

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

Number 6039

Konkoly Observatory
Budapest
15 November 2012

HU ISSN 0374 – 0676

MINIMA TIMES OF SOME ECLIPSING BINARY STARS

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Observatory and telescope:

16" Schmidt/Cassegrain telescope at Ankara University Observatory

Detector:

Apogee ALTA U47+ back illuminated CCD camera, Peltier cooling, E2V CCD47–10 chip, 1024 × 1024 pixels.
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Method of data reduction:

Reduction of the CCD frames was made with the IRAF ¹ CCDRED and DAOPHOT packages.
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Method of minimum determination:

The minima times were computed with several methods in Minima25b (Nelson, 2006): parabolic fit, tracing paper, bisectors of chords, Kwee and van Woerden method (Kwee & van Woerden, 1956), Fourier fit and sliding integrations technique. Then weighted mean minimum-time values were calculated for all filters used.
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¹IRAF is distributed by the National Optical Astronomical Observatories, operated by the Association of the Universities for Research in Astronomy, inc., under cooperative agreement with the National Science Foundation

Times of minima:					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
V546 And	55456.3647	0.0004	I	BVRI	GS
	55456.5558	0.0003	II	BVRI	GS
	55467.4721	0.0002	I	BVRI	YD-TO
BO Ari	55487.3294	0.0002	II	BVRI	GS-SS-GV
	55487.4889	0.0001	I	BVR	GS-SS-GV
	55509.4440	0.0008	I	BVRI	AO-SC-YŞ
	55528.3768	0.0000	II	BVRI	YD
	55551.2872	0.0001	II	BVRI	AO-YŞ-ND
	55553.1962	0.0001	II	BVRI	GS
AP Aur	55603.4537	0.0004	II	BVRI	GS-AY-CY
GS Boo	55328.5045	0.0031	II	BVRI	GS
	55330.3878	0.0003	I	BVRI	YD
HH Boo	55602.5508	0.0006	I	BVRI	BG-AO
	55609.4030	0.0010	II	BVRI	GG
	55637.4459	0.0006	II	BVRI	AY-MMK
	55645.4128	0.0002	II	BVRI	AY-GS
	55645.5708	0.0003	I	BVRI	AY-GS
	55647.4830	0.0005	I	BVRI	YD-TO-AK
	55648.4386	0.0012	I	BVRI	MSH-ZT-MAk
CD Cam	55372.3935	0.0022	I	VRI	GS
ASAS J013630+0150.3	55450.5883	0.0002	I	BVRI	GG-MSH-YK
GW Cnc	55502.5278	0.0000	I	BVRI	AO-SC-YŞ
	55508.5771	0.0001	II	BVRI	ZT-GV-MSH
	55515.6124	0.0002	II	BVRI	HG-GV-MSH
	55635.3537	0.0003	I	BVRI	AO-YŞ-ND
	55636.3383	0.0007	II	BVRI	GG-YK-MÖ
V1073 Cyg	55447.4114	0.0001	I	BVRI	GG-MD
V1918 Cyg	55468.5269	0.0007	I	BVRI	GG-YK-MSH
ASAS J202521+0425.5	55458.3026	0.0005	I	BVRI	YD
	55463.3044	0.0007	II	BVRI	GS
	55464.3567	0.0004	II	BVRI	AO-SC
GSC 4428-1574	55604.3181	0.0012	II	BVRI	GS-AY-CY
	55604.5627	0.0005	I	BVRI	GS-AY-CY
	55649.4931	0.0001	II	BVRI	AO-YŞ-ND
GV Leo	55599.5559	0.0005	II	BVRI	ZT-MSH-ZŞŞ
GSC 3526-2369	55416.3474	0.0003	I	BVRI	YD
	55418.3287	0.0004	I	BVRI	UD
V566 Oph	55036.4336	0.0003	I	BVRI	ED
V407 Peg	55443.5811	0.0014	II	BVRI	AO-MD
	55459.5026	0.0005	II	BVRI	ZT-GV-MSH
GSC 2751-1007	55445.4778	0.0007	I	BVRI	UD-MD
	55448.4001	0.0004	I	BVRI	HG
	55449.4447	0.0007	II	BVRI	GS-MD
ASAS J225956+1418.2	55501.3022	0.0002	II	BVRI	ZT-MSH-SS
V1367 Tau	55528.5606	0.0003	I	VRI	YD
	55595.3150	0.0002	I	BVRI	EA
V Tri	55207.2586	0.0006	II	VRI	UD

Explanation of the remarks in the table:

Observers: AK: Altuğ KARADAĞ, AO: Abdullah OKAN, AY: Arzu YOLKOLU, BG: Birol GÜROL, CY: Ceren YILDIRIM, EA: Emre AYDIN, ED: Ethem DERMAN, GG: Gökhan GÖKAY, GS: Gözde SARAL, GV: Gamze VAROL, HG: Hande GÜRSOYTRAK, MAk : Mihriban AKI, MD: Mehtap DOĞANAY, MMK: Metehan Metin KEKLİK, MÖ: Maksude ÖZTÜRK, MSH: Muhammed ŞEMUNİ, ND: Nermin DEMİRCİOĞLU, SC: Sonay CERİT, SS: Sümeyye SURİ, TO: Tahsin OZUN, UD: Utku DERMİRHAN, YD: Yahya DEMİRCAN, YK: Yücel KILIÇ, YŞ: Yunus ŞENDAĞ, ZSS: Zeynep Sinem ŞAHİN, ZT: Zahide TERZİOĞLU

Remarks:

The times of minima are weighted averages from all filters observed.

Acknowledgements:

We are grateful to Ankara University Observatory for use of the telescope time allocation and other facilities.

References:

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Nelson, B., 2006, Minima v2.3,

<http://www.members.shaw.ca/bob.nelson/software1.htm>