

KG
11365
102

B.31

No. 31.

Reduction of Transits
June 24. 1858 to Nov. 9. 1858

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

KG 11365.102

KG 11365.102



June 24, 1858

A.H.

Ill. Wm

 β Scorp δ Ophiuchi α Scorp τ Scorp

Moon 1.0

50.7

34.1

21.7

42.3

30.5

54.6

37.8

25.8

46.3

34.6

58.1

41.2

29.5

50.1

38.6

1.8

44.6

33.3

54.0

42.7

15 57

5.6

16

6

48.2

16

20

37.3

16

26

58.0

17

12

46.6

19

170.8

205.9

147.6

250.7

193.0

290.4

15 56

58.16

16

6

41.18

16

20

29.52

16

26

50.14

17

12

38.60

19

June 24.

Ill. West

A. H.

 d Ophiuchi c^2 " Ophiuchi

57.4

28.1

1.7

29.5

5.6

33.1

9.4

36.9

19 18 13.7 17 22 40.9

87.8

161.9

27.8

19 18 5.56 17 22 33.18

Jan 24/25

M.C.B.

Auntie

48.4

52.3

56.0

59.7

1 59 3.7

220.1

1 58 56.02

Ill. Wm

June 27/28.

A.H.

M. Wm

 α Aurigae β Tauri

48.5

57.1

53.5

1.2

58.4

5.2

3.4

9.2

5 6 8.3 5 17 13.3

172.1

86.2

5 5 58.42 5 17 5.24

June 28/29. 1858.

Ill. Wm

R. F. B.

Cassiopeia

2.7

9.2

18.2

21.3

0 32 27.8

76.2

6 32 15.24

Jan 29/30.

Ill. Weir

A.H.		" "		" "	
Moon 110		a Persei		a Tauri	
	22.2		48.2		25.7
	26.0		53.7		29.5
	29.6		59.0		33.0
	33.2		64.2		36.8
21 39	37.0	3 14	9.8	4 27	40.4
	148.0		174.9		165.4
			294.9		
21 39	29.60	3 13	58.98	4 27	33.08

July 72. 1858.

A. H.		Ill. Wier									
67	Agnari	2	Agnari	2	Pis. Aus.	2	Pegani	2	Moon	11.0	
	31.2		54.0		29.2		22.8		8.6		
	34.8		57.6		33.4		26.1		12.2		
	38.3		1.0		37.3		29.9		15.7		
	41.8		4.6		41.3		33.3		19.2		
22	35	45.2	22	45	8.3	22	49	45.4	22	57	37.2
	191.3		125.5		186.6		149.7		78.5		
			5.5								
22	35	38.26	22	45	1.10	22	49	37.32	22	57	29.94
									23	13	15.70

July 2.

W.C.B.

M. Wier

	α Urs. Maj		β Leonis		γ Urs. Maj	
0						
6		29.8		13.8		29.8
2		37.6		17.5		37.6
7		44.9		21.2		44.9
2		52.3		24.8		52.3
3	10	55	0.2	11	6	28.7
5		164.8		106.0		185.1
70	10	54	44.96	11	6	21.20
						37.02
						46
						9.62

July. 7th. 1858

A. N.

M. W. Put

 ϵ Piscium

" Moon 110

 β Arietis

" Arietis

16.7

7.1

29.1

51.1

20.3

10.9

33.2

55.1

23.8

14.4

36.9

59.2

27.2

18.0

40.5

3.0

0 55

30.8

40

21.8

46

44.4

59

6.9

118.8

72.2

184.5

176.1

0 55

23.76

40

14.44

46

36.90

58

59.22

July 5/6

Ill. Wm

A. U		η Tauri	
α Persei			
	50.2		44.0
	55.8		47.9
	0.9		51.6
	6.2		55.2
3	14	3	38
	124.9		257.9
3	14	3	38
	0.98		51.68

July 6. 1858

1858phae.pro

A. U.				Ill. Wm				S. Wm				S. Wm				S. Wm			
Polaris s. p.				α Virginis				α Serpentis				5 Urs. Min.				β Scapit			
2	9.3				28.1				58.9				32.1				54.4		
4	29.7				29.1				3.6				50.1				58.2		
6	43.5				32.6				7.0				6.3				2.0		
8	56.7				36.1				10.3				23.3				5.4		
13	11	20.3	13	17	39.7	15	37	14.0	15	49	41.0	15	57	9.3	1				
		159.5			163.0			94.7			153.2			129.3					
13	6	43.90	13	17	32.60	15	37	6.94	15	49	6.64	15	57	1.86	1				

July '77.

A. N.

Polaris

" α Aurtis

M. W. W.

" α Aurtis

4	2	42.4		29.9		52.1	
2	5	3.1		33.6		58.0	
0	7	18.4		37.3		59.8	
4	9	32.7		41.0		3.6	
3	1	11	56.3	1	46	44.9	1
3			152.9			186.9	
6	1	7	18.58	1	46	37.38	1
						58	59.78

July 7. 1858

A.U.

M. W. W.

Polaris s.p.

" Virginis

	2	4.5			25.8				
	4	25.8			29.4				
	6	41.9			32.9				
	8	55.0			36.3				
13	11	17.6	13	17	39.9				
		144.8			164.3				
13	6	40.96	13	17	32.86				

July 7/8

A. N.

 β Aintia

Ill. V. m.

30.0

34.0

37.5

41.1

1 46 48.0

187.6

1 46 37.52

July 8.

A. H.

Ill. Wm

Polaris s.p.

2 Virgin

2 6.4 28.9

4 29.8 29.1

6 43.2 33.0

8 57.7 36.4

13 11 20.2 13 17 40.0

157.1 164.8

13 6 43.42 13 17 32.96

July 8/9

A. H.		J. H. C.		W. W. W.	
Polaris		α Persei		α Tauri	
2	45.8		50.2		27.7
5	10.1		56.0		31.9
7	23.5		1.2		35.3
9	38.6		6.8		38.9
1	12	0.6	3	14	12.0
				4	27
					42.8
					176.6
					176.6
1	7	23.72	3	14	1.24
				4	27
					35.32

July 15, 1858.

All.		J. H. C.		Ill. Wren		"		"		"	
Moon 10		2 Virginis		2 Bootis		2 Bootis		2 Bootis		2 Serpentin	
	58.3		26.8		39.0		54.9		0.8		
	2.0		30.5		43.0		58.7		4.4		
	5.1		32.8		46.3		2.2		8.0		
	9.0		37.4		50.0		5.8		11.3		
" 54	12.7	13	40.9	13	47	53.9	14	9	9.9	15	57
	87.5		169.4		232.2		131.5		39.5		
	27.5						11.5				
" 54	5.50	13	33.88	13	47	46.44	14	9	2.30	15	37
									7.90		

July 15.

J. H. C.

H. W. P.

S. W. Min

S. Ophionch:

	30.9			38.0
	30.0			38.5
	8.4			41.8
	23.3			43.4
11-49	39.8	16	5	49.0
	149.4			209.7
	29.4			
11-49	5.88	16	5	41.94

July 16, 1858

1858phae.proj

A. H.		J. H. C.		M. W. W.		"		"		"		"			
γ Virginis		Moon TO		α Virginis		β Draconis		α Ophiuchi							
	11.9		34.2		27.0		54.2		5.9						
	15.4		37.8		30.7		0.3		9.3						
	18.9		41.4		34.1		5.7		12.7						
	22.3		45.0		37.5		11.4		16.3						
12	34	25.9	12	41	48.5	13	17	41.1	17	27	17.1	17	28	20.0	10
	94.4		206.9		170.4		88.7		64.2						
							28.7								
12	34	18.88	12	41	41.38	13	17	34.08	17	27	5.74	17	28	12.84	10

July 17.

J. H. C.
Lionin

All Men

" Venus 10

		31.8		57.2
		39.4		0.7
		38.9		4.3
		42.4		7.9
10	0	46.0 11	9	11.6
		194.5		81.7

10	0	38.90 11	9	4.34
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July 18/19. 1858

A. W.

H. W.

 α Tauri α Aurigae β Orionis β Tauri

30.3

53.3

26.5

2.2

34.1

58.7

30.2

6.4

37.8

3.4

33.8

10.2

41.4

8.5

37.1

14.1

4 27

45.0

5

6

13.65

7

40.8

5

17

18.2

188.6

137.5

168.4

51.1

4 27

37.72

5

6

3.505

7

33.68

5

17

10.22

July 19.

A. H.

Ill. Wm

α^2 Librae				Moon TO				β Librae				γ Librae				b Scorpii			
		46.7				33.1				7.3				9.6				11.8	
		50.4				37.1				11.1				13.7				15.9	
		54.0				41.0				14.6				17.4				19.8	
		57.6				44.8				18.1				21.3				23.4	
14	43	1.3	15	7	48.8	15	9	21.8	15	28	25.4	15	42	27.4					
		210.0			204.8			72.9			87.4			98.3					
		270.0																	
14	42	54.00	15	7	40.96	15	9	14.58	15	28	17.48	15	42	19.66					

July 29/21. 1858

W.C.B.

M. Wier

 β Tauri δ Orionis ϵ Orionis

2.3

29.2

12.9

6.3

33.1

16.6

10.3

36.0

20.0

14.1

39.4

23.4

5 17 18.2 5 24 43.0 5 47 27.0

51.2

180.7

99.5

5 17 10.24 5 24 36.14 5 47 19.98

July 21.

M. W. P.

A. H.			" "			Moon 10			A. Ophiuchi			B. Ophiuchi		
Scorpii			" Scorpii?											
		27.9			48.4			5.9			22.9			3.4
		32.0			52.6			10.1			26.8			7.2
		35.7			56.3			14.2			30.7			11.1
		39.7			6.3			18.2			34.3			14.8
16	20	43.5	16	37	4.3	16	54	22.3	17	6	38.5	17	13	18.9
		178.8			161.9			70.7			153.2			58.4
					281.9									
16	20	35.76	16	36	56.38	16	54	14.14	17	6	30.64	17	13	11.08

July 21. 1858.

A. H.

1 ophiuchi

3.1

7.2

11.1

15.1

17 18 19.3

55.8

17 18 14.16

July 25/26

M.C.B.		A.H.		M. W. W.C.B.		A.H.		W.C.B.	
α Tauri		α Aurigae		β Orionis		β Tauri		δ Orionis	
	32.1		55.3		28.5		4.0		30.7
	36.0		0.6		32.1		8.0		34.3
	39.6		5.3		35.4		12.0		37.7
	43.1		10.3		38.8		16.0		41.2
4	27	5	6	5	7	5	17	5	24
	46.8		15.4		42.4		20.0		44.6
	197.6		86.9		177.2		60.0		188.5
4	27	5	6	5	7	5	17	5	24
	39.52		5.38		35.44		12.00		37.70

July 2¹/₂ 26

A.U.

Ill. Wm

8 Orionis

46.1

49.8

53.1

56.1

0.0

205.5

5 29

5 28 53.10

July 26/27

A. U.

Ill. Wm

0 Capricorn

Moon 110.

45.7

49.1

clouds

6.9

53.0

10.7

56.7

14.3

20 58 0.4 21 24 18.0

205.3

265.3

20 57 53.06

July 30/31. 1858

W.C.B.				A.H.				W.C.B.				A.H.				W.C.B.			
Tauri				α Aurigae				β Orionis				β Tauri				γ Orionis			
		32.7				58.0				28.8				4.4				31.1	
		36.4				1.1				32.3				8.7				34.8	
		40.0				6.0				35.9				12.4				38.2	
		43.7				10.8				39.2				16.4				41.8	
4	27	47.2	5	6	15.9	5	7	43.0	5	17	20.7	5	24	45.1	5				5
		200.0				89.8				179.2				62.6				191.0	
4	27	40.00	5	6	5.96	5	7	35.84	5	17	12.52	5	24	38.20	5				5

July 30/31

A. H.

M. W.

E Orionis

46.5

50.2

53.7

57.1

5 29 0.5

208.0

5 28 53.60

Aug. 5. 1858.

W.C.B.

J.H. West
H.U.

Polaris s.p.

 α Virginis γ Bootis

	2	40.0			28.7			41.0
	5	4.1			32.2			44.8
	7	18.4			39.6			48.3
	9	32.0			39.1			52.0
13	11	51.6	13	17	42.7	13	47	51.4
		150.1			178.3			241.9
13	7	18.02	13	17	39.66	13	47	48.38

Aug 8/9

A.U.

W.C.B

M. Wen

p Lauri

p Orionis

4.0

48.9

8.2

49.4

11.9

52.9

15.8

56.2

5 17

19.9

5

28

59.8

59.8

264.2

5 17

11.96

5

28

52.84

Aug. 9. 1858.

M. C. B.

M. W.

M. C. 03.		" "		" "		" "				
Polaris s.p.		a Virginis		γ Uro. Maj.		γ Bootis				
	—		28.3		38.1		40.7			
5	5.6		32.0		43.8		44.5			
7	20.4		35.6		49.0		48.0			
9	33.4		39.0		54.4		57.7			
	—	13	17	42.5	13	42	0.1	13	47	55.1
				177.4			185.4			240.4
		13	17	35.48	13	41	49.08	13	47	48.08

Aug. 12.

W.C.B.

A.H.

M. Wm

Polaris s.p.

5 Virginis

γ Bootis

2 41.9

13.3

40.9

5 7.0

12.0

44.8

7 22.5

20.4

46.2

9 36.6

23.8

51.9

11 59.7

13

27

27.3

13

47

55.6

171.7

101.8

241.4

13 7 22.34 13 27 20.36 13 47 48.28

Aug. 13. 1858.

A.H.

M. West

γ Virginis				Moon TO				α Virginis				ϵ Bootis				δ^2 Librae			
		13.2				37.6				26.2				32.0				47.5	
		16.8				41.4				32.0				36.0				51.3	
		20.2				45.0				35.4				39.9				54.9	
		23.7				48.4				39.0				43.8				58.4	
12	34	27.3	13	8	52.3	13	17	42.6	14	38	47.8	14	43	2.1					14
		101.2			224.7			177.2		199.5				214.2					
														274.2					
12	34	20.24	13	8	44.94	13	17	35.44	14	38	39.90	14	42	54.84					14

Aug. 13.

A.U.

M. Wm

β Urs. Min.		ψ Bootis		β Librae		α Cor. Ber.		α Serpentin						
	35.5		6.8		8.3		25.7		2.7					
	49.3		10.9		12.0		29.8		6.3					
	2.1		14.7		15.4		33.5		9.8					
	15.1		18.5		18.8		37.3		13.2					
14	51	28.8	14	58	22.4	15	9	22.4	15	28	41.4	15	37	16.8
	130.8		73.3		76.9			167.7						48.8
	10.8													
14	51	2.16	14	58	14.66	15	9	15.38	15	28	33.54	15	37	9.76

Aug. 14, 1858.

$$\frac{a}{b} + 0.29$$

$$e$$

W.L. B.		A.U.		Ill. Wm		"		"		"	
Polaris s.p.		α Virginis		δ Virginis		γ Ursa. Maj.		γ Bootis			
2	46.4		28.0		12.8		37.8		40.3		
5	6.2		31.8		16.4		43.3		44.1		
7	23.2		35.2		19.9		48.4		47.6		
9	36.8		38.7		23.3		53.9		51.3		
13	12	1.5	42.3	13	27	26.8	13	41	59.4	13	47
	114.1		176.0		99.2		242.8		278.3		
13	7	22.82	13	17	35.20	13	27	19.84	13	41	48.56
										13	47
											47.66

Aug. 16.

$$\frac{a}{b} + 0.30$$

A. H.

All. Ear

E Bootis

β Uro Min.

2 Cor. Ber.

Moon 10

β Scorp

		30.8			31.9			24.4			58.2		
		34.9			48.4			28.4			58.2		0.0
		38.8			38.7			32.3			3.2		3.7
		42.6			11.4			36.2			7.1		7.2
14	38	46.7	14	51	25.1	15	28	40.2	11	40	11.2	15	57
		193.8			172.1			161.5			171.5		
					292.5						15.9		
14	38	38.76	14	50	38.50	15	28	32.30	11	40	3.18		

Aug. 16. 1858.

A. H.

M. Ear

5 Scipii

2 Scipii

18.8

27.3

22.8

31.3

26.5

35.0

30.3

38.8

16 12 34.3 16 20 42.9

132.7 178.3

16 12 26.54 16 20 35.06

Aug. 17/8

A.U.

Ill. Wm

 α Can. Min. β Gemina

31.8

20.4

32.5

24.4

42.9

28.3

46.2

32.1

7 31 49.9 7 36 36.2

214.3

141.4

7 31 42.86 7 36 28.28

Aug. 18. 1858.

$$\begin{matrix} a \\ 6 + 0.30 \\ c \end{matrix}$$

A.H.		M.C.B.		A.H.		M.C.B.		A.H.		M.C.B.		A.H.		M.C.B.	
Polaris r.p.		α Virginis		γ Bootis		α Bootis		β Librae							
—		220		39.1		54.9		7.2							
—		30.7		43.0		58.7		10.9							
8 4.3		34.0		46.6		2.3		14.3							
—		37.4		50.2		5.9		17.8							
13 —		41.1 13 17		54.0 14 9		9.8 15 7		21.4							
		170.2		232.9		131.6		71.6							
						11.6									
13 17		34.04 13 47		46.58 14 9		2.32 15 7		14.32							

Aug. 18.

A.H.

Ill. Ear

A.H.		" "		" "		" "		" "	
2 Cor. Bor.		2 Serpentes		8 Urs Min		A Ophiuchi		B Ophiuchi	
24.6		1.4		35.3		22.4		3.0	
26.1		5.1		1.5		26.9		7.0	
32.3		8.7		27.3		30.3		10.8	
36.1		12.0		52.2		34.2		14.6	
15	28	40.2	15 37	15.7	16 1	19.0	17 6	38.1	17 13
111.7		42.9		135.3		158.4		53.9	
15	28	32.34	15 37	8.58	16 0	27.06	17 6	30.28	17 13
								10.78	

Aug 18, 1858.

A. U.

All Part

Moon TD

10.9

11.0

19.0

23.0

17 29 27.2

98.1

17 29 19.02

Ag. 18/19.

W.C.B.

M. E an

s Tami

s Aurijar

32.2

—

36.0

—

37.5

—

43.0

9.1

4 27 46.8

5

6

—

197.5

4 27 39.50

Aug. 19. 1858.

W.C.B.

M. Ear
A. 21.

1858phae. f

M.C.B.		"A.H."													
Polaris s.p.		" Virginis		" Urs Maj.		" Bootis		" Sagittarii							
3	10.2		27.0		36.7		39.3		42.5						
5	34.4		30.8		42.2		43.1		46.8						
7	47.0		34.2		47.6		46.8		50.8						
10	2.8		37.7		52.9		50.4		54.7						
13	12	26.0	13	17	41.3	13	41	58.3	13	47	54.3	17	55	58.8	17
		120.4			171.0			237.7			233.9			253.6	
		240.4													
13	7	48.08	13	17	34.20	13	41	47.54	13	47	46.78	17	55	50.72	17

Aug. 19.

A.H.

M. East

B. A. C. 6127		♂ Sagittarii		Moon 10		♀ Sagittarii		♂ Sagittarii						
	51.1		39.5		57.1		32.9		13.6					
	55.1		44.1		58.2		37.0		17.7					
	59.1		48.0		59.2		40.8		21.4					
	2.9		52.1		3.1		44.7		25.2					
17	59	7.0	15	11	56.2	18	21	7.2	18	36	48.8	18	46	29.3
	175.1		240.2		175.8		204.2		107.2					
	29.1				29.8									
17	58	59.02	18	11	48.04	18	24	59.16	18	36	40.84	18	46	21.44

Aug. 20. 1858.

A. H.

M. Ear

 δ Sagittarii

Moon TO

 κ^2 Sagittarii

13.3

49.8

49.9

17.4

49.8

53.9

21.2

53.7

57.6

25.0

57.6

1.4

18. 46

29.0

19

20

2.0

19

28

5.4

105.9

208.9

168.2

266.9

286.2

18. 46

21.18

19

19

53.78

19

27

57.64

Aug. 29th

A. H.

W. E. Carr

& Can. Maj.

36.8

40.4

44.0

47.5

6 38 51.3

220.0

6 38 46.00

Aug. 21. 1858.

A. H.

M. Ear

Moon TO

p Capricorn

0.1 31.1

4.0 31.3

7.9 39.0

11.7 42.6

20 13 15.8 20 20 46.4

39.5 194.8

20 13 7.90 20 20 38.96

Aug. 2 $\frac{1}{2}$ 2

A. H.

M. Ean

γ Geminor			α Can. Min.			β Geminor		
		14.0			35.3			20.0
		17.8			39.0			24.1
		21.3			42.4			27.9
		24.8			45.9			31.8
6	29	28.6	7	31	49.1	7	36	36.0
		106.1			212.1			139.8
6	29	21.30	7	31	42.42	7	36	27.96

Aug. 23.

W. C. B.

M. East
H. D. 7.

Polaris s.p.		α Virginis		α Lyrae	
3	14.3		26.3		50.2
5	36.8		29.9		54.6
—			33.3		59.1
10	9.1		36.9		3.5
13	12	29.6	13 17	40.4	18 32 7.9
				166.8	175.3
				295.3	
		13 17	33.36	18 31	59.06

Aug. 23.

A.H.

M. East

Capricorn			" "			Moon 10			o Aquarii			x Aquarii		
		5.8			58.8			13.9			53.4			9.6
		9.4			2.6			19.6			57.0			13.3
		13.2			6.2			23.1			0.5			16.9
		16.9			9.8			26.8			—			20.2
21	14	20.8	21	32	13.4	21	53	31.5	22	23	7.8	22	30	23.8
		66.1			90.8			115.9						83.8
					30.8									
21	14	13.22	21	32	6.16	21	53	23.18				22	30	16.78 ¹⁶

Aug. 24/21, 1858.

M.C.B.		A.U.		M. Ear	
Canis Maj.		2 ^d Gemini		a Can. Min.	
				β Gemini	
	35.3		13.8		34.6
	39.3		18.0		38.3
	42.9		22.0		41.8
	46.3		26.0		45.2
6	38	50.6	7	25	30.3
	213.8		110.1		208.7
					135.9
6	38	42.76	7	25	22.02
				31	41.74
				36	27.18

Aug. 25.

A. H.

M. East

Polaris s.p.	μ Herculis	γ Draconis	μ Sagittarii
—	36.8	57.0	0.4
5	39.9	2.9	4.3
7	50.3	8.3	8.0
—	48.3	13.9	11.6
13	—	17	53
	40	52.5	19.6
	223.0	101.7	39.7
	17	40	44.60
	17	53	8.34
	18	5	7.94

Aug. 29/30

A. H.

Ill. East

1858phae.

A. A.		" Aritis		" Beti		Moon 110		" Aritis		
	34.3		57.0		40.0		14.1		13.8	
	38.2		0.8		43.4		18.7		17.3	
	41.9		4.5		47.0		22.4		21.1	
	45.5		8.0		50.2		26.0		24.8	
2	4	49.4	2 10	11.8	2 35	53.9	2 55	30.0	3 3	28.4
	209.3		82.1		234.5		111.6		105.4	
			22.1							
2	4	41.86	2 10	4.42	2 35	46.90	2 55	22.32	3 3	21.08

Aug. 29/30

A. H.

M. East

5 Arietis

6 Arietis

27.3

44.8

31.1

48.1

34.9

52.2

38.4

55.8

3 6

42.3

3

12

59.7

174.0

261.0

3 6

34.80

3

12

52.20

Aug. 30/31

Aug. 31/32

M. East

A. W.

α^2 Geminor	α Can. Min.	β Geminor	α Aurigae	Moon 110
13.1	34.0	18.6	26.6	18.0
17.3	37.5	22.6	30.9	22.1
21.4	40.9	26.6	35.0	26.0
25.4	44.3	30.3	39.2	30.1
7 25 29.7	7 31 47.8	7 36 34.5	4 47 43.5	5 1 34.1
106.9	204.1	132.6	175.2	130.3
7 25 21.38	7 31 40.90	7 36 26.52	4 47 35.04	5 1 26.06

Aug. 30/32

A.U.

α Aurigae		β Orionis		β Tauri	
	52.2		25.0		0.9
	57.3		28.8		4.9
	2.4		32.3		8.8
	7.3		35.7		12.7
5	6	5	7	5	17
	12.4		39.3		16.7
	131.6		161.1		44.0
5	6	5	7	5	17
	26.22		32.22		8.80

Sept. 5/6. 1858

A. U.

Ill. Can

 α^2 Geminor α Can. Min. β Geminor

11.7

32.5

17.1

16.0

36.1

21.2

20.0

39.6

25.1

23.9

42.9

29.0

7 25 28.2 7 31 46.6 7 36 33.1

99.8

197.7

125.1

7 25 19.96 7 31 39.54 7 36 25.10

Sept. 8/9.

W. C. B.

M. East

 β Geminorum

15.8

19.7

23.6

27.5

7 36 31.7

118.3

7 36 23.66

Sept. 9/10

M. East

W. C. B.

 β Geminor

15.2

19.2

23.2

27.0

7 36 31.2

115.8

7 36 23.16

Sept. 13.

A.U.

Alt. East

A. A.		" "		" "		" "					
2 Cor. Ber.		5 Ur. Min.		Moon TO		2 Scorpi					
	16.3		17.4		32.6		19.1				
	20.4		34.3		36.7		23.2				
	24.2		51.3		40.6		27.2				
	28.0		8.3		44.6		30.8				
15	28	32.2	15	49	28.4	16	11	48.8	16	20	34.9
	121.1		136.7		203.2		131.2				
			256.7								
15	28	24.22	15	48	51.34	16	11	40.64	16	20	27.04

Sept. 14, 1858.

A. H.

M. East

♄ Scorpii

γ Draconis

♄ Herculis

Moon T.T.

♄ Ophiuchi

18.7

31.1

30.8

46.4

57.3

22.7

38.5

35.0

50.7

1.0

26.6

46.0

39.2

54.8

4.1

30.4

53.1

43.2

58.8

8.0

16 20

34.4

16

22

0.7

16

35

47.4

17

7

3.0

17

28

11.7

132.8

169.4

195.6

213.7

82.5

229.4

273.7

22.5

16 20

26.58

16

27

45.88

16

35

39.12

17

6

54.74

17

28

450

Sept. 11.

A. H.

M. Carr

Moon 10

 α^1 Sagittarii α^2 Sagittarii

44.8

13.1

41.0

48.9

18.9

45.0

52.8

22.7

48.7

56.7

26.4

52.4

18 58

0.7

19

16

30.4

19

27

46.4

203.9

113.4

243.5

263.9

18 57

52.78

19

16

22.68

19

27

48.70

1858, Sept. 17.

B.P.B.

Alt. East

1858phae

♂ Aquilae			γ Aquilae			ε Aquilae			Moon TO			η Capricorn		
		57.3			7.2			28.2			30.9			18.0
		0.8			10.9			31.8			34.9			20.8
		4.3			14.4			35.2			38.8			23.6
		7.7			17.9			38.8			42.6			26.9
19	18	11.3	19	39	21.4	19	43	42.3	19	51	46.9	20	9	33.1
		81.4			71.8			176.3			194.1			127.4
		21.4												
19	18	4.28	19	39	14.36	19	43	35.26	19	51	38.82	20	9	21.48

Sept. 17/18

C. Mr. Pritchett

M. East

 α^2 Geminor α Can. Min. β Geminor

6.6

27.6

12.0

11.0

31.2

16.2

14.7

34.7

20.0

18.9

37.9

23.9

7 21 28.27 31 41.77 36 28.0

74.4

173.1

170.1

7 21 14.887 31 34.627 36 20.02

Sept. 18. 1858

M. East

A.H.

Moons	10	32	Vulpeculae	0	Capricorn	v	Aquarii	(clouds)
	19.4		6.0		34.9		28.7	
	23.2		10.0		38.6		32.3	
	27.0		13.9		42.2		36.0	
	30.9		17.7		45.8		39.4	
20	43	34.9	20	48	21.8	20	57	49.6
	135.4		69.4		211.1		179.6	

20 43 27.08 20 48 13.88 20 57 42.22 21 1 35.92

Sept. 20. 1858.

A.H.		Ill. Ear	
μ Capricorn	γ Aquarii	Moon TO	γ Aquarii
9.4	22.3	33.7	39.8
13.0	26.0	37.3	43.4
16.7	29.5	40.9	46.9
20.1	33.0	44.4	50.2
24 45 23.6	21 58 36.7	22 21 48.1	22 27 53.9
83.0	147.5	204.4	234.2
21 45 16.60	21 58 29.50	22 21 40.88	22 27 46.84
			35 32.72

Sept. 20. 1858.

H. H.

M. East

Pis. Aus.

"
 & Pegasi

23.9

17.2

28.0

20.9

32.0

24.4

36.0

27.9

22 49

40.2

22

57

31.6

160.1

22.0

22 49

32.02

22

57

24.40

Sept. 24/11

A. U.

All. Ear

 α^2 Gemini cr α Can. Min. β Gemini cr

		1.0			21.9			6.6
		5.4			28.8			10.8
		9.3			29.1			14.5
		13.2			32.4			18.4
7	24	17.7	7	31	36.0	7	36	22.6
		46.6			145.2			72.9
7	24	4.32	7	31	29.04	7	36	14.4

Sept. 27. 1858

A. H.

M. East

1858phae.

J. A. 1		J. A. 2		Moon T10		2 Aurigae		5 Leporis						
J. A. 1		J. A. 2		Moon T10		2 Aurigae		5 Leporis						
	13.1		9.9		14.9		10.8		53.0					
	16.8		13.8		19.0		15.0		56.9					
	20.4		17.6		23.0		19.0		0.5					
	24.0		21.3		27.0		23.2		4.1					
4	27	27.8	4	33	28.2	4	41	31.1	4	47	27.6	4	59	8.1
	102.1		87.8		115.0						98.6		122.6	
													2.6	
4	27	20.42	4	33	17.56	4	41	23.00	4	47	19.12	4	59	0.52

Sept. 29.

M. East

A.H.		" Orionis		" Aurigae		" Orionis		" Leporis						
2	Aurigae													
	36.2		9.9		54.8		11.6		53.9					
	41.3		13.0		59.0		15.3		57.6					
	46.3		16.4		3.1		18.4		1.2					
	51.0		19.6		7.1		21.8		4.8					
5	5	56.5	5	7	23.3	5	23	11.3	5	24	25.6	5	26	8.8
	231.3		81.9					135.3			92.7			126.3
								11.3						6.3
5	5	46.26	5	7	16.38	5	23	3.06	5	24	18.54	5	26	1.26

Sept. 29, 1858.

A. H.

M. Ear

48 Aurigae		ε Geminae		α Can. Maj.		Moon T10	
	49.0		34.5		18.8		40.7
	53.3		38.5		19.7		44.8
	57.3		42.2		23.3		48.7
	1.1		46.0		26.9		52.5
6 19	5.5	6 34	50.0	6 38	30.6	6 54	56.9
	166.2		211.2		116.3		243.6
	286.2						
6 18	57.24	6 34	42.24	6 38	23.26	6 54	48.72

Sept. 30.

A. H.

H. E. au

8 Gemini

59.8

3.5

7.2

10.9

7 11 14.9

96.3

7 11 7.26

Oct. 2. 1858.

A. H.

M. Ear

2 Capricorn

2 Cygni

32 Vulpecula

31.2

51.7

49.6

35.0

57.0

53.5

38.5

2.0

57.4

42.0

6.8

1.3

20 9 45.6 20 36 11.8 20 48 5.4

192.3

128.8

167.2

20 9 38.26 20 36 1.76 20 47 57.44

Oct. 5.

W.C.B.				H. Ear A. U.				C. W. P.				"							
S Ophiuchi				2 Scorpii				γ Draconis				32 Vulpeculae 61 Cygni							
10.8				58.2				29.0				46.5				46.9			
14.4				2.2				34.9				50.2				51.3			
17.8				6.2				40.3				54.3				55.8			
21.1				10.0				45.8				58.2				59.8			
16	6	24.8	16	20	14.0	17	52	51.6	21	48	2.0	22	0	4.8					
88.9				90.6				201.6				211.2				218.6			
16	6	17.78	16	20	6.12	17	52	40.32	21	47	54.24	21	59	55.72					

Oct. 5, 1858.

M. Ear

H. P. 7.

x Pis. Aus.

5.8

10.0

13.9

17.8

22 49 21.9

69.4

22 49 13.88

Oct. 5/6

W.C.B.

M. Ear

α^2 Gemini		α Can.		Min.	
	47.8			8.6	
	52.2			12.2	
	56.2			15.7	
	0.2			19.2	
7	25	4.4	7	31	22.8
	160.8				78.5
7	24	58.16	7	31	15.70

Oct. 6. 1858.

C.M.P.

Ill. East

λ Vis Min.		α Cygni	
57	40.8		48.0
0	52.4		52.8
3	56.4		57.8
6	48.7		2.1
21	9	58.420	36
			7.9
	257.7		168.6
21	3	51.5420	35
			57.72

Oct. 78.

W.C.D.

Ill. Ear

α Gemini			α Gemini			α Can. Min		
		46.9			—			7.9
		51.2			51.5			11.7
		55.2			55.7			15.1
		59.1			59.5			18.3
7	25	3.2	7	25	3.8	7	31	22.2
		211.6						75.2
7	24	55.12				7	31	15.09

Oct. 8, 1858.

A. H.

All. East

Cephei

" β Aquarii" γ Pegasi

17.3

21.8

29.0

25.0

28.3

32.6

32.2

28.7

36.2

40.0

32.0

39.7

21 14 46.9 21 23 38.6 21 36 43.3

161.4

143.4

180.5

21 14 32.28 21 23 28.68 21 36 36.16

Oct. 11.

*

A.U.

Alt. East

β Draconis			α Ophiuchi			μ Urculis			γ Draconis		
		19.6			33.0			5.2			28.0
		28.4			36.8			9.2			30.7
		31.1			40.3			13.2			36.2
		36.8			43.8			—			41.8
17	26	42.7	17	27	47.5	17	40	21.1	17	52	47.4
		158.6			201.4						181.1
17	26	31.12	17	27	40.28				17	52	36.22

Oct. 15, 1858.

A. H.

M. East

C. W. P.

Lyrae			♂ Aquilar		♂ Aquilar		♂ Aquilar		♂ Sagittarii	
	56.9		1.7		16.0		29.4		22.2	
	1.1		5.4		21.7		33.1		26.2	
	5.8		9.0		25.1		36.6		30.0	
	9.4		12.4		28.5		40.0		33.8	
18	44	13.6	16	58	16.1	19	10	32.2	19	17
	86.5		44.6		125.1		182.8		150.0	
	26.5									
18	44	5.30	18	58	8.92	19	10	25.1	19	17
								36.56	19	47
									30.00	19

Oct. 15

C. M. P.

All. Ear

C. M. P.		Moon TO		3 Capricorn		4 Capricorn		32 Vulpecula						
C Sagittarii														
	3.9		51.9		6.6		49.8		37.4					
	7.8		55.7		10.3		53.1		41.5					
	11.7		59.4		14.0		57.3		45.2					
	15.1		3.0		17.6		1.0		49.1					
19	52	19.1	20	21	7.3	20	31	21.2	20	37	5.0	20	47	53.2
	58.4				177.3			69.7			166.6			226.4
					297.3						286.6			
19	52	11.68	20	20	59.46	20	31	13.94	20	36	87.32	20	47	45.28

Oct. 18. 1858.

C. M. P.

M. Earl

1858phae. f.

61' Cygni		" Cygni		2 Cephri		0 Aquarii		5 Aquarii							
	38.9		38.3		7.3		27.2		14.8						
	40.2		2.3		14.5		30.8		18.6						
	44.6		6.2		22.0		34.3		21.9						
	48.9		10.1		29.2		37.7		25.4						
20	59	53.1	21	6	14.2	21	14	37.0	22	8	41.4	22	22	29.0	20
	223.1		91.1				110.4		171.4		109.7				
20	59	44.62	21	6	6.22	21	14	22.08	22	8	34.28	22	22	21.94	20

Oct. 19

Al. E. gut
C. W. P.

A. H.			"			"			"			"		
α Cygni			32 Vulpecula			α Pis. Aur.			α Peg. ari			ρ Aq. narii		
		36.7			34.8			53.6			46.9			4.4
		41.8			38.7			57.7			50.4			7.9
		46.6			42.5			1.8			54.2			11.1
		51.2			46.2			5.4			57.5			14.8
20	35	56.4	20	47	50.3	22	49	9.8	22	57	1.2	23	6	18.2
		232.7			212.5			128.3			210.2			58.4
								4.3			270.2			
20	35	46.54	20	47	42.50	22	49	1.66	22	56	54.04	23	6	11.28

Oct. 19. 1858.

A.U.

M. Ear

96 Aquarii		Moon 10		21 Piscium	
	8.3		29.2		17.4
	12.0		32.9		21.0
	15.1		36.6		24.6
	18.7		39.9		27.9
23 11	22.1	23 34	43.7	23 41	31.3
	77.0		182.3		122.2
23 11	15.40	23 34	36.46	23 41	24.44

Oct. 20.

A.U.

M. E. an

32 Vulpecula			61' Cygni			61 ² Cygni			5' Cygni		
		33.3			33.9			35.3			51.8
		37.4			38.4			40.0			0.5
		41.2			42.8			44.2			4.4
		45.1			47.0			48.5			8.2
20	47	49.2	20	58	51.8	20	58	53.2	21	6	12.4
		206.2			213.9			221.2			81.8
20	47	41.24	20	58	42.78	20	58	44.24	21	6	4.36

Oct. 25. 1858.

A.H.

St. East.

Cygni		32 Vulpeculae			
	30.2		28.1		
	35.1		32.1		
	40.2		35.9		
	45.0		39.7		
20	35	50.1	20	47	43.9
	200.6				179.7
20	35	40.12	20	47	35.94

Oct. 26.

A.H.

All. East

α Cygni			32 "Vulpeculae			61 ¹ Cygni			61 ² Cygni			5 ¹ Cygni		
		28.9			27.0			27.4			28.9			50.0
		33.9			31.0			31.8			33.2			54.2
		38.8			34.8			36.2			37.8			58.0
		43.7			38.6			40.7			42.2			1.9
20	35	48.8	20	47	42.8	20	59	45.2	20	59	46.7	21	6	6.1
		194.1			174.2			181.3			188.8			170.2
20	35	38.82	20	47	34.84	20	59	36.26	20	59	37.76	21	5	58.04

Oct. 27, 1858.

A. H.

Ill. East

Cygni

32 Vulpes lar

28.9

27.0

34.0

31.0

38.8

34.8

43.8

38.6

20 35 48.7 20 47 42.8

194.2 174.2

20 35 38.84 20 47 34.84

Oct. 28.

A. H.

All. Ear

α Cygni		32 "Vulpecula		61 "Cygni		61 ² "Cygni		5 "Cygni						
	29.0		27.0		27.5		29.0		49.9					
	34.2		31.8		32.0		33.4		54.1					
	39.1		31.0		36.3		38.0		58.0					
	43.8		38.8		40.8		42.2		2.0					
20	35	49.0	20	47	42.8	20	59	45.2	20	59	46.8	21	5	6.2
		195.1			174.7			181.8			189.4			170.2
20	35	31.02	20	47	34.94	20	59	36.36	20	59	37.88	21	5	58.04

Nov. 1. 1858.

Ill. East

M.C.B.

 α Lyrae

0.5

3.3

9.7

14.1

18 31 18.7

48.3

18 31 9.6.6

Nov. 8.

A. H.

Mt. East

E Pegasi

16 Pegasi

θ Aquarii

12.2

34.7

20.7

15.9

38.8

24.2

19.3

42.1

27.8

22.8

46.0

31.2

21 36

26.4

21

45

50.1

22

8

34.8

96.6

212.1

138.7

21 36

19.32

21

45

42.42

22

8

27.74

