

KG
11365
67

A. 67

A 67

Meridian Circle

1865 July 5th _____

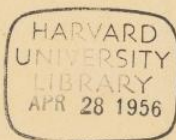
_____ 1865 July 18th

Sold by T. Groom & Co., Stationers, India Building, 92 State St., Boston.

KG 11365.67

Period			
	141	142	143
	July 3-11	July 13-15	July 17-26
n	-0.003	+0.061	-0.025
c	+0.286	+0.286	-0.286
cut out			

KG 91365.67



N.B. — About thirty one stars omitted from the first
 part of July 5th to 17th See end of this book for stars from

July 5. 1875

Am.

10 1	34.76 + 0.29	11.92	Σ +36.87
13 18	30.38 + 0.29	7.47	36.80

T.H.S.

15 28	24.01 + 0.32	0.90	36.57
15 38	3.20 + 0.29	40.50	36.61
16 21	34.96 + 0.32	11.85	36.57
17 8	55.75 + 0.30	32.70	36.65
17 29	6.42 + 0.29	43.30	36.59
h.w.			Σ +36.598
16 25			

1885 July 5 - Mt East

next page

See end of book.

E. Mrs. Min. & Visculis			50 Ophurechi			64 Camel. B			74 Camel. B sp		
16	58	30.9			14.8			55			40.3
		55.0			18.3	17	17	55.4			56.1
	59	22.5			22.0			26.3			6.1
		41.2			25.0			8.5			20.0
17	0	10.5	17	8	2.8	17	12	29.1	17	19	47.2
		160.1						109.2	17	21	32.7
		100.1									155.2
											35.2
16	59	20.02	17	7	55.75	17	12	21.84	17	21	7.04

55.75
.76

29.08

30.01

29.06

29.50

29.41

July 5th M. East / July 8th M. East
 1. H.S. / 1. H.S.

1 CPB

Ghruichi			Polaris			α Kingmis			α Bores			ρ Bores		
		59.5	13	4	12.8			24.5			49.3			18.6
		3.0		7	55.4			27.9			52.7			22.5
		6.6						31.6			56.6			26.6
		9.4		12	6.2			34.2			59.3			29.9
17	28	13.6		14	16.3	13	17	38.2	14	9	3.5	14	25	34.5
		92.1						156.4			221.4			132.2
		32.1						3.28			281.4			
17	28	6.42	13	9	49.47	13	17	31.28	14	9	56.28	14	25	26.44

13	4	10.4	
		12.1	
		13.7	1
		15.0	
		17.2	12.8
		52.4	
		171.0	
		15.6	2
7		59.6	
		21.6	53.4
		1.2	
		3.3	
		4.5	
		5.9	
		7.2	4
		8.7	
		11.1	
		43.2	6.2
		12.5	
		13.9	
		15.5	5
		17.0	
		18.6	
13	14	20.1	
		697.6	16.3

47.86
 48.92
 51.75
 49.35
 49.47

1865 July 8. Sth East

J.C.B.

J.C.B.

A.M.

next page

Venus			E. Portis			d ² libra			N. Portis			W. Portis		
		16.8			24.0			44.8			43.5			30.5
		20.0			27.7			46.1			47.6			33.9
		23.8			31.7			52.0			52.4			38.2
		26.3			34.4			54.7			55.9			41.0
14	34	30.5	14	38	39.0	14	42	58.8	14	54	1.0	14	55	45.4
		117.4			156.8			258.4			200.4			189.0
											260.4			
14	34	23.48	14	38	31.36	14	42	51.68	14	54	52.08	14	55	37.80

1865 July 8 Ill East
 Ill.

18 Cephei H	1 Camel. H sp	~~B. Silvae~~ ^{8 Proles}	~~8 Proles~~ ^{albrona}	~~7 Corona~~ ^{albrona}
2 Wire				
35.3	19.6	21.5	56.1	47.5
47.5	29.8	25.4	59.8	57.3
3.3	35.8	29.9	4.1	53.6
15 2 18.3	44.4	33.1	7.2	58.7
	15 7 52.1	15 9 37.8	15 17 11.8	15 27 3.2
	181.7	147.7	139.0	216.3
			19.0	276.3
	15 7 36.34	15 9 29.54	15 17 3.80	15 26 33.26

1865 July 8. Ill. East

A.M.

next page

~~a Corona~~~~u Corona?~~~~o Mrs. Min~~~~a Serpentes~~~~β Serpentes~~

17.4

31.6

21.0

57.1

17.1

20.8

35.8

36.2

0.3

20.5

24.9

see notes

40.6

53.8

4.0

24.4

27.9

44.0

5.6

6.6

27.0

32.3

15 30

49.1

15 35

24.7

15. 37

10.6

15 39

30.9

123.3

201.1

141.3

78.6

119.9

261.3

18.6

15 28 24.66

15 30 40.22

15 34 52.26

15 37 3.72

15 39 23.98

(Not to be copied)

No note - Can't tell
what this is -

15 27 34.3

36.4

38.2

40.2

1865 July 8. Id. East
Id.

λ Lupi			δ Corona			λ Libra			λ Cygni H sp			π Scorpion		
		43.1			15.0						25.1			1.6
		47.0			18.5						49.3			5.2
		51.3			22.6			57.5			4.6			9.3
		54.3			25.6			0.5			25.8			12.0
15	41	59.1	15	43	30.0	15	45	4.6	15	47	174.7	15	50	16.4
		254.8			111.7						149.5			44.5
											29.5			
15	41	50.96	15	43	22.34				15	47	5.90	15	50	8.90

1885 July 8 Ill. East
A.M.

next page

e Corona			Gr. 766 sp			Gr. 774 sp.			87 Draconis B			o Corona		
		18.8			44.8			10.2			5.3			55.8
		22.5		56	19.3			42.8			14.2			59.7
		26.5			41.6			3.7			24.0			4.2
		29.7			14.8			33.9			30.9			7.1
15	57	34.0	15	57	42.2	16	0.	0.9	16	5	41.9	16	10	12.0
		131.5			162.7			91.7			116.3			138.8
					222.7			31.7						18.8
15	57	26.30	15	56	44.54	15	59	6.34	16	5	23.26	16	10	3.76

865 July 8. M. East
A.M.

σ Scorpii			14 Mrd. Min.			α Scorpii			2 Ophiuchi			17 Drac, pr.		
		19.4			~~40.1~~ 14.2			28.2			26.6			17.7
		23.1			53.3			31.9			29.9			23.0
		27.2			8.5			35.9			33.5			29.2
		29.9			19.1			38.8			36.2			33.4
16	13	34.3	16	15	36.2	16	21	43.3	16	24	40.1	16	33	39.9
		133.9			157.2			178.1			166.3			143.2
					37.2									
16	13	26.78	16	15	7.44	16	21	35.62	16	24	33.26	16	33	28.64

1865 July 8. Ill. East
A.M.

mess page

XVI 195		e Scorpii		53 Hercules		10 Camel.		30 Ophiuchi	
	23.7		45.5		9.8		37.8		17.1
	38.6		49.4		13.4		45.7		20.2
	56.3		53.8		18.0		~~55.8~~		24.0
	8.0		56.9		20.8		58.3		26.6
16 37	26.5	16 42	1.7	16 48	25.7	16 52	5.0	16 54	~~38.6~~
	153.1		207.3		87.7		197.6		118.5
	273.1		267.3				257.6		
16 38	54.62	16 41	53.46	16 48	17.54	16 51	51.52	16 54	23.70

1865 July 8 Ill. East
Am.

δ Draconis		ϵ Urs. Min		α Herculis		α Cygni	
	27.6	16	59	~~30.9~~ ~~13.9~~	49.7		15.6
	35.2			54.9	53.0		19.0
	44.0	17	0	21.3	56.9		22.9
	50.3			41.1	59.5		25.7
16 55	59.9	17	1	10.8	3.5	17 13	29.9
	217.0			159.0	222.6		113.1
				99.0	282.6		
16 55	43.40	17	0	19.80	56.52	17 13	22.62

July 8. 1865

JHS

	<i>1</i>			<i>1</i>			
13 18	31.28	+0.29	7.44	35.87	$13^h 44^m$	35.855 (2.)	JHS
14 10	56.28	+0.30	32.42	35.84			

Am

14 43	51.68	+0.30	27.88	35.90			
15 29	24.66	+0.32	0.87	35.89			
15 37	3.72	+0.29	40.08	36.07	$15^h 52^m$	35.926 (5)	Am.
16 21	35.62	+0.32	11.84	35.90			
17 9	56.52	+0.30	32.69	35.87			

1865 July 9 Ill. East
 Mm.

Polaris.

1	4	57.1	+4	29.78	
	7	10.1	+2	16.78	46.56
	9	39.2	-0	12.32	
	11	24.5	-1	57.62	
	14	3.5	-4	36.62	46.56
		134.4			

1 9 26.88

1	4	53.9		
		55.1		
		56.9		
		58.9		
	5	0.8		
		235.6	57.1	
	7	9.0		
		10.0		
		11.4		
		30.4	10.1	
	9	38.3		
		39.1		
		40.1		
		27.5	39.2	
		22.7		
		23.7		
		25.0		
	11	26.5		
		17.7	24.5	
		1.7		
		2.7		
		3.8		
	14	8.6		
		13.9	3.5	

July 1865

n End

1865 July 10 Id. East
A.M. I.C.B.

A.M.

Polaris, s.p.			E. Bootis		B. Alt. Min.		B. Libra		M. Bootis		d	
13	5	14.4		24.9		6.8		5.7		41.9		
	7	37.9		28.0		19.4		8.7		45.9		
	9	39.2		32.4		32.4		12.7		50.6		
	12	8.9		35.3		43.0		15.9		53.8		
	14	20.2	14 38	39.9	14 50	58.3	15 8	19.2	15 18	58.8	15	
		137.6		160.5		160.3		61.6		251.0		
		257.6										
13	9	51.52	14 38	32.10	14 50	32.06	15 8	12.32	15 18	50.20	15	
13	5	12.7 14.7 15.8 13.2	14.4									
		51.4 52.5 54.6 57.2 58.7										
	7	54.4	54.9									
		36.7 37.9 40.0										
	9	42.4 156.7	37.2									
		6.3 7.9 9.7										
	12	11.8 35.7	8.9									
		19.0 19.6 20.3 21.8										
	14	0.7	20.2									

1865 July 10. S.W. East
A.M.

End

	α Corona	γ Boötis	α Serpentis	β Serpentis	Lupis ?
9	17.9	17.0	57.5	17.9	24.7
9	21.6	20.9	1.2	21.3	26.8
6	25.7	26.1	4.9	25.0	29.1
8	28.6	29.4	7.5	27.8	
8	15 28 33.1	15 33 34.6	15 37 11.6	15 39 31.9	15 42 .
10	126.9	128.0	82.7	123.9	
			22.7		
20	15 28 25.38	15 33 25.60	15 37 4.54	15 39 24.78	

α Corona
 α Serpentis
 δ
 $25.38 + 0.32$
 $4.54 + 0.29$
 $15^h 33^m$
 0.84
 40.06
 35.14
 35.23
 35.5185

1865 July 11. M. East
T. H. S.

next page

B. libra	5 Serpenti	7 Corona	323 Camel. 13 ps.	α Corvici
6.0	16.6	57.2	2 nd Dec 21 31.4	18.3
9.4	49.9	0.9	8.6	22.0
13.1	53.7	5.3	23 6.0	26.0
15.7	56.1	8.3	15 23 52.7	29.0
15 9 19.7	15 12 0.1	15 17 12.9		15 28 33.5
63.7	206.4	84.6		128.8
	266.4	24.6		
15 9 12.78	15 11 53.28	15 17 4.92	15 22 13.89	15 28 25.76

14.80
13.38
14.80
12.58
13.89

1865 July 11 Ill. East
J.H.S.

μ Corona	η Boötis	δ Virg. Min	α Serpenti	β Serpenti
36.4	17.0	22.6	58.5	16.4
40.4	21.6	38.0	1.7	21.8
45.3	26.5	53.8	5.6	25.6
48.6	29.8	7.3	8.0	28.3
15 29 53.8	15 32 35.0	15 35 26.2	15 37 12.0	15 39 32.5
224.5	129.9	149.9	83.8	126.6
		269.9	23.8	
15 29 44.90	15 32 25.98	15 35 53.98	15 37 5.16	15 39 25.32

36.4
40.4
45.3
48.6
53.8
58.5
63.9

1865 July 11 M. East
T.H.S.

next page

♌ Corona		♎ Libra		♏ Aphelion ♏		♏ Scorpi		♌ Corona	
44	16.2		57.8		27.0		2.8		20.0
8	19.8		55.1		50.8		6.5		23.8
6	24.0		59.1		6.4		10.5		27.9
3	26.7		1.8		28.5		13.4		30.7
5	15-43 31.2	15-45 6.1	15-47 47.5	15-50 17.8	15-52 35.2				
6	117.9	173.9	160.2	51.0	137.6				
		293.9	40.2						
32	15-43 2338	15-44 58.78	15-47 8.04	15-50 10.20	15-52 27.52				

1865 July 11 Ill. East
J.H.D.

Gr. 766		Gr. 774		2 ¹² Scorpi		87 Draconis 13		α Corona	
55	47.2		12.3		30.7		6.9		57.0
56	21.4		45.8		34.2		15.2		1.0
	45.1	0	5.6		38.1		25.3		5.2
57	16.7		37.0		40.7		32.3		8.5
15 57	44.5	16 1	3.9	16 3	45.0	16 5	42.9	16 9	13.1
	174.9		104.6		188.7		122.6		84.8
	234.9		44.6						24.8
15 56	46.98	16 0	8.92	16 3	37.74	16 5	24.52	16 9	4.96

1865 July 11. Sk. East
L.H.S.

next page

♏ Scorpi			19 Mr. Min.			♌ Corua			♏ Scorpi			♏ Phinchi		
		20.8			40.8			10.1			29.6			29.9
		24.4			34.6			14.0			33.1			31.2
		28.3			20.4			18.3			37.3			34.9
		31.2			20.6			21.3			40.1			37.5
16	12	35.6	16	14	37.4	16	16	26.0	16	20	44.6	16	23	41.4
		140.3			163.8			89.7			184.7			172.9
					43.8									
16	12	28.06	16	14	8.76	16	16	17.94	16	20	36.94	16	23	34.58

1865 July 11 L.H. East
J.H.S.

1865phase

γ Draconis pul. XVI 195				5' Scorpii		5 ² Scorpii		53 Herculis			
		25.2			49.5		26.3		10.9		
	24.4	40.0			53.8		30.6		14.9		
	30.4	57.1			59.1		35.5		19.1		
	34.5	9.0			2.3		38.9		22.2		
16	33	41.2	16 36	27.9	16 44	7.8	16 44	44.4	16 47	26.8	
		159.2				172.5		175.7		93.9	
		279.2				292.5					
29.86	16	36	55.84	16	43	58.50	16	44	35.14	16 47	18.78
30.05											
29.87											
29.74											
<u>29.82</u>											
29.86											

1865 July 11. Ill. East
T.H.S.

End

10 Camel.	30 Ophiuchi.	X Draconis	E. W. Min
	18.3	28.7	16 58 31.6
~~47.6~~	21.8	36.5	55.3
52.4	25.3	45.5	59 23.2
59.9	27.9	57.7	43.4
16 51 6.4	16 53 31.8	16 55 1.0	17 00 10.9
	125.1	163.4	164.4
		223.4	104.4
	16 53 25.02	16 54 44.68	16 59 20.88

July 11. 1865 T.H.S.

abovae	25.76	+0.32	0.83	34.75
asuperis	5.16	+0.29	40.05	34.60
asuperis	36.94			34.675 2 F

1865 July 12. M. East
A.M.

End

α Serpenti

58.5

2.1

5.5

8.0

15 37 12.0

86.1

26.1

15 37 5.22

with n and c from previous period

15 37

$5.22 + 0.29$

40.04

⁵
34.53

1865 July 13. Ill. East
T.H.S.

S. C.B.

next page

W. Min. Sp.			Virginia		W. May			Booth		Booth				
13	5	20.0		26.4			29.5		~~50.7~~			25.8		
	8	0.0		29.5			34.5		~~54.3~~			29.3		
	9	44.2		33.4			40.0		~~58.2~~			33.5		
	12	14.1		35.9			44.2		~~58.2~~			36.2		
	14	24.3	13	17	40.0	13	41	50.2	14	9	~~5.2~~	14	38	40.8
		102.6			165.2			198.4			169.2			165.6
		282.6									289.2			
13	9	56.52	13	17	33.04	13	41	39.68	14	8	57.94	14	38	33.12
13	5	15.5												
		19.4												
		20.3												
		24.7												
		79.9												
		20.0												
		55.5												
		59.2												
		0.9												
	8	4.3												
		239.9												
		39.6												
		41.9												
		43.3												
		46.5												
	9	49.5												
		220.8												
		8.5												
		12.3												
		12.9												
		13.8												
		16.3												
	12	19.0												
		84.8												
		19.1												
		23.0												
		24.0												
		25.2												
		30.3												
13	14	121.6												
		24.3												

865 July 13 M. East
J.N.S.

α Libra		γ Boötis		η Corona		θ Corona		δ Corona	
	46.7		0.0		57.8		49.3		19.0
	50.0		3.8		1.6		53.1		22.7
	53.8		7.9		6.0		57.6		26.8
	56.6		10.7		8.9		0.5		29.7
14 42	0.8	14 58	15.3	15 17	13.5	15 27	5.1	15 28	34.1
	207.9		37.7		87.8		165.6		132.5
	267.9				27.8		285.6		
14 41	53.58	14 58	7.54	15 17	5.56	15 26	57.12	15 28	26.50

1865 July 13. Ill. East.

J. H. S.

next page

μ Corona	ϕ Bootis	δ Vir. Min.	α Serpenti	β Serpenti
36.9	17.8	34 23.2	59.0	18.8
41.0	22.1	38.3	2.4	22.2
45.9	27.0	55.7	6.0	26.1
49.2	30.2	6.0	8.7	28.8
15 29 321.3	15 32 35.5	15 35 26.8	15 37 12.6	15 39 32.9
227.3	132.6	152.0	88.7	128.8
		272.0	28.7	
15 29 45.46	15 32 26.52	15 35 54.40	15 37 5.74	15 39 25.76

1865 July 13. M. East
J.H.S.

α Lupi	β Corona	γ Libra	δ Cephei	ϵ Sp	π Scorpii
44.9	16.8	52.3	46	28.6	3.4
48.8	20.5	55.8		57.9	7.0
53.2	24.5	59.7		7.0	11.1
56.3	27.4	2.4		28.9	13.9
15 42 1.0	15 43 31.7	15 45 6.5	15 47 48.5	15 50 18.4	
204.2	120.9	176.7	164.9	53.8	
264.2		296.7	44.9		
15 41 52.84	15 43 24.18	15 44 59.34	15 47 8.98	15 50 10.76	

1865 July 13. M. East
J.N.S.

next page.

E Corona			9.750 sp			62 Cbrs Min.			α^2 Scorpii			ϵ Draconis 13		
		20.8									31.5			7.1
		24.5			12.0			35.1			35.0			15.9
		28.5			42.7			6.8			38.8			25.7
		31.4			26.1			30.0			41.5			32.6
15	57	35.9	15	56	5.1	15	58	3.3	16	3	45.7	16	5	43.4
		141.1									192.5			124.7
15	51	28.22	15	55	46.15	15	57	4.50	16	3	38.50	16	5	24.94

46.17
45.74
46.47
46.24

4.35
4.07
5.21
5.38

1865 July 13 M. East
J.H.S.

Corona			Scorpii			19 Mss. Sim			Corona			Scorpii		
		57.6			21.4			41.5			10.9			30.4
		1.6			25.0			55.2			14.8			34.0
		6.0			29.0			10.5			19.0			37.9
		9.0			32.0			21.3			21.9			40.8
16	9	13.8	16	12	36.2	16	14	37.9	16	16	26.6	16	20	45.2
		88.0			143.6			166.4			93.2			188.3
		28.0						46.4						
16	9	5.60	16	12	28.72	16	14	9.28	16	16	18.64	16	20	37.66

1865 July 13 L.H. East
J. H. S.

next page

2 Ophiuchi	14 Draconis	17 Draconis	XVI 195	8 Mrd. Min.
28.7	24.2	19.5	25.0	12 30.6
32.0	33.3	24.9	40.0	13 24.0
35.6	43.5	31.0	58.0	14 27.1
38.2	50.6	35.3	9.7	15 10.6
16 23 42.0	16 28 2.0	16 32 42.1	16 36 28.4	18 16 18.2
176.5	153.6	152.8	161.1	110.5
	213.6		281.1	
16 23 35.30	16 27 42.72	16 32 30.56	16 36 56.22	18 14 22.10

1865 July 13 M. East
C.H.S.

Lyra

26.8

30.6

35.2

38.0

18 44 42.9

173.5

18 44 34.70

End

July 13 THS

α Virginis	^S 33.04 + 0.28	~~34.06~~ 7.38	^S 34.06	13.18
α Librae	53.58 + 0.28	27.83	33.97	14.43
α Coronae	26.50 + 0.35	0.81	33.96	15.29
α Lepantis	5.74 + 0.30	40.03	33.99	15.38
α Scorpii	37.66 + 0.29	11.82	33.87	16.21
			33.970	15.11
β Lyrae	34.70 + 0.38	8.99	33.91	18.45

No change in rate, : the obs. of β Lyrae to be
stated

1865 July 14. M. East
Am.

J.G.B.

Polaris			α Virginis			α Bootis			ρ Bootis			ϵ Bootis		
13	5	24.1			26.9			57.5			20.4			26.3
	8	3.9			30.2			52.8			24.9			29.9
	9	50.0			34.0			58.9			29.2			33.9
	12	18.5			36.5			1.6			32.3			36.9
	14	28.9	13	17	40.6	14	9	5.9	14	25	36.8	14	38	41.4
		125.4			168.2			172.7			143.6			168.4
		5.4						292.7						
13	10	108	13	17	33.64	14	8	58.54	14	25	28.72	14	38	33.68

13	5	21.4	
		24.2	
		26.4	
		<u>72.4</u>	24.1
		0.9	
		2.6	
		4.1	
4		8.0	
		<u>15.6</u>	3.9
		45.9	
		48.8	
		51.6	
9		<u>53.6</u>	
		<u>199.9</u>	50.0
		14.6	
		17.5	
		20.0	
12		<u>21.8</u>	
		<u>73.9</u>	18.5
		25.2	
		28.6	
14		<u>32.9</u>	
		<u>86.7</u>	28.9

1865 July 14. S.M. East

next page

A.M.

d ² Libra			♄ Bootes			♈ Bootes			♊ Bootes			♈ Bootes		
	47.3			31.4			45.9			32.8			24.0	
	50.6			34.7			50.0			36.4			27.9	
	54.4			38.6			54.8			40.5			32.3	
	57.1			41.4			58.2			43.3			35.4	
14	4.3	1.3	14	44	45.6	14	52	3.3	14	55	47.7	15	9	40.2
	210.7			191.7			212.2			200.7			159.8	
	270.7						272.2							
14	4.2	54.14	14	44	38.34	14	53	54.44	14	55	40.14	15	9	31.96

proj. 1865 July 14 EM. East
A.M.

1865 July 14. 2nd East
A.M.

myth page

<i>q Bootis</i>			<i>o Urs. Min.</i>			<i>α Serpentis</i>			<i>β Serpentis</i>			<i>γ Lupi</i>		
		18.4			28.0			59.7			19.6			45.5
		22.8			38.7			2.9			22.9			49.5
		27.5			55.8			6.6			26.8			53.9
		30.9			7.9			9.2			29.6			56.9
15	32	36.2	15	35	26.8	15	37	13.3	15	39	33.6	15	42	1.8
		135.8			156.2			91.7			132.5			207.6
					276.2			31.7						267.6
15	32	27.16	15	34	55.24	15	37	6.34	15	39	26.50	15	41	53.52

1865 July 14. M. East
AM.

Corona			Libra			49 Cephei H sp			70 Scorpii			E Corona		
	17.4			52.4		46	29.2		4.0			21.2		
	21.1			56.8			52.7		7.5			25.0		
	25.3			0.13			7.9		11.8			29.1		
	28.0			3.0			29.5		14.6			32.0		
15	43	32.5	15	45	7.3	15	47	48.6	15	50	19.0	15	51	36.5
	124.3			119.8			167.9		56.9			143.8		
				299.8			47.9							
15	43	24.86	15	44	59.96	15	47	95.8	15	50	11.38	15	51	28.76

1865 July 14. M. East
M.

my page

Gr. 766 sp			Gr. 774 sp			v ² Scorpi			87 Draconis B			o Corona		
		48.5		59	13.8			32.0			7.8			58.2
		23.5			46.6			35.5			16.4			2.1
		46.9	16	00	81.0			39.4			26.2			6.6
		18.4			38.0			42.0			33.7			9.7
15	57	46.9	16	1	3.7	16	3	46.3	16	5	43.8	16	9	14.4
		183.4			110.1			195.2			128.3			91.0
		243.4			50.1									31.0
15	56	48.68	16	0	10.02	16	3	39.04	16	5	25.66	16	9	6.20

1865 July 14. Mt. East
A.M.

Scorpii			19 Min. Min.			3 Corona			2 Scorpii			2 Ophiuchi		
		21.9			41.8			11.5			30.6			29.2
		25.6			45.5			15.2			34.2			32.5
		29.6			10.8			19.5			38.6			36.3
		32.5			21.6			22.5			41.4			38.8
16	12	36.9	16	14	38.3	16	16	27.2	16	20	45.8	16	23	42.8
		146.5			168.0			95.9			190.6			179.6
					48.0									
16	12	29.30	16	14	9.60	16	16	19.18	16	20	38.12	16	23	35.92

1865 July 14. M. East
A.M.

myth page

A Draconis		17 Draconis pr.		XVI 195		E Scorpi		3' Scorpi	
	24.8		19.9		25.1				50.7
	33.7		25.3		40.8		57.9		17.3
	44.0		32.5		58.0		56.4		0.0
	57.1		35.8		10.2		59.5		3.7
16 28	2.4	16 33	42.7	16 37	28.9	16 41	4.4	16 44	9.1
	156.0		155.2		163.0				118.8
	216.0				283.0				298.8
16 27	43.20	16 33	31.02	16 36	56.60			16 43	59.76

1865 July 14 L.H. East
 Mo.

5 ² Scorpii			53 Herculis			10 Camel. sp)			30 Ophiuchi			16 Draconis		
		27.5			12.2			40.6			19.8			30.1
		31.9			16.1			48.6			23.0			38.8
		36.9			20.4			53.9			26.7			46.4
		40.5			23.4			1.3			29.2			52.7
16	44	45.8	16	47	28.1	16	57	7.8	16	53	33.2	16	55	1.4
		182.6			100.2			152.2			131.9			169.4
								272.2						229.4
16	44	36.52	16	47	20.04	16	50	54.44	16	53	26.38	16	55	45.88

1865 July 14. M. East

A.M.

next page

E. W. Min.		α Herculis		40 Ophiuchi		64 Camel. Bsp.		74 Camel. Bsp.	
58	33.5		52.2		16.2	17	17	14.5	44.9
	56.4		57.5		21.5	17	18	1.0	59.9
59	23.8		59.4		25.4			30.6	9.8
	42.3		2.0		28.4		19	15.3	23.9
17	00	17	8	17	12	17	19	51.6	36.5
	168.7		175.1		125.9			112.0	175.0
	108.7		295.1					102.0	55.0
16	59	17	7	17	12	17	18	34.40	11.00
	21.74		59.02		25.18				

1865 July 14 Ill. East
Am.

Geminchi		Polaris	
	2.8	1	5
	6.2		7
	10.0		9
	12.6		11
17	28		14
	16.6		
	48.2		
			0.8
			13.8
			40.0
			26.3
			5.6
			86.5
			146.5
17	28	1	9
	9.64		
			29.30

1	4	52.3	
		56.9	
		57.5	
		1.9	
		5.3	
		7.9	
		<u>4.8</u>	0.8
		10.6	
		12.6	
		14.5	
	7	17.2	
		<u>15.1</u>	13.8
		36.1	
		39.9	
	9	42.1	
		<u>120.1</u>	40.0
		26.0	
		25.2	
		26.5	
	11	29.5	
		<u>25.2</u>	26.3
		52.7	
		2.0	
		4.4	
		6.3	
		7.6	
		9.9	
		11.2	
1	14	<u>41.4</u>	6.9
		39.1	5.6

End

July 14 AM

<i>α Virgins</i>	33.64 + 0.28	7.37	<i>S</i> 33.45	13 ⁴ 18 ⁰⁰
<i>α Librae</i>	54.14 + 0.28	27.82	33.40	14 43
<i>α Booteae</i>	26.96 + 0.35	0.79	33.48	15 29
<i>α Serpentis</i>	6.34 + 0.30	40.02	33.38	15 38
<i>α Scorpii</i>	38.12 + 0.29	11.81	33.40	16 21
<i>α Herculis</i>	59.02 + 0.31	32.67	33.34	17 9
<i>α Ophiuchi</i>	9.64 + 0.31	43.29	33.34	17 29
			33.428	14 47 (4)
			33.360	17 0 (3)
<u>No change in rate</u>		<u>Mean</u>	<u>33.399</u>	<u>15 44</u>

1865 July 15. M. East
 L.H.S. L.C.B.

Polaris	α Bootis	α^2 Libra	β ~~Libra~~ ^{Virgo}	δ ~~Bootis~~ ^{Virgo}
13 5 22.8	26.6		8.2	7.6
	30.4		20.4	11.3
	34.5	52.8	35.0	14.8
12 19.9	37.3	57.3	44.4	17.4
14 29.9	41.9	1.8	59.4	21.5
	170.7		167.4	72.6
	15			
12 10 1.47	14 38 34.14		14 50 33.48	15 9 14.52

5	17.2
	20.4
	22.7
	24.5
	27.9
	29.8
	14.6
	18.4
12	21.9
	24.8
	26.0
	27.6
	29.4
	30.9
13 14	35.4

4 28.47	1.42
2 17.30	2.60
4 34.57	0.37

1885 July 15. M. Sash

next page

A.M.

J.C.B.

A.M.

5 Serpentes	η Corona	μ Bootis	θ Corona	α Corona
48.3	58.6	43.9	50.41	19.9
57.7	2.7	44.1	52.2	23.6
55.3	7.0	52.5	58.6	27.8
57.9	10.0	56.0	1.6	30.8
15 12 1.8	15 17 14.6	15 19 1.1	15 27 6.3	15 28 35.2
215.0	93.1	201.6	171.1	137.3
275.0	33.1	261.6	291.1	
15 11 55.00	15 17 6.62	15 18 52.32	15 26 58.22	15 28 27.46

1865 July 15. Ill. East
AM.

α Corona		γ Bootis		δ Vir. Minor		α Serpentes		β Serpentes	
	38.0		18.8		23.6		0.1		20.0
	42.2		23.2		38.8		3.4		23.4
	47.1		28.0		56.6		7.1		27.2
	52.4		31.5		8.7		9.8		29.9
15 29	135.4	15 32	36.7	15 35	27.4	15 27	13.6	15 39	34.0
	233.1		138.2		155.1		34.0		134.5
					275.1				
15 29	46.62	15 32	27.64	15 34	55.02	15 37	6.80	15 39	26.90

1865 July 15 Lth. East
Lth.

next page

α Lupi	δ Corona	α Libra	α Cygni	α Scorpii				
	17.8	53.4	46	29.4	4.5			
(49.8)	21.4	56.8		13.0	8.1			
(54.3)	25.6	0.7		8.8	12.1			
(57.2)	28.4	3.5		30.0	15.1			
(2.2)	33.0	7.7	15 47	49.2	15 50	19.4		
	126.2	122.1		170.4		59.2		
		2.1		50.4				
53.88	15 43	25.24	15 45	0.42	15 47	10.08	15 50	11.84

53.84

.92

.74

54.01

~~54.01~~
53.2

1865 July 15. M. East
Am.

2 Corona			Gr. 766 4p			Gr. 774 3p			2 ² Scorpii			87 Draconis B		
		21.7		55	44.5		59	14.8			32.6			8.4
		25.4			24.2		5	46.0			36.0			16.9
		29.6		56	46.3		0	8.0			39.9			26.8
		32.5			19.2			38.6			42.6			33.2
15	57	37.0	15	57	47.3	16	1	4.7	16	3	46.7	16	5	42.6
		146.2			185.5			114.1			197.8			130.1
					245.5			54.1						
15	51	29.24	15	56	49.10	16	0	10.82	16	3	39.56	16	5	26.02

1865 July 15. Mt. East
A.M.

next page

Corona		Scorpius		19 Nov. Min.		E Corona		Scorpius	
	58.7		22.6		41.8		11.8		31.1
	2.5		26.0		55.6		15.6		34.8
	6.9		30.0		11.1		19.9		39.0
	9.9		33.0		21.9		22.9		41.7
16 9	14.8	16 12	37.3	16 14	38.7	16 16	27.7	16 20	46.2
	92.8		148.9		169.1		97.9		192.8
					49.1		97.9		
16 9	62.56	16 12	29.78	16 14	9.82	16 16	19.58	16 20	38.56

1865 July 15. M. East
H.M.

<i>A. Ophiuchi</i>	<i>A. Draconis</i>	<i>17 Draconis pr.</i>	<i>XVI 195</i>	<i>5' Scorpii</i>
	25.1	20.2	25.9.	57.4
	33.8	25.8	41.2	55.5
36.5	44.5	32.1	58.4	0.7
39.1	57.6	36.2	10.3	4.2
43.0	2.9	42.7	29.5	9.6
	157.9	157.0	165.3	121.4
	217.9		285.3	1.4
36.19	16 27 43.58	16 32 31.40	16 36 57.06	16 44 02.8

- 0.32
 - 2.87
 - 4.83
 36.18
 36.23
 36.17
 36.19

1865 July 15. M. East
M.M.

next page

53 Hercules			30 Sphincter			h. Maconis			Pd 1377 sp)			α Hercules		
		12.7			20.1			30.3	56		26.3			52.7
		16.5			23.5			37.9	57		15.9			55.9
		20.9			27.1			46.9			46.1			59.8
		23.8			29.7			53.0	58		36.6			2.6
16	47	26.6	16	53	33.7	16	55	2.6	16	59	19.3	17	8	6.7
		102.5			134.1			170.7			146.2			171.7
								230.7			266.2			297.7
16	47	20.50	16	53	26.82	16	56	46.14	16	57	53.24	17	7	59.54

1865 July 15. 2M. East
Am.

60 <i>Ophiuchi</i>		14 <i>Camel. Bsp.</i>		74 <i>Camel. Bsp.</i>		2 <i>Ophiuchi</i>		μ <i>Herculis</i>	
	18.5	17	16.7		45.1		3.3		32.8
	22.1	18	9.4		0.5		6.5		36.6
	25.9		32.8		10.8		10.3		40.7
	28.6	19	16.2		24.8		13.0		43.6
17 12	33.0	17 19	52.0	17 21	36.7	17 28	17.0	17 41	47.9
	128.1		123.1		117.9		50.1		201.2
			183.1		57.9				
17 12	25.62	17 18	36.62	17 21	11.58	17 28	10.02	17 41	40.24

End

July 15 1865 AM

<i>a borovae</i>	27.46	+0.35	0.78	32.97	15 28
<i>a serpentin</i>	6.80	+0.30	40.01	32.91	27
<i>a siroppii</i>	38.56	+0.29	11.81	32.96	16 21
<i>a herculis</i>	59.54	+0.31	32.66	32.81	17 9
<i>a ophiuchi</i>	10.02	+0.31	43.28	32.95	29
				<u>32.920</u>	<u>16 25</u>

1865 July 17 M. West
A.M.

q Corona			o Corona			a Corona			μ Corona			φ Pictus		
		0.4			57.8			21.5			39.6			20.4
		5.0			56.6			26.0			44.6			25.5
		8.1			59.7			28.8			47.9			28.9
		12.3			3.9			32.9			52.8			33.7
15	17	16.0	15	27	7.8	15	28	36.6	15	29	56.9	15	32	38.0
		41.8			179.8			145.8			241.8			146.5
					299.8									
15	17	8.36	15	27	59.76	15	28	29.16	15	29	48.36	15	32	29.30

1865 July 17. M. West

next page

α Urs. Min.	α Serpenti	β Serpenti	α Lupi	δ Corone
26.5	1.1	21.4	47.6	19.2
44.9	5.6	21.7	52.2	23.7
57.3	8.2	28.3	55.4	26.6
14.8	11.9	32.0	59.8	30.6
15 35 30.0	15 37 15.2	15 39 35.4	15 42 3.6	15 43 34.2
173.5	42.0	142.8	218.6	134.3
293.5			278.6	
15 34 58.70	15 37 8.40	15 39 28.56	15 41 55.72	15 43 26.66

1865 July 17, I. H. West
AM

α Libra	α Cephei	α sp	π Scorpii	ϵ Corona	γ 766 sp
55.0	46	28.4	6.0	23.2	55 47.3
59.0		47.3	10.4	27.5	14.7
1.8		9.5	13.2	30.6	56 47.3
5.7		24.3	17.4	34.7	10.2
15 44 9.1	15 47	48.0	15 50 20.9	15 51 38.3	15 57 44.5
130.6		157.5	67.9	154.3	164.0
10.6		37.5			224.0
15 44 2.12	15 47	7.50	15 50 13.58	15 51 30.86	15 56 44.80

1865 July 17. M. West
A.M.

next page

Gr. 774		2 ² Scorpii		87 Draconis		α Scorpii		19 Urs Minor	
	12.6		34.0		10.2		24.0		46.4
	39.4		38.2		20.7		28.4		1.3
0	9.4		40.9		27.5		31.0		12.0
	30.7		44.8		37.7		35.2		27.7
16	3.3	16	3	16	5	16	12	16	14
	95.4		206.0		142.2		137.5		126.5
	35.4								66.5
16	0	16	3	16	5	16	12	16	14
	7.08		41.20		28.44		31.50		13.30

1865 July 17 M. West

M.

Coronae			α Scorpii			λ Ophiuchi			δ Draconis			γ Draconis		
	13.5				32.8			31.1			27.1			22.0
	18.0				37.3			35.0			38.0			28.6
	20.8				40.0			37.7			45.5			32.8
	25.3				44.0			41.3			55.7			39.0
16.	16	29.1	16	20	47.8	16	23	45.7	16	28	41.8	16	32	44.3
	106.7				201.9			189.8			171.1			166.7
											231.1			
16	16	21.34	16	20	40.38	16	23	37.96	16	28	46.22	16	32	33.34

1865 July 17 M. West
St. M.

next page

481 195			3' Scorpii			53 Hercules			10 Camel			30 Geminis		
		28.9			52.7			14.0			41.6			21.6
		47.3			54.2			16.7			47.9			25.6
		59.1			1.6			21.6			53.5			28.3
		16.8			6.4			26.2			0.5			31.9
16	36	32.0	16	44	10.9	16	47	29.8	16	51	8.5	16	53	35.1
		184.1			129.8			110.5			154.0			142.5
		4.1			9.8						274.0			8.17
16	36	0.82	16	44	1.96	16	47	22.10	16	50	54.80	16	53	28.50

1865 July 17 M. West
A.M.

h Draconis			d Hercules			40 Ophiuchi			271 Hercules		
		32.0		56	21.7			20.1			40.3
		41.7		57	2.7			24.1			45.5
		47.7			50.3			26.9			48.8
		57.0		58	27.2			30.8			53.7
16	55	4.6	16	59	13.6	17	8	8.0	17	12	34.4
		183.0			115.5			125.7			136.3
		243.0			235.5			5.7			
16	54	48.60	16	57	47.10	17	8	1.14	17	12	27.26
									17	16	49.22

1865 July 17. Lk. West
A.M.

next page

ρ Herculis? γ Camelopardalis				α Herculis				α Ophiuchi				Gr. 2456			
		24.4				44.5				40.9					
		29.3				57.0				45.3					8.7
		32.4				11.7				48.2					24.1
		37.0				21.5				52.2					45.6
17	18	41.1	17	21	36.5		17	24	55.8	17	29	18.5	17	30	5.4
		164.2			171.2				242.4			58.7			
					51.2										
17	18	32.84	17	21	10.24		17	24	48.48	17	29	11.74	17	29	25.88

-39.11	26.29
-20.00	25.60
+1.87	25.97
+16.95	25.65
	25.88

1865 July 17, M. West
M.

Herculis			Draconis			Ophiuchi			X Herculis			Herculis			b		
atmos. signal and at wire together																	
0.7?																	
4.0			57.4			32.6			0.2			43.7					
6.5			8.3			36.4			5.2			48.4					
10.3			15.1			39.2			8.4			51.4					
15.3			25.8			42.8			13.1			55.7					
10.2			34.7			46.0			17.2			59.4					
10.2			141.3			197.0			44.1			258.6					
52.7			81.3														
17	25		17	37		17	40		17	51		17	52		18		
17	35	10.54	17	37	16.26	17	40	39.40	17	51	8.82	17	52	51.72	18		

next page

	b Herculis			Gr 2517			A Herculis			η Sagittarii			36 Draconis		
43.7			17.7			46.9			13.0			54.3			23.2
48.4			22.4			52.5			17.5			58.8			32.6
7.4			25.3			56.0			20.8			2.3			38.3
57			29.5			1.1			25.0			6.8			46.7
3.4			33.4			3.4			28.9			11.1			54.3
8.6			128.3			161.9			105.2			133.3			195.1
						281.9						13.3			
72	18	1	25.66	18	3	56.38	18	6	21.04	18	8	2.66	18	12	39.02

July 17, 1885. U. W.

N. H.

5 Mrs. Min.	24 Mrs. Min.	3 Hb. Scuti	2 Lyrae	51 Lepid. Hb.	
18 13 39.4	18 18 19.1	17.0	45.5	18 33 8.7	
	19 33.9	20.9	50.0	34 15.0	
15 29.0	20 22.0	23.5	53.6	35 33.6	
16 31.4	21 31.4	27.5	58.1	36 26.9	
17 26.6	22 34.2	30.7	2.2	37 47.2	
	140.6	117.6	209.4	131.4	
			269.4		
18 15 34.54	18 20 28.12	18 27 23.92	18 31 53.88	18 35 26.28	18

86°36'30"3 1.22798

A	151.88	~~4.72~~ 34.72
B	57.22	34.18
C	9.34	34.34
D	48.60	
E	1 55.63	34.93

33	7.6
	2.5
	9.9
	28.0
34	14.5
	15.4
35	33.2
	33.9
36	26.9
	45.8
	47.1
18 37	48.8
	21.7

must

1865phae

	5 Sagittarii	o Draconis	16 Lyrae	18 Aquilae	16 Lyrae
7	22.6	21.1	39.3	—	52.6
7	26.9	39.0	4.9	6.6	57.3
6	29.6	43.9	8.6	9.2	0.6
9	33.7	51.4	14.0	12.9	5.3
22	37.1	57.6	18.8	16.1	9.1
4	149.9	223.0	105.6		124.8
			45.6		4.8
28	18 46 29.9818	28 44.6016	57 9.1219	0 19 2	0.96

7.6
1.5
1.0
7.0
1.6
4.1

8.7

15.0

33.6

2.9
5.8
7.1
7.8
1.7

47.2

-6.74	9.36
-3.45	9.45
+0.32	9.52
+2.92	9.52
+6.94	
	9.46

July 17, 1885. H. W.

No.

End.

η Lyrae	δ Draconis	59 Draconis.		
32.9	45.8	10.5		
38.0	56.2	27.5		
41.4	3.8	~~37.8~~		
46.3	12.4	53.8		
50.3	21.2	7.6		
208.9	138.4	137.2		
	18.4	197.2		
η 8	41.78	19	12	3.78
		19	13	39.44

July 17 Am

15 28	29.16	∓ 0.34	0.75	⁸ 31.93
15 37	8.40	-0.29	39.99	31.88
16 20	40.38	-0.33	11.79	31.72
17 8	1.14	-0.29	32.65	31.80
17 29	11.74	-0.29	43.28	31.83
18 32	53.88	∓ 0.39	25.26	<u>31.73</u>
16 46				+ 31.822

July 18. 1885. Ill. W.

N.S.

A. 16.

Polaris sp	L Virginis	η Geronae	δ Geronae	L Geronae	μ
13 5 11.2	29.5	1.2	52.5	22.0	
7 20.4	33.6	5.7	57.1	26.4	
9 50.8	36.6	8.7	0.2	29.3	
11 32.5	39.9	12.8	4.5	33.5	
14 14.2	43.1	16.7	8.4	37.2	
139.1	182.2	45.3	122.7	148.4	
199.1			2.7		
13 9 39.82	13 17 36.44	15 17 9.06	15 27 0.54	15 28 29.64	15

13

5

7.2
10.2
12.7
14.9
45.0
11.2

7

17.1
20.1
22.2
1.3
20.4

9

48.1
50.8
53.5
2.4
50.8

11

30.5
32.0
34.9
7.4
32.5

14

12.0
14.0
16.6
12.6
14.2

mrt

	μ Coronae	γ Bootis	α Serpentis	β Serpentis	ϵ Lupi
2.0	40.0	20.8	2.2	22.2	48.0
6.4	45.2	26.3	6.3	26.0	52.9
9.3	48.6	29.6	8.7	28.8	55.9
3.3	53.4	34.5	12.4	32.7	0.4
7.2	57.6	38.7	15.7	36.2	4.3
8.4	84.8	149.9	45.3	145.9	161.5
					281.5
6.4	15 29 48.96	15 32 29.98	15 37 9.06	39 29.18	15 41 56.30

July 18, 1865. Ill. W.

A. W.

Coronae			Librae			49 Uphi 76. 4)			π Scorpii			E Coronae			U		
	19.9			53.2	15	46		29.1		6.7			23.6				
	24.3			59.5				48.3		11.0			26.3				
	27.2			2.3		47		7.9		13.6			31.2				
	31.4			6.2				25.7		18.0			35.3				
	34.9			9.7				49.1		21.4			38.9				
	137.7			132.9				162.1		70.9			157.5				
				12.9				42.1									
15	43	27.54	15	115	2.58	15	47	8.42	15	50	14.18	15	51	31.50	15		

net

1865pha

	Gr. 766. sp.		Gr. 774. sp.		ν^2 Scorpii	87 Draconis	σ Coronae					
3.6	55	46.9	15	59	13.9	34.5	10.4	0.7				
4.3	56	16.0			40.0	38.7	21.2	5.5				
1.2	—	—	16	0	9.9	41.4	28.1	8.6				
5.3	57	11.1			31.8	45.4	38.2	13.0				
8.9	—	45.4	1		3.2	48.7	47.0	17.0				
7.5					98.8	208.7	144.9	44.8				
					38.8							
50	15		16	0	7.76	41.74	16	5	28.98	16	9	8.96

July 18, 1885, U. W.

No.

<i>♂ Scorpii</i>			<i>19 Urs. Min.</i>			<i>♂ Gornae</i>			<i>♂ Scorpii</i>			<i>♂ Aphinchi</i>			<i>A</i>		
		24.5			45.0			13.9			33.4			31.8			
		28.9			2.0			18.6			37.6			35.6			
		31.7			12.9			21.6			40.6			38.0			
		33.9			28.4			25.8			44.7			41.9			
		39.3			41.9			29.7			48.4			45.1			
		160.3			130.2			109.6			204.7			192.7			
					70.2												
16	12	32.06	16	14	14.04	16	16	21.92	16	20	40.94	16	23	38.54		16	

rect

	<i>A Draconis.</i>	<i>E Uss. Min.</i>	<i>μ Draconis.</i>	<i>folk.</i>	<i>Uss. Min. B.</i>	<i>L. Hercules</i>
1.8	27.8	16 58	37.6	52.5	1.2	54.6
5.6	38.8		6.3	59.1	16.8	58.7
8.3	45.9	59	25.2	3.5	26.9	1.2
9	56.2		53.0	9.9	41.7	5.2
5.1	5.3		16.8	15.8	54.7	8.5
2.7	174.0		138.9	140.8	141.5	128.2
	234.0			20.8		8.2
54	16 27 46.80	16 59 27.78	17 2 4.16	17 5 28.30	17 8 16.4	

July 18, 1875. U.L. W.

16.

0	Ophiuchi	271	B Herculis	ρ Herculis	74	Camel. B. s. p.	δ Ophiuchi	17
	20.6		40.6		24.9	45.5	5.3	
	24.8		46.0		29.8	57.6	9.4	
	27.6		49.4		33.0	12.1	11.9	
	31.5		54.2		37.7	21.9	15.9	
	34.8		58.6		41.7	37.3	19.1	
	139.3		249.0		167.1	174.4	61.6	
						57.4		
17	12	27.86	17	16	49.80	17	18	33.42
							21	10.88
							17	28
							12	32
								17

Gr. 2456		<i>i Herulis</i>		<i>w Draconis</i>		Gr. 1030, s.p.		S Urs. Min.	
3	—	1.5		57.9		33.0	18	13	39.7
4	9.0	7.1		8.8		48.0		14	45.4
9	24.1	10.9		15.7		2.8		15	29.2
9	46.1	16.0		26.2		12.8		16	31.5
1	5.4	20.7		35.3		29.1		17	26.3
6		56.2		143.9		127.7			172.1
				83.9		7.7			
22	17 29	17 35 11.24	17 37	16.78	17 46	1.54	18	15	34.42

18	13	39.0
		<u>40.5</u>
		39.7
	14	45.4
	15	29.2
	16	31.5
	17	26.3

26.29
 26.10
 25.97
25.95
 26.08

July 18 1865

JHS	13 18	36. ⁵ 44	-0.29	7.32	<u>36.57</u>
Am	15 28	29.68	0.34	0.74	31.40
	15 37	9.06	0.29	39.98	31.24
	16 21	40.94	0.34	11.79	31.66
	17 8	1.64	0.29	32.65	31.30
	17 28	12.32	-0.29	43.27	<u>31.24</u>
	16 24				<u>31.262</u>

No perceptible change of rate.

July 5, 1865. Ill. E.

M.

T.H.S.

α Leonis	Polaris sp.			α Virginis	γ Coronae	γ Bootis	
27.9	13	5	7.2	23.6	—	15.6	
31.3		7	48.7	26.9	25.0	19.7	
34.9		9	33.2	30.7	24.4	24.8	
37.8		12	2.2	33.3	27.3	28.2	
41.9		14	14.1	37.4	31.8	33.2	
173.8			105.4	151.9		121.5	
			225.4				
10 0 34.76	13	9	45.08	13 17 30.38	15 28 24.08	15 32 24.30	15
	13	5	4.2				
			5.2				
			6.5				
			7.9				
			9.0				
			10.5				
			43.3	7.2			
	7		47.4				
			48.1				
			49.0				
			50.4				
			194.7	48.7			
	9		30.4				
			31.4				
			33.1				
			34.7				
			36.5				
			16.1	33.2			
	11		59.3				
	12		10.5				
			2.0				
			3.8				
			5.5				
			11.2	2.2			
	14		10.6		23.80		
			11.5		24.04		
			13.2		24.08		
			14.9		24.13		
			16.5				
			17.9				
			24.6	14.1			

next

1865 phase

	+ Uss. Minn.	L Serpentiis	B Serpentiis	L Lupi	5 Coronae					
6	21.1	56.6	16.5	42.5	14.3					
7	36.4	59.8	19.8	46.5	17.9					
8	53.9	3.6	23.7	50.8	22.0					
2	6.2	6.0	26.3	53.8	24.9					
2	25.0	10.0	30.5	58.4	29.4					
5	142.6	136.6	116.8	252.0	108.5					
	262.6	16.0								
30	15 34	52.52	15 37	3.20	15 39	23.36	15 41	50.40	15 43	21.70

July 5. 1885. Ill. E

S. S.

1865pha

Librae		49 Lepthii 16.		π Scorpii		E Coronae		Or. 766 s.p.							
	49.7		24.2		0.8		18.2	15	55	43.7	13				
	53.2		48.3		4.5		21.7		56	18.5					
	57.2		3.3		8.4		26.0			41.3	16				
	59.8		25.1		11.3		28.8		57	14.4					
	3.9		44.5		15.8		33.3			42.2					
	223.8		145.4		40.8		128.0			160.1					
	283.8		25.4							220.1					
15	44	56.76	15	47	5.08	15	50	8.16	15	57	25.60	15	56	44.02	16

next

1865 phase

	Dr. 774	sr	v^2 Scorpii	87 Drae. B.	σ Scorpii	19 Urs. Min.
7	15 59	10.0	28.7	5.0	18.8	39.6
5		42.5	32.0	13.7	22.4	53.0
3	16 0	3.6	35.9	23.7	26.4	8.5
4		33.7	38.7	30.6	29.1	19.7
2	* 1	0.3	43.1	40.9	33.6	35.8
1		90.1	178.4	113.9	130.3	156.6
1		30.1				36.6
02	16 0	6.02	16 3 35.68	16 5 22.78	16 12 26.06	16 14 7.32

July 5. 1885. Ill. E

M. S.

1865pha	5	Coronae	2	Scorpii	1	Aphini	A	Draconis	17	Draconis pr.	Σ				
		8.2													
		13.1			27.6		25.9		22.3		16.9				
		16.3			31.2		29.2		31.0		22.4				
		19.3			35.3		32.9		41.4		28.6				
		24.0			38.2		35.4		48.5		32.8				
					42.5		39.5		59.8	*	39.4				
		80.1			174.8		162.9		203.0		140.1				
16	16	16.02	16	20	34.96	16	23	32.58	16	27	40.60	16	32	28.02	16

next

XVI 195		E Scorpii		(3) Scorpii		(3 ²) Scorpii		53 Herculis	
9		23.7		44.8		47.5		24.2	9.1
14		38.5		48.6		51.9		28.4	13.9
16		55.9		53.0		56.9		33.5	17.2
28		8.0		56.2		6.1		37.1	20.2
34		26.4		1.0		5.6		42.4	24.9
51		132.5		203.6		162.0		165.6	84.3
		272.5		263.6		282.0			
02	16 35	54.50	16 40	52.72	16 43	53.40	16 44	33.12	16 47 16.86

1865 July 5 MLE

1865 Sept. See first part of Book.

10 Gamul. s.p.

36.8

44.9

50.0

57.4

4.2

193.3

253.3

16 50 50.66

