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Oct. 10. 1911. (Tuesday)

Brooks Comet.

13	11	+3!6
20	24	
+7	17	

Register too low. Abandoned.

Photometer I. which gave trouble on Oct. 7 and 9. (principally Oct. 9), fixed, and worked well to night.

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Oct. 10, 1911.

R Z Cassiop.

26		
2	36	+69.0
20	V3	
−V	K3	
+6	17	

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1911phae.proj..608C

Oct. 12, 1911

I

Index above

227.7 ← Var. dis.
7-34-15 268.6 35.9
49.0 27.9
76.9 63.8 −2.72

231.5 24.1 −2.67
259.6 36.6
43.2 66.7 −2.62
81.8

Index below

136.0 35.0
171.0
322.9 21.6
7-42-1.0 344.5 56.6 −2.99

141.2 22.7 −2.88
7-42-10 163.9
76 25.5 312.0 39.8 −2.77
7 38 12.1 351.8 62.5
tr −1 12.5
12 37 0.0 −2.78
9320.5257

1911phae.proj...608C

Oct. 10, 1911

II

Index below

138.6
169.0 30.4
324.6 21.0
345.6 √1.4 −3.21

7-44-25

142.9 22.1 −3.14
165.0
318.√ 32.7 −3.07
351.2 √4.2

Index alone

44.2
82.√ 38.3
231.8 24.1
255.9 62.4 −2.77

−2.80

√2.0
7√.√ 23√
226.6 36.9 −2.84
263.√ 60.4

7-√0-4√
9√ 10.√
747 3√.√
+√ -1 12.√
1246 23.√
9320.√322√

−2.97

1911phae.proj..608C

Oct. 10, 1911

III

Index above

7-53-30

43.5
82.8 39.3
233.0 23.3
256.3 62.6 -2.76

-2.74

√0.6
75.√ 2.9
225.3 39.3
264.6 6×.2 -2.71

Index below

315.4 360
351.4
142.9 21.1
164.0 √7.1 -2.97

-2.96

323.√ 2.9
7-59-40 346.4
13 10.√ 137.0 34.√
7 √6 34.√ 171.√ √7.4 -2.96
+√ -1 12.√
12 √√ 23.√

-2.4√

9320.√34√-

1911phae.proj...608C

Oct. 10, 1911

IV

Index below

8-3-0

315.2
3√3.5
143.3
164.9

3∆.3
21.6
√99 −2.46

−2.94

323.0
344.9
137.3
171.0

21.9
33.7
√5.6 −3.03

Index above

225.5
264.9
51.3
76.1

39.4
24.4
64.2 −2.71

−2.74

8-9-10
12 10.√
∆ 6 √
∓ −1 12.√
13 K √3

231.2
257.4
46.1
82.6

26.2
36.√
6.7 −2.76

9320.√4√0

−2.44

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Oct. 10, 1911. V

Index above

~~222.7~~
~~363.5~~

~~8-17-15~~

52.0
75.7 23.7
8-18-15 226.1. 36.6
262.1 59.7 -2.47

44.9 36.6 -2.44
81.5
232.7 24.4
257.0 61.1 -2.41

Index below

322.2
346.6 24.4
137.0 34.0
171.0 58.4 -2.9~

-2.99

315.8 33.2
8-24-35 349.0 21.4 -3.06
2 50. 143.0 55.0
4 21 25. 164.8
+5 -1 12.
13 20 13

-2.9~

9320.555

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1911phae.proj...608C

Oct. 10, 1911

VI

Index below

8-40-0

322.2 2V.1
347.3
135.5 35.2 / 60.3 −2.4V
170.7

−2.9K

316.4 3K.1
350.V
143.5 21.6 / 55.7 −3.03
165.1

Index above

232.0 25.K
257.4
47.0 35.0 / 60.K −2.4K
82.0

−2.7V

222.V K−K
264.9
53.0 23.1 / 65.5 −2.66
76.1

8-46-30
6 30.V
A 43 1V.1 V
+V −1 12,
13 4V 3. V
9320.V70A V

−2.4K

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1911phae.proj..608C

Oct. 10, 1911

VII

Index above

232.0
256.5 24 ✓

43.2 40 ✓
83.6 6 ✓ 9 -2.6 ✓

223.5
262.4 38.9 -2.7 ✓

✓2.✓ 23 ✓
75.6 6 2 3 -2.7 ✓

Index below

144.1 -0.9
165.0
317.1 33.3
350.4 ✓ ✓ -3.0 ✓

137.5 35.0 -3.0 ✓
172.5
322.0 22.7
344.7 ✓7.7 -2.9 ✓

-2.7

8-48-20

8-53-50

2 10. ✓
4 ✓ 1 ✓.
+✓ -1 12. ✓
13 ✓ 9 ✓3.

9320. ✓763 ✓

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1911phae.proj...608C

Oct. 10, 1911.

VIII

Index below

8-56-10

143.2 23.0
166.2
316.2 34.2
351.0 ✓7.8 −2.94

135.9 36.4 −2.9✓
172.3
322.1 22.9
345.0 ✓9.3 −2.89

Index above

✓2.2 23.8
76.0
224.5 36.4
260.9 60.2 −2.45

−2.46

45.9 34.9
80.8
231.6 24.8
256.4 ✓9.7 −2.87

−2.89

9
8-1-50
11A 0.✓
8 ✓9 0 ✓
✓ −1 12.✓
13 ✓7 48✓
9320.✓48✓

P. A., 25.2 Vernier B

Wis watch used for time.
Watch 1m 12sec fast.

E. A. P.

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Oct. 12. 1911. (Thursday).

√ 4√ Rather cloudy.

6 4√ ~~Hazy~~ Wholly cloudy.

Cleared again.

-26 R Z Cassiop.

χ 36 +69.0

21 19

-√ 17

+6 43

For remarks, see fol. pages.

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Oct. 12, 1911.

I

Index above

7-49-5

47.6 32.7
80.3
230.√ 26.4
2√6.9 √9.1 2.49

√1.6 23.9 2.44
7√.√ .1
225.√ 37.9
263.4 61.8 2.79

Index below

317.0 32.0
349.0
142.8 22.9
165.7 √4.9 3.07

322.6 23.7 3.04
346.3
138.0 32.4
170.4 √6.1 3.01

7-√6-0
10√ √. √
7√2 32. √
+√ -1 14. √
12√1 18. √
9322.√3√6 √

2.94

1911phae.proj..608C

Oct. 12, 1911. II

Index below

7-57-45

317.9
350.4 32.√
142.1 23.4
165.√ √√.9 3.02

322.0 2.96
345.2 23.2
136.8 3√.4
172.2 √6.6 2.91

Index above

226.0
263.5 37.√
√0.4 2√.9
76.3 634 2.73

230.1 26.0 2.76
256.1
46.1 3√.√
81.6 61.√ 2.80

8-4-0 2.86
1 4√.√
4 0 √2.√
+√ -1 14.√
12 √9 3√.
9322.√414√

1911phae.proj..608C

Oct. 12, 1911.

III

Index above

225.5 37.4
263.3
51.7 26.7
76.4 62.5 2.77

231.5 25.4 2.72
256.9
43.0 39.6
82.6 60.0 2.64

Index below

135.0 35.2
170.2
324.0 21.5
345.5 56.7 2.99

2.99

143.0 23.3
166.3
317.7 33.3
351.0 56.6 2.99

2.96

8-5-50

8-11-10

17 0.5
8 8 30.5
+5 -1 14.5
137 10.5
9322.5467

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1911phae.proj..608C

Oct. 12, 1911

IV

Index below

8-13-20

136.2 36.3
172.5
323.2 22.4
345.6 56.7 2.91

142.3 22.7 2.91
165.0
315.5 31.0
351.5 52.7 2.91

Index above

44.8 37.4
82.2
231.6 24.9
256.5 62.3 2.77

51.5 26.2 2.74
77.7
225.6 37.7
263.3 63.9 2.72

2.72

8-18-45

	32	5.5
8	16	2.
40	-1	14.
13	14	44.

9322. 55 20

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1911phae.proj...608C

Oct. 12. 1911

IV

Index above

8-19-50

46.4 36.2
82.6
232.4 25.1 / 61.3 = 2.41
257.5

50.6 26.0 = 2.74
76.6
226.0 39.5 / 65.5 = 2.66
265.5

Index below

315.3 36.9
352.2
143.0 21.5 / 57.4 = 2.96
164.5

321.9 25.7
346.6
137.8 32.0 / 56.7 = 2.99
169.8

8-26-20
46 10.5
+ 23 5.5
+5 -1 14.5
13 21 51.5
9322.5 + 56.5

2.45

P.A. 205.5 Vernier B

W's watch used for time,
Watch 1m 14 sec fast

L. A. F.

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1911phae.proj..608C

Oct. 13. 1911. [Friday].

R S Sagittarii.

18	9	−34.2
19	40	
+1	31	

For results, see fol. pages.

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1911phae.proj...608C

Oct. 13, 1911.

I

Index left and below

6-17-0

206.7
247.6 40.9
34.5 26.7
61.2 67.6 2.59

213.9 29.1 2.63
243.0 36.1
30.0 65.2 2.67
66.1

Index right + above

118.
156.6 38.1
302.2 28.6
330.6 66.8 2.62

123.0 29.8 2.84
152.8
298.0 39.3
337.3 68.1 2.82

6-22-40
39 40.
6 19 50.
+ 1 13.
11 18 37.
9323, 4912

-260
2.70
6.10

1911phae.proj..608C

Oct. 13, 1911 II

Index right and above

6-24-45

119.0
156.4 37.4 ✓
303.0 28.2 ✓
331.2 65.6 ✓ 2.66

123.4 28.1 ✓ 2.60
151. ✓
297.0 [illegible] ✓
337.9 69.0 ✓ 2.54

Index left + below

29.5 37.9 ✓
67.4
211.5 29.5 ✓
241.0 67.4 ✓ 2.59

31.8 30.3 ✓ 2.60
62.1
210. 236.6 ✓
246.8 66.9 ✓ 2.61

6-30-15

✓✓ 0. ✓
6 27 30. ✓
+✓ −1 13. ✓
11 26 17. ✓
9323.4766 ✓

260
8.70
6.10

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1911phae.proj...609C

Oct. 13, 1911

III

Index left + below

6-34-0

26.3 34.2
60.5
213.2 27.5
240.7 61.7 2.40

93.5 24.1 2.76
61.6
210.0 36.0
246.0 64.1 2.71

Index right + above

295.7
334.8 39.1
123.0 30.0
153.0 69.1 2.54

2.52

302.0 29.2
331.2
120.0 37.5 2.62
157.5 66.7

6-39-40

13 40.
6 36 50.
+5 -1 13.
11 35 37.
9323.4 30

2.67
2.71
6.03

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1911phae.proj..6080

Oct. 13, 1911. IV

Index right + above

298.0 39.2 ✓
337.2
122.2 29.9 ✓
152.1 69.1 ✓ 2.54

302.2 29.8 ✓ 2.54
332.0
117.4 34.9 ✓
156.3 64.7 ✓ 2.55

Index left + below

208.9
246.8 37.9
32.5 29.1
61.6 67.0 2.61

212.7 29.8 2.59
241.5
26.5 39.8
65.9 64.2 2.57

6-41-25

6-41-0

Δ 2.57 ✓
6 44 12 ✓
+5 -1 13 ✓
11 42 57 ✓
9323.442 ✓

2.56
4.70
2.6
6.14

1911phae.proj..608C

Oct. 13, 1911. V

Index left and below

6-48-30

208.1 38.√
246.6 29.√
32.√ 67.6 2.√7
62.0

213.1 29.6 2.√4
242.7
26.6 40.4
67.0 70.0 2.√1

Index right & above

118.0 39.3
1√7.3
301.6 28.6
330.2 67.9 2.√4

123.4 24.6 2.√√
1√2.0
297.√ 41.1
338.6 69.1 2.√2

6-√√-√
3 3√.√
6√14.√
√-1 13.
11√0 3√.√
9323.4 3√-√

2√4
8.70
6.16

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1911phae.proj..6080

Oct. 13. 1911.

R Z Cassiop.

26		
2	36	+69.0
20	V R	
−V	3 A	
+6	22	

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1911phae.proj...608C

Oct. 13, 1911 I

Index above

7-21-15

227.4 3√.6
263.0
52.1 23.9
76.0 √9.√ 2.42

230.2 36.6 2.67
266.8
4√.8 34.9
80.7 71.√ 2.46

Index below

137.6 32.9
170.√
322.1 22.9
34√.0 √√.6 3.02

148.7 22.1 3.01
16√.8
316.6 34.2
3√0.8 √6.3 3.00

7-28-2√
9 40.√
7 24 √0.√
tv -1 13.√
12 23 37.√
9323.√164√

-2.44

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1911phae.proj..6080

Oct. 13, 1911. II

Index below

7-31-40

136.8 3V.3
171.1
321.V 2V.4
346.9 V9.7 2.47

141.3 23.V 2.91
164.8
316.4 34.1
350.V V7.6 29V-

Index above

44.9 36.7
81.6
232.2 23.1
2VV.3 V9.A 2.47

V2.6 23V 2.40
7V.8
223.0 40.V
263.V 637 2.73

7-38-20
10 0.V
7 3V 0.V
tV -1 13.V
12 33 47.V
9323.V2 3V-V

2.86

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1911phae.proj...608C

Oct. 13, 1911. III

Index above

7-40-45

43.8 37.2 v
81.0
231.7 33.9 v
265.6 71.1 v 2.47

52.0 23.9 2.64
75.9
226.3 37.5
263.8 61.4 2.41

Index below

315.2 35.7
350.9
142.8 22.6
165.4 57.3 2.93

2.49

7-46-50

322.3 24.3
346.6
135.3 35.9
171.2 60.2 2.45

7 43 42.1 v
5 -1 13.
12 42 35.4 v
9323.5 296 v

2.76

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1911phae.proj..6080

Oct. 13, 1911. IV

Index below

7-49-30

314.9 36.3
351.2
143.4 21.3
164.7 57.6 2.8

323.2 22.4 2.96
346.0
136.7 34.3
171.0 57.1 2.97

Index above

226.0 35.0
261.0
52.0 25.0
77.0 60.0 2.46

230.8 25.1 2.46
255.9
46.2 35.2
81.4 60.3 2.45

7-59-0
Δ 30.
7 54 N.
+5 -1 13.
12 53 2
9323.536A

2.91

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1911phae.proj...606C

Oct, 13, 1911. V

Index above

8-1-0

224.2 37.4
262.0
51.0 24.6 / 62.4 2.77
75.6

231.8 2.4.4 2.42
256.2
44.7 35.4 / 79.4 2.47

Index below

136.6 34.4
171.0
321.7 24.5 / 45.9 2.90
346.2

142.5 23.0 2.90
165.5
315.8 35.9 / 56.9 2.90
351.7 -2.46

8-9-0 / 10 0

8 5 0.
+5 -1 13.
13 3 47. P.A. 205.5 Vernier B
9323.5443

L. P. P.

W's watch used for time.
Watch 1m 13sec fast

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1911phae.proj..6080

Oct. 14. 1911. (Saturday).

R Z Cassiop.

26		
4	36	6 9.0
20	V-2	
-V	44	
+6	76	

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1911phae.proj...606C

Oct. 14, 1911. I

Index above

7-27-5

45.8 34.4
80.6 24.5
232.1 24.5/59.3 −2.49
256.6

√1.3 25.6 −2.42
76.9
22√5.0 37.5/63.1 −2.74
262.5

Index below

314.9
348.4 33.5
141.4 23.6
16√.0 √7.1 −2.97

322.0 −2.9√
7-34-50 346.2 24.2
61 √√. 137.0 34.0/√4.2 −2.93
7 30 √2. 171.0
+√ −1 14.
1229 44
9324. √206

−2.42

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1911phae.proj..608C

Oct. 14, 1911. II

Index below

317.0
3√2.0 3√.0
142.8 22.0
164.8 √7.0 −2.9A

7-37-√√

322.√ 23.0 −2.9A
346.3
135.6 33.1
168.7 √6.9 −2.9A

Index above

√27.1 3√.9
263.0
√1.8 24.2
76.0 60.1 −2.6

230.8 25.6 −2.0
2√6.4
43.2 37.6
80.8 6.3.2 −2.7

7-43-30

	41	25.
7	40	42.
+√	−1	14.
12	39	29.

−2.9

9324.√274

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1911phae.proj...600C

Oct. 14, 1911.

III

Index above

7-46-10

223.9
263.2
√2.4
77.7

39.3 ✓
25.3 ✓
64.6 ✓ −2.69 ✓

229.0
2√5.1
47.6
83.0

26.1 ✓
3√.4 ✓
61.√ ✓ −2.81 ✓

−2.74 ✓ ✓

Index below

137.8
171.4
321.0
344.8

33.6 ✓
23.4 ✓
√7.4 ✓ −2.96 ✓

142.2
166.√
316.1
3√1.√

~4.3 ✓
3√.4 ✓
√9.7 ✓ −2.87 ✓

−2.9~ ✓

7-√1-√
97 1√. ✓
7 44 3A. ✓
+√ -1 14. ✓
12 47 24. ✓
932 4. √329 ✓

~2.8√ ✓ ✓

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1911phae.proj...6080

Oct. 14, 1911. IV

Index below

7-53-25

137.2
171.9 34.7
321.4 23.5
344.9 46.2 -2.93

143.0 -2.46
166.3 23.3
313.2 34.3
351.5 61.6 -2.40

Index above

45.0 36.4
81.4
232.1 24.3
356.4 60.7 -2.44

1.8 -2.74
7-58-15 77.8 26.0
11 40. 225.0 34.1
7 0. 263.1 64.1 -2.71
-1 14. -2.62
12 54 36.
9324.379

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1911phae.proj...608

Oct. 14, 1911

V

Index above

8-0-20

46.0 36.6
82.6
232.2 24.8
207.0 61.8 −2.81

−2.84

71.8 24.6
76.4
226.5 30.5
262.0 60.1 −2.86

Index below

314.8 37.2
342.0
142.0 24.0
166.0 61.2 −2.81

321.8 24.7 −2.92
346.5
138.0 30.8
168.8 55.5 −3.0K

−2.88

8-6-20

6 40.
+ 3 20.
+ −1 14.
13 2 6.
9324.432

P. A. 205.5 Vernier B

L. P. P.

W's watch used for time,
Watch 1m 14sec fast.

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1911phae.proj..6080

Oct. 16. 1911. (Monday).

R S Sagittarii.

18	9	−3K.
20	6	
+1	√1	

For results. see fol. pages.

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1911phae.proj...608C

Oct. 16, 1911. I

Index left + below

6-13-10

207.9 39.2
247.1
33.√ 26.6
60.1 65.8 −2.6√

214.3 27.8 −2.√8
242.1
26.2 42.1
68.3 69.9 −2.√1

Index right + above

117.1 41.1
158.2
303.2 28.7
331.9 69.8 −2.√1

−2.47

6-20-0

33 10.√
6 16 35.√
√ −1 16.√
11 1√ 19.√
9326.4809√

123.0 29.0
152.0
295.3 43.3
338.6 72.3 −2.43

−2.√2
2.70
6.18

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1911phae.proj..6080

Oct. 16, 1911. II

Index right and above

6-21-50

113.0
157.4 44.4
301.9 33.1
335.0 77.5 −2.27

−2.46

122.7 30.5
153.2
298.3 35.7
334.0 66.2 −2.64

Index left and below

26.1
68.6 42.5
211.0 30.0
241.0 72.5 −2.43

−2.43

6-30-20

30.0
61.8 31.8
205.8 40.7 −2.43
246.5 72.5

√2 10.
6 26 √.
+√ −1 16.
11 24 49.
9326.47 √6

−2.44
6.70
6.26

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1911phae.proj...6080

Oct. 16, 1911 III

Index left and below

6-35-5

24.4 44.3
68.7
31.0 30.5
61.5 74.2 −2.3

214.5 22.1 −2.4
242.6
26.0 40.9 −2.5 4
66.9 69.0

Index right and above

116.5 43.6
160.1
303.0 22.1
331.1 71.7 −2.4

6-49-0

22 5.
6 42 2.
+ −16.
11 41 46
9326.4274

−2.4
2.2°
6.26

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1911phae.proj..6080

Oct. 16. 1911.

R Z Cassiop.

26
8 36 · +69.0
21 V

− V	31
+6	−9

For measts. see fol. pages.

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1911phae_proj...608C

Oct. 16, 1911 I

Index above

7-16-0

228.√ 34.√
263.0
√1.6 2√.4
77.0 √9.9 2.46

230.7 2√.9 2.40
2√6.6
44.0 37.4
81.8 63.7 2.73

Index below

137.8 30.√
168.3
322.1 21.7
343.8 √22 3.17

142.9 23.0 3.0√
16√.9
31√.8 3√.3
3√1.1 √8.3 2.93

7-22-50
3A √0.√
7 19 2√.√
√ 1 16.√
12 1A 9.√
9326.√126√ 2.9√

1911phae.proj..6080

Oct. 16, 1911 II

Index below

7-25-5

137.√ 33.0
170.√
323.√ 20.7
344.2 √3.7 3.11

143.9 21.4 3.07
16√.3
31√.2 34.3
349.√ √√.7 3.03

Index above

46.2 3√.√
81.7
231.7 2√.3
2√7.0 60.4 2.43

√1.2 2.43 2.79
7√.√
7-33-15 22√.√ 34.6
√4 20.√ 264.1 62.9 2.7√
7 29 10.√
+√ -1 16.√
12 29 √4.√
9326.√193√

~~2.44~~

2.98

1911phae_proj...608C

Oct. 16, 1911.

III

Index above

7-3√-4√

4√.1 36.9
82.0
232.4 22.9
2√√.3 √9.6 2.47

√1.0 2√.0 2.94
76.0
233.2 29.√
262.7 √4.√ 3.0A

Index below

316.4 33.6
3√0.0
142.9 20.3
163.2 √3.9 3.11

322.8 23.2 3.02
346.0
136.1 34.7
170.8 √7.9 2.94

7-41-40
77 2√.
.7 3A 42.
√. -1 16.
(23) 26.
9326.√260

3.00

1911phae.proj..6080

Oct. 16, 1911. IV

Index below

7-46-20

317.0
3√1.4 34.4
142.2 22.4
16√.0 √7.2 2.97

322.1 24.√ 2.94
346.6
138.4 32.1
170.√ √6.6 2.99

Index above

225.√ 36.√
262.0
√0.6 24.4
7√.0 60.9 2.43

231.1 26.2 2.74
2√7.3
44.1 37.√
81.6 63.7 2.73

7-52-√√
99 1√.√
7 49 34.√
+√ -1 16.
12 48 22.√
9326.√336√

2.88

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1911phae.proj...608C

Oct. 16, 1911 V

Index above

224.9
7-56-3√ 262.3 37.4
√1.9 2√.1
77.0 62.√ 2.77

231.4 2√.4 2.76
2√7.2
44.8 37.4
82.2 63.2 2.74

Index below

137.3 30.9 √
168.2
323.0 21.4 √
344.4 √2.3 √ 3.17

143.1 22.2 √ 3.0√
16√.3
31√.0 36.0
3√1.0 √4.2 2.93

8-3-30
0 √.√
4 0 2.√
4√ -1 16.√
12 √4 46.√
9326.√409 P. A. 20√.7 Vernier B

-2.90

Ws watch used for time
Watch 1m 16s fast

L. A. P.

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1911phae.proj..6080

Oct. 23. 1911. (Monday).

R Z Cassiop.

26
8 26 +69.0
21 ~~26~~

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1911phae.proj...608

Oct. 23, 1911 I

Index above

7-16-0

41.2 44.0
85.2 34.1
229.0 78.1 −2.37
259.1

48.9 32.2 −2.30
81.1
220.8 46.7
267.5 78.9 −2.23

Index below

311.0
354.4 43.4
138.5 30.3
168.8 73.7 −2.39

317.0 31.5 −2.34
348.5 45.7
131.3 77.2 −2.24
177.0

7-22-55
34 55.
7 19 24.
+5 −1 27.
82 18 1
9333.5/25+

−3.32

1911phae.proj..6080

Oct. 23, 1911. II

Index below

7-2√-√0

309.8 4√.2√
3√√.0
138.9 30.2√
169.7 76.0√ −2.32√

317.1 −2.3√
349.2 32.1√
132.0 42.7√
174.7 74.8√ −2.3√

Index above

221.1
267.2 46.1√
46.0 32.9√
78.9 79.0√ −2.22√

−2.18√

228.0
261.2 33.2√
38.√ 49.0√
87.√ 82.2 −2.13√

7-31-4√
√7 3√.√
7 28 4√.√
+√ −1 27.√
12 27 21.√
9333.√190√

−2.26√

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1911phae.proj...608C

Oct 23, 1911. III

Index above

7-33-2

218.9 ✓0.1 ✓
269.0
46.6 34.0 ✓
80.6 41 ✓ −2.04 ✓

226.9
260. ✓ 33.6 ✓ −2.04 ✓
37.1 ✓2.7 ✓
89.8 63 ✓ −2.01 ✓

Index below

128.3
176.9 48.6 ✓
316.3 31.7 ✓
348.0 ✓0.3 ✓ −2.19 ✓

136.6 33.0 ✓ −2.16 ✓
169.6
310.1 48.9 ✓
359.0 ✓1.9 ✓ −2.14 ✓

7-40-1 ✓
73 40. ✓
7 36 ✓0. ✓
✓ −1 27. ✓
12 35 ✓ 23. ✓
9333. ✓246 ✓

−2.10 ✓

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1911phae.proj..608C

Oct. 23, 1911 IK

Index below

7-42-√0

129.2 +4.2√
177.4
317.6 34.6√
342.2√ −2.11√
342.2

136.2 36.2√ −2.06√
172.4
308.4 √0.1√
358.5 +63√ −2.01√

Index above

37.6 √0.7√
88.3
226.0 35.√√
261.5 +62√ −2.02√

7-46-3√

46.3 35.1√ −1.9F√
81.4
217.9 √6.4√
273.8 91.9√ − 1.46

7 44 42.√
+√ −1 27.√
12 43 15.√
9333.√300√

— 2.00√

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1911phae.proj..608C

Oct. 23, 1911. V

Index above

7-49-30

38.2
90.4 52.2
225.0 37.4 -1.92
262.4 89.6 +1.70

46.0
83.9 37.9
216.0 55.5
271.5 93.5 -1.82

Index below.

304.6 86.9
1.5
133.9 38.1
172.0 90.0 -1.78

314.5 39.0 -1.82

7-55-10
104 40.
7 52 20.
55 -1 27.
12 50 53

353.5
128.0 53.2
181.2 92 -1.86

-1.84
+1.79

9333.5 3 53 P. A. 205.3 Vernier F

L. P. P.

Wo watch used for time
Watch 1m 27s fast

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1911phae.proj..608C

Oct. 23. 1911.

Z Persei.

26		
8	33	+42,2
22	28	
−4	√	
+7	√−√	

Abandoned.

L. P. P.

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1911phae.proj..608C

Oct. 24. 1911. (Tuesday).

R I Cassiop.

26		
~~2~~	26	+69,0
21	32	
−K	V K	
+7	6	

For measts. see fol. pages.

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1911phae.proj..6080

Oct. 24, 1911. I

Index above

47.1 — 33.3 — Var. dec.
80.4

231.2 — 25.5
256.7 — 5.4 — −2.91

√0.4 — 25.9 — −2.80
76.3

225.8 — 34.7
264.√ — 6.6 — −2.69

Index below

316.4 — 33.9
30√0.3

143.0 — 22.7
165.7 — √6.6 — −2.99

323.0 — 22.√ — −2.94
34√.√

7-18-0

30 — 14.
7 — 15 — 8.
+√ — −1 — 24.
12 — 13 — 44.

135.√ — 36.√
172.0 — √9.0 — −2.90

−2.87

9334. √09√+

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1911phae.proj...608C

Oct. 24, 1911. II

Index below

315.1 3V.V
7-20-10 350.6
143.2 22.4
165.6 V7.9 -2.94

323.4 22.6 -2.91
346.0
135.9 36.9
172.8 V9.V -2.82

Index above

226.4 36.6
263.0 23.3
V2.6 V9.9 -2.86
75.9

231.4 22.8 -2.88
7-25-20 254.2
4V 30. 44.3 38.4
7 22 4V. 82.7 61.2 -2.84
4V -1 24.
12 21 21.
9334.V149

-2.88

1911phae.proj..6080

Oct. 24, 1911 III

Index above

7-27-3√

225.2
261.4 36.2√
√2.0 23.6√
7√.6 √9.8√ −2.87√

231.3 22.9√ −2.90√
2√4.2
46.1 35.1√
81.2 √20.0√ −2.94√

Index below

136.8 35.0√
171.8
322.0 24.0√
346.0 √9.0√ −2.90√

141.7 24.2√ −2.86√
7-33-√ 165.9
60 40.√ 314.√ 37.1√
7 30 20.√ 3√1.6 61.3√ −2.81√
t√ −1 24.√ −2.88√
12 2d √6.√
9334.√200√

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1911phae.proj...608C

Oct. 24, 1911. IV

Index below

7-34-√√

136.√ 3√.1
171.6
322.√ 23.√ / √4.6 − 2.91
346.0

142.6 23.√ − 2.44
166.0
31√.0 39.1 / 62.√ − 2.77
354.1

Index above

46.0 3√.1
81.1
230.9 23.9 / √9.0 − 2.90
254.8

− 3.06

√2.9 24.6
77.√
234.√ 24.√ / √1.1 − 3.23
261.0

7-40-√

7√ 0.
737 30.
+√ −1 24.
12 36 6.

− 2.9√

9334.√2√1

1911phae.proj..6080

Oct. 24, 1911. V

Index above

7-41-55

45.1
81.9 36.8
231.8 23.2
255.0 60.0 −2.46

55.0 24.6 −2.85
75.6 36.0
225.7 60.6 −2.44
261.7

Index below

313.9
353.4 39.5
143.0 −1.6
164.6 61.1 −2.85

322.1 24.0 −2.46
7-47-5 346.1
89 0. 136.3 35.0
7 44 30. 171.3 59.0 −2.90
+5 −5 24. −2.46
12 43 6.

9334.5300 P. A. 205.3 Vernier B

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1911phae.proj...606C

Oct. 24. 1911.

β Lyrae.

18	4V	+33.2
22	30	
+3	4V	

For measures see fol. pages.

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1911phae.proj..608C

Oct. 24, 1911. I

Index below

8-8-40

37.4 19.4 Var. dis.
56.8
216.1 21.4
237.√ 40.4 -3.7 2

37.0 20.0 -3.79
√7.0
218.0 14.3
236.3 34.3 -3.76

Index above

307.4 16.4
325.8 21.4
126.0 37.8 -3.78
141.4

-3.78

305.8 22.6
8-14-√ 328.4
22 √5. 127.√ 18.7 -3.70
11 22. 146.2 41.3
-1 24.
13 9 √8.

-3.76

9334. √486

1911phae.proj...608C

Oct. 24, 1911. II

Index above

8-15-55

308.1 17.8
325.9
126.6 14.9
146.5 37.3 -3.90

307.6 19.6 -3.87
324.2
127.0 18.1
146.1 37.7 -3.84

Index below

218.4 18.1
236.5
37.5 19.5
57.0 37.6 -3.91

217.0 19.9 -3.83
236.9
36.3 20.5
56.8 40.4 -3.75

8-20-55

36 50.
18 25.
-1 24.
13 17 1

9334. 55 35 +

-3.85

WS watch used for time.
Watch 1m 24sec fast.

L. P. P.

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1911phae.proj..608C

Oct. 25. 1911. (Wednesday).

A Z Cassiop.

26		
~~24~~	26	+69.0
21	36	
−4	+0	
+7	10	

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1911phae.proj...608C

Oct. 27, 1911. I

Index above — Var. dia.

7-17-30

227.8 323
260.1
71.0 27.9
76.9 48.2 2.93

228.2 27.4 2.74
256.0
44.2 36.6 2.63
82.8

Index below

136.2
171.9 35.7
322.3 24.3 2.46
346.6 60.0

2.95

142.2 23.4
165.6
316.9 32.0 3.04
348.9 54.7

7-23-40
41 10.
7 20 35.
47 1 26.
12 19 9.
9335. 1132

-2.86

1911phae.proj..608C

Oct. 25, 1911. II

Index below

~~+37.9~~

7-27-25 ~~+92.6~~

321.9

7-28-30 346.6 24.7

139.0 33.6

172.6 √4.3 2.93

312.5 40.1 2.87

352.6

143.3 21.2

164.5 61.3 2.41

Index above

231.0

255.7 24.7

45.1 37.4

82.5 62.1 2.74

2.74

33.1 40.1

7-34-0 263.2

51.4 21.9

73.3 62.0 2.79

6 2 30.

7 31 5.

+5 -1 26.

12 29 49

933 5 207

2.82

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1911phae_proj...608C

Oct. 25, 1911. III

assumed

Index above

7-[illegible]√-4√

232.3 2.4
256.7
43.3 3.4√
81.8 62.9 2.7√

2.79

√23.6
261.5 37.9
√1.0 23.0
74.0 60.9 2.43

Index below

143.0 √3.6
166.6
313.9 37.3
352.2 61.9 2.79

136.8 3√.1 2.44
171.9
3√2.√ 24.3
346.√ √9.4 2.44

7-41-20

77 √.√
7 3 2 3√.
+√ -1 26.
12 37 6.√
933√.√2 √.6√

-2.4-

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1911phae.proj..608C

Oct. 25, 1911. IV

Index below

7-43-25

143.6 22.4
166.0
313.4 37.6 / 60.0 2.46
351.0

133.9 36.7 2.44
170.6
323.0 22.0
341.0 54.7 2.91

Index above

351.8 23.3
75.1
223.9 39.1 / 62.4 2.77
263.0

2.77

43.5 38.4
81.9
331.8 24.1 / 62.5 2.77
255.9

7-49-15

92 40.5
7 46 20.5
+5 -1 26.5
12 44 54.5
933.5 312.5

2.42

1911phae.proj...608C

Oct. 25, 1911. V

Index above

7-√1-2√

√1.6
73.9 22.3
√√3.3 40.1
√63.4 62.4 2.77

43.8 39.7 2.7√
83.√
23√.√ 24.0
√√6.2 63.7 2.73

Index below

322.7 23.3
346.0
136.0 33.0
169.0 √6.3 3.00

7-57-40

9 √.√
7 √4 32.√
+√ -1 26.
12 √3 6.√

31√.1 36.√ 2.97
3√1.6
143.0 21.3
164.3 √7.4 2.94

-2.46

P. A. √0√.4 Vernier B

933√.√369√

W's watch used for time
Watch 1m 26sec fast.

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1911phae.proj..608C

Oct. 25. 1911.

β Lyrae.

18	45	+33.2
22	30	
+3	45	

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1911phae.proj...608C

Oct. 2V, 1911. I

Index below

8-10-V

216.V	22.7		36.V	20.9	
239.2		-9.4	V7.4		
37.0		V2.4	217.0	20.0	
66.4			237.0	40.9	-3.7~

216.8	20.6	-3.70
237.4		
36.3	21.1	
V7.4	41.7	-3.64

Index above

126.4		
147.9	21.V	
307.4	19.6	
327.0	41.1	-3.71

-3.7~

8-1V-2V

2V	30.V	127.3	19.V	
4 12	4V.V	146.8		
4V	-1 26.V	306.5	21.1	
12	11 19.V	327.6	40.6	-3.74

-3.71

9335.V49V+V

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1911phae.proj..608C

Oct. 2√, 1911. II

Index above

126.0
148.0 22.0
306.8 20.1 / 42.1 −3.6√
326.9

−3.69

127.0
147.2 20.2
307.1 20√ / 40.7 −3.73
327.6

Index below

36.8
√7.√ 20.7
216.9 20.1 / 40.8 −3.72
237.0

−3.70

37.0
√7.0 20.0
216.3 21.6 / 41.6 −3.64
237.9

8-17-0
8-17-0

8-22-√√
39 √√.'
A 19 √A.'
+√ −1 26.'
13 1A 32.'
933√.√√46'

−3.70

Y. P. A.

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1911phae.proj..608C

Oct. 26. 1911. (Thursday.)

R I Cassiop.

26		
~~R~~	26	+69.0
21	40	
−4	46	
+7	14	

For results, see fol. pages.

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1911phae.proj..608C

Oct. 26, 1911. I

Index above — Var. Lis.

7-15-2√

2 21.√ 38.8
2√9.√ 18.9
√3.0 √6.9 2.94
71.9

2.99

√31.0 22.7
2√3.7
46.9 33.6 / √6.3 3.00
80.√

Index below

138.0 33.3
171.3 23.4 / √7.1 2.97
346.1

2.98

143.√ 23.0
166.√ 37.√
314.9 60.√ 2.94
3√2.4

7-20-√√
36 20√
7 18 10.√
√ -1 32.√
12 16 34√
9336.√11√

2.94

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1911phae.proj...609C

Oct. 26, 1911. II

Index below

7-22-40

135.0 34.9
173.9
3√1.6 24.0 / 62.9 2.7√
34√.6

143.√ 22.√ 2.40
166.0
31√.3 37.√ / 60.0 2.46
3√2.8

Index above

4√.7 34.9
80.6
23√.√ 24.2 / √9.1 2.89
2√√.7

√1.4 25.6 2.41
77.0
22 3.6 37.9 / 63.√ 2.73
261.√

7-29-1√

√1 √√.
7 2√ √2.
+√ -1 32.
12 24 26. √
9336.√170

2.40

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1911phae.proj..608C

Oct, 26, 1911. III

Index above

4√.0
7-31-40 80.7 3√.7
√31.7 23.2
2√5.√ / √9.√ 2.A2

√1.6 2.46 2.A√
76.2
224.6 36.4 / 61.0 2.A2
261.0

Index below

313.0
3√1.1 3A1
143.1 22.2 / 60.3 2.A√
16√.3

3√3.0 2.40 2.A6
7-37-√0 347.0
69 30.√ 136.0 36.4 / 60.0 2.A6
7 34 4√.√ 172.0
+√ -1 32.√ 2.A6
12 33 13.√
9336.√230√

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1911phae.proj..609C

Oct 26, 1911. IV

Index below

7-39-40

312.6
3√2.√ 39.9
142.7 22.8
16√.√ 62.7 2.76

321.6 2.78
346.6 2√.0
136.0 37.0
173.0 62.0 2.79

Index above

226.7
261.9 3√.2
√2.2 23.9
76.1 √9.1 2.89

2.88

231.9
7-46-20 2√√.8 23.9
26 0. √ 4√.0 360
7 43 0. √ 81.0 √9.9
+√ -1 32.√
12 41 28.√
9336.√28 P. A. 2√.√ Vernier B

-2.83

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1911phae.proj..608C

Oct. 26. 1911.

β Lyrae.

18	45	+33.2
22	40	
+3	′ ′	

For masts. see fol. pages.

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1911phae.proj..608C

Oct. 26, 1911.

I

Index below — Var. dis.

8-9-30

217.3 19.V
236.8
36.7 22.2 / 41.7 — 3.6A
V8.9

3.66

V14.8 22.9
237.7
37.6 19.4 / 42.3 3.64
V7.0

Index above

126.2 20.6
146.8
306.1 21.0 / 41.6 3.6A
327.1

3.64

8-1V-2V
24 VV.
A 12 20.
+V -1 32,
13 10 V6
9376. V492

12V.0 22.V
147.V
307.0 20.4 / 42.9 3.61
327.4

3.6V

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1911phae.proj..608C

Oct. 26, 1911.

II

Index above

8-17-√

127.0			
147.0	20.0		
306.2	21.4 / 41.4	3.67	
328.0			

12√.3	23.0	3.√9
148.3		
306.0	22.0 / 45.0	3.√1
328.0		

Index below

36.4	21.1	
√7.√		
21√.6	23.4 / 44.9	3.√1
239.4		

36.0	22.3	3.√3
√8.3		
216.0	21.9 / 44.2	3.√√
237.9		

8-22-√0

39	√√.	
19	√8.	
−1	32.	
18	26.	

9336.√√4√-

−3.√6

1911phaeproj...608C

Oct. 26, 1911.

III

Index below

8-24-√√

36.9
√7.1 20.2
21√.8 22.6 3.6 √
238.4 42.4

3.√6

3√.√ 23.0
√8.√
21√.4 22.4 3.49
237.8

Index above

306.√
327.4 20.9
124.8 23.1 3.√6
147.9 44.0

3.√7

30√.8 22.1
327.9
12√.8 21.4 3.√2
147.2 43.√

8-31-0

√√ √√. √
4 27 √4. √
4√ -1 32. √
13 26 26 √
9336.√600

- 3.√6

Wis watch used for time.
Watch 1m 32sec fast.

L. A. P.

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1911phae.proj..608C

Oct. 28, 1911, (Saturday).

2 Persei.

26		
~~X~~	33	+42.1
21	Y 3	
−4	40	
+7	20	

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1911phae.proj..608C

Oct. 28, 1911.

I

Index right and above

115.4 ——— Comp Star dis.

7-26-2√ 193.2 77.8 ✓

301.0 64.4 ✓

√.4 142.2 ✓ +0.73 ✓

1 2 √.8 60.1 ✓ +0.7 4 ✓

18 √.9

290.√ 81.0 ✓

11.√ 141.1 ✓ +0.7 √ ✓

Index left and below

2 4.1

103.8 79.7 ✓

2 1 √.0 61.8 ✓

276.8 141.√ ✓ +0.7 4 ✓

+0.√9

29.2 69.7 ✓

7-33-√ 98.9

√9 30. ✓ 201.4 87.1 ✓

7 29 4√. ✓ 288.√ 156.8 ✓ +0.44 ✓

+√ -1 37. ✓ +0.66 ✓

12 28 8. ✓

9338. √19√ + ✓

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1911phae.proj..608C

Oct. 28, 1911.

II

Index left and below

7-34-0

15.7
106.0 90.3
11.5 61.8
73.3 152.1 +0.53

30.5 69.4 +0.54
99.9
204.5 41.7
286.2 151.1 +0.55

Index right and above

296.1 75.4
1.1.5
120.0 65.2
185.2 140.6 +0.76

301.5 61.4 +0.76
2.9
114.0 79.0
193.0 140.4 +0.77

7-40-0

74 0.
7 37 0.
+5 -1 37.
12 35 23

+0.65

9334.5246

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1911phae.proj...608C

Oct. 28, 1911.

III

Index right and above

7-42-10

296. ✓ 74.6
11.1
124.6 ✓✓.K
180.0 130.0 +0.94

306.3 ✓6.2 +0.90
2. ✓
111.2 ±0.9
192.1 137.1 +0.43

Index left and below

✓05.1
✓81.3 76.2
32.1 62.2
94.3 13 ±K +0.41

+0.77

✓12.2 61.8
274.0
24.0 ±0.✓
104.✓ 14✓.3 +0.73

7-48-0

90 10. ✓
✓ KV ✓.
✓✓ -1 37.
12 K3 2±.

+0.±4

9330. ✓302 P. A. 193.2 Vernier B

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1911phae.proj..608C

Oct. 28. 1911.

R Z Cassiopeiae

26		
~~2~~	26	+690
22	24	
−3	$\sqrt{4}$	
+4	2	

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1911phae.proj...608C

Oct. 28, 1911.

I

Index left and above

45.5 ← Var. dis.

7-√8-30 79.3 33.4 ✓

√33.0 23.K ✓

2√6.4 √7.2 ✓ ÷ 2.97 ✓

√2.2 24.0 ✓ −2.93 ✓

76.2

2√5.9 3√.1 ✓

√61.0 √9.1 ✓ −2.49 ✓

Index right and below

31√.4

3√2.√ 37.1 ✓

143.2 22.K ✓

16√.6 √9.√ ✓ −2.44 ✓

32√.1 2K√ ✓ −2.44 ✓

8-4-40 346.6

3 10. ✓ 137.4 34.2 ✓

& 1 3√. ✓ 172.2 √9.3 ✓ −2.49 ✓

+√ −1 37. ✓

12 √9 √8.

9338.√417 ✓

−2.90 ✓

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1911phae.proj..608C

Oct. 28, 1911.

II

Index right and below

8-7-√

314.2
3√1.0 36.4
143.3 21.6
164.9 √7.K −2.9

323.2 24.3 −2.91
347.√
136.4 31.6
171.0 √4.9 −2.90

Index left and above

227.6 34.1
261.7
√2.7 21.3
74.0 √√.K −3.04

√33.0 23.1 −3.02
2√6.1
4√.1 33.0
78.1 √6.1 −3.01

−2.96

8-13-2√5

	20	30.
4	10	15.
4√	−1	37.
13	4	34.

9334. √476

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1911phae.proj...608C

Oct. 28, 1911.

III

Index left and above

8-16-0

2 2 ✓.2
2 6 2.3 37.1 ✓
✓1.9 28.4 ✓
7 ✓.3 60.✓ ✓ −2.44 ✓

✓3 2.8 24.6 ✓ −2.44 ✓
2 ✓6.8
4 3.8 36.6 ✓
8 0.4 60.6 ✓ −2.44 ✓

Index right and below

136.2
17 2.✓ 36.3 ✓
3 2 3.0 23.9 ✓
3 4 ✓.9 59.2 ✓ −2.49 ✓

14 2.8 23.4 ✓ −2.49 ✓
166.6
316.✓ 36.✓ ✓
3 ✓3.0 60.3 ✓ −2.4✓ ✓

8-2✓2-0
3 4 0. ✓
4 19 0. ✓
+✓ -1 37. ✓
13 17 23. ✓
9334.✓✓34 P. a. 20✓.6 Vernier B

−2.46 ✓

Use watch used for time
Watch 1m 37sec fast.

L. P. P.

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1911phae.proj..608C

Oct. 30. 1911. (Monday.)

R Z Cassiop.

26		
~~3~~	26	+69.0
22	0	
−4	26	
+7	34	

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1911phae.proj...608C

Oct. 30, 1911.

I

Index left and above

47.0 ——— Var. dis.

7-20-15 77.8 30.8

232.0 24.2

256.2 54.0 −3.06

50.5 −2.92

76.8 26.3

228.0 325

260.5 58.8 −2.91

Index right and below

316.0

352.3 36.3

142.8 22.2

165.0 −2.92

~~50~~ −3.00

323.0 23.0

346.0 31.4

139.9 54.4 −3.02

171.3

−2.99

7-26-20

46 35

7 23 10

45 −1 37

12 21 41.

9340.5151

1911phae.proj..608c

Oct. 30, 1911.

II

Index right and below

7-28-20

316.4
352.0 35.6
143.8 21.6
165.4 57.2 -2.97

323.1 23.7 -2.97
346.8
137.6 33.4
171.0 57.1 -2.97

Index left and above

228.6 33.4
261.0 26.0
51.0 59.4 -2.84
77.0

231.0 25.2 -2.91
256.2
46.6 32.8
79.4 58.0 -2.94

-2.94

7-33-10

61 30.
7 30 4
+4 -1 37.
12 29 4.
9340. 202

P.A. 25.5, Vernier B

1911phae.proj..608C

Oct. 30, 1911.

Observations made through some cloud and moonlight. Observations troubled somewhat by these conditions. Right away after the last previous group this region and the sky in general became quite cloudy.

No watch used for time
Watch $1^m\ 37^{sec}$ fast.

L. P. P.

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1911phae.proj..608C

Nov. 2, 1911. (Thursday).

Z Persei.

26		
24	33	+42,1
22	10	
−4	28	
+7	37	

For matls., see fol. pages.

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1911phae.proj...608C

Nov. 2, 1911.

I

Index left and below

22.0 ← Comp star dis

7-26-10

108.√ 46.√ ✓
211.√ 64.√ ✓
276.0 64.√ / 151.0 ✓ +0.√6 ✓

27.7 67.4 ✓
9√.√ +0.√4 ✓
200.9 24.6 ✓
28√.√ 152.4 ✓ +0.√3 ✓

Index right and above

293.2 21.4 ✓
1√.0
126.1 √4.9 ✓
181.0 136.7 ✓ +0.84 ✓

+0.74 ✓

30√.7 √7.0 ✓
2.7

7-32-20

√4 30. ✓ 107.8 45.0 ✓ +0.73 ✓
7 29 1√. ✓ 192.8 142.0
√ −1 36. ✓

+0.66 ✓

12 27 39 ✓
9343.√192 ✓

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1911phae.proj..608C

Nov. 2, 1911.

II

Index right & above

294.0
7-34-40 19.9 21.9
126.0 17.1
183.1 139.0 +0.79

301.9 60.2 0.7
2.1

114.0 28.7
194.7 170.9 0.76

Index left and below

199.3
288.4 49.1
34.2 63.3
98.1 153.4 +0.11

211.3 63.2 +0.14
7-40-15 274.1
74 11.
7 37 22. 22.0 12.6
+5 -1 36. 104.6 116.2 +0.66
12 35 52
9343.1249

0.66
+0.64

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1911phae.proj...608C

Nov. 2, 1911.

III

Index left and below.

	197.1	45.9	
7-42-0	283.0		
	33.8	61.3	
	95.1	147.2	+0.63
	210.6	64.6	+0.54
	275.2		
	16.5	91.7	
	108.2	156.3	+0.45

Index right and above

	114.4		
	194.2	79.8	
	302.4	56.2	
	1.2	138.6	+0.80
	126.0		
7-48-45	183.0	57.0	+0.82
90 45	295.1		
7 45 22.	1.0	78.9	+0.84
+5 -1 36.		136.9	
12 43 46.			+0.68

9343.530 - P. A. 13.0 Vernier B

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1911phae.proj..608C

Nov. 2. 1911.

Susp. Var. near α Cephei
Phot. J. H. obs. Brandt rec.

2K		
α	√0	+0.1.2
22	√0	
−2	0	
+10	0	

For measts. see fol. pages.

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1911phae.proj...608C

Nov. 2, 1911.

I

Index left and above

19.7 ——— D. V. dis.

8-4-10

108.3 88.6
210.0 61.0
271.0 149.6 − 0.2

31.4 62.6 − 0.2
94.0
194.2 92.4
287.3 154.4 − 0.4

Index right and below

290.0 84.6
14.6
122.1 65.1
187.2 149.7 − 0.2

299.1 66.4 − 0.6
8-11-0 1.1
12 10. 110.0 84.9
A 7 35. 194.9 151.3 − 0.2
12 −1 36. − 0.4
13 2 29.
9343.24A

1911phae.proj..608C

Nov. 2, 1911.

II

Index right and below

8-12-40

290.√
12.2 Δ1.7
124.0 61.6
18√.6 1Γ3.3 −0.71

301.0 6√.1 −0.66
6.1
112.0 Δ3.Δ
19√.8 14Δ.9 −0.60

Index left and above

198.5
288.0 Δ9.√
31.0 6Γ0
9√.0 1Γ3.√ −0.√1

−0.√0

210.√ 6Γ
27√.0
18.6 Δ9.4
108.0 1Γ3.9 −0.√0

8-18-2√

	31	√.
Δ	1√	32.
Γ	−1	36.
13	13	√6.

9343.√√13

−0.√R

P.A. 338.1 Vernier B

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1911phae.proj...608C

Nov. 2, 1911.

ε Aurigae. Phot. I. H. 60. Bamberg.

2α		
~~4~~	V V	+43.7
23	3 V	
− V	20	
+6	40	

For meast. see fol. page.

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1911phae.proj..608C

Nov. 2, 1911.

Index right and above.

8-44-V0

1V3.7
173.0 19.3
33V.V 17.0
3V2.V 36.3 -3.94

1VV.9 15.0 -3.96
170.9
332.7 22.2
3V4.9 37.2 -3.93

Index left and below.

11V.9
13V.7 19.4
300.6 12.V
313.1 32.3 -4.24

120.1 13.V -4.20
139.6
298.0 19.4
317.8 33.3 -4.17

8-V1-30
96 20.
44 10.
-1 36.
13 46 3V
9343.V740

-4.04

P.A. 171.6 Vernier B.

L.P.A.

Water used for time.
Watch 1m 36sec fast.

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1911phae.proj..608c

Nov. 3, 1911. (Friday).

I Perrei. Phot. T. W. obs. Brandt rec.

26		
~~2~~	23	+42.1
22	12	
-4	21	
+7	39	

For means, see fol. page.

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1911phae.proj..6080

Nov. 3, 1911.

I

Index right and above

264.4 — Comp Star dis

7-19-25

348.5 441

102.2 545

156.7 1346 +0.40

277.7 542 +0.64

336.2

91.1 76.7

167.8 345.2 +0.47

Index left and below

354.0 466

80.6

187.0 612

248.2 147.4 +0.62

6.9 619 +0.60

7-30-10

68.8

49 35.

175.7 47.3

7 24 44.

263.0 149.2 +0.59

+5 -1 32.

12 23 10.

+0.7

9344. 5161

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1911phae.proj...608C

Nov. 3, 1911.

II

Index left and below

348.8 94.2
7-32-0 83.0 94.
190.8 97.2
248.3 (51.7) +0.54

6.0 61.7 +0.49
67.7
171.0 94.0
266.0 (56.7) +0.44

Index right and above

83.7 87.6
171.3
280.2 56.4
337.0 (57.4) +0.69

98.0 56.2 +0.77
7-38-20 154.2
70 20. 266.0 40.2
73 10. 346.2 (80.4) +0.45
+5 -1 30.
12 33 32.

9344. 233 P. A. 13.1 Vernier B

126
63

+0.63

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1911phae.proj..6080

Nov. 3. 1911.

R Cassiop. Phot. I.

H. ds. Brand rec.

26

2	26	+69.0
22	47	
3	39	
+δ	21	

For means, see fol. pages.

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1911phae.proj...606C

Nov. 3, 1911.

I

Index left and above

18.9 ~~37.6~~ Var. Lis.

7-46-0 √6.√

206.√ 24.2

230.7 61.2 −2.9

25.8 25.2 −2.7

√1.0

198.0 39.0

237.0 64 −2.7

Index right and below

291.6 31.2

323.4

116.6 26

139.2 ~~√44~~ −3.0

296.7 22.3 −3.0

7-√1-2√ 319.0

97 25. 109.0 36.0

7 48 42. 145.0 ~~√2.3~~ −2.9

+√ -1 32.

12 47 4.

9344.√327 −2.2

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1911phae.proj..6080

Nov. 3, 1911.

II

Index right and below

7-√3-1√

289.9
324.0 34.1
117.2 23.7
140.9 √7.4 -2.9

296.8
319.7 22.9 -2.9
109.0
146.8 37.8 -2.8
60.7

Index left and above

199.0
235.8 36.8
26.9 24.√
√1.4 61.3 -2.1

204.2 24.1 -2.8
228.3
21.0 36.0
√7.0 60.1 -2.6

7-√9-10
11 2 2√.
7 √6 12.
+√ -1 3A.
12 √4 3A

-2.6

9344.√379' P.A. 26.0 Vernier B.

We watch used for time
Watch 1m 38 fast. L.A.P.

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

1911phae.proj...606C

Nov. 4, 1911. (Saturday.)

R Z Cassiop. Phot. R.
W. obs. Brand rec.

26		
4	26	+69.0
22	26	
−4	0	
+4	0	

For means. see fol. pages.

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1911phae.proj..6080

Nov. 4, 1911.

I

Index left and above

	5.9	← Var. dis.	
7-32-0	67.0	61.1 v	
	195.0	47.0 v	
	242.0	108.1 v	−1.46 v
	14.9	46.8 v	−1.47 v
	61.7		
	186.3	60.7 v	
	247.0	107.5 v	−1.48 v

Index right and below

	278.8	56.8 v	
	335.6		
	107.3	41.0 v	
	148.3	97.8 v	−1.71 v
	285.0	44.0 v	−1.60 v
	329.0		
	97.0	63.0 v	
	160.0	107.0 v	−1.49 v

7-37-5

	69	5. v	
7	34	32. v	
+5	−1	36. v	
	12	32	56. v

934 5. v 224 v

−1.54 v

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1911phae.proj...606C

Nov. 4, 1911.

II

Index right and below.

7-38-50

278.0
335.6 +7.6
106.3 +5.6
151.9 103.2 −1.58

287.0 +1.6 −1.62
328.6
98.6 +8.3
156.9 99.9 −1.66

Index left and above

189.1 +6.8
245.9
15.6 +4.4
60.0 101.2 −1.63

7-44-40

195.2 +4.7 −1.58
239.9
43 30. .2 60.9
7 41 45 66.1 105.6 −1.52
+5 −1 36. −1.60
12 40 9.
9345.52 79

P. A. 25.5. Vernier B

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1911phae.proj..6080

Nov. 4, 1911.

Sky rather bright; nearly full moon.

W's watch used for time.
Watch 1m. 36sec fast.

L. P. P.

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

1911phae.proj...608C

Nov. 22. 1911. (Wednesday)

AZ Cassiop.

26

~~8~~ 26 +69.0

23 21

−3 √

+2 √√

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1911phae.proj..6080

Nov. 22, 1911.

I

Index left and above

17.4 ← Var. dia

7-10-0

59.7 ✓ 23.5 ✓

204.1 26.9 ✓

231.0 69.2 ✓ −2.53 ✓

−2.53 ✓

22.5 24.5 ✓

51.0 40.7 ✓

195.6 69.2 ✓ −2.53 ✓

236.3

Index right and below

288.1

327.0 38.9 ✓

113.7 26.3 ✓

140.0 65.2 ✓ −2.67 ✓

108.1 ?

−2.67

~~−2.86~~ ✓

295.2

320.6 25.4 ✓

7-16-25 118.1 39.7 ✓ 2.67

147.8 65.1 ~~3.05~~

65.1

26 25.5 ✓

7 13 12.5 ✓

+5 −1 40.0 ✓

12 11 32.5

9363.5040 ✓

−2.60 ✓

~~−2.70~~

It looks as if circle might be read wrong by 10° in 3d reading, last set. Readings somewhat difficult. – to magnifier –

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1911phae.proj...608C

Nov. 22, 1911.

II

Index right and below

	288.6		
7-18-2√	328.2	39.6 √	
	113.9	26.4 √	
	140.7	66.4 √	−2.63 √

	297.4	22.6 √	−2.64 √
	320.0	43.4 √	
	105.0	66.0 √	−2.64 √
	148.4		

Index left and above

	196.2	42.7 √	
	238.9		
	24.3	26.6 √	
	√0.9	69.3 √	−2.√3 √

	203.1	26.4 √	−2.√6 √
7-24-√0	229.√		
43 1√. √	18.1	40.9 √	
7 21 34. √	√9.0	67.3 √	−2.60 √
+√ −1 40. √			−2.60 √
12 19 √4. √	P.A. 25.4	Vernier B	
9363.√139 √			

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1911phae.proj..6080

Nov. 22. 1911.

R H Sauré.

27	$\sqrt{-4}$	$+27.2$
23	$\sqrt{-1}$	
-4	7	
$+7$	$\sqrt{-3}$	

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1911phae.proj..608C

Nov. 22, 1911

I

Index left

104.8 ← Var. dis.
7-56-25 154.2 49.4
288.7 35.1
323.8 84.5 -2.06

109.0 36.6 -2.07
145.6
283.8 47.2
331.0 83.8 -2.08

Index right

7.6 56.5
64.1
196.1 40.3
236.4 96.8 -1.74

-1.76

18.9 41.0
8-3-40 59.9
5. 191.4 54.4
8 0 2. 245.8 95.4 -1.77
15 -1 40.
12 58 22.
9363.5406

-1.92

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1911phae.proj..6080

Nov. 22, 1911.

II

Index right

6.5
65.0
196.0 42.4
238.4 100.9 -1.63

15.0 44.0 -1.64
9.0
191.3 53.5
244.8 97.5 -1.72

Index left

283.1
332.0 48.9
109.0 38.1
147.1 47.0 -2.00

287.9
323.8 35.9 -2.00
100.9 51.3
152.2 47.2 -1.99

-1.44

8-13-45
19 40.
9 50.
-1 40.
13 10.
9363.473

8-5-55

1911phae.proj...609C

Nov. xx, 1911.

III

Index left

8-16-✓

280.3
334.0 ✓3.7✓
109. ✓ 343✓
143.8 44.0✓ -1.97✓

291.1 33.4✓ -1.97✓
324.9
99.0 ✓4.0✓
1✓3.0 47.4 -1.97✓

Index right

188.0
24✓.1 ✓7.1✓
13.1 45.✓✓
✓8.6 102.6 -1.✓9✓

195.8 42.4✓ -1.60✓
238.6
7.0 ✓9.2✓
66.2 102.0 -1.61✓

8-23-3✓
39 40.✓
4 19 ✓0.✓
+✓ -1 40.✓
13 14 10.✓
9363.✓✓43✓

-1.74✓

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1911phae.proj..608C

Nov. 22, 1911.

IV

Index right

8-25-20

18√.9 61.4"
247.3
14.0 46.√"
60.√ 107.9" −1.47"

−1.44"

193.√ 46.4"
239.9
4.8 63.8"
68.6 110.2" −1.41"

Index left

100.2 √√.√"
1√√.7
287.4 38.1"
32√.√ 93.6" −1.42"

107.0 42.√"
149.√
280.2 √√.6"
33√.8 94.1" −1.70"

−1.76

−1.60"

8-34-0

√9 20"
+ 29 40."
+√ −1 40."
13 28 0."

9363.√611"

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1911phae.proj..608C

Nov. 22, 1911.

V

Index left

98.2

8-38-50 1 58.5 60.3

287.0 34.1

3 25.1 94.4 −1.70

108.1 38.4 −1.75

146.9

280.0 55.5

33 5.6 94.4 −1.40

Index right

4.6

69.4 64.8

193.2 46.6

239.8 111.4 −1.39

14.6 46.5 −1.38

8-46-0 61.1

184.6 65.7

250.3 112.2 −1.37

A 42 25. 40.

42 −1 40.

13 40 42.5 −1.56

P.A. 308.0

9363.5700

Seeing throughout evening rather poor. Air rather cold. No watch used for time. Watch 1m 40s fast.

L. A. P.

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1911phae.proj..608C

Dec. 1. 1911. (Friday).

R. W. Imai.

~~2~~		
1	$\sqrt{4}$	+27.2
0	$\sqrt{}$	
-3	$\sqrt{-3}$	
$+4$	7	

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1911phae.proj..608C

Dec. 1, 1911.

Index left

Var. dec.

287.2	43.5	
330.7		
110.0	30.0	
140.0	73.5	−2,39

7-25-55

292.1	34.0	−2,14
326.1		
97.4	36.4	
153.8	90.4	−1,90

Index right.

195.2		
244.8	49.6	
20.6	35.4	
56.0	85.0	−2,05

199.2	34.8	−2,00
234.0		
11.1	53.5	
64.6	88.3	−1,96

7-34-15

60 10.

70 5.

55 − 2 4.

12 28 1

9372.5194

−2,07

1911phae.proj..608C

Dec. 6, 1911

II

Index right

193.6 ✓2.2 ✓ Var. Sky.
245.8
18.7 36.0 ✓
54.7 ✓4.2 ✓ −1.96 ✓

7-38-50

202.4 −2.06 ✓
231.8 29.4 ✓
12.0 ✓2.1 ✓
64.1 41.5 ✓ −2.15 ✓

Index left

101.0 ✓0.0 ✓
151.0
287.2 ✓2.3 ✓
329.5 92.3 −1.85 ✓

7-46-0

105.5 ✓5.7 ✓ −1.90 ✓
151.2
292.4 ✓2.4 ✓
334.8 42.1 −1.96 ✓

−1.96 ✓

44 50. ✓
7 42 20. ✓
+5 −2 4. ✓
12 40 21
9372. ✓21 ✓

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1911phae.proj...608C

Dec. 1, 1911.

Index left

114.1
7-√4-√ 148.√ 29.4 √
28√.0 429 √
327.9 723 √ -2,43 √

104.9 -2,36 √
~~7-√7-1√~~ 1√1.0 46.1 √
292.2 309 √
323.1 77.0 √ -2,22 √

Index right

197.0
23√.1 38.1 √
8.2 √68 √
6√.0 94.9 √ -1,79 √

190.2 √2.4 √ -1,24 √
8-2-0 243.0
116.√ √ 18.√ 37.6 √
7 √4 2. √ √6.1 90.7 √ -1,90 √
+√ -2 4. √ -2,10 √
12 √√ √4. √
9372.√394 √

P. A. 307.6 Vernier B

L. P. P.

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1911phae.proj..6080

Dec. 1, 1911.

Observations made with great difficulty through more or less clouds. Moon rather bright. Observations very difficult. Sky now becoming more cloudy still; in fact, generally cloudy. Observations not considered of much value.

W's watch used for time. Watch 2^m 4^sec fast.

L. P. P.

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1911phae.proj...608C

Dec. 2, 1911. (Saturday).

R W Sauri.

3	$\sqrt{A}$	+27.2
0	6	
$-\delta$	$\sqrt{2}$	
$+\alpha$	A	

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1911phae.proj..6080

Dec. 2, 1911.

I

Index right

191.6 ——— Var. dis.

7-17-√√ 244.0 √24 ✓

205.0 240 ✓

233.0 240.4 ✓ −2.18 ✓

18.9 37.4 ✓ −2.02 ✓

√6.3 √4.1 ✓

191.0 91.√ ✓ −1.87 ✓

245.1

Index left

285.8 442 ✓

330.0

109.2 36.8 ✓

146.0 81.0 ✓ −2.17 ✓

290.9 31.1 ✓ −2.22 ✓

7-26-40 322.0

44 3√. ✓ 105.8 459 ✓ −2.28 ✓

7 22 12. ✓ 151.7 77.0

+√ −2 12. ✓ −2.12 ✓

12 20 6. ✓

9373.√140 ✓

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1911phae.proj...606C

Dec. 2, 1911.

II

Index left

7-30-√0

283.8
333.8 √0.0
109.0 33.2
142.2 A3.2 -2.10

292.4 31.4 -2.1A
323.8
103.9 46.3
150.2 77.7 2.26

Index right

194.0
241.9 47.9
18.3 32.A
√1.1 A0.7 -2.17

198.9 32.1 2.00
237.0
6.1 √4.1 1.A3
61.0 93.0

-2.09

7-31-40
6A 30.
7 3K 1√.
+√ -2 12.
12 32 3.
9373.√222

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1911phae.proj..6080

Dec. 2, 1911.

III

Index right

7-40-40

192.√ √6√
249.0
17.2 33.4
√1.0 903 -1.91

200.2 33.4 -1.9√
234.0
6.9 √5.8
62.7 29.6 -1.9√

Index left

105.0
149.1 44.1
295.3 29.6
324.9 73.7 -2.39

7-47-√√

118.√ 24.√ -2.43
143.0
283.9 46.6
330.√ 71.1 -2.47

7 44 18.
√ -2 12.
12 42 6. -2.18
9373.√293

P.A. 306.7 Vernier B

W's watch used for time.
Watch 2m 12sec fast. L. P. P.

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1911phae.proj...608C

Dec. 5. 1911. (Tuesday).

R Hr Tauri.

3	$\sqrt{\alpha}$	+27.2
0	27	
−3	31	
$+\alpha$	29	

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1911phae.proj..6080

Dec. 6. 1911. (Wednesday).

Fourth Type +61°.667.

3	$\sqrt{3}$	+61.4
0	2 /	
$-\sqrt{3}$	3 2	
+4	2 4	

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1911phae.proj...606C

Dec. 6, 1911.

I

~~7-22-40~~ Index above

6.1 ~~61.1~~ 4th type dis.

7-22-40 67.2 61.1 v

182.9 226 v

255. v 183.7 v -0.90

-1.02

359.0 73.9 v

72.9

194.1 48.9 v

243.0 122.8 v -1.13

Index below

280.1

336.0 55.9 v

92.1 30.7

162.8 126.6 -1.05

271.0 67.2 -1.10

7-27-10 338.2

49 50. v 101.0 54.8

124 55. v 155.4 121.6 -1.16

tv -2 16. v

12 22 39. v

9377. 5157 P. A. 179.2

-1.06

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1911phae.proj..6080

Dec. 6. 1911.

Fourth Type +34° 4700

21 36 +34.9
24 V
+3 1V

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1911phae.proj...604C

Dec. 6, 1911.

Index left

19.√ — Fourth Type dis.

7-44-15

√4.9 35.4 v
196.4 43.6 v
240.0 79.0 v — 2.2 v

13.0 48.0 — 2.19
61.0
201.9 33.1
235.0 81.1 — 2.16

Index right

290.0 35.1
325.1
104.9 45.1 — 2.19
150.0 20.2

285.8 44.3 — 2.20

7-48-√

92 20. v
746 10. v
√ -2 16. v
1243 √4. v

330.1
110.0 34.8
144.8 79.1 — 2.22

— 2.20

9377.√30√+ P. A. 248.3

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1911phae.proj..6080

Dec. 6. 1911.

+2° 4709

23	39	+2.7
25	11	
+1	32	

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1911phae.proj...604C

Dec. 6, 1911.

Index left and above

16.9 ——— 4th type dis

8-9-15 54.9 32.0

203.8 26.5

230.3 58.5 -2.69

22.4 29.1 -2.69

51.5 34.5

200.1 63.6 -2.69

235.6

Index right and below

289.7 33.0

323.7

113.0 29.0

142.0 63.0 -2.75

294.6 25.9 -2.74

8-14-10 320.5

23 24.5 110.4 37.6

8 11 42.5 148.0 63.5 -2.73

-2 16.

13 9 26.

9377.5+42.5 P.A. 159.5

-2.72

L. A. P.

Mr watch used for time.
Watch 2m 16sec fast.

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1911phae.proj..6080

Dec. 7, 1911. (Thursday).

+61° 667

3	√3	+61.4
0	30	
−3	23	
+4	57	

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1911phae.proj...609C

Dec 7, 1911.

Index above

190.7 ——— Fourth Type Dis.

7-21-30

244.2 73.✓ ✓

3✓9.2 76.3 ✓

75.✓ 129.4 ✓ −0.9Δ ✓

−1.0 6

181.7 71.4 ✓

2✓3.1

11.0 +0.4 ✓

61.8 72.2 ✓ −1.1 4

Index below

101.8 49.2 ✓

1✓1.0

271.8 71.0 ✓ −1.19 ✓

342.8 120.2

−1.16 ✓

91.3 72.9 ✓

7-26-3✓ 164.2

4f ✓ 28✓ ✓0.0 ✓

7 24 2. ✓ 332.✓ 122.9 ✓ −1.13 ✓

+✓ −2 18. ✓

12 21 44. ✓ P. A. 179.✓ Vernier B

9374.✓1✓1 ✓

−1.1 1/4 ✓

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1911phae.proj..6080

Dec. 7. 1911.

Fourth Type +34° 4708.

21	36	+34.9
24	vv	
+3	1.9	

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1911phae.proj...60dc

Dec. 7, 1911.

Index left

191.3 ——— Fourth Type dis

7-46-10 242.1 √0.8 √

21.4 31.5 √

√2.9 42.3 √ −2.13 √

202.0 30.7 √ −2.16 √

232.7

14.√ 49.3 √

63.8 80.0 √ −2.14 √

Index right

106.0 45.8 √

1√1.8

290.0 33.7 √

323.7 79.√ −2.21 √

−2.11 √

111.1 32.8 √

7-49-√√ 143.√

96 √. √ 282.7 √4.1 √

7 48 2. √ 336.8 46.√ √ −2.01

√ -2 28. √

12 -4√ 44. √ P.A. 249.0

9378. √319 √

−2.14 √

~~−2.08~~

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1911phae.proj..6080

Dec ~~11~~ 7. 1911.

Fourth Type +2° 4709.

23	39	+2.7
2v	1v	
+1	36	

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1911phae.proj..60sc

Dec. 7, 1911.

Index left and above

19.8 ← Fourth Type Obs.

8-√-10 √6.0 36.2

20 √.8 2√.2

231.0 61.F − 2.A

22.2 24.0 − 2.72

√1.0

200.2 34.3

234.√ 63.1 − 2.74

Index right and below

288.0 34.4

326.8

113.3 24.7

142.0 67.√ − 2.√9

29√.4 24.4 − 2.69

8-10-3√ 319.8

1√ 4√.√ 109.√ 37.4

4 7 √2.√ 146.9 61.4 − 2.79

+√ −2 18.√ − 2.7K

13 √ 34.√ P. A. 158.8. Vernier B.

9374.√.4√√+

Color .6 in Photometer

Color 4 in Finder.

L. P. A.

Ms watch used for time

Watch 2m 18sec fast

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1911phae.proj..6080

Dec. 13. 1911. (Wednesday)

R W Sauer.

3	$\sqrt{4}$	$+27.2$
0	$\sqrt{1}$	
-3	$\sqrt{3}$	
$+4$		

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1911phae.proj...60sic

Dec. 13, 1911.

I

Index right

10.4 ← Var. dis

7-21-√0 60.0 49.6 ✓

197.8 38.4 ✓

236.6 48.4 ✓ −1,96 ✓

20.2 37.6 ✓ −1,96 ✓

√7.8

192.√ √0.2 ✓

242.7 47.4 ✓ −1,97 ✓

Index left

283.1 46.9 ✓

330.0

111.2 33.3 ✓

144.√ 40.2 ✓ −2.19 ✓

291.1 32.9 ✓ −2.14 ✓

7-28-√ 324.0

49 √√. ✓ 103.3 48.3 ✓

7 2K √A. ✓ 151.6 51.2 ✓ −2.16 ✓

√ +21. ✓

12 √ 19. ✓ −2.07 ✓

9304.√176 ✓

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1911phae.proj...6080

Dec. 13, 1911.

II.

Index left

284.√
330.0 KV,√
109.2 33.3 ~2.23
142.√ 76.2

291.1 33.K ~2.20
324.√
103.6 47.K
187.0 20.2 ~2.17

Index right

196.2
243.2 47.0
20.0 35.2
√5.2 55.2 ~2.13

198.8 36.1 ~2.0√
234.9
14.0 √1.9
6√.9 22.0 ~1.97

7-30-√

7-3√-√0
6√ √√.
7 32 √4.
+√ +21.
12 33 19
.934K √231

~2.12

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1911phae.proj...60IC

Dec. 13, 1911.

III

Index right

7-37-30

192.0
239.2 47.2
20.0 35.4
55.8 43.0 −2.11

199.5 35.7 −2.04
235.2
10.7 42.3 −1.97
63.0 44.0

Index left

102.2
152.1 49.9
292.2 30.2
322.4 40.1 −2.19

111.3 32.4 −2.17
7-43-40 143.7
41 10. 281.9 49.1
7 40 35. 331.0 41.5 −2.15
45 +26.
12 40 56.
938.4 52.40

−2.10

1911phae.proj..6080

Dec. 13, 1911.

IV

Index left

103.√
154.0 √0.√
292.0 30.1
322.1 40.6 −2.18

110.8 35.4 −2.17
146.2
282.2 45.4 −2.16
328.0 41.2

Index right

11.9 √0.6
62.√
200.4 34.4
238.2 38.4 −2.04

18.2 37.3 −2.02
√√.√ 193.2 49.6
242.8 56.9 −2.00

7-√2-0
98 √.√
49 2.√
+√ +21.√
12 49 23
9384.√343

−2.10

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1911phae.proj...60dC

Dec. 13, 1911.

V

Index right

12.2 ✓2.4 ✓

7-✓3-20 64.6

198.8 36.3 ✓

23✓.1 48.7 ✓ −1.9✓ ✓

−1.94 ✓

~~−2.04~~

19.0

✓8.4 39.4 ✓

192.0 ~~50.0~~ ✓ −1.93 ✓

242.0 ~~49~~ ~~−2.1~~

Index left

284.✓

331.✓ 47.0 ✓

109.0 38.9 ✓

147.9 ~~25.9~~ ✓ −2.03 ✓

290.9 32.1 ✓ −2.10 ✓

8-0-0 323.0

113 20. ✓ 102.✓ 49.2 ✓

7✓6 40. ✓ 1✓1.7 ~~21.3~~ ✓ −2.16 ✓

+✓ +21. ✓ −2.0~~2~~ ✓

12✓7 1.

9304.✓396 ✓ P.A. 126.7 Vernier B

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1911phae.proj..6080

Dec. 13. 1911.

E Aurigae. W. Bo. Brandt rec.
Phot. F. 7" cap.

4	vv	+43.7
2	11	
-2	44	
+9	16	

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1911phae.proj...60sC

Dec. 13, 1911.

Index right and above

	211.2		Var. dia
8-4√-0	224.4	13.2√	
	23.6	26.7√	
	√0.3	39.9√	-3.77√
	204.1	24.9√	-3.76√
	229.0		
	30.3	15.3√	
	4√.6	40.2√	-3.76√

Index left and below

	121.0	14.2√	
	13√.2		
	296.7	20.4√	
	317.1	34.6√	-4.09√
	11√.6	23.6√	-4.02√
8-√1-10	139.2		
96 10.√	299.6	13.4√	
A 4A √.√	313.0	37.0√	-3.94√
+√ +21.√			-3.82√
13 48 26.			

9384.√7√3√ P.A. 172.1 Vernier B

L. P. P.

W's watch used for time
Watch 21 seconds slow

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1911phae.proj..6080

Dec. 19. 1911. (Tuesday.)

ε Aurigae, H. obs. Brand & cc.
Phot. I. 7" exp.

4	V-V	+43.7
1	1V	
−3	40	
+2	20	

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1911phae.proj..603C

Dec. 19, 1911.

Index right and above

	24.8	22.8	
7-11-20	47.6		
	213.8	13.2 / 36.0	−4.00
	227.0		
	27.4	16.1	−3.82
	43.		
	206.2	23.8 / 39.9	−3.77
	230.0		

Index left and below

	298.0	20.6	
	318.6		
	119.7	14.1 / 34.7	−4.09
	133.8		
	301.0	13.9	−4.02
7-17-20 / 20 40	314.9		
	115.6	21.0 / 34.9	−4.07
7 17 20	136.6		
+v +42. / 12 17 2.			−3.90

9390. v10 P.A. 172.1 Vernier B

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1911phae.proj..6080

Dec. 19. 1911.

R W Tauvin. H. obs. Brandt rec.
Phot. I.

3	√A	+27.2
1	3√	
−2	23	
+9	37	

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1911phae.proj...603C

Dec. 19. 1911.

Index left — Var. dec.

7-40-0

286.6 ~~42.4~~ v
329.0 33.3 v
111.0 ~~7~~ 37.7 v −2.32 v
144.3

~~201.4~~
~~221.0~~ −2.30 v

112.v 30.4 v
142.9 47.2 v
283.0 77.6 v −2.27 v
330.2

Index right

12.1 v0.1 v
62.2 34.1 v
199.4 ~~42~~ 42.2 v −2.07 v
233.v

−2.00 v

18.v 37.2 v
7-48-0 v5.7
744.0 v 189.8 v2.0 v −1.94 v
tv +42. v241.8 ~~42~~ 39.2 v
12 44 42. v
9390.v311 v

−2.1v v

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1911phae.proj..6080

Dec. 19, 1911.

Index right

11.3
62.
199.0
233.7

34.7
49.

-2.03

19.3
6.4
192.
245.0

37.1

2.
49.6

-1.92

-1.92

Index left

283.0
327.0
112.0
142.4

44.0

30.4
74.4

-2.36

292.7
323.0
105.0
142.3

30.3

47.3
77.6

-2.27

-2.32

-2.10

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1911phae.proj...608C

Dec. 19, 1911.

III

Index left

8-0-20

283.0
332.0 49.0
112.2 30.9
143.1 79.9 −2.20

292.1 −2.23
321.0 28.9
102.8 49.0
171.8 77.9 −2.26

Index right

193.8 46.6
240.4
19.3 35.9
55.2 42.2 −2.12

197.3 37.3 −2.04
8-7-10 234.6
7 30. 11.0 51.0
A 3 55. 62.0 44.3 −1.96
+V +K −2.14
13 4 27 P.A. 307.8 Vernier B
9390. V (K)

L. R. P.

Watch used for time
Watch 42 sec. slow

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1911phae.proj..6080

Dec. 20. 1911. (Wednesday).

R. H. Tawi.

3	$\sqrt{4}$	$+27.2$
1	2^4	
-2	3^4	
$+9$	26	

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1911phae.proj...608C

Dec. 20, 1911.

I

Index left

Var. dis

7-21-30

103.9
1√3.0 49.1
28√.6 39.6
32√.2 44.7 −1.9√

106.2 −1.46
14√.0 32.4
276.3 √7.2
333.√ 96.0 −1.76

Index right

9,√
64.0 √4.√
197.√ 39.√ −1.41
237.0 94.0

−1.71

7-27-30

14.1 43.7
√7.8
187.8 √4.2 1.61
246.0 101.9

49 0
7 24 30.
√ 0 4.
12 2√ 1

−1.70

9391.√176

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1911phae.proj..6080

Dec. 20, 1911.

II

Index right

9.2

7-31-0

66.0 √6.4

199.3 37.6

236.9 9 F.F −1.80 ✓

−1.76 ✓

18.4 40.0

√8.4 √7.0

190.0 97.0 −1.73 ✓

247.0

Index left

281.1

331.6 √0.√

107.9 34.4

142.7 2 √.3 −2.04 ✓

−2.09 ✓

289.2 33.3

7-37-30

322.√ 48.4 −2.14 ✓

102.1 2 1.7

1√0.√

6A 30. ✓

3F 1√. ✓

+√ 0 4A ✓

12 3√ 3. ✓

9391.√243 ✓

−1.9√ ✓

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1911phae.proj...608C

Dec. 20, 1911.

III

Index left

7-40-5

283.9 47.6
331.5 31.2
110.8 78.8 −2.23
142.0

−2.12

290.7 35.6
326.3
102.8 41.1 −2.00
153.9 76.7

Index right

191.4 52.1
243.5 41.1 −1.43
17.0 93.2
58.1

−1.40

197.0 40.1
7-46-30 237.1
46 35 10.1 55.9 −1.76
7 43 12 66.0 96.0
5 0 48
12 48 6

−1.96

9391.530

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1911phae.proj..6080

Dec. 20, 1911.

IV

Index right

7-√0-20

191.0 √36
244.6
16.2 F0,√ −1.A1
√6.7 9 K1

−1.A2

198.9 37.6
236.√
8.4 √6.1
64.√ 93.7 −1.A2

Index left

105.√
1√5.0 49.√
289.4 3X.4
323.8 A3.9 −2.0A

−2.12

7-√√-40

106 0.√
7 √3 0.√
√ 0 4A.√
12 √8 4A.√
9391.√374

108.√ 36.1
144.6
284.3 4√√ −2.1√
A1.6
329.8

−1.97

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1911phae.proj...608C

Dec. 20, 1911.

V

Index left

8-0-10

105.8 48.7
154 ✓
287. ✓ 37.0
324.5 48.7 −2.03 ✓

107.0 −2.04 ✓
144.2 37.2
285.0 48.1 −2.13 ✓
330.1 42.3

Index right

10.6 ✓34
64.0
197.4 37.0
234.4 90.4 −1.90 ✓

18.1 −1.44 ✓
8-6-25 36.6
6 35 ✓ 56.7 ✓3.7
4 3 14. ✓ 192.0 92.3 −1.48 ✓
✓ 0 44. ✓ 245.7 −1.94 ✓
13 4 6. ✓

P. A. 307.8. Vernier B

9391. ✓44✓ ✓

Wis watch used for time
Watch 48 sec. slow.

L. P. P.

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1911phae.proj..6080

Dec. 2d. 1911. (Thursday).

A W Lauri.

3	$\sqrt{\Delta}$	$+27.2$
1	46	
-2	12	
$+9$	4Δ	

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1911phae.proj...608C

Dec. 28, 1911.

Index right

		Var. dis
7-14-0	194.8	
	243.	48.7
	11.4	47.7
	9.1	96.4 -1.7

198.9	38.1	-1.43
237.0		
9.6		
61.8	2.2 / 90.3	-1.91

Index left

105.2	43.0	
148.2		
290.0	32.9 / 7.9	-2.32
322.9		

-2.2

109.9	34	
7-19-15	144.4	46.1
33 15	281.8	40.6 -2.12
7 16 38	327.9	
1 22		-2.04
12 12 0		

9399. 12

1911phae.proj..6080

Dec. 28, 1911.

II

Index left

7-21-3√

103.8	√0.2	
1√4.0		
290.9	3 9 √	
321.4	40.7	−2.17

−2.18

110.9	33.1	
144.0		
283.2	46.7	−2.20
329.9	79.8	

Index right

9.3	√3.0	
62.3		
198.0	36.2	
234.2	49.2	−1.94

−1.82

7-27-4√

16.3	41.0	
√7.3		
190.3	√6.7	
247.0	97.7	−1.71

49 20.

7 24 40.

+√ 1 22.

12 26 2.

9399. √181

−2.00

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1911phae.proj..608C

Dec. 28, 1911.

III

~~7-29-30~~ Index right

6,8 √4.9√

7-29-30 6√.7 42.2√

198.0 101.1√ −1.63√

240.2

−1.73√

16.2 32.6√

√4.8

190.0 √4.√ √

244.√ 93.1 −1.43√

Index left

282.0

321.2 39.2√

113.0 32.√ √

14√.√ 71.7 −2.4√

291.1 31.7√ −2.32√

7-3√-0 322.8

64 30.√ 103.4 40.9√

7 32 1√.√ 1√2.3 40.6√ −2.18

√ 1 22.√ −2.02√

12 33 37.√

9399.√233√

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1911phae.proj..6080

Dec. 28, 1911

IV

Index left

281.8	0.1	
331.9		
111.8	30.0	
141.8	0.1	−2.19

7-37-1

290.	31.4	−2.18
321.9		
101.3	49.8	
1 1.1	1.2	−2.16

Index right

189.		
245.0		
18.9	39.1	
8.0	94.6	−1.79

−1.78

197.9		
234.9	37.0	
6.0	9.0	
6.0	96.0	−1.76

7-42-40

79	5.
7 39	4.
+ 1	22.
12 41	20.

9399.247

−1.94

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1911phae.proj...609C

Dec. 28, 1911.

V

Index right

7-45-30

188.8
248.0 ✓9.2✓
18.2 37.6✓
✓5.8 96.4✓ −1.74✓

197.1 34.9✓ −1.72✓
236.6
8.7 ✓9.3✓
68.0 94.2✓ −1.70✓

Index left

10✓.3 46.6✓
151.9
288.✓ 3✓.0✓
323.✓ 41.6✓ −2.1✓✓

−2.12✓

7-✓1-20
96 ✓0.✓
4A 2✓.✓
✓ 1 22.✓
12 49 47.✓

110.0 3✓.0✓
14✓.0 49.1✓
282.0 44.1✓ −2.04✓
331.1

−1.92✓

P.A. 127.4 Vernier B

9399.✓346✓

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1911phae.proj..6080

Dec. 28. 1911.

δ Arietis. W. obs. Brandt rec.
Phot. A (1 previous)

5	27	−0.4
2	46	
−2	41	
+9	19	

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1911phae.proj...60ac

Dec. 28, 1911.

Index left and below

8-16-10

39.9
√3.√ 13.6 ᵛ S. V. dis.
220.3 13.9 ᵛ
233.2 26.√ ᵛ 4.67 ᵛ

40.0 13.1 ᵛ −4.66 ᵛ
√3.1 13.6 ᵛ
220.0 26.7 ᵛ 4.66 ᵛ
233.6

Index right and above

309.√ 13.√ ᵛ
323.0
129.4 13.9 ᵛ
143.3 27.4 ᵛ −4.60 ᵛ

4.60

8-20-1√
36 2√. ᵛ
4 14 12. ᵛ
+√ 1 22 ᵛ
13 19 34 ᵛ
9399.√√√3 ᵛ

310.0 13.2 ᵛ
323.2
128.8 14.1 ᵛ 4.61 ᵛ
142.9 27.3 ᵛ −4.63 ᵛ

seeing poor throughout evening, much wind. Barom. rising after storm. Air rather cold.

L. A. P.

No watch used for time.
Watch 1ᵐ 22ˢᵉᶜ slow.

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1911phae.proj..6080

Dec. 29. 1911. (Friday)

R Tauri.

3	5 4	+27.2
1	4 5	
−2	1 3	
+9	4 7	

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1911phae.proj...6080

Dec. 29, 1911.

I

Index left

7-8-50

107.4 ——— Var. dis.
148.6 41.2
291.1 32.4
323. 73.6 — 2.39

112.8 32.4 — 2.28
145.2
283.1 44.3
331.4 20.7 — 2.17

Index right

11.3
64.2 52.9
203.4 31.7
7-14-20 235.1 24.6 — 2.06

23 10. — 2.04
7 11 35. 19.9 34.2
1 24. 14.1
12 12 59. 190.9 22 — 2.01
9400. 090 243.1 26.4

— 2.16

1911phae.proj..6080

Dec. 29, 1911.

II

Index right

9.1 ∓2.1 ✓
61.2 30.2 ✓
202.0 A2.3 ✓ −2.13 ✓
232.2

19.0 3 ∓3 ✓ −2.00 ✓
∓4.3 ∓6.0 ✓
188.0 91.3 ✓ −1.85 ✓
244.0

Index left

283.0 32.0 ✓
321.0
111.2 31.1 ✓
142.3 69.1 ✓ −2.54 ✓

290.0 32.8 ✓ −2.52 ✓
322.8
111.8 37.4 ✓
149.2 } 0.2 ✓ −2.50 ✓

7+22-0
32 30 ✓
7 19 12 ✓
+5 1 24 ✓
12 20 42 ✓
9400. ∓144 ✓

−2.26 ✓

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1911phae.proj...604c

Dec. 29, 1911.

III

Index left

7-24-0

280.8 √0.9√
331.7
112.2 29.7√
141.9 20.6√ −2.2√

289.8 34.0√ −2.11√
323.8
101.2 √1.3√
1√2.√ 47.3√ −2.0K√

Index right

190.4 √2K√
242.8
19.4 37.9√
√7.3 90.3√ −1.91√

−1.91√

7-30-0

199.√ 3K.3√
233.8
9.√ √√.9√
90.2 −1.91√

√K 0.√
7 27 0.√ 6√.4
+√ 1 24 — −2.01√
— 28 24.√

9400.√197√

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1911phae.proj..6080

Dec. 29, 1911.

IV

Index right

7-32-10

190.0
244.0 √40.0
19.2 35.4
√4.6 29.4 −1.93

199.3 34.4 −1.44
234.1
8.0 √7.9
6√.9 9.7 −1.44

Index left

102.√
150.3 47.4
291.2 31.6
322.8 79.4 −2.24

7-38-10

112.9 30.1 −2.32
143.0
281.9 39.3
321.2 69.4 −2.13 (−2.13

70 20.√
3√ 10.√
√4 24.√
12 36 3√
9400. √2√4√

P.A. 127.5 Vernier B

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1911phae.proj..608C

Dec. 29. 1911.

δ Orionis. W. obs. Brandt rec.
Phot R (Upsilon)

5	27	−0.4
2	47	
−2	42	
+9	12	

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1911phae.proj..6080

Dec. 29, 1911.

I

Index right and above

129.8 ← S. V. dis

8-13-20

143.2 13.4

309.5 13.0

322.5 26.4 4.62

130.0 13.4 −4.62

143.4 13.1

310.2 26.5 4.67

323.3

Index left and below

39.5 14.0

53.5 14.1 4.55

219.7 24.1

233.8

39.1 −4.50

8 = 8-30 53.4.0 14.9

11 50. 219.5 14.3

4 5 55. 233.8 29.2 4.46

45 1 24.

137 19

9400.5467

−4.59

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1911phae.proj...60dc

Dec. 29, 1911.

II

Index left and below

39.8
8-10-√ √3.6 13.4
219.2 15.0 / 24.4 4.49
234.2

39.9 13.4 4.√1
√3.7
220.0 14.√ / 24.3 4.√3
234.√

Index right and above

309.8
323.7 13.4 / 13.3 / 27.1 4.64
129.8
143.1

4.√4

309.9 14.7
8-1√-0 324.6 13.4 / 24.√ 4.√-
2√ √. 129.7
4 1- 3- 143.√ - 4.√4
4√ 1 24
13 13 √6

9400.√√13 Seeing rather poor throughout evening. Air somewhat cold, considerable wind. During the day wind has been very high with much dust blowing about.

W's watch used for time
Watch 1m 24sec slow.

L. P. R.

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1911phae.proj..6080

Dec. 30. 1911. (Saturday).

R H Sauri.

$$\begin{array}{lll} 3 & \sqrt{4} & +27.2 \\ 1 & \sqrt{0} & \\ \hline -2 & 4 & \\ +9 & \sqrt{2} & \end{array}$$

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1911phae.proj...608C

Dec. 30, 1911.

I

Index left and above

Var. dis.

7-10-2√

10√.9
149.√ 43.6√
289.7 33.1√
322.8 76.7√ 2.29√

114.2 30.2√ ~2.3√√
144.4
282.6 47.0√
327.6 75.2√ 2.34√

Index right and below

7.4 59.6√
65.0 1.42√
197.6 35.9√ ~~1.74~~
233.√ 93.√√

−1.76√

17.6 41.4√
7-18-√ √9.0
24 30.√ 190.2 √64√ 1.71√
7 14 15. 246.6 97.2√
47 1 27 −
12 15 42
9401.√109√

−2.0√

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1911phae.proj..6080

Dec. 30, 1911.

II

Index right and below

6.3
64.4 ✓ 4.1 ✓
198.0 3✓.✓ ✓
233.✓ 93.6 ✓ −1.42 ✓

−1.42 ✓

18.4 40.6 ✓
✓9.0
191.0 ✓24 ✓
243.4 ✓ 930 ✓ 1.43 ✓

Index left and above

283.0
327.9 44.9 ✓
110.9 320 ✓
142.9 ✓ 16.9 ✓ −2.29 ✓

293.0 276 ✓ −2.33 ✓
320.6
106.✓ 46.✓ ✓ −2.37 ✓
1✓3.0 ✓41 ✓

7-28-10
4✓ ✓ ✓
7 24 2. ✓
+✓ 1 27. ✓ ✓
12 2✓ 29.
9401. ✓177 ✓

− −2.04 ✓

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1911phae.proj...608C

Dec. 30, 1911.

III

Index left and above

7-31-25

282.5 46.0
328.5 25.7
116.0 71.7 −2.46
141.7

293.9 −2.43
323.2 29.3
105.1 43.6
148.7 72.9 −2.41

Index right and below

192.0 20.0
244.0 36.6
19.0 44.6 −1.96
25.6

−1.90

7-39-25

199.1 35.9
235.0 36.2
7.6 63.8 92.1 −1.86

7° 30.
7 35 15.
25 1 27.
12 36 42. P.A. 308.0 Vernier B
9401.225−

−2.16

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1911phae.proj..608C

Dec. 30. 1911.

δ Orionis.

Photometer R. 1 prism.

V	27	−0.4
2	27.4	
−2.4	3	
+9	17	
2	33	
+9	27	

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1911phae.proj...608C

Dec 30, 1911

I

Index right and above

309.3 ——— Var. Dis

8-12-50

323.2 13.9 ✓

130.0 13.4 ✓

143.4 27.3 ✓ −4.61 ✓

310.0 13.2 ✓ −4.64 ✓

323.2

129.✓ 13.5 ✓

143.0 26.7 ✓ −4.66 ✓

Index left and below

220.✓

233.9 13.4 ✓

39.9 13.7 ✓

✓3.6 27.1 ✓ −4.64 ✓

220.9 −4.64 ✓

8-17-20 233.8 12.9 ✓

30 10.✓ 40.4

2 15 ✓. ✓3.✓ 13.1 ✓ 26.0 ✓ −4.72 ✓

+5 1 27.✓ −4.66 ✓

13 16 32.✓

9401.✓✓32 ✓

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1911phae.proj..6080

Dec 30, 1911

II

Index left and below

8-19-0(±)

219.9
233.2 13.3
40.2 13.6
√3.8 26.9 − 4.64

220.0 13.3 − 4.66
233.3
40.4 13.1
√3.√ 26.4 − 4.64

Index right and above

129.9
143.3 13.4
309.9 13.3
323.2 26.7 − 4.66

129.9 − 4.64
8-23-15
42 15±
143.7 13.8
309.9 13.5
323.4 27.3 − 4.61
− 4.63
Gen. Mean − 4.62
& 21 &
+√ 1 √7.
13 22 35. Seeing rather poor throughout evening, and intermittent in character.
9401.√√73

We watch used for time
Watch 1m 27sec slow.

L. P. P.

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1911phae.proj...608C

Jan. 1. 1912. (Monday).

α Cephei.

0	50	+81.2
2	12	
+1	22	

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1911phae.proj..6080

Jan. 1. 1912.

I

Index left and below

184.8 ← Var dis

7-20-45

251.1 −66.3 ✓

17.4 43.9 ✓

61.3 ✓ 110.2 ✓ −1.41 ✓

197.1 43.4 ✓ −1.40 ✓

240.5 ✓

4.9 67.5 ✓

72.4 ✓ 110.9 ✓ −1.40 ✓

Index right and above

97.6

156.9 ✓ 59.3 ✓

288.7 ✓ 39.6 ✓

328.3 ✓ 99.9 ✓ −1.64 ✓

108.0 37.0 ✓ −1.7 ✓

7-26-40

47 25. ✓

1450.0 ✓

276.3 ✓ 58.7 ✓

7 23 42. ✓ 3250.0 ✓ 97.7 ✓ −1.76 ✓

+r 1 20. ✓

12 25 2. ✓

9403.5174 ✓

−1.56 ✓

2.41 ✓

6.45 ✓

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1911phae.proj...608C

January 1, 1912.

II

Index right and about

	98.0		
7-29-55	158.5	60.5	
	288.2	37.3	
	325.5	97.8	−1.71
	108.2		
	146.8	38.6	−1.62
	274.8	61.2	
	336.0	99.8	−1.66

Index left and below

	0.6		
	73.2	72.6	
	193.2	45.5	
	238.7	118.1	−1.73
	16.0		−1.26
7-37-10	63.0	47.0	
67	181.9	69.1	
7 33 32	251.0	116.1	−1.28
+5 1 20.			−1.47
12 34 52.			8.41
9403.52			6.94

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1911phae.proj..6080

Jan. 1, 1912.

III

Index left and below

7-43-√√

3.2
73.9 70.7 ✓
193.9 48.1 ✓
242.0 118.8 ✓ −1.22 ✓

14.6
64.1 49.5 ✓ −1.24 ✓
183.2 67.8 ✓
251.0 117.3 ✓ −1.2√ ✓

Index right and above

279.0
33√.4 √6.4 ✓
108.0 34.√ ✓
146.√ 94.9 ✓ −1.79 ✓

287.0 −1.78 ✓
7-√0-30 324.√ 37.√ ✓
94 2√. ✓ 98.6 √8.4 ✓
7 47 12. ✓ 1√7.0 95.9 ✓ −1.76 ✓
+√ 1 20. ✓
12 48 32. ✓
9403.√337

−1.√1 ✓
0.41 ✓
6.90 ✓

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1911phae.proj...608C

Jan. 1, 1912.

IV

Index right and above

277.4
336.4 9.0
108.5 37.4
146.3 96.4 -1.7K

288.0
325.9 37.9 -1.7K
99.2 8.4
178.0 96.7 -1.7K

Index left and below

184.0
251.4 67.K
15.0 46.6
61.0 113.4 -1.3K

195.2 46.A -1.3
240.0
6.6 63.5
70.1 110.3 -1.5

7-58-40
111 45
7 55 52
5 1 20.
12 57 12.
9403.597

-1.56
A.41
6.A5

1911phae.proj..6080

Jan. 1, 1912.

V

Index left and below

8-1-10

18 ✓.1
2✓0.7 6✓.6✓
16.6 44.6✓
61.2 110.2✓ −1.41✓

194.2
239.2 4✓.0✓ −1.3✓
4.0 68.1✓
72.1 113.1✓ −1.3✓

Index right and above

98.1 ✓9.1✓
1✓7.2
286.7 39.✓✓
326.2 9A.6✓ −1.69✓

−1.74✓

8-6-✓✓

108.2 39.9✓
148.2
280.0 ✓4.✓✓ −1.40✓
334.✓ 94.4

A ✓. 2.✓
A 4 2.✓
4✓ 1 20.
13 ✓ 22.✓
9403.✓4✓4✓

P.A. 12.6 Vernier B

−1.✓6✓
A.41✓
6.A✓

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1911phae.proj...608C

Jan. 1, 1912.

δ Orionis Phot. R. (Hartwein)
W. obs. Brand sec.

V	27	-0.4
3	12	
-2	15	
+9	45	

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1911phae.proj..608C

Jan. 1, 1912.

Index left and below

40.4

8-22-25 13.7

13.1 13.0

220.6 26.7 −4.74

233.6

39.9 13.4 −4.70

13.3 13.3

220.4 26.7 −4.66

233.7

Index right and above

310.2

323.1 12.9

129.5 13.5

143.0 26.4 −4.68

310.2 −4.67

8-26-35 323.3 13.1

49 0 129.8 13.6

4 24 30 143.4 26.7 4.66

+5 1 20 −4.68

13 25 50

L. P. A.

Watch used for time
Watch 1m 20 sec slow.

J

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1911phae.proj...608C

Jan. 3. 1912 (Wednesday)

δ Orionis. Phot. R. (1 prism)

V	27	−0.4
2	3	
−3	24	
+A	36	

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1911phae.proj..608C

Jan, 3, 1912

Index right and above

309.7 S. V. dis.

7-6-3 ✓ 323.1 13.4 ✓

130.3 13.1 ✓

143.4 26.5 ✓ −4.67 ✓

310.1 13.1 ✓ −4.62 ✓

323.2

129.5 ✓ 15.6 ✓ 27.7 ✓ −4.74 ✓

144.1

Index left and below

220.0 13.3 ✓

233.3

40.3 12.6 ✓

✓2.9 25.9 ✓ −4.73 ✓

219.8 13.2 ✓ −4.64 ✓

7-12-0 233.0

1A 3✓. ✓ 39.8 13.9 ✓ 27.1 ✓ −4.63 ✓

7 9 12. ✓ ✓3.7

+✓ -12. −4.6✓ ✓

129 6. ✓

J

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1911phae.proj..608C

Jan. 3. 1912.

ν Cephei. Phot. Δ.

0	$\sqrt{0}$	+0.2
2	26	
+1	36	

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1911phae.proj..6080

Jan. 3, 1912.

I

Index left and below

186.0 ← 62.3 Var, dis

7-33-25 248.3 47.3

14.4 109.6 −1.43

61.7

192.6 +0.2 −1.3

242.8 67.1

4.8 117.3 −1.2

71.9

Index right and above

277.6 +7.4

335.0

106.5 42.4

149.3 100.2 −1.6

287.0 +0.1 −1.7

7-39-35 327.1

73 0. 101.5 +4.9

7 36 30. 156.4 95.0 −1.7

+ +1 20.

12 37 +0.

9405. +263

−1.53

4.41

6.44

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1911phae.proj...608C

Jan. 3, 1912.

II

Index right and above

7-42-0

276.2
335.0 ✓ ✓
107.✓ 40.1 ✓
147.6 96.9 ✓ −1.62 ✓

287.2 39.3 ✓ −1.62 ✓
326.✓
98.6 60.0 ✓
158.6 99.3 ✓ −1.67 ✓

Index left and below

185.3
249.0 63.7 ✓
16.0 45.6 ✓
61.6 109.3 ✓ −1.43 ✓

−1.41 ✓

193.8 43.1 ✓
7-47-45 ✓ 236.9 64.1 ✓
89 45. ✓ 3.1 111.2 ✓ −1.39 ✓
7 44 52. ✓ 71.2
+ ✓ 1 20. ✓
12 46 12. ✓
9405. ✓320 ✓

−1.54 ✓
.41 ✓
6.87

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1911phae.proj..6080

Jan. 3, 1912.

III

Index left and below

7-49-3√

184.8
248.6
14.4
61.4

63.2 √
47.0 √
110.2 √ −1.40 √

19√.8
239.9
√.0
71.0

44.1 √
66.0 √
110.1 √ −1.42 √

−1.41 √

Index right and above

100.1
160.9
284.4
327.1

60.8 √
42.7 √
103√ √ −1.√7 √

~~106.1~~
~~1√1.2~~
281.0
334.9
107.4
149.1

√39 √
41.7 √
96√6 √ −1.77 √

−1.67 √

7-√7-30
107 √. √
7 √3 32. √
+√ 1 20. √
12 √4 √2. √
940√. √321 √

−1.√√4 √
2.41 √
6.47 √

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1911phae.proj..608C

Jan. 3, 1912.

IV

Index right and above

7-59-30

286.0 41.0
327.8 56.7
100.2 98.5 −1.69
156.9

279.1 56.2 −1.70
93.3
107.8 41.2 −1.71
149.6 90.0

Index left and below

185.5
250.1 64.6
14.7 45.2
60.5 110.4 −1.41

−1.41

194.8 45.0
8-6-15 239.8 65.2
45.5 5.8 110.2 −1.41
A 2 52. 71.0
+5 1 20.
13 4 12.
940 5. 5 44 5 +

−1.56
2.41
6.85

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1911phae.proj.:608C

Jan. 3, 1912.

IV

Index left and below

185.4	6K6	
250.0		
14.0	47.1	
61.9	112.5	−1.36

−1.39

193.4	K5.6	
239.0		
7.0	6KK	
71.4	110.0	−1.52

Index right and above

98.4	59.9	
158.3		
286.4	50.A	
327.2	100.7	−1.64

−1.69

107.5	K1.5	
149.0	55.2	
279.8	96.7	−1.74
335.0		−1.5K

8-15-20

23 50.

A 11 55.

+5 1 20.

13 13 15, P. A. 13.8 Vernier B

940 5.550A

A.41

6.A7

L. P. P.

W's watch used for time

Watch 12° fast.

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1911phae.proj..608C

Jan. 6. 1912. (Saturday).

U Cephei.

8	V 0	+1.2
2	41	
+1	V 1	

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1911phae.proj..608C

Jan 6, 1912

I

Index right and above

97.9 ——— Var. dis.

7-41-37

160.4 63.0 ✓

287.0 32.7 ✓

32✓.7 101.7 ✓ −1.61 ✓

107.2 40✓ ✓ −1.62 ✓

147.7

278.3 ✓6.0 ✓ −1.74 ✓

334.3 96.✓ ✓

Index left + below

2.0 72.1 ✓

74.1 43.6 ✓

194.8 11✓.7 ✓ −1.29 ✓

238.4 −1.42 ✓

7-47-✓0

15.9 4✓.0 ✓

60.9 ✓9.2 ✓

187.8 10✓.2 ✓ −1.✓✓ ✓

247.0

9 27. ✓

7 4✓ 4✓. ✓

✓✓ +31. ✓

12 ✓✓ 1✓. ✓

940✓.✓314 ✓

−1.✓✓ ✓

✓.41 ✓

6.✓6 ✓

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1911phae.proj...60aC

Jan 6, 1912.

II

Index left and below

3.0
68.0 6√.0
196.9 42.4
239.3 107.4 −1.44

1√.7 43.1 −1.42
√8.8
18√.0 64.4
249.4 107.√ −1.42

Index right and above

281.0 √2.6
333.6
10√.0 42.√
147.√ 9√.1 −170

287.4 40.6 −1.70
328.0
97.0 61.2
1√8.2 101.2 −161

7·√6-2√
6 30.
7 √3 1√.
+√ +31.
12 √3 46
940a. √374

−1.√9
2.41
6.42

1911phae.proj.:608C

Jan. 6, 1912.

III

Index right and above

280.0
336.1 ✓61 ✓
108.0 39.0 ✓
147.0 9✓1 ✓ −1.7✓ ✓

287.0 39.8 ✓ −1.7✓ ✓
326.6
98.✓ ✓40 ✓
1✓6.✓ 97.6 ✓ −1.72 ✓

Index left and below

180.0
2✓0.4 70.✓ ✓
16.8 ✓2.✓ ✓
✓9.6 113.2 ✓ −1.3✓ ✓

−1.40 ✓

197.4 ✓3✓ ✓
240.8
✓.✓ 6✓.1 ✓
70.6 106.✓ ✓ −1.✓5 ✓

7-✓9-1✓

8-✓-1✓
4 30. ✓
✓ 2 1✓, ✓
+✓ +31. ✓
13 2 46. ✓
940✓.✓437 ✓

P. A. 194.0 Vernier B

−1.✓✓ ✓
✓.41 ✓
6.✓3 ✓

M's watch used for time
Watch 31 sec. slow

L. P. P.

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1911phae.proj...60C

Jan 6. 1912.

Observations of second and third groups especially made through more or less varying cloud.

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1911phae.proj..6080

Jan. 9. 1912. (Tuesday)

S. V. near U Cephei. Phot. V.

0	V−0	+A1,2
2	.3A	
+1	+A	

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1911phae.proj...608C

Jan. 9, 1912.

I

Index left

3548 ← S. V. dis.

7-9-20

80.0 A5.2

184.0 67.2

251.2 (52 A) −0.3

6.3 64.2 −0.5

70.5

173.8 A6.2

260.0 (50.4) −0.7

Index right

266.0

347.6 A1.6

97.1 61.2

158.3 (42.4) −0.7

277.2 59.3 −0.6

7-15-5 336.5

24 25. 85.4 A6.7

7 12 12. 172.1 (46.0) −0.6

tr 1 24. −0.6

12 13 36.

9411.509

1911phae.proj.:608C

Jan. 9, 1912.

II

Index right

7-16-40

26√.1
348.9 A3.A
94.1 62.7
1√6.8 1K6√ −0.6K

277.8 60.8 −0.6Z
338.6
82.√ AA.K
170.9 1K9.2 −0.√9

Index left

168.9
263.0 94.1
4.8 66.2
71.0 160.3 −0.3A

7-24-0

40 40.
7 20 20.
+√ 1 24.
12 21 44. P.A. 158.0 Vernier B
9411.√151

184.√ 64.9 −0.4Z
249.4
3√3.6 91.2
84.8 156.1 −0.46

−0.√2

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1911phae.proj...608C

Jan. 9. 1912.

γ Camelop. Phot. V.

7/3	2V	+76.2
	A	
−6	17/43	
+7		

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1911phae.proj..608C

Jan. 9, 1912,

I

Index above

266.2 ← Comp, Star dis.

345.8 79.6

98.8 59.3

158.1 139.9 +0.40

274. 62.4 +0.74

336.9

87.7 62.4

170.1 154.4 +0.64

Index below

175.8

269. 91.7

7.2 62.1

69.3 153.4 +0.50

+0.50

184.7 67.1

271.8 46.7

353.8 153.4 +0.50

80.5 +0.62

7-54-35

8-0-0

114 35.

7 57 14.

+5 1 24.

12 58 42

9411.540

1911phae.proj...609C

Jan 9, 1912.

II

Index below

175.0
8-1-40 260.0
4.2
69.0

Index above

90.1
170.7
338.4

8-6-
3
4 1
1
13
9411.

1911phae.proj..6080

Jan 9, 1912

III

Index above

8-8-3 ✓

85.2
167.0 41.8 ✓
277.3 60.3 ✓
337.7 152 ✓ +0.73 ✓

96.9 64.0 ✓ +0.70 ✓
160.9
266.1 41.6 ✓
347.1 145.0 ✓ +0.67 ✓

Index below

3✓3.4
80.8 47.4 ✓
184.1 69.1 ✓
2✓3.2 156✓ ✓ +0.45✓

8-15-20
23 ✓✓ ✓
A 11 ✓4. ✓
+✓ 1 24. ✓
13 13 22✓ ✓
9411.✓✓10 ✓

✓.8 61.8 ✓ +0.✓1 ✓
67.6
174.2 44.6 ✓
262.8 150.6 ✓ +0.✓7 ✓

+0.60 ✓

P.A. 163.✓ Vernier B

Wis watch used for time
Watch 1m 24 sec slow

L. A. P.

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1911phae_proj...609C

Jan. 10. 1912 (Wednesday)

α Cephei.

0	$\sqrt{0}$	+81.2
2	46	
+1	$\sqrt{6}$	

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1911phae.proj..608c

Jan. 10, 1912.

I

Index left and below

171 0 ——— Var. dls

7-24-40

264.9 939 ✓

8.9 ∓9.1 ✓

68.0 ——— ✓ −0.∓2 ✓

188.0 6.9 ✓ −0.∓2 ✓

248.9

350.8 926 ✓

83.4 ——— ✓ −0.∓1 ✓

Index right and above

84.0 ∠ 86∓ ✓

170.∓ ——— ✓

279.3 ∓6.0 ✓

33∓.3 ——— ✓ −0.72 ✓

96.9 −0.70

7-30-0 158.2 61.3 ✓

∓4 40 ✓ 264.1 ∓27 ✓

7 27 20.1 ✓ 347.4 ——— ✓ −0.69 ✓

∓∓ ∠ ✓ 144.0

12 27 20. ✓ −0.61 ✓

9412.∓191 ✓ ∠.41 ✓

——— ✓

7.40 ✓

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II

Index right and above

89.6
7-33-10 16 √ √ 7 √.9 √
278.2 √9.6 √
337.8 13 √.√ √ −0.47 √

97.√ 61.0 √ −0.40 √
18.√ 266.8 41.6
348.4 142.6 −0.72 √

Index left and below

3√3.2
83.0 49.4 √
18√.0 63.4 √
248.4 1√3.2 √ −0.√1 √

4.2 6K.4 √ −0.√2 √
7-39-30 68.6
7240.' 172.2 44.0 √
7 36 20.' 260.2 1√2.K √ −0.√3 √

+√ 4. √
12 36 20. √

9.412.√2√3 √

−0.66 √
4.41 √
7.7√ √

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III

Index left and below

7-42-1

3 4.4 26.1
81.5 79.7
187.6 14 4 6 −0.66
247.3

9.3 60 −0.62
69.8 46
171.9 149.1 −0.49
260.4

Index right and above

268.1 79.9
346.0 100.9 4 4.2
106.1 133.1 −0.91

278.3 46.7 −0.66
7-49-1 330.0
91 30.4 89.4 79.2
7 4 45.4 168.6 134.9 −0.46
4 4.4
12 4 43.
9412.431 6

−0.74
4.41
7.66

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IV

Index right and above.

271.0 74.√
7-52-√√ 34√√ √4.√
101.0 √4.√
1√√.√ 129.0 −1.00

278.√
333.8 √√.3 −0.96
87.8 27.9
165.7 133.2 −0.91

Index left and below

176.9
262.3 4√.4
7.4
66.3 √4.9
144.3 −0.69

189.8
7-58-1√ 243.6 √3.4 −0.76
11 10 3√√.2 43.7
7 √√ 3√. 78.9 137.√ −0.42
+√ + 4.
12 √√ 43.
9412.√34)

−0.46
4.41
7.5.√

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V

Index left and below

174.6 Δ3.7
2√8.3
10.8 √4.7
6√.√ 134.4 −0.Δ1 ✓

1904 √1.Δ −0.Δ2 ✓
242.2
3√7.2 Δ4.Δ
82.0 136.6 −0.Δ4 ✓

Index right and above

104.3 √√.9 ✓
1√0.2
271.2 72.2 ✓
343.4 114.1 ✓ −1.23 ✓

90.0 −1.20 ✓
164.√ 74.√ ✓
284.2 46.4 ✓
330.6 120.9 −1.17 ✓

8-9-0 −1.01 ✓
12 √ ✓ Δ.41 ✓
Δ 6 2 ✓ 7.40 ✓
+√ +Δ.
13 6 10. ✓ P. H. 13.3 Vernier B
9412.√4√9 ✓

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Y Cancelli. Phot. I,

7	25	+76.2
13	46	
−3	39	
+4	21	

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I

Index above

Comp'star dis

8-21-3V

26 5,9
34 V 4 79.V
94.0 63.0
1 V 7.0 1K2.V +0,72

V 76,0 V8.0 +0.73
334.0 A3.7
86.2 1K1.7 +0.74
169.9

Index below

17 V.0
2 V 8.0 A30
6.0 61.V
66.V 1K3.V +0.70

18 V.1 61.7 +0.63
8-27-0 246.8
7 V 2.4 A9.3
81.7 1K1.0 +0,V6

+0,6A

4A 3V.
A 2K 12.
+V +V.
13 2K 23.
9412. VV A6

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II

Index below

177.7 62.4
260.5 62.6
6.9 14.8 +0.67
69.5

188.0 62.2 +0.6
2 50.2
3 52.8 14.6 +0.54
80.2

Index above

87.2 60.7
167.9
27 52.2 61.2 14.9 +0.74
336.4

+0.40

99.5 56.5
8-34-40 156.0
63 50.5 267.0 79.4 13.9 +0.46
A 31 55.5 346.4
+5 +5.
13 32 0

P. A. 343.2 Vernier B +0.71

9412.5-639

Watch used in previous observations
8 sec. slow.

L. P. P.

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