

KG
11366
v.370

Sept. 5. 1900.

Eros. Phot. L.

H. ds.

$$\begin{array}{r}
 26 \quad 22 \quad + 34.3 \\
 \hline
 21 \quad 30 \\
 \hline
 4 \quad 52 \\
 7 \quad 2
 \end{array}$$

$$+34^{\circ} 44' = 2 \quad 22 \quad 24.$$

$$+34 \quad 45.1$$

$$\text{Eros last night} = \begin{array}{r} \\ 2 \quad 22 \quad 32. \end{array}$$

$$\begin{array}{r}
 -2.0 \\
 \hline
 +34 \quad 37.1 \text{ at } 11^h 11^m
 \end{array}$$

$$\text{Day's motion} = \begin{array}{r} +1 \quad 6. \\ \hline \end{array}$$

$$\text{Eros. to night} = (16.5) 2 \quad 23 \quad 44.$$

$$\begin{array}{r}
 22.3 \\
 \hline
 +34 \quad 59.4 \text{ " " " }
 \end{array}$$

10^h 28^m

I think clouds in this region at present time.

1.5

1.5

1.6

1.5

1.6

10 40

10 55

Eros now follows D.M. +34° 45' by 2.5 sec, and is 0.7 M of it. I am unable to measure to night.

Sept. v. 1900.

o Cete, Phot. R. Yr. obs.

$$\begin{array}{r}
 26 \ 12 \quad -3,6 \\
 22 \ 12 \\
 \hline
 -K \ 0 \\
 A \ 0
 \end{array}$$

Plotted.

110632

Only left + below

$$\begin{array}{r}
 283,5 \\
 295,2 \\
 103,8 \\
 115,0
 \end{array}
 \begin{array}{r}
 11,7^+ \\
 11,2^+ \\
 22,9^+
 \end{array}
 \begin{array}{l}
 \text{Ledgered} \\
 \text{Posted} \\
 -4,99^+
 \end{array}$$

11 10 32

$$\begin{array}{r}
 283,5 \\
 296,5 \\
 103,3 \\
 115,0
 \end{array}
 \begin{array}{r}
 295,8 \\
 12,3^+ \\
 11,7^+ \\
 2K,0^+
 \end{array}
 \begin{array}{l}
 (-4,94^+) \\
 4,29^+
 \end{array}$$

Clouds.

Only right + above

$$\begin{array}{r}
 193,4 \\
 205,3 \\
 13,8 \\
 25,7
 \end{array}
 \begin{array}{r}
 11,9^+ \\
 11,9^+ \\
 23,2^+
 \end{array}
 \begin{array}{l}
 4,91^+
 \end{array}$$

$$\begin{array}{r}
 194,0 \\
 206,0 \\
 13,5 \\
 25,0
 \end{array}
 \begin{array}{r}
 205,8 \\
 11,0^+ \\
 11,5^+ \\
 23,3^+
 \end{array}
 \begin{array}{l}
 (-4,9K^+) \\
 4,96^+
 \end{array}$$

mem -4,94^+

11 23 30

11 40 34

11 13 21

16 13 24

McTune

68.676

Wed. Sep 5 1900.

Index right above

194.0 193.2

205.3 12.1^x

13.4

25.3

11.9^x24.0^xK.89^x11 $\frac{26}{25}$

194.0 193.8

205.5

14.0

25.3

11.7^x11.3^x23.8^x(- K.9K)^xK.92^x

Index left above

102.8

114.8

283.0

295.4

12.0^x12.4^x24.4^x24.4^xK.26^x

113.3 103.3

115.4 12.1^x

283.3

295.1

11.2^x23.9^x23.9^x(- K.8A)^xK.90^x

11 31

57

11 28

5-

16 28 In Mt.

5-268.686^x~~mean 4.91^x~~mean - 4.91^x

Sept. 7. 1900. (Friday).

I Kereuko. Phot. V. K. Ab.

$$\begin{array}{r} 17 \quad \checkmark 1 \quad +1\checkmark.2 \\ 12 \quad \checkmark 2 \\ \hline +0 \quad \checkmark 1 \end{array}$$

Ledgers

Index right and above Posted.

Plotted.

7 44 08

192.0

228.4

364[✓]

9.5

48.8

39.3[✓]

75.7[✓]

-2.32[✓]

7 46 03

198.7

231.0

11.3

47.3 47.4

40.3[✓]

36.1[✓]

76.8[✓]

-2.30[✓]

(-2.31[✓])

Index below.

7 49 53

104.0

134.8

281.3

316.0

30.2[✓]

35.7[✓]

65.5[✓]

-2.66[✓]

7 52 47

192.51

7 48 13

102.4

137.3

288.0

315.0

35.9[✓]

32.0[✓]

66.9[✓]

-2.61[✓]

(-2.64[✓])

mean -2.64[✓]

12 48 13[✓] 2nd Mt.

5270.5334[✓]

6

Friday, September 7, 1900.

Same again.

Index, below.

7. 5934

103.2

31.6^v

135.0 104.5

281.3

38.2^v

315.5

 $\frac{38.2}{65.2} \times 2.6$

8 02 32

101.8

35.2^v $\rightarrow (-2.66)^{+}$

137.0

284.4

29.9^v

314.1 314.3

 $\frac{29.9}{65.1} \times 2.6$

Index above,

8 ⁰⁵ 13 06

13.0

38.0^v

47.0

190.2

41.0^v

231.2

 $\frac{41.0}{75.0}$ 2.35^v

8 09 52

10.0

39.0^v

49.4

192.8

35.0^v

227.8

 $\frac{35.0}{78.4}$ 2.36^v

A- 31.1

8-

13.04 31⁺ M.T.

5270.5448

mean -2.51^{+}

Same.

Friday, September 7, 1900

Index above,

81545

1012.4

34.2⁺

47.2

191.0 190.7

34.3⁺

229.0

$$\begin{array}{r} 34.3 \\ \hline 73.1 \end{array}$$
2.41⁺

818 57

11.6

37.1⁺(-2.43⁺)

48.7

192.8

34.5⁺

227.3

$$\begin{array}{r} 34.5 \\ \hline 71.6 \end{array}$$
2.4⁺

Index below,

82258

284.3

30.5⁺

314.8

103.7

136.4

$$\begin{array}{r} 32.7 \\ \hline 63.2 \end{array}$$
2.74⁺

82624

282.4

33.0⁺(-2.74⁺)~~315.3~~ 315.4

103.6

133.9

30.3⁺

$$\begin{array}{r} 30.3 \\ \hline 63.3 \end{array}$$
2.74⁺

8 2101

mean = 2.52⁺

$$\begin{array}{r} 13.2101^+ \text{ G.M.T.} \\ 5270.5563^+ \end{array}$$

Friday, September 7 1900.

Same again -

Index below.

8 33 48

284.1 300⁺
 314.1
 103.7 313⁺
 135.0 $\frac{613}{\text{}}^{\vee}$ 221⁺

8 36 20

282.3 325⁺ (-278)⁺
 314.8
 103.4 306⁺
 134.0 $\frac{631}{\text{}}^{\vee}$ 278⁺

Index above.

8 40 21

193.2 334⁺
 226.6
 12.5 35.0⁺
 47.5 $\frac{62.5}{\text{}}^{\vee}$ 256⁺

8 43 30

192.1 362⁺ (-252)⁺
 228.3
 13.0 34.3⁺
 47.3 $\frac{70.5}{\text{}}^{\vee}$ 289⁺

8 38 30

5

mean = -265⁺

13 38 30⁺ M.T.

5270.5685⁺

Friday, Sep. 7, 1900,
Same again
Index alone.

85315

$$\begin{array}{r}
 13.4 \\
 46.5 \\
 193.5 \\
 \hline
 226.8 \quad 227.0
 \end{array}
 \begin{array}{r}
 33.1^{\vee} \\
 33.5^{\vee} \\
 \hline
 66.6^{\vee} - 26.2^{\vee}
 \end{array}$$

85732

$$\begin{array}{r}
 13.0 \\
 47.4 \\
 194.0 \\
 \hline
 227.0 \quad 226.8
 \end{array}
 \begin{array}{r}
 34.4^{\vee} \\
 32.8^{\vee} \\
 \hline
 67.2^{\vee} - 26.0^{\vee}
 \end{array}
 \quad - (26.4)^{\vee}$$

Index alone.

90343

$$\begin{array}{r}
 284.4 \\
 315.3 \\
 103.3 \\
 133.9 \\
 \hline
 283.0 \quad 314.6
 \end{array}
 \begin{array}{r}
 30.9^{\vee} \\
 30.6^{\vee} \\
 \hline
 61.5^{\vee} - 22.0^{\vee}
 \end{array}$$

- 26.2⁺

90322

$$\begin{array}{r}
 236.52 \\
 858.43^{\vee} \\
 \hline
 1358.43^{\vee} \text{ G.M.T.} \\
 5270.5824^{\vee}
 \end{array}
 \begin{array}{r}
 283.0 \\
 314.6 \\
 104.2 \\
 133.5 \\
 \hline
 283.0 \quad 314.6
 \end{array}
 \begin{array}{r}
 29.3^{\vee} \\
 60.9^{\vee} \\
 \hline
 90.2^{\vee} - 2.7^{\vee}
 \end{array}$$

mean = - 2.7⁺

135843⁺ G.M.T.
5270.5824⁺

Friday, Sep. 7, 1900
Same again.

Index below

9 13 35

284.5	303 ^v x	
314.8		
104.2	30.4 ^v x	
135.0	<u>611^vx</u>	2.42 ^v x

9 16 43

283.7	313 ^x	(2.42) ^x
315.0	29.6 ^x	
103.9	<u>60.9^x</u>	2.43 ^v
133.3	133.5	

Index above

9 20 46

193.0	34.3 ^{xv}	
227.3		
13.0 [*]	33.2 ^{xv}	
46.2	<u>67.5^{xv}</u>	2.19 ^{xv}

9 25-46

193.0	34.7 ^{xv}	(2.61) ^{xv}
227.7		
13.5	31.7 ^v	
45.2	<u>66.2^x</u>	2.63 ^{xv}

9 19 12

- 2.7^{xv}

14 19 12^x M.T.
5270.5966^x

Friday Sep 7 1900
Same again.

93312

Index, above,

193.5 33.7⁺

227.2

12.3

34.5⁺

46.8

62.5⁺

2.57⁺

93618

193.2

34.0⁺

(-2.52⁺)

227.2

13.0

33.9⁺

46.9

67.9⁺

2.52⁺

Index below

94025

104.3

29.4⁺

133.7

282.8

31.5⁺

314.3

60.9⁺

2.23⁺
2.79

103.4

31.2⁺

-2.42⁺

134.6

284.2

30.0⁺

314.2

61.2⁺

2.41⁺

-2.69

94353

153.48

93827⁺

5

143827⁺

5270.6100⁺

40 MT. Fraunhofer Circle (Venus A) 282.8

Sprockett wheel { -2.5 B system
-1.8 C system

mean -2.70⁺

Sept. 7, 1900.

Eros. Phot. J. Gr. sh.

$$\begin{array}{r}
 26 \\
 22 \quad 24 \quad + 344 \\
 \hline
 21 \quad 29 \\
 - 4 \quad \sqrt{3} \\
 \hline
 7 \quad 7
 \end{array}$$

$$\begin{array}{r}
 2 \quad 23 \quad 39.1 \quad + 34 \quad \sqrt{7.6} \\
 \quad \quad + 2.5 \quad \quad + 0.7 \\
 \hline
 2 \quad 23 \quad 41.6 \quad + 34 \quad \sqrt{8.3} \\
 \quad + 2 \quad 5. \quad \quad + 11.6 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{Eros. (1655)} = 2 \quad 25 \quad 47. \\
 + 3\sqrt{504} (9.4) = 2 \quad 25 \quad \sqrt{4.} \\
 \quad \quad \quad - 7 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 + 35 \quad 42.9 \\
 + 35 \quad 35.9 \\
 \hline
 + 7.0
 \end{array}$$

10 30 Utterly impossible to measure Eros to-night.

Friday, September 7, 1900.

o beti

$$\begin{array}{r} 26 \\ 2 \quad 12 \quad -3.6 \\ \hline 21 \quad 58 \end{array}$$

414

7 K6

Index left below,

103.8

116.7

12.9⁺

284.5

296.5

12.0⁺

$$\frac{24.9^+}{24.9^+}$$
4.21⁺

104.0

116.4

12.4⁺(-4.23⁺)

284.3

296.4

12.1⁺

$$\frac{24.5^+}{24.5^+}$$
4.2⁺

Index right above,

14.2

25.8

194.1

206.0

11.6⁺11.9⁺

$$\frac{23.5^+}{23.5^+}$$
4.94⁺

1053 07

98 K5

102441

5

15-2441-92 M.T.

5270.642⁺

14.4

26.4

193.8

205.9

12.0⁺12.1⁺

$$\frac{24.1^+}{24.1^+}$$
(-4.91⁺)4.22⁺mean -4.2⁺

Friday, Sep 7, 1900,
Same again

Index right labor.

10 56 2.0

14.0

25.9

194.0

206.1

11.9^{*}

12.1^{*}

$\frac{12.1^*}{24.0^*} = 4.99^*$

14.1

206.2

194.1

206.1

12.1^{*}

12.0^{*}

24.1^{*}

-4.88^*

(-4.88)

Index left labor

283.9

295.7

104.0

116.1

11.2^{*}

12.1^{*}

$\frac{12.1^*}{23.9^*} = 4.90^*$

283.9

296.0

103.8

116.1

12.1^{*}

12.3^{*}

24.4^{*}

-4.86^*

(-4.88)

11 04 25

45

11 00 22

5

1600 22^{*} Gr Mit.

5270.667^{*}

mean -4.82^*

Sept. 7. 1900.

In. P. & C. Phot. R. Gr. obs.

$$\begin{array}{r}
 27 \\
 \hline
 22 \quad 29 \\
 \hline
 22 \quad 32 \\
 \hline
 -K \quad 57 \\
 \hline
 7 \quad 3
 \end{array}$$

Ledgered
Plotted.
Posted

112037

var. dis.

Index left.

260.3

318.9

80.7

139.3

58.6

58.6⁺117.2⁺ - 1.25⁺

259.6

320.9

80.5

139.3

Index right.

169.2

229.9

348.9

49.4

61.3⁺58.8⁺120.1⁺ - 1.19⁺Mean = -1.20⁺

229.9

348.9

49.4

60.7⁺60.5⁺121.2⁺ - 1.17

169.7

230.0

350.2

49.2

60.3⁺59.0⁺119.3⁺ - 1.21

11 28 10

16 24 21 Gr M.T.

5270.683⁺

Friday Sep. 7, 1900

Same again

Index right ~~below~~

11 31 10

169.5

229.8

350.0

50.8

60.3^{*}

60.8^{*}

121.1^{*} - 1.17^{*}

169.8

231.5

350.7

49.4

60.7^{*} - 1.19^{*}

58.7^{*}

119.4^{*} - 1.21^{*}

Index left

81.2

140.2

259.3

321.1

59.0^{*}

61.8^{*}

120.8^{*} - 1.18^{*}

11 39 01

79.3

140.2

260.5

319.3

60.9^{*}

58.8^{*}

119.7^{*} - 1.20^{*}

- 1.19^{*}

11 35 06

5

16 35 06^{*} 92 m. T

5270.691^{*}

Mean = - 1.19^{*}

Sept. 2, 1900 (Saturday.)

7 0 Cloudy

7 3.0. "

8 0 "

8 10 Slightly clearer.

U Ophiuchi. Phot. T. Gr. obs.

$$\begin{array}{r} 17 \quad 9 \quad +1.1K \\ 1.9 \quad Kr \\ \hline +2 \quad 36 \end{array}$$

Cloudy.

After long trial, impossible to get U Ophiuchi.

Sepetus. Phot. T. Gr. obs.

$$\begin{array}{r} 17 \quad \sqrt{3} \quad -22.6 \\ 20 \quad 30 \\ \hline +2 \quad 37 \end{array}$$

Saturn seen by not Sepetus. Saturn dim and now all cloudy and Saturn invisible.

Sept. 8, 1900.

I Persei.

Tr. obs.

26

~~7~~ 9

+K A, 3

20 ~~K~~

- 5 2K

6 36

Thickly cloudy and growing
still worse. Impossible to get
I Persei.

+42° 3332

Tr. obs.

19

20

+K 3.0

20

50

+1

30

Cloudy.

+45° 3062

20

A

+K 6.3

20

55

+0

K 7

Cloudy.

Sept. 2, 1900.

γ Cygni.

H. obs.

20	46	+3K.1
20	56	
<hr/>		
+0	10	

+12° 3v-v-7

H. obs.

18 2K +12.5

All cloudy in this region.

η Cephei.

H. obs.

24		
0	50	+21.1
21	12	
<hr/>		
-3	3.4	
A	22	

Ledger ed.
Posted.

Saturday, Sep. 8, 1900.
Index left & above

4 56 04
+ 0 04 04

Var. dis. \rightarrow 349.0
67.2
172.5
243.6

72.2^x

$\frac{71.1^x}{149.3^x} - 0.59^x$

9 58 58

~~353.5~~ ~~352.2~~ 352.0

(-0.54)^x

66.6

74.6^x

171.4

$\frac{79.1^x}{153.7^x}$

250.5

-0.50^x

Index below & right

1 0 02 12

256.3

below & thicker

334.1

below & thicker

85.5

153.0

77.4^x

67.5^x

$\frac{145.3^x}{145.3^x}$

-0.67^x

261.4

333.0

71.6^x

-0.70^x

83.5

$\frac{70.4^x}{142.4^x}$

-0.73^x

~~154.6~~ 154.3

10 03 59

40 01 13

10 00 13

5 - 05

10 00 08 Dr. M. Time

5271.6251^x

mean -0.62^x

Saturday Sep. 8 1900.

Same again.

Index below right

1009 23

264.1

332.0

83.0

154.2

cloud rather thick

67.9^{*} " thick.

21.2^{*}

139.1^{*} - 0.79^{*}

262.0

336.0

85.0

169.2

cloud thick. - 0.69^{*}

74.0^{*}

25.2^{*}

149.2^{*} - 0.59^{*}

Index above + left

171.5

20.0^{*}

251.5

349.2

64.9 64.5

75.3^{*}

155.3^{*}

- 0.47^{*}

169.4

249.0

345.4

74.0

79.6^{*}

22.6^{*}

162.2^{*}

- 0.22^{*}

mean - 0.52^{*}

21 53

60 16

10 15 04

5 - 05

15 14 59^{*} S.M.T.

5271.6354^{*}

Saturday, Sep. 8, 1900.
Same again.

Index above.

165.2

254.3

347.0

66.2

10 23 53

25 41

~~170.7~~

~~249.0~~

~~253.2~~

~~349.1~~

clouds thick.

27 08

30 53

clouds thick

165.4

Saturday, Sep. 8, 1900.

Same again.

Index above + left

53 50
10 50 53

160.0

259.5 99.5⁺

341.0

79.6 $\frac{94.6^+}{194.1^+}$

161.9⁺

+0.34⁺

55 34

158.9

261.8 102.9⁺

+0.36⁺

343.0

79.6 $\frac{96.6^+}{199.5^+}$

160.5⁺

+0.37⁺

Index below right

58 42

71.0

168.0 97.0⁺

249.4 $\frac{101.1^+}{194.1^+}$

350.5

161.9⁺

+0.34⁺

69.4

100.6⁺

170.0

+0.32⁺

251.9

347.4 $\frac{95.5^+}{196.1^+}$

163.9⁺

+0.30⁺

11 00 37

228 43

10 57 11

5 - 05

15 57 06 Gr Mt.

5271.6647⁺

mean = +0.34⁺

Saturday, Sep 8, 1900.
Same again. Index below left

11 02 14

$$\begin{array}{r} 69.3 \ 60.8 \\ 166.8 \quad 106.0^{\times} \\ 251.4 \\ 358.8 \quad \underline{99.4^{\times}} \\ 205.4^{\times} \\ 154.6^{\times} + 0.49^{\times} \end{array}$$

04 42

$$\begin{array}{r} 69.5 \\ 167.8 \quad 97.5^{\times} \\ 249.0 \quad \underline{100.2^{\times}} \\ 349.2 \quad 197.7^{\times} \\ \quad \quad 162.3^{\times} \quad 0.34^{\times} \end{array} \quad (+0.42^{\times})$$

Index above

07 18

$$\begin{array}{r} 335.5 \quad 106.0^{\times} \\ 81.5 \\ 155.6 \quad \underline{102.2^{\times}} \\ 264.0 \quad 214.4^{\times} \\ \quad \quad 141.6^{\times} + 0.66^{\times} \end{array}$$

11 08

$$\begin{array}{r} 333.0 \quad 102.2^{\times} \\ 81.8 \\ 156.8 \quad \underline{110.9^{\times}} \\ 267.7 \quad 219.7^{\times} \\ \quad \quad 140.3^{\times} \quad 0.77^{\times} \\ \quad \quad \text{mean } 2 + 0.57^{\times} \end{array} \quad (0.7^{\times})$$

25 22

11 06 20

5 - 05

16 06 15^h Dr. M.T.

5271.6709^h

Position angle (Vernier A) 187.8

Shuckett wheel { -215 A system

-1.5 B system

Before reading position angle, Shuckett
in gear subround as closely as possible
through clouds. Some appreciable disph-
and through all the settings.

Saturday, Sep. 8, 1901.

Settings made this hour though more or less cloud, and quite a portion of the time with considerable difficulty. Delayed thoroughly by clouds so the usual number of settings could not be obtained within the hour limit.

Watch used in previous settings on α Cephei, was 5 sec. fast.
Correction = -5 sec.

Sept. 11, 1900. (Tuesday)

7 0

Cloudy.

7 30

"

7 45

Slightly clearer.

Z. Koreulis, Phot. L. H. B.

$$\begin{array}{r} 17 \quad 51 \quad +15.2 \\ 19 \quad 35 \\ \hline +1 \quad 84 \end{array}$$

8 02

Clouds all thick; no stars visible.

$$\begin{array}{r} 17 \quad 51 \\ +9 \quad 35 \quad +15.2 \\ \hline 20 \quad 13 \\ 2 \quad 22 \end{array}$$

9 0

Still cloudy.

9 30

Slight break in clouds.

Sept. 11. 1900.

X Cygni. Phot. L. H. obs.

$$\begin{array}{r} 19 \quad 45 \quad + 32.6 \\ 21 \quad 22 \\ \hline +1 \quad 43 \end{array}$$

$$\begin{array}{r} 19 \quad 45 \quad + 32.6 \\ 21 \quad 55 \\ \hline 2 \quad 10 \end{array}$$

10. 19

Utterly impossible to get X Cygni
or anything else. Gap in clouds
only for a few minutes and now
sky all thickly cloudy again.

Sept. 12, 1900 (Wednesday)
 Iapetus. Phot. J. Obs.

$$\begin{array}{r} 17 \quad 54 \quad -22.6 \\ 19 \quad 1.3 \\ \hline +1 \quad 19 \end{array}$$

Theoret. Pos. Ang. Iapetus = 273°
 " Dist " = 0.86

7 43 Position angle of Iapetus = 274°
 Distance = 7.5 minutes.

Star a precedes Saturn 36.5 seconds and is 7.5 N of it. Mag. of star a is ~~7.9~~ ^{8.0}

Star b follows star a 29.5 seconds and is 3.3 N of it. Mag. of star b is ~~8.1~~ 8.3

Star c follows star a 1.5 seconds and is 8.5 N of it. Mag. of star c is 8.6

Star d follows star b by 34 seconds and is 5.0 S of it. Mag. of star d is 8.6

Star e precedes star d by 11 seconds and is 6.2 S of it. Mag. of star e is 9.1

Wednesday, Sep. 12 1900.

Jupiter.

Star f precedes star c 11.5 seconds and is about 17' S of it. Mag. of star f = 8.9 or 9.0

Star g precedes star f 3.5 seconds and is 2.8' S of it. Mag. of star g is 9.3

Star h follows star g 27 seconds and is 7.8' S of it. Mag. of star h is 9.2

Comparison star used to-night is star f

Sat.	1855	=	17	50	52	-22° 37'	25" =	"	"
<u>a</u>	(1855)	=	17	50	15.5	-22 29	55" = S.D.	-22° 44' 74 (6.2)	
<u>b</u>	"	=	17	50	15.0	-22 26	37. = "	" 44' 70 (7.3)	
<u>c</u>	"	=	17	50	17.0	-22 21	25. = "	" 44' 75 (8.5)	
<u>d</u>	"	=	17	51	19.0	-22 31	37. = "	" 44' 84 (9.1)	
<u>e</u>	"	=	17	51	2.0	-22 37	49. = "	" 44' 82 (8.9)	
<u>f</u>	"	=	17	50	56.5	-22 54	49. = "	" 44' 80 (9.0)	
<u>g</u>	"	=	17	50	53.0	-22 57	37. = "	" 44' 79 (9.0)	
<u>h</u>	"	=	17	51	20.0	-23 5	25. =	Outside S.D. limits.	

Star f (above) is the comp. star used to-night with Jupiter and Titan.

Star f (comp. star) = S.D. -22° 44' 80 (9.0)

Wednesday, Sep. 12, 1900.

Latitudes

Index left tabra

8 20 12

C. S. dis. $\begin{array}{r} 275.0 \\ 325.4 \end{array}$

$\begin{array}{r} 50.4^* \\ 40.8^* \end{array}$

Plotted

99.0

$\begin{array}{r} 40.8^* \\ 91.2^* \end{array}$

139.8

$+ 1.58$

Ledgers

Posters

279.0

$+ 1.90$

322.0

$\begin{array}{r} 43.0^* \\ 46.5^* \end{array}$

95.4

$\begin{array}{r} 46.5^* \\ 89.5^* \end{array}$

141.9

$+ 1.93$

Index below right

182.8

235.8

$\begin{array}{r} 53.0^* \\ 51.8^* \end{array}$

2.6

$\begin{array}{r} 51.8^* \\ 104.8^* \end{array}$

54.4

$+ 1.54$

183.2

$+ 1.50$

8 29 38

237.5

$\begin{array}{r} 54.3^* \\ 54.1^* \end{array}$

9 50

2.4

$\begin{array}{r} 54.1^* \\ 108.4^* \end{array}$

8 24 55

56.5

$+ 1.45$

5 - 6

13 24 49 Gr. M. Time

Mean = $+ 1.70$

5275.559

Wednesday, September 12 1900.
Same again.

831 50

181.6

237.4

3.5

55.8

55.8⁺52.3⁺108.1⁺ + 1.46

+ 1.50

184.0

238.0

3.7

55.0

54.0⁺51.3⁺105.3⁺ + 1.53

Index above + left.

93.3

142.0

275.0

321.3

48.7⁺46.3⁺95.0⁺ + 1.78

+ 1.76

96.4

144.4

275.0

323.3

48.0⁺48.3⁺96.3⁺ + 1.75Mean = + 1.63⁺

95.0

143.7

276.2

323.2

Reject this set.
Seriously troubled
by clouds.
Final Mean = +1.66⁺

839 03

4120

72 10

8 36 35⁺

5 - 6

13 36 29⁺50 75 566⁺13 35 26⁺13 36 20⁺ v.m.t.

Wednesday, Sept. 13, 1900.

Titan

Index left + above

8 45

C. S. dis. > 252 251.5

343.8

71.5

168.3

Ledgered

Plotted

Posted -

253.5

344.3

72.7

167.0

90.3⁺
96.8⁺
189.1⁺

170.9⁺ - 0.17⁺

90.8⁺ - 0.13⁺
94.3⁺
185.1⁺
174.9⁺ - 0.09⁺

Index right + below

160.6

259.3

344.7

75.9

98.7⁺
91.2⁺
189.9⁺
170.1⁺ - 0.19⁺

160.7

256.0

347.0

74.0

95.3⁺ - 0.12⁺
87.0⁺
182.3⁺ - 0.04⁺
177.7⁺

Mean = -0.12⁺

8 53

8 49⁺
5 - 6

13 43⁺ Er. Mt.

5270.572⁺

Wednesday, Sep. 12, 1900.
Same again.

2	rr	162.4	96.0 ⁺
		258.4	96.5 ⁺
		341.1	<u>192.5⁺</u>
		77.6	<u>167.5⁺</u> - 0.24 ⁺

	159.0	99.9 ⁺ - 0.31 ⁺
	258.9	100.1 ⁺
3 probably and assumed	<u>348.5</u>	<u>200.0⁺</u>
	78.6	<u>160.0⁺</u> - 0.38 ⁺

Index left above

70.6	
169.8	99.2 ⁺
255.0	<u>94.0⁺</u>
349.0	193.2 ⁺
	<u>166.8⁺</u> - 0.25 ⁺

~~70.2~~ 70.6

161.3	90.7 ⁺ - 0.20 ⁺
250.9	<u>97.8⁺</u>
349.0 348.7	188.5 ⁺
	<u>171.5⁺</u> - 0.16 ⁺

9	02
	147
A	58 ⁺
5	- 6
13	52 ⁺ Gr. Mt.
5-27	5578 ⁺
9	37

Mean = 0.26

Delayed somewhat by clouds in above observations, but by waiting, Iaphetia and Titan taken when sky was clear.

Final Mean = - 0.19

Wednesday, Sep. 12, 1900.

X Cygni. Phot. T. S. S. S.

19 45 + 32.6

21 10

+1 33

9 39

Cloudy.

Cloudy.

Cloudy.

10 08

Still Cloudy.

Too cloudy for X Cygni.

0 Ceta. Phot. R. S. S.

26

X

12

-3.6

22

0

-4

-12

7

44

10 19

all Cloudy.

Wednesday, September 12, 1900.

Index left & below.

1031 0 Cete

282.6

295.2

102.4

115.8

Plotted.

12.6^{*} Ledgered.

13.4^{*} Poted

26.0^{*} - 4.72^{*}

281.8

+ 4.67^{*}

~~295.5~~ 295.3

13.5^{*}

101.8

13.7^{*}

115.5

27.2^{*} - 4.62^{*}

Index right & above

191.8

205.4

13.6^{*}

12.0

13.5^{*}

~~25.9~~ 25.5 - Clouds.

27.1^{*} - 4.64^{*}

192.4

- 4.70^{*}

192.0

205.2

13.2^{*}

12.4

12.9^{*}

24.7

25.5^{*} - 4.76^{*}

Mean = - 4.68^{*}

11 40

11 06^{*}

5 - 06^{*}

16 00^{*} Gr.M.T.

5275.667^{*}

Wednesday, Sep. 12, 1900.
Same again.

11 43

192.4

204.8

12.3

26.0

12.4^{*}

13.7^{*}

26.1^{*} - 4.71^{*}

- 4.73^{*}

192.3

205.4

12.3

24.8

13.1^{*}

12.5^{*}

25.6^{*} - 4.75^{*}

Index left balance.

102.1

115.1

281.3

295.4

13.0^{*}

14.1^{*}

27.1^{*} - 4.64^{*}

- 4.64^{*}

101.7

115.4

281.6

294.8

13.7^{*}

13.2^{*}

26.9^{*} - 4.64^{*}

Mean = - 4.68^{*}

11 51

11 47^{*}

5 - 6

16 41 Gr. M. T.

5275.695^{*}

11 56

Wednesday Sep 12, 1900.
Too cloudy for W Deep line.

Watch was 5¹⁵ m. fast at beginning
of evening's observations.

21 00

Wound & reset chronometers.

Comp. of chronometers

Bond 236

F. 1327

8 55 43.2

8 55 01.0

8 56 43.1

8 56 01.0

Bd C 1182

B 39K

21 11 56.7

21 12 0.0

21 12 56.7

21 13 0.0

Sept 13, 1900 (Thursday)

BBC 1182

B 394

6 58 50.2

6 59 0.0

6 59 50.2

7 00 0.0

Selection of 12th magn Standards

for R Aquilae

W Ob.

19 2

+5.9 Campbell P.C.

19 27

0 25

No 26

" 24

" 31

" 28

" 33

P 10

with 29 as an alternative

P 20

a 14th magn following faint star e
by 1.5 secs. & 2.0 north of it could very
well replace faint star a or c

a faint star following faint star e
by 19 secs & 1.5 North of it could replace
faint star a or faint star c

Sept 13, 1900
Near standards near

S Hercules. W 66

$$\begin{array}{r} 16 \quad 42 \quad +189 \\ 16 \quad 45 \quad +182 \\ \hline 20 \quad 30 \\ 3 \quad 45 \end{array}$$

9 00 A faint star follows var
40 sec & 1.0 South of it.

9 05 Clouds

Wagon no 17 with no 7.

Left

Ledger B

8.8 (comp + dis)

Posted.

$$9 \ 24.0 \ 49.3 \quad 40.5^+$$

188.2

$$\underline{41.7^+}$$

229.9

$$82.2^+$$

$$+ 2.13^+$$

7.0

50.7

$$43.7^+$$

$$205^+$$

187.8

$$\underline{44.2^+}$$

232.0

$$87.9^+ + 1.97^+$$

Right

281.6

320.7

$$39.1^+$$

100.8

$$\underline{39.2^+}$$

140.0

$$78.3^+ + 2.25^+$$

278.7

$$9 \ 28.0 \ 321.4$$

$$42.7^+$$

$$+ 2.16^+$$

$$9 \ 26.0 \ 98.9$$

$$\underline{41.4^+}$$

$$5 \ +.2$$

$$84.1^+$$

$$+ 2.08^+$$

$$1426.2 \ 140.3$$

$$205 \ + 2.10^+$$

Sept 13, 1900

Hagen No 15 with No 7.

Right

279.2 comp & dis. Ledgered.

9 30.0

320.2

41.0⁺

98.8

41.3⁺

140.1

82.3⁺+ 2.13⁺

275.6

+ 2.00⁺

325.3

49.7⁺

100.1

41.9⁺

142.0

91.6⁺+ 187⁺

Left

185.9

229.3

43.4⁺

2.2

52.0⁺

54.2

95.4⁺+ 1.77⁺

185.0

+ 1.77⁺

9 34.0

224.9

49.9⁺9 32.0⁺

8.4

45.6⁺

5 + .2

54.0

95.5⁺+ 1.77⁺14 32.2⁺ Gr. M.T.5276.606⁺Mean = + 1.88⁺

Sept 13, 1900.

Phot T.

U Cephei

W 66

24 50 + 81.1

$$\begin{array}{r}
 21 \quad 25 \\
 \hline
 3 \quad 25 \\
 \hline
 8 \quad 35 \\
 \hline
 \hline
 \end{array}$$

Posted
 I

Le above

171.2 < radius. $L\&g = -0.004$
 9 4500 244.8
 351.45
 66.2

$$\begin{array}{r}
 73.6^* \\
 74.7^* \\
 \hline
 148.3^*
 \end{array}$$
 $+ 0.61^*$

L & g method

172.4

+ 0.62⁺

46 07 247.9

353.4

64.8

R & Below

82.4

48 33 1542

268.4

334.5

$$\begin{array}{r}
 75.5^* \\
 71.4^* \\
 \hline
 146.9^*
 \end{array}$$
 $+ 0.64^*$

$$\begin{array}{r}
 71.8^* \\
 66.1 \\
 \hline
 137.9^*
 \end{array}$$
 $+ 0.82^*$

88.0

+ 0.86

9 50.00 149.6

189 40 2629

9 47 25 335.6

5 + 12

1447 37⁺ 82 m.T.
$$\begin{array}{r}
 616^* \\
 727^* \\
 \hline
 1343^*
 \end{array}$$
 $+ 0.89^*$

$$\begin{array}{r}
 5276.6164^* \\
 5276.4860^* \\
 \hline
 + 0.1304 (2492)
 \end{array}$$
Mean = -0.74⁺

Sept 13, 1900.

II

R & Below

84.1

9 51 42 154.2
265.8
333.8

70.1^{*}
68.0^{*}
136.1^{*} - 0.85^{*}

86.4
53 13 151.7
259.6
339.7

65.3^{*} - 0.78^{*}
78.1^{*}
143.4^{*} - 0.71^{*}

Mean = - 0.59^{*}

L & Above

347.7
55,4 70.0
172.7
247.6

82.3^{*}
74.9^{*}
157.2^{*} - 0.43^{*}

350.6
5657 67.2
17 06 16 7.1
25 1.1

76.6^{*} - 0.40^{*}
84.0^{*}
160.6^{*} - 0.37^{*}

9 54 16^{*}5276.6212^{*}

5 + 12

1454 28^{*} 22 mt.

5-276.

5276.6212^{*}
+ 0.1352^{*} (24928)^{*}

Sept 13, 1900.

III

L & above

346.3

100200 69.9

173.2

250.6

+

350.6

0313 68.8

167.8

251.0

83.6⁺77.4⁺161.0⁺ - 0.36⁺- 0.36⁺78.2⁺83.2⁺161.4⁺ - 0.35⁺

R & Below

259.6

05-02337.7

81.7

152.6

263.8

0638 337.4⁷

1653 80.9

1004 13158.9

5 + 12

18-0425⁺ gmt.5276.6281⁺5-276.4860⁺0.1421⁺ (2.4928)mean = -0.46⁺78.1⁺70.9⁺149.0⁺ - 0.59⁺- 0.56⁺73.9⁺78.0⁺151.9⁺ - 0.54⁺

Sept 13, 1900

IV

R & Below

260.0

10 08 30 340.8

82.4

157.0

80.8⁺74.6⁺155.4⁺ - 0.47⁺

262.4

09 53 337.5

79.1

157.5

75.1⁺78.4⁺153.5⁺ - 0.51⁺0.49⁺

R & Above

166.2

12 32 253.2

349.0

72.7

87.0⁺83.7⁺170.7⁺ - 0.17⁺

168.8

10 14 05 251.4

45 00 345.1

10 11 15⁺ 73.482.6⁺88.3⁺170.9⁺ - 0.17⁺- 0.17⁺

5 + 12

15 11 27⁵⁴ M.T.5276.6329⁺

5276.4860

80.1469 (2492.8)Mean = - 0.33⁺

Sept 13, 1900

H

L & above

165.6

10 16 10 252.3

346.5

67.7

86.7⁺81.2⁺167.9⁺ - 0.23⁺

167.6

17 17 252.5

345.9

71.4

84.9⁺85.5⁺170.4⁺ - 0.18⁺- 0.20⁺

R & Below

19 50 77.6

159.3

259.3

340.8

81.7⁺81.5⁺163.2⁺ - 0.32⁺

21 15 80.8

74.32 159.3

10 18 38⁺ 255.9

5 + 12 343.7

15 18 50⁺ 42.7 m.t.5276.6381⁺

5276.4860

+ 0.1521 (2.4822)

78.5⁺87.8⁺166.3⁺ - 0.26⁺- 0.29⁺

Mean = - 0.24

Sept 13, 1900

VI

R & Below

10 24 00 77.6
16 1.8
259.4
344.87

84.2^x
85.3^x
169.5^x - 0.20^x

26 10 72.5 257.5 - 0.20^x
10 9.7 343.7 86.2^x
27 30 259.8 77.2 83.7^x
3 160.9 169.9^x - 0.19^x

L & Above

29 20 256.8 341.2
30 55 341.2 76.7
142.1
257.5

95.5^x
95.4^x
190.9^x
169.1^x + 0.20

342.6

10 32 45 70.3
115 10 159.1
10 28 42 259.4
5 + 12

92.7^x + 0.22
100.3^x
193.0^x
167.0^x + 0.25

15 28 54^x M.T.5276.6450^x5276.4260^x+ 0.1590^x (24928)

Mean = + 0.01

Sept 13, 1900

VII

L & Above

340.4

10 35 40 78.5

162.3

256.6

92.1^{*}94.3^{*}192.4^{*} + 0.24^{*}167.6^{*}

342.5

37 20 76.8

156.8

260.3

94.3^{*}103.5^{*}197.8^{*}162.2^{*}+ 0.34^{*}+ 0.29^{*}

R & Below

250.3

39 25 348.1

74.0

163.4

97.8^{*}89.4^{*}187.2^{*} + 0.14^{*}172.8^{*}

252.4

10 41 10 346.8

153 35 72.4

10 38 24 167.9

5 + 12

15 38 36 + 92 m.T.

5-276

94.4⁺95.5⁺189.9⁺170.1⁺+ 0.19⁺+ 0.16^{*}5-276.6518^{*}

5-276.4860

+ 0.1658 (2,492A)

Mean = + 0.22^{*}

Sept 13, 1900

Phot 7 X Cygni. 22-66-

19 45 + 32.6

22 35

2 50

Lt Above

Full Aperture

159.3 Lvar dia

10 52.0

258.2

98.9⁺

Posted.

344.3

91.1⁺

Ledgered

75.4

190.0⁺

Plotted

170.0⁺+ 0.19⁺

163.7

255.5

91.8⁺+ 0.19⁺

341.9

98.0

79.9

Rt Below

189.8⁺

71.6

170.2⁺+ 0.19⁺

167.0

95.4⁺

259.8

82.5⁺

342.3

177.9⁺

- 0.04

78.6

- 0.05

10 56.0

161.9

83.3⁺10 54.0⁺ 252.693.3⁺

5 + 2 345.9

176.6⁺

- 0.06

15 54.2⁺ 292 m.t.5276.662⁺Mean = + 0.07⁺

Sept 13, 1900

Same Again

R & Below

738
1057.8 164.6
255.2
344.8

90.8^{*}
89.6
180.4
179.6 + 0.01[^]

76.4
164.4
255.3
347.8

88.0^{*} + 0.01[^]
92.5[^]
180.5^{*} + 0.01[^]
179.5[^]

L & Above

Mean = + 0.06[^]

340.6
76.7
163.4
256.0

96.1[^]
92.6[^]
188.7^{*}
171.3[^] + 0.16[^]

344.8
11 02.0 75.3
119.8 161.8
10 59.9[^] 256.2
5 + 3

90.5^{*} + 0.12[^]
94.4[^]
184.9^{*}
175.1[^] + 0.09[^]

16 00.1[^] m.t.
B & C 1182
5276.667[^] 21 04 41.5⁻
21 05 41.5⁻

Bond 39.4
21 05 00.
21 06 00

Sept 14, 1900 (Friday)

B & C 1182 ✓

B. 394

6 59 43.5

7 00 0.0

7 00 43.4

7 01 0.0

Mean of Standards near

Phot. S. Heroult's W. Obs.

16 45 +1 5.2

19 12

Campbell Rec

2 27

7 30

cloudy

trans. no. with no 7.

7 50

clouds thicken

8 00

clouds thicken

Sept 14, 1900.

Left Hagen 2021 with 207

10.5
 8 03.0 49.4⁻²
 191.0
 228.0

38.7⁺
 37.0⁺
 75.7⁺ + 2.32

Ledge of
Posted.

12.0
 47.6
 188.8
 228.6

35.6⁺
 39.8⁺
 75.4⁺ + 2.33⁺

+ 2.32⁺

Right

103.2
 136.6
 282.6
 315.5

33.4⁺
 32.9⁺
 66.3⁺ + 2.63⁺

102.6
 8 10.0 138.3
 8 06.5⁺ 282.3
 5 7.3 315.8
 13 06.8 5 9/12 M. Time.

35.7⁺
 33.5⁺
 69.2⁺ + 2.53⁺

+ 2.57⁺

5277.547⁺Mean = + 2.45⁺

Sept 14, 1900

Hagen No 18 with No. 7.

Right

8 1330 103.2
 133.8 clouds
 284.5
 312.8

Ledgered
Posted

32.6^{*}
28.3^{*}
 60.9^{*} + 283^{*}

103.2
 132.9
 283.7
 314.4

27.7^{*}
30.7^{*}
 58.4 + 292^{*}

+ 288^{*}

Left

11.6
 46.5
 193.2
 226.3

34.9^{*}
33.1^{*}
 68.0 + 257^{*}

13.0

+ 261^{*}

8 23.6 45.2

32.2^{*}

8 18.3 193.6

33.7^{*}

13 18.6 224.3

65.9^{*} + 265^{*}

5277.555^{*}Mean = + 274^{*}

Sept. 14, 1900

Hagen No 16 with No 7.

Left

Ledgered
Posted

187.8
 230.8
 7.9
 5-1.1

43.0 "
43.2 "
 86.2⁺ + 2.02⁺

187.8
 232.2
 7.4
 50.4

43.4⁺
43.0⁺
 86.4⁺ + 2.01⁺

Right

100.4
 138.8
 278.8
 320.4

37.9⁺
41.6⁺
 79.5⁺ + 2.21⁺

8 35.6
 139.2
 281.2
 6.56
 8 31.8⁺ 318.2

40.1⁺
 37.0⁺
77.1⁺ + 2.28⁺

13 32.1⁺ Y.M. Time.Mean = + 2.13⁺5-277.564⁺

Sept 14, 1900

14th magn Standards for
S^r Herculis.

a 14th follows var 33 secs & is
4.8 North of it.

a 14th follows var 39 secs & is
5.1 North of it.

a 14th follows var 1^m 13 secs & is
and is 1.8 North of it

a 14th follow var 1^m 10 secs & is
and is 9.9 North of it.

a 14th magn follows var 26 secs & is
6.2 South of it.

a 14th magn precede var 50 secs
& is ~~1.4~~ North of it.

a 14th magn precede var 49 secs
& is 2.2 South of it.

a 14th magn precede var 46 secs
& is 4.2 South of it.

a 14th magn precede var 44 secs
& is 5.1 South of it.

Sept 14, 1900.

a 14th magn precedes var 1^m 7 sec
 & is ^{+2.3} 1.7 North of it

(This last star is the preceding
 southern and slightly brighter of a
 pair of three stars)

Selection of Standards near
 X Cygn. W Obs.

19	45	+ 32.6
21	30	
1	45	

a 14th magn follows var 54 sec
 and is 2.8 North of it.

a 14th magn follows var 51 sec
 & is 6.9 North of it.

a 14th magn follows var 47 sec
 & is 2.2 North of it.

a 14th magn follows var 43 sec
 & is 5.0 North of it.

(a 14th magn follows var 45 sec)
 & is 2.7 North of it.

1010. a 14th magn follows var 1^m 6 sec
 & is 4.7 North of it.

The star selection is made by hand.

Sept 14, 1900

X Cygni (continued).

Phot R. 0 Ceti. m 662.

26 12 - 3.6

22 32

3.40

8 20

R 1A.

11.2

10 50.3

25.3

192.2204.6

11.7

24.8

191.1

204.9

L 13.

280.4

294.8

101.1

114.8

281.2

10 56.0

295.0

10 53.2

100.9

5 + .3

114.7

15 53.5 2.2 m.

5277.662⁺14.1⁺12.4⁺26.5⁺ - 467⁺13.1⁺13.8⁺26.9⁺ - 464⁺14.4⁺13.7⁺28.1⁺ - 455⁺13.8⁺13.8⁺27.6⁺ - 459⁺Mean = - 4.62⁺

Ledgered

Plotted.

Posted.

- 4.66⁺- 4.64⁺- 4.57⁺

Sept 14, 1900

Same Again

L & B.

280.8

10578 294.9

101.6

115.0

14.1⁺13.4⁺27.5⁺ = 4.59⁺- 4.60⁺

281.1

294.9

101.0

114.6

13.8⁺13.6⁺27.4⁺ = 4.60⁺

R & A.

190.9

204.8

11.0

24.7

13.9⁺13.7⁺27.6⁺ = 4.59⁺- 4.61⁺

191.6

11 02.4 204.9

120.2 11.011 00.1⁺ 24.75⁺ +.813.3⁺13.7⁺27.0⁺ = 4.63⁺mean = - 4.60⁺16 00.4⁺ B & C 1182

B 394

5277.667⁺ 20 58 41.2

21 00 0.0

20 59 41.2

21 01 0.0

Sept 15, 1900 (Saturday)

BBC 1182

6 42 55.0
6 43 55.0

B3 394

6 44 0.0
6 45 0.0

Phot. of Hercules.

W 662

17 52 +15.2

19 09

Left Below 1 17

I

284.7

Lt. Eq. = -0.0005

7 33 30

314.6

29.9*

Ledgered, Plotted.

102.6

35.7*

Plotted

178.3

65.6*

-2.66*

283.0

-2.62*

35 43

319.2

36.2*

103.5

31.5*

135.0

67.7*

-2.59*

Right Above

Mean = -2.45*

190.0

39 05

227.2

37.2*

9.6

40.6*

50.2

77.8*

-2.26*

5278 5267*

5278 3894

Sum = 1373

189.0

-2.28*

7 41 10

230.0

41.0*

5278 5267*

149 28

12.0

33.2*

5278 3901*

75 37 22

47.2

76.2*

-2.31*

+0.1366 fact

12 38 27

Er. M. T.

Sept. 15, 1900.

II

R & A.

190.5

7 47 50 227.8

9.1

48.3

189.9

50 00 229.4³

10.6

48.4

37.3⁺39.2⁺76.5⁺ - 2.30⁺39.4⁺- 2.30⁺36.8⁺76.3⁺ - 2.31⁺

L. & B.

102.9

53 00 136.8

281.5

317.4

33.9⁺35.9⁺69.8⁺ - 2.51⁺

103.6

- 2.60⁺35 30 136.1

206 20 284.1

7 51 30⁺ 316.1

5 41 5

32.5⁺33.0⁺64.5⁺ - 2.69⁺12 52 40⁺ 32 m.T.5278.5366⁺5278.3901⁺+ 0.1465⁺ Hartwig.5278.5366⁺5278.3894+ 0.1472⁺

Turner.

Sept 15, 1900.

clouds
L & Below

III

8 03 00	103.2		
	135.4	32.2 ⁺	
	282.6	<u>34.4⁺</u>	
	317.0	66.6 ⁺	- 2.62 ⁺

06 00	102.9		- 2.63 ⁺
	136.6	33.7 ⁺	
	283.8	<u>32.5⁺</u>	
	316.3	66.2 ⁺	- 2.64 ⁺

R & Above

Mean = -2.54⁺

08 27	12.6		
	47.2	35.6 ⁺	
	189.9	<u>37.7⁺</u>	
	227.6	72.3 ⁺	- 2.43 ⁺

	10.5		- 2.44 ⁺
8 10 50	47.2	36.7 ⁺	
28 17	192.4	<u>35.1⁺</u>	
8 7 04	227.5	71.8 ⁺	- 2.45 ⁺
5 + 1 05			

13 8 09 ^h m f	62. made through some	
5278. 5473 ⁺	light clouds	5278. 5473 ⁺
5278. 3901		<u>5278. 3994⁺</u>
+ 0.1572 ⁺ Hartwig		+ 0.1579 ⁺ Duvier

Sept 15, 1900

IV

clouds thicker

R & Above

~~12.0~~~~8 38 17~~ 46.4

193 clouds thicker

25

2 5-3

Stopped by clouds

2 2 1

L & Below

B Persei

W 662

27

8 2 + 40.6

20 52

6 10

5 50

9 00 Clouds

9 15 Clouds

Sept 13, 1900

Phot 7. B Persei.

Above comp Star = DM

(6.5)

130.2

9 17 23

143.7

309.6

327.6

clouds thicker

125.4

14

Full aperture used.

3

3

Above

126.4

9 26 40

143.8

308.3

327.4

129.2

28 25

144.4

309.0

327.1

351.3 Below

Resect

not to be used
experimental

30 20

58.6

216.6

~~240.~~ 235.1

39.3

32 35

56.0

215.6

236.6

Sept 15, 1900

6 in caps used
henceforth

##

I

Below

217.7

Comp Star = DM + 40°664(6.5)

9 41 10 235.5

17.8⁺

Posted.

39.2

17.8⁺

28.89 = -.0024

57.0

35.6⁺-4.03⁺

Ledgered.

218.2

-4.04⁺

43 15 237.1

18.9⁺

39.4

16.4⁺

55.8

35.3⁺-4.04⁺

Above

127.5

Mean = -4.14⁺

45 05 145.8

18.3⁺

309.4

15.1⁺

324.5

33.4⁺-4.17⁺

47 03 130.0

-4.24⁺

46 39 145.2

15.2⁺

16 33 309.7

16.1⁺

9 44 08 225.8

31.3⁺-4.31⁺

5 + 1 05

14 45 13⁺ m.t.5278.6147⁺5276.6358⁺1.9789⁺ Hartwig.

Sept 15, 1900

~~III~~

II

Above

9 4907

127.2

145.3

309.5

325.3

18.1⁺15.8⁺339⁺ - 413⁺

51.03

129.7

145.5

309.6

325.1

14.8⁺15.5⁺30.3⁺ - 63.8⁺-4.26⁺

Below

Mean = -4.12⁺

53.13

38.3

56.1

218.2

237.1

17.8⁺18.9⁺36.7⁺ - 39.6⁺

38.3

-3.97⁺

9 5510

56.2

208.33

218.1

9 5208

237.6

5 1 5

17.9⁺18.5⁺36.4⁺ - 39.8⁺

Pos. Angle = 51.4

14 53 13

M.T.

Spoked Wheel - 10.5 a System

5278.6202⁺5276.6308⁺+1.98⁺Too cloudy for Standards
Growing thicker again

Posted
to here.

Sept 15, 1900

γ Persei

28 + 57.2

22 24

10 16

26 8

22 24

3 44

8 16

Comp star is K on old circumpolar chart.

10 40 Clouds

Utterly impossible to get.
10 33 γ Persei. Sky too thick with clouds

Poted.

Sept 16, 1900 (Sunday)

B&C 1182

21 03 14.7

21 04 14.7

B 39 K

21 04 00

21 05 00

Sept 18, 1900 (Tuesday)
 B & C 11 Re. B 394
 7 04. 08.0 7 04 0.0

Selection of 14th mag Standards
 3 Sagittarii K Obz.
 19 9 - 21.5
 19 29
 01 20 Campbell Per.

19 2 - 21.2
 19 52
 0 50

a 14th mag balloon 19.5 sec,
 and is 7.6 South.

S 30 a 14th mag balloon 34 sec & 5.0 South
 " " " " 40 " & 2.2 North
 " " " " 38 " & 2.0 South
 " " " " 44 " & 1.1 South.

12th mag Standards for
 3 Sagittarii.
 Hagen No. 35

9 00 " " 30
 " " 25
 " " 27
 " " 29

Comp Star = Hagen no. 7.

Sept. 18, 1900.

V Capricorn

21 00 - 24.8

21 00

00.00

20 58 - 24.1

21 05

0.07

12th Magn Standards

Hagen No. 9.

" " 14

" " 18

" " 19

" 16

C.S. = " 2

~~a 14th magn follows 36 sec & is 0.0 South~~a 14th magn follows 49 sec & is 0.2 South

" " " 57 " & " 0.6 North

" " " 35 " & " 2.5 North

" " " 71.5 " & " 0.1 North

" " " 64.5 " & " 3.8 North

Sept 12, 1900.
 Phot 7 M. cephei M 66

$$\begin{array}{r}
 24 \quad 5-0 \quad + 81.1 \\
 21 \quad 36 \\
 \hline
 3 \quad 14 \\
 8 \quad 46 \quad \text{Lb. eq} = -.0006
 \end{array}$$

L.S.A.

264.4 L. var. dis.

Ledgers ob.

9 4022 3452

80.8 *

Posted.

88.6

72.7 *

161.8

153.5 *

- 0.51 *

270.4

4205 341.4

71.0 *

-0.51 *

84.8

82.1 *

166.9

153.1 *

-0.51 *

R.T.B.

174.8

4422 255.2

80.4 *

Mean = -0.51 *

* 1.8

70.1 *

71.9

150.5 *

= 0.57 *

175.5

-0.51 *

4605 254.3

78.8 *

1254 358.5

77.7 *

943 14 * 76.2

156.5 *

-0.45 *

5-0 08

Mean = -

1443 06 * 4. M.T.

52.8. 6133 *

52.8. 4714

+ 0.1419 Uniform.

Sept 18, 1900

II

R & B below

176.4

9 4820 255.3

2.5

72.6

$$\begin{array}{r} 78.9^+ \\ 70.1^+ \\ \hline \end{array}$$

$$149.0^+ - 0.59^+$$

175.6

- 0.52⁺

49 45 254.3

356.9

75.0

$$\begin{array}{r} 78.7^+ \\ 78.1^+ \\ \hline \end{array}$$

$$156.8 - 0.44^+$$

L & above

49.3

5205 166.8

263.8

344.8

$$\begin{array}{r} 87.5^+ \\ 81.0^+ \\ \hline \end{array}$$

$$168.5^+ - 0.22^+$$

86.1

- 0.20⁺

9 5435 165.9

20445 259.1

9 51 11⁺ 350.7

5 - 0.8

$$\begin{array}{r} 79.8^+ \\ 91.4^+ \\ \hline \end{array}$$

$$171.2^+ - 0.17^+$$
1451 03⁺ g.m.t.5281.6187⁺

5281.4714

mean = - 0.36⁺+ 0.1473⁺ uniform.

Sept 18/1900

III

L & above

81.2

9 57 20 166.3

261.4

348.7

85.1^{*}87.3^{*}- 0.14^{*}172.4^{*}

83.3

- 0.12^{*}

10 00 06 166.7

262.0

350.9

83.4^{*}90.9^{*}174.3^{*}- 0.11^{*}

R & Below

Mean = - 0.15^{*}~~357.2~~ 354.910 04 30 ~~79.0~~ 76.7

172.5

259.7

81.8^{*}87.2^{*}169.0^{*}- 0.21^{*}

353.8

- 0.18^{*}

10 06 15 80.5

86.7^{*}

248 11 173.0

86.0^{*}10 02 03^{*} 259.0172.7^{*}- 0.14^{*}

5-0 - 8

15-01 55th m.T.5-281.6263^{*}

5281.4714

+ 0.1549^{*} Uniform.

Sept 18, 1900.

R & Below

IIII

10 09 00	3.524	86.3 [*]	
	78.7	92.8 [*]	
	170.2	<u>179.1[*]</u>	- 0.02 [*]
	263.0		

10 50	353.1	89.1 [*]	- 0.01 [*]
	82.2	91.1 [*]	
	169.8	<u>180.2</u>	
	260.9	<u>179.8</u>	+ 0.00 [*]

L & Above

Mean = +0.09^{*}

13 05	256.9	98.1 [*]	
	355.0	92.7 [*]	
	79.0	<u>190.8[*]</u>	
	171.7	<u>169.2[*]</u>	+ 0.20 [*]

10 14 47	260.1	93.5 [*]	+ 0.19 [*]
47 42	353.6	96.2 [*]	
10 11 56 [*]	77.3	189.7 [*]	
5 - 08	173.5	<u>170.3[*]</u>	+ 0.18

15 11 48^{*} M.T.5281.6332^{*}

5281.4714

+ 0.1618^{*} Uniform.

Sept 18, 1900

~~IX~~

Lo above

255.2

101722 353.1

75.5

174.2

97.9^{*}98.7^{*}196.6^{*}163.4^{*}+ 0.32^{*}

257.1

1910 355.2

74.1

174.3

98.1^{*}+ 0.34^{*}100.2^{*}198.3^{*}+ 0.35^{*}161.7^{*}

R & Below

168.2

21 43 263.8

346.5

83.9

95.6^{*}97.4^{*}193.0^{*}167.0^{*}+ 0.25^{*}Mean = + 0.30^{*}

167.4

10 2345 266.4

812 00 248.01020 30^{*} 82.25^{*} - 899.0^{*}94.2^{*}193.2^{*}166.8^{*}+ 0.25^{*}+ 0.25^{*}1520 22^{*} 82.252816392^{*}

52814714

+ 0.1675 Uniform

Sept 18, 1900

VH

R & Below

165.9

10 25 55 262.9

347.6

86.8

970⁺99.2⁺196.2⁺ + 0.31⁺163.8⁺

164.9

27 50 267.1

348.6

87.3

102.2⁺+ 0.36⁺99.7⁺201.9⁺158.1⁺+ 0.42⁺

L & Above

74.8

30 55 175.1

250.2

361.5

100.3⁺111.3⁺211.6⁺148.4⁺ + 0.61⁺Mean = +0.46⁺

76.6

10 32 35 176.5

117 15 252.5

10 29 19 358.3

5 - 08

10 29 11 42 M.T.

5281.6452⁺

5281.4714

+ 0.1738⁺ Uniform99.9⁺+ 0.55⁺105.8⁺205.7⁺

+ 0.49

154.3⁺

Spoke Wheel A - 2.5

" " B - 1.5

Pos. Ang. = 181.4 Ver A.

Sept 18, 1900.

Phot R.

o celi.

W Ob.

26 12 - 3.6

22 47

3 25

2 35

Left

10 1.8

10 48.4 11 8.0

28 2.4

29 7.4

16.2⁺15.0⁺31.2⁺ - 4.32⁺

10 2.2

11 6.3

28 1.9

29 7.6

Right

11.4

27.7

19 2.3

20 6.8

14.1⁺15.7⁺29.8⁺ - 4.42⁺- 4.37⁺16.3⁺14.5⁺30.8⁺ - 4.35⁺

12.3

10 55.2 2 7.1

10 3.6 19 1.5

10 51.8 20 7.6

5 - 0.1

14.8⁺16.1⁺30.9⁺ - 4.34⁺- 4.34⁺

Mean = - 4.36

15 51.7⁺ 2 m. Time.52 8.6⁺

Sept 18, 1900

Same Again

Right

11.2

10 57.5

27.6

192.3

206.9

16.4^{*}14.6^{*}31.0^{*} - 4.33⁺

11.5

-4.34⁺

27.2

15.7^{*}

191.8

15.0^{*}

206.8

30.7^{*} - 4.35⁺

Left

Mean = 4.39⁺

281.6

297.0

102.4

116.2

15.4^{*}13.8^{*}29.2^{*} - 4.46⁺

282.1

-4.44⁺

11 02.2

296.8

14.7^{*}

119.7

101.9

15.1^{*}10 59.8^{*}

117.0

29.8^{*} - 4.42⁺ Final M = -4.38

5 - 0.1

1300 1182

18 394

15 59.7^{*} 21 03 04.3

21 03 0.0

5281.667^{*} 21 04 04.6

21 04 0.0

Sept 19, 1900 (Wednesday)

B&C 1182

B.394

7 05 06.3

7 05 00

2 Sagittarii

W 66

19 2 - 21.2

19 32

0 30

Estimates of 14 th magn Standards.

c 3.5 b

b 1 d.

d 2 a

a 1.5 e

d 1.5 f

f follows var 22 sec of South of it.

St Hercules.

W 66

16 45 + 15.2

2 0 30

3 45

14 th magn Standards

for - 1^m 7^s + 1^m 7^s read - 1^m 7^s + 2^m 3^s

d 1 e

e 1 c

c 1.5 a

a 3 b

Sept. 19, 1900.

R Perseus. W 66.

15 40 + 159

20 55

5 15

8 55. Impossible to see or estimate
14th magn altitude too low

Some light cloud & haze in West.

✓ Capricorn

W 66.

20 58 - 241

21 07

0 09

Est. of 14th magn StandardsRevision of 14th magn Standards

+ 0 34 + 5.0 North

+ 0 48 + 0.0

+ 0 56 + 0.4

+ 1 10 + 0.0

+ 1 03 + 3.0

e 2.5 d

d 2 b

b 1.5 c

c 0.5 a

Sept. 19, 1900

X Cygni

W 66

$$\begin{array}{r}
 19 \quad 45 \quad + 32.6 \\
 22 \quad 10 \\
 \hline
 2 \quad 25
 \end{array}$$

Abandoned for the present

R Vireosilae

W 66

$$\begin{array}{r}
 20 \quad 52 \quad + 21.8 \\
 22 \quad 20 \\
 \hline
 1 \quad 28
 \end{array}$$

Selection of 12th magn Standards.

Hagen No 24

" " 23

1035

" " 26

" " 25

" " 29

comp Star = Hagen No. 5

Selection of 14th magn Standards
see next Page.

(1)

$$\begin{array}{r}
 + 0 \quad 35.0 \quad + 2.3 \\
 + 0 \quad 37.0 \quad - 7.7 \\
 + 0 \quad 34.0 \quad - 10.2 \\
 + 0 \quad 33.5 \quad - 8.9 \\
 + 0 \quad 37.5 \quad - 9.5 \\
 (2) \quad + 0 \quad 37.0 \quad - 4.8
 \end{array}$$

(over)

Ported
to here.

Sept 19, 1900

0 33 12

0

+ 0 27

Cont from Prev. Page.

RVulpeculæ H 66.

14 ~~th~~ Magn Standards

		^m	^s	
a	+ 0	35	-	+ 2.3
b	+ 0	57		- 4.8
c	+ 0	44		- 10.0
d	+ 0	27		- 9.5
		+ 0	32.5	- 11.5
e	+ 0	23		- 9.2

d 3.5 a

a 2 e

e 2 c

c 1 b

B 8 C 1182

21 1402.5

21 1502.4

B 39K

21 1300

21 1400

Sept 21, 1900 (Friday)
Saturn

17 54 - 22.6
19 24

17 30

Photo. Japetus W 62

Pz angle 278 Dist. 0

Saturn (1855) 17 51 38.0 - 22 20
- 295 + 7

17 51 08.5 22 13

- 220
SDM 448 4 (7.5)

SDM - 220 4478 (7.3)
SDM - 220 4474 (6.8)
SDM - 220 4475 (6.5)

2 28
3.1
3.2
3.0
3.0

2 29
5.5
5.5
5.5

The star precedes 13.7 and 5.0 South of
the (7.6)

Sept 21, 1900.

Comp Star = $-22^{\circ}.4480(90)$

L & Above Southern of the two

49.2

7 39.4

150.0

comp star also

100.8

232.8

93.8

326.6

194.6

165.4

51.2

150.9

99.7

229.6

97.6

327.2

197.3

R & Above

Below

162.7

316.6

60.4

3.8

Mean = -

137.3

241.2

315.0

7 45.0

60.5

138.0

241.8

Sept 21, 1900.

Northern of the two.

R & Below

7 47.6

329.4	< comp x dis
59.0	84.6
148.4	80.3
228.7	167.9 +

329.4		+
52.4	83.0	
148.8	84.6	
233.4	167.6	+

clouds

LD Above

Mean =

243.2 Stars gone.

319.3

6 Stars gone.

1

7

2, 3, 6

Sta Saturn gone if no stars visible through opening in shutter 8:02

Troubled in obs of Jap by clouds & stopped by clouds impossible to finish spectroscopic observations. Much lightning sky thickly cloudy & shower of rain early evening.

Sept 21, 1900

B4C 1182

21 04 52.1

21 05 52.1

B 39K

21 06 00

21 07 00

Sept 22, 1900 (Saturday)
Saturn

17 54 - 22.6

19 34

1 40

Courto-night to B & C = +1^m

angle Iapetus

Pos. 285° Distance = 8.2

~~Best~~ Comp. Star = SD-22° 44' 80" (19.0)

Same 2 comp stars as on Sept. 12, 1900

Phot T. Iapetus W 662
L 80 above

256.1 (comp & dis) Ledgered

7 33.0

302.4

46.3^{*}

Plotted

77.7

44.6^{*}

Posted

122.3

90.9^{*}

+189^{*}

254.8

303.0

48.2^{*}

+180^{*}

75.3

49.2^{*}

124.5

97.0^{*}

+172^{*}

R & B below

160.7

Mean = +1.6³³^{*}

215.4

54.7^{*}

343.4

52.4^{*}

35.8

107.1^{*}

+149^{*}

161.7

+146^{*}

7 40.0

215.8

54.1^{*}

75 36.5

340.7

53.7^{*}

12 35.0

36.4

109.8^{*}

+142^{*}

52 25.5 22.2 T.

52 25.5 22.2

Sept 22, 1900

Jupiter Again

Right to Below

7 43.0	162.4	54.8 ⁺
	217.2	52.2 ⁺
	342.5	<hr/>
	35.7	107.0 ⁺ + 149 ⁺

163.1		+ 151 ⁺
218.4 ³	51.2 ⁺	
341.6	54.2 ⁺	
35.8	<hr/>	
	105.4 ⁺ + 153 ⁺	

Left to Above

174.4	Mean = + 162 ⁺
3.6	51.2 ⁺
125.4	48.9 ⁺
254.8	<hr/>
303.7	100.1 ⁺ + 165 ⁺

7 52.0	75.8	+ 172 ⁺
	122.9	
	255.4	
7 47.5 ⁻	302.8	47.1 ⁺
0 + 1.0		47.4 ⁺
		<hr/>
12 48.5 ⁺ grmt.		94.5 ⁺ + 180 ⁺
5285.534 ⁺		

Sept 22, 1900

Phot. T. Titan

W Ob.

Comp Star = $RD-22^0$ 4480 (9.0)

Titan dis

Left

Ledgered

322.6

Posted

755.6

538

91.2⁺

Plotted

151.2

75.0⁺

226.2

166.2⁺ - 0.26⁺

331.4

- 0.26⁺

48.3

76.9⁺

144.6

89.2⁺

233.8

166.1⁺ - 0.26⁺

Right

Mean = - 0.34⁺

235.1

85.1⁺

320.2

71.5⁺

62.1

133.6

156.6⁺ - 0.45⁺

243.6

- 0.42⁺

204.0

313.6

119.6

544.2

759.8⁺

143.3

541.0

70.0⁺
89.1⁺159.1⁺ - 0.40⁺13 00.8⁺ γ -m.T.5285.542⁺

Sept 22, 1900

Titan Again.

Right

$$\begin{array}{r}
 8 \quad 06.4 \quad 322.1 \quad 86.5^+ \\
 \quad \quad 62.2 \quad \underline{73.5^+} \\
 \quad \quad 135.7 \quad 160.0^+ - 0.38^+
 \end{array}$$

$$\begin{array}{r}
 245.3 \quad -0.32^+ \\
 320.2 \quad 74.9^+ \\
 \quad \quad 51.7 \quad \underline{91.7^+} \\
 \quad \quad 148.4 \quad 166.6^+ - 0.25^+
 \end{array}$$

~~Bob~~ Left

Mean = - 0.24

$$\begin{array}{r}
 145.3 \\
 232.9 \\
 327.3 \\
 48.8 \\
 \quad \quad 87.6^+ \\
 \quad \quad \underline{81.5^+} \\
 \quad \quad 169.1^+ - 0.20^+
 \end{array}$$

$$\begin{array}{r}
 149.2 \quad 0.16^+ \\
 8 \quad 14.0 \quad 230.9 \\
 8 \quad 10.2^+ \quad 324.7 \\
 5 \quad +1.0 \quad 565.8 \\
 13 \quad 11.2^+ \quad 528.5 \\
 528.5 - 549^+
 \end{array}$$

$$\begin{array}{r}
 81.7^+ \\
 \underline{92.1^+} \\
 173.8^+ - 0.12^+
 \end{array}$$

~~Same~~ Sept 22, 1900

Titan Again. III

Right Left

8250 326.0
53.8 87.8
148.2 80.4
228.6 168.2 -0.22

331.6 -0.21
48.2
144.8
237.4 76.6
92.6
169.2 0.20

Right -0.40
240.0

320.0 80.0
63.4 70.5
133.9 150.5 0.57

8310 244.4 -0.58
313.9
58.6
139.1 69.5
80.5
150.0 0.58

Reject this group. Region
low, ~~seeing~~ stars blurring.
Obs. on Titan rather difficult,
especially in last group.

Sept 22, 1900.

Selection of Standards for
R Pegasi. W 62.
Abandoned for the present.

Eroz.

2 40 59 +41.6

R Pegasi Resumed.

23 2 +9.0

21 27
1 35
10 25

12 th Magn Standards.

Hagen No 21

22 20

22 17

22 23

22 19

14 th Magn Standards.

+ 58 sec - 3.2

+ 32 " - 8.1

+ 46.5 " - 8.5

- 10.5 " - 5.5

+ 1^m 4 " - 11.0

Sept 22, 1900.

S Aquarii

Mr GG

22 48 -20.9

22 48

12 th magn Standards

Hagen No 20

" " 21

" " 19

" " ~~20~~ 16 ?

" " 17

14 th magn Standards

+ 43 sec - 8.0

- 43 " - 2.8

- 45.5 " - 2.3

- 49.5 " - 3.2

+ 21.0 " 0.0

Phot R 0 Octo 26 12 - 3.6 Mr GG

23 27

2 45

9 15

(over)

Sept 22, 1900:

O ceti.Ledgered
Posted.
Plotted.

Left

104.2

1108.0

119.6

282.7

297.9

15.4⁺15.2⁺30.6⁺- 4.36⁺

100.8

- 4.34⁺

107.7

282.6

299.9

13.9⁺17.3⁺31.2⁺- 4.32⁺

Right

14.3

28.6

193.2

209.0

14.3⁺15.8⁺30.1⁺Mean = - 4.34⁺- 4.40⁺

1.316

- 4.35⁺

11 12.2

28.3

16 11.1⁺

192.6

209.4

14.7⁺16.8⁺31.5⁺- 4.30⁺5280.674⁺

Sept 22, 1900

2 cets Again

Right

130

11 13.6

29.3

193.4

208.8

16.3^{*}15.4^{*}31.7^{*}- 428^{*}

13.2

- 432^{*}

27.9

14.7^{*}

194.2

10.7^{*}

208.9

30.4^{*}- 437^{*}

Left.

Mean = -4.29^{*}

283.0

299.1

102.6

119.0

16.1^{*}16.4^{*}32.5^{*}

- 422

282.6

- 426^{*}

11 18.4

297.9

32.0

103.0

11 16.0^{*}

119.0

5 + 1.0

15.3^{*}16.0^{*}31.3^{*}- 431^{*}16 17.0^{*} 8.0 mt.5280 = 678^{*}

94

Pasted to
here.Sept 23, 1900. (Sunday)

B 8 C 1182

21 09 45.6

21 10 45.6

B 394

21 10 0.0

21 11 0.0

Sept 24, 1900 (Monday)

B & C 1182

7 04 11.4

7 05 11.3

B 394

7 05 00

7 06 00

Eros.

Ch. obs.

$$\begin{array}{r}
 2^h \quad 41^m \quad 57.5^s \quad + \quad 42^0 \quad 19.6' \\
 \quad \quad \quad -2 \quad 55.1' \\
 \hline
 2 \quad 39 \quad 2.4 \\
 2 \quad 39 \quad 19' \\
 \hline
 \quad \quad \quad -17.1'
 \end{array}$$

$$\begin{array}{r}
 \quad \quad \quad -11.4' \\
 \hline
 +42 \quad 2.2' \\
 42 \quad 7.5' \\
 \hline
 \quad \quad \quad +0.7'
 \end{array}$$

(A.A)

$$\begin{array}{r}
 26^h \quad 34^m \quad + \quad 43.6' \\
 19 \quad 53 \\
 \hline
 6 \quad 45 \\
 5 \quad 15 \\
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 26 \quad 38 \quad + \quad 43.6' \\
 20 \quad 25 \\
 \hline
 6 \quad 13 \\
 5 \quad 47 \\
 \hline
 \hline
 \end{array}$$

(over)

Sept 24 1900

Error Cont.

- 8 22 An 11.0 precede (the S.A.) 40.5 sec & 2.2 South
 8 24 a 9.4 precede (the S.A.) 19.5 sec & is 1.9 North
 of it
 8 25 a faint star, the 9.4 2.5 sec & is 1.8 South of it.
 8 27 a faint star follows 9.4 by 2.5 sec & is 0.6 N. of it.
 8 29 a faint star precede 9.4 by 12 sec & is 3.3 N of it.

S Aquarii

$$\begin{array}{r} 22 \quad 48 \quad -20.9 \\ 21 \quad 29 \\ \hline 1 \quad 25 \\ 10 \quad 35 \end{array}$$

$$\begin{array}{r} 21 \quad 29 \\ \hline 1 \quad 25 \\ 10 \quad 35 \end{array}$$

14 magn Standards

At Ob

9 37

$$\begin{array}{r} +30 \text{ sec} \quad -8.2 \\ +43.5 \quad -8.0 \\ -41.5 \quad -7.5 \\ +20 \quad 0.0 \\ -45.5 \quad -2.7 \end{array}$$

9 34

$$\begin{array}{r} c \quad +30 \text{ sec} \quad -8.2 \\ b \quad +43.5 \quad -8.0 \\ a \quad -45.5 \quad -2.7 \\ d \quad -49 \quad -4.1 \\ e \quad -50 \quad -5.2 \end{array}$$

Sept 24, 1900.
S. Aquarii Cont.

9 56

$$a = b$$

$$c = d$$

$$e = 5d$$

$$b = c$$

R Pegasi.

N 62

$$23 \quad 2 \quad + 9.0$$

$$22 \quad 32$$

$$0 \quad 30$$

$$11 \quad 30$$

10 04 14 ~~Mag~~ Magna look all right tonight.

Eros. Cont 1 Resumed N 62

$$26 \quad 38 \quad + 43.6$$

$$22 \quad 35$$

$$4 \quad 03$$

$$7 \quad 57$$

10 09 Eros now precede P mag 18 sec and is 3.5
North of it.

Comp P_{tar} = DM + 42° 637(9.0) for
Photo tonight.

Sept. 24, 1900.

Photo T. Error.

W. C. C.

L & Above

Ledgered.

~~256.6~~ comp. & div.

Posted.

10 32.0

300.9

257.1

10 34.4

298.4

41.3^{*}

78.3

43.8^{*}

122.1

85.1^{*} + 2.05^{*}

258.0

+ 2.04^{*}

301.8

43.8^{*}

79.2

42.1^{*}

121.3

85.9^{*} + 2.03^{*}

R & Below

166.7

Mean = +1.96^{*}

209.2

42.5^{*}

345.4

48.5^{*}

33.9

91.0^{*} + 1.89^{*}

165.4

+ 1.88

10 39.0

212.8

47.4^{*}

13.4

347.6

44.0^{*}10 36.7^{*}

31.6

91.4^{*} + 1.88

5 + .8

10 37.5^{*} Gr. M. T.5287.651^{*}

N

Sept. 24, 1900.

Eroz Agam

R & Below

1040.5
168.5
210.8⁹
344.1
33.8

424^{*}
49.7^{*}
92.1^{*} + 1.86^{*}

163.5
213.7
348.8
54.3

50.2^{*}
45.5^{*}
95.7^{*} + 1.81^{*}
+ 1.76^{*}

L & Above

Mean = +1.90^{*}

77.7
121.3
256.4
300.8

43.6^{*}
44.4^{*}
88.0^{*} + 1.97^{*}

76.5
1045.5 121.6
6.0 257.4
1043.0^{*} 298.9
5 + .8

45.1^{*}
41.5^{*}
86.6^{*} + 1.99^{*}
+ 2.01^{*}

1543.8^{*}
5-287.656^{*}

Posted

Sept 24, 1900
 Selection of Standards for
 R Camelopardalis W 66

14 40 + 84.1

23 20

8 40

11 15

Sep 25, 1900 (Tuesday)

B9 C 1182

7 00 36.5

B. 394

7 02 0.0

Selection of Standards

clouds

R Camelopard

W Obs.

14 40 + 84.1

19 45

5 05

8 00

Stand's exam. again. Sky more or less hazy with light patches of clouds, but stars 1, 2, 3, 4, 8, 5 will perhaps do with δ Herculis.

W Obs.

6 or 7 as possible

alternatives.

16 32 + 37.3

20 42

4 12

16 32 + 39.2

20 33

4 13

8.30

Prov. selection of standards made in thin places & intervals in light cloud but selection not considered over critical region to be examined another night.

\vee Aurigae

W Obs.

cloudy 30 ~~4~~ 13 + 47.2

21 13

9 00

3 00

too low.

Sept 25, 1900.

R Persei.

W Obs.

Clouds 27.3 26 +35.1
 21 1.6
 6 1.0
 5 5.0

Cloudy.

9 00. Provisional Selection of Standard made

S Ceti.

W Obs.

~~0 17.40~~ - 9.8
 20.18
 21.40
 2.38
 9.22

9 22 Clouds

12th Magn. Stand.

Pages 20.24

" " 27

" " 23

10 20

" " 26

" " 22

Nos 23 & 25 used as alternatives.

14th Magn. Stand.

+ 26.5 + 2.7

- 51.0 + 2.0

10 42

+ 41.0 - 0.5

Impossible to-night to make critical selection of 14th Magn. or to finish those already

Posted.

Sept. 23, 1900.

R Lacertas. W 663.
 22 40 + 41.2
 23 20
 0 40

11 10 Pior. Selection of Standards for R Lacertas
~~made.~~ made.

Sept 26, 1900 (Wednesday)

BBC 1182

6 56 11.6

6 57 11.5

B39K

6 58 00

6 59 0.0

Standards near

R Camelopard.

M 66.

14 40 +84.1

19 48

5 8

BBC 1182

7 27 12.0

7 28 12.0

B39K

7 29 0.0

7 30 0.0

Stars 1, 2, 3, 4, & 5 on R Camelopard
seem pretty good, although
3 & 5 are a little faint, but taking
configuration and all, it looks
as though they would do very well.
6 & 7 are very good and could be
used if needed.

Jupiter

16 16 - 20.8

20 16

2 00

Sept. 26, 1900.

Reap. Jup. I Phot R. W62. Campbell Rec
 Compworth = Sat

7 5-100 clouds Jup Invisible.

7 53-05 cloudy Jup Invisible.

Obs. made with no eyepiece. Too cloudy for
 Phot.

7 5634 Jup faintly seen

7 5640 Sat I not

7 57 25 Jup faintly seen Sat I not seen

57 44 " " " " I seen.

58 12 Sat I seen

58 36 Sat I seen

58 51 " I "

58 59 Sat I "

59 49 Sat I seen Sat III & IV plainly seen

B&C 1182

-B. 394

8 03 12.6

8 05 0.0

8 04 12.7

8 06 20

R Lacertab

22 40 +41.2

W62.

20 46

1 54

10 06

8 5-5- Region examined

Sept 26, 1900

Eros

N 6h.

26	38	+ 436
21	48	
<hr/>		
4	50	
7	10	
<hr/>		

9 18 Asteroid probatly ab S. of slightly fainter star.

Comp. Star a follows $DM + 42^{\circ} 638 (8.0)$ by 14 sec. It is 6.5 north of it. $magn = (8.7)$

^{magn}
Comp. Star b ~~preced~~

Comp. Star b = $DM + 42^{\circ} 627 (9.2)$

Sept 26, 1900.

Phot T.

W66

Eros comp. with Star a

L & above

	68.7	(comp + dis	Ledgers.
10 00.8	130.4	61.7 *	Posted.
	252.7	<u>54.0</u> *	
	306.7	115.7 *	+1.29 *

	70.5		+1.32 *
	128.2	57.7 *	
	252.2	<u>55.4</u> *	
	307.6	113.1 *	+1.35 *

R & Below

Mean = +1.16 *

335.3			
43.6		68.3 *	
159.0		<u>61.6</u> *	
220.6		129.9 *	+0.98 *

335.8

+0.99 *

10 06.0	40.2	64.4 *	
10 03.4	158.0	<u>64.6</u> *	
5 + 1.8	222.6	129.0 *	+1.00 *

15 5.2 * Gr. M. Time.

5289.628 *

Sept 26, 1900

Eros with star, a again

R & Below

339.4

10 07.8

43.4

157.3

222.3

64.0^{*}65.0^{*}129.0^{*}+ 1.00^{*}

338.2

47.5

156.9

221.8

63.3^{*}64.9^{*}128.2^{*}+ 1.02^{*}+ 1.01^{*}

L & Above

Mean = +1.14

245.8

307.2

70.4

126.2

61.4^{*}55.8^{*}117.2^{*}

+ 1.25

249.8

+ 1.26

10 13.2

307.8

10 10.5^{*}

69.3

5 + 1.8

128.12

58.0^{*}58.9^{*}116.9^{*}

+ 1.26

15 12.3^{*} 82 m.T.5289.600^{*}

Sept 26, 1900.

Error with * b

L & Above

$$\begin{array}{r}
 341.8 \text{ count} * \text{dis} \\
 1018.2 \quad 34.8 \\
 162.5 \\
 215.6 \\
 \hline
 53.0^* \\
 53.1^* \\
 \hline
 106.1^* + 1.01^*
 \end{array}$$

$$\begin{array}{r}
 342.2 \\
 35.8 \\
 162.7 \\
 217.4 \\
 \hline
 53.6^* \\
 54.7^* \\
 \hline
 108.3^* + 1.48^*
 \end{array}$$

R & Below

Mean = +1.62^{*}

$$\begin{array}{r}
 255.7 \\
 304.9 \\
 74.8 \\
 124.1 \\
 \hline
 49.2^* \\
 49.3^* \\
 \hline
 98.5^* + 1.69^*
 \end{array}$$

$$\begin{array}{r}
 255.3 \\
 1023.8 \quad 302.2 \\
 \hline
 42.0 \quad 76.4 \\
 10 \quad 21.0 \\
 5 \quad +1.8 \\
 \hline
 15 \quad 22.8 \text{ sum M.T.} \\
 5289.641^*
 \end{array}$$

$$\begin{array}{r}
 48.9^* \\
 46.6^* \\
 \hline
 95.5^* + 1.76^*
 \end{array}$$

Sept 26, 1900.

Eros with x t.

p. 13.

254.6 clouds

10 26.5

30 1.7

72.8

124.8

47.1

52.0

99.1⁺ + 1.68⁺

clouds

255.1

302.6

74.1

123.3

+ 1.71⁺47.5⁺49.2⁺96.7⁺ + 1.74⁺

28 above

162.3

216.6

342.8

34.6

163.6

10 37.0

215.7

63.5

10 31.8

342.4

5⁺ + 1.2

35.8

Mean = +1.62⁺54.3⁺51.8⁺106.1⁺ + 1.51⁺52.1⁺+ 1.52⁺53.4⁺105.5⁺ + 1.52⁺15⁺ 33.6⁺ 42 m.t.5-2 89.649⁺

10 43

10 44

Eros is now 1.6 north of faint star
 Eros now follows Dm + 42 63 (9.3) by
 13 sec. & is 8.5 North of it.

Noted.

Sept 26, 1900

Standards near δ Ceti.

W 66.

24	18	-9.2
23	22	

0.	50
----	----

11	10
----	----

11 02 Tonight the best stars seem to be, 23, 24
25, 26, 27. Not clear enough for
14 th Magna.

Sept 27, 1900. Thursday

B+C 1182

B 394

7 00 10.0

7 02 00

3 Hercules

Phot T 17 54 +15.2 W O₆

19 49

1. 55

I

Left & Below

83.6 L var dec

Light Eq. = +.0004

Led. Plot. Post.

7 18 48

115.5

31.9

262.6

33.5

296.1

65.4 - 2.66

81.1

- 2.62

21 08

118.0

36.9

263.3

30.8

294.1

67.7

- 2.59

Right above

352.3

Mean = -2.54

23 16

26.0

33.7

171.8

36.4

208.2

70.1

- 2.50

349.3

- 2.46

725 00

27.8

38.5

88 12

173.0

34.3

7 22 23

2017.3

72.8

- 2.42

5 + 1 50

5290.5166

5290.5166

81223 53 1/2 M.T.

5290.8686

5290.8692

+ 0.1474 Hart

Sept 27, 1900.

II

Reabove

~~349.~~

350.4

73148 28.7

172.0

208.9

38.3*

36.9*

75.2*

- 2.34*

351.6

3620 27.2

171.4

207.5

Left Below

264.6

293.9

3654 81.8

115.8

35.6*

36.1*

71.7*

- 2.40*

- 2.40*

Mean = -2.55

39.3*

34.0*

63.3*

- 2.74*

- 2.70*

262.3

73835 296.6

2137 838

73524 114.97

541 50

123714 12.0 mT

5290.5254*

5290.8692*

+ 0.1566* Hart.

34.3*

30.9*

65.2*

- 2.64*

Dimer = 0.1572*

Sept 27, 1900

III

L & Below

84.3

7 4420. 115.4

263.1

295.9

31.1

32.8

63.9

- 272*

83.2

- 275*

46 46 115.1

265.9

294.2

31.9

30.3

62.2

- 278*

R & Above

Mean = -2.67*

351.6

49 47 27.4

172.3

205.9

35.8

33.6

69.4

- 2.53*

352.2

- 2.59*

7 5507 25.9

196 00 170.3

7 4900 205.3

5 + 1 50

33.7

32.0

65.7

- 2.63*

1250 58 Y.M.T.

5290.5953

5290.5953*

5290.8692

dmer = 0.1667

5290.8962

+ 0.1661 Hart.

+ 0.1391

Sept 27, 1900.

IV

R & Above

8 01 00	173.6	31.8*	
	205.4	32.7*	
	352.6	64.5*	- 2.69*
	27.0		

0426	173.9	32.4*	- 2.66*
	206.3	33.7*	
	352.2	66.1*	- 2.64*
	25.9		

L & Below

Mean = -2.7

84.3			
0736	115.1	30.8*	
	264.3	29.7*	
	294.0 Stars dim	60.5*	- 2.84*

83.0			- 2.80*
8 10 43	114.2	31.2*	
	234.0	31.7*	
8 05-56	294.7	62.9*	- 2.78*
5-+1 5-1			

13 07 47* G.M.T.

5290.5471*

5290.3692*

0.1779* Hart.

Dmer = 0.1785*

Sept 27, 1900

V

L & Below

848

8 17 58 11 5.3

263.8

295.0

30.5*

31.2*

61.7*

- 2.80*

83.3

19 53 11 4.7

264.2 clouds

294.8

31.4*

30.6*

62.0*

- 2.80*

- 2.79*

R & above

Mean = 2.73*

353.2

2453 25.0

1872.8

206.0

31.8*

33.2*

65.0*

- 2.68*

353.0

8 27 10 25.5

89 54 173.1

8 22 28 206.7

5 + 1 5-1

13 24 19 25.5

8 30 19 25.5

5 290.5571*

5 290.3692*

+ 0.1879* Hartwigs

32.5*

33.6*

66.1*

- 2.66*

- 2.64*

sym. T.

cloudy stars very dim.

Cloudy

Dimer = 0.1845*

Pos. Angle Var $\alpha = 98.3$ Spurcket Wheel $\alpha = 2.5$

B = 1.7

Sept 27, 1900.

Phot. T. Dm + 42° 33' 38" W Ok

19	20	+43.0
21	45	
<hr/>		
2	25	

L & Above

I

76.3 Lran obs.

Ep. 765

Lt. Eq. = +.008¹⁴

9 18 28 123.0

46.7*

255.3

46.3*

Ledger, Posted

301.6

93.0*

- 1.83*

75.2

20 58 124.3

49.1*

- 1.81*

256.5

45.7*

302.2

94.8* - 179*

R & Below

Mean = - 1.71*

341.6

23 14 36.7

55.1*

166.3

48.6*

214.9

103.7* - 1.57*

345.0

- 1.61*

9 25 18 34.7

49.7*

27 58 164.0

50.7*

9 22 00 214.7

100.0* - 1.60*

5 + 1 51

142351 842 M.T.

5290.5999*

5290.1034*

Sept 27, 1900.

II

RAB Elbow

9 28 33	342.7		
	36.4	53.7 ⁺	
	165.6	48.1 ⁺	
	<u>213.7</u>	<u>101.8⁺</u>	-1.61 ⁺

-1.66⁺

30 08	346.3		
	34.0	47.7 ⁺	
	164.2	50.7 ⁺	
	<u>214.9</u>	<u>98.4⁺</u>	-1.70 ⁺

L. Elbow

Mean = -1.78⁺

32 47	255.6		
	302.3	46.7 ⁺	
	75.8	45.1 ⁺	
	<u>120.9</u>	<u>91.8⁺</u>	-1.87 ⁺

9 34 19	257.3		
	302.0	44.7 ⁺	
	47.5	43.9 ⁺	
12 5 47	<u>121.4</u>	<u>88.6⁺</u>	-1.93 ⁺

9 31 27	
5 + 1 52	

14 33 19 22 M.T.

5290.6064 ⁺
5290.1034
<u>+0.5030⁺</u>

Sept 27, 1900

III

L & above

9 36 30 256.3
302.3
78.4
120.6

46.0^{*}
42.2^{*}
88.2^{*} - 196^{*}

- 200^{*}

38 07 258.1
300.6
78.0
120.9

42.5^{*}
42.9^{*}
85.4^{*} - 204^{*}

R & B below

mean = -190^{*}

40 09 164.4
214.6
346.0
32.5

47.2^{*}
46.5^{*}
93.7^{*} - 182^{*}

166.3

- 180^{*}

4125 212.7

156 11 345.2

9 39 03^{*} ~~34~~5 + 1 52 32^{*} 414 80 55^{*} 42 m. T.5290.6117^{*}

5290.1034

46.0^{*}
48.2^{*}
94.6^{*} = 179^{*}

Sept 27, 1900

IV

R&B

1664

9 4452 214.6

347.0

323

48.2⁺45.3⁺93.5⁺ - 182⁺

167.9

4702 212.9

345.8

341

- 182⁺45.0⁺48.3⁺93.3⁺ - 183⁺

L&A

76.0

5020 119.8

258.3

300.3

43.8⁺42.0⁺85.8⁺ - 203⁺

77.4

- 205⁺

5210 120.1

42.7⁺41.6⁺

9 194 24 258.4

48 38 300.2

5 + 1 52

84.3⁺ - 207⁺

14 50 30 257.7

5290.6184⁺5290.1084⁺0.5150⁺

Sept 27, 1900

V.

L&A.

78.8

9 56 28 119.5

258.4

300.0

40.7*

41.6*

82.3*

- 2.13*

79.0

58 03 120.5

259.3

299.5

41.5*

40.2*

81.7*

- 2.14*

R&B.

348.1

10 01 40 29.1

168.8

210.2

41.0*

41.4*

82.4*

- 2.12*

- 2.12*

349.6

10 04 48 30.2

240.59 168.5

10 00 10 210.7

5-7 1.52

16.02 07* sum T.

40.6*

418.42.2*

82.8*

- 2.11*

5-290.6265*

5-290.1034

0.5231*

x Sept 27, 1900

VI

R & B.

346.3

10 07 38

30.6

168.8

210.4

44.3*

41.6*

85.9* - 2.03*

348.0

09 16

31.0

169.0

211.4

L & A.

260.4

11 34

296.9

79.9

117.1

43.0*

42.4*

85.4* - 2.04*

- 2.04*

Mean = - 2.21

36.5*

37.2*

73.7* - 2.39*

2.38*

260.5*

10 13 00

298.1

41 28

80.9

10 10 22

117.8

5 + 1 52

15 12 14 29 m.T.

9.

37.6*

36.9*

74.5* - 2.36*

5290.6334*

5290.1034

+ 0.5300*

Sept 27, 1900

VII

L & A.

~~239.4~~

10 15 30

~~297.9~~~~38.5~~~~80.4~~~~37.5~~~~117.9~~~~76.0~~~~-2.32~~

261.0

1825 - 2 clouds

1

Stopped by clouds

PR & B.

10 25 - clouds thick

Pos. Ang.

210.8

Spec. Wheel A

-55

" " B

-45

W Hercules

W Ob

16

32

+39.2

28

12

6 x 0

10 40

clouds thick no stars vis
in finder or large telescope
clouds thick no chance for W
Hercules or any standards

(over)

Posted

Sept 27, 1900

Ceto Mr 66

sub 12 3.6

$$\begin{array}{r} 23.27 \\ \hline 255 \end{array}$$

$$\begin{array}{r} 9.15 \\ \hline \end{array}$$

10 50 clouds thick

Impossible to do anything
11 00 with C on any other else

B 8 C 1182

21 03 01.2

B 394

21 05 0.0

Sept. 24, 1900 (Friday)

Comparison Stars for
R Lacertae.

W. Obs.

$$\begin{array}{r} 22 \quad 36 \quad + 41.2 \\ \hline 20 \quad 35 \\ - 2 \quad 1 \\ \hline 9 \quad 34 \end{array}$$

Stars 1, 2, 3, 4, 5 as indicated on chart
& 05 are the ones best suited for selection
among those already considered

W Hercules.

W Obs.

$$\begin{array}{r} 16 \quad 38 \quad + 39.2 \\ \hline 20 \quad 55 \\ 4 \quad 17 \end{array}$$

$$\begin{array}{r} 16 \quad 38 \quad + 39.2 \\ \hline 21 \quad 07 \\ 4 \quad 29 \end{array}$$

8 30 Stars 1, 2, 3, 4 & 05 as indicated on Hagen
Chart seem to be good stars

8 55 Clouds. Selection of 14 th magn. pre-
vented by clouds clouds all thick

9 03 in this region brightest stars gone

9 04 clouds thick.

Posted.

Sept 28, 1900.

Phot 22 Cephei. Mr Obs.

24	50	+ 811
21	50	
<hr/>		
3	00	

B6 C 1182	B 394
9 10 22.0	9 12 00
9 11 17.0	9 13 00
9 12 17.0	9 14 00

9 15 Clouds thick no stars visible

24	50	+ 811
22	15	
<hr/>		
2	35	
79	25	

9 30 Clouds thick

24	50	+ 811
22	50	
<hr/>		
2	00	
100	0	

cloudy during all the critical time in 22 Cephei

10 05 Still thickly cloudy with no prospect of clearing.

~~Sept~~

Oct. 4, 1900

(Monday)

B & C 10.82

6.5-8 30.2

B. 39x

6.5-8 0.0

Photo 7

J. perculis

W O 62

17

5-4

+16.2

20

08

7 20

Clouds thick. comp stars about invisible

7 21

Comp stars invisible now.

Clouds thick.

7 26

Fog thick.

A 00

Still cloudy

A 30

Still "

A 45

Clouds thick.

A 50

Fog very thick and heavy: no stars or moon visible no chance for anything farther.

Oct. 2, 1900(Tuesday)

B&C 1182

B 394

7 00 45.2

7 00 0.0

7 01 45.2

7 01 0.0

Standards for W Herulis

16 32.5

+37.2 W Ob

20 21.2

349

16 38

+39.2

20 28

350

7 30

Selection of 12th magn. made this
other night all right

7 37

Comp star = f of sequence $Dm + 7^{\circ} 2777(8.8)$
Sky too bright for 14th mag stars,
Clouds.

R. Persei

W Ob

27 36

+35.1

20 46

6 48

5 20

Too low

7 50 back-thick

Oct. 3, 1900.

S Piscium

MOB

cloudy $\begin{array}{r} 24 \quad 10 \quad + 8.2 \\ 20 \quad 5.0 \\ \hline 3 \quad 20 \\ \hline 8 \quad 60 \end{array}$

Clouds thick

$\begin{array}{r} 25 \quad 06 \quad + 6.2 \\ 21 \quad 00 \\ \hline 4 \quad 06 \\ \hline 7 \quad 54 \end{array}$

12 ~~th~~ Magn Standards.

p 05 cloudy

p 30

Hagen 15

" 18

" 14

" 16

" 12

Provisionally selected, although σ_2 through
 three places in cloud not to be considered
 over critical.

p 32 No 16 seems rather faint.
 Probable comp. star = No 10.

p 33 Cloudy

Posted.

Oct. 2, 1900.

9 00 cloudy still

9 22 Still cloudy: no stars or moon visible
no chance for anything farther.

Oct. 4, 1900 (Thursday)

B8C1182
7 00 18.0

B394
6 59 00

Phot T. R. Wsae Junioris M. Obs

$$\begin{array}{r} 16 \quad 34 \quad +72.9 \\ 20 \quad 24 \\ \hline 3 \quad 50 \end{array}$$

R & Above

Ledgered. I
Plotted.
Posted.

68.8 (comp. & dis)

7 32.5 130.0 61.2*

251.1 57.4*

308.5 118.6* + 1.22*

71.9

128.6

246.8

309.7

L & Below

333.2

458

158.1

221.7

304.4

7 40.5 41.8

7 36.5* 160.7

5 - 1.3 220.4

12 35.2* Gr. M. Time

5 297.52*

56.7*

62.9*

119.6* + 1.20*

Mean = +108*

72.6*

63.6*

136.2* + 0.85*

60.5* + 0.96*

59.7*

125.2* + 1.08*

Oct. 4, 1900.

L & Below) Same Again

II

742.2

332.6

45.4

72.8^{*}

159.0

62.9^{*}

221.9

135.7^{*}+ 0.86^{*}~~332.2~~+ 0.89^{*}~~46.1~~~~72.8~~

155.1

224.6

69.5^{*}+ 0.92^{*}

337.1

63.5^{*}

40.6

133.0^{*}

R & Above

Mean = + 1.00^{*}

71.7

131.5

59.8^{*}

247.6

63.6^{*}

311.2

123.4^{*}+ 1.12^{*}

769.0

+ 1.11^{*}

7 51.0

131.5

62.5^{*}

93.2

248.6

62.0^{*}7 46.6^{*}

310.6

1241.5^{*}+ 1.10^{*}

5 -1.3

12 45.3^{*} Gr. M. Time.5297.531^{*}

Oct. 4, 1900

Same Again.

III

R & Above

68.2

7 55.4

131.9

63.7^{*}

248.5

62.4^{*}

310.9

126.1^{*}+ 1.06^{*}

70.6

+ 1.11^{*}

130.7

60.1^{*}

248.7

61.5^{*}

310.2

121.6^{*}+ 1.16^{*}

L & Below

Mean = + 1.02^{*}

331.1

390

67.9^{*}

156.6

66.4^{*}

223.0

134.3^{*}+ 0.89^{*}

335.9

+ 0.92^{*}

8 03.8

42.6

66.7^{*}7 59.6^{*}

157.2

64.5^{*}

5 + 1.3

221.7

131.2^{*}+ 0.95^{*}12 58.8^{*}

22.21.12

5 297.540^{*}

Position Angle Ver. A = 316.8

Sprocket Wheel B = -5.5

C = -4.7

Oct. 4, 1900

Phot T. Ero2 2062

26	46	+ 46.7
21	26	
<hr/>		
5	20	
6	40	
<hr/>		

8 30 Ero2 follows $DM + 45^{\circ} 66' 2(8.3)$ by 30.5 sec.
and is 5.4 north of it.

8 32 Ero2 precedes a faint star 6 sec.
and is 2.2 north of it.

Comp star α equals $DM + 45^{\circ} 66' 2(8.3)$
" " β follows $DM + 45^{\circ} 66' 3(9.4)$ by
 $2^m 14^s$ and is 1.6 South of it.

Oct. 4, 1900.

Right

Eros comp. with $b = 6.4$ Ledge
Posted

8 52.0

155.6

223.5 Comp & dis

67.9⁺

33 1.3

73.3⁺

44.6

141.2⁺ + 0.75⁺+ 0.71⁺

154.8

227.0

332.2

45.2

72.2⁺73.0⁺145.2⁺ + 0.67⁺

Left

Mean = + 0.86

69.6

134.1

246.1

312.6

64.5⁺66.5⁺131.0⁺ + 0.96⁺

65.3

+ 1.00⁺

8 59.6

129.7

8 55.8⁺

247.5

5-1.3

309.8

13 54.5⁺

310.8

5 297.580⁺

222.7

64.4⁺63.3⁺127.7⁺ + 1.03⁺

October 4, 1900

Eros camp with $\frac{5}{2}$ again ~~(6.4)~~
 Comp. Star $\frac{6}{1} + 45^\circ 663$ (9.4) by $2''$ $14''$ and is 1.0 south of it.

Left

69.3

9 02.0

132.4

63.1*

244.4

66.0*

310.4

129.1* + 1.00*

64.8

+ 0.98*

132.2

67.4*

244.8

63.4*

311.6

130.8* + 0.96*

Right

Mean = + 0.85*

335.3

47.5

72.2*

154.5

70.4*

224.9

142.6* + 0.72*

332.7

+ 0.72*

9 10.2

46.4

9 61*

155.4

73.7*

5-13

224.7

68.3*

14 4.8*

224.7

142.0* + 0.73*

5297.587*

Gr. M. Time.

October 4, 1900.

Eros comp with $\frac{a}{\lambda} = (8.3)$

L & Above

Ledgered.
Posted.

352.5

9 15.8

26.9

Comp & die

34.4*

173.0

323*

205.3

66.7

+ 2.62*

352.6

+ 2.60*

26.5

33.9*

171.0

342*

205.2

68.1

+ 2.57*

R & Below

Mean = + 2.67*

263.2

295.4

83.4

115.3

32.2*

31.9*

64.1

+ 2.71*

263.7

+ 2.74*

9 23.0 ± 296.6

32.9*

9 19.4* 84.9

29.7*

5 - 1.3 114.6

62.6*

+ 2.76*

14 18.1 ± in Time.

5297.596*

October 4, 1900

Eroz comp. with star a again.
 Comp. star a is Dec. + 45° 662 (A.3)
 R + Below

9	27.0	264.1		
		296.4	32.3*	
		82.6	32.7*	
		115.3	<u>65.0*</u>	+ 268*

		262.4		+ 269*
		295.4	330*	
		84.5	31.3*	
		115.8	<u>64.3*</u>	+ 270*

L. & Above

		172.9		Mean = + 2.60*
		207.2	34.3*	
		351.9	34.9*	
		26.8	<u>69.2*</u>	+ 2.53*

		171.3		+ 2.50*
--	--	-------	--	---------

9	35.4	207.1	35.8*	
9	31.2*	351.7	35.1*	
5	-1.3	26.8	<u>70.9*</u>	+ 248*

14 29.9⁴ 29. m. Time

5297.604 Troubled by moonlight and some fog.

9 54 Eroz now follows the (9.4) 30secs and is ~~8.9~~ ^{6.6} north of it.

October 4, 1900.

Err. cont.

Err now precede faint star 5.5 sec
9 56 and 3.3 North of it.

R Persei

W Ols

$$\begin{array}{r} 27 \quad 36 \quad + 35.1 \\ 2.3 \quad 10 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 26 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 34 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \quad 23 \quad + 35.0 \\ 2.3 \quad 20 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 0.3 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 57 \\ \hline \end{array}$$

Preliminary selections of 12 the magn. stand
for R Persei made, but moon too
bright to make it as critical as it should
be.

Phot R.

O Ols

W Ols

$$\begin{array}{r} 26 \quad 12 \quad - 3.6 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \quad 32 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 40 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 20 \\ \hline \end{array}$$

see next page.

Oct. 4, 1900.

Ledgers
 & Cts. Plotted.
 Posted.

R & A

191.5
 10 28.0 211.0
 12.5
 30.6

19.5⁺
18.1⁺
 37.6⁺ - 391⁺

192.6
 210.4
 10.6
 30.9

17.8⁺
20.3⁺
 38.1⁺ - 388⁺

- 390⁺

L & B.

Mean = 3.88⁺

100.6
 120.4
 280.6
 301.2

19.8⁺
20.6⁺
 40.4⁺ - 375⁺

100.9

- 377⁺

10 34.0 120.9
 10 31.0⁺ 281.2
 5 - 1.3 301.3

19.4⁺
20.1⁺
 39.5⁺ - 379⁺

15 29.7⁺ - 92. m. time -
 5 297.646⁺

Oct. 4, 1900

Same Again

L & B

1036.0
101.5
120.6
281.7
301.2

19.1^{*}
19.5^{*}
38.6^{*} - 38.5^{*}

101.1
121.1
280.9
301.4

20.0^{*}
20.5^{*}
40.5^{*} - 3.74^{*}

- 3.80^{*}

K & A

Mean = - 3.80^{*}

19.1
31.2
192.1
211.2

21.1^{*}
19.1^{*}
40.2^{*} - 3.76^{*}

10
~~12~~, 8

- 3.81^{*}

10 440 30.4

19.6^{*}
19.8^{*}
38.4^{*} - 3.86^{*}

190.8
10 40.0^{*} 210.6

5 - 1.3

15 38.7^{*} 1/2 M. Time.5297.652^{*}

Posted

Oct. 4, 1900

Ceti again III

R & Above

11.0

10 50.8

31.9

20.9*

191.5

19.0*

210.5

39.9*

3.77*

11.6

-380*

31.0

19.4*

191.1

19.5*

210.6

38.9*

383*

L & Below

Mean = -3.78*

280.8

301.4

20.6*

101.2

19.8*

121.0

40.4*

3.75*

280.8

-376*

10 57.4

300.9

20.1*

2.2

100.8

20.1*

10 54.1

12.99

40.2*

5 - 1.3

-376*

15 52.8*

42 m. time

5297.662*

11 00

Obs. of Ceti difficult: Sky murky
with some fog object - glass found
found to be deved at end.

Oct. 5, 1900 (Friday)

B 394

6 57 42.7

6 58 42.7

Phot T.

J Periculis

17 54 +15.2

20 2K

R & Above

2 30

Light Equations +.0010

351.2 Lvarolis.

7 20 50

26.6

169.0

208.6

351.2

35.4*

Legend, Plotted.

39.6*

Posted

75.0*

- 2.35*

22 55

27.9

173.3

206.5

L & Below

264.5

24 47

293.8

81.8

116.1

263.3

26 33

297.9

15 05

84.8

7 23 46

114.5

5-1 43

36.7*

- 2.43*

33.2*

69.9*

- 2.51*

Mean = -2.58*

29.3*

34.3*

63.6*

- 2.73*

34.6*

- 2.72*

29.7*

64.3*

- 2.70*

12 32 03 * Gr. m. Time

5298.5153*

5298.3543*

5298.5153*

5298.3547*

+0.1606* Dimer

Oct. 5, 1900.

II

L & Below

264.7
 7 33 18 294.8
 81.7
 115.6

30.1^{*}
 33.9^{*}
 64.0^{*} - 2.71^{*}

263.6
 35 02 296.1
 84.7
 114.7

32.5^{*}
 30.0^{*}
 62.5^{*} - 2.77^{*}

- 2.74^{*}

R & Above

mean = -2.61^{*}

173.2
 38 03 206.4
 300.5
 28.3

33.2^{*}
 37.8^{*}
 71.0^{*} - 2.47^{*}

170.4

- 2.48^{*}

7 39 52 207.9
 26 15 352.8
 7 36 34^{*} 20.9
 5-2 43

37.5^{*}
 33.3^{*}
 70.8^{*} - 2.48^{*}

12 354 51^{*} M. Time.

5298.5255

5-298.5255^{*}

5298.3543

5-298.3543^{*}

+ 0.1699 Hartwig

+ 0.1695 Diner

Oct. 5, 1900.

III

R & Above

351.4

74920 26.9

171.2

206.7

35.5*

30.5*

71.0* - 2.47*

351.1

2.51*

5115 27.6

36.5*

173.2

32.2*

205.4

68.7* - 2.55*

L & Below

Mean = -2.64*

265.9

5343 292.9

81.4

116.5

27.0*

35.1*

62.1* - 2.78*

262.3

-2.78*

5515 295.5

33.2*

20933 85.1

28.7*

752 207 13.8

61.9* - 2.79*

5-43

1249 40* Gr. M. Time.

5298.5345

5298.3543

5298.5345

5298.3547

+0.1809* Hartwig

+0.1805* Dimer.

Oct. 5, 1900.

IV

L & Below

263.1
 8 02 00 294.1
 83.5
 116.2

31.0
 32.7
 63.7 - 2.73

264.9
 03 51 294.9
 84.0
 115.0

-2.78
 30.0
 31.0
 61.0 - 2.82

R & Above

173.2
 05 56 206.4
 351.2
 26.0

Mean = -2.68
 33.2
 34.8
 68.0 - 2.57

172.5

-2.58

8 08 14205.8

33.3

20 01 351.2

34.4

8 05 00 25.6

67.7 - 2.59

5 - 01 43

13 03 17 24 M. Time

5298.5440

5298.5440

5298.3543

5298.3547

+0.1897 Hartwig

+0.1893 Dimer.

Oct. 5, 1900

V

R & above

8-12-10	172.4	206.6	34.2	
	351.6		33.7	
	25.3		67.9	-2.58

14-34	+171.5	206.7	34.8	-2.60
	353.0		32.1	
	25.1		66.9	-2.6

L & Below

Mean = -2.73

8-5-1				
17-00	115.0	29.9		
	264.9	30.1		
	295.0	60.0		-2.86

8-4-1

-2.86

8-20-15	115.2	31.1		
	63.59	29.2		
8-16-00	265.4	60.3		-2.85
5-1-43	294.6			

5-298.5576
5-298.8547
+0.19692 miles

much troubled throughout of area -
 5298.5516 hours by night moonlight & haze
 5298.3543 Settings rather difficult.

+0.1973 Por Angle 287.1

Harp. Spiret Wheel G = 1.7 13-2.5

Oct 5, 1900.

Plot 7. Eros. W 66

$$26 \quad 46 \quad + 46.7$$

$$21 \quad 46$$

$$\hline 5.00$$

$$\hline 7.00$$

$$2 \quad 40 \quad 27.6 \quad + 45 \quad 49.3$$

$$+ 30.5$$

$$+ 5.4$$

$$\hline 2 \quad 40 \quad 58.1 \quad + 45 \quad 54.7$$

$$- 7.0$$

$$+ 22.5$$

$$\hline 2 \quad 40 \quad 57.1$$

$$\hline 22.2$$

$$+ 46 \quad 17.2$$

$$\text{Comp Star } a = DM + 46^\circ 638 (8.7)$$

$$\text{" " } b = DM + 46^\circ 649 (9.4)$$

9 00 Eros now precedes the 6.0 ($DM + 46^\circ 648 (6.0)$), in p. sec. & is 2.6 North of it.

9 02 Eros now precedes faint star near it by 1.2. & is 0.6 North of it.

Oct. 5, 1900.

Cross with Star a = (8.7)

Left

348.2 < complex dis.

Ledgered
Posted.

9 14.2

32.0

43.8 *

169.2

41.1 *

210.3

84.9 *

+ 2.05 *

349.2

+ 2.08 *

29.5

40.3 *

169.0

43.1 *

212.1

83.4 *

+ 2.10 *

Right

Mean = + 2.21 *

262.4

298.4

36.0 *

80.0

39.7 *

129.7

75.7 *

+ 2.32 *

261.3

2.34 *

9 20.6 298.9

37.6 *

9 17.4 * 81.9

37.3 *

5 - 1.7 119.2

74.9 *

+ 2.35 *

1415.7 Gr. M. Time.

5296.594 *

Oct. 5, 1900.

Error with a again = (p. 7)

Right

260.5

9 22.8

298.5

38.0

81.6

37.1

118.7

75.1 + 2.34

262.1

+ 2.36

298.3

36.2

81.6

37.9

119.5

78.1 + 2.37

Left

167.2

Mean = + 2.19

210.1

42.9

347.9

43.5

31.4

86.4 + 2.01

167.5

+ 2.02

9 30.0

209.9

42.4

9 26.4

347.9

43.5

5 -1.7

31.4

85.9 + 2.03

14 24.7

5 298.604

Oct. 5, 1900

Eros comp. with $b = (9.4)$

Left

68.4

< comp + dis.

Ledgers b.

9 35.0

120.5

72.1

Posted.

246.8

61.6

308.4

123.7 + 1.1

69.0

+ 1.09

130.9

61.9

247.4

63.6

311.0

125.5 + 1.07

Right

Mean = + 1.00

335.4

42.5

67.1

156.9

64.2

221.1

131.3 + 0.95

336.4

+ 0.92

9 43.2

41.3

64.9

9 39.1

155.4

69.5

5-1.7

224.9

134.4 + 0.89

14 37.4

92 M. Time

5296.609

Oct. 5, 1900.

Eroz with b again = (9.4)

Right

9 47.0 336.2 19.4 dis. 69.1
 45.3 69.6
 156.0 138.7 + 0.80
 225.6

3340

+ 0.78

45.5

71.5

155.5

69.7

224.2

141.2 + 0.75

Left

Mean = + 0.91

247.2

311.0

60.8

67.7

63.7

131.4

127.5 + 1.03

246.8

+ 1.04

9 56.4

310.1

63.3

103.4

66.5

63.5

9 51.7

130.0

126.8 + 1.05

5 - 1.7

14 50.0

troubled especially in last group
 by moonlight and haze.

5298.618

10 13

Eroz now precedes DM + 26° 64' (6.0) by
 1 m g sec and is 4.6 north of it.

10 14

Eroz now precedes faint star by 2 sec 0.10

Oct. 3, 1900.

Phot R. 0 ceti.

W Ob.

$$\begin{array}{r}
 26 \quad 12 - 3.6 \\
 \underline{23 \quad 25} \\
 2 \quad 47 \\
 \underline{9 \quad 13}
 \end{array}$$

R above

Plotted.

Legend

Posted.

10 20.8

29.0

18.1 *

191.6

18.3 *

209.9

36.5 *

3.98 *

11.0x

29.6

18.6 *

3.94 *

190.7

19.1 *

209.8

37.7 *

3.90 *

L & Below

280.9

Mean = - 3.91 *

299.9

19.0 *

101.2

19.2 *

120.4

38.2 *

3.87 *

280.7

3.88 *

10 26.4 299.7

19.0 *

10 23.6 100.7

19.0 *

5 - 1.7 119.7

38.0 *

3.88 *

15 21.9 42 M. Time.

5298.640 *

Oct. 5, 1900

Same Again

L & B below

10 27.5

280.9

299.9

101.1

120.7

19.0*

19.6*

38.6* - 38.5*

281.1

300.6

101.0

120.6

19.5*

19.6*

39.1* - 38.2*

- 38.4*

R & A above

Mean = - 38.5

190.5

209.9

10.5

30.1

19.4*

19.6*

39.0* - 38.2*

190.6

209.5

10.5

29.4

18.9*

18.9*

37.8* - 38.9*

- 38.6*

10 33.0

10 30.2*

5 - 1.7

15 28.5*

5298.644

No m. Time.

Oct. 5, 1900.

Same Again. III

R + above

190.84

10 38.4 209.9

10.5

29.9

19.5^{*}19.4^{*}38.9^{*} - 3.23^{*}

190.4

210.0

10.6

30.0

19.6^{*}19.4^{*}39.0^{*} - 3.22^{*}- 3.22^{*}

Lt Below

Mean = -3.80⁺

10 0.5

10 44.0 120.1

10 40.2 280.7

5 - 1.7 300.9

15 38.5 1/2 m.t.

5298.652⁺19.6^{*}20.2^{*}39.8^{*} - 3.78⁺

10 50

Troubled by moonlight & haze during
settings & stopped by clouds.

Oct 5, 1900

Phot 7. X Cygni

or Obs.

$$\begin{array}{r} 19 \quad 45 \quad + 32.6 \\ 24 \quad 05 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 20 \\ 19 \quad 51 \quad + 34.7 \\ 24 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 41 \quad + 33.4 \\ 24 \quad 11 \\ \hline 4 \quad 30 \end{array}$$

$$\begin{array}{r} 19 \quad 51 \quad + 34.7 \\ 24 \quad 14 \\ \hline 4 \quad 23 \end{array}$$

11 05 Heavy fog came in preventing observation of X Cygni.

Oct. 11, 1900. (Thursday)

Phot. N Delphin. W 66

$$\begin{array}{r} 20 \quad 31 \quad +17.8 \\ 20 \quad 5-1 \\ \hline 0 \quad 20 \end{array}$$

> 10 Cloudy Chron. used tonight is $1^m 36.8^s$ fast of Bond 394

$$\begin{array}{r} 20 \quad 31 \quad +17.8 \\ 21 \quad 01 \\ \hline 0 \quad 30 \end{array}$$

7 50 Clouds still thick

7 56 clouds too thick.
~~244.1 / comp. & dis~~

7 56.55 309.2 clouds.

72.1

~~127.1~~

clouds.

reject as group would
 clouds thick. not be completed and
 clouds caused delay

see next page.

Oct 11, 1900.

W Delphinii

I

Left + above

L^t. Equation = -0.0023

250.8

(comp + dis

Epoch = 687.

8 08 00

311.9

61.1⁺

65.1

67.8⁺

Ledgered Posted.

132.9

128.9⁺

+ 1.00

245.4

+ 1.00⁺

09 34

312.6

67.2⁺68.3³61.9⁺

130.2

129.1⁺+ 1.00⁺

R + below

Mean = $+0.91$ ⁺

158.8

11 33

221.6

62.8⁺

334.4

74.8⁺

49.2

137.6⁺+ 0.82⁺

154.8

+ 0.82⁺

8 13 13

22.44

69.6⁺

42 20

333.8

68.8⁺

A 10 30

42.5

138.3⁺+ 0.81⁺

5-1-36

13 8 59⁺ M. M. Tins -5304.5479⁺5304.3955⁺+ 0.1524⁺

Oct. 11, 1900

R & Below

II

159.6
 8 15 30 221.6
 333.0
 46.2

62.0^{*}
 73.2^{*}
 135.2^{*} + 0.87^{*}

152.2
 16 51 225.3
 334.7
 45.2

73.1^{*}
 70.5^{*}
 143.6^{*} + 0.70^{*}

Mean = + 0.80

L & Above

66.0
 20 54 133.5
 243.6
 315.0

67.5^{*}
 71.4^{*}
 138.9^{*} + 0.80^{*}

63.0
 8 22 42 134.7
 75 53 245.8
 8 18 58 310.9
 5-1-36

71.7^{*}
 65.1^{*}
 136.8^{*} + 0.84^{*}

1317 22^h 42^m M. Time

5304 5538
 5304 2955^{*}
 + 0.1583^{*}

Oct. 11, 1900.

Left + above

III

~~67.0~~~~26 15 130.4~~

244.2

27 23 314.8

67.7

130.3

245.5

29 23 311.6

62.6

134.3

Right + Below

151.8

3

2

328.6

32 15 34.2

153.8

3 3 222.4

328.7

33 54 46.8

122 55 151.9

30 44 226.3

5-1 36

13 29 08 Dr. M. T. J. C.

5304.5619

5304.3955

+0.664

69.6

62.6

132.2 + 0.93

65.8 + 0.88

71.7

137.5 + 0.82

Mean = +0.80

65.6

68.6

134.2 + 0.89

+ 0.71

78.1

74.4

152.5 + 0.53

Oct 11, 1900

IV

R⁺ Below8 3600 328.1
47.5

153.6

226.0

79.4 *

72.6

151.8 *

+ 0.54 *

3750 332.6
45.2

151.6

226.0

72.6 *

74.8

147.4 *

+ 0.63 *

Lt above

Mean = + 0.68 *

4050 244.6
31.6.4

65.0

131.8

71.8 *

66.8

138.6 *

+ 0.80 *

+ 0.79 *

8 4306 245.2
312.4

62.0

8 157 46
39 26 34.7

5-1 36

67.2 *

72.7

139.9 *

+ 0.78

1397 5024.7 M. Time.

5304.5600 *

5304.3950

+ 0.1720 *

Oct. 11, 1900

IV

~~Look above.~~~~243.2~~~~2 47 43 316.6~~~~65.3~~~~13~~

2

Pos. Angle = 163.6

Sprocket wheel A = -1.5

B = -0.5

C = 0.0

~~Look Below~~

Phot T

X Cygni

Mr Gb

19 45 + 32.6

22 35

2 50

Full aperture

Oct. 11, 1900

X cypri.

L & above

I

74.4 comp * dis

Plotted.

Ledgered.

Posted.

9 13.8 1247

50.3⁺

251.2

55.9⁺

307.1

106.2⁺ +

1.51

70.4

+ 1.52⁺

126.1

55.7⁺

255.2

48.8⁺

304.0

104.5⁺ +1.55⁺

R & Below

Mean = 1.38⁺

341.8

37.6

55.8⁺

158.9

63.3⁺

222.2

119.1⁺ +1.21⁺

337.8

1.24⁺

9 21.0 391

61.3⁺

348 161.6

54.7⁺

9 17.4 216.3

126.0⁺ +1.28⁺

5 - 1.6

14 15.8⁺ 4. M. Time.5304.594⁺

Oct. 11, 1900

Same Again

R & Below

9 23.0

341.7

36.5

161.3

218.3

54.8*

57.0*

111.8* + 1.38*

337.2

41.1

162.6

216.4

+131*

63.9*

53.8*

117.7* + 1.24*

L & Above

Mean = + 1.41*

254.3

304.5

72.4

128.8

50.2*

54.4*

104.6* + 1.54*

+151*

9

251.6

10 28.0

308.5

56.9*

9 25.5*

74.0

50.6*

5 -1.6

124.6

107.5* + 1.48*

14 28.9* 3/4 M Time.

5304.600*

Pos. Angle = 200.6

Sprocket Wheel a = -3.5

" " B = -2.5

Oct. 11, 1900.

Eroz.

W. Ob.

$$\begin{array}{r}
 \cancel{2} \quad \cancel{41} \quad \cancel{59.} \\
 \cancel{2} \quad \cancel{41} \quad \cancel{59.} \\
 \quad \quad \quad -3 \quad 2. \\
 \hline
 2 \quad 38 \quad 57.
 \end{array}$$

$$\begin{array}{r}
 \cancel{+48} \quad \cancel{33.2} \\
 \cancel{+48} \quad \cancel{35.9} \\
 \quad \quad \quad -11.4 \\
 \hline
 +48 \quad 24.5
 \end{array}$$

$$\begin{array}{r}
 26 \quad 34 \\
 \hline
 23 \quad 26 \\
 \hline
 3 \quad 08 \\
 \hline
 8 \quad 52
 \end{array}$$

10 00

Eroz precedes $\text{DM} + 48^\circ 762 (7.0)$ by 8.5 sec. & is 10.6 South of it.

Eroz at present time is in the same decl. as a faint star following.

Comp star b precedes $\text{DM} + 48^\circ 756 (8.6)$ by 34 sec. and is 1.5 North. $\text{mag} = 10.8$

comp star a = $\text{DM} + 48^\circ 757 (8.2)$

Oct. 11, 1900

Error comp. with stars b

Left

60.9
 10 16.0 137.1
 241.3
 319.6

(error dis.)

76.2^{*}
 78.3
 154.5^{*}

~~Plotted~~

Ledgered Pictet

- 0.49^{*}

64.5
 138.65
 241.7
 313.2

74.0^{*}
 71.5^{*}
 145.5^{*}

- 0.58^{*}- 0.66^{*}

Right.

152.7
 226.1
 329.0
 46.2

73.4^{*}
 77.2^{*}
 150.6^{*}

Mean = - 0.56^{*}- 0.54^{*}

10 23.4 225.3
 39.4 327.6
 10 19.7^{*} 48.0
 5 - 1.6

72.6^{*}
 80.4^{*}
 153.0^{*}

- 0.52^{*}18.1^{*} S.M. Time.5304 637^{*}

Oct. 11, 1900

Geo comp. with stars 6

Right

152.1

CO 25.6 225.8

33 0.5

51.3

$$\begin{array}{r} 73.7^* \\ 80.8^* \\ \hline 154.5^* - 0.49^* \end{array}$$

152.6

227.3

330.6

47.0

Left

61.1

136.5

248.2

318.1

$$\begin{array}{r} 74.7^* \\ 76.4^* \\ \hline 151.1^* - 0.55^* \end{array}$$

Mean = -0.56^{*}

$$\begin{array}{r} 75.4^* \\ 75.5^* \\ \hline 150.9^* - 0.56^* \end{array}$$

-0.60^{*}

$$\begin{array}{r} 60.7 \\ 1032.8 \\ \hline 68.4 \end{array}$$

243.1

315.1

5-1.6

$$\begin{array}{r} 75.3^* \\ 72.0^* \\ \hline 147.3^* - 0.63^* \end{array}$$

15 28.1 - 42.72.12

5304.644^{*}

Oct. 11, 1900

Eros comp. with Star a

Left

10 36.7

352.1 (8.2) comp. * dia.

Lidgerud's Proted

27.9 35.8*

178.8 33.1*

205.9 68.9*

+ 2.5-4

359.8

2.4^{6*}

27.2

36.4*

170.4

37.2*

208.76

73.6*

+ 2.39*

Right

261.6

mean = + 2.57*

296.4

34.8*

85.0

29.5*

114.5

64.3*

+ 2.70*

264.0

+ 2.68*

10 44.2 295.5

31.5*

10 40.4* 82.9

33.8*

5 - 1.6 116.7

65.3*

+ 2.67*

15 38.8* 1/2 m. time.

5304.652*

Oct. 11, 1900

Eroz with stars a again.

Right

261.6

1046.2

297.4

84.0

115.3

35.8^{*}31.3^{*}67.1^{*} + 2.60^{*}

263.7

294.53

83.2

114.4

31.6^{*}34.2^{*}65.8^{*} + 2.62^{*}

Left

172.9

206.5

352.2

26.6

33.6^{*}34.4^{*}68.0^{*} + 2.57^{*}Mean = + 2.58^{*}

171.7

1054.0

206.6

350.0

1050.1

5-1.6

1054.5

1100

5304.658^{*}

1101

1101

1101

1101

1101

1101

1101

1101

26.1

24.1

24.1

24.1

24.1

24.1

24.1

24.1

24.1

24.1

24.1

24.1

34.9^{*}

35.1

70.0^{*} + 2.57^{*}+ 2.54^{*}

Eroz is now 1.0 north of faint

star.

precedes

Eroz now 2 m + 45° 762(7.0) by 9. stars.

and is 9.0 South of it

Oct. 12, 1900 Friday

B+C 1182

B 394

6 35 44.2

6 54 0.0

6 56 44.2

6 55 0.0

7 00 cloudy

7 30 "

8 00 "

8 30 "

8 45 Still cloudy and growing worse.

Oct. 15, 1900. Monday

Chron. = 1^m 52^s.5 fast at 10:07 B 39th time
Phot T. Nova Sagittarii W66

$$\begin{array}{r}
 18 \quad 51 \quad -13:0 \\
 21 \quad 01 \\
 \hline
 39 \quad 10
 \end{array}$$

18 51

21 11

R & A. 2 20

Ledger.

Plotted.

Posted

$$\begin{array}{r}
 731.0 \quad 90.9 \text{ 2 comp } \times \text{ dis.} \\
 106.4 \quad 15.5^*
 \end{array}$$

273.1

287.1

90.7

106.2

270.3

286.3

359.0

20.2

180.0

202.0

358.8

7.41.2

21.0

736.1

178.4

5-1.9

201.2

12 34.2

5308.52

15.5*

14.0*

29.3*

+ 4.44*

1.55*

1.60*

3.15*

+ 4.30*

21.2*

22.0*

43.2*

+ 3.60*

22.2*

22.8*

45.0*

+ 3.51*

+ 4.44*

+ 4.37*

+ 4.30*

Mean = + 3.96*

+ 3.56*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

+ 3.51*

Oct. 15, 1900

Same Again

L & Below

359.3

7 45.0

21.2

21.9⁺

178.4

21.0⁺

199.4

42.9⁺+ 3.61⁺

358.9

+ 3.58⁺~~18.1~~ 19.320.4⁺

177.8

23.8⁺

201.6

44.2⁺ + 3.55⁺

R & Above

Mean = + 3.77⁺

269.5

~~289.5~~20.0⁺

89.2

16.7⁺

105.9

36.7⁺ + 3.96⁺

269.8

+ 3.96⁺

7 57.0

289.2

19.4⁺

90.8

17.5⁺7 51.0⁺

108.3

36.9⁺ + 3.95⁺

5-19

12 49.1⁺ M. T. 2.0 preceding. 2.0 South some
 530P. 534⁺ Region a little low, sky a little
 foggy ~~partial~~ causing some glare
 from electric light on same object

Oct. 13, 1900.

itself very faint and consequently
 object as seen in phot. extremely
 faint and difficult. Spectroscope put
 on object extremely faint in same,
 but spectrum practically mono-
 chromatic. No continuous spectrum
 certainly seen. Illuminated dome of State
 House not visible on account of fog.

Phot. T. done

No 66

Error. Phot. % K. obs.

$$\begin{array}{rclcl}
 2 & 39 & 24^{\circ} & +49 & \sqrt{-2.0^{\circ}} \\
 & & -4 & & +1.6 \\
 \hline
 2 & 39 & 20^{\circ} & +49 & \sqrt{-3.6^{\circ}} \\
 & -13 & 4. & & +11.5 \\
 \hline
 2 & 36 & 16^{\circ} & +49 & 42.1 \text{ (1st vt)} \\
 2 & 35 & 47. & +49 & 35.3 \\
 & & +29^{\circ} & & +6.2^{\circ}
 \end{array}$$

$$+49^{\circ} 76.1 (2.4) =$$

$$\begin{array}{rcl}
 26 & 34 & +48.6 \\
 22 & 24 & \\
 \hline
 & 410 & \\
 & 730 &
 \end{array}$$

Comp star a = DM + 49° 753 (8.7)

Comp star b follows DM + 49° 753 (8.7) by

2.0 sec & 7.5 north of it magn. of b

11.2

Oct. 15, 1908.

9 0²20 sec following 7.3 North
& 0.6 north of faint star.

9 06

Precede faint star 1 sec of North

9 07

Star (probably Eros) follow the P.C.
by 20 sec in 7.3 North of it.

L.A. Eros comp. with star a.

9 16.7

162.0 Comp & dis

214.1

52.1^{*}

Ledgered.

302.5

53.7^{*}

Patched

36.2

105.8^{*} + 1.5⁻²

161.4

213.8

52.4^{*}+ 1.5⁻²

343.8

52.7^{*}

36.5

105.1^{*} + 1.5⁻³

R.V. Below

76.2

Meanst 1.66^{*}

123.2

47.0^{*}

256.2

46.8^{*}

303.0

93.8^{*} + 1.81^{*}

75.0

+ 1.79^{*}

9 23.0

124.6

49.6^{*}39.7^{*}

257.3

45.9^{*}9 19.8^{*}

303.2

95.5^{*}+ 1.77^{*}5 - 1.9^{*}17.9^{*} G.M.T.

5302.596

Oct. 13, 1900.

Same Again

RT Below

76.0

9 24.4 124.4

254.2

304.0

48.4^{*}49.8^{*}98.2^{*} + 1.70^{*}

73.3

124.2

257.0

303.5

+171^{*}50.9^{*}46.5^{*}97.4^{*} + 172^{*}

LT Above

Mean = +1.62^{*}

343.7

34.7

~~161.3~~

214.5

51.0^{*}53.2^{*}104.2^{*} + 1.55^{*}

340.9

+1.53^{*}

9 31.4 35.3

55.8 164.8

9 27.9^{*} 214.45 -1.9^{*}

14 26.0 42.7 m. Time.

5808.608^{*}54.4^{*}57.6^{*}106.0^{*} + 1.51^{*}

Oct. 15, 1900

Eros compared with star 6

Left Above

9 36.2 72.2 (var. dis.) 57.1
 12 6.83 53.5⁺
 25 1.7 107.6⁺ - 1.47⁺
 30 5.2

Ledgered
Partial

70.6 - 1.50⁺
 12 5.5 54.9⁺
 25 3.5 50.0⁺
 30 3.5 104.9⁺ - 15.4⁺

Right Below

Mean Error = 1.35⁺

340.0
 39.8 59.8⁺
 161.2 38.3⁺
 219.5 118.1⁺ - 123⁺

- 120⁺

9 44.5 339.0
 9 40.6⁺ 38.6 596⁺
 5 - 19 160.0 61.5⁺ - 117⁺
 22 1.5 121.1⁺

14 38.7⁺ Mr. W. Tainter.
 5308.652

Oct. 15, 1900.

Same Again

R & Below

~~339.2~~

9500

38.8

59.6^{*}

160.1

59.9^{*}

2200

119.5^{*}- 1.20^{*}

339.8

40.0

60.2^{*}- 1.19^{*}

159.8

60.2^{*}

220.0

120.4^{*}- 1.18^{*}

L & Above

Mean = -1.34^{*}

251.0

305.2

54.2^{*}

70.8

53.8^{*}

124.6

108.0^{*}- 1.46^{*}

253.3

- 1.49^{*}

958.0 305.0

51.7^{*}954.0^{*} 70.853.8^{*}

5-1.9 124.6

103.5^{*}- 1.52^{*}

1452.142 mt.

5308.619^{*}

Error now follows DM + 49° 6' (4.4)
by 18.5 sec. and is 1/2 north of it.

1012

Error now precedes faint star 3.0 sec
and is 2.6 north of it.

~~Oct~~ Oct 15, 1900.

P

Nova Aquilae.

19 15 - 0.5
24 40

X 55

Too low.

T. Ursae Major. W 66.

12 33 + 60.4

24 13

11 40

Too low

~~Scorpio~~

Phot T. R. Ursae Minor - W 66.

16 3X + 72.9

24 19

7 X 5

Oct. 15, 1900

R Mrs. Min

H. B. B. B.

~~312.4~~ comp & obs

Ledgers

Plotted

Ported

~~10350~~

67.0

1039.2

133.0

66.0 *

245.6

66.0 *311.6

132.0 *

+ 0.94 *

67.4

+ 0.95 *

134.4

67.0 *

246.1

66.1 *

310.2

131.1 * + 0.96 *

~~R. F. Bolow~~

Mean = 0.84

334.4

41.8

67.4 *

151.1

75.1 *

226.2

142.5 * + 0.72 *

332.2

+ 0.74 *

10 45.8

46.3

74.1 *

85.0

155.3

67.2 *

10 42.5 * 222.5

141.3 * + 0.75 *

5 - 1.9

15 40.6 * 4. m. T.

5348.653 *

Oct. 15, 1900

Same Again

Below

334.8

10 48.0

43.4

152.7

228.0

70.6

75.3

145.9

+ 0.66

332.4

47.2

156.7

222.8

74.8

66.1

140.9

+ 0.71

+ 0.76

Above

248.0

311.9

65.1

133.6

63.9

68.5

132.4

Means = + 0.92

+ 0.93

68.7

63.8

132.5

+ 0.93

244.9

313.6

67.2

131.0

10 54.4

10 57.2

5 -1.9

15 49.3

5308.659

24 times Per Angle 136.2

S-predict Wheel B = -25

" " C = 18

Oct. 15, 1900.

Phot R - 0 Ceti Or Or

$$\begin{array}{r}
 2 \ 12 \ - 3.6 \\
 0 \ 52 \\
 \hline
 1 \ 20 \\
 10 \ 40 \\
 \hline
 \end{array}$$

Left

Ledgers
Plotted
Posted.

1108.2 98.3 120.5

22.2*

277.2

224*

301.2

46.2* - 3.45

97.5

121.3

22.8* - 3.45

278.8

224*

301.2

46.2* - 3.45*

Right

Mean = -3.48*

7.9

30.1

22.2*

127.4

22.6*

210.0

44.8* - 3.52*

7.5

-3.52*

11 13.0 30.2

22.7*

21.2 127.8

22.2*

11 10.6* 210.0

44.9* - 3.51*

5 - 1.9

16 8.7* 42.12

5308.673*

Oct 15, 1900

Same Again

Right

11 14.8
 7.6
 30.0
 188.2
 209.9

22.4^{*}
 21.7^{*}
 44.1^{*} - 3.55^{*}

7.6
 30.8
 187.6
 210.4

23.2^{*}
 22.8^{*}
 46.0^{*} - 3.46^{*}

- 3.50^{*}

Left

278.6
 301.2
 97.5⁻
 120.4

22.6^{*}
 21.9^{*}
 44.5^{*} - 3.53^{*}

Mean = -3.49^{*}

11 19.2
 340
 11 170
 5 - 1.9
 16 151 g.m.t.
 5308.677^{*}

277.2
 301.3
 97.6
 120.2

24.1^{*}
 22.6^{*}
 46.7^{*} - 3.42^{*}

- 3.48^{*}

Oct 16, 1900 Tuesday

B & C 1182

S 55 138

S 56 138

S 45 cleared.

9 00 cloudy

Phot R. M. P. 441.

W 66.

27	31	+ 62.5
----	----	--------

23	0.5
----	-----

4	2.3
---	-----

7	37
---	----

9 18 clouds thick everywhere.

9 36

9 47

9 55

cloudy.

27	31	+ 62.5
----	----	--------

23	5.1
----	-----

3	40
---	----

8	20
---	----

see next page.

Oct. 16, 1900

Phot R. M. P. 441

Mr Ch.

10 01 clouds thick

10 04

Left above

Ledgers

~~Post~~Plotted.

259.2 (var. dis)

10 09.4

307.4

48.2^{*}

78.4

59.6^{*}

138.0

107.8

- 147

clouds

257.8

- 134^{*}

320.0

62.2^{*}

81.2

56.6^{*}

137.8

118.8^{*} - 122^{*}

Ror Below

Mean = - 1.33^{*}

169.4

227.8 clouds

58.4^{*}

351.1

56.7^{*}

47.8

115.1^{*}- 130^{*}

171.3

10 19.0

228.2

56.9^{*}- 132^{*}

2 349.4 clouds

56.4^{*}

10 14.4

438

113.3^{*}- 134^{*}5 - 2.2^{*}15 12.0^{*}9^h M Time

5309, 639

Oct. 16, 1900.

Same Again

R & Below

168.8

1023.2

226.6

349.2⁰

49.7

57.8^{*}60.7^{*}118.5^{*} - 1.23^{*}

168.1

- 1.22^{*}

227.7

59.6^{*}

348.9

59.3^{*}

48.2

118.9^{*} - 1.22^{*}

L & Above

Mean = 1.22

79.5

137.5

258.0

318.2

58.0^{*}60.2^{*}118.2^{*} - 1.23^{*}

78.2

- 1.27^{*}

1031.0

138.2

542

258.3

1027.1^{*}

318.0

60.0^{*}59.7^{*}118.7^{*} - 1.20^{*}

5 - 22

1524.9^{*} M. M. Tins.5309.642^{*}

Oct. 16, 1900

Same Again

IV

Left above

78.8

10 34.8 137.0

10 40

Troubled more unless by
clouds in preceding groups
of m.p. 44%.

Third group was attempted -
but cat-gut string would not
work it being too loose.

S Cassiope

72.6

$$\begin{array}{r}
 25 \quad 9 \quad + 72.1 \\
 23 \quad 56 \\
 \hline
 1 \quad 33 \\
 10 \quad 27
 \end{array}$$

$$\begin{array}{r}
 25 \quad 10 \quad + 72.1 \\
 25 \quad 40 \\
 1 \quad 30 \\
 10 \quad 30
 \end{array}$$

$$\begin{array}{r}
 1 \quad 10 \quad + 72.1 \\
 0 \quad 46 \\
 0 \quad 34 \\
 11 \quad 26
 \end{array}$$

L. P. P.

10 55

S 2 var var 1.5 t

Oct. 16, 1900

5

~~5~~ Cygni.

20 60

20 8 + 57.2

2453

L.P.P.

4 x 5

11 05

p 1.5 var, var 2.5-9

Oct. 17, 1900 (Wednesday)

B & C 11+2
6 51 220
6 52 220

B 39K
6 49 00
6 50 00

Phot T. of Hercules W 6h.

17 54 +15.2

20 54.

Ledgered

R & above

3 00

Plotted

169.5

L & E = +.0020

7 04 00 208.9

39.4⁺

Posted

352.7

35.4⁺

28.1

74.8⁺ - 2.35⁺

173.3

05 38 205.3

32.0⁺ - 2.42⁺

350.8

38.8⁺

29.6

70.8⁺ - 2.48⁺

L & Below

Mean = - 2.58⁺

80.9

08 22 119.0

38.1⁺

265.2

28.0⁺

293.2

66.1⁺ - 2.64⁺

85.8

- 2.74⁺

7 10 12 115.4

29.6⁺

28 12 262.9

30.7⁺

2.85⁺

7 07 03⁺ 293.6

60.3⁺

5-02 22

5310.5033⁺

5310.5033⁺

42 04 41⁺ 9/2 M Time

5310.3345⁺

5310.3340

Oct. 17, 1900.

II

L & Belcher

84.0

7 19 34 115.4

26 5.0

29 4.7

31.4

29.7*

61.1* - 2.22

84.6

21 24 114.5

26 4.6

29 5.1

29.9*

30.5*

60.5* - 2.24*

- 2.23*

R & Above

mean = -2.72

352.1

26 00 25.6

172.8

205.3

34.5*

32.5*

66.0* - 2.64*

353.2

- 2.60*

7 27 44 20.2

94 42 170.3

7 23 40 206.4

5-2 22

32.0*

36.5*

68.5* - 2.75*

12 21 18^h 42^m 12^s Time.

5310.5148*

5310.5148*

5310.3345*

5310.3340

0.7803*

+ 0.1808 Diner

Oct. 17, 1900.

HH

R + Above

352.3

7 33 48 29.6

172.6

204.5

35.3^{*}31.9^{*}67.2^{*} - 2.60^{*}

353.2

- 2.60^{*}

35 42 25.3

170.8

205.8

32.1^{*}35.0^{*}67.1^{*} - 2.60^{*}

L + Below

Mean = - 2.71^{*}

262.8

38 20 294.9

835.3

113.4

32.1^{*}28.1^{*}60.2^{*} - 2.85^{*}

265.3

- 2.82^{*}

7 40 20 293.5

148 10 82.6

7 37 02^{*} 116.528.2^{*}33.9^{*}62.1^{*} - 2.78^{*}

5-2 23

12 34 40^{*} Gr. M. Time

5310.5241

5310.5241^{*}

5310.3345

5310.3345

+ 0.1896^{*}

+ 0.1901 Dimer.

Oct. 17, 1900.

IV

Lo Below

264.3

7 46 13 294.5

84.0

114.5

30.2*

29.5*

59.7* - 2.87*

264.6

- 2.82*

48 55 293.9

82.7

114.57

29.3*

33.0*

62.3* - 2.77*

RD above

mean = -2.70*

172.0

52 36 207.1

353.4

25.5

35.1*

32.1*

67.2* - 2.60*

173.0

- 2.54*

54 18 206.8

202 02 345.4

7 50 30* 25.86

5 - 222

33.0*

34.2*

68.0* - 2.57*

12 48 08* 1/2 m time.

5310.5334*

5310.5334*

5310.3345*

5310.3340

+ 0.1989

+ 0.1994

Oct. 17. 1900.

IV

R above

172.7

8 00 00

206.7

352.4

25.2

34.0^{*}32.8^{*}66.8^{*} - 261^{*}

172.5

01 17

205.5

351.2

25.7

32.9^{*}35.5^{*}68.4^{*} - 2.56^{*}- 2.52^{*}

L & Below

Mean = 2.71^{*}

82.5

04 02

116.5

264.4

293.6

34.1^{*}29.2^{*}63.3^{*} - 2.74^{*}

85.5

- 2.84^{*}

8 06 13

113.5

1132 265.4

8 02 53

295.7

27.9^{*}30.3^{*}58.2^{*} - 2.93^{*}

5 - 2 22

13 00 31 M. Time.

5310.5420^{*}5310.5420^{*}5310.3345^{*}5310.3340^{*}

+ 0.2075 Hartwig.

+ 0.2080 Diner.

Oct. 17. 1900.

VI

L & Below

23.2⁰

2 1332

113.9

265.4

293.8

30.9^{*}28.1^{*}59.3^{*} - 289^{*}

26.3

12 18

115.3

263.5

295.2

30.0^{*}31.7^{*}61.7^{*} - 2.80^{*}

R & Above

Median = 278

352.1

15 00

25.6

173.2

205.1

33.5^{*}31.9^{*}65.4^{*} - 2.66^{*}

353.2

- 2.62^{*}

2 1722

25.4

58 12 1722.4

2 1433 206.5

5-222 207.6

32.2^{*}35.2^{*}67.57^{*} - 259^{*}13 12 11^{*} 9. M. Time

For Angle = 106.6

5310.5501^{*}

Sketchet.

5310.3345

5310.5501^{*}

+ 0.2156 Hartwig.

5310.3340

+ 0.2161^{*} Dimer.

Oct. 17, 1900

VII

R & Above

3522

8 25 50

26.4

34.2^{*}

172.1

33.0^{*}

205.1

67.2^{*} - 260^{*}

352.3

- 260^{*}

27 40

26.1

33.8^{*}

172.1

33.6^{*}

205.7

67.4^{*} - 259^{*}

L & Below

262.2

Mean = 271^{*}

30 50

294.7

32.5^{*}

83.3

31.0^{*}

114.3

63.5^{*} - 273^{*}

264.0

- 272^{*}

8 33 40

294.3

30.3^{*}

118 00

25.4

28.7

8 29 30

114.7

59.0^{*} - 290^{*}

5 - 2 22

03 27 08

Sun. Time

Pos Angle = 247.1

5310.5605

Sprocket Wheel a - 2.5

5310.3347

5310.5605^{*}

B - 1.7

+ 0.2260

5310.3340

+ 0.2265^{*} Dimer.

Oct. 17, 1900.

Phot T. Nova Aquilae. & W 6h.

$$\begin{array}{r} 19 \\ 22 \\ \hline 3 \end{array} \quad \begin{array}{r} 15 \\ 45 \\ \hline 30 \end{array} \quad - 0.5$$

Spectrum monochromatic.

168.1

2 above

Ledgored

Posted.

9 12.0

212.1

< comp & dis 440"

347.3

31.2

43.9

87.9" + 197"

168.82

+ 197"

211.8

43.6"

347.6

43.3"

31.9

87.9" + 197"

R 13 below

80.0

mean = + 2.13

119.8

39.8"

261.5

36.5"

298.0

76.3" + 2.31"

80.4

+ 2.29"

9 19.6

119.2

11.6"

259.6

38.8"

38.6"

9 15.8"

298.2

77.4" + 2.27"

5-2.4"

14 134 1/2 m T.

53/0.592"

Oct. 17, 1900

Same Again

R+Below

9 23.8
81.5
118.5
260.4
300.4

37.0^{*}
40.0^{*}
77.0 + 2.28^{*}

78.7
118.8
260.4
297.0

40.1^{*}
36.6^{*}
76.7 + 2.29^{*}

L+Above

Mean = + 2.16^{*}

348.8
311
169.2
~~210~~, 211.1

42.3^{*}
41.9^{*}
84.2 + 2.07^{*}

348.3

+ 2.04^{*}

9 33.8
32.1
169.2
9 28.8^{*}
211.8

43.8^{*}
42.6^{*}
86.4 + 2.01^{*}

5 - 2.4

14 26.8^{*} 4 m. time.5310.601^{*}

Oct. 17, 1900.

Eros

W Ob.

26	30	+ 51.0
23	40	
<u>2</u>	<u>50</u>	
<u>9</u>	<u>10</u>	

Eros abandoned for tonight.

Selection of Standards

R Persei

W Ob.

27	23	+ 35.0
24	03	
<u>3</u>	<u>20</u>	
<u>8</u>	<u>40</u>	

Posted-

10 18 Selection of 12 magn made on R Persei.

Selection 12 ^{to} Magn Stand.

S Piscium

W Ob.

1	6	+ 6.8
0	16	
<u>0</u>	<u>50</u>	
<u>11</u>	<u>10</u>	

Posted

Hagen No. 14

" " 16

" " 15

" " 12

" " 13

10 47

Oct. 17, 1900.

Phot ~~★~~ R. g cito.

n OH

2 12 - 3.6

0 5-2

1 20

10 40~~Lta.~~

Ledger

Plotted

Posted,

1056.X

94.1

116.2

273.6

296.5

22.1^{*}22.9^{*}45.0^{*} - 3.51^{*}

94.4

116.4

274.1

296.8

22.0^{*}22.7^{*}44.7^{*} - 3.52^{*}

Right

Mean = 3.53^{*}

4.3

26.4

184.0

205.8

22.1^{*}21.8^{*}43.9^{*} - 3.56^{*}

3.2

- 3.54^{*}

11 04.0

26.1

22.9^{*}120.4

183.9

21.8^{*}11 00.2^{*}

205.7

44.7^{*}- 3.52^{*}5 - 2.4185.578^{*}

42.217

5310.665^{*}

Oct. 17, 1900

Same Again

Right

3.2		
1106.0	26.4	23.2 [*]
	183.3	23.2 [*]
	205.5	45.4 [*] - 3.49 [*]

3.6		-3.51 [*]
25.9	22.3 [*]	
182.6	22.3 [*]	
205.9	44.6 [*] - 3.53 [*]	

Left

Mean = 3.52

274.1		
295.6	21.5 [*]	
93.7	22.4 [*]	
116.1	43.9 [*] - 3.56 [*]	

272.5		-3.52 [*]
-------	--	--------------------

11 12.8	296.0	23.5 [*]
188	93.6	22.2 [*]
11 9.4	115.8	45.7 [*] - 3.47 [*]
5-2.4		

16 7.0 Gr. M. Tins.

5310.672^{*}

Oct. 18, 1906 (Thursday)

B & C 11 P2
7 09 0.0

B 33 V
7 06 0.0

Phot. T.

U Cephei

W Ols

24 50 + 81.1

21 15

2 35

8 25

7 23 Clouds. third no stars visible.

24 50 + 81.1

21 38

3 12

8 48

8 22 Clouds all thick & beginning to rain

Oct 19, 1900 Friday

B 8 C 1182

7 02 06.0

7 03 06.0

Phot. T. Ero2.

26 34 + 45.6

21 20

5 14

6 46

B 394

7 00 00

7 01 00

W 04

2 34 24.

-3 7.

2 32 21.

2 33 34.

-1 13.

+51 5.3

-12.6

+50 52.7

+50 55.1

-2.4

Err. 1255
1900

26 34 + 52.1

21 29

5 15

6 45

7 31

Object which is just Ero2 precede.

DM + 50° 6' 3" (8.4) by 1" 19" 4 is 1.3 S. of it

7 34

Object which is probably Ero2 follow
faint star 29 sec. 9 is 1.0 S. of it.

Comp Star = DM + 50° 6' 13" (8.4)

Comp Star follow DM + 50° 6' 13" (8.4) by

8.5 sec. 8 is 8.2 South of it. = magn. = 10. A

Oct. 19, 1900.

Eve. with star α

L8a.

Ledgered

Posted

7 54.8

75.0 (comp. & dis.)

122.9

47.9^{*}

253.56

51.1^{*}

303.8

99.0^{*} + 1.68^{*}

174.5

+ 169^{*}

124.2

49.7^{*}

254.9

48.7^{*}

303.6

98.4^{*} + 170^{*}

R 013.

Mean = + 1.56

343.83

35.9

52.5^{*}

161.7

55.9^{*}

217.6

108.4^{*} + 1.45^{*}

3403

+ 1.42^{*}

8 04.0

37.4

57.1^{*}

162.2

53.8^{*}

7 59.4

216.0

110.9^{*} + 140^{*}

5 - 2.1

12 57.4^{*} Gr. M. Time.5312.540^{*}

Oct. 19, 1900.

Bror. with star a again.

R & Below

A 07.5	342.7	53.0 [*]
	35.7	56.7 [*]
	161.1	
	217.8	109.7 [*] + 1.42 [*]

	341.4	+ 1.43 [*]
	37.1	55.7 [*]
	162.5	53.3 [*]
	216.1	109.0 [*] + 1.44 [*]

L & Above.

Mean = + 1.54

	255.0	
	302.9	49.9 [*]
	72.3	52.1 [*]
	124.4	100.0 [*] + 1.66 [*]

	254.5	+ 1.66 [*]
--	-------	---------------------

P 15.1	304.8	50.3 [*]
P 11.3	74.3	49.8 [*]
S - 2.1	127.1	100.1 [*] + 1.65 [*]

13 9.2^h 42 m Time.5312.540^{*}

Oct. 19, 1900.

Eros comp. with Star 6

Left

Legereds

Postid.

8 19.8

233.8

Error dis.

87.5^x

326.2

83.8^x

50.0

171.3^x - 0.16^x

146.6

- 0.17^x

231.2

84.6^x

327.1

85.9^x

53.0

170.5^x - 0.18^x

Right.

Mean 2 - 0.30^x

57.8

139.1

81.3^x

240.0

76.8^x

316.8

158.1^x - 0.42^x

60.7

- 0.42^x

- 8 29.8

138.9

78.2^x

239.1

79.0^x

8 24.8

318.1

157.2^x - 0.43^x

5 - 2.1

13 22.7^x Gr. M. Time -5312.558^x

Oct. 19, 1900

Eros with star again.

Right

δ 32.8
 60.7
 140.4
 240.7
 321.2

79.7⁺
 80.5⁺
 160.2 - 0.38⁺

61.3
 140.2
 240.1
 318.6

-0.40⁺

78.9⁺
 78.5⁺
 157.4⁺ - 0.43⁺

Left

Mean = -0.26⁺

324.5
 52.3
 145.6
 239.0

87.8⁺
 87.4⁺
 175.2⁺ - 0.09⁺

326.8

-0.11⁺

δ 40.3
 52.9
 836.6
 144.1
 5-2.1
 232.9
 1334.5
 5912.5-66⁺
 9 0 2

86.1⁺
 86.8⁺
 172.9⁺ - 0.13⁺

Eros now precede $\delta m + 50^{\circ} 61.3 (\pm .4)$ by 1^m
 24 sec. & is in the same declination.
 Eros now follows faint star by 24 sec
 and is δ 1 north of it. Hence object observed
 above for Eros is Eros.

Oct. 19, 1900

Standards
 Selection of ~~camp~~ near
 S. Piscum W Ob.

25 6 + 6.8

23 14

7521008

Posted.

Region examined, sky a little haze
 but sequence seems to be as good
 9.25 as can be made same stars held
 as were selected on the last night

U. Arctici.

26 5.8

+ 12.7

23 3.8

320800

Posted.

Hagen No. 15

17

21

22

12 or 24

10 00

C. S. = No. 5

Troubled by haze in selection
 Selection to be carefully looked at
 on a clearer night
 cloudy

Oct 19, 1900.

 Posted
 To here
 W 6 hr

 R. Lacertae
 22 30
 26 08
 1 30

+ 41.59

Too cloudy for Lacertae.

Phot R. 0 cts.

W 6 hr.

 2 12 - 3.6
 0 12
 2 00
 10 00

10 55 clouds thick. 0 not visible.

Oct 20, 1900 (Saturday)

B 8 C 1182
7 10 54.6

B 39 X
7 09 0.0

Phot T.

Eroz.

WOL

26 44 +52.1

21 24

5 20

6 40

2 33 34.5 +50 53.1

- 1 19.0

2 32 15.5

- 1 39.0

(Eroz) 2 30 36.5

(9.1) 2 30 29.0

+7.5

- 1 1.3

50 53.8

9.9

50 43.9

50 47.4

-3.5

2 32 15.5

- 1 5.0

2 31 10.5

2 31 12.0

- 1.5

50 53.8

+17.4

51 11.2 Eroz

50 53.1 (9.0)

+18.1

Comp Star = 2m + 50° 60' (9.0)

8.00 Eroz follows other 1.5 m + is 2.8 South of it.

Oct. 20, 1900

Eve with (9.0)

Above

Bedgered
Pated.

A 08.8

332.6 < comb + dis.

48.6

76.0^{*}

149.1

78.7^{*}

227.8

154.7^{*}+0.48^{*}

330.7

+0.52^{*}

47.4

76.7^{*}

151.8

74.4^{*}

226.2

151.1^{*}+0.55^{*}

Below

Mean = +0.61^{*}

244.8

314.6

71.8^{*}

60.6

75.6^{*}

136.2

147.4^{*}+0.63^{*}

244.0

+0.70^{*}

8 15.0

314.9

70.9^{*}8 11.9^{*}

66.1

69.2^{*}

5-9.0

135.3

140.1^{*}+0.77^{*}13 9.9^{*} m Time.5318.549^{*}

Oct. 20, 1900.

Below

8 16.6	244.0	
	315.4	71.4 [*]
	62.0	73.7 [*]
	135.7	145.1 [*] + 0.67 [*]
	243.2	+ 0.71 [*]
	314.5	71.3 [*]
	64.7	69.8 [*]
	134.5	14.1 [†] + 0.95 [*]

Above

Mean = + 0.64^{*}

153.1	
225.7	72.6 [*]
331.1	76.4 [*]
487.5	149.0 [*] + 0.59

151.1 + 0.57^{*}

8 22.4	227.6	76.5 [*]
8 19.5	331.7	73.5 [*]
5 -2.0	45.2	150.0 [†] + 0.58
13 17.5	32.0	

8 > 8. Error now follows adjacent star as seen
5312. 554[†] is 2'.4 South of it.

The object observed above for error
is Eros. It has also passed another
faint star in Dec. going north.

Oct. 20, 1900.

+ 32 crve now follows DM + 56° 599 (8.5) by
32.5 sec. or is 11.5 North of it.

~~Wt~~

S. Piscium

W. 6h

25 6 + 6.8

22 40

2 26

Ported.

9 34

853 Stars selected for S. Piscium seen to
be as good as the selection can be
made.

comp. Star = Hagen No. 10.

14th Magn.

- (1) Follows No 15 by 16.5 sec & 7.5 South of it
(2) Precedes No 15 by 0.5 sec & 3.0 South of it.
(3) " " 15 by 4.5 sec & is 2.3 South of it
(4) " " 15 by 34.5 sec & is 2.3 North of it.
(5) Follows No 15 by 17.5 sec & is 3.8 South of it

S. Cassiopeia

W. 6h

25 10 + 72.1

23 27

1 43

Ported.

10 17

10 07 Preliminary selection of 12th magn. stand. made

Oct 20, 1900

U Arietis

W Ob.

2 58 + 12.7

0 13

2 45

2 15

Posted.

Hagen No 21

10 38

" " 22

" " 19

" " 17

" " 15

U Tauri.

W Ob.

4 14 4 + 17.5

0 5.8

3 5.0

8 10

Posted.

10 56 Prov. Selection of 12 ~~the~~ magn mark

Phot R.

o ceto

W 66.

2 12 - 3.6

1 02

1 10

10 50

Oct. 20, 1900

Phot R. 0 Ceti W O6Left
28.2Lodgends
Plotted.
Ported1107.0 113.4
267.4
292.525.2^{*}
25.1^{*}
50.3^{*} - 3.26^{*}28.3
111.9
267.4
293.2- 3.28^{*}
23.6^{*}
25.8^{*}
49.4^{*} - 3.30^{*}Right
238.2Mean = 3.28^{*}23.1
177.9
202.224.9^{*}
24.3^{*}
49.2^{*} - 3.31^{*}357.6
23.2- 3.29^{*}1112.0
119.5^{*} 177.9
5-20 202.425.6^{*}
24.5^{*}
50.1^{*} - 3.27^{*}167.5^{*} 4. M. Time.
5313.672^{*}

Oct 20, 1900
 0 into again.

Right.

358.2

11 13.7

23.2

25.0^{*}

178.4

238^{*}

202.2

48.8^{*} - 3.32^{*}

358.2

22.4

24.2^{*}

- 3.32^{*}

178.0

246^{*}

202.6

48.8^{*} - 3.32^{*}

Left.

Mean = 3.32^{*}

268.4

293.0

246^{*}

88.2

24.5^{*}

112.7

49.1^{*} - 3.31^{*}

268.7

- 3.30^{*}

11 19.0

292.9

25.2^{*}

88.4

243^{*}

11 16.4

112.7

49.5^{*} - 3.29^{*}

5 - 2.0

16 14.4 yr, m. time

5313.676

Oct. 22, 1900 (Monday)

B+C 118.2
 7 04.5 46.5
 7 06 46.6

13 394
 7. 050.0
 7 06 0.0

copied in R. 120.

see B. 120.

1900ph3a-proj.1374N