

KG
11365
64

A.64

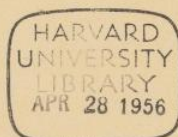
164
Meridian Circle.
1865. April 2th
— " 26th.
Sold by T. Groom & Co., Stationers, India Building, 82 State St., Boston.

KG 11365.64

135	136	137	
Apr 3 - Apr 4	Apr 5 - Apr 8	Apr 11 - Apr 26	
+ 0.206 - 0.351	+ 0.004 - 0.351 2.5453w	+ 0.067 - 0.351	
Y Last book	+ 0.492 - 0.455 - 0.403 - 0.372 - 0.355 - 0.351 - 0.357 - 0.375 - 0.408		45° 40 30 20 10 0 -10 -20 -30



KG-11365.64



1865 April 3. *St. West*

next page

*Am**Ami*

λ Wrs. Min.	X Geminon	15 Argus	β Cancri	η Cancri
52 3.3	25.4	59.9	24.4	6.5
54 57.0	29.9	4.3	28.3	10.6
	32.7	8.3	31.0	13.5
	37.0	11.2	34.8	17.4
8 3 48.7	7 57 40.6	8 1 14.7	8 8 38.0	8 24 20.8
	165.7	97.4	156.5	68.8
		37.4		
7 57 51.63	7 54 33.14	8 1 7.48	8 8 31.30	8 24 13.76
	55 15.17	49.31		55.74

57.11

52.86

51.71

51.63

1865 April 3. M. West

Am.

♂ Cephei. sp.			♂ Urt. Maj.			♂ Cancri			♂ Argus		
XX 257						39.1					
21.7			28.6			43.0			12.8		
29.0			40.0			45.7			18.4		
36.6			51.9			49.5			21.9		
42.9			6.5			52.8			26.7		
57.1			13.2			57.4			31.0		
181.3			134.1			230.2			110.8		
			120.0								
			254.1								
8 26 36.26			8 29 50.82			8 59 46.04			9 2 22.16		
			8 49 17.36								
			8 49 17.36								

1885 April 3. M. West

next page

Mr.

♂ Hydra		♂ Draconis H		♂ Hydra		Gr. 1564		♂ Leonis	
	33.5		10.4		10.3		39.5		9.9
	37.4		36.3		16.4		57.3		13.7
	40.1		57.5		17.1		59.0		16.4
	43.7		22.9		20.8		9.4		20.2
9 6	47.0	9 17	46.7	9 20	24.1	9 29	19.2	9 33	23.6
	201.7		175.8		86.7		178.4		83.8
			<u>1120</u>				<u>120</u>		
			295.8				2984		
9 6	40.34	9 16	59.16	9 20	17.34	9 29	59.68	9 33	16.76
					59.26				

1865 April 3 M. West

A.M.

2 Leonis		2 Leonis		30 Camel. H		M Hydra		P Leonis	
	23.7		24.0		79.9		47.1	24	55.5
	26.0		26.1		43.7		57.2		59.5
	30.9		30.7		14.2		52.0		2.2
	34.8		34.4		42.1		57.9		5.9
9 37	35.5	10 0	37.8	10 14		10 18	1.0	10 25	9.1
	155.9		155.0				211.2		132.2
							60		120
							271.2		12.2
9 37	31.18	10 0	31.00	10 13	45.44	10 18	54.25	10 25	2:44
38	13.16	1.	12.97						44.35

45.47

45.70

45.95

44.66

1865 April 3. Th. West

next page

A.M.

♄ Leonis		34 Cephei H: P		α Urs. Maj.		χ Leonis		ψ Urs. Maj.	
	23.0		17.5		24.7		16.7		14.6
	29.1		42.2		36.9		20.5		20.2
	29.7		9.4		42.8		23.4		23.9
	33.4		30.3		~~54.1~~ 50.6		27.0		29.1
10 41	36.7	10 47	59.7	10 51	57.9	10 57	30.3	11 1	33.7
	149.9		159.1		216.9		117.9		121.5
			<u>126</u>						
			39.1						
10 41	29.98	10 47	7.82	10 51	43.38	10 57	23.58	11 1	24.30
42	11.82					58	5.48		

1885 April 3 M. West

A.M.

♂ Leonis		♂ Crateris		♂ Leonis		39 Cephei H		♂ Leonis	
	8.7		49.2		13.3	25	5.5		15.8
	12.9		53.3		17.4		58.6		19.8
	15.7		56.0		19.9	26	0.6		22.4
	19.5		59.9		23.6	11	27		26.2
11 6	23.1	11 12	~~3 2.0~~	11 20	26.8			11 29	29.4
	79.9		220.4		101.0				113.6
			~~60.4~~						
			280.4						
11 6	15.98	11 11	56.28	11 20	20.20			11 29	22.72
	57.93	12	38.17					30	4.70

End

Am.

4 28	-0.31	412.09
5 7	-0.29	411.95
8	-0.39	412.25
18	-0.29	412.07
48	-0.33	412.17
6 15	-0.29	412.11
39	-0.43	412.43
7 55	-0.29	412.32
8 2	-0.48	412.31
25	-0.30	412.28
9 21	-0.38	412.30
38	-0.29	412.27
10 1	-0.31	412.28
26	-0.32	412.23
42	-0.32	412.21
58	-0.33	412.23
11 7	-0.30	412.25
13	-0.41	412.30
30	-0.35	412.33
8 20 (19)		

M5

7 26	-0.29	412.07
32	-0.33	412.17
37	-0.29	412.11
7 31 (31)		412.133

Am. m.

412.216
+ 0.083

5 32^m - 412.153

9 56 - 412.292

1865 April 4 M. W.

J. H. S.

Polaris			α Orionis			μ Geminor.			β Can. Maj.			ϵ Geminor.		
1	4	1.8			4.6			0.2			57.9			50.0
	6	42.0			8.7			4.5			2.0			52.5
	8	31.4			11.4			7.4			4.8			57.4
	10	56.7			15.0			11.3			8.7			1.4
1	13	11.0	5	47	16.3	6	14	14.4	6	16	12.1	6	35	5.0
		142.9			58.0			37.8			85.5			168.3
											6.0			1.20
											25.5			288.3
1	8	40.58	5	47	11.60	6	14	7.56	6	16	5.10	6	35	57.66
					52.86			48.88						
1	3	58.8												
		0.7												
		2.0												
		4.4												
	6	40.0												
		41.2												
		42.6												
		44.3												
		26.2												
		29.3												
		30.5												
		33.5												
	8	37.7												
		53.0												
		52.5												
		55.7												
		57.2												
		58.9												
1	11	0.7												
		7.7												
		9.7												
		10.8												
		12.6												
1	13	14.4												

1865 April 4 M. West

next page

J.H.S.

α Can. Maj.		α Can. Min.		β Geminor.		ξ Argus	
		27.4		10.1		15.8	49.7
		31.4		14.0		20.3	53.2
		34.0		16.8		23.3	57.0
	35.2	37.7		20.3		27.4	1.0
6 38	38.7	41.0	7 31	23.7	7 36	31.1	4.6
		171.5		84.9		117.9	166.5
							122
							2865
6 38	31.72	34.30	7 32	16.98	7 36	23.58	57.30
39	12.92	15.58			37	4.78	

31.75 6.95
31.70 3.50

1865 April 4. 3rd M. West

J.N.S.

A.M.

A.M.

156 Camel. B

x Geminor.

15 Argus

β Cancri

γ Cancri

26.0

0.6

25.0

7.1

30.5

5.0

29.1

11.5

33.5

7.8

31.7

14.2

37.7

11.9

35.5

18.2

41.5

15.8

38.7

21.6

169.2

41.1

160.0

72.6

33.84

8.22

32.00

14.52

55 15.15

49.29

55.73

37.35

37.19

1865 April 4 M. West

next page

A.M.

0 Cephei 50		XX 257		Moon I		♂ Canceri		♂ Urt. Maj.	
	22.8		40.6		42.0		14.02		—
	29.7		52.5		46.3		18.0		13.6
	37.8		1.4		49.2		21.02		17.5
	43.5		14.2		52.9		24.9		22.0
8 26	52.9	8 30		8 33	58.5	8 36	28.3	8 49	26.0
	186.7				246.7		106.2		
8 26	37.34			8 33 ³	49.38	8 36	21.24		

1865 April 4. 1st West

J. H. S.

α Corvi			β Corvi		
		21.8			32.5
		25.9			36.8
		28.6			39.7
		32.3			43.6
12	24	35.6	12	26	47.2
		144.2			199.9
12	24	28.84	12	26	39.98
			27		20.94

End

JWS

5 48	-0.33	41.59
6 15	-0.29	41.61
39	-0.43	41.63
7 32	-0.33	41.61
37	-0.29	41.49
12 27	-0.47	41.43
7 43 (1)		

6^h 41^m - 41.488

Am

7 55	-0.29	41.60
8 1	-0.48	41.55
25	-0.30	41.51
8 13 (2)		41.537
		41.474
		+ 0.063

1865 April 5. S.W. West

A.M.

α Auriga		β Orionis		β Tauri		α Orionis		μ Geminor.	
	53.8		16.0		58.0		5.1		0.5
	59.5		20.0		2.5		9.1		4.8
	3.3		22.6		5.6		11.7		7.8
	8.5		26.3		9.7		15.4		11.7
5	6	5	7	5	17	5	47	6	14
	13.4		29.9		13.5		18.7		15.4
	134.5		114.8		89.3		60.0		40.2
	120								
	18.5				29.3				
5	6	5	7	5	17	5	47	6	14
	3.70		2.296		5.86		12.00		8.04
	44.38		3.69		46.62		52.84		48.86

1865 April 5. Sk. West

next page

A.M.

J.H.S.

β Can. Maj.	ϵ Geminor.	α Can. Maj.	δ Can. Maj.	λ Geminor.
2.4	50.7	24.9	7.0	33.7
5.2	53.0	29.0	11.4	37.8
9.1	50.0	31.6	14.4	40.5
12.5	1.9	35.6	18.4	44.4
6 16	6 34 5.6	6 38 29.1	7 2 22.0	7 9 47.9
	163.2	160.2	73.2	204.3
	120			
	283.2			
	6 34 56.64	6 38 32.04	7 2 14.64	7 9 40.86
		39 12.90		

1865 April 5. M. M. M.

J.H.S.

δ Geminor.			γ Can. Major			α Can. Minor		
		17.0			51.4			28.0
		21.2			2.4			32.0
		24.1			9.6			34.6
		28.0			20.0			38.3
7	11	31.5	7	15	28.5	7	18	41.6
		121.8			111.9			174.5
					60			88.0
					51.9			30.1
7	11	24.36	7	15	10.38	7	18	6.02
	12	5.03						31 34.90
							32	15.57
								7 32 17.60

1865 April 5. M. West

A.M.

η Cancri			δ Cephei			XX 257			δ Cancri			2 Urs. Maj.		
		7.8			22.8			30.0			14.8			8.7
		12.2			29.9			40.8			19.0			14.6
		15.0			38.0			52.6			21.9			18.5
		16.7			43.8			1.3			25.7			24.0
8	24	22.3	8	26	52.3	8	30	13.9	8	36	29.1	8	49	29.0
		76.0			186.8			138.6			110.5			94.8
								<u>120</u>						
								258.6						
8	24	15.20	8	26	37.36	8	30	51.72	8	36	22.10	8	49	18.96
		55.71												

1865 April 5. M. West

next page

Am.

δ Argus	δ Hydra	δ Cephei	δ Draconis H	δ Hydra
14.6	35.0	24.9	41.2	11.8
18.2	39.0	32.5	0.2	15.9
	41.8	40.6	26.0	18.7
	45.3	46.0	49.8	22.3
9 2 32.9	9 6 46.6	9 14 52.6	9 17	9 20 25.6
	209.7	198.4		94.3
	9 6 41.94	9 14 39.68		9 20 18.86
				59.23

1865 April 5. Mr. West

10² 6²

A.M.

Moon I			Gr. 1564			ε Leonis			X μ Leonis			π Leonis			α		
		5 ^h .0			41.5			25.2			19.0			19.4			
		5 ^h .1			53.1			29.5			23.3			27.4			
		0.7			0.6			32.5			26.4			26.0			
		4.7			11.4			36.6			30.3			29.8			
9	23	8.0	9	30	20.9	9	37	40.1	9	44	34.0	9	52	33.1			
		125.5			127.5			163.9			133.0			131.7			
		120.0			120.0												
		5.5			7.5												
9	23	1.10	9	30	1.50	9	37	32.78	9	44	26.60	9	52	26.34			
							38	13.13					53	6.81			

1865. April 5. M. West.

next page

App.

α Leonis	λ Ura Maji	γ Leonis	30 Camel. H	μ Hydra
25.5	9.0	46.2	50.7	44.7
29.5	14.7	50.2	23.3	52.7
32.3	18.3	59.1	46.0	55.5
36.0	23.3	56.9	17.1	59.2
10 0 39.5	10 8 27.9	10 12 0.5	10 14 45.0	10 19 2.7
162.8	93.2	206.9	182.1	218.8
		<u>60</u>	<u>60</u>	<u>60</u>
		266.9	242.1	278.8
10 0 32.56	10 8 18.64	10 11 53.38	10 14 48.42	10 18 53.76
1 12.96		12 33.78		

1865 April 5. M. West

A.M.

p Leonis		193 Camel. B		l Leonis		34 Cephei #		d. Mr. Mag.	
	56.8		41.7		24.4		17.2		30.3
	0.9		7.0		28.4		42.1		38.8
	3.7		23.8		31.3		9.8		44.7
	7.4		48.4		34.9		29.6		52.3
10	25	10	30	10	41	10	47	10	52
	10.6		9.3		38.3		59.8		59.7
	79.4		130.2		157.3		158.5		225.8
	<u>60</u>						<u>120</u>		
	19.4						38.3		
10	25	10	29	10	41	10	47	10	54
	3.88		26.04		31.46		7.70		45.1.6
2	44.29				62				
					11.86				

1865 April 5. 16. West

next page

A.M.

X Leonis		γ Urs. Maj.		δ Leonis		δ Cratius		γ Cratius	
	16.2		16.3		10.2		50.9		23.6
	22.2		21.9		14.3		~~55.0~~		27.6
	25.0		25.6		17.1		~~57.0~~		30.5
	26.7		31.0		21.0		4.4		34.0
10. 57	31.9	11	35.6	11	24.6	11	12 4.6	11	17 37.7
	126.0		130.4		87.2				153.4
10. 57	25.20	11	26.08	11	6 17.44	11	11 57.90	11	17 30.68
58	5.46				57.91		12 38.16		

A	57.73	6.87
B	94	3.46
C		0.27
D	58.00	3.00
E	<u>57.95</u>	7.05

865 April 5. 1st. West

A.M.

39 Cephei H	γ Leonis	$\times$ Mr. Maj.	β Leonis	β Virginis
3.0	17.6	6.8	25.4	55.0
—	21.7	12.4	29.4	59.1
—	24.3	16.6	32.1	1.8
—	27.7	21.9	35.9	5.2
11 25 —	11 29 31.0	11 38 27.1	11 41 39.3	11 43 8.7
	122.3	84.8	162.1	129.8
				129.8
				9.8
	11 29 24.46	11 38 16.96	11 41 32.42	11 43 1.96
	30 4.70		42 12.74	42.27

End

Am

5	7	-0.50	-41.18 ✓
8		-0.36	41.09 ✓
18		-0.40	41.16 ✓
48		-0.35	41.19 ✓
6	15	-0.38	41.20
	39	-0.37	41.23 ✓
8	25	-0.37	40.88
9	21	-0.36	40.72 ✓
	38	-0.38	40.73
	53	-0.35	40.82
10	1	-0.36	40.76 ✓
	13	-0.37	40.77
	25	-0.36	40.77
	41	-0.36	40.76
	58	-0.35	40.61
11	7	-0.38	40.55
	13	-0.36	40.62
	30	-0.35	40.59
	42	-0.36	40.68
	44	-0.35	-40.66
9	3	(60)	-40.864

7145

7	12	-0.38	-41.05
7	32	-0.35	41.02
	37	-0.40	40.80

7 27 (3) -40.952

Am

$$\begin{array}{r} 41.012 \\ + 0.055 \\ \hline \end{array}$$

Fund Star only

5	32 ^m	41.8170	5
9	41	40.745	2
11	43	40.670	2
20 th		-0.08	

Lm

5 542 -41.175 6

10 29 -40.731 14

102

,366

1855 April 8. M. West

J.H.S.

Polaris			α Aurigae			β Tauri			ϵ Monis			γ Cancri		
					56.0			0.4			36.5			10.0
1	6	55.9			1.8			4.8			40.6			14.3
	8	41.9			5.4			7.8			43.7			17.0
	11	11.9			10.7			12.0			46.9			21.0
	13	25.2	5	6	15.6	5	17	15.7	5	40	50.2	8	24	24.4
					89.5			40.7			217.9			86.7
					29.5									
1	8	54.18	5	6	5.90	5	17	8.14	5	40	43.58	8	24	17.34
														55.66

* β Monis record
too faint to be read.

1	6	57.3
		57.2
		53.6
		57.9
	2	57.6
		56.2
		59.4
7		0.7
8		36.5
		37.6
		39.2
	3	41.7
		42.3
		44.0
		45.7
		46.3
11		4.0
		6.6
		9.5
	4	12.2
		14.2
		17.0
		19.5
13		17.5
		19.5
		21.2
		22.6
	5	25.0
		26.9
		28.9
		30.8
1	13	33.5
		47.04
		54.19
		55.49
		52.88
		54.38
		54.18

1865 April 8. M. West

next page

L.H.S.

A.M.

A.M.

8 Cancri

ε Leonis

μ Leonis

τδ Leonis

α Leonis

16.9

27.2

25.2

21.4

27.6

20.9

31.5

28.3

25.4

31.4

23.8

34.4

32.3

28.1

34.2

27.6

36.3

35.8

31.8

38.0

8 36

31.0

9

37

41.9

9

44

9

52

35.0

10

0

41.3

120.2

173.3

141.7

172.5

8 36

24.04

9

37

34.66

9

52

28.34

10

0

34.50

38

13.09

53

6.77

185 April 8. M. West

A.M.

1865 phase		2 Urs. Maj		2 Leonis		n Hydra		p Leonis		2 Leonis		d	
		11.1		48.0		52.5		58.9		26.5			
		16.6		52.0		57.4		2.7		30.4			
		20.3		52.9		1.3		5.6		33.2			
		25.3		58.9		4.7		9.2		36.9			
10	8	29.8	10	12	2.3	10	19	10	25	12.6	10	41	40.3
		103.1			216.7					89.0			167.3
					276.1					29.0			
10	8	20.62	10	11	55.22			10	25	58.0	10	41	33.46
				12	33.75					44.31		42	11.83

1865 April 8. M. West

next page

A.M.

α Mrs. Maj.	χ Leonis	ψ Mrs. Maj.	δ Leonis	δ Crateris
32.2	20.1	18.1	12.2	52.7
40.5	24.2	23.6	16.3	56.9
46.4	26.9	27.8	19.2	59.6
52.3	(maj) 30.3	32.8	23.0	3.3
10 55 1.6	10 57 33.8	11 1 37.6	11 6 26.6	11 12 6.6
175.0		139.9	97.3	179.1
235.0				299.1
10 54 47.00	10 57 27.08	11 1 27.98	11 6 19.46	11 11 59.82
	58 5.44		57.89	12 38.15

27.07 6.73
 (26.91) 3.39
 27.17 0.27
 27.14 2.94
 27.01 6.91

1865 April 8. J. H. West

A.M.

J. H. S.

Crateris			Leonis			202 Camel. B			2 Cephei sp.			X Mrs. Inej.		
		25.6			17.0		20	52.5			39.3			8.7
		29.6			21.0			21.4			53.5			14.7
		32.6			23.7			39.8			8.4			18.6
		26.3			27.3			5.7			21.2			24.1
11	17	39.7	11	20	30.5	11	22	29.7	11	33	38.5	11	38	29.0
		163.8			119.5			147.1			160.9			95.1
								209.1			40.9			
11	17	32.76	11	20	23.90	11	21	4.82	11	33	8.18	11	38	19.02

1865 April 8. M. West.

next page

J.H.S.

β Leonis			Moon I		6202 Rad. Ep.		ϵ Corvi		γ Corvi	
				53.9				28.5		9.5
		27.5		59.8						13.6
		31.4		2.6		32.4		32.7		16.3
		34.2		6.1		50.5		35.6		20.1
		38.0		9.6		12.4		39.4		23.5
11	41	41.5	11	43	11	45	19.9	12 2	43.0	12 8
		172.6		134.0				179.2		83.0
				14.0						
11	41	34.52	11	43				12 2	35.84	12 8
				2.80				3	13.99	

1865 April 8 H. West

J.H.S.

η Virginis

17.5

21.5

24.2

27.8

12 12 31.0

12 2.0

12 12 24.40

13 2.53

End

April 8 1865

<i>JMS</i>	<i>HT</i> + <i>cond</i>	<i>T₂ HT</i> + <i>cond</i>	<i>AR</i>		
5 7	✓ -0.50	5.40	44.31	+38.91	6 17 ^m +38.810 ₃
18	✓ 0.40	7.74	46.57	38.83	
8 25	-0.37	16.97	55.66	38.69	
11 42	✓ -0.36	34.16	12.73	38.57	
~~11 44~~	~~✓ -0.35~~	~~2.45~~	~~42.56~~		
12 3	-0.38	35.46	13.99	38.53	11 57 ^m 38.527 ₃
13	-0.35	24.05	2.53	38.48	
9 30 (7)					9 8 38.668 ₆

<i>Am</i>				<i>Comp</i>	
9 38	-0.38	34.28	13.09	38.81	+38.83 .02
53	-0.35	27.99	6.77	38.78	38.81 +.03
10 1	✓ -0.36	34.14	12.92	38.78	38.81 +.03
13	-0.37	54.85	33.75	38.90	38.80 -.10
26	-0.35	5.45	44.31	38.86	38.79 -.07
42	-0.36	33.10	11.83	38.73	38.77 +.04
58	-0.35	26.73	5.44	38.71	38.76 +.05
11 2	-0.38	29.08	57.89	38.81	38.75 -.06
13	-0.36	59.46	38.15	38.69	38.75 +.06
10 28 (7)				38.786	=.046

The rate seems to have varied:

up -.048

Pm. Rate by S 73.7 -2.289

" M 73.4 -2.078

Ad. 4.367

-.030

Folk's Rate by S 73.0 1.921

-.026

from day to day Adopt -.028

1885 April 11. 16. West

J.H.S.

μ Leonis	π Leonis	α Leonis	30 Camel. A	ρ Leonis	19
22.7	23.4	29.6	53.2	0.9	
27.1	27.3	33.5	26.3	5.0	
30.1	29.9	36.2	48.8	7.6	
34.2	33.7	39.9	19.0	11.3	
9 44 37.9	9 52 37.0	10 0 43.6	10 14 48.2	10 24 14.6	10
152.0	151.3	182.8	195.5	39.4	
			255.5		
9 44 30.40	9 52 30.26	10 0 36.56	10 14 51.10	10 24 7.88	10

1865 April 11. Ill. West.

End.

J.H.S.

193 Camel. 13

45.5

10.7

27.9

51.7

10 30 12.4

148.2

10 29 29.64

				at + w
9.53	-0.35	29.91	1.74	+36.83
10.1	-0.35	36.21	12.88	36.67
<u>25</u>	-0.34	7.54	44.28	<u>36.74</u>
10.6				36.747

1865. April 12, M. West

A.M.

d Leonis		γ Leonis		30 Camel. H		193 Camel. B		ε Leonis	
ref.	30.4		50.8	10	12	55.3	46.6		29.4
	34.6		55.0		13	27.5	11.7		33.2
-	37.2		58.0			49.9	29.5		36.0
	210.9		1.8		14	21.0	52.8		39.8
10	0	44.1	5.2	10	12	48.8	10 30 ref. 15.6	10	41 43.1
			170.8			202.5			181.6
			290.8						
		10	11	58.16	10	13	52.50		10 41 36.32

35.3

26.8

27.5

28.3

49.5

50.3

20.6

21.3

10 14 48.8

1865 April 12 M. West

End

A.M.

	γ Leonis	δ Leonis	δ Crateris	γ Crateris
2	23.0	14.9	55.4	28.5
3	26.9	19.1	59.6	32.5
0	29.5	22.0	2.2	
8		26.0	6.0	
10	57 36.7	11 6 29.5	11 12 9.5	11 17
6		111.5	132.7	
			12.7	
2		11 6 22.30	11 12 2.54	

T

~~10~~ 1				
10 13	-0.37	57.79	33.70	35.91
42	-0.36	35.96	11.80	35.84
58	-0.35	29.	5.41	
11 7	-0.35	21.95	57.86	35.91
13	-0.38	2.16	38.12	<u>35.96</u>
10 42				

1885. April 13 Ill West

A.M.

α Auriga	β Orionis	β Tauri	α Orionis	ϵ Geminor.
0.3	22.5	4.6	11.7	57.2
8.0	26.4	9.1	15.6	12.5
9.9	29.1	12.0	18.4	41.4
15.0	32.7	16.2	22.0	8.6
5 6 19.9	5 7 36.2	5 17 20.0	5 47 25.3	6 35 12.0
51.1	146.9	61.9	93.0	83.5
				23.5
5 6 10.22	5 7 29.38	5 17 12.38	5 47 18.60	6 35 4.70

1865 April 13. M. West

A.M.

next page

α Can. Maj.			δ Can. Maj.			δ Geminor.			α Geminor.			α Can. Min.		
		31.6			19.4			23.5	pr.		17.9			34.4
		35.5			17.8			27.7	fol.		23.0			38.4
		38.4			20.9			30.5	pr.		25.8			41.1
		42.1			24.8			34.5	fol.		30.3			44.7
6	38	45.5	7	2	28.6	7	11	38.0	pr.	25	33.8	7	31	48.2
		173.1			105.5			154.2						206.8
6	38	38.62	7	2	21.10	7	11	30.84		25° (26.20)		7	31	41.36

1885 April 13. M. West

A.M.

x Gemmor.			15 Argus			β Caneri			δ Caneri			2 Argus		
		33.2			7.7			32.3			21.2			20.9
		37.7			12.0			36.2			25.3			26.3
		40.7			14.9			38.9			28.2			29.7
		44.8			19.0			42.5			32.0			34.5
7	57	48.6	8	1	22.5	8	8	45.7	8	36	35.4	9	2	39.3
		205.0			76.1			195.6			142.1			150.7
7	57	41.00	8	1	15.22	8	8	39.12	8	36	28.42	9	2	30.14

1865 April 13, M. West.

next page

A.M.

α Hydra	γ Draconis	α Hydra	119 Cephei B	B Cephei
41.4	16 18.8	18.4	22 35.3	0.2
45.3	46.6	22.4	4.5	9.4
46.1	5.4	25.0	37.9	20.0
51.7	31.3	28.7	2.3	27.7
9 6 55.1	9 17 52.6	9 20 32.0	9 24 36.8	9 26 39.1
241.6	156.7	126.5	116.8	96.4
	36.7		176.8	
9 6 48.32	9 17 7.34	9 20 25.30	9 23 35.36	9 26 19.28

1865 April 13. M. West

A.M.

yr. 1864		μ Leonis		π Leonis		α Leonis		ξ Cephei sp.	
	47.8		25.5		25.9		32.1		23.6
	59.3		29.9		30.0		36.0		26.7
	7.1		32.8		32.6		38.9		29.4
	17.5		36.8		36.3		42.4		36.4
9 30	27.0	9 44	40.5	9 52	39.7	10 0	45.9	10 5	41.4
	158.7		165.5		164.6		195.3		157.5
	38.7								
9 30	7.74	9 44	33.10	9 52	32.72	10 0	39.06	10 5	31.50

1865 April 13. M. West

my page

M.

γ Leonis			β Camel. H			μ Hydra			ρ Leonis			ϵ Leonis		
		52.7			53.9			53.2			3.6			31.0
		56.7			29.8			59.2			7.5			35.6
		59.7			57.5			2.0			10.1			37.8
		3.4			22.9			5.9			13.9			41.6
10	12	7.1	10	14	50.8	10	19	9.2	10	25	17.2	10	41	44.8
		179.6			210.1			131.5			52.3			190.3
		299.6			270.1			11.5						
10	11	59.92	10	13	54.02	10	19	2.25	10	25	10.46	10	41	38.06

1865 April 13. M. West

A.M.

34 Alpha H	X	Scorpio	4 Mra. Maj.	8 Scorpio	8 Crateris
24.9		24.3	22.7	16.8	57.4
49.9		28.7	28.4	21.0	1.5
17.6		31.4	32.1	23.8	4.1
37.3		35.1	37.2	27.8	7.9
10 48 7.6	10	57 38.3	11 1 41.8	11 6 31.3	11 12 11.4
137.3		157.8	162.2	120.7	82.3
77.3					22.3
10 47 15.46	10	57 31.56	11 1 32.44	11 6 24.14	11 12 4.46

1865 April 13. M. West

next page

A.M.

γ Crateris	τ Leonis	39 Cephæi H	2 Leonis	γ Cephæi
30.1				
~~31.1~~	21.3	25 10.6	24.1	43.7
34.2	25.5	26 5.4	28.0	58.0
37.0	28.1	6.3	~~30.7~~	14.3
40.8	31.7	27 50.8	34.4	26.0
11 17 44.1	11 20 35.0	11 27	11 29 37.5	11 33 42.9
188.2	141.6		154.7	184.4
				64.9
11 17 37.24	11 20 28.32		11 29 30.94	11 33 12.98

1865 April 13. Th. West

A.M.

Mrs. May.			β Leonis			β Virginis			309 Cephei 13			α Virginis		
		13.2			31.8			1.9			55.4			19.2
		19.2			36.0			5.7			41.3			23.1
		23.2			38.8			8.3						25.8
		28.7			42.5			12.0						29.6
11	38	33.7	11	41	45.9	11	43	14.7	11	54	6.0	11	53	32.7
		118.0			193.0			42.6						130.2
11	38	23.60	11	41	39.00	11	43	8.52				11	53	26.04

1865 April 13. M. West

next page

A.M.

2 Corvi.		7 Corvi		7 Virginis		8 Cor. Bor.		7 Virginis spec.						
	33.1		14.0		22.0		33.4		11.3					
	37.2		18.0		25.9		37.9		15.2					
	40.0		20.8		28.7		40.8		17.9					
	44.0		24.6		32.3		45.0		21.3					
12	2	47.6	12	8	28.0	12	12	35.5	12	20	48.8	12	34	24.9
	201.9		105.4			144.4			203.9					90.6
12	2	40.38	12	8	21.08	12	12	28.88	12	20	41.18	12	34	18.12

1865 April 13. M. West

End

A.M.

2 Mrs. Min.

1 4 18.9
 6 59.8
 8 68.2
 11 17.5
 13 32.7
 177.1

1 8 59.42

4 16.0
 17.8
 19.8
 22.0

6 53.7
 55.7
 1.2
 2.4

8 45.7
 47.1
 49.0
 51.0

11 15.1
 16.6
 19.3
 19.9

25.9
 30.9
 32.7
 34.5
 36.5

Rate

Fundamentals
 sufficient

1 Am T

5	7	10.22	-0.43	44.22	+34.43	34.50	+0.07
8		29.38	-0.37	3.57	34.56	34.50	-0.06
18		12.38	-0.36	46.49	34.47	34.48	+0.01
48		18.60	-0.35	52.71	34.46	34.45	-0.01
6	39	38.62	-0.39	12.74	34.51	34.39	-0.12
7	12	30.84	-0.35	4.88	34.39	34.35	-0.04
26		(21.20)	-0.37	0.14	34.31 + 12	34.34	+0.03
32	5	41.36	-0.35	15.43	34.42	34.33	-0.09
55		41.00	-0.36	14.97	34.33	34.31	-0.02
8	2	15.22	-0.41	49.11	34.30	34.30	-0.00
9	21	25.30	-0.36	59.12	34.18	34.21	+0.03
53		32.92	-0.35	6.71	34.14	34.17	+0.03
10	1	39.06	-0.35	12.86	34.15	34.17	+0.02
13		59.92	-0.35	33.69	34.12	34.15	+0.03
26		10.46	-0.35	44.26	34.15	34.13	-0.02
42		38.06	-0.35	11.79	34.08	34.12	+0.04
58		31.56	-0.35	5.40	34.19	34.10	-0.09
11	7	24.14	-0.35	57.85	34.06	34.09	+0.03
13		4.46	-0.35	38.11	34.00	34.08	+0.08
30		30.94	-0.35	4.63	34.04	34.06	+0.02
42		39.00	-0.35	12.70	34.05	34.05	+0.00
44		8.52	-0.35	42.24	34.07	34.05	-0.02
12	3	40.38	-0.41	13.98	34.01	34.02	+0.01
13		28.88	-0.35	2.53	34.00	34.03	+0.03
50		11.38	-0.40	44.97	33.99	34.07	+0.08
13	18	34.18	-0.37	7.85	34.04	33.94	-0.10

Not including
 Virgin Capton
 P. 10/18

Obsd
 $\frac{D_L + m}{5}$

Form
 $\frac{34.164}{0.18} \frac{10}{rate}$

1865 April 14. M. West

J. H. S.

α Orionis		μ Geminor.		β Can. Maj.		ϵ Geminor.		α Can. Maj.	
	13.2								
	~~15.2~~		8.5		10.3		58.5		32.9
	17.1		12.8		13.2		2.8		37.0
	19.8		15.8		17.0		5.8		39.7
	23.4		19.7		20.6		9.8		43.5
5 47	26.8	6 14	23.2	6 16		6 35	13.5	6 38	46.9
	100.3		80.0				90.4		200.0
							30.4		
5 47	20.06	6 14	16.00			6 35	6.08	6 38	40.00

1865 April 14. M. Met

must pay

J. H. S.

2 Angus	Hydra	1 Draconis H	Hydra	Hydra
27.5	42.8	48.0	19.7	7.2
31.7	46.7	7.2	23.7	13.6
36.1	49.4	32.6	26.3	18.0
40.6	53.0	56.0	30.0	23.9
9 2	9 6 56.2	9 17	9 20 33.3	9 23 29.2
	248.1		133.0	91.9
	9 6 49.62		9 20 26.60	9 23 18.38

1865 April 14. M. West

T.H.S.

M Leonis			R Leonis			d Leonis			30 Camel. H			y Mra. Maj.			
		26.7			27.2			33.4	12		57.2			23.9	
		31.1			31.3			37.4			30.3			29.6	
		34.1			33.8			40.1			53.0			33.3	
		38.1			37.6			43.9			24.0			38.4	
9	44	41.7	9	52	40.9	10	0	47.1	10	14	57.9	11	1	43.0	
		171.7			170.8			201.9			216.4			168.2	
											276.4				
9	44	34.34	9	52	34.16	10	0	40.38	10	13	55.28	11	1	33.64	11

1865 April 14 Su. West

next page

J.H.S.

8 Crateris		2 Crateris		2 Leonis		2 Leonis		2 Cephei sp.						
	58.5		31.4		22.6		25.3		45.4					
	2.6		35.4		26.6		29.2		59.8					
	5.3		38.2		29.3		31.9		15.8					
	9.1		42.10		32.9		35.5		27.7					
11	12	12.4	11	17	45.5	11	20	36.3	11	29	38.9	11	33	44.6
	87.9		192.5		147.7		160.8		193.3					
	27.9								73.3					
11	12	55.58	11	17	38.50	11	20	29.54	11	29	32.16	11	33	14.66

1865 April 14. M. West

J. H. S.

β Leonis			β Virginis			π Virginis			η Virginis			γ Bo. Beren.		
		33.1			2.9			44.4			23.1			34.3
		37.2			6.4			48.3			27.2			39.0
		40.0			9.6			51.0			29.7			42.1
		43.7			13.2			54.7			33.3			46.2
11	41	47.1	11	43	16.5	11	52	57.9	12	12	36.8	12	19	50.0
		20.1			48.6			256.3			150.1			211.6
11	41	40.22	11	43	9.72	11	52	51.26	12	12	30.02	12	19	42.32

1865 April 14 M. West

End

T.H.S.

β Corvi	δ Virginis	Polaris γ	β Cr. Borealis	α Virginis
41.2	11.5	13 3 59.8	56.5	25.4
45.3	15.4	6 13.0	1.0	25.1*
48.2	18.0	8 39.1	4.0	32.5
52.2	21.8	10 29.8	8.2	27.8*
12 26 55.8	24.9	13 8.9	13 6 11.8	35.1*
242.7	91.6	150.6	81.5	42.2*
				47.6*
				42.2
				177.1

12 26 48.54	12 49 18.32	13 8 30.12	13 6 4.30	13 18 35.42
-------------	-------------	------------	-----------	-------------

58.5
59.7
0.1
1.7
12.1
12.8
14.2
38.4
39.1
39.6
25.1*
27.4*
29.8*
32.6*
33.9*
4.9
6.5
8.7
10.2
14.0

		Fundamentals		
		$\frac{T}{T}$	α	δ
5 48	α Orionis	20.06 - 0.35	52.70	32.99
1 39	α Canis	40.00 - 0.39	12.72	33.11 (03)
9 21	α Hydrae	26.60 - 0.36	59.10	32.86
10 1	α Leonis	40.38 - 0.35	12.85	32.82
11 42	β Leonis	40.22 - 0.35	12.70	32.83
11 44	β Virginis	9.72 - 0.35	42.24	32.87
13 18	α Virginis	35.42 - 0.37	7.65	32.80
	with cor ⁿ to Series			
7 57		+32.925		
12 15		32.833		

$\frac{\delta}{-0.12}$
mod of 34.04

Final Result

1865 April 16. 3rd West

J.H.S.

April 17

A.M.

Polaris	α Auriga	β Orionis	β Tauri	α Orionis
4 21.7	4.6	26.7	2.8	15.2
7 3.5	10.2	30.8	13.4	19.8
8 42.9	13.9	33.5	16.3	22.5
10 12.2	19.4	37.2	20.5	26.8
13 30.0	24.0	40.4	24.0	29.5
110.3	72.1	168.6	83.0	113.9
1 8 58.06	5 6 14.42	5 7 33.72	5 18 16.60	5 47 22.78
1 4 20.5				
22.9				
22.9				
15.9				
57.3				
7 0.2				
2.0				
3.4				
4.7				
7.0				
8 40.7				
41.9				
42.7				
44.4				
45.4				
10 9.0				
10.0				
12.0				
14.1				
15.9				
24.5				
29.5				
30.5				
1 13 31.7				

Encl

For April 14th

5 48
 6 15
 39
 9 21
 10 1
 11 13
 30
 42
 44
 12 13
 27
 13 18
 10 11

Apr. 16th

57 S	14.42	-0.43	44.15	+30.16
8 m	33.72	-0.36	3.53	30.17
18	16.60	-0.36	46.45	30.21
48	22.78	-0.35	52.67	30.24
5 25 m				+30.207

at + the

m - S +.04

1865 April 17. M. West

A.M.

3 Can. Maj.			2 Geminor.			2 Can. Maj.			2 Geminor.			2 Can. Min.		
		9.0			1.2			35.7	pr.		22.2			38.5
		13.3			5.6			39.7	fol.		27.0			42.5
		15.9			8.5			42.6	pr.		29.9			45.2
		19.7			12.5			46.3	fol.		34.4			48.8
6	16	23.2	6	35	16.2	6	38	49.8	pr.	25	37.8	7	31	52.2
		87.1			44.0			214.1						227.2
6	16	16.22	6	35	8.80	6	38	42.82	7	25 (30.30)		7	31	45.44

to meti

22.4

26.8

30.1

34.2

38.0

30.30

1865 April 17. 16. West

next page

A.M.

β Geminæ.			γ Cancri			δ Cancri			λ Argus			ε Cancri		
		26.9			18.3			25.3			25.0			57.5
		31.5			22.6			~~29~~ 24.4			30.3			53.6
		34.4			25.5			32.2			34.0			54.4
		38.5			29.4			36.0			36.9			2.1
7	36	42.2	8	24	32.7	8	36	39.5	9	2	43.7	9	10	5.7
		173.5			128.5			162.4			171.9			173.3
														293.3
7	36	34.70	8	24	25.70	8	36	32.48	9	2	34.38	9	10	58.66

1865 April 17 M. West

A.M.

see end

1 Draconis H		α Hydra		θ Urs. Maj.		β Cephei sp		δ Crateris	
	22.1		22.3		9.9		4.2		1.3
	49.8		26.5		16.4		13.7		5.5
	9.0		29.1		20.7		24.0		8.2
	35.0		32.7		26.5		32.1		11.8
9	17	9	20	9	22	9	26	11	12
	58.5		36.0		32.8		43.7		15.7
	174.4		146.6		106.3		117.7		42.5
	54.4								
9	17	9	20	9	22	9	26	11	12
	10.88		29.32		21.26		23.54		8.50

1865 April 17. M. West

next page

AM

γ Crateris	γ Leonis	39 Cephæi H	γ Leonis	γ Cephæi SP
34.0	25.4	24 17.4	28.0	47.9
38.2	29.4	11.5	32.0	2.5
41.0	32.1	11.0	34.7	18.9
44.9	35.8	27 55.5	38.3	30.0
11 17 48.2	11 20 38.9	11	11 29 41.7	11 33 47.6
206.3	161.6		174.7	146.9
				86.9
11 17 41.26	11 20 32.32		11 29 34.94	11 33 17.38

1865 April 17. Ill. West

A.M.

Mr. Maji		β Leonis		β Virginis		1202 Rad		Te Virginis	
	17.3		35.8		5.8	27.1	43.7		23.0
	22.1		39.9		9.7		59.9		27.0
	27.1		42.7		12.2		11.2		29.8
	32.6		46.4		15.9		29.1		33.5
11 38	37.5	11 41	49.9	11 43	19.2	11 45		11 53	36.8
	137.6		214.7		62.8				150.1
11 38	27.52	11 41	42.94	11 43	12.56			11 53	30.02

1865 April 17. Ill West

next page

A.M.

J.H.S.

E Corvi		η Virginis		γ Comae		γ Virginis		γ Capricorn	
	37.0		26.0		37.2	br	15.4		57.2
	41.2		30.0		41.8	fol.	19.4		58.0
	44.0		32.6		44.8	pr.	22.0		5.1
	48.1		36.2		49.0	fol.	25.7		10.5
12 2	57.6	12 12	39.5	12 19	52.7	12 34	28.7	12 48	16.3
	221.9		164.3		225.5				143.1
							<u>med</u>		23.1
12 2	44.38	12 12	32.86	12 19	45.10		22.25	12 48	4.62

185 April 17 Ill. West

I. Ho.

1865phae

12 Canum. Ven.				12 Canum. Ven.				Polaris			β Comae Ber.			α Virginis		
foll. pue 6.6				foll. foll 6.6				15	4	3.7			59.5			31.4
10.4				11.7					6	18.7			3.9			35.4
13.9				15.2					8	46.2			6.9			38.1
18.5				19.8					10	34.0			11.2			41.8
12	49	22.7		12	49	24.0		13	14.0		13	5	14.8	13	17	45.0
				77.3				116.6			96.1			191.7		
											36.1					
				12	49	15.46		13	8	35.32	13	5	7.22	13	17	38.34

1865 April 17. M. West.

2 N.S.

A.M.

11 omitted

Rept page

214 Camel. B	B Lyrae	d Leonis	5 Cephei sp.	7 Leonis pice.
18 27.4	29.9	36.0	28.0	56.6
19 17.4	34.3	40.1	33.9	6.7
50.7	37.7	42.7	40.7	3.6
20 36.2	42.0	46.4	45.5	7.5
13 21 17.4	18 44 46.0	10 0 49.8	10 5 52.9	10 12 11.0
14 9.1	18 9.9	215.0	201.0	79.4
26 9.1				19.4
13 19 53.82	18 44 37.98	10 0 43.00	10 5 40.20	10 12 3.88

1865 April 17. M. West

A.M.

30 Camel H			μ Hydra			193 Camel. B			34 Cephei H			ψ Urs. Maj.		
12	5	9.2			59.1	28		51.2	46		29.8			26.8
		32.2			3.1	29		16.2			52.9			32.3
		54.6			6.0	21		33.9			22.2			36.1
		25.6			9.8	24		57.2			42.0			41.2
10	14	53.4	10	19	13.1	10	30	18.8	10	48	11.8	11	1	46.0
		226.0			98.1			177.3			160.7			182.4
		285.0			31.1						100.7			
10	13	57.00	10	19	6.22	10	29	3546	10	47	20.14	11	1	36.48

End

Am

April 17

Cm^m

"6 39 F	42.82	-0.39	12.67	30.24	-08	} 718 ^m 30.198 (4
7 26 F	(30.30)	-0.37	0.06	30.13	+08	
32 F	45.44	-0.35	15.36	30.27	-04	
37 F	34.70	-0.36	44.53	30.19		
8 25						
9 12						
10 21 F	29.32	-0.37	59.06	30.11		9 41 30.135 2
11 1. F	43.00	-0.35	12.81	30.16		
11 13						
30						
42 F	42.94	-0.35	12.68	30.09		11 43 30.055 2
44 F	12.56	-0.35	42.23	30.02		
12 3						
13						
35						
~~10 1 +~~						Note
13						
"18 45						
10 29 (17)						
7						
145						
12 36						
12 50						
13 48	38.34	-0.37	7.87	29.90		

1865 April 18 M. West
J. H. S.

β Geminorum			119 Cephei B sp			5 Cephei sp.			γ Leonis			μ Hydra		
		28.2			42.5			29.3			57.8			6.4
		32.7			12.5			35.3			2.0			4.5
		35.7			44.5			42.4			4.9			7.3
		39.8			9.2			47.3			8.8			11.1
γ	36	43.4	γ	24	43.8	40	5	54.5	10	12	12.3	10	19	14.5
		179.8			152.3			208.8			85.8			37.8
					212.3						25.8			
7	36	35.96	9	23	42.46	10	5	41.76	10	12	5.16	10	19	7.56

1865 April 18. Ill West

next page

L.H.S.

α Leonis			γ Leonis			$\times$ Mr. Maji			β Leonis			β Virginis		
		26.7			29.3			18.6			37.1			7.0
		30.8			33.3			24.4			41.3			10.9
		33.4			35.9			28.4			44.0			13.6
		37.1			39.6			33.9			47.9			17.1
10	20	40.3	10	29	42.9	11	38	38.8	11	41	51.2	11	43	20.5
		168.3			181.0			144.1			221.5			69.1
10	20	33.66	11	29	36.20	11	38	28.82	11	41	44.30	11	43	13.82

1865 April 18 Ill. West

G.H.S.

6202 Rad. sp.			TC Virginis			E Corvi			γ Virginis			γ Comae Ber.		
		30.7			24.4			38.5			27.4			38.6
		45.6			28.4			42.5			31.2			43.1
		0.9			31.1			45.4			34.9			46.1
		13.1			34.8			49.4			37.6			50.3
11	45	30.3	11	53	38.1	12	2	53.0	12	12	40.8	12	19	52.1
		120.6			156.8			228.8			170.9			232.2
		0.6												
11	45	0.12	11	53	31.36	12	2	45.76	12	12	34.18	12	19	46.44

1865 April 18. M. West

JNS.

End

(AM?)

γ Caprip. sp.	Polaris	β Coma Ber.	δ Virginis	Moon II
52.7	13 4 5.2	0.6	32.5	46.2
59.0	6 17.7	5.0	36.5	50.2
6.4	8 46.8	8.0	39.3	53.1
11.5	10 35.4	12.2	43.0	57.0
12 48 19.6	13 13.8	13 4 16.0	13 17 46.3	20 28 0.4
149.2	118.9	41.8	197.6	206.7
29.2				266.9
12 48 5.84	13 8 35.78	13 4 8.36	13 17 39.52	20 27 53.38

4	5.2	1
6	16.9	2
	17.6	
	18.7	
8	45.4	3
	46.8	
	48.2	
10	34.4	4
	35.5	
	36.4	
13	12.3	5
	15.2	

7 37	35.96 - 0.36	4.50	28.90
10 13			
11 30			
42	44.30 - 0.35	12.67	28.72
44	13.82 - 0.35	42.22	28.75
12 3			
13			
13 18	39.52 - 0.37	7.87	28.72
11 18			

1865 April 19 9h West

A.M.

α Auriga			β Orionis			γ Orionis			β Can. Maj.			ϵ Geminor.		
		6.6			28.6			17.7			10.9			3.2
		12.2			32.6			21.9			15.0			7.5
		16.1			35.3			24.6			18.0			10.4
		21.2			39.0			28.2			21.5			14.3
5	6	26.0	5	7	42.3	5	47	31.4	6	16	25.2	6	35	18.2
		82.1			177.8			123.8			90.6			53.6
5	6	16.42	5	7	35.56	5	47	24.76	6	16	18.12	6	35	10.72

1815 April 19 M. West

A.M.

next page

α Can. Crap.		α Geminor		α Can. ~~Crap~~ ^{min}		β Geminor.		ϵ 3 Cancri					
	37.6	hr	24.0		42.5		28.8		53.4				
	41.7	fol	29.0		44.6		33.4		57.5				
	44.4	hr	31.8		47.1		36.3		0.3				
	48.2	fol	36.4		50.7		40.6		4.1				
6	38	57.7	25	39.9	7	31	52.2	7	36	44.1	9	10	7.4
	223.6				237.0			183.2					122.7
													2.7
6	38	44.72	7	25 (32.26)	7	31	47.40	7	36	36.64	9	10	0.54

24.2

28.8

32.0

36.2

40.1

32.26

1885 April 19 S.W. West

A.M.

J.H.S.

1 Draconis H		α Hydra		θ Leo Maj.					
	23.9		24.5		11.7		10.0		22.5
	52.2		28.2		18.2		13.9		26.0
	11.3		31.0		22.6		16.5		28.6
	37.0		34.7		26.4		20.1		32.2
9 18	0.7	9 20	38.0	9 23	33.9	9 25	23.5	9 27	35.7
	125.1		156.4		114.8		84.0		145.0
	65.1								
9 17	13.02	9 20	31.28	9 23	22.96	9 25	16.80	9 27	29.00

1865 April 19 M West

J.H.S.

next page

E Leonis

M Leonis

	10.5		37.9		53.0		31.4		5.1
	14.3		42.0		56.8		35.8		9.0
	17.2		45.0		59.5		38.8		11.9
	20.7		48.9		3.2		42.9		15.5
9 30	24.0	9 37	52.5	9 39	6.5	9 44	46.5	9 47	18.8
	86.7		226.3		179.0		195.4		60.3
					299.0				
9 30	17.34	9 37	45.26	9 38	57.80	9 44	39.08	9 47	12.06

1865 April 19 St. West

A.M.

α Leonis			γ Leonis			η Hydra			γ Crateris			τ Leonis		
		32.0			58.5			1.2			36.1			27.4
		36.0			2.6			5.2			40.1			31.4
		38.7			5.5			9.0			43.0			33.9
		42.4			9.4						46.8	17	20	37.6
9	52	45.7	10	12	12.8	10	19		10	17	50.3			
		194.8			88.8						2163			
					28.8									
9	52	38.96	10	12	5.76				11	17	43.26			

1865 April 19 Ill Wiet

End

Am

39	Uphur H	X Mrs. Maji	B Leonis	B Virginis
25	15.8	19.0	37.9	7.7
26	12.6	25.0	41.9	11.5
27	13.0	28.9	44.8	14.2
	58.3	34.5	48.6	18.0
11	~~28~~ 3.6	11 38 39.6	17 41 57.9	17 43 21.2
	105.3	147.0	225.1	72.6
	45.3			
11	27 9.06	11 38 29.40	11 41 45.02	11 43 14.52

Am

5 7	16.42	-0.43	44.11	+28.12
8	35.56	-0.37	3.49	28.30
58	24.76	-0.35	52.63	28.22
6 39	44.72	-0.39	12.63	28.30 - 8
7 26	32.36	-0.38	0.03	28.15 + 8
32	47.40	-0.35	15.32	28.27 - 4
37	36.64	-0.36	4.49	28.21
9 12				
21	31.28	-0.36	59.03	28.11
9 53				
10 13				
11 42	45.02	-0.35	12.66	27.99
44	14.52	-0.35	42.21	28.04
8 16 (13)				
9 38 (11)				

MAS

Am

11 29 ^m	+28.219	7
9 21	28.110	1
11 43	28.015	2

1865 April 24. M. West
Am.

β Orionis			β Tauri			α Orionis			β Can. Maj.			α Can. Maj.		
		34.5			16.4			23.6			16.7			43.4
		38.5			21.6			27.7			21.0			47.6
		41.3			24.1			30.6			23.8			50.3
		44.9			28.2			34.0			27.6			54.2
5	7	48.2	5	17	32.0	5	47	37.4	6	16	31.0	6	38	57.6
		207.4			122.3			153.1			120.1			253.1
5	7	41.48	5	17	24.46	5	47	30.62	6	16	24.02	6	38	50.62

1865 April 24 1st West

next page

A.M.

δ Can. Maj.		α Geminor.		δ Can. ~~Maj~~		β Geminor.		ε Argus	
	25.5	pr.	29.7		46.3		34.6		8.7
	29.9	fol.	34.7		50.2		39.2		13.0
	32.7	pr.	37.5		53.0		42.0		15.9
	36.9	fol.	42.3		56.6	rej	(46.1)		19.9
γ 2	40.5	pr	25 45.6	γ 31	59.9	γ 36	50.0	γ 42	23.5
	165.5	.			256.0		211.9		81.0
γ 2	33.10	γ 25	38.00	γ 31	53.20	γ 36	42.38	γ 42	16.20

29.9
 34.5
 37.7
 42.1
45.8
38.00

1865 April 24 Ill. West

A.M.

3 Cancri		α Leonis		5 Cephæi 50		30 Camel. H		193 Camel. B	
	44.0		43.7		35.9	10	13	5.5	10 28 58.4
	48.0		47.7		41.9			38.7	23.5
	50.7		50.5		48.7	14		1.6	29 41.0
	52.4		52.2		52.0	14		32.9	4.1
8 8	57.7	10 0	57.5	10 6	0.9	15		0.6	10 30 25.7
	254.8		253.6		181.4			79.3	152.7
					241.4			19.3	212.7
8 8	50.96	10 0	50.72	10 5	48.28	10	14	3.86	10 29 42.54

1865 April 24. M. West

next page

A.M.

34 Cephæi H			T Leonis			39 Cephæi H			V Leonis			7 Cephæi		
46	38.6			33.2		25	26.0		35.8			32	56.5	
	3.2			37.2		26	21.2		39.7				11.2	
47	30.8			39.8		27	20.7		42.4				26.6	
	57.3			43.4		11	28	6.2	46.0				38.5	
10 48	20.7		11	20	46.7				11 29	49.3		11 33	55.9	
	144.6				200.3					213.2			188.7	
													128.7	
10 47	28.92		11	20	40.86				11 29	42.64		11 33	25.74	

1865 April 24. M. West

A.M.

β Leonis			β Virginis			6202 Rad. sp			2 hrs. Maj.			Ti Virginis		
		43.6			13.4			37.4			12.2			30.8
		47.7			17.4			50.0			18.6			34.9
		50.3			20.0			8.2			23.2			37.5
		54.2			23.7			19.8			29.5			41.1
11	41	57.5	11	43	27.0	11	45	37.0			35.1	11	53	44.5
		253.3			10.15			152.4			116.6			188.8
								3.24						
11	41	50.66	11	43	20.30	11	45	6.48	11	46	23.72	11	53	37.76

3.9

12.2

18.6

23.2

29.5

35.1

11 46

1865 April 24 M. West

next page

A.M.

E Corvi			γ Virginis			δ Comae Ber.			β Corvi			δ Virginis		
		44.8			33.9			45.1			57.6			22.1
		49.0			37.8			49.5			55.9			26.0
		57.8			40.4			52.6			58.8			28.7
		⁵ 57.8			44.0			56.7			7.8			32.3
12	2	59.4	12	12	47.4	12	20	0.3	12	27	6.5	12	48	35.6
		260.8			203.5			204.2			175.6			144.7
								264.2			293.6			
12	2	52.16	12	12	40.70	12	19	52.84	12	26	59.12	12	48	28.94

1865 April 24 M. West

A.M.

12 Canum. pre.			12 Canum. foll.			Polaris sp.			β Com. Ber.		
		13.1			14.2	13	4	13.7			7.2
		18.0			19.4		6	28.5			11.4
		21.6			22.9		8	54.1			14.5
		26.2			27.3		11	44.2			18.7
12	49	30.5	12	49	31.6		13	23.7	13	5	22.5
		109.4			115.4			174.2			74.3
								22.4.2			
12	49	21.88	12	49	23.08	13	8	46.84	13	5	14.86

4
11.3
12.7
14.5
16.3

6
26.9
28.3
30.3

8
52.8
54.0
55.4

13 10
42.9
44.0
45.8

13 13
20.7
22.6
24.7
26.7

1885 April 24 Sk. West

End

Am.

a Virginis

Polaris

	39.1	1	~~2~~	29.4
	43.0		~~7~~	14.3
	45.8		8	59.1
	49.6		11	26.7
13 17	53.0		13	45.0
	230.5			174.5

13 17	46.10	1	~~27~~	10.90
-------	-------	---	---------------	-------

27.4
29.2
31.6

6 11.6
12.9
15.1
17.7

8 52.8
53.1
58.6
2.6
6.6

11 18.9
21.2
24.9
27.5
29.6
31.8
33.3

41.0
42.5
44.8
47.1
49.7

1 13

5 8	41.48	-0.37	3.44	22.33
18	24.46	-0.36	46.35	22.25
48	30.62	-0.35	52.57	22.30
6 39	50.62	-0.39	12.55	22.32 - 8
7 26	38.00	-0.37	59.93	22.30 + 8
32	53.20	-0.35	15.24	22.39 - 4
37	42.38	-0.36	4.40	22.38
10 1	50.72	-0.35	12.71	22.34
11 30				
42	50.66	-0.35	12.63	22.32
44	20.30	-0.35	42.18	22.23

12 3

13

27

50

166

13 18	436	46.10	-0.37	7.89	22.16
-------	-----	-------	-------	------	-------

9 36

Am	5		
6 ³⁰	22.319	7	
10 1	22.34	1	
12 15	22.237	3	

185 April 25. Ill. West

A.M.

Orionis			β Can. Maj.			α Can. Maj.			δ Can. Maj.			ε Geminor.		
		24.4			17.6						26.2	pr.		30.6
		28.5			21.7			48.4			30.7	fol.		35.6
		31.2			24.6			57.2			33.7	pr.		38.6
		34.8			28.4			52.9			37.7	fol.		41.1
5	47	38.1	6	16	31.8	6	~~26~~	58.3	7	2	41.4	pr.	25	46.6
		157.0			124.1						169.7			
5	47	31.40	6	16	24.82	6	38	51.39	7	2	33.94	7	25	38.94

30.8

35.4

38.8

42.9

46.8

38.94

4th should be

43.51

1865 April 25. In Met

next page

A.M.

α Can. Min.	β Geminor.	β Caneri	γ Draconis. H	δ Hydra
47.3	35.5	45.0	16 29.6	30.9
57.1	39.9	49.0	57.7	35.0
53.8	43.0	51.6	17 17.1	37.7
57.7	47.2	53.4	18 42.8	41.3
7 30 0.8	7 36 50.9	8 8 58.6	9 ~~18~~ 6.4	9 20 44.5
210.7	216.5	259.6	153.6	189.4
270.7			93.6	
7 31 54.14	7 36 43.30	8 8 51.92	9 17 18.72	9 20 37.98

185 April 25. M. West.

A.M.

Wrs. Maj.		β Cephei sp.		α Leonis		γ Cephei sp		30 Camel. H	
	18.3		13.2		44.6		36.8		6.2
	25.0		22.8		48.6		42.7		39.0
	29.1		33.5		57.4		49.7		2.4
	35.0		41.4		55.1		54.6		32.8
9	23	40.7	53.1	10	0	58.5	10	6	2.0
	148.1		164.0		258.2		185.8	10	~~15~~ 1.1
							245.8		81.5
									21.5
9	23	29.62	32.80	10	0	57.64	10	5	49.16
								10	14
									4.30

1865 April 25. M. West

next page

A.M.

193 Camel. B			34 Cephæi H			39 Cephæi H			2 Leonis			2 Cephæi		
		58.9			40.0	25		26.9			36.8			57.0
		24.4			4.4	26		21.0			40.6			11.9
		41.6			51.7	27		22.5			43.2			27.9
		5.9			52.3	11		6.8			46.8			39.4
10	30	26.4	10	44	22.4				11	29	50.2	11	33	56.2
		157.2			150.8						217.6			192.4
		217.2												
10	29	43.44	10	47	30.16				11	29	43.52	11	33	38.48

185 April 25 M. West

AM

β Leonis			β Virginis			6202 Rad.			2 Mrs. May			Te Virginis		
		44.4			14.3			38.5			19.5			31.8
		48.5			18.2			53.0			24.1			35.7
		47.2			20.9			8.9			30.3			38.4
		35.0			24.5			21.0	11	46	36.0			42.0
11	41	48.4	11	43	27.8	11	45	37.7				11	53	45.4
		257.5			103.7			159.1						193.3
								39.1						
11	41	37.50	11	43	21.14	11	45	7.82				11	53	38.66

1885 April 25. M. West

A.M.

End

α Corvi	β Virginis	Polaris	α Virginis
45.6	34.7	13 4 16.7	32.4
49.8	38.6	6 32.4	41.7
52.7	41.3	10 44.4	43.7
56.5	45.0	13 23.4	45.4
12 3 0.11	12 12 48.3	13 17 53.7	234.4
204.7	4		
264.7			
12 2 52.94	41.58	13 8 46.92	13 17 46.88

4	12.0
	15.6
	18.0
	21.2
6	32.4
	41.9
	43.7
	45.4
	46.7
13	20.1
13	23.4
13	26.8

5 48	31.40	-0.35	52.56	+21.51
6 39	[51.439]	-0.39	12.54	21.54 - 8
7 26	38.94	-0.37	59.92	21.35 + 8
32	54.14	-0.35	15.23	21.44 - 4
37	43.30	-0.36	4.38	21.44
9 21	37.98	-0.37	58.94	21.33
10 1	51.64	-0.35	12.70	21.41
11 30				
42	51.50	-0.35	12.62	21.47
44	21.14	-0.35	42.17	21.38
12 3				
13				
13 18	46.88	-0.37	7.69	21.38
9 46				

47.41	7.08	21.442	5
48.66	9 41	21.370	2
46.05	12 15	21.410	3
45.54			
46.92			

1865 April 26. M. M. M.

α Orionis			α Can. Maj.			α Geminor.			α Can. Min.			β Geminor.		
		25.0			41.7	pr		31.3			47.8			36.0
		29.0			48.7	fol.		36.2			57.8			40.5
		31.7			47.6	pr.		39.0			52.4			43.6
		35.4			55.6	fol.		43.5			58.1			47.7
5	47	38.7	6	38	59.0	pr.	25	47.2	7	32	1.4	7	36	57.4
		159.8			25.98						213.5			219.2
											273.5			
5	47	31.96	6	38	51.96	7	25	39.48	7	31	54.70	7	36	23.84

31.5
 36.0
 39.2
 43.0
47.4
 39.48

1865 April 26. M. West

End

A.M.

Draconis H		d Hydra		+ Mr. Phaf.		d Leonis		30 Camel. H	
	30.0		31.5		18.9		45.3	13	5.8
	58.5		35.6		25.5		49.2		40.0
9	17		38.1		30.0		52.0		2.5
	43.4		42.0		35.6		58.6		33.7
9	18	9	20	9	23	10	0	10	15
	6.3		45.3		41.1		59.0		1.7
	155.3		192.5		151.1		261.1		83.7
	95.3								23.7
9	17	9	20	9	23	10	0	10	14
	19.06		38.50		30.22		52.22		4.74

1865 Apr 26

548	31.96	-0.35	52.55	⁵ 20.94
639	51.96	-0.39	12.53	20.96-8
726	39.48	-0.37	59.90	20.79+8
32 ✓	54.70	-0.35	15.21	20.86-4
37	23.84	-0.36	4.36	20.88
921	38.50	-0.36	58.92	20.78
<u>101</u>	52.22	-0.35	12.68	<u>20.81</u>
446				

740 ^u	20.878	5
941	<u>20.795</u>	2

8
3
4

