1851phase.proj....79T

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B. 8

No. 8

Reduction of Transits

July 8. 1851 to Sept. 4. 1851.

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1851phae.proj...79T

1851. July. 8

a = + 0.21
b = + 0.08
c = + 0.09

Ill. West

N.P. ☆

α Aurigae

		48.0	
		7.4	
		27.4	
		47.3	
		7.1	
		26.5	
5	6	46.2	4
		29.9	
		47.13	
		-2	
5	5	45.13	4

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1851phae.proj...79T

1851. July. 9/10

a = + 0.21
b = + 0.08
c = + 0.09 Ill. West

C. W. 7.
α Tauri

		21.3
		35.5
		49.7
		4.2
		18.3
		32.5
4	25	46.9
		208.4
		4.06
		1.67
4	25	2.39

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1851phae.proj...79T

1851. July. 11

a = + 0.23
b = + 0.08
c = + 0.09

C. W. J.

Ill. West

	α Leonis		α Bootis		α Cor. Bor.		α Herculis		α Ophiuchi	
	50.8	8.5		33.2		1.0		33.4		44.0
+12° 42′		—		47.5		17.0		4[illegible].0		58.3
	50.6	36.5		2.0		32.5		2.2		12.5
	50.4	50.4		16.5		48.1		16.3		26.5
	50.4	4.5		31.2		3.5		30.4		40.4
	50.4	18.6		45.9		19.2		45.0		54.7
9 58	50.3	32.5	14 7	0.5	15 26	34.6	17 5	59.3	17 26	8.9
				176.8		155.9		234.6		245.3
				116.8		335.9		114.6		185.3
		50.48		16.68		47.98		16.37		26.41
		1.67		1.67		1.67		1.67		1.67
9 57		48.81	14 6	15.01	15 25	46.31	17 5	14.70	17 25	24.80

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1851. July. 11

Ill. West

	C. W. 7.															
	4 Sagittarii				μ Sagittarii				Moon IV				α Lyrae			
4.0			22.0				32.5				11.6				26.1	
6.3			37.2				47.0				26.5				43.8	
.5			52.5				2.0				42.4				1.0	
.5			7.6				16.7				57.4				18.2	
.4			22.4				31.3				13.0				36.0	
4.7			37.5				46.2				28.1				54.1	
3.9	17	48	52.3	18	3		1.0	18	22		43.5	18	30		11.9	
5.3			231.5				176.7				222.5				191.1	
5.3			51.5				116.7				402.5				131.1	
.41			7.36				16.67				57.50				18.73	
.67			1.67				1.67				1.67				1.67	
80	17	48	5.69	18	2		15.00	18	21		55.83	18	29		17.06	

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1851phae.proj...79T

1851. July. 11/12

a = +0.23
b = +0.08
c = +0.09

Ill. West

C. W. 7.

γ Ceti			α Ceti			
		16.6			11.5	
		30.4			25.0	
		44.2			39.0	
		58.0			52.6	
		11.6			6.2	
		25.4			19.8	
2	33	39.1	2	52	23.4	18
		225.3			187.5	
		57.90			52.50	
		1.67			1.67	
2	32	56.23	2	51	50.83	

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1851phae.proj...79T

1851. July, 12

a = + 0.22
b = + 0.08
c = + 0.09

Ill. West

C. W. 7.

α Lyrae			β Lyrae		
		24.1			8.3
		42.0			25.0
		59.6			41.2
		16.7			57.6
		34.6			14.0
		52.0			30.8
18	30	9.1	18	42	47.0
		238.1			223.9
		16.87			57.70

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1851phae.proj...79T

1851. July. 13/14

a = + 0.21
b = + 0.08
c = + 0.08

C. W. 7.

Ill. West

α Arietis			γ Ceti			α Ceti			
		51.3			12.3			—	
		36.1			26.1	+3°	30'	48.0 20.5	
		51.2			40.0			48.2 34.5	
		6.2			53.8			48.3 48.3	
		21.0			7.4			48.2 2.0	
		35.8			21.2			48.0 15.5	
1	56	50.5	2	33	35.0	2	52	47.6 28.8	13
		222.1			195.8				
		6.01			53.68				
		1.67			1.67				
1	56	4.34	2	32	52.01	2	51	48.05	13

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1851phae..proj...79T

1851. July. 14

a = + 0.21
b = + 0.08
c = + 0.09

Ill. West

G. W. 7.
α Virginis

		56.2
		10.3
		24.1
		38.2
		52.0
		6.3
13	15	20.0
		207.1
		38.15
		7.67
13	14	36.48

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1851phae.proj...79T

1851. July. 14/15

a = + 0.21
b = + 0.08
c = + 0.09

Ill. West

C. W. 7.

γ Ceti			α Ceti		
		9.6			4.2
		23.3			18.0
		37.0			31.6
		50.9			45.4
		4.7			59.2
		18.3			13.0
2	33	32.0	2	52	26.7
		175.8			198.1
		50.83			45.44
		1.67			1.67
2	32	49.16	2	51	43.77

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1851. July. 16

a = +0.20
b = +0.08
c = +0.09 Ill. West

C. W. 7.

α Bootis			β Libræ		
		19.1			29.3
		33.7			43.3
		48.4			57.0
		3.0			10.9
		17.4			25.0
		32.0			38.9
14	6	46.8	15	6	52.3
		201.4			256.7
		3.06			10.96
		1.67			1.67
14	6	1.39	15	6	8.29

1851phae.proj...79T

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1851. July. 16/17

a = + 0.20
b = + 0.08
c = + 0.09

Ill. West.

C. W. 7.

γ Ceti			α Persei			α Tauri			α Aurigae			
		0.0			45.4			44.8			46.6	
		13.8			6.5			59.0			6.2	
		27.4			27.4			13.0			25.9	
		41.3			48.6			27.4			46.0	
		55.2			9.5			41.5			5.4	
		9.0			30.8			56.0			25.0	
2	33	22.6	3	11	51.5	4	25	10.5	5	3	45.0	2
		169.3			219.7			252.2			200.4	
		41.33			48.53			27.46			45.73	
		1.67			1.67			1.67			1.67	
2	32	39.66	3	10	46.86	4	24	25.79	5	2	44.06	2

1851phae.proj...79T

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1851. July. 17/18

a = +0.19
b = +0.08
c = +0.09 Ill. West

C. W. 7.

γ Ceti			α Ceti			
		50.6				
		4.3	+3°	30′	25.8	58.3
		18.0			25.8	12.0
		31.6			25.8	25.5
		45.5			26.0	39.7
		59.2			26.1	53.5
2	33	13.0	2	52	25.8	7.2
		222.2				
		31.74				
		1.67			25.88	
					−1.67	
2	32	30.07	2	51	24.21	

1851phae.proj...79T

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1851phae.proj...79T

1851. July. 19/20

a = + 0.19
b = + 0.09
c = + 0.07

Ill. Wetr

N. A.

α Tauri			α Aurigae		
		59.0		1.3	
		13.5		21.2	
		27.7		41.1	
		42.0		1.0	
		56.3		20.5	
		10.8		40.1	
4	26	28.25	4	59.7	13
		234.5		184.9	
		42.07		0.70	13
		-2		2	
4	25	40.075	3	58.70	

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1851. July. 20

a = +0.19
b = +0.09
c = +0.07

Ill. Wire

W. C. B.

Polaris S.P. γ Ursæ Maj. α Bootis

	37	35.5			57.0			30.1
	46	22.0			18.8			44.8
	55	10.7			40.0			59.5
	3	59.0			1.5			14.0
	12	49.0			23.0			28.6
	21	36.8			44.3			43.2
13	30	33.5	13	41	5.6	14	7	57.7
		246.5			190.2			277.9
13	4	0.93			1.45			13.98
					-2			-2
			13	40	59.45	14	7	11.96

1851phae.proj....79T

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1851phae.proj...79T

1851. July. 20/21

a = + 0.19
b = + 0.09
c = + 0.07

Ill. West

G. W. 7.

μ Piscium	Moon III	α Arietis	α Cetti
6.4	27.0	27.3	12.8
20.3	41.4	42.2	26.7
34.1	55.4	57.0	40.5
48.0	9.5	11.9	54.4
1.7	23.5	26.8	8.0
15.3	37.0	41.7	21.9
1 21 29.0	1 51 51.3	1 57 56.5	2 53 35.7
154.8	245.1	263.4	200.0
334.8	65.1	83.4	380.0
47.83	9.30	11.91	54.28
-2	-2	-2	-2
1 20 45.83	1 5 7.30	1 57 9.91	2 52 52.28

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1851. July. 21

a = +0.18
b = +0.10
c = +0.07

Ill. West

G. W. T.

α Bootis			ε Bootis		
		35.1			9.6
		49.8			25.2
		4.6			40.8
		19.3			56.4
		33.8			11.6
		48.4			27.0
14	8	3.0	14	37	42.4
		194.0			213.0
		134.0			393.0
		19.14			56.14
		-2			-2
14	7	17.14	14	36	54.14

1851phae.proj....79T

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1851phae.proj...79T

1851. July. 21/22

* Ill. West

a + 0.18
b + 0.10
c + 0.07

C. W. T.																	
α Arietis			γ Cetí			Moon IIO			α Cetí			α Persei					
		31.5			22.9			46.7			17.3			8.3			
		46.4			36.6			1.0			31.1			29.5			
		1.3			50.3			15.1			44.9			50.6			
		16.1			4.0			29.5			58.6			11.9			
		31.0			17.9			43.8			12.4			33.1			
		46.0			31.6			57.8			26.2			54.0			
1	58	0.9	2	34	45.2	2	40	12.0	2	53	39.9	3	13	14.9			13
		173.2			208.5			205.9			230.4			202.3			
		113.2			28.5						410.4			82.3			
		16.17			4.07			29.42			58.63			11.76			
		-2			2.			2			-2			-2			
1	57	14.17	2	34	2.07	2	39	27.42	2	52	56.63	3	12	9.76			13

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1851, July, 22

a = + 0.18
b = + 0.11
c = + 0.07

Ill. Wed

C. W. 7.

α Virginis	α Böotis	β Libræ	α Cor. Bor.	α Serpentis
9.7	39.0	49.5	8.2	46.0
23.8	53.7	3.4	23.8	59.8
37.6	8.2	17.3	39.0	13.6
51.5	23.0	31.2	54.5	27.5
5.6	37.6	45.0	10.2	41.3
19.5	52.0	58.9	25.5	55.1
13 16 33.5	14 7 6.5	15 8 12.8	15 27 40.6	15 36 9.0
181.2	220.0	218.1	201.8	252.3
51.60	22.85	31.15	54.54	27.47
-2	-2	2	-2	-2
13 15 49.60	14 6 20.85	15 7 29.15	15 26 52.54	15 35 25.47

1851phae.proj...79T

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1851, July. 22/23

C. W. T.

Ill. West

a = + 0. 18
b = + 0. 11
c = + 0, 07

α Ceti		α Persei	α Tauri	α Aurigae	α Canis Min
	—	12.0	12.0	14.5	21.0
+3 30	—	33.1	26.3	34.3	34.5
2.5	48.7	54.3	40.5	53.9	48.3
2.4	2.4	15.5	54.8	13.5	2.1
2.4	16.1	36.6	9.4	33.3	16.0
	—	57.6	23.7	53.0	29.7
	—	3 13 18.5	4 26 38.0	5 5 12.8	7 30 43.5
		227.6	204.7	215.3	195.1
	2.43	15.37	54.95	13.61	2.15
	-2	-2	-2	-2	-2
	0.43	3 12 13.37	4 25 52.95	5 4 11.61	7 30 0.15

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1851. July, 23

a = + 0.18
b = + 0.12
c = + 0.07

Ill. West

C. W. T.														
α Virginis			ε Bootis			α² Librae			β Librae			α Cor. Bor.		
		13.0			17.2			30.6			52.8			11.7
		27.0			32.5			44.9			6.5			26.7
		41.1			47.8			59.0			20.4			42.0
		55.0			3.2			13.3			34.5			57.6
		8.9			18.5			27.5			58.0			13.0
		23.0			34.0			41.7			1.8			28.5
13	16	37.3	14	37	45.5	14	41	56.0	15	8	16.0	15	27	43.8
		205.3			198.7			273.0			180.0			
		55.04			2.67			13.28			34.28			57.43
		-2			-2			-2			-2			-2.
13	15	53.04	14	37	0.67	14	41	11.28	15	7	32.28	15	26	55.43

1851phae.proj...79T

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1851phae.proj...79T

1851. July. 23

a = +0.18
b = +0.12
c = +0.07

Ill. West

G. W. 7.
α Serpentis

		49.3
		3.1
		17.0
		30.8
		44.5
		58.5
15	36	12.3
		215.5
		30.79
		−1
15	35	28.79

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1851phae.proj...79T

July 23/24

a = +0.18
b = +0.12
c = +0.07

Ill. West

C. W. 7.

α Aurigae

—	
+45° 50′	—
16.8	57.0
16.7	16.8
17.0	36.7
17.0	56.4
16.9	16.0

16,86

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1851phae.proj...79T

1851 July. 24/25

a = + 0.17
b = + 0.13
c = + 0.06

Ill. Wire

G. W. T.

	α Ceti	α Tauri	ε Orionis	α Canis Min.	β Geminor
	28.0	1.8 19.0	—	28.0	3.6
	41.7	+16° 12′ 2.1 33.5	−1° 18′ 18.6 51.2	41.8	19.6
	55.5	2.1 47.8	18.7 5.0	55.5	35.3
	9.3	—	18.7 18.7	9.4	50.8
	23.2	—	18.4 32.2	23.2	6.4
	37.0	2.2 30.8	18.5 46.0	37.0	22.0
2 53	50.7	4 26 2.0 45.0	5 27 18.7 59.8	7 30 50.6	7 31 37.4
	245.4		1	245.5	175.1
	9.34	2.04	18.60	9.35	59.73
	−2	−2	−2	−2	−2
2 53	7.34	4 26 0.04	5 27 16.60	7 30 7.35	7 34 48.73

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1851. July. 25

Ill. West

a = + 0.16
b = + 0.18
c = + 0.03

G. M. T.

α Leonis	Polaris S.P. (omit)	Polaris S.P. (omit)
23.5	54 35.8 10.3	
37.7	12 55 38.5	13 16 8.5
54.9	88° 30′ 39″.3	88° 30′ 39″.4 19 6.8
6.0		20 32.5
20.0		21 59.3
34.0		23 28.7
9 59 48.0		30 48.2
221.1		
5.87		
-2		
9 59 3.87		

1851phae.proj...79T

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1851phae.proj...79T

1851. July. 25

a = + 0.16
b = + 0.13
c = + 0.07

Ill. East

G.M.T.

		Ursæ Maj.			α Bootis			α² Libræ				β Libræ			α Herculis					
		16.8			50.0			—				0.3			51.9					
		38.4			4.5			−15° 25′ 18.5	50.0			14.4			6.0					
		59.5			19.0			—				28.2			20.2					
		20.8			33.5			—				42.0			34.5					
		42.4			48.3			18.7	33.0			56.0			48.7					
		4.0			3.0			18.6	47.1			10.1			2.9					
13	41	25.3	14	8	17.5	14	42	18.7	1.4	15	8	23.9	17	7	17.3	17				
		207.2			175.8							174.9			181.5					
		21.03			33.68				18.62			42.13			34.50					
		−2			−2				−2			−2			−2					
13	40	19.03	14	7	31.68	14	41		16.62	15	7	40.13	17	6	32.50	17				

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1851. July. 25

Ill. East

C. W. 7.

β Draconis

9			40.0
0			2.4
2			25.0
5			47.6
7			10.4
9			33.0
3	17	26	55.5
5			213.9
0			47.70
			-2
0	17	25	45.70

1851phae.proj....79T

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1851phae.proj...79T

1851. July. 25/26

a = + 0.16
b = + 0.13
c = − 0.07

Ill. East

	W.C.B.				"				"				"				C.W.T.				"				
	Arietis				γ Ceti				β Ursæ Min.				α Persei				α Tauri								
		45.9				37.4			47	17.0				23.4											
		1.0				51.6			48	10.2				44.5			+16°	12	6.1	37.5					
		16.0				4.7			49	2.1				5.5					6.1	51.8					
		31.0				18.5			49	54.3				26.6					6.0	6.0					
		45.8				32.5			50	46.2				47.7					6.0	20.3					
		0.6				46.5			51	38.1				8.8					5.9	34.5					
1	58	15.5	2	35		0.0	2		52	30.5	3	13		30.0	4	26			6.0	48.8					5
		158.8				190.6				198.4				186.5											
		30.83				18.65				54.06				26.64						6.02					
		-2				-2				-2				2						-2					
1	57	28.83	2	34		16.65	2		49	52.06	3	12		24.64	4	26				4.02					5

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July. 25/26 1851.

Ill. East

C.W.T.	α Aquilae	β Orionis	β Tauri	ε Orionis	α Orionis
	25.8	—	—	41.4	8.3
	45.4	~~+28° 29'~~ —	28° 29' —	55.0	22.0
	5.0	+ 8 23 5.9 52.0	36.1 20.5	9.0	36.0
	24.8	5.9 51.9	36.0 36.0	22.6	49.7
	44.5	5.9 19.8	35.8 51.5	36.3	3.4
	4.3	5.8 33.6	36.1 7.4	50.0	17.5
5 5	24.0	47.8	36.2 23.0	5 28 4.0	5 46 31.5
	173.8			218.3	158.4
	24.83	5.87	36.04	22.61	49.77
	-2	-2	-2	-2	-2
5 4	22.83	3.87	34.04	5 27 20.61	5 45 49.77

1851phae.proj...79T

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1851phae.proj...79T

1851. July. 25/26

a = +0.16
b = +0.13
c = −0.07

Ill. East

C. W. 7.

α Canis Maj

35.3
49.5
3.8
18.0
32.4
46.6
6 38 1.0
186.6

18.08
-2
6 37 16.08

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1851. July. 26.

a = +0.17
b = +0.12
c = −0.07

C. W. T.				W. C. B.		Ill. East "				C. W. T.				"		
β Corvi				Polaris S. P.		12 Can. Ven.				η Ursæ Maj				η Boötis		
		—		37	58.2			—			24.8	42.0				37.3
−22°	34′	17.2	47.5	46	48.3	+39°	7′	—		+50°	4′	24.7	3.3			51.8
		17.2	2.3	55	38.5			45.5	27.8			25.1	25.0			6.4
		17.5	17.5	4	29.5			45.4	45.5			25.0	46.4			21.0
		17.2	32.1	13	15.5			45.5	3.2			24.8	7.5			35.4
		17.0	46.8	22	5.3			45.4	20.8	13	41	24.7	29.0			49.8
12	26	17.1	1.7	13	30	12	48	45.8	39.0					13	47	4.5
					245.0											206.2
		17.20		13	4	26.43			45.52			24.85				20.88
		−2							−2			−2				−2
12	25	15.20					12	47	43.52	13	40	22.85		13	46	18.88

1851phae.proj....79T

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1851phae.proj...79T

1851. July. 26

a = +0.17
b = +0.12
c = −0.07

Ill. East

C. W. T.

α Bootis

		53.8
		8.3
		23.0
		37.5
		52.0
		6.8
14	8	21.4
		202.8
		37.54
		2
14	7	35.54

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1851phae.proj...79T

1851. July. 26/27

a = +0.17
b = +0.12
c = −0.07

a = +0.17
b = +0.12
c = +0.06

W.C.B. Polaris	Ill East W.C.B α Arietis	Ill West W.C.B β Tauri
——	49.7	52.5
88° 30′ 39.6″ 47 37.4 0.0	4.5	8.3
55 40.4 51.2	19.4	23.8
4 40.2 38.5	34.5	39.6
13 39.4 27.3	49.3	55.0
22 37.4 13.7	4.2	10.6
1 31 41.9 12.0	1 58 19.	5 16 26.2
	180.6	216.0
39.45	1 57 34.36	39.43
−2	−2	2
1 4 37.45	1 57 32.36	5 15 37.43

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1851phae.proj...79T

1851. July. 27/28

a = + 0. 17
b = + 0. 12
c = + 0. 06

Ill. West

C. W. 7.

α Arietis			γ Ceti			α Ceti			α Persei		
		54.4			45.7			—			31.4
		9.5			59.5	+3° 30′	21.9	54.3			52.8
		24.3			13.2		21.5	7.8			13.8
		39.2			27.0		21.4	21.4			35.0
		54.3			40.7		21.5	35.3			56.2
		9.0			54.6		21.8	49.3			17.0
1	58	24.0	2	35	8.3	2	54 21.8	3.0	3	13	38.0
		214.7			249.0						244.2
		39.24			27.00			21.62			34.89
		2			−2			−2			−2
1	57	37.24	2	34	25.00	2	53	19.62	3	12	32.89

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July 28 1851.

a = +0.17
b = +0.12
c = +0.06

All. West

C.W.T.

	α Tauri	α Aurigae	β Tauri	α Hercules	γ Draconis
	14.2 31.2	34.0	57.5	4.8	59.4
+16° 12	14.6 46.0	54.0	13.1	19.0	21.5
	14.3 0.0	13.7	28.9	33.1	43.4
	14.3 14.3	33.0	44.5	47.4	5.3
	—	53.0	0.0	1.8	27.7
	14.4 43.0	12.6	15.8	15.8	49.9
4 28	14.5 57.3	5 5 32.0	5 16 31.4	17 7 29.9	17 53 11.8
		232.3	191.2	151.8	219.0
	14.38	33.18	44.46	47.40	5.57
	−2	−2	−2	−2	−2
4 28	12.38	5 4 31.18	5 15 42.46	17 6 45.40	17 52 3.57

1851phae.proj....79T

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1851phae.proj...79T

1851. July. 29.

a = +0.16
b = +0.17
c = +0.06

Ill. West

C. W. 7.

α Virginis	α Herculis	β Draconis	γ Draconis	α Lyrae
38.7	10.3	58.4	5.0	3.5
52.7	24.6	21.2	27.0	21.0
6.5	38.8	43.2	49.1	38.5
20.5	53.2	6.1	11.2	56.0
34.4	7.4	28.4	33.5	3.5
48.5	21.6	51.5	55.5	31.0
13 17 2.4	17 7 35.8	17 27 13.5	17 33 17.4	18 31 58.5
203.7	191.7	222.3	198.7	212.0
20.53	53.10	6.04	11.24	56.00
2	-2	-2	2	-2
13 16 18.53	17 6 51.10	17 26 4.04	17 52 9.24	18 30 54.00

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1851. July 29/30

a = +0.16
b = +0.12
c = +0.06

C. W. T.													
α Orionis						η Bootis						β Ursa. Min.	
			—						57.5				—
+7°	22′	9.4	41.7						12.2	+74°	46′		33.0
		9.5	55.7						26.5				24.9
		9.5	9.5						41.3				17.3
		9.6	23.5						55.7				9.2
		9.6	37.3						10.3				1.7
5	46	9.5	51.0	13		47		14	24.7		52		53.6
			167.6						228.2				86.1
			9.52						41.17				17.22
			-2						-2				-2
5	46		7.52	13		46		14	39.17		50		15.22
				1									

1851phae.proj...79T

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1851phae.proj...79T

1851. July. 30

a = +0.16
b = +0.09
c = +0.06

Dd. West

G.W.T.																	
β Libræ			α Cor. Bor.			α Serpentis			α Herculis			γ Draconis					
		24.7			43.2			21.3			16.4			11.0			
		38.6			58.5			35.2			30.5			33.0			
		52.5			14.0			49.0			45.0			55.1			
		6.3			29.5			2.8			59.0			17.3			
		20.2			45.0			16.5			13.4			39.5			
		34.1			0.4			30.4			27.4			1.5			3
15	5	48.0	15	28	16.0	15	36	44.3	17	7	41.5	17	53	23.5			
		224.4			206.6			199.5			233.2			180.9			
		6.34			29.51			2.78			59.03			17.27			
		-2			-2			-2			-2			-2			
15	8	4.34	15	27	27.51	15	36	0.78	17	6	57.03	17	52	15.27			3

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1851phae.proj....79T

1851. July 30/31

a = +0.16
b = +0.09
c = +0.06

Ill. West

	O. W. T. α Persei	α Tauri	β Tauri	ε Orionis	α Orionis
	49.0				
0	10.3	49.0	15.0	48.5 7.2	33.9
0	31.1	0.3	30.4	−1° 18′ 48.4 21.0	47.7
.1	52.3	17.5	46.0	48.6 34.9	1.5
3	13.4	31.9	1.8	48.6 48.6	15.4
.5	34.2	46.3	17.5	48.4 2.2	29.3
5	3 13 55.3	0.5	33.0	—	43.1
5		4 27 14.6	5 16 48.5	—	5 46 57.0
.9	245.6	162.8	192.2		227.9
27	52.23	31.83	1.74	48.50	15.41
	−2	−2	−2	−2	−2
27	3 12 50.23	4 26 29.83	5 15 59.74	46.50	5 46 13.41

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1851phae.proj...79T

1851. Aug. 1

a = +0.16
b = +0.06
c = +0.06

Ill. West

	C.W.T.																							
	η Boötis				α Boötis				β Ur. Min.				β Libræ				α Persei							
			—				25.8				52.3				36.4				0.9					
+19°	9'		—				40.5				44.3				50.4				22.0					
		38.5	24.0				55.2				36.5				4.3				43.1					
		38.4	38.4				9.8				28.9				18.1				4.3					
		38.4	53.0				24.6				21.2				32.0				25.4					
		38.3	7.4				39.0				13.4				46.0				46.5					
13	47	38.4	22.0	14	8		53.5	14	53		5.0	15	8		59.8	3	14		7.4				4	
							248.4				201.6				247.0				149.6					
		38.40					9.77				28.80				18.14				4.23					
		−2					−2				−2				−2				−2					
13	46	36.40		14	8		7.77	14	50		26.80	15	8		16.14		13		2.23				4	

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1851. Aug. 1/2

a = +0.14
b = +0.06
c = +0.04

Ill. West

C. W. T.																	
α Tauri			α Aurigae			β Orionis				β Tauri			δ Orionis		
		0.8			3.5			—			26.9			3.7	
		15.1			23.4	-8	23	—			42.5			17.5	
		29.4			43.0			43.9	30.0		58.0			31.3	
		43.8			2.8			43.9	43.9		13.8			45.0	
		58.0			22.5			43.6	57.5		29.5			58.9	
		12.4			42.0			43.6	11.4		45.0			12.6	
4	27	26.6	5	6	1.5	5	7	43.7	25.8	5	17	0.5	5	24	26.0	
		186.1			138.7						216.2			190.0	
		43.73			2.67			43.74			13.74			45.00	
		-2			-2			-2			-2			-2	
4	26	41.73	5	5	0.67	5	6	41.74		5	16	11.74	5	23	43.00	

1851phae.proj....79T

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1851phae.proj...79T

1851. Aug. 1/2.

a = + 0. 14
b = + 0. 06
c = + 0. 04

Ill. Wire

C. W. 7.

ε Orionis			α Orionis			α Canis Maj		
		19.0			—			13.1
		33.0	+7° 22′		—			27.4
		46.8		27.7	13.9			41.7
		0.4		27.5	27.5			55.9
		14.2		27.5	41.4			10.4
		28.0		27.7	55.4			24.6
5	28	41.6	5 47	27.5	9.0	6	38	38.9
		183.0						212.0
		0.43			27.58			56.00
		-2			-2			-2
5	27	58.43	5	46	25.58	6	37	54.00

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1851. Aug. 2

a = +0.13
b = +0.06
c = +0.04

Ill. West

C.W.T.

Polaris S.P.	α Virginis	η Ursæ Maj	η Boötis	α Boötis
—	2.5	59.0	15.4	32.0
12 47 13.6 36.5	16.4	20.4	30.0	46.4
88 30 41.0 56 12.5 23.4	30.5	41.5	44.5	1.2
5 13.7 12.0	44.6	3.0	59.0	15.9
14 12.7 0.5	58.4	24.5	13.5	30.5
22 16.0 51.5	12.5	45.8	28.0	45.0
—	13 17 26.4	13 42 7.0	13 47 42.5	14 8 59.4
	191.3	201.2	232.9	230.4
	13.70	44.47	3.03	58.98	15.77
	−2.0	−2	−2	−2	−2
12 5 11.70	42.47	13 41 1.03	13 46 56.98	14 8 13.77

1851phae.proj...79T

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1851phae.proj...79T

1851. Aug. 2

a = +0.13
b = +0.06
c = −0.05

Ill. East

C. N. 7.

α Cor. Bor.	α Serpentis	β Scorpii	δ Ophiuchi	2 Urs Min
1.4	39.4	28.4	16.5	—
16.5	53.0	43.0	30.0	82° 16′ 29.0
32.0	7.0	57.4	44.0	11.3
47.5	21.0	12.0	57.5	52.2
3.0	34.5	26.5	11.3	36.0
18.4	48.5	41.0	25.3	17.0
15 28 34.0	15 37 2.4	15 56 55.8	16 6 39.0	—
152.8	205.8	264.1	223.6	Mean 53.10
				Corr. + 0.11
47.54	20.83	12.01	57.66	53.21
-2	-2	-2	-2	-2
15 27 45.54	15 36 18.83	15 56 10.01	16 5 55.66	51.21

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1851. Aug. 2

Ill. East

		C. W. T.			"	
		α Herculis			β Draconis	
			34.5			23.0
.0			48.4			45.3
.3			2.6			7.6
.2			17.0			30.5
.0			31.0			53.0
.0			45.3			15.5
		17 7	59.6	17	27	38.0
10			238.4			212.9
11						
21			16.91			30.41
			-2			-2
21		17 7	14.91	17	26	28.41

1851phae.proj....79T

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1851phae.proj...79T

1851. Aug. 3/4

a = + 0.12
b = + 0.07
c = − 0.05

Ill. East

C. W. T.		C. W. T.	
α Tauri		α Aurigae	
	—		—
16° 12′	—	+45° 24′	34.5
	54.840.5		54.0
	54.954.9		13.5
	54.7 9.0		33.4
	54.823.4		53.1
4 27	54.837.8		—
		Mean	13.70
		Corr.	+ 0.02
	54.84		13.72
	−2		−2
4 26	52.84		13.72

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1851. Aug. 5

a = +0.12
b = +0.08
c = −0.07

	Ill. East						Ill. West	
C. W. T.								
	γ Ursæ Maj	Polaris S.P	γ Ursæ Maj	γ Boötis	α Boötis
	25.9	12 38 27,2 56.5	15.8	32.3	48.5
	49.5	47 26,6 50.5	37.1	46.5	3.0
	13.4 88° 30′ 37″,0	56 29,2 41.0	38.5	1.0	17.6
	37.5	—	19.5	15.6	32.3
	0.9	14 27,7 17.0	41.0	30.3	47.0
	24.5	23 30,5 8.3	2.4	45.0	1.4
11 46	48.3	13 31 32,0 58.0	13 42 24.0	13 47 59.5	14 9 16.0
	200.0		198.4 (7.3)	230.2	165.6
	260.0		118.3	110.2	225.8
	37.14	28,87	19.77 (6.90)	15.74	32.26
	−2	−2	−2	−2	−2
11 45	35.14	13 5 26,87	13 41 17.77 (4.90)	13 47 13.74	14 8 30.26

1851phae.proj...79T

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1851phae.proj...79T

1851. Aug. 5

a = + 0.12
b = + 0.09
c = + 0.21

Ill. West

C.W.T.

ε Bootis			α² Librae			β Ur. Min.			β Librae			α Cor. Bor.		
		22.8			37.0			13.6			59.2			17.1
		38.5			51.3			6.5			13.2			33.0
		54.0			5.4			58.6			27.0			48.5
		9.5			19.5			51.0			40.9			4.0
		25.0			33.8			43.0			54.8			19.4
		40.4			48.0			35.3			8.7			34.9
14	38	56.9	14	43	2.2	14	53	27.0	15	9	22.5	15	28	50.0
		246.1			197.2			235.0			226.3			207.3
		66.1			137.2			354.0			246.3			27.3
		9.43			19.60			50.71			40.90			3.90
		-2			-2			2			-2			-2
14	38	7.43	14	42	17.60	14	50	48.71	15	8	38.90	15	28	1.90

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1851. Aug. 5

Ill. West

C.W.T.	α Serpentis	o Libræ	δ Ophiuchi	Moon IV	χ Ophiuchi
.1	55.5	19.4	33.0	53.5	22.0
.0	9.4	34.0	46.5	8.5	36.6
.5	23.3	48.0	0.4	23.5	51.0
.0	37.0	2.3	14.0	38.0	5.5
.4	51.0	16.8	27.9	52.6	20.0
.9	4.9	31.0	41.5	7.5	34.5
.0	15 37 18.7	15 45 45.5	16 6 55.5	16 15 22.0	16 18 48.9
.3	199.8	197.0	218.~~6~~ 8	205.~~1~~ 6	216.5
.3	259.8	17.0	98.8	265.6	38.5
90	37.11	2.43	14.~~09~~ 11	37.~~87~~ 94	5.50
	-2	-2	-2	-2	-2
.0	15 36 35.11	15 45 0.43	16 6 12.~~09~~ 11	16 14 35.~~87~~ 94	16 18 3.50

1851phae.proj....79T

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1851. Aug. 5

a = +0.13
b = +0.10
c = +0.22

C. N. T.			"			Ill. West W.C.B.			W.C.B.			"		
ρ Ophiuchi			α Herculis			γ Draconis			δ Ursa Min.			β Lyrae		
		36.0			51.0			45.0	8	13.6	38.5			28.4
		50.4			5.2			7.7	12	16.3	33.0			44.5
		4.5			19.5			29.5	86 36 8.1		———			1.0
		18.9			33.5			51.5	20	14.7	15.5			17.5
		33.0			47.4			13.8	24	14.0	7.3			34.2
		47.5			1.8			35.6	27	14.35	8.3			50.0
16	23	1.6	17	8	16.0	17	53	57.2	31	13.0	48.0	18	45	6.5
		191.9			174.4			240.3						182.1
		131.9			234.4			360.3						122.1
		18.84			33.48			51.47			13.82			17.44
		-2			-2			-2			-2			-2
16	22	16.84	17	7	21.48	17	52	49.47	18	20	11.82	18	44	15.44

1851phae.proj...79T

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1851. Aug. 5/6.

a = +0.13
b = +0.10
c = +0.22

Ill. West

	W.C.B.			C.W.T.			W.C.B.			C.W.T.	
	Polaris		o Ceti			α Arietis			β Ursæ Minor		α Persei
.4	88° 30′ 41″.5	—		36.4		46.2	48		17.6		23.0
.5	0 47	32.0	55.0	50.5		1.0	49		9.6		44.3
.0	56	31.0	42.5	4.7		16.0	50		2.2		5.4
.5	5	32.8	35.5	18.4		31.0	50		54.3		26.5
.2	14	29.8	19.5	32.7		45.8	51		46.5		47.5
.0	23	32.3	11.0	46.0		0.7	52		38.8		8.6
.5		—	1 17	0.0	1 59	15.6	2 53		31.0	3 14	29.5
1				188.7		156.3			20.0		184.8
44	5	31.78		18.38		30.90	50		54.29		26.40
		−2		−2		−2			−2		−2
44	5	29.78	1 16	16.38	1 58	28.90	2 50		52.29	3 13	24.40

1851phae.proj...79T

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1851phae.proj...79T

1851. Aug. 6

a = + 0.13
b = + 0.10
c = + 0.22

Ill. West

N. C. B.																									
Polaris S.p.								α Virginis						α Bootis						β Ur. Min.				C. N. 7. β Libra			
			—							—						53.6				48		18.8				4.7	
88°	30′	41.7″	—					−10°	23′	—						8.5				49		11.4				18.8	
			—							—						23.2				50		3.8				32.7	
13	5		47.						6.3	6.3						37.5				50		56.0				46.5	
			—						6.5	20.5						52.2				51		48.3				0.4	
			—						6.6	34.5						7.0				52		40.5				14.6	
			—					13	17	6.6	48.4			14	9	21.5				53		32.7	15	9		28.0	15
																203.5						211.5				145.7	
																263.5						391.5				325.7	
			49.70							6.50						37.64				50		55.93				46.53	
			−2							−2						−2										−2	
13	5		47.70					13	17	4.50				14	8	35.64							15	8		44.53	15

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1851phae.proj....79T

1851. Aug. 6

a = + 0.13
b = + 0.10
c = + 0.22

Ill. West

	C. W. 7. β Scorpii			δ Ophiuchi			κ Ophiuchi			Moon 10			θ Ophiuchi		
7			50.4			38.3			27.9			31.5			54.4
8			5.0			52.0			43.0			46.5			9.5
7			19.5			5.9			57.0			1.4			24.8
.5			34.2			19.8			11.4			16.3			39.8
4			48.9			33.6			25.5			31.4			55.0
6			3.4			47.3			40.0			46.6			10.0
0	15	57	17.8	16	7	0.9	16	18	54.5	17	11	1.7	17	13	25.0
.7			179.2			197.8			259.3			175.4			218.5
7			239.2			137.8			79.3			115.4			278.5
53			34.17			19.68			11.33			16.48			39.78
			-2			-2			-2			-2			-2
53	15	56	32.17	16	6	17.68	16	18	9.33	17	10	14.48	17	12	37.78

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1851phae.proj...79T

1851. Aug. 6

a = +0.13
b = +0.10
c = +0.22

Ill. West.

G. W. T.

b Ophiuchi			α Ophiuchi			γ Draconis		
		19.0			6.9			51.0
		34.4			21.0			13.0
		49.5			35.0			38.3
		4.5			49.0			57.3
		19.6			3.3			19.4
		34.5			17.4			41.5
17	17	49.4	17	28	31.5	17	54	3.5
		210.9			164.1			221.0
		30.9			344.1			401.0
		4.41			49.15			57.28
		-2			-2			-2
17	17	2.41	17	27	47.15	17	53	55.28

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1851phae.proj....79T

1851. Aug 6/7

a = + 0.14
b = + 0.10
c = + 0.22

Ill. West

C. W. T.

α Aurigae		β Orionis		β Tauri		δ Orionis		ε Orionis	
	31.5		—		55.0		31.5		47.4
	51.4	−8° 23′	—		10.8		45.8		1.2
	11.1	11.9	58.0		26.6		59.5		14.8
	31.0	12.0	12.0		42.0		13.0		28.5
	50.6	12.1	26.0		57.6		26.9		42.2
	10.5	12.1	39.9		13.5		40.5		55.9
5 6	29.9	5 7	12.0 53.6	5 17	29.0	5 24	54.0	5 29	9.6
	216.0				234.5		271.2		199.6
	30.86		12.02		42.07		13.03		28.51
	−2		−2		−2		−2		−2
5 5	28.86	5 7	10.02	5 16	40.07	5 24	11.03	5 28	26.51

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1851phae.proj...79T

1851. Aug. 6/7

a = + 0.14
b = + 0.10
c = + 0.22

Ol. West

C. W. 7.
α Orionis

		14.2
		28.0
		41.9
		55.7
		9.5
		23.3
5	47	37.0
		209.6
		55.66
		-2
5	46	53.66

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1851. Aug. 7/8

a = +0.15
b = +0.11
c = −0.08

Ill. West

G. M. T.	α Tauri	α Aurigae	β Tauri	δ Orionis	ε Orionis
	34.4	37.2	0.5	37.2	52.7
	48.6	57.0	16.1	50.8	6.5
	3.0	16.6	31.8	4.5	20.3
	17.2	36.4	47.5	18.4	34.0
	31.7	55.8	3.0	32.1	47.7
	46.0	15.5	18.5	46.0	1.3
4 28	0.2	5 6 35.3	5 17 34.0	5 24 59.6	5 29 15.1
	181.1	253.8	151.4	248.6	177.6
	17.30	36.26	47.34	18.37	33.94
	−2	−2	−2	−2	−2
4 27	15.30	5 5 34.26	5 16 45.34	5 24 16.37	5 28 31.94

1851phae.proj...79T

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1851phae.proj...79T

1851. Aug. 8

a = + 0.17
b = + 0.11
c = + 0.04

Ill. East

C. W. T.														
μ Sagittarii			λ Sagittarii			α Pegasi			β Lyrae			5 Aquilae		
		6.8			0.8			59.5			45.0		33.3	5.0
		21.5			16.0			17.4			1.3	+13° 39′	33.5	19.3
		36.2			31.2			35.3			17.8		33.5	33.5
		51.0			46.4			53.2			34.3		33.3	47.4
		5.6			1.5			10.6			51.0		33.0	1.2
		20.5			16.8			28.0			7.5	18	59 33.3	15.8
18	5	35.1	18	19	32.0	18	32	45.6	18	45	24.0			10.4
		176.7			144.7			249.6			180.9			
		356.7			324.7			369.6			240.9			
		50.96			46.38			52.80			34.41			33.32
		-2			-2			-2			-2			-2
18	4	48.96	18	18	44.38	18	31	50.80	18	44	32.41	18	58	31.32

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1851phae.proj...79T

1851. Aug 8

Ill. East

C. W. T.

π Sagittarii				Moon II			ρ' Sagittarii		
		54.1	10.0			11.5			18.4
-21°	15'	54.1	24.6			26.2			32.9
		54.2	39.4			41.5			47.5
19	0	54.0	54.0			57.0 / 12.1			1.8
			—			27.4			16.2
			—						30.5
			—	19	2	42.8	19	13	45.0
						218.5			192.3
						398.5			13.3
			54.10			56.93			1.76
			-2			2			-2
19	0		52.10	19	1	54.93	19	12	59.76

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1851phae.proj...79T

1851. Aug. 9.

a = + 0.17
b = + 0.11
c = + 0.05

Ill. East

C. N. 7.															
δ Aquilae			" π Sagittarii			" ρ Sagittarii			" δ Aquilae			" γ Aquilae			
		57.4			16.1			24.7			24.0			35.0	
		11.5			30.8			39.2			37.6			48.9	
		25.4			45.5			53.5			51.5			2.8	
		39.5			0.0			8.0			5.0			16.5	
		53.8			15.0			22.4			18.9			30.7	
		8.0			29.8			36.9			32.6			44.5	
18	59	22.2	14	1	44.5	19	13	51.0	19	18	46.5	19	39	58.9	19
		217.8			181.7			236.0			216.1			237.6	
		277.8			01.7			56.0			36.1			117.6	
		39.68			0.24			8.00			5.16			16.80	
		-2			-2			-2			-2			-2	
18	58	37.68	14	0	58.24	19	13	6.00	19	18	3.16	19	39	14.80	19

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1851. Aug. 9

Ills East

C.W.T.	α Aquilae	β Aquilae	Moon TU	α² Capricorn	β Capricorn
	55.3	24.7	52.9	11.5	2.0
	9.0	38.2	8.2	25.5	16.0
	23.1	52.0	23.6	39.4	30.3
	37.0	6.0	38.5	53.5	44.7
	50.9	20.0	53.5	7.4	59.0
	5.0	33.6	8.9	21.5	13.1
	19 44 19.0	19 48 47.5	19 57 24.0	20 10 35.8	20 13 27.4
	199.3	222.0	209.6	194.6	192.5
	259.3	420	269.6	374.6	3125
	37.04	6.00	38.51	53.51	44.64
	-2	-2	-2	-2	-2
	19 43 35.04	19 48 4.00	19 56 36.51	20 9 51.51	20 12 42.64

1851phae_proj...79T

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1851phae.proj...79T

Aug. 9. 1851.

a = + 0.17
b = + 0.11
c = + 0.05

Ill. Ear.

G. M. T.

ρ Capricor

		45.2
		59.4
		13.5
		28.0
		42.4
		57.0
20	21	11.4
		256.9
		196.9
		28.13
		-2
20	20	26.13

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1851. Aug 10/11

a = + 0.14
b = + 0.11
c = + 0.05

Ill. E arr

W. P. B.		C. N. 7.	"	"	"
β Ms Mind P.		α Tauri	α Aurigae	β Tauri	ε Orionis
49	24.4 40.0	54.2	57.0	20.3	12.3
74° 46′ 50	24.1 31.9	8.3	16.5	35.9	26.0
51	23.9 24.0	22.5	35.9	51.5	39.7
52	23.6 16.0	36.9	55.5	7.0	53.5
53	23.4 8.0	51.3	15.9	22.5	7.2
14 54	23.4 0.0	5.5	34.9	38.4	20.8
		14 28 19.8	5 6 54.8	5 17 54.0	5 29 34.7
		198.5	270.0	229.6	194.2
	23.80	36.93	55.71	7.09	53.46
	−2	−2	−2	−2	−2
14 57.	21.80	4 27 34.93	5 5 53.71	5 17 5.09	5 28 51.46

1851phae..proj...79T

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1851phae.proj...79T

1851. Aug. 19/.1

a = +0.14
b = +0.11
c = +0.05

Ill. Eye

C. W. T.

α Orionis

		39.0
		52.9
		6.8
		20.6
		34.5
		48.3
5	48	2.2
		204.3
		20.61
5		-2
5	47	18.61

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Aug. 11/12 1851.

a = + 0.14
b = + 0.11
c = + 0.07

Ill. Part

C. W. T.

β Tauri			ζ Orionis			α Orionis		
		—			2.8			45.3
+28°	29'	13.3 42.0			16.6			59.0
		13.2 57.5			30.3			12.8
		13.2 13.1			44.0			26.6
		13.2 28.8			57.8			40.4
		13.1 44.3			11.5			54.5
5	18	13.1 0.0	5	25	25.3	5	48	8.4
					188.3			247.0
		13.18			44.04			26.71
		-2			-2			-2
5	17	11.18	5	24	42.04	5	47	24.71

1851phae.proj...79T

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1851phae.proj...79T

1851. Aug. 12

Ill. East

a = + 0.14
b = + 0.12
c = + 0.06

C.W.T.

α Lyrae			β Lyrae		
		25.8			10.8
		43.5			27.0
		1.0			43.5
		18.8			0.0
		36.5			16.4
		54.0			33.0
18	33	11.6	18	45	49.2
		191.3			179.9
		18.76			59.99
		-2			-2
18	32	16.76	18	44	57.99

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1851. Aug. 13

a = + 0.14
b = + 0.12
c = + 0.06

Ill. East

C. W. 7.

α Ophiuchi			γ Draconis			α Lyrae			β Lyrae		
		49.5			33.8			32.0			16.8
		3.4			55.5			49.3			33.0
		17.6			17.5			6.6			49.5
		31.9			39.4			24.4			5.9
		46.0			1.8			42.3			22.4
		0.0			23.9			59.8			38.6
17	29	14.3	17	54	46.0	18	33	17.4	18	45	55.0
		162.7			~~217.9~~			231.8			221.2
					217.9						
		31.81			39.70			24.54			5.96
		-2			-2			-2			-2
17	28	29.81	17	53	37.70	18	32	22.54	18	45	3.96

1851phae.proj...79T

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1851phae.proj...79T

1851. Aug. 14

a = + 0.14
b = + 0.14
c = + 0.06

Ill. East

C. N. 7.

α Bootis			ε Bootis			β Scorpii			β Draconis			γ Draconis			
		43.3			17.5			39.7			34.4			40.0	
		57.7			33.0			54.2			56.0			2.0	
		12.3			48.5			8.7			18.8			24.0	
		26.9			3.9			23.4			41.5			45.9	
		41.5			19.4			38.0			4.0			8.1	
		56.2			35.0			52.4			26.5			30.3	
14	10	10.8	14	39	50.5	15	58	7.0	17	28	49.0	17	54	52.6	4
		248.7			207.8			223.4			230.2			202.9	
		26.96			3.97			23.31			41.46			46.13	
		-2			2			2			2			2	
14	9	24.96	14	39	1.97	15	57	21.31	17	27	39.46	17	53	44.13	4

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1851phae.proj...79T

1851. Aug. 14/15

a = +0.14
b = +0.14
c = +0.06

Ill. East

C. N. 7.

	ζ Tauri			β Tauri			α Orionis		
			19.4			4.5			45.4
			33.5			18.4			1.0
			47.9			32.0			16.5
9			2.1			45.8			32.0
1			16.3			59.7			47.6
3			30.8			13.5			3.5
5	4	28	45.0	5	48	27.4	5	18	19.0
9			195.0			201.3			165.0
13			2.14			46.90			32.14
			-2			-2			2
3	4	28	0.14	5	47	43.90	5	17	30.14

These stars are interchanged

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1851. Aug. 15

a = + 0. 14
b = + 0. 15
c = + 0. 07

Ill. East

C. N. 7.												
Polaris S. P.			β Ur. Min.			α² Librae			α Cor. Bor.			
		—		49	16.0			38.8			19.5	
12	49	44.5	7.0	50	7.5			53.0			35.0	
38 30	44.0	57	47.3 58.5	51	0.0			7.0			50.4	
	6	44.8	46.5	51	52.0			21.3			3.8	
	15	45.1	35.0	52	44.5			35.5			21.3	
	24	42.3	21.5	53	36.5			49.8			36.5	
		—		14 54	29.0	14	44	4.0	15	29	52.0	
					185.5						220.5	
		44.80			52.21			21.34			5.78	
		2			-2			-2			-2	
13	6	42.80		14 51	50.21	14	44	19.34	15	29	3.78	

1851phae.proj...79T

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1851. Aug. 15/16

a = +0.14
b = +0.15
c = +0.07

~~W. West~~

C.W.T.

α Aurigæ			ε Orionis			α Orionis		
		28.5			44.3			11.0
		48.0			57.9			24.6
		7.7			11.5			38.5
		27.5			25.2			52.3
		47.2			39.0			6.3
		7.4			52.8			20.0
5	7	27.0	5	30	6.5	5	48	33.9
		193.3			237.2			186.6
		27.61			25.17			52.37
		-2			-2			-2
5	6	25.61	5	29	23.17	5	47	50.37

1851phae.proj...79T

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1851phae.proj...79T

1851. Aug. 17/18

a = +0.13
b = +0.15
c = −0.11

Ill. West

C. W. T.														
β Tauri			δ Orionis				α Orionis				ε Orionis			
		5.6			39.1	57.8				—			39.1	57.8
		21.4	−0°	25′	38.9	11.5	+7°	22′	6.2	38.5	−1°	18′	38.9	11.5
		37.0			39.0	25.3			6.3	52.5			39.0	25.3
		52.5			39.0	39.0			6.4	6.4			39.0	39.0
		8.0			39.0	52.8			6.1	20.0			39.0	52.8
		23.7				—			6.3	34.0				—
5	18	39.4	5	30	39.1	20.3	5	48	6.5	48.0	5	30	39.1	20.3
		187.6												
		52.51				39.02				6.30				39.02
		−2				−2				−2				−2
5	17	50.51	5	29		37.02	5	48		4.30	5	29		37.02

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1851phae.proj....79T

1851. Aug. 18

a = +0.13
b = +0.15
c = −0.11

Ill West

C. W. 7.
α Serpentis

		17.5
		31.5
		45.3
		58.9
		13.0
		26.9
15	38	40.8
		239.9
		59.13
		−2
15	37	57.13

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1851phae.proj...79T

1851. Aug. 18/19

a = +0.13
b = +0.14
c = −0.11

Ill. West

C. W. T.

α Aurigae			β Tauri			δ Orionis			ε Orionis			α Orionis		
		49.0			12.6			49.2			4.8			31.3
		9.0			28.5			3.0			18.7			45.4
		28.7			44.0			17.0			32.3			59.3
		48.5		59.6?	49.6?			30.6			46.0			13.3
		8.4			15.4			44.4			59.9			27.0
		28.0			30.9			58.1			13.6			41.0
5	7	47.6	5	18	46.5	5	26	11.9	5	30	27.2	5	48	54.7
		219.2			227.5			214.2			202.5			272.0
		48.45			49.64			30.60			46.07			13.14
		-2			-2			-2			-2			-2
5	6	46.45	5	17	47.64	5	25	28.60	5	29	44.07	5	48	11.14

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1851. Aug. 19/20

a = + 0.13
b = + 0.13
c = − 0.11

Ill. West

C. W. T.

	α Persei			ξ Tauri			η Tauri			Moon II U			α Tauri		
			53.9			38.0			7.0			13.0			53.6
			15.0			52.0			22.5			28.0			8.0
			36.0			6.0			37.3			42.8			22.0
			57.0			19.9			52.4			57.4			36.3
			18.0			33.8			7.1			11.9			50.8
			39.5			47.7			22.0			26.5			5.0
	3	16	0.6	3	21	1.5	3	40	37.5	4	4	41.3	4	29	19.2
			220.0			198.9			185.8			220.9			194.9
			400.0			136.9			365.8			400.9			254.9
			57.14			19.84			52.25			57.27			36.41
			-2			-2			-2			-2			-2
4	3	14	55.14	3	20	17.84	3	39	50.25	4	3	55.27	4	28	34.41

1851phae.proj....79T

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1851phae.proj...79T

1851. Aug. 19/20

a = +0.13
b = +0.13
c = −0.11

Ill. West

C.W.T.											
β Tauri			δ Orionis			ε Orionis			α Orionis		
		19.6			37.7 56.4			11.8			38.5
		35.4	−0°	25′	37.5 10.0			25.5			52.5
		51.0			37.6 23.9			39.4			6.4
		6.5			37.5 37.5			53.2			20.3
		21.9			—			6.9			34.0
		37.8			37.5 5.0			20.6			47.8
5	18	53.5	5	26	37.6 18.8	5	30	34.1	5	49	1.5
		225.7						191.5			201.0
		45.7						371.5			141.0
		6.53			37.57			53.07			20.14
		-2			−2			-2			-2
5	18	4.53	5	25	35.57	5	29	51.07	5	48	18.14

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1851phae.proj....79T

1851 Aug. 20/21

a = +0.14
b = +0.12
c = −0.11

Ill. West

C. W. 7.

α² Geminor			β¹¹ Geminor		
		37.8			9.9
		54.0			23.9
		10.0			37.4
		26.0			51.4
		42.3			5.0
		58.8			18.8
7	27	15.0	7	33	32.6
		243.9			179.0
		26.27			51.29
		−2			−2
7	26	24.27	7	32	49.29

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1851phae.proj...79T

1851. Aug. 22/23

a = + 0.14
b = + 0.10
c = − 0.10

Ill. West

C. W. 7.
β Orionis

		16.0
		30.0
		43.9
		57.8
		11.7
		25.6
5	9	39.5
		224.5
		57.78
		−2
5	8	55.78

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1851 Aug. 24/25

a = +0.15
b = +0.08
c = −0.10

Ill. West

C. W. T.

α Aurigæ			β Tauri			δ Orionis			ε Orionis		
		31.0			54.0			30.4			46.0
		50.5			9.5			44.3			59.8
		10.0			24.9			58.0			13.3
		29.8			40.8			11.8			27.0
		49.5			56.5			25.5			41.0
		9.2			12.0			39.1			54.6
5	8	28.9	5	18	27.5	5	26	52.9	5	31	8.3
		208.9			225.2			262.0			250.0
		29.83			40.74			11.71			27.14
		2			2			-2			-2
5	7	27.83	5	18	38.74	5	26	9.71	5	30	25.14

1851phae.proj....791

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1851phae.proj...79T

1851. Aug 26

a = + 0.15
b = + 0.08
e = − 0.10

Ill. West

C. W. T.

α Lyrae			α Cygni		
		0.0			24.0
		17.8			43.0
		35.4			2.5
		53.0			22.0
		10.7			41.2
		28.5			1.0
18	34	46.0	20	39	20.0
		191.4			154.0
		53.06			22.00
		-2			-2
18	33	51.06	20	38	20.00

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1851phae.proj....791

1851. Aug. 26/27

a = + 0.15
b = + 0.08
c = − 0.10

Ill. West

O. W. T.		O. W. T.	
α Orionis		β Geminor	
	26.9		52.8
	40.7		8.5
	54.5		24.0
	8.4		39.5
	22.2		55.4
	36.0		11.0
5 49	49.97	36	26.5
	238.6		217.7
	8.37		39.67
	-2		-2
5 49	6.37 7	35	37.67

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1851phae.proj...79T

1851. Aug. 27.

a = + 0.11
b = + 0.08
c = − 0.09

Ill. West

C. W. T.

ε Bootis			β Librae			α Cor. Bor.		
		10.4			46.5			4.5
		25.8			0.4			20.0
		41.2			14.6			35.5
		56.6			28.5			51.0
		12.4			42.3			6.5
		28.0			56.0	15	28	22.0
14	38	43.4	15	9	10.0			37.3
		217.8			148.3			176.8
		56.83			28.33			50.97
		-2			-2			-2
14	37	54.83	15	8	26.33	15	27	48.97

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1851phae.proj.1701

1851. Aug. 27/28

a = + 0.10
b = + 0.08
c = − 0.09

Ill. West

C. W. 7.

~~Aug. 28~~ "

α Ceti ~~β Librae~~

		16.5			
		30.5	−8° 50		58.9
		44.4	See next		13.9
		58.3	page		26.7
		12.0			40.5
		25.7			54.5
2	54	39.5	15	9	8.4
		226.9			
		58.13			
		−2			
2	53	56.13			

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1851phae.proj...79T

1851. Aug. 28

a = +0.09
b = +0.09
c = −0.07

Ill. West

C. W. 7.

β Libræ			α Cor. Bor.			γ Aquilæ			α Aquilæ		
		—			—			—			17.0
		26.7 58.9			49.3 18.5			38.2 10.3			30.8
−8°	50	26.8 12.9	+27°	13	49.4 34.0	+10°	15	38.4 24.5			44.6
		26.7 26.7			49.4 49.5			38.4 38.4			58.5
		26.6 40.5			49.5 5.0			38.2 52.2			12.4
		26.7 54.5			49.5 20.4			38.2 6.0			26.3
15	9	26.8 8.4	15	28	49.4 35.7	19	39	38.2 20.0	19	43	40.0
											229.6
		26.72			49.42			38.27			58.51
		−2			−2			−2			−2
15	8	24.72	15	27	47.42	19	38	36.27	19	42	56.51

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1851. Aug. 28/29

a = + 0.09
b = + 0.09
c = − 0.07

Ill. West

C. W. T.			"			"		
α² Geminor			α Canis Min			β Geminor		
		41.5			13.5			49.5
		58.0			27.4			5.5
		14.0			41.3			21.0
		30.3			55.1			36.7
		46.5			9.0			52.3
		2.5			22.6			7.9
7	25	19.0	7	31	36.5	7	36	23.5
		211.8			205.4			196.4
		30.26			58.06			36.63
		2			-2			-2
7	24	28.26	7	30	53.06	7	35	34.63

1851phae.proj....79T

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1851phae.proj...79T

1851. Aug. 29.

a = + 0.07
b = + 0.09
c = − 0.05

Dell. West

C. W. 7.			"			"		
α Lyrae			γ Aquilae			α Aquilae		
		26.6			54.3			18.0
		44.0			8.3			28.9
		1.2			22.4			42.6
		19.0			36.1			56.5
		36.5			50.2			10.4
		54.0			4.2			24.5
18	32	11.7	19	39	18.1	19	43	38.3
		193.0			193.6			216.2
		19.00			36.23			56.60
		-2			-2			-2
18	31	17.00	19	38	34.23	19	42	54.60

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1851. Aug. 29/30

a = + 0.06
b = + 0.10
c = − 0.05

C. W. 7. Ill. West

α Orionis	α Canis Min	β Geminor.
48.5	11.8	47.4
2.3	28.5	3.3
16.0	39.4	18.9
29.8	53.1	34.5
43.7	6.8	50.0
57.6	20.5	5.8
5 47 11.5	7 31 34.4	7 36 21.4
209.4	191.5	181.3
29.91	53.07	34.47
-2	-2	-2
5 46 27.91	7 30 51.07	7 35 32.47

1851phae.proj...79T

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1851phae.proj...79T

1851. Aug. 30/31

a = +0.05
b = +0.10
c = −0.05

Ill. West

C. W. T.
α Orionis

46.0
0.1
14.3
27.8
42.0
55.5
5 47 9.3
195.0

27.86
−2
5 46 25.86

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1851phae.proj..79T

1851. Aug. 31/32

a = +0.05
b = +0.10
c = −0.05

Ill. West

C. W. T.

α Aurigae		β Orionis		β Tauri		ε Orionis		α Orionis	
1.6	22.2		—		24.7		17.1		—
+45° 50′ 1.0	41.3	−8° 23′	—		40.5		31.0	+7° 22′	25.7 58.0
0.9	1.0		41.9 28.0		56.1		44.7		25.5 11.7
1.1	20.8		42.0 42.0		12.0		58.5		25.5 25.5
1.0	20.4		42.1 56.0		27.8		12.1		25.5 49.4
			42.0 9.8		43.1		26.0		25.5 53.2
1.12	5	7	42.1 23.7	5 16	58.9	5 28	39.7	5 47	25.4 6.9
					263.1		229.1		
1.12			42.02		11.87		58.44		25.52
−2			−2		−2		−2		−2
59.12	5	6	40.02	5 16	9.87	5 27	56.44	5 46	23.52

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1851phae.proj...79T

1851. Aug. 31/32

a = +0.05
b = +0.10
c = −0.05

Ob. West

C. W. 7.
β Geminor

43.2
58.9
14.5
30.0
45.8
1.4
7 36 17.1 16
210.9

30.13
−2
7 35 28.13 16

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1851 Sept. 1

a = + 0.05
b = + 0.11
c = − 0.06

Ill. West

C. W. 7.

δ Ophiuchi			α Ophiuchi			δ Aquilae			γ Aquilae			ν Aquilae		
		9.9			37.5			—			—			8.5
		23.6			51.9	+2°	49	18.5 51.0	+10°	15′	—			22.4
		37.4			6.0			18.5 4.8			29.9 16.0			36.5
		51.1			20.1			18.5 18.5			30.0 30.0			50.4
		4.9			34.2			18.5 32.3			30.0 44.0			4.0
		18.5			48.1			18.5 46.0			30.1 58.0			18.0
16	6	32.3	17	28	2.2	19	17	18.6 59.8	19	39	30.1 11.9	19	43	31.7
		177.7			200.0									171.5
		51.10			20.00			18.52			30.02			50.21
		2			−2			−2			−2			−2
16	5	49.10	17	27	18.00	19	17	16.52	19	38	28.02	19	42	48.21

1851phae.proj...79T

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1851phae.proj...79T

1851. Sept. 1.

a = +0.05
b = +0.11
c = −0.06

Ill. West

C. W. 7.

β Aquilae

		57.6
		51.5
		5.4
		19.0
		33.2
		46.8
19	48	0.5
		194.0
		19.14
		−2
19	47	17.14

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1851. Sept. 3

a = + 0.03
b = + 0.12
c = − 0.07

Ill. West

C. W. T.

ζ Aquilae																	
			51.4	8.9			35.4			46.4			6.9			36.0	
+13°	39′		51.2	23.0			49.4			03			20.9			49.9	
			51.2	37.1			3.2			14.2			34.6			3.8	
			51.2	51.2			16.7			28.0			48.5			17.5	
			50.9	5.1			30.5			41.9			2.4			31.4	
			—				44.4			56.0			16.3			45.3	
18	58	51.1	33.9	19	17	58.1		19	39	10.0	19	43	30.1	19	47	59.0	
						237.7				196.8			159.7			242.9	
			51.25			16.81				28.11			48.53			17.56	
			−2			−2				−2			−2			−2	
18	57		49.25	19	17	14.81		19	38	26.11	19	42	46.53	19	47	15.56	

1851phae.proj....79T

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1851phae.proj...79T

1851. Sept 3/4

a = + 0.04
b = + 0.12
c = − 0.07

Ill. West

O. W. 7.

α Tauri	β Orionis	β Tauri	δ Orionis	ε Orionis
56.5	57.4	—	40.2 12.8	14.3
11.0	11.5 +28° 29′	—	−0° 25′ 40.2 26.5	28.0
25.2	25.3	—	40.4 40.4	41.8
39.5	39.2	9.4 9.5	40.0 53.8	55.7
53.8	53.0	9.3 25.0	40.1 7.6	9.5
8.0	6.9	9.2 40.5	40.1 21.2	23.0
4 27 21.3	5 7 20.7	5 169.2 56.0		5 28 36.8
216.3	214.0			209.1
39.33	39.14	9.27	40.17	55.57
−2	−2	−2	−2	−2
4 26 37.33	5 6 37.14	5 16 7.27	38.17	5 27 53.57

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1851. Sept 3/4

Ill. West

C. W. 7.

α Orionis	α² Geminor	α Canis Min	β Geminor	2 Ursæ Maj
41.0	32.1	4.4	40.3	12.0
55.0	48.5	18.3	56.2	33.0
8.7	4.8	32.1	11.8	53.5
22.7	21.2	46.0	27.5	14.0
36.5	37.4	59.7	42.9	34.9
50.5	53.6	13.5	58.5	55.5
5 47 4.2	7 25 9.5	7 31 27.1	7 36 14.0	8 49 16.4
218.6	207.1	201.1	251.2	219.3
22.66	21.01	45.87	27.31	14.18
-2	-2	-2	-2	-2
5 46 20.66	7 24 19.01	7 30 43.87	7 35 25.31	8 48 12.18

1951phxe.proj..0701

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1851phae.proj....791

1851 Sept 3/4

a = +0.04
b = +0.12
c = +0.04

Ill. East.

C. W. 7
α Leonis

58.5
12.7
26.8
41.0
55.0
9.0
10 0 23.2
226.2

40.88
-2
Φ 59 38.88

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1851phae.proj...79T

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