105 MINIMA TIMINGS OF ECLIPSING BINARIES

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Observatory and telescope:
T1: 40 cm Cassegrain telescope (f/8), and
T2: 25 cm Newtonian reflector telescope (f/4.7) located at the Gerostathopoulion Observatory of the University of Athens
T3: 1.2 m Cassegrain telescope (f/13) located at the Kryonerion Observatory (Mt. Killini, Corinthia, Hellas) of the National Observatory of Athens.

Detector:	
	C1: ST-10XME CCD camera, KAF-3200ME chip, $16' \times 11'$ and $25' \times 17'$ (using a focal reducer) field of view (FoV) with T1, 2184 × 1472 pixels, **C2**: ST-8XMEI CCD camera, KAF-1603ME chip, $15' \times 10'$ FoV with T1 and $40' \times 27'$ FoV with T2, **C3**: AP47p CCD camera, Marconi 47-10 chip, $2.5' \times 2.5'$ FoV with T3. All CCDs have a Peltier-type cooling system and are equipped with Bessell $UBVRI$ filters.

Method of data reduction:
Differential photometry

Method of minimum determination:
Kwee & van Woerden (1956).

Times of minima:					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
QX And	55882.3077	0.0005	II	$BVRI$	T1+C1
	55882.5141	0.0006	I	$BVRI$	T1+C1
	55884.3688	0.0004	II	$BVRI$	T1+C1
	55887.2533	0.0003	II	$BVRI$	T1+C1
	55887.4600	0.0003	I	$BVRI$	T1+C1

Times of minima:

Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
V1464 Aql	56174.3242	0.0003	I	*BVRI*	T1+C1
	56181.3019	0.0004	I	*BVRI*	T1+C1
FN Cam	55929.6065	0.0011	II	*BVRI*	T1+C1
	55930.2817	0.0015	II	*BVRI*	T1+C1
	55930.6240	0.0007	I	*BVRI*	T1+C1
	55935.3642	0.0002	I	*BVRI*	T1+C1
IO Cep	56530.4827	0.0003	I	*BVRI*	T3+C3
TW CrB	56049.5494	0.0003	II	*BVRI*	T1+C1
	56057.4995	0.0005	I	*BVRI*	T1+C1
	56067.5098	0.0001	I	*BVRI*	T1+C1
	56078.4038	0.0002	II	*BVRI*	T1+C1
AE Cyg	56528.5496	0.0005	I	*BVRI*	T3+C3
V366 Cyg	56529.4209	0.0010	I	*BVRI*	T3+C3
V1187 Cyg	56168.4935	0.0003	I	*BVRI*	T1+C1
	56171.5095	0.0005	I	*BVRI*	T1+C1
V1191 Cyg	56166.4343	0.0002	I	*BVRI*	T1+C1
	56167.3749	0.0002	I	*BVRI*	T1+C1
	56168.3145	0.0002	I	*BVRI*	T1+C1
	56168.4719	0.0002	II	*BVRI*	T1+C1
	56169.2539	0.0007	I	*BVRI*	T1+C1
	56169.4123	0.0002	II	*BVRI*	T1+C1
	56170.3528	0.0003	II	*BVRI*	T1+C1
	56170.5089	0.0002	I	*BVRI*	T1+C1
	56171.2930	0.0002	II	*BVRI*	T1+C1
	56171.4489	0.0002	I	*BVRI*	T1+C1
YY Eri	55891.4726	0.0001	I	*BVRI*	T1+C1
	55894.5262	0.0001	II	*BVRI*	T1+C1
GSC 0163-1415	55632.3604	0.0037	I	*I*	T1+C1
GSC 0389-0120	56463.4435	0.0004	II	*BVRI*	T1+C1
	56464.3844	0.0004	I	*BVRI*	T1+C1
	56465.5142	0.0003	I	*BVRI*	T1+C1
	56470.4135	0.0002	I	*BVRI*	T1+C1
	56472.4858	0.0004	II	*BVRI*	T1+C1
GSC 1137-0293	56146.3836	0.0005	I	*B*	T1+C1
	56146.5701	0.0010	II	*BVRI*	T1+C1
	56148.4673	0.0009	II	*BVRI*	T1+C1
	56153.3782	0.0010	II	*BVRI*	T1+C1
	56153.5674	0.0009	I	*BVRI*	T1+C1
	56155.4612	0.0010	I	*BVRI*	T1+C1
	56157.5350	0.0010	II	*BVRI*	T1+C1
	56159.4258	0.0008	II	*BVRI*	T1+C1
GSC 2816-0743	55887.4764	0.0012	I	*BVRI*	T1+C1
GSC 3332-0638	55847.4869	0.0075	I	*VRI*	T1+C1
	55848.5258	0.0076	II	*VRI*	T1+C1
	55852.6150	0.0094	II	*I*	T1+C1
	55854.4571	0.0018	I	*I*	T1+C1
	55855.4815	0.0024	II	*RI*	T1+C1
	55856.5096	0.0068	I	*BVRI*	T1+C1

Times of minima:

Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
	55866.3433	0.0050	I	RI	T1+C1
	55867.3691	0.0019	II	I	T1+C1
	55867.5653	0.0041	I	I	T1+C1
	55868.3816	0.0050	I	RI	T1+C1
	55869.4026	0.0024	II	I	T1+C1
	55874.3295	0.0030	II	I	T1+C1
TT Her	56079.4869	0.0001	I	$BVRI$	T1+C1
	56084.5003	0.0004	II	$BVRI$	T1+C1
UX Her	56089.4797	0.0003	II	$BVRI$	T1+C1
	56093.3568	0.0001	II	$BVRI$	T1+C1
LT Her	56050.4343	0.0002	I	BV	T1+C1
	56070.4840	0.0007	II	BV	T1+C1
V878 Her	56077.3202	0.0002	I	$BVRI$	T1+C1
	56082.3525	0.0004	II	$BVRI$	T1+C1
V1097 Her	56111.3994	0.0002	II	$BVRI$	T1+C1
	56112.3004	0.0003	I	$BVRI$	T1+C1
	56112.4819	0.0002	II	$BVRI$	T1+C1
	56113.3827	0.0001	I	$BVRI$	T1+C1
	56114.4646	0.0002	I	$BVRI$	T1+C1
AU Lac	56531.5572	0.0003	I	$BVRI$	T3+C3
AL Leo	56014.3571	0.0001	I	$BVRI$	T1+C1
	56047.2698	0.0003	II	$BVRI$	T1+C1
RR Lep	55953.2674	0.0004	I	BV	T1+C1
V868 Mon	55939.4617	0.0002	I	$BVRI$	T1+C1
	55940.4192	0.0002	II	$BVRI$	T1+C1
	55953.4923	0.0002	I	$BVRI$	T1+C1
V1387 Ori	55898.3965	0.0006	II	BVI	T1+C1
	55904.5730	0.0009	I	$BVRI$	T1+C1
V407 Peg	56156.5656	0.0003	I	$BVRI$	T2+C2
	56175.3593	0.0002	II	$BVRI$	T2+C2
	56176.3065	0.0008	I	$BVRI$	T2+C2
UV Psc	54369.3737	0.0002	I	VR	T1+C2
EX Psc	56243.3327	0.0006	II	$BVRI$	T1+C1
	56245.2136	0.0009	I	$BVRI$	T1+C1
	56245.3587	0.0008	II	$BVRI$	T1+C1
	56246.2260	0.0007	II	$BVRI$	T1+C1
	56246.3705	0.0008	I	$BVRI$	T1+C1
XX Sex	55982.4356	0.0007	II	$BVRI$	T1+C1
	56006.4612	0.0003	I	$BVRI$	T1+C1
	56008.3536	0.0002	II	$BVRI$	T1+C1
HX UMa	55975.4313	0.0002	I	$BVRI$	T1+C1
	55975.6226	0.0003	II	$BVRI$	T1+C1
USNO-A2.0 1125-08352535	56111.3690	0.0004	II	I	T1+C1
	56112.4105	0.0005	II	$BVRI$	T1+C1
	56113.4523	0.0008	II	$BVRI$	T1+C1
	56114.3180	0.0024	I	$BVRI$	T1+C1
	56114.4945	0.0008	II	VRI	T1+C1

Times of minima:

Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
USNO-A2.0 1275-01929590	55818.5318	0.0019	II	$BVRI$	T1+C1
	55819.5033	0.0017	I	$BVRI$	T1+C1
	55833.4731	0.0035	I	$BVRI$	T1+C1
	55835.6033	0.0076	II	$BVRI$	T1+C1
ER Vul	54330.5464	0.0003	I	R	T1+C2

Explanation of the remarks in the table:

T1, T2, T3, C1, C2, and C3 refer to the instrumentation (telescope and CCD camera) used for each case.

Remarks:

The systems GSC 0163-1415, GSC 1137-0293, GSC 3332-0638, and USNO-A2.0 1275-01929590 were recently discovered by Liakos & Niarchos (2011, 2012). GSC 0389-0120, GSC 2816-0743, and USNO-A2.0 1125-08352535 are also new eclipsing binaries discovered by Pojmanski (2002), Zhang et al. (2009), and Mondal et al. (2010), respectively.

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