BBSAG Bulletin 29

1976 September 20

62nd List of Minima of Eclipsing Binaries

The following table lists 335 minima obtained visually mainly during 1976 July and August by the observers

RB Roland Boninsegna, Marcinelle, Belgium
JC Jean-Pierre Clovin, Marcinelle, Belgium
RD Roger Diethelm, Reinach, Switzerland
PD Philippe Doby, Wattrelos, France
MF Michel Frangeul, Angers, France
RG Robert Germann, Wald, Switzerland
ZH Zoltàn Hevesi, Kaposvàr, Hungary
KL Kurt Locher, Grüt, Switzerland
AM Alain Marot, Quimper, France
HP Hermann Peter, Otelfingen, Switzerland
EP Ennio Poretti, Arconate, Italy
JR Joseph Remis, St.Avold, France
GT Gilles Troispoux, Fleury-lès-Aubrais, France

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

current no.	star	minimum order	JD hel 244...	O-C	n	observer
10381	RT And	I	3017.357	-0.012	15	RG
10382	AB And	I	2975.431	+0.019	10	RG
10383		I	2975.432	+0.021	11	KL
10384		II	2975.602	+0.024	10	KL
10385		I	2987.381	+0.021	7	KL
10386		II	2989.545	+0.027	6	KL
10387		I	2990.360	+0.013	6	RG
10388		I	2990.375	+0.028	6	KL
10389		I	2993.366	+0.032	8	RG
10390		I	2997.336	+0.019	7	KL
10391		I	2997.343	+0.026	7	RG
10392		II	3014.433	+0.023	10	HP
10393		II	3016.424:	+0.023:	8	RD
10394	BX And	I	3012.496	+0.023	9	HP
10395	CN And	I	2993.450	-0.045	9	RD
10396	EP And	I	2973.522	*	13	KL
10397		I	2988.482	*	6	KL
10398		II	2989.483	*	11	KL
10399		I	2990.505	*	6	KL
10400		I	2997.358	*	10	KL
10401		II	3013.338	*	10	KL
10402		I	3016.358	*	6	KL
10403		II	3017.385	*	6	KL
10404	RY Aqr	I	2993.585	-0.083	6	KL
10405		I	3005.380	-0.087	10	KL
10406	XZ Aqr	I	2962.488	**	6	KL
10407	CX Aqr	I	2992.510	+0.012	10	KL
10408		I	3011.412	+0.010	9	RG
10409		I	3011.419	+0.017	10	KL
10410	CZ Aqr	I	2962.528	+0.017	6	KL
10411		I	2987.556	+0.026	4	KL
10412		I	2993.567	-0.003	6	KL
10413	EE Aqr	I	2990.484	+0.006	7	KL
10414		I	2992.525	+0.011	10	KL
10415	OO Aql	I	2961.474	-0.032	8	HP
10416		II	2971.360	-0.029	7	KL
10417		II	2974.388	-0.041	10	KL
10418		II	2975.403	-0.040	9	RG
10419		I	2990.355	-0.039	7	RG
10420		I	2993.393	-0.041	10	RG
10421		I	2993.393	-0.041	9	RD
10422		I	2993.406	-0.031	7	HP
10423		I	2997.453	-0.036	7	HP
10424		II	3011.398	-0.027	8	RG
10425		II	3015.441	-0.039	8	HP
10426	V417 Aql	I	2990.498	+0.059	8	RD
10427		I	3016.414	+0.066	8	RD
10428	V479 Aql	I	2961.495	+0.015	10	KL
10429		I	2996.508	+0.016	7	KL
10430		I	3011.510	+0.014	6	KL
10431		I	3017.353	+0.022	6	KL
10432	V805 Aql	I	2962.447	+0.020	10	HP

* GCVS 1969 period erroneous, O-C according to the GCVS 1976: +0.002 +0.010 +0.001 +0.013 -0.006 +0.014 +0.003 +0.019

current no.	star	minimum order	JD hel 244...	O-C	n	observer
10433		I	3015.415	+0.007	12	HP
10434	CL Aur	I	3015.548	+0.045	6	KL
10435	TZ Boo	II	2971.380:	-0.015:	7	RG
10436		I	2975.422	+0.015	10	RG
10437	UW Boo	I	2974.390	+0.016	7	KL
10438		I	2988.423:	-0.017:	6	KL
10439		I	2990.459	+0.010	6	KL
10440		I	2992.465	+0.006	5	KL
10441	AC Boo	II	2962.484	+0.005	9	HP
10442		I	2971.458	-0.008	8	HP
10443		I	3013.405	0.000	8	HP
10444	AD Boo	I	2997.442	+0.055	7	HP
10445	SV Cam	I	2988.422	-0.001	10	KL
10446		I	2989.593	-0.015	6	KL
10447		I	3004.436	0.000	11	KL
10448	UW Cap	II	2990.479	-0.039	7	RD
10449		I	3016.360	-0.042	5	RD
10450	RZ Cas	I	2962.454	+0.002	9	JR
10451		I	2962.457	+0.005	9	HP
10452		I	2968.426	-0.002	17	MF
10453		I	2974.406	+0.002	7	KL
10454		I	2974.410	+0.006	8	MF
10455		I	2975.597	-0.003	8	KL
10456		I	2987.554	+0.002	6	KL
10457		I	2993.519	-0.009	6	JR
10458		I	2993.528	-0.001	17	AM
10459		I	2993.529	0.000	19	JC
10460		I	2993.532	+0.003	14	RB
10461		I	3011.452	-0.005	21	GT
10462		I	3011.458	+0.001	11	HP
10463		I	3017.433	-0.001	10	HP
10464		I	3017.440	+0.006	17	AM
10465		I	3017.442	+0.008	22	GT
10466	TV Cas	I	2978.429	+0.043	11	ZH
10467		I	2987.439	-0.011	10	KL
10468	ZZ Cas	I	3016.390	+0.006	9	RD
10469	AB Cas	I	2997.404	+0.002	10	KL
10470	IV Cas	I	2975.463	+0.081	8	KL
10471		I	2990.443	+0.084	6	KL
10472		I	2992.437	+0.081	6	KL
10473		I	2996.432	+0.082	11	KL
10474	PV Cas	*II	2990.492	-0.046	9	RD
10475	V523 Cas	II	2990.393	**	6	KL
10476		I	2992.389	**	7	KL
10477		II	2993.444	**	10	KL
10478		II	3009.326	**	6	KL
10479	U Cep	I	2988.430	+0.039	7	KL
10480		I	2993.419	+0.041	10	KL
10481		I	2998.406	+0.043	13	KL
10482		I	3013.365	+0.043	16	RG
10483	VW Cep	II	2979.440	-0.096	10	RD
10484		I	2987.384	-0.084	4	KL
10485		I	2989.593	-0.101	7	KL
10486		I	2997.387	-0.100	10	RG
10487	EG Cep	I	2987.594	+0.010	4	KL
10488		I	2993.584	+0.009	5	KL
10489		I	2997.389	+0.002	10	RG
10490		I	2998.496	+0.019	9	KL
10491	EK Cep	I	3005.457	+0.013	22	HP
10492	GW Cep	I	3016.353	+0.070	5	RD
10493	IO Cep	I	2993.427	***	10	RD
10494	TW Cet	I	3012.625	-0.021	6	KL
10495		I	3013.555	-0.042	8	KL
10496	VY Cet	II	3013.556	****	10	KL
10497		II	3014.584	****	7	KL
10498		II	3015.598	****	10	KL
10499		II	3017.625	****	7	KL
10500	RW Com	II	2975.353:	-0.044:	6	RG
10501	SW Cyg	I	2974.520	+0.203	7	KL
10502	UW Cyg	I	2996.432	-0.012	11	HP
10503	WW Cyg	I	2962.416	+0.013	7	HP
10504	ZZ Cyg	I	3016.446	-0.029	7	HP
10505	AE Cyg	I	2974.467	+0.004	6	KL
10506	CG Cyg	I	2990.440	-0.023	7	RD
10507		I	2990.446	-0.017	8	HP
10508		I	2997.392	-0.013	7	HP
10509		I	3014.424	-0.022	8	HP
10510	KR Cyg	I	2980.426	-0.009	7	HP
10511		I	2996.485	-0.008	8	HP
10512		I	3013.390	-0.006	9	HP
10513	MY Cyg	I	2971.429:	+0.008:	9	HP
10514		I	2997.478	+0.023	10	HP
10515		I	3003.478	+0.016	14	HP
10516	V387 Cyg	I	3014.486	+0.049	14	HP
10517		I	3016.416	+0.057	9	HP
10518	V401 Cyg	I	2980.411	+0.048	8	HP
10519		I	3012.471	+0.059	8	HP
10520	V456 Cyg	II	2957.420	+0.023	10	HP
10521		I	2961.430	+0.023	10	HP
10522		II	2990.405	+0.034	11	HP
10523	V477 Cyg	I	3013.422	-0.016	10	HP
10524	V548 Cyg	I	3003.336	-0.007	7	RG
10525	V687 Cyg	I	3011.415	0.000	8	HP
10526	TY Del	I	2990.417	+0.009	10	HP
10527		I	3015.433	+0.012	13	HP
10528	YY Del	I	2990.446	+0.023	8	HP
10529		I	3017.409	+0.021	12	HP
10530	DM Del	I	2961.437:	*****	8	HP
10531		I	2962.423	*****	7	HP
10532		I	2964.422	*****	8	HP

* GCVS 1969 and 1971 elements identical except for doubling of period, minimum oder according to 1971

** not contained in the GCVS 1969, O-C according to the GCVS 1976: +0.001 +0.010 +0.014 +0.005

*** not contained in the GCVS 1969, O-C according to the GCVS 1974: +0.007

**** GCVS 1969 period erroneous, O-C according to the GCVS 1976: -0.019 -0.016 -0.022 -0.040

current no.	star	minimum order	JD hel 244...	O-C	n	observer
10533		I	2980.423	*****	8	HP
10534		I	2993.367	*****	7	RD
10535		II	3012.523	*****	8	HP
10536	ET Del	II	2993.386	-0.045	8	RD
10537	FZ Del	I	2964.435	0.000	7	HP
10538		I	2975.401	+0.002	7	RG
10539		I	2989.499	+0.002	10	KL
10540		I	2993.408	-0.006	11	KL
10541		I	2993.411	-0.003	9	RD
10542	Z Dra	I	2974.404	0.000	7	KL
10543		I	3016.485	0.000	8	KL
10544	RZ Dra	I	2990.422	-0.015	8	HP
10545		I	3016.319	-0.009	8	RG
10546		I	3017.413	-0.017	10	HP
10547	TW Dra	I	2971.435	-0.049	10	KL
10548		I	2971.436	-0.047	9	HP
10549		I	3016.345	-0.048	9	RG
10550	AI Dra	I	2989.525	+0.004	10	KL
10551	BS Dra	*I	2990.368	+0.059	10	RG
10552	S Equ	I	2988.463	+0.017	6	KL
10553		I	3012.509	+0.011	9	HP
10554	YY Eri	I	3012.593	-0.011	9	KL
10555	Z Her	I	2964.494	+0.015	12	HP
10556		I	2988.435	-0.001	11	KL
10557		I	2992.428	-0.001	10	KL
10558		I	2996.430	+0.008	11	KL
10559		I	2996.438	+0.017	13	HP
10560		I	3012.403	+0.010	9	HP
10561		I	3016.366:	-0.019:	7	RD
10562		I	3016.387	+0.001	8	HP
10563	RX Her	I	2977.452	+0.005	13	RD
10564		I	2993.448	-0.006	6	KL
10565	SZ Her	I	2970.374	+0.029	11	KL
10566		I	2987.556	+0.031	6	KL
10567		I	2997.373	+0.030	8	HP
10568		I	3015.369	+0.029	8	HP
10569	TU Her	I	3016.392	-0.080	9	HP
10570		I	3016.394	-0.078	7	KL
10571	UX Her	I	2923.409	-0.051	8	RG
10572		I	2971.421	-0.054	9	HP
10573		I	2971.425	-0.050	12	RG
10574		I	3016.346	-0.045	9	RG
10575	CT Her	I	3012.400	+0.046	9	HP
10576	DI Her	I	2990.503	-2.517	9	RD
10577	MT Her	I	3005.371	+0.028	10	KL
10578	V338 Her	I	3013.441	+0.090	8	HP
10579		I	3017.358	+0.090	10	HP
10580	V342 Her	I	3011.482	-0.023	9	HP
10581	u Her	I	2984.393	+0.009	4	RB
10582		I	2984.401	+0.016	25	EP
10583		I	2986.422	-0.013	8	JC
10584	S 9632 Her	I	3016.524	**	10	KL
10585		I	3017.435	**	7	KL
10586	SW Lac	II	2971.462	-0.087	9	HP
10587		I	2973.542	-0.092	12	KL
10588		I	2975.466	-0.093	8	KL
10589		II	2987.497	-0.089	6	KL
10590		I	2989.573	-0.097	8	KL
10591		II	2990.374	-0.098	7	RG
10592		II	2990.382	-0.089	6	KL
10593		I	2993.425	-0.094	10	KL
10594		I	3011.384	-0.096	7	RG
10595		II	3014.445	-0.082	9	HP
10596		II	3016.357	-0.093	8	RG
10597		II	3017.319	-0.094	8	RG
10598	TW Lac	I	2961.537	-0.060	6	KL
10599		I	2964.563	-0.080	7	KL
10600	VY Lac	I	3005.446	+0.083	10	HP
10601	CM Lac	I	2975.344	-0.002	9	RG
10602	ES Lib	I	2979.438	-0.066	11	RD
10603	GG Lup	I	2970.416	+0.070	9	RD
10604	TZ Lyr	I	2996.447	+0.026	11	HP
10605		I	3013.366	+0.023	7	RG
10606		I	3013.372	+0.028	8	HP
10607	EW Lyr	I	3011.381	+0.053	12	HP
10608	LZ Lyr	I	2962.464	+0.272	6	KL
10609	U Oph	I	2997.342	-0.006	7	RG
10610	RV Oph	I	2993.435	-0.002	11	HP
10611	SZ Oph	I	2993.380	+0.277	8	RD
10612	V501 Oph	I	2961.410	+0.001	9	HP
10613		I	2990.447	-0.001	7	HP
10614	V502 Oph	II	2979.401	-0.054	8	RD
10615		I	3016.347	-0.060	8	RG
10616	V508 Oph	I	2964.483	+0.006	8	HP
10617		I	2971.384	+0.011	7	RG
10618		I	2993.444	+0.005	10	RD
10619		II	2996.386	+0.014	9	HP
10620		II	3005.341	+0.006	6	KL
10621		II	3016.369	+0.017	7	RG
10622		II	3016.380	+0.012	8	RD
10623		II	3016.380	+0.012	8	HP
10624	V566 Oph	II	2965.436	+0.002	26	EP
10625		I	2973.418	-0.003	10	RD
10626		I	2973.426	+0.004	18	EP
10627		II	2974.448	+0.002	17	EP
10628		II	2976.493	-0.001	20	EP
10629		I	2982.427	-0.007	22	EP
10630		II	2983.462	+0.004	32	EP
10631		I	2984.492	+0.010	22	EP
10632		II	2988.381	+0.008	21	EP
10633		I	2989.406	+0.009	20	EP
10634	V839 Oph	II	2990.520	+0.008	8	RD

*****see preceding page

*GCVS 1969 and 1974 elements identical except for doubling of period, minimum order according to 1974

**period unknown

current no.	star	minimum order	JD hel 244...	O-C	n	observer
10635	V 1010 Oph	II	2979.431	-0.052	11	GT
10636		I	2980.391	-0.083	9	RG
10637		I	2980.423	-0.051	8	GT
10638		II	2981.434	-0.033	6	GT
10639		I	2982.406	-0.053	7	GT
10640		I	2984.379	-0.065	14	EP
10641		I	2988.355	-0.057	14	EP
10642	ER Ori	I	3012.624	-0.022	6	KL
10643	TY Peg	I	2990.499	-0.031	11	HP
10644	BN Peg	I	3014.463	-0.285	11	HP
10645	BY Peg	I	2997.582	+0.077	11	KL
10646		I	3012.602	+0.052	10	KL
10647	DI Peg	I	2990.570	-0.014	6	KL
10648		I	2993.412	-0.019	10	KL
10649		I	3013.351	-0.010	8	RG
10650	ST Per	I	2971.548	-0.001	4	KL
10651	WY Per	I	3014.568	-0.054	7	KL
10652	XZ Per	I	3014.580	+0.010	9	KL
10653	KW Per	I	2970.538	+0.036	12	KL
10654		I	2971.471	+0.038	10	KL
10655		I	2997.545	+0.036	10	KL
10656		I	2998.472	+0.032	10	KL
10657	Y Psc	I	2961.534	+0.150	6	KL
10658	UV Psc	I	3015.608	+0.019	6	KL
10659	RW PsA	I	2996.571	-0.054	11	KL
10660		II	3011.533	-0.051	6	KL
10661		I	3013.511	-0.056	10	KL
10662	U Sge	I	3012.437	+0.011	10	HP
10663	UZ Sge	I	2996.468	+0.051	10	KL
10664		I	2996.475	+0.057	13	HP
10665		I	3016.412	+0.053	10	KL
10666		I	3016.415	+0.056	8	HP
10667	V 505 Sgr	I	2979.452	-0.032	11	RD
10668		I	2992.465	-0.030	11	KL
10669		I	2998.382	-0.028	9	RG
10670		I	3005.474	-0.032	12	HP
10671		I	3011.385	-0.036	8	RG
10672		I	3011.395	-0.026	18	GT
10673		I	3017.314	-0.021	9	RG
10674	V 525 Sgr	I	2979.386:	-0.007:	7	RD
10675	V 883 Sco	I	2977.449	*	13	RD
10676	U Sct	I	3011.364	+0.029	8	HP
10677	RS Sct	I	2988.402	+0.029	6	KL
10678		I	2990.462	+0.016	6	KL
10679		I	2992.456	+0.017	7	KL
10680		I	2996.446	+0.021	10	HP
10681		I	3012.395	+0.029	10	HP
10682		I	3016.360	+0.009	5	RD
10683		I	3016.368	+0.017	10	RG
10684	AO Ser	I	2959.478	+0.003	10	HP
10685		I	2974.420	-0.004	7	KL
10686		I	2996.410	+0.003	10	HP
10687		I	3011.352	-0.004	8	HP
10688	AU Ser	II	2971.420	**	7	RG
10689		I	3013.365	**	7	RG
10690	AP Tau	I	3015.591	***	7	KL
10691		I	3016.556	***	5	KL
10692	BN Tau	I	3011.606	+0.023	10	KL
10693	X Tri	I	2987.519	-0.034	6	KL
10694		I	2988.492	-0.033	6	KL
10695		I	2989.460	-0.037	10	KL
10696		I	2990.431	-0.037	6	KL
10697	RW Tri	I	3011.562	-0.002	5	KL
10698	W UMa	I	2814.394	-0.095	8	PD
10699	UX UMa	I	3013.368	0.000	6	KL
10700	AT Vul	I	2990.444:	-0.033:	6	RD
10701	BE Vul	I	2962.486	+0.008	10	HP
10702	BO Vul	I	2961.472	-0.075	9	HP
10703		I	2961.479	-0.067	11	KL
10704		I	2996.506	-0.067	6	KL
10705		I	2996.507	-0.066	9	HP
10706		I	2998.451	-0.067	11	KL
10707	BU Vul	I	2963.602	+0.004	10	KL
10708		I	3011.403	+0.009	7	HP
10709	CD Vul	I	3010.376	-0.014	7	KL
10710	DR Vul	II	3016.395	+0.118§	9	RD
10711	FR Vul	I	3016.400	+0.006	9	RD
10712	NO Vul	II	2962.496	****	6	KL
10713		II	2975.466	****	7	KL
10714		II	3011.439	****	10	KL
10715		II	3017.376	****	6	KL

§ displaced secondary minimum

* not contained in the GCVS 1969, O-C according to the GCVS 1976: +0.009:

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

*** GCVS 1969 elements incomplete, O-C according to the GCVS 1976 : -0.071 -0.078

**** not contained in the GCVS 1969, O-C according to the GCVS 1976: +0.016 +0.008 +0.017 +0.022