

BBSAG Bulletin 32

1977 March 11

65th List of Minima of Eclipsing Binaries

The following table lists 216 minima obtained visually mainly during 1977 January and February by the observers

MB Michel Behagle, Wattrelos, France
 FB Francesco Berrilli, Roma, Italy
 RB Roland Boninsegna, Marcinelle, Belgium
 VB Viviane Boninsegna, Marcinelle, Belgium
 BB Bernard Bouzin, Toulouse, France
 PCa Patrick Cayla, Toulouse, France
 JC Jean-Pierre Clovin, Marcinelle, Belgium
 RD Roger Diethelm, Reinach, Switzerland
 MF Michel Frangeul, Angers, France
 RG Robert Germann, Wald, Switzerland
 ZH Zoltán Hevesi, Kaposvár, Hungary
 JL Jean-François Le Borgne, Brest, France
 ML Marc Le Saout, Rèze, France
 RL Rolande Leydon, Embrun, France
 KL Kurt Locher, Grüt, Switzerland
 HP Hermann Peter, Otelfingen, Switzerland
 EP Ennio Poretti, Arconate, Italy
 PR Philippe Palincourt, Nantes, France
 JR Joseph Remis, Aix-en-Provence, France
 AR Alain Royer, Epinac, France
 JS Jean Squelard, Somzée, Belgium
 FT Franco Travaglino, Vigevano, Italy
 SW Stefano Wabniz, Roma, Italy

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.

cur- rent no.	star	minimum or- der	JD hel 244...	O - C	ob- ser- ver	cur- rent no.	star	minimum or- der	JD hel 244...	O - C	ob- ser- ver
11133	RT And	I	3117.359	-0.010	16 JC	11145		I	3168.302	*	6 KL
11134		I	3139.369	-0.013	10 JC	11146		II	3188.305	*	7 KL
11135		I	3168.299	-0.014	16 RG	11147		I	3189.321	*	7 KL
11136	AB And	I	3068.362	+0.022	11 AR	11148	OO Aql	I	3069.414	-0.040	12 AR
11137		I	3069.371	+0.034	10 AR	11149	TT Aur	I	3188.372	-0.003	7 RD
11138		I	3154.317	+0.016	6 RG	11150	WW Aur	I	3126.427	+0.010	7 JL
11139		I	3161.287	+0.016	10 KL	11151		I	3136.526	+0.009	20 EP
11140		I	3161.289	+0.018	7 RD	11152		II	3145.330	-0.025	10 JC
11141		I	3168.261	+0.020	9 RG	11153		II	3160.502	-0.002	17 EP
11142	AD And	I	3161.258	+0.019	6 RD	11154		II	3198.384	+0.005	14 EP
11143	CN And	I	3069.357	-0.037	10 AR	11155	AR Aur	I	3136.363	0.000	16 EP
11144	EP And	I	3162.230	*	7 KL	11156		II	3196.332	+0.016	21 EP

* GCVS 1969 period erroneous, O - C according to the GCVS 1976: -0.007 +0.002 +0.002 +0.008

current no.	star	minimum or- JD hel der 244...	O - C	n	ob- server	current no.	star	minimum or- JD hel der 244...	O - C	n	ob- server
11157		I 3198.385	+0.002	16	EP	11205		I 3182.393	+0.015	13	JL
11158	HL Aur	I 3154.288	-0.007	6	KL	11206		I 3188.354	0.000	11	ZH
11159	IM Aur	I 3162.302	-0.020	15	EP	11207		I 3188.354	0.000	9	RB
11160	WX Cnc	I 3188.344	+0.143	10	HP	11208		I 3188.357	+0.003	9	HP
11161	YZ CVn	I 3194.688	*	8	KL	11209		I 3188.364	+0.010	7	RD
11162	R CMa	I 3161.377	+0.014	17	EP	11210		I 3200.304	-0.002	23	EP
11163		I 3162.514	+0.015	14	EP	11211		I 3200.310	+0.004	5	JR
11164		I 3186.361	+0.008	13	ZH	11212	TV Cas	I 3103.437	-0.020	22	PR
11165	AK CMi	I 3188.253	+0.015	7	KL	11213	AB Cas	I 3157.324	-0.002	9	KL
11166		I 3189.390	+0.021	8	HP	11214		I 3168.266	+0.004	8	HP
11167	RZ Cas	I 3011.458	+0.001	16	ML	11215	MN Cas	I 3161.283	-0.016	6	RD
11168		I 3011.461	+0.004	18	PR	11216	V 523 Cas II	I 3193.253	**	6	KL
11169		I 3017.438	+0.004	25	PR	11217	EG Cep	I 3128.295	+0.017	9	AR
11170		I 3018.626	-0.002	12	PR	11218	EK Cep	I 3138.297	+0.019	21	JC
11171		I 3072.418	+0.004	15	PR	11219	GK Cep	II 3106.366	-0.049	29	EP
11172		I 3072.420	+0.005	16	ML	11220		I 3159.246	-0.061	30	EP
11173		I 3078.393	+0.002		JL	11221		I 3173.283	-0.066	18	EP
11174		I 3084.372	+0.005	33	SW	11222	TW Cet	I 3154.251	-0.028	10	KL
11175		I 3090.338	-0.007	15	MB	11223		I 3154.258	-0.021	7	RG
11176		I 3096.315	-0.004	13	MF	11224	VY Cet	II 3154.320	***	7	KL
11177		I 3096.318	-0.001	16	PR	11225	CC Com	II 3177.672	+0.110	6	KL
11178		I 3096.323	+0.003	16	ML	11226		II 3188.485	+0.110	8	HP
11179		I 3096.324	+0.004	13	JL	11227	TW CrB	I 3177.620	****	8	KL
11180		I 3103.492	+0.001	15	PR	11228	W Crv	I 3188.614	-0.005	7	KL
11181		I 3103.493	+0.002	6	RB	11229	UW Cyg	I 3189.676	-0.011	7	KL
11182		I 3108.272	+0.001	29	SW	11230	WW Cyg	I 3194.667	+0.022	6	KL
11183		I 3108.280	+0.009	13	FB	11231	ZZ Cyg	I 3193.710	-0.035	5	KL
11184		I 3127.392	-0.004	14	JL	11232	Z Dra	I 3157.660	+0.001	10	KL
11185		I 3127.396	0.000	11	BB	11233	RR Dra	I 3203.640	+0.139	10	KL
11186		I 3127.401	+0.005	28	SW	11234	WW Dra	II 3161.535	+0.104	9	KL
11187		I 3133.372	+0.008	32	SW	11235		II 3189.321	+0.123	10	KL
11188		I 3133.374	+0.010	16	FB	11236	AI Dra	I 3177.730	-0.005	6	KL
11189		I 3139.348	-0.001	13	MB	11237		I 3200.505	-0.007	20	EP
11190		I 3139.351	+0.002	19	FT	11238	YY Eri	I 3157.260	-0.016	9	RG
11191		I 3139.351	+0.003	12	MF	11239		II 3188.291	-0.011	9	HP
11192		I 3139.351	+0.003	15	RB	11240	TX Gem	I 3161.330	+0.001	6	KL
11193		I 3139.352	+0.003	17	JC	11241		I 3189.332	+0.003	10	HP
11194		I 3139.354	+0.006	29	EP	11242		I 3189.333	+0.004	7	KL
11195		I 3139.356	+0.007	17	JS	-11243	AE Gem	I 3168.406	+0.058	8	KL
11196		I 3145.327	+0.005	22	JC	11244	FT Gem	II 3188.289	-0.029	6	KL
11197		I 3145.334	+0.012	19	MB						
11198		I 3157.269	-0.008	10	RG						
11199		I 3157.275	-0.002	33	EP						
11200		I 3157.280	+0.003	21	RL						
11201		I 3164.456	+0.007	18	JL						
11202		I 3164.462	+0.013	14	Pa						
11203		I 3164.473	+0.024	17	BB						
11204		I 3176.397	-0.004	10	RB						

* no period given in the GCVS, O - C according to the elements of BBSAG Bulletin 27, p.7 : +0.014

** not contained in the GCVS 1969, O - C according to the GCVS 1976: +0.017

*** GCVS 1969 period erroneous, O - C according to the GCVS 1976: -0.010

**** not contained in the GCVS 1969, O - C according to the GCVS 1976: -0.002

cur- rent no.	star	minimum or- der	JD hel 244...	0 - C	n	ob- ser- ver	cur- rent no.	star	minimum or- der	JD hel 244...	0 - C	n	ob- ser- ver
11245	RX Her	I	3009.452	-0.009	13	PR	11284	DI Peg	I	3154.288	-0.014	8	RG
11246	TU Her	I	3188.680	-0.082	6	KL	11285	EE Peg	I	3093.368	+0.048	13	PR
11247	WY Hya	II	3188.338	+0.009	11	HP	11286	Z Per	I	3168.358	+0.027	6	KL
11248		II	3203.373	+0.008	6	KL	11287	RT Per	I	3188.337	-0.055	9	HP
11249		II	3203.377	+0.011	7	HP	11288	RV Per	I	3203.385	+0.014	14	HP
11250	DE Hya	I	3168.475	+0.035	11	KL	11289	XZ Per	I	3188.472	+0.005	11	HP
11251	EU Hya	I	3189.351	-0.019	7	HP	11290		I	3188.480	+0.013	7	KL
11252	SW Lac	I	3150.251	-0.104	10	KL	11291	KW Per	I	3161.448	+0.039	6	KL
11253		I	3157.298	-0.112	7	RG	11292		I	3203.355	+0.039	14	KL
11254	CM Lac	I	3150.251	-0.006	10	KL	11293	β Per	I	3072.402	-0.085	14	PR
11255	PP Lac	II	3096.397	*	21	PR	11294		I	3135.483	-0.086	21	JC
11256		II	3188.666	*	11	KL	11295		I	3135.486	-0.083	7	RB
11257		I	3189.668	*	7	KL	11296		I	3138.344	-0.093	10	ZH
11258	RW Leo	I	3161.525	+0.038	6	KL	11297		I	3138.354	-0.083	7	VB
11259		I	3188.444	+0.036	7	KL	11298		I	3138.355	-0.082	10	JC
11260		I	3188.451	+0.044	10	HP	11299		I	3138.357	-0.080	7	RB
11261	UU Leo	I	3200.351	-0.027	8	KL	11300		I	3161.271	-0.105	8	RD
11262	UV Leo	II	3159.494	-0.006	19	EP	11301		I	3161.283	-0.093	11	KL
11263		II	3162.491	-0.009	22	EP	11302		I	3161.284	-0.091	8	JR
11264		I	3200.596	-0.011	15	EP	11303	XZ Pup	I	3188.297	-0.010	6	KL
11265		II	3203.306	0.000	7	RG	11304	AY Pup	I	3188.366	+0.056	10	KL
11266	AM Leo	I	3188.421	-0.017	5	RD	11305	RZ Pyx	I	3168.457	+0.197	10	KL
11267	BL Leo	I	3157.621	-0.007	7	KL	11306		II	3188.466	+0.190	10	KL
11268		II	3188.492	-0.008	6	KL	11307	V 505 Sgr	I	3011.385	-0.036	16	PR
11269	TY Lib	I	3203.621	-0.016	10	KL	11308	AU Ser	I	3177.634	**	6	KL
11270	SX Lyn	I	3188.412	-0.293	6	RD	11309		II	3188.647	**	10	KL
11271		I	3188.416	-0.289	10	HP	11310	RW Tau	I	3203.336	-0.079	13	HP
11272	RW Mon	I	3161.363	-0.001	10	KL	11311		I	3203.336	-0.079	15	RG
11273		I	3182.325	-0.006	7	KL	11312		I	3203.337	-0.077	11	KL
11274	BO Mon	I	3189.383	+0.132	13	HP	11313	RZ Tau	I	3188.403	+0.002	6	RD
11275		I	3189.387	+0.136	7	KL	11314	AM Tau	I	3154.300	-0.136	9	KL
11276	V 508 Oph	I	3180.675	+0.014	7	KL	11315	AP Tau	I	3161.396	***	6	KL
11277	ER Ori	I	3135.398	-0.035	12	JC	11316		II	3182.297	***	6	KL
11278		I	3165.258	-0.024	8	RG	11317	CT Tau	I	3188.467	+0.009	8	HP
11279		I	3188.341	-0.017	8	HP	11318	ET Tau	I	3161.262	-0.033	7	RD
11280	EW Ori	I	3189.360	-0.055	8	HP	11319	GQ Tau	I	3161.289	-0.010	6	RD
11281	FL Ori	I	3154.395	+0.094	5	KL	11320	HU Tau	I	3105.427	+0.011	26	SW
11282		I	3168.356	+0.095	7	KL	11321		I	3138.329	+0.013	7	JC
11283	UX Peg	I	3088.400	-0.011	6	KL	11322		I	3138.341	+0.024	7	RB

* no period given in the GCVS, 0 - C according to Figer's (first set) elements
IBVS 1231: +0.011 +0.027 +0.026

** GCVS 1969 period too inaccurate for reasonable reduction, 0 - C according to
the GCVS 1974: +0.001 -0.001

*** GCVS 1969 elements incomplete, 0 - C according to the GCVS 1976: -0.065 -0.062

cur- rent no.	star	minimum or- JD hel der 244...	O - C	n ser- ver
11323	V Tri	I 3186.254	+0.013	8 KL
11324	X Tri	I 3018.608	-0.035	13 PR
11325		I 3165.306	-0.039	15 RG
11326		I 3166.280	-0.036	8 KL
11327		I 3167.249	-0.039	11 KL
11328		I 3168.223	-0.036	6 KL
11329	K3II5959 TriII	3188.404	*	7 RD
11330	W UMa	I 3095.628	-0.126	15 JL
11331		II 3110.502	-0.099	13 JL
11332	TX UMa	I 3126.522	+0.008	25 EP
11333	UX UMa	I 3157.726	+0.001	6 KL
11334		I 3161.462	+0.001	4 KL
11335		I 3185.654	+0.002	4 KL
11336		I 3188.407	+0.001	6 KL
11337	XY UMa	I 3188.395	-0.028	6 RD
11338	XZ UMa	I 3182.310	-0.073	7 KL
11339		I 3193.298	-0.085	6 KL
11340	ZZ UMa	I 3203.351	+0.001	8 RG
11341		I 3203.361	+0.011	9 HP
11342	RU UMi	I 3069.290	+0.001	9 AR
11343	VV Vir	I 3177.664	**	8 KL
11344		I 3189.700	**	8 KL
11345		I 3194.610	**	11 KL
11346	AH Vir	II 3188.502	+0.044	6 KL
11347	AK Vir	I 3157.687	+0.037	8 KL
11348	AW Vul	I 3188.686	-0.024	7 KL

* period unknown

** O - C according to the GCVS exceeds 2 periods, O - C according to the elements of BBSAG Bulletin 31, p. 5 : +0.001 +0.008 0.000

The Minimum Brightness of A E Gem

is unknown according to the GCVS 1969/71/74/76. My survey during the night JD 2443168 yields th value

$$m_v \text{ min} = 13.0 \pm .3$$

as compared to several neighbouring AAVSO sequences.

K. Locher

Deceptive Observations of U U Canis Majoris

All the 5 minima hitherto observed by us (no.^s 5582, 5787, 5951, 5952, and an unnumbered one in ORION no. 128) have been used for the period study by Baldwin et al. (JAAVSO 5, 1, p.15, 1976) to get the strange result described there. Later discussion and comparison of the observed magnitudes among the authors and us have yielded the desillusive fact that our observations were all deceptive. Thus we regret that this most severe error ever found in our results could have become the base of the JAAVSO paper.

Meanwhile we have seen ourselves the star at true minimum to become sure of the fact. We must have been misled by a possible variability of a comparison star and also by the GCVS maximum brightness which is distinctly too large.

K.Locher & H.Peter

E r r a t a

star concerned	bulletin no.	minimum no.	misprinted entry	misprinted value	correct value
XZ And	6	4093	0	1616.347	1616.374
	6	4094	0	1616.347	1616.374
UU And	12	5539	0 - C	+0.186:	+0.086:
EG Cep	31	11021	0	3083.340	3088.340