COMMISSIONS 27 AND 42 OF THE IAU
INFORMATION BULLETIN ON VARIABLE STARS

Number 5378

Konkoly Observatory
Budapest
18 February 2003

HU ISSN 0374 – 0676

TIMES OF MINIMA FOR NEGLECTED ECLIPSING BINARIES IN 2002

DVORAK, S. W.

Rolling Hills Observatory, Clermont, FL USA; e-mail: sdvorak@rollinghillsobs.org

Observatory and telescope:
25cm catadioptric telescope at Rolling Hills Observatory (RHO)

Detector:	CB245 camera, Peltier cooling, TI TC245 chip, $11' \times 8'$ FOV, 252×242 pixels.

Method of data reduction:
Reduction of the CCD frames was made with sextractor and custom-written applications.

Method of minimum determination:
The times of minima were computed using the Kwee and van Woerden method as implemented in AVE [1] .

Observed star(s):

Star name	GCVS	Coordinates (J2000)		Comp. star	Ephemeris		Source
	type	RA	Dec		E 2400000+	P [day]	
CN And	EW	00 20 30	40 13 34	2787-1927*	41577.2970	0.4627959	1
CO And	EA	01 11 25	46 57 50	3268-400	26985.5100	1.827663	1
GZ And	EW	02 12 14	44 39 32	2842-919	41976.6950	0.305018	1
LO And	EW	23 27 07	45 33 22	3637-716	44081.5580	0.380852	1
EK Aqr	EW	23 39 16	−09 09 04	5829-938	39726.5600	0.61299	1
V1353 Aql	EB	19 24 21	16 02 42	1600-958	34461.5290	1.4147979	1
AH Aur	EW	06 26 05	27 59 56	1887-1240	36495.5710	0.4942624	1
HW Aur	EB	05 01 25	39 48 11	2899-1313	29250.6630	1.177404	1
AO Cam	EW	04 28 14	53 02 46	3732-1016	44559.9604	0.329917	1
TX Cnc	EW	08 40 02	19 00 00	1395-1070	38011.3909	0.382881537	1
WX Cnc	EA	08 46 51	32 51 04	2487-162	25620.3770	1.2245888	1
AK CMi	EA	07 40 16	03 57 11	187-673	43101.6720	0.5658975	1
AX Cas	EB	01 23 50	61 34 26	4030-1984	28626.4420	0.600376	1
BH Cas	EW	00 21 21	59 09 04	3665-848	49998.618	0.405890	2
BS Cas	EW	01 21 39	59 10 26	3682-1338	27984.4890	0.4404832	1
EP Cas	EB	23 52 59	57 26 49	4009-1361	28179.1820	0.8134394	1
V366 Cas	EW	01 08 26	58 44 17	3681-640	35075.4610	0.72927425	1

* GSC name

[1] AVE is written by Rafeal Barbera (rbarb@astro.gea.cesca.es) and the software can be obtained from `http://www.astrogea.org/soft/ave/introave.htm`

Observed star(s):

Star name	GCVS type	Coordinates (J2000) RA	Dec	Comp. star	Ephemeris E 2400000+	P [day]	Source
V384 Cas	EA	00 45 28	47 34 59	3266-1178*	36073.5160	1.108273	1
V520 Cas	EW	23 42 07	55 54 40	4004-975	41186.3690	0.48959	1
V541 Cas	EW	02 34 29	63 20 28	4051-648	39026.5420	0.909026	1
WY Cep	EB	22 46 21	67 42 22	4476-173	25123.0800	1.249056	1
NS Cep	EA	20 45 23	60 43 12	4246-1715	30639.3000	0.7763644	1
TX Cet	EB	01 56 06	00 44 20	4686-547	43082.6343	0.74084025	1
VY Cet	EW	01 49 34	−19 37 30	5857-1716	35429.0210	0.3408097	1
LO Cyg	EB	21 44 03	45 52 37	3591-1877	26267.4120	0.6292321	1
V505 Cyg	EB	20 29 29	32 47 46	2689-458	28099.4260	0.667672	1
V836 Cyg	EB	21 21 23	35 44 10	2715-2996	44853.4903	0.6534122	1
V877 Cyg	EB	19 30 52	32 12 04	2659-2463	35344.5130	0.8397642	1
V1141 Cyg	EW	19 39 53	36 39 43	2668-780	38001.4040	0.84909682	1
ET Del	EB	20 54 56	08 23 24	1090-2533	31432.5590	1.010784	1
LS Del	EW	20 57 10	19 38 53	1656-356	42687.4180	0.3638	1
RU Eri	EB	03 54 44	−14 55 59	5311-42	42359.3456	0.63219951	1
WW Eri	EB	05 05 05	−07 33 36	4762-349	26586.4530	0.926497	1
BL Eri	EW	04 11 48	−11 47 20	5315-263	29232.0820	0.4162	1
AZ Gem	EB	06 34 33	14 28 26	745-1048	26000.5640	1.006183	1
GW Gem	EB	07 52 29	27 09 22	1933-570	25645.5798	0.659444013	1
MS Her	EW	18 16 53	27 39 43	2100-912	26419.4980	0.6052626	1
EM Lac	EW	22 23 55	54 01 08	3982-1917	38259.5444	0.38913342	1
PP Lac	EW	22 42 38	53 25 01	3984-1519	45595.4380	0.401163	1
V342 Lac	EW	22 14 00	51 56 28	3618-677	33861.4954	0.7005779	1
V344 Lac	EW	22 18 47	51 59 13	3618-1289	45222.5635	0.39222768	1
EP Mon	EA	06 56 35	−05 20 35	4809-1327	32888.5760	1.1480993	1
IX Mon	EB	06 57 40	11 48 04	756-1290	27100.4080	1.1032704	1
NN Mon	EA	07 19 26	−01 25 59	4816-2900	30131.2530	0.912339	1
V396 Mon	EW	06 38 37	03 36 22	151-1077	34769.4175	0.39634498	1
V458 Mon	EW	06 57 49	02 12 00	153-1252	34769.5000	0.49521352	1
V514 Mon	EW	06 49 19	00 03 29	148-99	33330.4064	0.55737224	1
V530 Mon	EW	07 03 15	03 15 04	166-2402	33294.4200	0.52552935	1
EU Peg	EA	23 01 26	27 20 20	2243-1242	33981.9250	0.721114	1
HW Per	EB	03 58 42	44 43 41	2876-1970	28023.5270	0.634828	1
V450 Per	EA	02 59 24	41 46 01	2854-2486	38407.4460	0.948666	1
VZ Psc	EW	23 27 47	04 51 14	581-207	43832.2060	0.2611865	1
RS Sct	EB	18 49 11	−10 14 35	5697-600	44437.1658	0.6642384	1
BV Tau	EB	05 38 36	22 54 58	1861-1826	46052.6300	0.93044	1
CT Tau	EW	05 58 50	27 04 48	1871-434	45404.3590	0.6668303	1
GW Tau	EB	04 30 10	25 32 46	1833-974	16900.2300	0.6413291	1
FR Vul	EA	19 36 21	26 45 47	2146-4529	34981.3980	0.94185866	1
GU Vul	EW	19 48 56	26 23 17	2148-723	34985.4230	0.77422704	1
GSC 5178-1376	EW	20 48 13	−01 29 28	5178-1373	51463.5725	0.272218	3

* GSC name

Source(s) of the ephemeris:

1.: Kholopov et al., 1985; 2.: Metcalfe, 1997; 3. Dvorak, 2000

Times of minima:

Star name	Time of min. HJD 2400000+	Error	Type	Filter	$O-C$ [day]	Rem.
CN And	52555.6557	2	I	–	0.0591	
CO And	52539.9063	3	I	–	0.0122	
GZ And	52504.8489	1	I	–	0.1526	
LO And	52510.7114	1	II	–	0.1369	
EK Aqr	52527.6670	4	I	–	0.0368	
V1353 Aql	52552.5972	3	I	–	0.0475	
AH Aur	52537.9368	3	I	–	−0.0032	
HW Aur	52545.8623	3	I	–	0.2612	
AO Cam	52607.6550	1	I	–	−0.0014	

Times of minima:						
Star name	Time of min. HJD 2400000+	Error	Type	Filter	$O-C$ [day]	Rem.
TX Cnc	52611.843	1	I	–	0.030	
WX Cnc	52629.917	1	I	–	0.009	
AK CMi	52596.8492	1	I	–	−0.0170	
AX Cas	52576.5730	2	I	–	−0.0684	
BH Cas	52537.6746	6	I	–	−0.0999	
BS Cas	52527.8055	4	I	–	0.0331	
EP Cas	52585.5830	2	I	–	−0.0348	
V366 Cas	52539.6463	2	II	–	0.2654	
V384 Cas	52566.7055	2	I	–	−0.1293	
V520 Cas	52575.701	1	I	–	0.000	
V541 Cas	52610.5718	1	I	–	−0.0098	
WY Cep	52548.6232	2	I	–	0.0206	
NS Cep	52556.5635	4	I	–	0.4965	cycle count uncertain
TX Cet	52552.8063	2	I	–	0.0111	
VY Cet	52611.6341	1	I	–	0.0105	
LO Cyg	52587.643	1	I	–	0.081	
V505 Cyg	52549.686	1	I	–	0.111	
V836 Cyg	52524.5618	1	I	–	0.0123	
V877 Cyg	52581.5424	6	I	–	0.0294	
V1141 Cyg	52551.5866	2	I	–	0.0594	
ET Del	52538.7236	3	I	–	−0.0161	
LS Del	52550.5508	3	II	–	0.1524	
RU Eri	52630.6672	2	I	*V*	−0.0238	
WW Eri	52625.7069	3	I	–	0.0557	
BL Eri	52624.7486	1	I	–	0.1546	
AZ Gem	52566.8926	2	I	–	0.0789	
GW Gem	52628.7304	2	I	–	0.0205	
MS Her	52566.538	1	II	–	0.301	
EM Lac	52629.5129	3	I	–	0.0039	
PP Lac	52589.6764	3	I	–	−0.0385	
	52602.5135	4	I	–	−0.0386	
V342 Lac	52555.573	1	II	–	0.2072	
V344 Lac	52601.5480	3	I	–	0.0052	
EP Mon	52565.8929	1	I	–	−0.0993	
IX Mon	52637.7788	3	I	–	−0.0292	
NN Mon	52638.7594	7	I	–	0.1033	
V396 Mon	52602.9056	2	I	–	−0.0543	
V458 Mon	52587.7882	5	I	–	0.0105	
V514 Mon	52627.7337	5	I	–	−0.0144	
V530 Mon	52597.7630	4	I	–	−0.1759	
EU Peg	52581.6528	2	I	–	0.0344	
HW Per	52611.7076	3	I	–	0.0225	
V450 Per	52596.7098	2	I	–	0.0664	
VZ Psc	52545.6999	5	I	–	0.0511	
RS Sct	52539.5429	1	I	–	−0.0029	
BV Tau	52550.9138	3	I	–	0.1208	
CT Tau	52590.7511	2	I	–	−0.0380	
GW Tau	52576.6755	5	I	–	−0.0510	
FR Vul	52554.5930	2	I	–	−0.0039	
GU Vul	52580.5231	3	I	–	0.0164	
GSC 5178-1376	52565.5162	1	I	–	0.0052	

References:

Kholopov, P. N., et al., 1985, *General Catalog of Variable Stars*, 4th Eds.
Metcalfe, T., 1997, *IBVS*, 4482
Dvorak, S. W., 2000, *IBVS*, 4945