KG
11365
549

KG 11365.549

R 126
~~216~~

July 26, 1901 to

b 3, 0.5
e 3, 1 f
h 0, 3 k

KG 11365.549

HARVARD
UNIVERSITY
LIBRARY
MAY 8 1956

July 26, 1901 (Friday)

B 80 1182 B 394
7 32 16.5 7 31 00

R Scorpii w Obs.

16 9 -22.6
16 9
0 0

16 17 -23.1
16 21
0 4

m with g

R & above
0.1 < g dis.

8 20.0 60.6 60.5
176.5 68.9
245.4 129.4 + 0.99
357.3
65.9 68.6 + 1.00
181.1 60.0
241.1 128.6 + 1.01
L & Below Mean = +1.08
273.2
327.8 54.6
88.1 67.7
155.8 122.3 + 1.14

267.4 + 1.16
8 32.0 331.4 64.0
8 26.0 94.5 56.0
5 -1.3 150.5 120.0 + 1.19

13 24.7 G. M. Time

July 26, 1901.

Meas. extremely difficult & a little uncertain, moon very near region, &
8:42 impossible to do anything more this
evening.

S Serpentis W Obs

15 19 +16.0
17 09
1 50

(H15) 2 4 H16
H16 3.5 H17
9:02 H17 4 H~~20~~ 19
H19 5 H25

U Herculis W Obs.

16 16 +195
18 16
2 00

Meas. of comp. stars see next page.

July 26, 1901

s with Hagen 12

Left
159.3
10 06.0 263.9 H 12 dis 104.6
344.2 89.1
73.3 193.7 − 0.45
156.3

167.3
255.9 88.6 − 0.44
338.6 103.5
82.1 192.1
Right 157.9 − 042
257.3 Mean = − ~~0.16~~ 0.18
348.3 91.0
~~8~~79.4 84.4
163.8 175.4 + 009

257.7 + 0.08
10 20.0 344.0 86.3
10 13.0 76.7 89.7
5 −1.3 166.3 176.0 + 0.08
15 11.7 Gr M Time

July 26, 1901

1 with H12

L&a.
266.8
10 33.0 340.3 < r dis. 73.5
78.4 84.3
162.7 157.8 − 0.42

262.8
342.8 80.0 − 0.46
82.1 74.5
156.6 154.5 − 0.49
R&B. mean = − 0.44
172.7
247.7 75.0
350.1 83.2
173.3 158.2 − 0.42

166.8
10 51.0 252.2 85.4 − 0.42
10 42.0 354.0 73.3
5 −1.3 67.3 158.7 − 0.41
15 40.7 Gr. M. Time

July 26, 1901.

R Canum Venaticorum

13 43 +40.6 w Ob.
19 33
5 50

final g with k

Left
1855
11 24.0 237.0 < k dis 51.5 ✓
8.1 46.4 ✓
54.5 97.9 ✓ + 171 ✓

189.2 +172 ✓
233.9 44.7 ✓
4.6 52.6 ✓
57.2 97.3 ✓ + 172 ✓
Right
98.0 mean = + 181 ✓
140.5 42.5 ✓
~~32~~ 276.7 48.0 ✓
324.7 90.5 ✓ + 1.90 ✓

97.3 +190 ✓
~~11 38.0~~ 146.1 48.8 ✓
11 31.0 279.5 42.2 ✓
5 -1.3 321.7 91.0 ✓ + 189 ✓
16 29.7 Gr M Time

July 26, 1901

L & a. final 0 with k

2618

11 43.0 337.1 $<\overset{k}{g}$ dis 75.3 ✓

842 68.0 ✓

152.2 143.3 ✓ +071 ✓

267.8 +0.75 ✓

332.6 64.8 ✓

82.8 76.6 ✓

159.4 141.4 ✓ + 075 ✓

k & B Mean +0.66 ✓

1723

251.1 78.8 ✓

357.3 71.4 ✓

68.7 150.2 ✓ + 0.57 ✓

17~~7~~6.2 +058 ✓

11 53.8 246.2 70.0 ✓

11 48.4 ✓ 351.9 79.2 ✓

5-13 ✓ 71.1 149.2 ✓ +059 ✓

16 47.1 Gr M time.

Posted to here   July 26, 1901

final k with k

LOB

17 5.8
11 56.4   24 2.5 < k dis   66.7
3.0   59.1
62.1   125.8 + 1.07

185.3
240.8   55.5   + 1.10
358.9   67.9
66.8   123.4 + 1.12
R & A   Mean = + 1.15
86.8
152.5   65.7
275.0   53.9
328.9   119.6   + 1.20

90.7   + 1.20
12 05.4   148.4   57.7
121.8   270.0   62.3
12 00.9   332.3   120.0   + 1.19
5 - 1.3
16 57.6 Gr. M. Time -

July 27, 1901 (Saturday)

B&C 1182 B 394 7

7 29 17.1 7 28 0.0

Σ 41' w Ob

Phot R. 19 19 +16.7

16 09

3 10

8 50

χ Cygni w Ob. Phot T.

19 45 +32.6

16 15

3 30

8 30

Above

103.9 < radius

8 0.0 137.5 33.6

284.9 32.5

317.4 66.1 - 2.64

104.6

136.9 32.3 - 2.64

284.6 33.7

318.3 66.0 - 2.64

Ledgend. Plotted

Below

10.7 Mean = - 2.50

49.3 38.6

195.2 34.5

229.7 73.1 - 2.41

10.0

8 06.6 48.3 38.3 2.36

8 03.0 193.1 38.0

5 2.3

13 00.7 231.1 76.3 - 2.31

5593. 542

July 27, 1901

Same Again II

Below
10.3
8 09.0 51.3 41.0
196.3 34.0
230.3 75.0 − 2.35

− 2.30
12.3
49.9 37.6
191.2 40.9
232.1 78.5 − 2.24

Above mean = − 2.42
284.4
319.2 34.8
104.2 32.6
136.8 67.4 − 2.59

283.9 − 2.54
8 23.0 317.4 33.5
101.9 36.6
138.5 70.1 − 2.50

~~Pos Angle~~
~~Sprocket Wheel~~ =

Reject above groups as sky was consid-
erably cloudy, images varying at times
as well as dim

July 27 1901

Same Again. III

Above
283.3
8 24.0 318.3 35.0
103.8 33.4
137.2 68.4 - 2.56

284.3 - 2.58
317.7 33.4
103.6 34.2
137.8 67.6 - 2.59

Below Mean = - 2.47
192.7
232.4 39.7
13.4 35.1
48.5 74.8 - 2.31

194.0 - 2.36
8 30.0 229.2 35.2
8 27.0 10.7 38.7
5-23 49.6 73.9 - 2.38
13 24.7 Gr m time
5598.559 Pos Ang = 203.2 Final m = -2.48
Sp. Wheel 6.5 9 C.S. = 8.10
7.5 B magn = 5.62

July 27, 1901

Σ 56′ 20 Obs.

Phot R. 21 32 +6.0
17 12
4 20
7 40

Pos Ang 335 Dist 0.′6± 6.0 - 7.0
L & a.

204.7 < bc. dis
8 51.0 260.0 55.3
21.8 58.3
80.1 113.6 - 1.34

201.4 -1.35
260.7 59.3
22.4 53.3
75.7 112.6 - 1.36
R.O.B.
109.4 Mean -1.38
167.0 57.6
288.9 50.7
348.6 108.3 -1.46

109.5 -1.40
8 37.0 167.5 58.0
291.1 55.0
8 54.0 346.1 113.0 -1.35
5 -2.3
13 51.7 Gr.M.T.

July 27, 1901.

B & C 1182			B 394		
9	05	17.9	9	03	0.5
9	06	18.1		04	0.5

Reap. Jup II Phot R. W. Obs.
Campbell recorder.
Comp with nearer of 2 Sats. on prec. side = Sat I
Clds. 9:17

9 15 23 – 9 17 40 Jup. ft. seen. Sats invis. Clds thick.
16 20 – 18 36 Jup. gone clds. thick
17 30 – 19 46 " ft. seen. Sats invis.
20 06 > removed ~~f not~~ & put on ordinary eyepiece
22 22 Clds. thick no Sats seen.
17 – 33 Sats not seen
38 – 54 Jup. ft. seen. Sats invis.
58 – 23 14 Sat II susp, others sats seen.
21 11 – 27 Sat II quite certainly seen
18 – 34 Sat II def. seen
32 – 48 " II more plainly seen
22 15 – 24 31 put on Photometer.
22 33 – 24 49 Sat II certainly seen unpos. to measure it.
9
25 04 – 27 24 clds thicker impossible to measure

	29 25		95.9
29 49	29 42	A 1.0	176.9
-2 15	54	A 4.1	95.2
27 34		A 2.6	
	30 15		179.9
	~~30~~		~~94.5~~
	40		93.5

July 27, 1901

Sky clearer

9 30 56 87.0 180.5

9 31 05 ~~31 06~~ ~~96.8~~

-2 15 31 16 85.8 95.0

9 28 50 86.4 180.8

27

39 96.1

84.9

9 31 59 50 181.0

2 15 86.3

9 29 44 32 04 85.6 95.0

Clds a little thicker

22 181.3

40 83.0 96.0

33 10 57 85.4 179.0

2 14 84.2

30 56 33 16 94.8

Clds thicker

45 180.2

Clds thicker

Clds thicker

The above settings show as was expected, that Sat II was at full brightness when they were begun.

Clouds steadily increased in density up to a little before eclipse so that it was impossible to measure it photometrically and had to be taken with ordinary eyepiece

9 38 Sky still cloudy although some clearer than during eclipse proper

July 27 1901.

When it was found that eclipse could not be observed photometrically an ordinary eyepiece was put on. The brightness of Sats. I + III tended to show that although the sky was some cloudy the times of susp. & quite certainly seen were probably pretty near the true times of reappearance although perhaps ~~probably~~ a very little delay.

B&C 118²

9 43 13.0
44 13.1

β 394

9 41 0.0
42 0.0

δ Serpentis w. Obs.

15 19 +16.0
18 19
3 0

r 5 s
s 4 t
9 57 t 4 u
u 5.5 w

U Herculis w. Obs.

16 16 +19.5
18 33
2 17

Meas of comp. stars for Variable.

July 27, 1901

(Alar) 2 with H 12.

~~[illegible]~~

85.1
10 24.0 156.0 < * star 2 dis 70.9
263.2 80.0
343.2 150.9 − 0.56

87.3 −0.60
163.6 76.3
266.1 70.8
336.9 147.1 − 0.63
Below
355.0 mean = − 0.48
69.3 74.3
168.3 86.8
255.1 161.1 − 0.36

346.8 −0.37
10 42.0 71.9 85.1
10 33.0 172.2 75.2
5 − 2.3 247.4 160.3 −0.38
15 30.7 G.M.T.

July 27, 1901.

R Can. Ven.   W Obs.

Phot T.   13 43 +40.6
19 23
5 40

Meas. of comp. stars for Variable.

Left   q with k

184.4 < k dis
11 05.0 240.0   55.6 ✓
6.6   47.8 ✓
54.4   103.4 –   + 1.57 ✓

189.2   + 1.60 ✓
236.2   47.0
4.4   54.5
58.9   101.5   + 1.62 ✓
Right.   mean = + 1.74 ✓
96.0
145.9   49.9
281.8   44.8
326.6   94.7 + 1.79 ✓

101.3   187 ✓
11 15.0 140.0   38.7
276.7   49.8
326.5   88.5 + 1.95 ✓

July 27, 1901

p θ with k

R θ a.

94.2 <k dis

11 23.0 150.4 56.2

271.1 59.3

330.4 115.5 + 1.29

87.2 + 1.26

149.9 62.7

275.3 55.9

331.2 118.6 + 1.22

L θ B. Mean = + 1.20

2.4

61.5 59.1

181.6 59.8

241.4 118.9 + 1.22

0.0 + 1.14

11 29.8 62.3 62.3

11 26.4 180.~~8~~9 63.2

5 - 23 244.1 125.5 + 1.07

16 24.1 Gr M. Time

July 27, 1901. Posted to here.

o with k.

Left
3548 < k dis.
11 43.0 66.8 72.0
172.7 clds 79.2
251.9 151.2 +0.55
clds
356.0 clds +0.60
70.7 74.7
175.2 71.2
246.4 145.9 +0.66

Right mean = +
266.4
334.1 67.7
8 .
1 . +

impossible to finish this star.
17 15 stopped by clouds +
2 .

July 30, 1901 (~~Monday~~ Tuesday)

B8C1182 B394
7 35 31.8 7 32 00

R Scorpii w Obs

Phot 7.

Mean of Comp Stars

16 9 -22.6
16 29
0 20

Clouds

16 17 -23.1
16 42
0 25

8 00 clds

8 18 clds rather thick.

8 26 clds thicker.

8 50 clds

July 30, 1901

m with g

~~R & a.~~
~~357.4 < g dis~~
~~8 56.0~~ ~~63.0 dds~~
~~174.6~~
R & a.
352.7 g dis
9 04.0 64.2 71.5
179.2 60.9
240.1 132.4 + 0.93
358.1
61.8 dds 73.7 + 0.85
178.7 66.6
243.3 140.3 + 0.77
L & B. mean = + 1.08
268.6
328.3 59.7
92.7 54.8
147.5 114.5 + 1.32

270.0 dds + 1.30
9 14.0 327.2 57.2
9 09.0 89.9 58.9
5 - 3.5 148.8 116.1 + 1.28
14 5.5 G. M. Time.

July 30, 1901

q with g

Above

11.7 < g dis.

9 24.0 49.3 37.6

190.4 41.0

231.4 78.6 + 224

10.0 + 2.22

58.7 43.7

192.0 36.4

228.4 80.1 + 2.19

Below Mean = + 2.31

284.7

317.3 32.6

101.8 38.7

140.5 71.3 + 246

281.7 240

9 32.0 320.7 39.0

9 28.0 103.2 36.2

5 3.5 139.4 75.2 + 234

14 24.5 Gr. M. Time

July 30, 1901

~~p with g~~

o with g

Above

189.2 g obs

9 36.0 236.7 47.5

3.3 53.3

56.6 100.8 + 1.64

185.2 + 1.63

239.3 54.1

7.2 47.5

54.7 101.6 + 1.62

Below Mean = + 1.68

95.9

140.4 44.5

276.0 49.8

325.8 94.3 + 1.80

92.2 + 1.74

9 46.0 146.5 54.3

278.8 45.3

9 41.0 324.1 99.6 + 1.67

5

July 30, 1901.

Phot R. Σ 52′ 20 14 −N−2 20−06

18 40

1 34

10 26

Pos Ang 250° Dist 3.4″ 2.5 − 6.0

~~Left~~

307.1 < br. dis

10 08.0 336.1 29.0

124.9 32.8

157.7 61.8 − 279

306.2 − 282

337.4 31.2

127.6 28.7

155.3 59.9 − 286

Right Mean = − 285

216.5

244.6 28.1

35.3 31.1

66.4 59.2 − 289

214.7 − 288

10 16.0 246.6 31.9

10 12.0 36.5 28.0

64.5 59.9 − 286

Moon very near region; in fact almost in the field: field bright and a little murky but much [illegible]

July 30, 1901.

Σ 2838 W Obs

Phot R.

2 1 48 – 3.9
19 12
2 36
9 24

Pos Ang. 175 Dist 20" 6.0 – 8.8

Below
33.5 < bi. obs.
10 30.0 60.0 26.5
214.9 24.9
239.8 51.4 – 3.21

32.6 – 3.14
59.3 26.7
212.5 27.8
240.3 54.5 – 3.08
Above Mean = – 3.12
305.4
330.2 24.8
122.0 29.5
151.5 54.3 – 3.09

304.2 – 3.10
10 36.0 ~~3~~29.4 25.2
10 33.0 122.8 27.6
150.4 52.8 – 3.11

Sky bright; images faint, much care exercised. Clouds came during last setting, obs. considered good

July 30, 1901

Σ 12# 2w Obs

Phot R 23 9 -9.8

19 25

3 44

8 16

10 50 Too cloudy

Σ 2822 μ Cygni 2w Obs.

21 38 +28.2

19 38.

2 00

10 56 Clouds ~~too thick~~.

ε Sagittae 2w Obs

Phot R. 19 33 +16.2

19 40

0 07

Pos Ang 70° Dist 1.5" ± 4.0 - 7.1

~~Off of~~ Above clds

11 05.08 211.6 Pos. dis

247.2 35.6

34.5 30.3

64.8 65.9 — 2.65

212.6 — 2.63

245.1 32.5

32.8 34.3

67.1 66.8 — 2.61

July 30, 1901 **Posted to here**

Below cont. from prev. Page

124.5
157.2 32.7
305.0 31.3
336.3 64.0 — 271

— 268

125.2
11 13 155.9 30.7
302.8 30.2
333.0 60.9 — 265
Q mean = 2.66

11 20 Alt. very high clock gives ~~trouble~~
meas. made through clouds.

July 31, 1901 (Wednesday)

BDO 1182 B 394
7 26 045 7 22 05

7 40 clouds

R Scorpii
16 17 −23.1
16 27
0 10

7 48 clouds

8 25 clouds thick in this region.

clouds thick.

μ Cygni Σ 2822 w Ob
Phot

21 58 +28.2
17 08
4 30
7 30

8 28 Cloudy

9 12 "

Too cloudy

Σ 3124 w Ob
Phot R.

14 12 +52.0
18 12
4 00

9 30 Clouds thick

July 31, 1901

10 00 Still Cloudy.

14 12 +52.0
18 42

4 30

10 05 Clouds still thick; no chance for anything

Aug. 11, 1901. (Sunday.)

7 30 Coming up cloudy.
8 0 Still cloudy.
8 30 " "

12 30 Clearer.

B + C, 11 Lac. — B. 394.

12	31	19.1	12	31	0.0
	32	19.1		32	0.0

R. Urs. Min. — W. Obs.

16 32 +72.6
22 10
+5 38

Aug. 11, 1901.

Index above

91.6
12 53.8 150.1 58.5
273.2
325.1 51.9
110.4 1.41 Ledgered.

94.9
~~146.1~~ 53.2 (+1.39)
148.1 58.7
270.2 111.9 1.37
~~331.1~~ 328.9

Index below

Clds.
~~357.9~~
358.7
64.0 65.3
182.1 55.2
237.3 120.5 1.18

~~4.1~~ 3.0 63.9 (+1.13)
13 30.8 66.9
144.6 ~~181.4~~ ~~177.1~~ 61.3
13 12.3 182.2 125.2 1.08
5 -0.3 243.5
mean +1.26
18 12.0 Gr. M. Time -
5608.758

In first half of group sky fairly clear, last half of group taken with some difficulty through thin cld. Cld gradually increasing and ~~immediately~~ at end of first group it became completely cloudy and foggy so that nothing farther could be done.

Aug 11. 1901

This group considered pretty good but 2nd group could not be taken and o Ceti could not be taken as was intended. Clds. evidently closed in for the night. Sproked wheel reads 4.5 + 5.5 B + C.

Position angle = 319

Aug. 13. 1901. (Tuesday)

χ Cygni. Phot. T. Hi. obs.

19 45 +32.6
16 55
2 50
9 10

17 6
-2 39
9 21

7^{h} 7^{m} = 16 50

Watch 6.5 sec. slow.

See next page for record.

Aug. 13 - 1901.

Fred Plott.

Same again. Index above.

292.7
7 37.5 311.6 } var. dis. 18.9
112.5
130.8 18.3 / 37.2 3.93

-3.90

292.2 19.5
~~7 39 39 23~~ 311.7
111.4 18.6 3.88
130.0 38.1

Index below.

~~223.5~~ 200.7
8 ~~20.1~~ 222.8 22.1
~~41.9~~ 20.0
~~201.0~~ 41.0 21.0 / 43.1 3.60

~~221.4~~ 201.2 22.1 3.52
7 47 40 ~~18.5~~ ~~222.0~~ 223.3
~~41.0~~ 18.0 7 56 20
42.2 24.2 / 46.3 3.44

7 42.6
5 40.1
12 42.7 Gr. M. Time -
56 10.5 30

Mean -3.71

Twilight somewhat strong in above group. Sky darker in two following groups.

~~Tues~~ Aug. 13. 1901.

Same again.
Index below.

199,8
22,9 ✓
222,7
7 58' 06 — 19,8
20,3 ✓
40,1 — 43,2 ✓ — 3,60 ✓

200,2 ✓ — 3,59
20,3
220,5
18,2 ✓
23,3
41,5 — 43,6 ✓ — 3,58 ✓

Index above

110.2
21,3 ✓
8 02 19 — 131,5

291,8 ✓
19,7
2,25
8 02 12 — 311,5 — 41,0 ✓ — 3,71 ✓
5 + 6

13 01 18 Gr. M. T.
5610.542× — 110,9 — 3,73
20,2 ✓
131.1
292.1
20,1 ✓
312,2 — 40,3 ✓ — 3,75 ✓

mean −3,66

Aug. 13. 1901.

Same again. Index above.

111,0 212
132,2
291,8 19,6
311,4 40,8 3,72

−3,68

110,7 21,8
132,5
8 18 29 291,8 20,5
312,3 42,3 3,64

Index below

19,9 22,1
42,0
201,0 20,5
221,5 42,6 3,63

−3,62

19,7 20,8
40,5
8 24 22 200,1 22,1
8 21 26 222.2 42,9 3,61
5 40 6
13 21 32 Gr. M. T.
5660.549

mean −3,65
~~c. s. 8.10~~
magn. ~~4.45~~

Pos. angle = 203.5
Sp. Vh 6.5, 7.5 A. B.

Aug. 13, 1901.

R Urs. Min. Phot. T. W. obs.

16 32 +72.6
19 18
+2 46

Ledgmat

Index rt & above Comp. stands.

268.4
332.6 clouds. 64.2
93.7 53.6
147.3 117.8 1.24

9 58 03

273.5 53.7 (+1.26)
327.2 62.2
90.0
152.2 115.9 1.28

Index left & below

176.7 67.3
244.0
1 59 28 2.5 57.8
13 31 60.3 125.1 1.08
9 56 40
5 +6
14 56 46 G.M.T. +82.3 58.8 (+1.06)
5610.623+ 241.1 ~~240.8~~
358.0 68.6
66.6 127.4 1.03

mean +1.16

Aug. 13. 1901.

Same again

Index left + below.

177.9 65.4 ✓

10 8 06 243.3

3.6 ✓

61.1 57.5 ✓

122.9 ✓ 1.13 ✓

(+1.14)

181.5 57.3 ✓

238.8

358.8 65.3 ✓

64.1 122.6 ✓ 1.14 ✓

Index right + above

91.0 60.2 ✓

151.2

276.8 51.0 ✓

327.8 111.2 ✓ 1.39 ✓

(+1.32 ✓)

91.9 57.0 ✓

10 40 02 148.9

271.3 60.0 ✓

10 24 05 331.3 117.0 ✓ 1.26 ✓

5 40 6

15 24 11 G. M. T.

5610.642+

Watch used to right was 6.5 secs. slow.

Mean +1.23 ✓

Troubled somewhat by clouds, especially in last half of last group, but much care exercised and obs. considered good.

Final Mean = +1.20

Aug. 13 1901.

Pos. Angle 138.0 Sp. Wheel 4.5, 5.2, B.C.

Clouds became too thick for obs. of o Ceti, after R. Urs. Min., was taken.

Aug. 14. 1901. (Wednesday.).

Mr. Attwill's watch is 3.5 secs. fast. His watch used for time below.

$12^h\ 5^m$ E.T. = $22^h\ 2^m$ Ast. T.

o Ceti. W. obs.

26
~~2~~ 12 −3.6
22 17
−3 55
8 5

August 14, 1901.
Index right & above

~~169,7~~ ← Var. dis.
$12^{h}45^{m}52^{s}$ ~~187,6~~
~~349,3~~
~~6,8~~

Became thickly foggy suddenly, so that nothing farther could be done on o Ceti.
Reject above set.

Aug. 15, 1901. (Thursday).

o Ceti. Phot. Lt. Lt. obs.

26
~~7~~ 12 −3.6
22 0

4 12
7 45

26 12
22 23.

3 49
12 00

8 11

Index to rt. + above

170.5 < var. disc.
12 38.5 193.7
~~351.8~~ 350.5
12.0

171.8
192.9
350.6
14.0

Index to left + below

~~79.9~~ 79.3
96.2
258.3
278.6

Aug 15. 1901.

~~77.0~~ 78.2
12 46.4 ~~99.0~~ 98.1
259.2
~~276.1~~ 276.9

Left + below

~~79.5~~ 78.9
48.8 96.7
258.4
~~278.5~~ 277.1

78.0
96.8
~~259.9~~ 259.0
276.9

~~351.1~~ ~~351.8~~ ~~351.5~~
~~127.0~~ ~~130~~ ~~7.0~~
169.7
186.6
348.5
6.4

~~168.0~~ 169.2
187.0
349.4
58.5 ~~6.8~~ 7.0
Reject above two groups. See notes.

Aug. 15. 1901
Index to rt. and above

169.4 < ran. disc   Led. Plott.
13 00.2   ~~185.1~~ 185.9   16.5
348.0   18.8 ✓
~~7.1~~ 6.8   35.3 ✓   4.04 –

168.4   18.5 ✓   (4.04)
~~187.4~~ 186.9
349.0   17.0 ✓
~~5.9~~ 6.0   35.5 ✓   4.03 –

Index left + below
79.8   16.3 ✓
96.1
~~258.2~~ 259.0   18.1 ✓
277.1   34.4 ✓   4.10 –

(4.03)
~~78.0~~ 78.4   18.6 ✓
~~97.9~~ 97.0
~~259.2~~ 259.0   18.1 ✓
13 07.3   ~~276.9~~ 277.1   36.7 ✓   3.96 ✓

13 03.8
5 +0.2

18 04.0 Gr. M.T.   mean — 4.04 ✓
5612.753

Aug 15. 1901.

Index left + below

~~79.0~~ 79.0

13 09.3 96.8 17.8

~~258.2~~ 259.0 18.0

277.0 35.8 4.01

~~78.2~~ 79.1 18.2 (4.02)

97.3

~~260.0~~

259.1 17.5

276.6 35.7 4.02

Index to right + above.

~~349.1~~ 348.9 17.8

~~5.8~~ ~~5.8~~ 6.7

~~168.0~~ 168.4 17.6

~~187.9~~ 186.0 35.4 4.04

~~348.0~~ ~~349.8~~ ~~348.3~~ (4.07)

13 19.7 ~~6.2~~ 6.0 17.7

169.2 16.8

13 14.5 186.0 34.5 4.10

5 +0.2

18 14.7 Gr. M. Time

5 61 2.760

mean -4.04

Final mean = -4.04

26 12

23 19

2 53

12 00

9 07

over.

Aug. 15. 1901.

As Mr. Colson, who recorded, was a little uncertain (after two first groups on o Ceti were taken) as to whether he always read the circle ~~with~~ in the direction of increasing reading, they were rejected, and the last two groups taken and retained.

Mr. Colson's watch, used for time, was 14 secs. slow.

Troubled somewhat by clouds in first two groups (rejected).
The last two groups (retained) sky clearer.

Aug. 27. 1901. (Tuesday)

χ Cygni; Phot. I. Gr. do.

19 47 +32,7
17 50
1 57
10 3

Mr Attwill's watch used. Watch is 1m 27sec fast.

Index above

Led. Olott

Var. dir. 291,7 18.7 ✓
310,4
72314 112,2 18.5 ✓
130,7 37,2 ✓ 3.93 ✓

(−3.49 ✓)

291,2 19.7 ✓
310,9 18.8 ✓
111,3 38.5 ✓ 3.85 ✓
130,1

Index below.

199,5 22.7 ✓
222,2
7 28 38
~~7 2[illegible] 38~~ 21,0 21.3 ✓
11 52 42,3 44.0 ✓ 3.56 ✓
7 25 56 ×
5 −1 27 (−3.59 ✓)
200,8 20.4 ✓
12 24 29 × Gr. M.T. 221,2 ✓
5624.517 × 20.2 22.3
42.5 42.7 ✓ 3.62 ✓

mean −3.74 ✓

Aug. 27. 1901.
Same again.

Index below

203.0
7 33 12 222.9 19.9 ✓
19.7 21.6 ✓
41.3 41.5 ✓ 3.69 ✓

(−3.70 ✓)

203.0 19.7 ✓
~~222.0~~
222.7 21.6 ✓
20.4 41.3 ✓ 3.70 ✓
42.0

Index above

111.4 19.9 ✓
131.3
~~7 41 39~~ 290.8 21.4 ✓
312.2 41.3 ✓ 3.70 ✓

110.1 21.7 ✓ (−3.68 ✓)
~~7 43 39~~ 131.8
291.3 20.4 ✓
7 44 22 311.7 42.1 ✓ 3.65 ✓

77 34
7 38 47
5 −1 27
1 37 20 G.M.T.
5624.526

mean −3.69 ✓

Final Mean = −3.72

Altitude high and observations consequently a little difficult, but much care exercised.

Twilight a little strong in first group.

Pos. Angle 23°.3 Sh. Wheel reads 6.5, 7.5
B C

Aug. 27. 1901.

R Ursae Minoris. Phot. T. W. obs.

16 32 +72.6
19 0
+2 28

Zed. Plott

Index right.

84 1 28 C.v. dis. > 88.4
155.3 66.9 ✓
270.5 62.0 ✓
332.5 128.9 ✓ 1.00 ✓

90.2 61.2 ✓ (+1.04) ✓
151.4
269.8 64.7 ✓
334.5 125.9 ✓ 1.07 ✓

Index left.

353.7 74.1 ✓
67.8
179.8 63.9 ✓
243.7 138.0 ✓ 0.81 ✓

~~54~~
~~50~~ 357.2 69.0 ✓ (+0.78) ✓
~~40~~ 29 66.2
8 55 34 174.7 71.5 ✓
9 7 02 246.2 140.5 ✓ 0.76 ✓
8 48 31
5 -1 27 mean +0.91 ✓
13 47 04 Gr. M.T.
5624.574

Aug. 27. 1901
Same again.

Index left.

354.5
8 57 53 67.3 72.8
179.0 63.7
242.7 136.5 0.84

359.0 64.6 (+0.84)
63.6
174.7 72.7
247.4 137.3 0.83

Index right.

268.9 66.1
335.0
90.9 61.2
152.1 127.3 1.04

(+1.04)

271.4 60.8
9 08 16 332.2
126 09 87.1 66.1
9 03 04 153.2 126.9 1.04
5 -1 27
14 01 37 G. M. Time. Mean +0.9~~4~~
5624.585+
Final mean +0.92
Pos. Angle 139.0 Sp. wheel reads 3.5, 4.5
B C

Aug. 27, 1901.

Sprocket wheel reads a little different to-night from the last night, but region thoroughly identified and the double star companion to comparison star seen in position. The reason why the sprocket wheel reads a little different is probably due to the fact that there is some dust on the track so that when JW runs the prism up the track the chain slipped a little in its gear. This was noticed at the time, that the prisms were run up.

over.

Aug. 27. 1901.

o Ceti. Phot. Tr. Tr. obs.

26
~~2~~ 12 −3.6
23 30
−2 42
9 18

Led. Plotf.

Index to ~~left~~ right

Cs watch
13 05.7

348.0
9.7 < o dis.
167.2 21.7
190.9 23.7
45.4 3.49

(3.49)

347.3 23.2
10.5 22.1
167.9 45.3 3.49
~~189.8~~ 190.0

Index to left

259.0
~~280.6~~ 280.7 21.7
77.0 23.1
~~100.6~~ 100.1 44.8 3.52

(3.53)

257.8 23.2
13 13.4 281.0 21.2
13 09.6 78.6 44.4 3.54
5 − ~~1.4~~ 0.6 ~~99.2~~ 99.8
18 9.2 Gr. M. T.
5624.756

mean −3.51

Aug. 27. 1901.

Index to left.

~~258.8~~ 258.0
13 16.1 279.5 21.5 ✓
77.0 23.2 ✓
100.2 44.7 ✓ 3.52 ✓

257.0 23.0 ✓
~~281.9~~ 280.0 22.6 ✓ (3.50) ✓
~~77.9~~ 77.2 45.6 ✓ 3.48
~~99.8~~

Index to right.

~~166.3~~ 167.0 22.0 ✓
~~188.7~~ 189.0 23.8 ✓
346.2 45.8 ✓ 3.47 ✓
~~10.7~~ ~~10.2~~ 10.0
166.3 (3.46) ✓
13 25.4 ~~191.0~~ 190.2 23.9 ✓
41.5 347.0 22.0 ✓
13 20.8 ~~9.0~~ ~~8.9~~ 9.0 45.9 ✓ 3.46 ✓
−0.6
5 ~~1.4~~
18 ~~19.4~~ 20.2 Gr. M. Time. Mean 3.48 ✓
5624.76~~4~~ˣ Final mean − 3.50ˣ

Mr. Colson's watch, used in above groups on o Ceti, was 35 secs. fast.

Sept ~~2~~ 1, 1901 ~~(Monday)~~ (Sunday)

~~B0~~ F 3451 (reset.)	FB27
8 05 58.6	8 06 01.0
B8C1182. reset.	Ball. 103
21 10 47.5	21 11 0.0

Sept 2, 1901 (Monday)

21, B & Co 1182
~~9~~ 00 53.0

21, Ballou 103
~~9~~ 01 0.0

Sept. 3. 1901. (Tuesday).

19^h 22^m (S.T.) = 8^h 17^m (E.T.)

R & S Scorpii 20 Ob.

16 9 -22.6
19 34
3 25

8 30 clouds thick here, no stars visible

16 9 -22.6
19 44
3 35

8 40 clouds too thick, no stars visible.

R Can Ven.
13 40 41.8
19 47
6 07

9 01 clouds thick again.

9 10 Clouds thick everywhere

9 27 " " "

Became thickly & densely cloudy suddenly preventing meas. of comp. stars for R Can. Ven.

Sept 3, 1901.

Exam relation of stars m, n, o, p, q, r, s, t, u,
The relation as indicated by est. seems to
be allright

9 38 Evidently no chance for anything more.

BDC1182	~~B 394~~ Ballou 123
20 55 23.5	20 55 00

Sept 4, 1901 (Wednesday)

B & C 1182
7 00 43.5

Balloon 103
7 00 00

R & S Scorpii W Obs
16 9 - 22.6
18 15
2 6

Screws which tighten sprocket wheel chain of Phot T. apparently became loose during early part of vacation causing chain to slip on sprocket wheel and so making sprocket readings different from what they were before Aug. 1st. Chain tightened by setting screws up to day —
Sprocket wheel readings however will neccessarily be different from what they were before Aug. 1st. and also during August.

Micas of comp. stars.

Sept. 4, 1901

q with g

Above
191.1 < g dis
7 32 232.5 41.4″
13.8 34.5″
48.3 75.7″ + 2.32″

192.7 + 2.24″
230.9 38.2″
9.2 42.5″
51.7 80.7″ + 2.17″
Below
101.7 Mean = + 2.35″
140.4 38.7″
284.1 33.6″
317.7 72.3″ + 2.43″

103.9 + 2.46″
7 38 136.5 32.6″
7 35.0 282.2 38.2″
5 −0.7 320.4 70.8″ + 2.48″
12 34.3 ^{T} Gr. M.T.
5632.524^t

Sept 4, 1901

o with g

Below
276.3
7 42.0 325.8 g dis 49.5✓
98.0 44.6✓
142.6 94.1✓ + 1.81✓

279.0 +1.79✓
325.9 46.9✓
95.3 48.5✓
143.8 95.4✓ + 1.77✓

Mean = + 1.73✓

Above
187.2
237.7 50.5✓
8.2 45.0✓
53.2 95.5✓ + 1.77✓

188.1 +1.67✓
7 50.0 237.7 49.6✓
7 46.0 3.7 54.0✓
5 - 0.7 + 57.7 103.6✓ + 1.57✓
12 45.3 Gr. M.T.
5632.531+ g fols. H 14 by 25.5 secs & 1′ N of it

~~draw a line from H 15 to g; star β preces this line 2 secs & a little over 2/5 of way from 15 to g.~~
~~& fols~~

Sept 4, 1901

B prec. No 15 by 0.5 sec. + is 3.0 N. of it.

drawing a line from g to Hag 27, star α
is just about midway between g + No 27
and, very slightly ~~North~~ South of centre of line.
~~but~~

R Can. Ven. W Obs.
13 40 +41.8
19 40
6 00

Below s with k
193.5 < k dis.
8 45.0 226.2 32.7
16.7 30.0
46.7 62.7 + 2.76
195.3
225.2 29.9 +2.75
15.2 33.4
48.6 63.3 + 2.74
above
Mean = 2.84
104.8
134.8 30.0
287.7 26.6
314.3 56.6 + 2.99

106.3
8 54.0 136.6 30.3 + 2.92
8 49.5 286.6 30.2
5 – 0.7 316.8 60.5 + 2.84
13 48.8 G. M. T.
5632.576

Sept 4, 1901

r with k.

Above

2849 k dis

8 58.0 317.8 32.9✓

102.4 38.2✓

140.6 71.1✓ + 2.47✓

284.3 + 2.52✓

318.2 33.9✓

103.8 34.5✓

138.3 68.4✓ + 2.56✓

Below

1944 Mean = + 2.48✓

227.7 33.3✓

10.0 39.6✓

49.6 72.9✓ + 2.41✓

191.8 + 2.44✓

9 04.0 230.9 39.1✓

9 01.0 137 32.1✓

5 - 9.7 458 71.2✓ + 2.47✓

14 0.3 Gr. M. T.

5632.583

Sept 4, 1901.

q with k

Left

183.5 k dis

9 09.0 238.8 55.3

7.3 45.9

53.2 101.2 + 1.63

188.0 + 1.62

233.8 45.8

1.2 55.7

56.9 101.5 + 1.62

Right Mean = + 1.74

97.7

140.0 42.3

276.9 49.7

326.6 92.0 + 1.86

94.2

9 15.0 144.0 49.8 + 1.86

9 12.0 280.0 42.4

5 - 07 322.4 92.2 + 1.86

14 11.3 Gr. M. T.

5632.591

Sept 4, 1901.

p with k

Above
89.0
9 25.0 149.6 k dis 60.6✓
276.6 50.8✓
327.4 111.4✓ + 1.39✓

93.8 +1.42✓
145.~~6~~4 57.6✓
273.0 51.4✓
330.4 109.0✓ + 1.44✓
Below
356.7 Mean = 1.22
65.3 68.6✓
179.8 60.3✓
240.1 128.9✓ + 1.00✓

81.8
9 31.0 61.5 59.7✓ + 1.02✓
9 28.0 174.9 67.2✓ + 1.04✓
5 - 0.7 242.1 126.9✓
14 27.3 G. M. T.
5632.602

Sept 4, 1901

o with k

LθB.

174.9

9 33.0 247.0 k dir. 72.1✓

347.8 82.7✓

70.5 154.8✓ + 0.48✓

172.6 +0.52✓

250.2 77.6✓

355.6 73.1✓

68.7 150.7✓ + 0.56✓

RθA.

86.0 Mean = +0.60

156.5 70.5✓

266.0 71.9✓

337.9 142.4✓ + 0.73✓

80.4

9 43.6 158.9 78.5✓ +0.68✓

9 38.3 266.7 68.5✓

5 - 0.7 336.2 147.0✓ + 0.63✓

14 37.6 Gr. m.T.

5632. 610+

Star o Meas with some diff. on account of low alt & somewhat murky sky at this alt.

Sept 4 1901.

W Herculis W Ob.

16 28 + 38.4
21 38
5 10

Exam. of f & location of faint stars
Part of the stars located, but moon
too bright & sky murky to finish location
of faintest stars

Nova Persei. W Ob.

27 24 + 43.6
22 10 9.5 in cap used.
5 14
Above 6 46

85.8 < Novadis
11 18.0 156.6 70.8
268.4 63.0
331.4 133.8 − 0.90
90.6 −0.88
152.6 62.0
263.6 74.4
338.0 Below 136.4 − 0.85
355.6 Mean = − 0.76
65.2 69.6
172.5 78.3
250.8 147.9 − 0.62
351.2
11 24.6 68.8 77.6 − 0.64
11 21.3 177.0 68.1
5 0.7
16 20.6 GrMT 24$\underline{5}$1 5632.681 145.7 − 0.66

δ Sept 4, 1901.

Same

Z. P. P. to here.

Below
357.3
11 27.0 67.3 70.0
174.8 76.2
251.0 146.2 −0.65

355.4 −0.65
69.7 74.3
174.4 71.8
246.2 146.1 −0.65

Above Mean = −078
265.1
336.3 71.2
88.0 64.5
152.5 135.7 −0.86

271.0 −0.91
11 33.4 332.9 61.9
11 30.2 87.0 69.2
5 − 0.7 156.2 131.1 −0.96
16 29.5 Gr. M. T. Final Mean = −0.77
5632.687 Pos. ang. = 74.6 C. S. = 7.25
Spr. wheel = 0.5 a Magn = 6.×8
" " = 1.5 B

B D C 1182 Ballou 103
21 27 03.5 21 26 00

Sept 5, 1901 (Thursday)

BD C 1182 Ballou 183
6 59 196 6 58 08

R Cam. Ven. w Obs.
13 40 + 41.8
18 30
450

Left σ with k
170.3 ✓
7 33.0 251.6 < k dis. 81.3 ✓
352.3 73.3 ✓
65.6 154.6 ✓ + 0.49 ✓

173.3 + 0.52 ✓
244.0 70.7 ✓
348.5 81.0 ✓
69.5 151.7 ✓ + 0.54 ✓
Right Mean = + 0.65
86.7 ✓
154.3 67.6 ✓
265.2 73.0
338.2 140.6 ✓ + 0.76 ✓

84.8 ✓ + 0.78 ✓
7 41.6 157.1 72.3
7 37.3 268.0 66.2 ✓
5 -1.3 334.2 138.5 ✓ + 0.80 ✓
12 36.0 Gr. M.T.

Sept 5, 1901.

s with k

Above

286.7 < k dis.

750.0 317.4   30.7 ✓
104.7   31.1 ✓
135.8   61.8 ✓ +2.79 ✓

286.5
314.0   27.5 ✓ +2.84 ✓
104.2   31.6 ✓
135.8   59.1 ✓ + 2.89 ✓

Below   (mean + 2.81 ✓
194.7
228.1   33.4 ✓
15.8   30.0 ✓
45.8   63.4 ✓ +2.73 ✓

197.3   +2.78 ✓
800.0 224.6   27.3 ✓
7 55.0   14.0   33.3 ✓
5 - 1 3   47.3   60.6 ✓ +2.84 ✓
12 53.7 Gr. M.T.

Sept 5, 1901

Left ~ with k

193.2
8 06.0 230.1 < k div 36.9 ✓
10.8 38.2 ✓
49.0 75.1 ✓ + 2.34 ✓
*
193.5 ✓ +2.36 –
231.0 37.5 ✓
11.7 36.0 ✓
47.7 73.5 ✓ + 2.39 ✓

Right Mean = +2.44 ✓
103.1
135.6 32.5 ✓
283.3 36.9 ✓
320.2 69.4 ✓ + 2.53 ✓

100.8 + 2.52 ✓
8 15.0 138.2 37.4 ✓
21.0 ✓ 286.2 32.2 ✓
8 10.5 318.4 69.6 ✓ + 2.52 ✓
5 – 1.3
13 9.2 Gr. M. Time.

Sept 5, 1901

R Ophiuchi W Obs

16 59 −15 54
+3 +22

17 02 −15 32
19 48

2 46

17 02 −15.5
20 04

3 02

star o = Hagen 12
sequence including o is as fols.

Hag 13 4
" 19 5.5
" 23 3.5
" 28 4
9 05 " 31 5.5
" 36 3
" 40 5
" 44 3
" 45

W Herculis W Obs

16 28 +37.4
20 18

3 50

Sept 5, 1901

W Herculis W Obs.

t prec var 2.0 sec & 2.′2 S of it
u prec q 2 sec & is ½ way in dec bet q & star 4.′8 S of q
9:50 w fols var ~~8~~ 5.5 sec & 2.′3 S of it
x~~y~~ prec w 1 sec & 0.′8 S of it.
y fols var 1 sec & 5.′5 S of it

R Aquarii W Obs

23 35 — −16.2
21 17
2 18
9 42

s fols # 14 by 10 sec & 7.′2 S of it
w " " " 9.5 " & 4.′0 S of it.
star t is the one so indicated on Hagen's chart.
u fols var 1m 1 sec & 6.′1 N of it
v " " 17 sec & is 0.′2 N of it

χ Cygni W Obs

Phot T. 19 45 + 32.6
21 55
2 10

9.5 cap used

Sept 5, 1901

χ Cygni

Above
18.4 < var. dis.
10 55.0 42.1 23.7 ✓
198.2 28.6 ✓
226.8 52.3 ✓ - 3.17 ✓

16.5 - 3.22 ✓
4~~4~~3.7 27.2 ✓
200.0 23.1 ✓
223.1 50.3 ✓ - 3.26 ✓

Below Mean = - 3.30 ✓
291.4
312.0 20.6 ✓
107.8 26.3 ✓
134.1 46.9 ✓ — 3.41 ✓

287.6 3.37 ✓
11 02.0 314.2 26.6 ✓
117.0 109.7 22.0 ✓
10 58.5 131.7 48.6 ✓ - 3.33 ✓
5 -1.3

15 57.2 Gr. M. time
5633.665

Sept 5, 1901

Same Again

Below
290.4
11 04.0 313.1 22.7
108.6 26.2
134.8 48.9 — 3.32

288.3 — 3.32
315.4 27.1
180.6 21.6
132.2 48.7 — 3.33

Above Mean = — 3.24
199.7
224.7 25.0
16.2 28.0
44.2 53.0 — 3.14

198.6 — 3.16
11 10.0 226.1 27.5
11 07.0 18.1 24.5
5 — 1.3 42.6 52.0 — 3.18
16 05.7 M.T. Final mean = — 3.27
5633.671 Pos Ang = 203.2
S pr. wheel = 4.76 A
" " = 5.5 B

B&C 1182 Ballou 103
21 10 30.0 21 09 00

L.P.P. to here

Sept 6, 1901 (Friday)

BOC 1182 Ballou 103

7 01 26.5 7 01 00

R Ophiuchi w C Obs.

17 2 −15.5

1/8 32

1 30

Meas. of Comp Stars

Left " with m

279.5 < comp + dis

8 10:0 322.3 42.8

94.8 49.4

144.2 92.2 + 1.86

+ 1.94

277.8

325.3 47.5

101.8 39.0

1~~4~~0.8 86.5 + 2.01

Right Mean = + 1.72

184.9

234.3 49.4

3.0 58.2

61.2 107.6 + 1.47

8

1~~7~~1.2 + 1.50

8 16.4 238.5 57.3

8 13.2 6.6 47.4

5 −0.4 54.0 104.7 + 1.54

13 12.8 Gr.M.T.

Sept. 6, 1901

e ~~A~~ with m

Right

15.6
δ 20.0 47.4 31.8″
187.0 45.6″
232.6 77.4″ + 2.27″

10.9 + 2.28″
53.4 42.5″
192.5 34.4″
226.9 76.9″ + 2.29″
Left Mean = + 2.36″
285.4
314.7 29.3″
99.8 41.8″
141.6 71.1″ + 2.47″

277.4 + 2.44″
δ 27.0 320.4 43.0″
106.6 30.1
136.7 73.1 + 2.41″

Sept 6, 1901.
q with m

Left
92.7
8 31.4 144.4 51.7
282.3 43.5
325.8 95.2 + 1.78

101.8 + 1.80
142.9 41.1
275.7 51.9
327.6 93.0 + 1.83

Right Mean = + 1.73
5.4
55.~~4~~0 49.6
184.0 52.0
236.0 101.6 + 1.62

3.5 + 1.66
38.6 56.4 52.9
189.0 45.8
234.8 98.7 + 1.69

Sept 6, 1901

p with m

Right
~~66.0~~
8 54.0 356.3 < m dis
64.3 68.0 ✓
178.8. 67.0 ✓
245.8 135.0 ✓ + 0.88 ✓

0.0 + 0.90 ✓
65.8 65.8 ✓
175.6 66.8 ✓
242.4 132.6 ✓ + 0.92 ✓

Mean = + 1.09 ✓

Left
270.8
335.2 64.4 ✓
95.8 51.6 ✓
147.4 116.0 ✓ + 1.28 ✓

27$\overset{2}{3}$.6 + 1.28 ✓
9 02.0 326.4 53.8 ✓
91.9 62.5 ✓
154.4 116.3 ✓ + 1.27 ✓

Sept 6, 1901

~~o with ~~#~~ k~~

~~Left~~

~~264.8 < media~~

~~9 06.0 334.8~~

~~87.1~~

~~159.3~~

~~264.4~~

~~341.0~~

~~78.6~~

~~9 38.0 164.4~~

~~Right~~

o with m

Above

261.4 < media

340.4

83.2

155.6

79.0″

72.4″

151.4″ +0.55″

262.7

338.6

80.9

161.2

75.9″ +0.50″

80.3

156.2″ +0.45″

Mean = +0.56″

Below

168.8

251.8

358.8

64.2

83.0″

65.4″

148.4″ +0.61″

173.2

9 45.0 243.8

352.8

170.4

+0.61″

70.6″

77.6

148.2 +0.61″

Sept 6, 1901

o 5 p
p 5 q
q 3 r
r 3.5 s
s 5 t
t 4 u
~~w~~ u 5 w
w 4 x

est from w to x ~~very~~ quite diff on account of low alt. high power used.

R Sagittarii 2w Ob.

19 8 -19 34

19 9 -19 12
21 24
21 5

Extension of faint end of comp*s for R Sag.

u 4.5 w
w 3 x
x ~~3~~ 4 y

B d C 1182 Ballou 10 3
10 38 25.~~6~~0 10 38 00
39 25.~~6~~1 39 00

18 14 -23.5
21 58
3 44

Sept 6, 1901

Reap. Jup. I 20 Ob. Phot R.
Campbell recorder
Comp. with

copied

51 1~~4~~2	10	51 36	seen
		~~52 33~~	~~133.0~~
		~~46~~	~~218.0~~
		~~53 4 2~~	~~138.9~~
		~~17~~	~~221.8~~
		~~38~~	
		~~48~~	
		~~54 19~~	~~132.0~~
			magn
10 56 12		56 36	0.3 < Sat II
57 04		57 28	0.25 ~~2.0~~ < Sat II
57 56		58 20	0.15 < Sat II
58 55		59 19	0.1 < Sat II

reject phot. settings which are of no value. Imposs. to follow photometrically. Settings made were very unsatisfactory

The time when first seen was through ~~the~~ photometer ~~prob.~~ Jup. very low. Sats rather dim, Sat I about 3 times as near the planet as Sat II
Sat I although certainly at full brightness still looks from 0.1 to 0.2 < Sat II on account of closer proximity to Jup. which prob.

Sept 6, 1901.

B & C 118² Ballou 103

11 06 23.5 11 06 00

R Urs Min W Obs.

16 34 +72.9

22 34

6 00

Above

266.8 < comp * dia

11 28.0 333.3 66.5 ✓

90.1 62.0 ✓

152.1 128.5 ✓ + 1.01 ✓

270.6 + 1.00 ✓

329.6 59.6 ✓

85.8 69.2 ✓

155.0 128.8 ✓ + 1.00 ✓

Below Mean = + 0.90 ✓

172.4

246.8 74.4 ✓

359.1 64.5 ✓

63.6 138.9 ✓ + 0.80 ✓

179.1 + 0.81 ✓

11 35.0 245.3 66.2 ✓

6 3.0 355.7 71.6 ✓

11 31.5 ˣ 67.3 137.8 ✓ + 0.82 ✓

5 − 0.4

16 31.1 ˣ Gr. M. Time.

5 6 34.68 ˣ

L.P.P.

Sept 6, 1901

Same Again

Below
174.2
11 37.0 247.1 72.9
359.6 64.1
63.7 137.0 + 0.83

178.8 + 0.86
241.9 63.1
355.3 71.7
67.0 134.8 + 0.88

Above Mean = + 0.90
87.0
156.5 69.5
270.2 62.0
332.2 131.5 + 0.95

+ 0.95
88.7
4 43.0 152.2 63.5
11 40.0 267.9 67.9
5 -0.4 335.6 131.4 + 0.95
16 39.6 G. M. Time. Final Mean = + 0.90
56 34.694 Pos Ang. = 142.3
11 5 1 S per Wheel = 3.5 B
" " = 4.6 C

B&C 1182 Ballou 103
21 29 48.5 21 30 00

Sept. 7, 1901 (Saturday)

B & C 1182 Ballou 123
7 05 06.9 7 05 08

R Ophiuchi w Obs
Phot. T. Meas of comp. stars.
17 2 – 18.5
18 32
1 30

Left s with m
102.6 < m dis ✓
7 36.0 138.3 35.7 x
286.8 30.0 x
316.8 65.7 x + 2.65 ✓

107.5 x + 2.71 ✓
137.3 29.8
284.1 32.5 x
316.6 62.3 x + 2.77 ✓ /
Right mean = + 2.56
~~10.0~~ 13.8
~~49.8~~ 47.4 33.6 x
191.7 39.8 x
231.5 73.4 x + 2.40 ✓

~~x~~ 10.6 + 2.40 ✓
7 51.6 52.0 41.4 x
194.5 x
226.5 32.0 x
73.4 + 2.40 ✓

Sept 7, 1901

r with m

Left

~~97~~ 100.6 < mdis

8 00.0 141.8 41.2

273.8 53.0

326.8 93.2 + 1.83

92.7 + 1.79

144.5 51.8

279.5 44.5

324.0 96.3 + 1.75

Right. Mean = + 1.64

2.5

56.3 53.8

182.6 55.2

237.8 109.0 + 1.44

3.3 + 1.48

8 08.0 58.9 55.6

184.8 49.7

234.5 105.3 + 1.53

Sept 7, 1901

q with m

Left

282.2 < midis

8 16.0 316.8 34.6

106.1 30.3

136.4 64.9 +2.68

286.2 +2.66

316.2 30.0

103.6 35.8

139.4 65.8 +2.65

Mean = 2.56

Right

193.8

225.6 31.8

10.8 38.8

49.6 70.6 + 2.49

193.5 + 2.4~~9~~7

8 24.8 231.5 38.0

14.8 33.6

48.4 71.6 + 2.45

reject not q

wrong star

Sept 7, 1901.

q with m

Left

280.2 < medié

8 34.0 322.4 — 422 ✓

95.1 — 497 ✓

144.8 — 91.9 ✓ + 1.86 ✓

277.9 — + 1.78 ✓

327.0 — 49.1 ✓

96.6 — 487 ✓

145.3 — 97.8 ✓ + 1.71 ✓

Right. — Mean = + 1.78

189.2

232.8 — 43.6 ✓

~~8~~6.2 — 50.8 ✓

57.4° — 94.4 ✓ + 1.80 ✓

186.1 — + 1.78 ✓

8 42.0 233.6 — 475 ✓

80.0 — 479 ✓

55.9 — 95.4 ✓ + 1.77 ✓

Sept 7, 1901

p with m

	Above		
	357.6		
9 06.0	66.9	69.3 ✓	
	179.2	61.1 ✓	✓
	240.3	130.4 ✓	+0.97
	3.1	✓	+0.94 ✓
	62.0	58.9 ✓	
	173.4	74.8	
	248.2	133.7 ✓	+0.90 ✓
	Below	Mean =	~~+008~~ ✓
	275.4		+1.08
	327.8	52.4 ✓	
	90.7	63.0 ✓	✓
	153.7	115.4 ✓	+1.29
	~~260~~. 270.1	✓	1.22 ✓
9 12.8	332.3	62.2 ✓	
	92.4	59.8 ✓	
	152.2	122.0 ✓	+1.15 ✓

Sept 7, 1901

Above o with m.

79.7
9 21.4 158.7 < m dir 79.0
267.2 68.2
335.4 147.2 +0.63

88.7 +0.68
154.2 65.5
265.3 77.0
342.3 142.5 +0.72

Below
350.7 Mean +0.64
68.6 77.9
175.3 69.4
244.7 147.3 +0.63

356.2 +0.60
9 30.0 67.2 71.0
170.6 79.3
249.9 150.3 +0.57

o 5 p w 3 x
p 5.5 q
q 2 r
r 4.5 s
s 5 t
t 2 u
~~tt~~ u 5 w

Sept 7, 1901.

Phot T. U cephei W Obs

24 50 +81.0
21 00

3 50
8 10

Ledgered.
Plotted.

~~Left~~ & Above
~~348.8~~ <vardis
~~10 50 43~~ ~~76.1~~ ~~Left~~ <vardis
~~156.0~~ 160.0
~~9 55 12 265.1~~ 261.2 101.2
345.1 92.6
77.7 193.8
167.0 166.2 + 0.26
58 00 259.9 92.9
338.3 106.3 + 0.32
84.6 199.2
Right & Below 160.8 + 0.37
69.5 mean = +0.32
10 00 00 173.6 104.1
255.3 91.2
346.5 195.3
160.7 + 0.29
74.5
10 01 58 168.0 93.5 +0.33
235 10 246.9 106.0
9 58 48 352.9 199.3 + 0.37
5 - 0 7 160.7
14 58 41

5635.6741
5632.9567
+2.6674

5635.6241
5635.4495
+0.1746

Sept 7, 1901

II

ROB
68.0
10 03 42 174.2 106.2
255.3 92.4
347.7 198.6 +0.35
161.4

73.9
05 34 169.6 95.7 +0.39
248.4 106.8
355.2 202.5
157.5 +0.43

LDA Mean = +0.48
334.6
08 00 46.8 112.2
164.7 96.1
260.8 208.3
151.7 + 0.54

345.0
09 35 82.0 97.0 +0.58
26 41 153.2 114.6
10 06 43 267.8 211.6
5 - 0 7 148.4 + 0.61
15 06 36+ Gr. M.T.
5635.6296x
~~5632.9567x~~
~~+2.6729x~~
5635.4495
+0.1801x

Sept 7, 1901

III

LDA-

336.0

10 11 30 88.2 112.2

159.8 102.0

261.8 214.2 +0.66

145.8

342.6 +0.64

13 30 81.8 99.2

154.9 112.7

267.6 211.9 +0.61

108.1

R&B. Mean = +0.61

244.3

15 40 357.2 112.9

72.7 95.9

168.6 208.8 +0.55

151.2

250.9 +0.58

10 17 40 350.6 99.7

18 20 65.5 112.4

10 14 35 177.9 212.1

5 - 0 7+ 147.9 +0.62

15 14 28 Gr. M.T.

5635.6350+ Pos Aug 194.3

5635.4495 + S'pr. Wheel 6.5 B

+0.1855 " " 7.3 C

Sept. 7, 1901.

~~R Aq~~

R Sagittarii no Ob.

19 9 −19.2
21 59
2 50

u 4 w
w 3 x
10 50 x 4 y

S Aquarii no Ob.

22 49 −21 7
−2
22 47 −20.9
22 17
11 30

Location of Comp Stars for S Aquarii.

s prec. q by 24 secs & 4'.1 N of it
t " s by 25 secs & 2'.8 S of it.
w " t by 24 secs & 2'.2 N of it.

star which is prob. α fols Hagen 10 34 secs very slightly S. of it. Impossible to locate β & γ. and well to look at α when clearer

Sept 7, 1901.

Photom o Ceti   rw Obs.

26 12 - 3.6
23 00
3 12
8 48

Ledgered
Plotted

Left
261.5 ∠ var dis
11 45.0   283.5   22.0 ✓
79.8   24.1 ✓
103.9   46.1 ✓ - 3.45 ✓

259.8   - 3.48 ✓
283.6   23.8 ✓
81.2   21.0 ✓
102.2   44.8 ✓ - 3.52 ✓
Right   Mean = - 3.43 ✓
168.9 ✓
192.3   23.4
347.6   25.6 ✓
13.2   49.0 ✓ - 3.32 ✓

168.1   - 3.38 ✓
11 50.4   193.0   24.9 ✓
11 48.7   349.7   21.2 ✓
5 - 0.1   10.9   46.1 ✓ - 3.45 ✓
16 48.6 Gr. M. Time.
5635.701

Sept 7, 1901

Same Again

Right

168.4
11 52.5 191.9 23.5✓
346.8 25.2✓
12.0 48.7✓ -3.33✓

6.
1~~8~~4.8 -3.28✓
193.1 28.3✓
346.7 22.8✓
9.5 51.1✓ -3.23✓

Left

78.9 mean = -3.36✓
99.2 20.3✓
254.5 25.4✓
279.9 45.7✓ -3.47✓

~~7~~
75.2 -3.44✓
11 58.2 100.9 25.7✓
11 55.4 256.9 21.6✓
5 - 0.1 278.5 47.3✓ - 3.40✓
16 55.3+ Gr. M. Time.
5635.705+

Sept 7, 1901

Left
78.1
12 01.6 98.9 20.8
255.3 24.0
279.3 44.8 — -3.52

-343
75.1
101.3 26.2
256.3 22.3
278.6 48.5 - 334

Right Mean = -3.38
345.8
10.3 24.5
165.0 25.7
190.7 50.2 - 3.26

345.0
12 06.0 ~~4~~ 10.3 25.3 - 334
12 03.8 166.1 21.6
5 -0.1 187.7 46.9 - 341
17 02.7 Gr. M.T. Final Mean = - 3.39
5635.710 C.S. = 9.19
Magn = 5.80

L. P. P.

Sept 8, 1901 (Sunday)

B A C 1182 Ballau 103

21 05 55.0 21 05 0.0

Sept 9, 1901 (Monday)

Ball. 103
B°C 1182 ~~B 397~~
7 05 09.0 7 04 00.

R Ophiuchi w-Ob
Phot T. Meas. of comp stars s.

17 2 -15.5
18 42
1 40

Left s with m

~~10 3.0 < m dis~~
7 ~~46.0 141.2~~ 38.2

7 58 Sky too hazy, at least at the present time

R Sagittarii w Ob
19 9 -19.2
19 29
0 20

v 4 w
w 3 x
x 3.5 y
y with high power rather faint

Sept 9, 1901.

18 14 −23.5
19 45
1 31

20
Dis. Jup ~~III~~ Phot ~~R~~ 20 Obs
Campbell Recorder.

Comp with nearest Sat on preceding side = Sat I

8 24 0.0 122.1
8 24 48 41 110.4 232.5
−1 8 1 −0.8
25 03 111.7 122.8
8 23 40 Cloud 111.0
29 234.5 →
31 122.2
8 26 52 26 23 108.8 231.0
−1 8 Clouds thicker
8 25 46 ~~[illegible]~~ 56 110.5 121.8 −0.8
27 16 109.6 232.3
52 125.2
8 28 15 28 07 106.0 231.2
1 8 sky a little clearer
8 27 07 21 107.1 124.0 −0.6
39 106.6 231.1
55 123.5
8 29 26 29 19 104.5 228.0
−1 8 38 100.7 127.3
8 28 18 57 102.6 228.0 −0.5

sky a little clearer.

Sept 9, 1901

8 30 22	8 30	06		129 2	
-1 8		16	92.9	222.1	
8 29 14		28	92.9	130.9	-0.1
		38	92.9	223.8	
		48		130.1	
8 31 14	31	09	94.0	224.1	
1 8		23	87.4	132.9	0.0
8 30 06		34	90.7	220.3	
		46		135.0	
8 32 05	32	00	84.7	219.7	
-1 8		09	80.9	135.2	+0.3
8 30 57		24	82.8	216.1 →	
31 35		43	78.1	136 9	0.5
53	33	01	74.5	215.0	0.6
32 5		13	71.0	139.5	0.7
19		27	67.4	210.5	0.9
35		43	65.1	143.1	1.0
44		52	62.9	208.2	1.1
56	34	04	61.0	145.3	1.1
33 9		17	57.3	206.3	1.3
22		30	52.8	149.0	1.5
35		43	47.8	201.8	1.8
48		56	45.0	154.0	1.9
55	35	03	42.9	199.0	2.0
34 5		13	37.9	156.1	2.3
16		24	33.8	194.0	+2.6

Sept 9 1901.

8 34 28   8 35 36   31.8 160.2 +27
40   48   192.0
35 8   36 16 Not seen later

Limit of Visibility

8 36 41   27   161.0
-1 8   36   30.8 191.8
50   30.1 160.8
8 35 33   37 00   30.4 190.9   +28

Ballon 103   B&C 1182
8 38 00   8 39 08.0
8 39 00   8 40 08.0

Eclipse started as soon as possible. Sky very hazy inclining to rather thick cloudiness for Sats. at beginning. During Eclipse sky progressively becoming a little clearer, and fairly clear at end of eclipse but still somewhat hazy. Settings had to be made slowly and with much care. Before first settings Sats. seen, but not able to equalize. After eclipse Jupiter became dimmer again.

Sept 9, 1901.

R. Ur. Maj. W Ob.

10 32 +69.3
20 20
9 48

9 20 u 2 var, var 3 w
est. made with some difficulty ~~though~~ some haze. alt. low.

S Aqui W Ob.

20 8 +15.2
21 8
1 0

Troubled continually by light cloud & haze. Var. thought to be seen and identified. If so as near as can be est. through light cloud & haze var about = to star g
10 00 will look again another time.

Σ 131 W Ob.

22 25 +60.0
21 38
3 47
8 13

10 14 clouds

Sept 9, 1901 Posted to here

η Cassiop. W Ob.

~~8~~ 24 41 +57.2
21 41
3 00
9 00

Comp- invisible in ordinary eyepiece

Nova Persei W Ob.

27 24 +43.6
21 44
5 40
6 20

10 20 Cloudy

10 30 sky nearly all cloudy

27 24 +43.6
22 04
5 20
6 40

10.50 Troubled throughout evening by Clouds in different parts of the sky and gradually overspreading ~~the~~ whole sky Impossible to get Nova Persei

Omitted by

mistake

Omitted by

Mistake.

Sept 11, 1901 (Wednesday)

Ballows 103 BD C 1182
9 39 0.0 9 40 43.0

R Ophiuchi W Obs
17 2 -15 5
21 20
4 18

(cleared about 9.15 P.M.
cloudy before)
~~too low for R Oph.~~

R Delphini W Obs
20 8 +8.6
20 10 +8.4
21 25
1 15

m 6 n
n 1.5 o
10 04 o 4.5 k
k 1.5 q
q 5.5 r

R Vulpeculae W Obs.
20 58 +23.2
21 48 +22.8
0 50
20 57 +23.4
21 49
52

Sept 11, 1901

R Vulpeculae w Obs.

20 57 +23.4
21 53
0 56

20 57 +23.9
21 57
1 00

star o prec H. #2 by 23 secs & is 6.2' S' of it.

star n prec H#2 by 20 secs & 7.7' S. of it.

star final new q = Hag. 29. ~~call~~

~~new q~~ p 2.5 ~~new~~ q
q 2 r

11 00 hazy

R S. Cygni w Ob.
20 10 +38.6
22 49
2 39

Too hazy U Cygni w Ob.
20 9x +463
22 57
2 48

(over)

Posted to here

Sept 11, 1901

u Cygni wOb

Location of comp. stars.

k prec Var 30 secs & 1.2' S of it.

q fols " 0.5 sec & 2.3' N of it.

star (prob r) prec Var 14 secs & 3.8' N of it.

star (prob s) prec. Var 19 secs & 4.9' N of it.

11 55 t too faint to locate tonight.

B&C 1182	Ballou 103
21 31 53.0	21 30 00

Sept. 12. 1901. (Thursday)

19 45 S.T. = 8 5 E.T.

8 5 Clearer.

8 15 More cloudy again.

U Cygni.

20 9 +46.3
20 15
-4

All cloudy again.

Cloudy but will try for
Σ 1890. Phot W. W. obs.

14 46 +49.2
20 25
+5 39

Too thick for double. Visible at times but clouds peculiar. So much moisture in them, and clouds continually shifting, that it cannot be meas. further.

9 0 Beginning to rain. No chance for anything.

Sept 12, 1901.

β7C1182	Balloon 103
21 06 49.0	21 05 00

Sept 13, 1901. (Friday)

Ballou 103 B&C 1182
9 01 0.0 9 02 48.5

9 02 partly broken

9 08 clearing from west.

U Cygni.
20 ~~11~~ 9 +46.3
20 54
0 45

Too high

~~2148 +22~~.8 R Vulpeculae
2057 +23.9
20 57
0 00
w Ob.

p = q, q = r

RS Cygni w Ob.

20 10 +39.3
21 16
1 06

9 33 clouds

9 35 clouds coming thick again.

41 Arietis w Ob.
26 44 +26.9
21 20
5 24
6 36

9:45 clouds too cloudy

Sept 13 1901.

Σ60 η Cassiop. W Obs.

24 41 +57.2

Phot W 21 36

3 5

8 55

10 00 clouds

10 05 "

Pos ang 240 Dist 9" 4.0 - 7.7

10 08 clouds too thick

10 10 clouds ~~thick~~ - abandoned

U Cygni. W Obs.

20 9 +46.3

21 58

1 49

star r prec. Var. by 14 secs & 3'.8 North

" s " " by 19 " & 4'.9 North

" t " " " 38.5 secs & 5'.1 North

" o " " " 14 " & 9.2 North

" n " " " 3.5 " & 13.2 North

" m fok " " 22 " & 0.3 South

Sept 13, 1901 Posted to here.

S Aquarii 20 Obs.

22 47 -209
22 42
5
11 55

α fols Hagen X by 34 secs & 0.′2 S of it.
β prec α by 4 secs & 1.45 N of it.
γ " α by 5 " & 2.′8 N of it.

X = Hagen No 10.

11.30

B&C 1182
21 09 52.1

Ballou 103
21 08 0.5

Sept 14, 1901 (Saturday)

Ballou 103 B & C 1182
7 02 0.0 7 03 59.5

R Ophiuchi W obs.
17 2 - 15.5
18 55
1 53

Left s with m

107.8
7 30.0 135.3 (in dis 27.5
281.9 37.4
319.3 64.9 + 2.68

102.4 + 2.58
142.6 40.2
285.7 30.9
316.6 71.1 + 2.47
Right Mean = + 2.47
12.3
40.8 38.5
193.5 33.6
227.1 72.1 + 2.44

148 + 2.36
7 42.0 47.8 33.0
7 36.0 187.6 44.5
232.1 77.5 + 2.27

Sept 14, 1901

Same Again

	Right		
	11.2		
> 50.0	51.9	40.7 ✓	
	192.9	34.6 ✓	
	227.5	75.3 ✓	+ 2.34 ✓
	14.2		+ 2.36 ✓
	47.5	33.3 ✓	
	191.3	40.9 ✓	
	232.~~7~~2	74.2 ✓	+ 2.37 ✓
	Left.		Mean = + 2.44 ✓
	283.3		
	321.8	38.5 ✓	
	103.4	32.4 ✓	
	135.8	70.9 ✓	+ 2.48 ✓
	284.0		+ 2.52 ✓
800.0	316.0	32.0 ✓	
	102.3	36.2 ✓	
	138.5	68.2 ✓	+ 2.57 ✓

Final Mean = + 2.46 ✓

Sept 14. 1901
Nova Sagittarii
Phot T. WCb

18 51 - 13.0
20 16
1 25

Above comp+dis
2834
9 00.0 317.7 34.3 ✓
107.1 28.3 ✓
1354 62.6 ✓ + 2.76

288.2 + 2.78
315.3 27.1 ✓
103.3 34.3 ✓
137.6 61.4 + 2.81
Below
193.1 Mean = + 2.69
228.9 35.8 ✓
15.8 32.7 ✓
48.5 68.5 ✓ + 2.56

+ 2.60
195.9
9 06.0 225.4 29.5 ✓
11.3 36.8 ✓
48.1 66.3 + 2.63

Sept 14, 1901,

Same Again

Below
191.7
9 08.0 232.0 — 40.3 ✓
15.7 — 31.9 ✓
47.6 — 72.2 ✓ + 2.43

197.2 — + 2.48
226.8 — 29.6 ✓
11.0 — 39.6 ✓
50.6 — 69.2 ✓ + 2.53

Above — Mean = + 2.62
103.3
138.2 — 34.9 ✓
287.5 — 29.7 ✓
317.2 — 64.6 + 2.69

104.0 — + 2.76
9 20.0 133.3 — 29.3
286.9 — 31.4
318.3 — 60.7 + 2.84

Hour Ang. 2 17 Dec. − 13.1
Sid Time 21 14
Spr Wheel 6.5 12.4 Pos Ang 97.2
" " 7.6 13.5

Star meas. in above two groups was the (9.5) by 11.7 scr. and about 0.′3 S of it.

Sept 14, 1901

a faint star prec. the (q.v.) 35 secs about 3.0' South of it.

a slightly fainter star prec. the last by 3 secs & 0.2' South of it.

If star meas. is the Nova the chart ~~of~~ is not quite right.

There is no star certainly seen tonight in the ~~tw~~ exact pos. of the Nova as indicated by the chart. Consequently the star prec. 11.7 secs & 0.3' S was ~~prov~~ provisionally measured. S.

R Vulpeculae 2w Ob.

20 57 +23.9
21 42
0 45

p 2.59, 9.22
look up pos of on Hag chart.

R. S'. Cygni 2w Ob.

~~20 10 +39.3~~
~~22 00~~
~~1 50~~

20 12 +37.6
22 08
1 56

Sept 14, 1901

RS Cygni.

f, prec var 5 secs & 9.′2 N. of it
f′ " f 16 " & 2.′9 N " "
e " var 22 " & 6.′2 N " "
e′ " var 1 mt 7 sec & 8.′3 N " "
d fols var 16 ~~secs~~ & 2.′~~8~~2 S " "
c prec var 28 secs & 4.′7 S " "
b fols c 9 secs & 0.′5 S " "
a " c 3.5 " & 2.′7 S " "

the above notation is old notation.

m fols var 12 secs & 0.′8 S of it.

R Ursae Minoris

Phot T. 16 34 +72.9 W Obs
22 54
6 20

over

Sept 14, 1901

R Ursae Minoris
Above   Led. Plott-
265.9 < comp * dis   Posted
11 21.4   336.7   70.8
89.4   60.8
150.2   131.6 + 0.95

269.5   + 0.94
331.6   62.1
85.4   69.7
155.1   131.8 + 0.94
Below   Mean = + 0.83
172.4
252.0   79.6
358.4   64.3
62.7   143.9 + 0.70

178.9   + 0.72
11 30.0   244.1   65.2
51.4   352.8   76.9
11 25.7   69.0   142.1 + 0.73
5 – 2.0
16 23.7 Gr. M. Time.
5642.683

Posted to Zero

Sept 14, 1901

Same Again

Below
173.3
11 31.2 248.9 75.6
358.9 63.5
62.4 139.1 +0.79

180.3
243.0 62.7 +0.78
352.3 77.4
69.7 140.1 +0.77

Above Mean = +0.83
83.1
158.0 74.9
266.8 63.8
330.6 138.7 +0.80

89.2 +0.88
11 38.7 150.3 61.1
9.9 264.8 70.2
11 35.0 335.0 131.3 +0.95
5 -2.0 Final Mean = +0.8[illegible]
16 33.0 G.m.t. Pos. ang. = 138.6
5642.690 Spr. Wheel = 2.5 B & 3.6 C
Hour ang. = 6h 57m
Sid. time = ~~+72.7~~ 23h 28m
Decl. = +72°.7
11 48 Troubled a little by varying haze.

Sept 16, 1901 (Monday)

B&C 1182 B 394
7 06 03.1 7 06 0.0
Prob. chron. was corrected by someone in the interim of the last two comparisons.

Nova Sagittarii w Ob
18 51 -13.0
19 11
0 20

7 50 Nova not certainly seen; sky somewhat hazy in this region. As near as can be determined it seems as though the nova must be at least 1/2 magn. fainter than faint star mentioned at top of page 120.

8 00 Sky hazy and growing more so

V Cygni w Ob
20 43 +47.2
20 03
40
11 20
8 17 t 3.5 n

Sky too hazy for R.S. Cygni
8 22 " " cloudy. Nova Persei.

Sept 16, 1901

Double −29° 16980, 16981 W Ob.

Phot ~~III~~ R 20 14 − 29.5

~~Att~~ 20 34

0 20

Pos Ang 330° Dist 0.7 Magns 8.3 − 7.3

Right

8 50.2 < to dis.

46.0 111.8 61.6 ✓

228.3 65.9 ✓

294.2 127.5 ✓ − 1.03 ✓

47.7 − 1.03 ✓

114.6 66.9 ✓

229.5 60.5 ✓

290.0 127.4 ✓ − 1.03 ✓

Left Mean = − 0.98 ✓

320.4

22.4 62.0 ✓

133.4 70.3 ✓

203.7 132.3 ✓ − 0.93 ✓

8 314.5 − 0.94 ✓

54.0 22.4 67.9 ✓

A 50.0 137.3 63.1 ✓

5 200.44 131.0 ✓ − 0.96 ✓

13 50.0 Region low, sky hazy, ob a little diff

Sept 16, 1901

Double +2° 3458 3459 W Obs
Phot W 17 56 +29
21 06
3 10

Stopped to fix cannon balls of dome.

R Cygni. W Obs
19 32 +49.9
22 02
2 30

10 28 s 3 "a", "a" 2 t

10 32 final s 2 (s), (s) 3 t (final)

e 5 f
f 3 g
g 4 h star e apparently not wanted in sequence

final y 3 (f)

10.50 final z 1 (f)

sky hazy. est of f with z not regarded as an critical tonight
of course thought to be
seen at minimum

X Cygni. W Obs
Phot T.

19 45 +32.6
22 45
3 00

9.5 cap used

Sept 16, 1901

X Cygni.

	Above		
	15.1 < randis		
1102.0	48.5	33.4 ✓	
	190.4	37.9 ✓	✓
	228.3	71.3 ✓	* − 246
			✓
	13.9		− 2.52
	50.8	36.9 ✓	
	195.8	31.2 ✓	✓
	227.0	68.1 ✓	* − 2.57
	Below		mean = − 2.64 ✓
	287.5		
	315.4	27.9 ✓	
	104.6	33.7	
	138.3	61.6 ✓	− 2.80 ✓
	283.0		− 2.77 ✓
11 12.0	317.7	34.7 ✓	
11 07.0	107.5	28.6 ✓	
5	136.1	63.3 ✓	− 2.74 ✓
16 07.0			
5644.67			

Sept 16, 1901

Same Again

Below

286.7
11 13.6 316.2 29.5
104.2 33.8
1 38.0 63.3 - 274

- 274
284.1
317.8 33.7
106.8 29.4
136.2 63.1 - 274

Above Mean = - 2.64
196.8
226.3 29.5
9.8 39.5
49.3 69.0 - 2.54

193.1 - 2.54
11 19.0 231.9 38.8
11 16.3 × 16.2 29.7
5 ~~46.0~~ 68.7 - 2.55
16 16.3 × 45.9 Final mean - 2.64
5644.678 × Hour Ang 3^h 37^m Decl + 32°.5
Spr Wheel = 4.5 A, 5.5 B, 6.1 C.
Pos Ang 203.4
Sid Time = 23:23

Sept 16, 1901.

Phot Mr o Ceti 2w Obs

26 12 - 3.6
23 32

2 40

9 20

Left

243.3 < var dis
11 48.0 270.3 27.0
62.3 28.7
91.0 55.7 - 3.03

241.9 - 306
269.0 27.1
62.3 27.4
89.7 54.5 - 3.08

Right Mean = - 3.02
150.9
178.6 27.7 :
329.5 29.0
358.5 56.7 - 2.99

148.4 - 299
11 54.0 177.5 29.1
11 51.0 328.5 27.6
5 0.0 356.1 56.7 - 299

16 51.0 Gr. M. T.

5644.702 ×

⊗ Sept 16, 1901 Posted to Lee

Same Again

Right

148.4

11 56.0 176.9 28.5

328.0 28.2

356.2 56.7 − 2.99

146.8 − 3.00

176.2 29.4

329.1 27.0

356.1 56.4 − 3.00

Left Mean = − 3.01

58.2

85.9 27.7

238.0 27.4

265.4 55.1 − 3.05

57.2 − 3.02

12 04.0 86.8 29.6

12 00.0 237.8 27.2

5 265.0 56.8 − 2.98

17 00.0 Gr. M.T. Final Mean = − 3.02

5644.708 Hour Angle $9^h 52^m$ Cal. = 9.19

Decl − 3.6 Magn = 6.17

Sid. Time = 12:04

Pos Angle = 169.7 Ver. B

12:15

Sept 19, 1901 (Thursday)

B & C 1182 Ballou
6 53 09.0 6 53 0.0

Double +2° 3458, 3459
Phot R 17 56 +2.9 w Obs.
19 26
7 20 Obs. 1 30
Pos Ang. 150° Dist 1.4 Magn 4.0 - 8.5 –
Right
326.4 { for dis.
7 31.0 341.6 15.2
143.8 19.2
163.0 Obs. 34.4 – 4.10

324.4 Obs thick
341.3 16.9 – 4.14
145.2 16.1
161.3 33.0 – 4.19
Left Obs thick Mean = – 4.13
~~235.0~~
~~243.5~~
54.4
72.3 17.9
234.1 16.9
251.0 34.8 – 4.08

55.2 – 4.12
~~7 42.0~~ 71.1 15.9
7 30 234.1 17.8
7 41.5 251.9 33.7 – 4.15
5
12 41.5

Sept 19, 1901

Same Again

Left

53.7
7 51.0 72.2 18.5
234.6 16.5
251.1 35.0 – 4.06

55.2 clds thick again. – 4.12
70.8 15.6
233.6 17.4
251.0 33.0 – 4.19

Right mean = 4.14
~~320.7~~ clds
~~341.0~~ clds ~~15.3~~
144.0 clds 18.7
162.7 clds 15.2
326.2 33.9 – 4.13
341.4
– 4.17
~~3~~ clds 15.6
145.7 17.2
8 05.0 161.3 32.8 – 4.21
324.8
342.0

much troubled throughout both groups by clouds; but as much care exercised as possible

Sept 19.1901

Nova Persei. W Ob.

8 24 +43.6
27

20 24
7 00
5 00

8 30 Clds 9.5 in cap used
Above
83.5 < Nova Dis. Ledgend.
8 34.0 155.7 72.2
269.9 clds thick 64.0
333.9 136.2 − 085

88.3 − 0.84
151.9 63.6
265.0 73.4
338.4 137.0 0.83
Below Mean = −0.76
354.3 clearer
67.8 73.5
174.7 clds thicker 70.5
245.2 144.0 −0.69

356.0 −0.69
8 46.8 66.0 70.0
8 40.4 1~~8~~72.3 74.3
5−0.2 246.6 144.3 −0.69
13 40.2 Gr. M. Time
5647.569

Sept 19, 1901

Same Again

Clds.

Below

352.2

8 52.0 70.2 78.0✓

177.8 64.8✓

242.6 142.8 — 0.72✓

357.1 — 0.66✓

68.2 70.1✓

170.6 78.3✓

248.9 148.4✓ — 0.61✓

Above clds mean = — 0.77✓

265.6

336.9 71.3✓

88.7 63.0✓

151.7 134.3✓ — 0.89✓

270.9 — 0.88✓

9 04.8 332.8 61.9✓

86.8 73.0✓

8 58.4✓ 159.8 134.9✓ — 0.88

5 — 0.2 Final Mean = — 0.76✓

13 58.2✓ Gr. M. Time. C.N.= 7.25✓

5647.582ˣ Magn = 6.49✓

~~Hour~~ Ang = 6 00

Sid Time = 21:24

Decl = 43.4

Pos Ang = 75.4

S/n. Wheel = 0.5 a. & 1.5 B.

Sept 19, 1901.

V Cygni w Obs.

20 43 +47.2
21 33
0 50

20 38 +47.3
21 42
1 04

t 3 u

R Cygni w Obs.

19 32 +49.9
21 52
2 20

final s 3 (a), (a) 2 final t.

final s ~~4~~ 2 (s), (s) 3.5 final t.

order of final sequence will be
u, w, x, x', y, old h, z

x, 4 x'
x' 5 y
y 4.5 ~~4~~ old h
old h 5.5 z

x 2 ~~old~~ (f)
(f) 2 x'

Sept 19, 1901.
R Cygni Cont.

x 1.5 (e)
(e) 2.5 x'

y 1.5 (g)
(g) 3 (h)

y, follows w by 5 secs & is 1.3 N of it
x' prec w by 9 " & is 0.2 S of it
old h prec var 3 " & is 0.5 N of it
~~but~~
old h is in decl. 1/3 way from var to Hagen No 14.
z seems, to prec. the var 0.5 sec & to be about 0.3 S of it.

R.S. Cygni - W Obs
20 12 + 37.6
23 18
3 06

o Ceti W Ob. Phot W
26 12 − 3.6
23 42
2 30
9 30

Sept 19. 1901

o Ceti

Right

143.7
11 38.0 168.1 24.4
321.7 27.0
348.7 51.4 — 3.21

140.8 — 3.11
170.0 29.2
321.2 27.0
348.2 56.2 — 3.01

Left Mean — — 3.08
51.6 clds thick.
77.7 26.1
231.4 28.1
259.5 54.2 — 3.09

50.3 — 3.04
~~8~~ 11 45.2 79.9 29.6
231.8 26.9
258.7 56.5 — 3.00

Reject troubled by clouds

Sept 19, 1901

Same Again

I

Left

57.0 26.3 Ledgerwood
11 48.4 78.3 29.6
229.5 55.9 — 3.02
259.1

— 3.00

49.6
79.8 30.2
230.0 26.8
256.8 57.0 — 2.98

Right Mean = — 3.03
323.5
348.2 24.7
139.4 30.0
169.4 54.7 — 3.07

319.8 — 3.06
11 53.0 350.0 30.2
101.4 142.3 24.8
11 50.7 167.1 55.0 — 3.06
5 — 0.2
16 50.5 G. M. Time
5647.702

Sept 19, 1901

Posted

Same Again ~~III~~

II

Right
322.7
11 58.0 347.2 24.5
139.2 30.5
169.7 55.0 - 3.06

379.8 - 3.06
349.3 29.5
141.8 25.7
167.5 55.2 - 3.05

Left Mean = - 3.06
231.7
257.4 25.7
50.5 28.4
78.9 54.1 - 3.10

229.8 - 3.07
12 06.0 260.0 30.2
12 4.0 51.9 25.3
12 02.0 77.2 55.5 - 3.04
5 - 0.2 Hour ang 10.04 Final Mean = - 3.04
17 01. 8 Gr.M.T. Decl. - 8.6 O.S. = 9.19
5647.710 Sid. Time 0.15 Magn. = 6.15
~~Sp. Wheel~~
Pos. Ang. 292.2 Ver. B

12:15

Sept 21, 1901 (Saturday)

BD C 1182 Ballou, a 3
7 03 36.5 7 03 00

Double -29° 16980, 16981
Phot W 20 14 -29.5 W Obs
19 40
0 34
11 26

Pos Ang 320 Dist 0.7 Magns 8.3-7.3
There is a faint star pretty close to the brighter component. with reference to brighter component it would have a Pos Ang 70° Dist 4"± Magns diff to est on acct. of prox. Magn 9.3

Below
119.4 < br. dis.
7 42 183.7 64.3
295.4 72.4
367.8 136.7 - 0.84

113.6 -0.84
187.0 73.4
298.7 63.7
362.4 137.1 -0.83

Sept 21, 1901

Above

28.9

91.2 62.3

207.1 69.0

276.1 131.3 − 0.95

26.1 − 0.90

7 50 95.8 69.7

7 46.0 208.6 66.3

5 − 0.6 274.9 136.0 − 086

mean = − 0.87

12.45.4 Gr. M. Time.

5649.

H. a. $11^h : 5\overset{6}{7}^m$ or $-0^h{:}04^m$

Dec. − 29.6

S. T. = 20:08

Pos Ang ~~17.0~~ 353.0 Ver. B

Double +2° 3458, 3459 W Obs

Phot. R

f 17 56 +2.9

20 14

2 18

Pos Ang 150 Dist 1.4 Magns 4.0−8.5

(over)

Sept 21, 1901

Double; see bottom of preceding page

	Left		
	53.5		
8 05.8	69.1	15.6	
	231.8	18.6	
	250.4	34.2	– 4.11
	52.0		– 4.11
	70.4	18.4	
	232.2	15.9	
	248.1	34.3	– 4.11
	Right	mean 4.04	
	321.4		
	338.2	16.8	
	139.2	18.9	
	158.1	35.7	– 4.02
	319.3		– 3.96
8 12.0	339.4	20.1	
17.8	140.5	17.5	
8 8.9	158.0	37.6	– 3.91
5 – 0.6			
13 8.3			

Sept 21, 1901.
R Delphini
20 8 +8 39 2w Ob.

20 10 +8 31
20 45
0 35

8 46 q 4 var, 2 var 1.5 r 2w Ob.

R Cygni 2w Ob.
19 32 +49.9
21 08
1 36

Hagen 60 apparently fols. Hagen 1 by about 5 secs. & is 3'.4 South of it. It would seem as if there was an error in the ~~R.A.~~ pos. of Hagen 60. There is a star a little brighter than Hagen 60 with would preceed Hagen 1 by 0.5 sec & be 0'.8 S of it

There is a much fainter star than Hagen 60 X which is in about the same R.A. as Hagen 1 and be about 2'.2 South of it. But this last star is too faint for Hagen 60 & furthermore is radically out in Decl.

Hagen 60 is undoubtly final y with an error in R.A. in his list.

Sept 21, 1901

R Cygni (Continued)

final s 3.5 (a), (a) 2 t

final s 2.5 (s), (s) 3 t

x 5 x'
x' 4 y
y 4.5 h
h 5.5 z

x 2.5 (f)
(f) 2 x'

x 2 (e)
e 2 x'

y 1.5 (g)
9 35 (g) 3.5 (h)

S Aquarii 20 Ob.

22 48 −20.9
21 58
0 50
11 10

special c = Hagen 26

y 2 (c)
(c) 3 g

(e) = β
z 2 (d), (d) 2 α

Sept 21, 1901

S Aquarii cont.

(c) fols s final not. by 7.7 sec. & is 3.8 N. of it.

(d)
(e) prec. final d by 11 secs & 4.2' S. of it

R Cygni no Obs

19 32 +49.9
22 47
3 15

Loc. of old comp stars used.

old f fols var 28 secs & 1.3' S
" e " " 13 " & 3.0 N
" g " " 8 " & 4.0 N

old s = Hagen 36
" a = " 41

R Arietis no Obs

2 6 7 +24.4
23 20
2 47
9 13

1115 s 1 var, var 5 s

Sept 21, 1901

R Urs. Min. W Obs.
Phot T. 16 34 + 7 2.9
23 34
7 00

Led.
Plott.
Post.

Above
266.5 < comp * dis
11 30.0 336.2 69.7
86.2 68.4
154.6 138.1 + 0.81

+080
268.4
334.6 66.2
84.6 72.4
157.0 138.6 + 080
Below Mean = +074
173.3
251.3 78.0
356.9 67.5
64.4 145.5 + 0.66

+067
178.4
11 37.0 246.4 68.0
11 33.5 352.8 76.7
5 -0.6 69.5 144.7 + 0.68
16 32.9 Gr. M. T.
5649.690

Led. Plott-
Post.

Sept 21, 1901

Same Again -

Below
1728
11 ~~4~~39.0 250.2 77.4
3562 69.6
65.8 147.0 + 0.63

176.4 + 0.66
249.7 73.3
352.8 72.6
65.4 144.9 + 0.68

Above Mean = + 0.76
84.2
155.9 71.7
268.9 64.3
333.2 136.0 + 0.86

86.6 + 0.86
11 46.0 155.2 65.6
85.0 26~~7~~6.4 70.4
11 42.5 336.8 136.0 + 0.86
5 — 0.6 Final mean = + 0.75
16 41.9 G.M.T. Hour Angle = 7ʰ 32
5649.696 Decl. = 72.9
S'id Time. = 24 03
Pos Ang. = 318.6 B
11 5.0 St Pr. Wheel. = 2.5 B & 3.6 C

Sept 23, 1901 (Monday)

B&C 1182 Ballou 103
6 55 18.6 6 55 00

Double -29° 16980, 16981
Phot 25 20 Obs

20 14 -29.5
19 39
0 35
11 25

Poz Ang. 320 Dist 97 magns 8.3-7.3
Right & above
~~210~~ 210.2 < for dis.
7 29.0 276.1 65.9
318 59.4
91.2 125.3 -1.08
210.5
-1.05
270.4 59.9
27.0 68.3
~~95~~ 9.3 128.2 -1.02
Left & Below Mean = -1.02
119.2
185.8 66.6
300.8 61.0
361.8 127.6 -1.03
120.4
7 35.0 181.4 61.0 -1.00
7 32.0 295.6 69.5
5 -0.3 365.1 130.5 -0.97
12 31.7 Gr. M. Time.
Region somewhat low; moon bright
much care used. obs. considered good

Sept 23, 1901.

W.C.B.

New Var. in Scuti = 73.1901 Scuti

Phot T. 18 51 − 13.0
20 21
1 30

Above
8 354.1 comp star dis $\overset{\text{BD.}}{=}$ −12°.5198 (8.9)
7 19 50 67.4 73.3
167.6 84.5
252.1 157.8 + 042

+ 0.44

350.8
22 55 71.7 80.9
172.3 75.4
247.7 156.3 + 045

Below Mean = + 0.54
265.9
26 16 336.5 70.6
82.6 77.3
1~~6~~59.9 147.9 + 0.62

262.5 + 065
8 28 54 338.4 75.9
9 7 55 87.1 68.8
8 24 29ˣ 155.9 144.7 + 0.68
5 − 0 19
13 2~~4~~ 10ˣ Gr. M. Time.
5651.

Sept 23, 1901

II

Below
266.6
8 31 30 335.6 69.0
82.2 76.6
158.8 145.6 + 0.66

262.3 + 0.65
33 50 339.4 77.1
86.6 69.7
156.3 146.8 + 0.64

Above Mean = + 0.56
172.9
36 50 247.4 74.5
349.2 82.4
71.6 156.9 + 0.44

171.0 + 0.46
8 39 25 249.6 78.6
352.3 76.1
21 35 ~~1~~68.4 154.7 + 0.48
8 35 24ˣ
5 -0 19 $a.\ 2^h\ 21^m$
13 35 05ˣ $T.\ 21\ 09^m$
3651. Decl. − 12°.6
Pos Ang = 98.9
Sprocket Wheel 5.5 B
6.7 C

Sept 23, 1901

Nova Persei

Phot T. 3 24 + 43.6 W Obs.
27
21 19

9.5 caf used. 6 0 5

Above
841 < Nova this
909.0 159.7 75.6
265.8 69.4
335.2 145.0 − 0.67

85.8 − 0.70
153.2 67.4
263.0 74.9
347.9 142.3 − 0.73
Below Mean = − 0.57
359.0
72.9 82.9
177.2 70.9
248.1 153.8 − 0.50

351.2 − 0.44
9 19.8 69.1 77.9
9.14.4 169.0 82.0
5-0-3 251.0 159.9 − 0.38
14.14.1 Gr M Time

Sept 23, 1901.

Same Again.

Below

351.5

9 21.4 71.0 79.5 ✓

178.7 67.7 ✓

246.4 147.2 ✓ −0.63 ✓

355.9 −0.62 ✓

65.6 69.7 ✓

172.2 79.1 ✓

251.3 148.8 ✓ −0.60 ✓

Above ~~Be~~ mean = −0.71 ✓

265.2

337.5 72.3 ✓

85.1 66.9 ✓

152.0 139.2 − 0.79 ✓

272.1 −0.80 ✓

9 27.9 332.8 60.7 ✓

9.3 81.4 76.9 ✓

9 24.6 158.3 137.6 − 0.82 ✓

5 −0.3

14 24.3 Gr M.T.

5651.

Sept 23, 1901.

~~III~~

Above
264.7
9 34.0 336.2 71.5
88.8 63.1
151.9 134.6 − 0.89

267.9 − 0.82
333.~~x~~3 65.4
83.2 75.4
158.6 140.8 − 0.76

Below Mean = − 0.71
169.4
252.1 82.7
358.1 66.7
64.8 149.4 − 0.59

9 42.8 178.4 − 0.60
~~43~~ 246.7 68.3
9 38.4 351.2 80.0
5 − 0.3 71.2 148.3 − 0.61
14 38.1 Gr. M. Time.
5651.

Sept 23, 1901

IV

Below

168.2

9 50.0 251.0 82.8

357.5 69.2

66.7 152.0 − 0.54

177.5 − 0.59

245.7 68.2

3~~4~~52.0 78.4

70.4 146.6 − 0.64

Mean = − 0.68

Above

89.3

153.4 64.1

263.5 78.5

342.0 142.6 − 0.72

82.9 − 0.76

9 59.8 159.1 76.2

9 54.9 270.0 63.1

5 − 0.3 33~~2~~.31 139.3 − 0.79

14 54.6 Si. M.T. Final mean = − 0.70

5657

Reject, 1st groups. Considerable wind and images troubled in getting a good focus. Focus bettered in second and fol. groups

Sept 23, 1901
Nova Persei

H.A. 7 7
Decl 43.4
S.T. 22 29
Pos. Ang 255.0
Spr. Wheel 0.5 α
" " 1.5 β

S Aquarii W. Obs.
22 48 −20.9
22 48
0 0

with ~~pow~~ 1 in eye piece diam of field — 50 secs of time.

~~old~~ old (d) folls x 9 secs & is 3.3 N

z 2 (d), (d) 3 α

y 2 (c), (c) 2 z

α 3 (e), (e) 1 β

R Cygni W. Obs.
19 32 +49.9
23 16
3 44

x, 4 x'
x' 5 y
y 4 h
h 5.5 z

x 2 ~~(e)~~ (f) ~~(e)~~ (f) 3 x'
x 1.5 (e) (e) 3 x'
y 2 (g) (g) 3 h

Sept 23, 1901

o Ceti   W.C.lb.

Phot W — 26 12 — 3.6

23 32

9 40

9 20

Right & above

1324   (radii)

11 17.0 162.4   30.0

3122   30.2

342.4   60.2 — 2.85

131.8   — 2.89

161.5   29.7

3128   28.6

341.4   58.3 — 2.93

Left & Below   Mean = — 2.92

422

71.9   29.7

222.6   28.5

251.1   58.2 — 2.93

423   — 2.94

11 22.4   72.0   29.7

39.4   2224   28.0

11 19.7   250.4   57.7 — 2.95

5 — 0.3 +

16 19.4 G.M.T.

5651.

Sept 23, 1901

Same Again.

Left & Below

43.0
11 24.4 70.7 27.7
221.6 29.7
251.3 57.4 — 2.91

41.7 — 2.94
72.0 30.3
222.2 27.8
250.0 58.1 — 2.93

Right Mean = — 2.92

312.1
340.3 28.2
131.2 30.6
161.8 58.8 — 2.91

311.2 — 2.90
11 30.0 341.5 30.3
132.0 28.8
11 27.2 160.8 ~~17.3~~ — 2.89
5 — 0.3 59.1
16 26.9 Gr M Time Final Mean = —2.92
5651. Hour ang. 9:46 Col = 9.19
Sid Time 23.5.9 Magn = 6.27
Pos. ang. = ~~3.6~~ 162.7 Ver B
Dec'l = —3.6

11 40 O seems a little redder tonight than on previous one. But on equalization not partic. perceptable

Sept 24 1901 (Tuesday)

7 00 ~~B~~ cloudy.

7 30 thickly cloudy

8 00 clearing

73.1901 Scuti no Obs

Phot T. 18 51 −13.0

20 34

1 43

8 12 clouds here

8 16 " here

Above

171.5 < comp * dis.

8 30 00 249.4 77.9

346.7 86.1

72.8 164.0 +0.30

1668

32 20 253.8 87.0 +0 30

351.7 76.7

68.4 163.7 + 0 31

Below

mean = + 0.49

36 00 85.1 71.6

156.7 72.1

265.7 143.7 + 0.70

337.8

85.9 +0.68

8 37 40 30 160.2 74.3

138 50 264.9 71.4

8 5 34 42 331.8 143.8 +0.66

−0 27

13 34 15 + 4 m. T. 3652.

Sept 24, 1901

II

Below
85.6
8 43 48 156.0 70.4
261.5 80.1
341.6 150.5 + 0.57

80.3 + 0.56
46 04 162.5 82.2
267.16 69.5
33~~7~~.6 151.7 + 0.54

Above Mean = + 0.48
352.4
50 06 68.6 76.2
175.8 77.4
253.2 153.6 + 0.50

348.3 + 0.40
~~8~~ 52 52 73.3 85.0
19 2 50 171.3 78.9
8 48 12 250.2 163.9 + 0.30
5 - 0 27 H a = 2 39
13 47 45 S T = - 12.6
5652. Decl = 21 27
Pos. Ang = 99.0 Ver. a.
Spr. Wheel = 5.513 6.5 C

moon so bright ~~that~~ and prob. ~~a little~~ remainder from cloudiness alt a little low also; that together with the fact that stars are not over bright it is considered not best to take any more exposures tonight

Sept 24, 1901

R Herculis 20 Ob.

16 00 +18.46
15 58 +18.2
21 48
5 50

Abandoned region too low

S Coronae 20 Ob
15 15 +32.0
21 59
6 44

9 37 r 4.5 rar, rar 1 s

V Cygni. 20 Ob

20 34 +47.6 ~~34~~
22 11
1 37

9 56 t 2 rar rar 2 u

R Cygni 20 Ob
19 32 +49.9
22 27
2 55

Sept 24, 1901
R Cygni cont.

final x 2 (x), (x) 3 ~~y~~ (final) y

~~the~~ above (x), used on date Nov. 18, 1893 by W

final k 3.5 (psi) (ψ), (ψ) 2 l (in finder)

final l σ 2.5 (ξ), (ξ) 2.5 p final

final ~~m~~ n 3 (α), (α) 1 σ final

As X is ξ on Mr R's chart

final k 3.5 (ρ) (ρ) 1.5 l final finder

S Aquarii W Obs
22 48 − 20.9
23 22
0 34

g 2 (d), (d) 2 α
y 2 (c), (c) 3 g
α 2.5 (e), (e) 1 β

o Ceti W Obs Phot W
26 12 − 3.6
23 32
2 x0
9 20

(over)

Sept 24, 1901
o Ceti

R. & a.
312.1 (ronchi
11 12.0 342.1 30.0
132.0 29.6
161.6 59.6 — 287

311.2 — 284
341.5 30.3
131.6 30.8
162.4 61.1 — 282

L&B. Mean = — 2.87
221.5
251.6 29.8
42.3 28.4
70.7 58.2 — 293

221.2 — 2.90
11 18.6 251.2 30.0
11 15.3 41.3 30.0
5 — 0.4 71.3 60.0 — 286
16 14.9 Gr. M.T.
5652.

Sept 24 1901

Same Again.

Left & Below

221.5
11 21.0 250.4 28 9
41.0 30 7
71.7 59.6 — 2.87

221.3 — 2.89
251.8 30.5
42.~~7~~3 28.3
70.6 58.8 — 2.91

Rt A. Mean = — 2.88

132.6
160.8 28.2
310.2 31.4
341.6 59.6 — 2.87

130.1 — 2.86
11 27.6 161.3 31.2
11 24.3 311.2 29.3
5 — 0.4 340.5 60.5 — 2.84
16 23.9 Gr.Mt. ~~R~~A 9:45 02 - 2:15 (288 919 6.31)
5652. Sid. T. 23:57
Decl. — 3.6
Poz Ang 195.6 A

11 36. 1880 ll 82 Ball 103
11 37 27.1 11 37 08

Sept 25, 1901 (Wednesday)

BOC 1182 — Ballou 103
7 05 38.2   7 05 00

Phot. 7³-1901 Sept   20 Obs.
18 51 -130
19 51
1 00

Above
353.2 <comp * dis
7 31 30 68.4   75.2
166.3   87.8
254.1   163.0 +0.32

34~~7~~4.2   +0.36
34 58 72.4   85.2
173.8   74.5
248.3   159.7 +0.39
Below   mean = +0.42
266.6
38 26 337.7   71.1
79.7   82.9
162.6   154.0 + 0.50

1 259.9   +0.48
7 46 38 340.8   80.9
146 32 88.1   74.7
7 36 38 155.8   155.6 +0.47
5 - 0 38

12 36.00 Gr. M. Time
5653.

Sept 25, 1901.

II

Below
266.4
5
74847 336.8 70.4
81.2 81.1
162.3 151.5 + 0.55

262.0 + 0.56
4832 340.6 78.6
85.8 71.0
156.8 149.6 + 0.58

Above Mean = + 0.41
172.4
5200 251.4 79.0
346.6 86.7
73.3 165.7 + 0.27

165.9 + 0.26
75522 254.0 88.1
20141 351.8 78.1
75085 69.9 166.2 + 0.26
5 0 38
124947 Hour Angle = 1:46
5653. Decl. = -12.6
Sid Time = 20:33
Poz Ang = 99.8 Var a.
Spr. Wheel = 5.5B 6.6C

Sept 25/1901

U Herculis. Wells.

16 21 +19.1
20 51
4 30

16 20 +19.2
21 13
4 53
4 49

c' = g   c' = +18° 3191 (9.4)
f 2.5 (α), (α) 1 g finder.
α is +19° 3096 (7.0)

W Herculis

16 30 + 37.2
22 08
5 38

(b) prec. Hag. 5 by 30 secs. & 6.'2 S. of it
m 3 (b), (b) 1 n

k 3 (a), (a) 1 l

(a) prec. l 14 secs & 19.6 S of it
a is a DM star

Sept 25, 1901

R Cygni. 20 Ob.

19 32 +49.9
22 52
3 20

x 2.5 (x) (x) 2.5 y

(x) fol. var 19 sec & 5.0 N. of it

ξ ~~*~~ is Hag. 14
[illegible] * σ 3 (ξ), (ξ) 2 k

ψ is DM +50° 2819 (8.4)

k 3.5 (ψ) (ψ) 1 l (finder)

(l) is DM +49° 3038 (8.3)

k 3 (l), (l) 1 l finder

α is Hagen 13 & a DM star
m 3 (α), (α) 0.5 σ

X Cygni 20 Ob.

Phot T. 19 45 +32 6
9.5 in cap 23 30
3 45

Sept 25th 1901.

X Cygni

9.5 in cap. used

L & A.

13.2° < var. dis.

11 10.0 49.9 36.9

187.7 47.7

235.4 846 − 2.06

8.3 −2.06

53.2 449

192.1 400

232.1 849 ✱ − 2.05

R & B. Mean ✱ − 2.17

283.8

317.6 33.8

99.8 42.1

141.9 75.9 − 2.32

279.6 −2.28

11 17.0 322.3 42.7

103.0 35.6

11 13.5 138.6 78.3 − 2.25

5 −0.6

16 12.9

5653.676

Sept 25. 1901
Same Again.

R&B
283.8
11 20.1 317.4 — 33.6
98.6 — 43.4
142.0 — 77.0 — 2.28

280.4 — 2.30
322.2 — 41.8
103.9 — 34.3
138.2 — 76.1 — 2.31

Left & Above — Mean = −2.20
191.9
231.0 — 39.1
8.6 — 45.0
53.6 — 84.1 — 2.08

188.9 — 2.09
11 27.9 234.3
13.0 — 45.4
11 24.0 50.8 — 37.8
5-06 — 83.2 — 2.10

16 23.4 G.M.T. Hour angle 4:20 — 2.18
56 53.683 Sid. time 0:03 — 8.11 — 5.93
Decl +32.6
Pos Ang 23.5 Vex B.
st fr. wheel 4.5-a 5.5 B

11 40

L. P. P.

Sept 26 1901 (Thursday)

B&C 1182 Ballou 103
7 04 0.0 7 02 0.0

73.1901 S'cuti.
Phot T. 18 51 −13.0 w Ob
19 57
1 00

Ledgered.

Above
8
350.2
7 2~~9~~ 40 69.6 79.4
164.3 88.5
252.8 167.9 + 0.23

345.8 + 0.22
31 50 7~~6~~4.1 88.3
170.8 80.2
251.0 168.5 + 0.22
Below Mean = + 0.~~4~~34
~~8~~ 81.8
35 26 ~~2~~163.4 81.6
265.6 71.2
336.8 152.8 + 0.52

84.7
7 38 17 161.0 76.3 + 0.47
134 13 260.7 81.7
7 33 33 342.4 158.0 + 0.42
5 − 2 00
12 31 33 Gr. M. T.
5654.

Sept 26, 1901

II

Below

~~342.3~~ 80.4

7 4~~4~~07 162.6 — 82.2 ✓

5

264.1 — 73.6 ✓

337.7 — 155.8 ✓ + 0.46 ✓

384.4 — + 0.44 ✓

4756 158.4 — 74.0 ✓

258.3 — 83.9 ✓

342.2 — 157.9 ✓ + 0.42 ✓

Above — Mean = + 0.37 ✓

348.0

51 08 71.9 — 83.9 ✓

172.6 — 79.0 ✓

251.6 — 162.9 ✓ + 0.32 ✓

352.8

7 53 37 68.1 — 75.8 ✓ + 0.30 ✓

19 74 8 164.8 — 89.2 ✓ ✓

7 49 27 254.0 — 164.5 ✓ + 0.29

5 - 20 0

12 47 27 Gr. M. T.

5654.

Sept 26, 1901

III

Above

346.8

8 07 45 70.8 84.0

172.1 78.5

250.6 162.5 + 0.33

350.5 +0.26

10 44 70.5 80.0

166.0 89.2

255.2 169.2 + 0.20

Below Mean = +0.37

261.5

14 48 342.2 80.7

84.4 73.0

157.4 153.7 + 0.50

263.8 +0.48

8 17 39 339.1 75.3

50 56 81.8 80.5

162.3 155.8 +0.46

8 12 44

5 -2.08

13 10 44 Gr M T

5654

Sept 26, 1901.

IV

Below
260.8
8 24 13 341.8 81.0
83.3 75.0
158.3 156.0 +0.46

264.1 +0.46
27 57 338.8 74.7
81.5 81.0
162.5 155.7 +0.46

Mean = +0.37

Above
167.2
31 ~~29~~ 30 253.1 85.9
350.3 78.6
68.9 164.5 +0.29

+0.28
169.4
8 34 10 250.8 81.4
11,7 50 348.3 85.0
8 29 28 73.3 166.4 + 0.26
5-2 00 Hour Ang. = 2:23
13 27 28 G.M.T. S'id Time = 21:11
5654. Decl. = -12.7
Pos Ang = 278.9 Var. B.
S'pr. Wheel = 55 138 6.6 c

Sept 26, 1901.
R Can. Ven. w Ob.

13 41 + 39.2
21 18
7 37

(x) = Hagen 14

q 1 (x), (x) 3 r

U Herculis w Ob

16 16 +19.5 ~~16 20 +19.2~~
21 56 ~~21 45~~
5 40 ~~5 25~~

p 3 (c'), (c') 1 q

9 30 f 3 (α), (α) 1 g

W ~~H~~ Herculis w Ob

16 30 + 37.2
22 08
5 38

k 2.5 (a), (a) 1 l

9 45 m 2 (b) (b) 1 n

X Cygni w Ob.

19 45 + 32.6
22 25
2 40

10 00 S 2.5 (H 92), (H 92) 0 m

Sept 26, 1901

R Cygni w Obs

19 32 + 49.9
22 38
3 06

x 2 (x), (x) 3 y

10 20 o 2 (ξ), (ξ) 3 ~~p~~
k 3 (ψ), (ψ) 2 l finder

k 3 (l), (l) 2 l "

n 2 (α), (α) 1 o

R Delphini w Obs

20 10 + 8.5
22 57
2 47

(k) is Hagen 4.

g 2 (k), (k) 2 h

(h) is Hagen 3 g 1 (h), (h) 3 (h)

g 3 (l''), (l') 1 h l' is Hagen 5

Sept 26, 1901

o Ceti w Obs

Phot w 26 12 - 3.6

23 47

2 25

9 35

~~Left~~ Ledgered.

226.8

11 17.4 256.2 29.4

45.6 30.6

76.2 60.0 - 2.86

225.0 - 2.83

255.2 30.2

43.9 31.5

75.4 61.7 - 2.80

~~Below~~ Right Mean = - 2.86

133.4

162.8 29.4

313.0 29.8

342.8 59.2 - 2.89

134.0 - 2.90

11 25.0 163.0 29.0

313.3 30.0

11 21.2x 343.3 59.0 - 2.90

5 - 2.0

16 19.2x Gr M. Time

5654.680x

Sept 26, 1901
Same Again.

Posted to here

Right
132.8
11 27.6 163.6 30.8
312.8 29.8
342.6 60.6 — 2.84

133.9 — 2.87
162.5 28.6
312.9 30.4
343.3 59.0 — 2.90

Left mean = — 2.86
43.2
73.3 30.1
223.0 30.1
253.1 60.2 — 2.85

42.9 — 2.84
11 35.0 73.3 30.4
11 31.3 222.6 30.6
5 — 20 253.2 61.0 — 2.82
16 29.3 Gr. M. Time 2.86
5654. 9.19
Hour Ang. = 10:0 or -2:00 6.33
Sid Time = 0 12
~~Sp.~~ Decl. = -3.6
Pos Ang = 857 Var 13

11:45

Sept 27, 1901 (Friday)

BDC1182 — Ball 103
7 05 01.1 7 03 08

7³. 1901 Sleuti Wells
Phot T. 18 51 – 13.0
19 51
1 00

Above
35~~1~~.8 ∠ comp * dis.
7 19 53 69.6 77.8
~~1~~65.3 92.1
257.4 169.9 +0.19

346.8 +0.24
22 37 73.4 86.6
17~~2~~.0 78.2
2~~4~~0.2 164.8 +0.29
Below Mean = +0.36

266.9
25 54 3~~4~~0.1 73.2
80.6 81.6
162.2 154.8 +0.48

258.8 +0.48
7 28 26 342.0 83.2
96 50 86.0 71.8
7 24 12ˣ 157.8 155.0 +0.48
5 – 2 01
12 22 11 Gr. M. T.
5655.5154ˣ

Sept 27, 1901

II

Below
266.1
7 31 11 337.4 71.3
80.9 82.3
163.2 153.6 +0.50

+0.48

259.0
3 3 35 341.4 82.4
84.8 73.7
158.5 156.1 +0.46

Above Mean = +0.37
170.3
37 09 251.3 81.0
348.5 84.1
72.6 165.1 +0.28

+0.26

167.6
7 39 30 254.8 87.2
20 25 349.8 80.4
7 35 06 79.2 167.6 +0.24
5-2 1 H. A. +1.'32
12 38 00 St. T. 20:20
56 55 52 30 Decl −12.7
Pos A. 99.8 Ver. A
Spi. Wheel 5.5 B & 6.6 C

Sept 27, 1901

Phot I. U Cephei w Ob.

8 50 +8.1.1
24
20 25

3 25
8 35

24 50
20 38

4 12
7 48

~~2.8~~a.
356.7 <zardis.

8 01 30 67.8 71.1
166.1 90.4
256.5 161.5 −0.35

347.2 −0.35
03 37 73.8 86.6
175.2 75.2
250.4 161.8 −0.35
Below
267.1 −0.42
06 12 337.8 70.7
79.6 82.1
161.7 152.8 −0.52

257.2 −0.50
8 08 13 34.32 86.0
19 32 88.1 68.7
8 04 53 156.8 157.7 −0.48
5 −2 1
13 02 52 Gr.M.T.

5655.5437
5655.3910

0.1527

Sept 27, 1901

II

Below
265.8
8 12 20 337.4 71.6
77.6 85.2
162.8 156.8 ∓0.45

258.1 −0.40
14 27 343.4 85.3
82.7 75.5
158.2 160.8 −0.37

above mean = −0.20
170.8
17 52 253.6 82.8
344.5 96.2
80.7 179.0 −0.02

164.8 0.00
8 19 46 260.0 99.2
24 25 350.6 81.4
8 16 06 72.0 180.6
179.4 +0.01

5 – 2 1
13 1405
5655.5515
5655.3910
+0.1605

Sept 27, 1901

III

Above
170.0
8 21 48 252.6 — 82.6
341.7 — 97.0
78.7 — 179.6 — 0.01

163.5 — +0.01
23 40 260.2 — 96.7
347.9 — 85.0
72.9 — 181.7
Below — 178.3 — +0.03
80.5
26 57 163.7 — 83.2 — Mean = -0.04
254.8 — 95.0
349.8 — 178.2 — ∓0.03

43.9 — -0.06
8 29 15 167.5 — 93.6
21 40 260.6 — 82.1
8 25 25 342.7 — 175.7 — -0.08

5 - 2 1
13 24 24 ×
5655.5586 ×
5655.3910 ×
+0.1676 ×

Sept 27, 1901

IV

Below

~~1~~ 78.4

8 32 00 163.4

254.0

351.3

71.9

34 10 168.9

258.9

343.6

above

345.0

3720 78.3

156.8

264.5

336.8

8 39 25 85.3

2255 16~~6~~.~~4~~5

A 35 44 ~~259.8~~

5-2 1 260.2

13 33 43 Gr. M. Time.

5655.5651 x

5655.3910 x

+0.1741 x

85.0 ✓

97.3 ✓

182.3 ✓

177.7 ✓ +0.04 ✓

97.0 ✓ +0.04 ✓

84.7 ✓

181.7 ✓

178.3 ✓ +0.03 ✓

mean = +0.23 ✓

93.3 ✓

107.7 ✓

201.0 ✓

159.0 ✓ +0.40 ✓

108.5 ✓ +0.42 ✓

94.~~7~~5 ✓

203.0 ✓

157.0 ✓ +0.44 ✓

Sept 27, 1901

V

Above

345.0

8 41 50 77.8 92.8 ✓

161.0 105.4 ✓

266.4 198.2 ✓

161.8 ✓ +0.30 ✓

336.9

43 $\overset{3}{5}$0 8~~1~~4.7 107.8 ✓ +0.43 ✓

163.5 99.0 ✓

262.5 206.8 ✓ +0.57 ✓

Below 153.2

253.3 Mean = +0.44 ✓

46 55 349.3 96.0 ✓

70.0 106.3 ✓

176.3 202.3 ✓

157.7 ✓ +0.43 ✓

248.4

8 48 50 354.2 105.8 ✓ +0.44 ✓

21 05 73.3 97.8 ✓

8 45 16 × ~~170.6~~ 203.6 ✓

5 −2 1 171.1 156.4 ✓ +0.45 ✓

13 43 15 G.M.T. Hour Angle = 8: 42 or 3:18 East

5655:5716 × S'id Time = 21 36

5655.3910 Decl. = +81.1

+0.1806 × Pos ang. = 194.1 Ver B

S'for wheel = 6.5 − B + 7.5 C

Sept 27. 1901

R Can Ven   w Obs.

13 41 + 39.2

21 56

~~45~~

8 15

~~9 21, 22~~

9 23 final q 2 (x), (x) 2 r final

U Herculis   w Obs.

16 16 + 19.5

22 06

5 50

final p 2.5 (c'), (c') 1 final q

9 38 final f 3 (α), (α) 1.5 final g

W Herculis   w Obs.

16 30 + 37.2

22 20

5 50

9 58 final m 2.5 (b), (b) 1.5 n final

~~+0 00~~ " k 2 (a), (a) 1.5 l "

R Delphini   w Obs.

20 10 + 8.5

22 37

2 27

final g 3 (k), (k) 2 final h

(over)

Sept 27. 1901.

R Delp cont

final g 1.5 (h), (h) 2.5 h final.

10 18 " g 1.5 (l'), (l') 2.5 h final.

Nova Persei w Cl b

9.5 in cap. 27 34 +43.6

27 34 22 54

23 04 4 40

4 30 7 20

7 30

Above

266.8 < Nova Pis

10 30.8 33~~4~~5.3 68.5

81.2 78.4

159.6 146.9 −0.64

262.3

340.2 77.9 −0.64

85.7 69.3

155.0 147.2 −0.63

Below mean = −0.56

17~~5~~4.6

248.3 73.7

350.4 80.3

70.7 154.0 −0.48

170.3 −0.48

10 38.6 252.8 82.5

10 34.7 354.0 72.8

5 −2.0 66.8 155.3 −0.47

15 32.7

6655.648

Sept 27, 1901.
Same Again.

Below

174.4

10 41.8 249.2 74.8

350.3 82.2

72.5 157.0 − 0.44

167.8

252.8 85.0 − 0.42

354.3 73.3

67.6 158.3 − 0.41

Above Mean = − 0.55

87.7

154.6 66.9

262.4 77.1

339.85 144.0 − 0.69

83.8 − 0.68

10 47.8 159.4 75.6

265.6 69.4

10 45.8 335.0 145.0 − 0.67

5 − 2.0

15 43.8

5655.656

Hour Angle = 8:09 or − 3:51 East
Sid. Time = 23:32
Decl. = +434
Pos Ang = 75.6 B
S/n Whal = 0.5 a 0.5 B

Final mean = − 0.56
7.25
6.69

Sept 27, 1901

M. P. 441

Phot R 8 31 +62.8 W Clk

27
23 36

3 35
8 05

Left & above

	34.2	< var dis	
11 06.0	91.2	57.0 ✓	
	213.7	57.7 ✓	
	271.4	114.7 ✓	− 1.31 ✓
	32.1		−1.30 ✓
	91.3	59.2 ✓	
	214.1	55.8 ✓	
	269.9	115.0 ✓	− 1.30

Right & Below Mean = − 1.29 ✓

	305.1		
	360.2	55.1	
	121.5	61.9 ✓	
	183.4	117.0	− 1.26
			− 1.28 ✓
	302.2		
11 12.0	361.8	59.6 ✓	
11 09.0 ✓	124.8	55.8 ✓	
5 - 20	180.6	115.4 ✓	− 1.29
16 07.0 ✓			

5655.672

Sept 27, 1901

Plane Again

Right & Below

305.8

11 14.8 359.2 53.4

122.2 60.1

182.3 113.5 −1.34

302.4 −1.32

362.4 60.0

125.2 54.6

179.8 114.6 −1.31

Left & Above Mean = −1.31

213.6

270.0 56.4

32.2 60.0

92.2 116.4 −1.27

21~~0.3~~ 1.1 −1.30

11 21.4 271.7 60.6

36.2 35.8 53.4

11 18.1 89.2 114.0 −1.33

5 − 2.0 Final mean = −1.30

16 16.1 H. A. 8:30 or 3:30 East 9.18

# Decl 62.2 magn = 7.88

56 5.678 Sid Time 0:03

Pos Ang. 160.5 B

Sept 27, 1901

γ Cygni W Ob.

19 45 + 32.6

24 05

4 20

11 40 final L 3 (1+92), (1+92) final on

Sept 28, 1901 (Saturday)

B&C 1182 Ballou 103
6 53 20.6 6 50 00
6 54 20.7 6 51 00

6 55 Partly cloudy.

Dis. Sup. IV w Obs. Campbell Rec. Phot R. Comp. with other Sat on fol. side = Sat I some light cloud images a little faint.

7 08 45 ×296.2
70941 09 ~~04~~ 10 64.7 360.9
-321 ~~images rather faint.~~ 1
70620 ~~35~~ 57 62.0× 120.2
10 11 63.4× 182.2 +1.0
10 46 ~~10~~ 30 119.5
3 21 41 62.9× 182.4 2
07 25 52 61.9× 120.0
11 02 62.4× 181.9 +1.1
12 50 12 ~~27~~ 34 122.0
3 21 44 59.9 181.9 3
09 29 ~~54~~ 61.4 120.6
13 06 60.6× 182.0 +1.2
~~39 116.0~~
14 22 56 117.0
3 21 14 08 65.2 182.2 4
11 01 ~~23~~ 34 63.1× 117.9
57 64.2× 181.0 +1.0

Sept 28 1901

	7	15	49		119.0	
7 16 18		16	12	61.2	180.2	5
3 21			30	63.3	118.7	
7 12 57			43	61.8	181.0	+1.1
			59		119.5	
17 26		17	12	62.5	182.0	
3 21			31	62.9	118.0	6
14 05			~~5~~	62.7		+1.1
		18	01		180.9	
			24		118.2	
18 46			33	63.9	182.1	
3 21			~~48~~		~~117.1~~	7
15 25			58	62.1	119.0	
		19	11	63.0	181.1	+1.1
			28		118.9	
19 52			47	63.1	182.0	
3 21		20	00	62.8	119.0	8
16 31			13	63.0	181.8	+1.0
			35		118.0	
21 00			52	64.8	182.8	
3 21		21	09	63.4	117.7	9
17 39			22	64.1	181.1	+1.0
			36		118.5	
21 54			47	62.8	181.3	
3 21		22	00	64.0	118.1	10
7 18 33			12	63.4	182.1	+1.0

Sept 28, 1901

7 24 31	24	15		118.8	
-3 21		26	62.2	181.0	
7 21 10		35	62.8	119.4	11
		49	62.5	182.2	+1.1
25 33	25	06		117.5	
3 21		22	64.8	182.3	
22 12		~~3~~40	63.5	117.0	12
	26	04	64.2	180.5	+1.0
	27	40		118.9	
28 14		~~0~~			
-3 21	28	06	64.2	183.1 ~~[illegible]~~	
24 53		24	66.0	117.0	
		46	65.1	183.0	+1.0
	~~29~~	~~02~~		117.0	
29 19					
3 21		13	68.7	185.7	
25 58		25	66.1	118.1	
		36	67.4	184.2	+0.9
		49		118.3	
30 00	30	12	61.8	180.1	
3 21		22	64.9	119.0	
26 39		35	63.4	183.9	+1.0
		53		119.5	
31 14	31	06	62.5	182.0	
3 21		18	62.0	118.0	
27 53		33	62.2	180.0	+1.1
		50		123.0	

Sept 28, 1901

7 32 10	7	32	04	56.5×	179.5	
−3 21			16	58.7	120.5	
7 28 49			32	57.6×	179.2	+1.3 ✓
			~~18~~		~~12~~	
33 39		33	15	×	122.5	
3 21			29	57.4	179.7	
30 18			~~42~~	×	~~12~~	
			50	57.2	121.0	
		34	02	57.3×	178.2	+1.3 ✓
			22		122.0	
34 54			46	55.0×	177.0	
3 21			~~56~~		~~124.7~~	
31 33		35	08	54.2×	123.1	
			20	54.6×	177.3	+1.4 ✓
35 53			32		125.7	
3 21			44	49.7×	175.4	
32 32		36	02	48.5×	126.0	
			13	49.1×	174.5	+1.7 ✓
36 43			29		126.8	
3 21			37	46.2×	173.0	
33 22			48	45.9×	127.1	
			58	46.0×	173.0	+1.9 ✓
		37	08		127.6	
37 24			17	44.6×	172.2	
3 21			30	44.0×	128.0	
34 03			40	44.3×	172.0	+2.0 ✓

Sept 28, 1901

	7	37	52		129.0	
7 38 11		38	05	41.5	170.5	
−3 21			17	40.8	129.5	
7 34 50			29	41.2	170.3	+2.1
			~~8~~			
			45		131.9	
7 39 00			56	37.6	169.5	
3 21		39	04	35.2	133.8	
7 35 39			15	36.4	169.0	+2.4
			~~20~~			
36 11			32	360	133.0	+2.4
25			46	34.5	169.0	+2.5
41		40	02	31.7	134.5	+2.7
37 04			25	32.2	166.2	+2.7
			38 faint			
25			46	31.2	134.0	+2.8
39		41	00	30.4	165.2	+2.8
49			10	29.2	134.8	+2.9
56			17	27.0	164.0	+3.1
38 08			29	28.8	137.0	+3.0
21			42	27.7	165.8	+3.0
34			~~55~~	25.1	138.1	+3.3
45		42	06	23.8	163.2	+3.4
39 02			23	22.6	139.4	+3.5
19			40	22.3	162.0	+3.5
			~~54~~		~~13.~~	
42		43	03	21.8	139.7	+3.6
40 01			X 22		161.5	

Sept 28, 1901.

7 40 09 7 43 30 not seen later
~~45~~ Limit of Visibility.
45 135.5
7 44 33 44 10 30.0 165.5
− 3 21 20 clouds thicker
7 41 12 47 26.9 136.1
45 29 28.4 163.0 +3.0 ×

Chron. Corr. = $-3^m 21^s$ on above eclipse.

Clouds over the sky during the eclipse; thicker in some parts than in other parts;)

During most of the eclipse sky fairly clear (but not wholly so) in region of Jupiter. Clouds varying somewhat constant as well as during time of variation. Consequently settings made somewhat slowly and with much care. Eclipse considered good.

* Although clouds were varying during variation being a little thicker at times yet in general sky was moderately clear during most of the time of variation. Sky quite clear at end of variation; so that the time of actual disappearance was well seen. Immediately after disappearance clouds came again

Sept 28, 1901

somewhat varying in density. so that it is possible that L.V. is not quite a good as it would otherwise have been.

BBC 1132 Ballou 103
7 58 21.0 7 55 0.0
7 59 21.0 7 56 0.0

73.1901 Scuti 20 Ob
Clouds too ~~thick~~ for observation.

R Delphini 20 Ob.
20 10 +8.5
20 50
0 40

final g 2.5 (k) (k) 1.5 ~~#~~ final h
8:20 " g 2 (h) (h) 3 final h
" g 2.5 ~~(l'), (l')~~ ~~#~~ 1" h

~~χ Cygni~~

Dome had to be fixed before continuing

χ Cygni 20 Obs
19 45 +32.6
22 15
2 30

9 40 Cloudy | final g 2.5 (H92) (H92) 1 # final η

Sept 28, 1901.

R Androm W Obs.

24
0 11 +36.0
22 46
1 25
10 35

Clouds too thick with moon-light to do anything with specials on this variable.

S Ceti W Obs.
same notes as on R Androm.

ε Sagittae w Obs.
19 33 +16.2
23 08
3 35

10 40 Impossible to measure this double principal seen but companion not seen ~~with~~ ordinary eyepiece.

Σ 845 w Obs.
28& 2 +48.7
23 25
4 37
7 23

10 54 Clouds thick double invisible.
Clouds thick everywhere & no chance for anything brilliant

Sept 28, 1901

One of the cannon balls got out of position so that dome could not be moved. Jacked dome & readjusted cannon ball.

11 00

Posted to here.

Sept 29, 1901 (Sunday)

B&C 1182	Ballou 103
21 03 38.8	21 00 00

Sept 30, 1901 (Monday)

B+C 1182
7 04 49.5

Ball 10
7 01 00

R Ophiuchi no Obs.

17 2 −15.5
20 2
3 0

Final n 3.5 (σ) (σ) 1.5 σ final

(σ)$_x$ above = Hagen No 10.

R Bootis

14 26 +27.2
20 26
6 00

final p 3.5 (α), (α) 1.9 final

(α) above is Hag. 12

R Cancri Ven. no Obs.

13 41 +39.2
20 46
7 05

8 06 final q 1.5 (x), (x) 3 final r

Sept 30, 1901

Phot T. 73.1901 Starts wells.
18 51 -13.0
20 56
2 05

Above
Ledgard

357.3 < comp + obs

8 22 10 68.8 77.5
166.0 89.4
255.4 166.9 +0.25

347.8 +0.28
24 20 75.4 87.6
173.2 75.9
249.1 163.5 +0.31
Below mean = +0.44
265.9
27 30 336.5 70.6
79.9 81.2
161.1 151.8 +0.54

262.8 +0.60
8 29 40 340.~~8~~4 77.6
23 40 86.3 68.8
8 25 55 155.1 146.4 +0.65
5 - 3 50
13 22 05 Gr. M.T.
5658.5564

Sept 30, 1901

Below II

266.1
8 32 20 33~~4~~8.3 72.2
82.6 77.9
160.5 150.1 + 0.57

263.4 + 0.60
85 00 3~~4~~0.2 76.8
87.2 70.0
157.2 146.8 + 0.64

Above Mean = + 0.58

173.8
39 50 249.6 75.8
349.3 80.6
69.9 156.4 + 0.45

169.3 + 0.42
8 41 50 252.8 83.5
29 00 352.5 76.5
8 37 30* ~~70.1~~ ~~159.8~~ + 0.38
6 - 3 50 69.0 160.0
13 33 40* Gr. M. Time.
5605. 5651×

Sept 30, 1901

III

Above

352.7

8 51 ~~4~~5 0 67.6 74.9 ✓

169.6 83.0 ✓

252.6 157.9 ✓ + 0.42 ✓

349.4 ✓ + 0.38 ✓

5 3 40 67.5 78.1 ✓

163.5 83.8 ✓

247.3 161.9 ✓ + 0.34 ✓

Below Mean = + 0.48 ✓

264.5

57 30 336.7 72.2 ✓

81.6 78.3 ✓

159.9 150.5 ✓ + 0.57 ✓

260.6

~~9~~ 8 59 ~~24~~ 340.0 79.4 ✓ + 0.57 ✓

22 24 85.2 71.2 ✓

8 55 36^x^ 156.4 150.6 ✓ + 0.57 ✓

5 - 3 30

13 51 46^x^ Gr. M. Time.

56 08 5777^x^

Sept 30, 1901

IV

Below

267.8

9 03 16 338.3 70.5

83.3 73.1

156.4 147.6 +0.70

264.6 +0.72

05 22 338.4 73.8

87.2 68.4

155.6 ~~141.8~~ +0.73

142.2

Above Mean = 0.62

174.3

08 43 249.2 75.0

350.1 77.3

68.4 152.3 +0.53

172.5

9 11 04 251.6 79.1 +0.52

ZA 25 353.2 74.3

9 07 06 × 67.5 153.4 +0.51

5 - 3 00

14 03 16 Pos Ang. ~~99.6~~ = 79.5 Var B.

0600.0806 Hour Ang +3 14

Decl. -12.7

Sid Time. 22:03

Sp. Wheel = 5.5 B & 6.5 C

over

Sept 30, 1901

Note of om 73.1901 Scuti
Moon up before obs. of preceding var. were begun; but ~~rather~~ it was rather low down in the east; moon steadily rising and observations progressively becoming a little more difficult with rising moon & decreasing altitude. Extreme care however exercised.

R Androm. No Obs

24 11 +36.0
22 26
1 45
10 15

final t 3(u), (u) 4 final u

(u) above is H37

10 00 final t 5(w), (w) = final u

(w) above is Hag 36

S Ceti No Obs

24 12 −9.6
22 58
1 14
10 46

Sept 30, 1901

S Ceti cont.

final g 3 (n), (n) 2 n final

R Arietis W Obs.

26 8 +24.3
23 12
2 56
9 04

Region identified but moon to near & bright for estimate.

x = Hagen 19
y = " 28

Phot W o Ceti W Ob.
26 12 -3.6
23 55
2 17
9 63

(over)

Sept 30, 1901

~~o Ceti~~

o Ceti

Ledgered

R & a.

132.2

11 16.4 165.2 33.0

312.5 30.0

342.5 63.0 — 275

132.0 — 277

162.2 30.2

310.7 31.7

342.4 61.9 — 279

L & B Mean = — 280

42.3

73.3 31.0

221.8 29.6

251.4 60.6 — 284

41.6 — 283

11 23.6 71.7 30.1

11 20.0 220.2 30.9

5 3.8 251.1 61.0 — 282

16 16.2 Gr. M.T.

5658.678

Sept 30, 1901

Same Again.

L & B

408
11 25.6 71.1 30.3
~~210.~~ 220.4 30.3
2507 60.6 — 284

407 — 284
70.0 29.3
219.2 31.3
250.5 60.6 — 284

R & A. Mean — 2.86

3102
3407 30.5
129.8 29.6
159.4 60.1 286

3102 — 2.87
11 31.4 339.4 292
11 28.5 130.0 30.3
5 - 3.8 160.8 59.5 288
16 247 G.M.T. Hour Ang = - 1:48 283
5658. 684 Sid Time = 0:24 869
Decl - 3.67 Magn. 6.36
Pos Ang 26.5 Ver B.
Moon very bright & pretty near.
11 43 Observation a little difficult.

Sept 30, 1901

B&C 1182
21 34 03.4

Ballou 103
21 30 00

Posted, Ledgered, Plotted to here.

Oct. 1, 1901. (Tuesday)

Phot T. d Serpentis w Obs.
18 20 +0.1
20 10
4 50
6 in c.fs.
Leid. Plott.

Above
192.6 < rar dis.
7 38.0 228.7 36.1
9.8 40.8
50.6 76.9 — 2.29

190.4 − 2.30
231.0 40.6
13.8 35.4
49.2 76.0 − 2.32
mean = − 2.42

Below
106.3
136.7 30.4
281.8 38.6
320.4 69.0 − 2.54

− 2.54
101.4
7 48.0 140.0 38.6
7 43.0 285.9 30.5
5 4.4 316.4 ~~68.8~~ — 2.54
12 38.6 Gr. M. Time 69.1
5659.527
6.667 Phase

Oct. 1, 1901

Same Again

Below
106.0
7 50.6 136.4 30.4
282.4 37.9
320.3 68.3 − 2.56

101.2 − 2.50
144.08 ~~2~~3 9.6
284.8 32.7
317.75 72.3 − 2.43

Above Mean = − 2.38
11.4
49.2 37.8
190.5 41.5
232.0 79.3 − 2.22

9.6 − 2.26
8 02.8 50.5 40.9
7 56.7 193.3 36.0
5 − 4.4 229.3 76.9 − 2.29 Final m = −2.40
12 52.3 Gr. M. T Dec'l = + 0.1
5609536 Hour Angle = + 2.38
6.676 Phase. Sid. Time = 21.00
Pos Ang = 90.7 Ver a,
Sp. Wheel = 8.50 & 9.50

Oct 1, 1901.

R Ophiuchi w Obs.

17 2 -15.5

21 12

4 10

final n 3.5 (o), (o) 1 final o.

R Bootis w Obs.

14 26 +27.2

21 26

7 00

final p 3 (α), (α) 2 final q

R Andromedae w Obs

24 11 +36.0

21 31

2 40

9 20

final t 3 (u)(u) ~~3.5~~ 4 final u

9:50 final t 5 (w), (w) 1.5 final u

S Ceti w Obs.

24 12 -9.6

21 52

2 20

9 40

~~10~~ 9:10 final q 3 (n) (n) 1.5 n final

Oct. 1, 1901.

R Arietis ~~E~~ W Obs.

26 8 + 24.3

22 8

4 00

8 00

9 32 final ~~x~~ t 3' (x) (x) 5 final u

" t 4 (y) (y) 2 " u

R Vulpeculae W Obs

20 52 +21.8

22 42

1 50

Final m 2 (x), (x) 2 final n

1018 (x) above = Hagen [illegible]

R Pegasi. W Obs.

23 1 +10.0

23 11

0 10

10 22 sky somewhat covered with thin clouds

22 59 22 +9 45.7

-1 20

22 58 ~~+9.~~ 10.1

23 14

0 16

Oct. 1, 1901.

R Pegasi. w Obs.

final u 2 ~~t~~ (y) (y) 2 w final

10 32 (y) = Hagen 27

S' Pegasi. w Obs.

23 12 +7.2
23 28
0 16

11 00 findl t 3.5 (α) (α) 1 u final
α above = Hagen 20

Ball 103
☆ 11 07 0.0

B&C 1182
11 11 26.6

Posted, Ledgered, Plotted.

Posted

Oct 2, 1901 (Wednesday)

B&C 1182	Ball 103
21 16 54.5	21 12 00
17 54.5	13 00

Oct 3, 1901 (Thursday)

B&C 1182 Ballau 103
8 14 005 8 09 05
cloudy to 8 P.M.

R Ophiuchi w Obs.
17 2 −15.5
21 22
4 20

8 34 final n 3 (o), (o) 1 final o

R Vulpeculae w Obs
20 52 +21.8
21 32
0 40

abandoned for the present

R Androm. w Obs
0 11 +36.0
24
21 41
2 30
9 30

8 58 final t 3.5 (u), (u) 3.5 final u
9 03 final t 4.5 (w), (w) 2 final u

R Vulpeculae w Obs.
20 52 +21.8
22 02
1 10

9 13 final m 2.5 (x), (x) 1.5 final n

Oct. 3 1901

al done

R Pegasi no Obs

23 03 +9.0
22 13
0 50
11 10

9 32 final w 2.5 (y), (y) 1.w final

S Pegasi no Obs.

23 12 +7.1
22 32
0 40
11 20

9 34 clouds

9 46. final t 3 (α)(α) ~~α~~ final u

S Ceti no Obs

24 12 −9.6
22 48
1 24
10 36

10 10 final q 3 (n), (n) 1.5 final r

R Arietis no Obs.

26 8 +24.3
23 8
3 0
9 0

Oct 3, 1901.

R Arietis cont.

10 25 final + 1 (x) (x) 5 final "

10 27 final + 4.5 (y) (y) 1.5 " "

R Ursae Minoris

Phot I. 16 34 +72 9 20 Obs

23 34

7 00

Led. Plotted
Posted

Above

81.5 < comp * obs

10 42.4 159.5 78.0 ✓

268.6 66.5 ✓

~~330.1~~ clds 144.5 ✓ + 0.68 ✓

86.5

152.4 65.9 ✓ + 0.72 ✓

262.8 75.4 ✓

338.2 141.3 ✓ + 0.75 ✓

Below (clds)

mean = + 0.62 ✓

351.5

69.8 78.3 ✓

176.1 71.4 ✓

247.5 149.7 ✓ + 0.58 ✓

354.2 0.52 ✓

10 58.8 68.2 74.0 ✓

10 58.6 × 171.0 81.3 ✓

5 - 60.0 × 252.3 155.3 ✓ + 0.47 ✓

15 45.6 × Gr M Time

5 66.1 65.7 ×

Posted

Oct. 3, 1901.

Same Again

Below

01.0 351.7
11 ~~00.4~~ 70.5 78.8
176.1 70.5
246.6 149.3 +0.59

355.5 +0.57
67.0 71.5
171.4 80.0
251.4 151.5 +0.53
Above mean = +0.66
264.0
339.8 75.8
86.8 66.6
153.4 142.4 +0.73

268.5 +0.75
11 09.0 334.0 65.5
11 05.0 82.2 74.8
5 -5.0 157.0 140.3 +0.77
16 00.0 Gr. M. T. mean = +0.64
5661.667
Hour Angle 7:37
Sid Time 0:08
Pos Ang 319.1 Ver B
Dec'l +7 28
S/p Wheel 2.5 B & 3.6 C
11.15

This book is
posted, Ledgered & plotted.

1901phae.proj..550M