

BBSAG Bulletin 46

1980 March 10

79th List of Minima of Eclipsing Binaries

The following table lists 264 minima obtained visually mainly during 1979-80 December to February by the observers

CA Claudio Agnesoni, Siena, Italy
 MA Μαρία 'Ανδρακάκου, 'Αθήνα, Greece
 GB Guy Boistel, Sautron, France
 AB Alberto Buzzoni, Ferrara, Italy
 RD Roger Diethelm, Flüh, Switzerland
 RG Robert Germann, Wald, Switzerland
 KL Kurt Locher, Grüt, Switzerland
 DM Δημοσθένης Μουρίνης, Πειραιάς, Greece
 CPa Carlo Pampaloni, Firenze, Italy
 HP Hermann Peter, Otelfingen, Switzerland
 EP Ennio Poretti, Arconate, Italy
 PR Philippe Ralincourt, Tunis, Tunisia
 GT Gilles Troispoux, Fleury-les-Aubrais, France

The O-C values refer to the linear elements of the GCVS 1969, disregarding improved elements in the 1971, 1974, and 1976 supplements to the GCVS. Reductions were made mainly using the tracing paper method.

(footnotes to page 2 :)

* GCVS 1969 period erroneous, O-C according to the GCVS 1976:
 +.003 +.021 +.014

** not contained in the GCVS 1969, O-C according to the GCVS 1976:
 +.060 +.062

*** no period given by the GCVS 1969, O-C according to the GCVS 1971:
 -.022

**** not contained in the GCVS 1969, O-C according to the GCVS 1976:
 -.003 -.004 +.002

***** not contained in the GCVS 1969, O-C according to the GCVS 1974:
 -.035 -.029 -.041

§ GCVS 1969 period erroneous, O-C according to the GCVS 1976: -.012

§§ not contained in the GCVS 1969, O-C according to the GCVS 1974:
 -.012 -.012

§§§ GCVS elements incomplete, O-C according to Martins' elements PASP 87, p.168, 1975: -.402 -.405

(t) typically)

(s) slightly)

(v) very slightly) disturbed according to the criteria of Crawford and Olson, PASP 91, p.413, 1979, but no correction applied to the symmetric tracing paper solution

cur- rent no.	star	minimum or- JD hel der 244...	ob- C n ser- ver	cur- rent no.	star	minimum or- JD hel der 244...	ob- C n ser- ver
14993	RT And	I 4212.318	-.020 9 RG	15050	IV Cas	I 4220.626	+.108 6 KL
14994		I 4258.238	-.013 6 RG	15051	OR Cas	I 4210.389	+.033 6 KL
14995		I 4268.298	-.015 9 RG	15052		I 4215.371	+.033 6 KL
14996	TT And	I 4211.275	-.063 11 HP	15053		I 4225.326	+.022 6 KL
14997	WX And	I 4225.271	-.376 9 KL	15054	V 523 Cas	I 4264.353	**** 5 KL
14998		I 4282.280	-.391 6 KL	15055		I 4297.302	**** 6 KL
14999	WZ And	I 4225.363	-.022 6 KL	15056		II 4299.295	**** 6 KL
15000	XZ And	I 4226.426	-.035 6 KL	15057	V 752 Cen II	4234.616	***** 7 KL
15001	AB And	I 4235.296	+.025 7 RG	15058		I 4235.547	***** 6 KL
15002	EP And	II 4225.244	* 6 KL	15059		I 4243.681	***** 7 KL
15003		I 4253.348	* 8 RD	15060	U Cep (t)	I 4247.433	+.056 7 KL
15004		II 4267.282	* 5 RD	15061	(s)	I 4267.369	+.046 7 KL
15005	GZ And	II 4291.324	** 11 KL	15062	(v)	I 4282.327	+.047 11 KL
15006		II 4294.375	** 11 KL	15063	(t)	I 4297.284	+.046 11 KL
15007	CX Aqr	I 4211.232	+.014 7 KL	15064	EG Cep	I 4211.336	+.020 6 KL
15008	OO Aql	I 4212.231	-.043 7 HP	15065		I 4214.638	+.024 11 KL
15009		II 4230.200	-.065 4 KL	15066	EK Cep	I 4112.399	+.007 33 AB
15010	SS Ari	I 4266.318	-.086 5 RD	15067	GI Cep	I 4253.266	-.004 6 RD
15011	SZ Ari	I 4266.391	-.052 6 RD	15068	IO Cep	I 4266.326	+.024 5 RD
15012	WW Aur	II 4251.319	+.086 22 GB	15069	TW Cet	I 4210.322	-.027 6 KL
15013	ZZ Aur	I 4247.386	-.014 6 KL	15070	VY Cet	I 4267.232	6 KL
15014	AH Aur	II 4253.300	+.033 9 RD	15071	AA Cet	II 4210.391	8 KL
15015	CL Aur	I 4221.337	+.042 6 KL	15072		I 4212.268	6 KL
15016		I 4247.459	+.033 6 KL	15073	RW Com	I 4290.375	-.044 7 RG
15017	IM Aur	I 4241.231	-.006 13 EP	15074	RZ Com	I 4214.711	-.003 6 KL
15018	TU Boo	I 4229.648	-.005 4 KL	15075		I 4299.681	+.002 6 KL
15019		I 4278.622	+.002 7 KL	15076	W Crv	I 4214.700	-.005 11 KL
15020		I 4288.673	.000 6 KL	15077		I 4282.616	-.003 7 KL
15021		II 4290.451	-.006 6 KL	15078		I 4284.562	+.003 7 KL
15022	SV Cam	I 4268.247	-.024 10 RG	15079	Z Crv	I 4267.714	-.005 5 KL
15023		I 4278.344	-.010 7 RG	15080	Y Cyg	II 4134.443	-.033 15 PR
15024		I 4284.271	-.013 8 RG	15081	ZZ Cyg	I 4225.272	-.034 11 KL
15025	RY Cnc	I 4281.589	-.040 11 KL	15082		I 4278.703	-.036 6 KL
15026	TX Cnc	I 4298.322	+.067 9 RD	15083	BR Cyg	I 4211.264	+.020 9 HP
15027	TY Cnc	I 4289.367	-.138 11 KL	15084		I 4215.250	+.008 7 HP
15028	WX Cnc	I 4284.325	+.125 7 RG	15085	CG Cyg	I 4288.698	-.026 9 KL
15029	EE CMa	I 4294.436	-.015 8 KL	15086	KR Cyg	I 4165.332	-.008 10 HP
15030	EG CMa	I 4290.293	*** 6 KL	15087	V 456 Cyg II	4211.319	+.017 9 HP
15031	AK CMi	I 4212.519	+.012 6 KL	15088	V 477 Cyg	I 4048.445	-.019 15 PR
15032		I 4224.405	+.013 6 KL	15089	TY Del	I 4211.325	+.018 13 HP
15033	TY Cap	I 4211.246	-.113 8 KL	15090	FZ Del	I 4211.306	-.004 10 HP
15034	RZ Cas	I 4076.423	.000 16 GT	15091		I 4211.307	-.003 6 KL
15035		I 4082.399	.000 9 GT	15092		I 4222.274	-.001 7 KL
15036		I 4149.338	+.005 30 CPa	15093	Z Dra	I 4265.344	+.014 6 KL
15037		I 4149.341	+.009 8 CA	15094		I 4288.412	+.006 12 KL
15038		I 4198.342	+.005 9 EP	15095	UZ Dra	II 4298.339	-.022 11 RD ✓
15039		I 4198.344	+.006 36 CPa	15096	AI Dra	I 4134.410	+.022 26 PR
15040		I 4210.288	-.002 8 RG	15097		I 4074.431	-.016 8 GT
15041		I 4222.251	+.005 9 RG	15098	BH Dra	I 4130.361	+.020 16 CPa
15042		I 4235.384	-.006 8 RG	15099	CM Dra	I 4220.657	6 KL
15043		I 4253.321	+.002 8 RG	15100		I 4204.719	6 KL
15044		I 4259.296	+.001 24 GB	15101	TZ Eri	I 4212.445	-.078 7 KL
15045		I 4290.373	+.001 9 RG	15102		I 4212.454	-.069 8 HP
15046	TV Cas	I 4129.383	-.011 30 CPa	15103		I 4225.478	-.076 10 KL
15047		I 4149.306	-.027 46 CPa	15104	WX Eri	I 4266.304	+.000 7 KL
15048		I 4207.310	-.026 21 PR	15105	YY Eri	I 4235.248	-.006 6 RG
15049	AB Cas	I 4215.293	+.005 7 HP	15106		I 4241.351	-.011 12 KL
				15107		I 4241.352	-.010 12 DM

cur- rent no.	star	minimum or- der	JD hel 244...	0-C	n ser- ver	ob- serv	cur- rent no.	star	minimum or- der	JD hel 244...	0-C	n ser- ver	ob- serv
15108		I	4251.354	-.008	8	MA	15158	TV Mon	I	4225.475	-.016	6	KL
15109		II	4257.257	-.019	7	RG	15159		I	4267.277	-.012	6	KL
15110		I	4278.312	-.022	7	RG	15160	BM Mon	I	4294.495	+.015	6	KL
15111		II	4284.268	-.014	8	RG	15161	BC Mon	I	4266.382	+.147	8	KL
15112		II	4291.339	-.016	8	RG	15162	FS Mon	I	4291.330	+.055	9	RD✓
15113	ZZ Eri	I	4244.319	+.012	7	KL	15163	IU Mon ^{new}	I	4220.680	+.033	6	KL
15114		I	4253.365	+.017	6	KL	15164	U Oph	II	4046.520	-.000	19	PR
15115		II	4289.308	+.021	8	KL	15165	V 449 Oph	I	4289.698	+.061	6	KL
15116	AM Eri *	I	4244.392	+.008	7	KL	15166		I	4294.669	+.061	5	KL
15117		I	4253.247	+.003	6	KL	15167	V 582 Oph	I	4076.391	-.055	16	GT
15118		II	4253.404	+.002	6	KL	15168		II	4078.445	-.042	11	GT
15119		II	4267.345	+.020	8	KL	15169		I	4081.388	-.046	11	GT
15120		II	4281.271	+.023	5	KL	15170	V 508 Oph	II	4278.658	+.000	6	KL
15121		I	4289.344	+.027	7	KL	15171		II	4299.667	+.004	6	KL
15122	RW Gem	I	4215.349	+.004	11	KL	15172	V 1010 Oph	I	4072.427	-.078	9	GT
15123		I	4278.392	+.007	7	KL	15173		I	4074.400	-.009	8	GT
15124	YY Gem	II	4295.344	-.003	11	RD	15174		I	4076.376	-.098	10	GT
15125	CP Gem	I	4253.356	+.061	4	KL	15175		I	4288.695	-.100	9	KL
15126		I	4289.483	+.075	6	KL	15176	ER Ori	II	4284.316	-.015	7	RG
15127	CX Gem	I	4294.328	-.025	6	KL	15177		II	4290.245	-.014	7	RG
15128	GW Gem	I	4291.354	-.055	10	RD	15178		I	4291.301	-.016	7	RG
15129		I	4295.318	-.025	8	RD	15179		I	4294.265	-.016	8	RG
15130	SZ Her	I	4212.247	+.035	8	HP	15180	FK Ori	I	4278.299	+.296	8	KL
15131		I	4282.688	+.040	6	KL	15181	FL Ori	I	4294.359	+.094	7	KL
15132	UX Her	I	4295.686	-.060	8	RG	15182	V 640 Ori	I	4291.324	-.014	10	RD✓
15133	DQ Her	I	4267.723	+.009	10	KL	15183		I	4295.374	-.005	9	RD✓
15134		I	4289.682	+.010	7	KL	15184	U Peg	I	4212.302	-.011	6	RG
15135	MT Her	I	4284.660	+.037	8	KL	15185	AT Peg	I	4211.318	-.087	6	HP
15136	WY Hya	II	4282.390	+.003	6	KL	15186	EE Peg	I	4118.394	+.075	22	CPa
15137	SW Lac	II	4074.412	-.121	8	GT	15187		I	4189.341	+.061	10	EP
15138		I	4076.489	-.128	13	GT	15188	RT Per	I	4215.259	-.067	7	HP
15139		I	4235.257	-.121	6	RG	15189		I	4282.364	-.063	6	KL
15140	Y Leo	I	4244.375	+.115	6	KL	15190		I	4299.349	-.068	7	KL
15141		I	4264.587	+.095	5	KL	15191	RV Per	I	4247.367	+.022	7	KL
15142		I	4281.472	+.119	6	KL	15192	ST Per	I	4298.349	-.023	14	RD✓
15143	RW Leo	I	4298.520	+.050	10	KL	15193	XZ Per	I	4266.401	+.006	6	KL
15144	UU Leo	I	4290.500	-.032	8	KL	15194		I	4267.538	-.009	5	KL
15145	UV Leo	I	4234.554	+.001	6	KL	15195	KW Per	I	4218.432	+.048	7	KL
15146		I	4276.542	-.017	10	MA	15196		I	4288.273	+.045	5	KL
15147		I	4276.546	-.013	10	DM	15197	β Per	I	4222.216	-.094	10	RG
15148		I	4290.365	+.004	7	RG	15198	Y Psc	I	4268.266	+.161	9	KL
15149	BL Leo	II	4220.654	+.003	6	KL	15199	UV Psc	I	4212.460	+.017	8	HP
15150	RY Lyn	I	4289.423	**	6	KL	15200	RW PsA	I	4210.222	-.049	6	KL
15151	SW Lyn	I	4299.332	-.010	8	RD✓	15201	UZ Pup	I	4214.690	-.029	8	KL
15152	SX Lyn	I	4266.400	-.331	6	KL	15202	XZ Pup	I	4284.480	-.019	11	KL
15153	UU Lyn	I	4291.323	-.023	10	RD✓	15203	AY Pup	I	4225.468	+.056	6	KL
15154	TZ Lyr	I	4212.223	+.037	7	KL	15204	GK Pup	I	4244.418	+.016	6	KL
15155	RW Mon	I	4215.426	-.009	11	KL	15205	RZ Pyx	II	4209.627	+.195	6	KL
15156		I	4278.333	-.003	11	KL	15206		I	4212.584	+.199	6	KL
15157		I	4299.298	-.004	7	KL	15207		II	4234.574	+.204	6	KL

* These results disprove the corrected value of the period presented in BBSAG Bulletin 41, page 4, so that the typical slow shift of the 0-C values may rather be due to some oscillatory term to be added to the GCVS elements.

** no period given by the GCVS, 0-C according to the elements of Samolyk and Wedemayer, JAAVSO preprint 1977: +.004

current no.	star	minimum or-der	JD hel 244...	O-C	n ser-ver	ob- current no.	star	minimum or-der	JD hel 244...	O-C	n ser-ver	ob-	
15200		I	4235.554	+.200	7	KL	15233	I	4291.317	-.040	12	RG	
15209		I	4209.361	+.192	6	KL	15234	I	4293.257	-.043	7	KL	
15210	V 505 Sgr	I	4046.414	-.010	15	PR	15235	RS Tri	I	4211.310	+.007	15	HP
15211	RT Scl	I	4210.294	-.152	0	KL	15236	RW Tri	I	4224.314	.000	5	KL
15212		I	4211.310	-.152	9	KL	15237		I	4225.471	-.003	6	KL
15213		I	4212.339	-.154	7	KL	15238		I	4253.296	-.003	6	KL
15214	AU Ser	II	4271.622	*	7	KL	15239		I	4282.285	.000	5	KL
15215	RW Tau	I	4258.259	-.086	10	RG	15240	TX Uma	I	4278.289	-.004	8	RG
15216	RZ Tau	II	4267.304	+.024	6	RD	15241	UX Uma	I	4220.733	.000	7	KL
15217		I	4295.350	+.011	12	RD	15242		I	4277.572	.000	6	KL
15218		II	4299.307	+.019	9	RD	15243		I	4281.504	.000	6	KL
15219	AC Tau	I	4253.244	+.064	7	KL	15244		I	4284.651	.000	6	KL
15220	AH Tau	I	4252.395	-.042	7	RD	15245		I	4290.551	.000	6	KL
15221		I	4291.326	-.034	8	RD	15246	VV Uma	I	4278.356	+.103	9	RG
15222		I	4295.308	-.045	7	RD	15247	AA Uma	I	4298.284	+.002	9	RD
15223		I	4298.305	-.042	11	RD	15248	BH Uma	I	4299.318	-.018	9	RD
15224		I	4299.310	-.035	9	RD	15249	FX Vel	I	4234.549	**	6	KL
15225	V Tri	I	4224.409	+.014	6	KL	15250		II	4235.545	-**	7	KL
15226		I	4268.299	+.014	7	KL	15251	UW Vir	I	4267.549	+.324	6	KL
15227	X Tri	I	4218.449	-.043	6	KL	15252	VV Vir	I	4267.568	***	7	KL
15228		I	4221.365	-.042	6	KL	15253	AH Vir	II	4214.664	+.065	11	KL
15229		I	4224.279	-.043	6	KL	15254	BH Vir	I	4278.662	+.012	11	KL
15230		I	4225.252	-.041	6	KL	15255	AW Vul	I	4215.301	-.023	12	HP
15231		I	4257.308	-.045	12	RG	15256	NP Vul ^{neu}	I	4289.722	****	6	KL
15232		I	4290.344	-.042	12	RG							

*GCVS 1969 elements too inaccurate for reasonable reduction, O - C according to the GCVS 1974: -.002

**not contained in the GCVS 1969, O-C according to the GCVS 1976: +.020: +.070:

***O-C according to the GCVS exceeds 2 periods, O-C according to the elements of BBSAG Bulletin 31, page 5: +.002

****not contained in the GCVS 1969, O-C according to the GCVS 1976: +.048

Note on DM Delphini

In BBSAG Bulletin 27, p.5 the writer reported new elements for this bright eclipsing binary based on visual observations. Photoelectric observations in the V and B bands of the Basel University Observatory single-channel RG UBV photometer with the 1 m reflector on the Gornergrat, Switzerland, reveal that these new elements are erroneous.

The GCVS elements 2430663.067 + .8446725E are found to be essentially correct, with only a slight correction necessary. The 128 observations yield an O-C value of +.0550 for the minimum of JD 2444076 (1979 July 21). DM Del is an EB system with a lightcurve without special features. I found

$$\text{Max}_I = \text{Max}_{II} = 8^{\text{V}}.58 \quad \text{Min}_I = 9^{\text{V}}.12 \quad \text{Min}_{II} = 8^{\text{V}}.80 \quad \text{Phase}_{\text{Min}_{II}} = .5$$

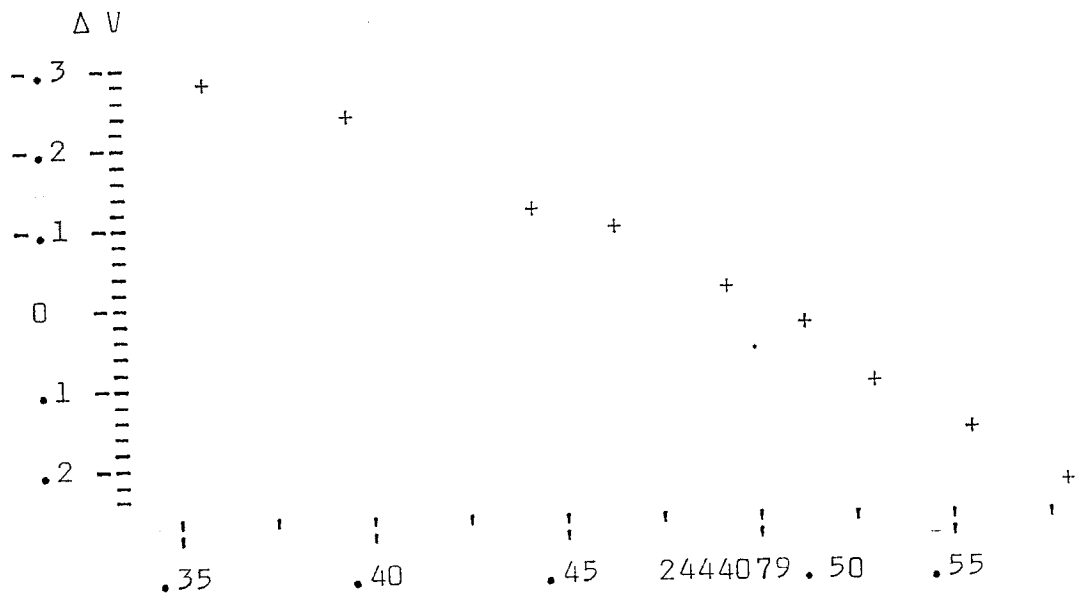
A detailed account of the photoelectric work will be presented elsewhere.
R. Diethelm

O n t h e O - C V a l u e o f V 4 9 8 C y g

During the night JD 2444079 (1979 July 24) I observed V498 Cyg over a five hour span with the one-channel RGUBV photometer of Basel University attached to the 1 m reflector of Gornergrat Observatory, Switzerland. Figure 48 shows the differential observations in the instrumental V band versus time (comparison star about 4.5' south of variable).

From these observations a lower limit for the O - C value, referring to the GCVS 1969 elements, can be estimated as +0.^d10 . R. Diethelm

Figure 48



E R R A T A

star concerned	bulletin no.	minimum no.	misprinted entry	misprinted value	correct value
TT Del	34	11717	0 O-C	3360.405 +.047	.429 +.029
V 508 Oph	44	14505	0	4079	4099
UX Peg	45	14880	0	4043	4143

