BBSAG Bulletin 12

1973 December 7

45th List of Minima of Eclipsing Binaries

The following table lists 231 minima obtained visually during October and November (except 2 addenda of BY Pegasi) 1973 by the observers

RD	Roger Diethelm, Winterthur
RG	Robert Germann, Wald
KL	Kurt Locher, Grüt
PM	Peter Morger, Hinwil
HP	Hermann Peter, Otelfingen
JS	Jules Staub, Hinwil

The O-C values refer to the linear elements of the GCVS 1969, disregarding improved elements from the 1971 first supplement to the GCVS. Reductions were made using the tracing paper method by RD, RG, KL, and HP.

current no.	star	minimum order	JD hel 244...	O-C	n	observer
5533	RT And	I	1997.229:	-0.015:	14	JS
5534		I	1997.231:	-0.013:	14	PM
5535	TW And	I	2005.290	+0.015	7	KL
5536	UU And	I	1971.371	+0.102	7	KL
5537		I	1974.345	+0.103	11	HP
5538		I	1980.291:	+0.105:	5	KL
5539		I	1983.245:	+0.186:	4	KL
5540	XZ And	I	1958.429	+0.008	6	KL
5541		I	1993.711	+0.001	5	KL
5542	AB And	II	1959.347	+0.020	9	KL
5543		II	1960.342:	+0.019:	11	PM
5544		II	1961.336	+0.018	12	HP
5545		II	1961.336	+0.018	7	RG
5546		II	1961.338	+0.019	14	PM
5547		II	1975.274	+0.016	5	RG
5548		II	1981.257	+0.021	7	RG
5549		II	1983.254	+0.031	7	RG
5550		I	2005.322:	+0.028:	12	PM
5551		I	2008.297	+0.016	7	RG
5552		I	2010.293	+0.020	8	RG
5553	CN And	I	1981.301	-0.055	5	RD
5554	RY Aqr	I	2008.304	-0.079	7	KL
5555		I	2010.258	-0.091	8	RG
5556		I	2010.275	-0.074	9	KL
5557	XZ Aqr	I	2011.357:	.*	6	KL
5558	CX Aqr	I	1958.381	+0.016	10	KL
5559		I	1972.277	+0.012	12	KL
5560		I	1982.284	+0.011	7	KL
5561		I	1987.281	+0.004	10	KL
5562		I	1997.291	+0.006	8	KL
5563	CZ Aqr	I	1976.396	+0.014	11	KL
5564		I	1989.332	+0.008	6	KL
5565		I	2008.317	+0.013	6	KL
5566	DX Aqr	I	1972.290	+0.007	7	KL
5567	EE Aqr	I	1961.300	+0.009	5	KL
5568		I	1965.373	+0.010	8	KL
5569	OO Aql	II	1959.294	-0.028	7	KL
5570		II	1960.295	-0.040	6	KL
5571		II	1961.326	-0.022	8	RG
5572		II	1966.379	-0.038	11	RG
5573		I	1975.263	-0.022	6	RG
5574		I	2010.227	-0.027	8	RG
5575		I	2011.228	-0.040	7	KL
5576	V 346 Aql	I	1959.327	-0.001	7	KL
5577	RS Ari	I	2005.320	-0.007	8	KL
5578	Y Cam	I	1960.331	+0.072	5	KL
5579	SV Cam	I	1987.301	-0.016	7	RG
5580		I	2006.290	-0.006	9	HP
5581	TX CMa	I	1996.699	-0.065	7	KL
5582	UU CMa	I	1996.705	-0.039	8	KL
5583	TY Cap	I	1959.361	-0.077	6	KL
5584		I	1989.255	-0.075	6	KL
5585	RZ Cas	I	1958.444	0.000	12	KL
5586		I	1982.352	+0.003	11	KL
5587		I	1982.354	+0.005	15	HP
5588		I	1988.330	+0.004	7	RG
5589		I	1994.304	+0.002	7	KL
5590		I	1994.308	+0.007	10	HP
5591		I	2006.254	-0.001	6	KL

* no period given in the GCVS, O-C = +0.016: according to the elements of Rocznik Astronomiczny Obserwatorium Krakowskiego 44, 1973

current no.	star	minimum order	JD hel 244...	O - C	n	observer
5592		I	2006.258	+0.004	13	HP
5593	TV Cas	I	1981.432	-0.019	10	KL
5594		I	1983.259	-0.005	8	RG
5595	AB Cas	I	1961.320	+0.009	10	HP
5596		I	1987.290	+0.009	7	KL
5597	VW Cep	II	1965.266	-0.079	10	KL
5598		I	1965.417	-0.067	11	KL
5599		I	1981.267	-0.082	6	RD
5600	SS Cet	I	1972.516	-0.047	11	KL
5601		I	1981.433	-0.052	7	KL
5602		I	1987.381	-0.053	10	KL
5603	TW Cet	I	1958.456	-0.021	9	KL
5604		II	1972.550	-0.027	6	KL
5605		II	1981.428	-0.022	10	KL
5606		II	1987.452	-0.017	10	KL
5607		II	1996.324	-0.017	8	KL
5608		I	1997.427	-0.023	12	KL
5609		I	2004.404	-0.017	11	KL
5610		I	2005.356	-0.016	10	KL
5611		I	2006.299	-0.023	10	KL
5612		II	2008.356	-0.025	12	RG
5613		II	2008.367	-0.015	7	KL
5614		II	2009.314	-0.018	10	KL
5615		II	2009.318	-0.014	6	RG
5616		I	2010.422	-0.019	10	KL
5617		I	2011.372	-0.020	10	KL
5618		II	2015.336	-0.016	8	KL
5619	VY Cet	II	1958.436	*	11	KL
5620		II	1961.502	*	10	KL
5621		II	1971.379	*	10	KL
5622		I	1980.403	*	11	KL
5623		I	1981.426	*	10	KL
5624		I	1982.443	*	9	KL
5625		II	1984.332	*	6	KL
5626		II	1987.396	*	16	KL
5627		II	1989.442	*	11	KL
5628		I	1996.433	*	5	KL
5629		I	1997.451	*	12	KL
5630		II	2004.434	*	13	KL
5631		I	2005.293	*	11	KL
5632		I	2006.316	*	10	KL
5633		I	2007.331	*	10	KL
5634		I	2008.354	*	11	KL
5635		I	2009.374	*	13	KL
5636		I	2010.398	*	11	KL
5637		I	2011.423	*	10	KL
5638		II	2015.343	*	8	KL
5639	AA Cet	II	1958.476	**	8	KL
5640		I	1976.440	**	6	KL
5641		II	1987.409	**	14	KL
5642		I	1997.349	**	12	KL
5643		I	2005.384	**	9	KL
5644		II	2008.339	**	8	KL
5645		I	2011.287	**	10	KL
5646		II	2015.307	**	7	KL
5647	RW Com	I	2004.724	-0.043	6	KL
5648	Y Cyg	II	1965.271§	+0.140	11	KL
5649		II	1983.237§	+0.128	4	KL
5650		II	1989.230§	+0.128	11	KL
5651	WW Cyg	I	1980.368	+0.023	11	KL
5652	ZZ Cyg	I	1989.284	-0.029	11	HP
5653		I	2004.366	-0.034	11	HP
5654	V687 Cyg	I	2009.284	+0.012	9	HP
5655	V728 Cyg	I	1961.351	+0.048	11	HP
5656		I	1994.326	+0.061	11	HP
5657	TT Del	I	1959.351	+0.041	11	KL
5658		I	1982.318	+0.039	11	KL
5659	TY Del	I	1961.290	+0.011	10	KL
5660		I	1986.301	+0.008	5	KL
5661	FZ Del	I	1982.290	+0.004	10	HP
5662		I	1989.326	-0.008	8	RG
5663	Z Dra	I	1994.334	+0.002	11	HP
5664	RZ Dra	I	1982.325	-0.008	10	HP
5665	AI Dra	I	1981.327	+0.009	10	KL
5666		I	1987.293	-0.019	6	RG
5667		I	1987.300	-0.012	8	KL
5668	TZ Eri	I	1989.473	-0.036	5	KL
5669	YY Eri	II	1965.647	-0.004	8	RG
5670		II	1989.440	-0.002	10	KL
5671	SZ Her	I	1981.296	+0.027	10	HP
5672		I	2008.288	+0.021	11	HP
5673		I	2008.288	+0.021	7	KL
5674	UX Her	I	1983.246	-0.058	5	KL
5675	SW Lac	II	1966.338	-0.049	7	RG
5676		I	1981.245	-0.056	7	RG
5677		II	1985.253	-0.057	12	HP
5678		I	1987.325:	-0.070:	7	RG
5679		I	1988.298	-0.059	9	RG
5680		I	1989.267	-0.052	7	RG

* GCVS period erroneous, O - C according to the elements of BBSAG Bulletin 6 (in bracket) and BBSAG Bulletin 11 (following the bracket): (-0.034)+0.008 (-0.036)+0.006 (-0.044)-0.001 (-0.052)-0.008 (-0.052)-0.007 (-0.058)-0.013 (-0.044)+0.001 (-0.047)-0.002 (-0.046)-0.001 (-0.042)+0.004 (-0.048)-0.001 (-0.052)-0.004 (-0.045)+0.002 (-0.045)+0.003 (-0.052)-0.004 (-0.052)-0.004 (-0.054)-0.006 (-0.053)-0.005 (-0.051)-0.002 (-0.051)-0.002

** not contained in the GCVS, O - C according to Bloomer's (new) elements IBVS 745: +0.002 +0.004 -0.018 +0.002 -0.006 +0.001 0.000 -0.002

§ excentric secondary minimum

current no.	star	minimum order	JD hel 244...	O-C	n	observer
5681		II	2007.379	-0.061	7	KL
5682		II	2008.352	-0.050	8	RG
5683		II	2008.356	-0.046	10	HP
5684		II	2009.317	-0.048	6	RG
5685		II	2010.268	-0.059	7	RG
5686	TW Lac	I	1974.370	-0.050	14	HP
5687	VX Lac	I	1981.258	-0.051	9	HP
5688		I	1981.260	-0.049	5	RD
5689		I	1981.270	-0.040	6	KL
5690	AU Lac	I	1958.304	-0.046	8	KL
5691	CM Lac	I	1980.438	+0.001	11	KL
5692		I	1985.250	-0.001	12	HP
5693		I	1985.260	+0.009	7	KL
5694		I	2009.319	-0.002	7	RG
5695		I	2009.320	-0.002	13	HP
5696	DG Lac	I	2009.414	+0.145	12	HP
5697	UV Leo	I	1974.636	+0.005	10	KL
5698	UZ Lyr	I	1961.321	+0.020	12	HP
5699		I	1961.329	+0.028	9	RG
5700		I	1997.246	+0.011	10	KL
5701	FL Lyr	I	1996.290	-0.004	8	HP
5702		I	2009.368	+0.005	8	HP
5703	BO Mon	I	1996.679	+0.122	10	KL
5704	V449 Oph	I	1981.288	+0.046	6	KL
5705	V508 Oph	I	1965.275	+0.008	10	KL
5706		I	1985.268	-0.001	7	KL
5707		I	2004.236	+0.003	8	HP
5708	ER Ori	II	1974.660	-0.019	8	KL
5709	U Peg	II	1989.280	-0.014	10	HP
5710		II	2004.272	-0.013	10	HP
5711	UX Peg	I	1996.362	0.000	8	KL
5712	BY Peg	I	1900.464	+0.013	7	KL
5713		I	1901.481	+0.004	7	KL
5714	DI Peg	I	1988.321	-0.022	7	RG
5715		I	2008.263	-0.011	8	HP
5716	RT Per	I	1981.335	-0.050	15	HP
5717		I	1991.526	-0.051	6	KL
5718		I	2009.361	-0.055	11	HP
5719	RV Per	I	2011.392	+0.007	6	KL
5720		I	2015.346	+0.014	8	KL
5721	ST Per	I	1994.312	+0.004	7	KL
5722		I	1994.315	+0.007	10	HP
5723	IQ Per	I	1971.394	*	6	KL
5724	β Per	I	1994.296	-0.052	8	KL
5725		I	1994.309	-0.039	11	HP
5726	Y Psc	I	1982.411:	+0.126:	7	KL
5727		I	1982.413	+0.128	18	HP
5728		I	1997.471	+0.123	13	KL
5729	UV Psc	I	1989.241	+0.019	6	KL
5730	RW PsA	II	1971.273	-0.044	10	KL
5731		II	1984.241	-0.052	11	KL
5732		II	1989.276	-0.064	5	KL
5733	AY Pup	I	1974.697	+0.057	10	KL
5734		I	1991.582	+0.060	6	KL
5735		I	2004.711	+0.059	8	KL
5736	U Sge	I	1981.340	+0.003	15	HP
5737		I	1981.342	+0.005	6	KL
5738	RW Tau	I	1965.672	-0.068	14	RG
5739		I	2004.434	-0.070	10	KL
5740		I	2004.435	-0.069	20	HP
5741	EQ Tau	II	1972.509	+0.043	8	KL
5742		I	1973.629	+0.060	8	KL
5743		I	1974.672	+0.047	8	KL
5744	X Tri	I	2004.327	-0.030	10	HP
5745		I	2005.299	-0.029	8	KL
5746		I	2006.270	-0.029	15	HP
5747		I	2007.242	-0.029	11	HP
5748	RW Tri	I	1976.435	-0.002	11	KL
5749		I	1980.376	-0.002	6	KL
5750		I	1984.322	+0.001	5	KL
5751		I	2006.349	-0.002	7	KL
5752		I	2009.362	-0.002	7	KL
5753		I	2010.290	0.000	5	KL
5754		I	2011.448	-0.003	10	KL
5755	TX UMa	I	2008.416	-0.014	10	HP
5756	Z Vul	I	2007.242	+0.014	11	HP
5757	BO Vul	I	1959.357	-0.056	11	KL
5758		I	1961.302	-0.058	11	KL
5759		I	1996.329	-0.057	10	KL
5760	BP Vul	I	1965.387	+0.013	13	KL
5761	BU Vul	I	2004.280	+0.004	12	HP
5762		I	2009.397	0.000	9	HP
5763	FR Vul	I	1981.289	-0.003	7	RD

* no period given in the GCVS, O-C = -0.009 according to Bischof's elements IBVS 673

Note on the O-C of RW Persei

During the late evening hours of 1973 October 24 (JD 2441980) I observed a considerable part of the descending branch of this EA type binary. A check just before dawn showed it still at or near minimum, from which an O-C value of