

# BBSAG Bulletin 38

1

1978 September 4

## 71<sup>st</sup> List of Minima of Eclipsing Binaries

The following table lists 375 minima obtained visually mainly during 1978 July and August by the observers

RB	Roland Boninsegna, Marcinelle, Belgium
AB	Alberto Buzzoni, Ferrara, Italy
TC	Tiberio Carradori, Campli, Italy
JC	Jean-Pierre Clovin, Marcinelle, Belgium
RD	Roger Diethelm, Reinach, Switzerland
RD	Renaud Dore, Caen, France
RG	Robert Germann, Wald, Switzerland
JL	Jean-François Le Borgne, Brest, France
KL	Kurt Locher, Grüt, Switzerland
EL	Eolo Lucentini, Caldarola, Italy
EN	Edmond Nezry, Toulouse, France
CPa	Carlo Pampaloni, Firenze, Italy
AP	Angelo del Parigi, Matera, Italy
MP	Maurizio Penna, Asti, Italy
HP	Hermann Peter, Otelfingen, Switzerland
EP	Ennio Poretti, Arconate, Italy
PR	Philippe Ralin-court, Nantes, France
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.

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
12854	RT	And	I 3705.409	-.011	7 HP	12868	II	3717.384	+.029	7	RG
12855			I 3713.582	-.014	9 RG	12869	II	3723.364	+.035	6	RG
12856			I 3739.368	-.014	8 RG	12870	I	3745.432	+.033	7	HP
12857	TT	And	I 3713.558	-.051	6 KL	12871	EP	And	II 3703.551	*	7 KL
12858			I 3749.494	-.063	6 KL	12872	I	3706.583	*	11	KL
12859	UU	And	I 3735.607	+.112	10 KL	12873	I	3713.451	*	7	KL
12860			I 3747.498	+.114	7 KL	12874	I	3715.478	*	7	KL
12861	XZ	And	I 3706.585	-.033	10 KL	12875	I	3717.484	*	6	KL
12862			I 3717.441	-.035	7 KL	12876	I	3732.440	*	6	KL
12863			I 3725.583	-.036	10 KL	12877	I	3734.449	*	7	KL
12864			I 3736.438	-.040	5 KL	12878	II	3746.384	*	7	KL
12865	AB	And	II 3703.453	+.038	6 RG	12879	GZ	And	II 3743.518	**	13 KL
12866			I 3713.566	+.028	7 RG	12880	RY	Aqr	I 3703.525	-.098	6 KL
12867			II 3714.408	+.040	6 RG	12881	I	3705.493	-.097	5	KL

\* GCVS 1969 period erroneous, O - C according to the GCVS 1976: +.012  
+.013 +.012 +.018 +.003 +.008 -.003 +.010

\*\* not contained in the GCVS 1969, O - C according to the GCVS 1976:  
+.053

cur- rent no.	star	or- der	minimum JD hel 244...	O-C	n	ob- ser- ver	cur- rent no.	star	or- der	minimum JD hel 244...	O-C	n	ob- ser- ver		
12882	XZ	Aqr	I	3732.599	*	6	KL	12929	AL	Cam	I	3702.437	-.001	9	HP
12883	CR	Aqr	I	3734.531	+.182	10	KL	12930			I	3706.425	+.001	9	HP
12884			I	3735.557	+.179	10	KL	12931	TY	Cap	I	3724.438	-.096	4	KL
12885	CX	Aqr	I	3707.508	+.012	10	KL	12932			I	3744.363	-.099	7	KL
12886			I	3717.508	+.005	6	KL	12933	RZ	Cas	I	3568.443	.000	15	RB
12887			I	3726.414	+.015	7	KL	12934			I	3611.474	+.003	5	EN
12888			I	3736.419	+.013	6	KL	12935			I	3672.436	+.007	10	GT
12889			I	3741.422	+.012	6	KL	12936			I	3684.382	+.001	11	TC
12890	CZ	Aqr	I	3735.556	+.018	11	KL	12937			I	3684.386	+.004	7	EP
12891	EE	Aqr	I	3725.471	+.003	11	KL	12938			I	3685.578	+.002	9	PR
12892			I	3726.492	+.006	14	KL	12939			I	3703.502	-.003	35	AP
12893			I	3732.600	+.006	6	KL	12940			I	3703.510	+.005	44	CPa
12894	KP	Aql	I	3740.392	+.051	9	HP	12941			I	3703.513	+.007	33	JL
12895	OO	Aql	I	3703.405	-.047	7	RG	12942			I	3709.482	.000	34	AP
12896			I	3703.412	-.041	10	KL	12943			I	3715.452	-.006	15	EN
12897			I	3706.452	-.041	6	HP	12944			I	3715.460	+.002	17	JC
12898			I	3718.367	-.036	6	KL	12945			I	3715.460	+.002	18	RDo
12899			II	3723.426	-.044	8	HP	12946			I	3715.465	+.008	30	CPa
12900			I	3735.339	-.042	7	RG	12947			I	3721.433	-.001	36	AP
12901			I	3738.378	-.043	8	RD	12948			I	3739.356	-.006	8	RG
12902			I	3739.391	-.043	9	RG	12949			I	3739.371	+.008	9	GT
12903	V 342	Aql	I	3706.420	-.053	7	KL	12950	TV	Cas	I	3703.412	-.018	6	RG
12904			I	3706.449	-.023	7	HP	12951			I	3703.419	-.011	23	EL
12905			I	3723.389	-.039	8	HP	12952			I	3712.479	-.013	36	CPa
12906			I	3723.396	-.032	8	KL	12953			I	3732.418	-.015	9	EP
12907			I	3740.344	-.039	7	HP	12954			I	3732.421	-.011		MP
12908			I	3740.350	-.032	6	HP	12955	AB	Cas	I	3705.442	-.002	8	HP
12909	V 343	Aql	I	3707.493	-.014	7	KL	12956			I	3742.354	+.005	8	KL
12910	V 346	Aql	I	3739.459	-.010	8	HP	12957	EP	Cas	II	3715.480	+.012	6	KL
12911			I	3749.425	-.001	7	HP	12958	IR	Cas	I	3723.376	-.093	6	KL
12912	V 479	Aql	I	3713.409	+.025	10	KL	12959			I	3725.422	-.088	7	KL
12913	V 805	Aql	I	3711.400	+.013	6	HP	12960	V 523	Cas	I	3715.420	**	7	KL
12914	RS	Ari	I	3739.527	-.035	6	KL	12961			II	3717.407	**	6	KL
12915	WW	Aur	II	3511.477	-.005	6	JC	12962			I	3719.391	**	7	KL
12916			II	3568.312	+.017		MP	12963	U	Cep	I	3706.420	+.033	7	KL
12917			I	3578.392	-.003		MP	12964			I	3706.434	+.047	12	HP
12918	HL	Aur	I	3747.546	+.002	6	KL	12965			I	3711.420	+.047	12	HP
12919	TU	Boo	I	3713.391	+.003	10	KL	12966	ZZ	Cep	I	3741.351	-.009	7	HP
12920	ZZ	Boo	I	3657.522	+.011	17	PR	12967	EG	Cep	I	3705.418	+.024	7	HP
12921			I	3712.419	-.002	6	KL	12968			I	3706.519	+.036	16	JL
12922			I	3717.404	-.008	11	KL	12969			I	3711.407	+.022	8	HP
12923			I	3742.372	+.001	6	KL	12970			I	3712.496	+.022	10	KL
12924	AC	Boo	II	3717.373	-.009	7	RG	12971			I	3713.581	+.018	7	RG
12925			II	3735.345	-.012	5	RG	12972			I	3717.396	+.020	9	RG
12926	SV	Cam	I	3577.334	-.009		MP	12973			I	3723.386	+.019	8	RG
12927			I	3578.516	-.013		MP	12974			I	3723.387	+.021	8	HP
12928			I	3702.480	-.001	9	HP	12975			I	3741.354	+.015	7	KL

\* no period given in the GCVS 1969, O-C according to the GCVS 1974: +.069  
 \*\* not contained in the GCVS 1969, O-C according to the GCVS 1976: +.003  
 +.004 +.001

cur- rent no.	star	minimum or- der	JD hel 244...	O-C	n	ob- ser- ver	cur- rent no.	star	minimum or- der	JD hel 244...	O-C	n	ob- ser- ver
12976	EK Cep	I	3740.459	+0.002	9	HP	13019	V 728 Cyg	I	3712.478	+0.068	10	HP
12977	GI Cep	I	3705.448	+0.037	7	KL	13020		I	3743.377	+0.066	12	HP
12978	GK Cep	I	3589.399	-0.079		MP	13021		I	3745.429	+0.057	7	HP
12979		I	3590.360	-0.054		MP	13022	TY Del	I	3719.389	+0.015	7	KL
12980	NU Cep	I	3712.476	*	8	KL	13023		I	3726.538	+0.017	7	KL
12981	TW Cet	II	3734.576	-0.019	10	KL	13024	YY Del	I	3726.436	+0.028	7	KL
12982	VY Cet	I	3735.568	**	10	KL	13025	FZ Del	I	3712.404	+0.001	6	KL
12983		I	3749.539	**	7	KL	13026		I	3719.448	-0.004	6	KL
12984	AA Cet	I	3735.606	***	13	KL	13027		I	3722.580	-0.004	4	KL
12985		I	3743.651	***	12	KL	13028		I	3726.496	-0.004	6	KL
12986		I	3749.553	***	6	KL	13029		I	3741.381	-0.001	11	HP
12987	RW Com	I	3713.388	-0.040	10	KL	13030	Z Dra	I	3741.363	+0.006	11	KL
12988	TW CrB	II	3734.390	****	6	KL	13031	RZ Dra	I	3699.408	-0.007	8	HP
12989	WW Cyg	I	3735.453	+0.013	10	HP	13032		I	3732.446	-0.023	7	HP
12990		I	3745.464	+0.021	9	HP	13033		I	3742.346	-0.039	7	RG
12991	ZZ Cyg	I	3739.350	-0.034	7	KL	13034	TW Dra	I	3712.447	-0.050	15	KL
12992		I	3739.352	-0.033	8	HP	13035		I	3712.448	-0.049	10	HP
12993		I	3740.607	-0.035	6	KL	13036		I	3740.523	-0.043	8	KL
12994		I	3749.410	-0.033	6	HP	13037		I	3743.320	-0.053	11	RG
12995	CG Cyg	I	3705.523	-0.025	8	HP	13038	AI Dra	I	3658.467	+0.008	19	PR
12996		I	3712.469	-0.022	8	HP	13039		I	3688.436	+0.007	21	PR
12997		I	3712.471	-0.020	7	KL	13040		I	3716.418	+0.006	12	EP
12998		I	3714.366	-0.018	10	KL	13041		I	3712.410	+0.005	13	EP
12999		I	3743.396	-0.021	13	HP	13042		I	3718.405	+0.005	11	KL
13000	DO Cyg	I	3714.454	-0.025	6	KL	13043		I	3718.409	+0.010	13	EP
13001	GO Cyg	I	3739.366	+0.018	8	RG	13044		I	3718.411	+0.012		MP
13002	KR Cyg	I	3706.426	+0.004	9	HP	13045		I	3730.397	+0.010		MP
13003		I	3739.368	-0.015	8	HP	13046		I	3742.378	+0.002	8	RG
13004	V 382 Cyg	I	3719.416	-0.054	6	HP	13047	CM Dra	I	3744.392	*****	6	KL
13005	V 387 Cyg	I	3711.465	+0.062	9	HP	13048		I	3749.462	*****	7	KL
13006	V 401 Cyg	II	3732.412	+0.052	7	HP	13049	S Equ	I	3713.484	+0.027	11	KL
13007	V 456 Cyg	II	3702.439	+0.007	7	HP	13050	BL Eri		3749.631	*****	6	KL
13008		II	3719.398	+0.033	7	HP	13051	RX Her	I	3740.443	-0.016	6	HP
13009		I	3723.388	+0.013	8	HP	13052		II	3741.335	-0.008	7	HP
13010		II	3735.420	+0.014	9	HP	13053	SZ Her	I	3703.392	+0.034	7	KL
13011		I	3739.437	+0.021	9	HP	13054		I	3712.390	+0.034	8	HP
13012	V 477 Cyg	I	3703.431	-0.024	8	RG	13055		I	3712.391	+0.035	6	KL
13013		I	3703.450	-0.005	22	EL	13056		I	3739.387	+0.033	10	KL
13014		I	3717.528	-0.009	9	RG	13057		I	3739.391	+0.038	9	HP
13015		I	3743.340	-0.015	10	RG	13058	TT Her	I	3714.417	-0.047	8	RG
13016		I	3743.343	-0.011	8	HP	13059		I	3735.410	-0.032	8	HP
13017	V 548 Cyg	I	3734.408	-0.063	6	HP	13060	TU Her	I	3746.360	-0.077	11	KL
13018	V 687 Cyg	I	3740.408	+0.006	8	HP	13061	TX Her	I	3695.432	+0.003	39	AB

\* not contained in the GCVS 1969, O-C according to the GCVS 1976: +.030

\*\* GCVS 1969 period erroneous, O-C according to the GCVS 1976: -.013 -.015

\*\*\* not contained in the GCVS 1969, O-C according to the GCVS 1974: -.016 -.013 -.009

\*\*\*\* not contained in the GCVS 1969, O-C according to the GCVS 1976: -.013

\*\*\*\*\* GCVS elements incomplete, O-C according to Martins' elements PASP 87, p.168, 1975: -.308 -.312

\*\*\*\*\* GCVS period probably erroneous; but this result fits neither the elements of BBSAG Bulletin 36 p.6. Further investigation is planned.

cur- rent no.	star	minimum or- der	JD hel 244...	G-C	n ser- ver	ob- server	cur- rent no.	star	minimum or- der	JD hel 244...	G-C	n ser- ver	ob- server
13062		I	3695.442	+.014	10	EP	13113		II	3714.395	-.019	8	RG
13063		I	3730.441	-.004	12	EP	13114		I	3735.383	+.003	8	HP
13064		I	3732.488	-.017	19	EP	13115		I	3740.416	+.003	6	HP
13065	UX Her	I	3702.494	-.040	9	HP	13116	RV Oph	I	3712.422	-.004	14	HP
13066	DH Her	I	3713.518	-.052	7	KL	13117		I	3712.425	-.001	8	KL
13067	DP Her	I	3703.478	-.190	7	KL	13118	V 501 Oph	I	3715.448	+.005	6	KL
13068	GL Her	I	3732.442	+.066	6	KL	13119		I	3717.385	+.006	6	KL
13069	V 338 Her	I	3709.409	+.103	8	HP	13120	V 502 Oph	II	3714.396	-.014	7	RG
13070		I	3739.432	+.094	12	HP	13121	V 508 Oph	II	3699.407	+.007	6	HP
13071	V 342 Her	I	3741.427	-.010	11	HP	13122		I	3703.380	+.015	6	KL
13072	V 359 Her	I	3738.394	-.071	8	HP	13123		II	3711.479	+.011	8	HP
13073		I	3745.414	-.073	9	HP	13124		I	3714.405	+.006	7	RG
13074	V 502 Her	I	3714.393	+.091	6	KL	13125		I	3723.389	+.025	7	RG
13075		I	3732.468	+.088	6	KL	13126		I	3743.372	+.010	7	RG
13076		II	3746.536	+.085	11	KL	13127	V 1010 Oph	I	3689.468	-.067	12	EP
13077	SW Lac	II	3707.515	-.105	7	KL	13128		I	3695.419	-.068	12	EP
13078		I	3712.482	-.109	11	KL	13129		I	3699.392	-.063	6	EP
13079		II	3713.596	-.117	9	RG	13130		I	3740.372	-.093	11	KL
13080		I	3714.404	-.112	6	RG	13131		I	3742.367	-.082	8	KL
13081		I	3715.370	-.107	6	KL	13132		I	3742.369	-.080	8	RG
13082		II	3717.446	-.116	6	KL	13133	TY Peg	I	3726.448	-.029	10	KL
13083		I	3718.570	-.115	11	GT	13134	UX Peg	I	3746.416	-.006	7	KL
13084		I	3719.533	-.114	17	GT	13135	AW Peg	I	3741.453	+.081	9	KL
13085		II	3725.474	-.107	14	GT	13136	BN Peg	I	3703.507	-.285	6	KL
13086		II	3722.583	-.112	7	KL	13137		I	3723.486	-.278	6	KL
13087		I	3723.392	-.104	7	RG	13138	BY Peg	II	3703.503	+.076	6	KL
13088		II	3726.431	-.112	14	GT	13139		II	3732.556	+.064	6	KL
13089		I	3726.603	-.100	9	GT	13140		I	3734.438	+.066	6	KL
13090		I	3732.374	-.102	16	GT	13141		I	3746.414	+.074	6	KL
13091		II	3735.419	-.104	7	HP	13142	DK Peg	I	3717.524	+.037	11	KL
13092		I	3749.359	-.115	7	RG	13143	DG Peg	I	3742.506	+.159	7	KL
13093	VY Lac	I	3749.467	+.083	11	HP	13144	Z Per	I	3718.489	+.024	7	KL
13094	CM Lac	I	3705.481	.000	8	HP	13145	RT Per	I	3717.511	-.062	6	KL
13095		I	3742.382	-.006	8	RG	13146		I	3723.449	-.070	6	KL
13096	PP Lac	II	3715.387	*	7	KL	13147	ST Per	I	3739.560	-.010	7	KL
13097		II	3717.401	*	8	KL	13148		I	3747.507	-.008	6	KL
13098		II	3719.398	*	8	KL	13149	DK Per	I	3743.612	+.086	10	KL
13099		II	3723.405	*	7	KL	13150	KW Per	I	3715.542	+.036	11	KL
13100		II	3725.414	*	10	KL	13151		I	3717.409	+.041	7	KL
13101	TT Lyr	I	3707.382	-.023	9	HP	13152		I	3741.620	+.039	11	KL
13102		I	3749.350	-.005	10	HP	13153	$\beta$ Per	I	3717.543	-.106	10	KL
13103	TZ Lyr	I	3702.438	+.037	8	HP	13154		I	3717.545	-.105	19	RG
13104		I	3712.477	+.029	8	HP	13155		I	3717.557	-.092	9	JC
13105		I	3738.382	+.021	7	RD	13156	Y Psc	I	3718.458	+.155	8	KL
13106		I	3738.387	+.026	7	HP	13157	UV Psc	I	3734.582	+.019	11	KL
13107	EW Lyr	I	3732.418	+.057	8	KL	13158	RW PsA	II	3725.584	-.058	10	KL
13108		I	3732.424	+.063	8	HP	13159		II	3726.483	-.060	10	KL
13109		I	3734.376	+.066	9	KL	13160		II	3734.600	-.065	7	KL
13110	U Oph	I	3683.381	-.002	15	TC	13161	U Sge	I	3705.458	+.006	7	KL
13111		I	3688.419	+.004	20	PR	13162		I	3705.471	+.017	11	HP
13112		I	3709.396	+.014	8	HP	13163		I	3732.501	+.004	8	KL

\* no period given in the GCVS, G-C according to Figer's (1<sup>st</sup> set) elements IBVS 1231: +.104 +.112 +.104 +.100 +.103

cur- rent no.	star	minimum or- der	JD hel 244...	O-C	n ser- ver	ob- ser- ver	cur- rent no.	star	minimum or- der	JD hel 244...	O-C	n ser- ver	ob- ser- ver
13164		I	3732.515	+0.018	22	EP	13197	V Tri	I	3723.482	+0.022	7	KL
13165		I	3732.518	+0.020		MP	13198		I	3747.475	+0.022	10	KL
13166		I	3749.411	+0.010	12	HP	13199	RV Tri	I	3725.583	-0.025	10	KL
13167	XY Sgr	I	3718.383	+0.015	8	KL	13200	RW Tri	I	3734.575	-0.001	6	KL
13168		I	3724.435	-0.002	4	KL	13201	ST Tri	I	3734.611	**	8	KL
13169		I	3726.458	-0.002	10	KL	13202	UX Uma	I	3703.489	+0.002	6	KL
13170	EG Sgr	I	3717.492	-2.660	7	KL	13203	RU UMi	I	3726.494	-0.003		MP
13171		I	3732.442	-2.628	12	KL	13204		I	3726.496	-0.001	21	EP
13172		I	3742.397	-2.618	11	KL	13205	VV Vir	I	3714.360	***	7	KL
13173	V 505 Sgr	I	3691.548	-0.025	11	GT	13206	Z Vul	I	3730.588	+0.002	17	EP
13174		I	3704.552	-0.032	9	JL	13207		I	3735.501	+0.005	10	HP
13175		I	3717.551	-0.045	12	RG	13208		I	3740.419	+0.013	9	HP
13176		I	3717.567	-0.029	6	KL	13209	AW Vul	I	3735.462	-0.022	8	HP
13177		I	3717.577	-0.019	13	EP	13210	AX Vul	I	3713.414	+0.005	7	KL
13178		I	3723.471	-0.039	8	KL	13211	BE Vul	I	3735.416	+0.018	8	HP
13179		I	3730.580	-0.027	17	EP	13212		I	3749.381	+0.015	9	HP
13180		I	3730.590	-0.017		MP	13213	BO Vul	I	3712.585	-0.074	11	KL
13181		I	3742.387	-0.048	9	RG	13214		I	3718.421	-0.077	7	KL
13182		I	3748.318	-0.032	7	RG	13215	BU Vul	I	3741.411	.000	9	HP
13183	RT Scl	I	3734.553	-0.136	10	KL	13216		I	3745.402	+0.006	10	KL
13184		I	3735.575	-0.137	11	KL	13217		I	3749.385	+0.007	8	HP
13185	RS Sct	I	3726.432	+0.010	6	KL	13218		I	3749.393	+0.016	10	RD
13186		I	3732.412	+0.013	6	KL	13219	CD Vul	I	3706.430	-0.013	7	KL
13187		I	3732.443	+0.043	8	HP	13220		I	3712.573	-0.023	11	KL
13188		I	3734.426	+0.033	6	KL	13221		I	3734.453	-0.022	7	KL
13189		I	3742.390	+0.026	6	KL	13222		I	3745.388	-0.028	10	KL
13190	AO Ser	I	3703.396	-0.006	6	KL	13223	NO Vul	I	3703.488	****	6	KL
13191		I	3740.328	-0.007	10	KL	13224		I	3712.376	****	6	KL
13192	AU Ser	I	3709.454	*	7	HP	13225		I	3713.495	****	10	KL
13193		I	3711.387	*	8	HP	13226		II	3714.420	****	8	KL
13194		I	3735.346	*	5	RG	13227		I	3732.400	****	6	KL
13195	HU Tau	I	3578.363	-0.001		MP	13228		II	3732.598	****	6	KL
13196		I	3732.597	+0.011	8	EP							

\* GCVS 1969 elements too inaccurate for reasonable reduction, O - C according to the GCVS 1974: -0.005 -0.004 -0.009

\*\* GCVS period erroneous, true period unknown

\*\*\* O-C according to the GCVS exceeds 2 periods, O-C according to the elements of BBSAG Bulletin 31, page 5: +0.002

\*\*\*\* not contained in the GCVS 1969, O-C according to the GCVS 1976: +0.028 +0.017 +0.023 +0.022 +0.019 +0.033

E r r a t a

BBSAG Bulletin 36 page 4 DI Peg: The name of the observer should be RG instead of KL for minimum no. 12496.

BBSAG Bulletin 37 page 1 The final month in the introductory sentence should read June instead of July.

V 803 Aquilae :

Evidence for a Roundover against the GCVS Ephemeris

The oblique linear run (fig. 39) of the O-C values of all my 26 minima observed 1973 to 1978 clearly shows that the present value near zero is the result of a wandering once through all phases since the GCVS zero epoch in 1937.

Last doubts on this disappeared when recently Mrs. Кукаркина confirmed me that the period correction in the GCVS 1976 with respect to the GCVS 1969 is based on my observations prior to 1975 alone. Hence it seems that the star was not watched at all between 1937 and 1973.

Figure 39 denotes by (x) the observations that were taken account of for the GCVS 1976 elements, and by (+) the later remaining ones. Figure 40 is a small scale extension back to 1937.

The definite elements, with an unaltered zero epoch, now turn out to be

$$2428700.357 + E (.2634254 \pm .0000001)$$

K. Locher

Fig.39

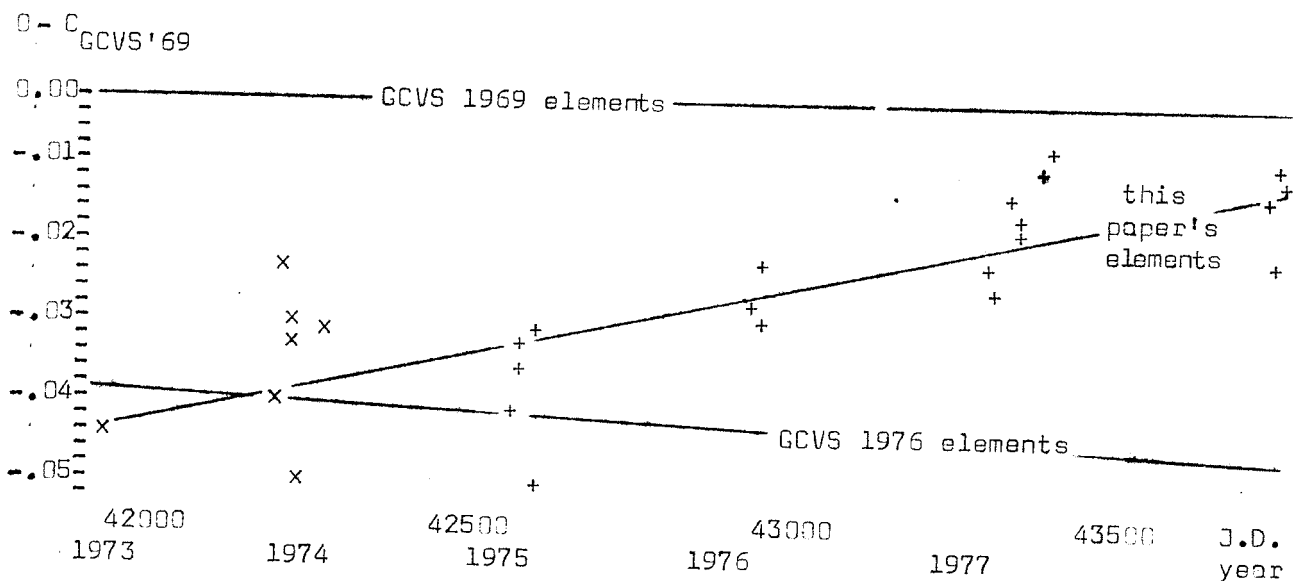
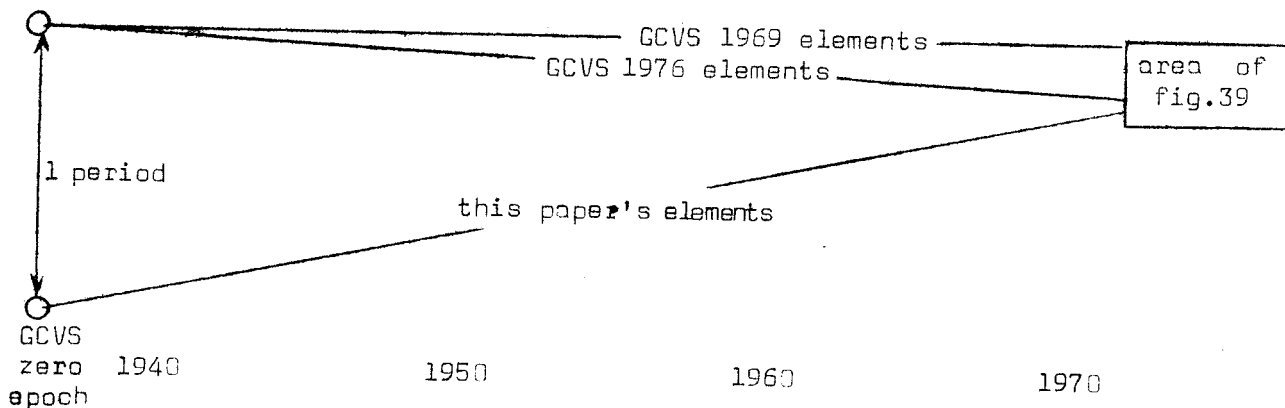


Fig.40



V 342 Aquilae :

Probable Recent Shallowing of the Minimum I

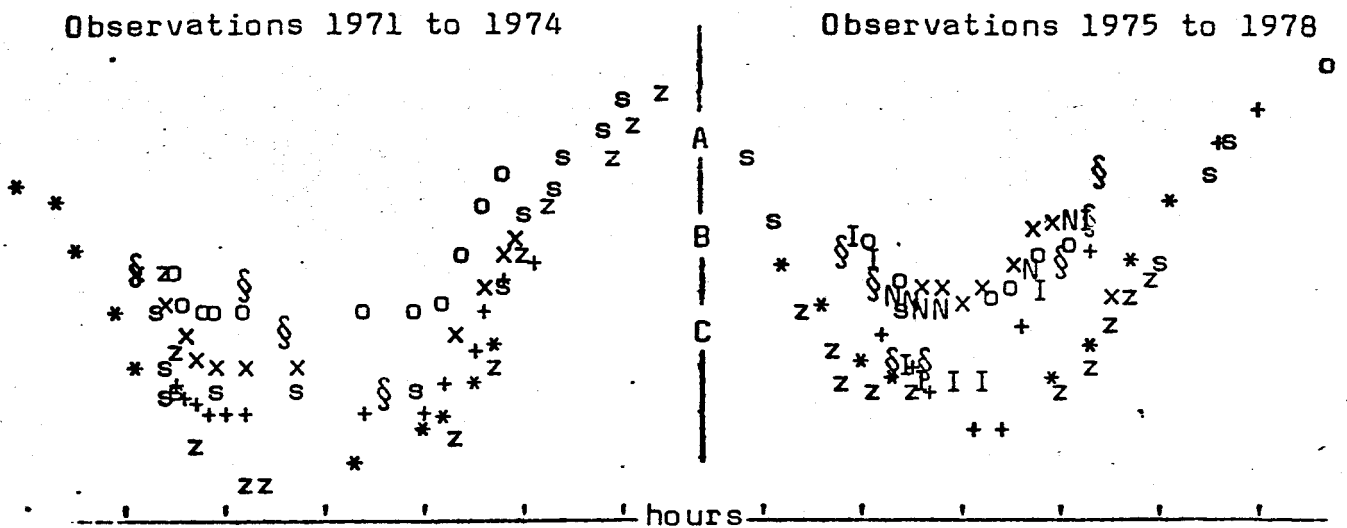
Although our visual brightness estimations are especially inaccurate in the case of this star because of the close proximity of a much brighter one, we are able to prove a decrease of its amplitude during the past 8 years by the plots in figure 40.

We guess that the GCVS (1969) d value of 2,7 hours had diminished already before our first observation in 1971 and became zero near 1976. However, this is not clearly evident from the plots, but necessary to explain the amplitude decrease if we do not assume some kind of intrinsic change in the fainter component of the binary.

The cut between 1974 and 1975 that we made to separate the 2 samples of the plot is chosen arbitrarily to get about equal statistical weights.

R. Diethelm, K. Locher, and H. Peter

Figure 40



plot symbols at left :

- \* JD 41139 Diethelm
- s JD 41173 Peter
- z JD 41207 Peter
- x JD 41512 Peter
- + JD 41902 Peter
- o JD 42214 Peter
- § JD 42558 Locher

plot symbols at right :

- z JD 42569 Peter
- s JD 42665 Locher
- \* JD 43689 Peter
- §) JD 43706 (Peter Locher)
- o) JD 43706 (Peter Locher)
- I) JD 43723 (Peter Locher)
- + JD 43723 (Peter Locher)
- N) JD 43740 (Peter Locher)
- x) JD 43740 (Peter Locher)

Comparison magnitudes :

- A 6' northeast
- B 4' east
- C 2' southwest

