KG
11365
575

1905phae.proj...576W

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1905phae.proj..576W

KG 11365.575

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1965phar.prot...576W

KG 11365.575

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1905phae.proj..570V

July 18, 1905 (Tuesday)

Q Vulpeculae Phot. J H. Obs. Bowie Rec.

20	30	+26.1
15	55	
4	35	Index Left
7	25	

8 40 46

273.5	var. dia.	
6.2	92.7'	
103.2	75.8'	
179.0	168.5'	−0.22'

250.0		−0.14'
358.9	78.9'	
90.1	97.4'	
187.5	176.3'	−0.07'

Index Right

184.6		
274.5	89.9'	
15.9	66.2'	
82.1	156.1'	−0.46'

196.4		−0.46'
261.4	65.0'	
4.0	91.0'	
95.0	156.0'	−0.46'

Mean −0.30'

8	50	18
	90	64'
8	45	32'
5		−26'
13	45	6'

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1905phae.proj..576W

July 18, 1905.

Index Right

		185.5		
8	54	20	273.8	88.3'
			16.3	67.0'
			83.3	155.3'

A

193.5		
260.7	67.2'	
5.0	88.3'	
93.3	155.5'	-0.47'

-0.47'

Index Left

90.4		
186.6	96.2'	
281.5	76.2'	
357.7	172.4'	-0.14'

B

102.2		
175.29	73.7'	
271.6	95.4'	
7.0	169.1'	-0.20'

-0.17'

Mean -0.32'

9	4	6	
17	58	26	
8	59	13	
5		26	
13	58	47	

S.J. 17^h 29^m
R.A. -3^h 5^m
Dec. +25.5
P.A. 145.2 Var. B
Sprocket -5.5 A
" -4.5 B
" -3.9 b

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1905phae.proj...576V

July 18, 1905.

19 26 16 – Sagittarii Phot. J. K. Oka. Bonn Rc.

19	26	-16.7
18	8	
1	18	
10	42	

Index R & A

305.8	← variable	
331.2	25.4'	A
124.6	34.3'	
156.9	59.7'	-2.87'

10 29 36

302.2		-2.87'
336.2	34.0'	
125.6	25.7'	
151.3	59.7'	-2.87'

Index L & B

217.6		B
240.8	23.2'	
31.3	34.0'	
65.3	57.2'	-2.97'

212.2		-2.90'
246.#2	34.0'	
37.5	26.5'	
64.0	60.5'	-2.84'

Mean -2.88'

10 39 58

	68	94
10	34	47
5		-26
15	34	21

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1905phae.proj..576V

July 18, 1905

S. J. 18h 48m
H. A. — 0 41
Dec. — 17, 0
C. A. 215, 4 Ver. B
Sprocket — 2, 5 B
" — 1.5 b

H's watch used for times tonight.
Watch 26 sec. fast.

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1905phae.proj...576W

July 19, 1905 (Wednesday)

α Cephei Phot 3 4.0hz B

0	50	+81.1
15	50	
9	0	Index ℓ KB
3	0	202.9 wardia

δ	16	48	256.4	53.5'	B
			14.4	70.0'	
			84.4	123.5'	-1.12'
			192.0		-1.07'
δ	19	0	264.8	72.8'	
			22.0	55.2'	
			77.2	128.0'	-1.02'

Index R ℓ A

			108.0		
δ	21	30	170.3	62.3'	A
			278.0	81.5'	
			359.5	143.8'	-0.70'
			98.1		-0.63'
δ	23	34	181.6	83.5'	
	79	112'	287.0	67.3'	
δ	19	73'	354.3	150.8'	-0.56'
5		-22'			
13	19	51'			

Mean -0.85'

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1905phae.proj..576V

July 19, 1905.

Index R & A

			107.2		II
8	25	54	170.9	63.7'	
			275.9	88.8'	
			4.7	152.5'	-0.53' A
			96.8		-0.54'
8	27	40	180.1	83.3'	
			286.3	67.3'	
			353.6	150.6'	-056'

Index L & B

			21.2		
8	31	6	79.1	57.9'	
			188.6	80.2'	
			268.8	138.1'	-0.81' B
			13.8		-0.84'
8	33	29	86.6	72.8'	
	116	129	197.5	62.5'	
8	29	32	260.0	135.3'	-0.87'
5		-22			
13	29	10			

Mean -0.69'

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1905phae.proj...576

July 19, 1905.

Index L & B

19,8

III

8 36 34 79,2 59.4'

186,8 82.6'

269,4 142.0' -0.73'

B

11,0 -0.74'

8 38 30 88.0 77.0'

197,0 63.7'

260.7 140.7' -0.76'

Index R & A

283,6

8 42 17 355,0 ~~354,4~~ 71.4'

91,0 94.8'

185,8 166.2' -0.26'

A

272,1 -0.28'

8 44 22 4,0 91.9'

160 103' 101,5 72.5'

8 40 26' 174,0 164.4' -0.30'

5 -22'

13 40 4

Mean -0.51'

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1905phae.proj..570W

July 19, 1905

Index R & A

IV

283.8

8	47	28	354,0	70.2'		
			91,5	95.5'		A
			187,0	165.7'	-0,27'	

269,3 -0.19'

8	49	35	10,4	101.1'		
			102,6	73.3'		
			175,9	174.4'	-0,11'	

Index L & B

197.5

8	52	38	261,2	63.7'		B
			2,8	88.5'		
			91,3	152.2'	-0,53'	

185,7 -0,48'

8	54	58	271,7	86.0'		
			13,6	72.0'		
			85,6	158.0'	-0,42'	

	202	159'
8	50	70'
5		-22'
13	50	48'

Mean -0.34'

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1905phae.proj..57GW

July 19 1905

Index L & B

V

194.3

8 57 54 — 264.3 — 70.0'

4.0 — 90.3'

94.3 — 160.3' — −0.38'

B

183.6 — −0.27'

9 1 28 — 275.1 — 91.5'

10.0 — 79.8'

89.8 — 171.3' — −0.16'

Index R & A

98.6 ~~99.5~~

9 5 2 — 180.7 — 82.1'

265.4 — 103.0'

8.4 — 185.1'

174.9' — +0.09'

A

86.0

9 7 31 — 188.9 — 102.9' — +0.10'

277.6 — 82.8'

360.4 — 185.7'

174.3' — +0.11'

35 70 115'

8 62 59'

9 2 59'

5 −22'

14 2 37'

Mean −0.17'

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1905phae.proj..57GW

July 19, 1905

Index R & A

99.6

VI

9	12	8	179.2	79.6'		
			264.0	110.0'		A
			14.0	189.6'		
				170.4'	+ 0.18'	
			84.0			
9	15	12	190.5	106.5'	+ 0.22'	
			276.0	86.5'		
			2.5	193.0'		
				167.0'	+ 0.25'	

Index L & B

9.0

9	19	12	92.8	83.8'		
			177.3	102.9'		B
			280.2	186.7'		
				173.3'	+ 0.13'	
			356.2			
9	21	35	98.7	102.5'	+ 0.18'	
			184.4	89.2'		
			273.6	191.7'		
				168.3'	+ 0.22'	

Mean +0.20'

	67	67'	
9	16	62'	
5		−22'	
14	16	40'	

S J 17h 46m
R. A −7 5
Dec. +81.0
P. A 195.0 Var. B
Sprocket −1.5 B
" −0.5 b

Troubled somewhat by clouds especially in first group. Sky progressively growing clearer and clouds thinner and rather more scattered during series. Clouds

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1905phae.proj..570

July 19, 1905.

were not of a very dense character but rather of a somewhat light character and in early part of series rather more massive at times

γ Cygni Phot. J. A. Obs. Bowie Rec.

20	40	+ 33.4
17	55	
2	45	
9	15	

For measurements see following page.

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1905phae.proj...5703

July 19, 1905.

Index L & A

300.2 ← var. dis

10 11 34

338.86	38.4'	
112.9	48.3'	B
161.2	86.7'	−2.00'
293.8		−1.98'
344.0	50.2'	
119.4	37.9'	
157.3	88.1'	−1.96'

Index R & B

211.2		
244.9	33.7'	A
24.2	48.1'	
72.3	81.8'	−2.14'
204.0		−2.12'
251.2	47.2'	
31.4 ~~33.1~~	35.8'	
67.2 ~~64.9~~	83.0	−2.11'
		−2.05'

10 21 30

32 64

10 16 32

5 −22

15 16 10

S.J. 18h 47m

H.A. −2 0

Dec +33.6

P.A 229.5 Ver B

Sprocket −0.5 A

" +0.5 B

" +1.1 b

H's watch used for times
Hatch 22 sec fast

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1905phae.proj..57GW

July 20, 1905 (Thursday)

Y Cygni Phot. J. H. Obs. Bowie Rec.

20 40 +33.4'
15 45
4 52
7 8

Index L & A

		114.2	variable	
8	12	5	163.0	48.8'
			285.5	66.5'
			352.0	115.3 -1.30'
				-1.29'
			104.8	
8	14	54	171.0	66.2'
			294.6	50.0'
			344.6	116.2' -1.28'

Index R K B

~~8~~	~~10~~	~~27.0~~		
		~~69.6~~		
		blonds ~~197.3~~		
~~8~~	~~54~~	" ~~258.6~~		
		27.4	42.0'	
8	25	48 69.4	59.8'	
		198.8	101.8'	-1.61'
		258.6		
				-1.60'
		18.4		
8	28	4 78.8	60.4'	
		207.3	41.8'	
		249.1	102.2'	-1.60' -1.44'

	79	111
8	39	86
5		-25
13	40	1

Mean

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1905phae.proj...57GW

July 20, 1905.

				Index
				~~27.0~~
8	33	10	blonds	~~69.6~~
			" thick	~~+97.3~~
			blonds	20.9
9	34	16	blonds	75.8
			" thick	

9 52 blonds thick everywhere No chance for anything further. Although several trials were made, nothing could be obtained of value except the first group

S.J. 18 3
H.A. -2 45
Dec. +33.7
P.A. 230.6 On B
Sprocket −0.5 A
" +0.5 B
" +1.1 b

On account of clouds the various readings of P.A. Sprocket etc are not rigorously exact although very nearly so

Use watch used for times tonight
Watch 25 sec. fast

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1905phae.proj..57GW

July 21, 1905 (Fridays)

V Vulpeculae Phot. J. Fr. Obs. Bonne Rec.

20	30	+26.1
16	14	
4	16	
7	44	
	21	

Index Left & Below

B

269.1 ← var dis

9,1	100.0 '	
97,0	79.0 '	
176,0	179.0 '	−0.02'

278,8 −0.00

359,6	80,8 '	
86.3	99.9 '	
186.2	180.7 '	
	179.3 '	+0.01'

Index Right & Above

178,0

A

277,2	99.2 '	
10.9	75.5 '	
86.4	174.7 '	−0.10'

191,2 −0,11

266.6	75.4 '	
359,1	95.3 '	
97.4	173.7 '	−0.12'

Mean −0.06

8 30 8

P.A. 8 39 17

	19	25 '
8	34	42 '
5		−15 '
13	34	27 '

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1905phae.proj...570W

July 21 1905

Index Right & Above

	178.6		
8 .44 18	276.1	97.5'	
	12.0	73.9'	
	85.9	171.4'	−0.16'
	190.0		−0.15'
	266.7	76.7'	
	0.9	95.6'	
	96.5	172.3'	−0.14'

Index L & B

	86.2		
	186.2	100.0'	
	279.2	76.1'	
	355.3	176.1'	−0.07'
	102.0		−0.08'
	177.3	75.3'	
	266.5	100.2'	
	6.7	175.5'	−0.08'

Mean −0.12'

8	54	48
	98	66
8	49	33
5		−15
13	49	18

S.T. 17h 20m
H.A. − 3 15
Dec. + 25.5
P.A. 145.0 Dec. B
Sprocket − 5.5 A
" − 4.5 B
" − 3.9 b

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1905phae.proj..57GW

July 21, 1905

α Serpentis Phot. J. H. Oba. Bowie Rec.

18	12	−15.9
17	52	
20		comp. Star = −15° 49′ 08″ (9.0)

Index L & A

	85.1 ←	comp. Star dist.
	271.9	
10 18 8	13.3	86.1′
	82.2	68.9′
		155.0′ +0.48′

B

	193.4	
	260.6	67.2′ +0.52′
	5.7	84.3′
	90.0	151.5′ +0.55′

Index R & B

	96.0	
	181.9	85.9′
	281.8	72.3′
	354.1	158.2′ +0.42′

A

	102.3	+0.38′
10 25 48	173.6	71.3′
46 56	272.0	91.0′
10 23 28	3.60	162.3′ +0.34′
5 −15		
15 23 13		Mean +0.45′

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1905phae.proj..570W

July 21, 1905

D. J. 18h 50m
R. A. + 0 40
Dec. - 16.2
P. A. 341.0 for B
Sprocket - 1.5 A
" - 0.5 B
" + 0.1 b

It's watch used for times tonight
Watch 15 sec fast

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1905phae.proj..57GW

July 22, 1905 (Saturday)

ν Serpentis Phot. 5 Ht. Obs. Bowie Res.

15 12 −15.9
16 7

2 5
9 55

Index Left

190.5 ←
266.7 76.2'
17.8
78.8 61.0'
137.2' +0.43'

197.4 59.6'
257.0 +0.46'
11.3
86.0 74.7'
133.3' +0.49'

Index Right

98.5
178.3 79.8'
284.8 67.7'
352.5 +0.62'
147.7'

102.5
169.8 67.3'
276.0 +0.52'
359.9 83.9'
157.4' +0.55'

+0.72"

8 37 5 B

8 40 25

8 45 8 A

8 48 0

170 38
8 42 40
5 −14
13 42 26

I

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1905phae.proj..57GW

July 22 1905

Index Right

		98.0		II
8	52	55	178.5	80.
			285.7	
			352.0	66.3
				146.2 + 0.6
			104.6	
8	57	38	171.6	67.0 + 0.6 0
			275.4	
			359.2	43.8
				150.8 + 0.56

Index Left

		8.2		80.3
9	3	12	88.5	
			197.0	61.4
			258.4	141.7 + 0.74
			15.0	
9	5	55	79.5	61.5 + 0.79
34	117	160	191.6	
8	59	55	267.0	75.4
5		-14		136.9 + 0.24
13	59	41		+ 0.70

9 / 9 5 / 14

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1905phae.proj..576W

July 22 1905

Index Left

8.3

9 11 35 — 86.5 ~~87.9~~ — 78.2 — III

197.1 — 60.9

258.0 — 139.1 — +0.79 — B

~~18.8~~

18.8 — 77.4 — +0.42

9 17 20 — 77.2

~~188.0~~ — 78.2

266.2 — 136.6 — +0.44

Index Right

277.8

9 22 36 — 356.x 7.0 — 71.9.2 — A

107.1 — 64.9

172.0 — ~~154.1~~ — ~~+0.50~~

2 — 144.1 — +0.69

~~279.5~~ — 94.7 — 45.7 — +0.64 ~~0.42~~

~~26 2~~ — ~~352.6~~ — 180.4

9 30 14 — 286.2 — 63.3

80 105 — 349.5 — 149.0 — +0.59

9 20 26

5 −14

14 20 12

~~0.65~~

+0.73

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1905phae.proj..576V

July 22 1905

Index Right

106.0

IV

9	37	20	172.1	~~191.3~~ 275.3	66.1' 206'	
				355.9	146.7'	+0.64'
9	53	16	~~99.8~~	107.3		
	~~46~~	~~22~~	~~170.0~~	170.5	63.2'	+0.60'
			176.0	~~273.7~~ 0.7	47.0' 150.2'	+0.57'

Index Left

			8.5			
9	57	10	87.5	79.7'		
			195.2	64.6'		
			259.8	143.3'		+0.71'
			16.5			
			79.0	62.5'		+0.72'
			188.8	40.2'		
			269.0	102.7'		+0.72'
						+0.66'

10	0	5
37	147	51
9	51	58
5		-14
14	51	44

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1905phae.proj..576V

July 22 1905

V

Index Left

7.6

10 18 12 88.5 89.3 20.9'

196.0

259.8 63.8' 1447' +0.62'

B

17.9

10 23 13 79.6 61.7' +0.70'

186.9 41.1'

268.0 1428' +0.72'

Index Right

274.0

10 27 29 359.3 85.3'

104.0 67.0'

171.0 1523' +0.53'

+0.58'

285.8 62.5'

10 30 47 348.3

98 101 96.7 25.1'

10 24 55 181.8 1476' +0.62'

5 -14

15 24 41 0.64'

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1905phae.proj..576W

July 22, 1905.

Index Right

	272,0			VII
10 43 5	1,8	89.8'		
	106,0	60.0'		
	171,0	149.8'	+0.46'	A
	284,5	66.7'		+0.42'
10 46 0	351,2			
	93,5	88.8'		
	182,3	149.8'	+0.47'	

Index Left

	184,9	86.1'		
10 51 12	271,0			
	151,0	63.0'		B
	78,0	149.1'	+0.59'	
				+0.62'
	194,4	66.0'		
10 53 28	260,4	79.5'		
	510		+0.66'	
	193 45'			
10	48 26			
5	-14'			
15	48 12			

84,5

145.5'

+0.55'

S.J. 19h 23m

Mch + 1 10

Dec. -16.3

P.A. 160.8

Sprockets -1.5 A

" -0.5 B

" +0.1 b

We watch used for times

Watch 14 sec fast

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1905phae.proj..576V

July 25 1905 (Tuesday)

ζ Ursae Majoris Phot. J. H. Oba Boone rec.

20 30 +26.1

16 17

4 13

7 47

Index L & B

87.0 ← var. dia.

8 21 13

186.8 99.8'

274.6 88.2'

188.0'

2.8 172.0 +0.15'

B

94.0

179.2 85.2' +0.24'

263.5 111.4'

196.6'

14.9 163.4 +0.32'

Index R & A

357.4

98.5 101.1'

188.0 78.2'

179.3' −0.01'

A

266.2

10.7 −0.04'

8 29 58 87.0 76.3'

177.7 100.3'

50 71 176.6' −0.06'

8 25 36 278.0

5 18

13 25 18

Mean +0.10'

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1905phae.proj...570W

July 25, 1905

Index R & A

	0.9	
8 35 55	97.5	96.6'
	188.3	78.6'
	266.9	175.2' −0.09'

	10.0	−0.06'
	87.1	77.1'
	177.2	101.8'
	279.0	178.9' −0.02'

Index L & B

	265.03	
	10.8	105.5'
	96.5	83.2'
	179.7	188.7'
		171.3' +0.16'

	275.9	
	2.0	86.1' +0.18
	85.6	103.9'
	189.5	190.0'
		170.0' +0.19'

8	46	30
	81	85
8	40	72
5		−18
13	40	54

Mean +0.06'

S.S. 17^h 4.9
H.A. −2 44
Dec. +25.5
P.A. 144.5 for B
Sprocket −5.5
" −4.5
" −3.9

9
9
5
14

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1905phae.proj...576W

July 25, 1905

ν Serpentis Phot J. H. Obs. Bowie Rec.

18 12 −15.9
17 53
— 19 Index L & A

δ 1.6 ~~δ 0.4~~ ← var. dec.

9 37 40	194.3	112.7'	
	271.8	92.6'	
	4.4	205.3'	
		154.7'	+0.48'

B

	90.8		
	184.9	94.1'	+0.50'
	261.1	112.8'	
	13.9	206.9'	
		153.1	+0.51'

Index Q & B

	352.0		
	106.2	114.2'	
	182.8	86.8'	
	269.6	201.0'	
		159.0'	+0.40'

A

	2.7		
9 54 16	94.0	91.3'	+0.42'
91 56	172.0	112.0'	
9 45 58	284.0	203.3'	
5 −18		156.7'	+0.44'
14 45 40		Mean	+0.46'

S. J. 18 33
H. A. +0 22
Dec. −16.1
P. d. 339.0 B
Sprocket −1.5 A
" −0.5 B
" +0.1 B

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1905phae.proj..576N

July 25, 1905

210116 R Sagittarii Phot. J. H. Obe. Bowie Rec.

20	58	−17,8
18	53	
2	5	
9	55	

Index Left

	20.0	Comp Star. dist
10 52 20	77.0	57.0'
	192.0	71.8'
	263,8	128,8' +1.00'

(B)

	14,5	+1.08'
	81.3	66.8'
	200.0	54.6'
	254.6	121.4' +1.16'

Index Right

	287.5	
	349,5	62.0'
	101.7	72.2'
	173.9	134.2' +0,89'

(A)

	279.0	+0.91'
11 1 10	355.7	76.7'
21 53 30	110.0	55.7'
10 56 45	165.7	132.4' +0,93'
5 −18		Mean +1.00'
15 56 27	S.T. 19h 36m	
	L.A. −1 25	
	Dec. −17.4	H's watch used
	P.A. 335.0 B	Watch 18 sec fast
	Sprocket −4,5	
	" −3.5	
	" −2.9	

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NOTICE: ford-eaa505

July 26, 1905 (Wednesday)

Yerkes Phot. 3 Hr. Obs., Bowie Rec.

20 40 +33.4

16 12

4 28

7 32

blonde I

Index L & A

blonde 113.6 var dis

8 46 10 160.4 46.8' B

284.0 66.7'

350.7 113.5' -1.34'

103.2 -1.36

8 50 48 167.86 64.4'

294.0 46.7'

340.7 111.1' -1.39'

Index R & B

~~250~~ 198.5

9 2 54 ~~55~~ 8 ~~67.7~~ 258.5 60.0' A

blonde, thick 27.6 40.4'

68.0 100.4' -1.65'

205.1 -1.60

9 5 46 247.2 42.1'

16.5 61.8'

78.3 103.9' -1.56'

34 103 158'

8 55 84'

5 -15'

13 56 9'

mean -1.48

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1905phae.proj..576N

July 26 1905

Index R & B

196.5

9 9 48 257.92

27.4

66.9

207.4

9 12 45 247.0

15.6

78.0

Index L & A

108.5

blonde

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1905phae.proj..576

July 26 1905

Index L & A

			105.8		
9	28	42	168.0	62.2	II
			296.6	41.9	
			338.5	104.1	−1.56
					B
			117.1	41.1	−1.59
9	31	8	158.2		
			287.6	60.5	
			348.1	101.6	−1.62

Index R & B

			17.9	57.1	
9	35	22	76.0		
			208.0		
			245.5	37.5	
				95.6	−1.77
					A
			26.2	100	−1.72
9	38	22	66.2		
	132	94	198.0	59.0	
9	33	24	257.0	99.0	−1.62
5		−15			
14	33	9			Means −1.66

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1905phae.proj..576V

July 26, 1905

Index R & B

III

17.9

9	43	12	75.6	57.7°	
			207.4	39.6°	A
			247.0	97.3°	−1.72°
			27.0		−1.70°
9	46	26	68.0	41.0°	
			198.5	57.9°	
			256.4	98.9°	−1.68°

Index L & A

286.3

9	50	15	346.8	60.5°	B
			117.0	39.4°	
			156.4	99.9°	−1.66°
			297.6		−1.70°
9	53	5	337.6	40.0°	
			107.9	57.0°	
			164.9	97.0°	−1.73°

	192	58
9	48	14
5		−15
14	47	59

Mean −1.70°

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1905phae.proj...576W

July 26, 1905

Index L & A

			288.8		IV
10	0	10	346.4	58.6'	
			118.0	39.9'	B
			157.9	98.5'	−1.69'
			297.2		−1.71'
10	3	36	337.1	39.9'	
			107.6	57.3'	
			164.9	97.2'	−1.73'

Index R & B

			198.4		A
10	8	45	254.7 ~~255.4~~	56.3'	
			28.2	38.5'	
			66.7	94.8'	−1.79'
			207.7		−1.85'
10	11	58	245.6	37.9'	
			20.0	52.1'	
			72.1	90.0'	−1.91'

	22	149'
10	5	67'
5		−15'
15	5	52'

Mean −1.78'

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1905phae.proj..576W

July 26 1905

Index R & B

		202.7		V
10	30	24	252.5	49.8'
			27.9	37.1'
			65.0	86.9' −2.00'
			209.8	−2.00'
10	32	58	244.6	34.8'
			21.7	51.7'
			73.4	86.5' −2.01'

Index L & A

			110.4	
10	37	0	163.2	52.8'
			297.8	37.6'
			335.4	90.4' −1.90'
			118.5	−1.44'
10	40	22	155.6	37.1'
	139	104	289.5	54.7'
10	34	71	344.2	91.8' −1.87'
5		15		
15	34	56		−1.94'

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1905phae.proj...576V

July 26 1905

Index Card

	109.5			
10 47 28	162.3	+2.8'		VI
	298.3	36.9'		
	335.2	39.7'	-1.92'	B
	119.6			
10 50 40	153.0	33.4'	-2.00'	
	292.0	50.8		
	342.8	49.2	-2.07'	

Index R & B

	18.7	+4.6'		
10 55 0	73.3			A
	207.4	35.9'		
	243.3	90.5'	-1.90'	
	28.7			
		37.1'	-#1.94'	
10 57 57	65.8			
	200.2	+0.3'		
	250.5	47.4'	-1.9#'	

	209	125'
10	52	46'
5		-15'
15	52	31'

Mean -1.97'

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1905phae.proj..576W

July 26, 1905

Index R & B

A

VII

22.8

11 10 5 . 69.6 46.8'

209.4 33.9'

243.3 A0.7' −2.17'

30.1

11 12 38. 65.9 35.A' −2.12'

202.2 AA.0'

250.2 A3.A' −2.0A'

Index L & A

290.4 ~~291.8~~

11 16 10 343.9 ~~342.0~~ 53.5'

119.0 33.2'

152.2 A6.7' −2.00'

B

299.2 35.2'

11 19 10 334.4 −1.9A'

57 63 109.0 ~~111.4~~

11 14 31 162.0 ~~160.6~~ 53.0'

5 −15

A8.2' −1.96'

16 14 16 −2.05'

S.T. 22h 2mm

R.A. − 0 47

Dec. +33.7

C.A. 48.8

Sprocket −0.5

" +0.5

" +1.1

R's watch used for times

Watch 15 sec fast

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1905phae.proj...576V

July 27 1905 (Thursday)

Gross Phot J Ok Bowie Rec

21 8 -13.8
17 35 Comp Star = -14° 5977 (9.0)
3 33
8 27 Index Rock I

291.5 Comp

10 44 56 340.6 341.3 49.8'
116.6 36.4'
153.0 86.2' +2.02' A

299.2 +2.12'

10 48 3 334.0 34.8'
114.6 44.8'
159.4 79.6' +2.21'

Index L&B

206.0

10 55 56 246.2 40.2'
29.6 32.9'
62.5 73.1' +2.41' B

210.8 +2.43'

11 0 30 242.5 1.6 30.8'
27.0 40.9'
67.9 68.1 71.7' +2.45'

41 147 145
10 51 81
5 -18
15 52 3

Mean + 2.28'

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1905phae.proj..576W

July 27 1905

Index L & B

			204.7		II
11	9	55	249.0	44.3'	
			31.5	31.1'	
			62.6	75.4'	+2.33'
			209.4		+2.34'
11	15	30	241.6	32.2'	
			26.2	42.2'	B
			68.4	74.4'	+2.36'

Index R & A

			297.9		
11	22	49	335.0	37.1'	
			111.8	48.1'	
			159.9	85.2'	+2.05'
			289.1		+1.96'
11	27	20	342.5	53.4'	A
			117.1	38.1'	
			155.2	91.5'	+1.87'

	73	154	
11	18	54	
5		-18	
16	18	36	

Mean +2.15'

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1905phae.proj...576V

July 27 1905

Index R & A

			298.7		III
11	36	12	335.4	36.7'	
			112.9	46.9'	
			159.8	83.6' +2.09'	A
			290.8		+2.04'
11	40	12	341.2	50.4'	
			116.8	37.1'	
			153.9	87.5' +1.98'	

blonds

Index L & B

			30.8		
12	15	14	61.8	31.0'	
			207.0	40.6'	
			247.6	71.6' +2.45'	B

34	91	38	'
11	50	33	'
5		-18	' blonds thick
16	50	15	'

2.24'

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1905phae.proj..576W

July 27 1905

9	38	Dros prec. intermediate star by $0.^s9$
10	0	Dros follows 10.0 magn. by $8.^s0$ and is 7.'7 north of it
10	9	Dros follows 6.5 magn. by $51.^s0$ and is 6.'0 north of it (The 6.5 is $\sqrt{2}-13^\circ \sqrt{2491}$)
10		Intermediate star follows 10.0 magn by 11 sec and is 4.'1 north of it
10	13	Dros now prec. intermediate star by $3.^s3$
10	26	Comp. star follows 6.5 magn. by 2.0 sec. and is 15.'0+ south of it
10	26	Dros now prec. intermediate star by $4.^s4$

This page of memoranda of transits etc should properly have been copied on first page of evening and before the first group.

14

14
5
19

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1905phae.proj..576W

July 27, 1905.

Reversed Telescope

13
1 9 48 ~~45.2~~ ~~157.4~~ ~~300.0~~ ~~331.5~~ ~~IV~~

Clouds

Index R + B

14
2 3 36 115.0 160.0 ~~159.5~~ 45.0° 298.6 36.4' 335.0 21.6' +2.1'

118.4 36.4' +2.0'
14 8 10 155.2 293.3 ~~34.5~~ 25.3' 2.0'' 341.8

Index L e A

25.8 42.2' ~~39~~ 2'
14 11 45 68.0 208.5 ~~33.6~~ ~~22.4~~ 75.8' 2.32' ~~2.52~~ 242.1

28.5 +~~2.28~~ ~~2.33~~
14 15 45 63.3 205.4 ~~34.4~~ ~~33.6~~ 7.4' 2.2' 249.0

37 136
14 9 49
5 -18
19 9 31

~~+2.22~~

Mean + 2.19

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1905phae.proj..576W

July 27 1905

Index L & A

		23.3		V	
14	22	10	68.3	K5.0	
			210.3		
			243.2	32.9	
				77.9	2.26
14			29.5		+2.26
	24	55	63.6	34.1	
			206.2		
			249.9	K3.7	
				77.8	2.26

Index R & B

			292.5		
14	30	8	340.3	K7.8	
			118.8		
			153.8	35.0	
				A 2.8	+2.11
			298.0 ~~333.3~~	36.2	+2.18
14	33	~~45~~	334.2		
	109	118	115.0	K2.2	
14	27	44	157.2	74.8	+2.24
5		-18			
19	27	26			

Mean +2.22

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1905phae.proj...576N

July 27 1905

Index R & B

VI

294.6
336.4 41.8'

1h 42 32

120.5
153.4 32.9'
74.7' +2.36'

299.0 34.0' +2.30'
1h 47 38 333.0
114.0 44.0'
158.0 72.9' +2.25'

Index L & A

207.5
1h 52 22 246.0 38.5'
31.1
60.6 29.5'
62.0' +2.57'

211.6
1h 56 54 241.5 29.9' +2.61'
25.0 36.0'
64.0 65.9' +2.65'

Mean +2.46'

197 146
14 49 52
5 -18
19 49 34

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1905phae.proj..576W

July 27, 1905.

Index 44A

14 206,8

4 5 8 245,7

S.J. 23 41
H.A. +2 32
Dec. −13.1
P.A. 21.5 B

4 14h 15m Dros now follows 6.5$_A$ magn. by 27.^{s}0 and (=−13° 2291 (6.5)) is 6'.8 north of it

It's watch used for times tonight
Watch 18 sec fast

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1905phae.proj...576V

July 28, 1905. (Friday)

Eros Phot 3 H. Obs Bowie Rec

21	8	−13.8
17	7	
4	1	
7	59	

9 8 Object precedes 8.6 mag. by 5.5 and is 1.7 north

9 19 Eros precedes −13° 5888 (8.6) by 8.7 sec. and is 1.9 north of it. This object is Eros as is proved by comparison of above transit with a preceding transit (not given above); and also from the fact that it is in about theoretical position and there is no star in this place on the photographic plate

9 28 Clouds now thick in this region

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1905phae.proj..576N

July 28, 1905

Index

25.6

10 15 35 65.1

210.5

239.0

30.2

10 26.26 59.1

blonde

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1905phae.proj...576N

July 28, 1905.

21,8
11 8 28 67,6
208,0
240.7

30,0

Clouds

Impossible to do anything sucessfully with Croz tonight Atmosphere conditions steadily growing worse

Before beginning fragmentary obs. ~~made~~, ~~a~~ another transit was taken dark not recorded which proved that the object assumed to be Croz was Croz

H's watch used for times
Watch 17 sec fast

Nothing of value could be obtained tonight the fragmentary obs. made rejected

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1905phae.proj..576N

Aug. 2, 1905 (Wednesday)

Groz Phot. J K. Obs. Bowie Rec.

21	8	-13.8
17	43	
3	25	
8	35	

8 35 Cloudy in this region

10 10 1 sec. precedes

10 20 Groz preceed 1.8 sec

10 33 Groz precedes -13° 5845 (8.7) by 37 sec. and is 7.2 north of it.

10 35 Groz prec star x by 3 sec and is 0.6 south of it

10 45 A star ~~about~~ 8.5 mag prec. the (8.7) mags by 1 m. 27 sec. and is 9.3 south of it.

Comp. star prec. 8.5 mag. by 24.5 sec. and is 0.6 south of it (This comp. star ~~ab~~ and used as last preceding star)

Another star about ~~same~~ brightness prec. 8.5 mag by ~~about~~ 5 sec and is 2.7 south

Finally concluded to use (8.5) mag. for comp. star

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1905phae.proj...576N

Aug. 2, 1905

comp ~~star~~ = -13° 5841 (8.8)

I

Index L & B

27.0 ← comp star dis

11	6	38	65.4	38.4'
			210.0	28.4'
			238.4	66.8' +2.61"

			31.0	+2.62"
11	9	38	59.8	28.8'
			206.3	37.7'
			244.0	66.5' +2.62"

B

Index R & A

295.0

11	13	48	336.3	41.3'
			119.7 ~~+20.4~~	29.3'
			149.0	70.6' +2.49"

A

300.1

11	17	14	331.5	31.4' +2.42"
			113.9	43.7'
			157.6	75.1' +2.34"

	45	138
11	11	50
5		+7
16	11	57

Mean +2.52"

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1905phae.proj..576W

Aug. 2, 1905

II

blonds

Index R & A

Rotated eyepiece and Incol to see if pencils could not be bettered

53.5

11 56 b

102.5	49.0'	
236.4	37.7'	
274.1	86.7'	+2.00"

58.0 +1.92"

12 0 35

94.2	36.2'	
229.2	52.0'	
281.2	88.2'	+1.96"

Index L & B

323.0

12 5 35 6.0

blonds

"

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1905phae.proj...576V

Aug. 2, 1905.

Index R & A (Reversed Telescope) III

			54,0		
13	40	40	98,3 ~~99,0~~	44.3'	
			239,0	34.0'	
			273,0	78.3'	+2,2"
			58,2		+2,2"
13	44	54	92,9	34.7'	A
			235,3	41.7'	
			277,0	76.4'	+2,30"

Index L & B

			328,0		
13	49	38	6,2	38,2'	
			152,0	29.6'	
			181,6	67.8'	+2,42" B
			330,7		+2,49"
13	54	18	1,3	30,6'	
			144,8	42.8'	
			187,6	73,4'	+2,40"

become +2,30"

	187	150
13	46	82
13	47	22
5		+07
18	47	29

E

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1905phae.proj...57GW

Aug. 2, 1905.

Index L & B

IV

327.0

13 59 54

7.4 40.4 v

151.5 32.2 v

183.7 72.6 v +2.2 v

331.1 +2.2 v

14 2 28

1.5 30.4 v

145.1 42.7 v

187.8 73.1 v +2.1 v

Blonde

Index R & A

blonde

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1905phae.proj...576V

Aug 2, 1904

Index R & A V

50,8 r0.2'

14 30 6 101,0

236,7 3A.r'

275,2 AA.7' +1.9r" A

56,6 39.0' +1.91"

14 33 44 95,6

230,8 r2.8'

253,6 91.A' +1.A7"

Index L & B

319,9 r0.8'

14 38 0 10,7 B

151,9 33.7'

185,6 A4.r' +2.06"

328,6 35.6" +2,12"

14 40 23 4,2

143,2 45.K" +2.17"

188,6 ~~7.90~~ ~~+2.20~~

21.0

14 35 33

5 +7

19 35 40

mean +2.02"

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1905phae.proj..576W

Aug 2 1905.

Index L&B

	323.3	48.6 v		VI
14 45 18	11.9			
	148.8	34.2 v		
	183.0	42.8 v	+2.51	
	329.5	36.0 v	+2.02 v	
14 49 30	5.5			
	142.4	49.3 v		B
	191.7	45.3 v	+2.04 v	

Index R&A

	230.0	55.9 v		
14 53 2	285.1			
	57.0	34.7 v		
	95.7	93.78 v	+1.27 v	
	236.8	39.9 v		A
14 55 54	276.7		+1.82 v	
	50.0	53.2 v		
14 50 56	103.2	96.1 v	+1.63	
5		+7		
19 51 3			Mean +1.95	

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1905phae.proj...570V

Aug 2 1905

Index R & A

VII

228.9 +5.9"
284.8

15 0 35 57.6 37.2"
95.4 93.7" +1.42"

A

236.3 +2.2" +1.72"
279.1

15 9 58 49.9 +4.1"
104.0 96.9" +1.73"

Index L & B

142.4 +9.7"
192.1

15 12 10 328.0 35.7"
3.7 25.4" +2.04"

B

148.5 37.3" +2.02"
185.8

15 13 18 319.8 +0.0"
9.8 47.3" +1.99" becomes +1.90"

34 121"
15 2 60."
15 9 0.
5 7.
20 9 7.

15 30 → Drew prec. (8.7) mag. by 61.5 sec. and 7.8 north of it

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1905phae.proj..576N

Aug 2 1905

Gro precedes the star with which it formed a double by 27.5 sec. and in same dec.

H's watch used for times tonight
H.atch 7 sec. slow.

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1905phae.proj...570V

Aug. 3, 1905 (Thursday)

Croz Phot. I H. Obs. Bowie Rec.

21	8	−13.8
17	25	
3	43	
8	17	

8 35 7.3 14.3

(−13° √8442)

8 38 Croz precedes 8.7 mag by 2m 20s and is 9.5 north of it

For measurements see fol. page.

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1905phae.proj...576W

Aug 3 1905

Index Left & Above

			327,4	Comp Star dis	I
9	12	56	3,2	35.8'	
			141,4	48.0'	
			189,4	83.8'	+2.02'
			324,5		
9	16	20	8,1	43.6'	+2,14'
			149,7	36.1'	
			185,8	79.7'	+2.20'

B

Index Right & Below

			236,5		
9	20	42	277,2	40.7'	A
			51,4	51.6'	
			103,0	92.3'	+1.25'
			231,5		
9	23	18	280,0	48,5'	+1.94'
			57,5	37.5'	
			95,0	86.0'	+2.02'

Mean +2.04'

	71	136
9	17	79
9	18	19
5		+11
14	18	30

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1905phae.proj...57GV

Aug 3, 1905

Index R & B

II

	235,4			
	274,5	39.1 v		
9 29 35	49,8			
	102,3	r-2,r- v		A
		91,6 v	+1,47 v	
	230,8	r1,4 v	+1,92 v	
9 33 47	282,2			
	57,6	36,4 v		
	94,0	47,8 v	+1,97 v	

Index L & A

	139,6			
	190,6	51.0		B
	328,9	36,0 v		
	4,9	87,0 v	+2,00 v	
	148,4		+2,04 v	
9 41 44	184,0	35.6		
	322,6	48,4		
	11,0	84,0	+2,02 v	
			Mean +1,98 v	

	141	164
9	35	56
5		+11
14	36	7

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1905phae.proj..576W

Aug. 3, 1905.

Index L & A

III

			142.7	46.7 v		
9	49	43	189.4			
			329.8	34.6 v		
			3.8	40.7 v	+2.17 v	
			149.0	34.7 v	+2.20 v	
9	54	32	183.7			
			324.8	44.3 v		
			9.1	79.0 v	+2.22 v	

B

Index R & B

			53.2	45.4 v		
10	1	4	99.0			
			238.6	35.6 v		
			274.2	41.4 v	+2.15 v	

A

			58.3	33.9 v	+2.14 v	
10	3	52	92.2			
			233.2	45.6 v		
			278.8	79.5 v	+2.21 v	

mean +2.19 v

38	107	131
9	56	78
9	57	18
5		+11
14	57	29

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1905phae.proj...57dV

Aug. 3, 1905.

Index Right & Below

55,3 IV

10	15	40	100,2	44.9	
			241,8	32.8	
			274,6	77.7	+2.26

~~2~~

			59,6		+2.26
10	20	~~28~~	93,0	33.4	
			235,0	44.0	
			279,0 ~~278,5~~	77.4	+2.27

Index Left & Above

325,0

10	27	6	9,0	44.0	
			150,0	31.4	
			151,4	75.4	+2.33

+2.41

332,2

10	33	7	3,0 ~~2,2~~	30.8	
	95	81	147,3	39.7	
10	23	65	187,0 ~~186,5~~	70.5	+2.49
10	24	5			mean +2.34
5		+11			
15	24	16			

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1905phae.proj..576W

Aug 3 1905

Index Left & Above V

328.6

10 45 14	6.0	37.4 ✓		
	152.4	28.7 ✓		
	181.1	66.1 ✓	+26.4 ✓	(B)
	331.5		+2.52 ✓	
10 51 8	2.1	30.3 ✓		
	147.5	39.1 ✓		
	186.6	69.4 ✓	+2.53 ✓	

Index Right & Below

236.0

10 56 47	279.0	43.0 ✓		
	60.6	30.4 ✓		
	91.0	73.4 ✓	+2.40 ✓	(A)
	241.3		+2.30 ✓	
11 3 12	274.9	33.6 ✓		
	52.8	46.2 ✓		
	99.0	79.8 ✓	+2.20 ✓	
			mean +2.44 ✓	

41	155	81
10	53	65
10	54	5
5		+11
15	54	16

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1905phae.proj...57GW

Aug. 3, 1905.

Index R & B

VI

232.6

11 15 44 250.2 47.6

59.5 33.5

93.0 81.1 +2.16 A

239.2 +2.12

11 22 20 277.1 37.9

54.1 46.0

100.1 83.9 +2.04

Index L & A

143.0

11 29 30 188.2 45.2

330.5 33.6

4.1 78.8 +2.23 B

148.3

11 34 24 184.0 ~~185.8~~ 35.7 ~~37.5~~ +2.14

321.9 49.3

11.2 ~~86.8~~ 85.0 +2.05

11 100 118

11 25 30

5 +11

16 25 41

Mean +2.13

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1905phae.proj..576W

Aug 3 1905.

Index L & A VII

			329,0			
11	49	0	5,5	36,5 ✓		
			140,6	52,6 ✓		
			193,2	89,1 ✓	+1,94 ✓	B
			321,4			
11	53	38	10,0	48,6 ✓	+2,00 ✓	
			147,4	36,6 ✓		
			154,0	85,2 ✓	+2,05 ✓	

Index R & B

			237,4			
12	3	2	278,9	41,5 ✓		
			50,4	51,9 ✓		
			102,3	93,4 ✓	+1,82 ✓	A
			229,4		+1,44 ✓	
12	8	8	281,5	52,1 ✓		
			57,0	39,7 ✓		
			96,7	91,8 ✓	+1,87 ✓	
					mean +1,92 ✓	

46	113	48
11	58	27
5		+11
16	58	38

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1905phae.proj..576W

Aug 3 1905

Index R & B

VIII

	237.1			
12 20 43	278.0	40.9 ✓		A
	52.2	49.0 ✓		
	101.2	± 9.9 ✓	+1.92 ✓	
	232.9	47.7 ✓		
12 26 20	280.6			+1.94 ✓
	56.3	40.6 ✓		
	96.9	± 2.3 ✓	+1.96 ✓	

Index L & A

	143.9			
12 35 49	186.7	42.8 ✓		B
	327.0	38.5 ✓		
	5.5	± 1.3 ✓	+2.16 ✓	
	147.4	38.9 ✓		+2.15 ✓
12 40 58	186.3			
	324.9	43.1 ✓		
	8.0	± 2.0 ✓	+2.14 ✓	

	121	170
12	30	58
5		+11
17	31	9

Mean +2.04 ✓

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1905phae.proj...570W

Aug. 3 1905

B + B

Index ~~Lodd~~ Reversed Telescope

			236,8	32.2 ✓	IX	
13	2	54	275,0			
			56,8	39.7 ✓		
			96,5	77.9 ✓	+2.6 ✓	4
			234,8	41.4 ✓	+2.9 ✓	
13	6	52	276,2			
			56,6	41.3 ✓		
			97,9	42.7 ✓	+2.12 ✓	

A + A

Index ~~B + B~~

			~~147,9~~			
			150,6	31.9 ✓		
13	14	20	182,5			
			322,6	46.4 ✓		B
			9,0	74.3 ✓	+2.25 ✓	
			143,3	44.4 ✓	+2.30 ✓	
13	19	4	187,7			
			330,8	30.7 ✓		
			1.5 ~~0.9~~	75.1 ✓	+2.34 ✓	

	41	130	
13	10	48	
5		+11	
18	10	59	

Mean +2.24 ✓

Stopped by extremely close propinity of Dro to a bright star

~~Observations throughout~~

Bright star in the field most of the ~~evens~~ time throughout evening

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1905phae.proj..576

Aug. 3, 1905.

Observations progressively more dif. as Iroz approached bright star

13 42 Iroz has moved to preceding by about 24.7 sec. since 8h 35m this evening

Iroz is now practically in same R. A. as bright star and slightly north of it

Bright star above mentioned is −13° 5837 (8.0)

Same comp. star used as last night = −13° 5841 (8.8)

H's watch used for times tonight Watch 11 sec slow

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1905phae.proj..570W

Aug 4, 1905 (Friday)

Droz	Phot. I	H. Obs.	Bowie Rec.
21	8	−13.8	
19	32		
3	36		
8	24		

9 1 ox Droz precedes (8.0) magn. by 1m 31s and is about 1.'9 north of it

9 4 11.5 7.9

Comp Star for tonight =
− 13° 5822 (9.0)

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1905phae.proj..576

Aug 4, 1905.

Index
54,4
Stopped by southern scud
50.2
11 11 22 104,5
232.2
278,3

55,0
11 22 56 97,8
228,0

12 21 0. Impossible to do anything with Gras tonight as was found after many trials The balconies are reeking with moisture and the air is also full of moisture. The sky especially towards the south ~~is~~ misty has been misty throughout evening and now southern scud practically covers whole sky

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1905phae.proj..576M

Sept. 5 1905 (Tuesday)

Nova Aquilae No. 2 Campbell Obs. Bouvier Rec

18	58	-5.0
20	18	
1	10	

Est. of sequence

n 3 m 6 o 3 q 3 r 4 p 6 s ~~7 t~~ 4 u
u 2 t 5 w 4 x

9 30 y, z, α not seen
9 31 l^2_N 2h

Re-est. of sequence

18	58
21	31
2	33

n 3 m 6 o 5 q 3 r 3 p 5 s 5 u
10 34 u 3 t 4 w 5 x 3 z
y and α not seen

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1905phae.proj...576w

Sept. 6, 1905 (Wednesday)

Nova Aquilae No. 2 Campbell Obs. Bowie Rec
15 11

n 2 m 6 o 4 q 4 r 1 p 5 s 6 ~~w~~ 2 t 4 v 4 x
x 2 z

8 5b b 3, 3 h

Sky clear but moon nearer and brighter than last night Est. fairly easily made and considered good

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1905phae.proj..576

7 2

Sept. 9 1905 (Saturday) 1

L. Campbell Obs. Bowie Rec. 15"

035727 — Tauri Algol Var

27
$ 5A +27.2
22 06

27 45 +31.5 5 52
22 11 6 0A
5 34
6 26

22 30 S.T.

3 45 +31.5 H.9.6 28 26.6 Dec.
27 45
22 27
5 18 11.06 f 3,2 9.0
6 42 11.06

2A 02 +26.6
23 20

7 1A

See page 2

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1905phae.proj...570W

Sept 9 1905

11 51. n3, 1p 32 — Tauri Algol var.

11 57 n4, 0 ~~f~~p 33

12 03 n5, 0p 34

12 17 n5, 0p, 3q 34

12 31 p1, 2q 34.5

13 04 p1, 2q 34.5

13 31 h3, 1l 21 ~~19~~

13 36 k3, 3b 22

13 55 f4, 1g 10

14 03 f2, 2g 4

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1905phae.proj...576

Sept. 14, 1905 (Thursday)

No. 2. See Morrstyle No. 197.

Nova Aquilae ↑ Phot. J. H. Oke. Rowie Rec.

18 57 −4.2 comp. star = −4° 4665 (8.8)

20 10

1 13

18 59 −5.1

20 38

1 39

18 59 −5.1

19 45

0 46

Index R & A

48.4 comp. star dis.

106.4 58.0'

236.0 42.4'

278.4 100.4' +1.65' A

54.1 +1.61'

100.0 45.9'

230.0 57.5'

287.5 103.4' +1.57'

Index L & B

322.5

12.7 50.2'

146.3 39.5'

185.8 89.7' +1.92' B

327.2 +1.84'

8.0 40.8'

137.0 54.9'

191.9 95.7' +1.76'

Mean +1.72

8 50 0

8 58 38

108 38

8 54 19

5 32

13 53 47

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1905phae.proj...570W

Sept. 14, 1905.

Index L & B

320.5

9 9 20

12.0	51.5'	
145.6	40.5'	
186.1	92.0'	+1.86'

(B)

327.0		+1.76'
8.5		
136.7	41.5'	
	58.8'	
195.5	100.3'	+1.65'

Index R & A

234.0

277.5	43.5'	(A)
48.0	58.1'	
106.1	101.6'	+1.62'

228.5

9 16 56

286.0	57.5'	+1.64'
55.5	42.5'	
98.0	100.0'	+1.66'

25 76'

9 12 68'

5 -32'

Mean +1.70'

14 12 36'

S.T. 21h 14m

R.A. +2 17

Dec. -4.4

P.A. 222.0 L & B

Sparkes -2.5 B

" -1.5 L

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1905phae.proj..576

Sept. 14, 1905.
R W Tsuri.

New Algol Var. 035727 = H6 1174 H. Obs Phot J
Bowie Rec

27	58	+27.2
21	27	
~~17~~	~~29~~	
6	31	
	29	

There is a 9.5 magn. star which precedes the var. by 1m 6s and is 5'.3 north of it. There is another 9.5 magn. star which precedes the var. by 58s and is 9'.0 north of it. This latter star is star b of circular 104 and star h will be used as comp. star.

For results, see next two pages.

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1905phae.proj..576V

Sept. 14. 1905

Index Left

	145.5	var dis	
10 29 35	188.0	42.5'	
	329.6	32.8'	
	2.4	75.3'	−2.34' (B)
	148.1		−2.28'
	184.5	36.4'	
	325.4	42.6'	
	8.0	79.0	−2.22'

Index Right

	54.3		
	99.6	45.3'	
	239.0	34.5'	
	273.8	80.1'	−2.19' (A)
	58.5		−2.16'
10 37 38	96.0	37.5'	
	235.1	44.9'	
	280.0	82.4'	−2.12'

Mean −2.22'

	66	73'
10	33	36'
5		−32'
15	33	4'

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1905phae.proj..576N

Sept. 14, 1905

Index Right

	54.9 ~~53.8~~			
10 39 55	100.0	45.1°		
	237.1	37.7°	−2.11°	A
	2745 ~~2751.4~~	82.8°	~~2.08~~	
			−2.14	
			~~2.12~~	
	59.0			
	94.6	35.6°		
	233.9	45.5°		
	279.4	81.1°	−2.16°	
	Index Left			
	325.2			
	9.6	44.4°		B
	147.0	38.0°		
	185.0	82.4°	−2.12°	
	325.3		−2.16°	
10 49 45	3.8	35.5°		
88 100°	144.0	44.5°		
10 44 50°	188.5	80.0°	−2.19°	
5 −32°				
			−2.15°	
15 44 18°			~~2.14~~	

S.S. 22 54
R.A. −5 3
Dec. +27.2
R.A. 131.0 Ver B
Sprocket −1.5 B
−0.5 b

Obs. of above var. rather difficult on account of very bright moonlight and rather low altitude
H's watch used for times tonight
Watch 32 sec. fast.

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1905phae.proj...576N

Sept. 21, 1905 (Thursday)

α Serpentis N. Ok. Phot 3 Bowie Rec.

18 12 −15.9
19 42
+1 30

Index L & A

122.8 ← comp star dis. I
210.0 27.2
315.0
20.0 65.0
152.2 +0.53

132.9 66.6 +0.50
199.5
301.4 44.6
30.0 155.2 +0.47

Index R & B

34.0
121.5 47.5
222.5 67.1
289.6 154.6 +0.49

40.6
110.4 ~~109.5~~ 69.8 +0.42
212.5
298.8 163 +0.46
161 +0.49

7 52 40
7 54 20
7 56 52
8 2 25

29 164 150
7 56 38
5 −24
12 56 14

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1905phae.proj..57GW

Sept. 21. 1905

Index R & B

34.0

8 6 20	121.6	87.6°		II
	224.2	65.8°		
	290.0	153.4°	+0.51°	A

42.0 +0.50°

8 7 56	109.2	67.2°		
	213.5	86.5°		
	300.0	153.7°	+0.50°	

Index L & A

304.9

8 13 28	31.8	86.9°		
	131.5	67.9°		
	199.4	154.8°	+0.48°	

314.5 +0.50°

8 16 30	20.0	65.5°		
	122.9	87.8		
	210.7	153.3	+0.51°	

	42	134°
8	10	64°
5		-24°
13	10	40°

Mean + 0.50°

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1905phae.proj...576V

Sept. 21, 1905.

Index L & A

303.5

8 24 16	31.3 ~~32.2~~	87.8°		III
	132.0	67.7°		
	199.7	155.5°	+0.47°	
	314.4		+0.50°	
8 27 58	20.0	65.6°		
	123.0	86.0°		
	209.0	151.6°	+0.54°	

Index R & B

212.1

8 34 20	300.0	87.9°		
	43.5	68.4°		
	111.9	156.3°	+0.45°	
	221.5		+0.46°	
8 35 56	289.5	68.0°		
	33.5	88.0°		
	121.85	156.0°	+0.46°	

	120	150°	
8	30	38°	
5		-24°	
13	30	14°	

Mean +0.48°

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1905phae.proj..576W

Sept 21, 1905

Index R & B

		212.8	26.7	IV
8	41	40	299.5	
			42.2	67.8	A
			110.0	154.5	+0.49
			222.0		
8	44	33	290.2	68.2	+0.47
			32.9	24.1	
			121.0	156.3	+0.47

Index L & A

		121.8	22.2	
8	47	28	210.0	
			314.0	66.2	B
			20.8	155.0	+0.46
			131.5		
8	50	35	199.0	67.5	+0.46
			303.0	27.0	
			30.0	154.5	+0.49

Mean +0.46

	182	136	
8	45	64	
5		-24	
13	45	40	

S.T. 21 23
L. A +3 10
Dec -15.2
P.A. 338.5
Sprocket - 1.5 A
" - 0.5 B
" 0.0 A & B

9
9
5
14

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1905phae.proj..570V

Sept. 21, 1905.

Nova Aquilae No. 2 ~~Phot.~~ J. H. Obs. Bowie Rec

18 58 -5.1

21 45

+2 47

Index Left

329.0 ← Comp. star dis.

4.1 35.1'

140.4 49.8'

190.2 84.9' +2.05' B

322.8 +2.06'

8.9 46.1'

145.5 38.4'

183.9 84.5' +2.06'

Index Right

234.5

275.8 41.3'

48.0 56.4'

104.4 97.7' +1.71' A

228.0 +1.75'

9 51 17 283.3 ~~284.3~~ 55.3' -

93 27'

9 46 44' 56.4 39.4'

5 -24' S.T. 22h 15m 95.8 94.7' +1.79'

14 46 20' R.A. +3 17 Mean +1.90'

Dec. -4.1

P.A. 223.5 Ver. B

Sprocket - 2.5 B

" - 1.5 b

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1905phae.proj..57GW

Sept. 21, 1905

New Algol Var. 035727 = Hb 1174 Phot 3 H. Obs.
Bowie Rec.

27 58 +27.2
22 24
5 34
6 26

Index Left

145.7 ← Star dia.

188.0	42.3'	
329.7	33.2'	
2.9	75.5'	−2.33'
149.8		−2.32'
182.6	32.8'	
325.4	43.6'	
9.0	76.4'	−2.30'

Index Right

54.2		
100.6	46.4'	
238.0	36.3'	
274.3	82.7'	−2.12'
58.3		−2.13'
94.0	35.7'	
233.5	46.1'	
279.6	81.8'	−2.14'

Mean −2.22'

10 19 25

10 25 35
44 60
10 22 30
5 −24
15 22 6

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1905phae.proj...570V

Sept. 21, 1905.

Dis. Jup. I Phot. R. H. Obs. Bowie Rec.
compared with nearer of two Sats. on preceding side = Sat. II

	B & b	1182		B	394
10	33	16.8	10	33	0.0
10	34	16.7	10	34	0.0

		10	51	58		54.5	
10	52	35	"	52	23	157.0	
		-15					
10	52	20	"	"	42	53.2	1
			"	53	17	156.2	
			"	"	39	53.0	
10	54	8	"	54	3	159.0	
		-15	"	"	18	53.5	2
10	53	53	"	"	33	159.0	
			"	55	15	53.1	
10	55	45	"	"	36	157.0	
		-15	"	"	55	53.5	3
10	55	30	"	56	15	158.4	
			"	57	2	56.5	57.0
10	57	34	"	"	23	157.0	
		-15	"	"	44	54.2	4
10	57	19	10	58	8	155.3	

	102.5		
	103.0		
	205.5		
-0.5	102.8		
	106.0		
	105.5		
	211.5		
-0.6	105.8		
	103.9		
	104.9		
	208.8		
-0.6	104.4		
	100.5		
	101.1		
	201.6		
-0.4	100.8		

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1905phae.proj..57GW

Sept. 21, 1905

10	59	8	10	58	35		102.1	53.9	11
		-14		"	52		104.2	156.0	
10	58	54	10	59	21	-0.5	206.3	55.7	5
				"	46		103.2	159.9	
11	0	50	11	0	10		102.8	55.1	
		-14		"	45		103.4	157.9	
11	0	36		1	6	-0.5	206.2	54.6	6
				"	19		103.1	158.0	
				"	45			53.8	
11	2	14		2	7		102.2	156.0	
		-14		"	26		101.8	55.5	7
11	2	0		"	39	-0.5	204.0	157.3	
				3	7		102.0	53.0	
11	3	41		"	38		106.0	159.0	
		-14		"	52		104.5	53.9	8
11	3	27		4	7	-0.6	210.5	158.4	
				"	28		105.2	54.0	
11	4	50		"	43		104.2	158.2	
		-14		"	57		103.9	54.0	9
11	4	36		5	12	-0.5	208.1	157.9	11
				"	56		104.0	52.3	11
11	6	38		6	37		107.7	160.0	
		-14		"	51		103.9	54.1	10
11	6	24		7	8	-0.6	211.6	158.0	
11	7	09		"	23	-0.4	105.8	54.8	
11	7	19	11	"	33	-0.1	99.2	154.0	
11	7	32		"	46	0.0	92.8	61.2	
							90.8		

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1905phae.proj..576V

Sept. 21, 1905.

11	7	44'	11	7	58	+0.1'	87.9'	152.0
	7	54'		8	8	+0.3'	82.2'	64.1
	8	01'		"	14	+0.4'	80.5'	146.3
	8	09'		"	22	+0.4'	79.2'	65.8
	8	17'		"	30	+0.6'	75.1'	145.0
	8	25'		"	38	+0.7'	72.6'	69.9
	8	33'		"	46	+0.7'	72.0'	142.5
	8	42'		"	55	+0.8'	68.5'	70.5
	8	55'		9	8	+1.1'	61.0'	139.0
	9	03'		"	16	+1.3'	57.8'	78.0
	9	19'		"	32	+1.5'	52.2'	135.8
	9	30'		"	43	+1.8'	47.2'	83.6
	9	37'		"	50	+2.2'	40.0'	130.8
	9	49'	11	10	2	+2.8'	31.4'	90.8
	9	58'		"	11			122.2
	10	06'		"	19			Not seen later

Limit of Vis.

			11	10	45			90.9
11	11	4'		"	56		32.6'	123.5
		-13		11	12		29.8'	91.8
11	10	51		"	25	+2.8'	31.2'	121.6

Seeing somewhat blurry ~~at times~~ and especially so as Sat. began to grow faint, making observations a little difficult

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1905phae.proj..576W

Sept. 21, 1905.

B & b 1182			B 3941		
11	26	11.8	11	26	0.0
11	27	11.8	11	27	0.0

H's watch used for times tonight
H watch 24 sec. fast.

∴ 11A2 is 16.ˢ fast at 10ʰ 36ᵐ 24ˢ. G. − 16.ˢ
" " 15.ˢ " " 10 47 0. " − 15.ˢ
" " 14.ˢ " " 10 57 36ˢ " − 14.
" " 13.ˢ " " 11 8 11. " − 13.
" " 12.ˢ " " 11 18 47. " − 12
" " 11.ˢ " " 11 29 22. "

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1905phae.proj..57GV

Sept 22 1905 (Friday)

ν Serpentis Phot. J H. Obs. Bowie Rec.

18	12	−15.9			
19	54				
1	42	Index A			I
		145.1 ← comp star dia.			
7	54	55	225.4	7.9	82.8′
			334.0		65.2′
			39.2		148.0′ +0.61′
			153.0		+0.64′
			218.7		65.7′
			326.0		80.0′
			46.0		145.7′ +0.66′
			Index R & B		
			54.1		
			138.6		84.5′
			242.7		67.3′
			310.0		151.8′ +0.54′
			62.5		+0.56′
8	5	18	130.0	+29.6	67.5′
15	59	73		234.0	83.0′
7	59	66		317.0	150.5′ +0.57
5		−32			
12	59	34			Mean +0.60′

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1905phae.proj..57GW

Sept. 22, 1905.

Index R & B

		54.0		II
8	10	28	135.5	81.5'
			243.0	64.6'
			307.6	146.1' +0.65'
			62.6	+0.59'
8	13	55	129.1	66.5'
			234.4	85.6'
			320.0	152.1' +0.53'

Index L & A

		326.0		
8	17	52	49.5	83.5'
			154.0	64.3'
			218.3	147.8' +0.62'
			334.3	+0.62
8	21	40	39.7	65.4'
			144.5	83.0'
			227.5	148.4' +0.61'
	61	175'		Mean +0.60'
8	15	59'		
5		-32'		
13	15	27'		

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1905phae.proj..576V

Sept. 22, 1905

Index L x A

III

327.7

8 35 55 — 47.2 — 79.5'

154.2 — 62.7'

216.9 — 142.2' — +0.73'

B

334.7 — +0.70'

8 39 6 — 38.6 — 63.9'

144.7 — 81.6'

226.3 — 145.5' — +0.66'

Index R x B

234.6

A

8 43 35 — 318.2 — 83.6'

63.2 — 65.4'

128.6 — 149.0' — +0.59'

244.0 — +0.59'

8 46 53 — 308.5 9.1 — 65.1'

53.7 — 84.3'

138.0 — 149.4' — +0.59'

163 149'

8 40 82'

5 −32'

13 40 50'

Mean +0.64'

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1905phae.proj..576W

Sept. 22, 1905

Index R&B

236.0

IV

6	53	45	317.3	~~318.50~~	81.3°	
				66.0	61.3°	A
				127.3	142.6°	+0.72°
				245.9		+0.72°
6	59	45		308.4	62.5°	
				55.6	80.9°	
				136.5	143.4°	+0.71

Index L&A

146.8

9	3	46	228.2	81.4°	B
			335.6	62.6°	
			38.2	144.0°	+0.69
			154.8		+0.67°
9	6	57	219.3	64.5°	
			324.1	81.9°	
			46.0	146.4°	+0.65

34	121	193°	
8	60	63°	
5		−32°	
14	0	31°	Mean +0.70°

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1905phae.proj..576V

Sept. 22, 1905

Index L & A

145.0 V

9 11 54	225.5	80.5		
	335.5	61.2		
	36.7	141.7	+0.74	B
	155.6		+0.74	
9 15 45	217.9	62.3		
	327.0	79.2		
	46.2	141.5	+0.74	

Index R & B

57.5

9 20 2	135.2	77.7		
	244.7	63.4		A
	308.1	141.1	+0.75	
	64.5		+0.74	
9 24 30	127.2	62.7		
	236.7	79.1		
	315.8	141.8	+0.74	

	70	131	
9	17	63	
5		−32	
14	17	31	

Mean +0.74

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1905phae.proj..57GV

Sept. 22, 1905

Index R & B

	58.0	77.4		VI
9 35 48	135.4			
	244.4	64.4		
	308.8	141.A	+0.7K	A
	66.0	61.0		+0.7K
9 40 4	127.0			
	236.0	40.1		
	316.1	141.1	+0.7R	

Index L & A

	328.1	76.5		
9 44 22	44.6			
	154.7	62.3		B
	217.0	138.2	+0.20	
	334.6	62.K		
9 50 0	37.0			+0.7A
	147.0	77.9		
	224.9	140.3	+0.77	
169 74				
9 42 34				
5 -32				
14 42 2			Mean	+0.76

DJ 22 15
So. A 4 2
Dec -15.2
P.A. 337.7 Va B
Sprocket -1.5 A
-0.5 B
0.0 L

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1905phae.proj..576N

Sept 22 1905

Nova Aquilae Phot J H Obs Bowie Rec.

18 58 -5.1

22 25

3 27

Abandoned

New Algol Var. 035727 = H. 1174 Phot J
H. Obs. Bowie Rec

27 58 +27.2

22 28

5 30

+ 6 30

For measurements see next page.

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1905phae.proj..576W

Sept. 22, 1905.

Index Left

	162.5 ← Var dis		
10 20 46	209.0	46.5'	
	350.0	32.0'	
	22.0	78.5'	−2.24'
	169.4		−2.28'
	202.8	33.4'	
	345.8	42.0'	
	27.8	75.4'	−2.33'

Index Right

	74.0		
	120.5	46.5'	
	259.0	34.8'	
	293.8	81.3'	−2.16'
	79.5		−2.10'
10 29 21	114.3	34.8'	
49 67'	250.6	50.4'	
10 24 64'	301.0	85.2'	−2.05'
5 −32'			Mean −2.19'
15 24 32			

S. S. 22h 57m
R. A. −5 1
Dec. +27 2
P. A. 311.5 ker B
Sprocket −1.5 B
" −0.5 b

11

11
11.5
16

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1905phae.proj..576N

Sept. 22, 1905.

♎ beta	Phot	W	H. Obs	Bowie	Rec	
26	6		−3.1	26	12	−3.6
23	6			23	24	
−3	0			2	48	
+9	0			9	12	

26	12	
23	42	
2	30	
9	30	−3.6

Index R & A

Retaken, as something was evidently wrong.

	158.4	~~341.5~~	Comp Star	
11 31 24	244.0	~~62.5~~	~~81.0~~	85.6
	348.8	~~171.4~~	~~62.1~~	63.9
	52.7	~~233.5~~	~~143.1~~	149.5 +0.58

	348.5		+0.56
	56.0	67.5	
	157.0	84.2	
	241.2	151.7	+0.54

Index L & B

	248.0		
	334.8	86.8	
	77.5	67.9	
	145.4	154.7	+0.48

	255.2		+0.44
11 40 2	325.4	70.2	
71 26	66.7	88.1	
11 35 43	154.8	158.3	+0.41
5 −32			Mean +0.50
16 35 11			

It's watch used for times
Watch 32 sec fast.

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1905phae.proj..576N

Sept 23 1905 (Saturday)

Asteroid (167) Urda Phot. H. Obs. Bowie Rec.

22	9	−9.8
19	45	
2	24	
9	36	

Object (prob. aster.) follows 9.2 magn. by 22.6 sec and is 5.5 south of it

Abandoned, not found.

New Algol Var. 035727 Z 1174 Phot. J
H. Obs. Bowie Rec.

27	58	+27.2
20	55	
7	3	
4	57	

27 V Z
21 0
6 V − Z'
V − ~

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1905phae.proj...576N

Sept. 23, 1905

Index L & A

		244.5	Comp Star dia.	I
9	13	57	310.8	66.3 ✓
			72.0	
			116.7	44.7 ✓
				111.0 ✓ +1.39 ✓
				B
		252.5	49.0 ✓	+1.36 ✓
9	16	21	301.5	
			62.5	64.5 ✓
			127.0	113.5 ✓ +1.34 ✓

Index R & B

		163.7	46.3 ✓	
9	20	50	210.0	
			334.0	64.5 ✓
			38.5	110.5 ✓ +1.40 ✓
				A
		160.9	49.5 ✓	+1.36 ✓
9	24	46	220.4	
			338.4	54.6 ✓
			33.0	114.1 ✓ +1.32 ✓
	73	174		
9	18	58		
5		-41		
14	18	17		

Mean +1.36 ✓

7112.5960

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1905phae.proj..576N

Sept. 23, 1905.

Index R & B

II

158,4
213,7 55.3
327,0
45,0 70.0
1333

+0.91

A

145,7
227,2 81.5
336,5
37,2 60.7
1422

+0.82

+0.73

Index L & A

63,8
129,0 65.2
232,0
318,8 86.8
1520

+0.54

B

54,1
141,5 87.4
240,0
315,3 75.3
1627

+0.33

+0.44

+0.63

9	35	30
9	31	4
9	28	22
9	35	12
	132	68
9	33	17
5		-4.1
14	32	36

9
9
9
9
5
14

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1905phae.proj...576N

Sept 23 1905

Index L & A

III

	58.5			
9 42 40	131.5	73.0 ✓		
	227.7			B
	325.0	97.3 ✓		
		170.3 ✓	+0.1 ✓	
	46.3	100.2 ✓		
9 44 42	146.5		+0.0 ✓	
	236.3	90.3 ✓		
	316.6	170.5 ✓		
		179.5 ✓	−0.1 ✓	

Index R & B

	325.3	74.2 ✓		
9 48 55	46.5			
	135.2	102.3 ✓		A
	237.5	170.5 ✓		
		179.5 ✓	−0.1 ✓	
	315.8	101.8 ✓		
9 51 16	57.6		−0.0 ✓	
	143.1	85.5 ✓		
	227.6	156.3 ✓	−0.1 ✓	
		173.7		
185 153				
9 46 53				
5 −41				
14 46 12			+0.1 ✓	

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1905phae.proj..576N

Sept. 23, 1905.

Index R & B

	323.5		IV	
9 56 20	48.4	A4.9 ✓		
	131.5	107.9 ✓		A
	239.4	192.F ✓	− *0.2K ✓	
		167.2 ✓		
	311.5			
9 59 40	60.9	109.4 ✓	− *0.32 ✓	
	140.0	91.2 ✓		
	231.2	200.6 ✓	− *0.39 ✓	
		159.K ✓		

Index L & A

	336.4	62.3 ✓		
10 4 2	38.7			B
	141.9	A6.6 ✓		
	228.5	1KA.9 ✓	−0.60 ✓	

	324.5			−0.✓9
10 7 32	49.4	AK.9 ✓		
38 126 94	153.2	65.0 ✓		
9 61 54	218.2	149.9 ✓	−0.✓F ✓	
5 −41				
15 1 13				−0.46 ✓

10
5
15

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1905phae.proj..576N

Sept. 23, 1905.

Index

336.1
35.3
147.0
227.5

~~10 17 12~~

V

Index L & A

329.8 ↙ var. now dis.

B

10 19 55

40.7 ✓ 7 0.9 ✓
157.4
215.0 ✓ 7.6 ✓
12 A ✓ −1.0 ✓

337.4 ✓ 9.3 ✓ −0.90 ✓

10 22 8

36.7
146.0 ✓ A 0.0 ✓
226.0 ✓ 13 9.3 ✓ −0.79 ✓

Index R ↙ B

A

57.4 ✓ 7 6.A ✓

10 25 44

134.2
247.8 ✓ 5 A.2 ✓
306.0 ✓ 13 5.0 ✓ −0.AA ✓

64.7 ✓ 9.0 ✓ −0.AA ✓

10 29 16

123.7
237.8 ✓ 7 5.2 ✓
313.0 ✓ 13 A.2 ✓ −0.A9 ✓

95 123
10 23 76
5 −41
15 23 35

−0.A9

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1905phae.proj..570N

Sept. 23, 1905.

Index R & B

			59,5		VI
10	33	18	132.4	73.9	
			247.4		A
			305.1	57.7 / 1306	−0.97
			66.9		−0.96
10	34	28	124.8	57.9	
			238.0		
			312.0	74.0 / 131.9	−0.94

Index L & A

			329.7		
10	37	30	42.1	72.4	
			159.0		
			213.0	54.0 / 1264	−1.05
			340.2		−1.06
10	39	40	31.6	51.4	
	143	116	148.3		
10	35	74	223.1	74.8 / 126.2	−1.06
5		−41			
15	35	33			

~~−0.97~~
−1.01

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1905phae.proj..576N

Sept. 23, 1905.

Index L & A

	331.0	69.0 ✓	VII
10 42 56	40.0		
	161.1		
	212.8	+1.7 ✓	
		128.7 ✓	-1.12 ✓ B
	342.1	+0.3 ✓	-1.12 ✓
10 44 55	32.4		
	150.5	69.9 ✓	
	220.7	120.2 ✓	-1.19 ✓

Index R & B

	241.5	69.2 ✓	
10 47 40	310.7		
	70.8	+1.3 ✓	A
	122.1	120.5 ✓	-1.14 ✓
	251.0	+0.4 ✓	-1.22 ✓
10 49 35	301.4		
	63.3	67.0 ✓	
	130.3	117.4 ✓	-1.24 ✓
			-1.20 ✓

	180	186.
10	45	76.
5		-41.
15	45	35.

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1905phae.proj..576N

Sept. 23, 1905.

Index R & B

	242.3		
10 52 13	309,1	668 ✓	VIII
72,0 ~~711~~		49,0 ✓	
	121,0	115.8 ✓	−129 ✓

A

	251,0	−1,30 ✓
10 54 18	301,6	506 ✓
	64,5	645 ✓
	129,0	115.1 ✓ −1,30 ✓

Index L & A

	153, 0		
10 58 2	217,0	640 ✓	
	343,0	470 ✓	
	30,0	111.0 ✓	−1,39 ✓

B

	162,5	−1,43 ✓
11 0 28	208,6	46.1 ✓
	336,0	61.5 ✓
	37,5	107.6 ✓ −1,47 ✓

41	164	61
10	56	15
5		−41
15	55	34

−1.36 ✓

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1905phae.proj..576N

Sept. 23, 1905.

Index L & A

			157.2	61,1 ✓	IX
11	6	30	318.3		
			344.2	63.2 ✓	
			28,0	104.9 ✓	-1,✓4 ✓
			162.8	46,2 ✓	-1,✓0 ✓
11	8	54	209,0		
			335,1	61.7 ✓	
			36,8	107.9 ✓	-1,47 ✓

Index R & B

			65,8	62,2 ✓	
11	12	57	128,0		
			254,6	45.4 ✓	
			300,0	107.6 ✓	-1,47 ✓
			74,0	45,7 ✓	-1,✓0 ✓
11	15	45	119,7		
			246,0	60.0 ✓	
			306,0 ~~307,7~~	105.7 ✓	-1,✓2 ✓
					-1,✓0 ✓

	41	186.	
11	10	62.	
5		-41.	
16	10	21.	

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1905phae.proj..576N

Sept 23 1905

Index R & B

67.5 X

11 26 47 123.0 55.5 ✓

255.6 43.0 ✓

298.6 98.5 ✓ −1.69 ✓ A

75.3 −1.69 ✓

11 29 48 117.4 42.1 ✓

248.0 56.5 ✓

304.5 98.6 −1.69 ✓

Index L & A

338.9

11 33 15 33.3 54.4 ✓

165.7 40.6 ✓

206.3 95.0 ✓ −1.78 ✓ B

347.3 −1.78 ✓

11 36 0 26.9 39.6 ✓

157.0 55.9 ✓

212.9 95.5 ✓ −1.77 ✓

124 110

11 31 28

5 −41

16 30 47

−1.74 ✓

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1905phae.proj..576N

Sept. 23, 1905.

Index L & A

341.1

XI

11 44 6 — 32.6 — 51.5 ✓

167.3 — 37.2 ✓

204.5 — 88.7 ✓ — −1.95 ✓ B

347.4 — −1.88 ✓

11 47 17 — 26.8 — 39.4 ✓

158.4 — 54.2 ✓

212.6 — 93.6 ✓ — −1.82 ✓

Index R & B

248.6

11 50 17 — 303.5 — 54.9 ✓

76.0 — 38.9 ✓ A

114.9 — 93.8 ✓ — −1.81 ✓

256.8 — −1.84 ✓

11 53 05 — 2956.3 — 39.5 ✓

70.9 — 52.5 ✓

123.4 — 92.0 ✓ — −1.86 ✓

194 45

11 48 41

5 −41

16 48 0 — S.J. 0h 24m — −1.86 ✓

L A −3 34

Dec +27.2

P.A 311.0 B

Sprocket −1.5 B

−0.5 b

W's watch used for times

Watch 41 sec fast

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1905phae.proj...576

Sept. 25, 1905 (Monday)

Asteroid (167) Urda Phot T ✱ Obs. Bowie Rec.

22 9 −9.8
19 50
−2 19
+9 41

This transit somewhat uncertain. The next one better.

7 32 Object (probably Asteroid) precedes −10° 5886 (9.2) by 46.5s and is 4.'2 north of it.

8 35 Asteroid now precedes above star by 45.4 sec and is about 4.'2 north of it.

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1905phae.proj..576N

Sept. 25, 1905

Index L×B

128.7 ←	comp. star dia.	
173.9	45.2 ✓	
303.4	55.3 ✓	
358.7	100.5 ✓	+1.64 ✓

9 23 16

118.5		+1.69 ✓
173.4	54.9 ✓	
311.3	41.8 ✓	
353.1	96.7 ✓	+1.74 ✓

(B)

Index R×A

30.8		
89.6	58.8 ✓	
40.2	44.7 ✓	
84.9	103.5 ✓	+1.57 ✓

(A)

220.1		+1.58 ✓
265.0	44.9 ✓	
30.9	57.4 ✓	
88.3	102.3 ✓	+1.60 ✓

10 14 50

19	37	66
9	48	63
5		−69
14	47	54

Mean +1.64 ✓

old
~~Asteroid~~ precedes −10° 5886 (9.2) by 48.5 sec and is about 3.'8 north of it

Comp. Star precedes −10°5886 (9.2) by

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1905phae.proj...576

Sept. 25, 1905.

1m. 10 sec. and is 4'.7 south of it.

A fainter star precedes comp. star by 6 sec. and is 1'.5 south of it.

A slightly brighter star follows comp. star by 8 sec and is 4'.0 north of it

Mag^n. of comp. star about 10.1

Use watch used for times tonight
Watch 1m 9s fast.

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1905phae.proj..576N

Sept. 25. 1905

δ Vulpeculae Phot. J. H. Obs. Bowie Rec.

20 31 +26.0

24 0

+3 29

Index L & B

	103.5	var dis		
11 50 55	198.3	94.5 ✓		B
	299.7	63.3 ✓		
	3.0	157.8 ✓	−0.42 ✓	
	117.4	62.6 ✓		−0.46 ✓
	186.0			
	288.7	85.3 ✓		
	14.0	153.9 ✓	−0.50 ✓	

Index R & A

	15.3	90.0 ✓		A
	105.3			
	204.1	73.4 ✓		
	277.5	163.4 ✓	−0.32 ✓	
	24.7	74.2 ✓		−0.24 ✓
	98.9	93.6 ✓		
	193.8	167.8 ✓	−0.23 ✓	
	283.3 7.4			

11 57 33		
107 88		
11 53 74		
5 −69		
16 53 5		

L.J. 0h 32m

L.A. 3 58

Dec. 26.4

P.A. 320.0 var B

Sprkts −5.5 A

" −4.5 B

" −4.0 b

mean −0.37

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1905phae.proj..576W

Sept. 25, 1905.

Dis. Jup. II Phot. R W. Obs. Bowie Rec.
Compared with northern and brighter of two Sats. on following side = Sat III

B & b 1182			B 394		
12	17	21.5	12	17	0.0
12	18	21.5	12	18	0,0

12	43	22		69.8	165.0	
		39		66.5	234.8	1
		53		136.3	166.3	
	44	11	+0.8	68.2	232.8	
		21		67.7	165.3	
		37		69.9	233.0	2
		51		137.6	164.0	
	45	7	+0.8	68.8	233.9	
	46	2		68.7	164.3	
		22		68.8	233.0	3
		49		137.5	164.0	
	47	6	+0.8	68.8	232.8	
		31			164.3	
12	47	44		68.2	232.5	
				68.6		
				136.8		
			+0.8	68.4		

12	43	46
		-21
12	43	25
12	44	44
		-21
12	44	23
12	46	35
		-21
12	46	14
12	48	2
		-21
12	47	41

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1905phae.proj..576W

Sept. 25. 1905

12	48	21			165.1	4
	"	34			233.7	
	"	51		68.9	164.9	
	49	17		69.7	233.8	
	"	36		138.6	162.5	5
	"	51	+0.8	69.3	232.2	
	50	19		68.6	164.2	
	"	42		68.3	232.8	
	"	59		136.9	164.7	6
	51	14	+0.8	68.4	233.0	
	52	12		68.8	165.4	
	"	23		69.0	234.2	
	"	54		137.8	164.4	7
	53	18	+0.8	68.9	233.4	
	"	31		70.7	163.3	
	"	58		69.2	234.0	
	54	14		139.9	164.2	8
	"	25	+0.8	70.0	233.4	
	"	52		66.9	167.0	
	55	5		62.8	233.9	
	"	16		129.7	168.2	9
	"	38	+1.0	64.8	231.0	
	"	45		64.8	167.3	
	"	58		64.2	232.1	
	56	9		129.0	167.0	10
	"	23	+1.0	64.5	231.2	
12	56	37			168.4	

12	49	24	
		-21	
12	49	3	

12	50	48	
		-21	
12	50	27	

12	52	42	
		-21	
12	52	21	

12	54	2	
		-21	
12	53	41	

12	55	13	
		-21	
12	54	52	

12	56	4	
		-21	
12	55	43	

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1905phae.proj..576W

Sept. 25, 1905.

12	57	0	12	56	49		61.9	230.3			
		-21					61.3				
12	56	39	12	57	9		123.2	167.5	11		
				"	24	+1.1	61.6	228.8			
				"	35		62.2	168.0			
12	57	52		"	45		62.0	230.2			
		-21		"	58		124.2	168.5	12		
12	57	31		58	12	+1.1	62.1	230.5			
				"	27			168.8			
12	58	44		"	37		60.4	229.2			
		-21		"	49		62.0	168.0	13		
12	58	23	12	59	3	+1.1	122.4	230.0			
				"	18		61.2	169.8			
12	59	34		"	30		58.7	228.5			
		-21		"	39		59.1	170.1	14		
12	59	13		"	50	+1.2	117.8	229.2			
			13	0	4		58.8	170.0			
13	0	31		"	13		61.0	231.0			
		-21			~~35~~		61.4	~~+67.0~~			
13	0	10		"	45	+1.1	122.4	169.1	15		
			13	1	1		61.2	230.5			
				"	17			168.0			
13	1	32		"	29		61.4	229.4		13	
		-21		"	37		60.5	170.0	16	13	
13	1	11		"	47	+1.1	121.9	230.5			
13	1	35		"	56	+1.4	61.0	170.8			
13	1	55	13	2	16	+1.5	55.3	226.1			

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1905phae.proj..57GV

Sept. 25, 1905.

13	2	03	13	2	24	+1.5	54.0	173.0
	2	11		"	32	+1.6	51.8	227.0
	2	20		"	41	+1.8	47.4	175.2
	2	31		"	52	+1.6	51.7	222.6
	2	38		"	59	+1.6	51.1	170.89
	2	48		3	9	+1.9	45.0	222.0
	2	57		"	18	+2.0	43.0	177.0
	3	07		"	28	+2.1	41.0	220.0
	3	16		"	37	+2.2	39.1	179.0
	3	26		"	47	+2.5	35.1	218.1
	3	36		"	57	+2.8	30.7	183.0
	3	47		4	8	+3.0	27.7	213.7
	3	57		"	18	+3.2	25.9	186.0
	4	06		"	27	+3.5	22.5	211.9
	4	15		"	36	+3.8	19.6	189.4
	4	25		"	46	+4.2	16.5	209.0
	4	35		"	56	+4.6	13.6	192.5
	4	45		5	6			206.1
	4	55	13	"	16			not seen later

Limit of Vis.

			13	5	47			192.0
13	6	8		6	0		14.6	206.6
		-21		"	12		12.4	
							27.0	192.8
13	5	47	13	"	32	+4.6	13.5	205.2

Seeing a little blurry but fairly good, images a little out of round, and slightly colored owing to necessary tolerizing run of prisms.

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1905phae.proj..576W

Sept. 25. 1905.

B & b		1882	Bond 394		
~~B & b 394~~					
13	21	21.2	13	21	0.0
13	22	21.1	13	22	0.0

∴ From comparisons, Chron. # correction to times of eclipse is − 2½ secs. throughout the whole eclipse.

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1905phae.proj..576V

Sept. 26, 1905. (Tuesday)

Asteroid (167) Urda Phot J. H. Obs. Bowie Rec.

22	9	-9.8
19	50	
-2	19	
9	41	

7 24 Asteroid precedes -10° 5886. (9.2) by 1m. 13 s. and is 0'.9 north of it.

Asteroid precedes star x by 11.0 sec and is 2'.0 north of it

Measurements see next page.

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1905phae.proj..576W

Sept. 26, 1905

Comp. Star of to-night measured with the comp. star of last night, as (as C.S. of last night was too near the asteroid to be used)

Index L & B 1st group.

197.8 Comp star of tonight's dis

7 56 36

284.2	86.4'		
25.6	66.7'		
92.3	153.1'	+0.51'	(B)

208.5			+0.51'
275.8	67.3'		
17.8	85.8'		
103.6	153.1'	+0.51'	

Index R & A

117.8			
183.5	65.7'		A
285.5	89.0'		
14.5	154.7'	+0.48'	

112.1			+0.59'
191.8	79.7'		
299.3	64.2'		
3.5	143.9'	+0.70'	

Mean +0.55'

8 5 14

15	61	50
7	60	55
5	-1	18
12	59	37

8

8
5
13

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1905phae.proj..576W

Sept. 26. 1905

Same again.

Index R & A

	297.9		
8 8 42	4.0	66.1'	
	110.9	82.2'	A
	193.1	148.3'	+0.61'
	290.9		+0.64'
	11.5	80.6'	
	119.2	64.1'	
	183.3	144.7'	+0.68'

Index L & B

	208.0		
	278.0	70.0'	
	19.4	84.5'	
	103.9	154.5'	+0.49' B
	198.0		+0.58'
8 19 46	282.8	84.8'	
27 88	32.0	61.0'	
8 13 74	93.0	145.8'	+0.66'
5 -1 18			
13 12 56			

Mean +0.61'

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1905phae.proj..57GV

Sept. 26, 1905.

Not an S.D. star

Comp. Star of tonight precedes −10° 5886 (9.2) by 61.5 sec and 14.'0 north of it. Magn. 9.7 See also fr. 123

Index 24B Measr. of Asteroid.

	224.0 ←	comp star dis	
8 41 15	260.4	36.4'	
	39.1	49.0'	
	88.1	85.4'	+2.04'
	219.1		+2.11'
	267.0	47.9'	
	43.8	32.7'	B
	76.5	80.6'	+2.18'

Index R & A

	316.4		
	347.8	31.4'	
	129.0	40.1'	
	169.1	71.5'	+2.46' A
	311.5		+2.47'
9 12 58	354.0	42.5'	
17 53 73	137.0	28.4'	
8 56 66	165.4	70.9'	+2.48'
5 −1 18			Mean +2.29'
13 55 48			

Asteroid now precedes star x by 13.5 s and is 1.'7 north of it.

Star x is the star which follows the comp. star of last night by 8 sec. and 4'.0 north of it, said star being slightly brighter than comp. star

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1905phae.proj..570W

Sept. 26, 1905.

of last night.

Comp. star of tonight has a 10.5 magn. star preceding it by 11 sec. which is 2'.5 south of it. (the C. S.)

also

Comp. star of tonight has a 10.6 magn. star preceding it by 10 sec. which is 1'.0 north of it. (the C. S.)

New Algol Var. 035727=36 1174 Phot. 3 H. Obs. Bowie Rec.

27	58	+27.2
22	40	
− 5	18	
+ 6	42	

For measurements see next page.

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1905phae.proj..576W

Sept. 26, 1905.

Index Left

	308.5 ↙ var. dia		
10 24 33	354.7	46.2'	
	134.0	34.3'	
	168.3	80.5'	-2.18'

B

314.8		-2.16
350.0	35.2'	
127.8	47.1'	
174.9	82.3'	-2.13'

Index Right

218.4		
266.9	48.5'	
44.5	35.4'	
79.9	83.9'	-2.08'

A

224.5		-2.08'
259.4	34.9'	
36.5	48.8'	
85.3	83.7'	-2.09'

10	33	20
	57	53
10	28	56
5	-1	18
15	27	38

Mean -2.12'

S.T. 23h 36m
Lo. A. -4 23
Dec. +27.2
P.A. 312.0
Sprocket -1.5 B
" -0.5 b

H's watch used for times tonight
Watch 1 m. 15 sec. fast.

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1905phae.proj.:576V

Sept. 27, 1905 (Wednesday)

Z Piscium Phot. J H. Obs. Bowie Rec.

Fourth Type Star (Special list) + 25° 205 (7.0)

25 6 +23.8 bomp. Star = +25° 207 (9.1)

21 51

3 15

8 45

Full aperture used

Region identified. bomp. star selected but clouds came again. 9:30

Index above

	45.1 ← Snap	var. dis.
10 5 58	76.5	31.4' A
	218.6	46.2'
	264.8	77.6' −2.27'
	37.9	−2.24'
	85.0	47.1'
	225.2	32.1'
	257.3	79.2' −2.22'

Index Below

	315.8	
	346.0	30.2' B
	131.4	40.2'
	171.6	70.4' −2.49'
	310.7	−2.48'
10 14 12	351.0	40.3'
19 70'	135.4	30.4'
10 9 65'	165.8	70.7' −2.48'
5 −1 32'		Means −2.36'
15 8 33'		

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1905phae.proj..576W

Sept. 27, 1905.

S. T. $23^h\ 6^m$
R. A. $-2\ 8$
Dec. $+24.9$
P. A. 215.5 Var B
8 pockets -3.5 A
" -2.5 B
" -2.0 b

(167) Irda Phot H. Oke. Bowie Rec.

22	9	-9.8
23	10	
1	1	

10 52 0 A faint objects precedes star x (of last night) by 43 sec. and is 2.'6 south of it

H's watch need for times tonight
Watch 1m. 32 sec. fast.

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1905phae.proj...570V

Sept. 24. 1905. The object marked above with a circle turns out to be the asteroid. Its position was 2 or 3 secs. ~~of~~ preceding the computed place and about 1' south of it, but an examination of the photographic chart this morning shows that it was the asteroid, as there is no star in that position.

The asteroid last night was apparently of about the same brightness as on Sept. 25, and Sept. 26. 1905.

W.

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1905phae.proj..570V

Sept. 25, 1905. (Thursday)

Asteroid (167) Urda Phot. J H. Obs. Bowie Rec

22 9 -9,8
20 0
2 9
9 51

7 50 Asteroid ‖ precedes comp. star of Sept. 25 by 56.5 sec, and is 2.4° south of it

Index R & A

310.7 ← comp. star dis.

8 37 6

351.0 40.3'
136.8 26.6'
163.4 66.9' + 2.61'

A

318.0 + 2.51'
349.6 31.6'
130.0 41.5'
171.5 73.1' + 2.41'

Index L & B

217.6
265.0 47.4'
43.6 37.0'
80.6 84.4' + 2.07'

B

223.0 + 2.13'
258.3 35.3'
36.0 45.0'
83.0 80.3' + 2.19'

Mean + 2.32'

9 21 37
17 58 43
8 59 22
5 -1 48
13 57 34

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1905phae.proj...576W

Sept. 28, 1905.

S.J. 22^h 50^m
H.A. + 0 32
Dec. — 11.0
P.A. 47.4 Ver. A
Sprokets −5.5 B
" −4.5 b
Same comp. star used tonight as on Sept. 26.

10 16 Asteroid now precedes comp. star of Sept. 25 by 59.1 sec and is 2.″2 south of it

10 18 Asteroid follows star ry by 3 sec. and is 3.″8 south of it
Star ry precedes comp. star of Sept. 25 by 62.1 sec and is 2.″0 north of it
Magn. of star ry 9.×2

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1905phae.proj..57GV

Sept. 28, 1905

New Algol Var. 035727 = B 1174 A. Obs. Phot. J Bowie Rec.

27 58 +27.2
23 24
4 34
7 26

Index Left

127.1 B
10 49 52 174.0 → var. dis
314.0 46.9'
348.0 34.0'
80.9' −2.17'

133.4 −2.20'
168.1 34.7'
307.7 44.0'
351.7 78.7' −2.23'

Index Right

216.7
266.0 49.3' A
42.4 36.1'
78.5 85.4' −2.04'

223.0 ~~2219~~ −2.14'
259.~~4~~0 36.0'
11 1 55 40.0 ~~37.0~~ 42.5'
21 50 110 82.5 ~~84.0~~ 78.5' −2.24'
10 55 55
5 −1 48
15 54 7

Mean −2.17'

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1905phae.proj..576N

Sept. 28, 1905.

S. T. 0^h 3^m
H. A. − 3 55
Dec. +27.4
P. A. 311.5 Ver. B
Sprocket − 1.5 B
" − 0.5 b

035761.

Fourth Type Star +61°667 Phot. T W. Obs. B avie Rec.

3	53	+61.4
0	37	
−3	16	
8	44	

Full aperture used

Comp. Ster = +61° 666 (A.C)

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1905phae.proj..57GV

Sept. 28, 1905.

Index Above

34.8 ← var? dia

12	12	0	87.4	52.6'
			207.0	71.4'
			278.4	124.0' −1.11'

A

			24.2	−1.10'
			92.6	68.4'
			213.4	56.6'
			270.0	125.0' −1.04'

Index Below

			304.0	
			356.0	52.0'
			113.5	74.1'
			187.6	126.1' −1.06'

B

			294.0	−1.07'
12	17	22	7.0	73.0'
	29	22	125.3	52.2'
12	14	41	177.5	125.2' −1.04'
5	−1	48		Mean −1.04'
17	12	53		

12
12
12
12

S.T. 1h 1m
R.A. −2 55
Dec. +61.0
P.A. 185.7 Ker. B
Sprockets −4.5 A
" −3.5 B
" −3.0 b

H's watch used for times
Watch 1m. 48 sec. fast

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1905phae.proj..576V

Sept. 28, 1905.

Dis. Jups. I Phot. R. W. Obs. Brorie Rec. Compared with other Sat. on same preceding side = Sat. II

B. 1182

12	25	39.0
12	26	39.0

B. 394

12	25	0.0
12	26	0.0

12	41	19		99.6	234.2
		29		105.3	333.8
	42	2		204.9	234.7
		17	-0.5	102.4	~~340.0~~
		~~47~~			
		58		102.2	237.8
	43	9		101.0	340.0
		23		203.2	238.8
		33	-0.4	101.6	339.8
12	43	49			235.8

12	41	47'
		-36'
12	41	11'

12	43	16'
		-36'
12	42	40'

1

2

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1905phae.proj..576W

. Sept. 28, 1905.

12	44	12		12	44	10		105.2	341.0	
		−36						103.7		
12	43	36			"	18		208.9	236.3	3
					"	32	−0.6	104.4	340.0	
					45	20			235.1	
12	45	46			"	38		105.9	341.0	
		−35			"	56		107.0		
12	45	11						212.9	234.1	K
					46	9	−0.6	106.4	341.1	
					"	27			234.8	
12	47	9			"	56		105.5	340.3	
		−35			47	17		108.0	234.0	V
12	46	34			"	55	−0.6	213.5	342.0	
					49	16		106.8	234.0	
12	49	42			"	29		106.2	340.2	
		−34			"	54		104.1		
12	49	8						210.3	237.2	6
					50	7	−0.6	105.2	341.3	
					"	37			235.7	
12	50	56			"	50		105.5	341.2	
		−34			51	3		105.0		
12	50	22						210.5	236.0	7
					"	16	−0.6	105.2	341.0	
					"	39			236.1	
12	52	16			"	59		105.4	341.5	
		−34			52	27		105.9		
12	51	42						211.3	234.2	A
					53	1	−0.6	105.6	340.1	
Stopped to fix clock.					54	8			236.0	
12	54	28			"	18		104.1	340.1	
		−34			"	34		102.8		
12	53	54						206.9	237.0	9
				12	"	51	−0.5	103.4	339.8	

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1905phae.proj..576W

Sept. 28, 1905

			12	55	15		106.5	235.0	
12	55	45		"	31		104.0	341.5	
		-33							10
12	55	12		"	57		210.5	237.0	
				56	17	-0.6	105.2	341.0	
				"	57		106.5	234.3	
12	57	23		57	12		105.1	340.8	
		-33							
12	56	50		"	30		211.6	237.0	11
				"	53	-0.6	105.8	342.1	
				58	11		105.7	236.0	
12	58	39		"	33		108.2	341.7	
		-33							
12	58	6		"	44		213.9	234.0	12
						-0.7	107.0	342.2	
			12	59	9				
				"	31		107.8	234.1	
12	59	56		"	48		108.0	341.9	
		-32							
12	59	24	13	0	4		215.8	234.0	13
				"	19	-0.7	107.9	342.0	
				"	42		104.6	235.5	
13	1	0		"	54		103.6	340.1	
		-32							
13	0	28		1	7		208.2	236.4	14
				"	18	-0.5	104.1	340.0	
13	1	01		"	33	-0.4	101.5	237.0	
	1	13		"	45	-0.4	100.0	338.5	
	1	22		"	54	-0.4	99.9	238.5	
	1	36		2	8	-0.3	98.2	338.4	
	1	45		"	17	-0.2	95.8	240.2	
13	1	57	13	"	29	-0.1	93.8	336.0	

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1905phae.proj..576W

Sept. 25, 1905

13	2	05	^	13	2	37	+0.1	87.0	242.2
	2	21	^		"	53	+0.4	80.7	329.2
	2	41	^		3	13	+0.5	76.3	248.5
	2	54	^		"	26	+0.6	75.3	324.8
	3	2	^		"	34	+0.8	68.6	249.5
	3	10	^		"	42	+1.3	58.6	318.1
	3	19	^		"	51	+1.6	52.0	259.5
	3	33	^		4	5	+2.0	43.7	311.5
	3	44	^		"	16	+2.4	36.4	267.8
	3	54	^		"	26	+3.0	28.0	304.2
	4	3	^		"	35	+3.3	24.9	276.2
	4	12	^		"	44			301.1
13	4	25	^	13	4	57			not seen later

Limit of Vis.

				13	5	10			276.4
13	5	33		"	"	29		22.1	298.5
		-31		"	"	39		23.3	276.5
13.	5	2		"	"	54	+3.5	45.4 / 22.7	299.8

Seeing pretty good. Altitude rather high Image of Sat. II a little elongated and colored; for these reasons settings made a little slowly and with as much care as possible

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1905phae.proj..570V

Sept. 28, 1905.

B κ 6 11 52			B 394		
13	25	27.5	13	25	0.0
13	26	27.0 ← Slightly uncertain	13	26	0.0
13	27	27.0	13	27	0.0

1 at	12h	26m	39.0s	11A2 was	39.0s fast.	
		29	12.4	" "	38.5s "	39
		34	19.2	" "	37.5s "	38
		39	26.0	" "	36.5s "	37
		44	32.8	" "	35.5s "	36
		49	39.6	" "	34.5s "	35
		54	46.4	" "	33.5s "	34
"	12	59	53.2	" "	32.5s "	33
	13	5	0.0	" "	31.5s "	32
		10	6.8	" "	30.5s "	31
		15	13.6	" "	29.5s "	30
		20	20.4	" "	28.5s "	29
"	13	25	27.2	" "	27.5s "	28

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1905phae.proj..576W

Sept. 29, 1905. (Friday)

Asteroid (167) Urda Phot. 3 H. Obs. Bowie Rec

22	9	-9.8
21	7	
1	2	
10	58	

8 25 Asteroid precedes star y by 20sec and is 6.'8 south of it

8 45 Asteroid follows star z by 1.3 sec. and is 2.1 south of it

came up cloudy nothing further could be done

8
8 1
8 5
13

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1905phae.proj..576W

Oct. 3 1905 (Tuesday)

Fourth Type Star +46° 1817 (5.5) Phot J. H. Obs Bowie Rec.
12 38 +46.2 Comp. Star = +46° 1819 (9.2)
21 15 Full aperture used
8 37 Index L×B

323.8 each star dia
340.4 16.6'
137.8 24.2'
162.0 40.8' -3.72' (B)

8 39 45

319.9 -3.73'
343.5 23.6'
142.0 1.1 17.0'
158.1 40.6' -3.74'

Index R×A

232.2
250.0 17.8'
47.3 26.5' (A)
73.8 44.3' -3.54'

228.0 -3.54'
254.0 26.0'
51.3 18.1'
69.4 44.1' -3.55'

Mean -3.64'

8 50 8
89 56
8 44 58
5 -42
13 44 16

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1905phae.proj..576W

Oct. 3, 1905

S. J. 22 00
H. A + .9 18
Dec + 46.2
P.A. 260.0 Ser B
Sprocket − 2.5 A
" − 1.5 B
" − 1.0 b

Region rather low but seeing pretty steady observations considered good

Fourth Type Star +36° 3243 (7.5) Phot. J W Ole. Bowie Rec. 9

18 40 +37.4 Full aperture used 9
22 20 Comp. Star = +36° 3237 (6.8) 5
+ 3 40 14

Measurements on next page

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1905phae.proj..57.NW

Oct. 3, 1905.

Index L & A

22.8 ← ensp. var. dis.

	99.1	76.3'	
9 33 34	212.7	58.0'	
	270.7	134.3'	−0.89' (B)
	32.7		−0.87'
	89.6	56.9'	
	201.5	79.5'	
	281.0	136.4'	−0.85'

Index R & B

	291.0		
	12.4	81.4'	
	121.6	61.9'	
	183.5	143.3'	−0.71' (A)
	301.4		−0.70'
9 42 54	1.8	60.4'	
	109.1	84.0'	
	193.1	144.4'	−0.69'
			Mean −0.78'

	75	88
9	37	74
5		−42
14	37	32

S. J. 23^h 57^m
H.A. + 4 18
Dec. +37.0
P.A. 237.5 Var B
Sprocket +0.5 B
" +1.5 b

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1905phae.proj..576W

Oct. 3. 1905

4th. Type Star +9° 4369 (8.7) Phot. J. H. Obs. Boone Rec
19 54 +8.2 Comp. Star = +9° 4360 (9.1)
23 45 Full aperture used
3 51

Index L x B

212.4 susp. var. dis.

11 3 14

271.0 58.6'
18.3 82.7'
101.0 141.3' −0.75' (B)

200.7 −0.76'
282.0 81.3'
30.2 59.6'
89.8 140.9' −0.76'

Index Rect

122.8
182.5 59.7'
290.5 81.5'
12.0 141.2' −0.75' (A)

110.6 −0.80:
189.4 78.8'
300.7 57.9'
358.6 136.7' −0.84'
Mean −0.78'

11 11 4
14 18
11 7 9
5 −42
16 6 27

S.J. 0h 22m
Z.A. +4 27
Dec. +9.5
R.A. 285.7 Var B
Sprocket − 0.6 B
+ 0.4 b

Star watch used for times tonight
Watch 42 sec. fast

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1905phae.proj...576W

Oct. 4, 1905. (Wednesday)

New Algol Var. 035727 Phot. J. K. Obs. Bowie Rec.

27 58 +27.2
20 20

7 38 I
4 22

Index Left

343.5 ← var. dis.

8 3 10 38.7 55.2' B
168.7 42.1'
210.8 97.3' −1.72

346.4 −1.60'

8 7 8 33.4 47.0'
160.9 59.7'
220.6 106.7' −1.49

Index Right

249.1

8 12 2 313.7 64.6' A
76.3 47.8'
124.1 112.4' −1.36

257.8 −1.38'

8 15 40 305.5 47.7'
37 60' blonde 70.7 63.0'
8 9 30' 133.7 110.7' −1.40
5 −34'
13 8 56' Troubled by some in above group clouds, especially in latter part ~~of above group~~ last settings rather dif. Mean −1.49'

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1905phae.proj..576W

Oct. 4, 1905.

Index Right II

		67.7		
8	27	15	137.7	70.0
			256.0	51.0
			307.0	121.0 -1.17 A
			73.2	-1.09
8	31	46	128.0	54.8
			243.7	73.6
			317.3	128.4 -1.01

Index Left

			338.0	
8	38	38	46.2	68.2
			161.6	55.9
			217.5	124.1 -1.10 B
			342.1	-1.01
8	41	44	38.8	56.7
			151.5	75.9
			227.4	132.6 -0.92

	137	143
8	34	51
5		-34
13	34	17

Mean -1.05

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1905phae.proj...5709

Oct. 4, 1905.

Index Left

331,6

8	50	17	54.8	83.2	
			160.9	57.5	
			218.4	140.7	-0.76"

341,5 -0.74'

8	54	22	40.3	58.8	
			149.0	83.6	
			232.6	142.4	-0.73"

Index Right

236.5

8	58	40	blonde 327.4	90.9	
			64.2	71.5	
			135.7	162.4	-0.33"

246.4 -0.40'

9	6	56	317.3	70.9	
			64.0	85.0	
			149.0	155.9	-0.46"

33	168	135
8	57	34
5		-34
13	57	0

Mean -0.57'

Troubled by clouds in above group

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1905phae.proj..576V

Oct. 4, 1905.

Index Right

IV

230.3

9 13 8	333.4	103.1'		R
	62.9	73.9'		
	136.8	177.0'	−0.06"	
	244.0		−0.08'	
9 16 58	317.5	73.5'		
	50.6	101.8'		
	152.4	175.3'	−0.09"	

Index Left

138.0

9 22 0	238.4	100.4'		B
51 66	325.6	88.2'		
9 17 22	53.8	188.6'		
5 −34		171.4	+0.16"	
14 16 48				
	325.2			
9 32 48	61.0	95.8'		
	129.8	119.9'		
83 114	249.7	215.7'		
9 20 74		144.3	+0.69"	
5 −34				
14 20 40				

The above group very labored and difficult some of the settings a little uncertain.

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1905phae.proj...57GV

Oct. 4, 1905.

Index Left

	257.4	← Comp Star Lec.		V
9 49 40	306.4	49.0		
	69.2	64.6		B
	133.8	113.6	+1.34	
	249.7		+1.34	
9 54 30	312.6	62.9		
	76.6	50.8		
	127.4	113.7	+1.33	

Index Right

	166.5			
9 59 2	215.0	48.5		
	339.0	63.2		A
	42.2	111.7	+1.38	
	160.9		+1.44	
10 3 38	221.1	60.2		
37 165 110	346.5	46.2		
9 56 42	32.7	106.4	+1.50	
5 -34				
14 56 8			Mean	+1.39

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1905phae.proj..576V

Oct. 4, 1905.

Index Right

VI

		168.3		
10	20	56	210.7	42.4'
			343.2	59.4'
			42.6	101.8' + 1.61"

A

			160.9	+1.58'
10	25	25	222.0	61.1'
			348.3	43.7'
			32.0	104.8' + 1.54"

Index Left

			79.3	
10	31	16	124.0	44.7'
			246.6	66.6'
			313.2	111.3' + 1.39"

B

			67.2	+1.38'
10	34	54	132.6	65.4'
			257.3	47.1'
			304.4	112.5' + 1.36"

	110	151	
10	27	68	
5		-34	
15	27	34	

Mean +1.48'

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1905phae.proj...576W

Oct. 4. 1905

	Index Left	
	76.3	
10 41 55	122.2	45.9
	248.3	68.4
	316.7	114.3
	69.0	
10 45 22	130.6	61.6
	258.2	452
	303.4	106.8

Index Right

352.1

10 51.5 33.0 Reject above two setting impossible to finish group

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1905phae.proj..576W

Oct. 4, 1905.

VII
~~VIII~~

Index Right

			330.0	Av. 1	
11	25	25	55.1		A
			157.7	69.9	
			227.6	69.9	+0.48
				Av. 0	
			336.2		
11	28	48	47.0	70.8	+0.34
			141.7	94.5	
			240.2	98.5	+0.20
				169.3	

Index Left

			240.0	Av. 1.0	
11	34	16	321.0		B
			49.7	102.7	
			152.5	102.5	−0.07
				176	
			225.6	102.4	
11	37	45	331.0		−0.12
			58.0	86.0	
			144.0	172.4	
				171.6	−0.16

Mean +0.11

	124	134	
11	31	34	
5		−34	
16	31	0	

S.T. 0h 49m
R.A. −3 8
Dec. +27.2
P.A. 130.8 for B
Sprocket −1.5 B
" −0.5 b

It's watch used for times
Watch 34 sec fast

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1905phae.proj...520V

Oct. 5, 1905. (Thursday.).

Fourth Type Star +46° 1817 (5.5) Phot J.H.Obs. Bowie Rec.
12 38 +46.2 Full aperture used
20 27
7 49

Index L.B

359.5 ← susp. var. dis.

7 29 0

22.7	23.2'		
182.3	15.7'		B
198.0	38.9'	-3.83'	

3.0		-3.76'	
19.7	16.7'		
177.2	25.0'		
202.2	41.7'	-3.68'	

Index R.A

268.0			
293.5	25.5'		
90.7	17.9'		A
108.6	43.4'	-3.59'	

273.5		-3.65'	
290.0	16.5'		
88.0	24.5'		
112.5	41.0'	-3.71'	

Mean -3.70'

7 39 30
68 30'
7 34 15'
5 -28' S.J. 20h 58m
12 33 47 R.A. +8 15
Dec. +46.2
P.A. 259. var. B
Bracket -2.5 A
" -1.5 B

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1905phae.proj..576N

Oct. 5, 1905.

Fourth Type Star +25° 2051 Phot. J.H. Ole Bovie Rec

25 6 +23.8 Full aperture used

21 28

3 38

8 22 Index Above

8 30 25

85.0		A
118.1	Transp. var. dis.	
256.9	33.1'	
305.0	48.1'	
	81.2'	-2.16'
78.3		
122.8	44.5'	-2.28'
266.9	28.7'	
295.6	73.2'	-2.40'

Index Below

357.1		B
26.9	29.8'	
170.0	42.4'	
212.4	72.2'	-2.43'
347.9		-2.44'
31.0	43.1'	
176.6	28.8'	
205.4	71.9'	-2.44'

8 39 17

69 42'

8 34 51'

5 -28'

13 34 23'

Mean -2.36'

Transp. var. a little red. Color 3

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1905phae.proj..570N

Oct. 5. 1905.

S.T. 22^h 0^m
H.A. −3 10
Dec. +24.9
P.A. 216.5
Sprocket −3.5 A
" −2.5 B
" −2.0 b

Fourth Type Star +61° 667 Phot. J.K. Obs. Bonn Rec.

27	44	+62.7
22	16	
5	28	
6	32	

Full aperture used

For measurements see fol. page

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1905phae.proj..576W

Oct. 5. 1905.

Index Rd

		72.1	4th type dia	64.5	4th type dis.	
9	22	58	Something	128.9	56.8	137.0	72.5'	
			wrong.	321.3	101.3	253.8	55.7'	
				62.6	158.1	309.5	128.2'	-1.02'
			Retaken					
				138.0	252.7			-0.98'
				253.1	309.1	56.4'		
				308.5	62.4	75.0'		
					137.4	131.4'	-0.95'	

Index L & B

		154.6			
		226.9	72.3'		
		346.2	51.0'		
		37.2	123.3'	-1.12'	
		164.0			-1.14'
9	33	46	217.0	53.0'	
	55	104'	337.1	68.9'	
9	27	82'	46.0	121.9'	-1.15'
5		-28'			mean -1.08
14	27	54'			

Fourth Type Stars slightly red. Color 2

L.S. 23 7
L.A. -4 50'
Dec +61.1
P.A 4.5 Ver B

Standards -4.5 A
" -3.5 B
" -3.0 b

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1905phae.proj...570V

Oct. 5, 1905.

Fourth Type Star +2° 4709 Phot. J W. Obs. Bowie Rec.

23 39 +2.7 9.5 Comp used

23 25 Comp. Star = +2° 4710 (A.V.)

14 Index L & A

261.7 Fourth type star dis.

10 57 48

301.3	39.6'	
87.4	25.7'	B
113.1	65.3'	-2.67'

268.0		-2.73'
295.2	27.2'	
83.3	34.7'	
118.0	61.9'	-2.79'

Index R & B

174.5		
206.5	32.0'	
358.0	24.8'	
22.8	56.8'	-2.98' A

179.1		-3.04'
202.6	23.5'	
356.3	30.7'	
27.0	54.2'	-3.09'

Mean -2.88'

11 6 32

21 63 80'

10 61 70'

5 -28' S. J. or 25m

16 1 42 L. A. +0 45 Color 3 to 4

Dec. +3.0

P. A. 170.0 Ser B H's watch used for times

Sprocket -9.5 A) or (14.5

" -8.5 B) or (15.5

" -8.0 b) or (16.0

Watch 28 sec. fast

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1905phae.proj..576V

Oct. 6, 1905. (Friday)

X Persei

3 27	45	+31.4
20	45	
7	0	
5	0	

Abandoned for present ~~too~~ low

~~Fourth~~ Type ~~Star~~ +9°4369

19	44	+8.5
20	54	
1	10	

~~Full~~ aperture used

For measurements see fol. page

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1905phae.proj...570V

Oct. 6, 1905

Index R & A

	152.0	78.0'	4th type star dis.
7 54 30	230.0	58.5'	A
	341.8	136.5'	−0.84'
	403		
	162.4		−0.84'
	220.2	57.8'	
	331.0	79.6'	
	50.6	137.4'	−0.83'

Index L & B

	59.6		
	142.1	82.5'	
	251.7	57.6'	B
	309.3	140.1'	−0.77'
	71.6		−0.78'
8 6 45	129.5	57.9'	
	240.1	81.9'	
15 60 75'	322.0	139.8'	−0.78'
7 60 38'			Mean −0.81'
5 −17'			
13 0 21	S.T. 21h 29m		
	H.A +1 32		Color 2
	Dec +9.5		
	P.A 107.0 Var B		
	Sprocket −0.5 B		
	" +0.5 b		

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1905phae.proj..576W

Oct. 6. 1905.

X Persei Phot. I W. Obs. Bowie. Rec.

27 45 +31.4 Full aperture

21 40

6 5

5 55 Index L & A

172.1 ← var. dis.

8 45 16

210.2 38.1' B

356.1 28.8'

24.9 66.9' -2.61'

176.7 -2.58

207.4 30.7'

351.9 37.7'

29.6 68.4' -2.56'

Index R & B

78.9

121.3 42.4' A

265.6 30.5'

296.1 72.9' -2.41'

86.6 -2.43

8 53 30

115.3 28.7'

259.6 42.9'

302.5 71.6' -2.45'

98 46'

8 49 23'

5 -17'

13 49 6

Mean -2.50'

9

9

9

5

-14

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1905phae.proj...57GW

Oct. 6. 1905.

Same again

Index R & B

9.5 bar used

260.5

9 10 28

301.1 40.6'

85.6 29.8'

115.4 70.4' −2.49' A

264.6 −2.48

296.7 32.1'

82.0 38.7'

120.7 70.8' −2.48'

Index L & A

171.4

210.3 38.9'

356.2 28.8'

25.0 67.7' −2.59' B

176.9 −2.55

9 20 10 206.8 29.9'

350.5 40.0'

30.5 69.9' −2.51'

Mean −2.52'

30 38

9 15 19

5 −17

−14 15 2

S. T. 22h 42m

Z. A. −5 6

Dec. +30.0

P. A 60.5 Ver. B

Sprocket −5.5 B

" −4.5 b

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1905phae.proj..576N

Oct. 6, 1905.

Asthury's Bowie Res
~~Barnard~~, Susp. Spr. = 48 RT Aurigae Aurigae Phot J. W. Obs.
Full aperture used

30	19	+30.6
23	3	
7	16	
4	44	

Index L & A

87.2 < susp. var. dec. I

10 4 8	115.3	28.1'	
	270.6	20.7'	
	291.3	48.8'	−3.33'
	90.5		−3.20'
	111.6	20.6'	
	264.5	34.0'	
	298.5	54.8'	−3.07'

Index R & B

	359.7		
	20.8	21.1'	
	175.2	31.3'	
	206.5	52.4'	−3.17'
	355.4		−3.16'
10 12 14	27.4	32.0'	
16 22'	180.7	20.8'	
10 8 11'	201.5	52.8'	−3.17'
5 −17'			Mean −3.18'
15 7 54'			

1905phae.proj..57N

Oct. 6, 1905

Index R & B

0.4

10 15 12	22.2	21.8	II
	174.6	32.1	
	206.7	53.9	−3.11

A

3544		−3.12
26.4	32.0	
180.0	21.5	
201.5	53.5	−3.12

Index L & A

270.2		
291.7	21.5	
85.4	31.5	
116.9	53.0	−3.14

B

2647		−3.14
295.9	31.2	
91.1	20.0	
111.1	51.2	−3.12

Mean −3.15

10	19	40
	34	52
10	17	26
5		−17
15	17	9

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1905phae.proj..570N

Oct. 6, 1905.

Index L & A

III

270.4

10 31 48

291.21 20.7'
85.7 32.6'
118.3 53.3' -3.13'

B

265.6 -31.8'
296.0 30.4'
91.1 20.7'
111.8 51.1' 32.3'

Index R & B

175.3

206.0 30.7'
0.6 21.0'
21.6 51.7' -32.0'

A

179.2 -31.6'
10 42 44 201.0 21.8'
355.5 31.5'
27.0 53.3' -31.3'

Mean -31.7'

73 92'
10 36 76'
5 -17'
15 36 59'

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1905phae.proj..570N

Oct. 6, 1905

Index R+B

IV

175.0

10 53 50 206.0 31.0'

0.5 21.5'

52.5' −3.16'

22.0

A

179,0 −3.14'

201.3 22.3'

355.3 31.4'

53.7' −3.11'

26.7

Index L+d

85.6

117.1 31.5'

270.6 21.1'

52.6' −3.16'

291.7

B

90.8 −3.20'

11 5 35 111.23 20.5'

21 58 85' 266.0 30.5'

10 59 72' 51.0' −3.23'

5 −17'

15 59 55

Mean −3.17'

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1905phae.proj..570N

Oct. 6, 1905

Index L & A

V

	85.0			
11 15 40	116.0	31.0		
	270.0	21.3		B
	291.3	52.3	-3.17	
	90.5			
	111.6	21.1		-3.17
	265.4	31.1		
	296.45	52.2	3.17	

Index R & B

	0.2			
	22.3	22.1		A
	175.0	30.3		
	205.3	52.4	-3.17	
				-3.14
	355.4			
11 29 32	26.2	30.8		
44 72	179.0	22.7		
11 22 36	201.7	53.5	-3.12	
5 -17				
16 22 19				mean -3.16

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1905phae.proj..570N

Oct. 6, 1905

Index R+B

0,3 VI

11 33 50

22,0 21.7'
175,0 29.9'
204.9 51.6' −3.20' A

355.4 −3.17'
27.0 31.6'
179,0 22.4'
201.4 54.0' −3.10'

Index L+A

270.0
291,0 21.0' B
86.2 30.1'
116.3 51.1' −3.23'

266.8 −3.23'
11 46 2 297.4 ~~295.5~~ 30.6'
90.6 20.4'
111.0 51.0' −3.23'

mean −3.19'

79 52
11 39 56
5 −17
16 39 39

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1905phae.proj..576W

Oct. 6, 1905.

Index L & A

VII

271.0

11 57 6 — 291.5 — 20.5'

85.5 — 31.0'

116.5 — 51.5' — 3.21'

266.1 — −3.19'

297.10 — 30.9'

90.4 — 21.5'

111.9 — 52.4' — 3.17'

Index R & B

175.5

205.4 — 29.6'

0.8 — 20.8'

21.6 ~~22.0~~ — 50.4' — 3.27'

178.4 — −3.18'

12 7 45 — 201.2 — 22.8'

23 64 51 — 355.3 — 30.9'

11 62 26 — 26.2 — 53.7' — 3.11'

5 −17

17 2 9 — Mean −3.18'

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1905phae.proj..576N

Oct. 6. 1905.

Index R&B VIII

		175.3			
12	16	5	205.7	30.4'	A
			1.0	21.0'	
			22.0	51.4'	-3.21'
			179.1		-3.12'
			201.1	22.0'	
			355.6	31.1'	
			26.7	53.1'	-3.14'

Index L&A

			91.3		
			112.0	20.7'	
			265.9	31.2'	
			296.4 7.1	51.9'	-3.20' B
			85.6		
12	24	15	117.0	31.4'	-3.16'
	40	20'	269.5	22.0'	
12	20	10'	291.5	53.4'	-3.12'
5		-17'			Mean -3.17'
17	19	53'			

S.J. 1h 45m
L.A. -4 36
Acc. +30.0
P.A. 102.5 Ver. B.
Sprocket -4.5 A
" -3.5 B
" -3.0 b

H's watch used for times
Hatch 17 secs. fast.

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1905phae.proj..576W

Oct. 7, 1905. (Saturday)

New Algol Var. Phot. I H. Obs. Bowie Rec.

27 58 +27.2
20 40
7 18
4 42

Index Left I

346.5 ← var. dis.

7 57 0

38.6 52.1'
172.7 36.6'
209.3 88.7' −1.95'

350.6 −1.90'

8 0 58

30.3 39.7'
163.5 52.9'
216.4 92.6' −1.84'

Index Right

255.5

8 4 48

309.2 53.7'
81.4 37.6'
119.0 91.3' −1.88'

262.0 −1.84

8 8 40

301.7 39.7'
73.8 54.4'
128.2 94.1' −1.81'

31 69 146'
7 62 52'
5 −8'
13 2 44'

Mean −1.87'

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1905phae.proj..576W

Oct. 7, 1905.

Index Right

II

254.5

8	19	54	308.0	53.5'
			80.4	37.1'
			117.5	90.6'

-1.90' A

263.0

-1.90'

8	24	14	300.5	37.5'
			73.6	52.5'
			126.1	90.0'

-1.91'

Index Left

165.6

8	28	28	215.3	49.7'
			353.7	34.7'
			28.4	84.4'

-2.07' B

172.8

-2.12'

8	32	20	207.5	34.7'
			347.7	45.9'
			33.6	80.6'

-2.18'

	103	116
8	25	74
5		8
13	26	6

Mean -2.01'

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1905phae.proj..576W

Oct. 7, 1905

Index Left

166.4

8	44	24	214.50	47.6'		III 9
			353.8	35.1'		
			28.9	82.7'	−2.12'	B
			172.0		−2.12'	
8	48	53	207.4	35.4'		9
			347.9	47.1'		
			35.0	82.5'	−2.12'	

Index Right

77.0

8	52	30	124.4	47.4'		9
			252.6	46.0'		
			298.6	93.4'	−1.82'	A
			83.3		−1.94'	
8	56	18	119.8	36.5		9
	200	125'	256.6	47.9'		
8	50	31'	304.5	84.4'	−2.07'	9
5		−8'				5
13	50	23'				14

Mean −2.03'

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1905phae.proj..576V

Oct. 7, 1905.

Index Right IV

76.5

9	9	0	124.3 ~~+241.5~~	47.8'	
			264.0	34.3'	
			298.3	82.1'	−2.13' A
			83.5		−2.12'
9	13	8	118.5	35.0'	
			256.1	47.4'	
			303.5	82.4'	−2.12'

Index Left

			350.1 ~~359.7~~		
9	18	14	37.1 ~~33.0~~	47.0'	
			171.6 ~~173.5~~	37.4'	
			209.0 ~~206.7~~	84.4'	−2.07' B
			355.3		−2.17'
9	22	24	27.5	32.2'	
			167.8	45.2'	
			213.0	77.4'	−2.27'

	62	46	'
9	15	42	'
5		−8	'
14	15	34	

Mean −2.14'

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1905phae.proj...576W

Oct. 7, 1905

Index Left

			167.0		V
9	37	20	213.8	46.8'	
			354.0	34.4'	
			28.4	81.2'	−2.16' (B)
			173.3		−2.20'
9	40	30	206.9	33.6'	
			349.0	44.7'	
			33.7 ~~34.1~~	78.3'	−2.25'

Index Right

			78.8		
9	44	25	123.2	44.4'	
			263.3	35.3'	
			298.6	79.7'	−2.20' (A)
			84.0		−2.18'
9	47	22	117.6 ~~+86~~	33.6'	
			257.0	47.7'	
			304.7	81.3'	−2.16'
					Mean −2.19'

	168	100
9	42	25
5		−8
14	42	17

S. J. $23^h\ 36^m$
H. A. −4 20
Dec. +27.2
P. A. 130.0 on B
Sprocket −1.5 (A)
" −0.5 (B)

11
11
5
16

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1905phae.proj...57W

Oct. 7, 1905

4th. Type Star +40° 4210 Phot. T W. Obs. Bruce Tel

20 17 +39.8
23 .54
3 37

Comp. Star (in this group) = +39° 4213 (A.K)

Index 1.4.4

11	0	14	351.7	comp	
			29.8	38.1'	
			166.3	46.9'	
			213.2	85.0'	+2.05'
			344.1		+2.02'
			34.9	50.8'	
			171.3	36.2'	
			207.5	87.0'	+2.00'
			261.0		
			300.4	39.4'	
			77.0	47.0'	
			124.0	86.4'	+2.01'
			256.0		+2.03'
11	8	10	303.9	47.9'	
	8	24	81.0	37.1'	
11	4	12	118.1	85.0'	+2.05'
5		-8			
16	4	4			

Mean +2.02'

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1905phae.proj..576V

Oct. 7, 1905.

For comp. stars in this group see note below

Index R&B

		228.0	comp. star dis.	
11	18	25	329.0	101.0'	
			58.7	80.4'	A
			139.1	181.4'	
				178.6'	−0.03'
			237.4		
			320.8	83.4'	0.00
			53.2	94.8'	
			148.0	178.2'	+0.03'

Index Lick

		141.0		
		248.6	107.6'	
		331.3	80.7'	
		52.0	188.3'	B
			171.7'	−0.16'
		147.7		−0.13'
11	26	0	85.9'	
		233.6	99.5'	
		319.8	185.4'	
		59.3	174.6'	−0.10' Mean −0.06'
	44	25'		
11	22	12'		
5		−8'		
16	22	4'		

~~0.4~~ 2.4

comp. star used in above last group is one fil. the (which latter is the comp star of next previous group) by a little over half the field of the phot. and slightly north. It is also the most fol. of two rather faint stars.

Comp. Star used in above group follows +39° 4213 (8.4) by .37 sec. and is very slightly south of it. This comp. star adopted.

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1905phae.proj...57dw

Oct. 7, 1905.

S.J.	0^h	50^m
Hd. A.	+4	22
Dec.	+40.2	
P.A.	40.5 Ver B	
Sprocket	−0.5 B	
"	+0.5 b	

Magn of adopted comp star is 10.5 ±

H's watch used for times tonight
Watch 8 sec. fast.

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1905phae.proj..576W

Oct. 9. 1905. (Monday)

Asteroid Obs Phot W. Obs Bowie Rec

22	22	−0.8
20	55	
1	27	
10	33	

9

Asteroid seen with ordinary eye-piece although seen then with considerable difficulty observer having continually ~~having~~ to refind it. Put on phot. but nothing can be done photometrically tonight, moon only a few degrees distant and shining on objects glass, sky hazy

9

9
5
14

ν Cephei Phot. T W. Obs. Bowie Rec.

23	50	+82°.4
22	17	
1	33	
10	27	

9.5 Crab

For measurements see fol. page

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1905phee.proj...520W

Oct 9 1905

Index L & A

	329.6 ← var dia		
9 5 18	50.6	81.0'	B
	160.0	61.5'	
	221.5	142.5'	−0.72'
	340.6		−0.70'
	41.3	60.7'	
	147.5	84.0'	
	231.5	144.7'	−0.68'

Index R & B

238.5	82.6'	
321.1	62.2'	
69.8	144.8'	−0.68'
1320		
250.0		−0.69'
311.5	61.5'	
60.5	82.0'	
142.5	143.5'	−0.70'
		Mean −0.70'

9	14	20
	19	38
9	9	49
5		+5
14	9	54

S.T. $22^h\ 51^m$
H.A. −1 3
Dec. +82.0
C.A. 145.0 for B
Sprocket −2.5 B
" −1.5 b

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1905phae.proj..576W

Oct. 9, 1905

Eduriage

24	52
23	4
5	48
6	12

Phot. 3 St. Obs. Bowie Rec.

+43.6

7" Cap

Index R & A

271.0	var dis	
291.4	20.4'	
93.2	13.4'	
106.6	33.8'	−4.14'
274.4		−4.16'
289.4	15.0'	
90.6	18.0'	
108.6	33.0'	−4.19'

A

Lab

182.4		
200.3	17.9'	
3.6	13.4'	
17.0	31.3'	−4.31'
184.2		−4.18'
200.2	16.0'	
359.9	19.3'	
19.2	35.3'	−4.04'

B

Mean −4.17'

10	6	16
10	15	55
	21	71
10	10	66
5		+5
15	11	11

10

10
5
15

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1905phae.proj..570W

Oct. 9, 1905.

Index L & B

	1.0		
	19.0	18.0	
10 30 19	184.4	12.7	B
	197.1	30.7	−4.35

3.7		−4.31
17.2	13.5	
181.5	18.3	
199.8	31.8	−4.27

Index R & A

	271.7		
	290.6	18.9	
	93.6	13.7	A
	107.3	32.6	−4.22

	274.1		−4.14
10 38 35	289.9	15.8	
68 57	90.4	19.3	
10 34 28	109.7	35.1	−4.06
5 +5			Mean −4.22
15 34 33			

S.J. 0^h 27^m
H.A −4 27
Dec +43.3
P.A 359.5 for B
Sprocket − 8.5 A
" − 7.5 B
" − 7.0 b

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1905phae.proj..576W

Oct. 9, 1905.

Fourth Type Star +2° 4709 Phot. J W. Obs. Bowie Rec

23	39	+2.7
24	40	
1	1	

Index L a A

267.1		4th type star obs.
295.0	27.9	
83.5	33.2 v	
116.7	61.1 v	−2.42'

11 41 18

263.4 34.4 v −2.43 v
297.8
87.5 26.0 v
113.5 60.4 v −2.44'

Index R & B

180.4	22.2 v	
202.6		
356.5	29.2 v	
25.7	+1.4 v	−3.21'

175.5 29.4 v −3.16 v
205.3
359.0 23.6 v
22.6 +3.4 v −3.12'

−2.99'
−3.06

11 48 8
89 26
11 44 43
5 +5
16 44 48

S. J. 1h 21m
Sh. Ch. +1 40
Dec. +3.0
R. A. 168.0 Vega R
Sprockets −9.5 14.5
" −8.5 15.5
" −8.0 16.0

H's watch used for times.
Watch 5 sec slow

8
8
5
13

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1905phae.proj...576W

Oct. 10, 1905 (Tuesday)

Obst. I

Fourth Type ~~Star~~ +9° 35 7 6 (9.4), St. Obs. Bonn Rec
18 0 +9.5 comp. ~~Star~~ = +9° 35 7 8 (8.9)
20 55
2 55

Index L & A

149.3 ← comp. Star dis.

8 11 20

229.9	80.6'		(B)
340.2	59.9'		
40.1	140.5'	+0.76'	
159.3		+0.72'	
220.9	61.6'		
329.5	83.1'		
52.6	144.7'	+0.68'	

Index R & B

67.8	~~60.8~~		(A)
132.4	~~+39.9~~	64.6'	
239.8	~~239.0~~	82.0'	
321.8	~~322.5~~	146.6'	+0.64'
59.5			+0.64'
140.9	81.4'		
248.4	65.1'		
313.5	146.5'	+0.64'	

Mean +0.68'

8 27 2
38 22'
8 19 11'
5 +7'
13 19 18'

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1905phae.proj..576V

Oct. 10, 1905.

S.J. 22h 18m
H.A. + 4 15
Dec + 9.5
P.A. 185.0 Ver. B
Sprockets -4.5 A
" -3.5 B
" -3.0 b

Fourth Type Star +36° 3243 (7.5) Phot J
H. Obs. Bowie Rec.

15	40	+37.4
22	43	
4	3	

For measurements see fol. page.

9

9
5
14

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1905phae.proj...576W

Oct. 10, 1905.

Index L & A

	244.8 ← var.	dis.	
9 29 14	319.6	74.8'	
	70.2	58.5'	
	128.7	133.3'	-0.91'

B

248.4		-0.90'
310.6	62.2'	
64.1	71.6'	
135.7	133.8'	-0.90'

Index R & B

151.0		
230.4	79.4'	
340.6	60.1'	
40.7	139.5'	-0.78'

A

161.5		-0.82'
220.5	59.0'	
332.6	76.6'	
49.2	135.6'	-0.86'

Mean -0.86'

9	39	12
	68	26
9	34	13
5		+7
14	34	20

S.T. 23h 20m
R.A. 4 43
Dec. +37.1
P.A. 236.2 Ver. B
Sprokets +0.5 B
" +1.5 L

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1905phae.proj..576W

Oct. 10, 1905

Bonn Rev

~~Fourth~~ Type ~~Star~~ +9° 4369 (8.7) ~~Phot.~~ J H Obs

19 44 +8.5
23 30
3 46

Index L & B

	240.8 ← var dis		
10 15 48	320.0	79.2'	B
	69.9	61.1'	
	131.0	140.3'	−0.77'
	250.4		−0.76'
	311.4	61.0'	
	60.8	80.4'	
	141.2	141.4'	−0.75'

Index R & A

	154.6		
	227.7	73.1'	
	342.4	57.5'	A
	39.9	130.6'	−0.97'
	159.0		−0.90
10 25 58	220.47	61.7'	
	334.0	75.0'	
	49.0	136.7'	−0.84'

40 106'
10 20 53'
5 +7'
15 21 0'

Means −0.83'

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1905phae.proj..576W

Oct. 10, 1905.

S.J. 0h 4m
H.d. +4 9
Dec. + 9.5
P.A. 2 85.6 Ver B
Sprocket -0.5 B
" +0.5 b

Fourth Type Star +38° 1539 (6.3) Phot. J
H, Obs. Bowie Ref.

b 26 +38.5
0 20
b b
5 54

Full aperture
Color b.
Comp. Star = +38° 1540 (8.1)

For measurements see fol. page.

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1905phae.proj..576W

Oct 10, 1905.

Index R & A

86.5 ← var dia

11	4	16	113.7	27.2'
			264.4	35.0'
			299.4	62.2'

A

−2.78'

83.7 −2.78'

119.1	35.4'	
267.2	26.9'	
294.1	62.3'	−2.77'

Index L & B

358.8

23.5	24.7'	
173.5	35.2'	
208.7	59.9'	−2.86'

B

353.9 −2.90'

11	12	12	26.8	32.9'	
	16	28'	178.7	24.8'	
11	8	14'	203.5	57.7'	−2.95'
5		+7'			−2.84'
16	8	21'			

S.J. $0^h\ 49^m$

Hr. A −5 38

Dec +38.0.

P. A 193.5 Var B

Sprocket −3.5 B

" −2.5 b

Use watch used for times

Watch 7 sec. slow.

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1905phae.proj..570W

Oct. 12 1905 (Thursday)

Fourths Type Stars −16°52.7 (15) 2,1 Phot J.H. Obs. Bowie Rec
19 11 −16.2 Full aperture
21 3 Comp. Star = −16° ν 260 (A0)
1 52 Index R & A

		158.4	← 4th type dis.	
7	47	55	222.8	64.4' A
			348.0	46.4'
			34.4	110.8' −1.40'
			166.4	−1.33'
			214.8	48.4'
			336.9	68.4'
			45.3	116.8' −1.26'

Index L & B

		66.0		
		132.0	66.0' B	
		256.5	48.2'	
		305.0	114.2'	−1.32'
		76.5		−1.32'
8	4	48	124.5	48.3'
15	51	103	247.2	66.4'
7	55	82	313.6	114.7' −1.31'
5		−8		
12	56	14		

Barometer rising somewhat rapidly seeing somewhat poor and vars. color 5 (mean) −1.32'
Moon at the full.

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1905phae.proj..576V

Oct. 12. 1905.

R.J. 21 53
R.A. +2 38
Dec. −15.8
P.A. 118.0 for B
Sprocket −1.5 A
" −0.5 B
" 0.0 b

Fourth Type Star +9° 3576 (9.4) 1 Phot. J H. Oke Bowie Rec

18 0 +9.5
22 5
4 5

Measurements on next page.

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1905phae.proj..57OW

Oct. 12, 1905.

Index L & A

149.7 ~ comp Star dis

231.2	81.5'	
339.9	64.1'	
44.0	145.6'	+0.66'
158.4		+0.66'
220.8	62.4'	
330.7	82.7'	
53.4	145.1	+0.67'

Index R & B

59.0		
140.8	81.8'	
248.9	60.4'	
309.3	142.2'	+0.73'
72.7		+0.74'
130.5	57.8'	
239.0	83.5'	
322.5	141.3'	+0.75

Means +0.70'

8 41 0

8 51 15

92 15'

8 46 8

5 −8'

13 46 0

R.A. 23h 0m

Ho. A. 4 55

Dec. + 9.6

P.A. 185.0

Sprocket −4.5 A

" −3.5 B

" −3.0 b

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1905phae.proj..576W

Oct. 12, 1905.

Fourth Type Star +38° 1539 (6.3) Phot. J H. Obs Brown Rec.

30h 30 +38.6

23	12
7	18
4	42

Index R & A

9 43 35

266.8	4th's type star dis	A
294.4	27.6'	
82.5	35.7'	
118.2	63.3'	−2.74'

261.2		−2.74'
298.7	37.5'	
88.5	26.1'	
114.6	63.6'	−2.73'

Index L & B

178.4		B
202.5	24.1'	
352.5	36.3'	
28.8	60.4'	−2.84'

173.7		−2.90'
206.2	32.5'	
358.6	24.7'	
23.3	57.2'	−2.97'

Mean −2.82'

9	52	40
	95	75'
9	47	68'
5		−8'
14	48	0

S.S. 23h 40m
S.A. −6 51
Dec. +38.1
P.A. 192.5 for B
Sprocket −3.5 B
" −2.5 b

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1905phae.proj..570W

Oct. 12, 1905.

Fourth Type Star +40° 4210 (9.4) Phot. J Kr. Obs. Bonn Rec

20 17 +39.8 Same comp. stars used as on page 174

23 54

3 37

Index L & A

50.5 ← 4th type dis.

149.5 99.0'

244.5 75.1'

319.6 174.1' −0.11'

59.0 ← comp. star dis. −0.10'

139.6 80.6'

229.9 103.5'

333.4 184.1'

175.9' −0.08'

Index R & B

319.2 ← 4th type dis

62.0 102.8'

148.3 81.8'

230.1 184.6'

175.4' +0.09'

331.3 ← 4th type dis

51.0 79.7' +0.06'

140.5 101.6'

242.1 181.3'

178.7' +0.02'

Mean −0.02'

10 43 8

10 58 38

101 46

10 50 53

+5 −8

15 50 45 S.J. 1h 5m

H.A. +4 36

Dec. +40.3

P.A. 41.0 ver B

Sprockets −0.5 B

" +0.5 A

H's watch used for times

Watch 8 sec. fast

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1905phae.proj..576W

Oct. 13, 1905 (Friday).

– Androm. = D. M. +30° 42 (susp. by J Miller Barr. of Canada, of var.
Comp. Star = +30° 36 (8.5)

24	32	+30.0.
19	40	
4	52	

7 A Index L & A

I

170.6 ← Susp. var. dis

6 10 56

210.1	39.5		B
358.5	25.0		
23.5	64.5	−2.69	
177.1		−2.71	
205.4	28.3		
352.9	35.1		
28.0	63.4	−2.73	

Index L & B

80.1			
119.0	38.9		A
268.1	26.1		
294.2	65.0	−2.68	
87.2			
113.1	25.9	−2.74	
263.2	35.9		
299.1	61.8	−2.79	

Mean −2.72

6 20 0

	30	56
6	15	28
5		−5
11	15	23

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1905phae.proj..570W

Oct. 13, 1905.

Index R & B

II

87.3

6 26 20

112.37	25.4'	
262.6	36.5'	
299.1	61.9'	-2.79'
82.7		-2.76'
119.0	36.3'	
267.9	27.4'	
295.3	63.7'	-2.73'

A

Index L & A.

351.4		
31.2	39.8'	
177.1	28.4'	
205.5	68.2'	-2.57'
357.2		-2.63'
24.3	27.1'	
172.5	37.6'	
210.1	64.7'	-2.69'

B

6 38 20

64 40'

6 32 20'

5 -5

11 32 15'

Mean -2.70'

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1905phae.proj..576W

Oct. 13, 1905.

III

Index Ld A

172.2		
209.3	37.1'	
357.0	26.8'	
23.8	63.9'	−2.72'

177.3		−2.71'
204.1	26.8'	
351.8	37.5'	
29.3	64.3'	−2.70'

Index R.A.B

81.3		
120.1	38.8'	
266.7	27.8'	
294.5	66.6'	−2.62'

87.8		−2.63'
114.5	26.7'	
260.9	39.3'	
300.2	66.0'	−2.64'

Mean −2.67'

6	54	55
	98	89
6	49	44
5		−5
11	49	39

6 44 34

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1905phae.proj..576W

Oct. 13. 1905

Index R & B

IV

	81.3			
9 3 38	119.4	38.1'		
	267.2	27.1'		
	294.3	65.2'	-2.67'	A
	86.7		-2.66'	
	113.3	26.6'		
	260.5	38.9'		
	299.4	65.5'	-2.66'	

Index L & A

	350.9			
	30.2	39.3'		B
	177.7	26.6'		
	204.3	65.9'	-2.65'	
	357.2		-2.64'	
7 16 16	24.9	27.7'		
19 54	171.3	38.7'		
7 9 57'	210.0	66.4'	-2.63'	
5 -5				
12 9 52'			Mean -2.65'	

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1905phae.proj..570V

Oct. 13, 1905

Index L + A

351.7

V

7 20 58

29,830.

38.1'

177.6

26.6'

204.2

64.7' -2.69'

B

357.1 -2.66'

24.6 27.5'

171.1 38.9'

210.0 66.4' -2.63'

Index R + B

260.3

299.7 39.4'

86.6 26.4'

113.0 65.8' -2.65'

A

267.0 -2.66'

294.0 27.0'

81.1 38.1'

119.2 65.1' -2.67'

Mean -2.66'

7 29 48

49 106

7 24 83

5 -5

12 25 18

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1905phae.proj...570W

Oct. 13, 1905.

Index Q & B
261.5

clouds

8 5. 0 Heavy clouds came, covering the whole sky, and still remain.

Sky ~~was~~ clear in all ~~the~~ five groups taken except that very slight wisps of clouds was noticed in one or ~~two~~ of the last settings in fifth group but nothing sufficient to produce any visiatory effects.

S.T. 21h 25m
H.A. -2 53
Dec. +29.8
P.A. 259.5 per B
Sprocket -4.5 A
" -3.5 B
" -3.0 b

H's watch used for times tonight
Watch 5 sec. fast

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1905phae.proj..576W

Oct. 14, 1905 (Saturday)

– Androm. = D. M. +30° 42 susp. by J Miller Barr of Canada,

24 32
19 26
5 6
6 54

5 50 39

Index
356.4 var
27.4
176.4
203.5

357.5
24.0
175.3
206.0

RKB
264.0
298.0
86.7

In above partial group took a new comp. star but as H. found it was rather faint on account of approaching moonlight and perhaps clouds, concluded to abandon this star and take the same one as was used last night

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1905phae.proj..570

Oct. 14, 1905.

Comp Stars used in this and fol groups was same as last night.

Index R & B

		80.76		I
6	4	3	120.7	40.1'
			267.9	26.3'
			294.2	66.4 -2.63' A
			87.0	25.2' -2.64'
			112.8	
			260.6	40.4'
			301.0	66.2' -2.64'

Index L & A

		352.7	34.3'
		31.0	
		178.0	25.9' B
		203.9	60.2' -2.71'
		358.5	25.4' -2.69'
		23.9	
		170.6	39.2'
		210.4	65.2' -2.67'

6	12	9
	16	12
6	8	6
5		-21
11	7	45

Mean -2.66'

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1905phae.proj..576W

Oct. 14, 1905

Index Left II

351.6 38.5'
30.1 ~~29.~~ 25.9'
177.5 64.4' -2.70'
203.4

B

357.7 -2.70'
22.8 25.1'
171.0 39.5'
210.5 64.6' -2.69'

Index R&B

260.5
300.3 39.8'
86.6. 27.9'
114.5 67.7' -2.59'

A

267.3 -2.67'
294.0 26.7'
82.9 36.2'
11~~8.5~~9.1 62.9' -2.75'

Means -2.64'

6 19 6

6 27 7
46 13'
6 23 6'
5 -21'
11 22 45'

6
5
11

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1905phae.proj...57dW

Oct. 14, 1905.

Index R & B

III

261.1
300.8 39.7'

86.4 27.6'
114.0 67.3' -2.60'

266.4 24.4' -2.56'
294.8

81.0 39.7'
120.7 64.1' -2.57'

Index L & A

171.4 37.9'
209.3

357.4 25.5'
22.9 63.4' -2.73'

176.8 27.2' -2.64'
204.6

351.2 38.2'
29.4 66.0' -2.64'

Mean -2.63'

6 34 42

6 42 47
76 89'
6 38 44'
5 -21'
11 38 23'

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1905phae.proj..57GW

Oct, 14, 1905

Index Rad

	171.0		IV
6 49 57	~~204.0~~ 8.3	37.3'	
	357.0	27.2'	
	24.2	64.5'	2.69'

177.0		
204.4	27.4'	-2.70'
352.5	36.9'	
29.04	64.3'	-2.70'

Index Rad B

82.2		
120.4	38.2'	
266.5	27.5'	
294.6	66.0'	-2.64'

87.4		-2.66'
114.4	27.0'	
260.0	38.0'	
29~~5.5~~ 8.0	65.0'	-2.64'

Mean -2.65'

6	57	20
	106	77'
6	53	38'
5		-21'
11	53	17

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1905phae.proj..570W

Oct. 14. 1905.

Index R&B

	81.3	3A.7.	V
7 6 44	120.0		
	266.5		
	294.6	2A.1. / 66A.	−2,61. A
	86.6	27.6.	−2.62.
	114.2		
	261.0	3A.4.	
	299.5	66.K.	−2,63.

Index L&A

	351,5	3A.9.	
	30.4		
	177,0	27.5.	B
	204,5	66.K.	−2.63.
	356.7		−2,64.
7 15 8	24,2	27.5.	
21 52.	172,1	37.9.	
7 10 56.	210.0 ~~209,8~~	65.K.	−2,66.
5 −21.			
12 10 35.			Mean −2.63.

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1905phae.proj..576V

Oct. 14, 1905.

Index L & A

VI

352.6
28.8
176.9
204.6

36.2'
27.7'
63.9'

-2.72'

B

356.7
24.3
173.6
209.3

27.6'
35.7'
63.3'

-2.73'
-2.74'

Index Q & B

261.0
300.6
88.8
114.8

39.6'
26.0'
65.6'

-2.66'

A

-2.66'

267.0
292.3 3.7
82.5
121.2

26.7'
38.7'
65.4'

-2.66'

Mean -2.70'

7 28 54
48 89
7 24 44
5 -21
12 24 23

Somewhat troubled by light cloud in above group

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1905phae.proj...57dW

Oct. 14, 1905.

Index R & B

VII

261.4
299.9 38.5'
87.0 27.4'
114.4 65.9' −2.65'

266.5 −2.66'
294.4 27.6'
83.5 36.4'
119.9 64.0' −2.71'

Index L & d

172.0
210.1 38.1'
356.6 27.4'
24.0 65.5' −2.66'

176.5 −2.70'
204.6 28.1'
354.4 35.3'
29.7 63.4' −2.73'

Mean −2.69'

7 41 2

7 50 7
7 91 9'
7 45 34'
5 −21'
12 45 13'

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1905phae.proj..576V

Oct. 14 1905

Index L+A

VIII

172.2

7 54 30

210.4	38.2'	
357.2	27.1'	
24.3	65.3'	-2.67' (B)

176.5 -2.62'

204.9	28.4'	
352.9	36.5'	
29.4	64.9'	-2.62'

Index R+B

82.8

120.0	37.2'	
266.9	26.3'	
293.2	63.5'	-2.73' (A)

87.3 -2.70

8 2 24

114.6	27.3'	
261.0	38.1'	
299.1	65.4'	-2.66'

15 56 54'
7 58 27'
5 -21'
12 58 6'

Mean -2.69'

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1905phae.proj..570W

Oct. 14, 1905.

Index R&B

	83.4		IX
8 10 46	119.1	35.7'	
	266.6	26.6'	
	293.2	62.3'	-2.77' A
	88.4		-2.7K'
	114.1	25.7'	
	261.0	38.3'	
	299.3	64.0'	-2.71'

Index L&A

	351.5		
	30.0	38.5'	B
	177.2	26.8'	
	204.0	65.3'	-2.67'
	356.5		-2.62'
8 19 54	22.6	26.1'	
	172.1	38.4'	
	210.75	64.5'	-2.69'

29 100'
8 14 80'
5 -21'
13 14 59

Mean -2.71'

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1905phae.proj..570V

Oct. 14, 1905.

Index L & A

	351.0		X
8 29 18	29.5	38.5'	
	176.5	28.2'	
	204.7	66.7'	-26.2'
			B
	356.5		-26.2'
	24.6	28.1'	
	171.6	38.4'	
	210.0	66.5'	-2.62'

Index R & B

	261.6		
	300.2	38.6'	
	87.0	27.5'	
	114.5	66.1	-26.4' A
			-2.73'
	267.4		
8 36 40	293.9	26.5'	
65 58	84.4	34.6'	
8 32 59	119.0	61.1'	-2.42'
5 -21			
13 32 38			Mean -2.62'

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1905phae.proj..570W

Oct. 14, 1905

Index R & B

	82.0		XI
8 48 22	118.8	36.8	
	267.2		
	294.0	26.8	
		636	−2.73
	87.7		
	113.9	26.2	−2.76
	262.6		
	298.6	36.0	
		62.2	−2.78

Index L & A

	351.1		
	30.0	38.9	
	177.2		
	204.0	26.8	
		65.7	−2.65
	357.0		−2.68
8 56 16	24.0	27.0	
104 38	173.0		
8 52 19	210.0	37.0	
5 −21		64.0	−2.71
13 51 58			Mean −2.72

S.J. $22^h\ 46^m$
Mo. A. −1 29
Dec +29.6
R.A. 78.5 for B
Sprocket − 4.5 A
" − 3.5 B
" − 3.0 b

H's watch used for times
H's watch 21 sec. fast

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1905phae.proj..570N

Oct. 14, 1905.

Somewhat ~~troubled~~ by approaching cloudiness in sixth group as mentioned on page 204 ~~below~~ After this group clouds steadily became more troublesome and progressively more so towards ~~the~~ end. The clouds were not massive but rather of a feathery character with varying density

7
7
7
7
7
7

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1905phae.proj..57GN

Oct. 16, 1905 (Monday)

Dis. of Jup. III Phot. R. A. Obs. Bowie Rec. Comps. with remoter (before eclipse) of the two sats. on same preceding side = Sat. II

B & b 1182

7	33	14.1
7	34	14.0

B 394

7	33	0,0
7	34	0,0

7	49	45		7	49	4	112.8	51.2
		-14				42	108.2	164.0
7	49	31				56	221.0	51.9
					50	18	-0.8 110.5	160.1
						32		51.9
7	50	55				47	109.9	161.8
		-14			51	3	111.3	52.9
7	50	41				18	-0.8 110.6	162
						29		51.8
7	51	54				42	112.1	163.9
		-14		7	52	4	112.0	51.0
7	51	40				20	-0.9 112.0	163.0

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1905phae.proj..57GV

Oct. 16, 1905.

			7	52	45			50.4	
7	53	14'		"	59		112.8'	163.2	
		-14 ^		53	23		111.1'	53.0	4
7	53	0 ^		"	50	-0.9^	223.9'	164.1	
				54	4		112.0'	53.0	
7	54	32'		"	20		111.0'	164.0	
		-14 ^			35		113.0'	53.0	5
7	54	18 ^		55	7	-0.9^	224.0'	166.0	
				"	19		112.0'	52.1	
7	55	50 ^		"	37		113.3'	165.4	
		-14 ^		56	3		112.4'	51.6	6
7	55	36 ^		"	19	-0.9^	225.7'	164.0	
				"	40		112.8'	52.1	
7	57	18'		57	0		112.9'	165.0	
		-14 ^		"	29		110.6'	52.5	7
7	57	4 ^		58	3	-0.8^	223.5'	163.1	
				"	19		111.8'	53.6	
7	58	55'		"	53		105.4'	159.0	
		-14 ^	7	59	6		104.5'	55.8	8
7.	58	41 ^		"	22	-0.6^	209.9'	160.3	
				"	36		105.0'	53.5	
8	0	10 ^	8	0	3		107.2'	160.7	
		-14 ^		"	22		99.5'	57.0	9
7	59	56 ^		"	37	-0.5^	206.7'	156.5	
				"	51		103.2'	59.0	
8	1	14 ^	8	1	3		15	6.0	
		-14 ^							
8	1	0 ^							

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1905phae.proj..570W

Oct. 16, 1905.

8	1	15		97.0 98.7 195.7	58.5	+0
	"	45	−0.3	97.8	157.2	
	2	1			60.1	
	"	13		94.9 90.5	155.0	
	"	24		185.4	61.8	+1
	"	39	−0.1	92.7	152.3	
	"	49		87.3	63.8	
	3	2		82.7	151.1	
	"	20	+0.2	170.0 85.0	67.1	+3
	"	34			149.8	
	"	59			66.5	
	4	21		83.5 79.8	150.0	
	"	40		163.3	69.6	+3
	"	55	+0.3	81.6	149.4	
	5	30			67.4	
	"	46		79.6 72.8	147.0	
	"	55		152.4	70.2	+1
	6	6	+0.5	76.2	143.0	
	"	23			75.1	
	"	32		67.9	143.0	
	"	43		66.1 134.0	76.0	+1
	"	54	+0.9	67.0	142.1	
	7	9		62.6	76.5	
	"	18		58.5	139.1	
	"	27		121.1	78.7	+1
8	7	46	+1.2	60.6	137.2	

8	2	19	^
		−14	^
8	2	5	^
8	3	11	^
		−14	^
8	2	57	
8	4	29	^
		−14	^
8	4	15	^
8	5	49	^
		−14	^
8	5	35	^
8	6	38	^
		−14	^
8	6	24	^
8	7	25	^
		−14	^
8	7	11	^

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1905phae.proj..570W

Oct. 16, 1905.

8	7	48^	8	8	2	+1.4^	55.6'	78.5
	8	1^		"	15	+1.6^	52.1'	134.1
	8	10^		"	24	+1.5^	53.0'	82.0
	8	24^		"	38	+1.6^	51.2'	135.0
	8	50^		9	4	+1.7^	49.2'	83.8
	9	3^		"	17	+1.9^	46.2'	133.0
	9	17^		"	31	+1.9^	44.7'	86.8
	9	29^		"	43	+2.0^	44.0'	131.5
	9	49^		10	3	+2.2^	40.5'	87.5
	10	8^		"	22	+2.4^	37.4'	128.0
	10	18^		"	32	+2.7^	32.5'	90.6
	10	36^		"	50			123.1
8	11	18^	8	11	32			Not seen later

L. of Vis.

			8	11	59			91.2
8	12	33^		12	13		31.8'	123.0
		-14^		"	52		29.7'	92.3
8	12	19^	8	13	9	+2.8^	61.5' 30.8'	122.0

Region low, nearly full moon not far distant. At time of beginning lower edge of objects glass was very close to upper edge of the lowest of the three small shutters. Cleared somewhat suddenly, considerable wind. Images ~~seem~~ considerably blurry and constantly flickering and chang-

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1905phae.proj..576N

Oct. 16, 1905

ing in lights relatively to each other. Settings had to be made slowly and with as much care as possible. Observations rather dif. but eclipse considered pretty good from the care exercised.

	B & D 1182		B 394	
8	24	13.5	8 24	0.0
8	25	13.4	8 25	0.0

∴ In all the times in previous eclipse, subtract 14 secs. from the observed times to obtain the corrected times.

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1905phae.proj..576N

Oct. 16. 1905

Fourth Type Star −16° 5272 Phot. J H Oke Bowie Rec

19	13	−16.2
22	33	Index Red
3	20	

8 50 32

341.8 ← 4th type star

40.8	59.0′	
162.6	53.1′	
215.7	112.1′	−1.37′ A

345.0		−1.37′
37.8	52.8′	
160.9	59.4′	
220.3	112.2′	−1.37′

Index L & B

247.8		
314.6	66.8′	B
73.4	54.6′	
128.0	121.4′	−1.16′

2549		−1.20′
306.0	51.1′	
67.0	67.0′	
134.0	118.1′	−1.23′

Mean −1.28′

8	57	38
	107	70′
8	53	65′
5		−42″
13	53	23

9

9

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1905phae.proj..576N

Oct. 16, 1905

S. T. 23 58
R. A. +3 44
Dec. -15.6
P. A. 116.0 Ver. B
Sprocket -1.5 A
" -0.5 B
" 0.0 b

Reap. of Jup. III Phot. R & Obs. B own Rec.
Compared with more remote of two sats. (after eclipse)
on same preceding side = Sat II

	B & b	1182		B	394
9	19	14.0	9	19	0.0
9	20	14.0	9	20	0.0

9	37	6	9	37	18		Seen
	37	30			42	+3.2 26.0	276.0
	37	42			54	+2.7 31.6	302.0
	37	53		38	5	+2.7 32.5	270.4
9	38	5	9	38	17	+2.8 30.9	302.9

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1905phae.proj..57ON

Oct. 16, 1905.

9	38	44		38	56	+2.4	36.0	272.0
	38	53		39	5	+2.4	37.2	308.0
	39	4		"	16	+2.3	39.0	270.8
	39	12		"	24	+2.2	39.6	309.8
	39	22		"	34	+2.2	39.8	270.2
	39	31		"	43	+2.0	43.0	310.0
	39	43		"	55	+2.2	40.5	267.0
	39	53		40	5	+2.0	43.7	307.5
	40	6		"	18	+1.9	45.2	263.8
	40.	18		"	30	+1.8	47.7	309.0
	40	32		"	44	+1.7	49.4	261.3
9	40	46		40	58			310.7
				41	~~23~~			
				"	40			260.0
						54.5		
9	42	15		42	14	51.3		314.5
		-11		"	28	105.8		262.1
9	42	4		"	39	+1.5	52.9	313.4
				"	52			261.2
						58.3		
9	43	26		43	13	72.5		319.5
		-11		"	42	130.8		252.5
9	43	15		"	58	+1.0	65.4	325.0
				44	19			252.0
						77.2		
9	44	44		"	38	78.3		329.2
		-11		"	53	155.5		251.8
9	44	33		45	7	+0.5	77.8	330.1

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1905phae.proj..570N

Oct. 16, 1905.

9

9	45	59	^
		-11	^
9	45	48	^

9	47	2	^
		-11	^
9	46	51	^

9	48	22	^
		-11	^
9	48	11	^

9	49	54	^
		-10	^
9	49	44	^

9	51	17	^
		-10	^
9	51	7	^

9	52	48	^
		-10	^
9	52	38	^

9

9	53	42	^
		-10	^
9	53	32	^

45	31		62.0	248.0
"	50		84.7	~~329.0~~ 330.0
46	12		166.7	247.8
"	24	+0.3	83.4	332.5
"	38		93.6	247.5
"	55		95.4	337.1
47	9		189.0	241.6
"	26	-0.2	94.5	337.0
"	52			240.0
48	13		97.0	337.0
"	31		101.8	238.4
"	53	-0.4	198.8 99.4	340.2
49	24			235.0
"	47		104.0	339.0
50	2		100.5 204.5	238.5
"	23	-0.5	102.2	339.0
"	47		105.7	234.5
51	7		106.5	340.2
"	20		212.2	235.5
"	53	-0.6	106.1	342.2
52	23		108.0	233.0
"	43		107.8	341.0
"	56		215.8	235.0
53	12	-0.7	107.9	342.8
"	24		106.3	235.2
"	35		105.5	341.5
"	48		211.8	235.5
		-0.6	105.9	

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1905phae.proj...5700

Oct. 16, 1905

							341.0	5
			54	29			236.0	
9	55	7	"	48		105.6	341.6	
		-10	~~55~~	~~20~~		108.1	~~232.~~	
9	54	57	55	28		213.7	233.9	6
			"	43	-0.6	106.8	342.0	
			56	1			233.3	
9	56	42	"	27		109.5	342.8	
		-10	"	48		108.8	235.0	7
9	56	32	57	32	-0.7	218.3	343.8	
			"	44		109.2	235.0	
9	58	12	58	5		107.0	342.0	
		-9	"	21		108.3	234.2	8
9	58	3	"	37	-0.7	215.3	342.5	
			0	27		107.6	230.2	
Clapped to see how many obs. for full hr. had been obtained			"	41		110.8	341.0	
10	0	54	1	3		109.0	234.0	9
		-9	"	24	-0.8	219.8	343.0	
10	0	45	"	41		109.9	234.2	
			2	33		110.8	345.0	
10	2	44	3	8		113.8	230.2	10
		9	"	36	-0.9	224.6	344.0	
10	2	35	4	1		112.3	234.0	
			"	17		108.1	342.1	
10	4	26	"	34		107.0	235.5	11
		9	"	53	-0.7	215.1	342.5	
10	4	17	5	8		107.6	234.5	

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1905phae.proj..576w

Oct. 16, 1905.

10	5	36	10	5	31		111.0		
		−9		"	45		106.7	345.5	
10	5	27		"	58		217.7	237.1	12
				6	23	−0.7	108.8	343.8	
10	6	49		"	37		106.9	235.1	
		−8		"	0		107.0	342.0	
10	6	41		7	17		213.9	235.0	13
				7	31	−0.7	107.0	342.0	
				9	42		106.5	236.0	
				"	54		1075	342.5	
10	9	50		"	11		214.0	234.5	14
		−8		10	25	−0.7	107.0	342.0	
10	9	42		"	44		109.7	234.3	
				"	59		106.5	344.0	
10	10	50		"	12		216.2	236.0	15
		−8		11	25	−0.7	108.1	342.5	
10	10	42		"	51		108.0	235.5	
				"	0		109.0	343.5	
10	11	56		"	28		217.0	235.0	16
		−8	10	12		−0.7	108.5	344.0	
10	11	48							

Stopped again for same reason as on previous page.

Limit of vis.

			10	14	23		29.0	274.0	
10	14	44		"	35		28.3	303.0	
		−7		"	45		57.3	273.2	
10	14	37	10	15	12	+3.0	28.6	~~302.0~~	
								301.5	

conditions somewhat better than in dis. tonight but as Sat. III at reap. was moderately close

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1905phae.proj..576

Oct. 16, 1905

to limb of Jup. and seeing ~~somewhat~~ ~~hugry~~ ~~was not the best~~
Observations were a little labored and difficult.
Eclipse however considered pretty good.

B. & b. 1182

10	35	5.0
10	36	5.0

B. 394

10	35	0.0
10	36	0.0

Corrections for times of Recp. Sat. III.

∴ From $9^h\ 32^m\ 44^s$ to $9^h\ 41^m\ 4^s$ Subtract 12 secs.

"	9	41	4.	"	9	49	24.	" 11 "
"	9	49	24.	"	9	57	44.	" 10 "
"	9	57	44.	"	10	6	4.	" 9 "
"	10	6	4.	"	10	14	24.	" 8 "
"	10	14	24.	"	10	22	44	" 7 "

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