0.015	20045	+0.006	+0.012 (with eph. LB 2007)
AT And	VBR	vis	54759.435	0.015	20126	–0.012	–0.006 idem

STARS	OBS.	MODE	HJD	ACC	E (GC 85)	O-C (G 85)	NOTES
DR And	VBR	vis	54055.273	0.01	29896	–0.022	
DR And	VBR	vis	54360.467	0.015	30438	–0.038	
OV And	VBR	vis	54024.352	0.01	15428	+0.188	–0.012 (with eph. LB 2007)
OV And	VBR	vis	54709.521	0.02	16884	+0.210	–0.009 idem
OV And	VBR	vis	54759.402	0.02	16990	+0.211	–0.010 idem
SW Aqr	VBR	vis	54728.411	0.01	64513	+0.008	
SW Aqr	VBR	vis	54757.343	0.01	64576	+0.004	
BN Aqr	VBR	vis	54683.543	0.01	35794	+0.594	+0.004 (with quadratic elements of LB 2007)
CP Aqr	VBR	vis	54758.361	0.01	36413	–0.107	+0.005 idem
CP Aqr	VBR	vis	54765.307	0.01	36428	–0.112	0.000 idem
V341 Aql	VBR	vis	54296.548	0.01	22664	+0.039	+0.009 idem
V341 Aql	VBR	vis	54758.383	0.01	23463	+0.036	+0.004 idem
RW Ari	SAL	CCD	53765.5031		29229	+0.066	
RW Ari	SAL	CCD	53785.3378		29285	+0.058	
RW Ari	SAL	CCD	54354.7017		30892	-0.004	
RW Ari	SAL	CCD	54361.4198		30911	–0.019	
RW Ari	SAL	CCD	54378.4364		30959	–0.011	
RW Ari	SAL	CCD	54411.3788		31052	–0.022	
RW Ari	SAL	CCD	54428.3976		31100	–0.012	
RW Ari	SAL	CCD	54745.4684		31995	–0.076	
RW Ari	SAL	CCD	54771.6934		32069	–0.072	
BH Aur	VBR	vis	54506.442	0.01	25773	–0.002	+0.005 (with eph. LB 2007)
ST Boo	VBR	vis	54557.549	0.01	56848	+0.082	
TV Boo	SAL	CCD	53481.6420		92373	+0.081	
TV Boo	SAL	CCD	53487.5830		92392	+0.084	
TV Boo	SAL	CCD	53498.5260		92427	+0.087	
TV Boo	SAL	CCD	53499.4628		92430	+0.086	
TV Boo	SAL	CCD	54320.4976		95057	+0.028	
TV Boo	SAL	CCD	54621.4976		96020	+0.033	
TV Boo	SAL	CCD	54625.5496		96033	+0.022	
CM Boo	VBR	vis	54205.522	0.01	30052	–0.090	
RZ Cam	VBR	vis	54115.502	0.01	30589	+0.052	
RZ Cam	VBR	vis	54499.392	0.015	31388	+0.063	
LP Cam	SAL	CCD	54906.5094		5817	+0.170	
LP Cam	SAL	CCD	54909.3663		5822	+0.167	
RW Cnc	SAL	CCD	53787.5163		26007	+0.198	–0.029 (with quadratic elements of LB 2009)
RW Cnc	SAL	CCD	54911.467		28061	+0.202	–0.061 idem
TT Cnc	SAL	CCD	54907.4274		26556	+0.098	–0.011 idem
AS Cnc	VBR	vis	54169.448	0.015	24240	+0.357	
SW CVn	VBR	vis	54210.379	0.01	33480	+0.265	–0.008 (with parabolic elements of LB 2007)
SW CVn	VBR	vis	54595.525	0.01	34052	+0.286	0.000 idem
AL CMi	VBR	vis	54509.411	0.01	32537	+0.436	–0.017 (with eph. LB 2007)
HU Cas	VBR	vis	54737.506	0.01	56615	–0.028	
V363 Cas	VBR	vis	54749.415	0.01	34044	+0.575	
RZ Cep	SAL	CCD	54802.4087		39418	-0.722	
RZ Cep	SAL	CCD	54808.2739		39437	–0.722	
AQ Cep	VBR	vis	54509.460	0.01	40496	+0.077	
AQ CrB	VBR	vis	54592.434	0.01	5812	–0.002	
V759 Cyg	VBR	vis	54597.512	0.01	47424	–0.125	
CK Del	VBR	vis	54757.335	0.01	45527	+0.071	
CK Del	VBR	vis	54765.307	0.01	45545	+0.073	
DX Del	VBR	vis	54295.480	0.015	31586	+0.068	
DX Del	VBR	vis	54683.481	0.015	32407	+0.051	

STARS	OBS.	MODE	HJD	ACC	E (GC 85)	O-C (G 85)	NOTES
SW Dra	VBR	vis	54592.500	0.01	49797	+0.059	
AE Dra	VBR	vis	54718.486	0.01	37702	+0.036	
RR Gem	SAL	CCD	53342.5517		30167	–0.322	
RR Gem	SAL	CCD	53383.4719		30270	–0.325	
RR Gem	SAL	CCD	53395.3816		30300	–0.335	
RR Gem	SAL	CCD	53747.3851		31186	–0.348	
RR Gem	SAL	CCD	53805.3934		31332	–0.347	
RR Gem	SAL	CCD	53847.5094		31438	–0.346	
RR Gem	SAL	CCD	53853.4719		31453	–0.343	
RR Gem	SAL	CCD	54146.2767		32190	–0.357	
RR Gem	SAL	CCD	54161.3628		32228	–0.368	
RR Gem	SAL	CCD	54163.3538		32233	–0.364	
RR Gem	SAL	CCD	54169.3184		32248	–0.359	
RR Gem	SAL	CCD	54896.3469		34076	–0.386	
AF Her	VBR	vis	54728.332	0.01	42937	–0.124	
AR Her	VBR	vis	53508.4385		25647	–0.717	
CW Her	VBR	vis	54649.491	0.015	28738	+0.205	
CW Her	VBR	vis	54694.389	0.015	28810	+0.186	
DL Her	SAL	CCD	54737.3482		27938	+0.021	
DL Her	SAL	CCD	54747.4177		27955	+0.033	
GY Her	VBR	vis	52820.461	0.01	31337	+0.110	
SZ Hya	VBR	vis	54509.376	0.015	25743	–0.211	
SZ Leo	VBR	vis	54213.445	0.01	16376	+0.367	
AE Leo	VBR	vis	54509.478	0.015	55319	+0.198	
AE Leo	VBR	vis	54583.424	0.015	55437	+0.191	
AQ Leo	SAL	CCD	53829.5482		21943	–0.114	
X LMi	VBR	vis	54506.377	0.01	22367	+0.200	
RR Lyr	SAL	CCD	54347.4462		20154	–0.626	
RR Lyr	SAL	CCD	54348.5760		20156	–0.630	
RR Lyr	SAL	CCD	54355.3684		20168	–0.640	
RR Lyr	SAL	CCD	54729.5274		20828	–0.614	
RR Lyr	SAL	CCD	54733.4809		20835	–0.628	
RR Lyr	DMT	vis	54762.921	0.01	20887	–0.665	
RR Lyr	DMT	vis	54778.275	0.008	20914	–0.617	
RZ Lyr	VBR	vis	54649.550	0.01	26340	+0.002	+0.027 (with quadratic elements of LB 2007)
CN Lyr	KON	CCD	54652.434	0.003	24712	+0.020	0.000 (with eph. LB 2007)
CN Lyr	KON	CCD	54657.371	0.003	24724	+0.021	+0.001 idem
CN Lyr	KON	CCD	54666.420	0.002	24746	+0.019	0.000 idem
CN Lyr	KON	CCD	54684.522	0.003	24790	+0.020	+0.001 idem
CN Lyr	KON	CCD	54701.388	0.002	24831	+0.020	0.000 idem
EZ Lyr	VBR	vis	54736.356	0.01	39641	–0.116	
IO Lyr	VBR	vis	54738.354	0.01	26198	–0.040	–0.014 (with eph. LB 2007)
KX Lyr	VBR	vis	54324.442	0.01	33326	–0.010	–0.002 idem
NQ Lyr	VBR	vis	54672.528	0.01	62642	+0.011	
V535 Mon	SAL	CCD	54874.4712	0.007	60322	+0.145	
V445 Oph	VBR	vis	54649.488	0.01	68273	+0.010	
AV Peg	VBR	vis	54672.525	0.01	27876	+0.124	+0.015 (with quadratic elements of LB 2007)
AV Peg	VBR	vis	54683.449	0.01	27904	+0.117	+0.008 idem
CG Peg	KON	CCD	54658.519	0.002	33301	–0.046	–0.005 (with eph. LB 2007)
CG Peg	KON	CCD	54667.394	0.004	33320	–0.047	–0.006 idem
CG Peg	KON	CCD	54673.466	0.002	33333	–0.048	–0.007 idem
CG Peg	KON	CCD	54701.495	0.002	33393	–0.047	–0.006 idem
CG Peg	KON	CCD	54714.573	0.002	33421	–0.049	–0.008 idem
DZ Peg	VBR	vis	54381.436	0.01	33737	+0.160	+0.003 idem
DZ Peg	VBR	vis	54709.409	0.01	34277	+0.167	+0.007 idem

STARS	OBS.	MODE	HJD	ACC	E (GC 85)	O-C (G 85)	NOTES
ES Peg	VBR	vis	54359.470	0.01	30553	+0.150	
TU Per	VBR	vis	54505.324	0.01	25916	–0.219	
FM Per	SAL	CCD	54827.5885		43053	+0.202	number of cycle not sure
FM Per	SAL	CCD	54905.3857		43212	+0.216	idem
V375 Per	SAL	CCD	54837.4538		48159	–0.254	
V375 Per	SAL	CCD	54908.4503		48289	–0.247	
AT Ser	VBR	vis	54573.507	0.015	17112	+0.024	
SX UMa	SAL	CCD	53831.6128		28400	+0.134	
SX UMa	SAL	CCD	53836.5270		28416	+0.135	
SX UMa	SAL	CCD	53837.4485		28419	+0.135	
SX UMa	SAL	CCD	53847.5840		28452	+0.135	
SX UMa	SAL	CCD	53891.5049		28595	+0.138	
SX UMa	SAL	CCD	53892.4263		28598	+0.138	
SX UMa	SAL	CCD	53895.4977		28608	+0.139	
SX UMa	SAL	CCD	53902.5618		28631	+0.139	
SX UMa	SAL	CCD	53903.4833		28634	+0.139	
SX UMa	SAL	CCD	54240.4143		29731	+0.162	
SX UMa	SAL	CCD	54593.6237		30881	+0.186	
SX UMa	SAL	CCD	54598.5379		30897	+0.186	
SX UMa	SAL	CCD	54606.5235		30923	+0.187	
SX UMa	SAL	CCD	54912.3726		31919	+0.147	
BF UMa	VBR	vis	53844.463	0.01	27043	+0.054	
CE Vul	VBR	vis	54387.328	0.01	46455	–0.066	
FH Vul	KON	CCD	54638.487	0.002	45906	–0.109	
FH Vul	KON	CCD	54640.512	0.004	45911	–0.111	
FH Vul	KON	CCD	54647.403	0.001	45928	–0.112	
FH Vul	KON	CCD	54694.431	0.001	46044	–0.112	
FH Vul	KON	CCD	54700.515	0.002	46059	–0.110	
FH Vul	KON	CCD	54741.458	0.001	46160	–0.114	

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