

BBSAG Bulletin 113

Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
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BBSAG BULLETIN 113

1996 November 15

146. LIST OF MINIMA OF ECLIPSING BINARIES

The following table lists 41 electronically recorded (CCD; underlined) and 343 visual timings of minima of eclipsing binaries obtained primarily between July and October of 1996 by the following observers:

EBI	Ernst Bišttler, Wald, Switzerland
DDa	Davide Dalmazio, Formia, Italy
AD	Antonin Dedoch, Praha, Czech Republic
RD	Roger Diethelm, R. Szafraniec Observatory, Metzerlen, Switzerland
KL	Kurt Locher, Grÿt, Switzerland
MMa	Massimiliano Martignoni, Busto Arsizio, Italy
APs	Anton Paschke, Rÿti, Switzerland
HP	Hermann Peter, Otelfingen, Switzerland

The O-C values generally refer to the linear elements of the GCVS 1985, with the remarked exceptions. For the reduction of the minima, the tracing paper method was employed. For the reduction of some of the electronic observations the Kwee-van Woerden algorithm was used.

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
33334	2311+458	TT And	p	<u>50380.259</u>	0.005	-0.053	14	RD	CCD
33335	0000+325	TW And	p	50370.397	0.009	-0.010	10	KL	
33336	0041+306	UU And	p	50312.490	0.006	+0.017	7	HP	
33337			p	50379.357	0.009	+0.001	8	HP	
33338	0058+378	WZ And	p	50369.422	0.004	+0.015	7	HP	
33339	0153+418	XZ And	p	50357.306	0.004	+0.059	9	HP	
33340			p	50380.378	0.004	+0.057	9	HP	
33341			p	50380.378	0.004	+0.058	6	KL	
33342	2309+366	AB And	p	50375.287	0.004	-0.013	7	HP	
33343	2334+483	AD And	s	50331.350	0.005	-0.026	7	HP	
33344			p	50369.312	0.005	-0.032	8	HP	
33345	2304+506	BD And	p	<u>50380.3009</u>	0.0007	+0.0140	14	RD	CCD
33346	2308+516	BL And	p	50343.358	0.005	-0.011	8	HP	
33347			p	50369.380	0.005	+0.006	6	HP	
33348	2258+496	CU And	p	<u>50344.322</u>	0.002	-0.004	11	RD	CCD
33349	0139+445	EP And	p	50332.371	0.008	+0.045	5	KL	
33350	2324+452	LO And	p	49990.495	0.007	+0.051	16	MMa	elem. GEOS EB No. 11
33351			p	50379.299	0.004	+0.053	8	HP	
33352	0930-284	S Ant	p	49798.409	0.005	+0.048	23	MMa	
33353			s	49799.363	0.006	+0.029	20	MMa	
33354			s	49810.388	0.006	+0.032	17	MMa	
33355	2202-090	XZ Aqr	p	50334.503	0.007	+0.057	8	KL	
33356	2233-009	CX Aqr	p	50320.412	0.005	+0.005	6	HP	
33357			p	50369.334	0.003	0.000	6	KL	
33358	2319-162	CZ Aqr	p	50336.470	0.005	-0.012	7	KL	
33359	2243+007	DD Aqr	p	<u>50343.4481</u>	0.0013	-0.0006	15	RD	CCD; elem. BB. B. 90, 7
33360	2118-033	HV Aqr	s	49217.523	0.002	-0.032	17	MMa	elem. IBVS No. 3798
33361			s	49219.412	0.001	-0.015	19	MMa	
33362	1914-006	YZ Aql	p	50324.096	0.009	+0.711	13	HP	normal minimum
33363			p	50352.133	0.007	+0.714	9	HP	normal minimum
33364			p	50375.487	0.010	+0.707	6	HP	normal minimum
33365	1844+107	KO Aql	p	49958.387	0.017	+0.008	18	MMa	
33366	1914+092	V342 Aql	p	50325.329	0.005	-0.055	9	HP	
33367	1936+126	V343 Aql	p	50320.395	0.005	-0.014	8	HP	
33368			p	50357.292	0.005	-0.009	8	HP	

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
33369	2007+102	V346 Aql	p	50312.370	0.005	+0.010	6	HP	
33370			p	50343.331	0.005	-0.007	7	HP	
33371	1932+057	V417 Aql	p	49959.382	0.014	-0.014	19	MMa	elem. IBVS No. 4358
33372			p	49962.361	0.005	+0.003	10	MMa	

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
33373	1903-117	V805 Aql	p	49958.368	0.006	-0.001	18	MMa	
33374	1916+161	V889 Aql	s	<u>50312.387</u>	<u>0.002</u>	<u>-1.663</u>	13	RD	CCD; elem. SA 33, 41; dis. s.
33375	1908+120	V917 Aql	p	<u>50300.4252</u>	<u>0.0008</u>	<u>+0.0718</u>	20	RD	CCD; see note on page 10
33376	1922+159	V1353 Aql	s	50343.362	0.006	+0.019	8	HP	
33377	0509+334	CL Aur	p	50343.670	0.007	+0.102	5	KL	
33378	0511+462	IM Aur	p	49810.345	0.005	-0.051	18	MMa	
33379	1511+387	SS Boo	p	<u>50234.40</u>	<u>0.01</u>	<u>+0.02</u>	40	APs	CCD; norm. m, see note p 10
33380	1427+323	SU Boo	p	<u>50149.643</u>	<u>0.005</u>	<u>+0.002</u>	69	APs	CCD; normal minimum
33381	1458+353	TY Boo	p	50314.400	0.005	-0.010	6	HP	elem. BAV Mitt. 68, 21
33382			p	50334.378	0.005	-0.013	10	HP	
33383	1353+261	ZZ Boo	p	49797.393	0.012	+0.050	19	MMa	
33384			p	49807.363	0.005	+0.036	21	MMa	
33385	1454+465	AC Boo	s	50193.576	0.007	-0.047	89	APs	
33386	0734+761	Y Cam	p	50353.452	0.009	+0.148	8	KL	
33387	0630+823	SV Cam	p	49800.450	0.005	+0.035	23	MMa	
33388			p	49959.389	0.007	+0.032	21	MMa	
33389	1300+568	BI CVn	p	50252.453	0.005	-0.016	46	APs	elem. GEOS EB No. 23
33390	0244+694	RZ Cas	p	47908.394	0.008	+0.010	43	MMa	
33391			p	47951.416	0.009	+0.002	34	MMa	
33392			p	49959.453	0.004	+0.025	24	MMa	
33393			p	49990.525	0.004	+0.020	23	MMa	
33394	0241+655	TW Cas	p	49958.425	0.003	-0.013	17	MMa	
33395	0232+710	AB Cas	p	50311.601	0.004	+0.053	8	KL	
33396			p	50355.325	0.006	+0.037	5	HP	
33397			p	50370.377	0.004	+0.054	8	HP	
33398	0130+707	AH Cas	p	50370.375	0.005	-0.196	6	KL	
33399	0042+628	CW Cas	p	49990.565	0.007	-0.005	11	MMa	elem. JAAVSO 21, 34
33400			s	50312.447	0.005	-0.016	9	HP	
33401			p	50325.385	0.005	+0.008	8	HP	
33402			s	50375.274	0.005	-0.005	7	HP	
33403	0237+603	DO Cas	p	49798.384	0.008	-0.003	23	MMa	
33404			p	49800.429	0.006	-0.012	22	MMa	
33405			p	49811.392	0.005	-0.004	20	MMa	
33406			p	49989.425	0.012	+0.016	26	MMa	
33407	2350+572	EP Cas	p	50332.364	0.005	-0.026	7	HP	
33408			p	50380.358	0.004	-0.025	7	HP	

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33409	2304+538	IR Cas	p	50325.378	0.004	+0.028	8	HP	
33410			s	50343.412	0.004	+0.024	5	HP	
33411			p	50370.298	0.003	+0.022	6	KL	
33412			p	50387.314	0.005	+0.022	7	H	
33413	0048+585	KL Cas	p	50334.368	0.005	-0.011	10	HP	
33414	0045+605	OR Cas	p	50299.419	0.005	-0.008	9	HP	
33415			p	50370.417	0.005	-0.016	7	HP	
33416			p	50380.382	0.006	-0.016	5	KL	
33417	2309+534	V350 Cas	p	50312.364	0.005	+0.012	6	KL	
33418	0049+501	V364 Cas	p	50299.408	0.005	-0.015	7	HP	
33419			p	50370.375	0.005	-0.029	9	HP	
33420			p	50387.352	0.005	-0.026	10	HP	
33421	2354+558	V374 Cas	p	50314.387	0.006	+0.018	6	HP	
33422			p	50315.445	0.005	+0.031	5	HP	
33423			p	50337.380	0.006	+0.025	6	HP	
33424	2354+627	V375 Cas	p	50332.361	0.005	+0.036	8	HP	
33425			p	50357.401	0.005	+0.029	8	HP	
33426	0037+499	V523 Cas	s	50313.361	0.004	+0.036	6	HP	
33427			p	50335.676	0.004	+0.034	5	KL	
33428			s	50370.381	0.004	+0.036	6	HP	
33429	0057+816	U Cep	p	50370.434	0.007	+0.087	8	KL	
33430	2145+570	SU Cep	p	50324.383	0.005	+0.016	8	HP	
33431			p	50370.343	0.004	+0.004	7	HP	
33432	2038+754	VW Cep	p	48984.398	0.003	-0.023	16	MMa elem. IBVS No. 4117	
33433			s	49015.448	0.001	-0.004	10	MMa	
33434			p	49797.344	0.006	-0.013	13	MMa	
33435			s	49799.425	0.006	-0.020	14	MMa	
33436			p	49800.418	0.005	-0.001	21	MMa	
33437			p	49807.369	0.007	-0.007	16	MMa	
33438			p	49810.425	0.005	-0.013	13	MMa	
33439			s	49811.413	0.003	+0.001	20	MMa	
33440			p	49989.397	0.011	+0.008	20	MMa	
33441			s	49990.359	0.006	-0.005	12	MMa	
33442			p	49990.504	0.017	+0.001	22	MMa	
33443			p	50252.390	0.004	0.000	15	DDa	
33444			p	50259.347	0.005	-0.001	14	DDa	
33445			p	50262.408	0.016	-0.001	16	DDa	
33446			s	50268.391	0.007	-0.002	14	DDa	
33447			p	50274.373	0.006	-0.003	16	DDa	
33448			s	50288.429	0.010	-0.002	14	DDa	
33449			p	50289.401	0.007	-0.004	15	DDa	
33450			p	50299.427	0.004	+0.003	12	DDa	
33451			p	50303.322	0.009	+0.002	12	DDa	
33452			s	50305.397	0.012	-0.011	11	DDa	
33453			p	50309.447	0.005	+0.004	14	DDa	
33454			s	50312.362	0.007	-0.003	16	DDa	

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33455	2217+696	WW Cep	p	50320.366	0.006	+0.002	7	HP	elem. IBVS No. 4131
33456	2157+607	DK Cep	p	50320.444	0.005	+0.035	8	HP	
33457			p	50324.389	0.006	+0.036	6	HP	
33458	2017+766	EG Cep	p	50380.310	0.005	+0.014	7	HP	

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33459	2127+649	GI Cep	p	50313.364	0.005	-0.018	7	HP	
33460			p	50315.444	0.004	-0.015	6	HP	
33461			p	50369.399	0.007	-0.019	11	HP	
33462			p	50370.441	0.005	-0.015	8	HP	
33463	2130+706	GK Cep	p	49800.397	0.006	+0.061	21	MMa	
33464			s	49807.419	0.004	+0.061	19	MMa	
33465			p	49990.443	0.004	+0.066	24	MMa	
33466	0140+798	GW Cep	p	50299.392	0.005	-0.005	6	HP	elem. IBVS No. 4293
33467			p	50313.411	0.005	-0.014	8	HP	
33468			p	50357.416	0.005	-0.007	6	HP	
33469			p	50380.369	0.005	-0.011	8	HP	
33470	2024+614	HI Cep	p	50336.500	0.006	+0.319	7	KL	elem. BBSAG Bull. 81, 6
33471	2109+575	IO Cep	p	50314.364	0.005	+0.010	6	HP	
33472	2303+744	LL Cep	p	<u>50370.3367</u>	<u>0.0017</u>	<u>+0.0035</u>	12	RD	CCD
33473	0023+691	NR Cep	p	<u>50320.378</u>	<u>0.002</u>	<u>-0.022</u>	8	RD	CCD
33474	0220+809	V358 Cep	p	50332.455	0.005	+0.035	6	KL	elem. BBSAG Bull. 96, 10
33475	0146-211	TW Cet	s	50311.613	0.003	-0.014	6	KL	
33476	0147-198	VY Cet	s	50334.507	0.004	+0.004	6	KL	
33477	0156-231	AA Cet	p	49990.533	0.005	-0.032	19	MMa	
33478	1232+236	RZ Com	s	49810.410	0.005	+0.022	16	MMa	
33479	1516+318	U CrB	p	49799.395	0.006	+0.047	17	MMa	
33480	1604+274	TW CrB	p	50312.432	0.005	+0.026	5	HP	
33481	2005+461	SW Cyg	p	50355.401	0.009	-0.153	10	HP	
33482	2002+414	WW Cyg	p	50334.523	0.005	+0.013	7	KL	
33483	2051+386	WZ Cyg	p	50297.380	0.004	+0.050	5	KL	
33484			p	50335.366	0.006	+0.046	9	HP	
33485			p	50370.422	0.004	+0.035	7	HP	
33486			p	50380.366	0.005	+0.043	7	HP	
33487	2022+467	ZZ Cyg	p	50313.397	0.006	-0.026	8	HP	
33488			p	50357.406	0.005	-0.021	6	HP	
33489			p	50379.403	0.005	-0.025	7	HP	
33490	2111+305	AE Cyg	p	50369.369	0.004	0.000	9	HP	
33491	1939+466	BR Cyg	p	50334.394	0.006	+0.005	7	HP	
33492			p	50334.400	0.009	+0.011	6	KL	
33493	2056+349	CG Cyg	p	50334.431	0.005	+0.037	11	HP	
33494			p	50360.307	0.005	+0.036	9	HP	

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33495	2156+523	DO Cyg	p	50313.382	0.006	+0.005	8	HP	
33496			p	50325.348	0.005	0.000	7	HP	
33497	2035+352	GO Cyg	p	49990.430	0.018	+0.059	19	MMa	
33498	2018+337	MY Cyg	s	49990.497	0.005	-0.017	21	MMa	
33499	1941+326	V370 Cyg	p	50305.450	0.009	-0.006	16	AD	
33500			p	50312.416	0.005	-0.011	6	HP	
33501			p	50343.402	0.005	-0.007	6	HP	
33502			p	50357.344	0.005	-0.006	7	HP	
33503			p	50371.281	0.002	-0.011	5	KL	
33504	2051+353	V385 Cyg	p	<u>50315.391</u>	<u>0.002</u>	<u>-0.109</u>	10	RD	CCD
33505	2113+372	V387 Cyg	p	50299.356	0.005	+0.001	7	HP	
33506			p	50333.312	0.006	+0.005	6	HP	
33507	2026+381	V445 Cyg	p	50369.338	0.005	+0.195	7	KL	
33508			p	50369.339	0.005	+0.196	9	HP	
33509	2027+389	V456 Cyg	p	50300.430	0.005	+0.037	7	HP	
33510			p	50325.386	0.005	+0.040	8	HP	
33511			p	50375.280	0.006	+0.027	9	HP	
33512	2027+326	V505 Cyg	p	<u>50320.364</u>	<u>0.003</u>	<u>+0.146</u>	8	RD	CCD
33513	2128+499	V616 Cyg	p	50312.475	0.005	-0.265	8	KL	
33514	1924+298	V687 Cyg	p	50371.295	0.006	0.000	7	HP	
33515	2029+386	V700 Cyg	p	<u>50324.3715</u>	<u>0.0027</u>	<u>-0.0043</u>	11	RD	CCD
33516	2025+586	V728 Cyg	p	50387.346	0.005	-0.007	11	HP	
33517	2014+478	V787 Cyg	p	50332.396	0.006	+0.020	6	HP	
33518	2000+360	V824 Cyg	p	<u>50313.414</u>	<u>0.004</u>	<u>+0.026</u>	10	RD	CCD
33519	1925+288	V859 Cyg	s	<u>50381.2835</u>	<u>0.0019</u>	<u>-0.0495</u>	26	EBI	CCD
33520	1941+302	V959 Cyg	p	<u>50324.3666</u>	<u>0.0025</u>	<u>-0.0425</u>	11	RD	CCD
33521	1943+333	V975 Cyg	p	<u>50343.4750</u>	<u>0.0016</u>	<u>-0.0895</u>	14	RD	CCD
33522	2033+082	TT Del	p	50334.344	0.004	-0.054	6	KL	
33523			p	50334.344	0.005	-0.054	9	HP	
33524	2101+130	TY Del	p	50300.411	0.004	+0.051	6	HP	
33525			p	50331.379	0.004	+0.050	7	HP	
33526			p	50387.369	0.004	+0.057	8	HP	
33527	2025+183	XX Del	p	<u>50314.4610</u>	<u>0.0015</u>	<u>-0.2681</u>	22	RD	CCD; normal minimum
33528	2027+138	YY Del	p	50315.451	0.005	+0.009	6	HP	
33529			p	50369.380	0.005	+0.008	8	HP	

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33530	2033+129	AL Del	p	<u>50279.43</u>	0.01	+0.03	37	APs	CCD
33531			p	<u>50334.4075</u>	0.0012	+0.0447	15	RD	CCD
33532	2035+133	BN Del	p	<u>50332.5144</u>	0.0010	-0.2997	29	EBI	CCD
33533	2022+132	CN Del	s	<u>50334.4620</u>	0.0010	+0.0506	15	RD	CCD
33534	2051+044	FZ Del	p	50360.281	0.004	-0.030	7	HP	
33535	1142+725	Z Dra	p	50296.420	0.006	-0.098	9	KL	
33536			p	50315.430	0.005	-0.093	5	HP	
33537	1822+588	RZ Dra	p	50315.415	0.004	+0.023	6	HP	
33538			p	50331.400	0.004	+0.033	7	HP	
33539			p	50352.331	0.005	+0.031	7	HP	
33540	1850+477	WX Dra	p	<u>50337.3879</u>	0.0005	+0.0148	15	RD	CCD
33541	1655+527	AI Dra	p	49959.429	0.008	-0.004	25	MMa	
33542			p	49989.419	0.009	+0.015	24	MMa	
33543	1214+651	AR Dra	p	50300.418	0.005	-0.003	7	HP	
33544			p	50343.659	0.008	-0.015	4	KL	
33545	1902+573	BH Dra	p	49807.440	0.006	-0.005	21	MMa	
33546			p	50325.359	0.009	+0.001	15	AD	
33547	1804+678	HS1804+6753	s	<u>50334.393</u>	0.002	+0.031	16	EBI	CCD; elem. IAU S. 165, 89
33548		Dra	p	<u>50334.4878</u>	0.0004	+0.0208	14	EBI	CCD
33549	0409-105	YY Eri	s	49990.534	0.002	+0.070	14	MMa	
33550	1828+125	RX Her	p	49958.347	0.004	+0.004	17	MMa	
33551			p	49990.347	0.007	-0.010	14	MMa	
33552	1737+329	SZ Her	p	50314.427	0.004	-0.015	8	HP	
33553			p	50332.415	0.003	-0.025	6	KL	
33554			p	50332.421	0.005	-0.020	11	HP	
33555	1711+307	TU Her	p	<u>50277.515</u>	0.005	-0.062	31	APs	CCD
33556	1717+419	TX Her	s	49894.409	0.006	-0.010	13	MMa	
33557	1711+164	AK Her	p	49894.419	0.004	+0.007	13	MMa	
33558	1618+185	CT Her	p	50295.424	0.009	-0.024	4	KL	
33559	1845+227	DH Her	p	50337.432	0.005	-0.012	13	HP	
33560	1848+235	GL Her	p	50312.488	0.006	+0.041	8	HP	
33561	1853+121	LP Her	p	<u>50312.47</u>	0.02	+0.17	13	RD	CCD
33562	1819+144	MT Her	p	50312.375	0.005	+0.015	7	HP	
33563			p	50331.400	0.006	+0.018	7	HP	
33564			p	50334.315	0.003	+0.007	6	KL	

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
33565			p	50375.289	0.003	+0.013	8	HP	
33566	1751+437	V338 Her	p	50320.398	0.005	+0.037	6	HP	
33567			p	50337.370	0.005	+0.034	7	HP	
33568	1654+377	V359 Her	p	50352.349	0.005	+0.110	8	HP	
33569	2251+376	SW Lac	s	49990.406	0.007	-0.020	18	MMa	
33570			p	49990.566	0.004	-0.020	15	MMa	
33571	2212+496	TZ Lac	p	50312.33	0.02	+0.22	5	KL	
33572	2238+380	VX Lac	p	50320.432	0.006	+0.023	10	HP	
33573			p	50333.325	0.005	+0.023	6	HP	
33574	2247+447	VY Lac	p	50324.343	0.004	-0.131	7	HP	
33575			p	50352.319	0.005	-0.133	7	HP	
33576			p	50380.290	0.004	-0.140	7	HP	
33577	2213+484	AU Lac	p	50311.542	0.003	-0.011	5	KL	
33578	2216+542	AW Lac	p	50337.335	0.004	+0.122	7	HP	
33579	2244+565	CO Lac	s	<u>50370.3286</u>	<u>0.0027</u>	<u>+0.0182</u>	12	RD	CCD; displ. secondary
33580	2226+535	DG Lac	p	50312.460	0.004	-0.111	7	HP	
33581			p	50343.318	0.005	-0.145	7	HP	
33582			p	50387.474	0.005	-0.119	6	KL	
33583	2226+534	MZ Lac	s	<u>50304.458</u>	<u>0.005</u>	<u>+0.390</u>	14	RD	CCD; displ. secondary
33584	2240+531	PP Lac	p	49989.372	0.003	-0.005	12	MMa	
33585			s	49990.376	0.002	-0.003	12	MMa	
33586			s	<u>50380.2862</u>	<u>0.0012</u>	<u>-0.0235</u>	26	EBI	CCD
33587			s	<u>50380.2888</u>	<u>0.0009</u>	<u>-0.0209</u>	14	RD	CCD
33588			p	<u>50380.4813</u>	<u>0.0005</u>	<u>-0.0290</u>	24	EBI	CCD
33589	0912+429	UU Lyn	p	49800.419	0.006	+0.011	21	MMa	
33590			p	49807.438	0.005	+0.004	12	MMa	
33591	1814+410	TZ Lyr	p	50314.356	0.005	+0.004	6	HP	
33592			p	50332.334	0.004	+0.002	8	HP	
33593			p	50369.355	0.004	+0.005	8	HP	
33594	1919+378	UZ Lyr	p	50379.363	0.005	-0.011	6	HP	
33595	1901+300	DU Lyr	p	<u>50336.3130</u>	<u>0.0012</u>	<u>+0.1450</u>	19	EBI	CCD
33596	1920+347	ET Lyr	p	<u>50343.4255</u>	<u>0.0011</u>	<u>-0.0347</u>	14	RD	CCD
33597	1831+377	EW Lyr	p	50352.308	0.005	+0.242	6	HP	
33598	1852+268	MZ Lyr	s	<u>50320.362</u>	<u>0.002</u>	<u>-0.004</u>	8	RD	CCD
33599	1916+271	PS Lyr	p	<u>50314.338</u>	<u>0.002</u>	<u>+0.027</u>	10	RD	CCD
33600			p	50369.278	0.005	-0.019	7	HP	

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
33601	0632+088	RW Mon	p	50383.529	0.004	-0.022	6	KL	
33602	1732+072	RV Oph	p	50312.368	0.006	-0.006	9	HP	
33603			p	50360.295	0.005	-0.012	9	HP	
33604	1728+106	V449 Oph	p	50312.428	0.005	+0.035	9	HP	
33605	1816+142	V501 Oph	p	50300.411	0.006	+0.001	5	HP	
33606			p	50332.345	0.004	-0.007	9	HP	
33607	1638+006	V502 Oph	s	49959.343	0.006	-0.064	18	MMa	
33608	1738+078	V506 Oph	p	50300.405	0.004	+0.035	6	HP	
33609			p	50334.335	0.004	+0.031	7	HP	
33610			s	50360.306	0.005	+0.021	7	HP	
33611	1756+135	V508 Oph	p	50313.397	0.004	+0.013	7	HP	
33612			p	50343.402	0.004	+0.021	5	HP	
33613			s	50346.318	0.005	+0.005	6	KL	
33614			p	50360.298	0.004	+0.022	7	HP	
33615	1754+049	V566 Oph	s	49959.353	0.021	+0.012	18	MMa	
33616	1719+106	V752 Oph	p	<u>50299.4092</u>	<u>0.0009</u>	<u>-0.0569</u>	14	RD	CCD
33617	1806+091	V839 Oph	s	49962.351	0.003	+0.094	6	MMa	
33618			s	49989.354	0.004	+0.102	8	MMa	
33619			p	49990.374	0.007	+0.101	14	MMa	
33620	1752+141	V913 Oph	p	50315.427	0.006	+0.110	11	HP	
33621	0538+025	FZ Ori	p	47908.336	0.002	+0.008	34	MMa	
33622			s	47951.314	0.004	-0.012	19	MMa	
33623	0552-093	V640 Ori	p	50369.662	0.006	-0.062	6	KL	
33624	0456+100	V1202 Ori	p	47908.366	0.010	+0.010	42	MMa elem. IBVS No. 3544	
33625			s	47945.295	0.005	+0.006	6	MMa	
33626			p	47951.358	0.006	+0.007	38	MMa	
33627	2327+132	TY Peg	p	50334.380	0.005	-0.140	10	HP	
33628	2226+177	UX Peg	p	50357.355	0.005	-0.012	9	HP	
33629			p	50374.338	0.005	-0.019	6	KL	
33630	2220+160	BB Peg	p	50331.396	0.005	+0.016	6	HP	
33631	2250+153	BG Peg	p	50337.369	0.004	-0.793	8	HP	
33632	2125+047	BN Peg	p	50299.384	0.005	+0.017	7	HP	
33633			p	50344.324	0.004	+0.019	6	HP	
33634	2128+117	BO Peg	p	50314.376	0.005	-0.011	6	HP	
33635			p	50332.367	0.005	-0.014	6	HP	
33636			p	50343.403	0.005	-0.006	5	HP	
33637			p	50357.323	0.005	-0.016	5	HP	
33638	2205+059	DO Peg	p	50337.359	0.006	-0.003	5	KL	

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
33639			p	50371.338	0.005	-0.005	8	HP	
33640	0236+419	Z Per	p	50295.559	0.006	-0.103	7	KL	
33641	0320+463	RT Per	p	50368.353	0.003	+0.041	5	KL	
33642			p	50379.389	0.005	+0.036	7	HP	
33643	0256+389	ST Per	p	50368.392	0.008	+0.101	8	KL	
33644	0405+464	XZ Per	p	50313.597	0.003	-0.038	7	KL	
33645			p	50380.389	0.005	-0.040	7	HP	
33646	0220+577	DK Per	p	50313.507	0.004	-0.018	7	KL	elem. IBVS No. 3875
33647	0156+529	KW Per	p	50312.584	0.004	+0.002	8	KL	
33648			p	50355.427	0.005	+0.007	7	HP	
33649	0217+542	V505 Per	s	47937.347	0.019	-0.024	33	MMa	elem. IBVS No. 3479
33650			s	48093.578	0.004	-0.008	27	MMa	
33651	0116+309	RV Psc	p	<u>50360.3196</u>	<u>0.0014</u>	<u>-0.0355</u>	31	EBI	CCD
33652	2010+191	UZ Sge	p	50370.443	0.006	+0.014	10	HP	
33653			p	50379.310	0.005	+0.018	9	HP	
33654	1922+163	CU Sge	p	50325.385	0.005	-0.001	9	HP	
33655			p	50371.328	0.006	+0.025	9	HP	
33656	1905+188	DL Sge	p	50314.395	0.004	+0.089	7	HP	
33657			p	50332.392	0.005	+0.084	8	HP	
33658	1956+193	EI Sge	p	<u>50315.3697</u>	<u>0.0008</u>	<u>-0.0587</u>	20	EBI	CCD
33659	1808-164	XY Sgr	p	50337.379	0.004	+0.008	9	KL	
33660	1950-147	V505 Sgr	p	49958.397	0.003	+0.002	17	MMa	
33661	1846-102	RS Sct	p	50300.410	0.005	+0.012	7	HP	
33662	1556+173	AO Ser	p	50299.412	0.006	+0.025	8	HP	
33663	1554+224	AU Ser	s	49894.401	0.002	-0.034	12	MMa	
33664			p	50300.410	0.005	-0.045	6	HP	
33665			s	50313.356	0.005	-0.047	7	HP	
33666			s	50337.315	0.008	-0.050	5	KL	
33667			p	50343.309	0.004	-0.048	6	HP	
33668	1534+156	CC Ser	s	50332.329	0.004	-0.118	7	HP	
33669	0434+015	AC Tau	p	50387.474	0.007	+0.081	6	KL	
33670	0344+249	AH Tau	s	50279.570	0.002	-0.099	7	KL	
33671			s	50370.390	0.006	-0.099	6	HP	
33672	0128+301	V Tri	p	50343.324	0.006	+0.001	6	KL	
33673			p	50357.365	0.004	-0.013	8	HP	

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
33674	0940+561	W UMa	p	49797.405	0.004	-0.009	18	MMa	
33675			p	49798.400	0.010	-0.015	23	MMa	
33676			p	49799.401	0.004	-0.015	20	MMa	
33677			p	49800.397	0.009	-0.019	18	MMa	
33678			p	49807.405	0.004	-0.018	21	MMa	
33679			p	49810.404	0.006	-0.021	15	MMa	
33680			p	49811.406	0.005	-0.021	15	MMa	
33681			s	49959.363	0.009	-0.032	18	MMa	
33682	1042+458	TX UMa	p	49798.346	0.011	+0.104	23	MMa	
33683	1206+563	TY UMa	p	49811.369	0.002	-0.010	13	MMa	elem. JAAVSO 21, 111
33684			s	50315.382	0.006	+0.018	7	HP	
33685	0934+562	VV UMa	p	49799.367	0.005	-0.024	11	MMa	
33686	1026+620	ZZ UMa	p	50296.557	0.008	-0.010	7	KL	
33687	0943+459	AA UMa	p	49799.434	0.004	+0.008	11	MMa	
33688	0851+651	AC UMa	p	50370.462	0.008	-0.051	8	KL	
33689	1158+132	AG Vir	p	49811.432	0.001	-0.005	20	MMa	

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
33690	1211+120	AH Vir	p	49798.391	0.006	+0.081	19	MMa	
33691			s	49799.410	0.002	+0.081	20	MMa	
33692			p	49800.434	0.009	+0.086	20	MMa	
33693			p	49807.353	0.003	+0.077	19	MMa	
33694			s	49810.416	0.006	+0.083	16	MMa	
33695			p	49811.430	0.006	+0.079	20	MMa	
33696	2026+246	AW Vul	p	50331.436	0.006	+0.004	9	HP	
33697			p	50369.341	0.004	+0.006	7	HP	
33698	2030+246	AX Vul	p	50314.365	0.007	-0.014	6	HP	
33699			p	50320.434	0.005	-0.020	8	HP	
33700	2033+224	AY Vul	p	50313.520	0.004	-0.014	10	KL	
33701	2023+272	BE Vul	p	50325.405	0.005	+0.023	8	HP	
33702			p	50353.335	0.004	+0.016	6	KL	
33703			p	50370.404	0.006	+0.012	10	HP	
33704	1954+237	BO Vul	p	50332.461	0.003	+0.030	6	KL	
33705			p	50334.404	0.005	+0.027	13	HP	
33706			p	50369.426	0.005	+0.023	8	HP	
33707	2023+208	BP Vul	p	50324.400	0.005	-0.006	5	HP	
33708			p	50357.372	0.005	-0.020	8	HP	
33709	1935+218	BS Vul	p	50337.369	0.004	-0.006	7	HP	
33710			p	50357.362	0.004	-0.003	7	HP	
33711	2044+280	BU Vul	p	50334.350	0.004	+0.011	7	HP	
33712			p	50379.303	0.004	+0.013	8	HP	
33713	2023+263	CD Vul	p	50335.345	0.005	+0.009	6	HP	
33714			p	50387.305	0.005	+0.005	7	HP	
33715	2011+265	DR Vul	s	49989.452	0.006	-0.062	15	MMa displ. secondary	
33716	2021+255	FF Vul	p	<u>50313.386</u>	<u>0.003</u>	<u>-0.199</u>	10	RD	CCD
33717	1932+205	NO Vul	p	<u>50315.3473</u>	<u>0.0015</u>	<u>-0.0405</u>	10	RD	CCD

Notes on stars in table above

V917 Aql

The CCD observations obtained at JD50300 show that V917 Aqlae has a duration of totality of $d = 0.058^d \pm 0.002^d$ ($0.032^p \pm 0.001^p$).

R. Diethelm

SS Boo

This variable has a period of 7.6 days and $D = 18$ hours with a primary amplitude of only 0.67 mag in V, according to the SAC. Due to these facts SS Boo gets very little attention; the last minimum known to me was recorded in 1983.

I started to observe SS Boo in 1993, but after three seasons, the primary minimum is still not completely covered. The data gathered up to now indicate that the eclipse light curve of

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Nr	Design.	Star	Type	O	e.	O-C	n	Obs	Remarks
this star is W-shaped. Thus SS Boo might be one of the few eclipsing binaries showing a mid-eclipse brightening. The time given in the table refers to this central peak brightness. The formal minimum found in this observing run would be JD50234.48. The amplitude of the central peak is about 0.1 mag (unfiltered CCD).									

A. Paschke

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Nr Design. Star Type O e. O-C n Obs Remarks

Improved elements for the eclipsing binary EH Cnc

The EW type eclipsing binary EH Cancri was discovered as a suspected variable in 1934 by P. G. Kulikovskij (Per. Zv. 4 (1934), 294). It was finally classified as variable star after photo-electric measurements performed by A. Figer et al. (IBVS No. 2755); they gave the first elements of variation:

$$\text{Min (pri.,JD}_{\text{hel}}) = 2445768.624 + 0.418034 \text{ á E} \quad (1)$$

After visual observations carried out in 1995, I noted that these elements are in need of revision. Using my times of minima together with other timings published in the literature (see table below) the following new improved elements were derived:

$$\begin{aligned} \text{Min (pri.,JD}_{\text{hel}}) &= 2445768.625 + 0.4180364 \text{ á E} \\ &\pm .003 \quad \pm .0000004 \end{aligned} \quad (2)$$

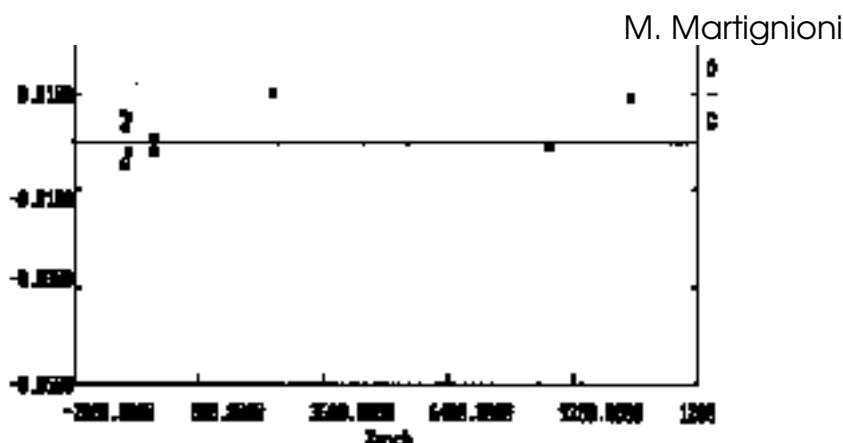


Fig.1 O-C Diagram for EH Cnc

Tab.1 Timings published in literature

J.d.	UHF	E (1)	O-C (1)	E (2)	O-C (2)	Observer(s)	Reference
2443183.302	v	-914.5	0.006	-914.5	0.007	A.Figer	IBVS No 367
2443199.485	v	-883	-0.005	-883	-0.004	A.Figer	IBVS No 367
2443408.429	v	-875	0.003	-875	0.004	A.Figer	IBVS No 367
2443410.365	v	-837	-0.004	-837	-0.003	A.Figer	IBVS No 367
2443438.388	v	-790	0.005	-790	0.006	A.Figer	IBVS No 367
2443440.465	v	-785	-0.002	-785	-0.001	A.Figer	IBVS No 367
2443672.683	v	-229.5	-0.0014	-229.5	-0.0010	A.Figer et al.	IBVS 2755
2443673.6123	v	-222.5	0.0009	-222.5	0.0004	A.Figer et al.	IBVS 2755
2443678.6345	v	-220	-0.0000	-220	-0.0025	A.Figer et al.	IBVS 2755
2446800.342	v	2460	0.010	2460	0.003	A.Martignoni	BBSAG Bull 107
2449393.422	v	8671	0.015	8671	0.003	M.Martignoni	BBSAG Bull 107
2449394.441	v	8673.5	-0.001	8673.5	-0.020	M.Martignoni	BBSAG Bull 107
2449429.372	v	8737	0.004	8737	0.002	M.Martignoni	BBSAG Bull 107
2450097.401	v	10355	0.035	10355	0.009	J.Vandenhoeve	BBSAG Bull 112
2450151.533	v	10484.5	0.038	10484.5	0.005	A.Dadoch	BBSAG Bull 112
2450152.346	v	10486.5	0.009	10486.5	-0.018	J.Vandenhoeve	BBSAG Bull 112
2450153.416	v	10489	0.033	10489	0.007	J.Vandenhoeve	BBSAG Bull 112
2450157.586	v	10490.5	0.032	10490.5	0.006	A.Dadoch	BBSAG Bull 112
2450163.440	v	10513	0.033	10513	0.006	A.Dadoch	BBSAG Bull 112