

K6
11366
v. 638

General Chronograph
Record of
Nov 28 1871 to Feb 19 1872

Sever, Francis, & Co., University Booksellers, Cambridge.

11
20

Nov 28/11,
 Wadsworth Lib. from
 B. B. Phipps 21 27

E		T	
278	274	256	253
275	380	256	252
380	275	249	247
288	275	252	253
288	280	253	248

Nov 138
 Bar 2995
 W. 648

W = 371
 2 = 372

21 ^h 22

20 4 41, 8 24, 7

~~Chronograph second bowl~~

1871 Nov 29 A-M obs Gl.

23^h 55^m 05

Σ		Σ	
7.1	6.0	53.2	52.8
7.2	6.7	53.8	52.8
6.8	6.1	53.9	52.5
7.3	7.0	53.7	52.8
7.0	6.5	54.0	52.9

1^h 38^m 05

No 1 = 373

No 4 150

Bar 29.75-

A 62

46.27

1871 Nov 30

46.063	46.308
1068	315
1070	313
1060	308
1058	315
<u>319</u>	<u>39</u>
064	46.312
312	
<u>376</u>	
188	
46.19	

2871 Dec 1st
oh 2 m 05

Zone
4.6.

22 2 m 05

22 6 m 05

ξ		τ	
10.3	8.0	56.0	54.0
9.9	7.4	55.8	54.2
9.8	7.8	55.6	54.3
9.2	7.1	55.3	54.5
9.3	7.4	55.8	54.7

32 17 m 05

EP 28° 1
Nov 4 17° 0
29.98
63° 7

247 = 0.74
2 = 0.75

1871 Dec 2

A m obs

 23² 59^m
 3⁰⁰

4.6.

2² 12⁰⁰

32.0	35.6	24.5	23.2
36.4	35.3	24.4	23.2
36.3	35.2	24.5	22.8
36.4	35.7	24.9	23.0
36.7	35.8	24.8	22.9

~~24.7~~

E P 29.7

W 4 16.6

Bar 30.27

A 66.8

M = 376

~~2-377~~

Dre 5-

46.843	46.098
353	92
344	80
344	89
348	86
<u>232</u>	<u>445</u>

46.361	46.050
371	850
370	045
360	040
268	042

46.346	46.089
089	
<u>435</u>	
217	

46.367
<u>46.045</u>

46.206

217

23

46.212

a. Argumini 21 5-9

3 Caprin 22 06 41-429.7 10.0

26.8	27.3	14.8	13.2
26.9	26.8	14.2	14.2
27.5	26.0	14.1	14.1
26.7	26.6	14.4	13.8
27.8	26.8	13.6	13.3

W4 = 152 W1 = 377

Bar 2971

2 = 378

W4 Th. 620

Dre 5-6 Polaris Blues in a Boot 5 B Boots

DEC 6 1871

$$\begin{array}{r}
 46,371 \\
 382 \\
 375 \\
 378 \\
 \underline{365} \\
 371
 \end{array}$$

$$\begin{array}{r}
 46,374 \\
 45,966 \\
 \hline
 92,340 \\
 46,170
 \end{array}$$

$$\begin{array}{r}
 45,960 \\
 968 \\
 968 \\
 968 \\
 \hline
 966 \\
 330
 \end{array}$$

45,966

$$\begin{array}{r}
 46,380 \\
 380 \\
 382 \\
 070 \\
 \hline
 370 \\
 382
 \end{array}$$

376

961

347

173

46,173

$$\begin{array}{r}
 45,962 \\
 960 \\
 952 \\
 968 \\
 \hline
 962 \\
 304
 \end{array}$$

45,961

46,172MAR obs. Glb. from 21^h 40^mAM obs. Glb. from 0^h 2^m

AM obs. zone

~~AM obs. Glb.~~

Cass 0. 29 46 + 53° 11'

Runs

	E	F	
201	19.8	4.7	3.2
200	19.4	4.8	4.1
200	19.3	4.9	4.1
198	19.6	4.5	4.5
200	19.0	4.7	5.0

$E.P. = 25.4$

NO4 15.4

Bar 2995

Alt. 66.2

$N01 = 379$
 $2 = 380$
 $3 = 381$

Dec 9 1871

W.R. Deale from

W.R. Deale from 12th 26th

{ Polaris 45th 2 11.6 46.9 } 45-2 28.5 4.3.
C. P. A.

W.R. Deale G. L.

W. H. = 110

Bar 3.022

~~117~~ 8.00

W. H. = 382

2 = 387

29011 1871

~~W.R. dr. 750 75 56.~~

~~12 Oct 0 20~~

x Cars 0 25-10 0 14.6 56.0

~~2 Cars 0 29 10 2 2.0 44.2~~

$\Sigma p. = 300$

W.R. 383

Bar 2882

{ 550

W.O. = 384

2 = 385 —

46.366 ³⁴²
 354 ³⁵²
 264 ³⁵⁰
 358 ³⁴⁸
 354 ³⁴⁰
 296 ³³⁶
 359

46.002
 -008
 +007
 +003
 +007
 46.000
 288
 348

46.354
 46.000
 46.177

Ward's bl from 23¹²

Ward's zone

Ward's bl

No 4 = 204
 Ben 3016

Ward's bl 700

No 1 = 386
 2 = 387

Dec 14 1871

Level W

57.1 62.9

57.9 62.8

55.2 62.8

55.8 67.0

300 155

57.50 63.87

57.50

216.37

11.18

+ 2.52

55.7 62.0

55.0 62.7

60.9 61.8

61.1 62.02327 185

5818

5818

5818

36.44

3.22

15) 25.8

1.5

1.08

b = +18

Dec 14

W.R. Do for longthind

J. Perini

~~300 44 + 47 22~~5th Camel 3 36 45 + 70 56 C.C.C.2nd Tami 3 38 49 + 23 42

27 " 3 41 29 + 23 39

3rd Perini 3 46 01 + 31 304th Persei 3 49 12 + 38 385th Perini 3 50 05 + 35 257th Tami 3 53 32 + 12 07

h.v.v.v. 3 56 51 + 85 13

~~6th Tami 3 59 12 28 + 15 19~~Jth Tami 4 15 29 + 17 14Eth Tami 4 21 05 + 18 53ath Tami 4 28 31 + 16 152nd Enidai 4 29 52 - 3 37

long

very

Selling very

WY = 388

Dec 16 1871

Level

E	W	E	W
698	612	615	690
71'2	598	604	704
822	784	620	628
532	754	620	640
<u>2464</u>	<u>276.8</u>	<u>154</u>	<u>2672</u>
61.60	6920	6398	6680
	61.6		6400
	<u>27.6</u>		<u>1280</u>
	3.8		1.40

at 6 P.M.

E	W	
630	678	3.80
63'6	664	1.40
64.8	69.2	<u>3.2</u>
60.8	<u>70.0</u>	82
<u>92</u>	2707	+2.7
62.30	684	<u>1216</u>
	62.3	+1.4
	<u>7161</u>	
	7305	

Dec. 17, 1871

W. J. R. No.

Level 5 P.M.

2	40
580	689
580	688
620	650
618	648
<u>2398</u>	<u>278</u>
5996	6688
	<u>5996</u>
	21692
	<u>346</u>
	31278
	<u>1792</u>
	48

a Peyani A.R. only
 A.M. obs 46. from 1^h 30^m

W1 = 389
 2 = 390

Dec. 18, 1871

W. A. R. Obs

46	34.6	45	97.5
	35.0		97.0
	35.0		97.7
	35.0		98.6
	35.0		98.0
	<hr/>		<hr/>
	246		388
46	349		978
45	978		
	<hr/>		
	327		
	.163		

W. A. R. Obs.

12.6	125	0.9	0.4
12.6	124	1.1	0.9
12.2	120	0.8	0.6
11.8	118	0.6	1.2
11.8	118	0.9	0.9
<hr/>	<hr/>	<hr/>	<hr/>
12.5	118		

E. P. = 33.0

~~904~~ = 819Bar. 2989
mm. 64.9

702 = 391

2 = 392 morning

DEC 20 1871
W. R. R. G. G.

46.362

356

356

366

352

292

46.358

001

359

46.179

46.000

02

06

01

-03

6

.001

46.361

362

354

352

349

258

356

010

366

183

172

36246.181

46.016

000

012

12

07

47

010

Level

E W

624

67.1

620

68.1

57.1

74.9

57.7

73.9

23922840

5980

7100

5980

1120

5600

625 717

621 722

610 699

619 691

155 282.9

6387

7072

6387

185

252

560

342

902

452

361

120

6=4.24

Dec 20
A Regain S R only

58.2	57.4	42.3	42.8
57.8	56.7	42.7	42.7
57.6	56.6	42.4	42.6
57.7	57.0	41.8	41.3
57.3	56.7	42.0	41.2

W R N do R only

a Per 3 15.07	55 4 303	7.4
2 N Can 3 1837	50 4 270	44
5 Per 3 2129	50 0 329	103

W 1 = 391
2 392
3 393

EP = 319

No 4 6.8
2960
620

Seeing had the first part of the evening
Able while after about 10^h

8871 Dec 24

Am Dec

1st wire lost

x Pexid	oh 6 ^m	35.5	50	4	49.2	41.7
x Gas	0 ^h 25 ^m		10	0	20.8	6.8
{ Gas	0 ^h 29 ^m		10	2	4.9	57.8
x Gas	0 ^h 33 ^m		30	3	29.0	15.7
η Gas	0 ^h 41 ^m		15	0	28.1	14.5
γ Gas	0 ^h 48 ^m		20	2	14.8	0.1
ε Pexid	0 ^h 56 ^m		10	1	48.3	41.8
B And	1 ^h 2 ^m		25	1	48.2	37.5
x Ins Inn			45	2	2.2	45.3

8.6 1^h 15^m 0

Living variable

ε	W	ε	W
57.5	65.2	58.6	64.0
57.6	65.0	58.0	64.2
57.8	64.9	57.0	65.8
58.4	64.2	57.7	65.1
<u>31.3</u>	<u>19.3</u>	<u>31.3</u>	<u>19.1</u>
57.82	64.82	57.82	64.78
	57.80		57.82
	7.00		6.96
	3.50		3.48
	3.48		
	3.49		

W = 594

3.50
2.80
b = + 0.70

Dec 27 1871
WSP des. l. b.
WSP des. zone
WSP des. l. b.

W1 = 395

2 = 396

Dec 28 1871 Wash D.C.

(u Cass) 0 5-9 38 + 54 18 ✓
 5 1 12.6 51.6 #

(B Audouin) 2 30 + 34 56
 #

X Piscine 1 4 34 + 20 21 ✓
 #

(37 Ceti) 1 7 55 - 8 37 ✓
 #

39 Ceti 1 10 06 - 3 11 ✓
 #

4 Cass 1 12 00 + 57 33 ✓
 #

ξ Audouin 1 14 47 + 44 57 ✓

Polaris

X

5 1 12.6 57.6

Jan 2

25 1 52.5 32.6

x a₁?

55-4 1.1 50?

X.

X.

X.

lost 3 wires

(A Corz) 1 21 37 + 69⁰ 36'

~~*~~

(2 Piscium) 1 24 36 + 14 41

(B. Ab 466) 1 27 14 + 37 32

(~~12 Persei~~) 1 30 04 + 47 59

(T Androm) 1 33 00 + 39 55 ✓

(2 Piscium) 1 34 44 + 4 51

X

45 2 54.5 29.0 45 3 18.6 53.4

40 1 30.0 35.0 40 2 46.1 31.1
 40 2 6.8 54.8

45 4 43.6 29.5 50 0 27.1 14.3

25 0 12.9 45.2 25 0 37.4 15.2
 20 4 52.7 33.3

25 2 54.2 31.9 25 3 35.8 15.8
 25 2 51.7 35.4 25 3 40.3 24.0

30 2 48.3 33.7 ~~30 2 48.3 33.1~~
 30 2 51.0 50.0 30 3 30.2 17.7

(α Piscium) 1 38 36 + 8⁰ 30'

(B. Ab 544) 1 41.01 + 37 19

(χ Ceti) 1 43 06 - 11 19

(γ Ceti) 1 45 07 - 10 58

(β Arietis) 1 47 31 + 20 11

(δ Arietis) 1 50 44 + 22 58

50 2 5.0 49.9

50 2 7.3 54.3

50 3 2.8 47.4

40 3 15.0 3.0

0 4 34.9 12.9

5 0 15.5 55.2

40 1 2 5.4 14.5

40 1 42.0 33.9

40 2 14.2 3.3

40 2 33.2 25.7

20 0 19.7 9.2

20 1 24.2 15.7

20 1 10.3 59.0

~~20 3~~

10 2 48.9 30.2

10 2 10.0 55.7

10 3 19.2 2.0

10 03 9.8 56.8

25 0 58.0 39.2

25 0 13.7 57.0

25 0 43.0 23.0

25 1 0.8 44.9

(α Ceti) 1 53 57 - 21 42
~~50 Cass 1 52 20 + 71 48~~

(γ Androm) 1 56 00 + 41 43

(α Aretis) 1 59 53 + 22 51

(β Trianguli) 2 1 51 + 34 23

(53 Cass) 2 4 23 + 65 55

(6 Persei) 2 5 02 + 50 28

0 3 32.1 17.9

0 4 18.7 7.5

40 0 41.2 22.3

40 1 25.2 6.6

40 0 34.9 16.7

40 1 39.2 23.0

30 1 44.3 23.2

30 2 35.4 15.5

30 1 50.0 29.8

30 2 44.0 26.4

0 0 32.9 17.7

0 1 24.0 4.7

0 0 34.6 18.3

0 1 33.7 18.0

25 3 43.0 16.9

25 3 43.0 17.8

25 3 53.0 26.9

~~2 Arietis~~ 2 10 57 + 19 17 X

(0 Crli) 2 12 57 - 3 34

(1 Cas) 2 18 28 + 66 49

~~(9 Crli)~~ 2 21 18 ~~+ 7 5-2~~

(27 Arietis) 2 23 46 + 17 08 J

(0 Crli) 2 26 00 - 15 48

X

0	4		
0	4	58.8	22.2

X#2

30	4	39.6	12.7	35	0	14.0	47.9
-	-	28.3	5.9				
-	-	50.2	26.3	35	0	9.7	47.7

X	25	4	44.7	29.3			
	25	4	45.8	33.3	30	0	52.4 38.0

~~Int-See~~

			15	0	30.0	13.2
10	4	51.9	37.3			

10	0	31.1	18.7	to
10	0	33.8	23.6	

(5 Mus Mus) Lb. 2 2800 103 43

(6 Ariels) 2 31 29 + 21 24

(✓ 684) 2 32 51 - 0 14

~~(8 Persei) 2 35 24 + 48 41~~

(8 684) 2 36 37 + 2 41

(1 Dridani) 2 39 04 - 19 08 ✓

39 Ariels 2 40 + 28 42 ✗

(41 Ariels) 2 42 20 + 2 6 4 3

40 1 ~~25.6~~ 58.2
~~40 1 42.2 46.1~~
 40 1 just seen
 1.3 36.3

~~15~~ 6 20
 40 1 20.9 58.0

55 3 40.6 20.4
 55 3 45.3 28.3
 55 3 42.2 26.8

55 4 36.3 16.1
 f b after m fr
 55 4 45.2 28.5

35 0 5 4.7 40.0

A 20

40 0 58.6 40.3
 40 1 3.9 48.9
 40 1 20.1 6.8

25 3 45.9 32.9
 25 3 46.7 36.2

25 4 41.1 29.0

35 4 21.1 2.3

35 4 21.8 5.7

35 4 19.0 2.9

40 0 11.2 80.3

40 0 11.6 55.4

(γ Persei) 2 41 - ~~00~~ + 52 14

~~47~~ See B₃ tree 3^h 37

Circle not to be read after this point

(δ Eridani) 3 ~~37~~ 10 - 10 12
29 Dec (bunk) at M - -

(γ Eridani) 3 42 10 - 24 17 ✓

(β Persei) 3 46 02 + 31 30 X

ϵ Persei 3 45 12 + 39 38 X

5.4 22.9 0.1 10 0 19.7 -3.2

5 fol

10 0 19.5 0.0

5.4 26.2 8.1 10 0 18.2 0.2

ξ Perseu 3 50 36 + 35 - 25 - X

γ Persei 3 56 58 + 49 ⁰69 ⁰ SX

ψ Tauri 3 59 04 + 28 39 X ✓
hump out

BAB. 1272 4 0 25 + 16 59 X ✓

ρ Tauri 4 02 58 + 26 08 X ✓

η Perseu 4 522 + 48 05 X ✓

✓ A Eridani 4 8 19 -10 35 ~~X~~
~~X~~

✓ B Ab 1313 4 10 29 +60 25 ~~X~~
 changed that ~~X~~

✓ X Tami 4 14 44 +25 19 ~~X~~
~~X~~

✓ V₂ Tami 4 16 39 + 17 08 ~~X~~
~~X~~

✓ 85 Tami 4 24 32 + 15 34 ~~X~~
~~X~~

✓ 9 Tami 4 26 32 + 14 34 ~~X~~
~~X~~

✓ 53 Eridani 4 32 18 - 14 37

✓ ST Pauri 4 34 29 + 22 42 X

~~✓~~ ✓ Eridani 4 39 06 - 3 30 X

✓ So. Orionis 4 45 13 + 14 02 X

~~✓~~ ✓ Camelopard 4 51 55 + 60 15 X

✓ Antares 5 4 34 + 38 20 X

✓ ~~semi~~

X

X

X

X

X

not seen

Beaumont

α Aurigae 5 7 10 145 52 X

β Orionis 5 8 24 - ⁹ ~~80~~ 4 X
 not an

γ Orionis 5 11 21 - 6 59 X
 X

β Tauri 5 18 8 + 28 30 X T

G 966 5 22 29 + 74 57 X

22 Camel. 6 4 37 + ~~69~~ 22 +
 V. No. 6 15 + 93 24 X

J 4 Gem 6 21 18 + 20 18 X?

J 13 Monoc 6 25 - 56 + 7 26 X
 — —

γ Gem 6 30 15 + 16 30 \times
~~22 Monoceros~~

15-Monoceros 6 23 5-2 + 10 01 \times ?

ϵ Gem 6 35-59 + 25 15 \times good

ζ Gem 6 38 03 + 13 02

51 π Cephei 6 39 14 + 87 14

mid gr —

FOOT B.

hang

Dec 28 1871

4 h P.M.

2 W

636 709

647 695

611 729

620 728

6258 7158

6256

860

$$4.3 \times 8 = 344$$

$$b = +23$$

4 P.M.

2 W

632 712

639 711

610 743

620 735

101 101

4.00

23

133

26

$$b = +26$$

$$(b = +25)$$

6252 7252

6252

100

50

$$\begin{array}{r} 397 \\ - 898 \\ \hline 237 \\ - 399 \\ \hline 400 \end{array}$$

$$C = 46.147$$

Seeing bad from 23^h to 0^h After
that tolerable till 5^h + when it became
came thick.

1871 Dec 29th

~~46.145~~
~~46.377~~ 45.881
~~380~~ 883
~~378~~ 880
~~378~~ 882
~~373~~ 878

~~386~~ 4
46.377 45.881
45.881
.258
46.130

2 2 8 ~ 0 S

|||

6 4 4 0

Run

+ 0 6

30.0	30.2	16.2	15.8
30.3	31.0	16.4	15.6
30.6	30.3	16.7	15.9
30.1	30.0	16.3	16.1
30.5	30.1	16.6	16.0

EP 29.8

W 4.2103

30.25-

At 665-

11 PM

E W

~~81.9~~ ~~62.0~~~~81.5~~ ~~60.7~~

63.0 82.3

63.3 80.5

73.2 70.6

74.3 69.4

27 34 300 8

68.45 75.20

~~68.45~~ ~~6.95~~

E W 3.37

74.2 69.5

75.0 69.1

61.5 82.0

62.0 82.6

272 7

68.18 303.2

75.80

~~68.18~~ ~~7.62~~

38.1

337

~~118~~ 359

287

No 1 = 401
 2 = 402
 3 = 403

957
 b = +.191

46.349 46.-037

358

345

344

344

240

46.348

38

310

46.153-

37

32

42

42

190

-038

Jan 1872

VHL obs.

~~1~~

3.0

3.2

50.1

50.7

2.8

2.6

50.3

51.0

3.0

2.6

50.8

50.8

3.6

2.0

50.7

50.8

2.8

4.9

50.8

51.0

Nov = 299

3050

72.0

Jan

~~✓ Dec 1744 10 107 48~~
 a Orion 5-48 11 7 23
 35 Dec 1755 18 103 02 ?

Jan 1-2 Morning
 ✓ Beginn 12 48 05

8 Dec 12 50 18

2 Beginn 12 55 44

Palais

69 hr May 11 13 23

3 Beginn 13 25 ?

2 Books 14 39
 B Mus Mus 14 54

no 1 = 404
 2 = 405
 3 = 406
 4 = 407

Jan 2

46 16.0
 17.1
 17.3
 16.0
 18.2

 84.6
 16.92
 16.22

 119
 1657

46,166

46 15.4
 16.5
 17.0
 16.0
 16.0

 812
 16.22

46 176

176

173

171

174

 20

46, 1740
 1342

 308.2

46 154

46,136

133

140

130

132

 171

1342

2 N Camel 3 18

cont a b c

5 Perseu 3 21

220

5 Perseu 3 33 43 + 47 22

Jan 21/21

$$\begin{array}{r} m_4 = 19,5 \\ 3057 \\ 62.9 \end{array}$$

$$\begin{array}{r} m_1 = 408 \\ 2 = 409 \end{array}$$

$$5-5 \quad 0 \quad -3,8 \quad (4) \quad 3 \quad 1.2$$

$$50 \quad 1 \quad 20 \quad 416h,$$

$$0 \quad 1 \quad 0,8 \quad 378$$

7871 Jan 5th A.M. obs1st 2nd 12^m 0^s2^d 4th 13^m 0^s

Sun bat * seeing bad

DO1 = 410

7871 Jan 6th A.M. obs1st 2nd 14^m 0^sSun bat * seeing good for
a short time but very bad at
last high wind etc2^d 3rd 55^m 0^s

DO1 = 411

46.15.4

7872 Jan 7th

S

N

46.125

46.169

.123

.162

.126

.162

.11.9

.168

.121

.169

35

46.123

46.167

46.167

290

46.145

Jan 8 1872 Zippich

46.149 46.128

158

146

162

156

271

46.154

130

284

46.142

120

140

132

120

180

46.130

2

65.9

66.0

67.0

66.3

252

66.30

Level

W

70.7

70.7

69.2

69.7

2803

70.07

66.30

3.77

1.89

1.51

b = +10

W4 18.4

Bar. 3030

Alt. 68.8

W1 = 412

2 = 413

3 = 414

Jan 8-9 Morning

B. H. N. H.

B. H. N. H.

Bad seeing

Jan 9 1872 22413
m 5.6.

47.9 47.6
47.9 47.0
47.8 47.5
47.8 46.8
47.6 46.8
47.6

320 319
320 319
319 319
319 319
319 319
314 319

W4 = 308

Bar 3007

W. 692

W1 = 415

Jan 9 Morning

Polaris 0 3 19.3 51.8 { 0 3 2.2 338

Booris

~~3 Booris lost 4 times~~

a 2000

~~W4 = 45~~

a Booris

5-12 min

2 Booris

a 1000

10-12 min

Jan 10 1872

46178 46.164

1209

162

200

162

189

167

191

164

99719

46,199

164

164

363

46.181

280

now 30.09

Bar 63.0

W1 = 416

2 = 417

3 = 418

W 2 or 3 bl.

" " none

" " bl.

seeing good

Jan 10 morning

Polaris 0 3 20.9 54.8 0 3 2.0 3.9

3 Virgins

n Bootis

o

a 9 haco

a Bootis

5 hrs Min

2 Bootis

a 2 hibrac

B hrs Min

Jan 11 Morning

Polaris 0 3 136 488 2586 340
~~Blind~~ mid gr.

3 Virginis C e e

n us nrig

n Bootis

a Draco

a Bootis

o Bootis

e 11

a, Librae

B us Min

Nov - 1889

Jan 12.0

Set the South Clock for noon
 about 30th.

1872 Jan 12th

+ In obs

+ Persi 2² 45-28^s

10 0 1.8 46.5

γ Persi 2 55-28

20 3 23.8 8.8

β Persi 2 59 42

55 0 39.2 26.9

λ Tauri 3 53 32

15 0 26.0 15.2

ε Persi 3 59 18

0 1 29.1 9.3

γ Tauri 4 12-27

0 3 58.2 47.9

δ Tauri 4 25-29

5 3 40.3 24.7

ε Tauri 4 21 5

25 4 22.3 12.4

Luci 4 31 0

4 6⁴ 35-Luci 5^h 22 ~1874 Jan 13th

A In obs

2² 43-05γ Persi 2² 43-054² 26-05

No 1 = 422

46.182

C
1872 Jan 14th

46.208	46.177
205-	.179
205-	.184
203	.183
21.1	.188
<hr/> 3.2	<hr/> 11
46.206	46.182
46.182	
.388	
46.194	

0^h 52^m 0Sun Bat *^s Seeing bad2^h 46^m 05Regulated Chronograph
Screw on top of pend bob worked up

No 1 = 423

1872 Jan 15

2^h 45^m 05Sun Bat *^s Seeing bad4^h 35^m 05

No 1 = 424

~~Jan 18 1872~~

~~27 Jan 1872~~

~~27 Jan 40 8894 99~~

1872 Jan 21st

oh 43^m 0^s

Gen Cat *^s

Weights on chronograph solid

2² 29^m 0^s.

wt = 425

3 16 0

Zone

3 59 0 Rejzel

S. M. obs.

For Gamutt -

V ⁷ Eridani	4.	30. ²	34 ⁵	- 30.49
E Leporis	5	0.	2	- 22.33
E Cancr	7.	55.	35.	+ 28.10
S Cancr	8.	4.	50.	+ 18.6.

Jan 22 1872

46,206	46,206
210	190
204	190
200	192
211	193
<u>31</u>	<u>971</u>
46,206	46,194
194	
<u>400</u>	
46,200	

Jan 2 @ 1872

W.R. attempts a run / cloudy
W.R. As Yb -

a

Polars

O Stars 0 4 40 + 160

C Cars 30 4 46.5 123

Wol 426

2-427

Jan 24

Planis cont a
WAR des lib.

" " " Home

⊙ Anigau 5-35 54 - 35 25-10 149
+49 46

✓ Anigau 5-4 233 - 15 1 55,0 212
+39 06

✓ Anigau 5-4 855 - 5 2 237 488
+54 16

⊙ Anigau 5-50 55 - 10 1 26,0 532
+37 12

101.428

" 2. 429

" 3. 430

" 3' = 430'

Special Notice

The inclination of the horizontal wire from _____ to Oct 23, when it was adjusted after cleaning is assumed to be $5^{\circ} 5'$

The individual values are

A Deepmin	= $5^{\circ} 5'$
a "	4
2 C ₁ pm.	2
o C ₂ y	3
a C ₁ pm.	5
2 Reg.	6
2 Cap.	8
B C ₁ pm.	10
	<hr/>
	43
	<hr/>
	6 ²⁵

In 39 cases the mean Deviation is 1.1" one of 1.4 one of 1.9 one of 1.8 and one of 2.9

The mean deviation between \sqrt{p} and \sqrt{q} is about .6" and the probable error of any deviation seems to be about .42" from 39 cases. The mean Deviation when the deviation exceeds 1" seems to be about .4" to .6"

Jan 25

In attempting to clean the glass
(lines) - accidentally started it flared
in falling it was broken.

After 30 trials ^{and nearly 30 hours labor} succeeded in obtaining
a new set of double lines which appear
satisfactory. In this set each line is
ruled double. The time of exposure
was 5^m and the proportion of Crisole
and Sulphuric acid was about as
1 to 40 by weight. Carefully adjusted
The glass is now fastened to the me-
chrometric plate by four screw heads.
The width of the double lines seem to be
about as before.

Jan 30

WFR obs. to
fun, h toA. M. obs. ^{ble} fun 3^h 5-5^m
and WFR readsWFR obs fun
and A. M. reads

WFR = 431
 2 = 432
 3 = 433

Jan 30

The observations of the following stars
 since Jan in declination of declination unit
 as follows:-

C Perseus	64	10
B Pami	4	61 30
S Pami	4	64 00
U	4	53 00
1 Camel	4	56 30
L Eridani	4	57 10
53 Pami	4	55 30

α Orion	(5-48) 4	66 10
B Antares		74 30
μ Orion		67 20
δ "		58 30
η Gem.		49 30
κ_2 Orion		64 00
ϵ Gem		59 00
13 Monoc		69 20
		<hr/> 508 20
		63 30

ν Pami (4-55)	64 40
μ Antares	61 40
α "	68 30
B "	51 30
T Orion	65 40
M Orion	56 40
β Pami	50 40
ν_2 Orion	51 10
η 966	60 40
	<hr/> 531 10
	59 00

4 5-9 50

4 5-9 00

4 63 30

182, 20

4 61

Until further notice
 the angle of inclination
 will be assumed as cut
 unit in secant to be "

0

0

Jan 31. WSR Obs. sl.
Polair's East 3 w.

WSR Obs. sl.
YPR Obs. sl.

Seeing very bad,

N^o 1.434

2.435

3.436

Feb 1 1872
 W R as bsl.
 W R as zone
 W R as bsl.
 Seeing pretty good.

2 Lynceis { 08 15 + 59 03
 { 20 01 3.2 247

20.8	19.0	51.0	51.7
20.9	18.6	51.6	52.1
20.0	18.8	51.5	52.3
20.8	18.4	51.0	52.0
21.0	18.8	51.1	52.2

Nov 437
 2 = 438
 3 = 439

8 Lynceis { 6 25 55 + 61 35
 { 45 4 54 290

51 Aurigae { 6 29 44 + 39 30
 { 50 4 10 276

1872 Feb 2

5- 16-

2 Orionis AR only

no 1=440

6 54 6

no 1 = 440

1872 Feb 4 ~~AR~~ Mols

B Aurigae 5 ^h 50 ^m 45	25- 2 35.0 21
2 Lynx 6 8 14	20 1 6.2 30.2
6 Aurigae 6 14 57	

no 1=441

2=442

Feb. 5 1872

W.R. Dingle.

$$\begin{array}{r} 6.4 \\ 6.4 \\ 9 \\ 6.7 \\ \hline \end{array} \quad \begin{array}{r} 6.7 \\ 7.1 \\ 7.0 \\ 6.9 \\ 7.2 \\ \hline \end{array}$$

$$\begin{array}{r} 42.2 \\ 41.9 \\ 41.8 \\ 41.8 \\ 41.7 \\ \hline \end{array} \quad \begin{array}{r} 42.8 \\ 27 \\ 23 \\ 22 \\ 42.2 \\ \hline \end{array}$$

$$\begin{array}{r} m_4 = 323 \\ 3024 \\ 69.8 \end{array}$$

$$m_1 = 448$$

Feb. 6/172

WHR ds. Gl.

Polaris ~~Ab~~ abed

Feb. 7 WHR ds. Gl.

Polaris (d₂₃ tolerati.

WHR ds. none

WHR ds. Gl.:

$$w_1 = 444$$

$$2 = 445$$

Being tolerable

Feb. 8

WAR no zone

WAR no slb.

Seems tolerable towards
the end. Bad at first.

no 1 = 446

2 = 447

Feb. 12

WAR no slb.

WAR no zone

WAR no slb.

Sunny work.

no 1 = 448

2 = 449

3 = 450

Feb. 14 1872

W.R. Dis. G.C. for 2^h 51^m

(Held the telescope with head at
2^h 56^m. Cleaned glass lens
after getting collimation)

a Persei 55 41 58.3 28.7

W.R. Dis. none.

W.R. Dis. G.C.

Seeing very good

No 1 = 451

2 = 452

Feb. 15 - 1872

W.R. Dis. G.C.

Remains same as Feb. 14

No 1 = 453

W 2 Feb 16 A.M. Obs

77 19
120 41

Zero \times^S

41 Auriga	6 ² 14 57.5	0	3	9.3	38.4
63 Auriga	7 ² 2 47.5	50	2	26.3	58.2
64 " "	7 ² 9 45	15	2	35.1	7.3
19 Lynx	7 12 19	50	3	2.1	31.0
1 Geminorum	7 17 43	20	0	57.2	27.5
9 " "	7 20 48	20	1	3.8	36.8
22 Gemin	7 26 21	10	3	58.0	31.7
3 Gemin	7 37 25	0	3	50.2	22.0

3 hrs Maj H 8 on 49

K Cephe Sp 8 13 9 first group
high up near file
were reject all
of the 8 stars

$$\text{No 1} = 454$$

$$2 = 455$$

NC Set 8/10 fast E.C

1872 Feb 17th A M obs

α Aurigae	5	7	10.	30	2	18.2	45.8
17 Camel	5	18	- +62° 57'	25	1	56.8	27.0
yr 966	5	22	29 + 74° 57'	25	2	17.6	46.0
3 Tauri	5	29	56 + 21° 4'	20	0	-0.8	33.7
α Aurigae	5	35	54 + 49° 46'	0	3	7.7	36.2
4'	11	6	14 57'				
63	11	11	7 2 47 + 39° 32'	50	2	21.2	54.6
64	11	11	7 9 4 + 41° 7'	15	1	54.9	26.6
19 Lynx	7	12	19 + 55° 31'	50	3	3.1	30.2
yr 1308	7	17	26 + 68° 43'	40	1	8.6	33.9
γ Gem	7	20	48 + 32° 2'	20	1	45.8	17.3
α Gem	7	26	21 + 32° 10'	10	3	54.5	27.0
B Gem	7	37	25 + 28° 20'	0	3	53.9	23.8

7 2 39 ~ 0

$\alpha = 456$

2 = 457

1872 Feb 18

A.M. obs

Polaris Mid hr & folChronograph stopped see note
on sheetgun Cat *^s

No 1 = 458

2 = 459

1872 Feb 19thgun Cat *^s

B gun 7 57 29 0 3 53.0 26.3

No 1 = 460

~~A.M. obs. till~~~~24 R obs for 5^h 38^m~~File:
Jan 20 1872

A.M. obs till

~~24 R obs for 5^h 58^m~~

Chronograph failed.

