KG
11366
208

1925phae.proj.1210w

MC's
Ida E. Woods
Book No. 32
Plates
Miscellaneous Milky Way Regions

N.G.
h.50 17 12 -22
88 17 39 -26
100 17 21 -32
126 16 53 -28

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

AG11366.208

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121MW

Harvard College Observatory

Ida E. Woods

Book No. 32.

Examination of Miscellaneous Milky Way Regions.
See Index.

Continued in Bk. 34

Drawings of fields are free hand, without measurement of spaces between stars, and vary ~~in~~ scale according to plate used, field of B, MF, or AD. North up usually, though one group of plates was sketched South up as superposed.

Ida E.W.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121..W

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

KB 11366 208

HARVARD
UNIVERSITY
LIBRARY
JUL 17 1956

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1241w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

Nov. ? 1924

Regions 23 17 +60
MC 20966
20978
20966 superposed

Th nebulous obj. marked in semi-circles

MC 20966
20986
20986 superposed
Obj. on 20986

Very faint nebulous object
$22^h\ 51^m$ +61.8° (1855)
New?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1217w

Nov. 17

Regin 23 17 +60

MC 20966

21009 September 27, 1924, Eff. 110m

20966 superposed.

* Moving object? $22^h\ 59.0$ +62.3 (1855) in 21009

See p. 18

a distant, short meteor?

No asteroid at +62°

MC 21007 September 26, 1924, Eff. 90m

21009 September 27, " Eff. 110

21007 superposed

MC 21007

21021 October 2, 1924 Eff. 100m

21007 superposed

MD Plates of this regin

MD 21007

21009

21009 superposed

MD 21009

21021

21007 superposed

UY Cassiop. (1900) $22^h\ 57.8$ +59.7 Var.? Br. 21021 Ft. 21007 & 21009

This is beyond field of MC plates of this regin.

(22 56 +56.8 1855)

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Monday, December 1, 1924

Regin 6.9 +4.8

MC 21081

21112

21081 superposed

21081 Hack

See Defects ? Seen by Dr. Fisher, pronounced defects.

See page 26

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1217w

Tuesday, December 2, 1924.

Region 3h 10m +5° 7'

Eff.

MC 20979 Sept. 5, 1924 86

21022 (Mended on glass)

21022 superposed

No objects.

Continued, p. 23

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

Saturday, December 6, 1924.

Regin $5^h 45^m$ $+19.9$ Regin of SU Tauri

MC 21111
21155
21111 superposed
No objects except SU Tauri

Too dark
first
later
Exam by elec

Mc 21111
21144
21144 superposed
Exam. by electric light.
No objects

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1217w

Dec. 6,

Regin $3^h 30^m$ $+48^\circ$

MC 21092

21150

21092 superposed,

✓ Defect on Asteroid, 21092

Exam by Miss Cannon —

Defect

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121MW

Wednesday, December 10, 1924.

Regin 2 00 +60
MC 20968
20972
20968 superposed
Plates 1 day apart but only other plate, 21010, too poor for comparison.

Thick regin. No objects found.

Regin 4 00 +50
MC 20980
20984
20980 superposed
Plates 1 day apart — short periods might be fnd. No objects except

Neb.? near center
→ Watch on later plates.

Regin 4 41 +42.
MC 20985
21017
20985 superposed
20985 images elongated N & S. Not good for comparison.
21017 cracked — mended on glass

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1217w

Monday, February 9, 1925.

Regin $6^h 42 \quad +8.8$

MC 21099 October 30, 1924, Exp. 94m

21156 November 26, " " 90

21099 superposed

Many defects on plates, especially 21156

Objest Asteroid ?

Scott Defect on 21156

Variable

6	31.2	+8 30	1855
	2.5	-2	
6	33.7	+8 28	1900
	2.4	-2	
6	36.1	+8 26	Approx. 1924

Position measured, Bks. 21, page 128.

See, continued, page 33.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1218w

Object, page 11

Asteroid-like trail at +62° on MC 21009

Not seen on MC 21009 but might be at limit of plate.

Object seen by Dr. Shapley,
Mr. Fisher
Miss Cannon

no AC plate of near date
AI 23571, Sept 27, 1924, 88m N.S. 23h +30°

		Eff.
AY 265	Sept. 27	129m
270	Oct 1, 1924	180m

AY 265 shows an image of this object.
3 exposures of each star. Apparently this image corresponds to the middle of the 3 exp. which is the strongest image of the 3 on the stars. Obj. extremely faint. (Dr. Shapley sees the other images). (Miss Cannon thought this defect)

MC 21007, taken Sept. 26, same region, Eff. 90m. does not show object

March 16. Crean again by Dr. Shapley. Would be on 21007, if an asteroid.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Monday, March 16, 1925.

to Show plates again to Mr. Fisher for exam.

* Not an asteroid

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

Monday, August 17, 1925.

Meteor Trail? on 736

Special Exam. for Cepheids.

Exam. of Special Milky Way plates in Perseus.

4 plates Given me by Dr. S.

a4	736	August	11-12	Exp. 70m
	737	"	11-12	62
	738	"	11-12	60
	740	"	12-13	82

Taken for Radiant Point of Perseids.

Compared (736
740

740 superposed

(737
740

740 superposed

(738
a4 18018 Exp. 48

18018 superposed

No objects found.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Tuesday, November 10, 1925.

Evgen. Milky Way Region
$3^h 7^m +51°$
MC 21084 October 25, 1924
21598 Sept. 20-21, 1925
21084 superposed
Plates rather dark — examined in direct sunlight

Use 21598 again.

Asteroid (?) (Moving Object) on MC 21084
$3^h 5^m +51°.7$ (1855)
$4^s.3 \times 45 \text{ yrs.} = 193^s.5$ $14''.0 \times 45 \text{ yrs.} = 630'' = 10'.5$
3 8 +51.9

Var.? Watch on other plates —
Does not seem quite perfect shape

Br 21084 NS 21598

2 51 +49.7

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

21084 Cont-

3 fr. nebulae (?) marked

1)

2)

3)

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Armistice Day

Wednesday, November 11, 1925. Card ✓ for Regim

Milky Way Regim $3^h\ 10^m$ +56° See plates exam. p. 13.

MC 21016 October 1, 1924, Exp. 93m

21026 October 4, 1924, Exp. 90.

21016 superposed

Use 21026 for comparison plate of regim.

New Var.

3 21 +58.2 Br. 21016 Ft. 21026

Not much range on these plates — but

N.S. 20979

Br. 21022 Ft. 21029

21004 20975 for plate probably N.S.

Should have been found on p. 13

Not in Card Cat.

MC 21004 Sept. 25, 1924 100m

21026 Oct. 4, 1924 90

21004 superposed

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Region 3.2 +57

Available plates — to date

Eugenio Blanco	20975	September 1, 1924	89
13	20979	" 5, 1924	86
23	21004	" 25, "	100
23	21016	October 1, 1924	93
13	21022	" 2, "	115
Conf. 23	21026	October 4, 1924	90
25	21029	" 5, "	88

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121rw

Thursday, November 12, 1925.

Regim 3, 2 +57 Cont

MC 21026

21029

21029 superposed

Object on MC 21026.

Is this Asteroid or Defect?

3 26 +55.7 Oct. 4, 1924

Not in Cat — See Eukrate. but this is bright

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

November 12, 1925

M.W. Region 6.9^h / 7.0^h + 5.°0

See page 12

	Available plates		Exp
page MC	21081	October 24, 1924	67
12	21112	November 4, "	60
12			
27	21212	December 26, "	90
27	21323	Feb. 27-28, "	40
27	21351	March 19-20, "	60

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121rw

Try 21212 with latter plates

Friday, November 13, 1925.

MC 21112
21351
21351 superposed
No objects
Should have found object below — 21323 —
it was under line
21112
21212
21212 superposed
both fogged plates.
plates Kodaly comparable — 21212 very good, except dark
No objects —

21112
21323
21323 superposed
Object Br. 21323 NS 2
21351 21081
21112 Ft or Defective
21212 Ft

Variable Known
6 59.7 + 5.2 (1855)
RS Monoc. 7 2.2 + 5° 9' (1900)
870205

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Saturday, November 14, 1925.

N.W. Region $0^h\ 0^m +62°$

Plates available

				Exp.
	NIC	21077	October 24, 1924	90
Pages	29	21209	December 26, 1924	121
Comparison	29	21565	August 22-3, 1925	104
		21597		

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

November 14, 1925

Use 21565 as Comparison plate.

21077
21565

21077 superposed

→ Excellent plates -
No objects found.

21209
21565

21209 superposed

21209, irregular, ringed, trailed images.
not compared — use for proof if needed.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121MW

November 14, 1925.

M.W. Region $0^h.7$ $+62^\circ.0$

		Available Plates		
	Eyepiece			Aff.
		20967	August 29, 1924	70^m
Comp. Pl. –		20973	" 30, "	90
	32	21003	Sept. 25, "	133
	31	21015	October 1, "	90
Davis –		21567	August 23-24, 1925	106

Use 20967 with later

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1217w

Regions 0.7 +62.0

MC 20973
21567
21567 superposed
Not compared — 21567 too dark — long exp., plates very faint stars.

20973
21015
21015 superposed
Excellent plates — Many stars

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Monday, November 16, 1925

N.W. Region $0^h.7$ $+62°$

20973

21003

21003 superposed

No objects found.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Tuesday, Nov. 17, 1925. See also page 17.

Milky Way Region $6^h.7$ 42^m $+9°$

page	Available plates:		Eff.
17	MC 21099	October 30, 1924,	94m
17	21156	November 26, 1924,	90
35	21163	November 28, 1924	81
35	21324	Feb. 27-28, 1925	40

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

Nov. 17, 1925.

Regin 6.7 +9 Cont.

MC 21163

21324

21324 superposed.

Mr. Fisher: "In film"

See peculiar, comet-like object, 21163 near corner

Also, another, below -

(Beauty) Winged nebula, on both plates.
6 31 +8.9

Faint object, not like stars -

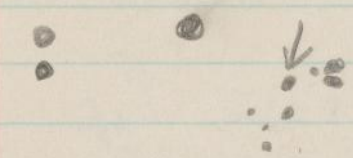
Object

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

Cepheid?
New Var.?

Br. 21163 N.S. 21324
21099
21156



6 39 +8.2 (1855)

ST Monoc. 6 41.7 +8 7 Hubble A.S.P. 32, 162
Magn 10 to 15

MC 21156
21163 not comp — 2 days only between
→ see that these plates are ~~Boots~~ used for
later comparisons.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

Wednesday, December 18, 1925

M. W. Region 6.7 0°

Page	Available Plates:		Eff.
37	MC 21086	October 25, 1924	91
Use as conf.	21171	December 4, "	123
37	21306	Feb. 20-21, 1925	162

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

Regin 6.7 0°

mc 21086
21171
21086 superposed

No objects

mc 21171
21306
21306 superposed

No objects

Watch bright star marked — possibly slight change.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Thursday, November 19, 1925.

M. W. Region 20 24 + 48

Available Plates

			Exp.
MC	21089	October 29, 1924	117m
	21559	August 18-19, 1925	80

21089
21559
21559 superposed

No objects

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Friday, November 20, 1925

M.W. Region $23^h 13^m +55°$

Available Plates

40	MC	21129	November 17, 1924,	Ref. 111
Dails pl? Cent.		21573	August 27–28, 1925	89
Two dubs	41	21653	October 17–18, 1925	87

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

November 20, 1925

N.W. Region 23 13 +54.1
MC 21129
21573

superposed

New Var.
23 30 +56.6 1855
Not in Var. Catalogue:
Br. 21129 Ft. 21573

Plates asked for.

21653 does not cover.

A 6487 6
1582
(238) 6488
1578

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Yale
Harvard

Saturday, December 21, 1925

MW Region 23 13 +54.1

MC

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

MW Region $6^h\ 0^m$ $+48°$

	Available Plates		Eff.
21	MC 21291	February 14-15, 1925	110
Pos	21295	Feb. 18-19, "	139
Darks.	21655	October 18-19, "	90

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Tuesday, November 24, 1925.

MW Region $0^h 38^m +57°$

Available Plates

			exp.
MC	21091	October 29, 1924	8b
	21581	August 28-29, 1925	113
	21091	superposed	

Ft. neb. about stars marked n

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121dw

Wednesday, November 25, 1925.

M.W. Region $1^h 37^m +56°$

	Page	Available Plates		Exp.
Use Comp. Pl.	45	MC 21139	November 18, 1924	135m
	45	21149	" 25, "	93
	45	21574	August 27-28, 1925	96

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

1 34 +56

~~1.6 +~~ 21139
21149
21149 superposed

No objects

21139
21574
21139 superposed
no objects

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Milky Way Region $22^h\ 9^m$ $+56.^\circ4$

page	Available Plates:		Eff.
47	MC 21116	November 14, 1924	92
47	21530	July 19-20, 1925	90

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Monday, November 30, 1925.

MC 21116
21530
21116 superposed

Var.? Probably defective image on 21116
Star just preceding +54° 2698 22h 6m 18.8 (1855) +54 33.0 90 M
Pos about 22 6.2 +54 34 (1855)
Br. 21530 Ft. or Defective 21116
Take other plates to prove.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

November 30, 1925.

Milky Way Region $22^h 44^m +53.0^\circ$

Available Plates

page			Eff.
49	MC 21145	November 19, 1924,	79
49	21566	August 23-24, 1925,	90

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

Gained
MC 21145
21566
21145 superposed

No objects

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12mw

Beginning MF Milky Way Regions

Saturday, December 5, 1925.

Milky Way Regions 17 12 -22

Available Plates from cards in drawer

	Page						
MF	51	8518	May 2, 1924	62	in	23908.818	
—		8651	Plate N.G.				
Comp. Bl.	51	8678	June 30, 1924	63		23967.685	
	56	8769	August 25, 1924	60		24023.545	
	69	9574	July 22-23, 1925	45			
		B 33949	17 6 -17.3	62		B 19079 16 58 -15.6	15
		B 32059				22790 17 8 -17.3	12
		34052				19724 17 8 -17.6	10
		32333	16 47 -22	60		29815 17 7 -17.3	10

→ Limits of Region & Kumm Vars., see Bk. 34, p. 11

Motion of Asteroids found on MF plates — see Bk. 34, p. 10

A plates 17.2 -22

		A 2841	6		63	A 3527	60
17.0 -20		A 3794			195	9375	60
		3795	16.8 -17	60			
9408	60	3821			210	3646	10
9368	60	3824			240		
		3913			216		
		2844			62		
		3646			10	17.1 -27	
		7408			50	A 10202	120
	A	16.8 -22				2676	67
		A 5507			11	5691	60
17.2 -18		2831			60		
5613	10	4770			10	10426	82 (Heff)
		7358	16 47 -22		60	17.0 -15	
17.0 -15	8X10	7363	16 47 -22		60	18769	90
A 11418	11323	8285			60	9243	84
11373	11326					2847	61
11559	11341	8419	16 48 -22		60	10454	83
	11346	10407			120	17.5 -18	
						6808	240

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phate.proj.12dw

Dates given as Vars. are found on different pairs of plates, but Vars. numbered continuously on MF 8678

Position measured Bk. 29, p. 80

MF 8678
8518
8678 superposed

Center of 8518 N. S. fogged, Mars apparent magn. affected in

Dec. 8, 1925 Mars in center of 8518, other stars readable

No. 1 New Variable 16 53.5 -24.3 (1900)

Br. 8678 Very Ft. or N. S. 8518

8769
9574

Mag. 14.2 North
Min. [15.5 ult

B 25522 ft stars not traced
34052 ft stars seen

Confirmed by Miss Cannon, March 3, 1926

On 8678 Var. a little brighter than X)
8518 perhaps barely seen.

a2831
Br. 8678 | Arthur Co. 23467 Ft. 8518
9574

These B plates do not show ft. stars

12113 20745 Max a 7358 much brighter than X

*Medium a little br. than y
B34052

Dec. 8, 1925

Also = 96

No. 2 New Variable ? 17 2 -26.3 (1900)

Br. 8678 N.S. 8518

Mag. 14.0
Min. [15.5

8769

B 25522

Barely seen 9574

Identified marked on B33830

(-Ophiuchi, -26° 11880 7.2 — AJ Cannon
HC. 164 16 59.8 -26 26 (1900)

Is not this this faint var Cat. Star prec. Var

On 8678 Var = x
* 8518 N.S. very ft. stars seen

Confirmed by Miss Cannon, March 3, 1926.

Br. 8678
* a 9272

N.S.
8518
Ft. but seen 9574
* Barely seen B34008

Position meas. Bk. 29 page 86

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

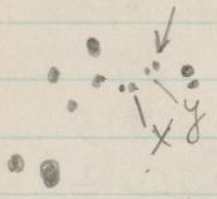
52

Position measured, Bk. 29, page 134.

1925

Dec. 8 No. 3 New variable? Region 17 12 – 22

17 6.0 – 19.6 (1855)



On 8678 about = x

On 8518 N.S. or barely trace

y = at least .3

a faint star at Max.

few plates show very ft. stars

Confirmed by Miss Cannon, Feb. 18, 1926.

Br. 8678 — Ft. 8518

~~8769~~ — 8769

a 3794 shows — 9574

brighter than y — a 9369 Var is probably seen and may be

not full Max. — a 9408 ~~I see~~ ~~Ft. stars~~ near Max.

B 34052 both stars show (y & Var) V br. not seen

32059 does not show ft. stars enough

Br. B25522

ft. B33949

14.0

8518 16.0?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1217w

Not found Meas. A 2849? Is this same star? ∴ Var? star on A 2849? Are there four stars?
See later Probably not
1925

Regim 17 12 -22

Dec. 9 No. 4 New Variable? 17 14.5 - 18.0 (1855)

o d or Neb

On 8678 a little brighter than x

• Group of several

On 8518 about = y

Nova?

x - ⁘ - y

Is 8518 ~~8678~~ defective?

• bright dbl

Miss Cannon saw this Probably a fourth star, see sketch above

Br. * 8678 Fr. 8518
8769 9574
B 33949 (1904)

not confused by B plates which have elongated images

If star seen is Var. but I think this agrees with the Bruce plates, three in line, and the Var. on MF plates is a fourth star.

Fr 2849 if same star is seen or are there four stars?
same, A 6768 Var. is probably N.S.
Fr A 2764
Seen, better plate A 6808
Fr. A 6768 (Broken)
B 34052 three stars
B 25522 three stars? (one long line)

Is this defective plate?

See 14804 Apparently 4 is part of the elongation of star
prec. ∴ 2 and 2 is variable N.S 14804
Br 4/5-36

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

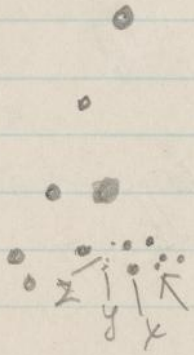
1925phae.proj.121w

54 Positions measured, Bk. 29, page 142

1925
Dec. 9 No. 5 New Variable? 17 11.4 − 18.8 (1855)

Region 17 12 −22

⊙ Cluster



On 8518 var quite a bit br. than x
On 8678 var. is between y & z

Br. ~~8678~~ Ft. 8678
~~8769~~ 8769
* 8518 ns 9574
a 5613 Short exp. but var. is probably at Max — through a faint star.
~~**~~ ns a 2849 Dbl
plate shows ft. stars

Confirmed by Miss Cannon, February 20, 1926.

Off edge a 3794
" " a 9408
9369 Too far

Meas. a 6768

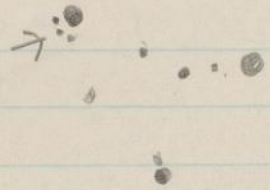
Br. a 6768

a 8518 14.0
Fainter than limit of
a 2849 [15.5 ?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

1925
Dec. 11 No. 6 Region 17 12 -22
New Variable? 17 1.0 -17.4 (1855)



Probably slight if any variation.
No more diff. than usual between these two plates
MF8518 – 8678

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12cw

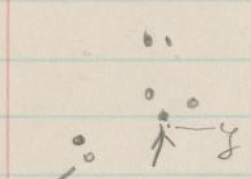
56

Position measured, Bk. 29, page 118.

1925

Dec. 11 No. 7 Star Variable? 16 55 -19.2 (1855) Regim 17 12 -22 found later, =103

MT8678
8769



Br. = a little br. than x
Fk. = N.S. fainter than y

x Br. 8678
Not Map but
Prof — Br. a3795
✓
Meas. 3795

Fk. or N.S. 8769
9574
* 8518
a 9369
a 9408

Confirmed by
Miss Cannon,
March 4, 1926

Map 13.8 MT8678
15.0 9408
if star is one seen

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

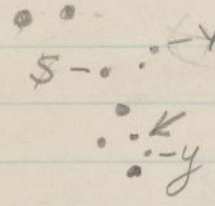
1925phae.proj.121w

Position measured, Bk. 29, page 132.

1925

Dec. 12 No. 8 New Variable? Regim 17 12 -22
17 1.0 -18.8 (1855)

large range
(found later on B plates independently)



Br. = a trifle fainter than 5 see brighter at B 3405.2
Ft. = as bright as " 5
Y

Found again = No. 105

Br. MF
MF
May * B 33052
Prof → a 3795
Meas. 3795 or 9369 Max B 33830

mF 8769) found by this change but not full range
Ft mF 8678)
** 9574
*B25522
a 9408 trace only
a 9369 " "

Confirmed by Miss Cannon, Feb. 12, 1926.

May 11.5
Min 15.2 a 9408

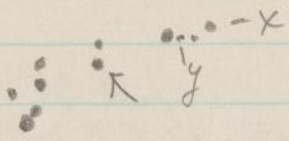
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

58 Meas. a 2764 ft. background image Measured Positions, Bk. 29, page 150.

1925 Region 17 12-22

Dec. 12 No. 9. New Variable? 17 22.6 −17.7 (1855)



Br. = x
Ft. = y, or fainter

Good range

Br. 8678	*Ft. 8769
Br. a 6808	9574
	*Ft. 8518
	B 33949
	B 22522
	B 82059
	B 34052
	Ft. a 2764

Confirmed by Miss Cannon, March 10, 1926

135 Ft 8678

14.5

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

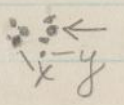
1925phae.proj.121w

Position measured, Bk. 29, page 90.

1925
Dec. 12 No. 10 New Variable. ? Regim 17 12 -22
17 2.5 -22.5

Br. = brighter than x
Ft. = about = y or slightly fainter

Confirmed by
Miss Cannon
March 2, 1926



* Br. 8678 Ft. 8769
Not Max 9574 N. S. 8518
Not Max A 2841 N S a 9408
Probably not Max B 34052 ~~N S~~ a 3794 * very ft. trace
Compare 2841 - 3794, though marked diff. in exposure & quality.
Meas. prs. 2841, if no better can be found.
B 35522 either Br. or Defective?
* B 32059 Max?
Prob. M 8518 — 32383
M 8678

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

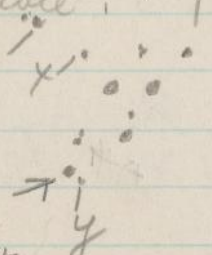
1925phae.proj.121tw

Position measured, Bb. 29, p. 98.

1925
Dec. 12

Region 17 12 −22

No. 11 New Variable? 17 5.2 −20.8 (1855)



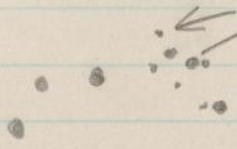
Br. = brighter than x
Fk. = N.S. fainter than y

Large range

Br ~~8678~~ 8769
B 34052
a 9408
a 9369

~~Probably N.S~~ ~~8769~~ 8678 barely seen
B 32059
MF 9574
MF* 8518
**a 3794

Detail from a 3794



Star marked is probably the variable, very faint. Match this with a 9369 or a 9408

Confirmed by Miss Cannon, March 15, 1926

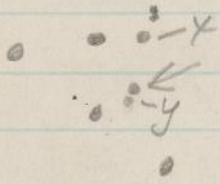
Probably same as 110 p. 92, Bb. 34

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Position measured, Bk. 29, f. 136.

1925 Dec. 12 No. 12 New Variable? Region 17 12 -22
17 9.4 -19.8 (1855)
Samas No. 107



Br. = x
Ft. N.S. fainter than y or barely seen

large range
Many ft stars
near dec
a 3794

Br. ** 8769

Ft. 8678
N S 9574

See BB 34 f. 33 for independent finding on a plate

Meas 2841

*Br. a 2841 —— *Ft. a 3794
B 34052 not Map N.S. B 20445 — short eff.
B 32059 " " B 25522 shows ft. stars, a 9369 V not seen

Confirmed by
Miss Cannon
Feb. 19, 1926.

This is known — of Remmutlis star by same position

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121rw

62

Position measured, ~~Bb~~. 29, p. 138.

1925
Dec. 12

Regm 17 12-22 17 10.2 - 19.8 (1855)

No. 13. New Variable? Small range.

Br. = a little brighter than x,

Ft. = y.



Measure

Br. 8678 Ft. 8769

~~Is this a dbl image?~~ 9574

Prof

B 25522 ——— B 34052

a 9369

** a 2841

Confirmed by
Miss Cannon
Feb. 19, 1926

13.8
15.5

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

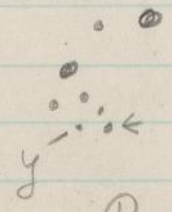
Not proved

1925 Regin 17 12 -22

Dec. 14 No. 14 New Variable 17 19.6 -20.9 (1855)

Br. = nearly as br. as x

F ~~ff~~ = fainter than y



Br. 8769

Probably seen, not full Max., B 84052, but at limit of plate

N.S 8678

N.S 9574

8518

a 2841 does not show ft. stars

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

64

Was: edge?

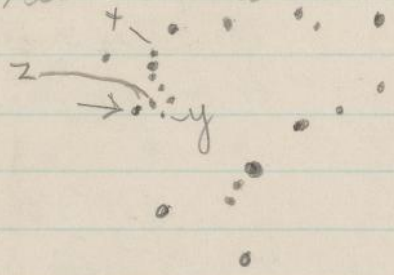
Position measured, BB. 29, page 92.

1925
Dec. 14

No. 15 New Variable?

Region 17 12 -22
17 5 -21.5

Same fund = 111



Br. = x
Ft. = N.S. fainter than y

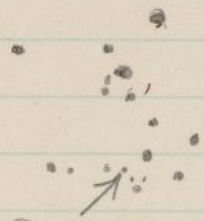
Confirmed by Miss Cannon, Feb. 10, 1926

MF
Br. 8769
*A 8419
*B 25522

(Ft.) N.S. 8678
Probably 9574 but seen 9516
Seen A 9408
Extremely ft A 3794.
A 2841
7358

A A
Prov. - 8419 - 7358
extreme ledge

See A 3794



Probably Var. is ft. star marked. Must find it bright with faint stars seen near, to be sure. The other A plates at present exam. do not show the extremely ft. stars but position seem right for the star exam. which is usually about = 2. Anyway, this star changes on those plates. There may be another ft. variable very close.

→ Br. on B 25522 and faint stars seen

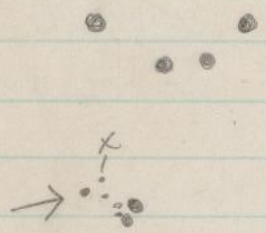
See Var 67 same star, fund

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

Position meas. Bb. 29, f. 84.

1925
Dec. 14 No. 16 New Variable? Regim 17 12 -22
16 58 -243



Br. = a little brighter than x
Ft. = N.S. or at limit of plate

Br. 8769
? nearly Nat. 2841 pair-edge
Nebulous — Br. 2831

Ft or N.S.
Ft. 8678
9574
8518
B12|13
25522
32059
34052

Very ff a3794 if seen

Also found as No. 46, Bb 34, f. 21.

Confirmed by Miss Cannon, March 15, 1926.

Mag 13.8

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12:DW

Not found.

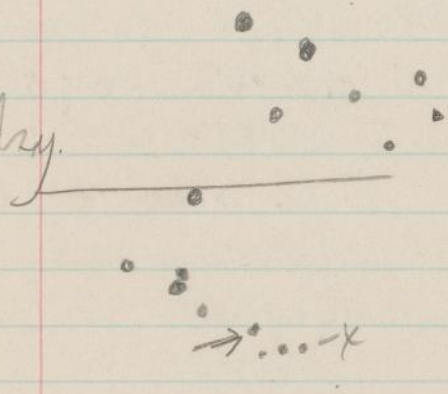
Regina 17 12 -22

No. 17 New Variable
◎ cluster

Variable is
above same cluster

16 54 -26.8 (1900)

The star
indicated
by drawing
apparently
does not vary.



Br. = nearly = X
Ft. = N.S. or at limit of
plate

Br. = 8769

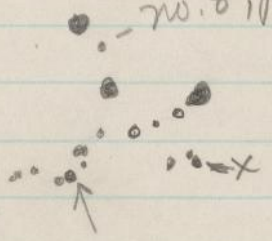
Ft. 8678
9574

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

How measure? Take special MC pl?
Not brighter on a plates

Regina 17 12 -22
No. 18 New Variable? 17 1.0 -18.9
near No. 8



Br. = nearly = x
Ft. = at or below limit of plate

Br. 8769 Very Ft. or N.S. 8678
Dec. 15, 1925 This was found on B plates B 25522
Br. B 34052 N.S. B 32059
Ft. but seen MF 9574
No trace on a 9408*
a 3795
a 9369

Confirmed by Miss Cannon, Feb. 12, 1926

Max 13,5
Min [15.5

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12:dw

December 15, 1925

Comparing B 32059
34052

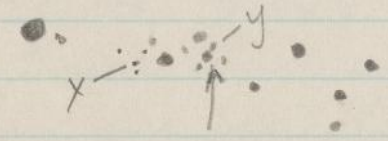
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

Not proved – December 17, 1925
No A plate for
positn
Region 17 12 –22
Comparing MF8678
9574 just recd from Arequipa.

17 15.2 –18.4

No. 19 New Variable? Very ft. when brightest



Br. = about = x
Ft. = N.S. when y is
Seen.

Br. 8678

Ft. or N.S.
x * N.S. 9574
* nS 8518
8769
B 25522
B 34052
B 32059
B 33949
Ft stars not Seen a 6768
N.S. a 2849

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

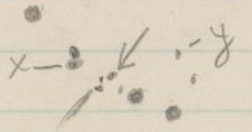
1925phae.proj.121mw

70

Position measured, Bk. 29, p. 146

Regin 17 12 -22

No. 20 New Variable? 17 12.8 -18.3 (1855)



Br. = brighter than x

Ft. = a little fainter than y

Br. 8678 *Ft 9574

** 8769 a6768 Ft, but not Nic.

8518

B 34052 probably not Max

Br. B 25522

a 2849

(Offedge a 3794)

B 33949

Meas a 2849

Confirmed by Miss Cannon, March 15, 1926

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

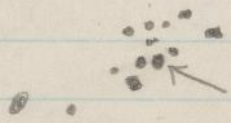
1925phae.proj.121tw

Measure a 3795? Extreme edge and very ft.

Region 17 12 -22

No. 21 • Near Variable ? 17 2.5 -18.4

Same st. as No. 86



These stars are fainter than indicated but they are plotted brighter for clearness.

Br.	Ft.
Br. 9574	
B 34052	NS. 8678
B 32059	NS 8518
a 3	NS 8769
	** a 3795
	a 9369

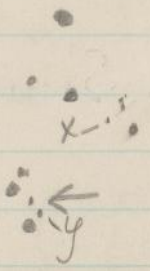
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

Position measured, Bk. 29, page 158

Region 17 12 -22

No. 22 New Variable 17 8.2 −21.8 (1855)



Br. = brighter than x
Fn. = about = y, or fainter

Br. 8678

Fn. 9574
8769
8518 too near
Nears.
Fn B 34052
B 32059
a 2841
B 25522

Confirmed by
Mrs Camm,
February 26, 1926

Proof a 3794

a 3794 14.5
a 2841 15.5

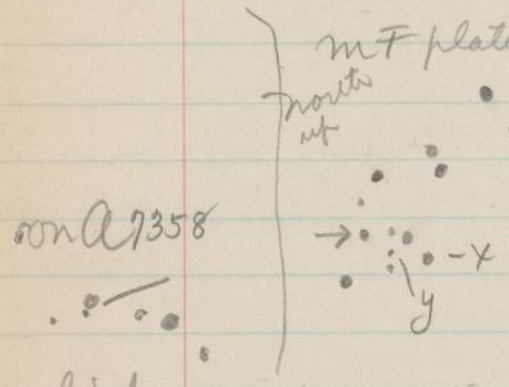
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Measure A 2831
Pos. measured, Bk. 29, p. 82
Region 17 12 -22

No. 23 New Variable? large range
16 54.6 -24.2 (1900) much
Br. = brighter than x
Fk. = faint by eye — y seen

MF plates
north at top



which star varies? I probably suppose one by position on MF 8678

Br. * 8678
A 2831
?

Very Fk. 9074
A 7358 seen but probably not Maximum
MF 8518
Very ~~NS~~ MF 8769
* N S B 34052
A 8419

Yes — see 2831

Found on A plates = Var. 48, Bk. 34, page 22
Confirmed by Miss Cannon, March 6, 1926.

13.7
14.2?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

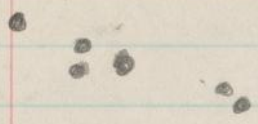
1925phae.proj.1210w

74

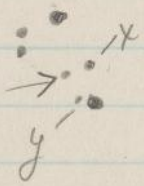
Measured Positim, Bb. 29, f. 88.

Regim 17 12 -22 17 4 -25.4

No. 24 New Variable Rather Large range



Br. = Brighter than x
Ft. = Fainter than y



Br. 8678 Ft. 9574
V=x 8518 * 8769
V=x a9272

Confirmed by
Miss Cannon
~~Febmo~~ March 6, 1926

Found again = 133 Bb 34, f. 104

Max 13.7
Min 14.4

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Not proved

Saturday, January 16, 1926

Regim 17 12-22 and a little prec -

Limits 16 24 to 17 4

Comparing a 2831 (16.8-22)
a 8419 (16.8-22)

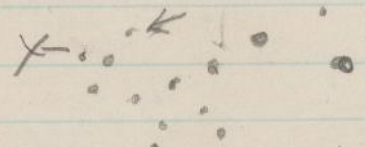
-19 -25.5

8419 superposed

Not on M Regim
Marked (N S) on B 32333
No. 25
on a plates
Marked on a 8419
Iden. on, if seen,
B 33230

Br. = Brighter than X
16 50 -20.3 1900

Very faint at Max.
bit bright on the
poorer plate



Br. a 8419
August 13, 1907

Nova?

page 76

N.S. 2831
a 9369
a 7363
B 32333 X is seen
NS a

ac plates of August,
1907, are poor.
am 4953 July 1, 1907 Exp 60 m
am 5047 Aug 5, 1907 Exp 121 m
am 5060 Aug. 14, " Exp. 62 m
do not show as faint
stars as these.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

Not proved Hale's later

Regions 17 12 -22

Jan. 16 No. 26

Jr

on a plate

Marked on a8419

o — same as p. 75

16 50 -20.5
(1900)

Small range
and very faint

Br = brighter
than x

Ft = fainter than
y

y — x

same as page 77

Br. 2831

Ft 8419
*a7363

Too poor
a9369

Too faint for
a32333
34052
32059
33949

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

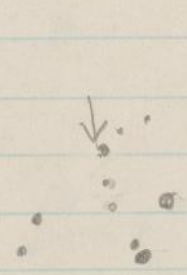
1925phae.proj.121dw

Not proved
Waterlow later

Regim 17 12 −22

Jan. 16 No. 27
on a plates

Same
as p. 76



small range.
16 50 −20.6
precedes & south of
No. 26

Marked on a8419

Br 2831
a7363

Fr. 8419

Too poor
a9369

Too faint
for a32333
34052
32059
33949

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

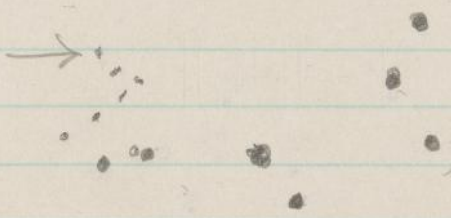
Too faint to be proved by photometric methods

Regions 17 12-22

Jan 16 No. 28 on A plates

Marked on a 8419

16 51 - 20.7



Same as 1.76

very ff & small range.

Br. 28[illegible] Oct. 15 Ft. 8419

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

not found

Measure ?

See Gr. Obs. 16 50.5 -21.3 as B34052

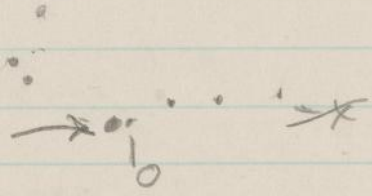
Position measured, Bk. 29, page 106

Regim 17 12-22

Jan. 16 No. 29
on a plates

16 52.3 -20.8 (1900)
Br. = about = ẋ
Ft. = barely seen

Marked on a8419
and MF edge



There may be a
small change in O.

8419 August 13, 1907
Br. ~~2834~~ ~~Sept 15, 1897~~

Very ft. ~~8419~~ 2831
N S a 3794
7358
7363
Trace 9408

1897 before
am plates

A plate nos. should have been reversed.

1897 B 19724 July 2
20355 Sept 15
20445 Sept 18 N.S.

am 5069, a good
plate Aug. 14, 1907
does not show ft. stars as
this, though this is bright for a
Bruce plate.

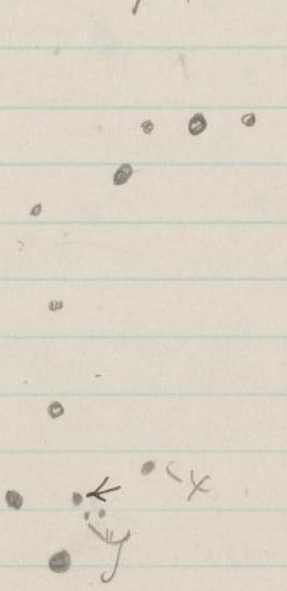
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

80 Position measured, Bk. 29, f. 104

Regin 1712 -22
1653 -21.9 (1900)

Jan. 16 No. 30
on a plates
Marked on a 8419
found on a pl
marked a MF 8676



Br. 8419 N.S. 2831
Seen not Mak MF 8678
" " " 8769
** MF 8518 ** Barely seen a 3794
9574 B 32333

Confirmed by
Miss Cannon,
March 12, 1926

13.8 MF 8518
18.0? a 3794

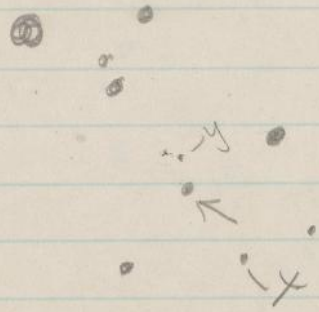
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121.tw

Position measured, Bk. 29, p. 102

Region 17 12-22
16 54.2 -20.5 (1900)

Jan. 16 No. 31
on a plates
Marked on
a 8419



Br. 8419
Seen, Medium, a 7358

Ft. 2831
NS MF 8678
B 32333
a 9408
B 34052

Confirmed by
Miss Cannon,
March 12, 1926.

a 8419 14.8
2831 17.0?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

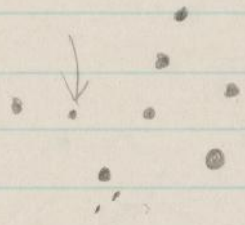
Probably ft. asteroid?

Regim 17 12-22

16 47 -21.1 (1900)

Jan. 16 No. 32 on a plates

Marked on a8419



seen on fourth plate

2 stars?

moving object?

defect?

Seen on 8419

N.S. 2831
9408
7358
7363

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

Maybe Nova?

Regim 17 12-22

16 41-21.2 1900

Jan. 16 No. 33
in a plate
Marked on a8419

Br. 8419

NS 2831
7358
shows ft. stars but no
trace of this
7363
Nothing seen B37530
May 31, 1907 10m Exp.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

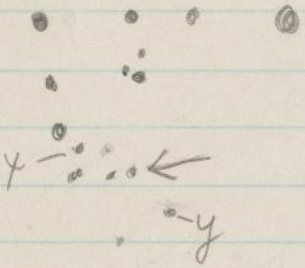
84 Prof ? Leave till later plates.

Regions 17 12-22
16 50.2-21.5 (1900)

Jan. 16 No. 34 on a plates

Marked on a 8419

Perhaps 0.8 magn. range - Small but apparently real



Br. on 8419 a little br. than ~~about~~ x
On 2831 about = y

Br. 8419
7358
7363

On 2831
Poor plate 9408 but apparently ft.

To poor 9369

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12:tw

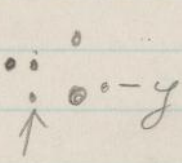
(not large but real) for a small range Var.
Good range but ft. at Max

~~Draft~~ Meas. Position, Bk. 29, page 188.
Regrm 17 12 −22

Jan. 16 No. 35 16 56 −22.1 (1900)

m a plates

Marsden a 8419
and MF 8678



Br. = nearly as bright as x
Ft. = a little fainter than y

Br. a 8419
Probably not Max 3794
Perhaps, MF 8769

Ft. 2831
9408
7363 shows Var
MF 8678
B 32059
B 34052
TW for 7369

Confirmed by Miss Cannon, March 16, 1926 as Var. of small range, perhaps .6.

At Max., this Var. is too ft. to seem more than a very ft. star on MF plates, so Var. does not show.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

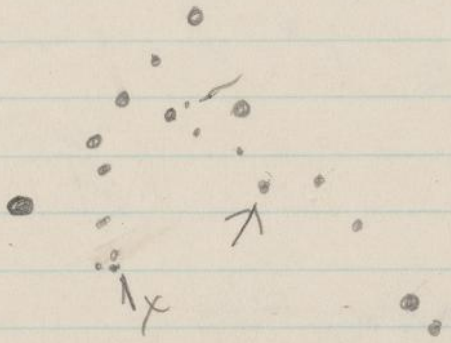
1925phae.proj.121nw

Good range, if real. Position measured, Bk. 29, p. 108.

Regim 17 12 -22
17 1.5 -21.5 (1900)

Jan. 16 No. 36
on a plate

Marked on
a 2831
and MF 8678



Br. = x
Fk. = N.S. when y
is distinctly seen

Prof —

* Br. 2831
MF 8678

Fk. (N.S.) 8419
MF 8769
MF 8518
MF 9574
** a 3794

Meas. 2831

Confirmed by
Miss Cannon,
March 12, 1926

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

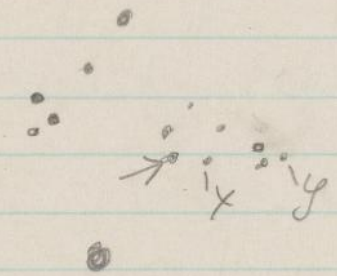
1925phae.proj.121rw

Not pursued

Continued, Bk. 34 p. 10

Regin 17 12 -22
16 50 -21.5 (1900)

Jan. 16 No. 37
on a plates
Small range
Rose ft?
Marked a 2831



Br. = much brighter than y
Ft. = fainter than y

a 2831
Br. a 7358
7363

Ft. 8419 ?

Is there difference between ft star pos. on 8419 and bright image? May be another ft. star which does not show when Var. is bright. Better point as Max.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Saturday, December 19, 1925

M.W. Region 17 39 -26 Available Plates

	90 M#	8556
Plate Nos. not rec'd		8662
	90	8720
	91	8784

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12.tif

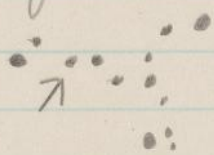
A few plates only available.
These are examined to see if the average of new variables found in 17.12-22 will continue in this nearby region.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Regions 17.8 39 - 26
MF 8556 confused
8720
8720 superposed

Defect or New Variable? 17 47 - 21.7 (1900)



Br. 8556 NS 8720

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

17.6 - 26

8556

8784

8784 superposed

In many parts of the plate, away from centre, the two plates are far from comparable. Slight evidences of variation would not be detected.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Defect(?) in 8556

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121.tw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Milky Way Region 17 21-32

Available Plates:

Page				Eff.
comparison pl.	MF 8527	May 3, 1924		60?
	8657			
	8772			
112	9104	May 14-15, 1925		45
	9150	May 19-20, 1925		45
105	9160	May 21-22, 1925		37
Adjustment	9178	May 23-24,	"	45
110	9199	May	"	45
	9214			
	9231	May 27-28	"	45
	9252	May 28-29	"	45
	9271	May 29-30,	"	45
	9289	May 30-31,	"	45
	9381	June 17-18,	"	45
	9409	" 19-20,	"	45
	9411	" 20-21,	"	45
	9426	" 22-23,	"	45
	9444	" 23-24,	"	45
	9461	" 24-25,	"	45
104	9477	June 25-26,	"	45
	9520	July 10-11	"	45
	9529	July 11-12,	"	45
	9530	July 11-12,	"	45
108	9531	July 11-12,	"	45
	9532	July 11-12,	"	45

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121W

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Wednesday, December 23, 1925

MW Region 17 21 -32

Using MF 8527 as superposed plate

Limits

9477 grid plate

8527

8527 superposed

Asteroid on 8527 17 8.0 − 31.4 (1900)

Asteroid? Faint, on MF 9199 Differs from star images 17 4 -34.9

?

1

A right angled shaped defect? on 9477

17 13.2 -32.3 (1900)

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

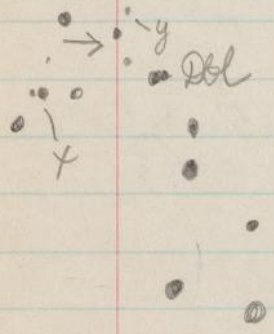
1925phae.proj.121w

Thursday, December 24, 1925

Eperc. Regin 17 21 -32°

8527
9160
8527 superposed

Dec. 24 A Christmas New (?) Variable New Small range
No. 1 17 8,5 -28.9



Br. = x
Fl. = triple brighter than y

Br.	Medium	Fl.
8527	9529	9160
~~9426~~	~~9537~~	9531
	9381	9199
	9520	~~9474~~ 9189
		9426
		9271
		9289
		9252
		9530
		9231
		9214
		9104 *
		9134 **
		9409
		9411
		9477

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

✓

Regin 17 21 -32.

No. 2 Near center of plate 17 30 - 30.4

:

✓ ·←

Watch on other plates: Probably defective

Bu 9160 Probably defective
9531 film 8527
9289
9529

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

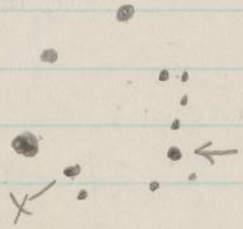
1925phae.proj.121w

Regions 17 21 -32

No. 3 A Christmas New (?) Variable

17 8.5 -36.8 New, if proved

Dec. 24



Br. = a little ~~brighter~~ than X

Ft. =

Br. 9214
9134
9104
9231
9532

notably almost

slightly fainter but not

9531
8529
9529
9520
9477

fainter, if any 9411
9381

Trace 9409 already mkd ?
or overlapping neg ?

* 9252 with 9530, 9529
* 9271
9426
9289
9531
9199

This is AHS Var No 17 MWF 186

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Tuesday, December 29, 1925

Examine Regin 17 21 -32

8527

~~9477~~ 9531

8527 superposed

√

No. 4 Near center of plate

17 26 -31.6

Br. 8527 Ft or Defective 9531

Defective film on 9531

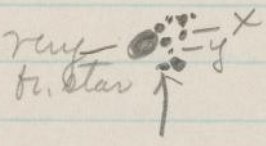
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Regions 17 21 -32

No. 5 Near center A ft. star but marked Change

17 28.2 -32.7[6] New



Br. = brighter than x

Ft. = y

Br.	Very ft.
8527	9539
9199	9529
9426	9532
9271	9530
9289	9520
9252	
9231	
9214	
9104	
9134	
9409	
9381	
9411	
9477	

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Wednesday, December 30, 1925

Region 17 21 -32

Exam. 8527

9199

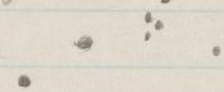
8527 superposed.

None?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae..proj.121W

Suspected object at marked
This is queer shape but similar on all the plates, looks like an uneven round ~~triple~~ nebulous matter. Many of the plates are elongated images but this is not caused by that.
Looked up on A 8759, Eqf. 120m
Several faint stars


and some fainter ones.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Thursday, December 31, 1925

Exam. Region 17 21 -32

8527
9104

8527 superposed

~~Tone?~~

No. 6 17 34 - 33.3 New

Not proved

9531 diffuse

No evidence Exam.

Not much range, if any.

Bl 8527
9520
slightly ~~Tr~~ light 9530
" 9426?
9

9426
9529
9477
9411
9381
9409
9214
9134
9231
9532 possibly slightly ft.
9529
9252
9271
9289

Tr 9104 — is this a real change?
9166?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

Saturday, January 2, 1926.

8527

9411

Time?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121sw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1216w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121ow

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121.tw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121.tif

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

January 2, 1926.

Milky Way Region 16 53 -28

Available Plates

Comp. Pl.	MF	8544
N.G. not precised		8667
p. 148		8723
140		8755
See p. 147 adj.?		8758
130		9648

a Plates

					Eff. m
a	9031	17	9	-30	60
	7289	16	51	-32	60
	10052	16	52	-28	60
	10202	17	5	-28	120
	5708	16	50	-27.5	60
	7282	16	40	-34	60
	7274	16	51	-35	?
	5691	17	10	-27.5	60

Important X4965
NGC 6273
Vars.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

Limits 16 32 to 17 15
-23° to -33°

Jan. 12, 1926.

Known Variables in region – from Card Cat.

16	32.0	-28	22	YY Scorpii	
	32.6	-27	49	YZ "	
p. 140	34.2	-32	11	SU "	
p. 151	34.8	-27	16	ZZ "	
	35.6	-26	55	aX "	
? p. 144	36.6	-24	34	TV Ophiuchi (or Scorpii)	
	38.3	-27	50	aY Scorpii	
	38.7	-24	56	aa "	Leavitt
p. 135	38.8	-28	43	— "	"
	39.0	-26	42	aZ "	"
p. 134	39.7	-29	32	BB "	"
	40.4	-27	12	aC "	"
	40.4	-29	58	BC "	"
	40.5	-27	57	BD "	"
	~~40.8~~ 41.1	-28	19	— "	"
	41.1	-30	16	BE "	"
	41.2	-29	25	— "	"
print	41.7	-32	46	aL "	"
	42.2	-29	57	BF "	"
	43.1	-27	3	aD "	"
	43.6	-27	16	BG "	"
	43.6	-29	24	— "	"
	43.9	-28	17	aE "	"
	44.1	-27	50	BH "	"
	44.2	-28	1	— "	"
	44.3	-25	23	aF "	"
	44.6	-27	48	— "	"

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

(-23° to -33°)

f. 143	16	46.3	-28	23	AG Scorpii	Leavitt
		48.8	-32	28	SS "	Innes
print		50.2	-30	25	RR "	Fleming
print		51.2	-25	38	UU Ophiuchi	Leavitt
		59.8	-26	26	— "	Cannon
	17	1.1	-31	42	TU Scorpii	Fleming
		4.0	-26	26	—	Ritchie-Shapley NGC 6293
		4.8	-32	12	AH Scorpii	Leavitt
print		8.3	-33	19	RW "	Fleming
	thro'	17	15			

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Region 16 53 -28

Exam. 8544
9648
8544 superposed

Asteroid $17^h\ 7^m$ -31.5° (1900)

✓ ? on 8544 16 50.5 −30.4 (1900)
RR Scorpii Fleming 16 50.3 −30 25
6.2 −12.2?
At or near Max. May 6, 1924
Confirmed by print.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

√

Jan. 2 No. 1

16 52 −30.6

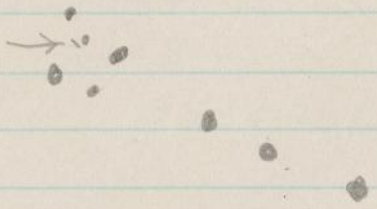
Probably defect —

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

132 √

Jan. 2 No. 2 1h 48.8m -29.3 (1900)



Apparently faint asteroid but probably two faint stars.
Confirmed by other plates

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

✓

Jan. 2 No. 3 16 52 - 29,6 (1900)

∴

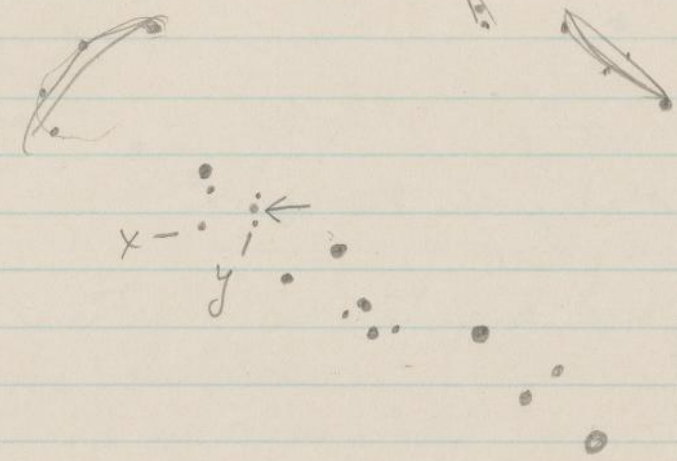
Probably no variation

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Region 16, 53 −28

Jan. 2 No. 34 16 39.8 −29.5 (1900)



South up

Br. = brighter than x

Fn. = fainter than y

Br. 8544

Fn. 9648
8755
8723 probably fn. image of x is pos-

16 39 29
BB Scorpii 16 39.7 −29 32 Leavitt

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

√

Region 16 53 -28

Jan. 2 M. 5 16 39.0 -28.8 (1900) large range

South of x

Br. = brighter than x
Fn. = barely trace

Br. 9648

Fn. 8544
8755
8723

? ~~16 39.0~~

16 38.8 -28 43 - Scorpii Learitd

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

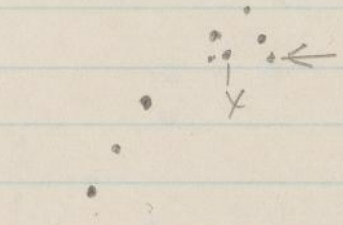
1925phae.proj.121nw

136 Position measured, Bk. 35, page 16.

Regim 16 53-28

Jan. 2 No. 6 16 50 -28.3 Near? Not in Card Cat

South of



Br. = a little brighter than ×
Ff = trace

Br. 8544
*a 10052
Medium a 5708

Ff. 9648
NS 8755
Ff. 8723
a 10202 ultra near edge
Not good proof, but apparently N.S.
NS B 26481
26489
34008
33758

Confirmed by Miss Cannon, March 25, 1926

[CQ Oph]

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

✓

Regin 16 53-28

Jan. 2 No. 7

South
of

Apparently slight, if any, variation

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

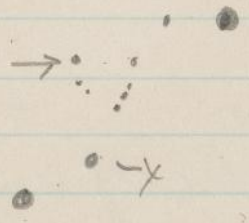
Position measured, Bk. 35, page 20.

Regm 16 53 -28

Jan. 2 No. 8 16 49.5 -26.9 (1900) Large range Neu? Not in Cat

South

up



Br. = a little brighter than x

Ft. trace

Br *9648 —— Ft. 8544

Prof a 10052 —— 8755

a 10202 upper edge 8723

*n s a 5708

a 9272

Confirmed by Miss Cannon, March 19, 1926.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121rw

~~Nova?~~

Regim 16 53 -26.

Jan 2 No. 9. 16 53 -26.9 (1900) large range Nov? Not in Card Cat.

South
up

Ft. = N.S.

→

°Br. 9648

~~Ft.~~ 8644
8755
8723
Veyft A 10052

Apparently not a star — motion indicated, or Defect.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

Monday, January 4, 1926 Very dark day.

Region 16 53 - 28

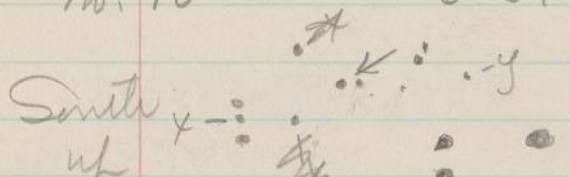
~~No. 10~~ Exam.

8544

8755

8544 superposed

No. 10 16 34 - 32.4 (1900)



Br. = x or a little brighter

Fr = y

Br. 8755 Fr. 8544

Br. ~~8544~~ 8723 Fr 9648

Image is perhaps defective or is it two stars?

Hazy, markedly on 8755, different from other bright stars.

Verify 16 34.2 - 32 11 SU Scorpii

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121rw

Position measured, Bk. 35, page 26.

Regin 16 53 -28

Jan. 4 No. 11 large range 16 55 -32.5 (1900) Near?

Br. = 4 Nothing Card Cat.

Ft = barely trace

South up

Br 8544
*a 7289

Ft 8755
9648 Trace
8723
*a 2660 very ft
a 9031 Tube? Corner

Mean 7289

Confirmed by Miss Cannon, March 25, 1926.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Leave for more plates

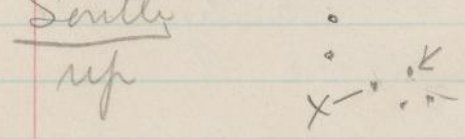
Tuesday, January 5, 1926

Region 16 53-28

Jan. 5 No. 12 (near 1) large range 16 51.5-30.6 (1900) Nur? Not in Card Cat.

No A plate for meas.

Southy up



Br. = X
Ft = N.S.

Br NF 8755
B 26481

Ft 8544 (N.S.)
Seen, Ft. 9648
NS 8723
B 3375-8
34008

South, Fol., near RR Scorpii
Does not show on print of RR Scorpii from a 3827

Confirmed by Miss Cannon, April 1, 1926

NS B 26460 extreme edge
B 9848 two faint
B 28170
1906 2 other stars near are seen even though plate is only for eye.

NS a 3827 8×10 excellent plate which was enlarged for RR Scorpii
NS a 7289
NS a 2660

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121sw

✓

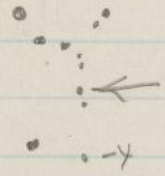
Region 16 53 -28

(900) Jan. 5 No. 13 in center 16 47 -28.5 (1900)

Br. = 4

Fn. = barely seen

South
up



Br. 8755
9648
8723

Very far N.S. 8544

To verify

16 46.3 -28 23 α Scorpii Leavitt

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Thursday, January 7, 1926

Regin 1653-28

Found Jan. 6

No. 14 very faint 1635.2-24.7 (1900)

South

NP

Br. a little brighter than ✦

Ph, nearly limit of plate

Br. 8544
8723

Ph 8755
9648

Toreifpy Position? TV Oph.?

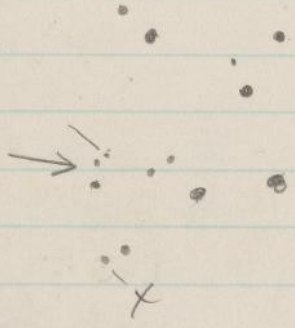
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121mw

√ Defect -

Regin 16 53 -28

Found Jan. 7 — No. 15 Smith nf — 16 {47° 46.5 −24.8 (1900) — New? Not in Card Cat.



Br. about = 4
Ft NS., yp very ft

8755
Br. 8544 — Ft. 8723
√ Defect on 8544 — Ft but seen 9648
NS @ 10052

CC 0ph - HV 42+7

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Meas A 2831? 8419

Regin 16 53-28

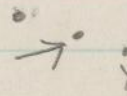
~~Slight~~ ~~Diffuse~~ 7712-22

Jan. 7 No. 16 16 49.5 -23.6 (1900) Neu ?

Surf Not in Cord Cat.

Br nearly = x

Ft at limit of plate



A 7358 Br. 8723 Ft 8544

This regin 8755 Ft. but distinctly seen 9648

is drawn with A 2831 A 7363 n S or limit

a circle labelled V, more Variation y/l

evidently suspected A 8419 7358

by someone.

Also on 2831

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925plate.proj.124w

Seen by Dr. Shapley January 18. Probably defects.

it as similar, in same field, nearby Found date, as suspected it to be comet

Comet? Found image 8755 first but passed it as a probably defect. On seeing image on 8723, recognized

Jan. 7 Object at on 8755 2424018 ~~2424~~
16 41 -28.1 (1900) Aug. 20, 1924

2423992
on 8723 16 47 - 32.~~8~~ (1900) July 25, 1924
marked obj no. of 8755

MF 8771 S ~~dbly~~ ~~*~~ 28.7 ~~N~~ 38° Aug 26

8758 Supposed to be taken for this regim.
In records from Peru is dated as adj. and probably never rec'd here.

14x17	a	13023	16 Reg 30 -32	July 4, 1924	edge at 16 45
8x10		13070	16 Reg 49 -29	Aug 26	edge comes at 16h 41m approx
8x10		13073	16 Reg 49 -29	Aug 27	

Also, on 8723, a similar Object, 16 46.5 - 26.5 1900

Regim marked on a ~~x~~ 724 July 26 and compared with 786 Aug. 28. No obj. bright enough to be seen.
Also, ~~a~~ 792, Sept. 4

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

January 7, 1926

Regin 16 53 -28.2

8544

8723

8544 superposed

8723 Cong, even trails (not a star image with Rail •—, but —) Difficult for Comparison for changes that would be slight. Probably No var. can be found except where it has entirely missing on one plate or shows a large range.

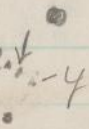
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121tw

Regm 1653-28 Nur? Not in Card Cat.

Jan. 7 No. 17 16 49.2 -31,3 1900

Suf



Br. = nearly = x
Ft. = little fainter than y

Br. 8544
8755

Ft 8723
9648

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Friday, January 8, 1926.

Regin 16 53-28,

Jan. 8 No. 18 $14^h 9^m - 29.2$ (900) Not in Cord Cat

Br. nearly = x

Ft. very ft.

Smith

Many ft. stars close to var.

Br. 8544 Ft. 8723

9648 NS 8755

This is HHS Var 11 MW # 186

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

Regin 16 53-28

Jan. 8 No. 19 large range 16 34.5 -27.3 (1900)

South rift



Br. = x

Fr. = limit of plate

y is extremely ft.

Br. 8544

Fr. 8723
8755
9648

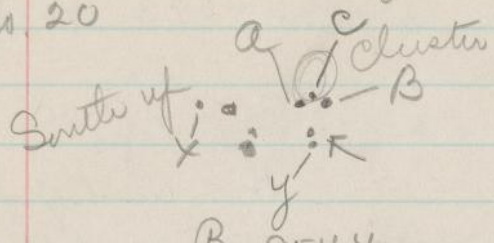
16 34.8 -27 16 22 Scorpii

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Regina 16 53-28

Jan. 8 No. 20



16 56.5-26.2 (1901)

Cluster = 6273 = M19

Br. 8544

Ft. 9648 V 8723 ~~8544~~ V 8755

Cl. 6273 not exam. by J. E. W. — See Bk. 4
No X Plates (but 1)

Br. = nearly = x
Ft = barely seen

Jan. 12 Do a & B, C change too?
Any a Plates?
X 4965 July 18, 1893, Var. very ft. = nearly as faint as y

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

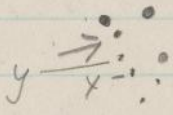
1925phae.proj.121w

Regin 16 53-28

Jan. 8 No. 21 14 3.0 -27.2 (1900)

New?
Not in Card Cat.

South
up



Br. = nearly = x
Fr. = ~~x~~ fainter than y

~~a slight change?~~

Br. MF 8544

Fr. MF 8723
8755
9648
NSA 10052

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121rw

154 Position measured, Bk. 35, p. 48

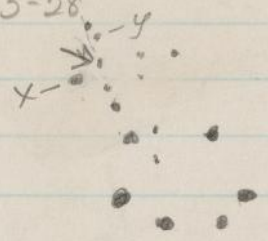
Monday, January 11, 1926.

Regin 16 53-28

Jan. 11 No. 22

Smith

ut



Near? Not in Card Cat.

$16^h\ 58^m - 23.3$ 1900

Br. about = x

Ft = faint to thingy

Not No. 44

of Regin 17 12-22

Br 8723
8755
B 28170 edge
B 34008
A 7363
MF 8678
8769

Ft. 8544
9648
*8518
*a 8419

Small range

Prof.

Confirmed by Miss Cannon March 17, 1926.

Meas. A 7363

N.B. Nebulosity around image?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

N.B. B plates have prismatic companions, which are not variables.

B6073 May 28, 1891
53000 June 6, 1918
53000 superposed

Exam. for vars. and also proper motion in wide interval of years.
Images hardly comparable for slight differences of magn.

No objects

B19062
B53000
53000 superposed

No objects

B19062 May 10, 1897
B26009 Sept. 5, 1900
26009 superposed

Bright defect prec. centre B19062

Continued, page 157

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

Wednesday, January 13, 1926.

Eclair MF 8544
B 19062
8544 superposed

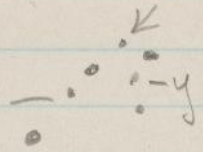
John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

Thursday, January 14, 1926.

Region 16 53-28
B1906z-26009
No. 23
near Var 20

16 55.5-26.2 Neu ?
Not in Var. Cat.



Br. = about = x
Fn. = fainter than y

Fn. B1906z

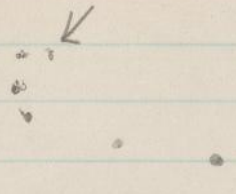
North
up

Br. B26009
MF 8544
8755
Br. - not max 8723
9648
a10052

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1211w

No number
Jan 14 North
up



this is same as No. 19

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12.tif

No. 24
Jan 14

Superposing A 5642
A 10052

on a
North
up.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Jan 14 No. 25
on a

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12

Jan 14 No. 26

a

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Jan 14 No. 27
and

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12[illegible]w

Jan 14 No. 28
on a

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

June 14 No. 29
between 8 & 9
on Cyfl.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1213w

Jan 14 No. 30

?

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Jan 14 No. 31

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.124tw

Jan 14 No. 32

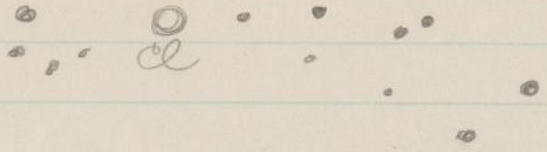
See No. 85
17 12 32

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121w

Jun. 14 No. 33

North up on a plates



John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12.new

Friday, January 15, 1926

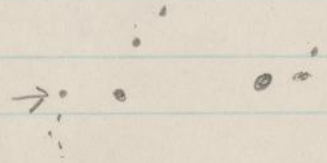
A 5642 — 10052 Cont.

Jan. 15

No. 34

North

up.

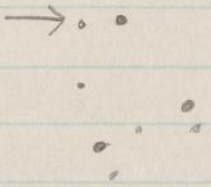


John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

Jun. 15 No. 35

North up

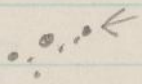


This is same Var. as No. 65, Regim 17 12-22
Bk. 34, page 48.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12.new

Jan. 15 No. 36
north up
on a plates

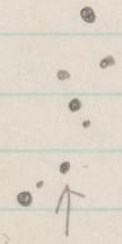


John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121nw

Jan. 15 No. 37

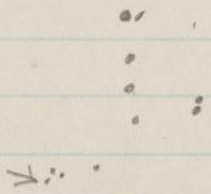
on a plates



John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.12.tw

Jm 15 No. 38
a plates



ft. but disappears
Br. MF 8544 nsa
Medium a

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210w

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.121W

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210W

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

1925phae.proj.1210W

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System