

KG
11365
92

B.21

No. 21.

Reduction of Transits
July 31, 1855 to Sept 25, 1855

Sold by T. Groom & Co., Stationers, India Building, 82 State St., Boston.

KG 11365.92

1855phae.proj...92B



Aug. 1. 1855

W.C.B.

J.H. West

$a = + 0.10$

$b = + 0.33$

$c = - 0.22$

Polaris s.p.			α Virginis		γ Urs. Maj		γ Bootis		ϵ Bootis	
88	32	2.8	—	30.8	—	24.6	—	42.3	—	58.3
			—	44.6	—	45.7	—	56.8	—	12.0
	5	53.6	—	59.0	—	8.0	—	12.1	—	28.1
	7	12.4	—	12.7	—	28.8	—	26.0	—	42.2
13	8	51.6	—	26.7	—	29.8	—	40.7	—	56.8
		—	—	40.5	—	11.1	—	55.0	—	11.3
		—	13	18	53.8	13	43	31.8	13	49
					268.1			199.8		242.0
										235.3
13	7	19.20	—	12.59	—	28.54	—	26.00	—	42.19
		0	—	0	—	0	—	0	—	0
13	7	19.20	13	18	12.59	13	42	28.54	13	49
								26.00	14	9
										42.19

* Polaris over mid wire and micrometer wire set 100^d before and after mid wire.

Aug. 2

 $a = + 0.10$
 $b = + 0.33$
 $c = - 0.22$

M.C.B.		" "		M. West		P.S.C.		P.S.C.	
α Leonis		δ Leonis		γ Urs. Maj		β Urs. Min		β Librae	
—	—	18.1	—	38.9	—	49	14.5	11.1	—
12 40	—	32.4	—	2.3	—	50	6.3	24.8	—
—	—	48.1	—	27.1	—	51	0.9	39.4	—
—	—	2.1	—	49.9	—	51	50.8	52.8	—
—	—	17.1	—	13.6	—	52	43.6	6.9	—
—	—	31.9	—	36.9	—	53	35.0	20.6	—
10 1 17.30 59.0	11	48.9	11	47	59.8	14	25.1 15	10	33.9
		195.6			228.5		175.6		189.5
17.30		2.23		49.79		50.80		52.79	
0		0		0		0		0	
10 1 17.30	11	2.23	11	46	49.79	14	51 50.80 15	9	52.79

Aug. 2, 1875

$a = +0.10$

$b = +0.33$

$c = -0.22$

P.S.C.

J.L. New
W.C. B.

R.T.B.

 α Cor. Bor. α Serpentes α Scorpii α Herculis α Sphincthi

26.9

6.6

26.1

0.5

10.8

41.9

20.2

41.4

14.3

24.7

58.2

34.8

57.4

29.2

39.4

13.0

48.0

12.1

42.9

53.0

28.4

1.7

27.3

57.1

7.1

44.0

15.7

42.6

11.1

21.2

15 29

58.9

15

38

28.9

16

21

57.4

17

9

24.9

17

29

34.8

17

271.8

155.9

264.3

180.0

191.0

13.04

47.99

12.04

42.86

53.00

0

0

0

0

0

15 29

13.04

15

37

47.99

16

21

12.04

17

8

42.86

17

28

53.00

17

Aug. 2

R. F. B.

H. West

 γ Draconis

48.9

10.7

23.8

55.1

17.1

39.4

17 55 0.4

205.4

55.06

0

17 54 55.06

Aug. 2/3. 1855

$a = + 0.10$

$b = + 0.33$

$c = - 0.22$

P.A.C.

M. M. M.

M.C.B.

 α Aurigae β Orionis β Tauri ϵ Orionis α Orionis

39.4

0.2

49.7

17.0

59.0 -8 22

15.5

3.2

30.8

19.5

22.2

17.7

45.3

38.5

13.77 13.8

47.2

30.8

58.6

58.1

13.72 27.6

2.8

44.6

12.4

17.8

13.55 41.3

18.4

58.2

26.2

37.0

8 13.58 54.7

18

33.3

30

11.4

48

39.7

269.3

149.6

215.6

230.0

38.47

13.65

47.09

30.80

58.57

0

0

0

0

0

38.47

8

13.65

17

47.09

29

30.80

47

58.57

Aug. 3/4

$a = +0.09$

$b = +0.33$

$c = -0.23$

M.C.B.

H.L. Hall

 α Aurigae β Orionis β Tauri δ Orionis ϵ Orionis

0		39.8	—		1.0		34.9		50.2
8		89.3	-8' 22"	—	16.4		48.3		3.7
3		20.1	—		32.7		2.8		18.0
6		39.0	14.17 14.2		47.7		15.9		31.3
4		58.8	14.12 28.0		3.3		29.7		45.0
2		18.5	14.05 41.8		18.8		43.3		58.8
7	5	37.2	5' 8" 14.08 55.2	5	18	34.0	5	25	36.7
0		272.8			153.9		231.6		218.9
7		38.97	14.11		47.70		15.94		31.27
		0	0		0		0		0
57	5	38.97	5' 8" 14.11	5	17	47.70	5	25	15.94
									29
									31.27

Aug 24. 1855

$$a = + 0.09$$

$$b = + 0.33$$

$$c = - 0.23$$

H. W. W.

J. F. F.

Canis Major

41.9

56.2

11.2

25.0

39.3

53.6

7.3

234.5

24.93

0

24.93

Aug. 5/6

$a = +0.07$

$b = +0.34$

$c = -0.23$

N.C. B.

Ill. Mr

α Tauri			α Aurigae			β Tauri		
		35.5			41.6			2.7
		49.3			1.2			18.1
		4.1			21.9			34.4
		18.2			40.8			49.3
		32.4			0.3			5.0
		46.8			20.0			20.7
4	29	0.25	7	39.05	18	35.6		
		187.0		164.8		165.8		
		18.14		40.69		49.40		
		0		0		0		
4	28	18.145	6	40.695	17	49.40		

Aug 97

$a = +0.06$

$b = +0.34$

$c = -0.24$

W.C.B.

ell. Mau

J. F. F.

 α Aurigae β Tauri δ Orionis ϵ Orionis α Canis Maj

		42.6		3.3		37.3		34.06	52.9		44.5			
		1.9		18.9		50.9	-1° 18	33.87	6.3		58.8			
		22.8		35.2		5.3		33.99	20.8		13.9			
		41.6		50.3		18.7		33.87	33.9		27.4			
		1.3		5.9		32.2		33.96	47.7		41.9			
		21.0		21.4		46.0		—			56.0			
5	7	39.9	5	18	36.6	5	25	59.2	5	3034.01	14.7	6	40	9.9
		171.1		171.6		249.6								252.4
		41.59		50.23		18.51		33.94			27.49			
		0		0		0		0			0			
5	6	41.59	5	17	50.23	5	25	18.51	5	29	33.94	6	39	27.49

Aug. 7/8. 1855

$a = +0.05$

$b = +0.34$

$c = -0.24$ All. War

W.C.B.

P.S.C.

v Ceti

v Orionis

45.0

53.9

58.9

7.2

13.0

21.5

26.6

34.8

29.9

48.7

53.8

2.3

2 56 7.05 30 11.3

244.2 153.7

26.31 34.81

0

0

2 55 26.315 29 34.81

Aug. 9.

P. S. C.

α Bootis

$a = + 0.06$

$b = + 0.34$

$c = - 0.22$

H. W. W.

"

γ Bootis

3.9

37.5

18.3

53.0

33.7

9.1

47.6

24.1

2.1

39.7

16.7

55.1

14 10

30.8

14

40

9.9

153.1

228.4

47.59

24.06

0

0

14 9

47.59

14

39

24.06

Aug. 9/1855

P. V. C.

H. W. M.

$a = + 0.06$

$b = + 0.34$

$c = - 0.22$

 α Aurigae β Tauri δ Orionis ϵ Orionis

41.0

5.9

39.5

55.0

4.3

21.2

53.2

8.7

25.1

37.5

7.5

23.0

44.0

52.6

20.9

36.2

3.8

8.2

34.4

50.0

23.4

23.9

48.1

3.1

42.25

185

38.95

26

1.45

30

16.7

187.8

188.2

201.0

193.1

43.97

52.60

20.71

36.16

0

0

0

0

43.975

17

52.605

25

20.715

29

36.16

Aug. 10/11

$a = +0.08$

$b = +0.34$

$c = -0.20$

P.S.C.

H. West

P.S.C.		H. West		P.S.C.		H. West	
α Aurigae	β Orionis	γ Tauri	δ Orionis	ϵ Orionis	ζ Orionis	η Orionis	θ Orionis
45.9	—	6.9	40.9	56.0	—	—	—
5.4 - 8° 22'	—	22.2	54.2	9.8	—	—	—
26.2	—	38.7	8.8	24.1	—	—	—
41.1	20.17 20.2	53.8	21.9	37.3	—	—	—
4.8	20.12 34.0	9.3	35.7	50.9	—	—	—
24.6	20.15 47.9	25.0	49.3	4.9	—	—	—
5 7 43.4 5	9 20.28 1.4 5	18 40.0 5	26 2.6 5	30 18.0	—	—	—
191.4	—	191.9	213.4	201.0	—	—	—
41.06	20.18	53.70	21.91	37.29	—	—	—
0	0	0	0	0	—	—	—
5 6 41.06 5	8 20.18 5	17 53.70 5	25 21.91 5	29 37.29	—	—	—

Aug 10/11. 1855

$a = + 0.08$

$b = + 0.34$

$c = - 0.22$

C.M.T.		ll. Wind			
α Orionis		α Canis Maj	α Canis Min.	β Semino	
23.7		48.0	46.9	21.0	
37.3		2.0	0.0	40.8	
52.0		17.2	15.0	57.0	
5.1		30.9	28.2	12.0	
19.0		41.2	42.1	27.7	
32.8		59.7	51.7	43.1	
5 48 46.1 6	40	13.3 7	33 9.0 7	37 58.2	
216.0		216.3	196.9	263.8	
5.14		30.90	28.13	11.97	
0		0	0	0	
5 48 5.14 6	39	30.90 7	32 28.13 7	37 11.97	

Aug. 12/13

$a = +0.08$

$b = +0.36$

$c = -0.19$

W.C.B.		D.P.C.		J. Ward		W.C.B.		C. W. T.		
α Aurigae		β Tauri		δ Orionis		ϵ Orionis		α Orionis		
	47.8		8.8		42.7		57.8		25.8	
	7.1		24.1		56.1		11.4		39.1	
	27.9		40.7		10.6		25.8		53.8	
	46.8		53.7		23.8		39.0		7.0	
	6.5		11.0		37.5		52.8		20.8	
	26.0		26.8		51.1		6.2		34.7	
5	7	45.1	5.2 18	41.8	5 26	4.3	5 30	19.7	5 48	47.9
	207.2		208.9		226.1		212.8		229.1	
	46.74		53.56		23.73		38.97		7.01	
	0		0		0		0		0	
5	6	46.74	5 11 17	53.56	5 25	23.73	5 29	38.97	5 48	7.01

Aug. 12/13 . 1855

$$a = + 0.08$$

$$b = + 0.36$$

$$c = - 0.19$$

All west

P.S.C.

 α Canis Maj

-16° 31'

6 39 32.64 4.0

32.64

0

6 39 32.64

Aug. 13.

$a = + 0.07$

$b = + 0.36$

$c = - 0.19$

Ill. West

A.S.C.

m. 2.

W.C.A.		β Scorpii		S Ophiuchi		α Scorpii		S Aquilae	
	15.0		6.2		—		35.2		—
	28.8		20.8	-3° 19'	—		50.3 + 2° 50'		—
	43.2		35.9		—		6.2	1.40	48.2
	56.8		50.0		34.07 34.1		21.0	1.27	1.2
	10.4		4.3		34.14 47.9		36.2	1.35	15.1
	24.2		19.0		34.09 1.6		51.4	1.41	28.9
15 38	37.4 15	58	33.0 16	8 34.15 14.9 16	22	6.3 19	191.27	42.0	
	215.5		169.2				206.6		
	56.54		49.89		34.11		21.94		1.34
	0		0		0		0		0
15 37	56.54 15	57	49.89 16	7 34.11 16	21	20.94 19	19	1.34	

Aug. 13. 1856.

$a = + 0.07$

$b = + 0.34$

$c = - 0.19$

P.S.C.

~~Ill. Wm.~~ β Cygni

companion

 γ Aquilae α Aquilae β Aquilae

55.9

57.9

—

51.0

20.2

11.2

13.3

+10°

16

12.01 44.0

4.8

33.9

27.5

29.6

12.20 58.8

19.2

48.3

42.3

44.4

11.97 12.0

32.6

1.7

57.8

0.0

12.04 26.0

46.6

15.5

18.3

15.4

11.99 39.9

0.5

29.1

19 25

28.119

25

30.2

19

40 11.96 53.3

19

45

13.8

19

49

42.4

20

236.1

190.8

168.5

191.1

42.30

44.40

12.03

32.64

1.59

0

0

0

0

0

19 24

42.3019

24

44.4019

19

40 12.03

19

44

32.64

19

49

1.59

20

Aug. 13.

A.C.C.

Jap. West

1855phae.p

α Cygni		32 Vulpiculae		61' Cygni		Companion		5 Cygni						
	21.3		26.3		22.0		23.3		48.7					
	40.4		41.8		39.0		40.7		4.3					
	0.8		58.1		57.6		58.9		20.9					
	19.3		12.9		14.3		15.8		36.0					
	38.7		28.5		31.8		33.2		51.9					
	58.0		43.8		49.0		50.6		7.6					
20	38	16.7	20	49	58.8	21	2	5.8	21	2	7.3	21	8	22.9
	195.2		270.2		219.7		229.8		192.3					
	19.31		12.89		14.24		15.69		36.04					
	0		0		0		0		0					
20	37	19.31	20	49	12.89	21	1	14.24	21	1	15.69	21	8	36.04

Aug. 13. 1855

$$a = +0.07$$

$$b = +0.36$$

$$c = -0.19$$

all. Mer

P.S.C.

Cephei

29.6

38.6

29.1

57.0

26.4

55.7

23.8

250.2

57.17

0

57.17

Aug 13/14

$a = +0.07$

$b = +0.36$

$c = -0.19$

W. West

C. W. T.

W.C.B.			W. West			C. W. T.			"		
α Persei			δ Persei			γ Tauri			α Tauri		
		48.9			25.4			—			48.9
		6.2			48.6	+23'	39	—	+16'	13	8.2
		28.4			7.0			—			28.9
		48.9			26.1		41.27	41.3	4	28.25	47.7
		9.9			46.7		41.41	56.4		—	7.3
		30.9			6.9		41.32	11.3		—	27.1
3	15	51.33	34		26.43		40.41.39	25.8		—	46.0
		221.5			184.1						214.1
		48.79			26.30			41.35		25.32	47.73
		0			0			0		0	0
3	14	48.793	33		26.303		39	41.35	4	28	47.73

Aug. 13/4. 1855

$a = +0.07$

$b = +0.36$

$c = -0.19$

u

All Med

P.S.C.

C. M. T.

 β Orionis β Tauri δ Orionis ϵ Orionis α Orionis

—

9.8

43.7

58.9

26.6

—

25.2

57.2

12.7

40.1

—

41.8

11.7

27.0

54.8

22.87 22.9

66.7

24.8

40.1

8.1

23.02 36.9

12.1

38.5

53.9

21.9

23.05 50.8

27.8

52.2

7.5

35.8

5	9	22.88	4.05	5	18	43.05	26	53.35	30	20.85	5	48	49.0
---	---	-------	------	---	----	-------	----	-------	----	-------	---	----	------

216.4

233.4

320.9

236.3

22.95

56.63

24.77

40.13

8.04

0

0

0

0

0

5	8	22.955	5	17	56.635	25	24.775	29	40.135	5	48	8.04
---	---	--------	---	----	--------	----	--------	----	--------	---	----	------

Aug. 13/4

P.S.C.

Ull. Wm-

	μ Gemino	α Canis Min	ρ Gemino
6	+22 34.08 45.8	49.8	27.8
1	Fin 60.07 0.0	3.2	43.4
8	wins 60.03 14.9	17.7	59.8
1	lost 60.06 29.8	31.1	14.8
9	59.84 43.9	44.9	30.2
8		58.6	45.9
0	7 33 11.8 7 38 1.0		
3		217.1	222.9
4	0.00 31.01 14.70		
	0 0 0		
4	0.00 7 32 31.01 7 37 14.70		

Aug. 14, 1855

 $a = +0.07$
 $b = +0.37$
 $c = -0.19$

P. S. C.

J. H. West
W. C. O.

1855phae.pl

α Virginis		γ Urs Maj		ϵ Bootis		α^2 Librae		β Urs Maj							
	40.8		34.4		42.1		58.6		23.0						
	54.5		55.6		57.5		12.8		14.5						
	9.2		17.9		13.7		27.7		9.3						
	22.6		38.3		28.6		41.4		59.3						
	36.5		59.8		44.0		55.7		51.7						
	50.5		21.0		59.6		9.8		43.6						
13	19	3.9	13	43	41.6	14	40	14.4	14	44	23.6	14	54	33.9	16
	218.0		268.6					259.9			229.6			285.3	
	22.57		38.37		28.56		41.37		59.33						
	0		0		0		0		0						
13	18	22.57	13	42	38.37	14	39	28.56	14	43	41.37	14	51	59.33	16

Aug. 14.

D.S.C.

 α Scorpii

Del. Men

35.8

51.0

7.0

21.5

37.0

52.2

16 22 7.0

211.5

21.64

0

16 21 21.64

Aug. 14/11, 1855

W.C.B.

J. H. Grist

x Anurajae

 β Tauri δ Orionis ϵ Orionis

49.5	10.4	44.2	59.6
9.0	25.9	57.9	13.3
29.8	42.3	12.3	27.7
48.8	57.8	25.6	40.9
8.3	12.9	39.0	54.7
28.1	28.4	58.0	8.3

47.05	18	43.55	26	6.05	30	21.7
220.5		220.5		238.0		226.2

48.57		57.21		25.43		40.89
0		0		0		0

48.575	17	57.215	25	25.435	29	40.89
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Aug. 15

ASC

Rev. Wren

 β Scorpii δ Ophiuchi α Scorpii

8.0 -3 19 35.918.3 -26° 6' 22.62 36.8

22.7 First with 35.9122.7 22.59 51.9

37.8 lost 35.835.9 22.79 8.1

51.7 36.0449.8 22.47 22.5

6.2 35.70 3.2 22.81 38.1

20.8 16 8 35.6516.416 21 22.52 53.1

15 58 34.8 E: —

182.0

51.71 35.85 22.63

0 0 0

15 57 51.71 16 7 35.85 16 21 22.63

Aug. 17/18. 1855

P.S.C.

Ill. Mass

 β Ophiuchi

30.6

44.1

58.7

11.8

25.8

39.3

52.7

263.0

11.86

0

11.86

P. A. C.

Ill. Wind

J. F. F.
a Orionis

[illegible]

Aug. 17/18. 1855

U. Men

4.7.7.

u Gemini		x Canis Maj		x' Gemini		x Canis Min	
18.9		37.12	54.2	23.7		24.0	53.1
33.8	-16 31	—		39.6		40.0	6.9
49.4		37.36	23.6	56.5		57.0	21.5
3.7		37.47	37.5	12.3		12.6	24.7
18.5		37.47	51.8	28.5		28.9	48.6
33.2		37.36	6.0	44.7		45.0	2.2
6 15 47.7	6	40 37.48	19.9	7 27 0.4	27	0.77	33 15.6
205.2				205.7		208.2	182.6
3.60		37.38		12.24		12.67	34.66
0		0		0		0	0
6 15 3.60	6	39 37.38		7 26 12.24	7	26 12.67	7 32 34.66

Aug. 17/18

J. J. J.

Bluminn

all. Vant

31.6

47.0

3.1

18.3

34.0

49.1

7 38 4.7

168.7

18.39

0

7 27 18.39

Aug. 16 1855

P.S.C.

All. West

W.C.B.

 δ Aquilae ρ Aquilae β Cygni γ Aquilae α Aquilae

56.8

5.90 24.7

6.2

34.4

55.3

10.7

+2°

50'

5.80 38.2

15.4

48.3

9.0

25.6

5.80 52.6

32.0

3.2

23.5

39.1

5.87 5.9

46.9

16.3

37.0

53.2

—

2.2

30.2

50.5

7.3

5.80 33.3

17.8

44.5

4.7

19

0

20.9

19

19

5.67 46.4

19

26

32.8

19

40

57.5

19

41

17.9

213.6

147.3

234.2

197.9

39.09

5.81

46.76

16.31

36.84

0

0

0

0

0

18

59

39.09

19

19

5.81

19

25

46.76

19

40

16.31

17

44

36.84

Aug. 18

W.C.B.

Ill. West

 β Argular

24.2

38.1

52.6

5.9

19.9

33.7

19 49 46.9

221.3

5.90

0

19 49 5.90

Aug 19: 1885

M.C.B.

Ill. Wau

Venus to disk

 β Corvi

36.9

50.6 - 22° 36'

4.9

18.3

32.2

45.52 0.4

46.0

45.36 15.1

12 24 59.212 2845.7329.8

248.1

18.30

45.54

0

0

12 24 18.30 12 27 45.54

Aug. 19/20

W.C.B.			J.F.F.			Ill. West					
α Tauri			μ Gemini			α Canis Maj			α Orionis		
		47.6			20.5			56.0			81.9
		1.9			351.3			10.3			45.7
		17.0			51.1			21.5			0.2
		30.9			5.1			39.3			13.4
		41.1			20.1			53.1			27.2
		59.3			34.9			7.8			41.1
4	29	13.06	15		49.36	40		21.65	48		54.3
		214.8			216.3			214.0			213.8
		30.69			5.19			39.14			13.40
		0			0			0			0
4	28	30.696	15		5.196	39		39.145	48		13.40

Aug. 21

W.C.B.

Ill. War

o Scorpion

α Scorpion

Moon's TO

A. Merriest

θ Sphindri

33.9

42.1

3.4

16.8

18.0

48.9

57.2

19.0

32.4

33.0

4.8

13.3

31.4

48.8

48.9

19.4

27.9

50.6

3.8

3.4

34.6

43.1

6.1

19.5

18.2

49.7

58.6

21.9

35.1

32.8

16 14

4.3/16

22

13.0/16

40

36.9/16

40

50.2/17

14

48.4

191.6

281.3

173.3

206.6

204.2

135.6

195.3

353.3

426.6

24.2

19.37

27.90

50.47

3.80

3.46

0

0

0

0

0

16 13

19.37/16

21

27.90/16

39

50.47/16

40

3.80/17

14

3.46

Aug. 21

W.C.B.

4th. Mar

d ophiuchi

15.7

31.3

47.9

3.1

18.9

34.8

17 19 50.0

201.7

x21.7

3.10

0

17 19 3.10

Aug. 23/24. 1855

P.S.C.

J. H. West
J. F. H.

		α Aurigae		α Orionis		α Canis Maj		α Gemini		α^2 Gemini		
		28.8		—		0.2		—		—		
		18.2	+7°	23	17.7950.0	14.6		—	+32°	12	—	
		28.8			17.50 40.2	29.1		18.28 2.7		18.58 3.0		
		58.0			17.67 17.7	43.4		18.17 18.2		18.57 18.6		
		17.4			17.55 31.4	57.7		18.57 34.8		18.77 35.0		
		37.1			17.71 41.4	11.9		18.35 50.8		18.74 51.2		
5	7	56.05		48	17.68 58.7 6	40	21.87	27 18.37 6.4 7		27 18.36.8		7
		284.3				182.1						
		57.76			17.65	43.30		18.35		18.68		
		0			0	0		0		0		
5	6	57.76 5		48	17.65 6	39	43.30 7	26 18.35 7		26 18.68		7

Aug. 23/24

Ill. Wm

J. F. F.

 α Can. Min. β Geminor

59.1

37.7

13.0

53.0

27.4

9.3

40.1

24.1

54.3

39.9

8.2

51.9

7 33

20.6

38

10.8

224.1

231.1

40.59

24.44

0

0

7 32

40.59

37

24.44

Aug. 24. 1855

1855phae.proj.

W. C. Dr.		P. S. C.		Ill. W. Dr.		"		"			
Cor. Borr.		μ Sagittarii		α Lyrae		β Lyrae		δ Aquilae			
	45.8		21.3		9.3		54.4		2.6		
	0.9		36.2		26.2		10.9		16.5		
	17.1		51.8		48.0		27.7		31.4		
	32.0		5.7		1.7		43.6		44.9		
	47.3		20.4		19.2		59.8		59.0		
	2.8		35.0		36.6		16.7		13.2		
15	30	17.7 18	6	49.2 18	33	53.6 18	46	32.0 19	0	26.9	4
	163.6		219.6		191.6		245.1		194.5		
	31.94	1	5.66		1.66		43.59		44.93		
	0		0		0		0		0		
15	29	31.94 18	6	5.66 18	33	1.66 18	45	43.59 18	59	44.93	4

Aug. 27/28

W.C.P.

 α Tauri β TauriJell. Warr
J. F. F. α Can. Min. β Gemini or

56.3

24.7

3.1

41.7

10.3

40.2

17.0

57.1

25.6

56.6

31.7

13.5

39.0

11.7

44.9

28.6

53.3

27.1

58.7

44.2

8.0

42.9

12.1

59.8

4 29 21.75

18

57.8

7

33

25.6

7

38

14.1

214.2

261.0

193.5

259.6

39.17

11.57

44.79

28.51

0

0

0

0

4 28 39.175

18

11.57

7

32

44.797

7

37

28.51

Aug. 28. 1855

W. C. B.

All. Van

γ Mus. Maj

γ Bootis

α Bootis

14	43	51.57	4.9	14	49	32.3	14	10	48.8
						165.6			218.7
		51.57				49.87			5.53
		0				0			0
14	42	51.57	14	48	49.87	14	10		5.53

Aug. 28/29

Ill. West

J. F. F.

 α^1 Geminor α^2 Geminor α Canis Min. β Geminor

35.0

35.4

4.7

43.3

51.0

51.4

18.3

58.1

8.2

8.6

32.9

14.8

23.7

24.0

46.0

29.9

40.0

40.4

0.0

41.2

56.2

56.6

13.7

0.9

7 27

118

27

12.1

33

26.8

7

38

16.0

228.9

228.5

142.4

208.6

23.70

24.07

46.06

29.80

0

0

0

0

7 26

23.70

7

26

24.07

7

32

46.06

7

37

29.80

Aug. 29/30. 1855

M.C.B.

H. W. W.

Orionis

Tauri

Geminor

57.7

26.2

11.7

41.7

28° 22' 31.2259.9

26.1

58.0

31.09 16.1

39.4

13.0

30.9731.0

53.3

28.7

31.09 46.7

7.1

44.3

31.19 2.4

5 9 20.5 5

18

59.3 7

3831.07 17.3

215.8

271.2

39.40

13.03

31.10

0

0

0

5 8 39.40 5

18

13.03 7

37 31.00

Aug. 30/31

W.C.B.

J.R. West

W.C.B.		" "		" "	
β Tauri		δ Orionis		ϵ Orionis	
	27.8		1.4		16.8
	43.0		15.0		30.4
	59.5		29.5		44.8
	14.4		42.9		58.0
	30.1		56.3		11.9
	45.8		10.0		25.5
5	19	0.8	26	23.3	5 30 38.8
	221.4		178.4		226.2
	14.49		42.63		58.03
	0		0		0
5	18	14.49	5 25	42.63	5 29 58.03

Sept. 2/3. 1855

W.C.B.

Ill. Mus

 β Orionis β Tauri

2.4

31.3

16.4

46.6

31.3

3.1

44.4

18.2

58.4

33.7

12.2

49.3

25.8

4.3

190.9

186.5

44.41

18.07

0

0

44.41

18.07

Sept. $\frac{3}{4}$.

M.C.B.		Ill. Mus.		"		J.H.F.			
δ Orionis		ϵ Orionis		Moon $\overline{110}$		α Orionis		α Canis Min.	
	6.2		—		—		49.2		12.3
	20.0	-1° 18'	—	+27° 14'	29.6257.9		2.9		25.9
	34.4		2.99 49.8		29.58 14.4		17.4		40.3
	47.6		2.87 2.9		29.93 29.9		30.8		53.7
	1.2		—		29.99 45.7		44.5		7.5
	14.9		3.24 30.7		29.70 1.3		58.3		21.2
5	26	28.2 5	303.11 43.8 5	38	29.98 16.8 5	49	11.9 7	33	34.5
	152.5				480		215.0		198.4
	332.5								375.4
	47.50		3.05		29.80		30.71		53.63
	0		0		0		0		0
5	25	47.50 5	30 3.05 5	37	29.80 5	48	30.71 7	32	53.63

Sept. 3/4. 1855

Ill. Wall

7.7.7

 β Geminor

50.7

6.1

22.4

37.5

53.1

8.7

7 38 23.7

202.2

262.2

37.46

0

7 37 37.46

Sept. 4.

P.S.C.

Ill. West

		β Draconis		α Lyrae		β Lyrae		δ Aquilae	
		13.8		—		7.0		15.0	
		36.0	+38 39	—		23.1		29.3	
		59.8		14.78	07.9	40.4		44.1	
		21.1		14.17	14.2	56.2		57.9	
		43.8		14.11	31.7	12.5		11.8	
		6.2		13.87	49.1	29.0		26.0	
17	29	27.5	18	34.24	6.3	18	46	44.7	19 0
		208.2						212.9	223.8
		21.17		14.23		56.13		57.69	
		0		0		0		0	
17	28	21.17	18	33	14.23	18	45	56.13	18 59
									57.69

Sept 4/5. 1855.

J.H. West

W.C.P.
8 Tami

2 Orionis

 β Orionis γ Geminor μ Geminor

33.7

23.1

50.5

35.7

39.4

49.4

36.8

4.2

50.5

44.1

5.5

51.0

18.7

5.9

9.8

20.6

4.2

32.1

20.0

24.0

36.2

18.0

45.9

35.0

39.0

51.9

31.7

59.7

50.0

53.9

6.9

30

45.0

49

13.16

8

4.16

16

8.2

204.2

209.8

224.2

201.6

228.4

144.2

129.8

141.6

168.4

20.60

4.26

32.03

20.23

24.06

0

0

0

0

0

20.60

30

4.26

48

32.03

6

7

20.23

15

24.06

Sept. 4/5

M.C.B.

Ill. West

J.F.F.

	Moon Spot	Moon	110	~~11~~ Gemini ²	~~2~~ Gemini ²	2 Canis Min
4	30.442.9		15.3	~~Rigid~~	44.3	7 32.85.05 13.7
1	+27° 46 30.2558.4		30.3	+22° 35	0.4	+5° 36 —
8	6 34 29.9414.7		47.0		17.6	—
0	165 —		2.2		33.0	—
0	—		18.2		49.3	—
9	—		33.9		5.1	—
2	— 6 35	49.27	13	24.0	7 27 21.0	—
4		196.1			171.1	
4		161				
6		2.30			33.01	55.05
		0			0	0
6	6 34 30.25	6 35	2.30		7 26 33.01	7 32 55.05

Sept. 5/6. 1855

Ill. Wur-

P.P.C.

P Orionis

"

a Orionis

9.0

52.0

23.0

5.7

37.2

20.4

50.2

23.5

4.2

47.3

17.8

1.0

5 26 30.6 5 49 14.3

172.0

174.2

50.29

33.46

0

0

5 25 50.29 5 48 33.46

Sept. 7.

M.C.B.

M. Men

 β Tauri

"

 δ Orionis

"

 ϵ Orionis

36.5

10.1

21.2

51.8

23.8

39.1

8.2

38.2

53.6

23.2

51.4

6.7

38.7

5.1

20.4

54.6

18.8

34.1

5 19 9.75

26 32.05

30 47.3

222.7

179.4

226.4

0

23.24

51.34

6.63

0

0

0

5 18 23.245

21 51.345

30 6.63

Sept. 7/8. 1851

Oll. West

1.7.7.		"		"		"	
δ Geminor		α^2 Geminor		α Canis Min.		β Geminor	
—		48.0		17.1		55.7	
+32° 15' —		4.0		31.0		11.1	
43.9529.7		21.1		41.1		27.3	
43.7743.8		36.7		58.7		42.5	
43.8658.7		53.0		12.7		58.1	
43.7313.4		9.3		26.3		13.8	
7 13	43.7527.7	7 27	24.7	33	39.6	7 38	28.7
			196.8		230.9		237.2
43.82		36.69		58.70		42.46	
0		0		0		0	
7 12	43.82	7 26	36.69	32	58.70	7 37	42.46

1855 Lept. 9/10

*

W.C.B.		P.S.C.		J.F.F. West		W.C.B.		J.F.F.	
ϵ Orionis		α Orionis		δ Geminor		α^2 Geminor		δ Canis Min	
	29.0		56.8		1.7		50.4		19.5
	42.7		10.4		16.4		6.4		33.3
	56.9		24.8		31.9		23.4		47.8
	10.2		38.1		46.2		39.0		1.0
	24.0		52.0		1.1		55.2		14.9
	37.7		6.0		16.0		11.3		28.6
5	30	50.9	19.1	7	13	30.1	7	27	33
	251.4		207.2			143.4		212.8	
	10.20		38.17			46.20		38.97	
	0		0			0		0	
5	30	10.20	38.17	7	12	46.20	7	26	33
								38.97	1.00

Sept. 9/10 1855

W.C.B.

Ill. West

 β semior

57.9

13.3

29.8

44.7

0.4

15.9

7 37 30.9

192.9

44.70

0

7 36 44.40

Sept. 19th

W.C.B.		Ill. Wm		P.S.C	
β Tauri		δ Orionis		α Orionis	
40.8	Thick market	14.6		30.0	57.6
56.1	"Midway to Lili"	28.3		43.4	11.2
12.7		42.7		58.3	21.8
27.7		56.8	/	11.1	39.0
43.2		9.8		21.1	53.0
59.0		23.1		38.7	6.9
5 19 13.9	5 26 76.4	5 30 51.9	5 49 20.0		
25.34	210.7	258.1	213.1		
27.62	55.81	11.21	39.07		
0	0	0	0		
5 18 27.63	5 25 55.81	5 30 11.21	5 48 39.07		

Sept. 19/10. 1855

J. F. F.		W. E. B.		J. F. F.	
α^2 Geminor		α Canis Min		β Geminor	
	51.2		20.4		58.7
	7.6		34.1		14.4
	24.2		48.6		30.9
	39.9		1.9		45.8
	56.1		15.7		1.3
	12.3		29.5		16.7
7	27	7	33	7	38
	28.0		42.7		31.8
	219.3		192.9		199.6
	39.90		1.84		45.66
	0		0		0
7	26	7	33	7	37
	29.80		1.84		45.66

Sept. 11.

W.C.C.

Polaris s.p

"

ε Bootis

Ill. West

"

β Urs Min

88	32	14.7	—		12.0	49	51.0		
			—		27.1	50	43.0		
		59	20.222.1		43.6	51	37.9		
		8	198 18.8		58.5	52	27.9		
13		16	18.054.7		14.0	53	19.9		
			—		29.6	54	12.8		
			—	14	40	44.3	14	51	2.6
					22 9.1		195.1		
			19.33		58.50		27.87		
			0		0		0		
13	8	19.33	14	39	58.50	14	52	27.87	

Sept. 1/2, 1855

W.C.B.		D.S.Q.		Ill. West		"		"	
β Tauri		δ Orionis		α Leporis		ϵ Orionis		α Orionis	
	41.9		15.6		—		31.0		58.7
	57.4		29.3	-17° 56'	—		44.7		12.3
	13.9		43.8		—		59.0		26.8
	28.8		56.9		—		12.2		40.2
	44.4		10.6		40.56 53.0		25.9		53.9
	0.0		24.3		40.94 9.8		39.5		7.8
5	19	14.95	26	37.55	2840.64 23.45	30	52.95	50	21.1
	201.3		218.0				265.2		220.8
	28.76		56.86		40.715		12.17		40.11
	0		0		0		0		0
5	18	28.765	25	56.865	27 40.715	30	12.175	49	40.11

Sept. 11/12

ell. Wren

J. F. T. "

α Can. Min.

β Geminor

21.7

0.0

35.2

15.5

49.9

31.9

3.0

46.8

16.7

2.3

30.7

18.0

7 37 43.9 7 38 33.0

201.1

147.5

3.01

46.79

0

0

7 33 3.01 7 37 46.79

Sept. 12. 1855.

P.S.C.		" "		Ill. Wm		" "		" "		M.C.B	
δ Ophiuchi		α Scorpii		γ Draconis		α Herculis		β Draconis			
25.0		6.9		—		41.0		22.8			
38.7		22.2	+61° 57'	—		58.0		48.0			
52.9		38.1		—		9.9		8.7			
6.0		52.9		—		23.7		30.0			
19.9		8.1		21.89	51.0	37.8		52.9			
33.5		23.2		22.20	20.4	61.9		18.0			
16 8 46.8	16 22	37.9	16	2421.97	48.2	17 10 5.6	17 29	36.9			
222.8		189.3				224.9		211.3			
6.11		52.76		22.02		23.56		30.19			
0		0		0		0		0			
16 8 6.11	16 21	52.76	16	23	22.02	17 9	23.56	17 28	30.19		

Sept. 12

M. C. B.

Ill. Mar

 γ Draconis

29.0

51.0

19.1

31.2

52.4

19.3

17 55 40.7

246.7

35.24

0

17 54 35.24

Sept. 12/13. 1855

W.C.B.		" "		Ill. New		J. F. F.		W.C.B.	
α Orionis		α Can. Maj		δ Geminor		α^2 Geminor		α Can. Min.	
59.6		This obs is rejected. 23.7		—		53.3		22.6	
13.3		Some trouble with 37.9		+22° 15'	—	9.4		36.1	
27.8		4th and 5th wires. 52.9		—		26.6		50.6	
41.0		7.2		—		42.0		3.9	
55.0		21.2		—		58.3		17.7	
8.8		35.2		49.03 18.7		14.3		31.4	
5 49 22.0	6	40 49.0	7	13 49.05-33.0	7	27 30.0	7	33 44.8	7
227.5		227.1				2 33.9		207.1	
41.07				49.04		41.99		3.87	
0				0		0		0	
5 48 41.07			7 12	49.04	7	26 41.99	7	33 3.87	7

Sept. 1913

J. F. F.

p. Gemini

6		0.9	
1		16.3	
6		32.7	
9		47.8	
7		8.1	
4		19.0	
8	7	38	34.0
1		153.8	
7		47.69	
		0	
7	7	37	47.69

Sept. 13/14 . 1855.

w.c.B.			J.F.F.			Oll. Wren w.c.B.			J.F.F.			J.F.F.		
α Can. Maj.			δ Geminor			α^2 Geminor			α Can. Min.			β Geminor		
		24.7			—			54.2			23.6			0.9
		39.1		22° 15'	—			10.6			37.1			17.2
		54.0			—			27.3			51.8			33.7
		7.8			—			43.1			8.0			48.7
		22.0			—			59.2			18.9			4.3
		36.3			50.23 19.9			15.3			32.8			19.9
6	40	50.0	7	13	50.05 34.0	7	27	31.0	7	33	41.9	7	38	35.0
		233.9						240.7			215.1			159.7
		07.30			50.14			42.96			5.01			48.53
		0			0			0			0			0
6	40	7.70	7	12	50.14	7	26	42.96	7	33	5.01	7	37	48.53

Sept 14/11

Ill. Mer

D. S. C.:

 α Leonis

9			19.7
2			33.4
7			48.2
.7			1.8
3			15.9
9			29.9
1.0	10	2	43.3
.7			192.2
53			1.74
			0
53	10	2	1.74

Sept. 15. 1865

Ill. Mass

P.S.C.

α Bootis

42.4

56.9

12.0

26.1

40.9

58.2

14 11 9.3

242.8

26.11

0

14 10 26.11

Sept. 16/17.

J.F.T. α Gemino		M.C.B. α Can. Min.		J.F.T. β Gemino	
	46.77 58.1		27.4		51.7
+32° 16	46.60 31.0		41.0		21.0
			55.4		37.5
	46.87 46.9		8.8		52.6
	46.96 3.2		22.5		8.0
	46.73 19.2		36.2		23.7
7	27 46.79 4.9	7	33 49.5	7	38 38.7
			240.8		187.2
	46.79		8.69		52.46
	0		0		0
7	26 46.79	7	33 8.69	7	37 52.46

Sept. 7, 8. 1855

Ull. Mar

p. 7. 7.

α Canis Min.

+5. 36

10.05 56.8

10.17 10.2

10.10 23.9

9.81 37.4

7 339.82 50.7

9.99

0

7 33 9.99

Sept. 19/19.

J. L. Van

f. T. T.

β Geminae	2 Urs. Maj	2 Hydrae	0 Urs. Maj	2 Leonis
—	—	14.0	28.7	19.7
+28° 22' 54.92 23.6	+48° 36' —	27.9	50.5	34.7
—	—	42.1	14.5	50.5
54.97 55.0	43.76 43.8	55.7	36.1	51.0
55.19 10.8	43.53 4.3	9.6	58.5	20.1
—	43.68 25.2	23.3	20.8	39.1
7 38 54.77 41.0 8	51.69 41.2 9	22 36.99	25 42.19	39 49.8
		209.9	251.6	214.9
54.96	43.66	55.70	35.94	4.99
0	0	0	0	0
7 37 54.96 8	50 43.66 9	21 55.70 9	24 35.94 9	39 4.99

Sept. 18/9. 1855

Ill. West-

p. 7.7.

a. Lion

24.4

38.7

53.2

6.9

21.0

35.0

10 2 48.7

227.9

6.84

0

10 2 6.84

Sept. 19. 1855.

W.C.B.		" "		H.C. Ware		" "		P.L.C.		" "	
M' Sagittarii		Moon TO		α Lyrae		Anonyma		α^2 Capricorn			
51.5		51.4		38.0		28.2		49.0			
6.0		7.4		55.4		38.7		2.9			
21.5		24.2		13.9		53.9		17.8			
25.8		39.8		30.8		7.3		31.0			
50.2		55.9		48.1		21.6		45.2			
5.0		12.0		6.1		39.5		59.3			
18 7	19.0	18 23	27.8	18 34	22.9	20 11	49.0	20 12	12.9		
	189.0		218.5		215.2		231.4		218.1		
	249.0		278.5				57.2				
	36.57		39.79		30.74		7.34		31.16		
	0		0		0		0		0		
18 6	35.57	18 22	39.79	18 33	30.74	20 11	7.34	20 11	31.16		

Sept. 19. 1855

1855phae.proj.

D.S.C.		"		Ill. Wre		"		"							
α Cygni		β^1 Cygni		β^2 Cygni		γ Cygni		δ Cephei							
	1.0		2.0		3.4		28.9		9.2						
	20.3		19.6		20.8		44.7		38.0						
	40.9		37.7		39.2		1.2		8.9						
	59.0		54.0		56.0		16.6		37.0						
	18.4		11.9		13.3		32.0		6.0						
	38.0		29.2		30.7		48.0		35.2						
20	38	56.4	21	2	46.1	21	2	47.7	21	9	3.4	21	18	3.6	21
	234.0		198.5		211.1		174.8		137.9						
	59.14		54.07		55.87		16.40		36.84						
	0		0		0		0		0						
20	37	59.14	21	1	54.07	21	1	55.87	21	8	16.40	21	16	36.84	21

Sept. 19.

P.L.C

Ill. Wri

β Aquarii			2 Pegasi			Jupiter Sat.			Jupiter I Limb			Jupiter II Limb		
		44.9			52.9	-14° 39'	27.93	48.4			14.4			18.2
		58.6			6.7	21	47	27.89	59.4		29.0			32.4
		13.2			21.2			—			43.9			47.2
		26.3			34.7			—			57.6			0.8
		40.2			48.7			—			11.9			18.2
		54.0			2.5			—			25.9			29.2
21	26	7.3	21	39	15.8			—	21	49	39.5	21	49	42.7
		244.1			187.1						222.2			185.7
		26.36			34.64			27.91			57.46			0.81
		0			0			0			0			0
21	25	26.36	21	38	34.64	21	48	27.91	21	48	57.46	21	49	0.81

Sept. 19, 1855

P. S. S.

J. L. W.

Aquarii

9.9

23.5

37.9

51.0

4.9

18.5

31.8

177.5

51.07

0

51.07

Sept. 19/20.

All West
D.J.C.

W.C.B.		"		"		"		"		"	
μ Gemini		α Canis Maj		α^2 Gemini		α Canis Min		β Gemini			
—		32.1		1.8		31.1		9.3			
+22° 35'		46.1		17.9		44.8		24.9			
—		1.3		34.8		59.2		41.0			
41.47 41.5		15.1		50.6		12.4		56.0			
41.63 56.5		29.8		6.6		26.1		11.9			
41.36 11.1		43.7		22.8		40.0		27.2			
6	16 41.44 25.5	6	40	57.5	7 27	38.6	7 33	53.3	7 38	42.2	
				22 5.6		19 3.1		266.9		212.5	
	41.48		15.0.9		50.44		12.41		56.07		
	0		0		0		0		0		
6	15 41.48	6	40	15.09	7 26	50.44	7 33	12.41	7 37	56.07	

Sept. 19/20 1855

J. F. F.

Ill. Wren

Mrs Maj

Hydrae

+ Mrs Maj

44.8342.6

15.3

+48° 36' 44.58 2.9

28.9 +52° 20' 37.00 51.9

43.8

37.08 15.5

44.86 44.9

56.9

37.16 37.2

44.93 5.7

10.7

37.32 59.8

45.18 26.7

24.89

25 37.97 21.9

8 51 44.59 46.19

22

37.9

168.9

218.3

44.83

56.90

37.31

0

0

0

8 50 44.83

9

23

56.909

24

37.31

W. C. B.

9.7.71

Ill. Wind

a Canis Maj

α Canis Min.

β Gemini

33.1

32.0

10.4

428

45.8

215

2.7

0.1

42. 2

16.1

13.3

57.1

30.7

27.2

12.9

44.8

410

28.5

6	40	58.8	7	33	54.2	7	38	42.4
---	----	------	---	----	------	---	----	------

234.0

2, 3, 6

220.4

16.29

13.37

57.20

6

3

0

6 40 16.29 7 33 13.37 7 37 55.20

Sept. 23/24. 1855

M.C. Or.		" "		Ill. Ear		J. F. F.		" "	
μ Geminor		α Canis Maj		α^2 Geminor		α Can. Min		β Geminor	
1.1		36.8		6.2		38.5		13.7	
18.6		50.4		21.9		48.8		28.8	
30.2		4.6		38.0		2.5		44.4	
48.3		19.0		54.2		16.2		59.9	
59.8		33.0		9.9		29.6		15.0	
18.1		47.9		27.0		44.0		31.2	
6 16 30.2	6 41 20	7 27 43.0	7 33 57.7	7 38 46.9					
197.3		193.7		200.2		234.3		239.9	
45.33		19.10		54.31		16.33		59.99	
0		0		0		0		0	
6 15 45.33	6 40 19.10	7 26 54.31	7 33 16.33	7 37 59.99					

Sept. 23/24

J. F. F.

All East
P. S. C.

	2	Us. Maj	8	Us. Maj	2	Us. Maj
7		47.1		34.5		48.7
8		7.2		56.1		17.0
4		27.9		18.6		46.9
9		48.9		41.0		16.4
0		9.0		2.7		44.9
2		30.5		26.4		16.2
9	8	57	51.0	9	25	48.3
9		221.6		227.6	10	57
						41.9
						236.0
99		48.80		41.10		16.57
		0		0		0
99	8	50	48.80	9	24	41.10
					10	56
						16.57

Sept. 24. 1855

P.S.S.

Ears

α Sagittarii		α Lynce		β Lynce		δ Sagittarii		δ Aquilae	
108	56.9	43.4		—		11.6		37.7	
109	11.1	0.5	+33° 12'	17.6	44.8	26.8		51.1	
110	25.8	17.9		17.5	1.1	42.6		5.2	
111	40.5	35.5		17.7	17.7	58.6		19.3	
112	54.8	52.3		17.8	33.3	13.8		32.9	
113	9.9	10.9		17.5	50.5	30.4		47.7	
118	7 24.7	18 34 28.3	18	47 17.7	6.9 18	55 46.2	19 1	1.9	19
	223.7	188.8		367		229.9		195.8	
	283.7	248.8				410.0		135.8	
	40.53	38.54		17.61		58.58		19.40	
	0	0		0		0		0	
118	6 40.53	18 33 35.54	18	46 17.61	18	54 58.58	19 0	19.40	19

Sept. 24.

Pech. Co.

Ill. Eau.

 δ Aquilae β^1 Cygni β^2 Cygni γ Aquilae α Aquilae

1855

7.7		5.5		41.0		43.2		15.7		36.7					
1.1		18.7		35.9		58.0		28.9		49.6					
2.2		32.5		11.4		13.5		42.9		3.6					
3.3		46.2		27.0		29.0		56.9		17.3					
9.9		59.4		41.8		43.9		10.3		30.8					
7.7		13.7		88.0		0.2		24.8		45.3					
9.9	19	20	27.6	19	27	13.5	19	27	15.6	19	41	38.8	19	45	59.8
8.8		203.6		248.6		203.4		218.3		241.7					
8.8		323.6		188.6				398.3		121.7					
40		46.23		26.94		29.06		56.90		17.39					
		0		0		0		0		0					
40	19	19	46.23	19	26	26.94	19	26	29.06	19	40	56.90	19	45	17.39

Sept. 24. 1855

P.S.C.

J. S. Carr

β Aquilae		θ Aquilae		Anonyma		α^2 Capricorn		γ Cygni	
	5.7		44.0		30.3		54.3		43.1
	19.0		57.2		44.0		7.8		0.0
	32.8		10.9		58.0		21.8		18.0
	46.5		24.5		12.0		31.9		36.0
	59.8		37.8		25.5		49.4		53.1
	14.2		52.2		40.3		4.2		11.7
19	50 27.8 20	6	5.8 20	11	54.3 20	12	18.3 20	19	29.6 20
	205.8		232.4		264.4		191.7		191.5
	325.8		172.4		84.4		251.7		267.3
	46.54		24.63		12.12		31.95		35.93
	0		0		0.06		0		0
19	49 46.54 20	5	24.63 20	11	12.12 20	11	31.95 20	18	35.93 20

Sept. 24.

P. C.

Jll. Ear

α Delphini			α Cygni			β^1 Cygni			β^2 Cygni			β Cygni		
14.4			6.5			7.6			9.0			34.3		
28.0			21.1			24.2			25.6			49.3		
42.2			44.1			41.8			43.2			5.2		
56.5			3.8			59.2			0.6			20.9		
10.2			22.3			15.9			17.2			36.1		
25.0			42.7			33.9			31.6			52.7		
20 34 39.1	20	39	1.9	21	2	51.5	21	2	52.9	21	9	8.3		
215.4			146.7			234.1			184.1			206.8		
395.4			26.7			414.1			4.1			146.8		
56.48			3.81			59.16			0.59			20.97		
0			0			0			0			0		
20 33 56.48	20	38	3.81	21	1	59.16	21	2	0.59	21	8	20.97		

Sept. 24. 1855

P.S.C.		" "		H. East		" "		" "	
Cephei		β Aquarii		β Cephei		ϵ Pegasi		δ Capricorn	
14.7		50.3		—		39.41	58.2	55.6	
42.7		3.4	+69° 55'	—		+9° 13'	39.42	11.6	9.3
11.8		17.3		27	20.00	40.0	39.41	25.5	23.8
41.0		31.1		28	20.13	20.1	38.39	43	39.4
8.9		44.4			20.39	58.8	—		51.8
39.6		58.9		29	20.23	40.5	—		6.9
8.9	21	12.7	21	30	20.72	20.7	21	39.39	61
167.6		218.1			151			23.8	206.4
287.6									266.4
41.09		31.16			20.30		39.46		38.05
0		0			0		0		0
41.09	21	31.16	21	28	20.30	21	38	39.46	21
									40
									38.05

Sept. 24

at S. C.

J. C. East

	Jupiter 3 ^d Sat.	Jupiter 4 th Sat.	Jupiter 1 st Limb	Jupiter 2 ^d Limb	α Arg. narii
6	4.47 22.4	11.97 29.9	23.47 41.4	26.87 44.8	15.3
3	4.30 35.9	11.70 43.3	23.60 51.2	26.90 58.5	28.4
8	4.30 50.1	11.70 57.5	—	—	42.1
0	4.43 4.4	11.87 11.8	23.53 23.1	26.83 26.8	51.9
8	4.36 18.0	11.66 25.3	23.46 37.1	26.86 40.5	9.2
9	21 47 4.39 32.9	21 47 (9.69 38.2)	23.80 52.3	26.69 55.2	23.5
0	—	—	21 48 23.54 6.1	21 48 26.64 9.2	22 0 37.1
4					211.5
4					391.5
05	4.37	11.76	23.57	26.80	55.93
	0	0	0	0	0
05	21 47 4.37	21 47 11.76	21 47 23.57	21 47 26.80	27 59 55.93

P.S.C.

Dr. Eam

Agave

5 Pegari

"
S. Aquarii

21
2 Pis. Aus.

7
a Pegani'

		5.2			8.4			51.0			27.4			26.2	
		18.6			21.7			4.8			42.7			39.9	
		32.2			35.9			18.9			58.8			53.9	
		45.8			49.8			33.5			14.6			8.2	
		59.0			2.7			46.9			29.9			21.8	
		13.5			17.5			2.1			46.5			36.7	
22	16	27.1	22	36	31.4	22	49	16.3	22	52	2.2	22	59	50.7	22
		201.4			167.4			173.1			222.1			237.4	
		321.4			347.4			233.5			102.1			57.4	
		45.91			49.63			33.35			14.59			8.20	
		0			0			0			0			0	
22	15	45.91	22	35	49.63	22	48	33.35	22	51	14.59	22	59	8.20	22

Sept. 24

P. & E.

Gen. E. & E.

 ψ Aquarii

Moon 10

Mercur

A

Spa

2			12.3			23.1			48.4			49.0			38.7
7.9			25.7			36.7			2.1			2.8			52.3
7.9			39.7			57.0			16.4			17.0			6.3
3.2			52.8			51.2			30.5			31.2			20.7
1.8			7.1			18.9			44.3			44.8			34.3
6.7			21.1			33.9			58.9			59.8			49.3
0.7	23	10	31.1	23	34	47.9	23	31	13.2	23	31	13.8	22	37	3.3
7.4			191.6			36.7			2033.8			218.4			204.90
7.4			375.6												29.27
20			53.61			5.24			30.54			31.20			20.70
			0			0			0			0			0
20	23	9	53.61	23	34	5.24	23	34	30.54	23	34	31.20	23	36	29.27

Sept. 24. 1851

P.L.C.

Ill. Eau

Moon 110		70 Piscium	33 Piscium	2 Andromedae	γ Pegasi	
42.1		26.6	49.9	—	22.30	40.3
51.8		39.9	3.3	+28° 17'	+14° 23'	22.35 54.0
10.0		53.6	17.0	—		—
24.3		7.1	31.0	29.83	29.8	—
38.0		20.8	44.2	29.92	44.9	—
52.9		31.3	58.7	29.80	1.1	22.19 31.8
23 37 6.9 23	56	48.9 0	12.4 0	3 29.87	16.6 0	22.15 30.6
2 30.4		2 32.6	2 16.1	3 42		89
170.4		52.6				
24.34		7.11	30.93	29.85		22.25
0		0	0	0		0
23 16 24.34 23	56	7.11 23	30.93 0	2 29.85 0	7	22.25 13

Sept. 25

D.S.C.

J.L. Ear

J.F.F.

 α Cor. Bor. α Serpentis β Scorpis δ Ophiuchi α Scorpis

3		21.4		1.3		—		39.5		—
0		36.2		14.6	-19° 24'	—		52.3	-26°	66.48 35.9
		51.7		28.5		35.56 21.0		6.1		6.49 51.2
		7.0		42.2		35.53 35.5		19.8		6.53 6.5
		21.9		55.6		35.62 49.6		33.0		6.51 21.2
1.8		38.1		10.0		35.57 4.8		47.3		6.62 37.0
2.6	15° 30	58.4	15° 39	23.8	15° 59	35.57 19.2	16 9	0.9	16	226.48 52.3
		229.7		176.0				197.7		
2.5		7.10		42.29		35.57		19.70		6.52
		0		0		0		0		0
2.5	15° 30	7.10	15° 38	42.29	15° 58	35.57	16 8	19.70	16	22 6.52

1855. Sept. 25.

O.S.C.

Ill. Ear

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61 ¹ Cygni		" 61 ² Cygni		5 Cygni		" α Cephei		" β Aquarii							
	8.0		9.4		35.0		15.2		51.0						
	25.2		26.6		50.2		43.7		4.4						
	42.6		43.9		6.1		12.6		18.2						
	0.0		1.4		22.0		48.9		32.0						
	16.8		18.3		37.1		9.9		45.3						
	35.0		36.5		53.5		40.7		59.8						
21	2	52.4	21	2	53.8	21	9	9.3	21	18	9.6	21	26	13.3	21
	180.0		189.9		213.2		173.6		224.0						
	0.00		1.41		21.89		41.94		32.00						
	0		0		0		0		0						
21	2	0.00	21	2	1.41	21	8	21.89	21	15	41.94	21	25	32.00	21

P.S.C.

Phyllis

E Pegani

Det. Sam

²¹
S Capricor

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