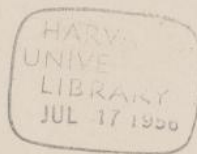


1896phae.proj. 7085

KG
11365
707

KG 11365.707



<u>Object.</u>	<u>Page.</u>
Measures of η Persei.	4 - 29 (rejected)
	30 - 42
	50 - 55
	91 - 93
" " Espino Variable $0^h 49. + 58^m 1$	43 - 49
" " Hartings "	58 - 65
" " Espino " $4^h 26.1 + 65^m 53$	66 - 80
" " R Trianguli	81 - 90
" "	94 - 99
" " Sawyer's Variable $6^h 29.2^m + 15^s 25$	100 - 104
" " R Gaele	105 - 115
" " η Cancri	116 - 120
" " S Sculptor	121 - 125
" " ? Canis Minor - BD + 5° 1797	126 - 127
" " R Stenolquin	128 - 136
" " S Pictor	136 - 137
	142 - 145
" " S Tucanum	138 - 141
	156 - 185 - 186
" " R Pictor	146 - 155
	183 - 184
" Var. in Hydra A.C. 13420	157 - 162
" W Camelopardali	163 - 182
	202 - 203
" Var. in Orion - BD + 6° 939	187 - 195
	204.
" Var. in Ceti Dm - 1° 475	196 - 201 - 205
" " " Octantis	206
" " " Lepus BD - 22° 995	207 - 215

October 31, 1896

Rejected

11^h 0'

Measures of U Persei

1^h 53.0^m + 54° 20' (1900)

Comparison Stars on I 9280.

I. 5785.

✓ 9.19 b 6 r 9.79 10.56 10.86 = 10.40 .61 .16 .46
 10.56 r 0 c 10.56
 10.66 r 2 d 10.86

I 12059

✓ 9.19 b 2 r 9.39 9.86 = 9.62 .23 .24
 9.86 r 7 c 10.56

I. 13796

✓ 9.19 b 2 r 9.39 9.76 = 9.57⁸ .18⁹ .18⁸
 9.76 r 8 c 10.56

Sub

I 14691

9.19 b 3 r 9.49 10.16 = 9.82 .33 .34
 10.16 r 4 c 10.56

Ref. I. 5120

✓ 10.56 c 2 r 10.76, 10.86 10.91 = 10.84 .08 .02 .07
 10.86 r 0 d 10.86
 10.91 r 2 e 11.11

I 15969

✓ 9.19 b 6 r 9.79 10.16 = 9.97⁸ .18⁹ .18⁸
 10.16 r 4 c 10.56

Ref. I 15790

✓ 9.19 b 7 r 9.89 10.36 = 10.12 .23 .24
 10.36 r 2 c 10.56

Oct. 31, 1896.

5

Rejected

Measures of U Persei (cont.)

I 11641

✓ 11.43 f 1ⁿ 11.53 11.50 = 11.51 .02 .01
11.56 r 2 g 11.70

Ref. B 1977

aut 9.196 7 r 9.89 10.36 = 10.12 .23 .24
10.36 r 2 c 10.56

I 15893

aut 9.196 5 r 9.69 9.26 = 9.47 .22 .21
9.26 r 3 c 10.56

I. 10759

aut 9.196 2 r 9.39 9.86 = 9.62 .23 .24
9.86 r 7 c 10.56

I. 12036

✓ 9.196 4 r 9.39 9.96 = 9.67 .28 .29
9.96 r 2 c 10.56

B. 1954

10.56 c 2 r 10.76 10.86 10.91 = 10.84 .08 .02 .07
✓ 10.86 r 0 d 10.86
10.91 r 2 c 11.11

B. 2068

✓ 9.196 3⁴ c 9.59 10.56 10.66 = 10.27 .68 .29 .39
✓ 10.56 r 0 c 10.56
10.66 r 2 d 10.86

Oct. 31, 1896

Measures of U Persei (cont.)

Rejected

B 1979

10.56 C 3 r 10.86 10.86 10.81 = 10.84 .03 .02 .03

10.86 r o d 10.86

10.81 r 3 e 11.11

I 13642

J 9.19 b 4 r 9.59 10.06 = 9.82 .23 .24

10.06 r 5 c 10.56

I 5388

✓ 10.86 d 3 r 11.16 11.01 = 11.08 .08 .07

11.01 r 2 e 11.11

I 5800

✓ 11.70 g 2 r 11.90 11.77 = 11.83 .07 .06

11.77 r 2 h 11.97

I 4628

✓ 11.43 f 1 r 11.53 11.40 = 11.46 .07 .06

11.40 r 3 l 11.70

I 11852

✓ 10.86 d 1 r 10.96 10.61 = 10.78 .18 .17

10.61 r 5 e 11.11

Rep. I. 11822

✓ 10.86 d 2 r 11.06 10.81 = 10.93 .13 .12

10.81 r 3 e 11.11

Oct. 31, 1896

7

Rejected

Measures of η Persei (cont.)

I. 9338

✓ 9.19 b 8 r 9.99 10.36 = 10.17 .18 .19
 10.36 r 2 e 10.56

Rep. I 7585

✓ 10.86 d 2 r 11.06 10.81 = 10.93 .13 .12
 10.81 r 3 e 11.11

Rep. I 2293

✓ 8.32 a 5 r 8.82 9.09 = 8.95 .13 .14
 9.09 r 1 b 9.19

Rep. I 1901

✓ 9.19 b 3 r 9.49 9.86 = 9.67 .18 .19
 9.86 r 7 c 10.56

I 2101

✓ 8.32 a 6 r 8.92 8.89 = 8.90 .02 .01
 8.89 r 3 b 9.19

I 8051

✓ 10.56 c 2 r 10.76 10.86 10.91 = 10.84 .08 .02 .07
 10.86 r 0 d 10.86
 10.91 d 2 e 11.11

Rep. I 8456

✓ 9.19 b 2 r 9.39 9.66 = 9.52 .13 .14
 9.66 r 9 c 10.56

Oct. 31, 1896

Rejected

Measures of α Persei (cont.)

✓ I. 4354 ✓

Plate too poor

I. 12408 Sp.

✓ Par. too near edge

I. 2856.

✓ 9.19 b 7 r 9.89 10.46 = 10.17 .28 .29
 10.46 r 1 c 10.56

I 2560

✓ 9.19 b 1 r 9.29 9.96 = 9.62 .33 .34
 9.96 r 6 c 10.56

Rep. I. 3186⁵³⁰⁷

✓ 10.86 d 2 r 11.06 10.81 = 10.93 .13 .12
 10.81 r 3 d 11.11

I 6030

✓ 10.56 c 2 r 10.76 10.66 = 10.71 .05 .05
 10.66 r 2 d 10.86

I 5607

✓ 11.11 c 3 r 11.43 11.23 = 11.33 .10 .10
 11.23 r 2 f 11.43

B 103

✓ 9.19 b 2 r 9.39 10.56 10.66 = 10.20 .81 .36 .46
 10.56 r 0 c 10.56
 10.66 r 2 d 10.86

Oct 31, 1896

Rejected

Measures of α Persei (cont.)

Rep. I 6854

✓ 9.19 b 1 r 9.29 9.56 = 9.42 .13 .14
 9.86 r 7 c 10.56

I. 7945

✓ 11.43 f 2 r 11.63 11.50 = 11.56 .07 .06
 11.50 r 2 g 11.70

I 4584

✓ 9.19 b 4 r 9.59 10.06 = 9.82 .23 .24
 10.06 r 5 c 10.56

✓ I 15768

Plate too poor

I 15714

✓ Plate too poor

I 8187

✓ 9.19 b 2 r 9.39 10.16 = 9.77 .38 .39
 10.16 r 4 c 10.56

I 3270

✓ 11.70 g 2 r 11.90 11.77 = 11.83 .07 .06
 11.77 r 2 h 11.97

✓ I 15711

Plate too poor.

Oct. 31, 1896.

Rejected

Measures of κ Persei (cont.)

✓ I 15621
various measured

✓ I 14124
9.19 h 3 r 9.49 9.96 = 9.72 . .23 .24
9.96 r 6 c 10.56

I 12081
✓ 9.19 h 4 r 9.59 10.06 = 9.82 . .23 .24
10.06 r 5 c 10.56

I 15351
✓ 11.43 f 2 r 11.63 11.70 11.57 = 11.63 .00 .07 ..07
11.70 r 0 g 11.70
11.57 r 4 h 11.97

Rep. I 12185
✓ 8.32 a 5 r 8.82 9.09 = 8.95 . .13 .14
9.09 r 1 h 9.19

✓ I 14370
8.32 a 4 r 8.72 8.89 = 8.80 . .08 .09
8.89 r 3 b 9.19

✓ I 9546
10.86 d 2 r 11.06 10.91 = 10.98 .08 ..07
10.91 r 2 e 11.11

Oct. 31, 1896

Rejected

11

Measures of α Persei (cont.)

I 12187

✓ 9.19 b1 r 9.29 10.06 = 9.67 .38 .39
 10.06 r5 c 10.56

✓ I 11766

11.11 e 1 r 11.21 11.13 = 11.17 .04 .04
 11.13 r 3 f 11.43

I 15346

✓ 11.43 f5 r 11.93
 g w.s.

✓ Rep. I. 7570

11.70 f3 r 12.00 g = .2
 r h(m.s.)

Rep. I 9986

✓ 11.43 f3 r 11.73 11.60 = 11.66 .07 .06
 11.60 r 1 g 11.70

I 11640

✓ 11.11 e 3 r 11.41 11.33 = 11.37 .04 .04
 11.33 r 1 f 11.43

I. 10202

10.86 d2 r 11.06 11.11 11.13 = 11.10 .04 .01 .03
 ✓ 11.11 r 0 e 11.11
 11.13 r 2³ f 11.43

Oct. 31, 1896

Rejected

Measures of α Persei (cont.)

I. 11752

✓ 11.11 e 1 r 11.27 11.23 = 11.22 .01 .01
 11.23 r 2 f 11.43

I 7772

✓ 11.43 f 3 r 11.73 11.70 11.77 = 10.73 .00 .03 .04
 11.70 r 0 g 11.70
 11.77 r 2 h 11.97

I 12632

✓ 9.19 b 4 r 9.59 9.86 = 9.72 .13 .14
 9.86 r 7 c 10.56

Rejm I 12765

✓ 8.32 a 4 r 8.72 9.09 = 8.90 .18 .19
 9.09 r 1 h 9.19

I 10351

✓ 10.56 c 2 r 10.76 10.86 10.71 = 10.78 .02 .08 .07
 10.86 r 0 d 10.86
 10.71 r 4 e 11.11

I 11608

✓ 11.11 e 4 f r 11.51 11.43 11.70 = 11.55 .04 .12 .15
 11.43 r 0 g 11.43
 11.70 f 2 g 11.70

I 15258

✓ 11.43 f 2 r 11.63 11.70 11.57 = 11.63 .00 .07 .07
 11.70 r 0 g 11.70
 11.57 r 1 h 11.97

Oct. 31, 1896.

13

Rejected

Measure of α Persei (cont.)

I 10932

✓ 9.19 b1 n 9.29 9.76 = 9.52 .23 .24
 9.76 n 8c 10.56

I 15542

10.86 d1 n 10.96 11.11 11.33 = 11.13 .17 .02 .20
 ✓ 11.11 n 0c 11.11
 11.33 n 1f 11.43

I 14617

✓ 9.19 b3 n 9.49 10.16 = 9.82 .33 .34
 10.16 n 4c 10.56

I 11727

✓ 11.11 d2 n 11.31 11.33 = 11.32 .01 .01
 11.33 n 1f 11.43

I 7823

✓ 11.43 f2 n 11.63 11.70 11.67 = 10.67 .04 .03 .00
 11.70 n 0g 11.70
 11.67 n 3h 11.97

I 10229

✓ 11.11 d2 n 11.31 11.23 = 11.27 .04 .04
 11.23 n 2f 11.43

I 10352

✓ 10.56 c1 n 10.66 10.86 10.81 = 10.78 .12 .08 .03
 10.86 n 1d 10.86
 10.81 n 3d 11.11

Oct. 31, 1896

Rejected

Measures of η Persi (cont.)

✓ Rep. I 3969

9.19 to 3 or 9.49

C. m. s. $b = .2$

✓ Rep. I. 10252

9.19 to 6 or 9.79 $10.26 = 10.02$.23 .2410.26 or $\frac{3}{4}$ c 10.56✓ I ²²⁹¹~~12881~~ 13610

or too near edge

or

✓ Rep. I 15048

var. m. s. $C = .2$

I. 15189

✓ 11.70 to 2 or 11.90

h. m. s. $g = .1$

✓ I 3541

var. m. s. $b = .6$ I ⁷4268✓ 8.32 to 6 or 8.92 $9.09 = 9.00$.08 .09

9.09 or 1 to 9.19

Rep. I. 3401

var. m. s.

11.70 $g = .1$

Oct. 31, 1896

15

Rejected

Measurements of α Persei (cont.)

I 10673

✓ 9.19 b 1 r 9.29 9.86 = 9.57 .28 .29
 9.86 b 7 c 10.56

I 2291 sp.

✓ 8.32 a 4 r 8.72 8.99 = 9.85 .13 .14
 8.99 r 2 b 9.19

I 10442

- 9.19 b 3 r 9.49 9.96 = 9.72 .23 .24
 9.96 r 6 c 10.56

I 3308

11.11 e 5 r 11.61 11.33 = 11.47 .14 .14
 ✓ 11.33 r 1 f 11.43

✓ I 16041

9.19 b = .3

var. n.s.

I 12831

mk 10.86 d = .2

var. n.s.

Repr. I. 3186

✓ 10.86 d 2 r 11.06 10.91 = 10.98 .08 .07
 10.91 r 2 e 11.11

✓ I 21838 sp.

9.19 b 4 r 9.59 10.06 = 9.82 .23 .24

10.06 r 5 c 10.56

November 3, 1896

Rejected

13h 45m

Measure of α Persei (repeated) \sqrt{I} 2293.

milk

9.19 b 2 r 9.39 9.96 = 9.67 .28 .29
 9.96 r 6 c 10.56

 \sqrt{I} 7585

milk

11.11 c 1 r 11.21 11.13 = 11.17 .04 .04
 11.13 r 3 f 11.43

 \sqrt{I} 11822

✓ 10.86 d 2 r 11.06 10.91 = 10.98 .08 .07
 10.91 r 2 e 11.11

 \sqrt{B} 1977

✓ 10.56 c 2 r 10.76 10.76 = 10.76 .00 .00
 10.76 r d 10.86

r

 \sqrt{I} 15790

✓

9.19 b 6 r 9.79 10.56 10.66 = 10.34 .55 .22 .32
 10.56 r 0 c 10.56
 10.66 r 2 d 10.86

milk

 \sqrt{I} 5120

10.56 c 1 r 10.66 10.86 10.91 = 10.81 .15 .05 .10
 10.86 r 0 d 10.86
 10.91 r 2 e 11.11

milk

 \sqrt{I} 6854

9.19 b 1 r 9.29 9.86 = 9.57 .28 .29
 9.86 r 7 c 10.56

milk

Nov. 3, 1896.

Rejected

Measures of η Persei (comb.) ± 5307

out 10.86 d1 r 10.96 10.71 = 10.83 .13 .12
 10.71 r 4e 11.11

 $\sqrt{I} 12185$

out 9.19 b1 r 9.29 9.76 = 9.52 .33 .24
 9.76 r 8c 10.56

 $\sqrt{I} 9986$

out 11.11 e 4 r 11.51 11.13 = 11.32 .19 .19
 11.13 r 3f 11.43

 $\sqrt{I} 12765$

8.32 a 2 r 8.52 9.19 9.86 = 9.19 .67 .10 .67
 out 9.19 r 0 b 9.19
 9.86 r 7c 10.56

 $\times I 10252$

11.11 b6 r e1 r 11.21 11.03 = 11.12 .09 .09
 11.03 r 2e r 4f 11.43

out $\sqrt{I} 3401$

Plate too poor

11.11 e = .1

out $\sqrt{I} 3186$

11.11 e 2 r 11.31 11.23 = 11.27 .04 .04
 11.23 r 2f 11.43

Nov. 3, 1896.

Revised

Measures of γ Persei (comb.) \checkmark I. 1901

9.196 \pm 2 σ 9.39 9.96 = 9.67 .28 .29
 9.96 \pm 6 σ 10.56

 \checkmark I 8456

9.196 \pm 1 σ 9.29 9.76 = 9.52 .23 .24
 9.76 \pm 8 σ 10.56

 \checkmark I 7570

11.11 \pm 2 σ 11.31 11.33 = 11.32 .01 .01
 11.33 \pm 1 σ 11.43

 \checkmark I 15048

11.11 \pm 1 σ 11.21 11.33 = 11.27 .06 .06
 11.33 \pm 1 σ 11.43

 \checkmark I 3969 $b = .6$ 9.19 \pm 3 σ 9.49 \pm n.s.

I. 9112

 $b = .3$ \pm 5 σ \pm 10 σ

Nov. 3 1896.

19

Rejected

14h 30^mMeasures of α Persei (cont.)

I 4814

$$\checkmark \quad 9.19 \text{ b } 5 \text{ r } 9.69 \quad 10.16 = 9.92 \quad \underline{.23} \quad .24$$

$$10.16 \text{ r } 4 \text{ c } 10.56$$

I 10901

$$8.32 \text{ a } 4 \text{ r } 8.72 \quad 9.19 \quad 9.76 = 9.22 \quad \underline{.50} \quad \underline{.03} \quad .54$$

$$\checkmark \quad 9.19 \text{ r } 0 \text{ b } 9.19$$

$$9.76 \text{ r } 8 \text{ c } 10.56$$

I 16206

$$\checkmark \quad 9.19 \text{ b } 6 \text{ r } 9.79 \quad 10.26 = 10.02 \quad \underline{.33} \quad .24$$

$$10.26 \text{ r } 3 \text{ c } 10.56$$

I 15837

$$\checkmark \quad \text{n.m.s.}$$

$$9.19 \text{ b } = .2$$

I 9280

$$9.19 \text{ b } 3 \text{ r } 9.49 \quad 10.06 = 9.77 \quad \underline{.28} \quad .29$$

$$10.06 \text{ r } 5 \text{ c } 10.56$$

November 7, 1896

Revised

13^h 0^m

Estimates of Comparison Stars a, b, c, d

I 9280

a 3 b

b 7 c

c 3 d

B 1979

a 3 b

b 9 c

c 1 d

B 2068 X b equals 2 near it

a 2 b

b 4 c

c 1 d

B 1977

a 3 b

b 9 c

c 1 d

B 1954

a 2 b

b 8 c

c 1 d

I 6030

a 4 b

b 6 c

c 1 d

Nov. 1896

Rejected

21

Estimates of Comparison Stars a, b, & c. (cont.)

I 6854

a 3 b x b nearer 2 than it.

b 3 c

c 1 d

I. 7570

a 2 b

b 9 c

c 1 d

I 7585

a 2 b x b nearer.

b 3 c

c 1 d

I 7625 x b nearer.

a 3 b

b 4 c

c 1 d

I 7772

a 3 b

b 8 c

c 1 d

I 7823 x b nearer

a 2 b

b 4 c

c 0 d

Nov. 7, 1896

Revised

Estimates of Companion Stars a, b, & c. (contd)

I 7945

a 3 b \times b mean.

b 4 c

c 1 d

I 4584

a 3 b \times b mean.

b 5 c

c 1 d

I 5120

a 3 b

b 6 c

c 1 d

I 5307⁸³a 4 b \times b mean

b 5 c

c 1 d

I 5307 \times b mean

a 3 b

b 4 c

c 1 d

I 5607

a 2 b \times b mean

b 4 c

c 1 d

Nov. 7, 1896.

Rejected

23

Estimates of Comp. Stars a, b, c (comb.).

I 5800

a 3 b

b 7 c

c 1 d

I 2186

a 4 b

b 8 c

c 1 d

I 3270

a 2 b X b meaner

b 9 c

c 1 d

I 3308

a 3 b X b meaner

b 5 c

c 1 d

I 3401

a 4 b

b 6 c

c 8 d

I 3541

a 9 b

b = .2

Nov. 7, 1896

Revised

Estimates of Comp. Stars a, b, + c (cont.).

I 3969
I 3919

a 3 b

b = .4

c 7 d m.s.

I 4267

a 3 b x b mean

b 6 c

c 1 d

I 1901

a 3 b

b 5 c

c 1 d

I 2101

a 4 b

b 6 c

c 1 d

I 2291 sp.

a 5 b

b 6 c

c 0 d

I 2293 x b mean

a 4 b

b .5 c

c 1 d

Nov. 7, 1896.

Rejected.

25

Estimates of Comp. Stars a, b, c (cont.).

I 2560

a 3 b

b 6 c

c 1 d

I 2856 x b mean

a 3 b

b 6 c

c 1 d

B 103 x b mean

a 2 b

b 5 c

c 2 d

I 12081 x b mean

a 5 b

b 6 c

c 1 d

I 12185

a 5 b

b 8 c

c 1 d

I 12187 x b mean

a 3 b

b 5 c

c 1 d

Nov. 7, 1896.

Estimates of Comp. Stars a, b, c. (cont.).

Rejected

I 13185

a 3 b X b mean

b 6 c

c 1 d

I 13101 X b mean

a 3 b

b 5 c

c 0 d

I ¹²⁶³²
~~12408~~

a 4 b

b 9 c

c 1 d.

I ¹³⁶⁴²
~~13610~~

X

a 3 b

b 5 c

c 1 d

I 11852 X

a 2 b

b 6 c

c 1 d

I 11640

a 5 b

b 4 c

c 1 d

Nov. 7, 1896

Rejected.

27

Estimates of Comp. Stars a, b, c (Contd.).

I 11608

a 2 b X

b 4 c

c 1 d

I 117²⁷~~22~~

a 3 b

b 4 c

c 8 d

I 11752

a 4 b X

b 6 c

c 1 d

I 11766

a 3 b X

b 4 c

c 0 d

I 11822

a 4 b X

b 6 c

c 1 d

I 10932 X

a 3 b

b 6 c

c 1 d

Estimates of Comp. Stars a, b, c (cont.).

Rejected

I 10202 X

a 4 b

b 8 c

c 1 d

I

a b

b c

c d

I

a b

b c

c d

I

a b

b c

c d

I

a b

b c

c d

I

a b

b c

c d

Rejected.

I

a b

b c

c d

I

a b

b c

c d

I

a b

b c

c d

I

a b

b c

c d

I

a b

b c

c d

I

a b

b c

c d

November 12, 189614^h 0^m.Measures of η Perseiph 53^m + 54° 20' (1900).

Comparison Stars on I 9280.

✓ I. 9280.

9.30 b 2 r 9.50 9.42 = 9.46 .04 .04
 9.42 r 2 c 9.62

✓ I. 2183 (2pr)

✓ 9.30 b 1 r 9.40 9.42 = 9.41 .01 .01
 9.42 r 2 c 9.62

I 9986

✓ 11.04 g 3 r 11.³4 11.04 = 11.19 .15 .15
 11.04 r 3 h 11.34

I. 9546

✓ 10.57 e 3 r 10.87 10.82 10.84 = 10.84 .63 .02 .00
 10.82 r 0 f 10.82
 10.84 r 2 g 11.04

I 9338.

✓ 9.62 c 4 r 10.02 9.⁷2 = 9.87 .15 .15
 9.72 r 2 d 9.92

I 8456

✓ 9.30 b 1 r 9.40 9.32 = 9.36 .04 .04
 9.32 r 3 c 9.62

I 8187

✓ 9.30 b 2 r 9.50 9.62 9.92 = 9.58⁶ .18 .06 .24
 9.62 r 0 c 9.62 .04 .04
 9.62 r 3 d 9.92

Nov. 12, 1896

Measures of α Persei (cont.)

I 8051

✓ 9.62 & 2 r 9.82 9.92 10.27 = 10.00 .18 .08 .27
 9.92 r o d 9.92
 10.27 r 3 e 10.57

I 10759

✓ 9.30 b 2 r 9.50 9.32 = 9.41 .09 .09 *
 9.32 r 3 c 9.62

I 10673

✓ 9.30 b 1 r 9.40 9.62 9.62 = 9.55 .15 .07 .07
 9.62 r o c 9.62
 9.62 r 3 d 9.92

I 10442

✓ 9.62 c 3 r 9.92 9.72 = 9.82 .10 .10
 9.72 r 2 d 9.92

I 10352

✓ 10.57 e 2 r 10.77 10.72 = 10.74 .03 .02
 10.72 r 1 f 10.82

I 10351

✓ 10.57 e 2 r 10.77 10.82 10.⁷84 = 10.78 .01 .04 .04
 10.82 r o f 10.82
 10.⁷84 r 3 g 11.04

I 10252

✓ 11.04 g 2 r 11.24 11.04 = 11.14 .10 .10
 11.04 r 3 h 11.34

Nov. 12, 1896

Measures of α Persei (cont.)

✓ Γ 10229
 11.04 10.82 2 n 11.24 11.34 11.39 = 11.32 .08 .02 .07
 11.34 10.82 n h 11.34
 11.39 n 2 h. 11.59

✓ Γ 14124
 9.30 b 1 n 9.40 9.32 = 9.36 .04 .04
 9.32 n 3 c 9.62

✓ Γ 13796
 9.30 b 2 n 9.50 9.32 = 9.41 .09 .09
 9.32 n 3 c 9.62 .12 .10

✓ Γ 16206
 9.62 c 2 n 9.82 9.62 = 9.72 9.10 .10
 9.62 n 3 d 9.92

✓ Γ 16041
 n m.o.
 9.92 d = .2 < 10.12

✓ Γ 15969
 9.92 d 3 n 10.32 10.27 = 10.24 .02 .03
 10.27 n 3 e 10.57

✓ Γ 15893
 9.92 d 3 n 10.22 9.97 = 10.10 .12 .13
 9.97 n 6 e 10.57

 Γ

Nov. 12, 1896

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measures of η Persei (cont.)

✓ I 15837

r m.s.

$$8.482 \pm .2 \quad \angle 8.68$$

I 15790

$$✓ \quad 9.92 \text{ d } 5 \text{ r } 10.42 \quad 10.47 = 10.44 \quad .\underline{02} \quad .\underline{03}$$

$$10.47 \text{ r } 1 \text{ } \angle 10.57$$

I 15785

$$✓ \quad 9.92 \text{ d } 5 \text{ r } 10.42 \quad 10.27 = 10.34 \quad .\underline{08} \quad .\underline{07}$$

$$10.27 \text{ r } 3 \text{ } \angle 10.57$$

✓ I 15711

Plate too poor

✓ I 15621

7m near edge

I 15542

$$✓ \quad 10.82 \text{ f } 2 \text{ r } 11.02 \quad 11.04 \quad 11.24 = 11.10 \quad .\underline{08} \quad .\underline{06} \quad .\underline{14}$$

$$11.04 \text{ r } 0 \text{ g } 11.04$$

$$11.24 \text{ r } 1 \text{ h } 11.34$$

I 14617

$$✓ \quad 9.30 \text{ b } 2 \text{ r } 9.50 \quad 9.32 = 9.41 \quad .\underline{09} \quad .\underline{09}$$

$$9.32 \text{ r } 3 \text{ c } 9.62$$

I 15351

$$11.34 \text{ h } 3 \text{ r } 11.64 \quad 11.59, 11.59 = 11.61 \quad .\underline{03} \quad .\underline{02} \quad .\underline{02}$$

$$✓ \quad 11.59 \text{ r } 0 \text{ h } 11.59$$

$$11.59 \text{ r } 3 \text{ h } 11.89$$

Nov. 12 1896

Measures of η Persei (cont.)

I 15346

✓ 11.34 hr 2 r 11.54
l.m.s.

I. 14370

✓ 9.30 hr 2 r 9.50 9.32 = 9.41 .09 .09
9.32 r 3 c 9.62

I. 15258

✓ 11.59 hr 2 r 11.79 11.59 = 11.69 .10 .10
11.59 r 3 l 11.89

I 15189

✓ 11.34 hr 2 r 11.54 11.59 = 11.56 .02 .03
11.59 r 0 hr 11.59
11.89 l.m.p.

I. 15048

✓ 11.04 g 3. r 11.34 11.24 = 11.29 .05 .05
11.24 r 1 hr 11.34

I. 12036

✓ 9.30 hr 2 r 9.50 9.32 = 9.41 .09 .09
9.32 r 3 c 9.62

I 15714

✓ 11.30 hr 2 r 11.54 11.59 = 11.56 .02 .03
11.59 r 0 hr 11.59
11.89 l.m.p.

I 15768

11.30 hr 2 r 11.54 11.59 = 11.56 .02 .03
11.59 r 0 hr 11.59
11.89 l.m.p.

Nov. 12, 1896.

Measures of η Persei (comb.)

I 12059

✓ 9.30 v 2 r 9.50 9.62, 9.62 = 9.⁵~~8~~ .08 .04 .04
 ✓ 9.62 r 0 c 9.62
 9.62 r 3 d 9.92

I 11640

✓ 11.34 h 2 r 11.54 11.59 11.69 = 11.61 .07 .02 .08
 11.59 r 0 h 11.59
 11.69 r 2 h 11.89

I 14691

✓ 9.62 c 2 r 9.82 9.92 10.27 = 10.00 .18 .08 .27
 9.92 r 0 d 9.92
 10.27 r 3 e 10.57

765

✓ I 12632

9.92 d 1 r 10.02 10.17 = 10.10 .08 .07
 10.17 r 4 e 10.57

I 12155

✓ 9.30 b 3 r 9.60 9.52 = 9.56 .04 .04
 9.52 r 1 c 9.62

I 2560

✓ 9.30 b 2 r 9.50 9.62 9.72 = 9.61 .11 .01 .11
 9.62 r 0 c 9.62
 9.72 r 2 d 9.92

Apr. 12, 1896

Measures of α Persei (cont.)

I 2291 (ap.)

✓ 8.48 a 4 r 8.88 9.10 = 8.99 .11 .11
 9.10 r 2 b 9.30

I 2101

✓ 8.48 a 5 r 8.98 8.90 = 8.9⁴~~9~~ .04 .04
 8.90 r 4 b 9.30 .01 .01

I 1901

✓ 9.30 b 3 r 9.60 9.42 = 9.51 .09 .09
 9.42 r 2 c 9.62

I 3969

✓ 9.30 b 2 r 9.50 9.62 9.62 = 9.58 .08 .04 .04
 9.62 r 0 c 9.62
 9.62 r 3 d 9.92

I 3541

✓ r m. o. 9.92 d = .2 < 10.13

I 3401

✓ 11.04 g = .1 < 11.14
 r m. p.

I 3186

✓ 11.04 g 3 r 11.34 11.14 = 11.24 .10 .10
 11.14 r 2 h 11.34

Dec 12, 1896.

Measures of α Persei (cont.)

I 5800

✓ 11.59 h 2 r 11.79 11.59 = 11.69 .10 .10
 11.59 r 3 l 11.89

I 5120

10.57 l 2 r 10.77 10.82 10.94 = 10.84 .07 .02 .10
 ✓ 10.82 r 0 f 10.82
 10.94 r 1 g 11.04

I 7772

✓ 11.34 h 3 r 11.64 11.59 11.69 = 11.64 .00 .05 .05
 11.59 r 0 h 11.59
 11.69 r 2 l 11.89

I 7570

✓ 11.04 g 3 r 11.34 11.14 = 11.24 .10 .10
 11.14 r 2 h 11.34

I 6030

✓ 10.57 l 2 r 10.77 10.82 10.84 = 10.81 .04 .01 .03
 10.82 r 0 f 10.82
 10.84 r 2 g 11.04

B 1954

10.57 l 2 r 10.77 10.82 10.84 = 10.78 .03 .04 .04
 ✓ 10.82 r 0 f 10.82
 10.84 r 3 g 11.04

Nov. 12, 1896.

Measures of α Persei (comb.)

B1977

✓ 10.57 ² & 1 r 10.67 10.52 = 10.60 .07 .08
 10.52 r 3 ~~of~~ 10.82

B1979

✓ 10.57 ² 2 r 10.77 10.82 10.74 = 10.78 .01 .04 .04
 10.82 r 0 ~~f~~ 10.82
 10.74 r 3 ~~g~~ 11.04

632

I 12765

✓ 8.48 a 4 r 8.88 9.00 = 8.94 .06 .06
 9.00 r 3 ~~b~~ 9.30

I 5607

✓ 11.04 ² 3 r 11.34 11.14 = 11.24 .10 .10
 11.14 r 2 ~~h~~ 11.34

I 2856

I 2856

✓ 9.92 d 3 r 10.22 10.27 = 10.24 .02 .03
 10.27 r 3 ² 10.57

B 103

✓ 9.92 d 2 r 10.12 10.57 10.52 = 10.40 .28 .17 .12
 10.57 r 0 ² 10.57
 10.52 r 3 ^f 10.82

I 3270

✓ 11.59 ~~h~~ 1 r 11.69
 11.89 ~~h~~ m. o.

Nov. 12, 1896

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Measures of η Persei (cont.)

I 2293

✓ 9.30 b1 r 9.40 9.32 = 9.36 .04 .04
 9.32 r 3 c 9.62

I 11822

✓ 10.82 f 3 r 11.12 10.94 = 11.03 .09 .09
 10.94 r 1 g 11.04

I 10932

✓ 9.30 b1 r 9.40 9.42 = 9.41 .01 .01
 9.42 r 2 c 9.62

I 10202

✓ 10.82 f 2 r 11.02 10.94 = 10.98 .04 .04
 10.94 r 1 g 11.04

I. 7945

✓ 11.04 g 3 r 11.34 11.34 11.29 = 11.32 .02 .02 .03
 11.34 r 0 h 11.34
 11.29 r 3 h 11.59

I 12187

✓ 9.30 b2 r 9.50 9.32 = 9.41 .09 .09
 9.32 r 3 c 9.62

I. 7585

✓ 11.04 g 2 r 11.24 11.04 = 11.14 .10 .10
 11.04 r 3 h 11.34

Nov. 17, 1896Measurements of α Persei.

14 h 0 m. I. 7628

✓ 11.34 h 3 r 11.64 11.49 = 11.56 .08 .07

11.49 r 1 h 11.59

I 7823

✓ 11.34 h 4 r 11.74 11.59 11.59 = 11.64 .10 .05 .05

11.59 r 0 h 11.59

11.59 r 3 h 11.89

I 4584

✓ 9.30 b 2 r 9.50 9.62 9.62 = 9.58 .08 .04 .04

✓ 9.62 r 0 c 9.62

9.62 r 3 d 9.92

I 5383

10.82 f 3 r 11.12 11.04 11.²~~4~~ = 11.13 .01 .09 .11

✓ 11.04 r 0 g 11.04

11.24 r 1 h 11.34

I 5307

✓ 10.82 f 3 r 11.12 10.84 = 10.98 .14 .14

10.84 r 2 g 11.04

I 3308

✓ 11.59 b 1 r 11.69 11.69 = 11.69 .00 .00

11.69 r 2 h 11.89

I 4267

✓ 8.48 a 3 r 8.78 9.30 9.42 = 9.17 .39 .13 .25

9.30 r 0 b 9.30

9.42 r 2 c 9.62

No. 17, 1896

Measures of κ Persei (cont.) ± 12081

✓ 9.62 C 1 κ 9.72 9.72 = 9.72 .00 .00
 9.72 κ 2 d 9.92

 ± 13185

✓ 11.34 h 2 κ 11.54 11.59 11.69 = 11.61 .07 .02 .08
 11.59 κ 0 h 11.59
 11.69 κ 2 h 11.89

 ± 13101

✓ 11.59³⁴ h 3 κ 11.64 11.89 = 11.52 .12 .13
 11.89 κ 2 h 11.59

 ± 13642

✓ 9.92 d 2 κ 10.12 10.17 = 10.14 .02 .03
 10.17 κ 4 h 10.57

 ± 11852

✓ 10.82 f 2 κ 11.02 10.74 = 10.88 .14 .14
 10.74 κ 3 g 11.04

 ± 11608

✓ 11.04 g 4 κ 11.44 11.14 = 11.29 .15 .15
 11.14 κ 2 h 11.34

 ± 11727

✓ 11.04 g 2 κ 11.24 11.14 = 11.19 .05 .05
 11.14 κ 2 h 11.34

Nov. 17, 1896

Measurements of κ Persei (cont.)

I 11752

✓ 11.04 g 3 r 11.34 11.34 11.39 = 11.36 .02 .02 .03
 11.34 r 0 h 11.34
 11.39 r 2 h 11.59

I 11766

✓ 11.04 g 3 r 11.34 11.14 = 11.24 .10 .10
 11.14 r 2 h 11.34

B 2068

✓ 9.62 C 3 r 9.92 9.82 = 9.87 .05 .05
 9.82 r 1 d 9.92

I 6854

✓ 9.30 b 1 r 9.40 9.42 = 9.41 .01 .01
 9.42 r 2 c 9.62

November 21, 1896.

11^h 0^m.

Measures of Espin's Variable

0^h 49.0^m + 58° 1 (1900)

I. 2289

✓ 11.48 d 2 r 11.68 11.68 = 11.68 .00 .00

11.68 r 4 e 12.08

I 15646

✓ Plate too poor

✓ I 14689

r.m.s. 12.082 = .1 < 12.18

✓ I 13840

r.m.s. 9.842 = .4 < 10.34

✓ I 13793

r.m.s. ^{12.53} f = .1 < 12.63

✓ I 13794

r.m.s. ^{11.48} d = .1 < 11.58

✓ I 11812

r.m.s. ^{12.95} g = .1 < 13.05

✓ I 11751

r.m.s. ^{11.48} d = .1 < 11.58

✓ I 14122

r.m.s. ^{12.08} e = .1 < 12.18

November 21, 1896

Measures of Lepin's new Variable. (cont.)

I. 14123

✓ 10.80 $C = .1$ r.m.s. < 10.90

I. 14368

✓ 12.53 $f = .1$ r 12.63
g m.s.

✓ I 14615

12.08 $l = .1$ r.m.s. < 12.18

✓ I 14369

11.48 $d = .1$ r.m.s. < 12.58

I 12079

✓ 12.53 $f = .1$ r.m.s. < 12.63

I 12169

✓ 12.08 $l = .1$ r.m.s. < 12.18

I 12184

✓ 12.95 $g = .1$ r.m.s. < 13.05

✓ I 11882

Plate too poor

I. 13572

✓ 11.48 d 11.58 11.88 = 11.73 .15 .15
11.88 r 2e 12.08

Nov. 21. 1896

Measures of Espin's new Variable (cont.)

I 13573

✓ 11.48 d 2 r 11.68 11.98 = 11.83 .15 .15

11.98 r 1 e 12.08

I 13498

✓ Plate too poor

✓ I. 13663

11.48 d = .1 r.m.s. < 11.58

I. 13662

10.80 C = .2 r.m.s. < 11.50

✓ I 13639

11.48 d = .1 r.m.s. < 11.58

I 11723

✓ Plate too poor.

✓ I 15531

Plate too poor.

✓ I 13609

12.08 e 1 r 12.18 12.43 = 12.30 .12 .13

12.43 r 1 f 12.53

✓ I 3253

10.80 C 2 d 11.50 10.88 = 10.94 .06 .06

10.88 r 6 d 11.48

Nov. 21, 1896

Measures of Esprit's new Variable (cont.)

I 2847

✓ 10.80 C 30^h 11.10 11.08 = 11.09 .01 .01
 11.08 d 4^h 11.48

✓ I 13859
 Plate too poor.

✓ I 13641
 11.48 d 1^h 11.58
 e.m.p.

✓ I 11720
 11.48 d = 1 e.m.p. < 11.58

✓ I 1793
 12.08 d = 1 e.m.p. < 12.18

I 15348

10.80 C 3^h 11.10 11.48 11.88 = 11.49 .39 .01 .39
 ✓ 11.48 r 0 d 11.48
 11.88 r 2^h 12.08

I 2600

✓ 10.80 C 3^h 11.10 11.48 11.98 = 11.52 .42 .04 .46
 11.48 r 0 d 11.48
 11.98 r 1^h 12.08

275
 I 2897

Nov. 21, 1896

47

Measures of Espin's Run Variable (cont.)

I 2275

10.80 c 4 $\frac{2}{5}$ 11.30 11.48 11.78 = 11.49 .29 .01 .29

11.48 r 0 d 11.48

11.78 r 3 $\frac{2}{5}$ 12.08

I 3928

9.84 a = .3 r.m.s. < 10.14

I 5118

10.80 c 3 r 11.10 11.28 = 11.19 .09 .09

11.28 r 2 d 11.48

I 5071

10.80 c 3 r 11.10 11.38 = 11.24 .14 .14

11.38 r 1 d 11.48

I 5070

10.80 c 3 r 11.10 11.28 = 11.19 .09 .09

11.28 r 2 d 11.48

I 9940

12.53 f = .1 r.m.s. < 12.63

I 9780

11.48 d = .1 r.m.s. < 11.58

I 9781

12.08 e = .1 r.m.s. < 12.18

Nov. 21, 1896

Measures of Espin's New Variable (cont.)

I 3261

10.80 C = .2 r.m.s. < 11.00

I 10201

12.53 f 2 r 12.73 12.85 = 12.79 .06 .06
 12.85 r 1 g 12.95

I 9387

12.08 d 2 r 12.28 12.53 12.85 = 12.55 .27 .02 .30
 12.53 r 0 f 12.53
 12.85 r 1 g 12.95

I 7769

11.48 d 1 r 11.58 11.88 = 11.73 .15 .15
 11.88 r 2 d 12.08

I 15257

11.48 d 1 r 11.58 11.88 = 11.73 .15 .15
 11.88 r 2 d 12.08

I 15046

11.48 d = .1 r.m.s. < 11.58

I 15967

9.84 a = .3 r.m.s. < 10.14

I 15892

10.26 b 4 r 10.66 10.80 11.28 = 10.91 .25 .11 .37
 10.80 r 0 c 10.80
 11.28 r 2 d 11.48

Nov. 21, 1896

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Measures of Espin's New Variable (cont.)

2597 - useless

I 12279

11.48d 3 r 11.78 11.98 = 11.88 .10 .10

11.98 r 1 e 12.08

I 7770 (1303)

11.48d 3 r 11.78 11.98 = 11.88 .10 .10

11.98 r 1 e 12.08

I. 12763

useless

I 11726 - (1329)

Does not cover region

I. 13177 (1391)

Does not cover region.

I 16224

10.80c 4 r 11.20 11.48 11.88 = 11.49 .29 .01 .29

11.48 r 0 d 11.48

11.88 r 2 e 12.08

December 5, 1896.

h₂₀ Measures of α Persei

I 15893

4.92 d 1 r 10.02 10.27 = 10.14 .12 .13
 10.27 r 3 e 10.57

I 11641

11.04 g 2 r 11.24 11.34 11.49 = 11.34 .12 .02 .13
 11.34 r 0 h 11.34
 11.49 r 1 h 11.59

B 1954

10.57 e 1 r 10.67 10.82 10.84 = 10.78 .11 .04 .06
 10.82 r 0 f 10.82
 10.84 r 2 g 11.04

I 2291 Sp.

~~Double Measure~~

B 1977

10.57 e 1 r 10.67 10.72 = 10.70 .03 .02
 10.72 r 1 f 10.82

I 14691.

9.92 d 2 r 10.12 10.27 = 10.20 .08 .07
 10.27 r 3 e 10.57

I 5120

10.57 e 1 r 10.67 10.82 10.84 = 10.78 .11 .04 .06
 10.82 r 0 f 10.82
 10.84 r 2 g 11.04

Dec. 5, 1896

Measures of α Persei

I 2101

L 8.48 a 3 n 8.78 9.00 = 8.89 .11 .11
9.00 n 3 b 9.30

I 2183 8p.

r 8.48 a 2 n 8.68 9.20 = 8.94 .26 .26
9.20 n 1 b 9.30

I 5607.

L 11.34 h 2 n 11.54 11.49 = 11.52 .02 .03
11.49 n 1 h 11.59

632

I 12765

L 8.48 a 3 n 8.78 9.30 9.42 = 9.17 .39 .18 .25
9.30 n 0 b 9.30
9.42 n 2 c 9.62

I 2291

r 8.48 a 4 n 8.88 9.30 9.42 = 9.20 .32 .10 .22
9.30 n 0 b 9.30
9.42 n 2 c 9.62

B 2068

L 9.92 d 1 n 10.02 10.57 10.72 = 10.44 .42 .13 .28
10.57 n 0 c 10.57
10.72 n 1 f 10.82

I.

Dec. 5, 1896.

Measures of α Persei. $\pm 4814.$

✓ 9.92d 2 \approx 10.12 10.27 = ~~10.20~~ .08 .07
 10.27 \approx 3 \approx 10.57

I 12829
 Improv.

I 10901

✓ 9.30b 2 \approx 9.50 9.42 = 9.46 .06 .06
 9.42 \approx 2c. 9.62

I 8051

✓ 9.92d 2 \approx 10.02 10.57 10.62 = 10.44 $\begin{smallmatrix} .32 \\ .28 \end{smallmatrix}$ $\begin{smallmatrix} .13 \\ .17 \end{smallmatrix}$.18
 10.57 \approx 0e 10.57
 10.62 \approx 2f 10.82

December 10, 1896.

15 hr. 0^m.measures of α Persei.D. ~~2564~~ 11721a = ~~5.2~~ 5.0b = ~~5.8~~ 5.5c = ~~6.2~~ 6.1d = ~~6.9~~ 6.6

e = 7.1

f = 7.3

g = 7.6

h = 8.3

k = 8.6

l = 9.0

var = 8.1 11.54 11.84¹ = 11.34 .20 .26 \pm 7823

a = 5.2

b = 5.8

c = 6.0

d = 6.4

e = 6.9

f = 7.2

g = 7.5

h = 8.0

k = 8.3

l = 8.6

var = 8.1 11.44 11.42³⁹ = 11.42 .02 .03

Dec. 10, 1896.Measures of α . Persei. (cont.)I. ^{6.17}
~~14.87~~ $a = 5.0$ $b = 5.8$ $c = 6.1$ $d = 6.3$ $e = 6.8$ $f = 7.0$ $g = 7.3$ $h = 7.8$ $k = 8.2$ $l = 8.5$ var = 6.0 9.50 $9.52 = 9.51$.01 .01

I. 9280

 $a = 4.9$ $b = 5.3$ $c = 5.8$ $d = 6.1$ $e = 6.9$ $f = 7.3$ $g = 7.6$ $h = 7.9$ $k = 8.3$ $l = 8.7$ var = 6.2 10.02 $9.92 = 9.92$.10 .10

Dec. 10, 1896

Measure of α Persei (comb)

I 2560

 $a = 5.0$ $b = 5.3$ $c = 5.7$ $d = 5.9$ $e = 6.5$ $f = 6.9$ $g = 7.2$ $h = 7.6$ $i = 8.0$ $l = 8.7$
 $\text{mean} = 6.3 \quad 10.32 \quad 10.37 = 10.34 \quad 0 \quad .02 \quad .03$

50.0

December 17, 1896

13^h 16^m Esplan Variable - scale measures.

I. 2289.

R Trianguli - yes - I 2235
 W Cancri nr I 2525
 S Sculptor — B 5734
 Canis Minor — B 14647
 R Caeli — yes B 12725 I 4493
 T Camel. — yes
 E Hartung —
 R Hrolg. — B 5691
 S Tucan. — B 5788
 Hydra — B 13557
 U Persei yes I 9280
 Sargus. — I 10891
 E spris. —
 X Ceti — B 12613
 Orion — I 7716
 M 441 — yes I 5799
 R Picta yes — B 4290
 S Picta yes B 12166
 T ~~Orion~~ Picta — I 12464
 Uctantis. yes B 5684

December 17, 1896

3 hr 10^m

Hartig's Variable.

$$\begin{aligned}
 a &= 10.86 \\
 b &= 11.11 \\
 c &= 11.33
 \end{aligned}$$

I. 18351

$$\begin{aligned}
 11.11 \pm 2 \text{ or } 11.31 \quad 11.13 &= 11.17 & .14 & \quad .14 \\
 11.03 \text{ or } 3 \text{ c } 11.33
 \end{aligned}$$

I. 5120

$$\begin{aligned}
 11.11 \pm 3 \text{ or } 11.41 \quad 11.23 &= 11.32 & .09 & \quad .09 \\
 11.23 \text{ or } 1 \text{ c } 11.33
 \end{aligned}$$

I 15893

$$\begin{aligned}
 11.11 \pm 1 \text{ or } 11.21 \quad 11.23 &= 11.22 & .01 & \quad .01 \\
 11.23 \text{ or } 1 \text{ c } 11.33
 \end{aligned}$$

I 11641

$$\begin{aligned}
 11.11 \pm 1 \text{ or } 11.21 \quad 11.13 &= 11.17 & .04 & \quad .04 \\
 11.13 \text{ or } 2 \text{ c } 11.33
 \end{aligned}$$

I 8051

$$\begin{aligned}
 11.11 \pm 2 \text{ or } 11.31 \quad 11.23 &= 11.27 & .04 & \quad .04 \\
 11.23 \text{ or } 1 \text{ c } 11.33
 \end{aligned}$$

I 14691

$$\begin{aligned}
 11.11 \pm 2 \text{ or } 11.31 \quad 11.23 &= 11.27 & .04 & \quad .04 \\
 11.23 \text{ or } 1 \text{ c } 11.33
 \end{aligned}$$

I 9338

$$\begin{aligned}
 11.11 \pm 1 \text{ or } 11.21 \quad 11.03 &= 11.12 & .09 & \quad .09 \\
 11.03 \text{ or } 3 \text{ c } 11.33
 \end{aligned}$$

Dec. 17, 1896

Hartwig's Variable (cont)

I 15049

n.m.s.

10.86 a = .1 10.96 < 10.96

I 12250

Plate too poor

I 14000

Plate too poor

I 13185

11.11 b 2 r 11.31 11.23 = 11.27 .04 .04

11.23 r 1 c 11.33

I 15969

11.11 b 1 r 11.21 11.23 = 11.22 .01 .01

11.23 r 1 c 11.33

I 12632

10.86 a 2 r 11.06 11.11 11.23 = 11.13 .07 .05 .10

11.11 r 0 b 11.11

11.23 r 1 c 11.33

I 12185

11.11 b 2 r 11.31 11.13 = 11.22 .09 .09

11.13 r 2 c 11.33

I 10459

11.11 b 3 r 11.41 11.23 = 11.32 .09 .09

11.23 r 1 c 11.33

Dec. 17, 1896

Hartwig's Variable (cont)

I 10673

11.11 b 3 r 11.41 11.23 = 11.32

.09

.09

11.23 r 1 c 11.33

I 10442

11.11 b 3 r 11.41 11.23 = 11.32

.09

.09

11.23 r 1 c 11.33

I 10352

11.11 b 1 r 11.21 11.03 = 11.12

.09

.09

11.03 r 3 c 11.33

I 14124

11.11 b 2 r 11.31 11.23 = 11.27

.04

.04

11.23 r 1 c 11.33

I 5800

11.11 b 1 r 11.21 11.03 = 11.12

.09

.09

11.03 r 3 c 11.33

I 3401

11.11 b 2 r 11.31 11.23 = 11.27

.04

.04

11.23 r 1 c 11.33

I 7772

11.11 b 1 r 11.21 11.03 = 11.12

.09

.09

11.03 r 3 c 11.33

Dec. 17, 1896

Hartwig's Variable (cont)

I 3541

11.11 b1r 11.21 11.23 = 11.22

.01.01

11.23 r1c 11.33

I 6854

11.11 b2r 11.81 11.13 = 11.22

.09.09

11.13 r2c 11.33

I 3308

11.11 b2r 11.31 11.23 = 11.27

.04.04

11.23 r1c 11.33

I 10932

11.11 b2r 11.31 11.23 = 11.27

.04.04

11.23 r1c 11.33

I 3270

11.11 b1r 11.21 11.23 = 11.22

.01.01

11.23 r1c 11.33

I 15351

11.11 b1r 11.21 11.13 = 11.17

.04.04

11.13 r2c 11.33

I 15258

11.11 b1r 11.21 11.13 = 11.17

.04.04

11.13 r2c 11.33

Dec. 17, 1896

Hartings Variable (cont)

I 15189

11.11 b1r 11.21 11.23 = 11.22 .01 .01

11.23 r1c 11.33

I 15048

11.11 b1r 11.21 11.23 = 11.22 .01 .01

11.23 r1c 11.33

I 15714

Plate too poor.

I 11640

11.11 b2r 11.31 11.13 = 11.22 .09 .09

11.13 r2c 11.33

~~I 13642~~

I 13642

11.11 b2r 11.31 11.23 = 11.27 .04 .04

11.23 r1c 11.33

I 11752

11.11 b3r 11.41 11.13 = 11.27 .14 .14

11.13 r2c 11.33

I 11766

11.11 b1r 11.21 11.23 = 11.22 .01 .01

11.23 r1c 11.33

I 13101

11.11 b2r 11.31 11.23 = 11.27 .04 .04

11.23 r1c 11.33

Dec. 11 1896

Hartig's Variable (cont)

I 15894

11.11 61r 11.21 11.03 = 11.12 .09 .09
 11.03 r 3c 11.33

I 11822

11.11 61r 11.21 11.23 = 11.22 .01 .01
 11.23 r 1c 11.33

I 16206

11.11 62r 11.31 11.03 = 11.17 .14 .14
 11.03 r 3c 11.33

I 13796

11.11 61r 11.21 11.23 = 11.22 .01 .01
 11.23 r 1c 11.33

I 15542

11.11 61r 11.21 11.23 = 11.22 .01 .02
 11.23 r 1c 11.33

I 14370

11.11 61r 11.21 11.13 = 11.17 .04 .04
 11.13 r 2c 11.33

I 15621

Platitropov

I 15954

11.11 62r 11.31 11.23 = 11.27 .04 .04
 11.23 r 1c 11.33

Dec. 17, 1896

Hartwig's Variable (Lmbs)

I 13574

11.11 b2r 11.31 11.13 = 11.22 .09 .09
 11.13 r2c 11.33

I 13612

11.11 b1r 11.31 11.23 = 11.22 .01 .01
 11.23 r1c 11.33

I 12831

11.11 b2r 11.33

C.m.a.

I 10844

11.11 b3r 11.41 11.13 = 11.27 .14 .14
 11.13 r2c 11.33

I 3228

11.11 b2r 11.31 11.23 = 11.27 .04 .04
 11.23 r1c 11.33

I 12081

11.11 b2r 11.31 11.23 = 11.27 .04 .04
 11.23 r1c 11.33

I 12187

11.11 b2r 11.31 11.23 = 11.27 .04 .04
 11.23 r1c 11.33

Dec. 17, 1896

Startrig's Variable. (cont)

I 12765

11.11^b 1^r 11.21

11.33 C. m. s.

I 15346

11.11^b 2^r 11.21 11.13 = 11.17 .04 .0411.13^r 2^c 11.33

I 3186

11.11^b 1^r 11.21 11.13 = 11.17 .04 .0411.13^r 2^c 11.33

I 14617

11.11^b 2^r 11.31 11.23 = 11.27 .04 .0411.23^r 1^c 11.33

I 9288

11.11^b 2^r 11.31 11.23 = 11.27 .04 .0411.23^r 1^c 11.33

I 10901 (1323)

11.11^b 1^r 11.21 11.23 = 11.22 .01 .0111.23^r 1^c 11.33

December 26, 1896.12^h 30^m

Measurements of Espinosa Variable

4^h 26.1^m + 65.53

I. 432.

9.18 a 2 r 9.38 9.40 = 9.39 .01 .01

9.40 r 2 b 9.60

a = 7.5

b = 7.9 e = 9.4

c = 8.5 f = 10.0

d = 9.1 9.18 a 4 r 9.28 9.30 = 9.29 .01 .01

ran = 7.6 9.30 r 3 b 9.60

I 3529

ran n.s.

d = .3 11.62 f = .1 < 11.72

a = 7.6

b = 8.0 e = 9.6

c = 8.6 f = 10.1

d = 9.2 < 10.1

ran n.s.

I. 3402

11.07 e 4 r 11.47

r = .1

ran = 10.4

a = 7.4

b = 7.9

c = 8.4

d = 8.8 11.62 f 8 r 12.42

e = 9.1

f = 9.6

Dec. 26, 1896

Measures of *Espina* (cont.)

I 3118

10.15 c 5 r 10.65 10.65 = 10.65 .00 .00
 10.65 r 1 d 10.75

 $a = 7.5$ $b = 7.9$ $c = 8.4$ $d = 9.2$ $e = 9.5$

$f = 10.1$ 10.15 c 7 r 10.85 10.65 = 10.75 .10 .10
 raw = 9.1 10.15 r 1 d 10.75

I 13803

10.15 c 1 r 10.25 10.45 = 10.35 .10 .10
 10.45 r 3 d 10.75

I 12537

10.15 c 5 r 10.65 10.65 = 10.65 .00 .00
 10.65 r 1 d 10.75

I 13650

10.15 c 4 r 10.55 10.55 = 10.55 .00 .00
 10.55 r 2 d 10.75

I 13647

10.15 c 4 r 10.55 10.75 10.87 = 10.7² .17 .03
 10.75 ~~8~~ 0 d 10.75 .~~22~~ .~~84~~ .15
 10.87 r 2 e 11.07

Dec. 26, 1896

Measures of Espin's law (cont)

I 13634

10.15 c 4 r 10.55 10.65 = 10.60 .05 .05
 10.65 r 1 d 10.75

I 12653

11.07 e 3 r 11.37 11.52 = 11.44 .07 .08
 11.52 r 1 f 11.62

I 12634

11.07 e 3 r 11.37 11.42 = 11.40 .03 .02
 11.42 r 2 f 11.62

I 11337

11.07 e 4 r 11.47
 f m a

I 16592

9.60 b 1 r 9.70 9.75 = 9.72 .02 .03
 9.75 r 4 c 10.15

I 16639

9.18 a 3 r 9.48 9.60 9.85 = 9.64 .16 .04 .21
 9.60 r 0 b 9.60
 9.85 r 3 c 10.15

I 15060

Plate transp.

Dec. 26, 1896.

Measures of Espin's Var (cont.)

I 15050

11.07 \pm 5 \approx 11.57 11.42 = 11.50 .07 .0811.42 \pm 2 \approx 11.62

I 1188.7

9.60 \pm 3 \approx 9.90 10.05 = 9.9⁸ .0⁸ .0⁷10.05 \pm 1 \approx 10.15

I 11888

9.60 \pm 4 \approx 10.00 10.35 = 10.18 .18 .1710.35 \pm 2 \approx 10.15

I 13871

9.60 \pm 1 \approx 9.70 9.75 = 9.72 .02 .039.75 \pm 4 \approx 10.15

I 13801

10.15 \pm 2 \approx 10.35 10.35 = 10.35 .00 .0010.35 \pm 2 \approx 10.75

I 3530

rms. < 10.76

10.75 \pm 1 \approx 10.76

I 3657

Plate too poor

I 3698

< 11.17

Y.M.P.

11.07 \pm 1 \approx 11.17

Dec. 26, 1896

Measures of Espin's law. (cont.)

 ± 14129

9.60 b1 r 9.70 9.95 = 9.82 .12 .13

9.95 r2 c 10.15

I 4270

Plate too poor

 ± 4949

9.60 b2 r 9.80 9.85 = 9.82 .02 .03

9.85 r3 c 10.15

 ± 8094

10.15 c4 r 10.55 10.55 = 10.55 .00 .00

10.55 r2 d 10.75

I 8123

10.15 c5 r 10.65 10.65 = 10.65 .00 .00

10.65 r1 d 10.75

I 8175

10.75 d2 r 10.95 10.97 = 10.96 .01 .01

10.97 r1 e 11.07

I 8535

11.07 e1 r 11.17 11.42 = 11.30 .13 .12

11.42 r1 f 11.62

I 8536

r.m.o. < 11.17

11.07 e = .1 11.17

Dec. 26, 1896.

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Measurements of Espin's Van (comb.)

I 8590

r.m.s. < 10.95 $10.75d = .2$ 10.95

I 5559

9.60b4r 10.00 9.95 = 9.98 .02 .03

9.95r2c 10.15

I 6473

r.m.s. < 10.85 $10.75d = .1$ 10.85

I 5464

9.60b3r 9.90 9.95 = 9.92 .02 .03

9.95r2c 10.15

I 12510 Sp

r.m.s. < 9.70

9.60b = .1 9.70

I 7835

9.18a1r 9.28 9.30 = 9.29 .01 .01

9.30r3b 9.60

I 7819

9.18a2r 9.38 9.30 = 9.34 .04 .04

9.30r3b 9.60

Dec. 26, 1896

Measures of Espin's law (cont.)

I 7809

9.18 a 1 r 9.28 9.30 = 9.29 .01 .01

9.30 r 3 b 9.60

I 7639

9.60 b 1 r 9.70 9.75 = 9.72 .02 .03

9.75 r 4 c 10.15

I 8176

10.15 c 3 r 10.45 10.55 = 10.58 .05 .05

10.55 r 1 d 10.75

I 14394

9.60 b 3 r 9.90 10.15 10.25 = 10.10 .20 .05 .15

10.15 r 0 c 10.15

10.25 r 5 d 10.75

I 14496

10.15 c 2 r 10.35 10.55 = 10.45 .10 .10

10.55 r 2 d 10.75

I 14497

10.15 c 4 r 10.55 10.45 = 10.50 .05 } .05

10.45 r 3 d 10.75

I 14567

10.15 c 4 r 10.55 10.45 = 10.50 .05 .05

10.45 r 3 d 10.75

Dec. 26, 1896

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Measures of Espin's Star (cont.)

I 7709

$$9.18 a \approx 9.28 \quad 9.40 = 9.34$$

.06

.06

$$9.40 \approx 9.60$$

I 12447 Sp.

$$r.m.s. < 9.70$$

$$9.60 \approx 9.70$$

I 12261 Sp.

$$9.18 a \approx 9.48 \quad 9.50 = 9.49$$

.01

.01

$$9.50 \approx 9.60$$

I 12362 Sp.

$$r.m.s. < 9.28$$

$$9.18 a \approx 9.28$$

I 13307

$$11.07 a \approx 11.67 \quad 11.52 = 11.60$$

.07.08

$$11.52 \approx 11.62$$

I 13308

$$11.07 a \approx 11.37 \quad 11.62 = 11.50$$

.13

.12

$$11.62 \approx 11.62$$

$$r = .1$$

I 12161

$$9.18 a \approx 9.38 \quad 9.40 = 9.39$$

.01

.01

$$9.40 \approx 9.60$$

Dec. 26, 1896

Measures of Espin's star. (cont.)

I 12244 Sp.

9.18 a 1 r 9.28 9.30 = 9.29 .01 .01

9.30 r 3 b 9.60

I 4706

r.m.s. < 9.70

9.60 b = .1 9.70

I 4120 Sp.

r.m.s. < 9.28

9.18 a = .1 9.28

I 5574

10.15 c 1 r 10.25 10.25 = 10.25 .00 .00

10.25 r 5 d 10.75

I 5786

10.15 c 6 r 10.75 10.65 = 10.70 .05 .05

10.65 r 1 d 10.75

I 5787

10.15 c 4 r 10.55 10.75 10.87 = 10.72 .17 .03 .15

10.75 r 0 d 10.75

10.87 r 2 r 11.07

I 5312

9.60 b 1 r 9.70 9.75 = 9.72 .02 .03

9.75 r 4 c 10.15

Dec. 26, 1896

Measures of Espin's Star (cont.)

I 14375

9.60 b 3 r 9.90 9.95 = 9.92 .02 .03

9.95 r 2 c 10.15

I 11248

11.07 b 3 r 11.37

f m.o.

I 13111

r.m.o. < 11.27

11.07 b = .2 11.27

I 11249

11.07 b 3 r 11.37 11.52 = 11.44 .07 .08

11.52 r 1 f 11.62

I 11109

r.m.o. < 11.72

11.62 f = .1 11.72

I 12287

9.60 b 2 r 9.80 9.95 = 9.88 .08 .07

9.95 r 2 c 10.15

I 12286

9.18 a 3 r 9.48 9.60 9.85 = 9.64 .16 .04 .21

9.60 r 0 b 9.60

9.85 r 3 c 10.15

Dec. 26, 1896

Measures of Espin's Var. (cont.)

I 5389

9.18 a 2 r 9.38 9.60 9.75 = 9.58 .20 .02 .17

9.60 r 0 b 9.60

9.75 r 4 c 10.15

I 5392

9.60 b 1 r 9.70 9.95 = 9.82 .12 .13

9.95 r 2 c 10.15

I 5396

9.60 b 1 r 9.70 9.65 = 9.68 .02 .03

9.65 r 5 c 10.15

I 6253

ran. m. s. < 11.17

11.07 e = .1 11.17

I 6120

11.07 e 4 r 11.47

f. m. s.

I 6134

ran m. s. < 11.72

11.62 f = .1 11.72

I 6144

11.07 e 4 r 11.47 11.62 = 11.54 .07 .08

11.62 r 0 f 11.62

f = .1

Dec. 26, 1896

Measures of Espin's Var. (cont.)

I 5150

9.18 a 4 r 9.58 9.60 9.85 = 9.68 .10 .08 .17
 9.60 r 0 b 9.60
 9.85 r 3 c 10.15

I 5148

9.18 a 2 r 9.38 9.40 = 9.39 .01 .01
 9.40 r 2 b 9.60

I 4948

9.60 b 2 r 9.80 9.95 = 9.88 .08 .07
 9.95 r 2 c 10.15

I 4831

9.60 b 1 r 9.70 9.95 = 9.82 .12 .13
 9.95 r 2 c 10.15

I 14131

9.60 b 2 r 9.80 9.75 = 9.78 .12 .03
 9.75 r 4 c 10.15

I 14376

9.60 b 3 r 9.90 9.95 = 9.98 .02 .03
 9.95 r 2 c 10.15

I 12213

9.18 a 1 r 9.28 9.40 = 9.34 .06 .06
 9.40 r 2 b 9.60

Dec. 26, 1896.

Measures of Capri's Star (cont.)

I 12214

9.18 α 4 \approx 9.58 9.60 9.75 = 9.64 .06 .04 .11
 9.60 α 0 \approx 9.60
 9.75 α 4 \approx 10.15

I 10762

10.15 α 4 \approx 10.55 10.65 = 10.60 .05 .05
 10.65 α 1 \approx 10.75

I 10761

10.15 α 5 \approx 10.65 10.65 = 10.65 .00 .00
 10.65 α 1 \approx 10.75

I 9796

10.15 α 2 \approx 10.35 10.55 = 10.45 .10 .10
 10.55 α 2 \approx 10.75

I 9821

10.15 α 2 \approx 10.35 10.35 = 10.35 .00 .00
 10.35 α 4 \approx 10.75

I 10014

10.15 α 1 \approx 10.25 10.25 = 10.25 .00 .00
 10.25 α 5 \approx 10.75

I 14619

10.15 α 5 \approx 10.65 10.65 = 10.65 .00 .00
 10.65 α 1 \approx 10.75

Dec. 26, 1896.

Measurements of Espin's Star (cont.)

I 14620

10.15 C 5 r 10.65 10.55 = 10.60 .05 .05

10.65 r 2 d 10.75

I 14694

10.15 C 3 r 10.45 10.75 10.87 = 10.69 .24 .06 .18

10.75 r 0 d 10.75

10.87 r 2 d 11.07

I 14695

10.15 C 5 r 10.65 10.65 = 10.65 .00 .00

10.65 r 1 d 10.75

I 14965

11.07 24 r 11.47 11.52 = 11.50 .03 .02

11.52 r 1 f 11.62

I 8080

10.15 C 3 r 10.45 10.55 = 10.50 .05 .05

10.55 r 2 d 10.75

Jan. 7. 1897.

15 hi 0 m. Measures of Espin's M. (Cont).

I. 11108 (1325)

11.07 ℓ 3 α 11.37

f m. n.

I 3393

11.07 ℓ 2 α 11.27

f m. n.

8176

I. 5145

10.15 C 2 α 10.35 10.45 = 10.40 .05 .0510.45 α 3 d 10.75

I 5145

9.60 ℓ 2 α 9.80 9.95 = 9.88 .08 .079.95 α 2 C 10.15

I 14691

Does not cover the region.

Jan. 30, 1897

R. Trianguli-

 $2^h 31.0^m + 33^{\circ} 50' (1900)$

11 hr 0 m.

Comparison stars on I 2235.

I. 2875 $\begin{matrix} 9.12 \\ 9.62 \end{matrix}$ $\begin{matrix} 9.42 \\ 9.72 \end{matrix}$ $\begin{matrix} 9.62 \\ 10.04 \end{matrix}$ (changed) $\begin{matrix} 9.52 \\ 9.98 \end{matrix}$ $\begin{matrix} 10 \\ 10 \end{matrix}$ $\begin{matrix} a = a \\ b = b \\ c = c \\ d = d \\ e = e \\ f = f \\ g = g \\ h = h \\ i = i \end{matrix}$

$d \times r 9.68 \times 3 r$ 9.76 $10.08 = 10.02$ $\cdot 04 \cdot 06$

Repeated. $r = .1$ $10.08 \times 1 \times g$ 10.18 $\begin{matrix} 10.04 \\ 9.62 \end{matrix}$ $\begin{matrix} 10.14 \\ 9.72 \end{matrix}$

I 2235 $\begin{matrix} 7.80 \\ 7.67 \end{matrix}$ $\begin{matrix} 8.80 \\ 8.52 \end{matrix}$ $\begin{matrix} 8.30 \\ 8.10 \end{matrix}$

7.50 7.37 $7.41 \times 1 \times 3 r$ 7.71 $8.56 = 8.14$ $\begin{matrix} 50 \\ 43 \end{matrix}$ $\begin{matrix} 45 \\ 42 \end{matrix}$

$8.56 \times 2 \times 4 \times 8.76$

8.52 8.72 9.00

Repeated. $a = 6.8$ $g \times x = 9.2$

$b \times x = 7.3$ $h \times y = 9.8$

$e \times x = 8.0$ $k \times x = 10.3$

$f \times x = 8.9$

var = 7.5

I. 417. $\begin{matrix} 7.48 \\ 7.32 \end{matrix}$ $\begin{matrix} 7.40 \\ 7.27 \end{matrix}$ $\begin{matrix} 7.44 \\ 7.30 \end{matrix}$

7.28 7.12 $7.16 a \times 2 b$ 7.36 $7.31 = 7.34$ $\begin{matrix} 04 \\ 42 \end{matrix}$ $\begin{matrix} 04 \\ 43 \end{matrix}$

7.40 $7.31 \times 1 \times 3 \times b$ $\begin{matrix} 7.50 \\ 7.41 \end{matrix}$ $\begin{matrix} 7.27 \end{matrix}$

$a = 5.9$ $g \times x = 8.3$

$b \times x = 6.3$ $h \times y = 9.2$

$e \times x = 6.9$ $k \times x = 10.0$

$f \times x = 7.9$

var. 6.0

7.28 7.38 7.20 7.29 09 09

$7.12 a \times 1 r$ 7.22 7.07 7.14 08 07

7.20 $7.07 \times 3 b$ 7.37

Repeated. I 1875 $\begin{matrix} 7.58 \\ 7.42 \end{matrix}$ $\begin{matrix} 7.50 \\ 7.38 \end{matrix}$ $\begin{matrix} 8.60 \\ 8.32 \end{matrix}$ $\begin{matrix} 7.88 \\ 7.70 \end{matrix}$ $\begin{matrix} 30 \\ 38 \end{matrix}$ 7.2

7.28 7.12 $7.46 a \times 3 r$ 7.46 7.41 $8.36 = 7.74$ $\begin{matrix} 34 \\ 33 \end{matrix}$ $\begin{matrix} 33 \end{matrix}$ $\begin{matrix} 62 \end{matrix}$

7.50 7.37 $7.41 \times 1 \times 3 \times b$ $\begin{matrix} 7.50 \\ 7.41 \end{matrix}$ $\begin{matrix} 7.37 \end{matrix}$ $\begin{matrix} 7.52 \\ 7.17 \end{matrix}$ 7.34 18 17

8.60 8.32 $8.36 \times 4 \times 2 \times 8.76$ 8.72

$a = 5.2$ $e \times x = 6.5$ $var = 5.6$ $h \times y = 9.2$

$b \times x = 5.8$ $f \times x = 7.5$ $g \times x = 8.3$ $k \times x = 10.0$

Jan. 30, 1897.

R. Trianguli (cont.)

repeated
 $\begin{array}{r} 7.28 \\ 7.12 \\ 7.50 \end{array}$ I 2005 $\begin{array}{r} 7.48 \\ 7.32 \\ 7.36 \end{array}$ $\begin{array}{r} 7.50 \\ 7.37 \\ 7.41 \end{array}$ $\begin{array}{r} 8.50 \\ 8.22 \\ 8.36 \end{array}$ $\begin{array}{r} 7.83 \\ 7.64 \\ 7.68 \end{array}$ $\begin{array}{r} 35 \\ 32 \\ " \end{array}$ $\begin{array}{r} 33 \\ 27 \\ " \end{array}$ $\begin{array}{r} 67 \\ 58 \\ " \end{array}$
 \checkmark $\begin{array}{r} 7.37 \\ 7.50 \\ 8.50 \end{array}$ $\begin{array}{r} 7.41 \\ 7.41 \\ 8.22 \end{array}$ $\begin{array}{r} 7.41 \\ 7.41 \\ 8.26 \end{array}$ $\begin{array}{r} 7.41 \\ 7.41 \\ 8.76 \end{array}$ $\begin{array}{r} 7.41 \\ 7.41 \\ 8.72 \end{array}$ $\begin{array}{r} 7.41 \\ 7.41 \\ 9.00 \end{array}$

$a = 5.3$ $g \& = 8.2$ 7.72 7.37
 $b \& = 5.9$ $h \& = 9.1$
 $c \& = 6.5$ $k \& = 10.0$
 $f \& = 7.6$
 $ran = 5.9$

\checkmark $\begin{array}{r} 10.42 \\ 10.92 \\ 11.97 \end{array}$ I 2931 $\begin{array}{r} 10.62 \\ 11.12 \\ 11.97 \end{array}$ $\begin{array}{r} 10.82 \\ 11.37 \\ 11.41 \end{array}$ $\begin{array}{r} 10.72 \\ 11.24 \\ 11.28 \end{array}$ $\begin{array}{r} 10 \\ 12 \\ " \end{array}$ $\begin{array}{r} 10 \\ 13 \\ " \end{array}$
 $\begin{array}{r} 10.92 \\ 11.97 \\ 10.82 \end{array}$ $\begin{array}{r} 10.92 \\ 11.41 \\ 10.82 \end{array}$ $\begin{array}{r} 10.92 \\ 11.41 \\ 10.82 \end{array}$ $\begin{array}{r} 10.92 \\ 11.41 \\ 10.82 \end{array}$ $\begin{array}{r} 10.92 \\ 11.41 \\ 10.82 \end{array}$

B. 2192 Sp.

\checkmark $\begin{array}{r} 7.50 \\ 8.00 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.47 \end{array}$ $\begin{array}{r} 7.41 \\ 7.47 \end{array}$ $\begin{array}{r} 7.41 \\ 7.47 \end{array}$ $\begin{array}{r} 7.41 \\ 7.47 \end{array}$ $\begin{array}{r} 7.41 \\ 7.47 \end{array}$ $\begin{array}{r} 7.41 \\ 7.47 \end{array}$ $\begin{array}{r} 7.41 \\ 7.47 \end{array}$ $\begin{array}{r} 7.41 \\ 7.47 \end{array}$

ret. I 15788 $\begin{array}{r} 7.80 \\ 7.67 \end{array}$ $\begin{array}{r} 8.60 \\ 8.32 \end{array}$ $\begin{array}{r} 8.20 \\ 8.00 \end{array}$ $\begin{array}{r} 40 \\ 33 \end{array}$ $\begin{array}{r} 40 \\ 32 \end{array}$
 \checkmark $\begin{array}{r} 7.50 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$

ret. I. 14118 $\begin{array}{r} 7.80 \\ 7.67 \end{array}$ $\begin{array}{r} 8.50 \\ 8.22 \end{array}$ $\begin{array}{r} 8.15 \\ 7.94 \end{array}$ $\begin{array}{r} 35 \\ 27 \end{array}$ $\begin{array}{r} 35 \\ 28 \end{array}$
 \checkmark $\begin{array}{r} 7.50 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$ $\begin{array}{r} 7.41 \\ 7.37 \end{array}$

I 1981 Sp. $\begin{array}{r} 7.68 \\ 7.56 \end{array}$ $\begin{array}{r} 7.40 \\ 7.31 \end{array}$ $\begin{array}{r} 7.54 \\ 7.44 \end{array}$ $\begin{array}{r} 14 \\ 12 \end{array}$ $\begin{array}{r} 14 \\ 13 \end{array}$
 \checkmark $\begin{array}{r} 7.28 \\ 7.12 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$ $\begin{array}{r} 7.16 \\ 7.16 \end{array}$

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R. Inanguli - (cont.)

9.00
 8.72 8.76 ℓ Δ 5 r 9.26 9.66 $9.88 = 9.67$
 9.12 9.66 r 0 Δ ℓ 9.66 9.62 9.12
 9.42 9.84 9.88 r 3 ℓ g 10.18 10.14 9.72

9.35
 9.52
 9.56
 15 23 07
 22 40
 34 06 28
 $"$ $"$ $"$

9.00
 8.72 8.76 ℓ Δ 3 r 9.06 $9.56 = 9.31 = .25$
 9.02 9.56 r 1 Δ ℓ 9.66 9.12
 9.52 9.62

9.16
 9.27
 14 14
 25 25

9.72
 10.14
 10.18 g ℓ 3 r 10.48 10.96 $11.51 = 10.98$
 10.42 10.96 10.42
 10.92 11.51 r 2 g ℓ 11.71 11.12
 11.47 11.67

10.02 10.42 $10.92 = 10.45$
 10.44 10.92 11.47 10.94
 43 03 47
 50 02 53
 $"$ $"$ $"$

7.50
 7.37 7.41 ℓ Δ 6 r 8.01 $8.66 = 8.34$
 8.66 r 1 ℓ Δ 8.76 9.00
 8.90 8.62

8.10 $8.90 = 8.50$
 8.97 $8.62 = 8.30$
 40 40
 33 32

8.76 8.72
 $I 13178$ 9.00 ℓ
 $v. m. d.$ $\ell = .2$ < 8.96 9.20

7.50
 7.37 7.41 ℓ Δ 1 r 7.51 $8.36 = 7.94$
 8.32 8.36 r 4 ℓ Δ 8.76 8.72 9.00

7.60 $8.60 = 8.10$
 8.47 $8.32 = 7.90$
 50 50
 43 42

7.28
 7.12 7.16 a 2 r 7.36 $7.31 = 7.34$
 7.40 7.27 7.31 r 1 ℓ Δ 8.41 7.37 7.50

7.48 $7.40 = 7.44$
 7.32 7.27 7.30
 04 04
 02 03

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R. Inanguli (cont.)

10.42 I 11753 $\frac{10.72}{11.22} \frac{11.12}{11.67} = \frac{10.92}{11.44}$
 \checkmark ~~10.72~~ 10.96 $\frac{11.12}{11.67} \frac{11.71}{11.71} = \frac{11.48}{11.48}$
 11.12 11.71 $\frac{11.71}{11.67} \frac{11.71}{11.67} = \frac{11.12}{11.12}$

$\frac{20}{20}$
 $\frac{20}{20}$
 " "

7.50 I 2184 $\frac{8.00}{7.87} \frac{8.60}{8.32} = \frac{8.30}{8.10}$
 \checkmark ~~7.37~~ 7.41 $\frac{8.00}{8.32} \frac{8.60}{8.32} = \frac{8.14}{8.14}$
 8.60 8.36 $\frac{8.36}{8.36} \frac{8.76}{8.76} = \frac{9.00}{9.00}$

$\frac{30}{30}$
 $\frac{20}{20}$
 " "

7.28 I 7566 $\frac{7.48}{7.32} \frac{7.40}{7.27} = \frac{7.44}{7.30}$
 \checkmark ~~7.12~~ 7.16 $\frac{7.48}{7.32} \frac{7.40}{7.27} = \frac{7.34}{7.34}$
 7.40 7.27 $\frac{7.31}{7.31} \frac{7.41}{7.41} = \frac{7.50}{7.50}$

$\frac{04}{04}$
 $\frac{02}{02}$
 " "

I 15716

Tro. pr. v.

7.50 I 14126 $\frac{7.80}{7.67} \frac{8.40}{8.12} = \frac{8.10}{7.90}$
 \checkmark ~~7.37~~ 7.41 $\frac{7.80}{7.67} \frac{8.40}{8.12} = \frac{7.94}{7.94}$
 8.40 8.12 $\frac{8.16}{8.16} \frac{8.76}{8.76} = \frac{9.00}{9.00}$

$\frac{30}{30}$
 $\frac{20}{20}$
 " "

7.50 I 15792 $\frac{7.70}{7.57} \frac{8.60}{8.32} = \frac{8.15}{7.90}$
 \checkmark ~~7.27~~ 7.41 $\frac{7.70}{7.57} \frac{8.60}{8.32} = \frac{7.94}{7.94}$
 8.60 8.32 $\frac{8.36}{8.36} \frac{8.76}{8.76} = \frac{9.00}{9.00}$

$\frac{45}{45}$
 $\frac{30}{30}$
 " "

9.00 I 2424 $\frac{9.10}{8.62} \frac{8.72}{9.22} = \frac{8.91}{8.92}$
 \checkmark ~~8.72~~ 8.76 $\frac{9.10}{8.62} \frac{8.72}{9.22} = \frac{8.96}{8.96}$
 8.72 9.22 $\frac{9.26}{9.26} \frac{9.66}{9.66} = \frac{9.12}{9.12}$

$\frac{19}{19}$
 $\frac{30}{30}$
 " "

7.28 I 1841 $\frac{7.58}{7.42} \frac{7.40}{7.37} = \frac{7.49}{7.34}$
 \checkmark ~~7.12~~ 7.16 $\frac{7.58}{7.42} \frac{7.40}{7.37} = \frac{7.38}{7.38}$
 7.40 7.27 $\frac{7.31}{7.31} \frac{7.41}{7.41} = \frac{7.50}{7.50}$

$\frac{09}{09}$
 $\frac{08}{08}$
 " "

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R. Luanguli (cont.)

\checkmark 10.42 I 16736 $\frac{10.82}{11.32} \frac{11.02}{11.57} = \frac{10.92}{11.44}$ $\frac{10}{12}$ 10
 $\frac{10.92}{11.02} \frac{10.96}{11.57} h g f 4 r$ $\frac{11.36}{11.61} \frac{11.61}{11.67} = \frac{11.48}{11.12}$ $\frac{12}{13}$ 13
 $\frac{11.02}{11.57} \frac{11.61}{11.67} r i g h k$ $\frac{11.71}{11.67} \frac{11.67}{11.12}$

\checkmark 10.42 I 16886 $\frac{10.62}{11.12} \frac{11.12}{11.67} = \frac{10.87}{11.40}$ $\frac{25}{28}$ 25
 $\frac{10.92}{11.12} \frac{10.96}{11.67} h g f 2 r$ $\frac{11.16}{11.71} \frac{11.71}{11.67} = \frac{11.4}{11.12}$ $\frac{28}{27}$ 27
 $\frac{11.12}{11.67} \frac{11.71}{11.67} r o g h k$ $\frac{11.71}{11.67} \frac{11.67}{11.12}$

\checkmark 10.42 I 16888 $\frac{10.62}{11.12} \frac{11.02}{11.57} = \frac{10.82}{11.34}$ $\frac{20}{22}$ 20
 $\frac{10.92}{11.02} \frac{10.96}{11.57} h g f 2 r$ $\frac{11.16}{11.61} \frac{11.61}{11.67} = \frac{11.38}{11.12}$ $\frac{22}{23}$ 23
 $\frac{11.02}{11.57} \frac{11.61}{11.67} r i g h k$ $\frac{11.71}{11.67} \frac{11.67}{11.12}$

\checkmark 9.00 I 15958 $\frac{9.30}{9.02} \frac{8.72}{9.22} = \frac{9.01}{9.12}$ $\frac{29}{30}$ 29
 $\frac{8.72}{9.02} \frac{8.76}{9.22} r d x 3 r$ $\frac{9.06}{9.26} \frac{9.26}{9.62} = \frac{9.16}{9.12}$ $\frac{30}{31}$ 31
 $\frac{8.72}{9.22} \frac{9.26}{9.62} r 4 d x f$ $\frac{9.66}{9.62} \frac{9.62}{9.12}$

\checkmark 7.50 Ref. I 2144 $\frac{7.80}{7.67} \frac{8.80}{8.52} = \frac{8.30}{8.12}$ $\frac{50}{43}$ 50
 $\frac{7.37}{7.41} \frac{7.41}{8.56} v x t 3 r$ $\frac{7.71}{8.56} \frac{8.56}{8.76} = \frac{8.14}{8.72}$ $\frac{43}{42}$ 42
 $\frac{8.80}{8.56} \frac{8.56}{8.76} r 2 x d e$ $\frac{8.76}{8.72} \frac{8.72}{9.00}$

\checkmark I 2149
 var too near edge

\checkmark 9.73 I 16529 $\frac{9.82}{10.24} \frac{10.12}{10.62} = \frac{9.97}{10.43}$ $\frac{15}{19}$ 15
 $\frac{10.14}{10.62} \frac{10.18}{10.66} g f 2 1 r$ $\frac{10.28}{10.66} \frac{10.66}{10.47} = \frac{10.47}{10.42}$ $\frac{19}{20}$ 20
 $\frac{10.62}{10.12} \frac{10.66}{10.42} r 3 f g h$ $\frac{10.76}{10.42} \frac{10.42}{10.42}$

\checkmark 9.72 I 11823 $\frac{10.02}{10.44} \frac{10.42}{10.92} = \frac{10.45}{10.94}$ $\frac{43}{50}$ 43
 $\frac{10.14}{10.44} \frac{10.18}{10.92} g f 3 r$ $\frac{10.48}{10.96} \frac{10.96}{11.51} = \frac{10.98}{10.98}$ $\frac{50}{53}$ 53
 $\frac{10.42}{10.92} \frac{10.96}{10.92} r o f g h$ $\frac{10.96}{10.92} \frac{10.92}{10.42}$
 $\frac{10.92}{11.44} \frac{11.51}{11.67} r 2 g h k$ $\frac{11.71}{11.67} \frac{11.67}{11.12}$

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R. Inanguli (cont.)

~~Ref~~ I. 7630 ~~7.58~~ ~~7.50~~ ~~8.70 = 8.59~~ ~~7.93~~ ~~35~~ ~~43~~ ~~77~~
~~7.28~~ ~~7.42~~ ~~7.37~~ ~~8.42 = 7.74~~ ~~.01~~ ~~.09~~ ~~11~~
~~7.12~~ ~~7.16~~ ~~7.46~~ ~~7.41~~ ~~8.46 = 7.78~~ ~~.32~~ ~~.37~~ ~~.68~~
~~7.50~~ ~~7.37~~ ~~7.41~~ ~~7.41~~ ~~7.37~~ ~~7.50~~ ~~"~~ ~~"~~ ~~"~~
~~8.70~~ ~~8.42~~ ~~8.46~~ ~~8.76~~ ~~8.72~~ ~~9.00~~

I 7695

Tro near edge

~~9.00~~ I. 5308 ~~9.50~~ ~~9.02 = 9.26~~ ~~24~~ ~~24~~
~~8.72~~ ~~8.76~~ ~~9.26~~ ~~9.56 = 9.41~~ ~~.45~~ ~~.75~~
~~9.02~~ ~~9.52~~ ~~9.56~~ ~~9.66~~ ~~9.62~~ ~~9.12~~ ~~"~~ ~~"~~

~~Ref~~ I. 5430 ~~8.10~~ ~~8.90 = 8.50~~ ~~40~~ ~~40~~
~~7.50~~ ~~7.37~~ ~~7.41~~ ~~8.01~~ ~~8.66 = 8.34~~ ~~.31~~ ~~.32~~
~~8.90~~ ~~8.62~~ ~~8.66~~ ~~8.76~~ ~~8.72~~ ~~9.00~~ ~~"~~ ~~"~~

~~Ref~~ I. 5572 ~~8.00~~ ~~8.70 = 8.35~~ ~~35~~ ~~35~~
~~7.50~~ ~~8.37~~ ~~8.41~~ ~~8.71~~ ~~8.46 = 8.68~~ ~~.33~~ ~~.22~~
~~8.70~~ ~~8.42~~ ~~8.46~~ ~~8.76~~ ~~8.72~~ ~~9.00~~ ~~"~~ ~~"~~

~~9.72~~ I. 4946 ~~10.12~~ ~~10.32 = 10.22~~ ~~10~~ ~~10~~
~~10.14~~ ~~10.18~~ ~~10.58~~ ~~10.86 = 10.72~~ ~~.14~~ ~~.14~~
~~10.32~~ ~~10.86~~ ~~10.96~~ ~~10.42~~ ~~"~~ ~~"~~

~~9.72~~ I. 4894 ~~10.02~~ ~~10.22 = 10.12~~ ~~10~~ ~~10~~
~~10.14~~ ~~10.18~~ ~~10.48~~ ~~10.76 = 10.62~~ ~~.14~~ ~~.14~~
~~10.22~~ ~~10.76~~ ~~10.96~~ ~~10.42~~ ~~"~~ ~~"~~

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R. Mauguli (cont)

$\checkmark 9.72$ I 4880 $\begin{array}{r} 9.92 \\ \hline 10.34 \end{array}$ $\begin{array}{r} 10.12 \\ \hline 10.82 \end{array} = \begin{array}{r} 10.02 \\ \hline 10.48 \end{array}$ $\begin{array}{r} 10 \\ \hline 10 \end{array}$
 $\begin{array}{r} 10.14 \\ 10.18 \end{array} g f x 2 r \begin{array}{r} 10.38 \\ \hline 10.66 \end{array} = \begin{array}{r} 10.53 \\ \hline 10.53 \end{array}$ $\begin{array}{r} .14 \\ \hline .14 \end{array}$
 $\begin{array}{r} 10.12 \\ \hline 10.62 \end{array} 10.66 r 3 f g h \begin{array}{r} 10.96 \\ \hline 10.92 \end{array} \begin{array}{r} 10.42 \\ \hline 10.42 \end{array}$

9.72 I 4794 $\begin{array}{r} 10.22 \\ \hline 10.64 \end{array}$ $\begin{array}{r} 10.42 \\ \hline 10.92 \end{array}$ $\begin{array}{r} 10.72 \\ \hline 11.27 \end{array} = \begin{array}{r} 10.45 \\ \hline 10.94 \end{array}$ $\begin{array}{r} 23 \\ \hline 23 \end{array}$ $\begin{array}{r} 03 \\ \hline 03 \end{array}$ 27
 $\begin{array}{r} 10.14 \\ 10.18 \end{array} g f x 5 r \begin{array}{r} 10.68 \\ \hline 10.96 \end{array} \begin{array}{r} 10.96 \\ \hline 11.27 \end{array} = \begin{array}{r} 10.98 \\ \hline 10.98 \end{array}$ $\begin{array}{r} .30 \\ \hline .30 \end{array}$ $\begin{array}{r} .02 \\ \hline .02 \end{array}$ $.32$
 $\begin{array}{r} 10.42 \\ \hline 10.92 \end{array} 10.96 r 0 f g h \begin{array}{r} 10.96 \\ \hline 10.92 \end{array} \begin{array}{r} 10.42 \\ \hline 10.42 \end{array}$ $\begin{array}{r} .30 \\ \hline .30 \end{array}$ $\begin{array}{r} .02 \\ \hline .02 \end{array}$ $.32$
 $\begin{array}{r} 10.72 \\ \hline 11.27 \end{array} 11.27 r 4 f g h \begin{array}{r} 11.71 \\ \hline 11.67 \end{array} \begin{array}{r} 11.12 \\ \hline 11.12 \end{array}$

9.00 I 4587 $\begin{array}{r} 8.76 \\ \hline 8.72 \end{array}$ $\begin{array}{r} 8.82 \\ \hline 8.86 \end{array} = \begin{array}{r} 8.82 \\ \hline 8.86 \end{array}$ 9.10
 $\checkmark 8.76$ $2 \times 2 = .1$ n. n. o. $\begin{array}{r} 8.82 \\ \hline 8.86 \end{array}$ 9.10
 9.28 Rep. I 7520 $\begin{array}{r} 7.58 \\ \hline 7.42 \end{array}$ $\begin{array}{r} 7.50 \\ \hline 7.37 \end{array}$ $\begin{array}{r} 8.40 \\ \hline 8.12 \end{array} = \begin{array}{r} 7.83 \\ \hline 7.64 \end{array}$ $\begin{array}{r} 25 \\ \hline 25 \end{array}$ $\begin{array}{r} 33 \\ \hline 33 \end{array}$ 57
 $\checkmark 7.12$ 7.16 a 3 r $\begin{array}{r} 7.46 \\ \hline 7.41 \end{array}$ $\begin{array}{r} 7.41 \\ \hline 8.16 \end{array} = \begin{array}{r} 7.68 \\ \hline 7.68 \end{array}$ $\begin{array}{r} .22 \\ \hline .22 \end{array}$ $\begin{array}{r} .37 \\ \hline .37 \end{array}$ $.48$
 $\begin{array}{r} 7.50 \\ \hline 7.87 \end{array} 7.41 r 0 \& \& 6 \begin{array}{r} 7.41 \\ \hline 7.37 \end{array} \begin{array}{r} 7.50 \\ \hline 7.50 \end{array}$ $\begin{array}{r} .22 \\ \hline .22 \end{array}$ $\begin{array}{r} .37 \\ \hline .37 \end{array}$ $.48$
 8.40 8.12 8.16 r 6 & & 2 $\begin{array}{r} 8.76 \\ \hline 8.72 \end{array}$ 9.00

I 5199

Too near edge

$\checkmark 9.12$ I 5265 $\begin{array}{r} 9.82 \\ \hline 9.82 \end{array}$ $\begin{array}{r} 9.62 \\ \hline 10.04 \end{array} = \begin{array}{r} 9.47 \\ \hline 9.93 \end{array}$ $\begin{array}{r} 15 \\ \hline 15 \end{array}$ $\begin{array}{r} 15 \\ \hline 15 \end{array}$
 $\begin{array}{r} 9.62 \\ \hline 9.62 \end{array} 9.66 f x x 2 r \begin{array}{r} 9.86 \\ \hline 10.08 \end{array} = \begin{array}{r} 9.97 \\ \hline 9.97 \end{array}$ $\begin{array}{r} .11 \\ \hline .11 \end{array}$ $\begin{array}{r} .11 \\ \hline .11 \end{array}$
 9.62 10.04 10.08 r 1 x f g $\begin{array}{r} 10.18 \\ \hline 10.14 \end{array}$ 9.72

$\checkmark 9.72$ I 2717 $\begin{array}{r} 10.02 \\ \hline 10.44 \end{array}$ $\begin{array}{r} 10.32 \\ \hline 10.82 \end{array} = \begin{array}{r} 10.17 \\ \hline 10.63 \end{array}$ $\begin{array}{r} 15 \\ \hline 15 \end{array}$ $\begin{array}{r} 15 \\ \hline 15 \end{array}$
 $\begin{array}{r} 10.14 \\ 10.18 \end{array} g f x 3 r \begin{array}{r} 10.48 \\ \hline 10.86 \end{array} = \begin{array}{r} 10.67 \\ \hline 10.67 \end{array}$ $\begin{array}{r} .19 \\ \hline .19 \end{array}$ $\begin{array}{r} .19 \\ \hline .19 \end{array}$
 $\begin{array}{r} 10.32 \\ \hline 10.82 \end{array} 10.86 r 1 f g h \begin{array}{r} 10.96 \\ \hline 10.92 \end{array} \begin{array}{r} 10.42 \\ \hline 10.42 \end{array}$

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R. Trianguli (cont.)

I 2771

Iron near edge

I 2643

Iron near edge

Ref. ± 9547 7.70 $8.70 = 8.20$ 50 50
 7.50 7.44 7.42 7.64 $8.44 = 8.04$ $.43$ $.42$
 8.70 8.44 8.34 8.76 9.00 $"$ $"$

I 9608

Iron near edge

Ref. ± 9296 7.58 7.50 $8.50 = 7.86$ 28 36 $.64$
 7.28 7.42 7.37 $8.22 = 7.67$ $.25$ $.80$ $.65$
 7.12 7.16 7.41 $8.26 = 7.71$ $"$ $"$ $"$
 7.80 7.37 7.41 7.41 7.37 7.50
 8.80 8.22 8.26 8.76 8.72 9.00

9.72 ± 10250 10.02 10.42 $10.92 = 10.45$ 43 03 $.47$
 10.14 10.44 10.92 11.47 10.94 $.50$ $.02$ $.63$
 10.18 10.96 10.48 10.96 $11.51 = 10.98$ $"$ $"$ $"$
 10.42 10.96 10.96 10.92 10.42
 10.92 11.51 11.71 11.67 11.12

± 10080 9.42 9.52 9.47 05 05
 9.12 9.92 9.94 9.93 $.01$ $.01$
 9.62 9.66 9.96 $10.98 = 9.97$ $"$ $"$
 9.52 9.94 10.98 10.18 9.72

 ± 10343

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R. Manguli (cont.)

9.00 I 7882 $\frac{9.10}{8.82} \frac{8.82}{8.82} = \frac{8.71}{8.82}$ 39 39
 $\frac{8.72}{8.82} 8.76 \text{ l} \& \text{ 1r } 8.86 \quad 8.86 = 8.86$.00 .00
 ✓ $\frac{8.32}{8.82} 8.86 \text{ r } 8 \& \text{ f } 7.66 \quad 7.62 \quad 9.12$ "

7.50 Ret. I 7899 $\frac{8.10}{7.97} \frac{8.80}{8.52} = \frac{8.45}{8.24}$ 35 35
 $\frac{7.37}{7.41} \text{ l} \& \text{ 6r } 8.01 \quad 8.56 = 8.28$.27 .28
 ✓ $\frac{8.51}{8.56} 8.56 \text{ r } 2 \& \text{ e } 8.76 \quad 8.72 \quad 9.00$ "

7.50 Rep. I 7824 $\frac{8.7.90}{7.84} \frac{8.90}{8.62} = \frac{8.40}{8.20}$ 50 50
 $\frac{7.37}{7.41} \text{ l} \& \text{ 4r } 7.81 \quad 8.66 = 8.24$.43 .42
 8.90 $\frac{8.62}{8.66} \text{ r } 1 \& \text{ e } 8.76 \quad 8.72 \quad 9.00$ "

9.00 I 16207 $\frac{9.70}{7.42} \frac{8.92}{7.42} = \frac{9.31}{7.42}$ 39 39
 ✓ $\frac{8.72}{8.76} \text{ l} \& \text{ 7r } 9.46 \quad 9.46 = 9.46$.00 .00
 8.92 $\frac{9.42}{9.46} \text{ r } 2 \& \text{ f } 7.66 \quad 7.62 \quad 9.12$ "

9.00 I 14371 $\frac{9.50}{7.22} \frac{8.82}{7.32} = \frac{9.16}{7.27}$ 34 34
 ✓ $\frac{8.72}{8.76} \text{ l} \& \text{ 5r } 9.26 \quad 9.36 = 9.31$.05 .05
 $\frac{8.82}{9.32} 9.36 \text{ r } 3 \& \text{ f } 9.66 \quad 9.12$ "

7.50 Ret. I 15556 $\frac{7.90}{7.77} \frac{8.50}{8.22} = \frac{8.20}{8.12}$ 30 30
 $\frac{7.37}{7.41} \text{ l} \& \text{ 4r } 7.81 \quad 8.26 = 8.04$.23 .22
 ✓ $\frac{8.50}{8.22} 8.26 \text{ r } 5 \& \text{ e } 8.76 \quad 8.72$ "

9.00 I 2705 $\frac{9.80}{9.52} \frac{9.02}{9.52} = \frac{9.41}{9.52}$ 39 39
 ✓ $\frac{8.72}{8.76} \text{ l} \& \text{ 8r } 9.56 \quad 9.56 = 9.56$.00 .00
 $\frac{9.02}{9.52} 9.56 \text{ r } 1 \& \text{ f } 9.66 \quad 9.62$ "

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R. Inanguli (imb.)

\checkmark 10.10.42 I 2867 $\frac{10.72}{11.22} \frac{11.02}{11.57} = \frac{10.87}{11.40}$
 $\frac{10.94}{10.96} \times 3 \approx 11.26 \quad 11.61 = 11.44$
 11.02 $\frac{11.57}{11.61}$ 11.61 $\frac{11.71}{11.67} 11.12$

$\frac{15}{18} \quad \frac{15}{17}$
 " "

\checkmark I 10343 Sp.

$\frac{7.50}{7.50} \quad r.m.s \text{ by } = .4$

$\frac{7.41}{7.37}$

$\frac{7.81}{7.77}$

$\frac{7.90}{7.90}$

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91

15^h 0^m Measures of α Persei.

I 17050

✓ 9.30 b 2 r 9.50 9.62 9.72 = 9.61 .11 .01 .11
 9.62 r 0 c 9.62
 9.72 r 2 d 9.92

✓ I 16628

100 near edge

I 16662

✓ 8.48 a 3 r 8.78 9.30 9.32 = 9.13 .85 .17 .19
 9.30 r 0 b 9.30
 9.32 b 3 c 9.62

I 16875

✓ 9.30 b 1 r 9.40 9.62 9.72 = 9.58 .18 .04 .14
 9.62 r 0 c 9.62
 9.72 r 2 d 9.92

I 17035

✓ 9.30 b 2 r 9.50 9.52 = 9.51 .01 .01
 9.52 r 1 c 9.62

I 16552

✓ 9.30 b 3 r 9.60 9.52 = 9.56 .04 .04
 9.52 r 1 c 9.62

✓ I 16226

9.62 c 3 r 9.92 9.72 = 9.82 .10 .10
 9.72 r 2 d 9.92

Jan. 30, 1897

Measures of η Pusei (comb.)

I 16692

✓ 8.48 a 4 r 8.88 9.30 9.42 = $\overset{9.20}{\cancel{8.87}}$.32 .10 .22
 9.30 r o b 9.30
 9.42 r 2 c 9.62

I 16525

✓ 9.30 b 1 r 9.40 9.32 = 9.36 .04 .04
 9.32 r 3 c 9.62

I 16391

✓ 9.30 b 2 r 9.50 9.62 9.72 = 9.61 .11 .01 .01
 9.62 r o c 9.62
 9.72 r 2 d 9.92

Feb. 19, 1897

14h.

Measures N. Persei.I. 17190.

9.30 b 2 r 9.50 9.62 9.72 = 9.64 .10 .00 .11

✓ 9.62 r o c 9.62

9.72 r 2 d 9.92

I 16735

✓ 9.30 b 1 r 9.40 9.52 = 9.46 .06 .06

9.52 r 1 d 9.62

✓ I 16764.

9.62 c 1 r 9.72 9.62 = 9.67 .05 .05

9.62 r 3 d 9.92

Feb. 26, 1897

14 h. 0 m.

Measures of R. Trianguli (Repeated).

I 2235.

$\begin{array}{ccccccc} & \cancel{7.95} & \cancel{8.20} & & & & \\ 2.00 & 7.75 & 7.79 & 2r & 7.99 & 8.11 = & \cancel{8.05} \\ & .06 & .06 & & & & \\ s.25 & \cancel{8.07} & 8.11 & r & 1d. & \cancel{8.21} & \cancel{8.17} & 8.35 & \cancel{8.20} & 8.25 = & 8.22 & .02 & .03 \\ & & & & & \cancel{7.95} & \cancel{8.07} = & \cancel{8.01} & \cancel{.06} & \cancel{.06} & .06 \end{array}$

$$a = 5.5$$
$$b = 5.7$$
$$c = 6.0$$
$$d = 6.3$$
$$e = 6.6$$
 $f = 7.0$ $q = 7.5$
$$h = 8.1$$
 $h_2 = 8.9$
$$r_{av} = 6$$

I. 2005

$\frac{7.50}{7.37} \frac{7.41}{7.45} \approx 3 \approx \frac{7.67}{7.79} \frac{7.45}{7.75} = 7.60$
 $\frac{7.80}{7.75} \frac{7.70}{7.75} = 7.75$
 $\frac{7.45}{8.00} \frac{7.70}{7.75} = 7.71$
 $\frac{7.50}{7.37} \frac{7.41}{7.45} \approx 3 \approx \frac{7.67}{7.79} \frac{7.45}{7.75} = 7.60$
 $\frac{7.80}{7.75} \frac{7.70}{7.75} = 7.75$
 $\frac{7.45}{8.00} \frac{7.70}{7.75} = 7.71$

 ~~$a = 5.5$~~
$$Q = 5.5$$
$$b = 5.7$$

$C = 6.9$

 $d = 6.5$
$$e = 7.0$$
 $\mu = 7.5$ $q = 8.0$
$$h = 8.6$$
$$k_2 = n.$$
$$\sigma_{AV} = 3$$

Feb. 26, 1897

Measures of R. Inanguli (cont.)

I 5808

 $a = 5.4$ $b = 5.6$ $c = 6.0$ $d = 6.3$ $e = 6.8$ $f = 7.3$ $g = 7.8$ $h = 8.2$ $k = 8.9$ $\text{rav} = 7.2$ ~~9.00~~
~~8.72~~~~9.40~~ ~~9.02 = 9.21~~
~~9.12~~ ~~9.52 = 9.32~~~~19~~ ~~19~~
~~.20~~ ~~.20~~~~8.76~~ ~~0.4~~ ~~r~~ ~~9.16~~ ~~9.56 = 9.36~~~~.20~~ ~~.20~~~~9.02~~
~~9.58~~ ~~r~~ ~~1 f~~ ~~9.66~~ ~~9.62~~ ~~9.12~~~~7.50~~ I 7824 ~~7.80~~ ~~7.80 = 7.80~~ ~~00~~ ~~00~~
~~7.67~~ ~~7.55 = 7.61~~ ~~.06~~ ~~.06~~
~~7.37~~ ~~7.41~~ ~~b~~ ~~3~~ ~~r~~ ~~7.71~~ ~~7.59 = 7.65~~ ~~.06~~ ~~.06~~~~7.80~~ ~~7.55~~ ~~7.59~~ ~~r~~ ~~2~~ ~~c~~ ~~7.79~~ ~~7.75~~ ~~8.00~~ $a = 5.5$ $b = 5.7$ $c = 6.0$ $d = 6.3$ $e = 6.8$ $f = 7.2$ $g = 7.5$ $h = 8.3$ $k = 9.0$ $\text{rav} = 5.8$ ~~7.50~~
~~7.37~~~~7.60~~ ~~7.80 = 7.70~~
~~7.47~~ ~~7.55 = 7.51~~~~10~~ ~~10~~
~~.04~~ ~~.04~~~~7.41~~ ~~0.1~~ ~~r~~ ~~7.51~~ ~~7.59 = 7.55~~~~.04~~ ~~.04~~~~7.80~~
~~7.59~~ ~~r~~ ~~2~~ ~~c~~ ~~7.79~~ ~~7.75~~ ~~8.00~~

Feb. 26, 1897.

Measurements of R. Inauguli (cont.)

7.50 I 14118 $\frac{7.70 \ 7.85 = 7.78}{7.57 \ 7.67 \ 7.62}$ 08.07
~~7.37~~ 7.41 b 2 r 7.61 $\frac{7.71 = 7.66}{7.5}$.05
~~7.67~~ 7.71 r 5 d 8.21 c not on plate. 8.85
~~8.17~~

7.50 I 15788 $\frac{7.90 \ 7.90 = 7.907}{7.77 \ 7.65 = 7.81}$ 00 00
~~7.37~~ 7.41 b 4 r 7.81 $\frac{7.69 = 7.75}{7.6}$.06
 7.90 ~~7.65~~ 7.69 r 1 c ~~7.79~~ 7.75 8.00

7.50 I 12283 $\frac{7.60 \ 7.70 = 7.65}{7.47 \ 7.45 = 7.46}$ 05 05
~~7.37~~ 7.41 b 1 r 7.51 $\frac{7.49 = 7.50}{7.4}$.01
 7.70 ~~7.45~~ 7.49 r 3 c ~~7.79~~ 7.75 8.00

7.28 I 7520 $\frac{7.58 \ 7.50 \ 7.60 \ 7.56}{7.42 \ 7.37 \ 7.35 = 7.38}$ 02 06 04
~~7.12~~ 7.16 a 3 r 7.46 $\frac{7.41 \ 7.39 = 7.42}{7.4}$.04
~~7.50~~ ~~7.37~~ 7.41 r 0 b 7.41 ~~7.37~~ 7.50
 7.60 ~~7.35~~ 7.39 r 4 c ~~7.79~~ 7.75 8.00

7.28 I 7630 $\frac{7.48 \ 7.50 \ 7.80 = 7.59}{7.32 \ 7.37 \ 7.55 = 7.41}$ 11 09 21
~~7.12~~ 7.16 a 2 r 7.36 $\frac{7.41 \ 7.59 = 7.45}{7.3}$.08
~~7.50~~ ~~7.37~~ 7.41 r 0 b 7.41 7.37 7.50
 7.80 ~~7.58~~ r 2 c ~~7.79~~ 7.75 8.00

7.50 I 9296 $\frac{7.60 \ 7.80 = 7.70}{7.47 \ 7.55 = 7.51}$ 10 16
~~7.37~~ 7.41 b 1 r 7.51 $\frac{7.59 = 7.55}{7.4}$.04
 7.80 ~~7.54~~ 7.59 r 2 c ~~7.79~~ 7.75 8.00

I 1875 $\frac{7.47 \ 7.35 = 7.41}{7.37 \ 7.41 b 1 r 7.51 \ 7.39 = 7.45}$.06
 7.35 7.39 r 4 c 7.79
~~7.75~~

Feb. 26, 1897

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Measurements of R. Inanguli (cont.)

7.50 I 15792 7.70 8.00 $8.15 = 7.95$ $\frac{25}{19}$ $\frac{05}{01}$ $\frac{20}{21}$
 ~~7.57~~ ~~7.75~~ ~~$7.97 = 7.76$~~
 7.37 7.41 7.20 7.61 7.79 $8.01 = 7.80$ $\frac{19}{19}$ $\frac{01}{01}$ $\frac{21}{21}$
 8.00 ~~7.75~~ ~~7.79~~ 7.00 7.79 ~~7.75~~ 8.00
 8.15 ~~7.97~~ ~~8.01~~ 7.20 ~~8.21~~ ~~8.17~~ 8.35

8.00 I 12188 8.10 $8.25 = 8.18$ $\frac{08}{11}$ $\frac{07}{11}$
 ~~7.85~~ ~~$8.07 = 7.96$~~
 ~~7.75~~ ~~7.79~~ 7.00 7.89 ~~$8.11 = 8.00$~~ $\frac{11}{11}$ $\frac{11}{11}$
 8.25 ~~8.07~~ ~~8.11~~ 7.00 ~~8.21~~ ~~8.17~~ 8.35

7.28 I 2144 7.48 7.50 $7.90 = 7.63$ $\frac{15}{13}$ $\frac{13}{08}$ $\frac{27}{20}$
 ~~7.32~~ ~~7.37~~ ~~$7.65 = 7.45$~~
 7.12 7.16 7.20 7.26 7.41 $7.69 = 7.49$ $\frac{13}{11}$ $\frac{08}{11}$ $\frac{20}{20}$
 7.50 ~~7.37~~ ~~7.41~~ 7.00 7.41 ~~7.37~~ 7.50
 7.90 ~~7.65~~ ~~7.69~~ 7.00 ~~7.79~~ ~~7.75~~ 8.00

I 15556 7.77 7.55 7.66
 7.37 ~~7.41~~ 7.40 7.81 ~~$7.59 = 7.70$~~ $\frac{11}{11}$
 7.55 ~~7.59~~ 7.20 ~~7.79~~ 7.75

I 7899 8.20 8.35 $8.70 = 8.42$ $\frac{22}{23}$ $\frac{07}{01}$ $\frac{28}{24}$
 ~~7.95~~ ~~8.17~~ ~~$8.42 = 8.18$~~
 ~~7.75~~ ~~7.79~~ 7.20 ~~7.99~~ ~~8.21~~ ~~$8.46 = 8.22$~~ $\frac{23}{23}$ $\frac{01}{01}$ $\frac{24}{24}$
 8.35 ~~8.17~~ ~~8.21~~ 7.00 ~~8.21~~ ~~8.17~~ 8.35
 8.70 ~~8.42~~ ~~8.46~~ 7.20 ~~8.76~~ ~~8.72~~ 9.00

7.50 I 5572 7.80 $7.80 = 7.80$ $\frac{00}{00}$ $\frac{00}{00}$
 ~~7.67~~ ~~7.55~~ ~~7.61~~
 ~~7.37~~ ~~7.41~~ 7.30 ~~7.71~~ ~~$7.59 = 7.65$~~ $\frac{06}{06}$ $\frac{06}{06}$
 7.80 ~~7.55~~ ~~7.59~~ 7.20 ~~7.79~~ ~~7.75~~ 8.00

Feb. 26, 1897.

Measures of R. Inanguli (cont.)

$$\begin{array}{rcl}
 I \ 5430 & 8.65 & 8.90 = 8.78 \\
 8.35 & 47 & \\
 \cancel{8.5} & \cancel{d} & \cancel{3r} \ 8.51 \ 8.68 = 8.58 \\
 8.90 & \cancel{8.64} & r \ 1 \ 2 \ 8.76 = 9.00
 \end{array}
 \quad
 \begin{array}{r}
 13 \\
 .07 \\
 \hline
 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 12 \\
 .08 \\
 \hline
 \\
 \hline
 \end{array}$$

$$\begin{array}{rcl}
 I \ 2184 & 7.47 & 7.5 - 7.80, 7.80 = 7.80 \\
 7.50 & \cancel{7.4} & \cancel{b} & \cancel{3r} \ 7.71 \ 7.57 = 7.65 \\
 7.80 & \cancel{7.59} & r \ 2 \ 7.77 = 8.00
 \end{array}
 \quad
 \begin{array}{r}
 4 \\
 .06 \\
 \hline
 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 4 \\
 .06 \\
 \hline
 \\
 \hline
 \end{array}$$

$$\begin{array}{rcl}
 I \ 14126 & 8.20 & 8.35 - 8.60 = 8.38 \\
 8.00 & 5 & 17 & 32 = 5 \\
 7.78 & \cancel{c} & \cancel{2r} \ 7.99 \ 8.21 \ 8.56 = 8.19 \\
 8.85 & \cancel{8.21} & r \ 0 & \cancel{d} \ 8.21 \ 8.35 \\
 8.60 & \cancel{8.56} & r \ 4 & \cancel{2} \ 8.76 = 9.00
 \end{array}
 \quad
 \begin{array}{r}
 18 \\
 .20 \\
 \hline
 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 03 \\
 .02 \\
 \hline
 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 22 \\
 .17 \\
 \hline
 \\
 \hline
 \end{array}$$

$$\begin{array}{rcl}
 I \ 9547 & 7.80 & 7.80 = 7.80 \\
 7.50 & \cancel{7.4} & \cancel{b} & \cancel{3r} \ 7.71 \ 7.57 = 7.65 \\
 7.80 & \cancel{7.59} & r \ 2 & \cancel{c} \ 7.77 = 8.00
 \end{array}
 \quad
 \begin{array}{r}
 4 \\
 .06 \\
 \hline
 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 4 \\
 .06 \\
 \hline
 \\
 \hline
 \end{array}$$

Feb. 27 1897.

I. 2875

r. m. o.

$$\begin{array}{rcl}
 11.12 & \cancel{11.71} & b = .1 < 11.81 \\
 & \cancel{11.67} & \cancel{11.77} \\
 & & 11.22
 \end{array}$$

March 2, 1897.

Measures of R. Traugott.

I 3188 (1236).

m.m.o.

11.12 11.77 $\frac{1}{67}$ = .1 11.81 $\frac{1}{67}$ < 11.81 11.22
~~11.77~~ < ~~11.77~~

10.42 I 2875. 10.52 11.12 = 10.82 30 30
~~11.02~~ ~~11.67~~ = ~~11.34~~
~~10.92~~ 10.96 $\frac{1}{17}$ 11.06 11.71 = 11.38 ~~.32~~ ~~.33~~
~~11.12~~ ~~11.67~~ 11.71 $\frac{1}{17}$ 11.67 11.12
 " " "

✓ I 2000 sp. 7.58 7.30 = 7.44
~~7.28~~ ~~7.42~~ ~~7.17~~ ~~7.30~~
~~7.12~~ 7.16 a 3 br 7.46 7.21 = 7.34 14 14
~~7.30~~ ~~7.24~~ $\frac{1}{17}$ r 2 b 7.44 ~~27~~ 7.50
 " " "

March 2, 1897

Measures of Sawyer's Variable. $6^h 39.3^m + 15^\circ 25' 7.3''$
 comparison stars on 10891.

14^h 45'

I 5643. (1279)

7.29 b 1 r 7.39

7.47 r o c 7.47

7.47 r 2 d 7.67

7.77 r 3 f 8.07

7.04 a 2 r 7.24

e 7.72 r 2 e 7.92

b 7.39

c 7.47

d 7.47

f 7.77

a 7.24

7.51

.27 .12 .04 .04 .31 .26

I. 10891.

7.47 c 1 r 7.57

7.42 r 2 d 7.67

7.77 r 3 f 8.07

7.04 a 3 r 7.34

7.29 b 2 r 7.49

7.79 r 2 e 7.92

7.34

7.49

7.57

7.42

7.79

7.77

7.56

.22 .07 .01 .14 .23 .21

a = 4.8

7.04 a 3 r

7.19 r 1 b 7.29

b = 5.0

7.47 r o c 7.47

7.47 r 2 d 7.67

c = 5.1

7.52 r 4 e 7.92

d = 5.3

7.57 r 5 d 8.07

e = 5.5

7.38

.34

.19

.09

.09

.14

.19

f = 5.6

7.04 a 3 r

7.79 = 7.26

.08

.08

rav = 5.1

7.19 r 1 b 7.29

I. 14094. Sp.

7.92 e 2 r 8.12

7.97 r 1 f 8.07

7.04 a 5 r 7.54

7.47 c 3 r 7.77

7.29 b 4 r 7.69

7.67 d 1.5 r 7.82

7.54

7.69

7.77

7.82

8.12

8.07

7.84

.30 .15 .07 .02 .28 .23

14153 Sp.

Var. tremula edge

March 2, 1897

Measures of Sanyer's Variable (cont.)

I. 1937.

7.04 a 2 r 7.24
 7.19 r 1 b 7.29
 7.77 r 3 f 8.07
 7.47 r 2 d. 7.67

7.37 r 1 c 7.47
 7.67 r 3 se 7.92

7.24
 7.29
 7.47
 7.67
 7.67
 7.77
 7.52

.28 .23 .05 .15 .15 .25

I 12334.

7.04 a 2 r 7.24
 6.99 r 3 b 7.29
 7.57 r 5 f 8.07
 7.37 r 3 d 7.67

7.17 r 3 c 7.47
 7.52 r 4 e 7.92

7.24
 6.99
 7.17
 7.37
 7.52
 7.57
 7.31

I. 10325

7.47 c 1 r 7.57
 7.67 r 0 d 7.67
 7.82 r 1 e 7.92
 7.04 a 2 r 7.24
 7.87 r 2 f 8.07

7.29 b 1.5 r 7.44

7.24
 7.44
 7.57
 7.67
 7.82
 7.87
 7.60

.07 .32 .14 .07 .21 .26

.36 .16 .03 .07 .22 .27

I 3108

7.92 e 1 r 8.02
 7.97 r 1 f 8.07
 a not in plate
 7.29 b 4 r 7.69

7.47 c 3 r 7.77
 7.67 d 1.5 r 7.83

7.69
 7.77
 7.82
 8.02
 8.07
 7.87

.18 .10 .05 .15 .20

I. 5468

7.67 d 1 r 7.77
 7.92 r 0 e 7.92
 7.97 r 1 f 8.07
 7.04 a 4 r 7.44

7.29 b 3 r 7.59
 7.47 c 2 r 7.69

7.44
 7.59
 7.69
 7.77
 7.92
 7.97
 7.73

.29 .14 .04 .04 .19 .24

March 2 1897.

Measures of Sanyer's Variables (ont)

I 5485

7.92e 2 r 8.12
7.97 r 1 f. 8.07
7.04 a 4 r 7.44

7.29 b 3 r 7.59 7.44
7.47 c 2.5 r 7.72 7.59
7.67 d 2.5 r 7.92 7.72
8.12
8.07

7.81

I 2844

7.29 b 1 r 7.39
7.47 r o c 7.47
7.57 r 1 d 7.67
7.04 a 2 r 7.34
7.77 r 3 f. 8.07

7.72 r 2 e 7.92 7.34
7.39
7.47
7.57
7.72
8.77

7.54 .37 .22 .09 .11 .31 .26
.20 .15 .07 .03 .18 .23

I 5512

7.29 b 1 r 7.39
7.47 r o c 7.47
7.57 r 1 d 7.67
7.04 a 2 r 7.24
7.77 r 3 f. 8.07

7.72 r 2 e 7.92 7.24
7.29
7.47
7.67
7.72
8.72

7.52
.28 .23 .05 .15 .20 .20

I 7844

7.04 a 1 r 7.14
7.29 r o b 7.29
7.37 r 1 c 7.47
7.77 r 3 f. 8.07

7.47 r 2 d 7.67 7.14
7.67 r 2.5 e 7.92 7.29
7.37
7.47
7.67
7.77

7.45
-31 .26 .08 .12 .22 .32

I 14417

7.47 r 1 r 7.57
7.57 r 1 d 7.67
7.04 a 2 r 7.24
7.87 r 2 f. 8.07

7.29 b 2 r 7.49 7.24
7.82 r 1 e 7.92 7.49
7.57
7.57
7.82
7.87

7.59
.35 .10 .02 .02 .23 .28

March 2, 1897.

Measures of Sauguis Variable (cont).

I 14528

7.47 c 2 r 7.67
 7.57 r 1 d 7.67
 7.04 a 3 r 7.34
 7.77 r 3 f 8.07

7.34
 7.59
 7.67
 7.57
 7.72
 7.77
 7.61
 .27 .02 .06 .04 .11 .16

I 14677

7.29 b 1 r 7.39
 7.37 r 1 c 7.47
 7.04 a 2 r 7.24
 7.77 r 3 f 8.07

7.24
 7.39
 7.37
 7.47
 7.67
 7.77
 7.48
 .24 .09 .11 .01 .19 .29

I 14865

7.29 b 2 r 7.49
 7.47 a 0 c 7.47
 7.47 r 2 d 7.67
 7.04 a 3 r 7.34
 7.77 r 3 f 8.07

7.34
 7.49
 7.47
 7.47
 7.67
 7.77
 7.54
 .20 .05 .07 .07 .13 .23

I 8042

7.29 b 1 r 7.39
 7.47 r 0 c 7.47
 7.47 r 2 d 7.67
 7.04 a 2 r 7.24
 7.77 r 3 f 8.07

7.24
 7.39
 7.47
 7.47
 7.72
 7.77
 7.51
 .27 .12 .04 .04 .21 .26

I 9635

7.29 b 1 r 7.39 7.04 a 2 r 7.24
 7.47 r 0 c 7.47 7.77 r 3 f 8.07
 7.47 r 2 d 7.67

7.24
 7.39
 7.47
 7.47
 7.72
 7.72
 7.50
 .26 .11 .03 .03 .22 .22

March 2 1897

Measures of Sawyer's Van (comb.)

I 13980

Plate useless

I. 10325

7.07 a = 4.9	a 6 r 7.67				
7.29 b = 5.1	b 4 r 7.69				
7.47 c = 5.3	c 2 r 7.67				
7.67 d = 5.5	r 0 d 7.67				
7.92 e = 5.8	7.62 r 3 e 7.62				
8.07 f = 6.0	7.57 r 5 f	7.57	.03	.05	.03
ran = 5.5		<u>7.64</u>	.03	.03	.03
				.02	.07

I. 5468.

7.07 a = 4.6	a 9 r 7.97				
7.29 b = 4.9	b 6 r 7.89				
7.47 c = 5.1	c 4 r 7.87				
7.67 d = 5.3	d 2 r 7.87				
7.92 e = 5.6	r 1 e 7.82				
8.07 f = 5.8	r 3 f	7.77			
ran = 5.5		<u>7.86</u>	.11	.03	.01
			.01	.04	.09

I. 5485.

7.04 a = 4.6	a 11 r 8.14				
7.29 b = 4.9	b 8 r 8.09				
7.47 c = 5.1	c 6 r 8.07				
7.67 d = 5.3	d 4 r 8.07				
7.92 e = 5.5	e 2 r 8.12				
8.07 f = 5.6	f 1 r	8.17	.03	.02	.04
ran = 5.9		<u>8.11</u>	.04	.04	.01
				.06	

April 13, 1897.

15^h 0^m. Measures of R. Caeli - 4 37.1 - 38° 26' (1900).
Comparison Stars on I. 4493.

B 4493

✓ 6.86 a 2 r 7.06 7.16 = 7.11 .05 .05

7.16 r 3 b 7.46

B 15488

✓ 7.46 b 3 r 7.76 8.06 = 7.91 .15 .15

8.06 r 1 c 8.16

B 15663

✓ 7.46 b 4 r 7.86 7.86 = 7.86 .00 .00

7.86 r 3 c 8.16

B 16822

9.46 r 3 r 9.76 10.21 10.83 = 10.27 .51 .06 .56

✓ 10.21 r 0 f 10.21

10.83 r 3 g 11.13

B 16996

✓ 10.21 f 2 r 10.41 10.93 = 10.67 .26 .26

10.93 r 2 g 11.13

B 15333

✓ 11.13 g 1 r 11.23 11.6⁵ = 11.45⁴ .22¹ .22¹

11.6⁵ r 3 h 11.97⁵

B 15379

✓ 8.88 d 1 r 8.98 9.26 = 9.12 .14 .14

9.26 r 2 g 9.46

April 13, 1897

Measurements of R Caeli (cont.)

B 12846

✓ 7.46 h 5 r 7.96 8.16 8.58 = 8.23 .27 .07 .35
 8.16 r 0 c 8.16
 8.58 r 3 d 8.88

B 4315

✓ 6.86 a 3 r 7.16 7.26 = 7.21 .05 .05
 7.26 r 2 b 7.46

B 4345

✓ 6.86 a 1 r 6.96 7.26 = 7.11 .15 .15
 7.26 r 2 b 7.46

B 14327

May 15, 1897

10^h 0^m Measures of R Caeli (cont.) Comparison stars on B 12725

B 12725

✓ 12.53 l 2 r 12.73 12.88 = 12.80 .07 .08
 12.88 r 3 l 13.18

B 12454.

✓ 13.18 l 2 r 13.38 13.63 = 13.50 .12 .13
 13.63 r 1 m 13.73

B 15104

✓ 13.73 m 4 r 14.13
 13.98 o. m. s.

B 7138

✓ 8.16 c 2 r 8.36 8.78 = 8.57 .21 .21
 8.78 r 1 d 8.88

B 8875

✓ 8.16 c 3 r 8.46 8.68 = 8.57 .11 .11
 8.68 r 2 d 8.88

B 6984

✓ 12.53 l 3 r 12.83 13.18 = 13.00 .17 .18
 13.18 r 0 l 13.18
 13.73 m m s.

B. 6962

✓ 11.9⁵ p h 3 r 12.2⁵ 12.53 13.08 = 12.6²3 .3⁷6 .1⁰⁹6 .4⁶5
 12.53 r 0 l 12.53
 13.08 r 1 l 13.18

May 15, 1897

Measurements of R Coeli (cont.)

B 6983

✓ 12.53 h 3 r 12.83
13.18 l.m.s.

B 17306

✓ 12.53 h 1 r 12.63 12.78 = 12.70 .07 .08
12.78 r 4 l 13.18

B 17853

✓ 12.53 h = .3 < 12.83
r.m.s.

B 17606

✓ 13.18 h 2 r 13.38 13.63 = 13.50 .12 .13
13.63 r 1 m 13.73

10607

B 17422

✓ 12.53 h 2 r 12.73 13.08 = 12.90 .17 .18
13.08 r 1 l 13.18

B 14700

✓ 13.73 m 3 r 14.03 13.78 = 13.90 .13 .12
13.78 r 2 o 13.98

B 11876

✓ 12.53 h 4 r 12.93 13.18 13.63 = 13.25 .32 .07 .38
13.18 r 0 l 13.18
13.63 r 1 m 13.73

May 15, 1897

Measures of R Caeli (cont)

B 12322

✓ 13.18 $h = .1$ r.m.s. < 13.28

✓ B 12217

12.53 $h = .1$ r.m.s. < 12.63

B 14327

✓ 12.53 $h = .1$ r 12.63 12.78 = 12.70 .07 .0812.78 r 4 h 13.18

B 14841

✓ 13.73 $n = .1$ r.m.s. < 13.83 B 48⁵5✓ 11.13 $g = .1$ r.m.s. < 11.23

✓ ≡ B 17827

10.21 $f = .1$ r.m.s. < 10.31

✓ B 12526

13.73 $n = .1$ r 13.83 13.78 = 13.80 .03 1.02

13.78 r 20 13.98

out

B 12484

12.53 $h = .1$ r.m.s. < 12.63

✓ B 14607

12.53 $h = .5$ r 13.0313.18 h r.m.s.

May 15, 1897

measures of R Carli (cont.)

B 12218

✓ 12.53 $h = .1$ r.m.s. < 12.63

B 14540

✓ 13.18 $h = .1$ r 13.28

r.m.s.

B 17741

✓ 13.73 $h = .2$ r.m.s. < 13.93

B 12335

✓ 13.18 $h = .1$ r.m.s. < 13.28

B 10438

✓ 11.13 $g = .2$ r.m.s. < 11.33

B 12336

✓ 13.18 $h = .1$ r.m.s. < 13.28

B 11980

✓ 12.53 $h = .2$ r.m.s. < 12.73

B 17280

✓ 11.97⁵ $h = .4$ r 12.37⁵ 12.43 = 12.41³⁹ .03⁴ .03⁴

12.43 r 1 h 12.53

B 12162

✓ 13.18 $h = .1$ r.m.s. < 13.28

May 15, 1897

Measures of R. Caeli (cont.)

B 17160

✓ 11.13 g 1 r 11.23 11.9⁵ 12.43 = 11.8⁷ .6⁴ .09⁸ .5⁶
 11.9⁵ r 0 h 11.9⁵
 12.43 r 1 h 12.53

B 15282

✓ 12.53 h 1 r l.m.s. 12.63

B 15218

✓ 13.18 l 1 r 13.28 13.73 = 13.50 .22 23
 13.73 r 0 m 13.73

B.17642

✓ 13.18 l = .1 r.m.s. < 13.28

B 17668

✓ 12.53 h = .2 r.m.s. < 12.73

B 8347

✓ 13.73 h = .1 r.m.s. < 13.83

B 8792.

✓ 12.53 h 5 r 13.03 13.08 = 13.06 .03 .02
 13.08 r 1 l 13.18

B 8786 sp.

✓ 7.46 h = .3 r.m.s. < 7.86

May 15, 1897

measures of R Caeli (cont.)

✓ B 8682 Sp.
10.21 f = .1 r.m.s. < 10.31

✓ B 8539 Sp.
9.46 l = .1 r.m.s. < 9.56

✓ B 8578 Sp.
10.21 f = .1 r.m.s. < 10.31

✓ B 12287 Sp.
10.21 f = .1 r.m.s. < 10.31

✓ B 12638 Sp.
7.46 b = .7 r.m.s. near edge. < 8.16

✓ B 4415 Sp.
6.86 a 3 r 7.16 7.46 = 7.31 .15 .15
7.46 r o b 7.46
r = .1

✓ B 10755 Sp.
8.88 d = .1 r.m.s. < 8.98

✓ B 17428 Sp.
9.46 l = .1 r.m.s. < 9.56

✓ B 12661 Sp.
7.46 b = .15 r.m.s. < 7.96

May 15, 1897

Measurements of R Caeli (cont.)

B. 8320 sp.

$$\checkmark 10.218 = .1 \text{ r.m.s. } \angle 10.31$$

B 8919. sp.

$$\checkmark 7.466 \pm .1 \text{ r.m.s. } 7.76 \quad 7.96 = 7.86 \quad .10 \quad .10$$

$$7.96 \pm .1 \text{ r.m.s. } 8.16$$

B 12278 sp.

$$\checkmark 9.46 \pm .1 \text{ r.m.s. } \angle 9.56$$

B 17422 sp.

$$\checkmark 8.88 \pm .1 \text{ r.m.s. } \angle 8.98$$

B 15488.

$$a = 3.8$$

$$b = 4.3$$

$$c = 4.6 \pm .2 \quad 4.9$$

$$d = 5.89$$

$$e = 6.5$$

$$f = 6.9 \pm .1$$

$$g = 8.0$$

$$h = 9.0$$

$$i = 9.5$$

$$j = \text{no}$$

$$k = \text{no}$$

$$l = \text{no. } 7.46 \pm .1 \text{ r.m.s. } 7.86 \quad 7.96 = 7.91 \quad .05 \quad .05$$

$$\text{mean} = 4.7 \quad 7.96 \pm .1 \text{ r.m.s. } 8.16$$

May 15, 1897

Measures of R Carli (cont.)

B. 12725

unt.
 $a = 3.9$ $b = 4.5$ $c = 5.2$ $d = 5.9$ $e = 6.8$ $f = 7.1$ $g = 8.0$ $h = 8.5$ $k = 9.2$ $l = 9.8$ $n = 10.3$ $o = 10.5$ $var = 9.4$

$$12.53 \text{ } k_2 \text{ } r \text{ } 12.73 \text{ } 12.78 = 12.76 \quad .03 \quad .02$$

$$12.78 \text{ } r \text{ } 4 \text{ } l \text{ } 13.18$$

B. 4493.

unt.
 $a = 3.5$ $b = 4.0$ $c = 4.9$ $d = 5.5$ $e = 6.1$ $f = 6.8$ $g = 8.0$ $h = 9.0$ $k = 9.5$ $l = m$ $n = m$ $o = m$ $var = 3.9 \text{ } k_2 \text{ } 3l$ $a_2 \text{ } 3l$

$$6.86 \text{ } a \text{ } 4 \text{ } r \text{ } 7.26 \text{ } 7.26 = 7.26 \quad .00 \quad .00$$

$$7.26 \text{ } r \text{ } 2 \text{ } l \text{ } 7.46$$

May 15, 1897.

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Measurements of R Caeli (cont.)

B. 16822

a = 3.5

b = 4.2

c = 4.9

d = 5.5

e = 6.2

f = 7.1

g = 7.8

h = 8.6

i = 9.2

k = 9.9

m = 10.5 9.46 & 3 ~ 9.76 9.61 = 9.68 .08 .07

n = 10.8 9.61 ~ 6 f 10.21

var = 6.5

October 9. 1897

Measures of κ Cancri. $9^h 4.0^m + 25^\circ 39' (1900)$
 Comparison stars on ± 2525 .

23^h 15^m.

I. 13885-

$$9.81d = .1 < 9.91$$

r. m. s.

I 14499

$$9.81d \ 2. r \ 10.01 \ 10.07 = 10.04$$

.03 .03

$$10.07 r \ 3.2 \ 10.37$$

I 14900

$$11.39g = .1 < 11.49$$

r. m. s.

I. 14872

$$10.85f \ 2 r \ 11.05 \ 11.29 = 11.17$$

.12 .12

$$11.29 r \ 1g \ 11.39$$

I 16254

$$11.99h = .2 < 12.19$$

r. m. s.

I. 16436

$$11.99h \ 2 r \ 12.19 \ 12.39 = 12.29$$

.10 .10

$$12.39 r \ 1h \ 12.49$$

I. 16535

$$11.39g \ 1 r \ 11.49 \ 11.89 = 11.69$$

.20 .20

$$11.89 r \ 1h \ 11.99$$

2.01

October 9, 1897

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Measures of W Canceri (cont.)

23^h 45^m

I 16974

11.39 g 3r 11.69 11.89 = 11.79

.10 .10

11.89 r 1 g h 11.99

I 16777

12.92 l 1r 13.02 13.22 = 13.12

.10 .10

13.22 r 1 m 13.32

I 14967

11.39 g 1r 11.49 11.79 = 11.64

.15 .15

11.79 r 2 h 11.99

I 15075

11.39 g = .1 < 11.49

r.m.o.

I 14336

10.37 e 2r 10.57 10.65 = 10.61

.04 .04

10.65 r 2 f 10.85

I 17523

8.89 b 3r 9.19 9.29 9.41 = 9.30

.11 .01 .11

9.29 r 0 c 9.29

9.41 r 4 d 9.81

I 18004

10.37 e 2r 10.57 10.45 = 10.51

.06 .06

10.45 r 4 f 10.85

October 9, 1897

Measures of κ Cancri (cont.).24^h 0^m

I 18093

$$10.85 \pm .1 < 10.95$$

r.m.s.

I 16669

$$13.32 \text{ m o r } 13.32$$

$$r = .1 \quad m = .1$$

I 15108

$$11.99 \text{ h} \pm .1 < 12.09$$

r.m.s.

I 16123

$$11.39 \text{ g 2 r } 11.59 \quad 11.89 = 11. \overset{7}{\cancel{8}} 4 \quad . \underline{15} \quad . 15$$

$$11.89 \text{ r 1 h } 11.99$$

I 17747

$$8.89 \text{ b 2 r } 9.09 \quad 9.29 \quad 9.41 = 9.30 \quad . \underline{11} \quad . \underline{01} \quad . 11$$

$$9.29 \text{ r o c } 9.29$$

$$9.41 \text{ r 4 d } 9.81$$

I 14936

$$10.37 \text{ e} \pm .4 < 10.77$$

r.m.s.

± 14648

$$9.81 \text{ d 3 r } 10.16 \quad 10.37 \quad 10.65 = 10.38 \quad . \underline{27} \quad . \underline{01} \quad . 27$$

$$10.37 \text{ r o e } 10.37$$

$$10.65 \text{ r 2 f } 10.85$$

October 9, 1897

24^h 20^mMeasures of γ W Cancer (cont)

I 10476

9.29 C 3 r 9.59 9.61 = 9.60 .01 .01

9.61 r 2 d 9.81

I 14878

10.85 f 3 r 11.15 11.19 = 11.17 .02 .02

11.19 r 2 g 11.39

I 17743

8.89 f 3 r 9.19 9.29 9.61 = 9.36 .17 .07 .25

9.29 r 0 c 9.29

9.61 r 2 d 9.81

x I 17723

8.89 f 2 r 9.09 9.19 = 9.14 .05 .05

9.19 r 1 c 9.29

I 17418

8.89 f 1 r 8.99 8.99 = 8.99 .00 .00

8.99 r 3 c 9.29

I 13924

9.81 d = .5 < 9.91

r. n. s.

I. 17272 Sp.

8.89 f 2 r 9.09 9.09 = 9.09 .00 .00

9.09 r 2 c 9.29

Oct. 9, 1897.

Measures of W Cancri (cont.)

24^h 26^m

I 16950 sp.

9.29 $c = .1$ < 9.39

r.m.s.

I 4834 sp.

9.29 $c = .1$ < 9.39

r.m.s.

I 14277 sp.

9.29 $c = .2$ < 9.49

r.m.s.

I 17241 sp.

8.89 ± 2 r 9.09 9.19 = 9.14.05 .05

9.19 r 1 c 9.29

I 16998 sp.

10.37 $e = .1$ < 10.47

r.m.s.

I 10396 sp.

10.37 $e 1$ r 10.4710.85 f.m.s. $\sigma = .1$

I 12827

11.39 $g = .2$ < 11.59

r.m.s.

I 17821

Measure.

October 16, 1897

measures of S Sculptor -

 $0^h 10.4^m - 32^\circ 36' (1900)$ $10^h 50^m$

Comparison stars on B5734.

B19010

11.13		11.43	11.60	11.90 = 11.64		
10.93	3 m	11.23	11.40	11.70 = 11.44	<u>.21</u>	<u>.04</u>
✓ 11.60	0 m	11.60				
11.40	0 m	11.40				
11.90		12.00				
11.70	1 m	11.80				

B 17467
see later on -

B. 18517

9.02		9.12	9.30 = 9.21		
8.82	1 m	8.92	9.10 = 9.01	<u>.09</u>	<u>.09</u>
9.30		9.40			
9.10	4 m	9.50			

B 18335

8.34		8.74	8.82	8.78	<u>.04</u>	<u>.04</u>
8.14	4 m	8.44	8.62 = 8.33		<u>.09</u>	<u>.09</u>
8.82		9.02				
8.62	2 m	8.82				

B 18065

6.29		6.39	6.77 = 6.58		
6.09	1 m	6.19	6.37 = 6.38	<u>.19</u>	<u>.19</u>
6.77		6.87			
6.57	1 m	6.67			

B. 15276

8.04		8.24	8.34	8.52	8.37	
7.84	2 m	8.04	8.14	8.32 = 8.17		<u>.13</u>
8.34		8.34				<u>.03</u>
8.14	0 m	8.14				<u>.15</u>
8.52		9.02				
8.32	5 m	8.82				

B 15194

6.87		6.97	7.39	7.64 = 7.33	<u>.36</u>	<u>.06</u>
6.67	1 m	6.77	7.19	7.44 = 7.18		<u>.31</u>
7.39		7.19	7.39			
7.19	0 m	7.19				
7.64		7.84	8.04			
7.44	4 m	7.84				

Oct. 16, 1897.

Measures of 3 Sculptor (cont.)

1h 20m

B. 17596 $\frac{7.59 \ 7.84 \ 7.72}{7.39 \ 7.17 \ 7.39 \ 7.64 = 7.52} \quad .13 \quad .12$
 $\frac{8.04}{7.84 \ 7.64 \ 7.84}$

B. 14469 $\frac{10.35 \ 10.40 = 10.38}{10.95 \ 10.15 \ 10.20 = 10.18} \quad .03 \quad .02$
 $\frac{10.40}{10.20 \ 10.70 \ 10.50}$

B. 16501 $\frac{11.43 \ 11.60 \ 11.80 = 11.61}{10.93 \ 11.48 \ 11.23 \ 11.40 \ 11.60 = 11.41} \quad .18 \quad .01 \quad .19$
 $\frac{11.60}{11.40 \ 11.80 \ 11.60 \ 12.00 \ 11.80}$

B. 16922 $\frac{10.45 \ 10.70 \ 11.03 = 7}{10.95 \ 10.25 \ 10.50 \ 10.83 = 10.53} \quad .28 \quad .03 \quad .30$
 $\frac{10.70}{10.50 \ 10.70 \ 10.83 \ 11.13 \ 10.92}$

B. 17266 $\frac{9.12 \ 9.30 = 9.21}{8.82 \ 8.92 \ 9.10 = 9.01} \quad .09 \quad .09$
 $9.30 \ 9.10 \ 9.50 \ 9.70$

B. 16834 $\frac{10.90 \ 11.03 = 10.96}{10.70 \ 10.70 \ 10.83 = 10.86} \quad .06 \quad .07$
 $\frac{11.03}{10.83 \ 11.13 \ 10.92}$

B. 16790 $\frac{10.90 \ 11.13 \ 11.30 = 11.11}{10.50 \ 10.70 \ 10.93 \ 11.10 = 10.91} \quad .21 \quad .02 \quad .19$
 $\frac{11.13}{10.93 \ 11.13 \ 10.92 \ 11.30 \ 11.60 \ 11.10 \ 11.40}$

Oct. 16 1897

Measures of S Sculptor (cont).

1^h 30^m B 16523

$\begin{array}{r} 10.70 \\ \hline 10.50 \end{array}$ h 2 r $\begin{array}{r} 10.90 \\ \hline 10.70 \end{array}$ $\begin{array}{r} 11.03 \\ \hline 10.83 \end{array}$ $\begin{array}{r} 10.96 \\ \hline 10.76 \end{array}$.06 .07
 $\begin{array}{r} 11.03 \\ \hline 10.83 \end{array}$ r 1 l $\begin{array}{r} 11.13 \\ \hline 10.93 \end{array}$

11.13 B. 16461

$\begin{array}{r} 10.93 \\ \hline 10.73 \end{array}$ l = .1 $\begin{array}{r} 11.03 \\ \hline 11.23 \end{array}$
 r.m.s. $\leftarrow 11.03$

13-16989

$\begin{array}{r} 10.15 \\ \hline 9.95 \end{array}$ h 2 r $\begin{array}{r} 10.35 \\ \hline 10.15 \end{array}$ $\begin{array}{r} 10.70 \\ \hline 10.50 \end{array}$ $\begin{array}{r} 10.93 \\ \hline 10.73 \end{array}$ = $\begin{array}{r} 10.66 \\ \hline 10.46 \end{array}$.31 .04 .27
 $\begin{array}{r} 10.70 \\ \hline 10.50 \end{array}$ r o h $\begin{array}{r} 10.70 \\ \hline 10.50 \end{array}$
 $\begin{array}{r} 10.93 \\ \hline 10.73 \end{array}$ r 2 l $\begin{array}{r} 11.13 \\ \hline 10.93 \end{array}$

8.04 B 14860

$\begin{array}{r} 8.24 \\ \hline 7.84 \end{array}$ d 2 r $\begin{array}{r} 8.34 \\ \hline 8.04 \end{array}$ $\begin{array}{r} 8.52 \\ \hline 8.14 \end{array}$ = $\begin{array}{r} 8.37 \\ \hline 8.17 \end{array}$.13 .03 .15
 $\begin{array}{r} 8.34 \\ \hline 8.14 \end{array}$ r o l $\begin{array}{r} 8.34 \\ \hline 8.14 \end{array}$
 $\begin{array}{r} 8.52 \\ \hline 8.32 \end{array}$ r 5 f $\begin{array}{r} 9.02 \\ \hline 8.82 \end{array}$

6.29 B 17881

$\begin{array}{r} 6.39 \\ \hline 6.19 \end{array}$ a 1 r $\begin{array}{r} 6.77 \\ \hline 6.57 \end{array}$ = $\begin{array}{r} 6.58 \\ \hline 6.38 \end{array}$.19 .19
 $\begin{array}{r} 6.77 \\ \hline 6.57 \end{array}$ r 1 h $\begin{array}{r} 6.87 \\ \hline 6.67 \end{array}$

6.29 B 17736

$\begin{array}{r} 6.49 \\ \hline 6.29 \end{array}$ a 2 r $\begin{array}{r} 6.67 \\ \hline 6.47 \end{array}$ = $\begin{array}{r} 6.58 \\ \hline 6.38 \end{array}$.09 .09
 $\begin{array}{r} 6.67 \\ \hline 6.47 \end{array}$ r e h $\begin{array}{r} 6.87 \\ \hline 6.67 \end{array}$

7.39 B 17574

$\begin{array}{r} 7.79 \\ \hline 7.59 \end{array}$ C 4 r $\begin{array}{r} 8.04 \\ \hline 7.84 \end{array}$ $\begin{array}{r} 8.04 \\ \hline 7.84 \end{array}$ = $\begin{array}{r} 7.96 \\ \hline 7.76 \end{array}$.17 .08 .08
 $\begin{array}{r} 8.04 \\ \hline 7.84 \end{array}$ r o d $\begin{array}{r} 8.04 \\ \hline 7.84 \end{array}$
 $\begin{array}{r} 8.04 \\ \hline 7.84 \end{array}$ r 3 e $\begin{array}{r} 8.34 \\ \hline 8.14 \end{array}$

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Measures of S Sculptor (cont)

1 hr 40 m

B 17103

$$\begin{array}{r} 9.02 \\ 8.82 \end{array} \begin{array}{l} f 3r \\ r 1g \end{array} \begin{array}{r} 9.82 \\ 9.12 \\ 9.60 \\ 9.40 \end{array} \begin{array}{r} 9.60 \\ 9.40 \\ 9.40 \\ 9.50 \end{array} = 9.46$$

$$\begin{array}{r} 9.82 \\ 9.40 \end{array} \begin{array}{l} f 3r \\ r 1g \end{array} \begin{array}{r} 9.12 \\ 9.40 \\ 9.40 \\ 9.50 \end{array} = 9.26$$

.14 .14

✓ I 17085

Too near edge.

B 15995

$$\begin{array}{r} 11.60 \\ 11.40 \end{array} \begin{array}{l} m 1r \\ r 0w \end{array} \begin{array}{r} 11.70 \\ 11.50 \\ 12.00 \\ 11.80 \\ 12.20 \\ 12.00 \\ 11.97 \\ 11.77 \end{array} = 11.97$$

$$\begin{array}{r} 12.00 \\ 11.80 \end{array} \begin{array}{l} r 0w \\ r 10 \end{array} \begin{array}{r} 12.00 \\ 11.80 \\ 12.30 \\ 12.10 \end{array} = 11.80$$

.27 .03 .23

B 16332

$$\begin{array}{r} 11.60 \\ 11.40 \end{array} \begin{array}{l} m 2r \\ r 0w \end{array} \begin{array}{r} 11.80 \\ 11.60 \\ 12.00 \\ 11.80 \\ 12.20 \\ 12.00 \\ 12.00 \\ 11.80 \end{array} = 12.00$$

$$\begin{array}{r} 12.00 \\ 11.80 \end{array} \begin{array}{l} r 0w \\ r 10 \end{array} \begin{array}{r} 12.00 \\ 11.80 \\ 12.30 \\ 12.10 \end{array} = 11.80$$

.20 .00 .20

B 14524

$$\begin{array}{r} 9.70 \\ 9.50 \end{array} \begin{array}{l} g 2r \\ r 0h \end{array} \begin{array}{r} 9.90 \\ 9.70 \\ 10.15 \\ 9.95 \\ 10.40 \\ 10.20 \end{array} = 10.15$$

$$\begin{array}{r} 10.15 \\ 9.95 \end{array} \begin{array}{l} r 0h \\ r 4^3h \end{array} \begin{array}{r} 10.15 \\ 9.95 \\ 10.70 \\ 10.50 \end{array} = 9.95$$

.25 .00 .25

B 15097

$$\begin{array}{r} 6.87 \\ 6.67 \end{array} \begin{array}{l} v 2r \\ r 2c \end{array} \begin{array}{r} 7.07 \\ 6.87 \\ 7.19 \\ 6.99 \\ 7.12 \\ 6.92 \end{array} = 7.12$$

$$\begin{array}{r} 7.19 \\ 6.99 \end{array} \begin{array}{l} r 2c \\ r 2c \end{array} \begin{array}{r} 7.39 \\ 7.12 \end{array} = 6.73$$

.06 .06

B 15336

$$\begin{array}{r} 9.02 \\ 8.82 \end{array} \begin{array}{l} f 1r \\ r 4g \end{array} \begin{array}{r} 9.12 \\ 8.92 \\ 9.30 \\ 9.10 \\ 9.21 \\ 9.01 \end{array} = 9.21$$

$$\begin{array}{r} 9.30 \\ 9.10 \end{array} \begin{array}{l} r 4g \\ r 4g \end{array} \begin{array}{r} 9.10 \\ 8.92 \\ 9.10 \\ 9.01 \end{array} = 9.01$$

.09 .09

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measures of S & Sculptor (cont.)

1 hr 50 m

B 14593 Sp.

✓ 10.93 l = .3 r.m.s. (corner of plate)
11.23

B 15112 (Sp.)

6.87	7.17	7.39	7.54	7.37		
6.67 b 3 r	6.97	7.19	7.34	7.17	.20	.02 .17
7.39	7.39					
7.19 r 0 c	7.19					
7.54	8.04					
7.34 r 5 d	7.84					

B 17183 (Sp.)

 ✓ r.m.s. (edge of plate)
 8.04 ~~7.84~~ d = .2 ~~8.04~~ < 8.24

B. 18034

6.29	6.49	6.67 =	6.58		
6.07 a 2 r	6.29	6.47	6.38	.09	.09
6.67	6.87				
6.47 r 2 b	6.67				

B. 17467 8.14 8.14 = 8.14

8.04	7.84 d 1 r	7.94	7.94	8.14	.00	.00
8.14	8.34					
7.94 r 2 e	8.14					

October 16, 1897.

Measures of new Variable in Canis Minor.

BD +5° 1797 - 7^h 41.1^m +5° 47'2^h 5^mComparison Stars on ~~13~~ 14647.

I 12205

10.02 d or 10.22 10.30 10.42 = 10.31 .09 .01 .11

10.30 r o l 10.30

10.42 r 3 f 10.72

I 16742 sp.

10.30 l t. r 10.40 10.62 = 10.51 .11 .11

10.62 r 1 f 10.72

I 16828

10.02 d 2 r 10.22 10.30 10.42 = 10.31 .09 .01 .11

10.30 r o l 10.30

10.42 r 3 f 10.72

I 16584

10.30 l 2 r 10.50 10.52 = 10.51 .01 -01

10.52 r 2 f 10.72

I 16608

10.30 l 2 r 10.50 10.52 = 10.51 .01 .01

10.52 r 2 f 10.72

I 17683

10.30 l 2 r 10.50 10.42 = 10.46 .04 .04

10.42 r 3 f 10.72

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Measures of Canis Minor (cont.)

2^h 30^m

I 17622

10.02 d 2 r 10.22 10.30 10.42 = 10.31 . 09 . 01 . 11

10.30 r 0 e 10.30

10.42 r 3 f 10.72

I 17589

		52	5	04	.04
10.30 e 3 r	10.60	10.92 =	10.86	.16	.16

10.92 r 2 f 10.72

52

B 15017

10.30 e 3 r 10.60 10.52 = 10.56 . 04 . 04

10.52 r 2 f 10.72

I 17494

10.30 e 1 r 10.40 10.42 = 10.41 . 01 . 01

10.42 r 3 f 10.72

October 26. 1897Measurements of R. Hargraves -
2^h 49^m - 58° 10^m (1875)

Comparison stars on B 5691.

1^h 50^m

B 8939

✓ 8.29 d 2 r 8.49 7.97 = 8.23 .26 .26

7.97 r 6 e 8.57

B 12689

✓ 7.31 C 1 r 7.41 8.09 = 7.75 .34 .34

8.09 r 2 d 8.29

B 12524

out 9.98 h 4 r 10.38 10.66 = 10.52 .14 .14

10.66 r 1 h 10.76

B 12523

✓ 9.98 h 3 r 10.28 10.66 = 10.47 .19 .19

10.66 r 1 h 10.76

B 12522

✓ 9.98 h 3 r 10.23 10.76 10.86 = 10.62 .39 .14 .24

10.76 r 0 h 10.76

10.86 r 3 h 11.16

B 14839

out 11.68 m = .2 r. n. d. < 11.88

B 14721

out 11.68 m = .1 r. n. d. < 11.78

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measures of R Hoelquin (cont.)

2^h 5^m

B 14727

✓ 11.68 m = .2 r.m.s. < 11.88

B 14599

✓ 11.16 l = .2 r.m.s. < 11.36

✓ B 14505

11.68 m 1 r 11.78

✓ B 14527

11.68 m 1 r 11.78

r = .1.

B 14324

✓ 11.16 l 3 r 11.46 11.58 = 11.52 .06 .06
 11.58 r 1 m 11.68

B 14011

✓ 10.76 l 1 r 10.86 10.96 = 10.91 .05 .05
 10.96 r 2 l 11.16

✓ B 15376

5.33 a 3 r 5.63 6.31 = 5.97 .34 .34
 6.31 r 2 l 6.51

B 15328

✓ 5.33 a 3 r 5.63 6.41 = 6.02 .39 .39
 6.41 r 1 l 6.51

October 26/897

Measures of R Stralgunin (cont.)

2^h 15^m

B 15278

✓ 7.31 C1 r 7.41 8.09 = 7.75 .34 .34
8.09 r 2 d 8.29

B 15182 sp.

✓ 9.45 f = .1 r.m.s. < 9.55

B 15030

✓ 11.16 l1 r 11.26 11.48 = 11.37 .11 .11
11.48 r 2 m 11.68

B 15099

✓ 11.16 l2 r 11.36 11.58 = 11.47 .11 .11
11.58 r 1 m 11.68

B 17849

✓ 11.16 l = .2 r.m.s. < 11.36

B 17887

✓ 11.16 l = .1 r.m.s. < 11.26

B 17604

✓ 10.76 l = .1 r.m.s. < 10.86

B 17471

✓ 11.16 l 3 r 11.46 11.58 = 11.52 .06 .06
11.58 r 1 m 11.68

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Measurements of R. Houlgum (cont.)

2^h 25^m

B 17251

✓ 10.76 h 1 r 10.86 11.06 = 10.96 .10 .10
 11.06 r 1 h 11.16

B 17250

✓ 10.76 h 1 r 10.86 10.96 = 10.91 .05 .05
 10.96 r 2 h 11.16

B 17206

✓ 10.76 h 1 r 10.86 10.86 = 10.86 .00 .00
 10.86 r 3 h 11.16

B 17131

✓ 9.98 h 5 r 10.48 10.66 = 10.57 .09 .09
 10.66 r 1 h 10.76

B 16994

✓ 9.70 g 2 r 9.90 9.88 = 9.89 .01 .01
 9.88 r 1 h 9.98

B 16793

✓ 9.45 f 2 r 9.65 9.70 9.78 = 9.71 .06 .01 .07
 9.70 r 0 g 9.70
 9.78 r 2 h 9.98

B 16464

✓ 8.57 c 3 r 8.87 9.25 = 9.06 .19 .19
 9.35 r 2 f 9.45

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2^h 30^m

Measurements of R Hologuini (cont.)

B 16336

✓ 8.29 d2 r 8.49 8.4⁷~~9~~ = 8.48 .01 .07
 8.47 r1 f 8.57

B 15485

✓ 7.31 C1 r 7.41 7.89 = 7.65 .24 .24
 7.89 r4 d 8.29

B 8860 Sp.

✓ 7.31 C3 r 7.61 7.99 = 7.80 .19 .19
 7.99 r3 d 8.29

B 8736

auth. 5.33 a2 r 5.55
 knot on plate

B 8735

✓ 7.21 r1 C 7.31
 knot on plate.

B 6994 Sp.

✓ var. too near edge.

B 6897 Sp.

✓ 6.91 r6 C 7.31
 a + knot on plate

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measures of R Hoolguin (cont.)

2 hr 40 m

B 6894 sp.

✓ 5.33 a 2 r 5.53 6.21 = 5.87 .24 .34
6.21 r 3 b 6.51

B 9970

✓ 11.16 l 1 r 11.26 11.48 = 11.37 .11 .11
11.48 r 2 m 11.68

B 9023 sp.

1st near edge

B 8938

aut 8.57 l 4 r 8.97 9.15 = 9.06 .09 .09
9.15 r 3 f 9.45

B 10666

aut 5.33 a 4 r 5.73 7.11 = 6.42 .69 .69
7.11 r 2 c 7.31
knob on plate

B 10652

✓ 5.33 a 3 r 5.63 6.11 = 5.87 .24 .24
6.11 r 4 b 6.51

B 10395

aut 8.57 l 4 r 8.97 9.25 = 9.11 .14 .14
9.25 r 2 f 9.45

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Measures of R Herculini (cont.)

2h 45^m B10280 sp.✓ 8.57^h = .2 < 8.77

B 10015

✓ 11.16^h 2^r 11.36 11.58 = 11.47 . 11 . 11
11.58^r 1^m 11.68

B 10014

✓ 10.76^h 2^r 10.96 11.16 11.48 = 11.20 - .24 - .04 .28
11.16^r 0^h 11.16
11.48^r 2^m 11.68

B 11953

✓ 11.16^h = .1 r.m.s. < 11.26

B 11838

✓ 11.68^m = .1 r.m.s. < 11.78

B 11770 sp.

✓ 8.57^h = .3 r.m.s. < 8.87

B 11515

✓ r.m.s. ^m = .1 11.68 < 11.78

B 12450

✓ 9.98^h 5^r 10.48 10.66 = 11.57 . .09 .09
10.66^r 1^h 10.76

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Measurements of R. Hoelguin (cont.)

2h 50m

✓

B 124148p.

$$r.m.s. \overset{9.45}{f} = .1 < 9.55$$

✓

B 123598p.

$$r.m.s. 11.16l = .4 < 11.56$$

✓

B 12298

$$11.16l = .1 \quad r.m.s. < 11.26$$

with

B 12213

$$11.68m = .1 \quad r.m.s. < 11.78$$

with

B 12158

$$11.16l \text{ } 3r \text{ } 11.46 \text{ } 11.68 = 11.57 \quad .11 \quad .11$$

$$11.68r \text{ } 0m \text{ } 11.68$$

✓

B 120548p.

$$r.m.s. \overset{9.45}{f} = .1 < 9.55$$

✓

B 13834

$$9.98l \text{ } 3r \text{ } 10.28 \text{ } 10.56 = 10.42 \quad .14 \quad .14$$

$$10.56r \text{ } 2l \text{ } 10.76$$

B 12798

✓

$$6.51l \text{ } 1r \text{ } 6.61 \text{ } 7.11 = 6.86 \quad .25 \quad .25$$

$$7.11r \text{ } 2c \text{ } 7.31$$

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Measures of Variable in Picta (2)

 $5^h 8.3 - 48^m 38'$ $20^s 5^h 28.3$ $20^h - 40$

Comparison Stars on B 12166.

B 10844.

✓ 8.73 b & 2 r 8.93 $9.10 = 9.02$.09 .02
 9.10 r 1 & 9.20

add B 4676 (8p.)
 8.73 b & 1 r 8.83

c.k. m.s.

✓ B 12751 (8p.)
 8.73 b & 1 r 8.83
c.k. m.s. on plate

✓ B 7100
 12.93 b & 1 r. m.s. < 13.03

add B 14800
 13.67 n & 1 r. m.s. < 13.97

add B 12⁶⁸⁷~~486~~
 11.40 g & 1 r. m.s. < 11.50

✓ B 12⁴⁶⁰⁹~~566~~
 12.58 b & 1 r. m.s. < 12.68

add B 14681
 12.93 b & 1 r. m.s. < 13.03

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Measures of Variable in Picta (2) (cont.)

21^h 10^m

✓ B 14539

13.67 ~~m~~ = .1 r.m.s. < 13.77

✓ B 14886

11.40 ~~g~~ = .2, r.m.s. < 11.60

✓ B 14821

13.30 ~~m~~ = .1, r.m.s. < 13.40

✓ B 14842

11.98 ~~h~~ = .1, r.m.s. < 12.08

✓ B 14773

13.67 ~~m~~ = .1, r.m.s. < 13.77

B

October 30, 1897.Measures of *V. ar. Tucanum*. $0^h 17.2 - 62^\circ 21' (1875)$ 21^h 40

Companion Stars B 5788.

- B 18156

✓ $9.44 l = .1$ r.m.s. < 9.54

very near corner.

B 18230.

✓ $9.44 l = .2$ r.m.s. < 9.64

near corner

B 14490

✓ $11.08 l = .2$ r.m.s. < 11.28

B 17818

✓ $8.92 C = .2$, r.m.s. < 9.12

very near corner.

✓ - B 14784

✓ $10.78 l \pm 2$ r 10.98 $10.98 = 10.98$.00 .00 $10.98 \pm 1 l$ 11.08

B 15152 (Sp.)

✓ $8.92 C = .3$, r.m.s. < 9.22

very near corner.

✓ B 14562

 $11.08 l = .1$, r.m.s. < 11.18

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Measures of Var Tucanum (Cont.)

22-00 B 18159

✓ 9.69 $f = .1$, r.m.s. < 9.79
 very near corner.

B 15570

✓ 11.08 $h = .1$, r.m.s. < 11.18

B 17915

✓ 10.78 $h = .1$, r.m.s. < 10.88

B 17376

✓ 9.69 f 3 r 9.99 10.23 = ¹⁰9.11 .12 .12
 10.23 r 2 h 10.43

B 17466

✓ 10.43 h 1 r 10.53 10.58 = 10.56 .03 .02
 10.58 r 2 h 10.78

B 17571

✓ 10.78 h 1 r 10.88 10.98 = 10.93 .05 .05
 10.98 r 1 h 11.08

B 17734

✓ 10.78 h 2 h 10.98
 l.m.s.

✓ B 17797

9.44 $e = .2$ < 9.64
 r.m.s.

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Measures of δ Tucanum (cont.)

22h 15m

B17016

N 8.92 C³ r 9.22 9.14 = 9.18 .04 .04
 9.14 r 1 d 9.24

Very near corner

B17074

V 8.92 C 1 r 9.02 9.24 9.24 = 9.17 .15 .07 .07
 9.24 r 0 d 9.24
 9.24 r 2 e 9.44

B18032

V 10.78 b = .1 r. m. s. < 10.88

B17229

V 9.44 e 3 r 9.74 9.49 = 9.62 .12 .13
 9.49 r 2 f 9.69

B16212

V 10.11 g 1 r 10.21 10.43 10.58 = 10.41 .20 .02 .17
 10.43 r 0 h 10.43
 10.58 r 2 h 10.78

B16425

V 9.44 e 3 r 9.74 9.59 = 9.66 .08 .07
 9.59 r 1 f 9.69

B16620

rub 8.92 C 1 r 9.02 9.14 = 9.08 .06 .06
 9.14 r 1 d 9.24

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Measures of δ Tucanum (comb.)22^h 25^mB 167⁶³~~36~~

✓ 8.52 b 3 r 8.82 8.92 9.14 = 8.96 .14 .04 .18

8.92 r o c 8.92

9.14 r 1 d 9.24

B 16831

✓ 8.52 b 2 r 8.72 8.92 9.04 = 8.89 .17 .03 .15

✓ 8.92 r o c 8.92

9.04 r 2 d 9.24

B 16914

✓ 8.52 b 2 r 8.72 8.82 = 8.77 .05 .05

8.82 r 1 c 8.92

B 15993

✓ 10.78 b 1 r 10.88 11.08 = 10.98 .10 .10

11.08 r o l 11.08

B 14485

✓ 11.08 l = .3, r.m.s. < 11.38

B 14487

✓ 11.08 l = .2, r.m.s. < 11.28

✓ - B 1461⁵3 Sp.

8.92 c = .1, r.m.s. < 9.02

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measures of 4 av. Pictor (2) (comb. fr. page 137)

22^h 30^m

B 12566

8.48 a' 2 v 8.68 8.73 8.70 = 8.70 .02 .03 .00

✓ 8.73 r o a b 8.73

8.70 a 5 & c 9.20

✓ B 12486

8.48 a' 1 v 8.58 8.53 = 8.56 .02 .03

8.53 r 2 a b 8.73

B 15105

✓ 13.30 m & = .1, r.m.s. < 13.40

✓ B 15197

11.98 h & = .1 r.m.s. < 12.08

alt B 17541

13.67 m & = .1, r.m.s. < 13.77

alt B 17903

12.93 l & = .1, r.m.s. < 13.03

B 17928

✓ 12.93 l & = .1 r.m.s. < 13.03

alt B 17854

12.93 l & = .1, r.m.s. < 13.03

✓ B 17672

12.58 h & = .1, r.m.s. < 12.68

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Measures of Var. Pictor (r) (cont.)

22^h 45^m

✓ B 17667

13.30 m & = .1, r.m.s. < 13.40

aut

B 18372

13.30 m & 1 r 13.40 13.67 = 13.54 .14 .13

13.67 r 0 m m 13.67

✓

B 18477

11.98 h & 1 r 12.08 12.38 = 12.23 .15 .15

12.38 r 2 & h 12.58

B 18618

✓ 8.73 b & 6 r 9.33 9.60 = 9.46 .13 .14

9.60 r 1 & d 9.70

c & not on plate

aut

B 15283

9.70 d & 2 r 9.90 10.10 = 10.00 .10 .10

10.10 r 2 & e 10.30

✓

B 15337

9.70 d & 1 r 9.80 10.10 = 9.95 .15 .15

10.10 r 2 & e 10.30

aut

B 12633

8.73 b & 1 r 8.83 8.90 = 8.86 .03 .04

8.90 r 3 & c 9.20

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measures of Pictor (2) (cont.)

2^h 53^m B 15664✓ 10.30 $d\lambda = .1$, r.m.s. < 10.40

✓ B 15490

9.70 $d\lambda = .1$, r.m.s. < 9.80

✓ B 16997

13.67 $d\lambda = .1$, r.m.s. < 13.77

✓ B 18131

10.85 $d\lambda = .2$, r.m.s. < 11.05

✓ B 17580

11.98 $d\lambda = .1$, r.m.s. < 12.08

B 17473

✓ 13.30 $d\lambda = .1$, r.m.s. < 13.40

✓ B 18524 Sp.

~~at 9.20 $d\lambda = .1$~~ ~~r.m.s. r.m.s. < 9.30~~

ant B 18482 Sp.

~~at 9.70 $d\lambda = .1$ r.m.s. < 9.80~~ ~~r4a~~

✓ B 12016 Sp.

8.73 $d\lambda$ or 8.83 9.10 = 8.96 .13 .149.10 r1 $d\lambda$ c 9.20

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Measures of Picta (2) (cont)

23^h 10^m

✓ B 4414 Sp.

8.48 a' = .1

r.m.s. < 8.58

aut B ⁹²89~~46~~ Sp.

8.48 a' = .2. r.m.s. < 8.68

aut B 5654 Sp.

Plate too poor

- B 5808 Sp.

✓ 8.48 a' = .1 r.m.s. < 8.58

aut B 9018 Sp.

9.20 Cx = .1, r.m.s. < 9.30

B 9024 Sp.

✓ 8.48 a' = .2. r.m.s. < 8.68

✓ B 12640 Sp.

8.48 a' 5 r 8.98 8.63 = 8.80 .18 .17

8.63 r 1 & d 8.73

B. 12488

✓ 8.48 a' 1 r 8.58 8.53 = 8.56 .02 .03

8.53 r 2 & d 8.73

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Mercuries of Var. R Pictn.

A 9 C 5428. $4^h 43.5^m - 49^{\circ} 25'$

Companion in 8 trans. B 4290.

0^h 45^m B 14800

aut 8.58⁵ d & 3 r 8.88⁵ 8.74³ = 8.80⁷⁹ .06 .06
 8.74³ r 1 & f 8.84³

B 7100

✓ 7.98⁷ c & 1 r 8.08⁷ 8.28⁵ 8.48⁵ = 8.27⁶ .19 .01 .19
 8.28⁵ r 0 & d 8.28⁵
 8.48⁵ r 1 & e 8.58⁵

B 14872

✓ 8.28⁵ d & 2 r 8.48⁵ 8.58⁵ 8.74³ = 8.59⁸ .13 .03 .15
 8.58⁵ r 0 & e 8.58⁵
 8.74³ r 1 & f 8.84³

B 14608

✓ 8.28⁵ d & 1 r 8.38⁵ 8.48⁵ = 8.41⁰ .05 .05
 8.48⁵ r 1 & e 8.58⁵

B 14014

✓ 7.98⁷ c & 1 r 8.08⁷ 8.28⁵ 8.38⁵ = 8.29² .15 .03 .13
 8.28⁵ r 0 & d 8.28⁵
 8.38⁵ r 2 & e 8.58⁵

B 12453

✓ 8.28⁵ d & 1 r 8.38⁵ 8.58⁵ 8.74³ = 8.55⁴ .19 .01 .19
 8.58⁵ r 0 & e 8.58⁵
 8.74³ r 1 & f 8.84³

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Measures of R Picta (comb.)

1 hr 0 m

✓ B 7093
Plate too poor.

✓ B 7079
aut 8.28⁵ d & 1 r 8.34⁵ 8.54⁵ = 8.44⁵ .10 .10
8.54⁵ r o d e 8.54⁵
fx not on plate

✓ B 12648 sp.
8.84³ fx = .1 r.m.s. < 8.94³

✓ B 18460 sp.
7.98⁷ c & 2 r 8.18⁷ 8.14⁵ = 8.14⁶ .01 .01
8.14⁵ r 1 d 8.26⁵

✓ B 8961 sp.
8.28⁵ d & 1 r 8.34⁵ 8.44⁵ = 8.44⁰ .05 .05
8.44⁵ r 1 d e 8.54⁵

✓ B 5774 sp.
8.24⁵ d & 1 r 8.34⁵ r.m.s. < 8.34⁵

✓ B 4743 sp.
Plate too poor.

✓ B 10754 sp.
8.24⁵ d & 2 r 8.44⁵ 8.44⁵ = 8.44⁵ .00 .00
8.44⁵ r 1 d e 8.54⁵

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Measures of R Picta (comb.)

1^h 10^m

B 12421 Sp.

cut 8.26⁵ d & 1 r 8.36⁵ 8.36⁵ = 8.36⁵ .00 .00
 8.36⁵ r 2 d & 8.56⁵

B 12334

✓ 8.26⁵ d & 1 r 8.46⁵ 8.46⁵ = 8.46⁵ .00 .00
 8.46⁵ r 2 d & 8.56⁵

B 17828

✓ 8.26⁵ d & 1 r 8.36⁵ 8.36⁵ = 8.36⁵ .00 .00
 8.36⁵ r 2 d & 8.56⁵

B 17279

✓ 7.98⁷ c & 2 r 8.18⁷ 8.26⁵ 8.46⁵ = 8.30²⁹ .12 .04 .16
 8.26⁵ r 0 d & 8.26⁵
 8.46⁵ r 1 d & 8.56⁵

B 18368

✓ 7.98⁷ c & 2 r 8.18⁷ 8.26⁵ 8.16⁵ = 8.20¹⁹ .02 .06 .04
 8.26⁵ r 0 d & 8.26⁵
 8.16⁵ r 4 d & 8.56⁵

B 14416

✓ at r r 0 a' 7.58⁷ 7.48⁷ = 7.53² .05 .05
 r 3 d r 3 a & 7.78⁷
 7.48

B 15358

✓ 8.26⁵ d & 1 r 8.36⁵ 8.36⁵ = 8.36⁵ .00 .00
 8.36⁵ r 2 d & 8.56⁵

Dec. 30, 1897

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Measure of R Picta (comb.)

1h 25^m

B15489

$$\checkmark 8.26^5 \text{ dx } 2 \text{ r } 8.46^5 \text{ } 8.56^5 \text{ } 8.64^3 = 8.55^3 \quad .09 \quad .01 \quad .09$$

$$8.56^5 \text{ r } 0 \text{ dx } 8.56^5$$

$$8.64^3 \text{ dx } 2 \text{ dx } 8.84^3$$

B17135

$$\checkmark 8.26^5 \text{ dx } 1 \text{ r } 8.38^5 \text{ } 8.46^5 = 8.41^0 \quad .05 \quad .05$$

$$8.46^5 \text{ r } 1 \text{ dx } 8.56^5$$

B17307

$$\checkmark 8.56^5 \text{ dx } 1 \text{ r } 8.66^5 \text{ } 8.64^3 = 8.65^4 \quad .01 \quad .01$$

$$8.64^3 \text{ r } 2 \text{ dx } 8.84^3$$

B18278

$$\checkmark \text{ r } 0 \text{ a } 7.58^7 \text{ } 7.48^7 = 7.53^2 \quad .05 \quad .05$$

$$7.48^7 \text{ r } 3 \text{ dx } 7.78^7$$

B18500

$$\checkmark 7.78^7 \text{ dx } 1 \text{ r } 7.88^7 \text{ } 7.98^7 \text{ } 8.16^5 = 8.01^0 \quad .13 \quad .03 \quad .15$$

$$7.98^7 \text{ r } 0 \text{ dx } 7.98^7$$

$$8.16^5 \text{ r } 1 \text{ dx } 8.26^5$$

B18665

~~r 0 a~~
~~r 3 a~~

B18665

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measures of R Pictor (cont.)

1 hr 50 m

B 18326

 $7.58^7 a' 1 r \quad 7.68^7 \quad 7.78^7 \quad 7.88^7 = 7.78^7 \quad .10 \quad .10$
 $\checkmark \quad 7.78^7 r o \& b \quad 7.78^7$
 $7.88^7 r 1 \& c \quad 7.98^7$

B 17580

 $\checkmark \quad 8.56^5 d \& 3 r \quad 8.86^5 \quad 8.84^3 \quad 9.06^5 = 8.92^1 \quad .06 \quad .08 \quad .14$
 $8.84^3 r o \& f \quad 8.84^3$
 $9.06^5 r 1 \& g \quad 9.16^5$

B 17928

 $\checkmark \quad 8.26^5 d \& 1 r \quad 8.36^5 \quad 8.46^5 = 8.46^0 \quad .05 \quad .05$
 $8.46^5 r 1 \& e \quad 8.56^5$

B 12486

 $\checkmark \quad 8.84^3 f \& 1 r \quad 8.94^3$
 $g f \text{ not on plate}$

B 15105

 $\checkmark \quad 8.84^3 f \& 1 r \quad 8.94^3 \quad 9.16^5 \quad 9.24^3 = 9.11^0 \quad .17 \quad .05 \quad .23$
 $9.16^5 r o \& g \quad 9.16^5$
 $9.24^3 r 2 g \quad 9.44^3$

B 15197

 $\checkmark \quad 8.56^5 d \& 2 r \quad 8.76^5 \quad 8.84^3 \quad 8.86^5 = 8.82^1 \quad .06 \quad .02 \quad .04$
 $8.84^3 r o \& f \quad 8.84^3$
 $8.86^5 r 3 \& g \quad 9.16^5$

Oct. 30, 1897

measures of R Picta (comb.)

1^h 55^m

B 17541

³ 8.84 f & 2 r ³ 9.04 ⁵ 9.06 = ⁴ 9.05 .01 .01
⁵ 9.06 r 1 f g ⁵ 9.16

B 17854

⁵ 8.26 d & 1 r ⁵ 8.36 ⁵ 8.56 ³ 8.54 = ⁴ 8.49 .13 .07 .05
⁵ 8.56 r 0 d e ⁵ 8.56
³ 8.54 r 3 x f ³ 8.84

B 17667

⁵ 8.56 d & 3 r ⁵ 8.86 ³ 8.84 ⁵ 9.06 = ¹ 8.92 .06 .08 .14
³ 8.84 r 0 x f ³ 8.84
⁵ 9.06 r 1 f g ⁵ 9.16

B 18372

⁷ 7.78 b & 1 r ⁷ 7.88 ⁷ 7.78 = ² 7.83 .05 .05
⁷ 7.78 r 2 b c ⁷ 7.98

B 18618

⁵ 9.76 k & 1 r ⁵ 9.86 ⁷ 9.98 ¹⁹ 10.26 = ⁰ 10.0x .15 .03 .19
⁷ 9.98 r 0 d l ⁷ 9.98
¹⁹ 10.26 r 1 x m ²⁹ 10.80

B 15283

⁷ 7.58 a' 1 r ⁷ 7.68 ⁷ 7.68 = ⁷ 7.68 .00 .00
⁷ 7.68 r 1 a b ⁷ 7.78

B 15337

⁷ 7.78 b & 2 r ⁷ 7.98 ⁷ 7.88 = ² 7.93 .05 .05
⁷ 7.88 r 1 x c ⁷ 7.98

Oct. 30, 1897

Measurements of R Pictor (cont.)

2nd 5^m

B 15664

 $8.58^5 d \& 1 r \quad 8.68^5 \quad 8.64^3 = 8.65^4 \quad .01 \quad .01$
 $\checkmark \quad 8.64^3 r 2 \& f \quad 8.84^3$

B 15490

 $\checkmark \quad 8.58^5 d \& 1 r \quad 8.68^5 \quad 8.74^3 = 8.70^{69} \quad .04 \quad .04$
 $8.74^3 r 1 d \& 2 \quad 8.84^3$

B 16997

 $\checkmark \quad 7.58^7 a' 1 r \quad 7.68^7 \quad 7.68^7 = 7.68^7 \quad .00 \quad .00$
 $7.68^7 r 1 d \& 7.78^7$

B 18131

 $\checkmark \quad 7.58^7 a' 0 r \quad 7.58^7 \quad 7.58^7 = 7.58^7 \quad .00 \quad .00$
 $7.58^7 r 2 d \& 7.78^7$

B 17473

 $\checkmark \quad 8.84^3 d \& 1 r \quad 8.94^3 \quad 9.08^5 = 8.99^{8.99} \quad .06 \quad .06$
 $9.08^5 r 1 f g \quad 9.14^5$

B 18482 sp.

 $\checkmark \quad 8.26^5 d \& 1 r \quad 8.38^5 \quad 8.28^5 = 8.38^0 \quad .05 \quad .05$
 $8.26^5 r 3 d \& 8.56^5$

B 12016 sp.

 $\checkmark \quad 8.84^3 d \& 1 r \quad 8.94^3$
 $g / \text{mob on plate}$

Oct. 30, 1897

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Measures of R Picta (cont.)

2h_{10m}

B12488 Sp.

✓ 8.84³ f & 2 r 9.04³

g not on plate

B12751 Sp.

✓ 7.98⁷ c & 1 r 8.08⁷ 8.16⁵ = 8.12¹ .04 .04
8.16⁵ r 1 & d 8.28⁵

B10844

✓ 8.84³ f & 3 r 9.14³

g not on plate

B14821

✓ 8.58⁵ e & 3 r 8.86⁵ 8.74³ = 8.80⁷⁹ .06 .06
8.74³ r 1 & f 8.84³

B14539

✓ 7.78⁷ b & 1 r 7.88⁷ 7.98⁷ 8.16⁵ = 8.00⁰ .13 .03 .15
7.98⁷ r 0 & c 7.98⁷
8.16⁵ r 1 & d 8.28⁵

B14609

✓ 7.78⁷ b & 1 r 7.88⁷ 7.88⁷ = 7.88⁷ .00 .00
7.88⁷ r 1 & c 7.98⁷

B12687

✓ 7.58⁸ a' 1 r 7.68⁷ 7.78⁷ 7.78⁷ = 7.75⁴ .07 .03 .03
7.78⁷ r 0 & b 7.78⁷
7.78⁷ r 2 & c 7.98⁷

Oct. 30, 1897

Measures of R Picta (comb.)

2^h 15^m B 12687

aut 7.58⁷ a'0 r 7.58⁷ 7.58⁷ = 7.58⁷ .00 .00
 7.58⁷ r 2 a b 7.78⁷

B 14842

✓ 8.56⁵ d 2 r 8.76⁵ 8.74³ = 8.75⁴ .01 .01
 8.74³ r 1 x f 8.84³

B 18796

✓ 9.76⁵ b 1 r 9.88⁵ 9.78⁷ = 9.82¹ .04 .04
 9.78⁷ r 2 b d 9.98⁷

B 4676 sp.

aut 8.28⁵ d = .2 r.m.s. < 8.46⁵

B 89928 sp.

aut 7.78⁷ b = .1, r.m.s. < 7.88⁷

B 9018 sp.

aut 7.78⁷ b = .1, r.m.s. < 7.88⁷

B 9024 sp.

✓ 7.98⁷ c 1 r 8.08⁷ 8.16⁵ = 8.12¹ .04 .04
 8.16⁵ r 1 d 8.26⁵

B 12640 sp.

✓ 8.56⁵ d = .2, r.m.s. < 8.76⁵

Oct. 30, 1897

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Measures of R Pictor (cont.)

2^h 20^m B 16821

$$\checkmark \quad 7.58^7 a' \text{ in } 7.68^7 \quad 7.68^7 = 7.68^7 \quad .00 \quad .00$$

$$7.68^7 \text{ in } 1 \text{ \& b } 7.78^7$$

B 16551

$$\checkmark \quad 7.58^7 a' \text{ in } 7.68^7 \quad 7.78^7 \quad 7.78^7 = 7.75^4 \quad .07 \quad .03 \quad .03$$

$$7.78^7 \text{ in } 0 \text{ \& b } 7.78^7$$

$$7.78^7 \text{ in } 2 \text{ \& c } 7.98^7$$

B 18665

$$\checkmark \quad 9.98^7 \text{ in } 1 \text{ \& in } 10.08^7 \quad 10.20^{19} = 10.14^3 \quad .06 \quad .06$$

$$10.20^{19} \text{ in } 1 \text{ \& in } 10.30^{29}$$

November 4. 1897-

Measurements of S Tucannus. (fr. Page 141)

2 h 0 m.

B 11667

$$\checkmark \quad 8.52 \text{ b } 5r \quad 9.02 \quad 8.82 = 8.92 \quad .10 \quad .10$$

$$8.82 \text{ r } 1 \text{ c } 8.92$$

$$\checkmark \quad B \ 12066 \ 8p.$$

$$8.52 \text{ b } = .1$$

$$r.m.s. < 8.62$$

B 12005 8p.

$$\checkmark \quad 8.14 \text{ a } = .1 \quad r.m.s. < 8.24$$

B 14243

$$\checkmark \quad 11.08 \text{ l } = .1, \quad r.m.s. < 11.18$$

B 12478

$$\checkmark \quad 11.08 \text{ l } 3r. \quad 11.38$$

$$r = .1$$

Nov. 30, 1897

Measures of A & C 13420. New Variable Hydra.
 $9^h 46.5^m - 22^{\circ} 33' (1900)$

Comp. Stars. B13557.

2^h 0^m B18422

8.21 b 6 r 8.81

r. very near edge.

B16553

9.69 f 2 r 9.89 9.99 = 9.94 .05 .05
 9.99 r 1 d 10.09

B19257

7.81 a 1 r 7.91 8.21 8.49 = 8.20 .29 .01 .29

8.21 r o b 8.21

8.49 r 1 c 8.59

B15267

8.21 b 2 r 8.41

r. very near edge.

B16307

8.59 r 1 r 8.69 8.81 = 8.75 .06 .06
 8.81 r 1 d 8.91

~~B~~ 16542

8.21 b 2 r 8.41 8.59 8.81 = 8.60 .19 .01 .21

8.59 r o c 8.59

8.81 r 1 d 8.91

Nov. 30, 1897

measures of A.G.C 13420 (cont.)

2 hr 15 m

I 16780

8.59 C 1 r 8.69 8.71 = 8.70 .01 .01

8.71 r 2 d 8.91

I 17044

8.91 d 1 r 9.01 9.21 = 9.11 .10 .10

9.21 r 1 e 9.31

I 17331

8.91 d 3 r 9.21 9.21 = 9.21 .00 .00

9.21 r 1 e 9.31

I 17525

7.81 a 4 r 8.21 8.01 = 8.11 .10 .10

8.01 r 2 b 8.21

I 17819

7.81 a 1 r 7.91 8.11 = 8.01 .10 .10

8.11 r 1 b 8.21

B 18280

8.59 C 2 r 8.79 8.91 9.21 = 8.97 .18 .06 .24

8.91 r 0 d 8.91

9.21 r 1 e 9.31

B 18345

a 1 r 8.59 C 1 r 8.69 8.81 = 8.75 .06 .06

r 0 b 8.81 r 1 d 8.91

etc

Nov. 30 1897

measures of A & C 13420 (Limb)

2 hr 35 m

B18508

8.59 C 2 r 8.79 8.91 9.11 = 8.94

.15 .03 .17

8.91 rod 8.91

9.11 r 2 l 9.31

B18626

7.81 a 2 r 8.01 8.11 = 8.06

.05 .05

8.11 r 1 l 8.21

B18963

8.21 b 2 r 8.51 8.59 8.81 = 8.64

.13 .05 .17

8.59 r 0 c 8.59

8.81 r 1 d 8.91

B19105

7.81 a 1 r 7.91 8.01 = ~~8.06~~ 7.96.05 .05

8.01 r 2 b 8.21

B18697

8.91 a 2 r 9.11 9.11 = 9.11

.00 .00

9.11 r 2 l 9.31

B18745

8.21 b 2 r 8.41

n. on edge of plate.

Nov. 30, 1897

Measures of Algol 13420

2^h 45^m

B19110

8.59 c1 r 8.69 8.71 = 8.70 . 01 . 01

8.71 r2 d 8.91

B18799

7.81 a1 r 7.91 8.01 = 7.96 . 05 . 05

8.01 r2 h 8.21

B18115

7.81 a1 r 7.91 8.21 8.49 = 8.20 . 29 . 01 . 29

8.21 r0 h 8.21

8.49 r1 e 8.59

B18143

8.91 d3 r 9.21 9.01 = 9.11 . 10 . 10

9.01 r3 h 9.31

B15600 sp.

8.91 d3 r 9.21 9.21 = 9.21 . 00 . 00

9.21 r1 e 9.31

B19290

8.21 b2 r 8.41 8.59 8.81 = 8.60 . 19 . 01 . 21

8.59 r0 c 8.59

8.81 r1 d 8.91

Nov. 30 1897

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Measure of ABC 13420

2nd 20

B 13323 Sp.

7.91 r1a 7.81 ^{Reflected} Tolomung star.
see p 162.

x 7554 8224

8.91 d1r 9.01 9.01 = 9.01 .00 .00

9.01 r3e 9.31

x 6248

7.81 a2r 8.01 8.21 8.39 = 8.20 .19 .01 .19

8.21 r0b 8.21

8.39 r2c 8.59

x 8225

8.21 b4r 8.61 8.39 = 8.50 .11 .11

8.39 r2c 8.59

x 7553

8.21 b6r 8.81

n. on edge

+ 8224 7554

n. n. seen Plate too poor

December 4, 1897

Measure of a B.C. 13420 Repeated

1 hr 20 m.

B15085

Var. too near edge

B16553

9.31 d 2 r 9.51 9.69 9.89 = 9.70 .19 .01 .19

9.69 r 0 f 9.69

9.89 r 2 g 10.09

B19105

8.21 b 2 r 8.41 8.59 8.71 = 8.57 .16 .02 .14

8.59 r 1 b 8.59

8.71 r 2 d 8.91

B18697

8.91 d 3 r 9.21 9.11 = 9.16 .05 .05

9.11 r 2 d 9.31

B18143

8.91 d 3 r 9.21 9.01 = 9.16 .05 .05

9.01 r 3 d 9.31

B13323 sp.

8.59 com 8.59

X 8224

8.21 b 1 r 8.31 8.39 = 8.35 .04 .04

8.39 r 2 c 8.59

December 4. 1897

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Measures of η Camelopardis M.P. 441
Comparison Stars. I 433. 5799

1^{hr} 35^m I 16591

10.61 b 2 r 10.81 10.79 = 10.80 .01 .01

10.79 r 1 c 10.89

I 16115

Comparison Stars had to be changed.

December 10, 1897.

measures of MP 441 (cont.)

2h 0m

I 16115

✓ 10.89 C1 r 10.99 11.19 11.29 = 11.16 .17 .03 .13

✓ 11.19 rod 11.19

11.29 r 2 r 11.49

I 16591

✓ 10.61 b2 r 10.81 10.79 ^{10.80} ^{.01 .01} ^{near edge}

10.79 r 1 c 10.89

I 16227

✓ 10.61 b2 r 10.81 10.89 11.09 = 10.93 .12 .04 .16

10.89 r 0 c 10.89

10.09 r 1 d 11.19

I 10984

✓ 11.49 r = .1 11.59

r.m.s. < 11.59

I 15607

✓ 10.89 C1 r 10.99 11.09 = 11.04 .05 .05

11.09 r 1 d 11.19

✓ I 15715

Plate too poor

✓ I 15898

10.89 C1 r 10.99 11.19 11.39 = 11.19 .20 .20

11.19 rod 11.19

11.39 r 1 d 11.49

Dec. 16 1897

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Measures of MP 441 (cont)

I 15970.

✓ 11.19 d1 r 11.29 11.49 11.69 = 11.49 .20 .20
 11.49 r0e 11.49
 11.69 r2 f 11.89

I 14128

✓ Plate too poor

I 14373

✓ 10.61 b1 r 10.71 10.69 = 10.70 .01 .01
 10.69 r2 c 10.89 b scattered.

I 14566

✓ 10.61 b2 r 10.81 10.69 = 10.75 .06 .06
 10.69 r2 c 10.89

I 14618

✓ 10.61 b3 r 10.91 10.69 = 10.80 .11 .11
 10.69 r2 c 10.89

I 14693

✓ 10.61 b1 r 10.71 10.59 = 10.65 .06 .06
 10.59 r3 c 10.89

I 13799

✓ 10.89 c1 r 10.99 11.09 = 11.04 .05 .05
 11.09 r1 d 11.19

Dec. 10, 1897

Measurements of MP 441 (cont.)

2h 25m

I 12766

✓ 11.49 d 1 r 11.59 11.69 = 11.64 .05 .05

11.69 d 2 f 11.89

I 5822

✓ 11.89 f 2 r 12.09

g.m.s.

I 5388

✓ 11.89 f 1 r 11.99

g.m.s.

I 9616

✓ 11.19 d 2 r 11.39 11.49 11.69 = 11.52 .13 .03 .17

11.49 r o e 11.49

11.69 r 2 f 11.89

I 9617

✓ 11.19 d 2 r 11.39 11.49 = 11.44 .05 .05

11.49 r o e 11.49

f.m.s.

I 7637

✓ 11.89 f 2 r 12.09

g.m.s.

I 9563

✓ 10.89 c = .2 11.09

r.m.s.

Dec. 10 1897

measures of M.P. 441 (cont.)

I 9554.

✓ 12.67 $g=.1$ 12.17
 r.w.s.

I 11446

✓ 11.19 d2r 11.39 11.39 = 11.39 .00 .00
 11.39 r1e 11.49

I 11468

✓ 11.19 d2r 11.39 11.39 = 11.39 .00 .00
 11.39 r1e 11.49

I 11510

✓ 10.89 C1r 10.99 11.19 11.39 = 11.16 .17 .03 .13
 11.19 r0d 11.19
 11.39 r1e 11.49

I 11511

✓ 10.89 C1r 10.99 11.09 = 11.04 .05 .05
 11.09 r1d 11.19

✓ I 10968

12.07 $g1r$ 12.17

December 13, 1897.

measures of MP 441 (comb.)

2^h 0^m

I. 9952

✓ 10.89 C1 r 10.99 11.19 11.29 = 11.19 .10 .00 .10
 11.19 rod 11.19
 11.29 r2e 11.49

I 7775

✓ 11.89 f1 r 11.99
 gms.

I 9790

✓ 10.89 C1 r 10.99 11.19 = 11.09 .10 .10
 11.19 rod 11.19
 ens.

I 9788

✓ 10.89 C1 r 10.99 11.19 = 11.09 .10 .10
 11.19 rod 11.19
 ens.

I 7608

✓ 11.19 d = .1 11.29
 rms. < 11.29

✓ ⁴
 I 659 Sp.

b = .2 10.61 b2 r 10.81
 rms. ens.

I 659 Sp.

✓ 10.39 a1 r 10.49 10.51 = 10.50 .01 .01
 10.51 r1b 10.61

Dec. 13, 1897.

measures of MP (441) (Cont).

✓ I 3020 Sp
Too poor. near edge

I 3075 Sp.
✓ 10.39 a 1 r 10.49 10.51 = 10.50 .01 .01
10.51 r 1 b 10.61

December 15, 1897.

2h 5m measures of MP (441) (Cont)

✓ I 2426
11.49 e 1 r 11.59 11.79 = 11.69 .10 .10
11.79 r 1 f 11.89

I 12009
✓ 10.61 b 3 r 10.91 10.79 = 10.85 .06 .06
10.79 r 1 c 10.89

I 7638
✓ 11.89 f 2 r 12.09 12.07 = 12.08 .01 .01
12.07 r 0 g 12.07

I 8457
✓ 11.89 f 2 r 12.09
gms.

I

Dec. 15, 1897

measures of MP 441 (cont.)

✓ I 13193
Plate too poor.

✓ ± 10019 .
10.89 C1 r 10.99 11.09 = 11.04 .05 .05
11.09 r id 11.19
r very near edge

✓ I 11886
10.61 b 2 r 10.81 10.89 11.09 = 10.93 .12 .04 .16
10.89 r oc 10.89
11.09 r id 11.19

✓ I 16205
11.49 e 1 r 11.59 11.79 = 11.69 .10 .10
11.79 r 1 f 11.89

✓ I 2191
Plate too poor.

✓ I 2269
too poor

✓ I 2854
11.19 d 1 r 11.29 11.49 = 11.39 .10 .10
11.49 r oc 11.49
f no.

Dec. 15, 1897

Measures of MP 441 (cont.)

✓ I 3189
Too poor.

✓ I 1671
Too poor.

✓ I 14724 ?
Too poor. Plate I 14724 down of core region. J.E.B.

✓ I 12633
11.49 ϵ 2 r 11.69 11.69 = 11.69 .00 .00
11.69 r 2 f 11.89

✓ I 17824
10.89 ϵ 1 r 10.99 10.99 = 10.99 .00 .00
10.99 r 2 d 11.19

I 19219
✓ 11.19 d 2 r 11.39 11.49 11.69 = 11.52 .13 .53 .17
11.49 r o e 11.49
11.69 r 2 f 11.89

✓ I 18189
Too poor

I 18463
✓ 10.61 b 3 r 10.91 10.69 = 10.80 .11 .11
10.69 r 2 c 10.89

Dec. 15, 1897.

Measures of MP441 (comb.)

2h 25m

✓ I 18360
Too poor

✓ I 17008
10.61 d 1 r 10.71 10.79 = 10.75 .04 .04
10.79 r 1 c 10.89

✓ I 18722
10.19 d 1 r 11.29 11.29 = 11.29 .00 .00
11.29 r 2 c 11.49

✓ I 17039
10.61 b 2 r 10.81 10.59 = 10.70 .11 .11
10.59 r 3 c 10.89

✓ I 17281
10.61 b 3 r 10.91 10.69 = 10.80 .11 .11
10.69 r 2 c 10.89

✓ I 17517
10.61 b 3 r 10.91 10.89 11.09 = 10.96 .05 .07 .13
10.89 r 0 c 10.89
11.09 r 1 d 11.19

✓ I 16698
10.61 b 3 r 10.91 10.69 = 10.80 .11 .11
10.69 r 2 c 10.89

Dec. 15, 1897,

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Measurements of MP441 (cont.)

✓ I 11219
500 p.m.

✓ I 11247
11.49 dir 11.59
fms.

I 11519
✓ 11.19 dir 11.29 11.49 11.69 = 11.49 .20 .00 .20
11.49 rze 11.49
11.69 rze 11.89

I 11520
✓ 11.19 dir 11.29 11.29 = 11.29 .00 .00
11.29 rze 11.49

I 11594
✓ 10.89C 2r 11.19 11.09 = 11.14 .05 .05
11.09 rld 11.19

I 11767
✓ 10.61V3r 10.91 10.89 11.09 = 10.96 .05 .07 .13
10.89 rze 10.89
11.09 rld 11.19

✓ I 10990
11.49 2r 11.69 11.79 = 11.74 .05 .05
11.79 rld 11.89

Dec. 15, 1897

Measurements of MP 441 (cont.)

I 10985

✓ 11.49 $\epsilon = .1$ 11.59
 rms. < 11.59

I 15390

✓ 10.61 ϵ 4 π 11.01 10.79 = 10.90 .11 .11
 10.79 π 1 ϵ 10.89

I 15205

✓ 10.89 ϵ 1 π 10.99 11.19 = 11.09 .10 .10
 11.19 π 0 d 11.19
 ens.

✓ I 15335

Tro. prov.

✓ I 16167

10.39 ϵ 1 π 10.49
 rms.

I 15074

✓ 10.61 ϵ 3 π 10.91 10.79 = 10.85 .06 .06
 10.79 π 1 ϵ 10.89

I 16527

✓ 10.61 ϵ 3 π 10.91 10.89 10.99 = 10.93 .02 .04 .06
 10.89 π 0 ϵ 10.89
 10.99 π 2 d 11.19

Dec. 15, 1897.

Measurements of MP 441 (comb.)

I 11938

✓ 10.61 b2r 10.81 10.89 10.99 = 10.89⁹⁰ .09 .06 .09
 10.89 roc 10.89
 10.99 r2d 11.19

I 12022

✓ 10.61 b3r 10.91 10.69 = 10.80 .11 .11
 10.69 r2c 10.89

I 12076

✓ 10.61 b1r 10.71 10.59 = 10.65 .06 .06
 10.59 r3c 10.89

✓ I 10428

trop. prev.

✓ I 10507

trop. prev.

✓ I 10592

trop. prev.

I 10760

✓ 11.89 f3r 12.19 11.97 = 12.08 .11 .11
 11.97 r1g 12.07

✓ I 10993

11.89 f2r 12.09 12.07 = 12.08 .01 .01
 12.07 r0g 12.07

Dec. 15, 1897.

Measurements of MP 441 (cont.)

I 10992

✓ 10.89 C = .2 11.09
rms. < 11.09

I 9962

✓ 10.89 C 1 r 10.99 11.19 11.29 = 11.19 $\begin{smallmatrix} .10 \\ .17 \end{smallmatrix}$ $\begin{smallmatrix} 0 \\ .08 \end{smallmatrix}$ $\begin{smallmatrix} 0 \\ .13 \end{smallmatrix}$
11.19 rod 11.19
11.29 rze 11.49

I 1955 Sp.

Tospon

I 661

✓ 10.61 b4r 11.01 10.89 11.09 = 11.00 $\begin{smallmatrix} .01 \\ .11 \end{smallmatrix}$.09
10.89 roc 10.89
11.09 rid 11.19

I 13645

✓ 11.49 ex 2 r 11.69
fus.

I 13613

✓ 11.49 e1 r 11.59 11.79 = 11.69 $\begin{smallmatrix} .10 \\ .10 \end{smallmatrix}$
11.79 r1 f 11.89

I 12832

✓ 10.89 C = .1 10.99
rms. < 10.99

Dec. 15, 1897.

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Measures of MP 441 (comb)

I 10980

✓ 11.89 f 1r 11.99 12.07 = 12.03 .04 .04
 12.07 r o g 12.07

I 10970

✓ 11.89 f 2r 12.09 11.97 = 12.03 .06 .06
 12.97 r i g 12.07

I 10969

✓ 11.89 f 3r 12.19 11.97 = 12.08 .11 .11
 11.97 r i g 12.07

I 13575

✓ 11.49 e 2r 11.69 11.69 = 11.69 .00 .00
 11.69 r 2 f 11.89

I 16677

✓ 10.66 2r 10.81 10.79 = 10.80 .01 .01
 10.79 r i c 10.89

I 12134

✓ 10.89 c 1r 10.99 11.09 = 11.04 .05 .05
 11.09 r i d 11.19

I 12120

✓ 10.61 63r 10.91 10.79 = 10.85 .06 .06
 10.79 r i c 10.89

Dec. 15, 1897

measures of MP H 41 (cont).

I 12190

✓ 10.61 b 3 r 10.91 10.79 = 10.85 .06 .06
 10.79 r 2 c 10.89

I 12297

✓ 10.89 c 1 r 10.99 11.19 11.19 = 11.12 .13 .07 .07
 11.19 r 0 d 11.19
 11.19 r 3 e 11.49

I 12285

✓ 10.89 c 2 r 11.09 11.09 = 11.09 .00 .00
 11.09 r 1 d 11.19

I 12323

too poor

I 12354

✓ 11.19 d 2 r 11.39 11.39 = 11.39 .00 .00
 11.39 r 1 e 11.49

I 11003

✓ 11.89 f 2 r 12.09 12.07 = 12.08 .01 .01
 12.07 r 0 g 12.07

I 11022

✓ 11.19 d = .2 11.39
 rms. < 11.39

Dec. 15, 1897

Measure of MP 441 (cont.)

I 11159

✓ 11.89 $f = .1$ 11.99
rms. < 11.99

I 11160

✓ 11.89 $f = .1$ 11.99
rms.

I 13110

✓ 11.89 $f = .1$ 11.99
rms.

I 2007 Sp.

✓ 10.61 $b = .1$ 10.71
rms. < 10.71

I 529 + 537 Sp.

✓ 10.89 $c = .1$ 10.99
rms. < 10.99

I 639 Sp.

✓ 10.61 $b = .1$ 10.71 10.79 = 10.75 .04 .04
10.79 rms. < 10.89

I 555 Sp.

✓ 10.39 $a = .1$ 10.49
rms. < 10.49
Very near edge.

Dec. 15, 1897.

Measures of M P 441 (Cont.)

I 22608p.

✓ 10.61 $b = .2$ 10.81
rms. < 10.81

I 22988p.

✓ 10.61 $b = .1$ 10.71
rms < 10.71

I 29738p.

✓ 3 or poor

I 29418p.

✓ 10.39 $a = .1$ 10.49
rms. < 10.49

I 31998p.

✓ 10.39 $a = .1$ 10.49
rms. < 10.49

I 32128p.

✓ 10.61 $b = .1$ 10.71
rms.

January 7, 1898.

2^{hr} 10^m measures of MP 441 (cont.)

I 12022

$$a = \cancel{7.5} \cancel{8.4} 7.4$$

$$b = 8.6 \quad 7.6$$

$$c = 8.9 \quad 7.9$$

$$d = 9.2 \quad 8.1$$

$$e = \cancel{9.3} \quad 8.5$$

$$f = 9.6 \quad 9.0$$

$$g = \cancel{9.7} \quad 9.2$$

$$h_{\text{rav}} = \cancel{8.5} \cancel{9.7} \quad 10.71 \quad 10.69 = 10.70 \quad .01 \quad .01$$

I 17517

$$a = 8.0$$

$$b = 8.2$$

$$c = 8.5$$

$$d = 8.8$$

$$e = 9.1$$

$$f = 9.5$$

$$g = 9.6$$

$$h_{\text{rav}} = 8.6 \quad 10.99 \quad 10.99 = 10.99 \quad .00 \quad .00$$

I 17008

$$a = 8.3$$

$$b = 8.5$$

$$c = 8.7$$

$$d = 9.0$$

$$e = 9.2$$

$$f = 9.75$$

$$g = 9.87$$

$$h_{\text{rav}} = 8.5 \quad 10.59 \quad 10.61 \quad 10.69 = 10.63 \quad .04 \quad .02 \quad .06$$

Jan. 7, 1898.

Measures in P 441 (cont.)

 $T = 13575$ $a = 7.6$ $b = 7.9$ $c = 8.2$ $d = 8.6$ $e = 8.9$ $f = 9.3$ $g = 9.5$ $ran = 9.0$ $11.59 \quad 11.59 = 11.59 \quad .00 \quad .00$

Jan. 8. 1898.3th 10^m Measures R Pictor -31st 0^m B 4290

var = 5.8

a = 5.5

b = 5.7

c = 5.9

d = 6.2

e = 6.5

f = 6.9

g = 7.2

h = 7.6

k = 8.0

l = 8.3

m = 8.7

7.88⁷ 7.88⁷ = 7.88⁷ .00 .00B 1468⁰⁹

var = 5.5

a = 5.3

b = 5.5

c = 5.7

d = 6.0

e = 6.3

f = 6.5

g = 6.8

h = 7.0

k = 7.3

l = 7.5

m = 7.8

7.78⁷ 7.78⁷ 7.78⁷ = 7.78⁷ .00 .00 .00

Jan. 8, 1898.

measures of R Picta (cont.)

B 14842

rav = 6.5

a = 5.3

b = 5.5

c = 5.7

d = 6.0

e = 6.3

f = 6.5

g = 6.9

h = 7.1

k = 7.3

l = 7.5

m = 7.8

$$8.76^5 8.84^5 8.76^5 = 8.79^8 \cdot 03 \cdot 05 \cdot 03$$

B 18796

rav = 8.1

a = 5.9

b = 6.1

c = 6.3

d = 6.5

e = 6.8

f = 7.1

g = 7.4

h = 7.7

k = 8.1

l = 8.3

m = 8.6

$$9.88^7 9.88^5 9.78^7 = 9.81^0 \cdot 07 \cdot 05 \cdot 03$$

Jan. 8, 1898

Measures of Pictor (2) (cont)

B 12166

$\text{ran} = 8.7$

$a = 4.9$

$b = 5.1$

$c = 5.4 \ 5.7$

$d = 5.8 \ 6.2$

$e = 6.3 \ 6.8$

$f = 6.8 \ 7.5$

$g = 7.8 \ 8.1$

$h = 8.8$

$k = 9.3$

$l = 9.5$

$m = 9.7$

$n = 10.0$

B 10334

$\text{ran} = 6.3$

$a = 4.8$

$b = 5.0$

$c = 5.5$

$d = 5.9$

$e = 6.6$

$f = 7.1$

$g = 7.6$

$h = 8.2$

$k = 8.9$

$l = 9.3$

$m = 9.8$

$n = 10.3$

Jan. 8, 1898

measures of Pictor (c) (cont.)

B 10677

rav = 8.0

a = 5.0

b = 5.3

c = 5.8

d = 6.2

e = 6.8

f = 7.2

g = 7.8

h = 8.2

i = 8.8

k = 9.2

m = 9.6

n = 9.9

11.40 ~~g~~ 11.50 11.88 = 11.69 .19 .1911.88 ~~r~~ 11.98~~r~~

11.60 11.78 = 11.69 .89 .89

B 14681

rav = ms.

a = 5.0

b = 5.3

c = 5.9

d = 6.3

e = 6.8

f = 7.4

g = 7.9

h = 8.5

k = 9.1

l = 9.5

m = ms

n = ms

Jan. 8. 1898

22^h 30^m Measures of Var. in Orion - $B.D. + 0^{\circ} 9' 39''$
 Comparison Star on I 7716.

I 7716-

✓ 9.95 ϵ 2 r 10.15 10.43 10.68 = 10.42 .27 .01 .26
 10.43 r of 10.43
 10.68 r 2 g 10.88

B 12728

✓ 9.95 ϵ 1 r 10.05 10.33 = 10.19 .14 .14
 10.33 r of 10.43
 r 1 g

B 15252

✓ 8.49 ϵ 3 r 8.79 8.97 = 8.88 .02 .09
 8.97 r 1 c 9.07

B 14923

✓ ϵ 2 r 9.95 ϵ 2 r 10.15 10.33 = 10.24 .07 .09
 r 3 c 11.33 r 1 f 10.43

B 14768

✓ 9.07 ϵ 3 r 9.37 9.45 = 9.41 .04 .04
 9.45 r 1 d 9.55

B 14630

9.07 ϵ 1 r 9.17 9.55 9.85 = 9.52 .25 .03 .33
 ✓ 9.55 r 0 d 9.55
 9.85 r 1 e 9.95

Jan. 8, 1898.

measures of Orion (cont.)

✓ B 14575

8.49 b 2 r 8.69 8.87 = 8.78 .09 .09

8.87 r 2 c 9.07

#14568

✓ 9.95 d 1 r 10.05 10.33 = 10.19 .14 .14

10.33 r 1 f 10.43

I 14571

✓ 9.95 d 2 r 10.05 10.33 = 10.19 .14 .14

10.33 r 1 f 10.43

I 14642

✓ 9.55 d 1 r 9.65 9.85 = 9.75 .10 .10

9.85 r 2 c 9.95

I 14644

✓ 9.55 d 2 r 9.75 9.85 = 9.80 .05 .05

9.85 r 1 c 9.95

I 14668

✓ 9.55 d 1 r 9.65 9.95 10.23 = 9.94 .29 .01 .29

9.95 r 0 c 9.95

10.23 r 2 f 10.43

I 14445

✓ 9.95 d 1 r 10.05 10.23 = 10.14 .09 .09

10.23 r 2 f 10.43

Jan. 8, 1898

measures of Orion (cont.)

I 14117 & 14125.

✓ 8.49 ~~63~~ r 8.69 9.07 9.35 = 9.04 .35 .03 .31
 9.07 r o c 9.07
 9.35 r 2 d 9.55

I 14130

✓ 8.49 ~~64~~ r 8.89 8.97 = 8.93 .04 .04
 8.97 r i c 9.07

I 14194

✓ 9.55 ~~63~~ r 9.85 9.85 = 9.85 .00 .00
 9.85 r i c 9.95

I 14246

✓ 9.55 ~~61~~ r 9.65 9.95 10.33 = 9.98 .33 .03 .35
 9.95 r o c 9.95
 10.33 r i f 10.43

I 13649

✓ 9.55 ~~61~~ r 9.65 9.85 = 9.75 .10 .10
 9.85 r i c 9.95

I 13802

✓ 9.55 ~~61~~ r 9.65 9.75 = 9.70 .05 .05
 9.75 r 2 c 9.95

I 13821

✓ 8.49 ~~63~~ r 8.79 9.07 9.35 = 9.07 .38 .28
 9.07 r o c 9.07
 9.35 r 2 d 9.55

Jan. 8, 1898

Measure of Urn (comb)

I 13869

✓ 8.4963 r 8.79 8.97 = 8.88 .09 .09
8.97 r 1 c 9.07

I 13941

✓ 8.4963 r 8.79 9.07 9.45 = 9.10 .31 .03 .35
9.07 r 0 c 9.07
9.45 r 1 d 9.55

I 17520

✓ 9.0701 r 9.17 9.45 = 9.31 .14 .14
9.45 r 1 d 9.55

I 14716

✓ 9.55 d 1 r 9.65 9.85 = 9.75 .10 .10
9.85 r 1 e 9.95

I 16244

✓ 8.4962 r 8.69 8.77 = 8.73 .04 .04
8.77 r 3 c 9.07

I 16532

✓ 8.4961 r 8.59 8.87 = 8.73 .14 .14
8.87 r 2 c 9.07

I 16769

✓ 8.4963 r 8.79 8.97 = 8.88 .09 .09
8.97 r 1 c 9.07

Jan. 8, 1898

Measurements of Orion (cont)

✓ I 15744

8.49 ν 1 ν 8.59 8.87 = 8.73 .14 .148.87 ν 2 c 9.07

I 15986

✓ 8.49 ν 1 ν 8.59 8.87 = 8.73 .14 .148.87 ν 2 c 9.07

I 18726

✓ 9.07 ν 2 ν 9.27 9.45 = 9.36 .09 .099.45 ν 1 d 9.55

I 17285

✓ 8.49 ν 3 ν 8.79 8.97 = 8.88 .09 .098.97 ν 1 c 9.07

I 19223

✓ 9.07 ν 1 ν 9.17 9.45 = 9.31 .14 .149.45 ν 1 d 9.55

I 17037

✓ 8.49 ν 3 ν 8.79 8.97 = 8.88 .09 .098.97 ν 1 c 9.07

I 12500

✓ 10.43 ν 2 ν 10.63 10.78 = 10.70 .07 .0810.78 ν 1 ν 10.88

Jan 8, 1898

measures of Orion (cont)

I 13975

✓ 8.49 b5 r 8.99 8.97 = 8.98 .01 .01
8.97 r1 c 9.07

very near edge

I 14189
I 13975

✓ 9.55 d2 r 9.75 9.95 10.33 = 10.01 .26 .06 .32
9.95 r0 c 9.95
10.33 r1 f 10.43

I 14481

✓ 9.95 d2 r 10.15 10.23 = 10.19 .04 .04
10.23 r2 f 10.43

I 16302

✓ 8.49 b4 r 8.89 8.87 = 8.88 .01 .01
8.87 r2 c 9.07

I 11904

✓ 9.95 d1 r 10.05 10.23 = 10.14 .09 .09
10.23 r2 f 10.43

I 12466

✓ 10.43 f1 r 10.53 10.78 = 10.66 .13 .12
10.78 r1 g 10.88

I 12394

✓ 10.88 g1 r 10.98 11.23 = 11.10 .12 .13
11.23 r1 h 11.33

Jan 8, 1898

Measures of Orion (cont).

I 13953

✓ 9.07 C1 r 9.17
 duo near edge.

I 14226

✓ 9.07 C2 r 9.27 9.55 9.85 = 9.56 .29 .01 .39
 9.55 r u d 9.55
 9.85 r l e 9.95

I 18586

✓ 8.49 V3 r 8.79 8.87 = 8.83 .04 .04
 8.87 r 2 c 9.07

I 18706

8.49 V2 r 8.69 9.07 9.45 = 9.07 .38 .00 .38
 ✓ 9.07 r o c 9.07
 9.45 r i d 9.55

I 16606

✓ 8.49 V2 r 8.69 8.97 = 8.83 .14 .14
 8.97 r i c 9.07

I 16342

✓ 8.49 V3 r 8.79 8.87 = 8.83 .04 .04
 8.87 r 2 c 9.07
 near edge

I 16371

✓ 8.49 V2 r 8.69 8.77 = 8.73 .04 .04
 8.77 r 3 c 9.07

Jan. 8, 1898

Measures of Uruin (comb.)

I 16578

✓ 8.49 b3r 8.59 8.77 = 8.68 .02 .09
8.77 r3c 9.07

I 16987

✓ 8.49 b2r 8.69 8.97 = 8.83 .14 .14
8.97 r1c 9.07

I 16740 sp.

✓ 8.49 b1r 8.59 8.97 = 8.78 .19 .19
8.97 r1c 9.07

I 14632 sp.

✓ 9.07 c1r 9.17 9.45 = 9.31 .14 .14
9.45 r1d 9.55

B 14949 sp.

✓ 8.49 b3r 8.79 8.97 = 8.88 .09 .09
8.97 r1c 9.07

B 14663 sp.

aut 8.49 b3r 8.79 8.87 = 8.83 .04 .04
8.87 r2c 9.07

B 12391 sp.

✓ 8.07 c1r 9.17
dns.

Jan 8, 1898.

Measures of var. in Orion (cont.)

B 12676 sp

✓ 9.55 dir 9.65 9.85 : 9.75 .10 .10
 9.85 r1e 9.95

B 10654 sp

✓ 10.43 dir 10.53 10.28 = 10.40 .13 .12
 10.78 r1g 10.88

I 14590 sp

9.67 dir 9.65 9.45 = 9.31 .14 .14
 9.45 r1d 9.55

January 10, 1898

Measures of var. in Ceti - $\delta m = 10475$
 Comp. Stars B 12613

2h 0m

B 12613

✓ 12.52 m 2 r 12.72 12.82 = 12.77 .05 .05
 12.82 r 1 m 12.92

I 14259 16208

✓ 12.52 m = .1 12.62
 mm. < 12.62

I 16737

✓ 11.29 g 2 r 11.49 11.62 11.75 = 11.62 .13 .00 .13
 11.62 r 0 h 11.62
 11.75 r 1 h 11.85

I 16528

✓ 12.52 m 2 r 12.72 12.82 = 12.77 .05 .05
 12.82 r 1 m 12.92

I 16434

✓ 12.52 m 3 r 12.82 12.82 = 12.82 .00 .00
 12.82 r 1 m 12.92

I 17514

✓ 10.19 d 3 r 10.49 10.59 10.86 = 10.65 .16 .06 .31
 10.59 r 0 e 10.59
 10.86 r 2 f 11.06

Jan. 10, 1898

measures of X Ceti (comb.)

I 15622

9.25 b3 r 9.55 9.82 9.99 = 9.79 .24 .03 .20

9.82 r0 c 9.82

9.99 r2 d 10.19

I 15717

useless

I 15959

✓ 10.59 e1 r 10.69 10.86 = 10.78 .09 .08

10.86 r2 f 11.06

I 15809

9.82 c1 r 9.92 10.19 10.39 = 10.17 .25 .02 .22

✓ 9.92 r0 d 10.19

10.39 r2 e 10.59

I 17052

✓ 10.19 d1 r 10.29 10.49 = 10.39 .10 .10

10.49 r1 e 10.59

1

I 18724

✓ 10.59 e2 r 10.79

date from

I 16288

✓ 12.52 m a 1 12.62

mus < 12.62

Jan. 10, 1896

measures of X Ceti (emb.)

I 16159

✓ 11.85 \log = .1 11.95
 no. < 11.95

I 7827

✓ 10.19 \log 1 \log 10.29 10.39 = 10.34 .05 .05
 10.29 \log 2 \log 10.59

I 18912

✓ 11.06 \log = .1 11.16
 no. < 11.16

I 18869

✓ 10.59 \log 2 \log 10.79 11.06 11.19 = 11.01 .22 .05 .18
 11.06 \log 0 \log 11.06
 11.19 \log 1 \log 11.29

I 14245

✓ 10.59 \log 2 \log 10.79 10.96 = 10.88 .07 .08
 10.96 \log 1 \log 11.06

B 14479

✓ 10.19 \log 1 \log 10.29 10.29 = 10.29 .00 .00
 10.29 \log 3 \log 10.59

B 14344

✓ 9.82 \log 1 \log 9.92 10.19 10.29 = 10.13 .21 .06 .16
 10.19 \log 0 \log 10.19
 10.29 \log 3 \log 10.59

Jan. 10, 1898

measures of X Cebi (cont.)

I 18470

9.2562r 9.45 9.82 9.99 - 9.75 .30 .07 .34

✓ 9.82roc 9.82

9.99r2d 10.19

I 18410

✓ 9.82c1r 9.92 9.99 = 9.96 .04 .03

9.99r2d 10.19

✓ I 19332

ms. pms

I 19218

✓ 12.52 ms. 12.62

ms. < 12.62

Poor plate

I 14115

✓ 11.29g2r 11.49 11.52 = 11.50 .01 .02

11.52r1h 11.62

✓ I 19091

11.29g = .2 11.49

ms. < 11.49

Poor plate

I 14180

✓ 10.59r2r 10.79 11.06 11.19 = 11.01 .22 .05 .18

11.06roc 11.06

11.19r1g 11.29

Jan. 10, 1898.

Measures of X Ceti (cont.)

I 13996

✓ 11.85 ℓ or 11.95 12.15 12.42 = 12.17 .22 .02 .25
 12.15 α or 12.15
 12.42 α or 12.52

I 17282

✓ 9.82 ℓ or 10.02 10.19 10.39 = 10.20 .18 .01 .19
 10.19 α or 10.19
 10.39 α or 10.59

B 14594

✓ 10.59 ℓ or 10.79 10.86 = 10.82 .03 .04
 10.86 α or 11.06

B 14866

✓ 12.15 ℓ or 12.25
 α or < 12.25

B 14977

✓ 12.52 α or 12.62
 α or < 12.62

B 14996

✓ 12.92 α or 13.02
 α or < 13.02

B 14995

✓ 13.2702 α or 13.47

Jan. 10, 1898

Measures of X Ceti (comb.)

I 13865

✓ 12.52 $\delta m 1 r$ 12.62 12.82 = 12.72 .10 .10
 12.83 $r 1 m$ 12.92

I 13898

✓ 12.15 $\delta = .1$ 12.25
 rno < 12.25
 near edge

I 13899

✓ 13.27 $\delta 1 r$ 13.37

I 13940

✓ 12.52 $m o r$ 12.52
 from plate

I 14106

✓ 11.29 $g 2 r$ 11.49 11.52 = 11.50 .01 .02
 11.52 $r 1 h$ 11.62

✓ B 12675 Sp.
 from near edge

B 18392 Sp.

✓ 10.19 $\delta = .1$ 10.29
 rno < 10.29

✓ I 14101 Sp.

10.59 $\delta = .1$ 10.69

rno < 10.69

Jan. 15 1898.2^h 0^m

Measures of m P 441.

I 9866

10.89 c 1 r 10.99 11.19 11.39 = 11.19 .20 .00 .20

✓ 11.19 r o d 11.19

11.39 r 1 e 11.49

✓ I 15167

10.39 a 1 r 10.49

bns.

I 9849

✓ 11.19 d 1 r 11.29 11.39 = 11.34 .05 .05

11.39 r 1 e 11.49

I 12134

out 10.61 b 2 r 10.81 10.89 10.99 = 10.90 .09 .01 .09

10.89 r o c 10.89

10.99 r 2 d 11.19

I 11510

out 10.61 b 4 r 11.01 10.89 11.09 = 11.00 .01 .11 .09

10.89 r o c 10.89

11.09 r 1 d 11.19

out I 11511

10.61 b 3 r 10.91 10.89 11.09 = 10.96 .05 .07 .13

10.89 r o c 10.89

11.09 r 1 d 11.19

Jan 15th 898

measures of MP 441

I 10990

11.49 \pm 4 \times 11.89

fus. nail plate

I 16115

10.89 \pm 1 \times 10.99 11.19 11.29 = 11.16 .17 .03 .03

11.19 rod 11.19

11.29 \pm 2 \times 11.49

Jan. 15, 1898

measures of Orion.

B 14768

9.07 C 3 r 9.37 9.45 = 9.41 .04 .04
 9.45 r 1 d 9.55

I 14194

9.07 C 3 r 9.37 9.55 9.85 = 9.59 .22 .024 .26
 9.55 r 0 d 9.55
 9.85 r 1 e 9.95

I 14189

9.55 d 2 r 9.75 9.85 = 9.80 .05 .05
 9.85 r 1 e 9.95

B 14949 sp.

9.07 C 2 r 9.27 9.45 = 9.36 .09 .09
 9.45 r 1 d 9.55

B 14663 sp.

8.49 C 3 r 8.79 8.97 = 8.88 .09 .09
 8.97 r 1 c 9.07

Jan -15, 1898

Measure of X Ceti

I 14259 sp.

✓ 10.19 d 2 r 10.39 10.49 = 10.44 . 05 . 05
 10.49 r 1 r 10.59

± 16339

✓ 11.85 b 2 r 12.05 12.15 12.42 = 12.21 . 16 . 06 . 21
 12.15 r 0 d 12.15
 12.42 r 1 m 12.52

I 14274 sp.

✓ 10.19 d 3 r 10.49 10.49 = 10.49 . 00 . 00
 10.49 r 1 e 10.59

I 14312 sp.

✓ 10.19 d = .2 10.39 .
 rms. < 10.39

January 22, 1898

Measures of Var. in Octantis

Comp. Stau on B5684

0^h 45^m

B 12992

l 3 r

r 0 l

r 2 m

B 16038

l 1 r

r 3 l

B 15967 (Barlow)

l 2 r

r 0 l

r 2 m

B 15108 (Barlow)

m = .4

rms.

B

Comp. stars to be changed

January 24, 1898

2^h 15^m

Measures of τ in Lepus - BD - 22° 995'
 Comp. stars ± 12464

I 19506

✓ 8.04 c 2 r 8.34 8.49 8.77 = 8.50 .26 .01 .27

✓ 8.49 r o d 8.49

8.77 r 2 e 8.97

I 19222

✓ 8.97 e 2 r 9.17 9.37 9.72 = 9.42 .25 .05 .30

9.37 r o f 9.37

9.72 r i g 9.82

B 4310

✓ 9.82 g 2 r 10.02 10.24 10.34 = 10.28 .18 .04 .14

10.24 r o h 10.24

10.34 r 3 h 10.74

B 4600

✓ 8.97 e 2 r 9.17 9.37 = 9.22 .05 .05

9.27 r i f 9.37

very near edge

✓ B 4157

Too near edge

B 10679

✓ 9.17 r 2 e 8.97

near edge & not in plate

Jan. 24, 1898

measures of BD-22°995 (comb.)

B 12485

✓ 8.49 d 2 r 8.69 8.87 = 8.78 .09 .09
8.87 r 1 a 8.97

B 12729

✓ 8.49 d 2 r 8.69 8.97 9.27 = 9.98 .29 .01 .29
8.97 r 0 a 8.97
9.27 r 1 f 9.37

B 14577

✓ 9.37 f 2 r 9.57 9.82 10.14 = 9.84 .27 .02 .30
9.82 r 0 g 9.82
10.14 r 1 h 10.24

B 14632

✓ 9.37 f 3 r 9.67 9.72 = 9.70 .13 .02
9.72 r 1 g 9.82

B 14770

✓ 9.37 f 2 r 9.57 9.82 10.14 = 9.84 .27 .02 .30
9.82 r 0 g 9.82
10.14 r 1 h 10.24

B 14798

✓ 9.37 f 2 r 9.57 9.62 = 9.60 .03 .02
9.62 r 2 g 9.82

Jan. 24 1898

measures BD-220995 (cont.)

B 15251

✓ 8.49 d 2 r 8.69 8.87 = 8.78 .09 .09
8.87 r 1 e 8.97

B 17283

✓ 10.24 h 2 r 10.44 10.74 10.94 = 10.71 .27 .03 .23
10.74 r 0 h 10.74
10.94 r 2 h 11.14

B 17645

✓ 9.82 g 1 r 9.92 10.04 = 9.98 .06 .06
10.04 r 2 h 10.24

B 17670

✓ 9.37 f 1 r 9.47 9.82 10.14 = 9.81 .34 .01 .33
9.82 r 0 g 9.82
10.14 r 1 h 10.24

B 17830

✓ 8.49 d 1 r 8.59 8.87 = 8.73 .14 .14
8.87 r 1 e 8.97

B 17851

✓ 8.49 d 2 r 8.69 8.77 = 8.73 .04 .04
8.77 r 2 e 8.97

✓ B 18136

8.04 c 2 r 8.24 8.39 = 8.32 .08 .07
8.39 r 1 d 8.49

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measures of BD-22°995 (cont.)

B 18215

✓ 8.04 C 2 r 8.24 8.39 = 8.32 .08 .07
 8.39 r b d 8.49
~~8.32~~

B 18217

✓ 8.04 C 1 r 8.14 8.29 = 8.22 .08 .07
 8.29 r 2 d 8.49

B 18369

✓ 9.82 g 1 r 9.92 10.14 = 10.03 .11 .11
 10.14 r 1 h 10.24

✓ B 20203

10.24 h 2 r 10.44 10.54 = 10.49 .05 .05
 10.54 r 2 h 10.74

I 12485

✓ 10.24 h 2 r 10.44 10.74 = 10.59 .15 .15
 10.74 r 0 h 10.74
 hms

I 12567

✓ 10.24 h = .1 10.34
 rms < 10.34

I 13804

✓ 7.59 b 2 r 7.79 8.04 8.29 = 8.04 .25 .00 .25
 8.04 r 0 c 8.04
 8.29 r 2 d 8.49

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measures of BD - 22° 995 (cont.)

I 13651

✓ 9.37 for 9.57 9.82 10.04 = 9.81 .34 .61 .23
 9.82 r o g 9.82
 10.04 r 2 h 10.24

I 13870

✓ 8.04 C r 8.14 8.29 = 8.22 .08 .07
 8.29 r 2 d 8.49

I 14643

✓ 10.74 b 1 r 10.84 11.04 = 10.94 .10 .10
 11.04 r 1 h 11.14

I 14377

✓ 9.37 f 1 r 9.47 9.82 10.04 = 9.78 .31 .04 .26
 9.82 r o g 9.82
 10.04 r 2 h 10.24

I 15960

✓ 10.24 h 1 r 10.34 10.64 = 10.49 .15 .15
 10.64 r 1 h 10.74

I 14438

✓ 8.04 C = .1 8.14
 rms. Plate from < 8.14

I 14715

✓ 8.04 C = .2 8.24
 rms. Plate from < 8.24

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measures of BD-22°995 (comb)

I 16771

✓ 8.04 C 3r 8.34 8.39 = 8.36 .02 .03
8.39 r 1d 8.49

I 16245

✓ 9.37 f 2r 9.57 9.62 = 9.60 .03 .02
9.62 r 1g 9.82

I 17284

✓ 9.82 g 2r 10.02 10.24 10.64 = 10.30 .28 .06 .34
10.24 r 0 h 10.24
10.64 r 1 h 10.74

I 16531

✓ 7.59 b 2r 7.79 7.94 = 7.86 .07 .08
7.94 r 1 C 8.04

I 17056

✓ 9.37 f 1r 9.47 9.72 = 9.60 .13 .12
9.72 r 1g 9.82

I 17515

✓ 10.24 h 3r 10.54 10.74 11.04 = 10.77 .23 .03 .27
10.74 r 0 h 10.74
11.04 r 1 h 11.14

I 18727

too poor

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Measures of BD-22°995 (cont.)

✓ B 4334 Sp.
 6.97 $\alpha = .1$ 7.07
 rms. < 7.07

✓ B 7146 Sp.
 7.59 $\beta = .1$ 7.69
 rms < 7.69

✓ B 14948 Sp.
 8.97 α or 8.97 9.17 = 8.07 .10 .10
 9.17 α 2 f 9.37
 duobon plate

✓ B 17402 Sp.
 9.82 $\gamma = .1$ 9.92
 rms < 9.92

✓ B 7047 Sp.
 8.49 $\delta = .1$ 8.59
 rms. < 8.59

✓ B 4417 Sp.
 7.59 $\epsilon = .1$ 7.69
 rms. < 7.69

B 4472 Sp.
 too poor.

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measures of BD-22°995

B 17416 sp.

✓ 9.37 f = .1 9.47
 Ans. < 9.47

B 17429 sp.

✓ 9.37 f = .1 9.47
 Ans. < 9.47

B 12628 sp.

✓ 8.49 d 2 r 8.69 9.27 = 8.98 .29 .29
 9.27 r 1 f 9.37
 Ans.

B 15357 sp.

✓ 9.82 g 2 r 10.02 10.24 = 10.13 .11 .11
 10.24 r 0 h 10.24
 Ans.

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I 14643

✓ 10.24 h 2 r 10.44 10.74 11.04 = 10.74 .34 .50 .34
 10.74 r 0 h 10.74
 11.04 r 1 e 11.14

63 brighten alone
4 " " nights

19950344, 0003, 0002