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**NEW TIMES OF MINIMA OF 36 ECLIPSING BINARY SYSTEMS**

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**Observatory and telescope:**

0.3-m Schmidt-Cassegrain (Kle30) equipped with SBIG-ST7 camera  
0.13-m refractor (BHO13) 0.18-m refractor (BHO18) 0.40-m Newtonian (BHO40)  
0.13-m refractor (Hum13) 0.40-m Newtonian (Hum40) with SBIG-ST10XME and  
STL6303e cameras  
0.14-m refractor (HMB14) 0.20-m refractor (HMB20) 0.28-m Schmidt-Cassegrain  
(HMB28) with SBIG-ST10XME, STL6303e and STL11000 cameras  
0.26-m Maksutov-Cassegrain (Vlh26) 0.28-m Schmidt-Cassegrain (Vlh28) with  
SBIG-ST10XME camera  
0.08-m refractor (Duf08) 0.20-m Newtonian (Duf20) with SBIG-ST10XME camera

**Detector:**

SBIG-ST7 camera, Peltier cooling, KAF-400 chip,  
765×510 pixels<sup>2</sup>  
SBIG-ST10XME camera, Peltier cooling, KAF-3200ME  
chip, 2184 × 1472 pixels<sup>2</sup>  
SBIG-STL6303E camera, Peltier cooling, KAF-6303E  
chip, 3060 × 2040 pixels<sup>2</sup>  
SBIG-STL11000 camera, Peltier cooling, KAI-11000 chip,  
4008 × 2672 pixels<sup>2</sup>

**Method of data reduction:**

Reduction of the CCD frames was made with the following packages: AIP4WIN  
for Kle30; Mira-AP7<sup>1</sup> software for BHO13/BHO18/BHO40 and Hum13/Hum40;  
MaximDL4 for HMB14/HMB20/HMB28, Vlh26/Vlh28 and Duf08/Duf20.

**Method of minimum determination:**

The times of minima were computed with a parabolic fitting, in some cases (Kle30)  
also complemented with a few other methods available in the software *Minima*  
(cf. <http://members.shaw.ca/bob.nelson/software1.htm>).

<sup>1</sup>Mira-AP7 is distributed by Axiom Research Inc.

<b>Times of minima:</b>					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
CL Aur	54512.3138	0.0002	1	V	Vlh28
CL Aur	54522.2690	0.0001	1	V	Kle30
CL Aur	54858.2534	0.0001	1	V	Kle30
CL Aur	55104.6421	0.0004	1	V	Kle30
HP Aur	54522.3559	0.0001	2	V	Kle30
HP Aur	55155.5075	0.0006	2	V	Kle30
IU Aur	54495.3575	0.0002	2	B	Kle30
IU Aur	54496.2615	0.0001	1	B	Kle30
IU Aur	54505.3240	0.0002	1	V	Vlh28
IU Aur	54513.4762	0.0003	2	V	Vlh28
IU Aur	54514.3778	0.0006	1	V	Vlh28
IU Aur	54777.9493	0.0048	2	V	HMB20
IU Aur	54778.8542	0.0027	1	V	HMB20
IU Aur	54782.4751	0.0029	1	V	HMB28
IU Aur	54787.9143	0.0036	1	V	HMB20
IU Aur	54788.8166	0.0033	2	V	HMB20
IU Aur	54817.8060	0.0080	2	V	HMB20
IU Aur	54828.6684	0.0003	2	V	Vlh26
IU Aur	54831.3847	0.0002	1	V	Vlh26
IU Aur	54835.9180	0.0082	2	V	HMB20
IU Aur	54847.6863	0.0043	1	V	HMB20
IU Aur	54851.3094	0.0001	1	V	Kle30
IU Aur	54861.2703	0.0013	2	V	BHO18
IU Aur	55079.5586	0.0001	1	V	Kle30
AS Cam	54897.4283	0.0010	2	V	Duf20
AB Cas	54506.5768	0.0004	1	V	Vlh28
AE Cas	54843.3705	0.0037	1	V	HMB28
AE Cas	54843.3719	0.0022	1	R	HMB28
DN Cas	54838.3062	0.0007	1	V	BHO13
IT Cas	54669.4909	0.0001	2	V	Kle30
IT Cas	55041.4219	0.0006	1	V	Kle30
IV Cas	54506.3577	0.0001	1	V	Vlh28
IV Cas	54508.3542	0.0003	1	V	Vlh28
IV Cas	54509.3526	0.0002	1	V	Vlh28
IV Cas	54828.3764	0.0006	2	V	Vlh26
MU Cas	54749.4874	0.0001	2	V	Kle30
OX Cas	54499.3016	0.0001	2	V	Vlh28
OX Cas	55074.3340	0.0003	2	V	Kle30
PV Cas	54649.4909	0.0001	1	V	Kle30
PV Cas	54762.4303	0.0001	2	V	Vlh26
PV Cas	55077.5149	0.0004	2	V	Kle30
V821 Cas	54663.4449	0.0002	2	B	Kle30
V442 Cyg	55106.3494	0.0007	2	V	Kle30
V961 Cyg	54994.4216	0.0006	1	V	Kle30
V961 Cyg	54995.4417	0.0001	2	V	Kle30
V974 Cyg	54670.3887	0.0005	2	V	Kle30
V974 Cyg	54702.4295	0.0007	2	C	Duf08
V974 Cyg	55077.3493	0.0008	2	V	Kle30

<b>Times of minima:</b>					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
V1136 Cyg	54978.4275	0.0006	2	V	Kle30
CT Her	54643.4882	0.0001	1	V	Vlh26
RX Her	55026.3856	0.0006	2	V	Kle30
AU Lac	54746.4515	0.0001	1	V	Kle30
CO Lac	54614.4697	0.0001	2	V	Kle30
CO Lac	54644.5300	0.0001	1	V	Kle30
CO Lac	54746.3164	0.0001	1	V	Kle30
CO Lac	55015.4415	0.0006	2	V	Kle30
CO Lac	55022.3730	0.0005	1	V	Kle30
UU Lyn	54848.5266	0.0001	1	V	Kle30
UU Lyn	54858.3645	0.0001	1	V	Kle30
FL Lyr	54201.5793	0.0020	2	V	BHO13
FL Lyr	54359.4960	0.0005	1	B	BHO40
FL Lyr	54381.2785	0.0003	1	B	BHO40
IU Per	54502.22271	0.00023	1	$BVR_C I_C$	Kle30
IU Per	54751.6224	0.0003	1	B	Hum40
IU Per	54755.4849	0.0002	2	V	Kle30
IU Per	54759.3359	0.0002	1	V	BHO18
IU Per	54775.61885	0.00015	1	$BVR_C I_C$	Kle30
IU Per	54827.4647	0.0005	2	V	Hum40
IU Per	54830.4665	0.0005	1	V	Hum40
IU Per	54843.3216	0.0003	1	V	BHO18
IU Per	54861.3177	0.0010	1	V	HMB28
AO Ser	54612.5770	0.0001	1	V	Kle30
AO Ser	54614.3375	0.0001	1	V	Kle30
AO Ser	54628.4051	0.0003	1	V	Kle30
AO Ser	54974.4272	0.0008	2	V	Hum40
SV Tau	54491.4415	0.0004	1	V	Kle30
RS Tri	55041.5456	0.0020	2	V	Kle30
BS UMa	54923.5014	0.0004	1	V	Hum40
BS UMa	54942.3756	0.0007	1	V	Hum40
BS UMa	54942.5480	0.0005	2	V	Hum40
BS UMa	54943.4230	0.0007	1	V	Hum40
BS UMa	54943.5971	0.0009	2	V	Hum40
BS UMa	54944.4722	0.0007	1	V	Hum40
DN UMa	54508.4886	0.0005	2	BV	BHO13
DN UMa	54514.5462	0.0014	1	BV	BHO13
DN UMa	54515.4132	0.0013	2	V	BHO13
DN UMa	54944.5637	0.0014	2	V	Hum13
VV UMa	54592.4439	0.0031	1	V	Duf08
VV UMa	54605.5044	0.0004	1	V	Duf08
VV UMa	54862.5833	0.0009	1	V	HMB14
VV UMa	54893.5156	0.0037	1	V	HMB14
VV UMa	54897.6402	0.0020	1	V	HMB14
VV UMa	54910.3563	0.0013	2	V	HMB14
VV UMa	54911.3875	0.0022	1	V	HMB14
VV UMa	54927.5435	0.0030	2	V	Duf08
XZ UMa	54911.5821	0.0016	1	V	HMB14

<b>Times of minima:</b>					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
XZ UMa	54927.4703	0.0008	1	V	Duf08
GSC 143 226	55126.5304	0.0001	1	V	Kle30
GSC 3612 1565	55078.4828	0.0009	2	V	Kle30
GSC 4487 347	54743.4548	0.0001	2	V	Kle30
GSC 4550 1408	54861.4032	0.0027	1	V	HMB28
NSV 26199	55104.4202	0.0002	1	V	Kle30

#### **Explanation of the remarks in the table:**

Observers: Kle = Kleidis, S.; BHO/Hum = Lampens, P. & Van Cauteren, P.; HMB = Hamsch, J.; Vlh = Vanleenhove, M.; Duf = Dufoer, S.

#### **Remarks:**

We use filters  $B, V, R_C$  and  $I_C$  according to the specifications given by Bessell (1995). The monitoring of IU Aur is part of an international campaign organised by Hegedüs et al. (Baja Observatory, Hungary) and is still on-going. AB Cas, IV Cas, CT Her, AO Ser, IU Per, VV UMa and GSC 4550 1408 are members of the class of oEA stars (Mkrichian et al., 2004). In the majority of cases, we used ephemerides based on Nelson's *Eclipsing Binary O-C Files*. In the case of BS UMa, the eclipse type does not follow the convention of the *O-C Gateway* (Paschke & Brát), but our determination is based on the clear distinction between primary and secondary eclipse from light curves obtained during several consecutive hours.

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Nelson, B., *Eclipsing Binary O – C Files*  
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