



BAV-results of observations: Visual maxima and minima of pulsating and eruptive stars

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Abstract: *In this 97th compilation of BAV results of visual observations of variable stars obtained mostly in the year 2021 are presented, giving 162 maxima and 84 minima of pulsating and eruptive stars.*

We present 84 minima and 162 maxima of pulsating and eruptive stars. The results were acquired by 9 observers in Germany and France, mostly observed in the year 2021. The observations were made at private observatories.

This paper contains only unpublished observations. The types of the variable stars are taken from the GCVS-catalog [3] or observer.

Please use the following link for an easy access to all the publications of the BAV [1] [2].

Explanations to the table

column 1	Variable	designation from the GCVS
column 2		constellation
column 3	Phs	phase: maximum (max) or minimum (min)
column 4	HJD 24+	heliocentric UTC timings of the observed min or max
column 5	U	if uncertain, mark „:“
column 6	Mag	visual magnitude
column 7	Obs	abbreviations, see table at the end of the list
column 8	Type	type of the variable star
column 9	n	number of observations entering this maximum or minimum

Table 2: Times of minima and maxima

Variable	Phs	HJD 24+	U	Mag	Obs	Type	n
W	And	max	59384.0	7.3	VOH	M	31
R	And	max	59136.0	6.6	RCR	M	23
R	And	max	59131.0	6.3	VOH	M	66
TU	And	max	59357.0	8.2	VOH	M	26
VX	And	max	59094.0	7.1	NMN	SRA	13
R	Aql	max	59153.0	6.3	SM	M	18
R	Aql	max	59147.0	6.3	SCB	M	19
R	Aql	min	59027.0	10.8	VOH	M	89
R	Aql	max	59153.0	6.4	VOH	M	61
R	Aql	min	59297.0	10.8	VOH	M	60
RV	Aql	max	59425.0	10.0	VOH	M	25
R	Ari	max	59070.0	8.5	VOH	M	42
T	Ari	min	59109.0	10.3	VOH	M	39
R	Aur	max	59116.0	7.4	VOH	M	97
X	Aur	max	59127.0	8.0	VOH	M	32
X	Aur	max	59305.0	9.0	VOH	M	29
X	Aur	max	59452.0	8.3	VOH	M	18
Z	Aur	max	59135.0	10.3	VOH	SR	47
Z	Aur	min	59195.0	11.2	VOH	SR	40
Z	Aur	max	59228.0	10.1	VOH	SR	19
Z	Aur	min	59271.0	10.7	VOH	SR	17
UV	Aur	max	59210.0	7.9	VOH	M	73
VX	Aur	max	59218.0	8.9	VOH	M	23
V0442	Aur	max	58550.0	7.4	DMT	SR:	22
R	Boo	max	59063.0	7.0	RCR	M	8
R	Boo	max	59295.0	7.1	VOH	M	55
V	Boo	max	59358.0	7.3	SM	SR	10
V	Boo	max	59099.0	7.9	VOH	SR	44
V	Boo	min	59182.0	9.5	VOH	SR	67
V	Boo	max	59368.0	7.8	VOH	SR	85
R	Cam	min	58937.0	12.8	SCB	M	24
R	Cam	max	59066.0	9.2	VOH	M	77
R	Cam	max	59304.0	9.2	VOH	M	44
R	Cam	max	59372.0	9.3	VOH	M	44
T	Cam	max	59199.0	8.1	VOH	M	74
X	Cam	max	59174.0	8.2	VOH	M	50
X	Cam	max	59322.0	8.5	VOH	M	31
WY	Cam	max	58605.0	9.6	SCB	M	15
WY	Cam	max	59018.0	9.5	SCB	M	23
R	Cvn	max	59016.0	6.9	SCB	M	34
R	Cvn	max	59031.0	7.2	VOH	M	101
R	Cvn	min	59200.0	11.9	VOH	M	94
R	Cvn	max	59357.0	9.3	VOH	M	89
R	CMi	max	59202.0	7.8	VOH	M	29
R	Cas	max	59159.0	5.8	SCB	M	25
R	Cas	max	59161.0	5.7	VOH	M	121
T	Cas	min	58464.0	10.8	SCB	M	18
T	Cas	max	59083.0	7.8	VOH	M	184
T	Cas	max	59125.0	7.7	VOH	M	184
U	Cas	max	59314.0	8.1	VOH	M	29
V	Cas	min	59151.0	12.2	VOH	M	71
V	Cas	max	59260.0	7.5	VOH	M	69
W	Cas	max	59192.0	8.8	VOH	M	142
SV	Cas	max	58862.0	7.8	VOH	SR	98
WZ	Cas	max	58536.0	7.0	SCB	SRB	25
WZ	Cas	max	58909.0	6.7	SCB	SRB	37
PY	Cas	max	58987.0	10.1	NMN	SR	5
PY	Cas	min	59032.0	10.6	NMN	SR	9
V0667	Cas	max	59427.0	9.9	VOH	M	35

Variable	Phs	HJD 24+	U	Mag	Obs	Type	n
V1391	Cas	max	59073.0		11.2	VOH N	13
T	Cen	min	59314.0		7.3	SM SR	15
T	Cen	max	59359.0		6.0	SM SR	9
S	Cep	min	58531.0		9.9	SCB M	19
S	Cep	min	58980.0		9.6	SCB M	38
S	Cep	min	58994.0		9.7	VOH M	197
S	Cep	max	59278.0		6.9	VOH M	197
T	Cep	max	58641.0		6.7	SCB M	31
T	Cep	max	59006.0		6.5	SCB M	48
T	Cep	max	59014.0		6.3	RCR M	48
T	Cep	max	59001.0		6.6	VOH M	175
T	Cep	min	59177.0		10.2	VOH M	125
W	Cep	max	58918.0		7.2	SCB SRC	45
W	Cep	min	59119.0		7.7	VOH SRC	132
W	Cep	max	59273.0		7.2	VOH SRC	92
MY	Cep	max	59019.0		3.6	VOH SRC:	335
PQ	Cep	min	58904.0		11.0	SCB M	25
PQ	Cep	max	59138.0		8.5	VOH M	174
OMI	Cet	max	58776.0		2.6	SCB M	44
OMI	Cet	max	59112.0		3.1	VOH M	30
OMI	Cet	max	59112.0		3.2	SM	20
X	Cnc	min	58577.50		7.5	DMT SRB	8
S	CrB	min	59311.0		13.1	VOH M	76
S	CrB	max	58672.0		8.4	DMT M	9
RR	CrB	max	59248.0		7.2	VOH SRB	88
R	Cyg	max	59108.0		7.3	VOH M	40
U	Cyg	min	58762.0		11.5	VOH M	131
U	Cyg	max	58996.0		7.6	VOH M	130
U	Cyg	min	59240.0		11.5	VOH M	123
W	Cyg	max	59244.0		5.8	VOH SRB	50
W	Cyg	min	59312.0		6.5	VOH SRB	50
Z	Cyg	max	59137.0		8.5	VOH M	36
Z	Cyg	max	59374.0		8.8	VOH M	42
RS	Cyg	max	59039.0		7.1	VOH SRA	132
RS	Cyg	min	59183.0		9.5	VOH SRA	72
RT	Cyg	max	59064.0		7.9	VOH M	65
RT	Cyg	max	59229.0		6.9	VOH M	48
RT	Cyg	max	59427.0		7.7	VOH M	42
RU	Cyg	max	59244.0		8.0	VOH SRA	79
TY	Cyg	max	59137.0		9.8	VOH M	41
AA	Cyg	max	59017.0		8.6	VOH SRB	96
AA	Cyg	min	59141.0		9.8	VOH SRB	47
AA	Cyg	max	59209.0		8.9	VOH SRB	22
AA	Cyg	min	59311.0		10.1	VOH SRB	43
AF	Cyg	max	58386.0		6.6	DMT SRB	41
AF	Cyg	min	58690.0		8.5	DMT SRB	12
AF	Cyg	max	58744.0		6.8	DMT SRB	20
AF	Cyg	max	59113.0	:	6.6	SM SRB	33
AF	Cyg	max	59284.0		6.4	SM SRB	10
AF	Cyg	min	59363.0		7.3	SM SRB	10
AF	Cyg	min	59034.0		8.0	VOH SRB	93
AF	Cyg	max	59111.0		7.0	VOH SRB	65
AF	Cyg	min	59187.0		7.6	VOH SRB	61
AF	Cyg	max	59299.0		6.6	VOH SRB	67
AF	Cyg	min	59379.0		7.8	VOH SRB	53
BF	Cyg	min	58991.0		10.4	VOH ZAND	114
BG	Cyg	max	59387.0		9.1	VOH M	40
CH	Cyg	max	59064.0		7.4	VOH ZAND+SR	209
CHI	Cyg	max	59292.0		4.7	VOH	58
CN	Cyg	max	59096.0		9.3	VOH M	49
CN	Cyg	max	59302.0		9.4	VOH M	33
KHI	Cyg	max	59288.0		4.7	SM M	15
R	Del	max	59218.0		8.5	VOH M	7
R	Dra	max	59087.0		6.5	VOH M	96
R	Dra	max	59344.0		7.5	VOH M	42

Variable	Phs	HJD 24+	U	Mag	Obs	Type	n
S	Dra	max	59104.0		8.6	VOH SRB	119
S	Dra	min	59196.0		9.1	VOH SRB	119
S	Dra	max	59291.0		8.6	VOH SRB	119
Y	Dra	max	59190.0		8.8	VOH M	42
SV	Dra	max	59125.0		9.3	VOH M	23
SV	Dra	max	59384.0		9.3	VOH M	21
AH	Dra	min	58968.0		8.4	SCB SRB	17
AP	Dra	max	59099.0		11.1	VOH M:	12
AP	Dra	max	59382.0		11.0	VOH M:	14
CZ	Dra	max	59312.0		10.5	VOH M	34
R	Gem	max	59283.0		6.6	VOH M	22
SS	Gem	min	59204.0		9.8	VOH RVA	18
ST	Gem	max	59317.0		9.8	VOH M	25
ZZ	Gem	max	59230.0		9.3	VOH M	19
ETA	Gem	min	59177.0		3.5	VOH SRA+EA	58
S	Her	max	59149.0		7.8	VOH M	40
T	Her	max	59128.0		8.4	VOH M	33
T	Her	max	59307.0		8.4	VOH M	40
U	Her	min	59000.0		12.3	VOH M	82
U	Her	max	59162.0		7.7	VOH M	65
W	Her	max	59333.0		8.0	VOH M	52
X	Her	max	59359.0		5.8	SM SRB	6
RS	Her	max	59424.0		7.8	VOH M	50
SX	Her	max	58942.0		7.8	NMN SRD	9
SX	Her	min	58966.0		8.3	NMN SRD	7
SX	Her	max	59044.0		7.8	NMN SRD	7
SX	Her	min	59310.0		9.4	SM SRD	9
SX	Her	min	59325.0		8.8	VOH SRD	35
UU	Her	min	58947.0		9.2	NMN SRD	11
UU	Her	max	58976.0		8.9	NMN SRD	11
UU	Her	max	59056.0		8.9	NMN SRD	4
UU	Her	min	58950.0		9.3	VOH SRD	27
AC	Her	min	59029.0		8.4	SM RVA	12
AC	Her	min	59069.0		7.9	SM RVA	10
AC	Her	min	59104.0		8.2	SM RVA	5
AC	Her	min	59179.0		8.2	SM RVA	12
AC	Her	min	59325.0		8.2	SM RVA	15
R	Hya	min	59295.0		8.0	SM M	17
V	Hya	min	59275.0	:	8.3	SM SRA	20
RT	Hya	min	59172.0		8.4	SM SRB	19
RT	Hya	min	59273.0		8.2	SM SRB	22
RT	Hya	max	59325.0		7.1	SM SRB	8
S	Lac	max	59433.0		7.8	VOH M	27
R	Leo	max	58528.0		5.5	DMT M	22
R	Leo	max	58936.0		7.9	RCR M	20
R	Leo	max	59151.0		5.7	VOH M	47
R	Leo	min	59326.0		10.4	VOH M	47
S	Leo	max	59306.0		10.7	VOH M	17
R	Lyn	max	59110.0		7.9	VOH M	48
W	Lyr	max	59234.0		8.0	VOH M	29
W	Lyr	min	59331.0		12.8	VOH M	53
W	Lyr	max	59432.0		8.4	VOH M	67
RR	Lyr	max	59379.57			SPI RRAB	10
U	Mon	min	59262.0	:	7.3	SM RVB	10
U	Mon	min	59303.0		6.1	SM RVB	17
X	Mon	max	59279.0		7.2	SM SRA	25
X	Oph	max	59181.0		6.6	VOH M	77
Z	Oph	max	59039.0		8.3	VOH M	74
U	Ori	min	59221.0		11.9	VOH M	49
Y	Ori	max	59172.0		9.9	VOH M	20
BK	Ori	max	59207.0		10.2	VOH M	38

Variable	Phs	HJD 24+	U	Mag	Obs	Type	n
ALF	Ori	min	58885.0		1.7	SCB SRC	55
ALF	Ori	min	59271.0		0.6	BR	14
U	Per	max	59146.0		8.5	VOH M	114
U	Per	min	59273.0		11.0	VOH M	97
Y	Per	min	59088.0		9.7	VOH M	142
Y	Per	max	59193.0		9.3	VOH M	142
Y	Per	min	59315.0		9.9	VOH M	142
V1112	Per	max	59186.0		8.2	VOH NA	12
R	Sct	min	58725.0		7.6	DMT RVA!	16
R	Ser	max	58637.0		6.6	DMT M!	10
R	Sge	min	59067.0		9.8	SM RVB	10
R	Sge	min	59102.0		10.1	SM RVB	5
R	Sge	min	59173.0		10.1	SM RVB	10
R	Sge	min	59314.0	:	10.1	SM RVB	8
R	Sge	min	59384.0		10.1	SM RVB	11
RR	Sco	max	59428.0		5.6	SM M	9
RV	Sco	max	59328.58			SM DCEP	33
R	Sct	max	59083.0	:	5.3	SM RVA	9
R	Sct	min	59143.0		8.9	SM RVA	17
R	Sct	min	59286.0		7.0	SM RVA	14
R	Sct	min	59348.0		6.0	SM RVA	15
R	Sct	min	59146.0		8.5	VOH RVA	42
R	Ser	max	59348.0		6.5	VOH M	55
R	Ser	max	59352.0		6.1	SM M	8
R	Tau	max	59196.0		7.8	VOH M	43
S	Tau	max	59112.0		10.7	VOH M	18
V	Tau	max	59256.0		9.3	VOH M	23
R	Tri	min	59191.0		11.0	VOH M	85
R	UMa	max	59140.0		7.7	VOH M	72
R	UMa	min	59320.0		12.6	VOH M	81
S	UMa	max	59131.0		7.9	VOH M	80
S	UMa	min	59243.0		11.7	VOH M	70
S	UMa	max	59362.0		8.1	VOH M	61
T	UMa	max	59207.0		6.8	VOH M	71
Z	UMa	max	59113.0	:	6.7	SWZ SRB	23
Z	UMa	max	59107.0		6.9	SCB SRB	16
Z	UMa	max	59293.0		6.0	SWZ SRB	34
Z	UMa	max	59123.0		6.9	VOH SRB	72
Z	UMa	min	59227.0		9.5	VOH SRB	67
Z	UMa	max	59288.0		6.5	VOH SRB	65
RS	UMa	max	59247.0		9.3	VOH M	47
RY	UMa	max	59132.0		7.1	VOH SRB	177
RY	UMa	min	59247.0		8.0	VOH SRB	177
S	UMi	max	59206.0		8.9	VOH M	121
S	UMi	min	59361.0		11.6	VOH M	65
T	UMi	max	59188.0		10.7	VOH M	35
T	UMi	min	59289.0		11.1	VOH M	47
U	UMi	min	59195.0		11.4	VOH M	115
U	UMi	max	59359.0		7.6	VOH M	73
R	Vir	max	58985.0		6.4	SCB M	22
R	Vir	max	59269.0	:	6.7	SM M	13
R	Vir	max	59269.0		6.9	VOH M	32
R	Vul	max	59124.0		7.6	VOH M	16
R	Vul	max	59410.0		8.0	VOH M	18
V	Vul	min	59057.0		9.1	SM RVA	13
V	Vul	min	59167.0		8.9	SM RVA	11
V	Vul	min	59283.0	:	9.4	SM RVA	13
V	Vul	min	59360.0		9.1	SM RVA	13
VZ	Vul	max	59112.0		9.4	VOH CST:	113
BD	Vul	max	59387.0		9.8	VOH M	31

Observer

BR	Braune, Werner	Berlin	
DMT	Dumont, Michel	Bailleau l'Eveque	F
NMN	Neumann, Joerg	Leipzig	
RCR	Raetz, Kerstin	Herges-Hallenberg	
SCB	Schubert, Matthias	Stralsund	
SM	Sturm, Arthur	Saarburg	
SPI	Spiess, Wolfgang	Ertingen	
SWZ	Schwarz, Bernd	Laubach	
VOH	Vohla, Frank	Altenburg	

Remark:

The type of the variable is marked by „!“ if specified by the observer, else it is taken from the GCVS Catalog [3]. Uncertain classifications are marked by „.“.

References

- [1] BAV Services for Scientists, 2022,
<https://www.bav-astro.eu/index.php/veroeffentlichungen/service-for-scientists/bav-journal>
- [2] Lichtenknecker Database of the BAV, <http://www.bav-astro.de/LkDB/index.php/>
- [3] Samus N.N., Kazarovets E.V., Durlevich O.V., Kireeva N.N., Pastukhova E.N.,
General Catalogue of Variable Stars: Version GCVS 5.1, Astronomy Reports, 2017, vol. 61, No. 1,
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