



BAV Mitteilungen

BAV-results of observations

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Abstract: *This 77th compilation contains especially the results of visual observations of BAV-members mostly from the years 2012 and 2013. Here we publish altogether 189 minima and maxima of 104 eclipsing binaries and pulsating stars, 29 of them have been observed using CCD-Technique. The data were acquired by 9 observers.*

We introduce 3 minima timings from 3 eclipsing binaries, 2 maxima from 1 RR-Lyrae-Star, 114 maxima and minima from 70 mirastars, 63 maxima and minima from 25 semiregular, longperiod and RV-Tauri-stars and 7 maxima and minima from 5 cataclysmic variables.

The results were acquired by 9 observers in Germany and one in Austria mostly in the years 2012 and 2013. All moments of minima and maxima are heliocentric UTC.

This paper contains only unpublished observations. All the lightcurves with evaluations can be obtained from the office of the BAV for inspection.

Please use the following link for an easy access to all the publications of the BAV including the "Lichtenknecker Database of the BAV": <http://www.bav-astro.de/sfs>.

Table 1 – Eclipsing Binaries

Variable		JDhel. UTC	Observer	O-C	Source	n	Remarks
BV	Dra	min 56156.434	Rätz, K.	0.016	GCVS 2009	15	
AR	Lac	min 55775.425 :	Rätz, K.	-0.094	GCVS 2009	8	
V566	Oph	min 56156.445	s Rätz, K.	-0.013	GCVS 2009	15	

Table 2 – RR_Lyrae-Stars

Variable		JDhel. UTC	Observer	O-C	Source	n	Remarks
RR	Lyr	max 56179.432 :	Strüver, H.	-0.190	GCVS 2009	15	
		max 56183.398	Strüver, H.	-0.192	GCVS 2009	8	

Table 3 – Mirastars

Variable		JDhel	Mag	Observer	n	Rem	PH	Filter	Error
R	And	max 56165	6.9	Rätz, K.	35				
		max 56275 :	6.1	Neumann, J.	12				
		max 56278	6.2	Vohla, F.	34				
W	And	max 56214	8.7	Vohla, F.	28				
RR	And	max 56182	8.9	Schubert, M.	15				
TU	And	max 56195	8.0	Vohla, F.	44				
		max 56200 :	7.9	Schubert, M.	13				
R	Ari	max 56243	8.1	Vohla, F.	27				
R	Aur	max 56350	7.6	Vohla, F.	56				
X	Aur	max 56328	8.4	Vohla, F.	16				
VZ	Aur	max 56362 :	8.2	Vohla, F.	17				
R	Boo	max 56159	7.2	Rätz, K.	24				
		max 56163	7.6	Vohla, F.	54				
X	Cam	max 56026	7.9	Schubert, M.	7				
		max 56170	8.1	Schubert, M.	7				
		min 56230	12.1	Schubert, M.	8				
SU	Cnc	max 56256	10.3	Böhme, D.	12		C	-I	± 5
R	CVn	max 56064	7.3	Neumann, J.	11				
		max 56079	7.4	Schubert, M.	26				
		max 56088	7.7	Vohla, F.	27				
CN	CMi	max 56338	12.4	Böhme, D.	9		C	-I	± 8
U	Cas	max 56265	8.2	Vohla, F.	19				
V	Cas	min 56170	12.8	Vohla, F.	43				
		max 56280	7.5	Vohla, F.	34				
W	Cas	min 56194	11.8	Vohla, F.	86				
V667	Cas	max 56284	9.9	Vohla, F.	24				
S	Cep	min 56149	10.6	Vohla, F.	62				
		max 56377	8.6	Vohla, F.	62				
T	Cep	max 55978	5.75	Rätz, K.	73				
		min 56170	9.6	Vohla, F.	89				
		max 56375	6.3	Vohla, F.	63				
S	CrB	min 56051	12.4	Vohla, F.	75				
		max 56169	6.7	Vohla, F.	65				
V	CrB	max 56064	7.7	Neumann, J.	13				
R	Cyg	max 56095	8.0	Vohla, F.	54				
U	Cyg	max 56193	7.6	Vohla, F.	72				
Z	Cyg	max 56195	8.7	Schubert, M.	16				
RT	Cyg	max 55810	7.0	Winkler, R.	19				
		min 56100	12.3	Vohla, F.	51				

Table 4 – Mirastars (cont.)

Variable			JDhel	Mag	Observer	n	Rem	PH	Filter	Error
RT	Cyg	max	56185	6.6	Rätz, K.	18				
		max	56185	7.5	Vohla, F.	52				
TY	Cyg	max	56386	9.8	Vohla, F.	15				
CN	Cyg	max	56126	9.1	Vohla, F.	38				
		max	56334	9.4	Vohla, F.	12				
chi	Cyg	max	56022	4.9	Vohla, F.	74				
		max	56419	3.75	Vollmann, W.	36		C	o	
R	Dra	max	56135	7.6	Rätz, K.	29				
Y	Dra	max	56231	9.5	Vohla, F.	12				
R	Gem	max	56300	7.4	Vohla, F.	37				
ST	Gem	max	56376	9.9	Vohla, F.	20				
VX	Gem	min	56280	10.6	Böhme, D.	15		C	-I	± 7
ZZ	Gem	min	56271	10.4	Böhme, D.	19		C	-I	± 6
BP	Gem	min	56282	15.1	Böhme, D.	17		C	-I	± 6
CD	Gem	max	56275	11.9	Böhme, D.	17		C	-I	± 9
HV	Gem	max	56278	11.8	Böhme, D.	17		C	-I	± 6
IX	Gem	min	56312	17.4	Böhme, D.	17		C	-I	± 9
S	Her	max	56067	7.5	Vohla, F.	36				
		max	56074	7.0	Neumann, J.	7				
		max	56368	7.6	Vohla, F.	19				
T	Her	min	56096	12.2	Vohla, F.	41				
		max	56171	8.3	Vohla, F.	38				
		min	56229	11.7	Vohla, F.	19				
		max	56328	7.8	Vohla, F.	15				
W	Her	max	56236	8.2	Vohla, F.	32				
RS	Her	max	56350	8.6	Vohla, F.	11				
RU	Her	max	56120	8.0	Vohla, F.	54				
S	Lac	max	56073	8.0	Vohla, F.	15				
		max	56317	8.8	Vohla, F.	12				
R	Leo	max	56024	6.1	Rätz, K.	26				
		max	56030	5.9	Schubert, M.	22				
		max	56335	5.7	Vohla, F.	43				
W	Lyr	max	56114	8.6	Vohla, F.	47				
		max	56322	8.0	Vohla, F.	14				
Y	Mon	max	56227	7.8	Böhme, D.	17		C	-I	± 10
V562	Mon	max	56313	12.05	Böhme, D.	17		C	-I	± 8
V564	Mon	min	56308	16.4	Böhme, D.	14		C	-I	± 9
X	Oph	min	56035	8.6	Vohla, F.	77				
		max	56212	6.7	Vohla, F.	57				
Z	Oph	max	56269	8.4	Vohla, F.	29				
U	Ori	max	56390	6.4	Vohla, F.	32				
GN	Ori	max	56261	12.1	Böhme, D.	8		C	-I	± 5
		min	56310	14.7	Böhme, D.	7		C	-I	± 4
		max	56365	11.6	Böhme, D.	8		C	-I	± 5
R	Per	max	56292	8.5	Vohla, F.	19				
U	Per	max	56209	8.4	Vohla, F.	56				
Y	Per	min	56015	10.0	Vohla, F.	35				
		max	56152	9.0	Vohla, F.	35				
		min	56299	10.3	Vohla, F.	35				
TW	Per	max	56263	10.2	Vohla, F.	23				
		max	56268	9.6	Böhme, D.	13		C	-I	± 7
AI	Per	max	56270	11.6	Böhme, D.	12		C	-I	± 5
R	Tau	max	56262	8.9	Vohla, F.	25				

Table 4 – Mirastars (cont.)

Variable		JDhel	Mag	Observer	n	Rem	PH	Filter	Error
V1214	Tau	min	56328	17.8	Böhme, D.	13		C -I	± 10
V1215	Tau	max	56338	15.3	Böhme, D.	9		C -I	± 8
R	Tri	min	56261	11.7	Vohla, F.	22			
		max	56383	5.8	Vohla, F.	21			
R	UMa	max	56126	7.6	Vohla, F.	55			
S	UMa	max	56174	7.8	Vohla, F.	68			
		max	56396	8.1	Vohla, F.	38			
T	UMa	max	55610	7.6	Vohla, F.	52			
		max	55871	7.4	Vohla, F.	57			
		max	56128	8.8	Vohla, F.	40			
		max	56367	7.4	Vohla, F.	35			
S	UMi	min	56153	11.8	Vohla, F.	48			
		max	56297	8.1	Vohla, F.	87			
T	UMi	min	56104	12.2	Vohla, F.	42			
		max	56182	10.3	Vohla, F.	49			
		min	56269	12.0	Vohla, F.	34			
		max	56385	10.6	Vohla, F.	23			
U	UMi	max	56083	8.4	Vohla, F.	79			
R	Vir	max	56068	6.6	Schubert, M.	12			
		max	56422	7.4	Vohla, F.	16			
V	Vir	max	56384	9.7	Vohla, F.	15			
R	Vul	max	56244	8.7	Vohla, F.	17			

Table 4 – Semiregular, Longperiod and RV-Tauri-Stars

Variable		JDhel	Mag	Observer	n	Rem	PH	Filter	Error
UX	And	min	56296	9.7	Neumann, J.	16			
VX	And	max	56277	7.9	Neumann, J.	15			
T	Ari	min	56260	10.5	Vohla, F.	32			
Z	Aur	max	56262	9.7	Vohla, F.	13			
		min	56318	11.1	Vohla, F.	13			
		max	56382	9.9	Vohla, F.	13			
V	Boo	max	55662	8.6	Winkler, R.	28			
		min	55705	9.2	Winkler, R.	28			
SV	Cas	min	56110	10.3	Vohla, F.	27			
		max	56192	7.2	Vohla, F.	43			
PZ	Cas	min	55192	9.4	Neumann, J.	11			
		max	55226	8.8	Neumann, J.	11			
		min	55537	9.2	Neumann, J.	11			
		max	55751	8.8	Neumann, J.	18			
		min	55947	9.5	Neumann, J.	18			
W	Cyg	max	55401	5.5	Winkler, R.	44			
		min	55631	6.7	Winkler, R.	19			
		max	55662	5.8	Winkler, R.	19			
		max	55843	6.2	Winkler, R.	19			
		min	55868	6.6	Winkler, R.	19			
		min	56120	7.1	Vohla, F.	38			
		max	56205	6.3	Vohla, F.	38			
		min	56289	7.1	Vohla, F.	38			
RS	Cyg	min	55915	9.3	Vohla, F.	59			
		max	56049	7.2	Vohla, F.	27			
		min	56100	7.9	Vohla, F.	27			

Table 5 – Semiregular, Longperiod and RV-Tauri-Stars (cont.)

Variable			JDhel	Mag	Observer	n	Rem	PH	Filter	Error
RS	Cyg	max	56203	7.3	Vohla, F.	27				
RU	Cyg	max	56155	7.95	Vohla, F.	64				
		min	56297	8.75	Vohla, F.	49				
AA	Cyg	max	56312	8.6	Vohla, F.	22				
		min	56423	9.7	Vohla, F.	23				
CH	Cyg	max	56077	7.1	Vohla, F.	203				
S	Dra	min	56167	8.9	Vohla, F.	37				
		max	56248	8.6	Vohla, F.	37				
II eta	Gem	max	56314	14.0	Böhme, D.	17		C	-I	± 7
	Gem	max	56255	3.3	Neumann, J.	11				
		max	56268	3.29	Böhme, D.	6		C	-I	± 5
		min	56340	3.52	Böhme, D.	6		C	-I	± 5
		min	56358	3.7	Neumann, J.	11				
		max	56395	3.25	Böhme, D.	6		C	-I	± 5
		max	56210	6.2	Vohla, F.	38				
X AC	Her	min	56167	8.45	Vohla, F.	23				
		min	56244	8.4	Vohla, F.	23				
g	Her	min	55721	5.5	Vohla, F.	135				
		max	55945	5.1	Vohla, F.	135				
U	Mon	min	55595	7.1	Vohla, F.	12				
		max	55618	5.9	Vohla, F.	12				
		min	55640	7.0	Vohla, F.	12				
AX alpha	Mon Ori	max	56265	6.9	Neumann, J.	20				
		max	56350	0.4	Vollmann, W.	34		C	o	
R	Sct	max	55818	5.1	Winkler, R.	28				
		min	55863	5.5	Winkler, R.	28				
		min	56029	5.65	Sterzinger, P.	19		C	o	± 1
		max	56046	5.15	Sterzinger, P.	19		C	o	± 1
		min	56074	5.65	Sterzinger, P.	19		C	o	± 2
		max	56112	5.00	Sterzinger, P.	19		C	o	± 3
TU Z	Tau UMa	min	56169	5.80	Sterzinger, P.	19		C	o	± 1
		max	56329	8.6	Neumann, J.	17				
Z	UMa	max	56071	7.4	Vohla, F.	68				
		min	56191	9.3	Vohla, F.	57				
		max	56261	7.0	Vohla, F.	43				
		min	56353	9.0	Vohla, F.	48				
RY	UMa	min	56166	7.9	Vohla, F.	81				

Table 5 – Eruptive and CataclysmicVariables

Variable			JDhel	Mag	Observer	n	Rem	PH	Filter	Error
Z	And	max	55931	9.0	Vohla, F.	129				
R	CrB	max	56389	10.9	Vohla, F.	53				
T	CrB	min	56396	10.7	Vohla, F.	33				
SS	Cyg	max	56158	8.3	Vohla, F.	24				
		max	56234	8.3	Vohla, F.	15				
		max	56398	8.2	Vohla, F.	6				
V725	Tau	max	56334	8.6	Neumann, J.	17				

Remarks for Tables 1 to 5

: uncertain
n number of measurements
PH C := ccd-photometrie / blank := visual observation

Error mean error

- 1) ccd-camera Meade DSI Pro 3
- 2) ccd-camera Canon 450D
- 3) photometer SSP5

-l Infrared cut-off filter
o without filter

