

# VARIABLE STAR BULLETIN

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No. 23

Oct. 1997

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## Visual and CCD minima of eclipsing binaries during 1995-96.

Following table is summary of minima of eclipsing binary reported from VSOLJ members.

Star	minimum JD hel 2400000+	O-C	n	Obs.	Inst.	
RT And	49685.897 v	-0.008	14		Sny	16L
WZ And	49744.014 v	+0.003	11		Sny	28SC
XZ And	49661.002 v	+0.039	14		Sny	28SC
	50007.117 v	+0.048	27		Sny	28SC
OO Aql	49573.029 v	-0.001	25		Sny	28SC
	49978.970 v	+0.003	15		Sny	20SC
CX Aqr	49573.163 v	-0.002	17		Sny	28SC
DY Aqr	50361.996 v	+0.0077	26		Nga	6R+ST-5(V)
EL Aqr	50420.907 v	-0.0001	43		Nga	6R+ST-5(V)
UU Aqr	50016.050 C	-0.02	41		Kis	25SC+ST-6
	50018.013 C	-0.02	43		Kis	25SC+ST-6
WW Aur	49747.025 v	+0.008	10		Sny	8x3B
ZZ Aur	50459.153 v	+0.014	18		Mhh	20L
SV Cam	49744.101 v	+0.028	13		Sny	20x8B
AB Cas	49691.030 v	+0.043	24		Sny	28SC
IV Cas	50050.006 v	-0.003	18		Sny	28SC
RZ Cas	49288.913 v	+0.019	30		Sny	20x12B
	49694.103 v	+0.020	-		Nmt	-
	49733.040 v	-0.017	19		Sny	28SC
	49992.920 v	+0.025	32		Sny	20x8B
	50018.016 v	+0.021	19		Mhh	6R
	50018.021 v	+0.026	39		Sny	20x8B
	50023.997 v	+0.026	19		Sny	20x8B
	50025.190 v	+0.024	12		Sny	20x8B
	50031.164 v	+0.021	16		Sny	7x5B
	50416.039 v	+0.026	19		Mhh	-
	50439.941 v	+0.026	29		Mhh	6R
	50445.921 v	+0.027	117		Nga	20cmSC+PEP(V)
TV Cas	49596.179 v	+0.025	12		Sny	20x8B
V523 Cas	50431.954 v	+0.031	41		Mhh	20L
V523	50439.9 v	+0.032	51		Mhh	20L
V523 (II)	50440.017 v	+0.032	-		Mhh	20L
U Cep	49580.113 v	+0.061	35		Yad	20x8B
	49600.070 v	+0.074	33		Sny	20x8B
SS Cet	49684.022 v	-0.017	24		Sny	28SC
R CMa	50437.129 v	+0.058	6		Mhh	6R

AK CMi	49810.950 v	+0.003	15	Sny	28SC
U CrB	49820.112 v	+0.055	14	Sny	20x8B
CG Cyg	49979.095 v	+0.033	11	Sny	20SC
V456 Cyg	49606.182 v	+0.028	19	Yad	16L
	49607.077 v	+0.033	12	Sny	28SC
V477 Cyg	49685.916 v	+0.002	19	Sny	10.5R
ZZ Cyg	49855.136 v	-0.026	9	Sny	28SC
AI Dra	49831.171 v	+0.010	9	Sny	20x8B
TW Dra	49820.183 v	+0.023	17	Sny	20x12B
Z Dra	49481.962 v	-0.083	25	Sny	28SC
	49828.111 v	-0.085	24	Sny	28SC, 20SC
BV Eri	50425.993 v	-0.048	58	Nga	6R+ST-5(V)
	50430.059 v	-0.0439	103	Nga	6R+ST-5(V)
TZ Eri	49382.995 v	+0.114	20	Hsk	28SC
	49693.124 v	+0.122	-	Sny	28SC
YY Eri	49719.012 v	+0.050	32	Sny	20x8B
	50049.195 V	+0.058	-	Kis	25SC+ST-6
	50050.159 V	+0.058	-	Kis	25SC+ST-6
	50459.095 v	+0.053	22	Mhh	8R
	50443.994 v	+0.0628	60	Nga	6R+ST-5(V)
AF Gem	49748.010 v	-0.045	14	Sny	28SC
GW Gem	50432.116 v	+0.0142	63	Nga	6R+ST-5(V)
RW Gem	49719.971 v	-0.007	25	Sny	28SC
CT Her	49856.014 v	+0.017	9	Sny	20SC
SZ Her	49834.202 v	-0.016	18	Sny	20SC
	49857.105 v	-0.020	35	Mkn	25L
	49857.106 v	-0.019	28	Sny	28SC
AV Hya	49796.103 v	-0.039	18	Sny	20SC
FO Hya	50189.003 v	+0.023	18	Nga	6R+ST-5(V)
HS Hya	50186.978 v	+0.0135	69	Nga	6R+ST-5(V)
CM Lac	50307.182 v	+0.0001	32	Nga	6R+ST-5(V)
VX Lac	49664.981 v	+0.015	18	Sny	28SC
Y Leo	49719.144 v	-0.006	34	Sny	28SC
delta Lib	49831.085 v	+0.037	13	Sny	8x3B
	50229.017 v	-0.01	18	Nga	7x50B
EW Lyr	49865.132 v	-0.053 *1	-	Yad	16L
	49865.133 v	-0.052 *1	23	Sny	28SC
	49865.137 v	-0.048 *1	48	Mkn	25L
BO Mon	49362.085 v	-0.063	29	Sny	28SC
	49391.010 V	-0.066	25	Kis	10R+ST-6(V)
	49391.011 v	-0.065	28	Sny	28SC
	49689.182 v	-0.073	31	Sny	28SC
	49718.112 v	-0.071	45	Nto	16L
V498 Mon	50095.959 v	-0.0559	235	Nga	6R+ST-5(V)
V855 Oph	50277.062 v	+0.041	60	Nga	6R+ST-5(V)
EQ Ori	49382.958 v	-0.013	27	Sny	28SC
ER Ori	49691.332 v	+0.018	24	Sny	16L, 10.5R
	50438.935 v	+0.0341	75	Nga	6R+ST-5(V)
FL Ori	50095.005 v	+0.019	33	Sny	28SC
beta Per	49693.052 v	+0.038	26	Sny	N
	50039.987 v	+0.029	21	Sny	N
	50126.032 v	+0.055	16	Sny	N
RT Per	49716.009 v	+0.037	15	Sny	16L, 28SC
ST Per	49565.181 v	+0.167	13	Yad	35SC
	49979.089 v	+0.100	25	Sny	28SC
V432 Per	50458.126 v	+0.06	41	Mhh	20L
	50459.126 v	+0.058	33	Mhh	20L
XZ Per	49715.913 v	-0.024	9	Sny	28SC

RS Sct	50311.032 v	+0.006	40	Nga	6R+ST-5(V)
U Sge	49973.123 v	-0.002	22	Sny	20X8B
AM Tau	50451.094 v	-0.307	37	Mhh	20L
RW Tau	49374.983 v	-0.079	22	Hsk	28SC
	49374.985 v	-0.077	37	Sny	28SC
	49599.254 v	-0.084	-	Yad	-
	49696.160 v	-0.087	49	Sny	28SC+16L
	49710.005 v	-0.085	61	Nto	16L
	50031.182 v	-0.094	40	Sny	28SC
	50416.035 v	-0.109	55	Mhh	20L
SV Tau	49719.924 v	-0.007	14	Sny	16L
RV Tri	50446.013 v	-0.012	23	Mhh	20L
V Tri	49730.022 v	-0.005	9	Sny	28SC
X Tri	49285.958 v	-0.002	51	Sny	28SC
	49689.142 v	-0.025	11	Sny	16L
	49691.087 v	-0.023	-	Nto	16L
	50033.066 v	-0.024	28	Mhh	8R
	50338.124 v	-0.028	35	Mkn	25L
	50368.238 v	-0.032	18	Sny	20SC
	50409.047 v	-0.028	49	Mhh	20L
	50445.963 v	-0.03	17	Mhh	20L
TX UMa	50126.142 v	+0.133	13	Sny	20x8B
VV UMa	49747.122 v	-0.029	10	Sny	28SC
	49811.048 v	-0.029	17	Sny	20SC
W UMa	49730.001 v	-0.019	12	Sny	20x8B
	49797.071 v	-0.010	21	Sny	20x8B
	49812.108 v	+0.014	-	Nto	-
XZ UMa	49795.014 v	-0.035	20	Nto	16L
	49861.027 v	-0.028	12	Sny	20SC
RU UMi	49783.081 v	-0.005	10	Sny	20SC
AW Vir	50214.014 v	+0.0178	29	Nga	6R+ST-5(V)
BH Vir	49857.073 v	+0.007	21	Sny	20SC
UW Vir	49861.007 v	-0.027	20	Sny	28SC
BU Vul	49973.040 v	+0.011	10	Sny	20SC

**minimum:** observed on V; Johnson V, v; visual, C; CCD unfiltered

**O-C:** elements from GCVS IV (Samus et al, Moscow 1986) ), unless otherwise mentioned.

\*1 Min.JD hel=2444755.526+1.9487638E (SAC63, )

**n:** number of estimates

**Obs:** abbreviation for observers

Hsk Kenji Hirosawa (Aichi)  
Kis Seiichiro Kiyota (Ibaraki)  
Mkn Nobuhiro Makiguchi (Kanagawa)  
Mhh Hiroyuki Maehara (Saitama)  
Nga Kazuo Nagai (Kanagawa)  
Nmt Takanori Nishimura (Aichi)  
Nto Ryosuke Naito (Aichi)  
Sny Yuji Sekino (Kanagawa)

Yad Masanori Yamada (Ishikawa)

**Inst:** instrument(s) used for observation:

number indicates diameter of mirror or lens.

SCT; schmidt cassegrain telescope, L; reflector, R; refractor,

B; binocular, N: naked eye.

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