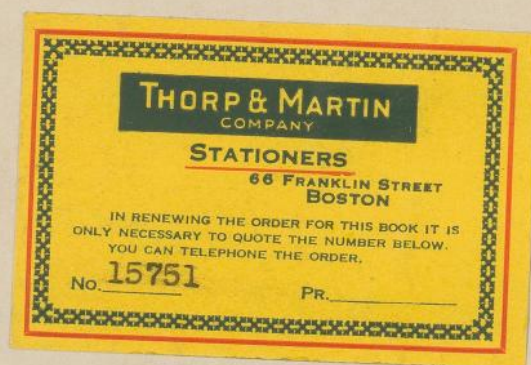
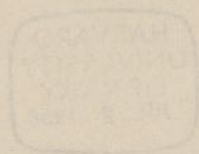


1.5-inch

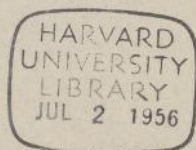
Nov. 1928

KG-11365,630





KG 11365.630



Tuesday, Nov. 6, 1928.

15" Cg.

Phot. T.

21 Cephei 005381

C's watch used.

E.S.T.
from
noon

P.A. -15°

L.C. Obs.

Readre Adams.
Rec. Miller.

7 45 20

155.2 < Var. dis.

I

262.3

107.1

358.8

72.2

- .001

71.0

179.3

175.0

74.5

- .014

249.5

91.8

349.8

165.3

- .028

81.6

P.A.

841

246.4

+ 0.06 = Mean

364.0

847

76.3

107.6

167.8

91.5

256.0

199.1

343.8

160.9

+ 0.36

71.0

878

+ 0.26

1000

7 50 07

171.0

1878

7 47 44

1722

+ 0.15

55

57.5325

57.3673

7 46 49

Phase + 0.1652.

25 5 57 5.325

November 6, 1928.

U. Cepheid II obs. Adams

Reader. Miller

P.A. 197

Recorder L. C.

D

265.7

7 52 38 265.7

351.0 85.3

70.1 103.9

174.0 189.2 +0.17
170.8

247.5 -0.02

366.0 108.5

95.4 60.8

156.2 169.3

P.A. 17

mean = $\frac{841}{-0.005}$
8.36

357.3

70.3 73.0

165.1 96.1

261.2 169.1 -0.21

345.2 -0.08

82.9 97.7

167.0 85.6

8 00 00 252.6 183.3 +0.06

7. 56 19 176.7

-55

57.5385

7 55 24

57.3673

25.55 7.53 85

+0.1712

November 6, 1928

U Cepheid

III

Obs. Miller

Reader Adams

P.A. 16

Recorder L.C.

8 00 35	359.2		
	69.4	70.2	
	167.8	90.8	
	<u>258.6</u>	161.0	- 0.36
	348.1		
	86.9	98.8	- 0.30
	184.0	68.8	
	<u>252.8</u>	167.6	- 0.24

P.A. 196

$$\begin{array}{r} 841 \\ \text{mean} = -0.27 \\ \hline 8.14 \end{array}$$

	82.0		
	161.0	79.0	
	262.4	92.3	
	<u>354.7</u>	171.3	- 0.16
	76.0		
	161.7	85.7	- 0.24
	269.1	77.7	
	<u>346.8</u>	163.4	- 0.02

8 06 06

8 03 20

- 55

8 02 25

25557.5434

57.35073

+ 0.1761

November 6, 1928

U. Cephei

IV

Obs. L.C.

Reader Miller

Recorder Adams.

P. A. 195

8 08 00

78.3

159.1

80.8

258.0

94.0

352.0

174.8

-0.10

76.0

171.3

95.3

+007

258.2

97.6

355.8

192.9

167.1

+024

P. A. 15

Mean = -

8.41

0.24

8.17

171.5

85.5

257.0

71.3

356.7

156.8

-0.44

68.0

175.0

248.0

730

2.2

723

8 14 30

745

145.3

-0.67

8 11 15

8 10 20

25557.5488

57.3673

0.1815

November 6, 1928.

U Cephei

- V

Obs. Miller

Reader Adams

Recorder S. C.

P.A. 12

8	14	05	165.9		
			258.0	92.1	
			6.1	<u>66.9</u>	
			73.0	159.0	-0.40

			181.0		
			252.8	71.8	-0.42
			354.9	<u>85.3</u>	
			80.2	157.1	-0.44

Mean = $\frac{841}{-0.44}$
797.

P.A. 192

			257.0	91.9	
			348.9	<u>58.3</u>	
			93.0	150.2	-0.57
			151.3		

			275.6		-0.44
			338.0	62.4	
			69.7	<u>99.3</u>	

8	18	45	169.0	161.7	-0.35
8	16	25			
8	15	30			
25557.5524					
<u>57.3673</u>					
0.1851					

November 6, 1928.

U Cephei

RT

obs. Adams

Reader Miller

Reader L.C.

P.A. 190.

8 19 30

259.1

350.3

91.2

90.4

63.6

154.0

154.8

-048

272.9

-030

338.9

66.0

76.0

106.2

183.2

173.2

-0.13

P.A.

mean $\frac{841}{-045}$
79.6

167.5

260.8

93.3

39.6

51.6

144.9

-068

179.2

245.3

66.1

-060

352.0

87.2

79.2

153.3

-051

8 25 40

8 22 35

8 21 40

25557.5568

57.8673

0 1895

November 6, 1928.

VII

P. A 12

Obs. Miller

Reader L.O.

Recorder Adams

8 28 30 178.8

243.2 64.4

356.3 18.7

75.0 143.1 - 0.71

171.5 - 0.67

250.8 79.3

355.2 67.9

63.1 147.2 - 0.63

P. A 192

Mean = $\frac{841}{-054}$
787

257.3

341.8 84.5

89.2 71.6

160.8 156.1 - 0.46

264.2 75.4 - 0.42

339.6 85.4

82.4 160.8 - 0.37

8 32 02 167.8

8 30 16

8 29 21

25557.5621

57.3673

0.1948

November 6, 1928.

U Cephei

VIII

Obs. Andrews

Reader Adams

Rec. Miller.

P. A. 19°

8 36 28	170.0	< compl. dis.	
	268.0	98.0	
	338.0	106.5	
	84.5	204.5	-047
	<u>163.9</u>	155.5	

279.8	115.9	-060
346.2	102.1	
88.3	218.0	
<u>142.0</u>		-073

P. A. 10°
 mean $\frac{841}{-060}$
 781

75.6	102.5	
178.1	102.8	
253.4	205.3	-048
366.2	154.7	
<u>71.8</u>		

182.7	110.9	-059
252.1	105.2	

8 41 40	357.3	216.1	
---------	-------	-------	--

8 39 04		143.9	-070
---------	--	-------	------

8 38 09			
---------	--	--	--

25557.5682

57.3673

0.2009

November 6, 1928
U Cephei

IX

Obs. Almatoad.
Reader Andrews
Rec. L.C.

P.A. 10

8 43 00	65.4	106.5	
	171.9	123.6	
	250.2	230.1	
	13.8	129.9	- 0.98
	<u>75.5</u>		
	191.0	115.5	- 0.76
	255.2	92.0	
	347.2	207.5	
		152.5	- 0.53

P.A. 190

Mean = $\frac{841}{-063}$
7.78

	359.2		
	77.0	77.8	
	159.0	122.0	
	281.0	199.8	
	<u></u>	160.2	- 0.38
	341.9		
	94.5	112.6	- 0.50
	156.0	100.0	
8 49 20	256.0	212.6	
8 46 10		147.4	- 0.63
8 45 15			
25557.5730			
57.3673			
<u>0.2057.</u>			

November 6, 1928
U CepheiX obs. Adams.
Reader Andrews
Spec. L.C.

P.A. 190

8	50	12	257.4	< Var. dis.	
			347.9	90.5	
			99.3	49.2	
			148.5	139.7	- 078

277.5		- 070
-------	--	-------

327.2	49.7	
77.5	97.5	
175.0	147.2	- 063

P.A. 10

3.5

55.5	52.6	
174.2	72.8	- 1.09
247.0	124.8	

348.4		- 0.92
-------	--	--------

70.9	82.5	
------	------	--

178.1	59.3	
-------	------	--

9	00	32	237.4	141.8	0.74
---	----	----	-------	-------	------

8	55	22			
---	----	----	--	--	--

8	54	27			
---	----	----	--	--	--

25557.5796

57.3673

0-2123

C's watch used⁴⁰ here

November 6, 1928.

U. Cephei - XL

Obs. Miller

Reader Almstead.

Rec. Andrews

P.A. 10			
9 01 33	359.5		
	62.8	63.3	
	167.7	78.1	
	245.8	141.4	-0.75

	359.1		-0.78
	65.0	65.9	
	174.5	71.8	
	246.4	137.8	-0.82

P.A. 190			Mean $\frac{841}{-0.79}$ 762
----------	--	--	---------------------------------

	271.1		
	338.2	67.1	
	82.0	77.2	
	159.2	144.3	-0.69

	263.8		-0.80
--	-------	--	-------

	328.8	65.0	
--	-------	------	--

	84.8	67.8	
--	------	------	--

	152.6	132.8	-0.92
--	-------	-------	-------

9 08 37

9 05 05

1 5

9 06 10

25557.5876

57.3673

0.2203

November 6, 1928

U Cephei

P. A. 190

XII. obs. Adams

Reader Andrews

Rec. Meller

9 26 12

270.2

333.8

63.6

92.2

62.6

154.8

126.2

-106

277.9

124

331.0

531

94.9

563

151.2

109.4

-1.43

$$\text{Mean} = \frac{841}{131} = 7.10$$

P. A. 10

5.8

59.0

53.2

192.9

53.1

236.0

106.3

-150

30

138

56.2

180.0

9 33 25

243.5

9 29 48

9 30 53

25557.6048

57.3673

0.2375

November 6, 1928

M Cephei

XIIIObs. Olmstead,
Reader - Andrews
Rec. Adams.

P.A. 17.

9 49 50 58.0 < comp & dis

181.4 1234

238.9 1231

362.0 246.5

113.5

- 1.34

71.3

-1.30

169.5 98.2

228.9 145.2

14.1 243.4

116.6

- 1.27

P.A. 97

841

277.9 < var. dis. Mean. -1.22

318.9 410

73.8 813

155.1 122.3

- 1.14

November 6, 1928.

U Cephei

- XIV obs. Miller

P.A. 197.

Read. Andrews.

Rec. Adams

9 51 12

268.1

330.3

62.2

92.0

63.0

155.0

125.2

- 1.08

265.5

- 0.92

332.9

67.4

84.0

73.2

- 0.76

157.2

140.6

$$\begin{array}{r} 8.41 \\ \text{mean } - 1.04 \\ \hline 7.37 \end{array}$$

P.A. 17

354.0

70.3

64.3

47.9

189.4

118.2

- 1.23

237.3

358.4

- 1.17

57.5

59.1

176.3

64.7

241.0

123.8

- 1.11

9 55 40

9 53 26

9 54 31

25557.6212

57.3673

0.2539

November 6, 1928

21. Cephei

- XV

Obs. Andrews

Read - Miller

Record - Adams

P. A 11

10 06 50

4.2

62.7

58.5

188.7

46.8

235.5

105.3

- 1.53

10.4

57.1

46.7

- 156

184.1

55.9

240.0

102.6

- 159

P. A. 191

Mean - $\frac{841}{1.48}$
6.93

89.9

156.3

66.4

273.9

52.2

326.1

118.6

- 1.22

96.9

- 1.39

145.9

49.0

274.0

55.1

10 13 32

329.1

104.1

- 156

10 10 11

10 11 16

25557.6328

57.6328

57.3673

0.2655

Wed., November 7, 1928.

15" Eq.

Phot. T.

21 Cephei . 005381

Obs. Olmstead.

E.S.T.

Reader - Miss Sanger

Moon

P.A.

Rec. Y. J. Demitroff

8 35 45

85.7 < var. dis.

I

153.1

67.4

269.2

65.8

.91

334.8133.2

94.1

.95

153.4

<

59.3

273.7

70.1

343.8

129.4

.99

P.A. 10

237.6

< comp. dis.

841

- 1.24

717

4.8

187.2

56.8

131.6

187.4

268.8

1.88

91.2

1.53

241.7

10.6

70.0

111.3

1.19

8 40 20

181.3

240.0

120.0

November 7, 1928

U Cephei 005381

Ob. Miss Sanger.

II

Read. in. Almeted.

P. A 10

Rec. Cy. 3-D.

8 47 00

50.3

191.4

141.1

210.2

128.5

8.7

267.6

61.8

92.4

- 185

179.8

118.0

192.4

136.0

168

238.4

46.0

P. Q 190

254.0

- 151

106.0

81.3

mean - 8.41

157.3

> 3.0

281.5

50.4

112

331.9

123.4

90.8

52.1

616

112.9

67.7

8 55 10

265.0

119.8

1.20

332.7

Wed. Nov. 7, 1928

15 Eq.

Phot. T.

Obs. Dandoff.

U. Cephei

Readn. Almsfeld

E.S.T. (Norm)

P.A. 190

Rec. Jg. D.

9 53 48

266.4 - var. dis.

III

326.9

60.5

99.6

51.1

1.38

140.7

111.6

278.0

1.34

338.0

60.0

86.2

55.5

1.29

141.7

115.5

P.A. 10

Cloudy.

Thursday 22 November 1925

29

L.C. Obs. L.E.C. Rec
12" Polar Phot T.

(B) var dis

7:40:10

345.6

14.0

359.6

E Ampere

045343

L.E.C. match

168.0

15.7

F.S.T. from now

183.7

29.7

- 4.42

uncertainty

until error

339.8

25.0

3.90

364.8

163.6

22.5

- 3.39

186.1

47.5

A

Mean = -4.14

75.8

25.0

90.8

254.6

17.5

- 4.22

272.1

32.5

4.47

76.4

90.2

13.8

258.6

12.2

- 4.72

270.8

26.0

7:45:20

- 5 30

7 42 40

12 43

Comp. = +43.1170 (29)

30

November 22 - 1928.

II

8 01

A
 253.3
 271.2
 77.2
 91.3

17.9

14.8
 32.0

+4.26

257.8

270.4

74.7

90.2

12.6

15.5
 28.1

-4.40

-4.55

340.2

365.5

163.8

184.9

25.3

21.1
 46.4

-4.10

-3.44

-3.80

344.7

359.6

166.2

184.8

14.9

18.6

33.5

-4.16

8 06 ±

This & prev. group
 meas. with stars at

(1855) 4^h 52.1 + 43° 34'

November 22 - 1928.

31

~~TH~~
 E Am. News with
 star at $4^h 50.4^m + 43^\circ 33' (1255)$

8:18:30 This comp * presumably the same as
 B 79.7 var dist used Feb. 28-1928
 88.9 9.2 o few fol. days
 258.7 8.1
 266.8 17.3 -5.61

81.2 -5.70
 87.8 6.6
 258.2 9.2
 267.4 15.8 -5.60

-5.40
 169.2
 178.8 9.6
 348.6 10.1
 358.7 19.7 -5.32

168.4 -5.09
 180.3 11.9
 345.8 12.5
 8:24 358.3 24.4 -4.86

Comp * = $+43.115^\circ (1.9)$

Nov. 22 / 1924

H. B. Sawyer rec

Same Conf # as in group III IV

8:36

A

167.2

12.6

179.8

347.8

11.0

358.8

23.6

4.93

169.4

8.5

177.9

5.25

348.8

9.1

357.9

17.6

5.57

B 259.8

7.2

266.0

5.46

79.7

8.7

88.4

15.9

5.79

257.8

9.4

267.2

5.66

79.4

8.4

8:41

87.8

17.8

5.54

Nov 22 '28

L.C. obs

HBS rec

Measurement of the 2 comp stars for ϵ Aurigae

8:44

B

First comp disappears and is the brighter.

224.3

74.9

299.2

 $\angle + 43^\circ 1170$ dis & br.

50.8

0.63

123.2

72.4

147.3

235.6

54.2

0.95

289.8

57.9

62.5

1.27

120.4

116.7

A

318.8

63.4

0.86

382.2

140.8

66.4

0.98

207.2

129.80.76

316.4

73.8

390.2

135.3

78.4

0.53

8:49

213.7

152.2 $+43.115^\circ$ comp with $+43.1170$

34

November 22, 1928

L.C. obs 1435 rec.

SU Tauri 054319

9:10

Too faint for photometer; newly at limit of visibility.
A rough estimate places it at 12.5. Moon quite bright.
Observation difficult; confirms Smith's earlier observation.

Nov. 22, 1928

L.C. obs NBS rec

TU Cassiopeiae

Obs dec +52.2

ST 1^h 38^mHA 1^h 17^m

B Vardis

9:24

47.2

71.5[✓]

Phot T

118.7

2
336.860.0[✓] - 0.95[✓]

296.8

131.5[✓]-0.89[✓]

46.9

69.8[✓]

116.7

230.4

67.4[✓]-0.83[✓]

297.8

137.2[✓]-0.74[✓]

A

141.4

67.8[✓]

209.2

-0.75[✓]

318.2

73.6[✓]

391.8

141.4[✓]-0.59[✓]

134.0

80.2[✓]

214.2

-0.43[✓]

315.8

77.0[✓]

9:29

392.8

157.2[✓]

5573.609

1004

Comp * = +50.71 (9.0)

Nov. 22 - 1928

Same by H.B. Sawyer Obs.
L.C. Dec

9 33 30

$$\begin{array}{r}
 A \\
 120.5 \\
 211.7 \\
 139.6 \\
 208.8 \\
 \hline
 23.2 \\
 69.2 \\
 152.4 - 0.53
 \end{array}$$

$$\begin{array}{r}
 320.9 \\
 388.1 \\
 134.3 \\
 205.3 \\
 \hline
 67.9 \\
 71.0 \\
 138.9 - 0.80
 \end{array}$$

B

Mean = -0.72

$$\begin{array}{r}
 49.0 \\
 119.2 \\
 224.6 \\
 303.5 \\
 \hline
 70.2 \\
 78.9 \\
 149.1 - 0.59
 \end{array}$$

$$\begin{array}{r}
 50.6 \\
 121.7 \\
 234.5 \\
 294.4 \\
 \hline
 71.1 \\
 59.9 \\
 131.0 - 0.96
 \end{array}$$

9 47 40

1611

1004

Nov. 22 - 1928

Sample by HBS & Ob

9 5-300

B

$$\begin{array}{r} 52.3 \\ 115.9 \\ 227.9 \\ 302.7 \end{array}$$

$$\begin{array}{r} 63.6 \\ 74.8 \\ \hline 138.4 - 0.01 \end{array}$$

$$\begin{array}{r} 51.4 \\ 114.9 \\ 219.1 \\ 300.3 \end{array}$$

$$\begin{array}{r} 63.1 - 0.75 \\ 81.2 \\ \hline 144.3 - 0.69 \end{array}$$

a

Mean = -0.80

$$\begin{array}{r} 147.4 \\ 210.6 \\ 322.9 \\ 394.9 \end{array}$$

$$\begin{array}{r} 63.2 \\ 42.0 \\ \hline 105.2 - 0.87 \\ 0.87 \end{array}$$

$$\begin{array}{r} 137.6 \\ 209.8 \\ 319.4 \\ 385.4 \end{array}$$

$$\begin{array}{r} 72.2 - 0.81 \\ 63.0 \\ \hline 135.2 \\ 8 \end{array}$$

10 00 20

.622

+004

Thurs Dec 6, 1928

U of the Phot. T

P.A. 12

CCCh

Adams Read
Chimney Rec.

Exp'd over G. L.

6 16 36

243.3
311.0
65.4
144.7

6.7.7

79.3

147.0 - 063

- 0.54

240.5

79.1

319.6

76.6

62.9

155.7 - 0.46

139.5

P.A. 192

Mean = -0.42

152.1

88.9

241.0

101.8

323.0

190.7

66.4

169.3

- 0.20

157.0

76.1

- X 0.30

227.1

125.0

328.8

201.1

- 0.40

5.38

158.9

6 20 51

11 18 44

11 18 24

242 5587.4711

Dec 6, 1928

McClure II

192 P.A. #85 (A)

Andrews Ob.
Adams Road
L.C. Rec

6 2200

159.6 Van der

231.0 A

345.4

52.2

70.4

66.8

137.2

- 0.23

152.2

228.9

345.8

51.8

76.7

66.0

142.7

- 0.72

Mean = - 0.69
2.41

P.A. 125

326.0 < comp + di

69.7

137.2

249.3

103.7

112.1

215.8

144.2

- 0.69

320.7

70.7

155.0

252.4

110.0

97.6

207.4

152.6

- 0.52

6 2748

9 46

11 2454

11 2434

242558.4754

Dec. 6, 1928

6 2850

438
327.4

comparison standards 104.6

Adams obs

72.0

127.5

Andrews Rd.

129.6

2321

Mills Obs

257.1127.9

1.02

316.0

121.5

Rogers

79.5

106.9

228.4

131.6

145.0

P.A. 100

0.95

251.9

Reverse photometry

154.8

variable disappears

79.3

234.1

351.9

57.2

49.1

136.5

- 0.8X

160.0

69.5

229.5

0.78

341.3

73.9

6 3534

55.2

143.4

0.71

6424

11 22 12

11 31 52

55 57.4798

Mean = 0.88

8.41

7.53

Thurs. Dec 6 U Cephei

Kreuzstein obs
Adams read
Sawyer record.6
1:37 ±

140.0	100.0	
240.0		
354.3	42.7	0.72

37.0

142.10.78

167.4 48.3

215.7 0.84

326.9 88.5

55.4

136.8

247.9 80.6

328.5 0.70

73.5 62.9

136.4

143.50.76

242.0 76.5

317.5 0.81

71.4 62.5

133.9

138.06:48 0

85 0

11 42 30

11 42 10

5587.4876

Dec 6 - 1928

U Cephei
Pa-190 10Miller, O.
Greenwich Royal
LC Rec

$$\begin{array}{r}
 6 \quad 5240 \quad \cancel{+43} \\
 \quad 246.2 \\
 \quad 321.2 \\
 \quad 79.5 \\
 \quad 132.0 \\
 \hline
 \quad 75.0 \\
 \quad 52.5 \\
 \hline
 \quad 127.5 - 1.03
 \end{array}$$

$$\begin{array}{r}
 260.7 \\
 316.5 - \\
 \quad 71.7 \\
 \hline
 139.8 \\
 \quad 55.8 \\
 \quad 68.1 \\
 \hline
 123.9 - 1.11
 \end{array}$$

$$\begin{array}{r}
 Pa, 190 \\
 330.4 \\
 55.2 \\
 167.0 \\
 231.3 \\
 \hline
 84.8 \\
 64.3 \\
 \hline
 149.1 - 0.59
 \end{array}$$

$$\begin{array}{r}
 \text{Mean} = -0.88 \\
 8.48 \\
 \hline
 7.53
 \end{array}$$

$$\begin{array}{r}
 346.8 \\
 48.0 \\
 155.2 \\
 232.3 \\
 \hline
 61.2 \\
 77.1 \\
 \hline
 138.3 - 0.81
 \end{array}$$

$$\begin{array}{r}
 6 \quad 5748 \\
 \hline
 538 \\
 11 \quad 5249 \\
 11 \quad 5229 \\
 5187.4948
 \end{array}$$

Dec. 6, 1928

P.A. 190

Mint & Sawyer Co.
Miller Road
P.C. Res

6 59 05 325.4

56.4
167.0
220.391.0
53.3
144.3

- 0.69

344.2

- 0.81

47.8

63.6

155.1

62.8

7 04 ±

223.9

132.4

- 0.93

Remond photometer

P.A.

Mean - 1.12

7 15 20

166.9

Var di-
65.1

232.0

84.1

358.2

7.29

45.4

47.2

- 1.36

181.2

112.3

226.6

45.4

- 1.44

353.5

- 1.52

7 17 15

53.9

60.4

35.40

105.8

7 08 51

12 06 35

55.87.5060

Dec 6, 1928

Obs. Olmstedt

Rec. Drexler

Reading Muller

7 18 35 163.5
240.2

77.7

3.0

52.0

- .99

55.0

129.7

171.0

- .86

232.8

61.8

348.0

80.3

- .73

68.3

142.1

328.0

74.0

106.0

Mean - 0.95
Comp & dis. 841

133.4

256.0

123.6

229.6

130.4

- .97

1.04

311.0

74.9

123.9

1.11

144.2

256.4

112.2

236.1

123.9

7 25 55

84 30

12 22 15

12 20 55

55P 5152

Dec. 6, 1928

$$\begin{array}{r}
 26.45 \quad 254.4 \\
 320.5 \\
 70.9 \\
 137.0 \\
 \hline
 \text{X}
 \end{array}$$

$$\begin{array}{r}
 661 \\
 611 \\
 \hline
 127.2
 \end{array}$$

Dimittoff Ob
Miller Reed
R.C. Rec

1.04

$$\begin{array}{r}
 254.3 \\
 323.9 \\
 67.8 \\
 131.0
 \end{array}$$

$$\begin{array}{r}
 696 \\
 632 \\
 \hline
 1328
 \end{array}$$

- 0.98

- 0.92

Pa.

$$\begin{array}{r}
 345.3 \\
 57.2 \\
 179.2 \\
 230.0 \\
 \hline
 \text{X}
 \end{array}$$

$$\begin{array}{r}
 65.9 \\
 508 \\
 \hline
 116.7
 \end{array}$$

$$\begin{array}{r}
 - 1.25 \\
 8.41 \\
 \hline
 7.16
 \end{array}$$

1.27

$$\begin{array}{r}
 354.0 \\
 216.1 \\
 184.4
 \end{array}$$

$$\begin{array}{r}
 52.1 \\
 431 \\
 \hline
 95.2
 \end{array}$$

1.52

$$\begin{array}{r}
 3520 \\
 227.5
 \end{array}$$

1.77

62 05

7 31 02

12 30 42

5547.5213

Dec 6 - 28

Mr. Carney bell off.
Greenstein read
G2. D record

7 38 23 353.9

47.4

no disapp

56.5

175.7

47.3

223.0

103.8 — 1.56

356.2

61.8

58.0

298.2

1.38

171.6

57.4

229.0

119.2 — 1.21

84.9

60.0

144.9

Mean - 1.21

265.6

61.4

8.41

327.0

121.4

7.20

86.2

1.16

144.5

78.3

268.9

54.9

7 43.30

323.8

133.2 — 0.91

~~7 44.13 145.2~~

2 53

7 41 26

12 41 06

5587.5286

8 00

Watch used = 20² feet

Dec. 11. 1928.

Andrews obs. read, etc.

EST

speak it.

6 37 55

326.5

35.2

136.1

222.3

319.5

42.8

147.5

220.0

138.9

221.0

330.5

31.5

142.5

216.5

324.2

40.0

< comp'dis.

68.7

87.2

170.5

83.3

0.18

72.5

0.33

155.5

0.47

82.1

+ 0.45

69.0

151.1

0.55

0.56

74.0

75.8

149.8

0.58

6 45 00

6 41 28

-14

6 41 14

mean

Dec 11 1928

Olinsted Obs.
Andrews Res.

6 48 45

srock. ST.

134.1

234.0

319.5

37.9

<comp. dis

99.9

78.4

178.3

+ 0.03

137.8

225.5

314.5

48.7

87.7

94.2

181.9

178.1

- 0.03

318.0

35.9

124.7

228.9

77.9

104.2

182.1

177.9

- 0.04

313.5

52.0

151.0

227.3

98.5

76.3

174.8

+ 0.10

+ 0.03

+ 0.02

6 55 50

6 52 18

- 14

6 52 04

mean

Dec 11 1928

Andrews Obs
Olunsted Res

6 59 08

45.5		
129.0	84.5	
226.2	<u>89.6</u>	
315.8	174.1	+0.11

53.4		
136.4	83.0	+0.04
220.7	<u>99.0</u>	
319.7	182.0	
	178.6	-0.03

226.7		
317.4	90.7	
39.6	<u>96.8</u>	-0.06
196.4	187.5	
	172.5	-0.15

224.1		
319.2	95.1	
46.7	<u>93.9</u>	-0.16
140.6	187.0	
	171.0	-0.17

07 55
~~7 18 46~~
~~3 32~~
~~7 15 20~~ mean
 - 14

~~7 15 06~~
 7 07 55

Dec 11 1928

Husted Obs.

Andrews Rec.

7 11 55

sprock NT.

43.1

136.2 93.1

218.6 104.9

323.5 198.0

162.0 -0.34

40.9

144.9 104.0

229.2 86.3

315.5 190.3

169.7 -0.20

222.0

318.5 96.5

44.6 90.2

134.8 186.7

173.3 -0.13

229.8

315.0 85.2

38.1 102.4

140.5 187.6

172.4 -0.14

7 18 46

7 15 20

-14

7 15 06

mean

Dec 11 1928

Andrews Obs.
Bluested Rec.

7 21 26

321.7	< corr dis	
43.7	82.0	
133.7	<u>93.2</u>	
226.9	175.2	0.09

310.6		
45.3	94.7	-0.03
136.1	<u>94.3</u>	
230.4	189.0	
	171.0	-0.17

140.9		
231.4	90.5	-0.10
310.9	<u>94.7</u>	
45.6	185.2	
	174.8	-0.10

129.4		
225.8	96.4	-0.17
311.8	<u>96.3</u>	
48.1	192.7	
	167.3	-0.24

7 26 25

7 23 56 mean
-14

7 23 42

52

Dec 11 1928

clustered obs
Andrews Res.

7 30 08 spruce st.

222.5	camp des	
321.0	98.5	
45.5	96.3	
141.8	194.8	
	165.2	-0.28

224.5		
318.3	93.8	-0.19
47.0	90.9	
137.9	184.7	
	175.3	-0.09

42.9		
141.9	99.0	-0.09
223.8	91.7	
315.5	190.7	
	169.3	-0.20

51.5		
151.0 ? 131.0	79.5	0.00
227.5	89.5	
317.0	169.0	+0.21

7 38 28

7 34 14 mean

- 14

7 34 00

Saturday 2-3 February 1929. L.E.C.

7:10 EST. SS Anigae : (139) 3V2 (145) = 14.3

Observation easy although air pumpy.

54

Tuesday 26 March 1929.

TX Draconis 163360

Phot T

15" Eq.

LEC fast Rec

E.S.T. referred
to noon uncorrected
for watch errorCompared with photographic companion star c
P.A. 264.5° Index A. Separation 4.4

Variable brighter and dis

A

I

8:31:30

170.3

J.D. 2425697.

235.9

65.6

349.0

67.3

56.3

132.9

-0.92

178.0

236.2

58.2

351.3

62.6

53.9

120.8

-1.18

B

-0.98

75.8

146.0

70.2

258.4

65.2

323.6

135.4

-0.87

79.0

144.0

65.0

260.0

66.2

8:43:30

326.2

131.2

-0.95

Took nearly 1 hour to open telescope and set on stars.

26 March 1929

55

B

II

8:47:30

77.7		
141.8	64.1	
258.1	<u>66.0</u>	
324.1	130.1	- 0.98

81.3		
146.0	64.7	
262.8	<u>61.9</u>	
324.7	126.6	- 1.05

A

- 1.03+

171.8		
232.8	61.0	
347.4	<u>68.5</u>	
55.9	129.5	- 0.99

174.3

232.9

58.6

348.8

65.0

8:58:30

53.8

123.6

- 1.11

Clock very little if any good.

Bright moonlight.

56

26 March 1929

III

9:03:00

A

176.0

234.2

354.8

49.7

58.2

54.9

113.1

- 1.35

1718

232.4

355.0

52.2

60.6

57.2

117.8

- 1.24

B

- 1.065

257.6

332.2

78.8

147.2

74.6

68.4

143.0

- 0.71

262.4

327.7

78.9

144.4

65.3

65.5

130.8

- 0.96

9:15:00

26 March 1929

57

B

TV

9:18:30

257.9

327.9

79.0

149.3

70.0

70.3

140.3

- 0.77

259.3

326.2

78.6

143.6

66.9

65.0

131.9

- 0.94

A

- 1.01 -

354.7

53.7

171.2

230.8

59.0

59.6

118.6

- 1.22

353.9

55.0

172.7

236.0

61.1

63.3

124.4

- 1.10

9:29:00

26 March 1929.

V

9:31:00

A
353.0

52.0

173.0

233.2

59.0

60.2

119.2

- 1.21

353.6

49.7

173.1

231.8

56.1

58.7

114.8

- 1.31

B

- 1.08-

76.9

141.7

260.1

328.7

64.8

68.6

133.4

- 0.91

80.0

145.0

257.7

9:39:30

327.4

65.0

69.7

134.7

- 0.88

Evening Mean - 1.03.

Door onto west balcony will not lock.

Watch 3^m 28^s Comparison star was BD star at (1855) 16^h 30^m
 fast at 10^h 42^m. estimated + 60° 47'
 from chart

Tuesday 7 January 1930.

59

EST referred to
moon uncorrected
for walden

Z Lyncis 080058

15" Equat

Compared with Jist BD

Phot T

star north of Z Lyncis.

LEC Rec

PA 90° Index A Separation 1.9

Watch 16^s fast at 16^h 01^m 00^s by standard clock.
variable brighter and dis.

16:30:40 325.0 Circle rotated with right hand.

248.8

76.2

144.7

80.7

64.0

156.9

- 0.44

II

315.9

254.2

61.7

133.1

60.3

72.8

122.0

- 1.15

- 1.05

222.9

169.0

53.9

39.7

49.9

349.8

103.8

- 1.56

227.8

165.0

62.8

45.7

63.7

16:43:40

342.0

126.5

- 1.05

16:45:50

230.0

162.4

46.7

346.3

67.6

60.4

128.0 - 1.02

II

221.0

169.0

43.3

349.7

52.0

53.6

105.6 - 1.52

-1.105

137.6

71.9

316.4

252.8

65.7

63.6

129.3 - 0.99

140.2

69.2

316.3

253.0

71.0

63.3

134.3 - 0.89

16:56:15

$$\begin{array}{r}
 16:58:00 \quad 142.0 \\
 - \quad 72.3 \quad 69.7 \\
 318.7 \quad 68.2 \\
 250.5 \quad \underline{137.9} \quad - \quad 0.82
 \end{array}$$

III

$$\begin{array}{r}
 137.2 \\
 73.8 \quad 63.4 \\
 320.0 \quad 64.3 \\
 255.7 \quad \underline{127.7} \quad - \quad 1.03
 \end{array}$$

- 1.04

$$\begin{array}{r}
 45.8 \quad 58.2 \\
 347.0 \quad 57.3 \\
 225.0 \quad \underline{115.5} \quad - \quad 1.29 \\
 167.7
 \end{array}$$

$$\begin{array}{r}
 47.8 \\
 345.0 \quad 62.8 \\
 229.0 \quad 65.4 \\
 17:07:15 \quad 163.6 \quad \underline{128.2} \quad - \quad 1.02
 \end{array}$$

16

17:13:10

43.0

345.7

57.3

226.7

62.8

163.9

120.1

- 1.19

IV

39.8

348.9

50.9

223.2

54.9

168.3

105.8

- 1.52

- 1.12

319.3

253.2

66.1

139.2

65.9

73.3

132.0

- 0.94

319.0

250.7

68.3

141.0

68.9

17:23:50

72.1

137.2

- 0.83

48

$$\begin{array}{r}
 17:25:00 \quad 317.9 \\
 251.0 \quad 66.9 \\
 142.2 \quad 73.3 \\
 68.9 \quad \underline{140.2} \quad - 0.77
 \end{array}$$

$$\begin{array}{r}
 318.7 \\
 255.0 \quad 63.7 \\
 135.1 \quad 59.3 \\
 75.8 \quad \underline{123.0} \quad - 1.13
 \end{array}$$

 $- 1.065$

$$\begin{array}{r}
 223.8 \\
 166.9 \quad 56.9 \\
 42.7 \quad 55.7 \\
 347.0 \quad \underline{112.6} \quad - 1.36
 \end{array}$$

$$\begin{array}{r}
 229.3 \\
 165.4 \quad 63.9 \\
 45.6 \quad 64.8
 \end{array}$$

$$17:35:50 \quad 340.8 \quad \underline{128.7} \quad - 1.00$$

26

1713710

228.7

168.7

60.0

45.0

60.8

344.2

120.8

- 1.18

224.2

165.9

58.3

44.7

59.6

345.1

117.9

- 1.24

- 1.07 +

136.7

73.6

63.1

318.1

65.3

252.8

128.4

- 1.01

141.7

71.2

70.5

318.0

65.2

17145145

252.8

135.7

- 0.86

29

17:47:50 142.6
 69.2 73.4
 321.4 71.8
 249.6 145.2 — 0.67

VII

138.0
 73.8 64.2
 316.0 61.0
 255.0 125.2 — 1.08

— 1.025

44.1
 345.7 58.4
 224.0 54.7
 169.3 113.1 — 1.35

47.3
 342.8 64.5
 229.0 64.6
 17:58:20 164.4 129.1 — 1.00

Evening Mean — 1.068

Watch 14^s fast at 18:17:00.

A few wisps of clouds noticeable in dawn.

I feel rather confident of tonight's work.

Friday 10 January 1930

EST referred to
moon uncorrected
for watch error

Σ Lyncis 080058.15" ²quat

For companion star see page 59 Phot T
PA 199.5 Index A Separation 1.7 LEC ^{0.5} Reg
Watch 9^s fast at 13^h07^m00^s by Standard Clock.
Var brighter + dis

13:56:00 50.1
341.4 68.7
229.7 69.3
160.4 138.0 - 0.81

I

39.7
348.7 51.0
223.2 53.5
169.7 104.5 - 1.55
- 0.99 -

319.8
254.8 65.0
137.0 64.9
72.1 129.9 - 0.98

320.9
250.8 70.1
145.0 78.0
13:06:50 67.0 148.1 - 0.61

Seeing very bad and position to near
vertical to be comfortable. Have to sit on
step of chair.

14:16:10 3 22.3

249.7

72.6

144.1

78.1

66.0

150.7

- 0.56

H

318.1

255.0

63.1

140.2

68.9

71.3

132.0

- 0.94

- 1.03

222.1

167.7

54.4

41.2

51.4

349.8

105.8

- 1.52

227.7

165.0

62.7

45.7

61.7

14:27:50

344.0

124.4

- 1.10

In ^{1 2}slate this group but still very uncomfortable. One image in first half of group (C.P. image) seemed out of focus.

Clock runs somewhat too slow.

Clock broke down after this group and required slight repairs.

14:46:15

224.0

167.0

44.5

344.9

57.0

59.6

116.6 - 1.27

III

222.9

170.0

41.9

347.1

52.9

54.8

107.7 - 1.47

- 1.17

140.2

74.1

317.0

253.8

66.1

63.2

129.3 - 0.99

140.0

76.0

316.6

255.1

70.0

61.5

131.5 - 0.95

14:57:10

Changed focus between halves.

Clock broke down again part after finishing group.

Clock trouble is in escapement. Fixed temporarily.

15:24:20 142.0

69.9

72.1

319.6

66.4

253.2

138.5

-

0.80

TU

137.2

75.0

62.2

315.1

58.3

256.8

120.5

- 1.18

- 1.11+

40.0

347.0

53.0

221.7

54.6

167.1

107.6

- 1.47

46.6

344.2

62.4

229.9

66.3

15:34:35

163.6

128.7

- 1.00

45

15135135

48.9

343.0

228.1

164.3

65.9

63.8

129.7 - 0.99

V

42.7

347.3

224.8

167.1

55.4

57.7

113.1 - 1.35

- 1.075

315.8

251.8

137.1

73.8

64.0

63.3

127.3 - 1.04

319.2

254.0

141.2

73.7

65.2

67.5

132.7 - 0.92

15147130

30

I have no great confidence in this group.
Clock now runs a little fast.

15:59:W 319.1

252.4

140.6

70.2

66.7

70.4

137.1

- 0.83

VI

316.2

254.0

134.4

74.6

62.2

59.8

122.0

- 1.15

- 1.67

224.8

166.4

42.7

345.9

58.4

56.8

115.2

- 1.30

228.6

163.0

47.0

343.7

65.6

63.3

128.9

- 1.00

16:10:50

28

16:14:50

228.9

166.9

44.6

343.8

62.0

60.8

122.8

- 1.13

VII

223.2

169.0

43.3

345.9

54.2

57.4

111.6

- 1.38

- 1.10-

137.8

73.2

316.0

255.1

64.6

60.9

125.5

- 1.07

141.4

71.0

319.6

252.0

70.4

67.6

138.0

- 0.81

16:26:50

16:28.10 144.7

71.3

320.8

248.8

73.4

72.0

145.4

- 0.67

VIII

186.5

74.7

315.8

254.1

61.8

61.7

123.5

- 1.12

- 1.045

40.8

347.7

224.4

165.7

53.1

58.7

111.8

- 1.38

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342.5

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614.130 165.0

65.2

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128.4

- 1.01

18

74

16:43:40

43.4

344.3

225.0

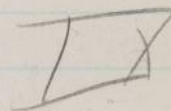
166.9

59.1

58.1

117.2

- 1.25



43.8

345.9

226.2

168.8

57.9

57.4

115.3

- 1.30

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317.6

253.4

136.4

75.7

64.2

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124.9

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16:57:30

48

17:17:20 318.8

251.8

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X

317.4

257.2

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61.7

121.9

- 1.15

- 1.14

223.3

168.8

38.7

348.3

54.5

50.4

104.9

- 1.54

227.1

165.8

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17:29:10 341.9

61.3

66.3

127.6

- 1.03

36

17:30:10

228.1

160.0

47.0

343.5

68.1

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131.6

- 0.95

X

224.3

167.5

42.3

347.9

56.8

54.4

111.2

- 1.39

- 1.04

136.9

74.8

316.3

251.3

62.1

65.0

127.1

- 1.04

139.3

69.7

321.4

251.3

69.6

70.1

139.7

- 0.78

17:40:10

16

17:41:40

142.1

72.3

69.8

320.7

69.5

251.2

139.3

- 0.79

137.3

75.0

62.3

315.0

62.0

253.0

124.3

- 1.10

- 1.09

42.3

347.2

55.1

222.6

55.6

167.0

110.7

- 1.40

44.8

342.9

61.9

228.5

63.7

164.8

125.6

- 1.07

17:53:10

36

17:54:20

47.9

340.3

228.1

163.5

67.6

64.6

132.2

- 0.93

XIII

42.7

345.9

222.2

168.7

56.8

53.5

110.3

- 1.41

- 1.07-

317.8

257.2

135.7

72.3

60.6

63.4

124.0

- 1.11

318.2

251.1

140.3

69.6

67.1

70.7

137.8

- 0.82

Evening Mean - 1.080

Watch 16^s slow at 18:23:00 by standard clock.
This change was caused by running down and being
found so immediately.

I feel that tonight's work has been rather unsatisfactory
because of poor seeing, cold, etc.

at dawn sky somewhat banded. Temp +14°F.

Thursday 5 June 1930

79

EST referred
to noon not
corrected for
watch error

Comet 1930e (Forbes)

Ephemeris place: 1855.0

15:00 $23^h 11^m 43^s$ $-31^\circ 32'$ 11

13:36:42 Watch 2:36:42 - Clock Standard 1:37:00

-30° maximum east hour angle is
 $3^h 45^m$.

14:00 One star seen at -29.5 , H.A. = $-2^h 45^m$
R.A. = $2^h 56^m$

Sky very poor particularly in this
section just over Boston.

From chart star probably 5 mag.

