

BBSAG Bulletin 37

1973 July 7

70th List of Minima of Eclipsing Binaries

The following table lists 291 minima obtained visually mainly during 1973 March to July by the observers

MBe Mino Benucci, Firenze, Italy
 AB Albert Buzzoni, Ferrara, Italy
 TC Tiberio Carradori, Compi, Italy
 RD Roger Diethelm, Reinach, Switzerland
 MFi Maurizio Franchini, Cerro Maggiore, Italy
 RG Robert Germann, Wald, Switzerland
 ZH Zoltán Hevesi, Kaposvár, Hungary
 AL Alfredo Livi, Pistoia, Italy
 KL Kurt Locher, Grüt, Switzerland
 EN Edmond Nazry, Toulouse, France
 CPa Carlo Pampaloni, Firenze, Italy
 MP Maurizio Penna, Asti, Italy
 HP Hermann Peter, Otelfingen, Switzerland
 EP Ennio Poretti, Arconate, Italy
 PR Philippe Ralincourt, Mantes, 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.

cur- rent no.	star	minimum or- der	JD hel 244...	O-C	ob- n ser- ver	cur- rent no.	star	minimum or- der	JD hel 244...	O-C	n ser- ver
12563	UU And	I	3689.533	+0.113	10 KL	12579	V 346 Aql	I	3616.653	-0.010	5 KL
12564	XZ And	I	3668.573	-0.040	0 KL	12580	V 479 Aql	I	3657.555	+0.022	10 KL
12565	EP And	II	3663.541	*	7 KL	12581	V 893 Aql	II	3658.494	-0.014	6 KL
12566		I	3668.572	*	8 KL	12582		II	3668.495	-0.022	7 KL
12567	CX Aqr	I	3658.578	+0.009	5 KL	12583		II	3673.511	-0.010	7 KL
12568		I	3673.593	+0.013	13 KL	12584		I	3689.446	-0.012	10 KL
12569	LT Aql	I	3673.517	+0.043	10 KL	12585	UU Aur	II	3544.311	+0.004	13 AB
12570	08 Aql	II	3657.549	-0.038	12 KL	12586		I	3568.293	0.000	3 EP
12571		II	3658.553	-0.048	10 KL	12587		I	3578.389	-0.006	20 PR
12572		I	3671.482	-0.042	12 KL	12588		I	3578.393	-0.002	10 EP
12573		I	3671.493	-0.042	6 HP	12589		I	3578.396	+0.001	14 AB
12574		I	3673.510	-0.042	10 KL	12590		I	3578.402	+0.007	14 MBe
12575		I	3678.578	-0.042	11 KL	12591		I	3578.402	+0.007	11 MFi
12576		II	3689.475	-0.041	11 KL	12592		II	3583.447	+0.002	9 EP
12577	V 342 Aql	I	3689.495	-0.023	9 HP	12593		II	3592.203	0.000	9 EP
12578	V 343 Aql	I	3622.639	-0.016	9 KL	12594		II	3597.326	-0.007	6 ZH
						12595		II	3597.337	+0.004	20 MBe
						12596		II	3597.330	+0.005	23 AB

* GCVS 1969 period erroneous, O-C according to the GCVS 1976: +0.009 -0.011

cur- rent no.	star	minimum or- der	JD hel 244...	0 - C	n ser- ver	ob- ver	cur- rent no.	star	minimum or- der	JD hel 244...	0 - C	n ser- ver	ob- ver
12597		II	3597.347	+0.014	12	TC	12635	SV Com	I	2577.320	-0.015	7	RG
12598	AR Aur	I	3471.291	+0.021	20	AL	12636	YZ CVn	I	3575.535	**	10	KL
12599		I	3504.356	+0.008	15	AL	12637		I	3662.549	**	10	KL
12600		II	3535.350	0.000	20	MBe	12638		I	3660.431	**	12	KL
12601		II	3535.364	+0.006	6	EN	12639	R CMa	I	3507.350	+0.010	6	EP
12602		I	3566.369	+0.001	8	EN	12640		I	3595.296	+0.004	10	EP
12603		I	3595.300	-0.002	13	EP	12641		I	3612.337	+0.007	0	EP
12604		I	3595.313	+0.003	9	EN	12642	TU CMa	I	3575.333	-0.005	0	HP
12605		I	3595.320	+0.009	26	AB	12643	EG CMa	I	3575.315	***	6	KL
12606		I	3595.321	+0.010	26	MBe	12644	TY CMi	I	3596.350	+0.044	0	RD
12607		I	3595.327	+0.016	9	ZH	12645	XZ CMi	I	3496.602	-0.012	9	RD
12608		II	3597.379	+0.001	22	AB	12646	AK CMi	I	3575.320	+0.011	0	HP
12609		II	3597.380	+0.002	19	MBe	12647	TY Cap	I	3657.534	-0.097	11	KL
12610	HL Aur	I	3622.410	-0.002	12	KL	12648	RZ Cas	I	3157.200	+0.011	9	MFi
12611	LY Aur	I	3560.269	*	7	EP	12649		I	3390.352	+0.001	12	MP
12612		II	3570.273	*	7	EP	12650		I	3421.436	+0.000	21	AL
12613		II	3506.273	*	7	EP	12651		I	3494.357	+0.020	23	AL
12614		II	3590.279	*	10	EP	12652		I	3531.307	-0.003	14	EN
12615		I	3592.203	*	9	EP	12653		I	3574.422	+0.003	13	PR
12616		II	3594.204	*	9	EP	12654		I	3500.403	+0.000	10	TC
12617		I	3596.200	*	11	EP	12655	TV Cas	I	3540.205	-0.011	10	AB
12618		I	3612.292	*	6	EP	12656		I	3570.339	-0.022	13	PR
12619	TU Boo	II	3579.521	+0.001	6	KL	12657		I	3654.469	-0.021	16	PR
12620		II	3501.574	+0.009	6	KL	12658	U Cep	I	3671.533	+0.040	10	KL
12621		I	3504.640	+0.002	0	KL	12659	XX Cep	I	3577.630	-0.016	7	EP
12622		II	3624.375	+0.004	10	KL	12660	GK Cep	II	3369.390	-0.079	30	MP
12623		II	3656.401	+0.005	11	KL	12661		II	3392.362	-0.052	10	MP
12624		II	3657.440	-0.001	11	HP	12662		II	3399.375	-0.060	10	MP
12625		I	3663.450	+0.010	7	HP	12663	RW Com	II	3616.425	-0.047	7	KL
12626		I	3665.397	+0.003	6	KL	12664		II	3622.364	-0.052	6	KL
12627		II	3660.402	+0.000	9	KL	12665		II	3659.306	-0.046	9	RG
12628	YY Boo	I	3623.510	-0.044	0	KL	12666		II	3663.410	-0.056	7	RG
12629	AC Boo	I	3659.410	+0.002	5	HP	12667	RZ Com	II	3612.369	+0.027	7	HP
12630		II	3662.399	-0.005	5	HP	12668		II	3642.460	-0.002	9	HP
12631	AD Boo	I	3609.457	+0.057	0	HP	12669		I	3656.512	-0.006	7	HP
12632	AR Boo	I	3624.395	+0.094	9	KL							
12633		I	3656.479	+0.097	9	KL							
12634		II	3662.524	+0.093	6	KL							

* not contained in the GCVS 1969, 0 - C according to the GCVS 1974: -0.005
-0.006 -0.012 -0.000 -0.006 -0.006 -0.003 -0.009

** no period given by the GCVS, 0 - C according to the elements of BBSAG Bul-
letin 27, p.7: +0.030 +0.026 +0.031

*** no period given by the GCVS 1969, 0 - C according to the GCVS 1971: 0.000

cur- rent no.	star	minimum or- der	JD hel 244...	0 - C	ob- n ser- ver	cur- rent no.	starr	minimum or- der	JD hel 244...	0 - C	ob- n ser- ver
12670		II	3663.455	-0.002	7 HP	12707	YY Eri	II	3577.295	-0.017	6 RG
12671	CC Com	I	3575.452	+0.115	7 HP	12708		II	3577.300	-0.012	9 HP
12672		I	3611.439	+0.131	7 RG	12709	U Gem	I	3596.320	+0.010	7 RD
12673		II	3612.419	+0.118	7 HP	12710	AF Gem	I	3616.319	-0.016	10 KL
12674		II	3642.436	+0.123	7 HP	12711	BD Gem	I	3575.337	+0.047	8 HP
12675		II	3657.441	+0.121	8 HP	12712		I	3596.347	+0.039	9 RD
12676		II	3663.396	+0.118	7 RG	12713	SZ Her	I	3653.394	+0.032	11 RG
12677		I	3673.433	+0.119	7 HP	12714		I	3662.406	+0.034	8 HP
12678	TW CrB	I	3581.584	*	10 KL	12715		I	3671.407	+0.036	6 HP
12679	W Crv	I	3577.470	-0.006	8 HP	12716	TT Her	I	3662.431	-0.044	8 HP
12680		I	3612.401	-0.002	8 HP	12717	TU Her	I	3662.476	-0.003	6 KL
12681	UW Cyg	I	3579.614	-0.007	9 KL	12718		I	3662.478	-0.000	8 HP
12682	WW Cyg	I	3662.470	+0.021	9 HP	12719	TX Her	II	3659.376	-0.006	10 RG
12683	ZZ Cyg	I	3618.653	-0.038	7 KL	12720		I	3664.536	+0.004	13 EP
12684		I	3671.466	-0.029	9 HP	12721	CC Her	I	3656.547	+0.067	8 HP
12685	DO Cyg	I	3673.414	-0.025	11 KL	12722		I	3656.548	+0.068	10 KL
12686	KR Cyg	I	3673.454	-0.007	7 HP	12723		I	3663.483	+0.067	12 HP
12687		I	3689.515	-0.004	7 HP	12724		I	3663.485	+0.069	6 KL
12688	V 456 Cyg	II	3660.556	+0.010	6 KL	12725		I	3689.495	+0.069	11 HP
12689		I	3665.466	+0.018	7 HP	12726		I	3689.509	+0.083	10 KL
12690		I	3673.482	+0.014	6 HP	12727	DF Her	I	3671.499	-0.182	6 KL
12691	V 477 Cyg	I	3689.364	-0.009	7 RG	12728	GL Her	I	3671.486	+0.078	10 KL
12692	AV Del	I	3662.551	-0.001	8 KL	12729		I	3671.407	+0.079	10 HP
12693		I	3689.515	-0.011	6 KL	12730	MT Her	I	3673.548	+0.033	7 KL
12694	Z Dra	I	3612.407	+0.006	11 HP	12731	V 359 Her	I	3673.432	-0.068	7 HP
12695		I	3658.561	+0.007	6 KL	12732	V 502 Her	I	3659.535	+0.093	6 KL
12696		I	3673.488	+0.003	6 KL	12733		II	3662.489	+0.086	7 KL
12697		I	3673.489	+0.003	7 HP	12734		II	3671.535	+0.092	6 KL
12698	RR Dra	I	3659.476	+0.147	13 HP	12735		I	3674.498	+0.094	7 KL
12699	RZ Dra	I	3662.494	-0.013	8 HP	12736	RX Hya	I	3575.464	+0.032	10 HP
12700	AI Dra	I	3392.337	+0.002	12 HP	12737	VZ Hya	I	3577.372	+0.804	8 HP
12701		I	3398.323	+0.007	11 HP	12738	EU Hya	I	3596.346	-0.023	9 RD
12702		I	3664.463	+0.010	12 EP	12739	CM Lac	I	3689.431	-0.002	9 RG
12703	CM Dra	I	3657.507	**	6 KL	12740	Y Leo	I	3642.434	+0.102	11 HP
12704		I	3662.582	**	8 KL	12741	UV Leo	I	3544.443	-0.012	12 EP
12705		I	3671.462	**	7 KL	12742		I	3577.446	-0.014	13 EP
12706	S Equ	I	3689.423	+0.018	9 RG						

* not contained in the GCVS 1969, 0 - C according to the GCVS 1976: -0.006

** GCVS elements incomplete, 0 - C according to Martins' elements PASP 87, p. 160, 1975: -0.294 -0.293 -0.293

cur- rent no.	star	minimum or- JD hel der 244...	0 - C	ob- n ser- ver	cur- rent no.	star	minimum or- JD hel der 244...	0 - C	ob- n ser- ver
12743		I 3577.449	-0.011	6 HP	12779		I 3631.501	-0.096	7 HP
12744		II 3578.349	-0.010	11 EP	12780		I 3656.434	-0.091	10 KL
12745		I 3583.448	-0.012	11 EP	12781	V1010 Oph	I 3577.676	-0.076	8 EP
12746		II 3587.349	-0.012	10 EP	12782		I 3579.648	-0.088	7 KL
12747		II 3593.348	-0.014	10 EP	12783		I 3581.643	-0.078	7 KL
12748		II 3596.347	-0.015	12 EP	12784		I 3656.376	-0.086	6 RG
12749		I 3598.439	-0.024	7 KL	12785		I 3609.452	-0.082	7 RG
12750		II 3599.351	-0.011	6 KL	12786		I 3609.457	-0.077	5 HP
12751	BL Leo	II 3570.505	-0.012	7 KL	12787	EQ Ori	I 3577.324	-0.074	8 HP
12752		II 3581.500	-0.013	10 KL	12788	OS Ori	I 3596.320	-0.032	8 RD
12753	CE Leo	I 3596.340	-0.076	7 RD	12789	BM Peg	I 3623.616	-0.206	7 KL
12754	RY Lyn	I 3570.508	*	6 KL	12790	BY Peg	I 3660.576	+0.062	10 KL
12755	RV Lyr	I 3658.515	+0.040	8 KL	12791	DI Peg	I 3609.571	-0.018	12 KL
12756	TT Lyr	I 3665.443	-0.007	8 HP	12792	RT Per	I 3577.354	-0.066	8 HP
12757	UZ Lyr	I 3663.455	+0.012	11 HP	12793	XZ Per	I 3575.421	+0.006	9 HP
12758	EW Lyr	I 3656.420	+0.060	11 KL	12794	KW Per	I 3660.595	+0.032	7 KL
12759		I 3609.551	+0.062	8 KL	12795	UZ Pup	II 3598.293	-0.017	7 KL
12760		I 3609.552	+0.063	10 HP	12796		I 3611.376	-0.049	5 KL
12761	FL Lyr	I 3673.475	+0.002	7 HP	12797	RZ Pyx	II 3597.328	+0.196	9 KL
12762	TU Mon	I 3575.379	-0.068	10 HP	12798		I 3598.307	+0.191	8 KL
12763	U Oph	II 3662.424	+0.008	8 HP	12799	UZ Sge	I 3663.411	+0.056	6 KL
12764	RV Oph	I 3627.616	-0.006	7 KL	12800		I 3674.490	+0.056	7 KL
12765	SZ Oph	I 3627.521	+0.272	7 KL	12801	RS Sct	I 3579.647	+0.022	5 KL
12766	WZ Oph	I 3689.479	-0.005	8 HP	12802	AK Ser	I 3671.510	-0.015	7 KL
12767	V449 Oph	I 3659.460	+0.066	6 KL	12803	AO Ser	I 3584.688	-0.002	7 KL
12768	V508 Oph	I 3631.493	+0.016	6 HP	12804		I 3623.382	+0.001	7 KL
12769		I 3656.405	+0.010	7 HP	12805		I 3659.434	-0.001	7 HP
12770		II 3658.374	+0.004	7 RG	12806	AU Ser	II 3611.457	***	7 RG
12771		I 3663.372	+0.003	6 KL	12807		II 3657.467	***	7 HP
12772		I 3663.382	+0.013	7 RG	12808		II 3659.401	***	6 RG
12773		I 3671.488	+0.016	7 HP	12809	AM Tau	I 3575.353	-0.151	10 HP
12774	V586 Oph	I 3627.527	-0.001	6 KL	12810		I 3577.482	-0.136	6 HP
12775		I 3662.542	-0.009	7 KL	12811	CD Tau	II 3518.463	-0.048	26 EP
12776		I 3689.494	+0.001	10 KL	12812		II 3596.324	-0.066	12 EP
12777	V752 Oph	I 3665.463	**	6 KL	12813	HU Tau	I 3584.342	+0.005	13 AL
12778	V913 Oph	I 3581.652	-0.096	10 KL	12814		I 3588.458	+0.009	18 MFi

* no period given by the GCVS, 0-C according to the elements of Samolyk and Wedemayer, JAAVSO preprint 1977: +0.015

** no period given by the GCVS, 0-C according to the elements of BBSAG Bulletin 27, page 4, footnote 1: +0.034

*** GCVS 1969 period too inaccurate for reasonable reduction, 0-C according to the GCVS 1974: -0.024 -0.007 -0.005

current no.	star	minimum or-der	JD hel 244...	0 - C	observer	current no.	star	minimum or-der	JD hel 244...	0 - C	observer
12015		I	3576.301	-0.007	14 MBe	12033	VV Vir	I	3579.626	*	10 KL
12016		I	3570.353	-0.010	18 CPa	12034		I	3656.363	*	10 KL
12017		I	3570.360	-0.004	16 EP	12035		I	3659.407	*	7 KL
12018		I	3570.365	+0.001	15 MFi	12036		I	3663.496	*	6 KL
12019		I	3570.366	+0.002	10 MBe	12037		I	3609.370	*	7 KL
12020		I	3570.373	+0.009	10 PR						
12021	X Tri	I	3575.294	-0.039	5 KL	12030	AH Vir	II	3590.497	+0.072	8 KL
12022	UX UMa	I	3575.651	0.000	5 KL	12039		I	3610.515	+0.067	6 KL
12023		I	3501.553	+0.001	6 KL	12040		II	3611.531	+0.064	6 KL
12024		I	3656.403	0.000	7 KL	12041	AK Vir	I	3655.412	+0.033	4 KL
12025		I	3663.563	0.000	6 KL	12042	AZ Vir	II	3642.439	**	9 HP
12026		I	3671.430	-0.001	7 KL	12043		II	3655.371	**	7 RG
12027		I	3673.396	-0.001	6 KL	12044		I	3659.397	**	7 RG
12028		I	3609.523	-0.001	6 KL	12045		II	3663.410	**	7 RG
12029	VV UMa	I	3625.333	+0.075	6 RG	12046	BF Vir	I	3663.425	-0.013	8 HP
12030	XZ UMa	I	3622.342	-0.074	11 KL	12047	BH Vir	I	3624.344	+0.007	6 KL
12031	AC UMa	I	3570.415	+0.206	10 KL	12048		I	3655.301	+0.003	8 RG
12032		I	3659.514	+0.272	6 KL	12049	Z Vul	I	3659.392	-0.002	7 RG
						12050	XZ Vul	I	3650.552	+0.237	7 KL
						12051		I	3609.454	+0.244	6 KL
						12052	AW Vul	I	3609.496	-0.021	9 HP
						12053	NO Vul	I	3674.555	***	7 KL

* 0 - C according to the GCVS exceeding 2 periods, 0 - C according to the elements of BBSAG Bulletin 31, p. 5 : +0.001 +0.003 +0.004 -0.002 +0.004

** GCVS 1969 period erroneous, 0 - C according to the GCVS 1976 : +0.020 +0.013 +0.010 +0.010

*** not contained in the GCVS 1969, 0 - C according to the GCVS 1976 : +0.014

A Finding Chart for NO Vulpeculae

By this contribution we continue our sporadic series of publication for stars lacking a reference in column 9 of the GCVS.
K. Locher

