KG
11365
573

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KG-11365.573

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KG 11365.573

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Feb 21. 1905 (Tuesday)

Yerkes Lamelop Phot 3 Ht obs Bonn rec

7	25	76.3	7	25	
5	50		5	56	
1	35		1	29	
10	25		10	31.	

Index L & A

90.6	82.4	comp star Dec.
173.0	60.4	
280.2	142.8	+0.72
340.6		

7 59 20.

B

+0.75

101.2		
161.7	60.5	
271.5	79.1	
350.6	139.6	+0.78

Index R & B.

358.5		
52.8	84.3	
188.8	63.6	
252.4	147.9	+0.62

A

+0.60

6.8		
73.6	66.8	
178.0	82.9	
260.9	149.7	+0.58

Mean +0.68

8	9	45
15	68	65
7	64	32
5		+39
13	5	11

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1905phae.proj..574W

Feb. 21. 1905.

S.I. 6 48
R.A. 0 42
Dec. +76.0
P.A. 168.5 Var B
Sprocket −1.5 A
" −0.5 B
" +0.1 b

I Draconis. Phot. J. H. obs. Bonn rec.

11	46	+73.0
7	08	
−4	46	
7	14	
	15	
7	29	

Too cloudy

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1905phaa.proj...574W

Feb. 21. 1905

9 8 23

Index above

15.3	← Comp. Star. Dia.		
65.7		50.4'	
190.6		64.4'	
255.0		114.8'	+1.31' A

+1.36'

9.7			
71.4		61.7'	
196.6		49.0'	
245.6		110.7'	+1.40'

Index Below

287.6			
337.4		49.8'	
102.3		58.4'	
160.7		108.2'	+1.46' B.

+1.46'

278.9			
340.0		61.1'	
108.1		46.7'	
154.8		107.8'	+1.47'

Mean +1.41'

9	18	50
	26	73'
9	13	36'
5		+39'
14	14	15'

S.J. 7^h 55^m
H.A. −3 46
Dec. +72°.0
P.A. 171.5 Ver. B
Sprocket − 0.5 A
" +0.5 B
" +1.1 b

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1905phae.proj..574W

Feb. 21 1905

0605 21 +21 1146 Phot. J Hodz. Barnard

6 6 +22.5

8 24

2 18

9.5 bar

Index R & B

95.0 ← Var dist

167.9 72.9'

280.0 61.5'

341.5 134.4' −0.89 A

−0.86'

101.0 59.6'

160.6 77.6'

272.0 137.2' −0.83

349.6

Index L & A

358.5 B

81.8 83.3'

189.4 63.4'

252.8 146.7' −0.64'

8.0 65.8' −0.63'

73.8 82.1

178.0 147.9 −0.62

260.1

Mean −0.74'

10 19 02

10 29 25

48' 27'

10 24 14'

5 +39'

15 24 53

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1905phaa.proj...574W

Feb. 21, 1905

S. T. 9^h 5^m
H. A. 2 58
Dec. +22.0
P. A. 28.3 Ver B
Sprocket −3.5 A
" −2.5 B
" −1.9 b

W's watch used for times tonight
Watch 39 sec. slow.

The reading of the declination index, when the tel. was pointed on Y Camelop, seemed to be a little out, but region thoroughly identified.
After finishing observations tonight tel. was turned to the west on Procyon, and the other index seemed to read about right.

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1905phae.proj..574W

Feb 23 1905 (Thursday)

o beti Phot W. Hoke Bonner

2	12	−3.6
5	50	
3	38	
	4	
3	42	

2	12	
6	64	
3	52	

Index L & A

21.5	var dra	
30.1	8.6'	
203.0	6.2'	
209.2	14.8	−5.95'

B

7 39 0

229		−5.91'
28.6	5.7'	
200.5	9.6'	
210.1	15.3	−5.87'

Index R & B

2903		
300.5	10.2'	
112.7	6.7'	
119.4	16.9	−5.66'

A

−5.58'

2929		
2989	7.0'	
111.5	11.1'	
124.6	18.1	−5.51'

7	48	58
	87	58
7	43	59
5		+3
12	44	2

Mean −5.74'

9.19

3.45

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1905phas.proj...574W

Feb. 23. 1905

○ beta Phot R. Kobe Bowie rec.

2	12
6	35
4	23

8 11 4

Index R & B

A

286.3		
296.2	9.9'	
108.3	6.7'	
115.0	16.6'	−5.70'

288.0		−5.64'
295.2	7.2'	
106.3	10.2'	
116.5	17.4'	−5.59'

Index L & A

B

196.8		
206.2	9.4'	
18.2	7.0'	
25.2	16.4'	−5.72'

197.6		−5.68'
204.6	7.0'	
16.3	10.1'	
26.4	17.1'	−5.63'

Mean −5.66'

9.19

3.53

8	19	48
	30	52
8	15	26
5		+3
13	15	29

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1905phae.proj..574W

Feb. 23. 1905

Measts. of Jupiters sats. I + III. Phot. Yr. Yr. obs. Bowie rec.

Indep Lat 9.5 cap.

9 5 35

72.6 ← Sat. III dis.
148.5 75.9'
247.3 84.9'
332.2 160.8' −0.37' B

65.9 −0.38
153.6 87.7'
254.1 71.8'
325.9 159.5' −0.39'

Indep R & B

163.3 A
233.4 70.1'
334.2 86.9'
61.1 157.0' −0.44'

154.9 −0.46'
242.6 87.7'
346.0 67.9'
53.9 155.6' −0.47'

Mean −0.42'

9	18	35
	23'	70'
9	11	65'
5		+3'
14	12	8'

The two Sats compared above were the two nearest to Jup on fol. side there being three in all on this side. The more remote of the two comp. together, was made to dis

Hence the objects comp were Sats I & III and Sat III was made to dis

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1905phas.proj..574W

Feb. 23 1905

Region rather low when settings were made and observations a little dif. It was practically impossible to take a second group

R Cassiop Phot J Hobs Bouvier

23	52	50.0
32	10	
8	18	
	3	
8	21	

23	41
32	20
8	39

For measurements see next page

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1905phae.proj..574W

Feb. 23. 1905.

Index L & A

10 17 14

256.0 ← comp star dec

339.6 51.6'

108.4 42.9'

151.3 94.5' +1.50' (B)

288.5

335.0 46.5' +1.71'

103.6 54.8'

158.4 101.3' +1.62'

Index R & B

191.3

249.0 57.7'

15.5 52.0'

67.5 109.7' +1.42' (A)

195.1 +1.37'

248.0 52.9'

9.0 61.4'

70.4 114.3' 1.32'

10 29 20

46' 34"

10 23 17

5 +3'

15 23 20

L.T. $9^h\ 5^m$ Mean +1.54'

R.A. $+9^h\ 8^m$

Dec. +50.9

P.A. 190.0 Ver. B.

Sprocket −3.5 B

" −2.5 b

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1905phae.proj..574W

Feb. 23. 1905.

Region very low. Observations difficult

It's watch used for times tonight
Watch 3 sec slow

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1905phae.proj..574W

Feb. 24. 1905. (Friday)

Relative Diasts. of two of Jup. Sats (if possible)
Phot ~~X~~. Hobs. Bonn rec

Impossible to bring any two Sats together tonight with Phot. ~~X~~.

Σ ~~X~~ 627 Phot ~~X~~. Hobs Bonn rec

~~4~~	~~54~~	
4	46	+ 2.2
6	43	
1	57	
2	1	

Abandoned for eclipse

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1905phae.proj..574W

Sept. 24. 1905.

Reap Inf II Phot R ✠. ☆ Bare sec

B	&	b	11 8 2	B	3 9 4	
8		31	39.3	8	32	0.0
8		32	39.3	8	33	0.0

Jupiter so low and clouds so thick that it is impossible to do anything with the eclipse Comp. Sat. practically invisible at full brightness

Σ 627 Phot ✠ ✠. ☆ Bare sec

4	46	+2.2
7	32	
2	46	

Pat. Ang. ~~3 9 8°~~ Dist 20" Magn. 6.1, 6.7

Measurements on next page

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1905phae.proj..574W

Feb. 24. 1905.

Index R & B A.

344.2	Brighter dis		
56.0	71.8°		
155.8	88.4°		
244.2	160.2°	0,38°	A

336.2			
70.0	93.8°	0.43	
Clouds	61.0°		
169.2	154.8°	0.45°	
230.2			

Index R & B B.

259.8			
327.4	67.6°		B
61.9	94.4°		
156.3	162.0°	0.34°	

241.0		.31	
339.0	98.0°		
77.0	67.1°		
144.1	165.1°	0.28°	

Mean 0.37

9	20	40
	27	50
9	13	55
5		−14
14	13	41

9 7 10

Observations in general rather difficult on account of clouds

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1905phag.proj..574W

Feb 24, 1905.

044526 Doubt Var +28° 707

Phot. I Ks. obs. Bonnies

4 39 +29.1
8 24

3 45
5

3 51

Indep Var A 9.5 6ap

289.3 comp star

337.0

10 7 45 blonde

Stopped by blonds

blonds thick. now everywhere, no chance for anything further

It's watch need for times tonight

Watch 14 sec fast

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1905phae.proj..574W

Feb. 25 1905 (Saturday)

Jupa Sats Phot #1 #2 & Bands rel
Sat. I compared with Sat. II.

Index 2 & A 9.5 bad

242.6
338.9 Sat II dia
67.0 96.5'
155.5 88.5'
184.8'
175.2' −0.09' B

246.5 88.5'
335.0 96.0' −0.08
62.4 184.5'
158.4 175.5' −0.08

Index A & B
151.5
250.0 98.5'
335.5 89.3'
187.8'
65.1 172.2' − 0.15' A

156.7
245.2 89.2' −0.10
334.0 92.9'
182.1'
66.9 177.9' −0.04'

Mean −0.09

7 31 30

7 40 48

71' 78'
7 35 69'
5 −25'
12 35 44'

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1905phae.proj..574W

Feb 25 1905
Same again
Index R & B

155.2			
248.2	93.0		
336.8	90.2		A
67.0	183.2		
	176.8	−0.06	
158.6			
245.2	86.6		−0.04
334.5	93.8		
68.3	180.4		
	179.6	−0.01	

Index L & R

62.0			
158.2	96.2		
244.9	91.9		
336.8	188.1		B
	171.9	−0.15	
64.8			
156.0	91.2		−0.14
242.7	96.1		
338.8	187.3		
	172.7	−0.14	

Mean −0.09

7 42 58

7 51 20

93 78
7 46 69
5 −25
12 46 44

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1905phae.proj..574W

Feb 25. 1905.

Z Persei Phot J Y de Bonis

2 33 +42.2
7 45
5 12

Index L & A

189.6 comp star dis
251.9 62.3'
1.8 79.0'
80.8 141.3' +0.75'

180.0
261.8 81.8' +0.76'
10.2 58.9'
69.1 ~~71.6~~ 140.7' +0.76'

Index R & B

98.6
159.8 61.2'
269.8 80.6'
350.4 141.5' +0.74'

925 76.9' +0.80'
169.4 59.0'
281.6 135.9' +0.86'
340.6

Mean +0.78'

9 47 23
81 78'
9 40 69'
5 -25'
14 40 44'

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1905phag.proj..574W

Feb 25 1905

Index R & B

9 50 55

99.2		
162.1	62.9	
272.9	76.0	
348.9	138.9	+0.80 A
91.5		+0.82
168.9	77.1	
251.0	59.5	
340.5	136.6	+0.84

Index L & A

8.5	64.2	
73.0	81.3	
150.2	145.5	+0.66 B
261.5		
1.0		+0.73
79.2	78.2	
191.0	60.6	
251.6	138.8	+0.80

9	59	15
	109	70
9	54	65
5		-25
14	54	40

Mean +0.78

S. T. 8h 51m
R. A. 6 15
Dec. +42°.1
P. A. 15.5 Var B
Sprocket, -2.5 B
" -1.5 b

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1905phae.proj..574W

Feb. 25. 1905.

Ψ Camelop. Phot I Ψ obs Bowie rec.

7 25 +76.3
9 0.0
1 35
5
+1 40

Index R & B

99.0	Comp Star Dec.
163.3	64.3
269.5	81.9
351.7	146.2 + 0.65

B

89.9 + 0.71
169.5 79.6
260.6 91.1
341.4 80.8
140.4 +0.77

Index R & A

3.4	70.0
73.4	78.6
181.4	148.6 +0.60
260.0	

A

+0.60

359.0	82.7
81.7	65.6
185.5	148.3 +0.61
251.1	

Mean +0.66

10 45 20

10 57 18
102 38
10 51 19
5 -25
15 50 54

S.T. 9h 45m
R.A. +2 15
Dec. +76.7
P.A. 345.0 on B
Sprocket -1.5 A
" -0.5 B
" +0.1 b

W's watch used for times tonight.
Watch 25 sec. fast

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1905phag.proj..574W

Feb. 27. 1905. (Monday)

Jupa. Date. Phot. W. Strobe Boone rec.

Sat. III compared with Sat. II.

Index L & A

	Sat III dis		
166.0			
237.8	71.8		
345.5	72.0		
57.5	143.8	−0.70	B

7 40 40

165.0		−0.74	
237.4	72.4		
347.1	67.6		
54.7	140.0	−0.77	

Index R & B

255.0			
328.4	73.4		
72.0	79.7		
151.7	153.1	−0.51	A

253.8		−0.50	
329.6	75.8		
71.5	78.4		
149.9	154.2	−0.49	

7 51 50

91 90

7 45 75

5 −42

12 45 33

Mean −0.62

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1905phae.proj..574W

Feb 27. 1905.

Index R & B

254.0
327.6 73.6
72.2 77.8
150.0 151.4 −0.55

A

253.5 72.8 −0.56
326.3 76.9
72.8 149.7 −0.58
149.7 ~~148.74~~

Index L & A

165.0
236.9 71.9
343.0 75.8
58.8 147.7 −0.62

B

164.7 −0.67
237.2 72.5
345.4 70.4
55.8 142.9 −0.72

Mean −0.62

7	57	25
8	13	13
15	70	38
7	65	19
5		−42
13	4	37

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1905phag.proj..574W

Feb 27 1905

α beti Phot R Yerk Bonn rec.

2	12	−3.6
7	16	
5	4	

Index 2 & 4

193.5 — var dia

203.3	9.8	
14.9	6.6	
21.5	16.4	−5.72

B

8 39 0

195.0 −5.72

202.43	7.3	
13.6	9.2	
22.5	16.5	−5.71

Index R & B

103.7		
113.5	9.8	
254.6	7.4	
292.0	17.2	−5.62

A

−5.62

104.7		
111.9	7.2	
253.3	10.0	
293.43	17.2	−5.62

8 49 30

	88	30
8	44	15
5		−42
13	43	33

−5.67

9.19

Mean −3.52

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1905phae.proj..574W

Feb 27 1905

U Cephei Phot I Hobe. Bauschinger.

Full aperture used

I

			0	50	+81.2	
			8	65		
			7	15		
			7	19		
			L	K	A	
			187.4	comp. star dis.		
9	35	20	251.8	64.4		
			2.3	79.1		B
			81.4	143.5	0.70	
			179.0		+.70	
9	37	45	260.4 ~~261.2~~	81.4		
			9.0	63.0		
			72.0	144.4	0.69	
			Index R	K	B	
			101.2	60.7		A
9	41	35	161.9	83.2		
			270.5	143.9	0.70	
			353.7			
					+0.72	
			90.7	80.3		
9	44	10	171.0	61.2		
			278.8	141.5	0.74	
			340.0			
	157	110		Mean	+0.71	
9	39	42			2.41	
5		-42			9.12	
14	39	00				

6904.6104

6904.5691

+.0413

1905phaa.proj...574W

Feb 27. 1905

Index R & B

99.4

9 46 48 — 160.7 — 61.3 — A

267.9 — 82.9 — II

350.8 — 144.2 — 0.69

89.0 — +0.67

9 48 50 — 174.6 — 85.6

280.0 — 60.8

340.8 — 146.4 — 0.65

Index L & A

5.4 — B

9 52 15 — 74.2 — 68.8

174.9 — 87.3

262.2 — 156.1 — 0.46

355.6 — +0.50

9 54 19 — 80.9 — 85.3

157.2 — 67.0

253.7 4.2 — 152.3 — 0.53

200 135

9 50 39

5 −42

14 49 57 ✓

Mean +0.52

2.41

2.99

6904.6181 ✓

6904.5691 ✓

+.0490 ✓

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1905phae.proj..574W

Feb 27 1905

Index Lo A

6.2 B

9 57 32

74.1 67.9
176.0 88.8
264.8 156.7 +0.44

III

353.9 +0.40
10 0 6
82.9 89.0
183.0 72.8
255.8 161.8 +0.35

Index R & B A

274.9
10 4 23
344.8 69.9
82.8 95.7
178.5 165.6 +0.27

265.0 +0.28
10 7 50
357.5 92.5
94.1 72.0
166.1 164.5 +0.29

39 68 111
9 62 28
5 -42
15 1 46

Mean +0.34
8.41
8.75

6904.6263
6904.5691
+.0572

1905phae.proj..574W

Feb 27 1905

Index R & B

A

IV

10 10 55

273.0
349.5 76.5'
84.4 93.6'
178.0 170.1' +0.19'

+0.16'

261.0
357.4 96.4'
92.5 75.9'
168.4 172.3' +0.14'

13 18

Index L & A

B

197.5
262.3 ~~360~~ 84.8'
347.8 102.0'
89.8 186.8'
173.2' −0.13'

20 20

166.7 103.3'
270.0 82.8'
358.2 186.1'
81.0 173.9' −0.11'

−0.12

10 22 55
65 148'
10 16 52'
5 −42'
15 16 10' ✓

~~+0.12~~

Mean +0.02'
2.41
2.43'

6904.6362 ✓
6904.5691 ✓
+.0671 ✓

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1905phae.proj..574W

Feb. 27. 1905.

Index L & A

B V

		178.9	80.7'	
10	25	48	259.6	103.9'
			348.8	184.6'
			92.7	175.4' − 0.09'
			167.3	
10	28	30	271.8	104.5'
			356.0	86.0'
			82.0	190.5'
				169.5' − 0.20'

Index R & B

A

			76.0	
10	32	43	183.0	107.0'
			265.3	87.3'
			352.6	194.3'
				165.7' − 0.27'
			86.0	
10	36	41	173.6	87.6'
			254.3	111.1'
			5.4	198.7'
				161.3' − 0.36'

	121	162'	
10	30	56' ✓	
5		−42'	
15	30	−14' ✓	

Mean −0.23'
±.11 ✓
±.18 ✓

6904.6459 ✓
6904.6911 ✓ = Comp.
±.0768 ✓

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1905phae.proj...574W

Feb. 27. 1905

Index R & B

73.5 A

10 39 19 185.7 112.2' VI
264.0 92.0'
204.2'
356.0 155.8' − 0.46'

84.8 −0.46'
10 42 52 175.1 90.3'
252.2 115.2'
205.5'
7.4 154.5' − 0.49'

Index L & A

339.8
10 46 45 97.0 117.2' B.
171.3 95.5'
212.7'
266.8 147.3' −0.63'

352.3
10 50 30 87.0 94.7' −0.63'
177 146 160.0 118.0'
10 44 52 212.7'
5 −42 278.0 147.3' −0.63'
15 44 10

S.J. 9. 41 Mean −0.56
6904.655 R.A. +5 45 We watch need for time tonight
6904.5691 Dec. +81°9 Watch 42 sec. fast.
+.0866 P. L. 15.0 Var B 0.41
Sprocket −1.5 B 7.05
" −0.5 b

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1905phae.proj..574W

Feb. 28. 1905. (Tuesday)

Jupe Sats. Phot. R. V. obs. Barn. ref.
9"5 Cap

5 5 +10
5 5 5 Sat. III compared with Sat. IV.
0 5 3

Index Below

172.0 Sat III dis.
230.4
349.5 58.4'
61.7'
51.2 120.1' −1.19'

7 17 20 (B)

170.0
229.8 59.8' −1.22'
351.0 57.8'
48.8 117.6' −1.25'

Index Above

80.2 (A)
140.3 60.1'
259.4 61.5'
320.9 121.6' −1.16'

78.8 −1.14'
141.7 ~~+62.0~~ 62.9'
260.3 60.7'
321.0 123.6' −1.11'

Mean −1.18'

7 28 40

45 60'
7 22 60'
5 −40'

12 22 20

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1905phas.proj..574w

Feb. 28. 1905.

Same again
Index Above

~~79.7~~
~~139.0~~
260.4
318.6
79.3
138.6

58.2
59.3
117.5 −1.25

259.5
320.3
79.5
139.5

60.5
60.0
120.5 −1.18

Index Below

169.5
229.4
351.3
51.0

59.6
59.7
119.3 −1.21

165.9
230.5
348.0
50.0 ~~49.9~~

61.6
62.0
123.6 −1.11

Mean −1.19

~~32 18~~

blends

7 47 15

7 58 55
105.70
7 52 65
5 −40
12 52 25

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1905phae.proj..574W

Feb 25. 1905.
Jupe. Sats. Phot. W. W. & Barnard rec.
Sat. I compared with Sat. II.
Index Below 9.5 Cap

65.5 ← Sat I dia.
8 6 18 153.0
242.5
333.5

68.4
153.8
246.5
334.0

Index Above

Clouds
Stopped by clouds over Jup.

8 42 Sky all cloudy

– Cloudy now everywhere and snowing

7
7 5
12

W's watch used for times tonight
Watch 40 sec. fast.

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1905phad.proj...574W

March 1 1905 (Wednesday)

Jupa Sats Phot. K. Koba. Bowie rec.
Sat. III compared with Sat. II. 9.5 6 ap

Index Above

	72.7 ← III dia.		
7 29 35	147.7	75.0'	A
	251.5	73.8'	
	325.6	148.8'	-0.60'
	73.7		-0.60'
	145.1	71.4'	
	251.0	77.0'	
	328.0	148.4'	-0.61'

Index Below

	342.7		B
	57.5	74.8'	
	164.3	71.1'	
	235.4	145.9'	-0.66'
	344.2		-0.65'
	56.1	71.9'	
	162.6	74.9'	
	237.5	146.8'	-0.64'

Mean -0.62'

7	40	49'
	69'	84'
7	34	72'
5		-37'
12	34	35'

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1905phae.proj..574W

March. 1. 1905.

Index Below

340.6

7 43 42

57.3 76.7'
163.1 73.6'
236.7 150.3' −0.57' B

343.0 −0.59'
56.4 73.4'
161.7 75.0'
236.7 148.4' −0.61'

Index Above

250.7

328.6 77.9'
73.0 73.1'
146.1 151.0 −0.56 A

251.6 −0.57'
326.5 74.9'
72.0 74.9'
146.9 149.8' −0.58

7 49 26

92 68'
7 46 34'
5 −37
12 45 57'

Mean −0.58

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1905phaa.proj..574W

March 1. 1905.

Sat. II follows centre of Jup. about 5 sec. and is about 0.4' north of it. Sat. III fol Sat. II 2 sec. and is 0.7' north of it.

A star follows Sat. III 5 sec and is 2.3' north of it.

Yerkes Camelop., Phot. N. obs Bowie rec

7	25	+76.3
7	50	
0	25	

Abandoned

0445 28 +25 707 Phot J Yerkes Bowie rec

4	39	+29.2
8	5	
3	26	

9."5 bad

(over)

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1905phae.proj..574W

March 1. 1905.

9.5 6 ap

Index Lab

283.1 b comp. Star. Dec.

335.3

92.5 55.2'

163.5 70.7'

125.9' +1.07'

B

275.4 68.8'

344.2 55.9'

99.8 124.7' +1.09'

153.8 5.7

+1.08'

Index R & B

192.6

246.9 54.3'

1.7 76.3'

78.0 130.6 +0.97'

A

181.2

256.5 75.3'

9.4 62.4'

71.8 137.7' +0.82'

+0.90'

Mean +0.99

9 25 8

9 35 15

60 23

9 30 12

5 -37

14 29 35

S. T. 8h 39m

H. A. +3 53

Dec. +28.5

P. A. 218.5 Dec B

Sprocket - 1.5 B

- 0.5 b

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1905phae.proj..574W

March 1. 1905.

060521 +21° 1146 Phot I Ht. Boone rec.

6 6 +22.5 9".5 bap
8 44
+2 38

Index L & S

189.5 var. dis.
250.59 61.4 :
0.0 78.0 :
78.0 139.4 −0.79 (B)

178.9 −0.80
257.5 78.6 :
9.6 59.9 :
69.5 ~~70.7~~ 138.5 −0.80

Index R & B

101.0
158.0 57.0 :
270.7 78.6 : (A)
349.3 135.6 −0.86

93.3 −0.89
168.46 75.3 :
251.4 57.5 :
338.9 132.8 −0.92

Mean −0.84

9 59 02

10 9 52
19 68 54
9 64 27
5 −3 7
15 3 50

S.T. 9h 10m
H.A. 3h 3m
Dec. 22.0
P.A. 206.5 var. B
Sprocket −3.5 A
" −2.5 B
" −1.9 S

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1905phae.proj..574W

March 1. 1905

Y Camelop. Phot. J Hobe. Bowie. rec

7	25	+76.3
9	15	
+1	50	

Index L CB

277.0 ← Comp. Star dia.

339.4	62.4	
89.0	80.6	
169.6	143.0	+0.71 B

271.3 +0.7v

346.2	74.9	
96.5	64.4	
160.9	139.3	+0.79

Index R CA

183.4		
253.8	70.4	
1.4	78.0	A
79.4	148.4	+0.61

" +0.52

175.9	84.3	
260.2 ~~259.6~~	66.9	
5.1	151.2	+0.55
72.0	mean	+0.66

10 43 33

10 56 16

	101	49
10	50	54
5		−37
15	50	17

S.J. 9h 58m
L.A. 2 30
Dec +76.8
P.A. 346.0 Index B
Sprockets −1.5 A
" −0.5 B
" +0.1 b

Watch need for times taken
Watch 37 sec. fast
See p. 68 for Aurora.

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1905phae.proj..574W

March. 2. 1905. (Thursday)

Jups. Sats. Phot. M. M. obs. Bauer rec

Sat. III comp with I

9".5 bap

Index R. & B

340.0	~~Sat~~ III dist	
	78.6'	
58.6	76.5'	
162.1	155.1'	-0.48' A
238.6		
341.7		-0.48'
59.2	77.5'	
161.2	77.7'	
238.9	155.2'	-0.47'

Index L & A

248.9		
331.5	82.6'	B
69.7	79.4'	
149.1	162.0'	-0.34'
249.1		
330.1	81.0'	-0.34'
68.8	81.0'	
149.8	162.0'	-0.34'

Mean -0.41'

7 22 21

7 32 48

54' 69'

7 27 34'

5 -31'

12 27 3'

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1905phae.proj..574W

March 2. 1905.

Index R & B

249.2		
329.8	80.6'	
69.4	79.7'	
149.1	160.3'	-0.35'

249.3 -0.36'

329.1	79.8'	
68.8	82.6'	
151.4	162.4'	-0.33'

Index R & B

161.6		
239.3	77.7'	
341.7	77.1'	
58.8	154.8'	-0.48'

162.2		
235.4	76.2'	-0.47'
339.0	79.9'	
58.9	156.1'	-0.46'

Mean -0.42'

7 36 5

7 45 30

84 35

7 42 18

5 -31

12 41 47

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1905phae.proj..574W

March 2 1905

Z Persei. Phot J. Obs Bowie rec.

2	33	+42.2
8	00	
+5	27	
+5	30	

Index Lick → Comp. star dis.

188.3	61.7	
250.0		
0.0	72.0	
77.0	133.7	+0.40

B

181.5	76.2	+0.43
257.7		
8.4	59.4	
68.2	136.0	+0.26

Index R + B

100.5	63	
156.8		
268.8	79.9	+0.25
348.7	136.2	

A

89.0	79.4	+0.25
168.44		
281.0	70	
338.0	136.4	+0.25

Mean +0.24

9 14 5

9 22 52

9	36	57
5	18	26
		31
14	17	57

S.T. 8h 28m
R.A. 5 52
Dec. 42°.2
P.A. 195.9 Var B
Sprocket − 2.5 B
− 1.5 b

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1905phae.proj..574W

March 2. 1915

Z Draconis Phot J Hobe Bowie.

11	46	+73.0
8	35	
3	11	
+8	49	

I

Index Dec

199.2

9 59 50 239.9 40.7' B

14.4 47.6'

62.0 88.3' +1.96'

194.2 +1.96'

10 2 35 245.5 51.3'

19.4 37.2'

56.6 88.5' +1.95'

Index R&B

A

110.5

10 6 19 150.7 40.2'

283.4 49.2'

332.6 89.4' +1.93'

+1.93'

104.9

155.87 50.8'

259.3 38.5'

327.8 89.3' +1.93'

Mean +1.94'

10	9	5
39	76	109
9	64	27
5		−31
15	3	56

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1905phae.proj..574W

March 2. 1905.

Same again
Index R & B II

	110.2			
10 12 2	149.0	38.8		
	286.4	44.8		A
	331.2	83.6	+2.09	
	105.0		+2.02	
14 45	155.1	50.1		
	288.1	38.3		
	326.4	88.4	+1.96	

Index L & A

	19.4			
19 35	55.0	35.6		B
	194.1	48.4		
	242.5	84.0	+2.08	
	17.2		+2.23	
10 22 8	58.1	40.9		
	203.5	33.1		
	236.6	74.0	+2.38	

Mean +2.12

	67	96
10	16	69
10	17	9
+5		-31
15	16	38

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1905phae.proj..574W

March 2 1905

Same

Index Left

III

22.8

10 24 55 53.8 31.0'

197.8 45.7'

B 243.5 76.7' +2.29'

15.3 +2.30'

27 39 57.9 42.6'

202.5 34.0'

236.5 76.6' +2.30'

Index Right

292.6

31 30 322.9 30.3'

111.0 41.1'

A 152.1 71.4' +2.46'

287.0 +2.48'

10 33 45 328.2 41.2'

114.3 29.1'

143.3 70.3' +2.50'

Mean +2.39'

10 33 45

11 17 12'

10 24 22'

10 29 24'

+5 -31'

15 24 27'

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1905phae.proj...574W

March 2. 1905.

Index R & B

293.1

10 37 52

323.4 30.3' IV

112.7 34.8'

147.5 65.1' +2.67' A

290.7 +2.72'

41 12

326.54 35.7'

115.9 26.5'

142.4 62.2' +2.78'

Index L & A

205.3

46 10

232.9 27.6'

21.0 33.0' B

54 0 60.6' +2.84'

203.6 +2.94'

10 49 1

235.4 31.8'

26.0 23.7'

49.7 55.5' +3.04'

17 37 5

10 43 34'

+5 -31'

15 43 3'

Mean +2.83'

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1905phae.proj..574W

March 21 1905

Index L & A

206.6

10 52 0 231.1 24.5' V

23.0 29.0'

52.0 53.5' 3.12' B

204.9 +3.18'

10 54 45 235.2 30.3'

28.0 20.2'

48.2 50.5' 3.25'

Index R & B

119.1

10 59 [illegible] 140.3 21.2' A

294.0 28.1'

322.1 49.3' 3.30'

116.5

11 4 35 141.2 24.7' +3.43'

229 9 298.0 19.0'

10 57 ~~39~~ 40' 317.0 43.7' +3.57'

+5 -31'

15 57 9' Mean +3.50'

S. T. 10 6

H. A. -1 37

Var. +72.1

P. A. 174.2 Var B

Sprocket -0.5 A

" +0.5 B

" +1.1 b

This watch used for times tonight

Watch 31 sec. fast.

See p. 6 A for observers.

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1905phae.proj..574W

March. 3. 1905. (Friday)

Jupr. Sats. As indicated by diagram in in the Almanac no two Sats. can be compared together tonight, there distances apart being found to be too great on exam. at telescope

R J Persei. Phot. J. W. obs. Bonn rec.

3	0	+44.3
6	58	
+3	58	

Comp. Star = +46° 739 (9.2)

For measurements see next page.

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1905phae.proj..574W

March 3 1905

Index Above

8 49 05

22.3
56.4 ← comp star dra
197.5 34.1'
241.2 43.7'
77.8' +2.26'

I

A

18.0
8 52 50 58.8 40.8' +2.34'
202.6 31.5'
234.1 72.3' +2.43'

Index Below

294.0
8 58 51 324.2 30.2'
108.8 41.2'
150.0 71.4' +2.46'

B

288.4 +2.46'
9 2 2 330.5 42.1'
114.0 29.0'
143.0 71.1' +2.47'

221 108'
& ∨∨ 42.'
+∨ −29.'
13 ∨∨ 13'

Mean +2.40'

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1905phae.proj..574w

March 3 1905

Index Below

B

295.0

9 4 52 — 325.6 — 30.6'
43.6'
106.9 — 74.2' +2.37'
150.5

II

287.8 +2.31'

9 8 6 — 331.32 — 43.4'
34.6'
112.0 — 78.0' +2.25'
146.6

Above

200.8

A

9 12 30 — 236.1 — 35.3'
46.4'
13.6 — 81.7' +2.14'
60.0

193.4 +2.08'

9 14 48 — 243.2 — 49.8'
36.4'
19.8 — 86.2' +2.02
56.2

38 136'
9 9 64'
9 10 4'
+5 -29'
14 9 35'

Mean +2.20'

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1905phae.proj..574W

March 3. 1905.

Index Above

~~199.6~~

~~9 19 0~~ ~~238.0~~ III

14.0

9 21 18 66.0 52.0.

38.0.

198.8 90.0. +1.91. A

236.8

+1.88'

19.2

9 23 10 56.0 36.8.

56.0.

194.2 92.8. +1.84.

250.2

Index Below

284.5

9 25 2 332.7 48.2.

40.2.

107.8 88.4. +1.96. B

148.0

+1.86'

288.2

9 30 48 330.0 41.8.

54.6.

100.5 96.4 +1.75.

155.1

~~9 30 48~~

~~102 78.~~

9 25 50.

+5 -29.

14 25 21.

Mean +1.87'

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1905phae.proj...574W

March 3, 1905.

Index Below

281.2

9 35 5 — 334.7 ~~335.2~~ — 53.5 — IV

106.5 — 43.5

150.0 — 97.0 — +1.73 — B

288.4 — +1.68

9 39 9 — 331.0 — 42.6

99.0 — 58.2

157.2 — 100.8 — +1.64

Index Above

189.0

9 41 35 — 250.1 — 61.1 — A

16.4 — 44.6

61.0 — 105.7 — +1.52

197.9 — +1.54

9 44 25 — 242.1 — 44.2

8.5 — 59.9

68.4 — 104.1 — +1.56

Mean +1.61

9 44 25

159 74

9 39 64

9 40 40

+5 −29

14 39 35

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1905phae.proj..574W

March 3, 1905.

Iso-dec Above
186.3
9 47 34 248.8
17.2
61.6

Light clouds
10 00 00 Still cloudy

194.3
Stopped by clouds

S.J. 9^h 22^m
Δ h.a. +6 6
Dec +46°.8
P.A 359.5 ker B
Sprocket – 2.5 B
" – 1.5 b

The images were superposed before clouds became too thick but hour angle may be slightly in error. It is however pretty close and region, in advance was thoroughly identified

W's watch used for times tonight
Watch 29 sec. fast

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1905phae.proj...574W

March. 4. 1905. (Saturday)

Jup's. Sats. I bamp. with II Phot. Ver. Ver. obs. Bowie, rec. 9"5 bamp.

Index L & A

7 25 6

337.8	← I dis		
60.0			
153.8	82.2		B
242.5	88.7		
	170.9	−0.17	
395.3			
63.4	88.1	−0.24	
166.5	75.1		
241.6	163.2	−0.32	

Index R & B

247.4			
330.54	83.0		A
65.3	89.5		
154.8	172.5	−0.14	
244.3		−0.14	
331.6	87.3		
66.5	85.0	−0.14	
151.5	172.3		
		Mean −0.19	

7 35 9

60 15

7 30 8

5 −26

12 30 42

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1905phae.proj..574W

March 4 1905

Index R & B

247.3
331.7 84.4'
66.6 86.3'
152.9 170.7' −0.17'

A

245.4
332.2 86.8' −0.16'
66.4 84.8'
151.2 171.6' −0.16'

Index L & A

159.9
240.4 82.5'
334.4 89.4'
63.8 171.9' −0.15'

B

153.0
243.4 90.4' −0.12'
335.8 85.2'
61.0 175.6' −0.08'

Mean −0.14'

7 38 46 8

7 50 0 8

88 46
7 44 23 8
5 −26 5
12 44 57 13

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1905phaa.proj...574W

March 4. 1905

Index 2 & A

158.5

8 2 40

242.0 83.5' B

335.1 87.4'

62.5 170.9' −0.17'

155.2

242.0 86.8' −0.16'

337.9 84.5'

62.4 171.3' −0.16'

Index R & B

63.8

153.5 89.7'

247.5 84.9' A

332.4 174.6' −0.10'

66.8 −0.12'

151.0 84.2'

244.1 88.4'

332.5 172.6' −0.14'

Mean −0.14'

8 12 25

14 65'

8 7 32'

5 −26'

13 7 6'

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1905phae.proj..574W

March 4, 1905.

Z Persei Phot. J K. obs. Bowie rec.

2 33 +42.2
7 43
5 10

Index Lat

185.0 comp. star dis. B
250.4 65.4"
358.6 80.0"
78.6 145.4" +0.67'

180.6 +0.72'
257.6 77.0"
6.5 63.5"
70.0 140.5" +0.76'

Ind R & B

99.5 A
158.5 59.0"
268.9 79.6"
348.5 138.6" +0.80'

89.6 +0.83'
165.5 76.2"
278.9 59.4"
338.3 135.6" +0.86'

Mean +0.78

8 49 45

8 57 25
106' 70'
8 53' 35'
5 -26'
13 53 9

S. J. 8h 10m
R. A 5 35
Dec +42°.2
P. A. 195.8 for B
Sprocket -2.5 B
" -1.5 b

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1905phaa.proj...574W

March 4. 1905.

α Cephei Phot ⊙ α. obs. Bouvier

0 50 +81.2
8 15
7 25

I

Index 2 & 3
186.5 ← comp star dif
250.6 63.8
359.4 77.9
77.3 141.7 +0.74

B

9 20 52

178.0 +0.68
261.2 83.2
6.3 64.0
70.3 147.2 +0.63

9 23 52

Index R & B
98.2
161.5 63.6
266.7 83.9
350.6 147.5 +0.62

A

9 27 23

86.3 +0.60
171.0 84.7
276.4 64.9
341.53 149.6 +0.58

9 29 40

Mean +0.64

99 167
9 24 87
5 −26
14 25 1

1905phae.proj..574W

March 4. 1905

Index R & B

94.9 II

9	32	34	161.0	~~+60.7~~ 66.1'	
				263.2 88.6'	A
				351.8 154.7'	+0.48'
			84.0		+0.48'
9	35	20		173.3 89.3'	
				276.0 66.3'	
				342.3 155.6'	+0.47'

Index L & A

6.1

9	38	20		72.9 66.8'	B
				172.0 93.3'	
				265.3 160.1'	+0.38'
			352.3		+0.33'
9	41	35		86.0 93.7'	
				183.6 71.4'	
				255.0 165.1'	+0.28'
	146'	109'			
9	36	57'		Mean	+0.40'
5		-26'			
14	36	31'			

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1905phao.proj...574W

March 4. 1905.

Index R & A

III

3.3

9 43 58

74.0	70.7	
167.9	97.7	
265.6	168.4	+0.22

B

351.0		+0.19
86.87	95.7	
179.6	75.6	
255.2	171.3	+0.16

9 46 30

Index R & B

271.1

9 51 0

345.3	74.2	
76.9	100.6	
177.5	174.8	+0.10

A

261.5		+0.13
356.0	94.5	
89.0	77.3	
166.3	171.8	+0.16

9 53 8

193 96

9 48 39

5 -26

14 48 13

Mean +0.16

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1905phae.proj..574W

March 4. 1905.

Index R. B

	269.1			IV
9 56 11	347.0	77.9		
	77.0	102.0		
	179.0	179.9	0.0	A
	258.4		−0.03	
10 00 7	359.4	101.0		
	87.1	82.2		
	169.3	183.2		
		176.8	−0.06	

Index L a A

	177.9			
10 4 58	260.8	82.9		B
	344.4	107.0		
	91.4	189.9		
		170.1	−0.19	
	161.6			
10 7 30	274.0	112.4	−0.28	
	354.6	86.4		
	81.0	198.8		
		161.2	−0.36	
			mean −0.15	

39	67	106
9	61	72
5		−26
15	1	46

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1905phaq.proj...574W

March 4 1905

Index Lab V

			174.0		
10	10	33	262.86	88.6	
			342.8	108.2	B
			91.0	196.8	
				163.2	−0.32
			161.9		
10	13	11	274.4	112.5	
			354.1	87.1	−0.34
			81.2	199.6	
				160.4	−0.37

Index R & B

			82.4		
10	16	40	174.4	92.0	
			252.8	112.9	A
			5.7	204.9	
				155.1	−0.48
			71.4		
10	19	48	184.9	113.5	
			262.6	90.8	−0.47
			353.4	204.3	
				155.7	−0.46
				Mean	−0.40

	58	132
10	14	63
5		−26
15	14	37

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1905phae.proj..574W

March 4, 1905.

Index R & B

82.6 VI

10	22	58	173.4	90.8'	
			250.8	114.2'	A
			5.0	205.0'	
				155.0'	−0.48'

69.0

10	25	15	154.6	115.6'	−0.50'
			262.3	91.7'	
				207.3'	
			354.0	152.7'	−0.52'

Index L & A

350.6

10	29	18	83.8	93.2'	B
			157.0	118.8'	
				212.0'	
			275.8	148.0'	−0.61'

338.0

10	32	23	96.3	118.3'	−0.64'
			169.5	95.8'	
				214.1'	
			265.3	145.9'	−0.66'
				Mean	−0.57'

	108'	114'	
10	27	28	
5		−26'	
15	27	2	

S. T. 9h 46m
R. A. +8h 48m
Dec. +81.°8
R. A. 18.0 Var B
Sprocket − 1.5 B
" − 0.5 b

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

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1905phaa.proj...574W

March 6 1905 (Monday)

Phot. M. M. obs Bowie rec

Jupi. Sats. ~~Sat III~~ comp. with ~~Sat IV~~

9."5 bap

Index d & B

72.0 ~~Sat III~~ dis

7 23 22 133.6 61.6 ✓

253.0 58.0 ✓ 119.6 ✓ −1.20 ✓

311.0

B.

72.3 60.5 ✓ −1.19 ✓

132.8

252.1 60.2 ✓

312.3 120.7 ✓ −1.18 ✓

Index R & A

340.9 61.6 ✓

42.5

161.6 60.2 ✓

221.8 121.8 ✓ −1.17 ✓

A.

342.9 59.0 ✓ −1.14 ✓

7 35 6 41.9

58 28 159.8 63.1 ✓

7 29 14 222.9 122.1 ✓ −1.14 ✓

5 −21

12 28 53 Mean −1.16 ✓

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1905phae.proj..574W

March 6. 1905.

Index R & A

339.5
41.4 61.9 ✓
160.3 60.2 ✓
220.5 122.1 ✓ −1.14 ✓

339.5 61.6 ✓ −1.12 ✓
41.1
159.0 62.7 ✓
221.7 124.3 ✓ −1.10 ✓

L & B

248.9 60.6 ✓
309.5
69.6 59.5 ✓
129.1 120.1 ✓ −1.19 ✓

250.3 58.7 ✓ −1.19 ✓
309.0
68.0 61.5 ✓
129.5 120.2 ✓ −1.19

mean −1.16 ✓

7 57 58

7 46 30

83 88
7 41 74
5 −21
12 41 53

8
8
5
13

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1905phae.proj..574W

March 6. 1905.

Phot. Yr. Yr. obs. Bowie rec.

Sat. II compared with Sat. IV.

Index R & B

149.5 ← Sat. II dis. 9",5 bad

8 4 35

227.4 77.9'

332.2 74.2'

46.4 152.1' − 0.53'

A

150.5 − 0.52'

223.4 72.9'

326.3 80.0'

46.3 152.9' 0.52'

Index L & A

60.2

B

133.1 72.9'

240.0 73.0'

313.0 145.9' − 0.66'

59.2 − 0.64'

132.9 73.7'

239.1 74.0'

313.1 147.7' − 0.62'

Mean − 0.58'

8	15	55
	19	90'
8	9	75'
5		−21'
13	9	54'

Region now getting too low, to take a second group

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1905phae.proj..574W

March 6. 1905.

Z Persei. Phot. J. H. obs. Brauer rec

2	33	+42.2
8	55	
6	22	
6	26	

Index A & A

8.0 ← comp. star. dia.

68.1	60.1'	B
177.5	81.8'	
259.63	141.9'	+0.74'

358.4		+0.76'
78.1	79.7'	
188.8	59.4'	
248.2	139.1'	+0.79'

Index R & B

276.9		
338.8	61.9'	A.
87.6	79.3'	
166.9	141.2'	+0.75'

269.4		+0.80'
347.7	78.3'	
99.2	58.3'	
157.5	136.6'	+0.84'

Mean +0.78

9 56 0

10	4	0
19	60'	0
9	60'	0
5		−21
14	59	39

S.J. 9h 24m
H.A. 6h 48m
Dec +42°.2
P.A. 195.3
Spectr −2.5 B
" −1.5 b

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1905phae.proj..574

March 6. 1905.

R J Persei. Phot. J. K. obs, Bowie, rec.

3 0 +44.3
9 30
6 30

Index L & A

11.0 ← comp. star. dis.

10 37 48

65.4 54.4'
182.9 69.1'
252.0 123.5' +1.12'

(B)

2.3 +1.12'
72.7 70.4'
191.8 52.5'
244.3 122.9' +1.13'

Index R & B

282.6

(A)

334.3 51.7'
93.0 69.6'
162.6 121.3' +1.16'

272.6

10 55 2
92 50'
10 46 25'
5 -21'
15 46 4'

342.8 70.2' +1.14'
101.8 53.0'
154.8 123.2' 1.12'

Mean +1.13'

R.J. 10h 19m
R.A. 7h 0m
Dec. 46.7
P.A 179.0 Ver B
Sprocket −2.5 B
" −1.5 b

K's watch used for times
K watch 21 sec. fast
Seeing, during above groups, rather blurry.
Bubble also gave trouble. Groups ½ wt.

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1905phae.proj..574W

Auroral Phenomena.

Mar. 7. 1905. Last night after finishing work and just before retiring — that is, at about 12h-1/2m being a little after midnight, noticed quite a brilliant aurora in north. It was in the shape of a low arch, the summit of the arch being about 1/4 the way from horizon to Pole Star. The arch was continually changing in intensity and interspersed with streamers, extending at times some little distance above arch. Altogether, the display was quite brilliant.

D. C. H.

Wednesday evening, March 6. There was considerable auroral light in north, assuming the form of a fine low arch about midnight, ~~and~~ with black sky underneath. and on the next night, Mar. 7, there was considerable auroral light in north but not as pronounced or fine as on Mar. 6.

The display of ~~last~~ last night, first mentioned above, was, however, by far the finest of all.

D. C. H.

7
5
12

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1905phae.proj..574W

March. 10. 1905. (Friday)

Bowiesec.

Jupis Sats. Sat III comp Sat IV Phot N Nebs. ^

9.5 bap

Index S & A

33 ~~47~~ 20 Sat. III dec.

7 27 45

33.6	61.6
153.5	59.0
212.5	120.6 . −1.18

B

31.0

~~333.3~~ 62.7 −1.17

33.7	58.8
153.2	121.5 −1.16
212.0	

Index R & B

243.2	
301.2	58.0
61.6	61.0
122.6	119.0 −1.21

A

242.1	−1.22
301.2	59.1
62.2	59.8
122.0	118.9 −1.22

Mean −1.19

7 37 15

64 60

7 32 30

5 −19

12 32 11

Stopped by cloud and haze. Troubled a little by light cloud in above group but extreme care exercised

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1905phae.proj..574W

March 10. 1905.

Z Persei Phot. J. H. obs. Bowie rec.

2 33 +42.2
8 24
5 51

Index L & A

6.0 comp star rdgs

68.5 62.5
177.2 80.1
257.3 142.6 +0.72

B

354.1 +0.70
76.7 82.6
187.0 62.6
249.6 145.2 +0.67

Index R & B

276.5
338.0 61.5
88.0 75.8
163.8 ~~165.5~~ 137.3 +0.83

A

268.5 +0.81
346.7 ~~347.12~~ 78.2
97.7 60.8
~~159.7~~ 8.5 139.0 +0.79

Mean +0.76

9 19 35
27 75
9 13 68
5 -19
14 13 49

S J 8 59
H.A 6 22
Dec +42.1
P.A 196.0 Var B
Sprocket -2.5 B
" -1.5 b

9 8 40

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1905phae.proj..574W

March 10. 1905

R Persei. Phot. J. Ke. obs. Bowdoin.

3 0 +44.3
9 8
6 8.

Index Err

B

187.9 comp star dia.
248.0 60.1'
1.1 68.9'
70.0 129.0' +1.00'

10 1 8

181.4 +1.00'
255.3 73.9'
9.5 55.5'
65.0 129.4' +0.99'

Index R & B

A

102.3 52.3'
154.6 70.5'
272.8 122.8' +1.13'
343.3

92.0 +1.13'
161.5 69.5'
280.4 53.3'
333.7 122.8' +1.13'

Mean +1.06'

10 11 50
12 58'
10 6 29'
5 -19'
15 6 10

S.T 10h. 5m.
R.A 6 47
Dec +46.6
P.A 177.4 Var B
Sprocket -2.5 B
" -1.5 b

We're watch used for times tonight
Watch 19 sec. fast.

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1905phae.proj..574W

March 11. 1905 (Saturday)

Bowie, rec.

Jupiter Sats. Sat III bump with Sat I Phot. A. W. obs. 9".5 bapi

Index R & B Below

48.6 ~~45.5~~ ← Sat III dis.

130.5	81.9'	
228.2	80.1'	
308.3	162.0	-0.34'

48.5		-0.32'
129.5	81.0'	
226.4	82.5'	
308.9	163.5'	-0.31'

Index ~~L & R~~ Above

314.5		
40.0	85.5'	
136.5	81.7'	
218.2	167.2'	-0.24'

315.4		-0.26'
37.2	81.8'	
134.9	83.8'	
218.7	165.6'	-0.27'

Mean -0.29'

7	26	2
7	36	18
	62	20
7	31	10
5		-18
12	30	52

7

7

7

7

5

12

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1905phae.proj...574w

March 11. 1905

Same again

Index	Strae	
314.0		
39.3	85.3	
134.9	84.0	
218.9	169.3	0.20

314.1		−0.25
35.8	81.7	
133.6	82.6	
216.2	164.3	0.30

Index Below

223.6		
304.5	80.9	
44.1	81.4	
125.5	162.3	0.34

223.9		−0.34
305.0	81.1	
43.1	81.2	
124.3	162.3	0.34

Mean −0.30

7 44 45

7 56 0

100 45

7 50 22

5 −18

12 50 4

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1905phae.proj..574W

March 11. 1905.

Brorsen

Jupis Sat Sat I comp Sat II Phot W. Knobe.

Index R & B 9.5 bap

221.1 Sat I dis.

8 2 6

302.6 81.5'

41.7 84.8'

126.5 166.3' −0.26' A

220.3 −0.23'

306.0 85.7'

40.7 83.7'

124.4 169.4' −0.20'

Index L & A

130.1

215.5 85.4'

307.2 89.4' B

36.6 174.8' −0.10'

127.0 −0.08'

216.5 89.5'

306.6 87.6'

34.2 177.1' −0.05

Mean −0.16'

8	12	42
	14'	48'
4	7	24'
5		−18'
13	7'	6

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1905phae.proj..574W

March. 11. 1905.

In first two groups tonight where Sat. III was comp. with Sat. I, Sat III was too near Jup. to measure the light of this pair satisfactory Observer had serious misgivings (before measuring this pair) about measuring them, but finally concluded to do so.

Even after beginning he practically concluded to stop at end of first group (on account of the unsatisfactory conditions and difficulties experienced) but finally concluded to try a second group. The wind, rising barometer, and somewhat poor seeing also complicated matters so that the measurements of this pair throughout were difficult and unsatisfactory. These two groups .½ weight

The last group in which Sat. I was comp. with Sat II was much more sastisfactory and considered allright, the images being more distant from Jup. and the measurements made with comparitive ease.

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1905phae.proj..574W

March. 11. 1905.

R. J. Peiser Phot. J. Hoke. Bowie. Rec.

3 0 +44.3
8 48
5 48

9 27 52

Index S & A

190.6 < comp. star. dia.
244.3
1.6
72.5

53.7'
70.9'
124.6' +1.09'

B

180.8 +1.07'
252.2
9.9
65.0

71.4'
55.1
126.5' +1.05'

Index R & B

101.7
155.6
273.9
341.2

53.9'
67.3'
121.2' +1.17'

A

92.9 +1.18'
160.1 ~~+59.4~~
281.4
334.8

67.2'
53.4'
120.6' +1.18'

Mean +1.12'

9 39 18
66 70
9 33 35'
5 -18'
14 33 17'

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1905phae.proj...574W

March 11. 1905.

Index R & B.

9 57 35

100.1			
154.5	54.4		
275.5	64.5		A
340.0	118.9	+1.22	

93.8		+1.22	
160.37	66.9		
282.4	51.5		
333.9	118.4	+1.23	

Index L & A

11.3			B
62.0	50.7		
184.7	68.6		
253.3	119.3	+1.21	

2.8		+1.18	
71.9 ~~72.0~~	69.1		
192.8	52.2		
243.5 ~~5~~ 5.0	121.3	+1.16	

Mean +1.20

10	6	36
19	63	71
9	61	66
5		-18
15	1	48

S. T. 9h. 51m.
H. A. +6h. 32m.
Dec.
P. A. 179.0 on B.
Sprockets −2.5 B
" −1.5 L

Tel. accidently moved in dec some distance before thinking to read dec. but region thoroughly identified

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1905phae.proj..574W

March. 11. 1905

Z Persei. Phot. J. Hoke. Bowie, rec.

2 33 +42.2
9 55
7 22

Index Left

183.6 comp. star dia.

10 27 56

250.0 66.4' B
355.4 80.8'
76.2 147.2' +0.69'

174.7 +0.68'
257.0 82.3'
6.8 60.3'
67.1 142.6' +0.72'

Index R+B

93.4
160.3 66.9' A
74.0'
~~265.9~~ 70.1 140.9' +0.76'
~~345.6~~ 4.1

+0.80'

88.5
165.9 77.4'
60.0'
279.0 137.4' +0.83'
339.0

10 37 38
64' 94'
10 32 47'
5 -18'
15 32 29'

S.J. 10 30
H.A. +7 53
Dec +42.1
P.A. 195.5 A+B
Sprocket -2.5 B
-1.5 A

Mean +0.74'

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

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1905phae.proj...574W

March. 13. 1905. (Monday).

Bonnevier

Jupr. Sats. Sat. III comp. with Sat. II Phot. R. R. obs.
9".5 b ap

Index Above

7 13 45	133.9	71.7	Sat III dia
	205.6	68.9	
	314.8	140.6	0.76
	23.7		
			0.72
	133.7		
	206.1	72.4	
	314.2	71.6	
	25.8	1440	0.69

Index Below

	43.8	72.1	
	115.9	71.6	
	222.2	143.7	0.70
	293.8		
	43.0		0.71
	113.6	70.6	
7 26 25	220.8	72.2	
	293.0	142.8	0.72

Mean — 0.72

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1905phae.proj..574W

March 13, 1905

Sat. III Comp. with Sat. II

Index Below

		40.3		
		113.4	73.1	
7	35	19	73.6	
		218.6	146.7	−0.64
		292.2		
				−0.62
		38.5		
		113.2	74.7	
		218.4	73.3	
		291.7	148.0	−0.61

Index Above

		308.6	73.3	
		21.9	74.9	
		125.6	148.2	−0.61
		200.5		
				−0.60
		305.0		
		20.4	75.4	
7	50	1	73.5	
		125.4	148.9	−0.60
	85	20		
7	42	40		
5		−5		
12	42	35		

Mean −0.61

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1905phae.proj...574W

March 13. 1905.

Index Above

8 11 10	338.3	80.3°	
	58.6	66.4°	
	164.2	146.7°	−0.64°
	230.6		
			−0.71°
	346.5		
	50.5	64.0°	
	157.5	75.9°	
	233.4	139.9°	−0.78°

Index Below

	247.1		
	328.6	81.5°	
	75.8	65.7°	
	141.5	147.2°	−0.63°
	254.8		−0.59°
	321.0	66.2°	
	66.5	85.1°	
	151.6	151.3°	−0.55°

Mean − 0.65°

8	26	0
	37	10
8	18	35
5		−5
13	18	30

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1905phae.proj..574W

March. 13. 1905.

Z Draconis Phot. Hoba Bonn ser

11	46	+73.0
9	12	
2	34	
9	26	
2	30	
9	30	

Abandoned

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1905phae..proj..574W

March 13 1905

Y Camelop Phot. J. Wolf Bonn rec

7	24	+76.3
9	30	
2	6	

Index L+B

276.2 ← Comp. Star. dec.

339.86	63.4	
88.0	79.8	
167.8	143.2	+0.71

B

266.6 +0.72

346.5	79.9	
96.4	63.0	
159.4	142.9	+0.72

Index R+A

177.1

256.6	79.5	
3.6	67.3	
70.9	146.8	+0.64

A

185.0 +0.62

251.1	66.1	
356.6	82.2	
78.8	148.3	+0.61
	Mean	+0.67

10 22 0

32 15

10 16 8

5 −5

15 16 3

S.T. 10h 12m

M.A. 2h 43m

Dec. +76.7

P.A. 347.4 Var B

Sprocket −1.5 A

" −0.5 B

" +0.1 b

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1905phae.proj..574W

March 13, 1905

~~0605-21 +21°~~ Bowie sec

Doubt. Var. 0605-21 +21° 1146 Phot 3 Probe

9".5 bape

6 6 22.5
10 25
4 19

Index L & A

187.0 ← var dis B

248.7	61.7'	
358.7	75.3'	
74.0	137.0'	−0.83'

10 50 30

178.1		−0.85'
254.7	76.6'	
7.7	58.9'	
66.6	135.5'	−0.87'

Index R & B

101.4 A

155.8	54.4'	
270.7	71.3'	
342.0	125.7'	−1.07'

93.5		−1.04'
162.7	69.2'	
277.5	59.9'	
337.4	129.1'	−1.00'

Mean −0.94'

10 59 1

	109'	31"
10	54	46
5		−5
15	54	41

S.J. 10h 47m
Hab. +4 40
Dec. +22.0
P.A. 208.2 Var B
Sprockets −3.5 A
" −2.5 B
−1.9 b

We watch used for times tonight
Watch 5 sec fast

7 7 5 12

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1905phaa.proj..574W

March. 15. 1905 (Wednesday)

Jupia. Sats. Phot. W. Hobe. Bowie rec.

Sats II comp with Sats IV

Index L & A.

164.4	75.6'	Sat II dia.	
240.0	72.3'		B.
345.7	147.9'	-0.62'	
58.0			
167.0		-0.69'	
237.7	70.7'		
346.8	70.1'		
56.9	140.8'	-0.76'	

Index R & B A.

77.1		
148.7	71.6'	
256.6	70.3'	
326.9	141.9'	-0.74'
76.3		-0.72'
148.2	71.9'	
256.2	71.6'	
327.8	143.5'	-0.70'

Mean -0.70'

7 19 0

7 26 40

45' 40"

7 22 50

5 -1

12 22 49

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1905phae.proj..574W

March 15 1905

Index R & B

	76.6		A
7 29 10	147.4	70.8	
	256.7	70.6	
	327.3	141.4	−0.75

76.3		−0.74
148.2	71.9	
257.2	70.3	
327.5	142.2	−0.73

Index L & A

346.5		B
57.6	71.1	
166.5	72.0	
238.5	143.1	−0.71

346.2		−0.69
58.0	71.8	
166.1	73.3	
239.4	145.1	−0.67

Mean −0.72

7	41	0
	70	10
7	35	5
5		−1
12	35	4

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1905phae.proj...574W

March .15.1905.

Asteroid Eunomia (15)

$\begin{array}{cc} 7 & 57 \\ 8 & 8 \\ \hline & 11 \end{array}$ +13.5

$\begin{array}{cc} 7 & 57 \\ 8 & 52 \\ \hline & 55 \end{array}$

$\begin{array}{cc} 7 & 57 \\ 9 & 35 \\ \hline 1 & 38 \end{array}$

$\begin{array}{cc} 7 & 57 \\ 9 & 38 \\ \hline 1 & 41 \end{array}$

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1905phae.proj..574W

March. 15. 1905.

A 9.5 mag. precedes +13° 1875 (9.0) by 22 sec. and is 2'.7 south of it

A 9.5 mags. precedes +13° 1875 (9.0) by 12 sec. and is 6'.2 south of it

A 10.0 mag. precedes +13° 1875 (9.0) by 1m. 44sec. and is about 2'.5 south of it.

As clouds became thicker, the last difference in dec is only approximate

Delayed by clouds

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1905phae.proj..574W

March 15 1905

This is not Eunomia (See bottom of page 90)

Index 2 KB

344.7 ← comp star dec.

10 12 45 90.2

173.4

264.1

352.5

82.7

162.7

270.4

Index R A Wrong object

256.2

358.0

84.6

172.8

264.2

10 22 0 350.8

75.0

178.4

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1905phae.proj..574W

March 15. 1905.

This is not Eunomia.

256.1
9.1
84.1
169.0 Strong object

265.5
350.8
76.1
179.0

10 31 10

On account of much trouble in identifying through clouds observer accidently got wrong object for Eunomia

Right object measured on the two following pages

10
5
15

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1905phae.proj..574W

March. 15. 1905.

Eunomia. Phot ✓ Wolf Bonn. rec.

Comp. Star = 13° 1875 (9.0)

Index Rod.

272.5 ← Comp Star dis.

10 47 2

348.7 3.4 70.6.
95.0 62.6.
157.6 133.2. +0.91. A

278.5 +0.93.
336.4 57.9.
91.0 73.5.
164.5 131.4. +0.95.

Index d v B

178.5 B
255.2 76.7.
8.6 55.8.
64.4 132.5. +0.93.

187.1 +0.92.
248.6 61.5.
1.5 72.0.
73.5 133.5. +0.91.

Mean +0.92.

10	57	45
	104.	47.
10	52	24.
5		−1.
15	52	23.

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1905phae.proj..574W

March 15. 1905.

Index L & B

180.0			
11 0 35	257.3	77.3'	
	8.6	55.4'	
	64.0	132.7'	+0.92' B
	186.5		+0.90'
	248.0	61.5'	
	0.3	73.7'	
	74.0	135.2'	+0.87'

Index R & A

276.8			
339.1	62.3'		A
100.2	55.4'		
155.6	117.7'	+1.24'	
	282.4		+1.22
11 8 39	334.2	51.8'	
	93.5	68.3'	
8 7 4	161.8	120.1	+1.19'
11 4 37			
5 1			Mean +1.06
16 4 36			

S.T. 11h 1m
H.A. +2h 49
Dec. +13.2
P.A. About 67
Sprocket +1.0 B
" +2.0 b

W's watch used for times
Watch 1 sec. fast.
The above (7 1/2) groups. 1/4 wt. Greatly troubled by clouds - ~~Lost~~ Asteroid nearly invisible most of the time. Observations extremely difficult and somewhat uncertain.
Position circle moved accidently before reading
Much better seeing in 1st group

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1905phae.proj..574W

March. 16. 1905. (Thursday)

Eunomia Phot. J. H. obs. Bowie rec.

7	57	+13, 5
8	35	
	38	
	5	
	43	

Eunomia precedes +13° 1875 (9.0) by 26.5 sec and is 2'.9 south of it

Eunomia precedes +13° 1874 (9.5) by 15.5 sec. and is 3'.9 north of it.

For measurements see next page.

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1905phae.proj..574W

March. 16. 1905.

Index 2 B

359.0	Comp. Star dis.		
75.5	76.5		
187.5	55.9		
243.4	132.4	+0.93	B

6.8		+0.96	
62.8	56.0		
182.3	73.7		
256.0	129.7	+0.99	

Index R A

265.3			
344.6	79.3		A
94.4	66.6		
161.0	145.9	+0.66	

274.5		+0.67	
339.0	64.5		
86.9	80.0		
166.9	144.5	+0.68	

Mean +0.82

9 19 8

9	52	47
	71	55
9	35	58
5		+7
14	36	5

S. T. 9h 59m
R. A. 1h 48m
Dec. + 13.3
P. A. 247.0
Sprocket. + 0.5 A
" + 1.5 B
" + 2.1 b

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1905phae.proj..574w

March. 16. 1905.

Observations extremely difficult. Asteroid within about 4° of the Moon. Moon two days past the quarter.

Clouds cleared off and sky became pretty clear a little before beginning observations. Sky however probably not perfectly clear and moon very bright producing a great glare on the prisms and in the field. Settings however were made with great slowness and extreme care, keeping the objects in the centre of the field (the objects in the sky being rather near together) and observer resting his eye continually between settings and also perfecting each setting as carefully as possible.

044068 — Camelop. Phot. I. Asbe. Boone rec.

9.5 bap

4	40	+66.1	
10	25		
5	4.8		

For measurements see next page.

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1905phae.proj..574W

March 16, 1905.

Index L & B

	184.6	comp. star dis	
10 44 38	249.2	64.6	
	10.7	51.3	
	62.0	115.9	+1.28 B
	192.8		+1.29
	243.0	50.2	
	5.4	64.8	
	70.2	115.0	+1.30
	93.8		
	160.5	66.7	
	282.5	48.3	
	330.8	115.0	+1.30
	102.1		+1.33
	151.0	48.9	
	274.8	63.7	
	338.5	112.6	+1.36
		Mean	+1.31

10	53	15
	97	53
10	4 8	56
5		+6
15	49	2

S.T. $10^h\ 53^m$
R.A. $+6^h\ 8^m$
Dec. +68.3
P.A. 262.5 Vm B.
Sprocket −1.5 B
" −0.5 b

K's watch used for times.
Watch 7 sec slow.

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1905phae.proj...574

March 17, 1905 (Friday)

Jup's. Sats. Phot. Fr. Hale. Brown. rec.
Sat. I bump. Sat. IV

9".5 bap

Index R & B

348.9 ← Sat I dis
55.3
166.7 66.4'
236.1 69.4'
135.8' −0.86'

A.

346.8 −0.84'
57.9 71.1'
168.3 66.4'
234.7 137.5' −0.82'

Index L & A

77.1
146.8 69.7'
256.8 68.5'
325.3 138.2' −0.81'

B.

76.8 68.8' −0.82'
145.6 68.3'
257.2 137.1' −0.83'
325.5

Mean −0.83'

7 16 0

7 25 5
41' 5'
7 20 32'
5 +5'
12 20 37'

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1905phae.proj..574W

March 17. 1905.

Index Left

	76.8		B
7 28 20	146.3	69.5.	
	258.5	66.7.	
	325.2	136.2.	−0.85.

78.3		−0.84.
146.4	68.1.	
257.9	68.9.	
326.8	137.0.	−0.83.

Index Right

	348.2		A
	56.8	68.6.	
	168.7	66.1.	
	234.8	134.7.	−0.88.

346.5		−0.82.
57.8	71.3.	
166.5	70.0.	
236.5	141.3.	−0.75.

Gen. Mean −0.83.

7	37	30
	65	50.
7	32	55.
5		+5.
12	33	0.

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1905phad.proj...574w

March. 17. 1905.

Double Star Phot. R. Hobe. Bowne rec.

7	25	-31.5	Posit. Ang.	60°	Dist 7"
8	30		Image.	7.0	7.7
1	5				

Index R & B

	80.5		
8 49 28	153.2	Brightness	A
	256.0	72.7'	
	328.7	72.7'	
		145.4'	0.67'
	78.0		0.58'
	151.0	73.0'	
	253.0	81.0'	
	334.0	154.0'	0.50'

Index L & A

	343.4		B
	64.6	81.2'	
	168.4	70.3'	
	238.7	151.5'	0.55'
	348.0		0.56'
	58.6	70.6'	
	164.1	79.0'	
	24 ~~2.5~~	149.6'	0.58'
	3.1		

Mean 0.57'

9	3	22
17	52'	50'
8	56'	25'
5		+5'
13	56'	30'

High power used. Seeing rather poor and blurry a considerable part of the time. Waited until images became steady as possible

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1905phae.proj.:574W

March 17. 1905.

Double Star. Phot. R. Knobe. Bonn. rec.

δ 10 −36.0
9 14
1 4 Pos. Ang. 175° Dist 1.2 Images
5.8 7.0

Index Below

327.2	Brighter & brighter, dis.		
30.4	63.2'		
147.2	65.6'		
212.8	128.8'	1.00'	B

326.4			
33.8	67.4'	0.94'	
144.0	67.9'		
211.9	135.3'	0.87'	

Index Above

234.2			A
303.1	68.9'		
55.4	64.7'		
120.1	133.6'	0.90'	

		0.90'	
235.0			
301.4	66.4'		
53.9	68.1'		
122.0	134.5'	0.89'	

Mean 0.92'

9 25 50

9 35 5
60' 55'
9 30' 28'
5 +5'
14 30 33'

Power 135 used.

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1905phas.proj...574W

March. 17. 1905.

Double Stars Phot R Knobs. Bowie rec.

9 6 −30.0
9 54
48

Pos. Ang. 155° Dist 25" Mags 6.0 9.8
Index R & A

104.7 ← Brighter dia
122.2 17.5
285.9 13.8
299.7 31.3 4.31 A
1 4.30
107.5
120.3 12.5
284.0 18.9
302.9 31.4 4.30

Index L & B

13.8
32.9 19.1
197.3 12.7
210.0 31.8 4.27 B
4.25

15.7
30.0 14.3
18.1
~~192.3~~ 3.4 32.4 4.23
211.5 Mean 4.28

10 5 30

10 19 40
24 70
10 12 35
5 +5
15h 12m 40s

High power used.

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1905phae.proj..574W

March. 17. 1905.

Sunonia Hobbs. Bonn sec.

7	57	+13.5
10	35	
2	38	

Asteroid precedes +13° 1875 (9.0) by 29.5 sec and is 4.'0 south of it

Asteroid precedes +13° 1874 (9.5) by 18.5 sec and is 2.'9 north of it

H'e watch used for times tonight
Watch 5 sec slow

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1905phaa.proj..574w

March 18 1905. (Saturday)

Jupe Sats. Phot Glob Bowe rec

7 3 0 Invisible in clouds
7 7 0 Jupiter invisible and Venus nearly invisible
7 18 0 Clouds now all over the sky.
7 33 0 Jupr. invisible. Sky practically all invisible.

Double Star. Phot. R. Globe. Bowe. rec.

7 25 −31.5"
8 43
1 18

Post. Ang. 60° Dist. 7" Image. 7.0, 7.7

8 50 Too cloudy to do anything now.

Abandoned

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1905phae.proj..574W

March. 18. 1905.

Double Star. −25° 3911, 3914

6 57 −25.1.
9 23
2 26

Post. Ang. 25° Dis 2'+ Image 5,5 9,0
Index Below
88.2 Brighter dis
132.7 4.5
275.2
305.0

9 33 57

Stopped by Clouds
Impossible to do anything further Clouds over-spreading the sky again.

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1905phaa.proj...5744

March. 22. 1905. (Wednesday)

Special list
Double Star ∧ Phot. R. H. obs. Bowie. Sec.

7 25 −31.5
8 00
35 Post. Ang. 60° Dist 7" Mags 7.0, 7.7

Index R & B

256.0 ← Brighter dis.
330.0 74.0'
74.5 80.7'
155.2 154.7' 0.48'

0.58

258.4
330.5 72.1'
78.0 72.7' A
150.7 144.8' 0.68'

Index L & A

164.4
240.7 76.3'
346.7 75.3'
62.0 151.6' 0.54' B

0.58'

167.3
238.5 71.2'
345.5 76.4'
61.9 147.6' 0.62'
Mean 0.58'

7 57 35

8 12 40
15 69 75'
7 64 68'
5 +15'
13 5 25'

High Power

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1905phae.proj..574W

March 22, 1905.

Double Star. Special List. Phot. R. A. obs. Bonn rec.

8 10 −36.0
8 42
32

Reading. 175° Dist. 1.2. Image. 5.5, 6.5

Index Above

75.3 Brighter dis

8 37 23

145.0 69.7
258.1 66.9
325.0 136.6 0.84 A

72.0 0.78
145.7 73.7
257.0 68.5
325.5 142.2 0.73

Index Below

348.0 B
54.0 66.0
169.1 64.2
233.3 130.2 0.97

349.0 1.02
51.8 62.8
169.0 63.0
232.0 125.8 1.07

Mean 0.90

8 46 35
8 83 58
8 41 59
5 +15
13 42 14

Power 135 used.

9
9
5
14

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1905phaa.proj..574

March. 22. 1905.

ν Cephei Phot J Kobe. Barnard

9".5 Cap

23	50	+82.3
33	40	
9	50	
	5	
9	55	

9 41 50

Index L & A

188.2	var dis	
247.5	59.3	
356.2	82.0	
78.2	141.3	-0.75
		-0.70

B.

175.5		
258.3	82.8	
6.5	62.8	
69.3	145.6	-0.66

Index R & B

96.6		
159.0	62.4	
267.8	78.4	
346.2	140.8	-0.76
		-0.78

A.

87.6		
168.8	81.2	
279.1	57.0	
336.1	138.2	-0.81

Mean -0.74

9	54	35
	95	85
9	47	72
5		+15
14	48	27

P.A. 10^h 20^m
H.A. +10 25^m
Dec. +82.9
P.A. 145.1 Var B
Sprocket -2.5 B
-1.5 b

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1905phae.proj..574W

March. 22. 1905.

045443 ε Aurigae Phot. D. H. dr. Bonn rec

4 55 +43.7
10 49
5 54

Index L.A 7." bap

117,8 ← Star. dia.

10 43 23

136.0 18.2'
301.0 14.3'
315.3 32.5' −4.22'

120.0 13.6' −4.20'
133.6 19.4'
298.6 33.0 −4.19'
318.0

Index R & B

25.2
49.0 23.8'
209.9 16.4'
226.3 40.2' −3.76'

29.2 −3.78'
45.3 16.1'
206.4 23.1'
229.5 39.2' −3.81'

Mean −3.99'

10 53 50
96' 73"
10 48' 36"
5 +15"
15 48' 51"

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1905phaa.proj..574W

March 22, 1905.

Same again.

Index R & B

	25.9		
10 55 33	48.0	22.1'	A
	208.9	17.1'	
	226.0	39.1'	-3.82'

	28.3		-3.82'
	45.2	16.9'	
	206.0	22.0'	
	228.0	38.9'	-3.83'

Index L & A

	299.2		
	317.5	18.3'	
	119.3	14.5'	B
	133.8	32.8'	-4.21'

	300.5		-4.19'
	315.5	15.0'	
	117.6	18.4'	
	136.0	33.4'	-4.17'

11	6	12	
21	61	45'	
10	60	52'	
5		+15'	
16	1	7'	

Beam -4.00'

Gen. " -4.00'

S.J 11h 34m

L.A. 6 38

Dec. +44.2

C.A. 359

Sprocket -8.5A } or { +15.5A

" -7.5B } or { +16.5B

" -6.9b } or { +17.1b

Use watch used for times tonight

Watch 15 sec. slow.

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1905phae.proj..574W

March 23. 1905 (Thursday)

(Barnard. sec.)

Jupe. Sats. Sat. II comp. Sat. IV R. obs. Phot. R. 9".5 bap

Index L & L

259.0 Sat II dis.

7 20 4

329.6 70.6 ˅
79.8 70.0 ˅
149.8 140.6 ˅ −0.76 ˅ B

258.0 −0.73 ˅
331.7 73.7 ˅
78.5 70.1 ˅
148.6 143.8 ˅ −0.70 ˅

Index R & B

165.4
240.6 75.2 ˅
345.8 75.5 ˅
61.3 150.7 ˅ −0.56 ˅ A

165.7 −0.56 ˅
240.6 74.9 ˅
346.2 75.8 ˅
62.0 150.7 ˅ −0.56 ˅

Mean −0.64 ˅

7	32	2
	52	6
7	26	3
5		+6
12	26	9

All possible care exercised in above setts. Setts. made very slowly perfecting them as much as possible After the above group, Jup. being rather low and sky a little fogy, it was not considered advisable to attempt a sec. group. The above group considered good

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1905phag.proj..574W

March 23. 1905.

R ☐ Persei Phot. J. Hobe, Barnard

3 0 +44.3
9 4
6 4

Index L & A

188.8 Comp. Star dia.

245.7 56.9'
3.1 68.9'
72.0 125.8' +1.07'

181.2 +1.02'
254.4 73.2'
9.0 56.7'
65.7 129.9' +0.98'

Index R & B

100.2
154.9 54.7'
274.5 67.9'
342.4 122.6' +1.14'

94.0 +1.15'
160.7 66.7'
280.7 54.8'
333 ~~3 1 5~~ 121.5' +1.16'
5.5
+1.08'

9 2 48

9 14 6

16 54
9 8 27
.5 +6
14 8 33

S.T. 9h 59m
R.A. 6 41
Dec +46.7
P.A. 179.0 Von B
Sprocket -2.5 B
" -1.5 b

As moon came up a sec. group was not taken since objects at equalization were rather faint

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1905phae.proj..574W

March. 23. 1905.

Eunomia Phot 3 Hobe. Bowie rec.

7	57	+13.5
10	15	
2	18	

Asteroid precedes +13° 1875 (9.0) by 13.5 sec. and is 9'.2 south of it

Asteroid precedes +13° 1874 (9.5) by 2.5 sec. and is 2'.7 south of it.

For measurements, next page.

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1905phag.proj..574W

March 23. 1905.

Index L & A

4.6 ← 66.0' bomp. Star, dis.
70.6

10 36 48

192.6 ∓1.2'
243.8 117.2' +1.2∓'

(B)

11.3 ∓1.6' +1.2∓'
62.9
183.2 66.7'
249.9 112.3 +1.23'

Index R & B

275.4 67.2'
342.6

(A)

101.0 ∓2.7'
153.7 119.9' +1.19'

282.1 49.7' +1.2'
331.8

10 48 34

84 82
10 42 41
5 +6
15 42 47

93.3 67.3'
160.6 117.0' +1.26'

Mean +1.23'

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1905phae.proj..574W

March 23. 1905

Index R & B

	275.1		
10 53 58	339.4	64.3	
	101.0	52.5	
	153.5	116.8	1.26
	282.5	49.5	1.26
	332.0		
	94.0	67.2	
	161.2	116.7	1.27

Index L & S

	186.5	63.5	
	250.0		
	12.7	64.1	
	60.8	111.6	1.32
	194.3	46.0	1.42
	240.63		
	4.6	62.5	
	67.1	104.5	1.45

1.34

11	6	10	
	119	68 ✓	
10	59	64 ✓	
11	0	4 ✓	
+5		+6 ✓	
16	0	10 ✓	

In above sec. group observer had much trouble in keeping images in centre of field. This should probably be rejected

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1905phag.proj..574W

March. 23. 1905.

			Index Corr		
			182.5	62.0'	
11	10	35	250.5		B
			14.4	K7.5'	
			61.9	115.5'	+1.29'
			193.1	K2.2'	+1.31'
			241.3		
			4.2	65.6'	
			69.8	113.8'	+1.33'
			Index Corr		
			94.3	66.1'	
			160.4		
			281.8	K1.2'	
			333.0	117.3'	+1.25' A
			100.9	K2.0'	+1.21'
			152.9		
			273.1	69.2'	
			342.3	121.2'	+1.17'
					Mean +1.26'

11	21'	13
	31	48
11	15	54
5		+6
16	16	0

S. T. 11h 59m
R. A. 3 48
Dec. +13.3
P. A. 204.0 Corr B
Sprocket. +0.5 B
" +1.5 lo

It's watch used for times.
Watch 6 sec. slow.

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1905phae.proj..574W

(March 27. 1905 Monday)

Jups. Sats. Obs. Phot. & Bowie rec

2	9	+12
7	49	
5	40	

Neither Sats. I and III nor I & IV can be obtained tonight. Sats. ~~too~~ far apart

blonde also coming over Jup.

Europa Obs. Phot. J. Bowie Rec.

7/8	57 6	13.5
	9	13.5

Europa follows +13° 1875(9.0) by 26.5 sec. and is about 12.″8 south of it.
Europa follows +13° 1874(9.5) by 37.5 sec and is about 6.′2 south of it.

For measurements see next page.

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1905phag.proj...574W

March. 27. 1905.

Index L & A

	11.0		Comp. Star Lis. I
8 45 35	63.8	52.8	
	184.8	68.9	B
	253.7	121.7	+1.16
	5.1		+1.18
	71.5	66.4	
	190.5	53.4	
	243.9	119.8	+1.20

Index R & B

	282.3		A
	333.5	51.2	
	95.6	64.4	
	160.0	115.6	+1.29
	275.4		+1.20
	339.8	64.4	
	103.5	59.1	
	152.6	123.5	+1.12

Mean +1.19

8	58	10
	103	45
8	51	52
5		-6
13	51	46

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1905phae.proj..574W

March .27. 1905.

Index R & B

283.0			
331.7	48.7 v		
95.3	6K.7 v	A	II
160.0	113.K v	+1.3 K.	
275.1	6K.7 v	+1.3 v.	
339.8			
104.0	47.7 v		
151.7	112.K v	+1.3 6.	

Index L & A

191.3	v1.6 v		
242.9		B	
5.6	6v.K v		
71.0	117.0 v	+1.2 6.	
185.5	66.0 v	+1.2 7.	
251.85			
12.2	v0.0 v		
62.2	116.0 v	+1.2 8.	

Mean 1.31.

9	17	46
	21	92
9	10	76
5		−6
14	11	10

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1905phae.proj...574w

March 27. 1905

Index L & A

194.0		
241.4	47.4	
4.7	66.5	
71.2	113.9	+1.33

B III

9 25 48

183.5	67.9	+1.30
251.4		
12.9	49.2	
62.1	117.1	+1.26

Index R & B

102.7	44.9	
151.6		
275.7	66.1	
341.8	111.0	+1.30

A

95.3	64.0	+1.32
159.3		
283.1	49.5	
332.46	113.5	+1.34

Mean 1.31

9 40 6

65 54

9 32 57

5 -6

14 32 51

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1905phae.proj..574W

March. 27. 1905.

Index R & B

9 46 49

102.5
152.32 49.7 ✓
272.9 69.4 ✓
342.7 119.5 ✓ +1.20'

93.8
161.9 68.1 ✓ +1.22'
283.0' 69.6 ✓
332.6 117.7 ✓ +1.24'

Index L & A

11.2
62.5 51.3 ✓
180.8
254.0 73.2 ✓
124.5 ✓ +1.10'

1.6
72.76 71.0 ✓ +1.10'
190.9
244.5 53.6 ✓
124.6 ✓ +1.09'

Mean 1.16'

9 59 11

	105	60
9	52	60
5		−6
14	52	54

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1905phae.proj..574w

March 27. 1905.

Index L & A

B

V

10 6 20

11.1
65.0 ✓3.9 ✓
178.6 ~~7.2~~ ✓
257.4 132.7 ✓ +0.92'

359.5 76.5 ✓ +0.9K'
76.0
190.0 ✓K.6 ✓
244.6 131.1 ✓ +0.96'

Index R & B

A

283.0
333.0 ✓0.0 ✓
90.5 71.0 ✓
161.5 121.0 ✓ +1.17'

272.1 71.K ✓ +1.12'
343.5
100.9 ✓K.1 ✓
155.0 12✓.✓ ✓ +1.07'

10 18 5
24 25
10 12 12
5 -6
15 12 6

Mean +1.03'

Shutter slightly interfers towards end of above group

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1905phae.proj..574W

March 27. 1905.

Index R & B

279.4

10 27 53 335.9 56.5 ᵛ VI

92.2 70.6 ᵛ

162.8 127.1 ᵛ +1.04 ᵛ A

272.5 +1.05 ᵛ

343.1 70.6 ᵛ

100.3 53.0 ᵛ

153.3 123.6 ᵛ +1.11 ᵛ

Index L & A

189.6

246.8 57.2 ᵛ

357.1 78.6 ᵛ B

75.7 135.8 ᵛ +0.86 ᵛ

177.9 +0.86

257.0 79.1 ᵛ

8.6 56.6 ᵛ

65.2 135.7 ᵛ +0.86

Mean +0.97 ᵛ

10	39	20
	66	73
10	33	36
5		-6
15	33	30

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1905phae.proj...574W

March. 27. 1905.

Index L & A

B

VII

188.8
246.2 57.4 ✓
358.7 77.7 ✓
76.4 135.1 ✓ +0.87 ✓

10 44 3

177.9 +0.85 ✓
257.9 80.0 ✓
8.7 57.0 ✓
65.7 137.0 ✓ +0.83 ✓

Index R & B

A

100.2
156.63 56.1 ✓
271.6 74.4 ✓
346.0 130.5 ✓ +0.97 ✓

91.0 +0.98 ✓
163.4 72.4 ✓
279.5 56.8 ✓
336.3 129.2 ✓ +1.00 ✓

Mean +0.92 ✓

10 54 23
98. 26
10 49 13
5 -6
15 49 7

S.J. 11 54
H.A. 3 41
Dec. +13.2
P.A. 157.5 Ver. B
Sprocket -1.5 B
" -0.5 b

It's watch used for times
Watch 6 sec fast.

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1905phae.proj..574W

March. 29. 1905. (Wednesday)

Eunomia. Phot. J. H. obs. Bowie rec.

7 57 +13.5
8 00
3

Eunomia follows +13° 1874 (9.5) by 1m.7 sec. and is 9'.2 south of it

Comp Star = +13° 1875 (9.0)
This is the same comp. star which has been used in all measurements of Eunomia thus far made

For measurements see next page.

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1905phae.proj..574W

March. 29. 1905.

Index R & B

10.4	comp.	Star.	Dia.
64.4		54.0	
180.2		74.5	
254.7		128.5	+1.01

B I

7 54 18

0.8		+1.02
71.9	71.1	
188.7	56.0	
244.7	127.1	+1.04

Index R & B

280.2		
333.4	53.2	
92.9	67.5	
160.4	120.7	+1.18

A

+1.08

271.7		
344.8	73.1	
98.6	56.6	
155.2	129.7	+0.99

Mean +1.05

8	6	1
15	60	19
7	60	10
5		−13
12	59	57

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1905phae.proj..574W

March 29. 1905.

Index R & B

II

279.9

8 12 45

336.2 5.6 55.7'
69.2'
92.8 124.9' +1.09' A
162.0

+1.08'

272.6
341.9 69.3'
98.3 56.1'
154.4 125.4' +1.08'

Index L & A

188.6
244.7 56.1'
0.7 74.0'
74.7 130.1' +0.98' B

+0.96'

180.3
255.1 74.8'
8.0 56.6'
64.6 131.4' +0.95'

Mean +1.02'

8	26	15
	38'	60'
8	19	30'
5		-13'
13	19	17'

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1905phae.proj..574W

March. 29. 1905.

Index L & A

188.2 III

8 31 11 245.2 57.0.
72.7.
0.1 129.7. +0.99. B
72.8

180.0 +0.98
8 34 55 253.8 73.8.
56.2.
8.2 130.0 +0.98.
64.54

Index R & B

8 40 20 97.1
156.3 59.2.
273.7 68.0.
341.7 127.2. +1.04. A

8 44 40 92.8 +1.10

149. 126.
8 37 46.
5 -13.
13 37 33.

159.8 ~~160.0~~ 67.0.
280.8 54.1.
334.9 ~~335.0~~ 121.1. +1.17.

Mean +1.04.

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1905phae.proj..574W

March. 29. 1905.

Index R & B

		100.3		IV
8	52	8	153.9	53.6°
			272.4	71.0°
			343.4	124.6° +1.09°

		91.2		
8	56	54	161.3	70.1°
			281.4	53.3°
			334.7	123.4° +1.12°

Index L & A

		9.8		
9	2	57	63.8	54.0°
			182.2	70.4°
			252.6	124.4° +1.10°

		1.6		+1.11°
9	6	42	71.8	70.2°
			190.3	53.1°
			243.4	123.3° +1.12°

Mean +1.10°

34°	116°	161°
8	59°	40°
5		-13°
13	59°	27°

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1905phae.proj...574W

March 29. 1905.

Index L & A

9	20	5	8.8	
			63.7	54.9'
			183.9	68.1'
			252.0	123.0' +1.13'
			3.0	+1.18'
9	25	38	69.2	66.2'
			191.0	52.2'
			243.2	118.4' +1.23'

Index R & B

			282.4	
9	33	2	332.4	50.0'
			95.7	61.9'
			157.6	111.9' +1.37'
			276.6	+1.40'
9	36	34	336.5 7.1	60.5'
			102.4	48.6'
			151.0	109.1' +1.44'

	114'	79'	
9	28	50'	
5		−13'	
14	28	37'	

Mean +1.29'

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1905phae.proj..574W

March 29, 1905.

Index R & B

		284.2		VI
9	41	23	331.8	47.6
			94.5	63.9
			158.4	111.5 +1.38 A
			275.4	+1.41
9	45	48	336.8	61.4
			102.9	47.5
			150.4	108.9 +1.44

Index S & A

			190.9	
9	52	20	241.4	50.5
			6.0	60.4
			-66.4	110.9 +1.40 B
			184.5	+1.37
9	56	47	249.6	65.1
			12.1	48.5
			60.6	113.6 +1.34

	194	138
9	48	64
5		-13
14	48	51

Mean +1.39

Dome interfered in last of this group

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1905phae.proj...574W

March 29, 1905.

Index L & L

194.2

10 1 48 — 241.3 — 47.1' — B

4.1 — 64.5' — VII

68.6 — 111.6 — +1.38'

182.9 — +1.36'

10 6 2 — 249.8 — 66.9'

13.3 — 47.0'

60.3 — 113.9' — +1.33'

Index R & B

103.0 — A

10 11 22 — 151.0 — 48.0'

276.6 — 59.0'

335.6 — 107.0' — +1.49'

97.5 — +1.46'

10 14 58 — 157.2 — 59.7'

282.1 — 49.9'

332.0 — 109.6' — +1.43'

Mean +1.41'

	32	130
10	8	32
5		−13
15	8	19

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1905phae.proj..574W

March 29, 1905.

Index R & B

100.3

10	30	10	152.3	52.0.
			274.8	64.9.
			339.7	116.9.

VIII

A

+1.26.

93.7

10	33	56	157.2	63.5.
			281.5	51.3.
			332.8	114.8.

+1.28.

+1.31.

Index S & A

10.0

10	39	25	64.4	54.4.
			181.7	72.2.
			253.9	126.6.

B.

+1.05.

2.2

10	44	35	72~~6.4~~ 1.5	69.3.
			189.0	55.8.
			243~~.9~~ 4.8	125.1.

+1.06.

+1.08.

Mean +1.17.

	146	126
10	36	62
5		13
15	36	49

S. T. 11h 51m
H. A. 3 38
Dec. +13.2
P. A. 322.2 Ver B
Sprocket −3.5 B
" −2.5 b

W's watch used for times
Watch 13 sec. fast.

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1905phae.proj..574W

March 31, 1905. (Friday)

Eunomia Phot J H. obs. Bowe rec.

$\frac{7}{8}$ $\frac{57}{8}$ +13.5

11

Asteroid follows +130 1874(9.5) by 1^{m} 41^{sec} and is 12.1 south of it

For means, see fol. pages.

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1905phae.proj..574W

March 31 1905

Index L & A I

		165.2 ← Comp Standard		
7	46	24	249.8 0	63.8'
			10.1	50.5'
			60.6	114.3' +1.32' B
			191.0	+1.34'
7	50	2	241.9	50.9'
			4.4	62.0'
			66.4	112.9' +1.35'

Index R & B

			95.9	
7	55	21	155.5	59.6'
			282.1	48.0'
			330.1	107.6' +1.47' A
			103.6	+1.46'
7	59	8	149.89	46.3'
			276.4	62.0'
			338.4	108.3 +1.46'
	210'	55'		+1.40'
7	52	44'		
5		-25'		
12	52	19'		

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1905phae.proj..574W

March 31, 1905

Index R & B

96.0

8 3 52	155.4	59.4		II
	282.7	49.3		
	332.0	108.7	+1.45	A
	103.0		+1.44	
8 6 51	150.76	47.6		
	277.0	61.5		
	338.95	109.1	+1.44	

Index L & A

1.9

8 12 50	67.2	65.3		
	188.7	54.0		
	242.7	119.3	+1.21	B
	10.3		+1.16	
8 16 20	63.41	52.8		
	180.4	70.6		
	251.0	123.4	+1.12	
37 173			+1.30	
8 9 58				
5 -25				
13 9 33				

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1905phae.proj..574W

March 31, 1905

Index L & A

			0.1		III
8	23	10	69.7	69.6	
			189.0	54.2	B
			243.2	123.8	+1.11'
			9.0		+1.12'
8	26.	0	62.4	53.4	
			182.2	70.0	
			252.2	123.4	+1.12'

Index R & B

			274.1		
8	32	16	340.8	66.7'	A
			99.7	51.9'	
			151.6.	118.6'	+1.22'
			281.4		+1.18'
4	35	21	333.45	52.1'	
	116	47'	90.6	70.3'	
8	29	12'	160.9	122.4'	+1.14'
5		-25'			
13	28	47'			+1.15'

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1905phae.proj..574W

March 31, 1905

Index R & B

91.6

8 42 19	160.7	69.1'		IV
	280.9	51.5'		A
	332.4	120.6'	+1.18'	
	99.8		+1.17'	
8 46 12	152.6	52.8'		
	272.1	68.9'		
	341.0	121.7'	+1.16'	

Index L & A

1.1

8 51 40	71.1	70.0'		B
	189.0	56.2'		
	245.2	126.2'	+1.06'	
	7.8		+1.00'	
8 56 8	64.5	56.7'		
	179.7	74.7'		
	254.4	131.4'	+0.95'	

195° 79'
8 48 65
5 −25
13 48 40

1.08

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1905phae.proj..574W

March 31, 1905.

Index L & b V

			359.5		
9	2	10	72.25	73.0°	
			187.9	56.9°	
			244.8	129.9°	+0.98° B
			7.9		+0.94°
9	6	44	64.7	56.8°	
			178.5	76.5°	
			255.0	133.3°	+0.91°

Index R & B

			270.9		
9	10	50	342.8	71.9°	
			99.2	52.8°	
			152.0	124.7°	+1.09° A
			279.8		+1.10°
9	14	56	335.91	55.3°	
			90.6	69.1°	
			159.97	124.4°	+1.10°
	32	160			
9/5	8	40			
		−25			
14	8	15			+1.02

In latter part of above group and especially in last set, troubled by clouds in this region blends however were of a somewhat feathery character

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1905phae.proj..574W

March 31, 1905.

Index R & B

~~272.4~~
~~34~~ } blinds

Stopped by clouds. Nothing more could be done!

S.J. $10^h\ 34^m$
R.A. +2 22
Dec +13.2
PA +138.0 R & B
Sprocket −6.5 A
" −5.5 B
" −4.9 b

In all the observations actually made tonight, sky generally clear with the exception of last part of last group (see remarks).

Great care exercised throughout and all the observations considered good.

W's watch used for times tonight
Watch 25 sec. fast.

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1905phae.proj..574W

April 1, 1905 (Saturday)

Eunomia Phot J Hobs. Bowie rec.

7 57 13.5
8 00
3

Eunomia follows X = +13° 1220 (9.4), by 28.5 sec and is 4'.8 south of it.

Full aperture used

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1905phae.proj..574W

April 1, 1905

Index Set

357.4 ← bump Star Dec.

7 29 48	63.2	65.5		I
	186.3	49.7		
	236.0	115.5	+1.29	B
	4.8		+1.28	
7 32 48	55.8	51.0		
	177.2	65.4		
	242.6	116.4	+1.27	

Index R & B

	274.1	44.1	A
7 37 7	328.12		
	98.6	43.2	
	141.8	97.3	+1.72
	279.5	44.6	+1.67
7 40 20	324.1		
	91.6	47.0	
	148.6	101.6	+1.62
		Mean	+1.42

	138	123
7	34	61
5		-33
12	34	28

6937.524

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1905phae.proj..574W

April 1 1905

Index R & B

II

273.0
329.0 +6.0
99.5 +2.6
142.1 92.6 +1.69

A

7 45 50

278.9
322.56 +3.7 +1.64
93.1 +2.2
148.3 92.9 +1.62

Index L & A

179.3 +5.0
244.3
6.8 47.1
53.9 112.1 +1.37

B

7 56 40

156.9 +9.1 +1.30
236.0
355.4 69.4
64.8 114.5 +1.23

Mean +1.49

8 0 24

29 150 136
7 52 64
5 -33

12 52 31

6937.536

1905phae.proj..574W

April 1 1905

Index & dot

8 9 17

176.8
245.6 68.8 ν B III
6.5 49.2 ν
55.7 112.0 ν +1.24 ν

155.5 ν0.2 ν 1.20 ν

8 13 4

235.8 6.3
355.8 71.0 ν
66.8 121.2 ν +1.17 ν

Index R & B

92.1 ν7.7 ν
8 18 45 149.8 R
279.7 43.6 ν
323.3 101.3 ν +1.62 ν

99.0 444 ν +1.52 ν

8 23 20 143.4

63 86 :
8 15 66 :
5 −33 :
13 15 33 .

270.7 60.2 ν
331.5 102.2 ν +1.53 ν

Mean +1.39 ν

6937.552 ν

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1905phae.proj...574W

April 1. 1905

Index R & B

90,5 IV

8 32 50 150,5 ~~15+3 0.X5~~

60.0
2776 45.4
3230 105.4 +1.53

98.4 +1.53

8 36 25 143.59 45.5
271.5 59.6
331.51 105.1 +1.53

Index L & A

356.2

8 44 2 65.3 69.1
182.1 57.4
239.5 126.5 +1.05

2.0 +1.02

8 48 22 57.45 55.5
73.5
175.2 129.0 +1.00

248.7 ~~249.1~~

Mean +1.28

	160	99
8	40	25
5		33
13	39	52

6937.569

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1905phae.proj...574W

April 1, 1905

Index 1 & A

354.5 V

8 58 1

65.5 71.0'
56.3'
181.7 127.3' +1.04' B
238.8

4.9 +1.02'

9 2 15

58.4 53.5'
173.0 76.1'
249.1 129.6' +0.99'

Index R & B

268.0

9 9 7

334.0 66.0' A
95.0 50.0'
145.0 116.0' +1.28'

275.0 +1.27'

9 12 39

327.0 52.0'
87.7 64.9'
152.6 116.9' +1.26'

35 81 62'
8 65 30'
5 33'
14 4 57'

Mean +1.14'

6937.087

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1905phae.proj..574W

April 1, 1905.

Index R+B

268.1 VI

9	21	40	335.43	67.2'	
			95.3	49.0'	
			144.3	116.2'	+1.28'

A

			277.2		1.28'
9	26	11	325.3	48.1'	
			87.5	67.3'	
			155.0 4.8	115.4'	+1.29'

Index 2 Act

172.3

9	34	10	249.0	76.7'	
			1.2	56.3'	
			57.5	133.0'	+0.92'

B

			181.7		0.93'
9	37	16	239.6	57.9'	
			352.8	73.8'	
			66.6	131.7'	+0.94'

9	118	77'	
9	29	49'	
5		33'	
14	29	16'	

Mean +1.10'

6937.604

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1905phae.proj..574w

April 1, 1905.

Index L & A

174.0 VII

9 55 30

247.0 73.0'
0.4 57.8'
58.2 130.8' +0.96' B

183.2 +0.95'

9 58 10

240.0 ~~239.5~~ 56.8'
352.6 74.9'
67.5 ~~66.7~~ 131.7' +0.94'

Index R & B

87.9
149.2 61.3'
~~315~~ 294.8 52.7' 114.0' +1.33'
327.5 A

94.9 +1.36'

10 6 58

144.6 49.7'
270.0 61.9'
331.9 111.6' +1.38'

38 122 113'
9 60 58'
5 -33'
15 0 25'

Mean +1.16'

6937.625

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1905phae.proj..574W

April 1, 1905

Index R & B

VIII

		87.9		
10	14	50	151.3	63.4
			276.4	49.3
			325.7	112.7 +1.36

A

		97.7		+1.40
10	18	18	144.5	46.8
			268.3	62.5
			330.8	109.3 +1.43

Index L & A

		355.5		
10	21	50	64.4	68.9
			182.0	56.2
			238.2	125.1 +1.08

B

		6.4		+1.12
10	24	48	57.0	50.6
			175.4	70.9
			246.53	121.5 +1.16

Mean +1.26

10	77	166
10	19	56
5		33
15	19	23

6937.638

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1905phae.proj...574w

April 1, 1905.

Index L & A

355.2

IX

10 28 34

64.80 68.8'

187.0 47.7'

234.7 116.5' +1.27' B

2.5 +1.15'

10 30 1

56.0 53.5'

175.1 74.0'

249.1 127.5' +1.03'

Index R & B A

271.8

10 35 1

331.0 59.2'

98.0 42.4'

140.4 101.6' +1.62'

278.0 +1.62'

10 42 23

323.0 45.0'

91.6 55.9'

147.5 100.9' +1.63'

135 59'

10 33 60'

5 33

15 33 27

Mean +1.38'

6937.648

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1905phae.proj..574W

April 1 1905

Index A & B

		273.5		
10	47	0	327.17	53.9'
			98.3	42.7'
			141.0	96.6' +1.74'
			278.5	+1.70
10	50	30	322.8	44.3'
			92.7	55.0'
			147.7	99.3' +1.67'

Index A & A

			177.6	
10	54	34	243.0	65.4'
			4.7	50.5'
			55.2	115.9' +1.28'
			187.3	+1.31'
			235.8	48.5'
			357.7	64.9'
			62.6	113.4' +1.34'
				+1.50'

10	57	48
	208	112'
10	52	28'
5		33
15	51	55

6937.661

S.T. 11 .59
R.A. 3 45
Dec 131
C.A. 314.0 Dec B.
Sprocket - 7.5 B
- 6.5 b

It's watch used for times
Watch 33 sec. fast

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1905phae.proj...574W

April 3, 1905 (Monday)

Eunomia Phot. I H. obs. Bowie rec.

7 8	57 11	13.5
	14	

Eunomia follows star x by 72. sec and is 7.7 south of it

Eunomia follows star y by 7.5 sec and is 5.'0 south of it

Star x = +13° 1AA0 (9.4)

" y = +13° 1AA6 (9.1)

Comp: Star for to right =

= +12° 1A20 (9.5)

For measurements see following pages

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1905phae.proj..574W

April 3, 1905

Index R & A

9	6	48	70.4 ← comp. star dis.	A
			166.6 ~~+69.0~~ 96.2 :	
			264.6 ~~73.8~~ :	I
			338.4 170.0	+0.19
			81.4	+0.18
9	11	5	158.5 77.1 :	
			254.2 94.0 :	
			348.2 171.1	+0.17

Index L & B

			338.2	
9	17	22	81.4 103.2 :	B
			167.2 84.6 :	
			251.8 187.8 :	
			172.2	−0.15
			348.4	
9	21	8	84.4 :	
			72.8 108.0 :	−0.20
	55	83 :	155.4 192.4 :	
9	13	66 :	263.4 167.6	−0.24
5		−48 :		
14	13	18 :		

Mean −0.01

6939.592

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1905phae.proj...57aW

April 3 1905

Index 2 to B

9	26	10	339.7	B
			84.93 104.6	
			167.8 84.3	II
			188.9	
			252.1 171.1	−0.17
			347.3	
9	30	41	73.2 ~~72.8~~ 85.9	−0.22
			156.2 108.5	
			194.4	
			264.7 165.6	−0.27

Index R to A

			250.3	
9	37	25	351.41 100.8	A
			79.7 80.4	
			181.2	
			160.1 178.8	−0.02
			260.2	
9	41	30	339.49 79.7	−0.04
			68.5 102.7	
			182.4	
			171.2 177.6	−0.05

	134	106	
9	33	56	
5		−48	
14	33	8	

Mean −0.13

6939.606

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1905phae.proj..574W

April 3, 1905.

Index R & A

A

			250.4		
9	49	16	3.57.2 0.4	100.0'	
				82.4'	
			78.2	182.4'	III
			160.6	177.6'	−0.05
			261.6		
9	54	10	341.86	80.0'	−0.07
				105.0'	
			66.9	185.0'	
			171.9	175.0'	−0.09

Index L & B

B

			155.4		
10	0	50	263.5 ~~264.0~~	108.1'	
				86.7'	
			345.7	194.8'	
			72.4	165.2'	−0.28
			166.3		
10	4	36		87.3'	−0.30
			253.6	109.6'	
			335.4	196.9'	
			85.0	163.1'	−0.32

38	107'	112'
9	56	73'
5		−48'
14	56	25'

Mean −0.18

6939.622

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1905phae.proj...574W

April 3, 1905.

156.2
10 10 8 265.8 ~~266.3~~
clouds 346.7 } Stopped by clouds.
73.6
Index L+B

345.8 New Start.
10 31 40 74.9
157.4
264.3

335.9
10 35 6 82.7
166.0
254.9

Index R+A
clouds Stopped by clouds

S.T. 11h 52m
R.A. 3 36
Dec. 13.0
P.A. 89.4 Dec A
Sprocket -5.5 B
" -4.5 b

W's watch used for times tonight
Watch 48 sec. fast.

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1905phae.proj..574W

April 6, 1905 (Thursday)

Eunomia Phot. 3 H. obs. - Bowie rec.

7	57	13.5
8	27	
	30	

Eunomia follows star ŋ by 1 min. 22 sec and is 10.3 south of it.
Eunomia precedes comp. star by 43.5 sec and is 9.2 south of it.

Same comp. stars used, as was used on April 3 =+12° 1820 (9.5)

7
5
12

6

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1905phae.proj..574W

April 6, 1905

Index L & B

351,2 ~ comp. star disp I

7 45 22	75,0	83.8.		
	161.3	102.7.		
		186.5.		
	264.0	173.5.	−0.12″	
	340.5		−0.16″	
7 49 7	85.6	105.1.		
	172.2	85.0.		
		190.1.		
	257.2	169.9.	−0.19″	

Index R & A

	260.3			
7 55 1	343.7	83.4.		
	70.4	104.2.		
		187.6.		
	174.6	172.4.	−0.14″	
	252.8		−0.10.	
7 57 58	354.4	101.6.		
	81.4	81.3.		
		182.9.		
206 88.	162.7 ~~160.4~~	177.1.	−0.05″	
7 51 52.				
5 −58.			−0.13.	
12 50 54.				

6942.535

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1905phae.proj..574W

April 6, 1905

Index Rod

		19.6		A
8	4	40	103.0 83.4'	
			193.3 103.7'	II
			297.0 187.1'	
			172.9'	−0.13"
		11.9		−.10'
8	8	18	1146 ~~115.4~~ 102.7'	
			201.8 81.7'	
			283.5 184.4'	
			175.6'	−0.08"

Index to B

		290.6		B
8	15	20	14.0 83.4'	
			100.0 106.1'	
			206.1 189.5'	
			170.5'	−0.18"
		281.2		−0.13'
8	18	54	27.0 105.8'	
			113.8 78.2'	
			192.0 184.0'	
			176.0'	−0.08"
				−0.12'

	45	132'
8	11	48'
5		−58'
13	10	50'

6942.549

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1905phae.proj..574W

April 6, 1905

Index L2B

290.2 III

δ 29 13 12.3 82.1

101.6 105.6 B

187.7

207.2 172.3 −0.14

281.4

δ 33 20 27.8 106.4 −0.12

79.0

114.1 185.4

194.0 3.1 174.6 −0.10

Index Rat

204.9 A

δ 40 47 282.5 77.6

89.3

13.3 166.9 +0.25

102.6

194.5 +0.12

292.9 98.4

75.6

24.3 174.0 +0.11

99.9

+0.03

δ 43 45

145 125

δ 36 46

5 −58

13 35 48

6942.567

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1905phae.proj..574W

April 6, 1905

Index R + A

207.4

8 50 15

280.5 73.1° IV

12.2 100.9°

113.1 174.0° +0.11 A

194.8 +0.13°

8 53 30

292.9 98.1°

25.8 74.1°

99.9 172.2° +0.15

Index L + B

115.8 B

8 58 16

191.3 75.5°

284.7 100.1°

24.8 175.6 +0.08

105.0 +0.14°

9 1 51

201.6 96.6°

296.4 73.5°

9.9 170.1° +0.19

+0.14°

33	162	112°
8	55	58°
5		−58°
13	55	0°

6942.580

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1905phae.proj..574W

April 6 1905

Index L&B

116.7 V

9 13 28 189.2 72.5'
283.9 98.9'
22.8 171.4' +0.16" B

104.7 +0.17'

9 16 28 202.9 98.2'
297.0 72.2'
9.2 170.4' +0.18"

Index R&A

26.4

9 22 50 100.0 73.6' A
198.0 92.9'
290.9 166.5' +0.25"

9 25 45 17.0 ~~15.6~~ +0.27'
111.1 94.1'
208.2 70.6'
278.8 164.7' +0.29"

76 151'
9 19 38'
5 -58'
14 18 40'

+0.22'

6942.596

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1905phae.proj..574W

April 6, 1905

Index R+A

27.1 VI

9 37 48 98.0 ~~99.0~~ 70.9 A

196.5 94.5

291.0 165.4 +0.28

17.6 +0.26

9 42 8 111.5 ~~110.2~~ 93.9

207.0 73.0

280.0 166.9 +0.25

Index L+B

293.6

9 49 2 10.8 77.2 B

103.7 99.3

203.0 176.5 +0.06

+0.08

~~+0.24~~

283.7

9 57 54 21.43 97.6

185 112 114.8 77.7

9 46 43 192.5 175.3 +0.09

5 -58 +0.17

~~+0.37~~

14 45 45

6942.615

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1905phae.proj..574W

April 6. 1905

Index L & B

VII

10 1 12	294.0		
	12.8	78.8	B
	103.0	101.5	
	204.5	180.3	-
		179.7	−0.01 v
	283.2		
10 4 17	23.0	99.8	+0.02
	114.5	77.9	
	192.4	177.7	+0.04 v

Index R & A

	205.0		A
	281.6	76.6	
10 8 50	13.4	100.6	
	114.0	177.2	+0.05 v
	194.1		+0.06
10 12 16	291.9	97.8	
25 95	23.3	78.7	
10 6 39	102.0	176.5	+0.06 v
5 −58			
15 5 41			+0.04

6942.629

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1905phae.proj..574W

April 6, 1905

VIII

Index R & A

203.0

A

10 19 22 282.1 79.1 :
12.2 103.6 :
182.7 :
115.8 177.3 : −0.05 ✓

~~22 30~~ ~~194.4~~
~~293.0~~

−0.04
~~50~~

23.2

10 25 42 103.7 80.5 :
100.8 :
193.0 181.3 :
293.8 178.7 : −0.02 ✓

are done

Index L & B

B

292.6

10 37 40 14.3 81.7 :
100.6 106.2 :
206.8 187.9 :
172.1 : −0.15 ✓

279.5

10 42 36 25.0 105.5 : −0.14 :
85.4 :
123 140 : 111.8 190.9 :
10 30 80 : 197.2 169.1 : −0.20 ✓
6 −58 :
15 30 22 :

−011 ✓
~~−0.14~~

6942.646

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1905phae.proj...574W

April 6 1905

Index L & B

10 53 50	291.7			IX
	141	82.4'		
	101.0	105.7'		B
	206.7	188.1'		
		171.9'	-0.15"	
	279.7			
10 53 54	24.8 ~~25.7~~	105.1'		-0.1"
	112.1	82.8'		
	194.9	187.9'		
		172.1	-0.15"	

Index R & A

	201.8			
10 59 42	285.5	83.7'		A
	11.6	102.4'		
	114.0	186.1'		
		173.9	-0.11"	
	192.7			
11 3 56	295.8	103.1'		-0.1"
	21.2	83.3'		
	104.5	186.4'		
		173.6'	-0.12"	

41 168 202'
10 57 50'
5 -58'
15 56 52'

S.T. 12h 24m
R.A. 4h 9m
Dec. 12.9
P.A. 231.0 var. B.

6942.665

Spracket -1.5 A
" -0.5 B
" +0.1 b

-0.14"

W's watch used for times
Hatch 58 sec. fast.

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1905phae.proj..574W

April, 7, 1905 (Friday)

Eunomia Phot. S. A. obs. Bowie rec.

7 57 +13.5
8 30
+ 33

Asteroid precedes comp. star by 16 sec. and is 11'.0 south of it
Asteroid follows star 2 by 4 sec. and is 2'.3 south of it.

Same comp. star as was used last night
= +12° 1820 (9.5)

7
7
7
7
5
12

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1905phae.proj..574W

April 7, 1905

Index L & A

129.2 ← comp star dis

I

7	40	8	229.8 ~~230.0~~	100.6		B
			316.0	82.5		
			38.8	183.4		
				176.6	−0.06	
			133.5		−0.12	
7	44	2	221.0	87.5		
			308.5	101.3		
			49.8	188.8		
				171.2	−0.17	

Index R & B

			36.9			
7	49	8	138.89	102.0		A
			226.6	81.6		
			308.2	183.6		
				176.4	−0.07	
			48.6		−0.04	
7	53	36	127.0 ~~6.9~~	78.3		
	186	54	217.0	103.0		
7	46	44	320.0	181.3		
5		−65		178.7	−0.02	
12	45	39			−0.08	

6943.532

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1905phae.proj..574W

April 7, 1905

Index R&B

36.0 II

7	59	58	139.1	103.1
			229.2	77.2
			306.4	180.3
				179.7 — 0.01

A

47.0 — 0.06

8	3	4	129.92	82.2
			215.3	103.8
			319.1	186.0
				174.0 — 0.11

Index L&A

305.7

B

8	8	10	48.0	102.3
			136.5	83.6
			220.1	185.9
				174.1 — 0.11

314.5 — 0.16

8	12	45	40.0 ~~39.5~~	85.5
			125.7	106.2
			231.39	191.7
				168.3 — 0.22

— 0.11

31	82	77
7	65	49
5		−65
13	4	44

6943.545

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1905phae.proj...574w

April 7. 1905.

Index L & A

306.2

8 21 22	51.2	105.0	
	136.2	83.0	
	219.2	188.0	
		172.0	−0.15

315.8

8 25 35	40.6	84.8	
	124.4	106.8	
	231.2	191.6	
		168.4	−0.22

Index R & B

215.2

8 30 8	319.9	104.7	
	45.0	87.0	
	132.0	191.7	
		168.3	−0.22

226.8 −0.14

8 33 38	307.9 8.0	81.2	
	37.1	102.3	
	139.4	183.5	
		176.5	−0.06

	109	103
8	27	41
5		−65
13	26	36

Mean −0.16

6943.560

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1905phae.proj..574W

April 7 1905.

Index R & B — IV

217.3

8	41	24	320.54	103.1
			46.4	82.0
			128.4	185.1
				174.9 — 0.09

A

227.3 — −0.08

8	45	22	309.25	82.2
			36.9	102.1
			139.0	184.3
				175.7 — 0.08

Index Left

128.8

8	51	57	228.6	99.8
			315.7	82.0
			37.7	181.8
				178.2 — 0.03

B

135.5 — −0.04

8	55	35	219.3	83.8
			308.8	98.6
			47.44	182.4
				177.6 — 0.05

	192	138
8	48	34
5		−65
13	47	29

Mean — 0.06

6943.575

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1905phad.proj...574W

April 7. 1905

Index Lat

B. V

		128.4		
9	4	38	228.3	99.9
			318.1	80.5
				180.4
			38.6	179.6 — 0.01
			135.9	+ 0.01
9	8	10	218.8	82.9
			311.2	95.7
				178.6 + 0.03
			46.9	

Index R & B

A

			38.5	
9	13	10	136.1	97.6
			230.3	77.5
				175.1 + 0.09
			307.8	
			48.9	+ 0.10
9	16	25	127.7	78.8
			220.6	95.4
				174.2 + 0.11
			316.0	
				Mean + 0.06

	41	83
9	10	36
5		-65
14	9	31

6943.590

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1905phae.proj..574W

April 7, 1905

VI

Index R & B

A

	42.0			
9 23 20	135.2	93.2		
	231.2	72.7		
	303.9	165.9	+0.27	
	49.8		+0.25	
9 27 30	126.8	77.0		
	224.0	91.0		
	315.0	168.0	+0.23	

Index Left

B

	311.0			
9 33 15	42.7	91.7		
	140.9	75.0		
	215.9	166.7	+0.25	
	320.6		+0.22	
9 38 2	34.7	74.1		
	130.6	95.0		
	225.6	169.1	+0.20	

Mean +0.24

	121	67
9	30	32
5		-65
14	29	27

6943.604

~~The~~ above group taken through haze

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1905phaa.proj..574W

April 7, 1905.

Index Left

311.6 VII

9 49 15

44.8 93.2 :
140.0 75.3 : B
215.3 168.5 : +0.22"

321.6 +0.21"

9 55 2

34.0 72.4 :
130.2 96.7 :
226.9 169.1 : +0.20"

Index R & B

222.4

10 0 20

313.1 90.7 :
50.1 75.7 : A
125.8 166.4 : +0.26"

230.5 +0.25"

10 4 25

304.6 74.1 :
40.9 93.0 :
133.9 ~~136.2~~ 167.1 : +0.24"

Mean +0.23"

38 108 62 :
9 57 15 :
5 -65 :
14 56 10

6943.622"

1905phae.proj..574W

April 7, 1905

Index R+B

220.3 VIII

10 12 28 316.4 96.1 A
73.4
50.5 169.5 +0.20
123.9

231.1 +0.18

10 16 22 304.95 73.4
98.3
38.2 171.7 +0.16
136.5

Index Lod

131.0

10 22 2 226.6 95.6 B
79.7
317.8 175.3 +0.09
37.5

137.9 +0.12

10 25 57 215.3 77.4
94.3
310.5 171.7 +0.16
44.8

Mean +0.15

10 75 109
10 18 72
5 -65
15 18 7

6943.638

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1905phae.proj...574W

April 7 1905

Index Set

10 32 54	128.0			IX
	228.12	100.2		
	316.3	79.7		B
	36.0	179.9	+0.00	
	140.0			0.00
10 36 40	219.7	79.7		
	307.8	100.4		
	48.2	180.1		
		179.9	0.00	

Index R & B

	37.4			
10 42 20	137.32	99.8		A
	225.6	80.7		
	306.3	180.5		
		179.5	−0.01	
	46.4			
10 46 10	129.35	83.1		−0.03
	218.9	99.4		
	318.43	182.5		
		177.5	−0.05	
156 124				
10 39 31				
5 −65				
15 38 26				−0.02

S.J. 12h 15m
Hb. 3 58
Dec. 13.0
P.A 195.5 On B
Sprocket −0.5 B
" +0.5 b

6943.652

Ke's watch used for times
Watch 65 sec fast

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1905phae.proj..574W

April 8, 1905. (Saturday)

Iunonia Phot. I 4 obs. Bovie rec.

7	57	13.5
8	37	
	40	

Iunonia follows comp star 13 sec. and is 12.4 south of it

Comp. Star = +12° 18 20 (9.5)

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1905phae.proj...574W

April 8, 1905

I

Index L+A

140.1

7	43	6	217.23	77.2	B
			308.9	96.9	
			45.8	174.1	+0.11

			130.1		+0.10
7	46	45	228.53	98.2	
			320.4	76.3	
			36.7	174.5	+0.10

~~125.5~~

~~229.9~~

~~55 22~~

Index R+B

220.2

7	58	5	317.4	97.2	A
			50.4	78.2	
			128.6	175.4	+0.09

			229.1		+0.08
8	1	44	308.5	79.4	
			38.4	97.6	
			136.0	177.0	+0.06

29	148	100	
7	52	25	
+5	-1	-11	
12	51	14	

Mean +0.09

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1905phae.proj..574W

April 8. 1905

Index R & B

218.8

8 7 13 318.0

46.5

128.0

227.0

8. 12 20 309.2

37.7

139.3 ~~138.8~~

Clouds Index

Clouds

Sr observer was delayed by clouds for some time, ~~repeatedly~~ after reversing it was impossible to finished this group so that a new group was started on next page

8

8

×5

13

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1905phae.proj...5740

April 8, 1905

Index R+B

II

216.7

8	27	18	319.4	~~320.0~~	102.7	
				48.5	78.9	
				127.4	181.6	
					178.4	−0.03

A

228.0

8	30	40		309.39	81.9	−0.08
				34.8	105.6	
				140.4	187.5	
					172.5	−0.14

Index L+A

135.6

8	37	48		219.6	84.0	
				305.0	106.0	
				51.0	190.0	
					170.0	−0.19

B

124.3

8	40	40		232.8	108.5	−0.26
				312.2	88.5	
					197.0	
			40.7	~~40.7~~ 43	163.0	−0.32

	134	146	
8	33	66	
×5	−1	−11	
13	32	55	

Mean −0.17

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1905phae.proj..574W

1 April 8 1905.

Index Dat

135.4

						III	
8	49	12	220.3 ~~219.5~~	84.9		(B)	9
			304.9	106.2			
			51.1	191.1			
				168.9	−0.21		
			125.2				
8	52	20	234.3	109.1	−0.22		9
			316.4	83.3			
			39.7	192.4			
				167.6	−0.24		

Index R+B

46.0

8	57	30	129.0 ~~128.3~~	83.0		A	9
			217.8	102.2			
			320.0	185.2			
				174.8	−0.10		
			36.9		−0.08		
9	1	48	137.9	101.0			9
33	159	110	227.2	81.8			
8	54	72	309.0	182.8			9
5		−71		177.2	−0.05		5
13	54	1					14

Mean −0.15

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1905phae.proj..574W

April 8 1905

Index R L B

IV

47.5

9	9	2	127.0	79.5'	A
			216.8	101.9'	
				181.4'	
			318.7	178.6	−0.03'

37.7

9	12	20	138.8	101.1'	−0.02'
			227.6	79.1'	
				180.2'	
			306.7	179.8	0.00'

Index L L A

317.0

9	17	48	37.53	80.3'	B
			125.3	103.1'	
				183.4'	
			228.4	176.6	−0.06'

306.6

9	21	50	49.2	102.6'	−0.05'
			139.7 +~~4.8~~	79.5'	
				182.1'	
			219.2	177.9	−0.04'

	59	120'	
9	14	75'	
5		−71'	
14	14	4'	

Mean −0.04'

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1905phae.proj..574W

April 8, 1905.

Index L & A

319.6

V

9	34	15	36.2	76.6	B
			130.4	97.1	
			227.5	173.7	+0.12

309.2 +0.12

9	37	46	44.8 ~~45.2~~	95.6	
			140.0	77.9	
			217.9	173.5	+0.12

Index R & B

230.5

A

9	44	6	308.0	77.5	
			40.0	93.5	
			133.5	171.0	+0.17

225.0 +0.25

9	46	21	313.7	88.7	
			50.8	73.7	
			124.5 ~~123.9~~	162.4	+0.33

	161	88	
9	40	37	
+5	−1	−11	
14	39	26	

Mean +0.18

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1905phae.proj...574W

April 8, 1905.

Index R & B

VI

			232.2		
9	55	13	304.3	72.1'	
			43.2	89.7'	A
			132.9	161.8'	+0.35'
			223.9		+0.35'
9	59	28	313.2 ~~314.0~~	89.3'	
			52.0	72.3'	
			124.3	161.6'	+0.35'

Index L & A

			142.0		
10	7	35	215.4	73.4'	B
			310.4	92.8'	
			43.2	166.2'	+0.26'
			130.9		+0.25'
10	11	35	226.3	95.4'	
			322.1	71.9'	
			34.0 ~~36.5~~	167.3'	+0.24'

38	132'	111'
9	63'	28'
5	-1	-11'
15	2	17'

Mean +0.30'

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1905phae.proj..574W

April 8, 1905

Index L & A

blonde 139.4

S. T. 11h 44m
R. A. 3 29
Dec 13.0
P. A. 175.0
Sprocket −0.5 B
" +0.5 b

St's watch used for times

Watch 1m 11 sec fast

As clouds came rather suddenly and in quite heavy masses, blotting out images it was impossible to set these images exactly (for final reading) but position angle and sprocket are pretty nearly correct. The hour angle is also fairly correct

Stopped by clouds. Troubled also by some clouds especially in early part of series Troubled also by rather poor seeing throughout evening

~~Probably~~ The first two the ones most affected by clouds

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1905phag.proj...574W

April 14. 1905. (Friday)

Barn's Suppositar. Plate I Hydr Bowie Rec

	1m	2m	+64.2	9.5
	9	27		
	8	25		
		6		
8 8 5	8	31		
			339.5	variable
			9.7	
			151.9	
			198.6	
			329.0	
8 11 33			16.5	
			159.6	
			189.4	
			250.2	
8 16 22			280.5	~~279.5~~

blonde

blonde came still thicker so that it was impossible to do anything further

9 30 0

Heavy clouds now everywhere

Hydr clouds grew thicker somewhat suddenly sprocket, etc. not read

H's watch used for times

Watch 19 sec fast

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1905phae.proj..574W

April 17 1905 (Monday)

060521 +2°1146 Phot. 5 St. obs. Bonn rec.
9.5 bap

6 6 22.5
9 19
3 13

Index 2 & 4

143.6 ← variés B

7 39 20 204.0 204.14 60.4'
313.5 80.2'
33.7 140.6' −0.76'

133.8 −0.75'
215.0 81.2'
323.0 60.6'
23.6 141.8' −0.74'

Index R & B A

55.4
112.5 57.1'
228.4 71.6'
300.0 128.7' −1.00'

48.4 −1.02'
7 48 8 121.8 73.4'
236.1 54.4'
290.5 127.8' −1.03'

Mean −0.88'

7 87 28
7 43 44
5 +33
12 44 17

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1905phaq.proj..574W

April 17, 1905

S.J. $10^h\ 4^m$
S.A. $3^h\ 56^m$
Dec. 22.0
P.A. 207.5
Sprocket -3.5 A
" -2.5 B
" -1.9 b

-bandop Phot J H. obs Brune

4	36	6.7.9
10	15	
5	39	
~~10~~	5	
5	44	

9."5 bap

For measurements see following page

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1905phae.proj..574W

April 17, 1905

Index left

321.2 brnch star dis. B

8 26 2

23.6 ~~25.7~~ 62.4'
150.0 49.8'
199.8 112.2' +1.37'

329.0 +1.34'
18.9 49.9'
142.0 64.4'
206.4 114.3' +1.32'

Index Right A

233.8
293.2 59.4'
61.6 45.6'
107.2 105.0' +1.54'

242.0 +1.56'
286.0 44.0'
55.8 58.7'
114.5 102.7' +1.59'

Mean +1.45'

8	34	40
	60	42
8	30	21
5		+33
13	30	56

S.J 10^h 46^m
L.t 6^h 1^m
Dec 65.3
P.d. 260.8 Van B
Sprkt −1.5 B
−0.5 b

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1905phae.proj..574W

April 17, 1905

044528 + 28 707 Phot. J Hobe Bovie Rec.

4	39	+29.2
11	16	
6	37	

Abandoned Region too low and too much light cloud

060426 — Gemmorum Phot J Hobe Bovie rec

6	2	+26.0
11	36	
5	34	

11	52	

5	58	+26.7
11	53	
5	55	

Abandoned

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1905phae.proj..574W

April 17, 1905.

+3°1958

0 8 1 4 0 3 Phot. Var. Phot. J. - A. ste. Bowie rec.

8	18	+2.6
12	13	
3	55	

Index R & A

243.9 ← comp. star dia. A

286.0	42.1'	
69.7	28.2'	
97.9	70.3'	+2.50'

249.2		+2.48'
278.9	29.7'	
62.3	41.8'	
104.1	71.5'	+2.46'

Index L & B.

B

149.4		
198.2	48.8'	
338.7	32.9'	
11.6	81.7'	+2.14'

155.9		+2.14'
191.2 ~~190.8~~	35.3'	
331.3	46.5'	
17.5 ~~+5.0~~	81.8'	+2.14'

Mean +2.31'

10	45	45
	87'	54"
10	43'	57"
5		+33"
15	44	30"

S. T. 12h 57m
Ch. +4 40
Dec. +3.2
O. A. 128.9 Var B
Sprocket −0.5 A
" +0.5 B
" +1.0 b

It's watch used for times
Watch 33 sec. slow

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1905phae.proj..574W

April, 18, 1905 (Tuesday)

ϒ Cephei Phot J Hobe Bowie rec.

23	50	+82.4	9.5 bar
33	22		
9	32		

Index L & A

B

7	35	44	
		145.2	var dis
		205.7	60.5'
		311.9	86.7'
		38.6	147.2' −0.63'

130.4		−0.58'
223.0	92.6'	
326.1	59.9'	
26.0	152.5'	−0.53'

R & B

A

56.2		
116.6	60.4'	
227.1	79.4'	
306.5	139.8'	−0.78'

45.8		−0.80
124.4	78.6'	
237.3	59.4'	
296.7	138.0'	−0.81'

Mean −0.69

7	46	22
	81	66'
7	40	63'
5		+49'
12	41	52'

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1905phae.proj..574W

April 18 1905.

S I. 10^h 5
L A 10 7
Dec. 82 8
P A 145.0 Var. B
Sprocket −2.5 B
" −1.5 b

Region of ν Cephei thoroughly identified.

ε Aurigae 045443 Phot. J Hinks Bonn ec

4	52	+43.6
10	24	
5	32	
5	35	

7" Braf.

For measurements see next page

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1905phae.proj...5744

April 18, 1905.

Index d + A

	75.0	rounds	
8 42 40	94.7	19.7'	
	259.2	14.8'	B
	274.0	34.5'	-4.10'

78.1		-4.09'
92.6	14.5'	
256.9	20.3'	
277.2	34.8	-4.08'

Index R + B

	344.0		
	7.2	23.2'	A
	167.6	17.2'	
	184.8	40.4'	-3.75'

347.0		-3.74'
3.6	16.6'	
164.0	24.0'	
188.0	40.6	-3.74'

Mean -3.92'

8	54	40	
	96	80	'
8	48	40	'
5		+49	'
13	49	29	'

S.T 11h 3m
H.A 6 11
Dec 44.1
P.A 180.8 Mean B
Sprocket -8.5 A
" -7.5 B
" -6.9 b

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1905phae.proj..574W

April 18, 1905.

081403 Doubt. Var. +3° 1958 Phot 3 A. de Bourrienne

8	18	2.6
11	25	
3	10	
	6	
3	16	

Index R & A

246.0 ← comp. star

286.9	40.9'	
71.2	31.1'	
102.3	72.0'	+2.44'

9 44 25

248.0 +2.40'

280.9	32.9'	
65.1	41.9'	
107.0	74.8'	+2.35'

Index L & B

152.3

198.6	46.3'	
338.7	33.5'	
122	79.8'	+2.20'

158.2 +2.18'

193.0	~~192.9~~	34.8'
	332.4	46.6'
	19.0	81.4' +2.15'

Mean +2.29'

9 56 10

	100'	35'
9	50	18'
5		+49'
14	51	7'

S. T. 12h 14m
H. A. 3 56
Dec. +3.0
R. A. 127.5
Sprocket −0.5 A
" +0.5 B
" +1.0 b

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1905phaa.proj...574W

April 15, 1905.

060426 Doubt Dec 26° 1117 Phot. Ht. obs Bonn rec

6	.2	+26.0
12	27	
6	25	

Abandoned. Too low.

E 1888 ξ Bootis Phot. Ht. obs. Bowie, Rec.

14	46	+19.6
12	44	
2	2	
9	58	

Abandoned

It's watch used for times tonight
Watch 49 sec slow

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1905phae.proj..574W

April 19, 1905 (Wednesday)

044528 Doubt Star +28° 707 Phot 5 Sk. obs. Bowie rec.

4 39 +29.2
9 33
4 54

9.5 Gaps

Index Dub

48.4 Comp. Star Dis. (B)

7 57 45

125.3 76.9'
236.0 59.0'
295.0 135.9' +0.86'

56.4 +0.90'
114.6 58.2'
228.4 73.9'
302.3 132.1' +0.94'

Index R vB

313.6 (A)
36.6 83.0'
144.5 63.1'
207.6 146.1' +0.65'

324.2 +0.68

8 13. 23
15 70' 68'
7 65' 34'
5 1 16'
13 6 50'

27.3 63.1'
134.5 80.3'
214.8 ~~215.9~~ 143.4' +0.71'

Mean +0.79'

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1905phao.proj...574W

April 19, 1905.

S.J. 10^h 34^m
R.A. 5^h 47^m
Dec 28.5
P.A 217.5 Var B
Sprocket −1.5 B
" −0.5 b

060426 Doubt Var. 26° 1117 Phot R. obs Boone

6. 2 +26.0
10 45
4 43

5 58 +26.7
11 2.
5 4

For measurements see fol. page

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1905phae.proj..574W

April 19 1905

Index & HB

59.5 var. dis.

9 10 45

110.0	50.5		B
234.6	65.0		
299.6	115.5	−1.29	

49.6		−1.27
117.6	68.0	
240.6	49.3	
289.9	117.3	−1.25

Index R & A

329.5			
22.8	53.3		
138.6	73.3		A
211.9	126.6	−1.05	

319.5		−1.08
31.2	71.7	
149.6	52.0	
201.6	123.7	−1.11

Mean −1.18

9	21	22
	31	67
9	15	64
5	1	16
14	17	20

S J. 11h 40m
H. A 5h 32m
Dec +26.2
P. A 281.5 on B
Sprocket −0.5 B
+0.5 b

H's watch used for times
Watch 1 m. 16 sec slow

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1905phae.proj..574W

April, 22, 1905. (Saturday)

Σ Draconis

11	46	73.0
10	00	
1	46	
10	14	

Abandoned

Z Persei Phot I Ht obs. Bouvie rec.

2	31	+42.1
10	10	
7	39	

For measurements see following page.

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1905phae.proj..574W

April 22 1905

Index Left

326.2	← Comp. Star Obs.	
26.3	60.1'	
135.6	82.7'	
218.3	142.8'	+0 72'

314.5		+0.78
34.8	80.3'	
147.5	57.0'	
204.5	137.3'	+0 83'

Index R & B

238.0	57.1'	
295.1	78.7'	
45.1	135.8'	+0.86'
123.8		

223.6		+0.78'
306.7	83.1'	
54.9	61.0'	
115.9	144.1'	+0.69'
	Mean	+0.78'

8 13 58 B

8 22 0

	35'	58"
8	17	59"
5	1	17"
13	19	16

S.I 10h 51m
H.A 8h 15m
Dec +42.1
P A 196.0 Var B
Sprocket −2.5 B
" −1.5 b

9.

19
9
5
15

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1905phae.proj..574W

April 22 1905

Yerkes Phot I. Hz. Bowie rec.

7 24 +76.3
11 46
4 22

Index R & A

319.8	comp star Dec	
28.5	68.7'	
133.0	88.0'	
221.0	156.7'	+0.44'

9. 49 40

312.6		+0.50'
37.6	85.0'	
141.7	66.1'	
207.8	151.1'	+0.55'

Index L & B.

235.3		
296.4	61.1'	
45.8	77.5'	
123.6	138.9'	+0.80'

226.3		+0.81'
305.7	79.4'	
56.6	58.3'	
114.9	137.7'	+0.82'

Mean +0.66'

10 9 15

19 58 55.
9 59 28.
5 1 17.
15 0 45.

S.J. 12h 45m
R.A +5 15
Dec +76.7
P.A 167.5 Var B
Sprocket −1.5 A
" −0.5 B
" +0.1 L

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1905phae.proj..574W

April 22, 1905.

Libræ. Phot. & Ast. Ex. Bonne Rec.

9.5 bapt.

15	4	-19.2
12	58	
2	6	
9	54	

Red

152.2 ← var. dis.

198.9	46.7	A
325.0	59.1	
24.1	105.8	-1.52

146.3		-1.45
204.5	58.2	
329.2	53.4	
22.6	111.6	-1.38

Index & B

239.7

293.2	53.5	B
63.4	45.1	
108.5	98.6	-1.69

243.2		-1.74
289.9	46.7	
62.0	47.5	
109.5	94.2	-1.80

Mean -1.60

11 6 12

11	15	52
	21	64
11	10	62
5	1	17
16	12	19

S.J. 1 46
R.A. -1 22
Dec -20.0
P.A. 249.5 Ind B
Sprocket -2.5 B
" -1.5 b

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1905phao.proj...574W

April 22, 1905.

Although the declination reads a little south. this is probably due in part to the fact that the other index is used. Region however thoroughly identified Seeing in above group a little blurry due to east wind

H's watch used for times tonight
H watch 1 mn. 17 sec. slow

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1905phae.proj..574W

April 24, 1905 (Monday)

Eunomia Phot 3 Ht. obs. Bowie sec.

8	19	+13.1
9	55	
1	36	

7 48 0 Star a Eunomia precedes +12° 1859 (8.0) by 25.5 sec and is 3.3 north of it.

8 10 0 Star b precedes +12° 1859 (8.0) by 7.5 sec and is 7.9 south of it.
Star c follows +12° 1858 (8.5) by 16.5 sec and is 7.5 north of it.
blinds thick

9 20. 0 Still cloudy

8	23
11	50
3	27

9 35 0 Still thickly cloudy, no stars visible, comparatively no chance for anything further

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1905phao.proj..574W

April 25, 1905 (Tuesday)

Gunonia. Phot. J. H. obs. Bowie rec.

8	19	+13.1
9	50	
1	31	

7 40 Gunonia follows +12° 1859 (8.0) by 21.5 sec and is 1.7 north of it

L.√ = +11° 1864 (9.0) = 8 24 ~~31~~ 32.4 +11 54.8 (9.0) Comp Star

For measurements see following pages.

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1905phae.proj..574W

April 25, 1905.

Index Left — I

229,8 ← comp. Star Dec.

7	56	22	301,5 ~~302.0~~	71.7'		
			59.6	50.6'		
			110.2	122.3'	+1.14'	B
			240,1		+1.14'	
7	59	35	291.4	51.3'		
			50.3	70.9'		
			121.2	122.2'	+1.14'	

Index Right — B

			137.3			
8	4	24	213.9	76.6'		A
			325.7	54.6'		
			23.3	131.2'	+0.95'	
			148,5		+0.94'	
8	7	38	205,93	56.8'		
			318.5	76.0'		
			34.5	132.8'	+0.92'	

Mean +1.04'

30	126'	119'
7	61	60'
8	2	0'
5	1	5'
13	3	8

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1905phaa.proj..574W

April 25, 1905

Index R&B

			138.5		II
8	14	2	214.7	76.2'	
			327.8	55.8'	A
			23.6	132.0' +0.94'	
			148.8		+0.93'
8	17	48	204.59	56.1'	
			318.0	76.6'	
			34.6	132.7' +0.92'	

Index L+A

			49.2		
8	21	59	122.8	73.6'	
			238.9	52.7'	B
			291.6	126.3' +1.06'	
			60.6		+1.10'
8	26	8	111.7	51.1'	
			230.5	71.8'	
			302.3	122.9' +1.13'	

	78'	117'	
8	19	59	'
5	1	8	'
13	21	7	'

Mean +1.02'

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1905phae.proj..574W

April 25, 1905

Index Dat III

49.3

8	37	8	119.72	69.9	
			240.0	50.7	
			290.7	120.6	+1.18

B

62.4 +1.20

8	41	3	110.2	47.8	
			228.0	71.3	
			299.3	119.1	+1.21

Index R+B

			319.5		
8	46	10	33.1	73.6	
			148.6	53.5	
			202.1	127.1	+1.04

A

329.3 +1.06

8	50	8	21.6	52.3	
			138.4	72.8	
			211.2	125.1	+1.08

	174	29	
8	43	37	
5	1	8	
13	44	45	

Mean +1.13

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1905phag.proj..574W

April 25, 1905

Index R & B

321.3

8 57 50 — 30.8 ~~31.6~~ — 69.5'

150.2 — 50.1'

200.3 — 119.6' — +1.20' — A

331.2 — +1.23'

9 1 48 — 19.7 — 48.5'

142.2 — 68.3'

210.5 — 116.8' — +1.26'

Index L & A

233.5

9 5 55 — 298.10 — 64.5' — B

62.5 — 44.0'

106.5 — 108.5' — +1.45'

245.0 — +1.50'

9 10 5 — 287.4 — 42.4'

54.4 — 61.6'

116.80 — 104.0' — +1.56'

Mean +1.36'

35	73	158	'
8	63	54	'
9	3	54	'
5	1	8	'
14	5	2	'

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1905phae.proj..574W

April 25. 1905

Index Left

			235.7			V
9	23	14	296.1	60.4		9
			64.4	42.4		
			106.8	102.8	+1.59	B
			245.2			+1.60
9	26	15	287.0	41.8		9
			54.8	60.5		
			115.3	102.3	+1.60	

Index R & B

			144.2			
9	31	48	206.5	62.3		A 9
			334.0	44.8		
			18.8	107.1	+1.49	
			152.7			+1.56
9	35	14	199.4	46.7		9
			333.4	54.4		
			27.8 ~~28.3~~ ~~27.2~~	101.1	+1.63	

Mean +1.58

	115	91
9	28	68
5	1	8
14	30	16

9
5
14

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1905phag.proj..574W

April 25 1905

Index R & B

VI

143.2

9	45	16	209.1	65.9	
			330.7	47.3	
			18.0	113.2	+1.34

A

152.0 +1.32

9	49	34	201.0	49.0	
			322.5	66.7	
			29.2	115.7	+1.29

Index L & A

54.0

9	54	24	114.5	60.5	
			243.6	43.9	
			287.5	104.4	1.55

B

61.2 1.54

9	57	48	107.2	46.0	
			236.3	59.7	
			296.0	105.7	1.52

	205	122
9	51	46
5	1	8
14	52	54

Mean +1.43

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1905phae.proj..574W

April 25, 1905.

Index L & b

		54.0		VII
10	3	40	115.0	61.0'
			243.6	44.7'
			288.3	105.7' +1.52' B
			63.0	+1.48'
10	6	48	108.X2	45.2'
			234.2	63.8'
			298.0	109.0' +1.44'

Index R & B

			321.9	
10	10	48	29.9 ~~30.0~~	68.0'
			150.3	51.5'
			201.8	119.5' +1.20' A
			331.0	+1.16'
10	14	55	22.9	51.9'
			138.8	71.1'
			209.9	123.0' +1.13'
				Mean +1.32'

	33	191'
10	8	63'
5	1	8'
15	10	11'

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1905phaa.proj..574W

April 25, 1905.

Index R & B

		321.0		VIII
10	23	6	29.5	68.5
			149.0	52.4
				120.9 +1.17
			201.4	A
			331.8	+1.19
10	27	30	21.0	49.2
			141.3	69.9
				119.1 +1.21
			211.2	

Index L & A

		~~232.9~~		
~~10~~	~~32~~	~~20~~	~~299.2~~	
			60.2	B
10	34	6	110.8	50.6
			232.0	66.0
				116.6 +1.27
			298.0	
			50.3	+1.25
10	37	21	118.4 ~~119.0~~	68.1
			241.8	48.0
				116.1 +1.28
			289.8	

	121	63
10	30	31
5	1	8
15	31	39

Mean +1.24

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1905phae.proj..574W

April 25 1905

Index L+A IX

			240.8			
10	52	44	290.85	49.7'		
			49.3	68.4'		B
			117.7'	118.1'	+1.23'	
			231.7		+1.22'	
10	57	55	298.2	66.5'		
			58.5	53.1'		
			111.6	119.6'	+1.20'	

Index R+B

			145.6			
11	3	24	205.5	59.9'		
			320.0	71.8'		A
			31.8	131.7'	+0.94'	
			138.3		+0.96'	
11	7	8	212.9 ~~213.0~~	74.6'		
			328.0	55.8'		
			23.8	130.4'	+0.97'	

Mean +1.09'

42	119'	131'
10	59	78
11	0'	18
5	1	8
16	1	26

S.T. 13h 45m
R.A. 5 15
Dec. +12.1
P.A. 145.5 Ver. B.
Sprocket - 2.5 B
" -1.5 b

W's watch used for times
Watch 1 m. 8 sec. slow

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