KG
11366
211

1926phae.proj.1213w

Ida E. Woods
Dec Book 35
Discussion of Suspected New
Especially Positive Variables.

Long Period Variables
for
Dr. B. Gerasimovič
Page 70

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KB11366 .011

AM stopped Feb. 1925
Bruce in Peru 1896

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Bh 35

Provisional Index

MW

Regions 1653-28 Vars.

Map of Sky 3-60 Var No. 1 page 60 022752

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Harvard College Observatory

Ida E. Woods.

Book No. 35

Examination and Discussion of Interesting Objects found by I. E. W.

Suspected Variables.

Especially, Measures of Positions.

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AG 11366.211

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Variable No. 1

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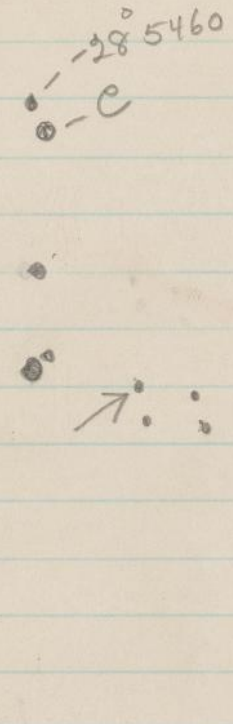
1926phae.proj.1213w

16

Continued

Regin 16 53 −28 Variable No. 6.

Found Jan. 2, 1926, on M7 Plates, Bks. 32, p. 136



glass up

a precedes b

B15373

	CPD	1875		Magn.
a	−28° 5454	16 47 3.3	−28 12.5	9.8
b	5456	16 47 14.8	−28 29.9	10.0
c	5459	16 47 44.8	−28 7.5	9.0
Orient by:	−28 5511	16 46 25.5	−28 45.1	9.0
	−28 5512	16 46 25.5	−28 54.4	8.8

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1926phae.proj.121sw

film of Position measured, A 10052

meas.	Var.	7.60	17.00	x * Var.	y - Var.	x x 4	sec δ	
m m paper March 24, 1926	a	13.43	21.88	+5.83	+4.88	23.32	1.135	26.46820
	b	10.58	3.95	+2.98	-13.05	11.92	1.138	13.56496
	c	4.30	26.92	-3.30	+9.92	13.20	1.134	14.96880

a	16 47	3.3	-28	12.5
		26.5		4.9
	16 47	29.8	-28	17.4
b	16 47	14.8	-28	29.9
		13.6		13.0
	16 47	28.4	-28	16.9
c	16 47	44.8	-28	7.5
		15.0		9.9
	16 47	29.8	-28	17.4

firma	16 47	29.8	-28	17.4	+0.5	-0.2
b		28.4		16.9	-0.9	+0.3
c		29.8		17.4	+0.5	-0.2
		1.0		.7		
Mean Pos. 1875	16 47	29.3	-28	17.2		

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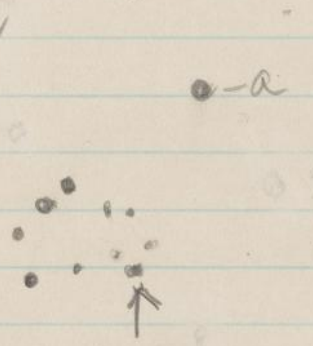
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1926phae.proj.1213W

20. Confirmed

Region 16 53-28 Variable No. 8.

Found January 2, 1926, on MF plates, Bb. 32, f. 138



a slightly precedes b
b " " " var

b should be sketched a little further South

B15373

a	-26	5760	16	48	3.1	-26 33.6	8.8
b	-26	5761	16	48	4.3	-26 57.5	9.0
c	-26	5764	16	48	48.6	-26 32.4	9.4

Orient by: — -27 5511 16 46 25.5 -27 45.1 9.0
-27 5512 16 46 25.5 -27 54.4 8.8

Z.C. Prec. 1 yr. 25 yrs.

α	3.7110	92.7750
δ	6.1796	154.4900 = 2 34.5-

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1926phae.proj.1216w

c

MF 9648 12.8

a 5708 [16.0

Mean Position a 10052

	Var. 8.50	19.00	x-Var.	y-Var.	x x 4	cos δ	
a	11.00	25.72	+2.50	+6.72	10.00	1.118	11.18000
b	9.80	1.44	+1.40	-17.56	5.60	1.122	6.28320
c	0.52	27.37	-7.98	+8.37	31.92	1.118	35.68656

a 16 48 3.1 -26 33.6
11.2 6.7
16 48 · 14.3 -26 · 40.3

b 16 48 4.3 -26 57.5
4.9 17.6
16 48 · 9.2 -26 · 39.9

c 16 48 48.6 -26 32.4
35.7 8.4
16 48 · 12.9 -26 · 40.8

from a	16 48 · 14.3	-26 40.3	+1.7	0.0
b	48 · 10.6	-26 39.9	-2.0	+0.4
c	12.9	40.8	+0.3	-0.5
	7.8	1.0		
Mean Pos. 1875	16 48 · 12.6	-26 40.3		
	1 32.8	2.6		
1900	16 49 · 45.4	-26 42.9		

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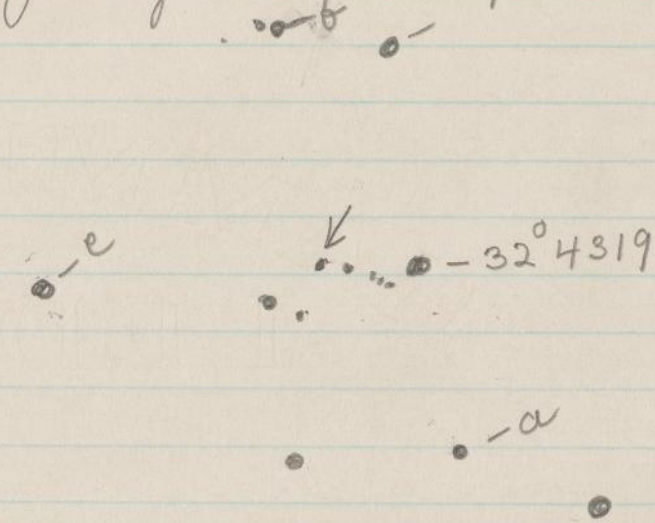
1926phae.proj.1213W

26

Confirmed

Regim 16 53 -28 Variable No. 111.

Found January 4, 1926, on MF plates, Bk. 32, p. 141.



Var. is n. of c
Var prec. b

B 15373

a	-32 4318	16 53 22.8	-32 34.5	9.8
b	-32 4322	16 53 52.8	-32 14.1	10.0
c	-32 4325	16 54 38.8	-32 29.0	9.2
Orient by:	-31 4556	16 56 59.8	-31 44.9	10.0
	-32 4324	16 56 59.8	-32 33.7	9.8

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Mean Positions, A7289

Var	13.00	13.00	x-Var	y-Var	x×4	sec δ	
a	18.38	6.30	+5.38	−6.70	21.52	1.187	25.5~~3237~~
b	11.97	27.18	−1.03	+14.18	4.12	1.182	4.86984
c	1.95	11.96	−11.05	−1.04	44.20	1.186	52.42120

a 16 53 22.8 −32 34.5
25.5 6.7
16 53 48.3 −32 27.8

b 16 53 52.8 −32 14.1
4.9 14.2
16 53 47.9 −32 28.3

c 16 54 38.8 −32 29.0
52.4 1.0
16 53 46.4 −32 28.0

from a	16	53 48.3	−32 27.8	+0.8	+0.2	
b		53 47.9	−32 28.3	+0.4	−0.3	
c		53 46.4	−32 28.0	−1.1	0.0	
		226		1		
Mean Pos. 1875	16	53 47.5	−32 28.0			

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1926phae.proj.121SW

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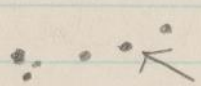
Confirmed

Region 16 53-28 Variable No. 22

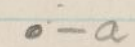
Found January 11, 1926, on MF plates, Bk. 32, f. 154



Var. slightly preceds a
a preceds b



c slightly south of b



B 20445

a	-23 6460	16 56 6.5	-23 40.1	10.1	
b	-23 6462	16 56 14.5	-23 26.2	8.2	
c	-23 6464	16 56 42.5	-23 26.7	9.8	
Print by: —	-23 6467	16 57 32.0	-23 9.5	9.4	
	-23 6468	16 57 32.0	-23 54.1	9.5	

Z.C. Prec.

	1 yr.	25 yr.
α	3.6331	90.8275
δ	5.5203	138.0075 = 2 18.0

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1926phae.proj.121GW

C

MT 8723 13.6

a 8419 15.2

Position measured, a 7363

Meas. March 17, 1926 — Images distorted — may be discordant

film				x-Var.	y-Var.	x x 4		
	Var.	12.00	12.00					
mt	a	11.58	6.32	-0.42	-5.68	1.68	1.092	1.83456
	b	10.00	20.48	-2.00	+8.48	8.00	1.090	8.72000
	c	3.48	20.15	-8.52	+8.15	34.08	1.090	37.14720

a 16 56 6.5 -23 40.1
1.8 5.7
16 56 4.7 -23 34.4

b 16 56 14.5 -23 26.2
8.7 8.5
16 56 5.8 -23 34.7

c 16 56 42.5 -23 26.7
37.1 8.2
16 56 5.4 -23 34.9

firm	a	16	56	4.7	-23 34.4	-0.6 +0.3
	b	16	56	5.8	-23 34.7	+0.5 0.0
	c		56	5.4	-23 34.9	+0.1 -0.2
			9		20	
Mean Pos. 1875		16	56	5.3	-23 34.7	
			1	30.8	2.3	
1900		16	57	36.1	-23 37.0	✓

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Continued from Bk. 43, p. 24

New Variable

Found November 11, 1926, Bk. 43, p. 24

" on AM 2155 — Map of Sky Reg. 47, h 3 -60°

Identified by Wda

→ CPD -52° 309 2 26 7.8 (1875) -52 15.8 9.0 V

0 51.1 V 6.7 V

2 26 58.9 -52 9.1 V (1900)

ZC Prec. 1 yr. $\alpha = 2^s.0440$ $\delta = 16''.1139$

25 25

$51^s.10$ $40''.8475 = 6' 42''.8$

H.D. 15774 2 27.0 -52 9 K5

D.S. ✓ NB CPD 9 mag

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1926phae.proj.121cw

Magns. Compared with Seq. R Hydrae $2^h 50.6$ $-50° 18'$
Provisional Magns. Bk 44, p. 66 Mkd on B 48747

		Corr.	Corr. for 1922
e	8.82		
d	8.97	+0.13	= 9.18
d'	10.05	+0.22	= 10.27
f	10.18	+0.22	= 10.40
g	10.50	+0.22	= 10.72
h	10.82	+0.23	= 11.05

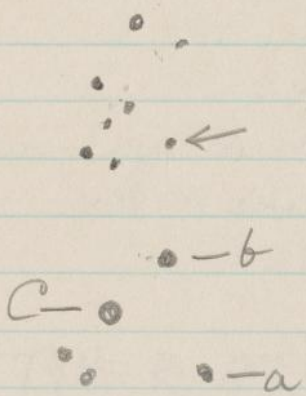
Based on these Magns. for Var. est.:

Am	3279	9.9 or 10.0	Dec. 8, 1904
	6490	10.5 or 10.6	
	2155	10.3	
	2450	10.7 or 10.8	Jan. 14, 1904

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1926phae.proj.1213w

Oriented by
−47 4030 10.8
10 8 59.7 −47 13.2
and −47 4029 10.0
10 8 59.7 −47 49.3



				x-Var	y-Var	
a	−47 4049	10.8	~~0.45~~	0.45	6.0	V / N
b	−47 4051	9.6	~~0~~	0.05	3.3	V / N
c	−47 4056	8.1	very large image	1.78	4.6	V / N

a 10 10 18.7 −47 23.7

b 10 10 20.7 −47 20.7

c 10 10 31.7 −47 22.2

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Friday, December 21, 1928.

Long Period Variables — Study of Maxima
for Dr. Gerasimovič

General Instructions:
See 79 Pt 2 Use Max. having Wt. 4 or 5 and Max. Mag.
Use 50, 70d etc days (as given by Prof. G.) each
side of Max.
Get out AC, I, MC plates where possible
included in these dates.
→ Get sequence from print if possible = Visual Seq.
But get photographic magnitudes for these stars

Plot observations
Later Eight (8) Maxima, if covered by plates, are
sufficient

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1926phae.proj.1213w

Index, Cont. page 174 1922 Corr. included = ✓

031401 page X Ceti

72 Dates of Maxima

73 Provisional Sequence ✓

74 Observations at Maxima

021143 W Andromedae

80 Dates of Maxima

81 Provisional Sequence, Plot & Magns ✓

82 Comparison Sequence

84 etc Observations at Maxima

053531 U Aurigae

98 Dates of Maxima

99 Provisional Sequence, Magns. ✓

101 " " Plot.

100 Comparison Sequence, Magns.

102 etc. Observations at Maxima

060450 X Aurigae

114, 136 Dates of Maxima

115 Provisional Sequence, Magns. & Plot ✓

116 Comparison Sequence, Magns.

118 etc. Observations at Maxima

043274 X Canelof.

146, 161 Dates of Maxima

147 Provisional Sequence Magn. & Plot ✓

148 Comparison " Magns.

150 etc. Observations at Max.

004047 U Cassiopeiae

162 Dates of Maxima

163 Sequence Magns. & Plot ✓

164 Comparison Seq. Magns.

166 etc. Observations at Max.

Continued, page 174

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1926phae.proj.1213W

72

AM stopped Feb 1925

X Ceti M. 72 to 79

03 01 X Ceti BD. -1°475 = DC 20646 Var Mb

allow ± 50 days

am

2m H A 79 only 4 Max

		J.D.	Wr	Max		
ac sam	8.3	16778	4	16728 to 16828	Sept 4 1904 to	Dec 13 1904
ac sam	9.0	18008	4	17958 18058	Jan 17 1908 to	Apr 26 1908
ac no am	8.6	18726	4	18676 18776	Jan 4 1910	Apr 14 1910
*ac no am	8.9	19071	5	19021 19121	Dec 15 1910	Mar 25 1911

* only 1 during interval

-1°475 3 12 2.5 -1 36.0 9.1 (1855)

Comparison Seq. Carte 3 -2,5, MC 4081, Bk 85, f. 8

New dates for X Ceti

from Prof. Gerasimovic, Dec. 24.

No B Ep ac sam	23448	23398 to 23498	Dec. 9 1922	Mar 19 1923	
1923 Aug 3	23685	23585 to 23685	June 14	Sept 22 1923	
1924 Jan 24	3809	3759	3859	Dec 5 1923	Mar 14 1924
1925 Jan 2	4153	4103	4203	Nov 13 1924 to	Feb 21 1925
	4525	4475	4575	Nov 20 1925	Feb 28 1926
	4871	4821	4921	Nov 1 1926	Feb 9 1927

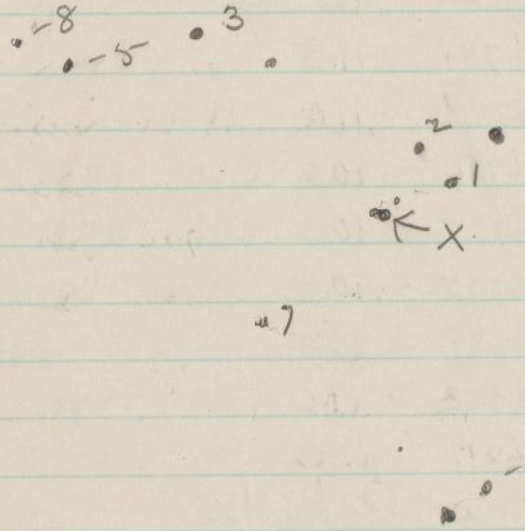
from Prof. Gerasimovic Dec. 29

Feb. 19 1921	2422740	22690 to 22790	Dec 31 1920 to	Apr. 10 1921	
Aug 11 1921	2913	22863 to 22963	June 22, 1921 to	Sept 30 1921	
Feb 4 1922	3090	23040	23140	Dec 16 1921	Mar 26 1922
July 30 1922	3266	23216	23316	June 10, 1922	Sept 18 1922

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1926phae.proj.1215W

Provisional Sequence



B 11955

Mlsd also on AM 3046

These plates show variation.

Mlsd with Comp Seq. (with Centre of Plate between)
B 28610 four images
30964 good " for Comparison
((Compared with Sequence and also by grades)

Cor for 1922	Cor.	Est. Magn.	To Correct for 1922					Pht.	Sf.	DC
10.0	+20	1	9.8	-1	473	3 11 28.8	-1 33.3	9.3	10.8	G5 20601
10.3	22	2	10.1	-1	474	11 40.2	-1 29.0	9.5		
10.6	22	3	10.4	-1	476	12 56.2	-1 24.8	9.5		
10.9	23	4	10.7	-1	478	14 12.7	-1 36.0	9.3		
11.2	24	5	11.0							
11.5	24	6	11.3							
12.1	24	7	11.9							
12.3	24	8	12.1							

A

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1926phae.proj.1213w

ac & am Plates near 1904 Max. See p. 72

ac = c am = m

ac Plates streaked & poor

	Date 1904	J.D.	Corr. used Est. Mag.
m 3046	Sept 17	16741	11.5
m 3064	" 20	16744	11.0
c 5349	Oct 7	6761	10.2
c 5404	21	6775	10.3
m 3165	31	6785	10.3
m 3190	Nov 4	6789	10.5
c 5556	18	6803	11.0
c 5609	26	6811	11.3
m 3275	Dec 7	6822	Perhaps 12.2
c 5686	8	6823	12.0
c 5695	9	6824	12.1
c 5775	28	6843	12.7 or fainter

Also B

B 35068	Oct 12	6766	10.2
35104	" 15	6769	9.8
35282	Nov 28		Ft Too poor
35401	Dec 12		Too poor

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1926phae.proj.1216w

Near 1908 Max

Corr. Magn. used

am 5288 Too fon
ac 9137 Faint
9213 Jan. 30 7971 11.2
9221 " 31 7972 11.1
9231 Poor
9275 Poor
9302 Feb 29 8001 9.8

Near Max 1910 (Jan)
ac 11385 Feb. 14, 1910
No am

Near Max 1910 (Dec)
ac 12183 Dec 8 1910 Too early
12207 Dec 12 " "
12299 Jan 18, 1911
Find am exchange

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1926phae.proj.1213w

Corr. Magn

190 1922 Dec 9 etc

1922 June 14 etc

1923 Dec 5 etc Mar 14 1924

am 16497	Dec 28 1923	11.5		2423782
16515	Jan 2 1924	11.4		3787
16521	" 3 "	Poor		3788
16549	" 9 "	11.2'		3794
16576	" 17 "	11.1	Poor	3802
ac 25112	Jan. 30 "	cl L^2		
am 16601	Feb. 2 "	11.0		3818

Nov 13 1924 etc

am 16643	Nov. 27	faint	4117
16645	" 28		4118
16656	Dec. 14	10.9	4134
16700	Jan 17	10.2	4168

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1926phae.proj.12150

Nov 20 1925 to Feb 28 1926

Nov 1 1926 to Feb 9 1927

Dec 31 1920 to April 10 1921

AC	23245	Jan 8 1921	22698	11.9
	23304	" 19 "	2709	Poor
	23384	" 25 "	2715	11.5
	23382	Feb 1 "	2722	11.1
	23423	" 12 "	2733	10.7

No AM
No B

June 22, 1921 to Sept 30 1921

AC	23983	Aug 19 1921	22921	Poor (Van Ft)
	24038	" 29 "	2931	Poor
	24136	Sept 23 "	2956	11.9 (?)
	24216	Oct 8 "	2971	<11.6

No AM
No B

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1926phae.proj.1213w

Dec 16 1921 to Mar 26, 1922

AC 24528 Ar Probably fainter than 6. Too poor to estimate

No AM

No B

June 10 1922 to Sept 18 1922

No AC

AM 16050 . abmt 11.0 Poor

No B

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1926phae.proj.1213w

80 W Andromedæ +45° pp. 80 to 97

Dates of Maxima

021143a W Andromedae Dm +43 461a

HA 79, P12, p.98 allow 100 days + and -

	Magn.	J.D.	Wt	allowing 100 d	
Dec 15 1899 (1)	7.6	15004	5	14904 to 15104	1899 Sept 6 to 1900 Mar 25
May 27 1905 (2)	6.9	16993	4	16893 to 17093	1905 Feb 16 to Sept 4
	no Magn	18548	4		
Oct 13 1910 (3)	7.7	18958	5	18858 to 19058	1910 July 5 to 1911 Jan 21
Nov 7 1911 (4)	7.2	19348	5	19248 to 19448	1911 July 30 to 1912 Feb 15
Dec 6 1912 (5)	8.0	19743	5	19643 to 19843	1912 Aug 28 - 1913 Mar 16
Jan 9 1914 (6)	7.3	20142	5	20042 to 20242	1913 Oct 1 - 1914 Apr. 19
Feb 4 1915 (7)	6.9	20533	5	20433 to 20633	1914 Oct 27 - 1915 May 15
Mar 25 1916 (8)	8.4	20948	5	20848 to 21048	1915 Dec 16 - 1916 July 3
Apr. 10 1917 (9)	7.5	21329	5	21229 to 21429	1916 Dec 31 - 1917 July 19
May 29 1918 (10)	8.0	21743	4	21643 to 21843	1918 Feb 18 - 1918 Sept 6
July 8 1919 (11)	7.6	22148	4	22048 to 22248	1919 Mar 30 - 1919 Oct. 16
Aug 12 1920 (12)	7.6	22549	4	22449 to 22649	1920 May 4 - 1920 Nov 20

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1926phae.proj.12160

W And

Var. See print, Mkd AC 505 I 29572

Conf. Seq. 2 0 +46 MC 6431 MC 7282

Magn. Bks. 10:39 I 29572 15789

Iden on I 29572 15789

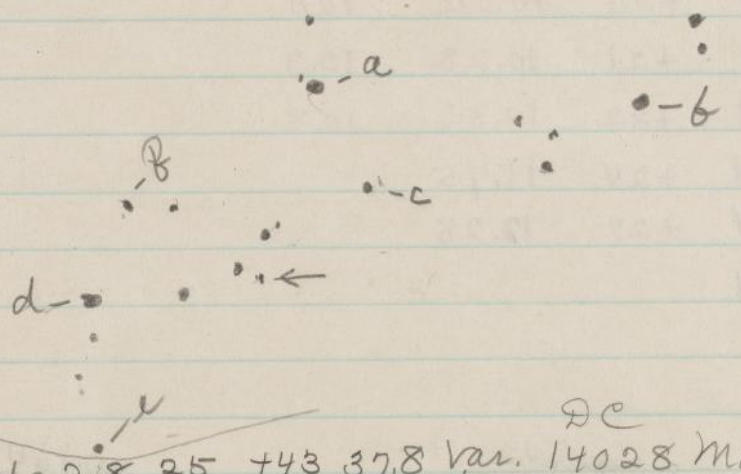
4h +45° does not correct AC 12228

Preliminary Sequence.

Plot from I 29572

Var. faint

1 +45 does cover — Mkd AC 19784



And mkd on AC 703 with conf Seq.

Used Corr. Magns.							DC	Mkd	Ptg
	Var.	+43 461	2h 8m 25s	+43° 37.8'	Var. M		14028	Md	P
9.0	a	+43 460	2 7 50.9	+43 53.9	9.0		--	--	
9.3	b	+43 451	2 5 12.0	+43 54.0	8.8		--	--	
9.5	c	+43 457	2 7 18.4	+43 46.0	8.9		--	--	
9.9	d	+43 466	2 9 51.3	+43 37.4	9.3		--	--	
10.2	e	+43 467	2 9 55.7	+43 20.4	9.5		--	--	
10.6	f	---	---						
	A	+42 507	2 13 48.7	+42 45.6	8.0		14621	AO	8.0

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1926phae.proj.1213w

Mkd AC 703

Comp Seq. MC 6431 Carte 2 +46

HA 85		1922 Corr.	Corr. M	Use
1	7.99	+.07	8.06	8.1
2	8.45	+.10	8.55	8.6
3	9.13	+.15	9.28	9.3
4	9.54	+.18	9.72	9.7
5	9.80	+.20	10.00	10.0
6	10.07	+.21	10.28	10.3
7	10.61	+.22	10.83	10.8
8	11.51	+.24	11.75	
9	12.04	+.24	12.28	
10	12.21			

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1926phae.proj.1216W

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1926phae.proj.1213w

Maxs numbered serially as given
Max 1 1.80

Regions $1^h, 2^h, 3^h$ $+45°$ for dates of Max see p. 80

Max Dec. 15, 1899 Plotted

find	AC482	1899		
	493	Poor		
9.8	504	Nov 7	14966	
9.9	505	" 7	"	
9.9	506	" 7	"	
9.9 or 10	511	" 9	14968	
	564	Reject		
8.8	579	Dec 9	14998	
8.7	638	" 30	15019	
9.3	664	1900 Jan 6	15026	
9.5	673	" 10	15030	
9.8	680	" 21	15041	
9.8	684	" 22	15042	
10.1	698	" 30	15050	
10.0	703	Feb 1	15052	

		1899		
N.S	I23550	Sept 16	f	f seen and fainter
N S	23551	" 16		" " "
	23751	~~Oct 7~~	not seen	
Seen	23806	14	14912	much fainter than f
10.1	23990	Nov 7	4966	
about 11.0	24662	1900 Feb 27	5068	
<10.6	24679	Mar 3	15082	much fainter than f

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1926phae.proj.1210W

Not plotted-poor

2

Max 2 Max May 27, 1905

<11.6ac 5933 Feb. 3, 1905 No Magn. <10.6 d more than 1M fainter

<11.6 5979 " 11

<11.0 5990 " 13

6023 " 18 Poor

<11.6 6053 " 23

Ff 6063 " 25 Barely seen

find 6114

6151 Mar 11

6164 13 Very ff a poor

6191 17 Poor

6488 July 4 Poor

6527 19 Poor d seen on these plates

6529 20 Poor

6608 Aug 18 Poor

6621 22 Poor

6660 Sept 6 Poor e seen

6682 " 10

No plates near Max. - May 27

Sem I 33376 Sept 23 Very ff 17112

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1926phae.proj.1213W

Map 3 Map Oct 13, 1910 Plotted

		1910			
<10.2 ac	11750	July 4		18857	
	11769	8	Pon		
<10.6	11781	11		18864	
<10.6	11800	26		18879	
<9.9	11824	Aug. 1		18885	
<10.2	11849	11		18895	
	11864	14	Pon		
	11917	Sept 11	Pon		
<9.9	11923	12	Pon	18927	
9.8	11937	15		18930	
8.5?	981	Oct 1		18946	
8.6	999	5		8950	
8.6	12002	5		8950	
8.7	026	11		8956	8.6 a 8.7 remeas.
8.6	028	11		8956	
8.6	066	29		8974	
9.6	114	Nov 12		8988	
9.8	138	19		8995	
10.1	170	Dec 3		9009	
10.1	192	9		9015	
10.3	218	16		9022	
Sqm ff <10.6	238	27		9033	
Sqm ff <10.6	259	31		9037	
	12288				

no I pl.

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1926phae.proj.1216w

Map 4 Nov 7 1911 Plotted

1911

very ff AC 12478 July 31

10.6 12505 Aug 18 19267

12535 Sept 1 Poor

10.5 12587 " 27 9307

8.8 12632 Oct 10 9320

8.5 12645 " 13 9323

~~8.3~~ 12714 Nov 3 9344 Remeas 7.8?

~~8.2~~ 12758 29 9370 Remeas 7.8?

7.9? 12773 Dec 7 9378

8.5 12795 " 19 9390

9.9 12836 1912 Jan. 10 9412

faint 12837

10.7 12877 Feb 5 9438

10.7 12897 " 9 9442

Vis Max at 19348

No Ipl

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1926phae.proj.1213W

Max. Dec. 6 1912 Plotted

Max 5 ∠80 1912

ac	13237	Sept. 16	19662	Poor
<10.6	13283	Oct. 2	9678	
	13320	" 8		Poor
<10.6	13349	" 16	9692	
<10.6	13384	" 21		Poor pl but Var N S ! !
10.1	13515	Nov. 27	9734	
10.1	13522	" 29	9736	
about 10.0	13554	Dec 6		Poor
10.8	13677	Jan 25 1913	9793	
about 11.1	13729	Feb. 4	9803	

38251 Jan 22 38257
38253 38259
38255

Max 6 ∠80 Max Jan 9 1914 Plotted

– ac	14425	Oct 2 1913		Poor
–	14437	20		Poor
Seen	14520	Nov 6		Quite ff
–	14551	" 13		Poor
about 10.6	14585	" 22	20094	
10.1	14622	Dec 5	107	
8.5	14697	" 20	0122	With Comp Seq
8 3 on 4	14763	Jan. 12 1914	0145	" " " Plate Poor – Var Br.
	14772	L'		
89 ?	14829	Feb. 4	0168	

No I Pl.

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1926phae.proj.1215w

Max 7 Max Feb 4, 1915 Plotted

1914

	aC15651	L'	
	15670	L'	
<106	15740	Nov. 17	20454
	15830	L'	
8.6	15983	Jan 8 1915	20506
7.8?	16029	Jan 20	0518
7.8	16132	Feb. 19	0548
8.4	16164	Feb 27	0556
9.0	16220	Mar. 9	0566
9.9	16307	" 23	0580
	16332	L'	

No I Pl.

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1926phae.proj.1213W

Mar 8 Max March 25 1916

1915

<11.0
(<10.6) ac 17061 Dec 1 20833 f at least = .4
— 17146 Dec 21 Poor
— 17148 Dec 21 Poor
<11.0 17183 Dec 31 20863
Very faint 17254 Jan 28 20891
find 17342
9.8 17393 Mar 11 20934
9.1? 17400 Mar 14 Poor 20939
— 17697 June 29 Too faint
— 17777 Aug 13 " "

No I Pl

Mar 9 Max April 10, 1917 Not Plotted

find ac 18439
— 18521 Feb 6 Too faint
Ft 18549 Feb 12 Seen but fainter than 11.0
Ft 18683 Mar 9 Seen probably but too faint to est.
Ft 18926 June 27 Poor

No I Pl

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1926phae.proj.121fw

Max 10 Max May 29, 1918 Plotted

		1918	
–	ac 19842	Feb 18	Pon
<11.0	19930	Mar 16	21669
10.0	20255	July 8	21783
10.0?	20327	July 28	1803
ft	20371	Aug. 15	1821
	20392		
	20417		
ft	20461	Sept 6	1843
–	20579	Oct 7	

No I Plates

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1926phae.proj.1213w

Max 11 Max July 8, 1919 Plotted

1919

Br	AC 21570	June 29	
—	21583	July 4 Poor	
9.6	21686	Aug 9	22180
—	21696	Poor	
9.8	21705	Aug 16	2187
—	21735	Aug 23 Poor	
10.0	21751	Aug 26	2197
10.0	21761	Aug 28	2199
10.0	21768	Aug 29	2200
10.7?	21812	Sept 18	2220
find	21829		
Ft	21891	Oct 8	2240
Ft	21897	Oct 12	Seen
—	21903	Oct 13	Poor
—	21912	Oct 17	
<10.2	21920	Oct 18	22250
Seen	21921	Oct 18 Very ft	

No I Plates

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1926phae.proj.1215w

Mar 12 May Aug 12, 1920 Plotted

1920

—	AC 22704	June 27	Poor
9.4	22740	July 15	22521
—	788	July 28	Poor
9.3	July 29	Aug 25	2562
—	865	Sept 7	Poor
9.8	910	" 25	2593
10.1	965	Oct 9	2607
10.1	967	Oct 9	2607
—	989	" 15	2613
Ff	23003	" 21	Probably seen
very ff	047	Nov 8	Seen
very ff	055	" 12	Seen
	23095		

I 40141 Nov. 17

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1926phae.proj.1213W

U Aurigae, pp. 98 to 113

053531 U Aurigae BD +31° 1057a

Dates of Maxima from HA 79, Pt. 2, page 105

	Magn	J.D	Wt	allowing ± 100 days			
May 16 1904 (1)	8.5	16617	4	16517 to 16717	1904 Feb 6	to	1904 Aug 24
Nov 23 1909 (2)	8.1	18634	5	18534	18734	1909 Aug 15	1910 Mar 3
Feb. 28 1912 (3)	8.7	19461	4	19361	19561	1911 Nov 20	1912 June 7
Apr. 16 1913 (4)	8.5	19874	4	19774	19974	1913 Jan 6	1913 July 25
Sept 11 1916 (5)	9.4	21118	4	21018	21218	1916 June 3	1916 Dec 20
Oct 26 1917 (6)	8.5	21528	4	21428	21628	1917 July 18	1918 Feb 3
Dec 16 1918 (7)	8.5	21944	4	21844	22044	1918 Sept 7	1919 Mar 26
Feb 8 1920 (8)	8.5	22358	5	22258	22458	1919 Oct 26	1920 May 13

Additional Maxima Dr. Gerasimovic, Jan. 9

March 26, 1921 (9)	24 22775	2675 to 2875	1920 Dec 16	to	July 4 1921	
May 18, 1922 (10)	3193	3093 to 3293	1922 Feb 7		Aug 26 1922	
Sept. 20, 1925 (11)	4414	4314 to 4514	1925 June 12		Dec 29 1925	
Nov. 4, 1926 (12)	4824	4724 to 4924	1926 July 27		Feb 12 1927	

Brother Bruce Dec. 1896

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1926phae.proj.1215w

See Print

U Aurigae Mkd I 27656 Mkd (seen) I 36368 (fol. edge)

+31° 1057a 5 32 43 +31 57.8 (1855) AC 12986

See I 5982 (black plate) 64" Eyf. (5 26 +31)
or 10553 for covering both Sequences (5 26 +32)

Use sequence as marked on MC 9529
with Miss Leavitt's Magns. Bk. 9, p. 73 (see p. 100 Words)

		Corr. not included	(Corr. 1922)	Use — (compared with grades)	
b	8.08	+.08	8.16		
a	8.64	.11	8.75	8.8	a
d	8.95	.14	9.09	9.1	— d should be brighter
c	9.39	.17	9.56	9.6	c
e	9.47	.18	9.65		
g	9.98	.21	10.19	10.2	g
h	10.22	.22	10.44	10.5	h) h is a little fainter than f
f	10.23	.22	10.45	10.4	f
l	10.52	.22	10.74	10.7	l
l'	11.15	.24	11.39	11.4	l'
k	11.58	.24	11.82	11.8	k

Identical d & d

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1926phae.proj.1213w

Comp. Sequence 49 K, Bk 7, p. 52
MC 2335

HA 71, No 3
(Bk 7, p. 52)

			(Corr. 1922)
1	9.93	+.21	10.14
2	9.94	.21	10.15
3	10.33	.22	10.55
4	10.96	.24	11.20
5	10.73	.23	10.96
6	11.42	.24	11.66
7	11.64	.24	11.88

etc

Also see AC 1298b Testing certain Magnus in terms of two Sequences

10.2 $^{102}_{g}$ of U Aur Seq abnt = $^{102}_{2}$ (49 K) on I 5982

10.6 $^{105}_{f}$ abnt. $\left.\begin{matrix}1\\2\end{matrix}\right\}$ br $^{106}_{3}$ (49 K)

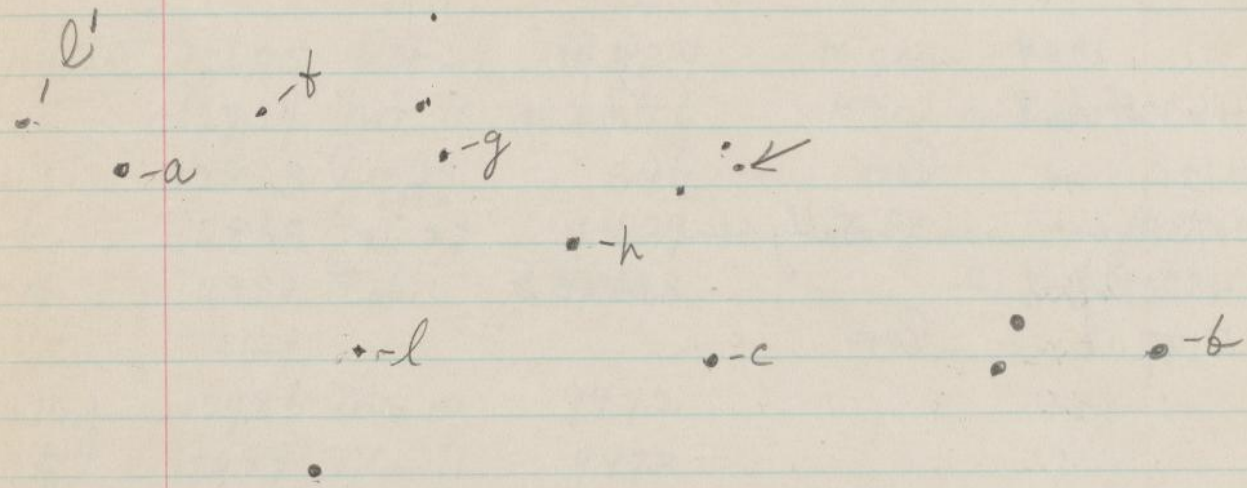
11.5 $^{114}_{e'}$ abnt. br. than $^{117}_{6}$

11.8 $^{118}_{K}$ a little br. than $^{119}_{7}$

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1926phae.proj.1216w

from MC 9529



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1926phae.proj.1213w

ac 12986 Var mkd
MC 9529 Leavitt Sequence

Map 1

Feb 6 1904 to Aug 24 1904

		1904		J.D
<11.8	AC 4622	Feb. 8		16519
—	4720		Poor	
Very ff	4732		Probably seen	
about 11.2	4820	April 12		16583
—	5197		Poor	

Map 2

		1909			
—	AC 10741	Aug. 28	Too poor	185	
<11.8	10832	Sept 18		18568	
<11.8	10939	Oct. 18	Cracked pl.	18598	Probably barely seen
10.3	11014	Nov. 5		18616	
10.2	11034	Nov. 9		620	
9.9	11119	Dec. 4		645	
10.9	11288	1910 Jan. 11		18683	
10.0	I 36368	Dec. 8		8649	

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1926phae.proj.1216w

Map 3 Nov 20, 1911 to June 7 1912

		1911	J.D	
<11.8 ac	12695	Oct 29	19339	K seen
<12.0	12737	Nov. 15	356	K seen at least 2
<11.8	12813	Dec 25 1912	396	
Ff	12868	Jan 27	9429	Var seen very ff 12.5 or fainter
10.8	12880	Feb. 5	9438	
	12929			
~~9~~ a10.1	12986	Mar 10	9472	
10~~5~~4	12989	Mar. 11	9473	

No I plates

Jan 6, 1913, to, July 25 1913

Map 4

		1913		
<11.8 ac	13619	Jan. 8	19776	
<11.8	13650	" 14	782	
—	13671	Jan. 22	Poor.	
—	13742	Feb. 6	Too poor	
<11.8	13762	Feb 10	9809	
Very ff	13830	Mar. 2	—	

No I plates

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1926phae.proj.1213w

Map 5 June 3 1916 to Dec 20 1916

1916

— ac 17879 Poor. Fk. if seen? Sept 13
108 17971 Oct 4 21141 Also by Comf Sey
11.2 18062 Oct 26 63
18090
— 18143 Too poor
— 18236 Clc
18266 Poor
— 18313 Very fk Barely seen
Seen 18378 Very fk Dec 30 21228

No I plates

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1926phae.proj.1216w

May 6 July 18, 1917, to Feb. 3, 1918

1917

— ac 19040 Too faint
— 150 Too faint -
— 167 Poor
— 214 Poor
About 11.0* 275 Oct 13 * if the right star — 21515
— 332 L'
10.4 397 Nov. 4 21537
437 ?
10.6 497 Nov 25 21558
— 536 L'
560 ?
616 ?
11.6 634 Jan 1918 21595
Very ff 11.8? 692 Jan 16 Seen 21610
— 712 Too ff
— 737 L'
— 775 Feb 4 Broken

No

No I Plates

— mc 13768 Oct. 13, 1917 Just off edge
10.4 13785 Oct 14, 1917 21514

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1926phae.proj.1213w

Mark 7 Sept 7, 1918, to Mar. 26, 1919

			1918	
—	aC	20522	Too faint	
—		20606	Too faint	
<11.8		20645	Nov. 3	21901
<11.4		20685	Nov. 11	21909
		20752		?
abnt 10.0		20859	Dec. 21	1949
abnt 10.0		20882	Dec. 29	1957
fairly br. no Est.		20914	Cl C	
—		20957	Cl L'	≠
—		20982	Cl L'	
		21030		?
			1919	
abnt 10.9		21083	Feb. 6	21996
		21147		?
11.2		21209	Feb. 27	22017
Ft.		21236		
—	I	39611	Cl M	
—		39613	Cl M	
—	MC	15348	Oct. 7, 1918	Not ever

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1926phae.proj.1215w

Mars 8 Oct. 26, 1919, to May 13, 1920

			1919	J.D
<11.4 ae	21941		Oct. 22	22254
<11.8	21996		Nov. 13	2276
<11.0	22023		Nov. 23	2286
—	22038	Poor	—	
<11.8	22050		Dec 1	2294
<12.0	22123		Dec. 18	2341
<11.4	22147		Dec 22	2315
—	22204	Poor	—	
11.2	244		Jan. 13	2337
—	335	Too Poor		
—	347	Too Poor		
—	406	Too Poor		
10.6	423		Feb. 20	2375
10.9?	479	Poor & black plate	March 3, 1920	22387 Cracked pl.
<11.8	22063	Perhaps barely seen	Dec. 3	22296
10.3 a 4	I 39747		1920 Jan 28	22352 near S edge

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1926phae.proj.1213w

Mark 9 Dec. 16, 1920, to July 4, 1921

			1920		
<11.8	ac	23097	Dec. 3	22662	
<11.8		23151	Dec. 18	677	
<11.2		23196	28	687	
<11.8		209	1921 Jan. 2	2692	
<11.8		217	Jan. 3	2693	
		261	Jan 12	5k 2702	
<11.8		271	Jan. 15	2705	
—		315	Jan. 22	Too poor	—
—		326	Jan. 24	Poor	—
<12.0		357	Jan. 27	2717	
<11.4		370	Jan. 28	2718	
<11.8		402	Feb. 4	2725	
<12.0		426	Feb. 12	2733	
abt 12.5?	-	475	Feb. 25	2746	
11.3	-	510	Mar. 10	2759	
Very ft		518	Mar. 11	Seen	2760
—		546		Poor	Mar. 22 —
11.2	-	570	Mar. 29	2778	
~~11.6~~ → Seen 11.3 Perhaps Est. not made		594	April 2	Very poor	2782 Var. defective but Seen brightness adj. class
—		619		Poor	
—		647		Poor	
—		667		Poor	
—		686		Too poor	
—		866		" "	

No I Pl.

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1926phae.proj.1216w

Max 10 Feb. 4, 1922, to Aug. 26, 1922

		Class	
ac	24625	C'	Feb 4
	24902	C'	Sept 30

No I Plates

Max 11 June 12 1925 to Dec 29 1925

		Class		
ac	26065	W	Sept 28-29	Perhaps h.
	26132	W	Nov. 10-11	
	26154	W	Nov 28-29	
	26204	Jan 7		

No I Plates

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1926phae.proj.1213W

Map 12 July 27, 1926, to Feb. 12, 1927

			1926	No Images	
AC	26461	Pau	Oct 3-4		
10.0	26469	M	Oct 9-10	3	24798-99
~~8.5 or 6~~ 9.2 or 3 map	26496		" 21-22	3	4810-11 Very black non plate
9.6 or 7	26530	W	Nov 10-11	3	24830-31
9.8	26553	W	" 27-28	1	847-48
	562		Dec 4-5		854-55
10.1	584	W	" 14-15	1	864-65
10.6	26618	W	" 29-30	1	879-80
	26700		Feb 15-16	Black, poor	
—	I 45668	L	Oct 10-11	not covered	
—	45678	L	14-15	not covered	
9.9	45681	L	14-15		24803-4
9.8 or 9.9	45803	L	Nov 27-28		4844-8
	45883	M	Jan 7-8 1927		24888-89
	45884	M	7-8		88-89
find	45941	M	Jan 31-Feb 1		4912-13
	45942	M	" 31 - 1		
	45943	M	" 31 - 1		
	45971	L	Feb 7-8		

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1926phae.proj.1213w

See p. 136

X Aurigae p. 114 to 145

060450 X Aurigae BD +50° 1279a

Dates of Maxima from HA 79, Pt 2, page 106
allowing ± 40d

		Mayr	J.D.	Wt				
Mar. 25	1909 (1)	8.3	18391	5	18351 to	18431	Feb. 13 1909 to	May 4
Feb. 9	1910 (2)	8.1	18712	4	18672	18752	Dec 31 1909	Mar 21 1910
Jan 9	1911 (3)	8.3	19046	4	19006	19086	Nov. 30 1910	Feb 18 1911
June 18	1911 (4)	8.2	19206	5	19166	19246	May 9 1911	Aug 28 1911
Nov 26	1911 (5)	8.3	19367	5	19327	19407	Oct 17 1911	Jan 5 1912
May 17	1912 (6)	8.5	19540	5	19500	19580	Apr. 7 1912	June 26 1912
Oct 28	1912 (7)	8.5	19704	5	19664	19744	Sept 18 1912	Dec. 7 1912
Apr 10	1913 (8)	8.4	19868	5	19828	19908	Mar. 1 1913	May 20 1913
Sept 26	1913 (9)	8.7	20037	5	19997	20077	Aug 17 1913	Nov 5 1913
Mar. 8	1914 (10)	8.4	20200	5	20160	20240	Jan. 27 1914	Apr. 17 1914

← Continued p. 136

Additional Maxima — Prof. Gerasimovic Jan. 11, 1929

May 8	1921 (24) (11)		2422818		22778 to	2858	Mar. 29 1921 to	June 17 1921
Oct 13	1921 (25) (12)		2976		2936	3016	Sept 3 1921	Nov. 22 1921
Mar. 16	1922 (26) (13)		3130		3090	3170	Feb. 4 1922 to	Apr. 25 1922
Aug 21	1922 (27) (14)		3288		3248	3328	July 12 1922	Sept 30 "
Jan 23	1923 (28) (15)		3443		3403	3483	Dec. 14 1922	Mar. 4 1923
Dec. 25	1923 (29) (16)		3779		3739	3819	Nov. 15 1923	Feb. 3 1924
May 29	1924 (30) (17)		3935		3895	3975	Apr. 19 1924	July 8
Nov. 8	1924 (31) (18)		4098		4058	4138	Sept 29 1924	Dec 18 1924
Apr 17	1925 (32) (19)		4258		4218	4298	Mar. 8 1925	May 27 1925
Sept. 18	1925 (33) (20)		4412		4372	4452	Aug 9 1925	Oct 28
Mar. 9	1926 (34) (21)		4584		4544	4624	Jan 28 1926	April 18

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1926phae.proj.1215w

Var. mkd at Max AC 11368

Pruit X Aurigae Mkd I Mkd AC 10236

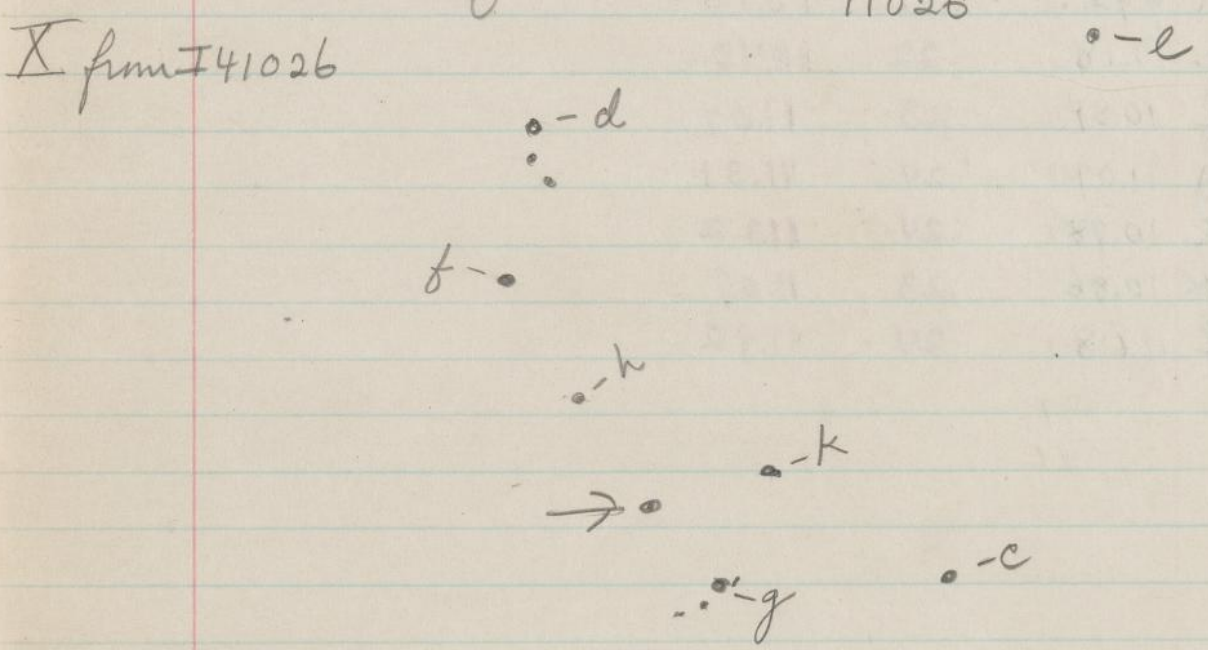
6h 0m 55s +50° 15.1' (1855)

Comp Sy S S Aurigae Magns. 9:83 mkd MC 6741

~~Carte 6.0+46 MC 7622~~

both eq. mkd on I 40743

41026 —— *



X Aurigae

Corr. Magns &c included.

	c	9.1
	d	9.5
	e	10.1
	g	10.4
?	f	11.0
	h	11.8
g is	k	11.87
brighter	l	<12.0 12.7 ?
than	b	photog. ~~f~~ than e
	f	" " " g

f may vary a few tenths. Several I & AC plates exam.

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1926phae.proj.1213w

Comf. Seg. SS Aurg. As mkd. on MC6741
Magn. Bk 9 (Leavitt) p. 83

Compared on I 41026 (Comf Seg. in corner); a good dc plate; MC6741 Var on N edge

a	7.96	+0.07	8.03
b	—	+	
c	8.91	+0.13	9.04
d	9.92	.21	10.13
e	10.18	.22	10.40
f	10.84	.23	11.07
g	11.07	.24	11.31
h	10.98	.24	11.22
k	10.86	.23	11.09
l	11.68	.24	11.92

K is brighter than g & h

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1926phae.proj.1216w

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1926phae.proj.1213w

× Aurigae Use AC 11368
I 41026

Max. 1. Feb 13 1909 to May 4 Plotted

		+45°	1909	
abnt 12.5	AC	10166	Jan 20	2418327
11.9		10177 10196	Jan 26	8333
11.1		10236	Feb. 17	8355
10.9		10242	18	8356
10.7		244	20	8358
10.6		246	20	8358
10.4	find	252	22	8360
10.4	10177	254	Feb 22	8360
10.2	196	286	Mar. 6	8372
Tav fm	242	287	—	
10.0	244	291	Mar 8	8374
10.0	246	337	20	8386
9.9	252	346	22	8388
10.0	254	Cl T' 358	23	8389
11.2	286	435	Apr. 17	8414
11.1	287	436	17	8414
Tav fm	291	482	May 5	8432
	337	+60		
10.5	346	10232	Feb. 17	8355
10.0	358	329 Cl T'	Mar 18	8384
9.9	435	348	Mar. 22	8388
10.0	436	389	April 1	8398
10.4	10358	10417 Cl T'	Apr. 10	8407
10.2	9.9 I	35871	Mar 5	8371
9.9		35874	6	8372
10.5		35950	April 10	8407
—		35960	" 17	8414
11.3		35963	" 17	8414

see 8414 Dec 9

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1926phae.proj.1216w

14 plate from Cat
only 6 " " box

Map 2 Dec. 31 1909 to March 21, 1910 Plotted

		AC	1909-1910	
11.9?	+45	11184	Dec 20	18661
Too few		11220	Dec 28	69
11.5		11250	Jan. 4	8676
11.4		11260	7	8679
11.0		11286	11	8683
Too few		289	—	—
find 10.8		295	12	8684
~~11368~~ 9.8		356	Feb 5	8708
11503 9.8		368	" 10	8713
99		376	12	8715
Too few		442	—	—
Poor		457	—	
11.8		502	Mar. 19	8750
		503		
∠12.0		522	" 23	8754
	+60			
11.5		11236	Dec. 31	18672
10.3		11318	Jan 19	91
11.5 I		36462	Dec 31	18672
		477	Jan 7	Cl T'

~~MC 201 Feb 1~~

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1926phae.proj.1213w

Mars 3 Nov. 30 1910 to Feb. 18 1911 Plotted

+45 1910-1911

10.5 ac	12173	Dec 3	19009
10.3	175	Dec 3	9009
10.4	185	Dec 8	9014
9 9	269	Jan 4	9041
about 12.0	332	Feb. 18	9086

+60

11.6 or 11.7	12146	Nov. 20	8996
10.3	12310	- Dec. 12	9018
9.7	263	Dec 31	9037
find 9 9	291	Jan. 16	9053
12303	303		
11.0	318	Jan. 30	9067
12.2 <~~120~~	339	(seen perhaps 12.2)	Feb 21 19089
	12348	probably N.S.	Feb 25 19093

No I plates

3

May 4 May 9 1911 to August 28 1911

No ac pl.
No I pl.

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1926phae.proj.121cw

Map 5 October 17 1911 to Jan. 5 1912 Plotted

+45 1911-12

11.5?	ac	12692	Oct 28	19338
10.0		709	Nov 2	9343
9.8		748	Nov. 18	9359
10.0		788	Dec 13	9384
		840	perhaps 12.4 or 5	Jan 10 19412

+60

	ac	12691		
		719		
9.9		12736	Nov. 15	19356
11.4		820	Dec 30	9401
find	11.4?	826	Jan. 1	9403

12719

No I pl.

Map 6 April 7 1912 to June 26 1912

+45

12.1	ac	13079	April 10	19503

+60

13092

13106

No I plates

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1926phae.proj.1213W

Mar 7 Sept 18 1912 to Dec. 7 1912 Plotted

	+45	1912	
—	13263	Two fm	
—	396	Two fm	
10.5	463	Nov 9	19716
—	570	cl C Hoelers fri est.	

	+60		
10.1	13385	Oct 21	Very fm 19697
—	395	Two fm	
10.0	408	Oct 30	19706
—	483	Pm	
12.2?	561	Dec. 7	19744

No I Plates

Mar 8 March 1 1913 to May 20 1913 Plotted

	+45		
11.1n.2 ac	13860	Mar. 8 1913	19835

	+60		
——	13866	Two fm	
10.3	878	Mar 12 1913	19839

No I plate

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1926phae.proj.1216W

Mar 9 August 17 1913 to Nov. 5 1913 Plotted

	+45	1913	
ac	14364	Cl. L'	
abmt 10.0	400	Sept 25	20036
99 a 10.0	406	Sept. 27	38
—	441	Too poor Oct. 20	

	+60		
106 a7 ac	14333	(Very poor) Sept 5	20016
14345	345		
477	349	Sept 9	20020
find	477		

No I plates

~~Mar 10~~

1926phae.proj.1213M

Continued See f. 137 = Max. 11

Map 10 Jan. 27 1914 to April 17 1914 Plotted

	+45	1914	
12.0 ac	14801	Jan. 22	20155
11.4	832	Feb 4	0168
—	858	Cl. L'	
10.3	903	Feb. 24	0188
10.3	15018	March 24	0216
—	15051	Cl. L'	
12.4?	15117	April 22	0245
	+60		
12.1 ac	14802	Jan 22	0155
11.4 a 5	831	Feb 4	0168
10.0	921	Feb 27	0191
—	15048	Cl L',	
< 11.8	098	Apr. 17	20240 Barely seen = perhaps 12.0

No I pl.

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1926phae.proj.1216w

Cont from p 145

Max 24 H March 29 1921 to June 17 1921 Plotted

+45 1921

ac	23565	
—	620	Tau for
—	638	Tau for
—	660	Tau for

+60

about 12.2	23535	March 18	22767
11.6	579	30	79
—	613	April Tau for	
10.1 a,2	656	April 26	22806

No I Pl

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1926phae.proj.1213W

Map. ~~12~~ 25 Sept. 3 1921 to Nov. 22 1921 Plotted

	+45	1921	
— ac	24078	Too faint	
—	157	Too faint	
10.0 or 10.1	177	Oct. 1	22964
9.9 or 10.0	243	Oct. 13	76
10.3	289	Oct 22	85
perhaps 10.8	329	Oct 28	91
10.7	24363	Nov. 5	2999
	24217	Poor, perhaps est. could be made if data needed	Oct 8
	+60		
— ac	24067	Too faint	
—	108	" "	
—	148	" "	
—	207	" "	
Perhaps 9.9	254	Oct 14	2977
? 10.3	287	" 22	85
about 11.5 or 6	24377	Nov. 10	3004
~~find~~	I 40660	not corrected	

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1926phae.proj.1216w

Max. ~~13~~ 26 - Feb. 4 1922 to April 25, 1922 Plotted

+60° 1922

— AC 24628 Cl C' Too poor

10.2 24669 Cl C' Poor March 6 23120

+45°

11.2 24640 Cl C' Feb. 14 23100

10.3 24661 March 3 3117

10.2 I 41026 Mar. 8 3122

Max 27 July 12, 1922, to Sept 30, 1922

+60 1922

None

+45

AC 24885

895

< 11.2 898 Sept. 28 23326

No I Plates

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1926phae.proj.1213w

Map 28 — Dec. 14, 1922, to Mar. 4, 1923 — Plotted

1922-1923

12.1	+60°	25008	Cl C' Dec. 1	23390
11.4a5 AC 4 right stars		25044	Dec 19 Cl C'	23408
10.2		079	Jan 16 C'	23436
10.0		089	Jan 19	439
10.0		099	Jan 23	443
—		113	Cl L^2	
10.6		118	Cl C' Feb 5	~~2356~~ 23456
10.7		138	C' Feb 10	23461
12.3a.4		184	C' Mar. 9	88
	+			
	+45°			
11.7		25036	C' Dec. 15	23404
10.5		051	C Dec. 29	418
—		056	L^2	
10.6		062	C' Jan 10.	430
10.1a.2		098	C' Jan 23	443
		100	L^2	
10.9		129	C' Feb 8	459
11.5a.6		156	C' Feb 19	470

No I Plates

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1926phae.proj.1216w

find 1923 — not 1924

Max. 29 Nov. 15, 1923, to Feb. 3, 1924 Plotted

	+60	1923		1923	
12.2n3	~~+60~~ 25439	Nov. 3 Cl W			23727
~~10.3~~ aC	25698	~~Nov 8~~	10.5	25489 Dec 8	23762
~~10.6~~	706	Nov. 28 Rotate	9.9	25514 Dec 19	very black 2 stars 23773
	710	—		17	T stars
	716	—		524	T stars black
	538		10.4	542 Dec 29	23783
	774				

~~10.5~~ 25489 ~~Dec 8 Cl W~~

	+45	1923		
11.4	25685	25475	Nov. 20	23744
10.6n7	723	492	Dec 11	3765
10.3	738	25505	Dec 17	3771
10.0	743	25515	Dec 19	black 3773
10.4	25786	538	Dec 29	3783

No I plates

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1926phae.proj.1213w

Max. 30 April 19, 1924, to July 8 1924

No ac Pl
No I Pl

Max. 31 Sept 29 1924 to Dec. 18, 1924 Plotted

	+60	1924	
	AC 25666		
	681		
—	697	Sent to Pamelorck	
10.5	698	Nov 18	241.08
11.1	706	Nov 28	4118
11.2a3	710	Dec 4	4124
—	715	Pon	
12.1a.2	716	Dec 14	4134
	+45		
10.2	25671	Oct 25	4084
10.1	685	Nov 4	4094
	723		
	738		
	~~45852~~		4078
	I 44199	Oct 19.	eclipse comet Est not made May be after
10.0?	44299	Nov. 18	4108

10.0

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1926phae.proj.1216W

Max. 32 March 8, 1925 to May 27, 1925

	+60	1925	
10.3? AC	25805	Mar. 12-13	24222

+45
None

11.2 I 44506 Mar 3-4 24213

Max. 33 August 9, 1925 to October 28, 1925 Plotted

	+60°	1925		
10.4 AC	26028	Aug 30-31	24393	Very faint
—	26052	Not seen		
10.0 or 9.9	26074	Sept 30-Oct 1	4424	
9.9	26079	Oct 5-6	4429	
10.4	26087	Oct 15-16	4439	
—	26110	Black, faint		

+45°
None

10.0 I 44950 Oct. 5-6 4429 Extreme corner

10.0

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1926phae.proj.1213W

Should be 1926, not 1927

May 34 Jan. 28, 1926, to April 18, 1926

	+60			1926
11.4 n 5 AC	26656	26224	Jan 22-23	24538
10.3	673	253	Feb 16-17	4563
perhaps 10 6	689	26266	Mar 27-28	4602 very poor
	738			
	743			
	748			

	+45	
	26655	None
	680	
	699	
	742	
	779	
	796	

No I plates

10.2 NC 21836 March 13-14 24588

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1926phae.proj.1216W

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1926phae.proj.1213w

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1926phae.proj.1215M

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1926phae.proj.1213w

 Cont. from page 114

X. Aurigae HA 79 p 106

Dates of Maxima

Max		Magn	Max.	Wt	allowing ± 40d	
Aug 11 1914	(11)	8.3	20356	5	20316 to 20396	July 2 1914 to Sept 20 1914
Jan 20 1915	(12)	8.4	20520	4	20480	20560 Dec. 13 1914 to March 8 1915
July 7 1915	(13)	8.2	20686	5	20646	20726 May 28 1915 to Aug 16 1915
Dec 20 1915	(14)	8.5	20852	5	20812	20892 Nov. 10 1915 to Jan 29 1916
May 28 1916	(15)	8.3	21012	5	20972	21052 Apr. 18 1916 to July 7 1916
Nov 10 1916	(16)	8.3	21178	5	21138	21218 Oct 1 1916 to Dec 20 1916
Apr. 21 1917	(17)	8.3	21340	4	21300	21380 Mar. 12 1917 to May 31
Oct 12 1917	(18)	9.0	21514	4	21474	21554 Sept 2 1917 to Nov. 21
Mar 24 1918	(19)	8.5	21677	5	21637	21717 Feb 12 1918 to May 3
Sept 3, 1918	(20)	8.8	21840	4	21800	21880 July 25 1918 to Oct 13
Feb 9, 1919	(21)	8.2	21999	5	21959	22039 Dec. 31 1918 to Mar. 21 1919
Jan 5 1920	(22)	8.4	22329	5	22289	22369 Nov. 26 1919 to Feb 14 1920
Nov 15 1920	(23)	8.0	22644	4	22604	22684 Oct 6 1920 to Dec. 25

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1926phae.proj.1215w

Map 11 July 2, 1914, to Sept. 20, 1914

+60

— 15495 Too faint

+45

11.5 15487 Sept 15 1914 20391

No I Plates

Map 12 Dec 13, 1914 to Mar 3, 1915 Plotted

+60 1914-1915 JD

10.5 AC 15925 Dec. 23 2049D

9 or 8 15970 Jan 5 0503

10.1 15987 Jan 8 0506 — ?

16188

+45

11.1 ? 15899 Dec. 18 0485

9.8 16019 Jan 13 0511

— 16077 Cl. L'

— 16104 Cl L'

11.1 16111 Feb. 17 0546

11.3 or 4 16134 " 19 0548

— 16194 Cl L'

No I Plates

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1926phae.proj.1213W

Max. 13 May 28 1915 to Aug. 16, 1915

~~+60~~

— ac 16740 Too few

+45

<11.8 16727

No I Plates

Max. 14 Nov. 10 1915 to Jan. 29, 1916 Plotted

+60 1915-1916

11.5 ac 16990 Nov. 13 20815

9.9 17084 Dec 8 20840

— 17135 Too few

10.0 17173 Dec. 30 0862

10.4 17195 Jan 7 20870

+45

11.6 16933 Nov. 5 0807

— 17008 Cl L'

10.3 17040 Nov 26 0828

10.0 17064 Dec 1 0833

9.8 17081 Dec. 7 0839

9.9 17104 Dec 11 0843

9.8 17108 Dec. 12 0844

— 17164 Too few

10.4 17196 Jan 7 0870

about 12.3 or 4 17292 Feb 7 0901

to I Plates

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1926phae.proj.1216W

May 15 April 18, 1916, to July 7, 1916

→ No I Plates

+60

17562

+45

— 17553 Torfm

~~May 16 Oct. 1, 1916, to Dec. 20, 1916~~

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1926phae.proj.1213w

Map 16 October 1, 1916 to Dec. 20, 1916 Plotted

	+60	1916	
11.3	17986	Oct. 7	21144
—	998	Too poor	
9.9	18082	Oct. 28	1165
9.8	091	Nov. 1	1169
9.8	110	Nov. 5	1173
—	226	Edge Too poor (covered by Binding)	
—	275	Too poor	
12.2	316	Dec. 17	1205
	~~No I Plates~~		
	+45		
about 11.3	17970	Oct. 4	21141
11.4	978	Oct 5	1142
—	997	Too poor	
	~~18012~~		
10.0	18052	Oct 24	1161
10.0	080	Oct 28	1165
	106		
9.9	121	Nov. 6	1174
9.8	131	Nov. 7	1175
10.4	288	Nov. 26	1195
—	267	Too poor	
—	289	Too poor	
—	315	Dec 16	Broken — find if needed
12.4	343	Dec 25	1223

No I Plates

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1926phae.proj.1216W

May 17 Mar. 12 1917 to May 31 Plotted

+45 1917

10.0 ac 18746 April 3 21322

10.0 18799 Apr. 24 1343

+60

18863

9.8 756 April 4 1323

9.8 771 Apr. 11 Very poor. 1330

No I Plates

May 18 Sept 2 1917 to Nov. 21 1917 Plotted

+60 1917

— 19110 Too poor

— 19149 Too poor

remeas. 19185

10.2 ~~10.4~~ 19276 Oct. 13 21515 is a trifle brighter than 10.4 poor plate

— 19404 Too poor

< 11.8 19452 Nov. 12 21545

+45

— 19127 Too poor.

about 10.4 19206 Sept 26 1498

Too faint 19228 Oct 1 21503

Too poor 235 330 ~~Too poor~~ C L fainter than 11.0 — est. difficult or

11.6 or 7 377 Nov 2 21535

Perhaps 12.2 460 Nov. 13 1546

No I Plates

10.2 MC ~~13882~~ 13862 Oct. 20 21522

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1926phae.proj.1213W

Mar 19	Feb. 12, 1918, t	May 3		Plotted
No I Plates	+60	1918		
10.8	AC 19826	Feb. 15	21640	
	918			
10.2	959	Mar 22	1675	
	+45			
11.5	19804			
10.5 or 6	832	Feb 17	1642	
10.7	833	Feb 17	1642	
10.1	893			
—	20061	Apr. 25	Too faint	
11.8	19776	Feb. 4	21629	
11.6	19796	Feb. 10	1635	
11.6	20070	April 26	1710	
Mar 20	July 25, 1918, t	Oct. 13,		
	466			Plotted
	AC 20481			
—	593	Too faint		
	+45			
—	20380	Too faint		
—	494	Too faint		
—	592	Too faint		
about 12.1	605	Oct 21	21888	

No I plates

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1926phae.proj.1216W

Map 21 Dec. 31, 1918, to Mar 21, 1919 Plotted

	+60	1918~~-~~1919	(1919) not 1918	
— ac	20935	Cl L'		
10.3	994	Jan. 20	~~21614~~	21979
9.9	21093	Feb. 7	~~1632~~	1997
	140	Con		
	245			
	+45			
—	20911	Cl C Tail pm		
9.8	21016	Jan. 29	~~1623~~	1988
9.8 or 9.9	21060	Feb 3	~~1628~~	1993
9.8 or 9.9	061	Feb. 3	~~28~~	1993
10.0	082	" 6	~~1631~~	1996
10.8'	094	" 7	~~1632~~	1997
—	132	Tail pm		
10.2	214	March 1	~~21654~~	2019
10.8	256	March 10	~~21663~~	2028
9.8 I	39540	Feb 2	21992	
9.9 or 9.8	562	Feb 3	only focus — bright — difficult	
10.0	594	Feb 5	21995	

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1926phae.proj.1213w

Dif see 22077 Obj.

Map 22 Nov. 26, 1919, to Feb. 14, 1920 Plotted

	+60	1919 – 1920	
	22060		
—	077	Too few	
—	084	Too few	
9.8	131	Dec. 19	22312
10.0	173	Dec. 30	2323
10.6	224	Jan. 10	2334
—	307	Too few	
11.7	366	Feb. 9	2364
11.8	425	Feb. 20	2375
11.4	+45 22824	Nov. 23	22286
10.4	22049	Dec. 1	2294
10.5	052	Dec 1	2294
10.5	064	3	2296
9.9	22105	Dec. 14	2304
—	143	Too few	
9.9	148	Dec. 25	2318
10.0	178	Jan. 1	2325
—	230	Too few	
—	336	Too few	
—	346	Too few	
11.6	353	Feb. 7	2362
11.7	383	Feb 11	2366
—	22394	Too few	
about 12.4	482	March 6	2390
11.2 I	39736	Jan 17	22341
	~~39834~~	Not seen	
10 3 MC	16474	Dec 4	22297

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1926phae.proj.1216w

Max 24 etc See p. 125

Max 23 Oct. 6, 1920, to Dec. 25 Plotted

No I Plates

	+60	1920	
11.5 a, b AC	22952	Oct. 7	22605
—	99	Too faint	
—	23070	Too faint	
—	086	Too faint	
11.3	23108	Dec. 6	2665
about 12.5	160	Dec. 20	2679
—	185	Too faint	
	+45		
11.5	22979	Oct 13	2611
9.8 or 9.9	23071	Jan. 14	2643
11.3	107	Dec. 6	2665
11.6	113	Dec. 7	2666
	129	Too faint	
11.8	150	Dec 18	77
about 12.4	194	Dec. 28	2687

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1926phae.proj.1213W

pages 146 to 161

043274 X Camelop. not in BD.

Dates of Maxima HA 79, Ph. 2, p 102.

		J.D	Ht.	Allowing ±40d.		
(1) April 16 1907	8.5	17682	4	17642 to 17722	Mar. 7 1907 to	May 26
(2) Mar. 25 1909	8.3	18391	4	18351 to 18431	Feb 13 1909	May 4
(3) Dec. 13 1911	8.6	19384	4	19344 to 19424	Nov 3 1911 to	Jan 22 1912
(4) May 7 1912	8.4	19530	4	19490	19570	Mar. 28 1912 to June 16
(5) Sept 25 1912	8.0	19671	4	19631	19711	Aug 16 1912 to Nov 4
(6) Feb 18 1913	7.8	19817	5	19777	19857	Jan 9 1913 to Mar. 30
(7) July 11 1913	7.6	19960	4	19920	20000	June 1 1913 to Aug 20
(8) Nov. 20 1913	8.7	20092	4	20052	20132	Oct 11 1913 to Dec 30
(9) April 15, 1914	7.9	20238	5	20198	20278	Mar. 6 1914 to May 25
(10) Sept 7 1914	8.0	20383	5	20343	20423	July 29 1914 Oct 17
(11) Jan 26 1915	7.8	20524	5	20484	20564	Dec 17 1914 Mar. 7 1915
(12) June 18 1915	8.0	20667	4	20627	20707	May 9 1915 July 28
(13) Oct 31 1915	8.0	20802	5	20762	20842	Sept 21 1915 Dec 10
(14) Mar 26 1916	8.5	20949	5	20909	20989	Feb 15 1916 May 5
(15) Aug 13 1916	8.0	21089	4	21049	21129	July 4 1916 Sept 22
(16) Jan. 2 1917	8.4	21231	5	21191	21271	Nov 23 1916 Feb 11 1917
(17) May 23 1917	8.1	21872	5	21832	21412	Apr. 13 1917 July 2
(18) Oct 12 1917	8.3	21514	5	21474	21554	Sept 2 1917 Nov 21 1917
(19) Mar 5 1918	8.0	21658	5	21618	21698	Jan 24 1918 Apr 14
(20) July 29 1918	8.1	21804	5	21764	21844	June 19 1918 Sept 7
(21) May 7 1919	8.1	22086	4	22046	22126	Mar. 28 1919 June 16
(22) Sept 22 1919	8.2	22227	5	22184	22264	Aug 13 1919 Nov 1
(23) Feb 17 1920	8.0	22372	5	22332	22412	Jan 8 1920 Mar 28
(24) Nov 24 1920	7.8	22653	5	22613	22693	Oct 15 1920 Jan 3 1921

see page 161 for later Maxima

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1926phae.proj.1215w

Covered by 0 to 8^h +75° 3.30 to 5.30 +69 to +79 74 77 71

Print x Camelop. See marked on ∓ 26395

$4^h 27^m 3^s$ +74° 48'.8 (1850)

Period 176d. Vis range 7.3–13.1

Seq — gation on print — Visual

Mkd Seq on AC 8376 no magn. by Miss Leavitt

Comp. Carte 3K

Visual Seq. letters used

from AC 12800 orientation may not be correct

These exclude 1922 Corr.

Confirmed by Leaks from MC 6505 and AC —

On AC 12800

		Dist	D. Cat	from 3K	from A'1	MC 6505	Use
HA 57	V	...					
	a	207	(+75)				
	b	213	+74	9.9	9.8	9.9	9.9
	c	217	+74	9.7	9.5	9.5	9.5
	c'	218	+74				
	d	---		9.8	10.0	9.8	9.7
	e	211	+74	10.3	10.5	10.5	10.5
	f			10.9	10.9	10.8	10.9
	g			11.1	11.2	11.2	11.3
	K						12.2

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1926phae.proj.1213w

Comp Segnuce = 3 K mkd on MC 2329
4h 8m +75.0
Magns. Bb. 7, f. 6

			Corr. for 1922		Use
	1	8.64	+0.11	8.75	8.7
in adv	2	8.83	12	8.95	8.9 9.0
3) 10.8 +2 11.0	3	10.85	.23	11.08	11.1
5) 11.0 +2 11.2	4	11.56	.24	11.80	11.8
4) 11.6 +2 11.8	5	10.98	24	11.22	11.2
6 11.8 +2 12.0	6	11.84	24	12.08	12.1

Better, use A 1 Standard Regn See print
Have selected magns that come on print Magns. Miss Walker's marked copy HA 71, No. 4

Marked on	No. in margin	Letter	Magn.	Corr. for 1922	Corr Magns.	
	6	H	8.76	+0.12	8.88	8.9
AC 10257	9	L	8.94	+0.13	9.07	9.1
And	11	P	9.72	+0.19	9 91	off print 9.9
Var Seq	13	Q	9.99	+0 21	10.20	10.2
	12	R	10.03	21	10.24	10.2
	14	S	10.55	22	10.77	10.8
	17	V	11.13	24	11.37	11.4
	19	X	11.38	24	11.62	11.6
	21	Z	11.88	24	1212	12.1
	22	a	12.40	24	1264	12.6
	23	t	12.62	25	1287	
	16	U	10.84	23	11.07	11.1

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1926phae.proj.1216w

from MC6505

9	L	8.94	+0.13	9.07
9a	M	9.10	+0.15	9.25
10	O	9.68	.19	9.87
13	P	9.99	21	10 20
9b	N	9.20	16	9.36

✓A Plates
✓I Plates
✓MC "

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1926phae.proj.1213w

 See 12800 orderg Comp Stars

Max. 1 March 7 1907 to May 26

10.3	ac	8376	March 25, 1907	24176 60	Plotted
—		8473	cracked Too faint		
		No I plates			

Max 2 Feb. 13 1909 to May 4 Plotted

10.8	10251	Feb. 25	24183 51 63	
10.5 & 6	10259	Feb. 25	18351 63	
9.7	280	March 5	8371	
9.6	328	March 18	8384	cl T' but good images
9.7	363	March 24	8390	Eden of Var. fairly certain
9.9	378	March 31	8397	
10.3	387	April 1	8398	
10.4	398	April 7	8404	
12.0	470	Apr. 28	8425	
	478	cl T1		

No I Plates

Max. 3 Nov. 3 1911 to Jan 22 1912 Plotted

abnt 12.5	ac 12705	Nov. 2 1911-12	9343	
	12761			
10.2	12800	Dec 20	9391	
10.5	12821	Jan 1	9403	

No I plates

?	10.8 pc	1533	Jan. 9	extreme edge 9411
1533 38	11.0	1538	Jan 9	9419
1552	—	1552	Too faint	

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1926phae.proj.1245w

Max 4 No plates

Max 5 August 16, 1912 to Nov. 4 Plotted.

* 9.4	13261	Sept 27 1912	2419673	* estimate made
* 9.3	13292	Oct. 4	9680	directly with Sy Al
10.0	13329	October 14	9690	H & L
—	13394	Too poor		
—	13458	Ft. Probably N.S.		

No I plates

Max 6 Jan. 9 1913 to Mar. 30 Plotted

		1913		
* 11.1 ae	13645	Jan 13	19781	11.0 direct comp. with ae
9.2	13700	" 30	9798	direct comp. ae [H
9.1n2	13710	Feb 1	19800	

No I plates

Max 7 June 1, 1913, to Aug. 20

— ae 14173 Too poor

No I plates

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1926phae.proj.1213w

Max. 8 Oct. 11 1913 to Dec. 30 Plotted

— 14440 Too few

10,6 14544 Nov. 19, 1913 20083

10.0 14603 Nov. 26, 0098 & seems a little brighter

10.1 626 Dec 8 0110

10.7 645 Dec 11 0113

12.4 739 Jan 5 1914 0138

No I plates

Max 9 Mar. 6 1914 to May 25 1914 Plotted

11.6 ac 14928 Mar. 4 20196

No I plates

Max 10 July 29 1914 to Oct 17 1914 Plotted

much < 12.2 15344 July 21 20335

— 437 Too few

No I plates

10.3 MC 6505 Sept 28 20404

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1926phae.proj.1216w

Map. 11 Dec. 17 1914 to March 9 1915 Abetted

1914-1915

12.0 aC	15896	Dec 18	2420485
11.1	917	Dec 22	0489
9.2	974	Jan. 7	0505
92?	16044	Jan 26	0524 Extreme edge, Very poor
—	062	Cl L'	
10.3	143	Feb. 20	0549
10.3	145	Feb. 20	0549
10.8	156	Feb. 25	0554
—	175	Cl L'	
<11.5	210	March 8	0565
124	257	March 13	0590

~~two 39000~~ Sto I pl.

Map 12 May 9 1915 to July 28

—	16471	Poor
—	586	Too poor
—	598	Faint — too poor for estimate
—	613	Poor

Sto I pl

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1926phae.proj.1213w

Map. 13 Sept 21 1915 to Dec 10 1915 Plotted

ac	16842		
9.8	16851	Oct. 16	20787
—	870	Too poor	
perhaps 9.4	879	Oct 24	0795
9.4	932	Nov. 5	0807
	978		
10.0 or 10.1	986	Nov 13	0815
10.6	17038	Nov. 26	0828
12.0	17101	Dec 11	0843
12.1	17103	Dec 11	0843

16817 Oct 6 Broken; piece missing

In I plates

Map 14 Feb 15 1916 to May 5 Plotted

12.4 ac	17295	Feb. 7 1916	20901
10.4 ac	17364	Feb 29	20923
10.4	17366	" 29	20923
10.3	380	March 4	0927
10.1	388	" 9	0932
10.3 4	504	April 10	0964
10.7	524	" 15	0979
—	567	Too poor	
<11.5	17576	May 9	0993

9.8: I 39287 March 25 0948

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1926phae.proj.1216w

Mar. 15 July 4 1916 to Sept 22 Plotted

— ac 17713 Poor

Perhaps 11.2 17878 Sept 13 24211120

12.5 17935 Sept 25 21132

No I plates

Mar 16 Nov 23 1916 to Feb 11 1917 Plotted

<122 18179 1916 Nov. 16 21184

— ac 18203 cl L'

— 211 cl L'

about 11.0 264 Dec. 7 21205

10.5 290 Dec 12 21210

10.0 342 " 25 21223

10.0 376 " 30 1228

9.5 392 Jan. 2 1231

Faint 398 Poor Jan 6 21235

406

514 Too poor

No I plates

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1926phae.proj.1213w

Mar 17 April 13 1917, to July 2 1917 Plotted

11.0	ac	18787	April 17	21336
10.6		804	April 25	1344
—		875	Too poor	
—		924	Too poor	

No I plates

Mar 18 Sept 2 1917 to Nov 21 1917 Plotted

19093

n.s	—	109	Poor	
	—	162	Too poor	
		165		
	—	172	Poor	
	—	203	Poor	
	—	213	Too poor for estimate	
	—	215	Poor	
9.3	?	234	Oct 2	21504
9.3		263	Oct 11	1513
	—	348	Cl L'	
	—	349	Cl L'	
10.5		395	Nov 4	1537
10.6		402	Nov 5	1538
10.6		407	Nov 5	1538

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1926phae.proj.1216w

18 Cent		1917	
11.2	19445	Nov. 11	21544
11.1	449	Nov 12	21545
11.4	486	Nov 18	21551
very ft	493	blacks plate	

No I plates

Mar 19 Jan. 24 1918 to April 14 Plotted

—	19726	Cl L'	
—	744	Cl L'	
—	746	Cl L'	
10.8	766	Feb. 2	21627
—	815	Too faint	
9.8 or 9	825	Feb. 15	1640
9.2	915	March 11	1664
9.3	917	March 11	1664
9.5	929	March 16	1669
9.8	951	March 19	1672
10.0	961	March 22	75
—	999	Cl L'	
—	20012	Cl L'	

brighter than c, est by grades

No I plates

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1926phae.proj.1213W

May 20 June 19, 1918, to Sept. 7 Plotted

— ac	20290	Too poor	
—	292	Too poor	
—	325	Too poor	
—	379	Too poor PL.	
—	425	~~Too poor~~ Cl L'	
—	459	Poor	
<11.5	20512	Sept. 18	21855

No I plates

May 21 March 28 1919, to June 16 Plotted

<11.5 ac	21290	Mar 24	22042
9.8	399	April 30	2079
9.6	455	May 19	2098
—	491	Too poor	

No I plates

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1926phae.proj.1216w

May 22 Aug 13 1919 to Nov. 1 Plotted

— ac	21704	Too few	
—	767	Too few	
—	769	Too few	
9.3	794	Sept. 12	22214
—	819	Too few	
—	822	Too few	
—	851	Bright Too few for estimate	Sept 28
9 3n.4	852	Sept 28 Poor	22230
9.8	881	Oct. 7	22239
9.8	893	Oct 8	2240
—	977	Too few	

No I plates

May 23 Jan 8 1920 to Mar. 28 Plotted

1920

— ac	22215	Too few	
	216		
—	231	Too few	
11.3	256	Jan. 14	22338
11.3	264	Jan. 15	22339
9.8	314	Jan. 28	2352
9.8	316	Jan. 28	2352
—	348	Too few	
9.6	365	Feb. 9	2364
—	414	Too few	
9.6	435	Feb. 25	2380
—	476	Too few	
10.3	492	March 7	2391
—	502	Too few	
11.1	516	March 18	2402
—	532	Too few	

<122 AC 22572 April 9 22424
H 29887 Feb. 27
39892

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1926phae.proj.1213W

Max. 24 Oct. 15, 1920, to Jan. 3, 1921 Plotted

abmt 12.0	22921	Oct. 1 1920	22599
—	ac 22990	Too few	
10.3	23031	Nov. 4	2633
10.4	042	Nov. 6	2635
9.6	054	Nov 12	2641
9.8	104	Dec. 6	2665
—	127	Too few	
10.2	136	Dec. 15	2674
10.8	192	Dec 28	2687
—	198	Too few	
abmt 11.9	212	Jan. 3	2693
12.1	223	Jan. 4	2694
	226		
	255		

I 40199 Not cover

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1926phae.proj.1216w

leave for present

J.D Additional Maxima from Dr. Gerasimovic

2422804
2944
3088
3232
3370
3521
3659
3806
3954
4096
4240
4401
4538
4676
4824

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1926phae.proj.1213w

Pages 162 To 175

004047 U Cassiopeiae

Data of Maggini, H.A. 79, Pt. 2, p. 94

		May J.D	Mt	Allowing ± 50d		
(1) Dec. 25 1905	8.2	17205	4	17155 to	17255	Nov. 5, 1905; To Feb 13 1906
(2) Sept 27 1906	8.6	17481	4	17431	17531	Aug 8 1906 Nov 16 1906
(3) Mar 27 1908	8.3	18028	5	17978	18078	Feb 6 1908 May 16 1908
(4) Jan 5 1909	8.2	18312	4	18262	18362	Nov 16 1908 Feb 24 1909
(5) Sept 28 1909	8.5	18578	4	18528	18628	Aug 9 1909 Nov 17 1909
(6) Jan 11 1912	8.4	19413	5	19363	19463	Nov 22 1911 Mar 1 1912
(7) Oct 20 1912	8.3	19696	4	19646	19746	Aug 31 1912 Dec. 9
(8) July 13 1913	8.3	19962	5	19912	20012	May 24 1913 Sept 1
(9) Apr. 13 1914	8.2	20236	5	20186	20286	Feb 22 1914 June 2
(10) Jan 29 1915	8.5	20527	4	20477	20577	Dec 10 1914 Mar. 20 1915
(11) Nov 5 1915	8.2	20807	5	20757	20857	Sept 14 1915 Dec 25
(12) Aug 4 1916	9.6	21080	5	21030	21130	June 15 1916 Sept 23
(13) May 9 1917	8.6	21358	5	21308	21408	Mar. 20 1917 June 28
(14) Jan 29 1918	8.0	21623	5	21573	21673	Dec 10 1917 Mar 20 1918
(15) Nov 8 1918	8.9	21906	4	21856	21956	Sept 19 1918 Dec. 28
(16) Aug 17 1919	9.2	22188	5	22138	22238	June 28 1919 Oct 6
(17) May 3 1920	8.4	22448	4	22398	22498	Mar. 14 1920 June 22

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1926phae.proj.121gw

+45° 0, 1, 2 (23h not covered)

Limits I 0.1 to 1.1 +42 to +52

Print H Cass. +47° 194

0 38 17 +47 27.1 (1855)

P = 284 days

Marked on AC #0923 (1 +45)

Vis. Seq. from ± 19475 (print marked on)

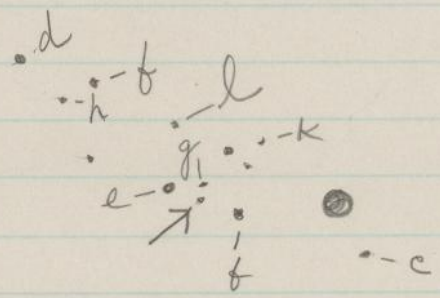
Comparison Seq. 20 K Magns. Bk.7, p.23 Mkd MC 1350 ~~1205~~ (AC 6952)

Comf. made at AC 6952

Seltus from Visual Sequence Chart Estimates made on AC 6952 verified by grades on MC 1350 and ± 19475 (a blue ff)

Corr. Magns for 1922 are included

a	
b	9.5
c	9.7
d	10.1
e	10.4
f	10.8
g	11.3
h	11.5
k	12.0
l	12.3



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Comparison Sequence

Magns of 20 K Bb. 7, 1. 23

		Corr for 1922	Cor. magn	Use
~~+8.~~				
1	8.63	+0.11	8.74	8.7
2	9.72	.19	9.91	9.9
3	9.79	.20	9.99	10.0
4	10.81	.23	11.04	11.0
5	10.30	.22	10.52	10.5
6	10.95	.24	11.19	11.2
7	11.53	.24	11.77	11.8
8	11.98	.24	12.22	
9	12.26	.24	12.50	

3 10.0
5 10.5
4 11.0
6 11.2
7 11.8
8 12.2

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1926phae.proj.1213w

Use AC 10923 for iden.

N Cassiopeiae Examination of Maxima

Max. 1 Nov. 5, 1905 to Feb. 13, 1906 Plotted

		These are 1904-5		1905-1906		
<12.0	ac	5487	ac 6952	Nov. 8	24	7158
11.3		5512	7006	Nov 18		7168
11.3		5547	7007	Nov 18		7168
~~10.~~		5624	7008			
—		5655	7009	Too faint		
		5713	7027			
		5762	7028			
10.8		5781	7060	Nov 27		7177
10.7		5787	7083	Dec 5		7185
		5795	7114			
10.8		5831	7124 76	Jan. 17		7228
		5856	7186			
		5933	7242			
—			7257	Too faint		
—			7276	Too faint		
	I	33731	7285			
	off edge					

Max 2 Aug. 8, 1906 to Nov. 16, 1906 Plotted

1906

<11.3	ac	7722	Aug 17	2417440	
10.6		7771	Sept 1	7455	
—		7883	Cl T'		
—		7922	Too faint		
—		51	Too faint		
11.9		8000	Nov 10	7525	
11.9		8022	Nov 16	7531	
12.1		8030	Nov 19	7534	
12.3		8056	Nov 25	7540	
—	I	34402	Dec +52°		

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1926phae.proj.121cw

Max 3 Feb. 6 1908 to May 16 1908

ac 9242

No I Pl —

Max 4 Nov. 16, 1908, to Feb. 24, 1909 Plotted
1908–1909

about 11.9	ac 9915	Nov. 15	18261
11.4	62	Nov. 28	8274
11.2 or 3	90	Dec. 3	8279
—	10004	Too few	
—	32	Too few	
10.7	40	Dec. 12	8288
10.4	111	Dec 29	8305
10.6	171	Jan. 25	8332
11.0	210	Feb. 6	8344
12.1	10267	Feb. 26	8364

No I plates

Max 5 August 9, 1909, to Nov. 17, 1909 Plotted
1909

—	ac 10745	Too few	
10.7	10923	Oct 15	18595
10.9	10937	Oct. 17	18597
11.2	11050	Nov. 6	8617
<11.3	11040	Nov. 10	Seen very ft, Pos pl. 18621
~~<12.0~~	No I plates		
—	10975	Too few	
11.0	10985	Oct. 29	18609
12.1	11090	Nov. 29	18640

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1926phae.proj.1213w

Max 6 Nov. 22, 1911, to Mar. 1, 1912 Plotted

1911–12

12.4 ?	ac	12758	Nov. 29	2419370
11.8		12773	Dec. 7	9378
11.1		12795	Dec. 19	9390
~~reject~~	10.3	12836	Jan 10	9412
10.9		12877	Feb. 5	9438

No. I plates

Max 7 August 31, 1912, to Dec. 9, Plotted

1912

—	13287	Too few	Van Sees
10.5	13283	Oct. 2	9678
10.5	13320	Oct 8	9684
10.6	13349	16	9692
10.6	13384	21	9697
—	13475	Cl L 1	
11.5	13515	Nov. 27	9734
11.8	13522	Nov. 29	9736
—	13554	Too few	

No I plates
mc 1945

Max 8 May 24, 1913, to Sept 1, 1913 Plotted

? —	~~No ac plates~~		
	No I "		
10.5	14141	July 3	19952
—	14163	Too few	
—	14190	Too few	
—	14276	Too few	
12.2	14343	Sept. 8	20019

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1926phae.proj.1216W

16799 Excellent images

Max 9 Feb 22 1914 to June 2

No ac plates
No I pl

Max 10 Dec 10, 1914 to March 20 1915 Plotted

10.8 ac	16983	Jan. 8 1915	20506
10.5	16029	Jan. 20	0518
11.2	16132	Feb. 19	548
<11.3	16220	March 9	20566
	16307		

h is Rem but all these images are poor and difficult to est.

No I plates

Max 11 Sept. 16, 1915, to Dec. 25 Plotted

— ac	16744	Too poor	
—	765	Cl L'	
11.1	799	Sept 30	20771
10.6	831	Oct 11	0782
10.4	873	Oct 23	0794
—	888	Cl L'	
10.3	912	Nov 1	0803
—	922	Cl L'	
10.3	940	Nov. 6	Slide 4065 20808
	958		
10.7	17013	Nov. 18	20820
10.7	17023	Nov 22	0824
10.8	17035	Nov. 26	20828

ac 17061 (11.2 Dec. 1 1915 20833
17146
17188 <12.3 Jan. 6 1916 20869
No I plates

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1926phae.proj.1213w

Max. 12 June 15 1916 to Sept 23 1916 Plotted

		1916	
< 12.0 ac	17697	June 29	21044
	17777	Too faint	
about 11.3	784	very faint	Aug. 14 21090
perhaps 11.8	848	Sept. 2	21109
probably 11.3	867	Too faint	
	886	Too faint	
12.3 or .4	891	Sept. 16	21123
12.3	895	Sept 17	1124
< 12.0	906	Sept 19	1126
< 12.3	17927	Sept 23	1130

No I plates

Max. 13 March 20, 1917, to June 28

18926	June 27	21407

No I plates

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1926phae.proj.1213W

Max. 14 Dec. 10, 1917, to March 20, 1918 Plotted

1917-18

12.4	19556	Dec. 7	21570
12.2	19566	Dec. 9	21572
12.3	19567	Dec. 9	21572
	~~19652~~		
10.7	19660	Jan. 11, 1918	21605
—	19662	Too poor. Seen.	
10.6	19690	Jan. 16	1610
—	19709	Poor	
v 10.7	19784	Feb. 5	21630
—	19930	Too poor Extreme edge	

No I plates

Max 15 Sept. 19, 1918, to Dec. 28 Plotted

<12.0	20498	Sept. 14	21851
<11.0 ac	20533	Sept. 27	1864
—	20556	Too poor	
—	596	Too poor	
10.8	633	Nov 2	21900
10.7	651	Nov. 5	21903
10.7	662	Nov. 8	906
10.9	672	Nov. 10	908
10.8	716	Nov. 23	21921
10.9	750	Nov. 27	1925
11.0	768	Nov 30	1928
11.2 or 11.1	784	Dec. 5	21933
<11.5	892	Dec. 30	21958

No I plates

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1926phae.proj.1213w

Max. 16 June 28, 1919, to October 6, 1919 Plotted

— ac 21583 Too poor

<11.5 21607 July 13 22153

11.1 686 Aug. 9 22180

— 735 Too poor

11.0 v.1 761 August 28 2199

— 787 Too poor

<10.8 812 Sept 18 2220

— 829 Too poor

— 850 Too poor

<11.5 897 Oct. 12 2244

<11.0 903 Oct. 13 2245

No I plates

MC 16231 Off edge

— 16224 Off edge

Max 17 March 14, 1920, to June 22, 1920

ac 22704 June 27 22503

No I plates

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1926phae.proj.1213w

Study of Long Period Variables for Dr. G.

Index, Cont. from p. 71.

~~205723~~ ~~R Vulpeculae~~ 1922 Corr. included.

043065 T Camelopadalis

176 Dates of Maxima

177 Sequence Magns. & Plot ✓

178 Comparison Seq. Magns.

180 etc. Observations at Max.

205723. ~~188~~ R Vulpeculae ✓

188 Dates of Maxima

189 Sequence Magns Plot.

190 Comparison Seq. Magns.

192 etc Obs. at Max.

024356 W Persei

204 2 Dates of Max. chosen for exam.

Star too faint to be exam. on AC plates.

Variables Continued in Bk. 47, page

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1926phae.proj.1213w

Pages 176 to 187

043065 T Camelopardalis BD +65° 422a

Dates of Maxima HA 79, Part 2, page 102

	Magn	J.D.	Wt	Allowing ± 70 days			
Jan 21, 1905 (1)	8.0	16867	4	16797	to 16937	Nov 12 1904	to April 1 1905
(2)	8.0	17242	4	17172	17312	Nov 22 1905	April 11 1906
(3)	8.1	17635	4	17565	17705	Dec 20 1906	May 9 1907
(4)	8.1	17999	5	17929	18069	Dec 19 1907	May 7 1908
(5)	8.1	18384	5	18314	18454	Jan. 7 1909	May 27 1909
(6)	7.9	18734	5	18664	18804	Dec 23 1909	May 12 1910
Mar 14 1911 (7)	8.5	19110	4	19040	19180	Jan. 3 1911	May 23 1911
Mar 22 1912 (8)	8.3	19484	4	19414	19554	Jan. 12 1912	May 31 1912
Mar 30 1913 (9)	8.3	19857	4	19787	19927	Jan 19 1913	June 8 1913
May 4, 1916 (10)	8.2	20988	5	20918	21058	Feb 24 1916	July 13 1916
May 1 1917 (11)	8.2	21350	5	21280	21420	Feb 20 1917	July 10 1917
May 18 1918 (12)	7.5	21732	5	21662	21802	March 9 1918	July 27 1918
May 31 1919 (13)	8.5	22100	4	22030	22170	Mar. 12 1919	July 30 1919
May 17 1920 (14)	8.2	22462	5	22392	22532	Mar. 8 1920	July 26 1920

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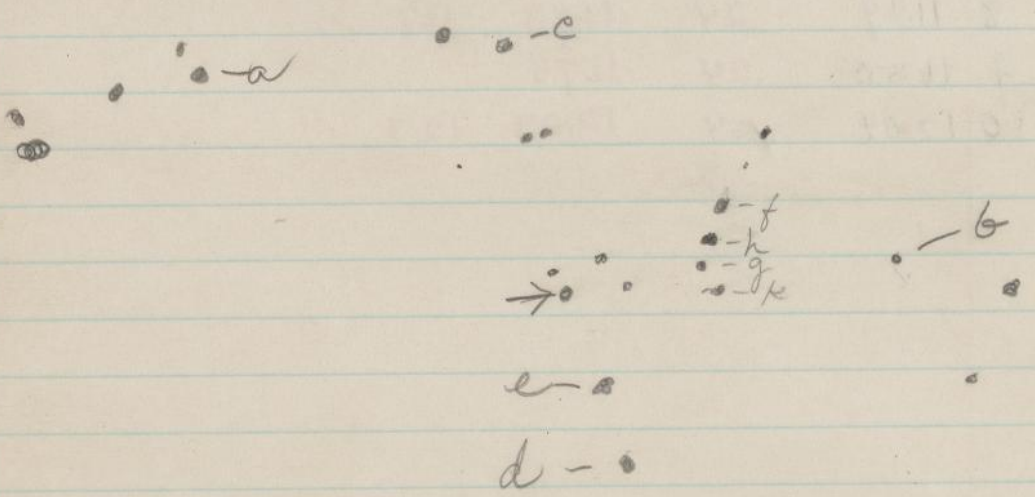
1926phae.proj.1216W

I 3.7 to 5.2 +61 to +70
ac ~~2 3 4 5 6 7~~ Regions at 60° 3, 4.5, 6 (1.5 & 7.5 do not cover)

HM Chart Var. T Canelop.
$4^h 25^m 59^s$ $+65° 50'.9$

P = 372 days Visual Seq from Chart marked on
I 9965, I 25112

Identify by I 35958 AC 22952
No magns. by Miss Leavitt
Use Carte Regin 6 0 +64 as marked on MC 7525
(7339 is given as Seq. plate but is broken & mended, and many ~~letters~~ numbers rubbed off.
ac 20994 (4.5)



I 9965
25112
AC 8183
AC 9326
* 20994

Used

~~f~~ 9.0 by Dr. Geraszimovic
c 9.0 (9.08)
d 9.6 (9.60)
e 10.0 (10.10)
f 11.0 (10.80)
g
h
k 11.6

g faint star? omit

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1926phae.proj.1213W

Magns. Comparison Seq. Carte 4.0 +64 30

As marked on MC 7525 Magns. Bk. 32, p. 179

		Corr. for 1922		
1	8.02	+0.07	8.09	8.1
2	9.34	.17	9.51	9.5
3	10.32	.22	10.54	10.5
4	10.51	.22	10.73	10.7
5	10.56	.22	10.78	10.8
6	10.84	.23	11.07	11.1
7	11.08	.24	11.32	11.3
8	11.49	.24	11.73	11.7
9	11.50	.24	11.74	
10	12.04	.24	12.28	12.3

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Plate I Nov. 12 1904 to April 1 1905

1904-1905

<11.0 ac	5480	Nov. 3	2416788	
11.4	5492	Nov. 7	6792	
10.8	5513	Nov. 11	6796	
10.8	5548	Nov. 17	6802	
10.8	5606	Nov. 26	6811	
10.8	85-	Dec. 8	6823	
10.8	5723	Dec. 14	6829	
—	63	Too poor		
10.8	5822	Jan. 10	6856	
10.85	63	Jan 20	6866	Very poor. Probably brighter than first est.
9.9	5915	Jan. 29	6875	
9.7	45	Feb. 4	6881	
—	6014	Poor		
9.8	47	Feb. 21	6898	
9.9	76	Feb. 27	6904	
10.0	6132	Mar 6	6911	
10.6	6219	Mar. 27	6932	
—	5580	Too poor		
10.8	5632	Nov. 30	6815	
10.8	5683	Dec. 7	6822	
10.8	5710	Dec. 11	6826	
11.0 ?	5714	Dec. 13	6828	
10.8	5746	Dec. 18	6833	
10.8	5841	Jan 15	6861	
9.9	5909	Jan 28	6874	
9.8	5917	Jan. 30	6876	
9.8	5958	Feb. 7	6884	
~~7~~89.9	6003	Feb. 14	6891	

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1926phae.proj.1216w

Map 1 continued 1905

9.8	6066	Feb. 25	6902
—	6082	Too faint	
—	6113	Too faint	
10.2	6192	March 17	6922
10.8	6235	Mar. 31	6936
—	6302	Too faint	
—	6316	Too faint	

~~9.8~~ reject I 32537 Jan 20 6866 2 2 plate — near N edge — out of focus?
9.4 32633 Feb 11 6888
9.4 or 5 32816 Mar 4 6909

Map 2 Nov. 22, 1905, to April 11, 1906 Plotted

		1905-6			+75°		
<11.0 Dc	6956	Nov. 8	24 17158	10.0	7204	Jan. 25	17236
<11.0	6974	Nov. 10	7160	9.7	7293	Feb. 17	17259
~~Dc~~ —	82	Too faint		—	7299	Feb 18	Too faint
—	7047	Too faint		9.8	7331	Feb. 28	7270
10.7	69	Nov. 30	7180	9.9	7346	March 4	7274
10.8	75	Dec. 1	7181	10.8	7442	April 3	7304
—	77	Too faint		—	7552	May 15	Too faint
~~10.8~~	~~7078~~	~~Dec 1~~	7181				
10.8	7117	Dec 18	7198				
10.8	7179	Jan 17	7228				
10.8	7181	Jan. 18	7229				
10.8	7189	Jan. 21	7232				
10.1	7206	Jan. 25	7236				
9.8	7212	Jan 26	7237				
10.2 or 3	7222	Jan 27	7238				

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Map 2 Continued

			1906	
9.9	7237	Jan 30	17241	
9.9	7239	Jan 30	241	
9.7 —	7269	Feb 10	252	
9.7	88	Feb. 16	258	
9.7	7322	Feb. 24	266	
9.8	50	March 5	7275	
9.9	64	March 10	7280	
	~~7413~~			
10.4	34	April 2	7303	
—	58	Too faint		
—	87	Too faint		
—	7505	Too faint		
	7531			
	7557			

No I plates

Map 31: Dec. 20, 1906, to May 9, 1907

			1906-1907				Plotted
	ac				+75°		
<11.0	8088	Dec 6	17551	—	8138	Jan 16	Too faint
<11.0	8089	Dec 6	7551				
—	8137	~~Faint~~ Poor					
find	8183						
	~~8224~~						
9.8	8236	Feb. 11	7618				
9.8	8252	Feb. 13	7620				
9.8	8289	Feb. 23	7630				
—	8298	Too faint					
9.9	8336	March 9	7644				
10.8	8387	April 2	7668				

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Max 3 Continued 1907

10.2 I 34585 March 16 17651

Max 4 Dec. 19, 1907 to May 7, 1908

		1908		Plotted +75			
10.8	ac 9148	Jan 6	17947	10.4	9158	Jan. 8	17949
10.5	9160	Jan 9	7950 ..	10.3	9207	Jan. 27	7970 68
—	9190	Too poor	Faint	9.9	9285	Feb. 22	7994
9.6	9326	March 10	8011 ..	10.0	9332	Mar. 12	8013
9.9	9333	March 12	8013	—	9339	Poor ~~9332 6 +75~~	8022
				10.1	9355	~~9355~~ March 21	^
	No I plates			10.7	9377	April 2	8034
				—	9406	Apr. 11	Poor

Max 5 Jan. 7 1909 – May 27 1909

		1909		Plotted			
	ac 10165						
11.1	I 174	Jan 26	18333				
—	205	rather br. Too poor for estimate					
9.9	213	Feb. 6	18344				
~~9.8~~ 10.2	232	Feb. 17	8355				~~10280 6+75~~
	~~285~~						~~10378 6+75~~
9.8	289	March 8	8374			1909	
9.8	329	Cl T'	March 18 18384	—	10206	Feb 3	Too poor
9.8	348	March 22	18388	—	10280	Mar 5	Too poor
9.8	389	April 1	18398	9.9	10378	Mar 31	crushed 8397
9.8	417	" 10	18407	—	10398	Apr. 7	Poor
				9.9 or 10.1	10470	Apr. 28	8425
35958	No ~~I plates~~	April 17	18414				
9.9							

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1926phae.proj.1213W

Max 6 Dec. 23, 1909, to May 12, 1910 Plotted

1909-1910

— AC 11161 Too poor

11.8	11184	Dec. 20	8661
11.4	11286	Dec. 31	8672
11.1	11287	Jan. 11	8683
10.9	303	Jan 15	8687
— 11.1	318	Jan 19	8691
10.9	367	Feb. 10	8713

No I plates

6 + 75

10.7	11394	Feb 18	8721
10.4 or 5	11411	Feb. 25	8728
9.7	11485	March 16	8747
9.8	11495	Mar 18	8749
9.8	11503	Mar. 19	8750
9.8	11514	Mar 21	8752
—	11622	Too poor	
—	11659	Too poor	

Max 7 Jan. 3, 1911, to May 23, Plotted

1911

— AC 12263 Probably seen.

11.9 or 3	291	Jan 16	19053
—	303	Too poor	
10.8	318	Jan 30	9067
10.7	339	Feb 21	9089
10.7 or 8	348	Feb 25	9093

No I plates

Max 8 Jan 12 1912 to May 31 Plotted

— AC 12826 N.S.

abnr 10.8 ?	13018	March 20	19482
10.6	13041	March 30	9492
abnr 10.0	13092	April 13	9506
10.8	13106	Apr. 25	9518

No I plates

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1926phae.proj.121GW

Max 9 Jan. 19, 1913 to June 8 1913 Plotted

1913

11.5 AC 13630 Jan 9 19748
10.8 649 Jan. 14 9782
— 663 Too faint
— 669 Too faint
— 706 Too faint
10.9 744 Feb. 7 19806
11.2 758 Feb. 6 9807
11.2 753 " 8 9807
— 866 Too faint
— 878 Too faint

No I plates

Max 10 Feb. 24, 1916, to July 13 Plotted

1916

— AC 17304 Too faint
11.5 — 17365 Feb. 29 20923
10.3 — 17429 Mar. 21 0944
10.8 17503 April 10 0964

No I plates

Max = 20988 ?

Lorbeer 17420 ?

75°

1916

17255 <12.0 Jan. 28 20891
11.5 17380 March 4 0927
— 17567 May 6 Too faint
<12.0 17295 Feb. 7 20901
11.4 17366 Feb. 29 0923
10.8 17524 April 15 0969

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1926phae.proj.1213W

Mar 11 Feb 20, 1917, to July 10, 1917 Plotted

11,2? qC	18572	Feb. 17 1917	21277
11.2	18610	Feb. 27	1287
11.2	18662	March 15	1303
N.S.	18756	—	
10.5a 9?	18776	April 14	1333

Mar 12 Mar 9, 1918, to July 27, 1918

—	qC 20126	1918 Too few	

about 12.0	19951 (+75°)	March 19	1672
—	20140 (+75)	May 17	Too few
—	20290 (+75)	July 18	Too few

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1926phae.proj.121GW

Max 13 March 12, 1919, to July 30, 1919

1919

ac 21384

Ray ft 21263 (+75°) March 11 22029

11.4 21245 (+60) March 6 2024

Max 14 March 8, 1920, to July 26, 1920

1920

11.4 ac 22533 March 24 22408

— 22559 Too fow

— 22614 Too fow

— 22753 Too fow

— 22619 Too fow (+75°) May 3

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1926phae.proj.1213w

Pages 188 to 201

205923 R Vulpeculae BD +23° 4230

Dates of Maxima H.A. 79

		Magn.	J.D	Wt.	Allowing ± 30 days		
Sept 3 1907	(1)	8.0	17822	4	17792 to 17852	Aug. 4 1907	to Oct 3 1907
	(2)	7.7	18232	5	18202 18262	Sept 17 1908	to Nov 16 1908
Sept 3, 1910	(3)	8.5	18918	4	18888 18948	Aug 4 1910	Oct 3 1910
	(4)	8.1	19058	5	19028 19088	Dec 22 1910	to Feb 20 1911
	(5)	8.1	19198	4	19168 19228	May 11 1911	to July 10 1911
	(6)	7.6	19336	5	19306 19366	Sept 26 1911	to Nov 25 1911
	(7)	8.9	19612	5	19582 19642	June 28 1912	to Aug 27
	(8)	7.8	19748	5	19718 19778	Nov 11 1912	to Jan 10 1913
	(9)	8.1	19882	5	19852 19912	March 25 1913	to May 24
	(10)	7.9	20022	5	19992 20052	Aug 12 1913	to Oct 11
	(11)	7.6	20158	5	20128 20188	Dec 26 1913	to ~~March~~ Feb 24 1914
	(12)	7.9	20300	4	20270 20330	May 17 1914	to July 16
	(13)	8.3	20444	4	20414 20474	Oct 8 1914	to Dec 7
	(14)	8.2	20570	5	20540 20600	Feb 11 1915	Apr. 12
	(15)	7.5	20704	5	20674 20734	June 25 1915	Aug 24
	(16)	8.5	20845	5	20815 20875	Nov 13 1915	Jan 12 1916
	(17)	8.5	20986	5	20956 21016	Apr 2 1916	June 1
	(18)	7.5	21118	5	21088 21148	Aug 12 1916	Oct 11
	(19)	8.3	21253	5	21223 21283		
	(20)	8.5	21393	5	21363 21423		
	(21)	7.8	21523	5	21493 21553		
	(22)	8.2	21659	4	21629 21689		
	(23)	8.1	21797	5	21767 21827		
	(24)	8.3	21937	4	21907 21967		
	(25)	8.0	22071	4	22041 22101		
	(26)	8.1	22209	4	22179 22239		
	(27)	8.0	22488	4	22458 22518		
	(28)	8.2	22626	5	22596 22656		

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1926phae.proj.121GW

I Pl. Limits 20.6 to 21.3 +18 to +28

20h +15°
21 +30

If needed, get 22h later, would be extreme edge.

DM Var enlargmt R Vulpeculae 20 57 56 +23 14.9

marked on AC9813 br
I 15819 N.S., I 25143 Seen

Vis seq. on print marked AC9813

MC 5934

AC 8798

Using visual seq.
order is diff. in photog magn.

a
b
c
d
e
f
g
h
k
l
m

e br
f br.
d 8.3
c 8.9
h 9.6 g 9.1
f 10.0
k 10.5
m 10.7

Conf. with Comparison Seq.
Used I, MC, AC plates and checked up by grades

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1926phae.proj.1213w

In 85,1, f.23 } Magns.
Also Bk.32, f.84 }

21.0 +24.5

Bk.32, f.84

MC 5934

Nos. HA 85 not to use

Des. in Bk.32 and on plate			Corr. for 1922	
1				
2	1	8.51	+0.10	8.61
3	2	8.98	+0.14	9.12
4	3	9.84	0.20	10.04
5	4	10.41	.22	10.63
6	5	10.71	.23	10.94
7	6	10.73	.23	10.96
8	7	11.47	.24	11.71
9	8	11.68	.24	11.92
10	9	11.94	.24	12.18
	10	12.42	.24	12.66

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Map 1 Aug. 4, 1907 to Oct. 3 1907 Plotted

20 + 30 21 + 30 no pl.

— ac 8668 Too poor
— 8694 Too poor Ft.
— 8716 Too poor
— 8889 Too poor

20 + 15

— 8792 cl M +10
— 8796 cl M
~~8798~~
8799
— 8853 cl M +10°
— 8858 cl M +10
— 8868 Too poor

21 + 15

— 8653 Too poor
10.2 8704 Aug. 18 17806
10.7 ~~9.8~~ yjest 8798 Sept 26 7845 —
10.4 8813 Oct. 1 7850
8858

am 21 + 15 20 + 15 none

— 5051 cl C
10.4 5053 Aug. 11 17799
10.3 5057 Aug 13 7801
5085
find 10.2 ~~5088~~ 5088 Aug 19 7807
9.9 5091 Aug. 25 7813
10.2 5149 Sept 16 7835 ✓
11.0 5186 Oct. 6 7855
<11.0 5200 Oct 15 7864

no I plates

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1926phae.proj.121GW

Max. 2 Sept 17, 1908 to Nov. 16 Plotted

20+30 21+30 None

— ac 9736 Too faint

10.2 9778 Oct. 3 18218

— 9798 Too faint

9.2 9804 Oct. 12 8227

— 9896 Too faint

20+15 None

21+15

— ac 9730 Too faint

— 9737 Too faint

— 9742 Too faint

9.3 9813 Oct 13 8228

9.6 9857 Oct. 30 8245

9.5 9866 Oct 31 8246

10.5 9907 Nov. 13 59

— 9920 Too faint

<11.0 am 5838 Sept 17 8202

10.8 5850 Sept 22 8207

9.4 5871 Oct 15 8230

10.2 5888 Nov 3 8249

No I pl

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1926phae.proj.1213W

Max 3 Aug 4 1910 to Oct 3 Plotted

20 +30 1910

— ac 11828 Too faint

— 869 Too faint

— 940 Too faint

— 11954 Too faint 11946 Too faint
959

— 994 Too faint

21 +30 none

20 +15 none

21 +15

ac 11804

— 11829 Too faint

~~+1946 Too faint~~

11.0 11969 ~~Sept~~ 29 18944

— 12074 Too faint

12126

— am 7173 Too faint. Probably N. S. Images very close —

— 7179 Too faint

9.8 7219 Aug. 24 8908

9.5 7234 Aug. 29 8913

9.8 7293 Sept. 10 8925

No I pl.

Max 4 Dec. 22, 1910, to Feb. 20, 1911

20 +30

21 +30

20 +15 no plates

21 +15

I —

am.

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1926phae.proj.1216w

Mar 5 May 11, 1911, to July 10

20+30 1911

— ae 12406 Extreme edge — Too few

— 12455 Fr. " " Too few

21+30 none

20+15 "

21+15

— 12412 Too few

— 12419 Too few

— 12441 Too few

— 12459 Too few

< 10.5 am 7609 July 23 19241

No I pl

Mar 6 Sept. 26 1911 to Nov 25 Plotted

20+30 1911

ae 12554

<10.7 12754 Probably sequ ft. Nov 27 19368

21+30

20+15

21+15

<10.7 12561 Sept. 13 19293

10.4 598 Sept 30 310

9.5 631 Oct 10 9320

10.1 701 Nov 2 9343

10.1 711 Nov 3 9344

10.8 739 Nov 18 9359

<11.0 771 Dec 7 9378

am 7783 Too few

~~7804~~

9.4 7895 Oct 18 9328

No I plates

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1926phae.proj.1213w

Max 7 June 28 1912 to Aug. 27 Plotted

20 +30

— ac 13195 Extreme edge. Too few

— 212 Too few

— 223 Too few

— 226 Fr. Poor.

21 +30

20 +15

21 +15

— 13216 Too few

— 222 Too few

10.3 227 July 19 19603

am 8322

<11.0 8373 June 21 9575

8383

— 8405 Too few

about 11.0 8425 July 9 9593

— 8481 Too few

10.4 8525 Aug. 2 9617

8535

— 8562 Too few

No I plates

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1926phae.proj.1216w

Max 8 Nov. 11, 1912, to Jan. 10, 1913 Plotted

20+30

— ac 13427 Faint — Con.

9.7? 13544 Perhaps 9.7 ? Dec. 3 19740

21+30 none

20+15 none

21+15

11.0 or fainter 13438 Nov. 4 19711

< 10.8 13442 Nov. 5 19712

9.8 13533 Dec. 1 19738

am none

I none

Max 9 March 25 1913 to May 27

20+30 1913

No plates

21+30

— ac 14012 May 7 +10° 15m exp

10.4 14018 May 9 19897

am 8876 Broken Slide 3731 May 6

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1926phae.proj.1213w

Mar 10 Aug 12 1913 to Oct. 11 Plotted

20 +30 21 +30 no pl.

— ac 14247 Too pon

— 261 Too pon

— 291 Too pon

299

— 313 Too pon

— 321 Too pon

9.5 351 Sept 10 20021

— 401 Too pon

— 428 Too pon

20 +15 no pl

ac 21 +15

<10.8 14267 Aug. 19 19999

10.7 14281 Aug. 21 20001

— 322 Too pon

10.4 394 Sept 25 20036

10.4 422 Oct 2 0043

471

21 +15 20 +15 none

— am 9338 Too pon

9.5 9435 Sept 8 20019

9460

— 9487 Too pon

— 9583 Seen faint, pon

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1926phae.proj.1216w

Max 11 Dec 26 1913 to Feb. 24 1914

20 +30

No plates

✓ 21 +30

20 +15

21 +15

Max 12 May 17 1914 to July 16 Plotted

20 +30

ac 15191

— 253 Tau fam

— 296 Tau fam

— 313 T fam

— 316 T fam

— 337 T fam faint

21 +30 no pl.

20 +15 " "

21 +15

10.4 ac 15213 May 28 20281

9.5 275 June 17 20301

9.5 285 June 21 305

10.5 310 July 3 317

<10.5 343 July 21 335

— ac 10023 acmpt July 28 fam

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1926phae.proj.1213w

Max 13 Oct 8 1914 to Dec 7

20 +30 21 +30 None
ac 15561 20 +15 "
595 21 +15 "
625 am "

Max 14 Feb. 11, 1915, to April 12

20 +30 21 +30 None
16141 21 +15 "
1648 am "
21 +15
16424

Max 15 June 25 1915 to Aug 21 Plotted

20 +30 1915
— ac 16641 Too few
21 +30
10.1 16560 July 5 0684
9.3 n.4 16609 July 24 0703
20 +15 None
21 +15
10.2 ac ~~16624~~ 16642 aug 11 0721
21 +15
— am 10828 Too few
9.5 10849 July 19 0698
9.7 10915 July 30 0709
n3 16648 aug 13

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1926phae.proj.1213w

Max 16 Nov. 13 1915 to Jan. 12 1916

20+30

16.3 ac 17059 Dec. 1 20833

21 +30

abnt 11.0 16929 Nov 3 20805

20+15 none

21+15

10.2 17125 Dec 16 20848

am none

Max 17 April 2 1916 to June 1

20+30

— 17517 Tr on pr

21 +30

abnt 11.1 n2 17632 May 25 21009

20+15

17631

21 15

+— 17501 Tr on pr

<10.5 17650

~~am none~~

<10.8 ac 17666 June 21 0.1036

— am 11851 Tr on pr

<10.5 11879 June 2 21017

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1926phae.proj.1213W

May 18 Aug 12 1916 to October 11 Plotted

20 +30

	17759			
—	761	Too faint		
—	820	Too faint N.S.		
10.8	963	perhaps 10.8	Oct 3	21140
<10.8	18026	Oct 17		1154

21 +30

9.3	17845	Sept 2	1109
10.3	951	Sept 28	1135

20 +15

9.5	17889	Sept 16	1123
	961		

21 +15

<10.5	17774	Aug 13	1089
<10.5	18003	Oct 11	1148

dim 20+15

9.8	12373	Aug 25	1101
10.0	378	Aug 26	1102

21 +15

—	12564	Cl L'

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1926phae.proj.1213w

W Persei 024356

Too faint for examination.

Dates of Maxima in HA 79 were looked up and plates found near to Max.

Max	Max
Aug. 6 1905	Jan. 12, 1913
AC 6541 July 22	13649 Jan. 14
6588 Aug 7	13669 Jan. 22
6593 Aug 11	
6630 Aug 23	

Found I 16605 in already marked, same star as print This was examined on above AC plates and Dr. G. decided star too faint.

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1926phae.proj.1218W

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