KG
11366
v. 369

R. 11.8.

July 9, 1900

to

July 9, 1900 (Monday)

α Ophiuchi

17 29 +12.6
15 20
2 9
9 51

7 40 Clouds

8.10 Clouds

Star following α Ophiuchi 1m 28secs about 4'.0 North as normal brightness.

PhotT. χ Cygni. W Obs.

19 45 +32.6
15 45
4 00
8 00

9.5 Caps used.

see next page

July 9, 1900.

χ Cygni

Ledgered

Plotted.

Above
42.1
8 31.0 80.1 38.0×
225.2 32.7×
257.9 70.7× −2.48×

44.4 −2.51×
77.4 33.0×
225.1 36.0×
261.1 69.0× −2.54×

Below Mean = −2.32
308.7
353.2 44.5×
133.7 38.1×
171.8 82.6× −2.12×

312.8 −214×
8 38.4 350.0 37.2×
9.4× 130.2 clouds 44.2×
8 34.7× 174.4 81.4× −2.15×
5 − 3.2
13 31.5× Gr. M. Time.
5210.564×

July 9, 1900

α Cygni again

Clouds

Below
309.6
8 42.0 353.5 43.9 x
133.5 37.4 x
170.9 81.3 x − 2.16 x

− 2.16 x
312.0
350.4 38.4 x
130.0 43.0 x
173.0 81.4 x − 2.15 x
Above Mean = − 2.32
225.0 clouds
261.4 36.4 x
45.5 33.0 x
78.5 69.4 x − 2.53 x

2.49 x
225.3
8 51.4 259.6 34.3
93.4 42.8 37.5 x
8 46.7 x 80.3 71.8 x − 2.45 x
5 − 3.2 Final Mean = − 2.32
13 43.5 Gr. M.T. Position Angle Ver. A. 151.3
5 210.5 72 x Sprocket Wheel = 3.58 = 2.5
9 00 Sky now practically covered with clouds.

July 9, 1900.

9 14 Sky all thickly cloudy

9 40 Cloudy still.

ζ Herculis

17 54 +15.2

19 10

8 44

11 16

abandoned

10 00 Cloudy

Supposed Nova found on photographic plate.

19 15 −0.5

17 40

1 35

10.25

10 20 clouds

19 15 −0.5

18 05

1 10

10 50

10 42 cloudy

July 9, 1900.

18 26  20.0
28  58.1

11 15 Clouds.

19 15 − 0.5
18 52
0 23
11 37

18 54  28.2
55. 09.5

Pos. Zero 164.5
45.0
209.5

Spectrum quite wholly mono-chromatic: Possibly a ~~very~~ a slight extension to continuous spectrum although this is not absolutely certain.

July 9 1900.

19 09 03.8 -.2
09 13.3 -.2
09 24.6
10 15.6

~~19 10 29.9~~
~~10 38.7~~

19 ~~11 23.1~~
~~11 31.8~~ +.1
~~11 43.6~~

19 12 00.6
12 09.0 -.3
12 21.9
13 11.2

19 13 29.0 +.1
13 32.0 ∓ -.2 ?
13 35.0
14 39.5 -.3

July 9, 1900

19 15 04.9
15 17.9 -.1
15 25.6
16 15.0 +.1

~~19 16 31.[illegible]~~

19 16 32.6
19 17 00.0 -.2
17 13.5
18 01.9

~~19 18 29.0 -.1~~
~~18 36.0 -.1~~

19 19 05.1
19 12.2 -.1
19 26.0
20 14.6 +.1

19 21 04.6 -.2
21 10.8
21 25.0
22 13.0

July 9, 1900.

19 22 34.1
22 40.6 -.1
22 55.0
23 43.0 -.1

~~19 24~~
19 25 17.9 -1
25 24.0 -.2
25 38.5 +.1
26 26.0

~~19 45.5 -.1~~
~~32.0~~

19 27 08.0
27 15.0
27 28.5
28 17.4

~~19 28 33.0~~
~~28 39.5~~

July 9,

Posted.

| | | |
|---|---|---|
| 19 | 29 | 12.0 |
| | 29 | 17.5 −.1 |
| | 29 | 32.5 |
| | 30 | 19.6 |

Order in preceding transits – 8.7; 8.7; nova; nova: both in northern half of square.

Nova quite faint in moonlight. magn. as near as can be estimated perhaps 12 to 12.5 Transits somewhat difficult on account of bright moonlight & faintness of nova.
Allowing for moonlight, magn. perhaps better 11.5 to 12.0
Comp. Star used in above transits was B.D. −0° 3705 (A) K

| BD C 1182 | Bond 394 |
|---|---|
| 22 30 15.1 | 22 27 00.0 |
| 22 31 15.0 | 22 28 00.9 |

| B 236 | Frodl 1327 |
|---|---|
| 5 56 45.0 | 5 57 01.0 |
| 5 57 45.0 | 5 58 01.0 |

July 10, 1900. (Tuesday)

Phot. γ Cygni. W Obs.

20 46 +34.1
15 16
5 30
6 30

20 40 $+33.\overset{4}{5}$
~~2~~15 23
5 17
6 43

20 40 +33 4
15 25
5 15
6 45

15 29 53.5
31 00.6

"15 32 31.0
33 30.5
33 58.8

July 10, 1900.

I

γ Cygni.

| | | | |
|---|---|---|---|
| | R & above | | |
| | 43.0 <var dis | | |
| 8 21 40 | 80.4 | 37.4 | |
| | 225.6 | 33.0 | |
| | 258.6 | 70.4 | −2.49 |
| | 450 | | −2.50 |
| 24 43 | 78.8 | 33.8 | |
| | 224.9 | 35.8 | |
| | 260.7 | 69.6 | −2.52 |
| | L & Below | | −2.27 |
| | 308.4 | | |
| 27 00 | 356.0 | 47.6 | |
| | 131.0 | 40.3 | |
| | 171.3 | 87.9 | 1.97 |
| | 312.6 | | −2.04 |
| 8 29 20 | 351.7 | 39.1 | |
| | 131.0 | 43.5 | |
| | 174.5 | 82.6 | 2.12 |

Reject Above group

Twilight very strong and in conjunction with moonlight makes it impossible to get a satisfactory focus and makes stars also very faint

over

July 10, 1900

In the three following groups twilight less strong: images ~~II~~ brighter and focus better adjusted

L & Below

I

308.5
8 31 17 356.0 47.5 Ledgered
131.3 41.5
172.8 89.0 -1.94

312.4 -2.03
33 38 351.7 39.3
129.8 43.2
173.0 82.5 -2.12

R + Above Mean = -2.18

222.0
36 03 262.8 40.8
44.5 35.3
79.8 76.1 -2.31

224.4 -2.32
8 . 38 32 260.4 36.0
19 30 42.4 39.8
8 34 52 82.2 75.8 -2.32
5 -3 30
13 31 22 Gr. M. Time.

5211.5635
5209.5819
+1.9816

July 10, 1900

R & Above ~~IIII~~

222.9 $^{x}$ ~~II~~

8 45 12 261.8 38.9

44.8 35.2$^{x}$

80.0 74.1$^{x}$ − 2.37$^{x}$

225.4 −2.36$^{x}$

4645 260.5 35.1$^{x}$

42.1 39.9$^{x}$

82.0 75.0$^{x}$ − 2.35$^{x}$

Lt Below mean = −2.20$^{x}$

130.5

4847 174.0 43.5$^{x}$

312.3 40.0$^{x}$

352.3 83.5$^{x}$ − 2.09$^{x}$

130.8 −2.05$^{x}$

8 51 05 173.6 42.8$^{x}$

19 49 310.8 43.7$^{x}$

8 47 57 354.5 86.5$^{x}$ − 2.01$^{x}$

5 − 3 30

13 44 27. Gr M. T.

0.211.5725$^{x}$

0209.0819$^{x}$

+1.9906$^{x}$

July 10, 1900

~~III~~

L & Below                III

133.2
8 55 23  173.3    40.1
312.6    40.4
353.0    80.5 − 2.18

130.7    − 2.12
57 53  173.9    43.2
311.1    42.0
353.1    85.2 − 2.05

R & Above    mean = − 2.23

42.2
9 01 35  80.5    38.3
225.3    37.4
262.7    75.7 − 2.32

43.3    − 2.34
9 06 35  79.9    36.6
241 26  224.1    38.4
9 00 22  267.8    75.0 − 2.35
5 − 3 − 30
13 56 52 Gr. M. Time  Pos. Angle 133.1
5211.5811    Sprocket Wheel − 2.5 B
5209.5819    " " − 1.5 C
+1.9992

July 19/1900.

U Virginis

12 40 +6.8
16 45
4 05

9 40 moon too bright for Standards.

Phot R. M. P. 441 W Obs

27 31   3 31   +6 28
17 11   17 11
10 20   13 40
~~1 40~~   12 00
R & Below   1 40

1 2 5 9 < varolis

9 56.0   194.0   68.1ˣ
307.2   62.0ˣ
369.2   130.1ˣ − 0.98

12 5.0   −0.93ˣ

19 2.8   67.8ˣ
30 4.7   66.9ˣ
371.6   134.7ˣ − 0.88

33.0 L & Above   mean = −0.90ˣ

102.4   69.4ˣ
216.0   66.1ˣ
282.1   135.5ˣ − 0.87

343   −0.88

669ˣ

10040   101.2   67.6ˣ
12 0.0   214.6   134.5ˣ − 0.89

10 00.0   282.2   5 211.622ˣ
5 3.5
14 56.5 Gr M Time

Ledgered.
Plotted.

July 10, 1900.

Same Again.

L O Above

34.1

10 06.2 103.8 69.7

215.7 66.9

282.6 136.6 − 0.84

−0.80

32.6

101.1 68.5

212.2 72.4

284.6 140.9 − 0.76

R O Below Mean = −0.81

304.6

311.8 67.2

124.7 68.1

192.8 135.3 − 0.87

303.9 −0.82

10 14.6 14.4 70.5

20.8 124.9 69.3

10 10.4 194.2 139.8 − 0.78

5 − 3.5

15 6.9 G. M. Time - Final Mean − 0.86

5211.6 30

Posted.

July 10, 1900

B&C 1182
10 49 30.1
10 50 30.2

B 394
10 46 00.0
10 47 0.0

B&C 1182
11 10 32.5
11 11 32.5

B. 394
11 07 00
11 08 00

B&C 1182
21 16 40.5
21 17 40.5
21 18 40.5

B 394
21 13 00
21 14 00
21 15 0.0

B 236
4 45 22.2
4 46 22.2

F. 1327
4 46 01.0
4 47 01.0

July 11 1900 (Wednesday)

Bond 39K   BD C 1182

~~BD C 1182~~

7 40 0.0   7 43 48.7
7 41 0.0   7 44 48.7

Phot T.   ζ Herculis.   W Obs.

17 54 + 15.2
15 24
2 30
9 30

8 00 clouds

17 52 + 15.4
15 38
2 14
9 46

17 54 + 16.8
15 41
2 13
9 47

8 15 clouds

17 52 + 15.2

July 11, 1900.

I

ζ Herculis

L & above

1333 <vardis    Ledgered
8 32 06 170.4    37.1 ×    Plotted.
315.5    33.7 ×
349.2    70.8 ×    −2.48 ×

134.5    −2.49 ×
8 35 10 169.4    34.9 ×
314.3    35.3 ×
349.6    70.2 × − 2.50 ×

R & B below    Mean = −2.58

447
8 39 00 79.0    34.3 ×
226.1    31.8 ×
257.9    66.1 × − 2.64 ×

46.9    −2.68 ×
8 42 14 78.5    31.6 ×
148 30 2 258    32.4 ×
8 37 08 258.2    64.0 ×    −2.71 ×
5 − 3 49
1333 19 Gr. M. Time

5212.5648 ×    5212.5648 ×
5210.5097    5210.5088
+2.0551 × Hartwig    +2.0560 Diner.

July 11, 1900

II

R & Below

46.0
8 47 45 77.1 31.1*
22 7.7 29.6*
257.3 60.7* -2.84*

47.4 -2.80*
8 50 25 77.5 30.1*
22 6.6 32.2*
258.8 62.3* -2.77*

L & Above Mean = -2.63*

313.1
8 53 10 349.1 36.0*
135.6 34.5*
170.1 70.5* -2.49*

314.6 2.46*
8 55 25 349.0 34.4*
206 45 134.4 37.5*
8 51 41 *171.9 71.9* -2.44*
5 -3 -49

13 47 52* Gr. M. Time
5212.5749* 5212.5749*
5210.5097* 5210.5088*
+2.0652* +2.0661*

July 11, 1900.

III

L & Above

314.5
90035 349.7    35.2x
134.3    34.9x
169.2    70.1x − 2.50x.

314.2    −2.48x
0306 349.4    35.2x
1349    35.9x
170.8    71.1x − 2.47x

R & Below    Mean = −2.63

226.8
0348 258.8    32.0x
47.1    30.1x
77.2    62.1x − 2.78x.

−2.78x

227.4
91050 258.6    31.2x
20 19 46.0    30.8x
9 05 05x 76.8    62.0x − 2.79x
5 − 3 − ~~49~~ 50
1401 18x Gr. M. Time.
5212.5841    5212.5841
5210.5097    5210.5088
+2.0744x    +2.0753

July 11, 1900.

IV

R&Below

227.1

9 15 30 258.7 31.6*

45.9 31.3*

77.2 62.9* -2.75*

227.5 -2.80*

18 04 257.5 30.0*

46.7 30.1*

76.8 60.1* 286*

L&Above

134.6 mean = -2.69

2229 169.2 34.6*

315.2 34.0*

349.2 68.6* -2.55*

135.2 -2.58*

9 26 39 169.0 33.8*

~~8 2 42~~ 315.6 32.8

9 20 40* 348.4 66.6 -2.62*

5 - 3 50

14 16 50* Clouds

5212.0950*

5210.5097*

+2.0853*

Pos Angle 244.5

Sprocket Wheel = -254 -1.8

5212.0950*

5210.0088*

+2.0862*

July 11, 1900.

Saturn

18 40 −21.8
17 10
1 30
10 30

18 00 − 22.5
17 20
0 40
11 20

9 50 clouds thick

18 00 − 22.5
17 30
0 30
11 30

10 00 cloudy

10 10 Sky now all thickly cloudy no chance for anything farther.

| BAC 1182 | | | B 394 | | |
|---|---|---|---|---|---|
| 10 | 13 | 50.0 | 10 | 10 | 0.0 |
| 10 | 14 | 50.0 | 10 | 11 | 0.0 |

Posted

July 11, 1900.

| | |
|---|---|
| B&O 1182 | B. 394 |
| 21 14 56.5 | 21 11 0.0 |
| 21 15 56.5 | 21 12 0.0 |
| | |
| B. 236 | F. 1327 |
| 4 48 00.8 | 4 49 01.0 |
| 4 49 00.9 | 4 50 01.0 |

July 12/1900

Posted.

| B&C 1182 | B. 394 |
|---|---|
| 21 10 09.5 | 21 06 00.0 |
| 21 11 09.5 | 21 07 00.0 |

Bond 236 ran down & reset.

| Bond 236 | Frodsh 1327 |
|---|---|
| 4 49 28.0 | 4 49 01.0 |
| 4 51 28.0 | 4 51 01.0 |
| 4 53 28.0 | 4 53 01.0 |

July 13, 1900 (Friday)

| B&C 1182 | B 394 |
|---|---|
| 7 39 08.9 | 7 35 00 |
| 7 40 08.9 | 7 36 00 |

γ Cygni
20 40 +33.4
15 30
5 10
6 50

7 30 clouds

8 00 clouds

Phot. T. M. Obs

see next page

8 10 clouds

July 13, 1900.

Y Cygni

R & above I

42.8 < var. dis. Ledgered

8 18 22 81.6 38.8

224.8 35.0.

259.8 73.8 - 2.38

45.0 - 2.38

21 22 80.3 35.3

223.6 38.2

261.8 73.5 - 2.39

L & Below Mean = - 2.22

307.9

24 38 354.0 46.1

131.7 40.6

172.3 86.7 - 2.00

313.0 - 2.06

8 26 15 351.9 38.9

9049 131.8 43.4

8 22 42 175.2 82.3 - 2.13

5 - 4 9

13 18 33 = Gr. M. Time.

5214.5546

5212.5812

+1.9734

July 13, 1900

II

Lt Below
3090
8 30 00 354.1 45.1 x
131.2 42.2 x
173.4 87.3 x - 1.99 x

313.7 - 2.08 x
32 27 357.6 37.9 x
131.6 43.0 x
175.6 80.9 x - 2.17 x

R Above Mean = - 2.21
224.1
34 46 262.7 38.6 x
42.9 37.8 x
80.7 76.4 x - 2.30 x

224.0 - 2.34
8 36 27 259.6 35.6 x
42.2 38.0 x
13 40 x 80.2 73.6 x - 2.39 x
8 33 25 x
5 - 4 09 x clouds coming
13 29 16 Gr. M. Time Position Angle = 139.8
5 2 14.5 20 x Sprocket Wheel = - 2591.5
5 2 12.58.2
8 41.98 08 Too cloudy in region for standards at this time.

July 13, 1900

Phot T. χ Cygni. W Obs

19 45 + 32.6
16 25
3 20
8 40

R & above

2 23.7
8.49.0 257.2 — $33.5^{x}$
44.1 — $35.5^{x}$
79.6 — $69.0^{x}$ $-2.54^{x}$

clouds

225.3 — $-2.53^{x}$
259.2 — $33.9^{x}$
2.9
~~4[illegible]~~ clouds — $35.6^{x}$
78.5 stars faint. — $69.5^{x}$ $-2.52^{+}$

L & Below — mean = $-2.34^{x}$

130.7
174.0 — $43.3^{x}$
313.7 — $37.2^{x}$
350.9 — $80.5^{x}$ $-2.18^{x}$

132.4 — $-2.15^{x}$
9 00.0 173.1 — $40.7^{x}$
109.0 310.6 — $41.7^{x}$
$8\ 54.5^{x}$ 353.3 — $82.4^{x}$ $-2.12^{+}$
5 - 4.2
$13\ 50.3^{+}$ Gr. M. Time -
5214.576

July 13, 1900
Same Again.

L ⊙ Below II

| | | | |
|---|---|---|---|
| | 131.0 | | |
| 9 03.0 | 174.0 | 43.0 x | |
| | 314.2 | 37.3 x | |
| | 351.5 | 80.3 x | -2.19 x |
| | 134.2 | | -2.18 x |
| | 171.2 | 37.0 x | |
| | 310.1 | 35.5 x | |
| | 353.6 | 80.5 x | -2.18 x |

R ⊙ Above Mean = -2.29 x

| | | | |
|---|---|---|---|
| | 43.3 | | |
| | 80.0 | 36.7 x | |
| | 223.5 | 36.6 x | |
| | 260.1 | 73.3 x | -2.40 x |
| | 43.4 | | -2.40 x |
| 9 10.0 | 81.0 | 37.6 x | |
| 9 6.5 x | 225.5 | 36.1 x | |
| 5 -4.2 | 261.6 | 73.7 x | -2.39 x |

14 02.3 x Gr. M. Time.
5214.585 x

July 13, 1900

~~III~~

R & above

43.5
9 14.0 80.6 37.1
224.1 34.8
258.9 71.9 -2.44

43.6 -2.42
80.3 36.7
224.4 36.2
260.6 72.9 -2.41

L & Below Mean = -2.28

310.2
352.7 42.5
133.0 38.8
171.8 81.3 -2.16

312.2 -2.15
9 22.0 352.5 40.3
9 18.0 131.4 41.6
5-42 173.0 81.9 -2.14
14 13.8 Gr. M. Time Final Mean = -2.30
5214.593

Position Angle 341.2
Sprocket Wheel = -.358 -2.5

Slightly delayed by passing clouds at times in above settings sky partly clear however when settings were made

July 13, 1900.
Meas of 12th magn Standards.
Phot T. U Virginis W Obs.
12 40 +6.8
17 10
4. 30
Hagen No 17 with No 9
L & above
218.9 Ledgered
9 51.4 265.6 46.7x
38.4 37.9x
76.3 84.6x +2.06x

226.1 +2.06x
265.3 39.2x
36.2 45.8x
82.0 85.0x +2.05x
R & Below
136.3 Mean = +2.04x
173.3 37.0x
307.2 46.6x
353.8 83.6x +2.09x

131.7 +2.02x
10 03.4 176.8 45.1x
114.8 306.4 43.4x
9 57.4x 349.8 88.5x +1.95x
5 -4.2x Region so low moon so bright
14 53.2x that it is impossible to continue
5214.620x on this region at least.

July 13, 1900.

S Virginis.

13 24 - 5.5
17 56
4 26

Region too low, moon too bright for standards in this region to-night.

R R Librae
15 45 - 16.3
17 55
2 10

10 40 moon too bright.

Saturn
18 00 - 22.5
18 19
0 19

(Pos. Angle 48.5)

3.0
3.0 Transits of supposed
10 55 3.0 Iapetus with reference
2.9 ~~with~~ to adjacent star.
2.9

Comp. Star = SD - 22° 4555 (9.0).

July 13, 1900

Phot T. Iapetus W Cb.

L & Above Ledgered
307.6 comp * dis. Plotted
11 17.8 357.6 50.0x
129.6 45.1x
174.7 95.1x + 1.78x

310.0 + 1.83x
355.2 45.2x
129.2 45.9x
175.1 91.1x + 188x
R & Below
220.1 Mean = + 1.86x
264.0 43.9x
39.8 44.3x
84.1 88.2x + 1.96x

219.~~4~~ 2 + 1.90x
11 25.0 264.8 45.6x
42.8x 38.4 47.6x
11 21.4x 86.0 93.2x + 183x
5 -4.2
16 17.2 Gr.M.Turne.
5214.678x

July 13, 1900

Iapetus Again.

R & Below

219.5

11 28.0 265.7 46.2ˣ

38.1 44.2ˣ

82.3 90.4ˣ + 1.90ˣ

219.2 + 1.88ˣ

265.6 46.4ˣ

39.0 46.0ˣ

85.0 92.4ˣ + 180ˣ

L & Above Mean = +1.79ˣ

127.4

178.4 51.0ˣ

308.6 46.3ˣ

354.9 97.3ˣ + 1.72ˣ

127.6 +1.70ˣ

11 37.4 177.8 50.2ˣ

65.4ˣ 308.6 49.2ˣ

11 32.7ˣ 357.8 99.4ˣ + 1.67ˣ

5 -4.2

16 28.5 Gr. M Time. Final Mean = +1.82

5214.686ˣ

July 13, 1900

Phot T. Titan. W Ob.

Ledgered
Plotted

L & above

23.6 ∠ Titan dis.

11 41.2 107.6 78.0x
200.2 85.6x
285.8 163.6x − 0.31x

18.2 − 0.30x
104.3 86.1x
204.2 77.9x
282.1 164.0x − 0.30x

R & Below Mean = − 0.22x

292.2
15.1 82.9x
108.0 89.9x
197.9 172.8x − 0.13x

287.1 − 0.14x
11 49.6 17.8 90.7x
110.8 80.6x
11 45.4x 191.4 171.3x − 0.16x
5 − 4.2x
16 41.2x Gr. M. time
5214.695x

July 13, 1910

Titan Again.

R & Below

290.0
11 51.4 13.0 83.0$^x$
107.9 90.1$^x$
198.0 173.1$^x$ -0.13$^x$

-0.11$^x$
285.9
17.1 91.2$^x$
109.5 83.7$^x$
193.2 174.9$^x$ -0.09$^x$

L & Above Mean = -0.20$^x$
204.6
282.7 78.1$^x$
18.8 84.0$^x$
102.8 162.1$^x$ -0.34$^x$

200.4 -0.30$^x$
11 58.2 285.9 85.5$^x$
9.6$^x$ 20.5 80.6$^x$
11 54.8 101.1 160.1$^x$ - 0.26$^x$
5 -4.2$^x$

16 50.6$^x$ Gr. M. Time. Final Mean = -0.21
5 21 4.702$^x$

July 13, 1900.

2.4
12 10 2.4
2.3
2.4
2.3

From the above transits as well as position angle & distance the object above measured was Iapetus then Titan next.

R Ursae Min.
16 34 +72.9
19 54
3 20

Phot T. & Obs.

see next page.

July 13, 1900

R Ursae Min.

R & above — Ledgered

38.2 (comp * dis. Plotted

1237.0 84.1 — ~~4~~5.9 x

217.2 — 51.8 x

269.0 — 97.7 x +1.71 x

36.1 — +1.71 x

86.4 — 50.3 x

219.6 — 47.6 x

267.2 — 97.9 x +1.71 x

L & Below — Mean = + 1.62 x

305.3

357.9 — 52.6 x

128.3 — 52.2 x

180.5 — 104.8 x +1.54 x

304.9 — +1.54 x

12 43.0 358.1 — 53.2 x

12 40.0 127.8 — 51.2 x

5 – 42 179.0 — 104.4 x +1.55 x

17 35.8 Gr. M.T.

5214.733 x

July 13, 1900

Left & Below
306.9
12 46.0 357.1 50.2*
126.6 52.4*
179.0 102.6* + 1.59*

306.8 + 1.59*
356.9 50.1*
127.2 52.6*
179.8 102.7* + 1.59*

R & Above Mean = + 1.62
8.2
21~~6.8~~
267.6 clouds 49.4*
38.0 stars gone 49.3*
87.3 98.7* + 1.69*

216.3 + 1.66*
12 59.0 267.8 51.5*
105.0 36.3 49.5*
12 52.5* 85.8 101.0* + 1.63*
ε - 4.2 Final Mean = + 1.62
17 48.3 Gr. M. T. Poz. Angle 108.3
5214.742* Sprocket Wheel. = 55.8 - 4.7

July 13, 1900.

B & C 1182
23 12 08.2
23 13 08.2

B 394 Posted.
23 08 00
23 09 0.0

Bond 236.
6 54 10.9
6 55 10.8

Frodsh 1327
6 54 01.0
6 55 01.0

July 14, 1900 (Saturday)

B&C 1180 B.394
7 39 07.6 7 35 0.0
7 40 07.6 7 36 0.0

Phot T. ζ Herculis W Obs.
17 54 +16.8
15 30
2 24
9 36 I

L & Above
135.2 Ledgered
& 14 36 169.5 34.3ˣ Plotted.
315.3 33.0ˣ
348.3 67.3ˣ −2.60ˣ
135.2
17 10 167.8 32.6ˣ −2.62ˣ
314.9 33.4ˣ
348.3 66.0ˣ −2.64ˣ
A & Below Mean = −2.72ˣ
45.9
21 15 76.4 30.5ˣ 5215.5522
228.0 30.5ˣ ˣ 5214.5017
258.5 61.0ˣ −2.82 +1.0505 Driver
46.2
8 26 13 77.2 31.0ˣ 2.83ˣ
77 1.42 27.8 29.5ˣ
8 19 18ˣ 247.3 60.5ˣ −2.84ˣ 5215.5522
5 − 4 08 5214.5024
13 15 10 Gr M Time Hartwig +1.0498ˣ

July 14, 1900.

II

Rt Below

47.4
8 2728 76.1 28.7
226.3 32.5
258.8 61.2 − 2.81

45.9 − 2.83
3043 77.4 31.5
228.0 28.8
256.8 60.3 − 2.85

Lt Above Mean = − 2.72

134.9
3500 169.5 34.6
316.2 31.6
347.8 66.2 − 2.64

136.0 − 2.62
3745 168.2 32.2
13056 314.0 34.6
8 3244 348.6 66.8 = 2.61
5 − 4 − 08
13 28 36 Gr. M.T. Poz. Angle 258.4
5215.5615 Sprocket Wheel. = 259 = 1.8
5214.5024 5215.5615
+1.0591 5214.5017
+1.0598

July 14, 1900.

U Virginis.

12 40 +6.8
16 26
3 46
~~8 14~~

S Virginis:

13 24 -5.5
16 34
3 10
~~9 50~~

9 00 Light cloud growing denser all over this region Impossible to measure standards
clouds growing consideratly thick in western half of sky

R R Librae.

15 45 -16.3
16 50
1 05

10 10 clouds

July 14, 1900.

Meas of 12th magn Standards
R K Lyrae
Hagen No. 18 with Mr

L& Above

37.5 < comp x dis    Led given

9 45.0 86.8    49.3*
219.8    45.4*
265.2    94.7    + 1.79*

+ 1.84

39.0
84.3    45.3*
220.9    45.8*
266.7    91.1*    + 1.88*

R& Below    Mean = + 1.70*

305.5
358.3    52.8*
126.7    50.7*
177.4    103.5*    + 1.57*

304.5    + 1.56*
9 52.0 358.3    53.8
126.9    51.0*
97.0
9 48.5 177.9    104.8*    + 1.54*
5 -4.1
14 44.4 Grm t.
5215.614*.

July 14, 1900

Hagen No 17 with No.

Right Ledged

1247
9 56.0 176.8 52.1*
306.2 49.4*
355.6 101.5 + 1.62*

+1.56*

125.0
178.2 53.2*
304.9 53.2*
358.1 106.4* + 1.50*
L above Mean = +1.58*
35.6
86.4 50.8*
216.6 55.1*
271.7 105.9* +1.51*

366.8 +1.61*
10 03.0 85.9 49.1*
119.0 217.7 48.6*
9 59.5 266.3 97.7* +1.71*
5 -4.1
14 55.4* clouds
42.mx

5210 = 621*

July 14, 1900

Hagen No 21 with No.

L & Above . Ledgered

37.6

10 13.0 84.5 46.9

221.2 45.0

266.2 91.9 + 1.86

39.4 + 1.84

85.8 46.4

219.2 46.8

266.0 93.2 + 1.83

R & Below Mean = + 1.74

306.4

357.7 51.3

126.5 50.7

177.2 102.0 + 1.61

307.9 1.63

10 22.0 356.8 48.9

35.0 127.4 51.3

10 17.5 178.7 100.2 + 1.65

5 - 4.1

15 18.4 Gr M Time.

5216. ~~627~~ 634

July 14, 1900.

Hagen No with No
clouds thicker stars gone
Stopped by clouds on meas
10:35 of standards

S Ursae majoris
12 34 +61.7
18 24
5 40

Abandoned clouds near

R Camelop.
14 40 +84.1
18 25
3 45

10 53 Too cloudy at present for estimate.

Clouds thicker

(Reject)

11 00 Sky a little clearer for a few minutes
as near as can be estimated
through some cloud & bright
moonlight R Camelop is
about equal to star m.
Est. a little uncertain

11 05 Cloudy

July 1~~3~~4, 1900

S Ursae Maj
12 34 +61.7
18 54
6 20

11 15 Cloudy

L.

11 20$^{a}$ K 3.5 var, var 2.5 l
5 – 4.1$^{a}$ Estimate thought to be pretty good
16 15.9$^{a}$ clouds somewhat thin in this region
Some cloud and strong moonlight still.

R Camelop. Again.
14 40 +84.1
19 05
4 25

L.

11:30$^{a}$ ~~[illegible]~~ l 4 var, var 1.5 m
5 – 4.1$^{a}$ In this est. sky clearer and stars
16 25.9$^{a}$ better seen. Est considered good.
This last est considered a much
better than previous one previous
previous one rejected

Sawyers Variable +12° 3557
18 24 +12.5
19 24
1 00

Posted-

July 14, 1900

S Cygni.

20 8 +57.2
19 38
0 30
11 30

12 00 ~~Too~~ altitude extremely high so that estimate cannot be well made abandoned till first of week-

Posted

July 15, 1900 (Sunday)

All chron. ran down & reset.

| B & C 1182 | B. 394 |
|---|---|
| 21 37 020 | 21 37 0.0 |
| 21 38 02.0 | 21 38 00 |

| Bond 236 | F. 1327 |
|---|---|
| 5 32 05.1 | 5 32 01,0 |
| 5 33 05.0 | 5 33 01.0 |

# July 16, 1900 (Monday)

B&C 1182     B 394

7 36 09.6     7 36 0.0

7 37 09.6     7 37 0.0

Phot 7.   ζ Herculis .   MOG

17 54 +16.8

15 40

2 14

9 46

L & above

136.2

8 14 50   168.6    32.4×    Ledgered Plotted

314.3    34.4×

348.7    66.8×   = 2.61×

134.6

17 27   170.6    36.0×   −2.66×

315.8    31.4×

347.2    67.4× − 2.59×

R & Below    Mean = −2.68×

46.9    × 5217.5549×

21 05   77.1    30.2× − 2.74    5214.5024

225.9    32.9×    +3.0525 ~~Downey~~ Hart.

258.8    63.1×    −2.76×

45.6

8 23 10   78.8    33.2×    5217.0549

5214.5017

78 02   227.7    28.9×    +3.04321

8 19 08   256.6    62.1× − 2.78    Dun.

5 − 0 10

13 18 58 Gr M T.

July 16, 1900

R & Below II

47.7
8 25 15 75.6 27.9 x
226.8 32.7 x
259.5 60.6 x −2.84 x

46.2 −2.80 x
27 46 78.4 32.2 x
227.7 30.7 x
258.4 62.9 x −2.75 x

L & Above. Mean = −2.71 x

313.9
31 00 348.8 34.9 x
135.9 32.0 x
167.9 66.9 x −2.61 x

315.9 −2.62 x
8 34 12 347.5 31.6 x
118 13 135.3 34.6 x
8 29 33 469.9 66.2 x −2.64 x
5 − 0 10
13 29 23 Gr. M. Time Position Angle 258.3
5217.5621 x Sprocket Wheel = −2.58 −1.8
5214.0024 5217.5621 x
+3.0597 H. 5214.5017
+3.0604 D.

July 16, 1900.

S Virginis.

13 24 - 5.5
16 36
3 1.2

13 24 - 5.5
17 06
3 42

Hagen no. 18 comp. with no. 6

above
47.6 (comp. + dir. - Ledgard
9 30.0 80.1 32.5
223.8 38.2
262.0 70.7 + 2.48
39.5
5.1
8 ~~4.6~~ 45.6 + 2.30
225.1 36.9
262.0 82.5 + 2.12
Below Mean + 2.21
310.2
351.1 40.9
130.2 43.5
173.7 84.4 + 2.07
309.0
9 36.6 351.3 42.3 + 2.12
9 33.3 134.9 38.2
5 - 0.2 173.1 80.5 + 2.18
14 33.1 Gr. M.T.
5217.606

July 16, 1900.

~~Hagen~~ no

Impossible to do anything more on this region previous obs. very difficult. sky hazy, & region low.

R R Librae

15 45 −16.3

17 45

2 00

L of above

50.1 Hagen no 22 with No 6

10 02.0 95.4 45.3

231.4 49.8 Ledgered.

281.2 95.1 +1.78

48.9

97.0 48.1 +1.76

230.9 48.2

279.1 96.3 +1.75

R of Below Mean = +1.74

318.4

8.0 49.6

138.8 46.6

185.4 96.2 +1.75

318.8 +1.71

10 11.0 8.0 49.2

10 06.5 138.8 50.2

5 −0.2 189.0 99.4 +1.67

15 06.3 G. M. T.

5 217.6 29

July 16, 1900.

Hagen No 19 comp. with No 6.

R & Below

133.4 Ledgred

10 15.0 188.2 54.8ˣ

315.7 clouds 52.1ˣ

367.8 106.9ˣ + 1.49ˣ

136.9 +1.57ˣ

187.8 50.9ˣ

317.9 49.3ˣ

7.2 100.2ˣ +1.65ˣ

L & above Mean = +1.58

43.0

101.4 58.4ˣ

230.8 43.2ˣ

274.0 101.6ˣ +1.62ˣ

47.8 +1.60ˣ

10 42.4 100.3 52.5ˣ

228.1 50.2ˣ

57.4 278.3 102.7ˣ +1.59ˣ

10 28.7ˣ

5 −0.2

15 28.5 Gr. M.T.

5217.644ˣ

Posted.

July 16, 1900

L & Above Hagen No 18 with No. 6.

Ledgered

230.8

10 53.0 278.0 47.2 x

47.6 50.8 x

98.4 98.0 + 1.71 x

229.6 +1.70 x

279.8 50.2 x

49.1 48.7 x

97.8 98.9 x + 1.68

R & Below Mean = +1.58 x

136.8

190.5 53.7 x

316.4 52.0 x

8.4 105.7 x + 1.52

136.4 1.47

11 02.0 190.3 53.9

115.0 315.0 55.9 x

10 57.5 10.9 109.8 x + 1.42

5 -0.2

15 57.3 BAC 1182 B. 394

5 217 665 21 12 14.1 21 12 0.0

21 13 14.1 21 13 0.0

B. 236 F. 1327

5 11 41.2 5 12 01.0

5 13 41.0 5 14 04.0

July 17, 1900 (Tuesday)

B.A.C. 1182 B. 39 4
7 30 23.0 7 30 0.0
7 31 23.0 7 31 0.0

U Ophiuchi

Phot T. 17 09 +1.4 W Obs.
15 49
1 20
10 40

R & Above

1532 Ledgered

8 17 28 1737 Clouds 20.5x
3313 23.8x
3551 44.3x -3.54x
1506
23 07 1748 24.2x -3.58x
3335 18.7x
3522 42.9x -3.61+

L & Below

649 Mean = - 3.63+
26 55 837 18.8x
2422 23.2x
2654 42.0x -3.66+

632 -3.68+
29 14 850 21.8x
96 44 2441 19.5x
8 24 11x 2636 41.3x -3.70+ 5218.5582x
5 - 0 23 5218.0366
13 23 48+ Gr. M. Time +0.5216+

July 17, 1906

II

Lt below

640
A 3210 84.2 20.2x
242.2 23.3x
265.5 43.5x -3.58x

-3.66x

61.6
3400 84.4 22.8x
244.6 17.9x
262.5 40.7x -3.73+

Rt above Mean = -3.61x

329.4
3745 354.8 25.4x
153.5 19.7x
173.2 45.1x -3.50x

-3.56x

333.8
3910 353.4 19.3
2305 151.8 23.3
8 35 46 175.1 42.6x -3.63+
5 - 0 23
13 35 - 23 Gr. M.T. Pos. Angle Ver A 159.9
5218.5663 Sprocket Wheel = 6.54 - 5.5
5218.0366
+0.5297+

July 17, 1900.

Meas of 12 ~~th~~ magn Standards near Phot T. S Virginis Dr Ob.

13 24 - 5.5
16 44
3 20

Hagen No 24 with No 6.

Above

Ledgered

239.7
9 04.8 269.1 29.4 x
59.2 25.9 x
85.1 55.3 x + 3.04
239.5
+ 3.08
26~~8~~5.5 26.0 x
57.6 27.3 x
84.9 53.3 x + 3.13 x

Below

148.9 Mean = + 2.97 x
179.0 30.1 x
329.6 28.7 x
358.3 58.8 x + 2.91 x
149.6
+ 2.86
9 12.0 178.3 28.7 x
9 08.4 326.0 33.0 x
5 -0.4 359.0 61.7 x + 2.80

x
14 08.0 Gr M.T.
5218.589 x

July 17, 1900.

Hagen No 20 with No 6

Below

322.6 Ledgered

9 20.0 363.1 40.5 ×

146.1 32.5 ×

178.6 73.0 × + 2.41 ×

+ 2.28 ×

323.9

361.5 37.6 ×

140.0 43.7 ×

183.7 81.3 × + 2.16

Above Mean = + 2.40 ×

236.0

270.9 34.9 ×

56.9 35.1 ×

92.0 70.0 × + 2.51 ×

234.5 + 2.52 ×

9 29.0 269.9 35.4 ×

57.1 34.2 ×

9 24.5 × 91.3 69.6 × + 2.52

5 −0.4

14 24.1 Gr. M.T. ×

5218.600 ×

July 17, 1900
Above Hagen not 9 with no 6
235.3 L E Edgecomb
9 39.0 273.8 38.5
54.7 36.6
91.3 75.1 + 2.34

235.3 + 2.38
272.0 36.7
54.6 35.8
90.4 72.5 + 2.43

Below Mean = 2.24
144.1
185.4 41.3
323.8 40.5
364.3 81.8 + 2.14

+ 2.10
144.0
9 45.0 183.7 39.7
320.8 44.7
9 42.0 366.5 84.4 + 2.07
5 - 0.4
14 41.6 Gr. M.T.
5218.612

July 17, 1900

Hagen No 22 with No. 6.

Below

428

9 5 2.0 724 Impossible to proceed

4 farther.

2. Stopped by low alt. & haziness

Meas of 12 th mag. Stand. for

Phot T. RR Librae 9r O4

15 45 −16.3

18 00

15

2

LOA. Hagen No 21 with No. 6

305.2 Ledgered

10 13.0 357.2 46.0×

121.2 50.7×

171.9 96.7× +1.74×

~~304.7~~ +1.74×

~~349.6~~

121.6 53.6×

175.2 43.6×

308.0 97.2× +1.73×

351.6 Mean = +1.70×

R & Below

31.5

82.7 51.2×

214.3 50.1×

264.4 101.3× +1.62

33.9 +1.66×

10 20.0 82.6 48.7×

10 16.5 213.4 49.3

5 −0.4 262.7 98.0 + 1.71

10 16.1 G.M.T. 5 21 8. 6.36×

July 17, 1900.

Hagen No. 17 with No. 6.

R & B. Below

32.3

10 22.6 84.0

211.7

265.6

51.7

53.9

105.6 + 1.52

Ledgered

+ 1.48

31.1

85.3

209.3

263.5

54.2

54.2

108.4 + 1.45

Mean = 1.62

L & Above

122.7

171.7

303.3

352.3

49.0

49.0

98.0 + 1.71

+ 1.76

123.2

10 30.6 174.8

53.2 305.4

10 26.6 348.1

5 – 0.4

15 26.2 Gr. M.T.

5218.643

51.6

42.7

94.3 + 1.80

July 17, 1900

Wagon No 22 with No 6.

L O Above                Ledgered

305.1
10424 350.4          45.3 x
123.6          52.8 x
176.4          98.1 x   + 1.70 x

+ 1.72 x
304.8
350.8          46.0 x
124.1          51.1 x
175.2          97.1 x   + 1.73 x

R O ~~Above~~ Below          Mean = + 1.70 x

214.0
260.4          46.4 x
32.6          50.8 x   + 1.73 x
83.4          97.2 x

+ 1.68 x
210.3
10488 262.5          52.2 x
10 45.6 x 34.4          48.4 x
5 -0.4 82.8          100.6 x   + 1.64 x
15 45.2 x Gr M.T.
5218.656 x

July 17, 1900

Hagen No 19 with No 6

R Below

213.1 Ledgered

10 57.0 262.8 49.7 x

33.2 46.7 x

79.9 96.4 x + 1.75 x

212.3 + 1.71 x

262.6 50.3 x

33.7 49.2 x

82.9 99.5 x + 1.67 x

Lt Above Mean = 1.76 x

124.2

174.4 50.2 x

303.8 46.7 x

350.5 96.9 x + 1.73 x

125.4 + 1.82 x

10 59.0 173.3 47.9 x

10 55.0 x 305.3 42.1 x

5 — 0.4 347.4 90.0 x + 1.91 x

15 54.6 x G.M.T.

52 18.663 x

Posted

July 17, 1900

Hagen Nothwith No 6

L D Aborz

3046 Ledgered

11 02.6 350.4 45.8 ×

1257.2 45.4 ×

170.6 91.2 × + 1.88

305.1 + 1.88 ×

350.3 45.2 ×

1251 46.3 ×

171.4 91.5 × + 1.87

Robilon Mean = + 1.67 ×

29.0

85.3 56.3 ×

212.2 51.8 ×

264.0 108.1 × + 1.46 +

28.7 + 146 +

11 11.8 84.6 55.9 ×

1.44 212.6 51.8 ×

11 7.2 264.4 107.7 × + 1.47 ×

5 — 04

16 06.8 × h m t. BD C 1182 B 394

5218.672 × 21 18 30.0 21 18 0.0

21 19 30.1 21 19 0.0

B 236 F, 327

5 19 19.5 5 20 01.0

July 18, 1900 (Wednesday)

B & C 1182 — B 394
7 33 34.5 — 7 33 00
7 35 34.5 — 7 35 00
Phot T. Z Herculis. W Ob.

17 54 +16.8
15 48
2 06
9 54

Halove
42,5
8 09 06 72,9 — 30.4
222,2 — 32.0
254,2 — 62.4 — 2,77
41,9
~~8~~ 11 18 73,7 — 31.8 — -2.79
223,8 — 29.4
253,2 — 61.2 — -2.81
R D Below — = -2.82
312,8
14 39 342,8 — 30.0
132,2 — 29.8
162.0 — 59.8 — -2.87
311,7 — 2.86
17 28 342,4 — 30.7
132,8 — 30.0
162,8 — 60.7 — -2.84

Reject above group obs made through clouds; equalization uncertain, and constantly changing due to clouds. nothing more can be done on this at

July 18, 1900.
~~Same Again~~
~~XVI~~

~~R & Below~~
312.4
8 ~~20.0~~ 3

Mean of Standards near
Phot. T. S Virginis. No 66.

13 24 – 5.5
16 30
3 06

8 14.0 Clouds quite thick & abundant in this region.

310.5 Hagen No 18 with No 6
8 52.0 348.8 ~~L~~above 38.3× Ledgered
128.7 39.0×
167.7 77.3× + 2.28×
309.8
347.8 38.0× + 2.27×
128.2 39.9×
168.1 77.9× + 2.26×
217.4 ~~R&~~Below Mean = + 2.18×
259.6 42.2×
36.1 41.6×
77.7 83.8× + 2.08×

8 217.2 + 2.08×
8 58.0 259.0 41.8×
8 55.0, 37.2, 42.1×
5 – 0.6 ~~80.6~~ 79.3 83.9× + 2.08×
13 54.4 Gr. M. T.
5219.579×
Present

July 18, 1900

Hagen No 24 with No 6.

Below

221.4 Ledgered

9 03.0 251.9 30.5

43.8 28.3

72.1 58.8 + 2.91

223.5 + 2.95

252.2 28.7

43.4 28.0

71.4 56.7 + 2.99

Above Mean = + 3.02

132.9

162.1 29.2

315.1 25.3

340.4 54.5 + 3.08

135.2 + 3.10

9 10.6 162.3 27.1

13.6 315.4 26.7

9 06.8 342.1 53.8 + 3.11

5 −0.6

14 06.2 Gr. M.T.

2219.587

July 18, 1900.

Hagen No 22 with No 6

Above

314.2 Ledgered

9 15.0 342.2 $28.0^{x}$

134.8 $27.4^{x}$

162.2 $55.4^{x}$ $+3.04^{x}$

$+3.02^{x}$

315.3

341.8 $26.5^{x}$

132.6 $29.8^{x}$

162.4 $56.3^{x}$ $+3.00^{x}$

Below Mean = $+2.92^{x}$

222.7

252.7 $30.0^{x}$

41.5 $30.3^{x}$

71.8 $60.3^{x}$ $+2.80^{x}$

$22\overset{2}{\cancel{4}}5$ $+2.82^{x}$

9 22.0 254.0 $31.5^{x}$

37.0 42.1 $30.5^{x}$

9 18.5 72.6 $62.0^{x}$ $+2.79^{x}$

5 −0.6

14 17.9 Gr. M. Time.

$5219.596^{x}$

July 18, 1900

~~Hagen~~ No 20 with No. 6

Below

Ledgered

35.4

9 25.6 78.5 43.1 $^{x}$

220.0 40.3 $^{x}$

260.3 83.4 $^{x}$ + 2.10 $^{x}$

+ 2.17 $^{x}$

36.5

75.6 39.1 $^{x}$

218.0 39.3 $^{x}$

257.3 78.4 $^{x}$ + 2.24 $^{x}$

Above

Mean = + 2.40 $^{x}$

313.0

343.7 30.7 $^{x}$

131.6 34.4 $^{x}$

166.0 65.1 $^{x}$ + 2.67

+ 2.62

309.6

9 32.6 343.8 34.2 $^{x}$

58.2 130.8 33.6 $^{x}$

9 29.1 $^{x}$ 164.4 67.8 $^{x}$ + 2.58

5 −0.6

14 28.5 $^{x}$ Gr. M. Time

5219.603 $^{x}$ ~~G. M. Time~~

~~52~~

July 18, 1900.
Hagen No 19 with No 6.

Above Ledgerwd

128.1
9 37.4 169.4 41.3×
308.4 36.6×
345.0 77.9× + 2.26×

+2.32

129.3
16~~7.6~~9.6 37.3×
309.6 36.9×
346.5 74.2× + 2.37

Below Mean = +2.24

38.0
78.8 40.8×
219.1 38.9×
258.0 79.7× + 2.20×

3~~1~~6.3 +2.15
9 45.0 79.1 42.8×
82.4 215.8 40.4×
9 41.2× 256.2 83.2× + 2.10
5 — 0.6
14 40.6× Gr. M.T.
0219.612×

July 18, 1900.

U Virginis
12 40 + 6.8
17 50
5 10
10 00 Too low.

R R Librae
Phot T. Do Ob.
meas of 12 th Mag. Standards
15 45 − 16.5
18 10
2 25
Hagen No. 1 with 6

L & Above Ledgered.
307.1
10 17.8 348.1 41.0 ×
126.4 42.1 ×
168.5 83.1 × + 2.10 ×
306.7 + 2.06
347.6 40.9 ×
124.8 44.8 ×
169.6 R & Below 85.7 × + 2.03 ×
210.8 mean = + 1.81 ×
264.5 53.7 ×
34.0 49.4 ×
83.4 103.1 × + 1.58 ×
211.7 + 1.56 ×
10 26.0 263.8 52.1 ×
31.2 52.2 ×
15 21.3 $9\frac{1}{2}$ m.T. 83.4 104.3 × + 1.55 ×
5219. 640 α

July 18/1900

Hagen No 7 with No 6.

R & Below

Ledgered.

210.4
10 28.0 264.5 54.1 ×
30.6 53.3 ×
83.9 107.4 × + 1.48 ×

210.6 + 1.50 ×
263.8 53.2 ×
31.2 53.0 ×
84.2 106.2 + 1.51

L & Above.

Mean = + 1.61 ×

120.8
174.2 53.4 ×
305.4 43.2 ×
348.6 96.6 × + 1.74 ×

+ 1.72 ×
124.2
10 34.0 176.1 51.9 ×
10 31.0 × 305.1 46.7 ×
5 −0.6 351.8 98.6 × + 1.69
15 30.4 × Gr. M Time.
5 2 19.646

July 18, 1900

L&A. Hagen No ~~7~~ 22 with No 6.

Ledgered

303.9
10 40.0 348.7 44.8
125.7 43.3
169.0 88.1 + 1.96

+ 1.90
305.4
351.0 45.6
123.9 47.3
171.2 92.9 + 1.84

R O Below

Mean = 1.82

212.3
260.7 48.4
33.7 48.3
82.0 96.7 + 1.74

213.9 + 1.74
10 47.0 261.4 47.5
10 43.5 34.1 49.5
5 - 0.6 83.6 97.0 + 1.73
15 42.9 Gr. M. Time.
5219.655

June 18, 1900.
Hagen No ~~2~~ 19 with Nr 6.

R & Below — Ledgered

10 210.5
7 50.0 264.3 53.8 x
34.2 48.1 x
82.3 101.9 x + 1.61 x

212.6 + 1.62 x
263.2 50.6 x
32.5 50.2 x
82.7 100.8 x + 1.64 x

L & Above — Mean = + 1.59 x
122.2
178.2 56.0 x
304.8 47.3 x
352.1 103.3 x + 1.58

119.8 + 1.56
~~4~~ 178.1 58.3 x
11 02.6 304.3 46.7 x
11 2.6 351.0 105.0 x + 1.54
10 56.3 x
5 -0.6
15 55.7 x Si. M. Time.
5 219.664 x

Posted -

July 18, 1900

B&C 1182
21 09 39.0
21 10 38.9
B 236
5 13 26.3
5 14 26.4

B 394
21 09 0.0
21 10 0.0
F 1327
5 15 01.0
5 16 01.0

July 1$\overset{9}{8}$, 1900 (Thursday)

~~✱~~ B & C — B 396

7 34 49.0 — 7 34 00

Phot T. — x Cygni — W Obs

19 45 +32.6

9.5 cap used 15 50

3 55

8 05

R & above — Ledgered. Plotted.

309.8

8 14.6 341.8 — 32.0ˣ

126.3 — 37.8ˣ

164.1 — 69.8ˣ — −2.5~~0~~1ˣ

306.7

345.9 — 39.2ˣ — −2.42

127.6 — 36.6ˣ

164.2 — 75.8ˣ — −2.32ˣ

L & Below

217.2 — Mean = −2.~~27~~ˣ

255.0 — 37.8

32.5 — 4~~6~~.4ˣ

78.9 — 8~~4~~.2ˣ — −2.0~~7~~ˣ

215.0 — −2.12ˣ

8 22.2 258.4 — 43.4ˣ

36.8 — 36.6 — 37.7ˣ

8 18.4ˣ 74.3 — 81.1ˣ — −2.16ˣ

5 −0.8

13 17.6ˣ Gr. M. Time

5220.554ˣ

July 19, 1900

Same Again

L & Below　　　　II

216.6
8 26.2　255.6　　$39.0^x$
31.8　　$47.0^x$
78.8　　$86.0^x$　$-20.2^x$

214.2　　　　~~2~~ $-2.07^x$
257.8　　$43.6^x$
36.1　　$39.0^x$
75.1　　$82.6^x$　$-2.12^x$

R & Above　　Mean = $-2.16^x$
127.5
164.1　　$36.6^x$
305.0　　$41.9^x$
346.9　　$78.5^x$　$-2.24^x$

125.6　　　　$-2.24^x$
8 33.6　168.6　　$43.0^x$
59.8　308.7　　$35.5^x$
8 $29.9^x$　344.2　　$78.5^x$　$-2.24^x$
5 -0.8
13 29.1 Gr. M. Time.
5 22 0.5 $62^x$　Pos Angle = 170.6
Sprocket Wheel a7 β7

July 19, 1900.

Meas. of 12th magn Standards.

Phot T. δ Virginis. W. Obr

13 24 −5.5

16 44

3 20

Above — Ledgered

313.3 Wagen No 24 with No 6.

8 55.0 339.4 26.1ˣ

133.1 27.4ˣ

160.5 53.5ˣ +3.12ˣ

314.2 +3.18ˣ

338.6 24.4ˣ

133.4 26.3ˣ

159.7 50.7ˣ +3.24ˣ

Below — Mean = +3.04ˣ

220.8

230.5 29.7ˣ

41.0 28.5ˣ

69.5 58.2ˣ +2.93ˣ

220.7 +2.91ˣ

~~8~~ 9 03.0 250.9 30.2ˣ

8 59.0ˣ 41.8 29.0ˣ

5 −0.8 70.8 59.2ˣ +2.89ˣ

13 58.2ˣ Gr. M. Time.

0 220.582ˣ

July 19, 1900

Hagan No 22 with No 6.

Below ——— Ledgered.

39.3
9 06.6 73.0 — 33.7×
221.6 — 32.0
253.6 — 65.7× + 2.65×

43.0 — +2.82×
70.0 — 27.0×
221.6 — 29.6×
251.2 — 56.6× + 2.99×

Mean +2.92×

Above

312.5
340.9 — 28.4×
131.5 — 28.5×
160.0 — 56.9× + 2.98×

+3.01×

312.4
9 12.0 339.3 — 26.9×
9 09.3× 131.2 — 28.4×
5 −0.8 159.6 — 55.3× + 3.04×
14 08.5× Gr. M. Time
5220.590×

July 19, 1900

Hagen No 20 with No. 6

Above Ledgered

129.2
9 14.0 162.4 33.2x
308.1 35.6x
343.7 68.8x + 2.55x

128.8 +2.56x
163.6 34.8x
309.4 33.3x
342.7 68.1x + 2.57x

Mean = +2.44x

Below
37.6
74.7 37.1x
216.2 39.4x
255.6 76.5x + 2.30x

36.2 +2.32x
9 20.0 74.1 37.9x
9 17.0x 215.9 37.3x
5-0.8 253.2 75.2x + 2.34

14 16.2x Gr. M. Time.
5-220.594x

July 19, 1900.

Hagen No 18 with No 6,

above
~~Below~~

| | | | |
|---|---|---|---|
| | 128.6 | | Ledgered |
| 9 28.0 | 164.6 | 36.0 | |
| | 305.7 | 40.8 | |
| | 346.5 | 76.8 | + 2.29 |
| | | | + 2.22 |
| | 128.8 | | |
| | 165.6 | 36.8 | |
| | 305.0 | 44.3 | |
| | 349.3 | 81.1 | + 2.16 |
| | Below | | |
| | 35.5 | | Mean = + 2.18 |
| | 79.7 | 44.2 | |
| | 218.9 | 37.0 | |
| | 255.9 | 81.2 | + 2.16 |
| | | | 2.13 |
| | 36.3 | | |
| 9 35.6 | 78.3 | 42.0 | |
| 63.6 | 216.8 | 41.4 | |
| 9 31.8 | 258.2 | 83.4 | + 2.10 |
| 5 – 0.8 | | | |

14 31 0 Gr. M. Time -
5220.605

July 19/1900.
U Virginis.
12 40 +6d
+8 00
5 20

Region ~~too~~ low. also in line with flag pole.

Saturn. N Obs.
18 00 −2.25
18 17
0 17

Iapetus precedes Saturn 9 secs & is 2.′6 N of it.

~~12.0~~
10 30 11.5
11.5
11.5

Comp Star′ = S.D. −22° 4555 (9.0)

July 19 1900

Phot T. Jupiter. Mr OG

Right                                        Ledgered.
149.6 comp * dis                         Plotted.

11 10.0   188.0   38.4
329.9   35.6
365.5   74.0 + 2.38

149.7   + 2.36
189.1   39.4
329.7   36.0
365.7   75.4 + 2.33

Left

Mean = + 2.17

58.1
102.1   44.0
234.5   46.3
280.8   90.3 + 1.91

58.0   + 1.98
11 20.5   101.4   43.4
11 15.2   238.1   42.1
5 - 0.8   280.2   85.5 + 2.04
16 14.4 Gr M.T.
5220.676

July 19, 1900

Iapetus Again

~~Left~~

59.0 Haze

~~11 25.5~~ 99.2 $40.2^{x}$

11 31.5 237.5 $\underline{41.0}$

278.5 $81.2^{x}$ + $2.16^{x}$

+ $2.08^{x}$

58.3

101.6 $43.3^{x}$

235.0 $\underline{43.6}^{x}$

278.6 $86.9^{x}$ + $2.00^{x}$

Mean = + $2.21^{x}$

Right.

331.3

365.8 $34.5^{x}$

146.0 $\underline{43.8}^{x}$

189.8 $78.3^{x}$ + $2.25^{x}$

+ $2.34^{x}$

330.1

11 43.4 369.9 $39.8^{x}$

148.9 $\underline{32.4}^{x}$

11 $37.4^{x}$ 181.3 $72.2^{x}$ + 2.63

5 − 0.8

16 $36.6^{x}$ Gr.M.T.

5220.$692^{x}$

July 19/1900

Phot. Titan  W Obs
clouds

~~Left~~ Right.  Ledgered
Plotted

310.2 Comp * dis.

11 52.8  33.7  83.5 *
119.2  101.2 *
220.4  184.7 *
175.3 *  — 0.09 *

297.5
32.8  95.3 *  — 0.18 *
122.0  99.6 *
271.6  194.9 *  = 0.28 *
~~Left~~  165.1 *  Mean = — 0.32 *
205.8
314.0  108.2 *
24.4  105.8 *
130.2  214.0 *  — 0.65 *
146.0 *

203.9  — 0.46 *
12 02.2  308.2  104.3 *
11 57.5  31.8  90.4 *
5 -08  132.2  194.7 *  — 0.28 *
16 56.7 Gr.M.T.  165.3
5220.706 *

July 19, 1900

Titan again

~~Left~~

209.3

12 10.0 309.4 100.1

38.5 83.3

121.8 183.4 − 0.06

176.6

214.2 −0.02

301.8 87.6

32.2 91.1

123.3 178.7 + 0.02

~~Left~~ Right Mean = − −0.11

12~~8~~5.4

213.1 87.7

297.0 103.1

40.1 190.8 = −0.20

~~169.2~~

115.6 169.2 −0.20

12 21.4 219.9 104.3

31.4 308.~~4~~0 85.8

12 15.7 33.8 190.1 − 0.19

5 − 0.8 169.9

17 14.9 Gr. M. T.

5220.719

Posted

July 19, 1900.

Iapetus now follows star by 9 secs. therefore object taken for Iapetus is Iapetus.

Obs. difficult.

Much troubled throughout preceding obs. of Iapetus & Titan by variable haze & clouds,

12 34 Settings however made with much care. Obs. of both sats 1/2 wt.

| | |
|---|---|
| B.&C 1182 | B 394 |
| 22 43 55.0 | 22 45 00 |
| 22 44 55.0 | 22 44 00 |
| B 236 | F, 1327 |
| 6 51 04.5 | 6 53 01.0 |
| 6 52 04.5 | 6 54 01.0 |

July 20, 1900 (Friday)

BOC 1182 B 394
7 33 58.6 7 23 00
Phot T. Z Herculis W Obs.
17 54 +16.8
15 54
2 00

7 30 Cloudy 10 00

8 00 clouds
8 04 clouds
8 40 Sky cloudy everywhere
8 54 Cloudy
Abandoned too cloudy

U Virginis
12 40 +6.8
17 00
4 20

9 00 Cloudy

over

July 20, 1900
Meas of standards near
Phot T. U. Virginis W.O.b.
Hagen No 16 with No 9
L & above
315.9 Ledgered
9 16.0 32.8 76.9^x
147.9 59.9^x
207.8 clouds 136.8^x +0.84^x

322.3 +0.94^x
30.9 68.6^x
149.9 58.1^x
208.0 126.7^x +1.05^x

R & Below Mean = +1.08^x
237.2
298.0 60.8^x
58.8 61.0^x
119.8 121.8^x +1.15^x

2~~4~~81.4 Clouds +1.22^x
9 31.6 294.6 Stars gone 53.2^x
47.6^x 57.0 62.9^x
9 23.8^x 119.9 116.1^x +1.28^x
5 - 1.0
14 22.8^x G. M. time
8 21.599^x Impossible to continue on this region
9 45 sky too hazy. altitude low.
6 b. in above group difficult.
Troubled more or less by clouds in
above group.

July 20, 1900 Posted

Meas of 12th magn Standards
Phot T. R Serpentis W Obs.

15 60 +16.0
17 50
2 10

10 00 Clouds thick.
Stars gone none visible in finder

10 22 clouds thick stars gone.

10 55 Impossible to get anything farther.

11 00 Much troubled by clouds throughout ~~the~~ whole evening. Clouds becoming thick now

BDC 1182
21 07 02.9
21 08 03.0

B. 394
21 06 0.0
21 07 0.0

B 236
5 17 43.1
5 18 43.2

F.x 327
5 20 010
5 21 010

July 24, 1900 (Saturday)

Cloudy to 9:00 Clearer now.

β Lyrae.

* 18 45 +33.2
17 35
1 10
10 50

9 30 Cloudy Ledgered
Above Plotted.

87.5
9 33.0 116.9 29.4*
266.9 30.5*
297.4 59.9* −286*
86.9
117.9 31.0* 284*
266.8 29.8*
296.6 60.8* −283*
Below Mean = −290
359.6
26.4 26.8*
177.0 30.5*
207.5 57.3* −296*
356.3
9 41.0 27.3 31.0* 297*
74.0* 179.0 26.70*
9 37.0 205.70 57.70* −298* 5222.608*
5 −1.3 5221.756*
14 35.7* Gr. M. Time 70.852*
5222.608*

July 21, 1900

Below
359.2
9 48.0 26.0 26.8x
178.7 28.1x
206.8 54.9x − 3.07x

359.0 − 3.09x
25.3 26.3x
178.8 27.3x
206.1 53.6x − 3.11x

Mean = − 3.02x

Above
266.4
296.4 30.0x
88.0 27.5x
115.5 57.5x − 2.96x

267.4 − 2.95x
9 56.0 295.2 27.8x
87.8 ~~29.5~~ 30.1x
9 52.0 117.9 57.9x − 2.94x
5 − 1.3
14 50.74 M.T.
5222 61.9x
5221. 756
40.863x

Impossible to get any more settings on β Lyrae. β Lyrae within a half hour of meridian therefore almost in the zenith. Observer down on his knees before the pier. Observation therefore a little difficult but made with great care and considered good.

July 21, 1900.

R Serpentis.
15 40 + 16.0
18 20
2 40

W Delphini
Phot P. 20 33 +17.9 W06.
18 23
2 10
9 50

10 15 It is now past the critical time for taking W Delphini Var nearly down to minimum. Night more or less cloudy So that can not later

R Serpentis Resumed
15 40 +16.0
18 30
2 50

10 30 Sky cloudy stars gone
Sky becoming thick no chance for faint Standards

Saturn
18 00 −22.5
18 50
0 50

10 40 cloudy

11 00 Sky now becoming thickly cloudy scarcely any stars visible cannot get above standards evidently closing in

Posted to here

Sunday

B & O 1182 July 22

| | | | | | | |
|---|---|---|---|---|---|---|
| B & O 1182 | | | | B 396 | | |
| 21 | 14 | 14.8 | | 21 | 12 | 00 |
| 21 | 15 | 15.8 | | 21 | 13 | 0.0 |

Bond 236 ran down to seat

| | | | | | | |
|---|---|---|---|---|---|---|
| Bond 236 | | | | F*1327 | | |
| 5 | 31 | 47.5 | | 5 | 32 | 01.0 |
| 5 | 32 | 47.5 | | 5 | 33 | 01.0 |

July 23 1900. (Monday)

8 30 Cloudy first part of evening

U Virginis W. B.

12 40 +6.8

17 05

4 25

9 20 Too cloudy for these standards

α Cygni.

19 45 +32.6

17 35

2 10

9 50

9 30 Clouds

see next page.

July 23, 1900.

Phot. C. X. Cygni W. Lh.

Above Ledgered
Plotted

339.0
9 37.0 16.8 37.8$^{x}$
160.5 35.0$^{x}$
195.5 72.8$^{x}$ — 2.42$^{x}$

340.6 −2.40$^{x}$
185.6 35.0$^{x}$
158.5 38.8$^{x}$
197.3 73.8$^{x}$ — 2.38$^{x}$
Below Mean = −2.20$^{x}$
244.9
291.1 46.2$^{x}$
66.1 42.4$^{x}$
108.5 88.6$^{x}$ — 190$^{x}$
Clouds
~~248.8~~ clouds
~~9 48.2~~ ~~291.2~~ ~~42.4~~ −2.00$^{x}$
~~97~~

66.7
112.8 46.1$^{x}$
9 54.0 249.2 39.1$^{x}$
9 45.5 288.3 85.2$^{x}$ −205$^{x}$
5 − −2 1

14 4 3.4$^{x}$ Gr. M. T.

5224.613$^{x}$

July 23, 1900

Same Again

Below

66.8

9 56.6 109.0 clouds 42.2

249.7 42.7

92.4 84.9 2.05

clouds

68.7 2.18

108.5 39.8

249.6 36.6

286.2 clouds 79.4 2.30

Above

339.8

16.2 clouds

Pos. Ang 167.5

Sprocket wheel = −2.5 0/1.84

10 30 Sky now all cloudy no chance for anything farther

Reject last partial group.

~~First~~ Troubled much by clouds throughout First group ~~taken~~ with care, although through more or less cloud.

Posted

July 23, 1900

| | |
|---|---|
| BGC 1182 | B 394 |
| 21 14 55.5 | 21 13 0.0 |
| 21 15 55.5 | 21.14 0.0 |

Bond 236 sundown & reset.

| | |
|---|---|
| Bond 236 | F 1327 |
| 5 39 51.0 | 5 39 01.0 |
| 5 40 51.0 | 5 40 01.0 |

July 24, 1900 Tuesday

BDC 1182
7 35 03.5
7 36 03.5

B 394
7 33 0.0
7 34 0.0

U Virginis
Phot. T. 12 40 +6.8 W Obs.
16 55 meas or 12th mag
4 15 standards

Begun No 17 with No 9

~~Left & above~~

~~333.2~~
9 02.4 ~~232~~
~~160.5~~
~~196.8~~
~~331.4~~
23.6

Too much haze, and altitude too low to measure faint stars

Phot T. R Serpentis W Obs.
15 40 +16.0
17 40
2 00

July 24, 1900.

R Serpentis.
Hagen No 15 with No 7

R & Above — Ledgend

336.1 {comp & dis

9 42.6 — 20.8 — 44.7$^{x}$

156.8 — 42.8$^{x}$

199.6 — 87.5$^{x}$ — +1.98$^{x}$

336.5 — +1.94$^{x}$

20.~~9~~ 5 — 44.0$^{x}$

155.6 — 46.3$^{x}$

201.9 — 90.3$^{x}$ — +1.91$^{x}$

L & Below — Mean = +1.77$^{x}$

2~~4~~4.5

291.6 — 47.1$^{x}$

60.6 — 55.0$^{x}$

114.6 — 107.1$^{x}$ — +1.63$^{x}$

242.6 — +1.60$^{x}$

9 50.6 — 293.5 — 50.9$^{x}$

63.0 — 52.2$^{x}$

9 46.6 — 115.2 — 103.1$^{+}$ — +1.58$^{+}$

5 − 2.1

14 44.5$^{x}$ Gr. M. T.

5 225.614$^{x}$

July 24, 1900.

Hagen No 17 with No 7.

Left Below. Ledgered

61.5
954.6 114.0 52.5
243.0 50.1
293.1 102.6 +1.59

63.5 +1.62
11~~5.7~~4.0 50.5
245.1 49.2
294.3 99.7 +1.66

R&Above. Mean = +1.78

157.2
201.5 clouds 44.3
336.3 44.7
21.0 89.0 +1.94
Clouds
1~~50~~7.3 +1.93
10 10.0 200.~~6~~2 42.9
12.4.6 334.3 47.0
10 2.3 21.3 89.9 +1.92
5 - 2.1
15 0.2 Gr.M.T.
5225.625

July 24, 1900

Hagen No 20 with No 7.

|  |  |  |  |
|---|---|---|---|
| 10 15 | clouds |  |  |
|  | R & Above |  | Ledgend |
|  | 161.8 |  |  |
| 10 48.0 | 194.2 | 32.4$^{x}$ |  |
|  | 331.8 | 48.5$^{x}$ |  |
|  | 20.3 | 80.9$^{x}$ | + 2.17$^{x}$ |
|  | Clouds |  |  |
|  | 163.0 |  | + 2.17$^{x}$ |
|  | 194.2 | 31.2$^{x}$ |  |
|  | 335.8 | 49.8$^{x}$ |  |
|  | 25.6 | 81.0$^{x}$ | + 2.17$^{x}$ |
|  | L & Below |  |  |
|  | 285.1 |  | Mean = + 2.32$^{x}$ |
|  | 318.1 | 33.0$^{x}$ |  |
|  | 101.7 | 40.6$^{x}$ |  |
|  | 142.3 | 73.6$^{x}$ | + 2.39$^{x}$ |
|  | 285.6 |  | + 2.46$^{x}$ |
| 11 06.0 | 321.0 | 35.4$^{x}$ |  |
| 11 40 | 102.0 | 34.0$^{x}$ |  |
| 10 57.0 | 136.0 | 69.4$^{x}$ | + 2.53$^{x}$ |
| 5 — 2.1 |  |  |  |
| 15 54.9 | Gr. M. T. |  |  |
| 5 225. | 663$^{x}$ |  |  |

July 24, 1900

Hagen No. 16 with No 7.

L & Below

95.3

11 13.6 151.1 55.8

271.2 55.8

327.0 111.6 +1.38

94.1 +1.36

152.1 58.0

273.0 55.7

328.7 113.7 +1.33

R & Above

1.2 1.40

66.1 64.9

188.5 47.6

236.1 112.5 1.36

309.7 1.44

11 23.0 61.7 62.0

190.1 43.4

233.5 105.4 1.53

Reject Above group.

July 24, 1900.

R+a
~~L+B~~. Same again. Hagen no 16 with no. 7.

188.2
11 30.0 231.2 43.0$^x$ Ledgered.
44.5 52.6$^x$
57.1 95.6$^x$ + 1.77$^x$

189.1 + 1.73$^x$
235.8 46.7$^x$
6.1 51.9$^x$
58.0 98.6$^x$ + 1.69$^x$

L+Below Mean = + 1.56$^x$
276.1
338.6 55.5$^x$
95.6 55.0$^x$
150.6 110.5$^x$ + 1.41$^x$

+ 1.40$^x$
273.2
11 38.0 328.4 55.2$^x$
11 34.0 95.0 55.8$^x$
5 – 2.1 150.8 111.0$^x$ + 1.39$^x$
16 31.9$^x$ G.M.T.
5225.689$^x$ Reject group before last; prot. circle
11 45 – out of order & dropping downwards
in last group however it was held
by hand to keep it in normal
condition

Posted

July 24, 1900.

| | |
|---|---|
| B0C 1182 | B.394 |
| 22 10 10.5 | 22 08 00 |
| 22 11 10.5 | 22 09 00 |
| B256 | pt, 1327 |
| 6 40 14.5 | 6 40 01.0 |
| 6 41 14.4 | 6 41 01.0 |

Posted.

July 25 1900 (Wednesday)

| B&C 1.182 | | | B 394 | | |
|---|---|---|---|---|---|
| 219 | 02 | 32.1 | 219. | 00 | 00 |
| 219 | 03 | 32.1 | 219 | 01 | 00 |

B. 236 ran down & reset.

| B. 236 | | | F. 1327 | | |
|---|---|---|---|---|---|
| 5 | 34 | 59.5 | 5 | 35 | 01.0 |
| 5 | 35 | 59.5 | 5 | 36 | 01.0 |

Posted.

July 26 1900. (Thursday)

| √Bα C 1182 | B. 394 |
|---|---|
| 21 04 23.2 | 21 02 0.0 |
| 21 05 23.2 | 21 03 0.0 |

Bond 236 randown & reset

| | |
|---|---|
| 5 40 43.5 | 5 40 01.0 |
| 5 41 43.5 | 5 41 01.0 |

July 27, 1900 (Friday)

B & C 1182 B 394

7 22 03.0 7 20 0.0

7 23 03.0 7 21 00

Phot T. χ Cygni M Obs

19 45 +32.6

95 cap used. 16 15

3 30

8 30

Abandoned for U Ophiuchi.

U Ophiuchi

17 9 +1.4

16 24

0 45

11 15

7 45 Clouds

17 09

16 31

0 38

11 22

8 00 Abandoned too cloudy

Meas of Standards near

U Virginis

Phot T. 12 40 +6.8 M Obs.

16 35

3 55

(over)

July 27, 1900.
u Virginis
Hagen No 17 with No. 9

L & above Ledgard

265.1
8 33.6 310.9 45.8ˣ
85.8 41.1ˣ
126.9 86.9ˣ + 2.00ˣ

266.3 + 2.12ˣ
307.2 40.9ˣ
87.2 38.0ˣ
125.2 78.9ˣ + 2.23ˣ

R & Below mean = +2.08ˣ

172.8
220.0 47.2ˣ
356.3 40.3ˣ
36.6 87.5ˣ + 1.98ˣ

4
8 4~~2~~.0 175.7 +2.03ˣ
216.8 41.1ˣ
355.2 43.0ˣ
77.6 38.2 84.1ˣ + 2.08ˣ
8 38.8ˣ
5 20
13 36.8ˣ Gr. M. Time.
5228.651ˣ

July 27 1900.

Hagen No. 8 with No. 9

Right & Below

342.9

8 47.0 50.1

Ledgered

163.5 67.2

229.5 66.0

133.2 +0.91

344.5

46.2 61.7 +0.96

161.8 3 67.5

22~~9.3~~ 129.2 +1.00

L & above

Mean = 1.02

254.3

318.7 64.4

75.3 62.7

138.0 127.1 +1.04

255.9 +1.09

8 54.0 316.3 60.4

101.0 7~~4~~.3 62.2

8 50.5 13 ~~5.9~~ 122.6 +1.14

5 - 2.0 6.5

13 48.5 Gr. M. Time.

5228.658

July 27, 1900

Hagen No 18 with No 9.

Left & Above

269.5 Ledgered

9 05.0 304.2 34.7″

87.8 35.5″

123.3 70.2″ + 2.50″

265.4 + 2.39″

307.7 42.3″

88.2 35.0″

123.2 77.3″ + 2.28″

R & Below Mean = + 2.32″

176.2

216.2 40.0″

356.4 38.4″

34.8 78.4″ + 2.24″

7.5

17~~8.0~~ + 2.25″

9 12.4 216.6 39.1″

17.4 357.9 38.6″

9 08.7 36.5 77.7″ + 2.26″

5 − 2.0

14 06.7″ Gr. M. Time

5 228.588″

July 27, 1900.

Phot T. Z Herculis. N Obs.

17 54 + 16.8

17 54

0 00

Plotted

I

Ledgered

Lt above

0.48

9 28 50 32.3 31.5

179.4 35.6

215.0 67.1 - 2.60

358.8 - 2.60

31 30 34.5 35.7

181.1 31.6

212.7 67.3 - 2.60

Mean = - 2.6~~8~~ 9

R above

269.1

35 00 30 3.5 34.4

91.9 29.5

121.4 63.9 - 2.7~~2~~

271.9 - 2.7~~8~~

36 50 301.8 29.9

132 10 91.2 30.5

9 33 02 121.7 ~~12 2.4~~ 60.4 - 2.8~~4~~

5 2 03

14 30 59 Gr. M. Time.

5228.6049 5228.6049

5226.4811 5226.4803

+ 2.1238 Hart + 2.1246 Dunér.

July 27, 1900

II

R & Below

270.0

9 42 15 303.3 3 3.3 ˣ

92.3 29.1 ˣ

121.4 62.4 ˣ − 2.77 ˣ

272.2 −2.81 ˣ

44 40 302.0 29.8 ˣ

91.8 30.5 ˣ

122.3 60.3 ˣ − 2.88 ˣ

L & above Mean = − 2.77 ˣ

178.4

48 52 214.0 35.6 ˣ

1.4 30.8 ˣ

32.2 66.4 ˣ −2.63 ˣ

180.8 −2.64 ˣ

51 30 212.0 31.4 ˣ

187 17 ~~2~~0.4 34.6 ˣ

9 46 49 ˣ ~~34.8~~ 66.0 ˣ − 2.64

5 −2 03 35.0

14 44 46 ˣ Gr. M. Time.

5228.6145 ˣ 5228.6145 ˣ

5226.4811 5226.4803

+2.1334 ˣ +2.1342 ˣ

July 27, 1900.

III

L & above

178.5

10 00 00 212.1 33.6

0.8 31.8

32.6 65.4 – 266

180.3 –264

02 18 212.5 32.2

359.6 34.4

34.0 66.6 – 262

R & Below Mean = –272

91.4

05 18 122.2 30.8

272.2 29.5

301.7 60.3 – 285

91.8 6 – 281

07 08 121.8 30.2

271.0 32.2

14 44 303.9 2 62.4 – 277

10 03 41

5 – 2 03

15. 01 38 Gr. M.T.

5228.6251 5228.6251

5226.4811 5226.4803

+2.1440 +2.1448

July 27, 1900

IV

Rt Below

90.4
10 14 06 123.4 — 32.0
272.8 — 28.0
300.8 — 60.0 — 2.86

— 2.80

91.1
16 50 121.3 — 30.2
269.9 — 33.4
303.3 — 63.6 — 2.73

Lt above.

Mean = — 2.72

359.9
21 00 33.8 — 33.9
180.8 — 31.2
212.0 — 65.1 — 2.67

1.1 — 2.64
23 17 32.8 — 31.7
179.3 — 35.3
75 07
10 18 47 213.8 — 67.0 — 26
46
5 — 2 03
15 16 44 Gr. M. Time.

5228.6366 — 5228.6366
5226.4811 — 5226.4803
+ 2.1555 — + 2.1563

July 27, 1900.

Saturn

18 00 - 2.2.5
19 10

1 10

2.6
~~10 47 2.7~~

3.0
10 48 3.1
3.0 mean = 3.0
3.0
3.0

3.1
2.8
10 49 2.7
3.0
2.7
2.7
2.6
2.8

July 27, 1900.

11 ,16 3.0
3.1
3.0 Mean = 3.0
2.9
3.0

2.5
11 16.6 2.6
2.5 Mean =
2.5
2.7

July 27, 1900

Phot T. Iapetus W 6 ba.
Right. Comp ★ = BD -22° 4511 (9.1)
178.1 < comp ★ dis.
11 31.6 216.0 37.9$^{\times}$ Plotted
356.7 37.1$^{\times}$ Ledgered.
33.8 75.0$^{\times}$ + 2.35$^{\times}$

177.9 + 2.32$^{\times}$
217.7 39.8$^{\times}$
356.4 37.5$^{\times}$
33.9 77.3$^{\times}$ + 2.28$^{\times}$
Left Mean = + 2.38$^{\times}$
87.7
127.6 33.9$^{\times}$
268.6 38.2$^{\times}$
306.8 72.1$^{\times}$ + 2.44$^{\times}$

87.0 + 2.44$^{\times}$
11 37.6 127.7 35.7$^{\times}$
268.7 36.6$^{\times}$
11 34.6 305.3 72.3$^{\times}$ + 2.43$^{\times}$
5 - 2.0
16 32.6$^{\times}$ Gr. M. T.
5228.690$^{\times}$

July 27, 1900

Same Again (Iapetus)

Left

89.0

11 39.4 125.1 36.1

269.3 40.9

310.2 77.0 + 2.28

+ 2.31

87.3

125.4 38.1

270.1 37.1

307.2 75.2 + 234

Mean = +2.30

Right

356.8

34.9 38.1

177.6 40.0

217.4 78.1 + 225

357.2 + 2.28

11 46.2 35.8 38.6

85.6 177.9 37.5

11 42.8 215.4 76.1 + 2.31

5 - 2.0

16 40.8 Gr. M.T.

5228.695

Final Mean + 2.34

July 27, 1900

Phot T. Titan W Ch.

Right

~~243.2~~ { Titan dis. Ledgered

~~11 49.4~~ 32. Plotted.

244.2

11 54.0 330.9 86.7

68.6 75.7

144.3 162.4 -0.33

250.0

-0.40

330.1 80.1

67.0 74.8

141.8 154.9 -0.48

~~Left~~

~~234.6~~ Mean = -0.30

333.6

60.8 87.2

155.2 80.6

235.8 167.8 -0.23

~~4~~ 334.9 -0.20

12 05.2 60.5 85.6

119.2 151.4 85.9

11 59.6 237.3 171.5 -0.16

5 - 2.0

16 57.6 Gr M.T.

5228.707

July 27, 1900

Titan Again -

Left

331.2
12 09.0 61.4 90.2 x
155.5 80.9 x
236.4 171.1 x −0.17 x

331.5 −0.13 x
58.7 87.2 x
150.7 88.2 x
238.9 175.4 x − 0.09 x

Mean = −0.26 x

Right

248.0
333.1 85.1 x
63.7 80.2 x
143.9 165.3 x − 0.28 x

250.9 −0.39 x
12 16.0 323.4 72.5 x
25.0 65.9 81.1 x
12 12.5 x 147.0 153.6 x − 0.50 x
5 − 20 Final Mean = − 0.28 x
17 10.5 x Gr.M.T.
5228.716 x

July 27, 1900

3.0
3.0
12 26 3.0
3.0
2.9

2.6
12 27 2.6
2.6
2.7
2.5
2.5

The object taken for Iapetus seems to me to be the only object that could be taken for Iapetus according to the Connaissance des Temps.

July 27, 1900

Eros.

1 30 10.
31 45.
1 35.

95.
6.9
855
570
24)655.5(27.3
48
175
168
75

1 30 10
+27
1 30 37
-2 36
Eros (1855) = 1 28 1

Lr. obs.

+21 12 37.
32 14.
19 37
60
1140
37
1177.
6.9
10593
7062
24)8121.3(338.4
72
92
72
201
192
93

21 12 37
+5 38
+21 18 15
-13 51.
+21 4 24.

July 27. 1900
Eros (cont.)

25 34 +19.5
21 24
4 10
7 50

25 34 +19.5
21 30
4 04
7 56

25 47 +20.1
21 32
4 15
7 45

5.5
13 19 5.5
5.5 Mean 5.5
5.5
5.5

~~16.5~~

~~13 28~~
13 35 4.5
4,5
4,4 Mean 4.5
4,5
4.4

July 27, 1900.
Eros (cont.)

~~E3~~ At 13 37 Eros precedes DM+21°216 (9.5) 35.5 secs. & is 2'.3 north of it.

Comp Star = DM + 21° 215 (9.5)

Phot T. W Obs.

R & above

85.1 < comp * dia Ledgered

14 04 00 124.4 39.3✓

266.0

305.9 39.9✓ / 79.2✓ +2.22

85.6 39.8✓ +2.18

125.4 41.6✓

266.7 81.4✓ +2.15

308.3

L & Below

351.3 45.5✓

36.8

17$\overset{2}{8}$.8 51.4✓

224.2 96.9✓ +1.73

352.3 49.2✓ +1.70

14 12.2 41.5

16.2 172.4 49.7✓

14 08.1 222.1 98.9✓ +1.68

5 − 2.0

19 06.1 Gr.M.T.

5228.796

Final mean Value +1.94✓

July 27, 1900

Same Again Eros.

L & Below

351.3 50.1 ✓

14 15.08 41.4

171.7 49.2 ✓

220.9 99.3 ✓ +1.67 ✓

348.8 50.9 ✓ +1.65 ✓

39.7

171.4 50.1 ✓

221.5 101.0 ✓ +1.63 ✓

R & above

265.4 41.2 ✓

306.6

85.6 39.6 ✓

125.2 80.8 ✓ +2.17 ✓

266.7 42.4 ✓ +2.14 ✓

14 23.2 309.1

38.2 85.8 40.8 ✓

14 19.1 126.6 83.2 ✓ +2.10 ✓

5 - 2.0 Final mean Value = +1.90

19 17.1 Gr M.T.

5 22 8.80 $3^{\alpha}$

1.0

14 32 0.7

0.5

0.5

0.5

(over)

July 27, 1900
cont from previous page

0.6
0.7
0.6
0.6
0.5

14 34 Eros now preceeds DM +, 21°216 (9.5) by 30.5 secs. is about 3.0' North of it

~~July~~ 28, 1900 (Saturday)

B&C 118.2 B 394
7 33 40.8 7 31 0.0
7 34 40.8 7 32 0.0
Bond 236 F. 1327
B. 236 rain down & reset
16 15 16.5 16 15 01.0
16 16 16.5 16 16 01.0

95 cap. used. X Cygni
19 45 + 32.6
16 25
3 20
8 40

Phot. W. Obs.
Above Ledgered
258.4 Plotted.
8 04.5 301.0 42.6x
81.2 35.6x
116.8 78.2x - 2.25x
262.2
297.4 35.2x - 2.26x
77.3 42.1x
119.4 77.3x - 2.28x
163.7 Below mean = - 2.06x
214.0 50.3x
347.7 41.6x
29.3 91.9x - 1.86x
168.5
8 10.2 209.5 41.0x - 1.86x
14.7 363.4 54.1x
8 5 - 7.4x 12.7 34.5 92.1x - 1.86x
13 4.7 ymit 5229.540x

July 28, 1900.

Below    Same Again

165.3
8 12.0    215.5    .50.2*
348.5    .40.0*
28.5    .90.2* – 1.91*

168.8    – 1.92*
209.9    41.1*
343.8    48.0*
31.8    89.1* – 1.94*

Above    Mean = – 2.05*

77.3
119.3    .42.0*
260.6    36.7*
297.3    78.7* – 2.23*

80.6    – 2.18*
8 19.4    119.0    38.4*
11.4    257.6    43.5*
8 15.7*    301.1    81.9* – 2.14*
5 –2.7
13 13.0* Gr M.T.

Final Mean = –2.06

5229.551*

July 28, 1900

Phot T. Nova in Aquilae. N Obs

19 15 -0.5

17 15

2 00

10 00

Comp Star = DM. -0° 3709 (9.5)

Spectrum of nova quite wholly mono-chromatic, with possible a slight trace ~~continuous slight~~ of continuous spectrum, but of this cannot be certain.

343.0 ~~Left~~ <comp + obs  Ledgered

920.6 347. 51.7×

166.9 46.4×

213.3 98.1× + 1.70×

344.6 + 1.67×

33.1 48.5×

163.7 52.2×

215.9 100.7× + 1.64×

255.7 Right Mean = + 1.84×

302.3 46.6×

76.7 40.5×

117.2 87.1× + 1.99×

258.5

929.0 299.0 40.5× + 2.01×

924.8 75.1 45.3×

5-2.7 120.4 85.8× + 2.03×

1422.1 Gr M. Time.

5229.599×

July 28, 1900

Nora Again.

Right.

255.6

9 31.2 300.8 45.2ˣ

76.9 42.1ˣ

119.0 87.3ˣ + 1.99ˣ

257.8 + 2.00ˣ

299.8 42.0ˣ

76.4 44.8ˣ

121.2 86.8ˣ + 2.00ˣ

Left. Mean = + 1.84ˣ

165.6

213.7 48.1ˣ

343.8 49.7ˣ

331.5 97.8ˣ + 1.71ˣ

164.1 + 1.67ˣ

9 40.8 251.3 51.2ˣ

72.0ˣ 340.8 49.7ˣ

9 36.0 33.5 100.9ˣ + 1.63ˣ

5 − 2.7 Pos Angle Vera = $328.\underset{B}{3}$

14 33.3ˣ Sprocket Wheel = $\overset{a}{-3.4} + -2.58 - 1.\overset{c}{9}$

5229.606ˣ

Final Mean = + 1.84

July 28, 1900.

Saturn

18 00 -22.5
18 30
0 30

~~2.8~~
~~10 00~~ ~~2.9~~
~~2.5~~

a system

2.8
10 01 2.9
3.0
3.0
3.0
2.8
2.9
3.0

Comp star = SD -22° 4511 (9.1)

~~2.5~~
2.7 B System
10 14 3.0
2.8
3.0
2.8
2.9
3.0
2.8

July 28, 1900

C System

5.5

10 22 5.4

5.4

5.5

5.6

5.5

5.5

11 18 Star a precedes x about 3.5 secs

Star b following y about 3 secs

Star c " " " 5.5 secs

11 40 Iapetus involved in cluster impossible to identify it to-night.

R Hrs. Min

16 34 + 7 29

20 14

3 40

July 28, 1900

Phot. T. R Ursae Min. W 6b

R & a

253.8 < comp x obs. Ledgered

11 47.4 303.0 $49.2^{+}$ Plotted

75.6 $44.0^{+}$ $+ 1.83^{+}$

119.6 $93.2^{+}$

258.2 $+186^{+}$

301.6 $434^{+}$

75.8 $47.3^{+}$

123.1 $907^{+}$ $+ 1.90^{+}$

L & Below Mean = +1.74

163.9

215.3 $51.4^{+}$

343.7 $50.0^{+}$

33.7 $101.4^{+}$ $+1.62^{+}$

164.6 $+ 1.63^{+}$

11 53.7 214.3 $49.7^{+}$

342.3 $50.9^{+}$

11 50.6 33.2 $100.6^{+}$ $+164^{+}$

5 - 2.7

16 47.9 Gr. M.T.

$5229.700^{+}$

July 28, 1900

Same Again

L & Below
164.7
11 55.6 216.5 51.8*
343.4 49.2*
32.6 101.0* + 1.63*

165.5 + 1.66*
214.2 48.7*
342.7 50.1*
32.8 98.8* + 1.69*

R & above Mean = + 1.77*
75.2
121.6 46.4*
257.4 45.2
302.6 91.6* + 1.87*

77.0 + 1.88*
12 02.0 121.9 44.9*
1.17.6 256.1 46.5*
11 58.8 302.6 91.4* + 1.88*
5 - 2.7 Pos Angle = 108.6
16 56.1 G.M.T Sprocket Wheel = - 5.5 & - 4.8
5229.707*

July 29, 1900 (Sunday)

B & C 1182 ran down & reset.

B & C 1182 B 394

7 45 00.2 7 45 0.0

7 46 00.2 7 46.0.0

Phot T. ζ Herculis. W Obs

17 54 +16.8

16 44

1 10 Plotted

Below & Right 10 50

I

81.7

8 17 26 115.6 33.9 Ledgered

258.2 41.0

299.2 74.9 − 2.35

77.0 − 2.33

19 44 120.2 43.2

261.8 33.1

294.9 76.3 − 2.31

349.4 L & above Mean = − 2.20

22 53 28.4 39.0

165.5 46.0

211.5 85.0 − 2.05

346.1 − 2.06

8 24 57 31.0 44.9

8 5 00 169.5 39.1

8 21 15 208.6 84.0 − 2.08

5 − 0 00 5 2 30.5564 5 2 30.6564

13 21 15 Gr M Time 5 2 30.6741 5 2 30.4733

+ 0.0823 + 0.0831

July 29, 1900.

II

| | | | |
|---|---|---|---|
| | L&A. | | |
| | 349.4 | | |
| 8 32 23 | 28.7 | 39.3 | |
| | 166.7 | 43.7 | |
| | 210.4 | 83.0 | − 2.11 |
| | 346.4 | | −2.10 |
| 35 26 | 31.2 | 44.8 | |
| | 169.2 | 39.0 | |
| | 208.2 | 83.8 | − 2.08 |
| | R&B. slow | | Mean = − 2.26 |
| | 81.6 | | |
| 38 49 | 114.6 | 33.0 | |
| | 259.2 | 39.8 | |
| | 299.0 | 72.8 | − 2.42 |
| | 79.4 | | − 2.42 |
| 8 41 10 | 118.2 | 38.8 | |
| | 261.6 | 33.7 | |
| 14 7 48 | 295.3 | 72.5 | − 2.43 |

8 36 57
5 −0 01

13 36 56 Gr. M. Time.

| | |
|---|---|
| 5230.5673 | 5230.5673 |
| 5230.4741 | 5230.4733 |
| + 0.0932 | + 0.0940 |

July 29, 1900

III

R & Below

|  |  |  |  |
|---|---|---|---|
|  | 82.2 |  |  |
| 8 46 00 | 114.9 | 32.7 |  |
|  | 259.3 | 38.1 |  |
|  | 297.4 | 70.8 | -2.48 |
|  |  |  | -2.48 |
|  | 79.9 |  |  |
| 48 10 | 118.1 | 38.2 |  |
|  | 262.6 | 32.8 |  |
|  | 295.4 | 71.0 | -2.47 |

Lt above

Mean = -2.34

|  |  |  |  |
|---|---|---|---|
|  | 349.8 |  |  |
| 51 53 | 27.4 | 37.6 |  |
|  | 167.4 | 42.0 |  |
|  | 209.4 | 79.6 | -2.21 |
|  |  |  | -2.20 |
|  | 346.9 |  |  |
| 55 07 | 21.3 | 42.4 |  |
|  | 140.0 | 37.9 |  |
|  | 207.9 | 80.3 | -2.19 |

20 10 10

8 50 18

5 -0 01

13 50 17 Gr. M. Time.

~~5229~~

| | |
|---|---|
| 5230.5766 | 5230.5766 |
| 5230.4741 | 5230.4733 |
| +0.1025 | +0.1033 |

July 29, 1900

IV

Lt Above

350.9
9 02 07 28.5 37.6
169.2 39.0
208.2 76.6 — 2.30

348.6 — 2.27
04 52 30.2 41.6
170.4 37.0
207.4 78.6 — 2.24

Rt Below Mean = — 2.40

262.1
08 20 295.6 33.5
80.8 37.2
118.0 70.7 — 2.48

260.5 — 2.52
9 11 26 296.8 36.3
26 45 83.1 32.5
9 06 41 115.6 68.8 — 2.55
5 — 0 01

14 06 40 Gr. M. Time.

5230.5880 5230.5880
5230.4741 5230.4733
+0.1139 +0.1147

July 29, 1900

V

R & Below

2627
9 18 00 296.5    33.8
80.6    36.0
116.6    69.8 — 2.51

260.8    − 2.54
21 30 296.1    35.3
82.0    32.6
114.6    67.9 — 2.58

L & Above    = − 2.46

171.3
24 24 207.0    35.7
348.8    39.4
28.2    75.1    − 2.34

171.0    − 2.39
27 35 208.3    37.3
9.1 29 350.9    34.7
9 22 52 25.6    72.0    − 2.44
5 − 0 01
14 22 51 Gr. M. Time.

5230.5992    5230.5992
5230.4741    5230.4733
+0.1251    +0.1259

July 29, 1900

VI

L & A.

351.3

9 33 45 25.9 34.6^x

169.2 38.4^x

207.6 73.0^x −2.41^x

−2.44^x

350.6

36 35 26.7 36.1^x

171.7 34.8^x

206.5 70.9^x −2.48^x

R & B. Mean = −2.54^x

39 25 267.5

294.6 32.1^x

81.8 33.3^x

115.1 65.4^x −2.66^x

261.4 −2.6~~3~~4^x

9 41 24 295.5 34.1^x

15 1 09 82.5 32.5^x

9 37 47 115.0 66.6^x −2.62^x

5 −0 02

14 37 45^x Gr. M. T. Pos Angle 265.4

5230.6096^x Sprocket Wheel = ~~35~~ 5.0 − 1.8

5230.0741 5230.6096^x

+0.1355^x 5230.4733

+0.1363^x

July 29, 1900 Posted to here

Saturn
18 00 -22.5
18 35
0 05

Iapetus follows Saturn 15 secs and is 2.1 north of it.

Pos Angle 65° Dist 4.0

| BDC 1182 | Bond 394 |
|---|---|
| 21 ~~9~~ 04 12.5 | 21 ~~9~~ 04 00 |
| 21 05 12.5 | 21 ~~9~~ 05 0.0 |

Bond 236 ran down to east.

| B 236 | F 1327 |
|---|---|
| 5 54 03.8 | 5 54 01.0 |
| 5 55 03.8 | 5 55 01.0 |

July 30, 1900 (Monday)

B&C 1182 B 394

7 30 14.1 7 30 0.0

7 31 14.1 7 31 0.0

New object seen last night by Prof. Pickering in Horizontal telescope

17 55 -8.2 17 51 -9.8

16 37 16 31

1 18 1 20

10 42 10 40

16 49 28.5

50 $\overset{3}{\cancel{2}}$1.5

50 49.8

16 57 38.5

58 41.5

59 00.0

17 01

8.5

8.5

8.7

8 27 8.8 mean 8.8

8.6

9.0

9.0

9.1

9.0

July 30, 1900.
Continued from previous page.

17 18 39.0
19 42.0
~~19 48.0~~
20 00.5

8 35 9.5
9.2 Mean = 9.3
9.4
9.0

9.5
8 46 9.6
9.5 9.5 = Mean.
9.5
9.6

10.0
10.0
8 58. 10.0 Mean = 10.0
9.8
10.0
10.0

The new object preceding S.D.-9°4644 (8.9) by 5.6 sec & 10.0′ South of it ~~seconds~~ (mag. 8.9 or 9.0) is undoubtedly an asteroid, transits as above extending

July 30, 1900.

over about an half hour indicate a motion of a sec & 2 tenths. Spectrum also continuous.

Saturn

18 00 −22.5

18 00

0 00

9 25 5.6

5.6

5.5

5.5 B system

5.7

5.5

5.5

5.5

6.2

9 27 6.4

6.5 a System

6.5

6.5

6.5 for defective follows.

~~Object taken~~ Saturn 21 secs and is 1.0 North of it.

July 30, 1900.

Left Phot 7. a. = Iapetus W 6 b.

264.8 (comp x dis

9 55.4 293.8 29.0 x

86.1 23.5 x

109.6 52.5 x + 3.16 x Ledgend Plotted.

5.2

26 ~~6.2~~ +3.12

293.9 28.7 x

85.0 25.6 x

110.6 54.3 x + 3.09 x

Right Mean = +2.90

175.3

207.6 32.3 x

351.8 32.9 x

24.7 65.2 x + 2.67

173.2 +2.69

10 03.8 205.2 32.0 x

358.2 32.0 x

9 59.6 x 25.2 64.0 x + 2.71 x

5 -0.2

14 59.4 x Gr. M. Time.

5231.624

July 30, 1900

Right · Same Again · = Inspection

172.9
10 05.2 205.6 32.7 x
351.2 33.8 x
25.0 66.5 x +2.62 x

172.6 +2.67 x
205.8 33.2 x
352.4 30.7 x
23.1 63.9 x +2.72 x

Left Mean = +2.86 x

82.1
109.4 27.3 x
266.0 28.8 x
294.8 56.1 x +3.01 x

83.0 +3.04 x
10 12.2 110.4 27.4 x
17.4 x 266.7 27.3 x
10 8.7 x 294.0 54.7 x +3.07 x
5 -0.2
15 8.5 x Gr. M. Time.
3231.631 x

July 30, 1900

Star "6" = Star

phot 7. W Obs

Left [illegible]

78.6 ‹ comp x dis.

10 17.0 118.0 39.4 x

260.1 41.8 x

301.9 81.2 x + 2.16 x

79.8 + 2.14 x

119.4 39.6 x

257.9 43.1 x

301.0 82.7 x + 2.12 x

Right Mean = + 1.96 x

344.4

34.0 49.6 x

167.4 45.6 x

213.0 95.2 x + 1.78 x

344.4 + 1.78 x

10 26.4 32.7 48.3 x

43.4 x 167.2 46.4 x

10 21.7 x 213.6 94.7 x + 1.79 x

5 − 0.2

15 21.5 x Gr. M. T.

5231.640 x

July 30, 1900.

Same Again = Star.

Right.
343.2
10 29.4 33.1 49.9$^{\times}$
166.5 46.5$^{\times}$
212.0 95.4$^{\times}$ + 1.77$^{\times}$

344.3 +1.80$^{\times}$
31.7 47.4$^{\times}$
167.3 45.4$^{\times}$
212.7 92.8$^{\times}$ + 1.84$^{\times}$

Left Mean = +1.95$^{\times}$
257.4
301.2 43.8$^{\times}$
176.5 41.2$^{\times}$
117.7 85.0$^{\times}$ + 2.05$^{\times}$

259.0 + 2.10$^{\times}$
10 37.0 299.6 40.6$^{\times}$
66.4 178.8 40.6$^{\times}$
10 33.2$^{\times}$ 119.4 81.2$^{\times}$ + 2.16$^{\times}$
5 −0.2
15 33.0$^{\times}$ G. M. T.
5 2 31.648$^{\times}$

July 30, 1900

Titan

Phot T. — W 6b

Left — Ledgered

149.4 < Titan dis. — Plotted

10 40.0 232.6 — 83.2 x

331.6 — 77.3 x

48.9 — 160.5 x — 0.37 x

— 0.28 x

145.2

230.6 — 85.4 x

327.0 — 84.7 x

51.7 — 170.1 x — 0.19 x

Right

60.1 — Mean = −0.36 x

140.3 — 80.2 x

236.5 — 80.8 x

317.3 — 161.0 x — 0.36 x

62.1 — −0.45 x

10 48.0 136.0 — 73.9 x

10 44.0 x 239.2 — 78.1 x

5 −0.2 317.3 — 152.0 x −0.54 x

15 43.8 x Gr. M.T.

5 = 231.656 x

July 30, 1900

Titan Again.

| | | | |
|---|---|---|---|
| | Right. | | |
| | 60.0 | | |
| 10 52.0 | 138.7 | 78.7 | |
| | 242.3 | 74.3 | |
| | 316.6 | 153.0 | −0.52 |
| | 62.8 | | −0.54 |
| | 137.0 | 74.2 | |
| | 240.6 | 76.6 | |
| | 317.2 | 150.8 | −0.56 |
| | Left | | mean = −0.42 |
| | 328.8 | | |
| | 54.2 | 85.4 | |
| | 146.5 | 82.3 | |
| | 228.8 | 167.7 | −0.23 |
| | 331.5 | | −0.30 |
| 10 59.4 | 46.7 | 75.2 | |
| 11.4 | 146.0 | 84.6 | |
| 10 55.7 | 230.6 | 159.8 | −0.38 |
| 5 − 0.2 | | | |
| 15 55.5 | Gr. M. Time. | | |
| 5231.664 | | | |

July 30, 1900.

5.6
11 07 5.7
5.5
5.6
5.4 a system
5.5
5.4
5.3

6.2
~~11 11~~ 6.1
6.0
6.0
6.2
6.2

6.4
6.5
11 14 6.5 b system
6.4
6.5
6.4

Star "b" meas. above tonight preceeds
11 20 star "x" 19 secs & is 1.1 N. of it.

Star "a" is without much doubt Iapetus
this is also indicated by transits.
Iapetus follows Saturn 21.5 secs & is 0.8 North of it.

Posted to here. July 30/1900.

Iapetus precedes star "b" about 6.5 secs & is 1.1 South of it.

Circumpolar Variables.

S Bootis W 6b.
14 15 +54.1
20 15
6 00
Ledgered.
Plotted.

11 35 n 4 var, v 2 o
Est made with 1" Eyepiece.

R Draconis W 6b
16 26 +67.4
20 26
4 00
Ledgered &
Plotted.

11 46 p 3.5 var, var 1.5 q

21 BD.C.1182.
21 9 00 19.5
21 9 01 19.5

21 B 394.
21 9 00 0.0
21 9 01 00

July 31, 1900 (Tuesday)

BOC 1182 B 394
7 30 21.2 7 30 0.0
7 31 21.3 7 31 0.0

x Cygni
Phot T. 19 45 +32.6 W. Obs.
9.5 exposed 16 35
3 10

Above 8 50
258.9
7 56.0 300.0 41.1 ✓ Ledgered
80.7 37.2 ✓ Posted.
117.4 78.3 ✓ – 220 ✓
260.0
297.1 37.1 ✓ (– 2.22 ✓)
76.3 42.9 ✓
119.2 80.0 ✓ – 219 ✓
Below
164.8 ~~206~~
214.2 49.4 ✓
347.8 42.6 ✓
30.4 92.0 ✓ – 1.86 ✓ ×

168.7 (– 1.90 ✓)
8 03.0 210.6 41.9 ✓
7 59.5 346.1 47.0 ✓
5 –.4 33.1 88.9 ✓ – 1.94 ✓
12 59.1 Gr. M. T. mean – 2.06 ✓ ×
5 2 32.541 ×

July 31, 1900

Same Again

Below

165.3
805.0 213.4 48.1
348.6 40.6
29.2 88.7 - 1.95

169.8 - 1.94
210.6 40.8
344.7 48.5
33.2 89.3 - 1.93

Above ~~= 2.04~~

76.5
120.3 43.8
260.0 37.4
297.4 81.2 - 2.16

10 79.3 2.15
8 ~~15~~.6 118.3 39.0
258.0 42.8
807.8 300.8 81.8 2.14
5 - .4 Final mean - 2.04
1307.4 Gr M.T.

Position Angle = 173.4

5232.547 Sprocket Wheel = - 354 - 2.5

July 31, 1900

S Cygni.

20 8 5.7.2

17 18 W Obs.

2 30

9 10 Posted

Ledgered

8 38 star t seen; star u faintly seen at intervals; var. thought to be seen very faintly at intervals; if var is certainly seen as it is thought to be at intervals about equal to star "u".

R Lyncis. W Obs.

6 49 + 5 5.1

17 30

10 41

~~1 19~~

Abandoned for the present. too low; too much twilight.

Saturn

18 00 -2 2 0

17 45

0 15

11 45

Exam of Region of Iapetus.

Iapetus throughly checked to-night and also with respect to its position last night. Star a of last night which was taken for Iapetus

July 31, 1900.

was certainly Iapetus. All the transits checks it and Iapetus (star a of last night) has gone from that region by the right amount preceding & south. Star b is exactly in position of last night.

It is absolutely certain that the star a taken last night for Iapetus was Iapetus.

Nova Sagittarii.

18 51 -13.0
18 30
0 21
11 39

Abandoned for the present.

W6b. T. Ursae Maj.

1 2 33 +60.4
18 33 Ledgered
6 00 Posted.

10 00 s 2 var, var 2 t

Obs a little difficult; the var. rather faint & sky not perfectly clear.

July 31, 1900

Phot. T. Nova Sagittarii W-Obs

18 51 − 13.0
18 51
0 00

~~Left~~ above Ledgered
267.4 < comp ✱ alis Posted.
10 25.0 290.2 22.8
86.2 22.0
108.2 44.8 + 3.52

267.0 + 3.47
292.0 25.0
87.0 21.7
108.7 46.7 + 3.42
Below Final mean = + 3.44
171.6
204.4 32.8
353.4 32.1
25.5 64.9 + 2.68

173.4 + 2.80
10 38.0 203.2 29.8
10 31.5 353.9 28.9
5 − .4 22.8 58.7 + 2.91
15 31.1 Gr M T.
5232.647

July 31, 1900.

Nova Sagittarii again.

Below
174.4
10 41.0 203.4 29.0
353.4 32.1
25.5 61.1 +2.82

173.9 +2.88
203.6 29.7
355.0 28.1
23.1 57.8 +2.94

Above ~~Final~~ mean = +3.06
86.9
111.3 24.4
266.5 26.7
293.2 51.1 +3.23

86.3 +3.24
10 54.0 110.3 24.0
10 47.5 267.0 26.6
5 – 4 293.6 50.6 +3.24
15 47.1 Gr. M.T.
5232.658

Final mean = +3.10

July 31, 1900.

Nova Sagittarii very faint and rather difficult from faintness and ~~st~~ slightly murky condition of atmosphere. Meas. however made with ~~grea~~ great care, and slowness and resting the eye frequently, so that obs. are considered good.

18 51 −13.0
20 01
1 10

20 10 21.5
10 41.9 20.4

10 55.5
11 15.9 20.4

R Lyrae W 6b
6 49 +55.1
21 09
40

30 49 +55.1
21 09
9 40
2 20

12 35 clouds abandoned for present

July 31, 1900

Phot R.  o Ceti  W Obs.

26 12  -3.6
21 42
4 30
7 30

26 14  -3.4
21 50
4 24
7 36

26 14  -3.4
21 56
4 18
7 42

26 14  -3.6
22 04
4 10
7 50

July 31, 1900.

o ceti

Plotted

Ledgered.

R&A.
205.6
13 23.6 212.~~5~~3 — 6.7 ✓×
25.3 — 7.3 ✓×
32.6 — 14.0 ✓× – 6.07 ✓×

(– 6.02 ×✓)

205.1
212.3 — 7.2 ✓×
25.0 — 7.5 ✓×
32.5 — 14.7 ✓× – 5.96 ×✓

L&B
115.6 — ~~6.00~~
122.6 — 7.0 ✓×
295.1 — 7.5 ×✓
302.6 — 14.5 ×✓ – 5.99 ✓×

(– 5.98 ×✓)

115.4
13 29.4 122.6 — 7.2 ✓×
13 26.5 × 295.3 — 7.5 ✓×
5 – .4 302.8 — 14.7 ✓× – 5.96 ×✓
18 26.1 × G.M.T.
5232.768 ×

mean – 6.00 ×

July 31, 1900

ι Ceti Again

B & L
115.5
13 31.4 122.8 7.3 ✓x
294.7 7.9 x✓
302.6 15.2 x✓ — 5.89 ✓x

(−5.88 x✓)

114.9
122.5 7.6 x✓
294.7 7.8 x✓
302.5 15.4 x✓ − 5.86 x✓

K & A. = −5.92 x

25.4
32.4 7.0 x✓
205.1 7.6 x✓
212.7 14.6 x✓ — 5.98 x✓

(5.96 x✓)

25.0
13 36.4 32.4 7.4 x✓
7.8 204.8 7.4 x✓
13 33.9 212.2 14.8 x✓ — 5.95 x✓
5 — .4 R Lyncis mean −5.92 x✓
18 32.5 x Gr M.T. 30 49 + 5.5./ Final mean = −5.96 x
5232.772 x 22 34
8 15
3 45 Posted - Ledgered
13 55 ℓ 1.5 var, var 3.5 f.
in large telescope.

Posted
to here.

July 31, 1900.

R. Lyncis cont.

13 56 e 1 var; var 4 f in finder

Aug. 4. 1900. (Saturday)

Brooks' New Comet. Gr. obs.

26 ~~7~~h 38m +50°
18 25
−8 13
3 47

18 30
−8 8
3 52
26 38
18 42
7 56

18 48 +48°.2
3 45 = Hour Circle Read.

8 15
18 48
~~23~~ ~~01~~
3 03
12 00
3 49
8 11
18 52
~~7~~ 3 03

Aug. 4, 1900.

~~26 03~~
~~19 59~~
~~56 4~~
~~45 56~~

*
27 03
20 10
6 53
5 7

$3^h\ 03^m$ +48°.2

Aug. 6. 1900.

~~Meas^t of light of comet~~

Meas^t of 10.5 magn. star both before and also during passage of Brooks' ☄ over it.

1st group = before comet was over it,
2d " = while comet's tail 1° from head was passing over it.

Phot. T used. Frost.

Aug. 4. 1900.

Before passage of comet over star,

05.5 55.1 ×

60.6 Index above.

11 25 ± 185.4 50.1 × 1.53 × Ledgered

235.5 105.2 × Posted.

+(1.68)

05.4 48.3 ×

~~05.0~~ ~~93.3~~

53.7 45.0 ×

~~53.3~~

186.4

11 31 ± ~~187.2~~ 93.3 × 1.83

231.4

~~231.7~~

Index below.

278.6 40.7 ×

~~279.0~~

319.3

~~318.9~~

11 37 ± 98.4 $4\overset{2}{\cancel{4}}9$ × ~~2.03~~

~~97.6~~

141.8 ~~83.6~~ 2.09 ×

~~144.5~~

83.6 ×

~~11 43~~ 276.3 43.3 × $+(2.0\overset{9}{\cancel{6}})$ ×

319.6

~~99.2~~

~~94.5~~ 40.4 ×

11 43 139.6 83.7 × 2.09

4)136

11 34.0 Mean $+1.8\overset{8}{\cancel{7}}$ ×

−0.4

11 33.6

16 33.6 G.M.T.

5236.690

Aug. 4. 1900.

During passage of o≡ over star.

279,0
279,4 41.4 Index ~~above~~ below.
320,4
11 40 ± ~~320,7~~
~~98,2~~ 98,7 41.8
~~98,4~~
146,5 83.2 +2.10

179,3 41.1 (+2.08)
320,4
~~322,6~~
~~97,6~~ 97,2
11 46 ± ~~95,3~~ 43.5
140,7 84.6 +2.06

Index above.

11 53 184,7
~~232,2~~ 231,7 47.0
~~232,4~~
~~82,7~~
~~83,0~~ 49.5
52,2 96.5 +1.74

~~183,8~~
~~184,7~~
~~184,9~~ 234,2 50.4 (+1.72)
11 58 ~~233,9~~ ~~234,3~~
~~233,0~~ ~~04,8~~
4|197 ~~04,2~~ ~~03,0~~
~~04,8~~ 47.9
11 49.2 52,7
−0.4 ~~51,9~~ 98.3 +1.70

16 48.8 Gr. M.T. mean +1.90

5236.701 Watch used above was 0m 25s fast, at 12h 52m.

At. 13h 15m E.T. R.A. o≡ = 3h 3m
" " " Dec. o≡ = +48°.7

Aug. 9. 1900. (Thursday)

Star 19 U Virginis. W. obs.

12 44 +6.3
17 16

+4 32

For measts. see next page.

Aug. 9. 1900.

Index right and below

W. ks.

Ledgered.

Posted

135.9 — ~~3~~6.8 ✓+

7h 55m 172.7

316.2 — 32.3 +✓

348.5 — 69.1 + +2.54 ✓+

(+2.60 ✓)

137.0 — 33.2 +✓

170.2 — 32.7 +✓

316.0 — 65.9 +✓ +2.65 ✓+

348.7 —

Index left and above

48.2 — 29.3 +✓

77.5

230.0 — 31.1 +✓

261.1 — 60.4 +✓ +2.84 +✓

50.6 — 28.9 +✓

(+2.93 +✓)

79.5

8h 10m 230.0 — 26.9 +✓

8 25 ✓ 256.9 — 55.8 + +3.02 +✓

5 0

13 25 ✓ G.M.T.

mean +2.76 +✓

5241.542 4+

Aug. 9. 1900.
χ Cygni Phot. I. W. ole.

19 45 +32.6
17 35
2 10
9 50

Ledgered
Posted.

Index above
~~96.2~~ 96.1 45.3 ✓×
δ 13± 141.4
279.0 41.4 ✓×
320.4 86.7 ✓× −2.00 ✓×

(−2.00) ✓×

~~100.4~~ 99.2
138.3 39.1 ✓×
276.8 47.2 ×✓
324.0 86.3 ×✓ −2.01 ×✓

Index below
1.5
~~56.3~~ 55.7 54.2 ✓×
186.8 46.4 ×✓
233.2 100.6 ✓ −1.64 ✓×

(−1.64) ×✓

5.8
51.0 45.2 ✓✓
8h 30m 181.1 55.7 ×✓ −1.63 ✓×
δ 21.5 ✓× 236.8 100.9 ×✓
13 21.5 ✓ Gr. M.T.
5241.556 ×

mean −1.82 ×✓

Aug. 9. 1900.

Same again.

~~Index Above~~ Index below.

~~3~~ 0.5
$8^h 33^m$ 54.7 54.2 v x
186.3 46.1 v x
232.4 100.3 x v −1.65 v x

4.5 46.2 x v (−1.68 x) v
~~49.7~~ 50.7
184.2 51.5 x v
235.7 97.7 x v −1.71 v x

Index ~~b~~ above.

~~276.1~~ 275.7 48.6 x v
324.3
97.7 43.2 x v
140.9 91.8 x v −1.87 x v

278.8 40.4 x v (−1.90 x) v
~~319.3~~ 319.2
~~95.0~~ 94.5 48.7 x v
$8^h 50^m$ ~~142.4~~ 143.2 89.1 x v −1.94 x v

8 41.5 v x
13 41.5 v x G.M.T.
5241.570 x

mean −1.79 x v

9.5 inch cap used. in prec. measts on χ Cygni.

Aug. 9. 1900.

Comet b 1900. (Borelli-Brooks) W. obs.

22
~~3~~ 10 +61.°5

18 50

8 20

3 40

3 55

8 5

19 8

8 5

9 40 3 13

~~61.8~~

61.8 Pos. o ∈

For meas'ts of ∈ see next two pages.

Aug. 9. 1900.

Index right above

3.3 Star dis. 59.0 ✓×

Ledgered
Posted

10h 3m 62.3

173.3 73.9 ✓×

247.2 132.9 ✓× +0.92 ✓×

Index left below

269.4 58.6 ✓× ~~+1.12~~ ✓×

328.0

10h 7m 92.5 55.5 ✓×

148.0 114.1 ✓× +1.32 ✓×

Index left a below +078

=+1.30

269.8 57.9 ✓×

327.7

91.0 58.2 ✓×

10h 12m ~~148.~~ 149. ✓ 116.1 ✓× +1.28 ✓×

Index right a above

~~+0.96~~ ×✓

173.1 74.5 ✓×

10 15 247.6

10 9.25 ✓× 353.2 71.5 ×✓

5 64.7 146.0 ×✓ +0.65 ×✓

15 9.25 ✓×

5241.631 ×

Gen. mean +1.04 ×

Aug. 9. 1900.

R & A

177.2
246.1 68.9 ✓×
351.1 75.1 ✓×
10 19 66.2 144.0 ×✓ +0.69 ×✓

~~+0.98~~ ×✓

L & B

90.0 58.0 ✓×
148.0 59.0 ×✓
269.5 117.0 ×✓ +1.26 ✓×
10 23 ~~328.0~~ 328.5

+0.70 × [brace: +0.69, +1.26, +0.70, +1.41] = +1.34

L & B

97.0 51.1 ✓
148.1
268.1 59.1 ✓
10 26 327.2 110.2 ×✓ +1.41 ✓×

~~+1.06~~ ×✓

R & A

352.4 75.1 ×
67.5 68.5 ×✓
143.6 ×✓ +0.70 ×✓

Mean +1.02 ✓

176.0
10 37
10 26.2 × 244.5
✓
15 26.2 ×

524.640 ×

Aug. 9. 1900.

Measurements made through increasing haze and cloud: settings difficult; moon bright and nearly full. attempt was made to measure light of nucleus, but this although somewhat stellar was a little elongated and surrounded by a little faintish coma, practically no tail visible tonight

Comp. star used with Phot. T. on
~~α b 1900 = D M. + 61° 555 (9.0)~~
α b 1900 = D M. + 61° 555 (9.0)

Aug. 9. 1900.

Expts with Phot. X.

Sky too bright and hazy to see artificial stars on sky background.

Tel. diaphragmed ~~to~~ down to 6 inches. Artificial stars faintly seen.

Settings on faint star Prof. Swezey obs.

12.6
12.4
12.1
16.8
12 25 16.1
14.6
15.1
14.7
15.0
11.5

Aug. 9. 1900.

Comp. of faint star in Phot. X.

W. S.

9.3
7.9
6.9
7.2
4.4
10.0
8.6
7.8
7.1
10.3
9.0
7.2
5.4
5.1
5.7
5.0

In all the above settings, meas. made through varying clouds, so that settings are not considered at all critical.

Aug. 19. 1905. Sunday.

o Ceti. Phot. Rc. W. obs.

26
~~2~~ 13 −3.5
22 15
−3 54
4 2

For obs. see next two pages.

Aug. 19. 1900.

Index to Right

199.1 8.4 Plotted

12 54 207.5 Ledgered

18.3 8.9

27.2 17.3 −5.61

198.5 8.6 −(5.58)

12 56.5 207.1

18.0 9.1

27.1 17.7 −5.56

Index to left

108.2 8.9

13 00 ~~116.8~~ 117.1

288.5

297.0 8.5

17.4 −5.59

13 01.5 108.3 8.5 −(5.58)

232.0 116.8

12 58.0 ~~287.5~~ 287.8 9.1

5 +5 296.9 17.6 −5.57

17 58.5 Gr. M.T.

5 2 51.749 mean −5.58

Aug. 19. 1900.

Index to left.

1 3 03.5 107.9
116.8 8.9
288.0 9.2
297.2 18.1 − 5.51

108.2 9.0 −(5.50)
1 3 05.0 117.2
287.5 9.2
296.7 18.2 −5.50

Index to right.

1 3 07.5 17.8 8.4
~~26.0~~ 26.2
198.3 8.6
206.9 17.0 −5.64

1 3 09.0 18.3 8.4 (5.63)
25.0 26.7
13 6.2 197.6 8.8
5 + 5 206.4 17.2 −5.62
18 6.7 Gr. M.T.
5251.755

mean = −5.56

Final Mean = −5.57

Aug. 19. 1900.

X Cygni. Phot. I. W. obs.

19 45 +32.6
23 30
+3 45

Ledgered
Posted

Index left + above

13 36.5

179.2
235.0 55.8
355.7 67.5 -1.12
63.2 123.3

13 39.6

175.4 66.8 (-1.11)
~~241.9~~ 242.2
2.2 57.5
59.7 124.3 -1.10

Index right + below.

13 45.0

91.5 57.0
148.5 49.2
272.1 106.2 -1.51
~~321.0~~ 321.3

(-1.52)

13 48.6

~~94.0~~ 93.6
143.0 49.4
269.8 56.4 -1.52
326.2 105.8

169.1
13 42.3
5 +5
18 42.8 Gr. M.T.
5251.780

mean -1.32

Aug 19. 1900

Index Right + below.

89.2 59.8
13 50.5 149.0
272.5 50.2
322.7 110.0 −1.42

(−1.44)

92.0
53.2
13 53.4 145.2
54.6
270.7 107.8 −1.47
325.3

Index left + above.

13 58.5 353.5 68.1
61.6
~~180.0~~ 179.6 58.4
126.5 −1.05
238.0

0.9 57.3 (−1.12)
14
~~2~~ 01 58.2
178.1 62.9
223.4 241.0 120.2 −1.19
13 55.8
5 +.5

18 56.3 Gr. M.T.

5251.789 Watch used was 30 secs. slow.

Mean −1.28

9.5 in cap. used.

Pos. Ang. 191.8

Sprocket wheel, −3.5 A system
−2.5 B system

Aug. 20. 1900. (Monday)

R Urs. min. Phot. T. Lw. obs.
16 32 +72.6
23 7
+6. 35

Too cloudy for R Urs. min.
Abandoned after much trying.

Aug. 21. 1900. (Tuesday).

R Urs. min. Phot. Y. Lv. ob.

16 32 +72.6
22 15
+5 43

Index right above

~~273~~ 277.3

12 20 ~~323.3~~ 322.5

~~97.7~~ 97.0

141.5

280.0 39.0

319.0

12 22 321.0

~~96.1~~ ~~96.7~~ 96.9

~~141.1~~ 140.8

Aug. 21. 1900.

Ledgered.
Index right & above Posted.

12 26.5 Corresp. star dir. > 280.9 40.4
321.3
97.0 44.2
141.2 84.6 +2.06

280.0 41.0 (+2.04)
12 30 321.0
96.5 44.9
141.4 85.9 +2.03

Index left & below

184.0 51.3
12 34 235.3
05.2 48.4
53.6 99.7 +1.66

12 36 185.7 50.4 (+1.64)
236.1
12 26.5 51.7
12 31.6 3.1 102.1 +1.61
5 54.8
17 31.6 G. M. T. mean = +1.84
52 53.731

Aug. 21. 1900

Images left & below

| | | | |
|---|---|---|---|
| | 186.2 | 48.2 | |
| 12 39.5 | 234.4 | 49.1 | |
| | 5.0 | 97.3 | +1.72 |
| | 54.1 | | |
| | | | (+1.77) |
| | 185.9 | 48.3 | |
| 12 ~~37~~ 42 | 234.2 | 49.0 | |
| | 5.0 | 97.3 | +1.72 |
| | 54.0 | | |

Image right & above

| | | | |
|---|---|---|---|
| 12 46 | 97.3 | 43.4 | |
| | 140.7 | 46.4 | |
| | 278.6 | 89.8 | +1.92 |
| | 325.0 | | |
| | | | (+1.94) |
| 12 50 | 96.5 | 45.8 | |
| 177.5 | 142.3 | 43.0 | |
| 12 44.4 | 279.0 | 88.8 | (+1.95 |
| 5 | ~~323.3~~ 322.0 | | |

17 44.4 Gr. M.T.

5-253.739

~~mean +1.8~~ ~~3~~

mean +1.83

Pos. Ang. = 130°

Sprocket wheel

Sept. 3. 1900. (Monday).

Japetus. W. obs.

After thorough trial found it impossible to get Japetus. Moon too near.

χ Cygni. Phot. J. W. obs.

19 47 +32.7
20 46
+0 53

19 47
21 0
+1 13

Ledgered

Posted

Index left to above.

10 11 177.5
63.5 ✓+
241.0
344.9
85.1 +✓
70.0
148.6 +✓ −0.60 ✓+

169.8
82.3 +✓
252.1
353.8
70.2 +✓
64.0
152.5 +✓ −0.53 ✓+

(−0.56 +)

Monday, Sep. 3 1900.

Index below & right.

~~10 20~~

86.0
155.0 69.0
258.9 80.8
339.7 149.8 -0.58

~~10 23~~

~~77.9~~
~~265.3~~
~~333.0~~ (-0.62)

10 24
15 17.5 4h M.T.
s = 266.687

85.5 67.1
152.6
260.3 78.2
338.5 145.3 -0.67

mean -0.59

Same again
Index below & right.

10 26.5

83.0
155.7 72.7
264.7 68.4
333.1 141.1 -0.75

85.4 66.4 (-0.72)
157.8 78.0
261.4 144.4 -0.69
~~340.0~~
339.4

Monday, Sept. 3 1900.

Index left alone.

~~10 33.5~~ 348.0 85.3

73.3

173.0 72.0

245.0 157.3 −0.43

(−0.46)

357.8 73.0

10 35 64.8 81.2

169.0 154.2 −0.49

10 30.8 250.2

5 mean −0.59

15 30.8 Gr. M.T. Position angle 194°.7 Vernier A.

5266.647 Sprockett wheel {−3.5 A system.

{−2.5 B system.

Monday Sept. 3.

Eros. Ast. obs.

| | | | |
|---|---|---|---|
| | 2 39 3. | +40° 24.2 | French. |
| | 2 38 49. | +40 23.7 | Jahr. |
| Correction | +1 4. | +0.5 | |

+3.61~~4~~4
45.
18070
14456
162.630

16.17
45.
8085
6468
727.65

| | | |
|---|---|---|
| Sept 3. | 2 23 5~~4.7~~ | +34 22.8 |
| " 4. | 2 25 2. | +34 44.9 |
| | 1 8 | 4/22.1 |
| | 4/68 | 5.5 |
| | 17. | |
| | 2 23 54. | +34 22.8 |
| | +17. | +5.5 |
| | 2 24 11. | +34 28.3 |
| Correction = | +14. | +0.5 |
| Pos. Eros (1900) = | 2 24 25. | +34 28.8 |
| | −2 43. | −12.1 |
| " " (1855) = | 2 21 42. | +34 16.7 |
| ✱ | 2 22 23. | +34 16.8 |
| | −41 | |

Monday Sept. 3.

Eros. Gr. ts.

26
~~7~~ 24 +33.9
22 49

---

-3 3√
4 2√

9.0
9.0

11 √6

11.0
11.0

---

10.8
10.5
10.5
10.8
10.6

12 20

9.5
9.5
~~12 20~~ 9.6
9.5
~~12~~ 9.5

Eros now precedes D.M. +34° 448 8.0
and ½

Monday September 3 1901.
Eros.
Comp. Star = Dur. + 34° 452 (9.4)
Index left + above

273,5  48.7  Posted.
12 45  322,2  Ledgered
93,7  521
145.8  100,8  1,64

275.3  51,3  1,70
326.6
~~99,0~~ 98,2  44.1
142,3  95,4  1,77

Index right + below
186,0  47,1
233,1
2,4  499
52,3  97,0  17,3

182,0  Clouds.  (1,61)
12 57  237,0  55,0
17 51 Gr.M.T.  4,2  51,8
5266.744  56,0  106,8  1,49 mean 1,66

Same again.

185,0  50,0
13 0  235,0  525
8.0 by 48 sec  ~~3.0~~ 4.0  1025  1,60
0.5 S of M  56,5

Posted &.
Ledgered
to here

Monday, Sep. 3 1900.

183.5
236.5 53.0 (1.63)
5.0 47.0
52.0 100.0 1.66

Index left + above.

95.5 48.5
144.0
273.4 50.2
323.6 98.7 1.69

97.0 46.7 1.74
13 12 143.7
275.0 48.0
13 06
18 06 Gr. M.T. 323.0 94.7 1.79
5266.754

mean 1.68

13.5
13.5
13.5

1 27

6.5
6.7
6.6

1 32m Eros now precedes 8th mag star before mentioned by $44.5^{sec}$

Tuesday. Sept. 4. 1900.

U Ophiuchi: Phot. T. Gr. Obs.

17 9 +1.4
18 43
+1 34

Ledgered
Posted

Index left.

| | | | |
|---|---|---|---|
| | 106.5 | 25.5 ✓ × | |
| 7 51 18 | 132.0 | | |
| | 289.6 | 21.5 ✓ × | |
| | 311.1 | 47.0 ✓ × | −3.41 ✓ × |
| | | | −3.46 × ✓ |
| | 108.3 | 21.7 ✓ × | |
| 7 53 22 | 130.0 | | |
| | 288.3 | 23.1 ✓ × | |
| | 311.4 | 44.8 ✓ × | −3.52 ✓ × |

Index right.

| | | | |
|---|---|---|---|
| | 17.1 | 22.4 ✓ × | |
| 7 56 48 | 39.5 | | |
| | 197.2 | 25.8 ✓ × | |
| | 223.0 | 48.2 ✓ × | −3.35 × ✓ |
| | 17.2 | 25.3 ✓ × | −3.36 × ✓ |
| 7 58 41 | 42.5 | | |
| | 198.3 | 22.3 ✓ × | |
| | 220.6 | 47.6 ✓ × | −3.38 × ✓ |
| | | mean | 3.41 ✓ × |

7 58 41
20 01 ×
7 55 00 ×
5 −28
12 54 32 × Gr. M.T.

5267.
and is 0.2' N of V. Mag. Grove = 12.7

Tues, Sep. 4 1900.

Index right.

19,0 20.7
8 01 42 39,7
196,6 25.9
222,5 46.6 3.43

17,1 25.4 (3,41)
8 04 03 42.5
198,2 22.1
220,3 47.5 3.39

Index left.

~~288~~ 287,9 22.8
8 07 08 310,7
107,2 23.8
131,0 46.6 3.43

286,6 24.0 (3.48)
8 08 53 310,6
21 46 109,4 20.5
8 5 26 129,9 44.5 3.53
5 - 28 mean 3.44
13 4 58 G.M.T.
5 267.

Tues. Sep. 4, 1900.

Index ~~left~~

| | | | |
|---|---|---|---|
| | 289,0 | 21.0 | |
| 8 11 54 | 310,0 | | |
| | 108,0 | 23.0 | |
| | 131.0 | 44.0 | 3.56 |
| | 288,8 | 22.6 | (3.56) |
| 8 13 47 | 310,6 | | |
| | 109,2 | 21.5 | |
| | 130,7 | 44.1 | 3.55 |

Index right.

| | | | |
|---|---|---|---|
| | 196.8 | 24.2 | |
| 8 19 02 | 221,0 | | |
| | 18,0 | 20.6 | |
| | 38,6 | 44.8 | 3.52 |
| | 198,5 | 21.5 | (3.51) |
| 8 23 17 | 220,0 | | |
| | 17,3 | 23.6 | |
| | 40,9 | 45.1 | 3.50 |

mean 3.54

68 00

8 17 00

5 - 28

13 16 32 Gr. M.T.

5 267.

Tues. Sep. 4. 1900

Index right.

| | | | |
|---|---|---|---|
| | 198,5 | 22,4 ✓× | |
| 8 27 38 | 220,9 | | |
| | 19,6 | 20,5 ✓× | |
| | 40,1 | 42,9 ✓× | 3,61 ×✓ |
| | 198,6 | 21,2 ✓× | (3,57) ×✓ |
| 8 30 03 | 219,8 | 23,4 ×✓ | |
| | 17,4 | 44,6 ✓× | 3,53 ×✓ |
| | ~~40,7~~ 40,8 | | |

Index left.

| | | | |
|---|---|---|---|
| | 108,4 | 23,3 ✓× | |
| 8 33 10 | 131,7 | | |
| | 289,3 | 20,8 ✓× | |
| | 310,1 | 44,1 ✓× | 3,55 ×✓ |
| | 109,8 | 20,9 ✓× | (3,57) ×✓ |
| 8 36 40 | 130,7 | | |
| | 288,1 | 22,5 ✓× | |
| | 310,6 | 43,4 ✓× | 3,59 ×✓ |

mean 3,57 ✓

127 31

8 31 53

5 - 28

13 31 25 Gr. M. T.

5-267

Tues, Sep. 4 1906,

INDEX LEFT

| | | | |
|---|---|---|---|
| | 108.6 | | |
| 8 39 20 | 130.6 | 22.0 ✓ x | |
| | 288.7 | 21.3 ✓ x | |
| | 310.0 | 43.3 ✓ x | 3.59 x |
| | 110.0 | 19.9 x | (3.64 x) |
| 8 41 43 | 129.9 | | |
| | 288.5 | 21.7 x | |
| | ~~310.4~~ 310.2 | 41.6 x | 3.64 x |

Index right

| | | | |
|---|---|---|---|
| | 18.4 | 22.3 x | |
| 8 46 42 | 40.7 | | |
| | 199.3 | 21.4 x | |
| | 220.7 | 43.7 x | 3.57 x |
| | 18.5 | 22.0 x | (3.55) |
| 8 49 20 | 40.5 | | |
| 177 05 | 198.5 | 22.5 x | |
| 8 44 16 x | 221.0 | 44.5 x | 3.53 x |
| 5 -28 | | | |
| 13 43 48 x Gr. M.T. | | mean | 3.60 x |
| 5 267. | | | |

Tues. Sep 4 1900.

Index right

19,0 22,4

8 56 57 41,4

198,7 22.6

221,3 45.0 3,51

18,4 21,2 (3,56)

8 59 48 ~~40,1~~ 39,6

198,2 22,0

220,2 43.2 3,60

Index left

289,2 20.9

9 04 12 310,1

109,6 19.7

129,3 40.6 3,74

289,7 20.0 3,72

9 07 03 309,7

248 .00 108,8 21.4

9 02 00 130,2 41,4 3,69

5 - 28 mean 3.64

14 01 38 Gr. M. T.

5267

Tue. Sep. 4 1900.

Index left.

| | | | |
|---|---|---|---|
| | 289,0 | 21,1 × | |
| 9 18 26 | 310,1 | | |
| | 110,0 | 19.0 × | |
| | 129,0 | 40,1 × | 3,76 × |
| | 290,0 | 19.0 × | 3.76 × |
| 9 20 54 | 309,0 | | |
| | 109,0 | 21.2 × | |
| | 130,2 | 40.2 × | 3,76 × |

Index right

| | | | |
|---|---|---|---|
| | 198,6 | 21.4 × | |
| 9 24 27 | 220,0 | | |
| | 19,0 | 21.3 × | |
| | 40.3 | 42.7 × | 3,62 × |
| | 198,7 | 21.0 × | 3.62 × |
| 9 28 48 | 219,7 | | |
| | 19.0 | 20.6 × | |
| | 39,6 | 41.6 × | 3.68 × |
| | | mean | 3.70 × |

9 2 35
9 23 09 ×
5 -28
14 22 41 × Gr. M. Time.
5267.

Tues. Sep. 4 1900

Index right

|  |  |  |  |
|---|---|---|---|
|  | 199.0 | 21.0 |  |
| 9 34 38 | 220.0 |  |  |
|  | 19.2 | 20.8 |  |
|  | 40.0 | 41.8 | 3.67 |
|  | ~~199.0~~ 198.5 |  | 3.62 |
| 9 37 29 | 221.0 | 22.5 |  |
|  | 18.7 | 21.5 |  |
|  | 40.2 | 44.0 | 3.56 |

Index left.

|  |  |  |  |
|---|---|---|---|
|  | 109.4 | 21.5 |  |
| 9 42 14 | 130.9 |  |  |
|  | 289.4 | 20.6 |  |
|  | 310.0 | 42.1 | 3.65 |
|  | 109.8 | 20.6 | 3.66 |
| 9 45 18 | 130.4 |  |  |
|  | 289.0 | 21.0 |  |
|  | 310.0 | 41.6 | 3.68 |

mean 3.64

9 45 18

1 59 31

9 39 23

5 - 28

14 38 55 Gr. M.T.

5 2~~0~~7

Tues. Sep. 4, 1900.

Index left.

109.0

10 ~~10~~ 00 11 — 131.0 — 22.0×

289.2 — 20.6×

~~310.0~~ 309.8 — 42.6× — 3.63×

109.3 — 20.7× — (3.64×)

10 03 8 — 130.0

288.5 — 21.6×

310.1 — 42.3× — 3.64×

Index right.

19.0 — 21.0×

10 06 17 — ~~39.6~~ 40.0

198.9 — 21.1×

220.0 — 42.1× — 3.65×

19.0 — 21.2× — (3.62×)

10 09 23 — 40.2

18 59 — 198.3 — 22.1×

10 04 45× — 220.4 — 43.3× — 3.59×

5 — 28

mean 3.63×

15 04 17× Gr. M.T.

5267.

Position angle by Vernier A = 4°.5

Sprocket wheel { −6.5 B system
−5.5 C system

Sept. 4. 1900.
Eros. Phot. T. L. B.

26
~~2~~ 22 +34.3
21 40

−4 42
7 1.8

8.0 mag. 2 22 23 +34 16.8
−54 −2.
2 21 29 +34 14.8
~~+2 secs. from~~ ~~23~~
+1 7 +22.2
1855. = 2 22 36 +34 37.0

10 50(?) 9.0
9.2
9.0
9.3
9.5
5)46.0
9.2 = Mean

~~10~~

10.5
11 10 10.4
10.2

One of the comparison stars of tonight precedes D.M. +34° 446 [9.1] by 54 sec. and is 12.5' S of it. Mag. = 10.0 – 11.0

Tues. Sep 4, 1900.

+0$^h$ Eros now follows D.M. +34° 449 [8.8] by 14.5$^{sec}$
11$^h$ 11$^m$ and is 8.0' S of it.

Comp. with star at bottom of prec. page.

Index left & above.

Ledgered + Posted.

comp. * dia → 174.1

11 21 246.2 72.1
343.7 82.8
66.5 154.9 +0.48

172.5 +0.56
246.0 73.5
352.5 73.0
65.5 146.5 +0.64

Index right & below.

~~86.4~~ 85.4
154.6 69.2
261.0 78.0
339.0 147.2 +0.63

84.4 0.61
11 29 157.0 72.6
11 25.0 260.0 76.8
5 – 0.5 336.8 149.4 +0.59
16 24.0 Gr. M.T.
5267.684

Mean = +0.58

Tues. Sep. 4, 1900.
Same again,

82,0
11 32 147,0 65.0 x
260,3 74.9 x
335,2 139.9 x + 078 x

79,0 +0.70 x
155,0 76.0 x
264,0 72.0 x
336,0 148.0 x + 0.61 x

Index lft + above,
352,5
83,5 71.0 x
171.0 76.2 x
247,2 147.2 x + 0.63 x

348,8 + 0.60 x
11 48 67,0 78.2 x
11 36 0 x 175,0 72.0 x
5 — 05 247,0 150.2 x + 0.57 x
16 35.5 Gr. M.T.
5267.692 x

Mean = + 0.65

Tues. Sept. 4 1908.
Index right & above

| | | | | |
|---|---|---|---|---|
| 11 56 | 1.0 | 54.3 ✓ × | | Ledgered<br>Posted. |
| | 55.3 | | | |
| | 186.3 | 52.5 ✓ ✓ | | |
| | 238.8 | 106.8 ✓ × | 1.49 ✓ × | |
| | 6.0 | 51.3 ✓ × | | 1.48 ✓ × |
| | 57.3 | | | |
| | 181.6 | 56.6 ✓ × | | |
| | 238.2 | 107.9 ✓ × | 1.47 ✓ × | |

Index left & below

| | | | | |
|---|---|---|---|---|
| ~~282.4~~ | 274.4 × | | | |
| ~~323.2~~ | 326.0 | 51.6 ✓ × | | |
| ~~94.7~~ | 95.0 | 48.2 × ✓ | | |
| ~~145.0~~ | 143.2 | 99.8 ✓ × | 1.66 × ✓ | |
| 272.7 | 49.7 ✓ | | | 1.66 × ✓ |
| 322.4 | | | | |
| 94.6 | 50.4 × ✓ | | | |
| 145.0 | 100.1 × ✓ | | 1.65 × ✓ | |

Comp. star used in this and fol. group is Dm + 34° 452 (9.4) which is same comp. star that was used on Sept. 3 with Eros.

12 09

125
12 02.5
5 -0.5
17 02.0 × Gr. M.T.
5267.710 ×

Mean = +1.57 × ✓

Tues Sept. 4 1900.

~~Same + b~~ Same again.

Index left + below.

12 12

274.6
322.0 47.4
92.8 44.7
141.5 92.1 +1.86

+1.86

277.5 44.1
321.6 47.5
94.5 91.6 +1.87
~~142.7~~ 142.0

Index right + above

182.0
239.3 57.3
2.9 51.4
54.3 108.7 +1.45

1.49

184.9 52.8
237.7
3.0 52.4
55.4 105.2 +1.53

Mean = +1.68

12 27
39
12 19.5
5 -.5
17 19.0 Gr M.T.
5267.722

Tues, Sep. 4, 1900.

12 55 Eros now follows 8.8 Mag. by 19.0 sec
and is about 5.8 S of it.

Correction to watch used in
preceding times in margin is -24. secs.
(that is, watch was 24. secs. fast)

Sept. 5. 1900. (Wednesday)

U Ophiuchi: Phot. I. G.v.B.

17 9 +1.4
12 53
4 44

Index left + above

289,7 19.6 ✓ ×  Ledgered
~~8~~ 9 5 10 309,3  ~~Posted~~
107,1 23.4 × ✓
130,5 43.0 × ✓ 3,61 ×

3.67 ×
288,5 21.2 ✓ ×
~~8~~ 9 8 01 309,7 19.5 × ✓
109,2 40.7 ✓ × 3.73 ×
~~128,5~~ 128,7

Index right + below
~~8~~ 9 13 28 198,6 21.2 ✓ ×
219,8 22.1 ✓ ×
18,9 43,3 ✓ × 3.59 ×
41,0

3.60 ×

197,8 22.9 ✓ ×
~~8~~ 9 16 23 220,5
20.4 ×
42 41 19,1 43.4 × 3.60 ^
8 10 40 39,5 mean 3.64 ×
5
13 10 40 Gr. M. T.  5268.5491 ×

Wed. Sep. 5 1900

Index right & below.

~~9~~ 8 20 02

199.6 20.6 ×✓
220.2
18.4 22.3 ×✓
40.7 42.9 ×✓ 3.61 ✓×

~~9~~ 8 21 48

198.5 22.1 ✓
220.6 21.0 ✓
19.0 43.1 ✓× 3.60 ✓×
~~3~~ 40.0

3.60 ✓

Index left & above.

~~9~~ 8 24 02

107.0 22.0 ✓×
129.0
288.5 21.3 ×✓
309.8 43.3 × 3.59 ✓

~~9~~ 8 26 13

107.2 22.8 ✓×
130.0
289.7 20.6 ✓×✓
310.3 43.4 × 3.59 ×✓

3.59 ×✓

12 06
8 23 02
5
13 23 02 G.M.T.
5268.5576 ×

means 3.60

Position angle (Vernier A) 184.1
Shoulder { −6.5 B system
Wheel { −5.5 C system

Sept. 5. 1900.

Eros. Phot. T. Lr. obs.

26 22 +34.3
20 0
---
−6 22
5 38

8 48 Quite thick clouds in this region. Impossible to get Eros at present time.

R Urs. min. Phot. T. Lr. obs.

16 32 +72.6
20 10
---
+3 38

Wed. Sep. 5 1900.
Index right & above

95.3 46.2
9 11 8 141.5
279.0 44.5
323.5 90.7 1.90

97.5 43.0 1.94
140.5
277.5 44.5
322.0 87.5 1.92

Index left & below.

2.6 53.7
56.3
182.6 51.6
234.2 105.3 1.53

1.6 53.2 1.55
9 22 38 54.8
183.0 50.5
233.5 103.7 1.57
mean 1.74.

Reject above groups. Very cloudy and stars almost invisible. Clearer in last two groups.

Wed. Sep. 5 1900

Same again, Index left + below.

2,0 51.2 Posted.

9 24 43 53,2 53.4 Ledgered

~~184~~ 181.4 104.6 +1.54

234.8 Plotted.

1.0 53.7 +1.54

54.7

184.0 50.5

234.5 104.2 +1.55

Index right + ~~below~~ above.

275,4 48.0

323,4

95.3 47.7

143,0 95.7 +1.76

276,2 48.6 +1.77

9 35 03 324,8

5 9 46 96,5 46.5

9 29 53 143,0 95.1 +1.78

5 Mean 1,66

14 29 53 Gr. M.T.

5268.604

Wed. Sep. 5 1900.
Index right + above.

9 54 33 277,0 47.3
324,3
94,6 47.8
142,4 95.1 +1.78

276,4 47.6 + 1.80
324,0
96,5 46.3
142,8 ~~99.9~~
93.9 +1.41

Index left + below.
183,6 51.6
235,2
1,0 54.0
55,0 105.6 +1.52

181,2 55.9 + 1.50
10 04 55 237,1
1 19 28 2,8 51.9
9 59 44 54,7 107.8 +1.47
5
14 59 44 Gr. M.T. mean 1.65
5268.625

Corr. in Book R. 119
Position angle (vernier A) 313,1
Sprocket wheel { −5,5 B System.
−4,8 C System.

This book is posted, ledgered
to last date within. LC

16 30 at 7 45