

BBSAG

BULLETIN

87

1988 March 18

120th List of Minima of Eclipsing Binaries

The following table lists 6 photoelectric (underlined) and 178 visual heliocentric minima of eclipsing binaries obtained primarily from January to March 1988 by the following observers:

FA	Francesco Acerbi, Codogno, Italy
EBI	Ernst Blättler, Wald, Switzerland
RD	Roger Diethelm, Rodersdorf, Switzerland
JFa	Juan Fabregat, Burjasot, Spain
RG	Robert Germann, Wald, Switzerland
MKo	Michael Kohl, Uster, Switzerland
KL	Kurt Locher, Grüt, Switzerland
HP	Hermann Peter, Otelfingen, Switzerland
JSu	Julia Suso, Valencia, Spain

The O-C values generally refer to the linear elements of the GCVS 1985, with the remarked exceptions. For the reduction of the visual minima, the tracing paper method was employed, while the photoelectric data were reduced with the Kwee-van Woerden algorithm.

Nr	Design	Star	Type	O	O-C	n	Obs	Remarks
24861	0058+378	WZ And	p	47169.365	-0.018	11	HP	
24862	0153+418	XZ And	p	47170.362	+0.004	10	HP	
24863			p	47208.361	-0.001	8	HP	
24864	0008+418	DO And	s	47170.303	+0.019	6	KL	MVS preprint 1987
24865	0209+444	6Z And	p	47170.237	+0.001	8	HP	
24866			p	47205.335	+0.021	8	HP	
24867	0031+410	HS And	p	47170.379	+0.112	8	KL	
24868	0201+237	SS Ari	p	47111.287	-0.035	8	EBl	
24869			s	47157.354	-0.048	6	EBl	
24870	0302+263	TX Ari	p	47111.359	-0.148	8	EBl	
24871	0546+316	RZ Aur	p	47195.298	-0.009	6	KL	
24872	0542+411	ZZ Aur	p	47208.378	+0.011	7	HP	
24873			p	47214.394	+0.015	9	HP	
24874	0509+334	CL Aur	p	47170.494	+0.056	5	HP	
24875			p	47195.390	+0.064	5	KL	
24876			p	47205.343	+0.062	7	HP	
24877	0548+302	FW Aur	p	47206.374	-0.051	4	KL	
24878	0615+497	HL Aur	p	47169.460	+0.002	8	HP	
24879			p	47209.302	+0.005	6	HP	
24880			p	47214.283	+0.005	6	HP	
24881	0507+357	HP Aur	p	47205.501	+0.016	7	HP	
24882			p	47208.346	+0.015	9	HP	
24883	0624+304	KU Aur	p	47195.384	+0.026	6	KL	
24884	1402+302	TU Boo	p	47192.636	-0.025	4	KL	
24885	1353+261	ZZ Boo	p	<u>47206.661</u>	+0.033	17	RD	pe. B
24886	0734+761	Y Cam	p	47219.649	+0.077	4	KL	
24887	0837+200	RY Cnc	p	47207.420	+0.036	7	KL	
24888	0906+306	WW Cnc	p	47177.372	-0.281	8	HP	
24889	0858+268	WY Cnc	p	47195.320	+0.002	9	HP	
24890	1329+288	VZ CVn	p	<u>47206.654</u>	+0.022	7	RD	pe. B
24891	0629+241	TU CMa	p	47211.373	-0.005	8	HP	
24892	0656+187	UU CMa	p	47176.491	-0.037	6	KL	
24893	0615+215	E6 CMa	p	47212.374	-0.025	5	KL	
24894	0646+162	EQ CMa	p	47212.360	0.000	6	KL	elem. BBSAG Bull. 87, 85
24895	0751+037	XZ CMI	p	47207.440	+0.015	6	HP	
24896			p	47210.327	+0.008	6	HP	
24897			p	47214.379	+0.008	7	HP	
24898	0705+063	AG CMI	p	47209.365	-0.023	8	HP	
24899	0737+040	AK CMI	p	47170.468	-0.007	8	HP	
24900			p	47195.362	-0.012	6	KL	
24901			p	47208.387	-0.003	8	HP	
24902			p	47212.351	0.000	8	HP	
24903	0727+046	BF CMI	p	47206.309	+0.012	6	HP	
24904	0244+694	RZ Cas	p	47149.412	+0.010	23	JFa	
24905			p	47149.421	+0.018	13	JSu	
24906	0037+499	V523 Cas	p	47039.450	+0.015	6	MKo	
24907			s	47055.449	+0.006	7	MKo	
24908			p	47176.275	+0.014	6	HP	
24909			p	47195.317	+0.010	6	KL	
24910	2038+754	VW Cep	p	47003.445	-0.013	12	FA	
24911			s	47005.511	-0.035	16	FA	
24912	0220+809	V358 Cep	s	47170.340	+0.485	7	KL	elem. BBSAG Bull. 63, 5
24913	0146+211	TW Cet	p	47169.246	-0.003	7	KL	
24914	0147+198	VY Cet	p	47169.228	-0.005	6	KL	
24915	0156+231	AA Cet	p	47169.240	+0.000	8	KL	
24916	1205+128	W Crv	p	47214.570	+0.004	6	KL	
24917	2056+349	C6 Cyg	p	47069.521	+0.019	7	MKo	
24918	1924+523	NSV12040 Cyg	p	47002.468	-0.061	11	FA	elem. IBVS 3090
24919	2101+130	TY Del	p	47060.519	+0.024	7	MKo	

Nr	Design	Star	Type	O	O-C	n	Obs	Remarks
24920	2051+044	FZ Del	p	47039.488	-0.002	8	MK ₀	
24921	1841+626	RR Dra	p	47170.351	+0.036	11	EBI	
24922	1822+588	RZ Dra	p	47109.323	+0.017	7	EBI	
24923	1533+640	TW Dra	p	47212.617	+0.018	7	KL	
24924	1731+572	CV Dra		47003.417		17	FA	
24925				47008.370		31	FA	
24926	1922+698	DW Dra	p	47170.244	+0.004	6	KL elem.	BBSAG Bull. 84. 6
24927	0419-061	TZ Eri	p	47157.351	+0.049	14	EBI	
24928			p	47170.377	+0.045	6	KL	
24929			p	47170.379	+0.047	9	HP	
24930	0321-008	WX Eri	p	47177.394	+0.006	9	HP	
24931			p	47210.311	-0.008	6	HP	
24932	0345-087	CD Eri	p	47208.322	-0.010	8	HP	
24933	0558+231	RW Gem	p	47195.462	-0.001	6	KL	
24934	0733+170	TX Gem	p	47207.341	-0.008	6	KL	
24935			p	47207.367	+0.018	7	HP	
24936	0731+319	YY Gem	p	47208.430	-0.013	8	RD pe, B; min. asymmetric	
24937	0629+198	AC Gem	p	47211.456	-0.006	9	HP	
24938	0647+214	AF Gem	p	47212.513	-0.046	9	HP	
24939	1654+209	AL Gem	p	47208.4493	+0.0117	9	RD pe, B	
24940	0631+155	BD Gem	p	47211.342	-0.012	9	HP	
24941	0749+272	6W Gem	p	47176.443	+0.016	10	HP	
24942			p	47209.418	+0.019	8	HP	
24943	0609+247	HR Gem	p	47211.460	+0.019	13	HP	
24944	1737+329	SZ Her	p	47214.657	-0.011	6	KL	
24945	1711+307	TU Her	p	47212.592	-0.001	7	KL	
24946	1615+090	CC Her	p	47195.678	+0.017	7	KL	
24947	0903-080	RX Hya	p	47212.434	+0.020	12	HP	
24948	0926+057	TY Hya	p	47212.526	-0.003	6	KL	
24949	0831-144	VW Hya	p	47205.482	+0.023	7	KL	
24950	0811+006	WY Hya	p	47208.368	+0.012	7	HP	
24951	0928-187	AS Hya	p	47208.409	-0.004	6	KL elem.	BBSAG Bull. 83. 5
24952	0828+034	KT Hya	p	47230.305	-0.105	5	KL	
24953	2238+380	VX Lac	p	47159.245	-0.001	8	EBI	
24954	2213+484	AU Lac	p	47195.253	-0.017	4	KL	
24955	0933+264	Y Leo	p	47213.594	-0.008	7	KL	
24956	0942+201	RT Leo	p	47230.484	+0.022	9	KL	
24957	0958+176	XY Leo	p	47211.466	-0.002	6	HP	
24958	0959+172	XZ Leo	p	47208.459	-0.001	7	HP	
24959	1142+250	BL Leo	p	47176.546	+0.000	6	KL	
24960	0945+335	T LMI	p	47230.428	-0.010	7	KL	
24961	0557-202	RS Lep	p	47195.329	+0.016	7	KL	
24962	0652+509	RV Lyn	p	47230.511	+0.476	6	KL	
24963	0900+382	UV Lyn	p	47206.656	-0.008	5	RD pe, B	
24964	1848+333	B Lyr	p	47230.9	-3.5	4	RG	
24965	0651-041	XZ Mon	p	47212.306	+0.028	6	KL	
24966	0657-105	AN Mon	p	47214.348	-0.002	6	KL	
24967	0706+007	BM Mon	p	47176.545	+0.011	6	KL	
24968	0757-033	BO Mon	p	47192.531	-0.029	6	KL	
24969	0643-002	DD Mon	p	47207.366	+0.082	10	HP	
24970			p	47211.346	+0.086	9	HP	
24971	0654-052	EP Mon	p	47205.388	+0.014	10	HP	
24972	0702-023	GH Mon	p	47205.375	-0.057	7	KL	+6.063?
24973	0700+003	HM Mon	p	47177.535	-0.006	5	KL	

Nr	Design	Star	Type	O	O-C	n	Obs	Remarks
24974	0635+036	V396 Mon	s	47170.465	+0.008	6	KL	
24975	0454-036	EQ Ori	p	47207.361	-0.023	7	HP	
24976			p	47207.363	-0.021	6	KL	
24977	0532+029	FF Ori	p	47209.345	+0.029	11	HP	
24978	0520+042	FH Ori	p	47205.320	-0.155	6	KL	
24979	0502+092	FK Ori	p	47205.416	-0.011	8	HP	
24980			p	47205.431	+0.003	6	KL	
24981			p	47207.368	-0.007	8	HP	
24982	0548+094	FR Ori	p	47211.356	-0.001	8	HP	
24983	0538+025	FZ Ori	p	47170.370	+0.017	10	HP	
24984			p	47206.347	-0.004	6	HP	
24985			p	47212.352	+0.001	7	HP	
24986	0533+088	OS Ori	p	47176.375	-0.001	7	KL	
24987			p	47207.363	+0.001	7	HP	
24988	0544+058	QT Ori	p	47176.433	-0.403	6	KL	
24989	0552-093	V640 Ori	p	47207.245	-0.021	6	KL	
24990	0320+463	RT Per	p	47169.493	+0.023	8	HP	
24991			p	47170.339	+0.020	7	HP	
24992			p	47209.411	+0.020	9	HP	
24993	0242+479	RY Per	p	47208.389	-0.023	6	KL	
24994	0405+464	XZ Per	p	47069.481	-0.001	7	MkO	
24995			p	47205.374	+0.000	7	HP	
24996	0256+437	IU Per	p	47159.236	+0.012	8	EBl	
24997			p	47170.379	+0.014	13	HP	
24998			p	47206.372	+0.012	8	HP	
24999			p	47212.370	+0.011	9	HP	
25000	0156+529	KW Per	p	47214.287	+0.003	8	HP	
25001	0236+454	PS Per	p	47170.406	+0.038	6	KL	
25002	0304+407	B Per	p	47181.249	-0.006	11	RG	
25003	0736-243	AY Pup	s	47170.530	-0.021	6	KL	
25004	1556+173	AO Ser	p	47192.649	-0.004	5	KL	
25005	1554+224	AU Ser	p	47229.705	-0.001	5	KL	
25006	1535+190	LX Ser	p	47212.617	+0.000	8	KL	
25007	0548+281	SV Tau	p	47169.484	-0.001	8	HP	
25008			p	47195.503	+0.015	7	KL	
25009			p	47206.337	+0.015	9	HP	
25010	0344+249	AH Tau	p	47151.313	-0.043	7	EBl	
25011			p	47169.270	-0.050	7	RG	
25012			p	47174.260	-0.050	7	RG	
25013			s	47206.359	-0.054	6	HP	
25014			p	47209.348	-0.060	5	HP	
25015	0549+162	AM Tau	p	47205.369	+0.008	9	HP	
25016			p	47207.412	+0.002	8	HP	
25017	0555+270	CT Tau	s	47176.449	-0.012	11	HP	
25018			p	47209.463	-0.006	6	HP	
25019	0345+221	EQ Tau	s	47159.266	+0.012	7	RG	
25020			s	47174.279	+0.005	8	RG	
25021			s	47176.334	+0.012	5	RG	
25022	0526+287	ES Tau	p	47212.495	+0.001	6	KL	
25023	0427+264	6W Tau	s	47212.341	+0.012	8	HP	
25024	0404+291	IL Tau	p	47170.290	-0.131	5	KL	
25025	0128+301	V Tri	p	47054.467	+0.000	9	MkO	
25026			p	47170.356	+0.018	7	EBl	
25027	0157+276	X Tri	p	47149.567	-0.007	19	Jfa	
25028			p	47157.347	+0.001	9	EBl	
25029			p	47159.287	-0.002	7	EBl	
25030	0132+293	RS Tri	p	47208.318	+0.005	8	HP	
25031	0210+367	RV Tri	p	47177.366	-0.008	8	HP	
25032			p	47211.288	-0.001	8	HP	
25033	0940+561	W UMa	p	47195.380	+0.004	8	HP	
25034			p	47205.3730	-0.0112	9	RD pe, B	
25035	1206+563	TY UMa	p	47214.286	+0.002	6	RG	
25036	0934+562	VV UMa	p	47176.349	+0.000	7	RG	
25037			p	47207.275	-0.006	9	RG	
25038	0906+546	XY UMa	p	47205.277	+0.021	7	RG	

Nr	Design	Star	Type	O	O-C	n	Obs	Remarks
25039	0928+496	XZ UMa	p 47169.507	+0.001	5	KL		
25040	1026+620	ZZ UMa	p 47192.566	+0.000	6	KL		
25041	0943+459	AA UMa	p 47206.472	-0.006	6	HP		
25042			p 47214.438	+0.002	7	HP		
25043	1042+525	BH UMa	p 47208.276	+0.013	8	RG		
25044	1707+803	RT UMi	p 47005.414	+0.094	43	FA		
25045	1312-172	UW Vir	p 47192.566	+0.000	6	KL		

On the O-C value of DN Orionis

According to the 1988 edition of the "Rocznik Astronomiczny Obserwatorium Krakowskiego", the longperiod ($P = 12.96641$ days) eclipsing variable DN Ori was last observed in 1982. In order to check on its period-behaviour I observed the star photoelectrically in the Johnson B-band on the night of February 16/17 (JD 47208). The observing run lasted for four hours and was terminated by unfavourable weatherconditions. During this time, the variable showed a steady decline in brightness by 0.78 mag. Using the duration of totality stated in the GCVS 1985 yields a lower limit for the time of minimum at 47208.62. Therefore it can be concluded that currently the O-C value against the elements of the GCVS 1985 is at least +0.55 days.

R. Diethelm

The period of EQ Canis maioris

is unknown according to the GCVS 1985. From a visual survey during 16 winter nights 1987-8 I am able to deduce the elements

$$JD_{\min \text{ hel}} = 2447150.503 + 2.2910 E$$

and the photometric parameters

$$D / p = .10 \pm .01$$

$$d / p = .01 \pm .01$$

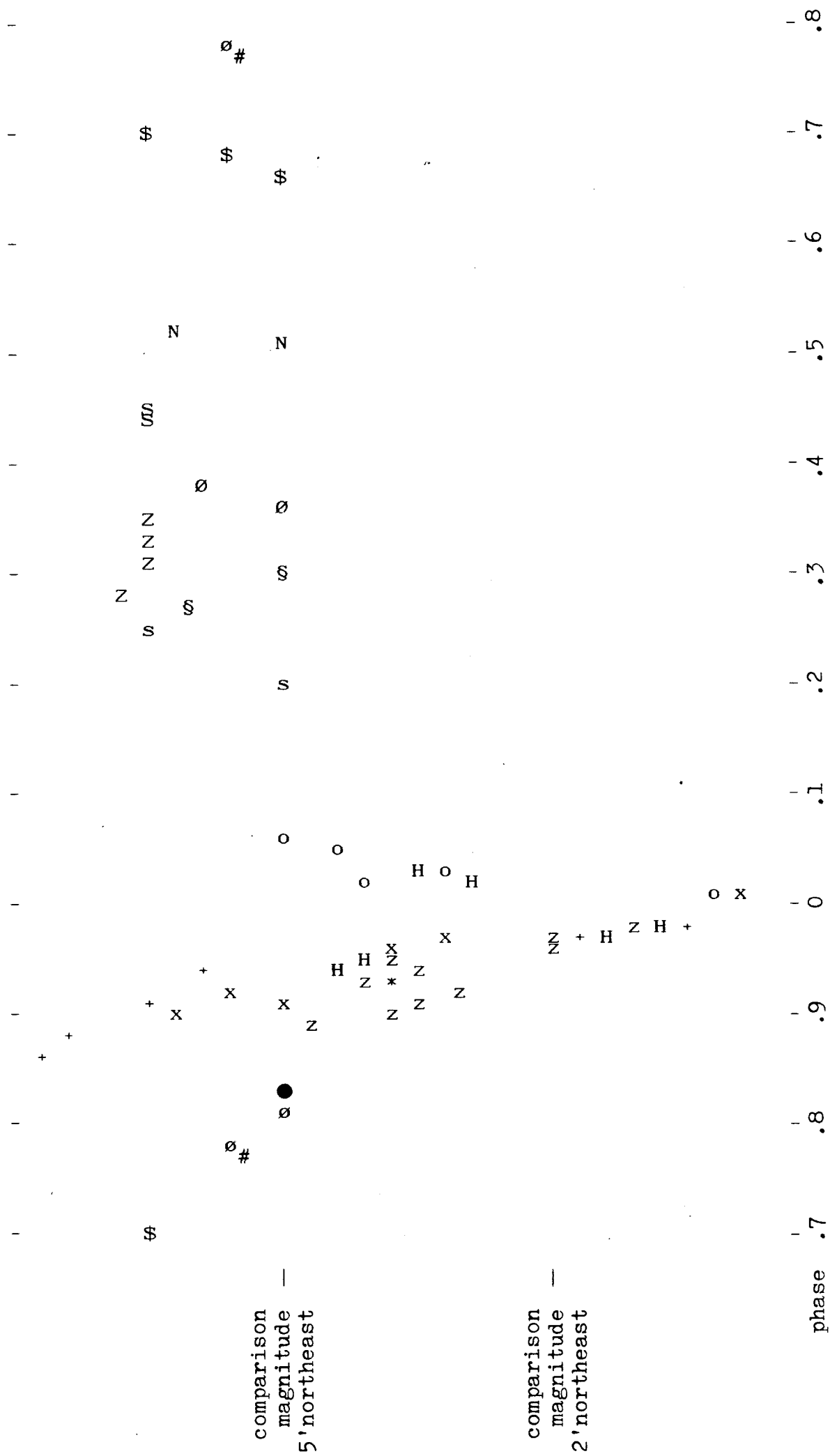
$$| \max - \min_{II} |_{\nu} = .05 \pm .05$$

whereas the primary amplitude 1.5 as given by the GCVS is roughly confirmed.

Figure 84 plots all my observations versus phase.

K. Locher

Figure 84



plot JD 47000+ 151 157 158 159 166 169 170 176 177 182 205 206 207 208 212 230
 symbols S O N + X S # N N S S S H H