

KG
11365
74

B.3

No. 3.

Reduction of Transits
Dec. 7. 1849 to April 2. 1850.

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

KG 11365.74



KG 11365.74



Dec. 7/8. 1849

$a = -0.18$

$b = +0.02$

$c = -0.21$

Ill. East

M.C.B.

 α Uro. Maj.

—

—

 $+62^{\circ} 34'$

—

—

—

24.1 23.6

10 56 23.9 53.5

24.00

-2

10 55 22.00

1849. Dec. 10/11

$a = -0.20$

$b = -0.01$

$c = -0.24$

W.C.B.

Ill. East.

Polaris S.P.

2 Bootis

2 Bootis

—

9

3.1

88° 30' 46.2

18.0

+27°

43

23.652.6

12 57 34.9 46.0

32.3

23.5 8.0

6 35.3 37.0

47.0

23.7 23.7

15 33.9 24.0

1.7

24.0 39.5

—

16.2

23.6 54.6

—

14

10

30.8

14

40 23.6 10.2

149.1

34.70

47.01

23.67

-2

-2

-2

13 6 32.7 14

9

45.01 14

39

21.67

1849. Dec. 11

$$a = -0.22$$

$b = 0.00$

$$C = -0.25$$

W. East

W. C. B.

W. C. 18.		" "		" "		" "		" "	
β Aquarii		β Cephei		α Aquarii		α Pegasi		α Pis. Aus.	
3	56.9	—	—	—	—	—	—	—	32.2
10.4		6	41.4 21.5	—	—	58.1	30.2	—	48.0
24.4	+69° 54'	7	41.3 1.3	-1° 3'	3.6 49.8	+10° 3'	57.7 43.7	—	4.0
38.3		7	41.6 41.5		3.3 3.3	57.8	57.8	—	20.1
52.1		8	41.6 21.5		3.3 17.0	58.1	12.0	—	36.1
6.		9	41.5 1.3		3.6 31.0	58.1	26.0	—	51.9
21 25	19.7 21	29	41.4 41.5 21	59	3.4 44.7	22 35	58.1 40.	22 51	7.9
	207.8								200.2
	38.26		41.47		3.44		57.98		20.03
	-2		-2		-2		-2		-2
21 24	36.26 21	7	39.47 21	59	1.44 22	34	55.98 22	50	18.03

1849. Dec. 11

w.c.b.

M. East

$a = -0.22$

$b = 0.00$

$c = -0.25$

 γ beti α beti

45.8

31.7 4.2

59.0

+2 36 31.9 18.3

13.1

32.1 32.1

27.0

32.3 46.0

40.7

32.3 59.8

54.5

2 37 32.3 13.6 2 56 8.2

248.3

32.10

26.90

-2

-2

2 36 30.10 2 55 24.90

1849, Dec. 11/12

$$a = -0.27$$

$$b = 0.00$$

$$c = -0.28$$

M. B.

M. East

Polaris S.P.		" Virginis		" Bootis	
—		7	34.3		2.9
12	4929.9 2.0		48.1		17.5
88° 30' 46"	57 35.3 46.3		1.8		32.3
6	34.3 36.0		16.0		46.8
15	33.8 24.0		30.0		1.5
24	34.4 14.0		44.0		16.0
—		3	18	58.0 14	10
			232.2		30.8
					147.8
	35.52		16.03		46.83
	-2		-2		-2
13	6	33.52	3	18	14.03 14
				9	44.83

1849. Dec. 12

Ill. East

$a = -0.32$

$b = +0.01$

$c = -0.32$

m.c. 3.

5 Cygni

6 44.0

59.7

15.3

31.1

47.0

3.0

21 8 18.7

218.8

31.26

-2

21 7 29.26

1849. Dec. 12/13

$a = -0.32$

$b = +0.01$

$c = -0.03$

M.C.B.

All. East

Polaris S.P.

 α Virginis α Bootis

			7	33.3	9	2.4
12	48 32.2 54.2			47.4		17.0
88 30 46.6 57	33.6 44.3			1.3		31.6
6	34.3 36.0			15.3		46.1
15	36.0 26.2			29.5		0.8
24	34.4 14.0			43.0		15.4
		13	18	57.1	14	10
				226.9		30.0
						143.3
	34.10			15.27		46.19
	-2			-2		-2
13	6 32.10	13	18	13.27	14	9
						44.19

1849 Dec. 14/15

$a = -0.31$

$b = +0.02$

$c = -0.27$

Ill. East

M.C.D.

Polaris S.P

 α Virginis

32.0

46.3

0.3

88° 30' 47.0

13 6 38.5

14.1

28.5

42.3

— 13 18 56.2

219.7

36.80 14.24

-2 -2

13 6 34.80 13 18 12.24

1849. Dec. 16/17.

Ill. East

$a = -0.27$

$b = +0.03$

$c = -0.27$

G. D. B

 α Virginis

32.3

46.0

0.0

14.1

28.0

41.9

13 18 56.0

218.3

14.04

-2

13 18 12.04

1849. Dec. 17

$a = -0.24$

$b = +0.04$

$c = -0.26$

Ill. East

M.C.B.

 β Aquarii

"

 α Pegasi

	3	54.2		7	3.5
		7.9			17.5
		21.7			31.4
		35.5			45.4
		49.5			59.5
		3.2			13.3
21	25	17.0	21	38	27.3
		189.0			197.9
		35.57			45.41
		-2			-2
21	24	33.57	21	37	43.41

1849. Dec. 7/18

$a = -0.22$

$b = +0.04$

$c = -0.26$

Ill. East

W.C.B.

1849phae. P.

W.C. 03,			" Polaris S. P.		" α Virginis		" η Urs. Maj		" γ Bootis		" α Bootis				
—			7	32.8	1	28.7	7	44.9	9	1.2					
—				46.5		50.0		59.6		15.8					
88° 30' 47".6				0.3		11.2		14.0		30.5					
13	6	31.0		14.1		32.7		28.6		45.1					
—				28.2		54.2		43.2		59.7					
—				42.0		15.4		59.7		14.3					
—			13	18	56.0	13	43	37.0	13	49	12.2	14	10	29.0	14
				219.9		229.2		260.2		195.6					
29.30				14.27		32.74		28.60		45.09					
-2				-2		-2		-2		-2					
13	6	27.30	13	18	12.27	13	42	30.74	13	48	26.60	14	9	43.09	14

Dec 7/18

All. Peri

w.e. 03

E Bootis

6 35.2

50.7

6.5

21.7

37.4

52.5

14 40 8.5

212.5

21.79

-2

14 39 19.79

1849. Dec. 18

$a = -0.22$

$b = +0.03$

$c = -0.25$

Ill. East

W.C.B.

γ Aquilae	α Aquilae	α Cygnus
—	3	6
—	42.0	17.4
—	56.0	36.9
+10° 15'	10.1	56.0
—	23.8	15.8
—	38.0	34.9
3.3 31.2	51.8	54.0
19 40 3.3 48.2	19 45 8.5	20 38 13.2
	227.2	228.2
3.3 0	23.89	15.46
-2	-2	-2
19 40 1.3 0	19 44 21.89	20 37 13.46

1849. Dec. 18/19

$$a = -0.22$$

$$b = +0.03$$

$$e = -0.25$$

Ill. East

M.C.B

 α Virginis

"

 α Bootis

2.6

14.1 46.2

17.0

-10° 22' 14.0 0.0

31.5

14.0 14.0

46.2

13.9 27.8

0.8

14.1 42.0

15.5

13 18 14.0 56.0 14 10

30.2

144.0

14.00

46.29

-2

-3

13 17 12.00 14 9

46.29

1849. Dec. 20/21

Ill. East

$a = -0.20$

$b = +0.02$

$c = -0.22$

W.C.B.

 α Virginis α Bootis

		7	33.		9	2.3		
			47.			16.8		
			1.0			31.5		
			14.9			46.1		
			29.0			0.5		
			43.0			15.2		
13	18		51.0	14	10	30.0		14
			224.9			142.4		
			14.99			46.06		
			-2			-2		
13	18		12.99	14	9	44.06		14

1849. Dec 22/23

$a = -0.21$

$b = +0.01$

$c = -0.23$

Ill. East

W.C. B.

 α Bootis

2.9

17.7

32.5

46.9

1.4

16.3

14 10 31.6

148.7

46.96

-2

14 9 44.96

1849. Dec. 24/25

$$a = -0.23$$

$$b = 0.00$$

$$c = -0.24$$

M. East

M.C. D.

 α Virginis

7 35.6

49.5

3.5

17.5

31.4

45.4

13 18 59.5

242.4

17.49

-2

13 18 15.49

1849 Dec. 25/26

$a = -0.23$

$b = 0.00$

$c = -0.24$

Alt. East

W.C.B.

 α Virginis α Bootis β Librae

		35.4	—	—
		49.5	—	55.8 28.0
		3.5	+19° 58' 48.0 33.4	-8° 49' —
		17.5	48.0 48.0	55.3 55.3
		31.5	48.3 2.9	55.9 9.8
		45.3	48.4 17.6	56.4 24.2
13	18	59.5	48.3 32.2	—
		2422		
		17.46	48.20	55.35
		-2	-2	-2
13	18	15.46	46.20	53.35

1849. Dec. 26/27

W. C. B.

Alt. East

$a = -0.25$

$b = -0.01$

$c = -0.24$

 α Bootis α Bootis α^2 Librae

9

5.3

20.0

34.6

49.1

3.5

18.2

14

10

33.0

163.7

49.10

-2

14

9

47.10

14

9

23.57

14

43

83.08

25.354.3

25.5 10.0

25.6 25.5

25.8 41.3

25.6 56.6

10.25.6 12.2

26.57

-2

35.1 6.6

-15° 25' 35.029.7

34.934.9

35.3 49.5

35.0 3.5

4435.2 18.0

35.08

-2

1849. Dec. 27/28

$$a = -0.26$$

$$b = -0.01$$

$$c = -0.24$$

W.C.B.

M. East

Polaris S. P.			" α Virginis		" α Bootis			
12	39	48.0	7	36.2	9	4.9		
	48	47.0		50.0		19.5		
	57	35.5		4.0		34.2		
	6	28.0		17.9		48.8		
	15	23.0		31.8		3.3		
	24	6.0		46.0		18.0		
13	32	57.0	13	0.0	14	10	32.6	
	45	4.5		185.9		161.3		
	6	26.36		17.99		48.76		
	-2			-2		-2		
13	6	24.36	13	18	14	9	46.76	

1849. Dec. $\frac{29}{30}$

$$a = -0.25$$

$$b = -0.01$$

$$c = -0.25$$

W.C. B.

Ill. East

Polaris S.P.			" α Virginis		" α Bootis	
2	39	51.3	7	37.1	9	6.1
	48	50.8		51.0		20.8
	57	34.0		5.2		35.5
	6	27.0		19.2		50.1
	15	14.0		33.2		4.5
13	24	10.0		47.0		19.2
	32	53.013	19	0.9	19	10
		240.1		193.6		170.2
		25.73		19.09		50.03
		-2		-2		-2
13	6	23.73	13	18	19	9
				17.09		48.03

1849, Dec. 3/32

$a = -0.25$

$b = -0.02$

$c = -0.25$

Ill. East

W.C.B.

 β Librae

-8° 49' —

9 56.943.0

57.057.0

56.810.7

56.724.5

14 10 56.738.5

56.82

-2

14 9 54.82

1850. Jan. 2.

$a = -0.25$

$b = -0.02$

$c = -0.24$

W.C. B.

Ill. East

Virginis

Boris

7	37.3	9	50.2	6.4
	51.3		50.2	21.0
	5.3	+19° 58'	50.2	35.6
	19.5		50.1	50.1
	33.4			—
	47.4		50.0	19.2
13	19	1.4	14	10
	195.6			—

19.37	50.14
-2	-2

13	18	17.37	14	9	48.14
----	----	-------	----	---	-------

1850. Jan. 4.

$a = -0.25$

$b = -0.03$

$c = -0.23$

W.C.B.

Old. East

 α Beti α Persei

	4	49.0	—
		3.0	4 42.40.3
	16.8	+49° 19'	42.621.5
	30.6		42.342.2
	44.4		42.73.8
	58.2		42.424.5
2	56	11.8	42.545.8
	213.8		
	30.54		42.38
	-2		-2
2	55	28.54	40.58

1880. Jan. 4/5

W.C.B.

Ill. East

$$a = -0.25$$

$$b = -0.03$$

$$c = -0.23$$

1849phae. p

W. C. Os.			"		"		"		"	
Polaris S.P.			α Virginis		α Bootis		α Cor. Bore.		α Serpentinis	
12	39	47.1	7	38.9	—		8	35.6	7	13.2
	48	40.5		52.4	—			51.0		27.0
	53	34.3		6.3	+19 58	—		6.0		40.9
	6	25.0		20.2		—		22.0		54.5
	15	11.0		34.4		51.2 5.8		37.3		8.4
	24	1.5		48.4		51.2 20.4		53.0		22.4
13	32	45.2	13	2.4	14	10 51.5 35.4	15	30 8.6	15	38 36.3
	44	24.6		203.0				213.5		202.7
	6	20.66		20.43		51.30		21.93		54.67
	-2			-2		-2		-2		-2
13	6	18.66	13	18.43	14	9 49.30	15	29 19.93	15	37 52.67

1850. Jan. 14/15

$a = -0.24$

$b = -0.04$

$c = -0.23$

W.C.B.

These observations have been
set "forward"

Ill. East

 ϵ Bootis α Bootis

52.2 23.0

29.1 58.1

52.1 37.5

 $+27^{\circ} 43'$ 29.2 13.7 $+19^{\circ} 58'$ 52.2 52.2

29.1 29.0

52.4 7.0

29.0 44.5

52.3 21.5

28.8 59.8

29.04

52.24

-2

-2

27.04

50.24

*first wire lost

1850. Jan. 10

$a = -0.24$

$b = -0.04$

$c = -0.23$

M. East

M.C.D. A.M.

P.M.

 α Lyrae α Tauri

		1	59.1		7	39.5
			17.0			54.0
			34.8			8.4
			52.5			23.0
			9.8			57.0
			27.3			51.4
18	33		45.0	4	29	5.7
			245.5			219.0
			52.20			22.71
			-2			-2
18	32		50.21	4	28	20.71

1850. Jan. 12

$a = -0.24$

$b = -0.04$

$c = -0.23$

Ill. East

M.C.D.											
α Tauri		α Aurigae		β Tauri		δ Orionis		ϵ Orionis			
7	40.5	5	42.6	7	6.5	4	44.0	9	0.0		
	54.5		2.1		22.0		57.6		13.2		
	9.0		22.0		38.0		11.3		27.0		
	23.2		40.9		53.6		25.0		40.5		
	37.5		1.5		8.3		39.0		54.4		
	52.0		21.2		24.5		52.4		8.0		
4	29	5	7	5	18	5	26	5	30		
	6.3		40.9		40.2		6.2		22.0		
	223.0		172.2		192.5		235.5		165.1		
	23.29		41.74		52.21		25.07		40.73		
	-2		-2		-2		-2		-2		
4	28	5	6	5	17	5	25	5	29		
	21.29		39.74		51.21		23.07		38.73		

1850. Jan. 15

$a = -0.23$

$b = -0.04$

$c = -0.22$

W.C. B.

Ill. East

14/15

$a = -0.23$

$b = -0.04$

$c = -0.22$

" See two pages back

Andromeda

E Bootis

 α Bootis

54.8

10.3

26.0

41.6

57.3

12.6

28.5

231.1

41.59

-2

39.59

— +19.58 23.9

58.1 First and 37.5

+27 43 13.7 last wires 57.2

29.0 last? 7.0

44.5 14 10 21.5

14 39 59.8

1850. Jan. 16

$a = -0.22$

$b = -0.04$

$c = -0.22$

Ill. East

W.C.B.

2 Jani

"

2 Anigae

7	41.7	5	43.0
	55.4		2.8
	9.3		22.5
	24.0		42.4
	38.7		2.0
	52.5		21.8
4 29	6.8	5 7	41.8
	228.4		176.3
	24.06		42.33
	-2		-2
4 28	22.06	5 6	40.33

1850. Jan. 19

$$a = -0.22$$

$$b = -0.04$$

$$c = -0.21$$

Ill. Part

W. C. B.

Andromedae

0 57.2

13.0

28.5

44.2

59.8

15.3

0 2 30.9

248.9

44.13

-2

0 1 42.13

1850. Jan. 22/23

$a = -0.20$

$b = -0.04$

$c = -0.21$

All. East

W.C. 03

 α Serpentis

"

 α Lyrae

7 19.4 2 6.0

33.2 23.4

47.0 41.1

0.8 58.5

14.6 16.3

28.5 33.8

15 38 42.4 18 33 51.4

185.9 230.5

0.84 58.64

-2 -2

15 37 58.84 18 32 56.64

1850. Jan. 23.

$a = -0.20$

$b = -0.04$

$c = -0.21$

W. C. B.

Ill. East

 β Tauri ϵ Orionis α Orionis μ Geminor

12.5

—

7

31.5

4

19.0

28.0

—

45.4

33.7

44.0

-1° 18'

46.3 32.5

59.3

48.5

59.2

45.9 45.9

13.4

3.4

15.

46.3 0.0

27.2

18.5

30.5

46.1 13.5

41.0

33.2

46.2

5

3046.0 27.3

5

48

54.6

6

15

48.0

235.4

272.4

204.3

59.34

46.12

13.17

3.47

-2

-2

-2

-2

5

17

57.34

5

29

44.12

5

48

11.17

6

15

1.47

14

14

1850. Jan. ²⁵/₂₄

$a = -0.20$

$b = -0.04$

$c = -0.21$

All East

w. p. B.

 ϵ Bootis

8 48.7

3.3

19.7

35.0

50.5

5.7

14 40 22.0

184.9

34.99

-2

14 39 32.99

1850. Jan 25

$a = -0.19$

$b = -0.04$

$c = -0.21$

W.C. B.

Jl. Fair

Polaris

α Arietis

23 19.358.0

9

9.8

32 16.451.0

25.0

88 30 19.8

40.0

W.C. B.

54.7

9.4

24.5

39.5

202.9

17.85

54.70

-2

-2

105.026 15.8552

59

52.70

1850. Jan. 26

$$a = -0.17$$

$$b = 0.00$$

$$c = -0.22$$

Ill. East.

W.C.B.

w.c.B.			"			"			"			"		
x Andromedae			Polaris			x Arietis			y Ceti			x Lani		
			0	39	53.	9	12.0		6	3.9		7	49.8	
	1	51.22 0.0		48	36.		26.5			17.5			3.9	
+28	16	51.33 5.7		57	28.5		41.6			31.5			18.5	
		50.85 0.7		6	16.5		56.0			46.0			32.7	
		50.9 6.3		15	9.5		11.3			58.5			47.0	
		50.922.0 *		24	4.		26.6			12.5			1.3	
0	2	50.837.6	1	32	52.5	2	41.7	2	37	26.6	4	29	15.7	
				44	20.0		215.7			195.5			168.9	
		50.98		6	20.00		56.53			45.07			32.70	
		-2			-2		-2			-2			-2	
0	1	48.98	1	6	18.00	7	59	54.53	2	36	43.07	4	28	30.70

* this wire is marked
"3 or 4 late".

1860. Jan. 26

$a = -0.17$

$b = 0.00$

$c = -0.22$

W. C. O

Ill. East

Amigae		β Tauri		δ Orionis		ϵ Orionis		
5	52.0	7	16.0	4	53.5	9	9.2	
	12.0		31.5		7.2		23.0	
	31.2		47.0		21.0		36.7	
	51.0		3.0		34.6		50.5	
	11.1		18.6		48.4		4.3	
	30.7		34.3		2.0		18.0	
5	7	5	18	5	26	5	30	18
	50.2		50.0		16.0		31.8	
	238.0		206.4		182.7		173.5	
	51.14		2.91		34.67		50.50	
	-2		-2		-2		-2	
5	6	5	18	5	25	5	29	18
	49.14		0.91		32.67		48.50	

1850. Jan. 29.

$a = -0.16$

$b = -0.04$

$c = -0.20$ Ill. E. ant

M. C. D.

 α Lyrae

"

 α Aquilae

	2	12.2		3	59.8
	.	24.5			13.5
		47.4			27.4
		4.6			41.3
		22.5			55.1
		39.9			9.0
18	33	57.5	19	45	23.0
		213.6			229.0
		4.80			41.29
		-2			-2
18	33	2.80	19	44	39.29

1850 Jan²⁹30.

W.C.B.

Lyrac

2 13.5

31.0

49.5

6.4

24.0

41.5

18 33 58.8

223.7

6.24

-2

18 33 4.24

$$a = -0.16$$

$$b = -0.04$$

$$c = -0.20$$

Ill. Part

1850 Jan. 30.

$a = -0.17$

$b = -0.10$

$c = -0.21$

W.C.B.

Ill. Part

α Cassiopeae	"	Polaris	"	α Arietis	"	γ Beti	"	β Urs. Min ^{2P}
—	0	39	52.3	15.4	7.3	49	49.4	
17.8 29.0		48	42.3	30.5	21.0	50	41.8	
+55° 43 17.45 3.0		57	31.5	45.3	34.8	51	34.0	
17.5 17.4		6	20.7	0.0	48.6	52	26.5	
17.5 41.9		15	12.5	15.0	2.3	53	19.0	
17.6 6.3		24	0.0	29.7	16.1	54	11.2	
17.6 30.9	1	32	53.0	2 0. 44.5	2 37 30.	2 55	3.6	
		44	32.5	180.4	160.1		185.5	
17.57 1		6	19.78	0.06	48.57		26.50	
-2		-2		-2	-2		-2	
15.57 1		6	17.78	4 59 58.06	2 36 46.57	2 52	24.50	

1850. Jan. 30

$$a = -0.17$$

$$b = -0.10$$

$$c = -0.21$$

Ill. East

1849phae.p

L.D.B.		M.C.B.		" "		" "		" "							
51 Cephei		α Persei		γ Tauri		γ' Eridani		α Tauri							
15	52.0	3	52.3	9	6.3	1	36.4	7	53.5						
20	34.7		13.7		21.6		50.6		7.5						
25	23.2		34.3		37.0		5.0		22.1						
30	11.7		55.7		51.5		19.0		36.4						
34	57.5		17.0		6.2		33.0		50.6						
39	46.0		38.0		21.6		47.2		5.0						
44	29.5	3	59.0	3	40	37.0	3	53	1.3	4	29	19.2	5		
	274.6		270.0			181.2			192.5			194.3			
	10.66		55.70			51.66			18.93			36.33			
	-2		-2			-2			-2			-2			
6	30	8.66	3	14	53.70	3	9	49.60	3	52	16.93	4	28	34.33	5

1850. Jan. 30

W.C.D.			M. East											
α Aurigae			β Tauri			α Leporis			Unk.			α Orionis		
5		55.3	7		19.7			41.5			45.			39.5
		15.0			35.0			56.0			2.2			53.0
		34.8			50.3			10.0			18.8			7.2
		54.5			6.0			24.5			35.2			21.0
		14.2			22.0			39.1			51.5			34.7
		34.0			37.7			53.5			7.5			48.5
5	7	53.6	5	18	53.0	5	28	8.0	5	36	24.	5	49	2.4
		261.4			223.7			232.6			184.2			206.3
		54.49			6.24			24.66	5	35	34.89			20.90
		-2			-2			-2			-2			-2
5	6	52.49	5	18	4.24	5	27	22.66	5	35	32.89	5	48	18.90

1850 Jan. 30

$a = -0.17$

$b = -0.20$

$c = -0.21$

Ill. East

W.C.D.

Unk.

29.6

45.7

2.2

18.7

35.1

51.2

5 55 8.0

190.5

5 54 1850

1850 Jan. $\frac{39}{31}$

$a = -0.17$

$b = -0.10$

$c = -0.21$

Ill. East

S. P. B.			W. C. B.		
α Scorpii			α Lyrae		
0		44.	2		14.6
		59.5			32.0
		14.5			50.0
		30.0			7.0
		44.8			24.7
		0.5			42.3
16	22	15.8	18	34	0.
		209.1			170.6
		29.87			7.23
		-2			-2
16	21	27.87	18	33	5.28

1850. Jan. 31

$$a = -0.19$$

$$b = -0.09$$

$$c = -0.16$$

Ill. East

N. N. S.

Polaris

30 49.3

48 13.233, 0

57 10.520,

1 6 11.710.

15 12.7 2.

23 14.5 53,

12.52

-2

1 6 10.52

Feb. 1/2

$a = -0.17$

$b = -0.09$

$c = -0.19$

M. East

L. P. B.

 α Scorpii

45.4

0.5

15.9

31.3

46.7

1.8

16 22 17.5

219.4

31.34

-2

16 21 29.34

Feb. 1

$a = -0.17$

$b = -0.09$

$c = -0.19$

W. P. B.

 α Arietis

9 18.0

33.0

47.8

2.7

17.6

32.5

2 0 47.5

199.1

2.73

-2

2 0.73

1850. Feb. 7/4

$a = -0.20$

$b = -0.10$

$c = -0.18$

G. P. B.

J. C. P. Part
W. C. B.2² Librae β Urs. Min

2 Lyrae

15.3 *half three middle wires* 33.140.7

29.3 14 52 33.3 33.2

43.6 +74° 46' 31.5 23.7

58.0

12.1

26.3

14 44

40.7

225.3

57.90

-2

14 43

55.90

14

52

30.63

18

33

10.56

32.63

-2

34

5.3

207.9

12.56

-2

2

19.5

37.3

55.0

12.6

30.4

47.8

1850, Feb. $\frac{4}{5}$

$$a = -0.18$$

$$b = -0.10$$

$$c = -0.19$$

Ill Pat

M. C. B.

α Lyrae

2 21.0
 38.1
 55.6
 13.1
 30.7
 48.1

18 34 6.0
 212.6

13.23

-2

18 33 11.23

1850. Feb. 7/6

$a = -0.18$

$b = -0.10$

$c = -0.19$

W.C.B.

Ill. Part

2 Ophionchi

" 2 Lyrae

8 37.7

2 20.0

51.8

37.8

6.0

55.0

20.0

12.8

33.8

30.5

48.0

47.9

17 30 2.2

5.6

199.5 18 34 20.96

19.93

12.80

-2

-2

17 29 17.93 18 33 10.80

1850. Feb. $\frac{7}{8}$

$a = -0.19$

$b = -0.11$

$c = -0.20$

Ill. East

B. D. B.

 β Scorpii

22.0

36.3

51.0

5.5

19.8

34.5

15 59 49.3

218.4

8.49

-2

15 58 3.49

1850. Feb. 10/11.

$a = -0.20$

$b = -0.12$

$c = -0.20$

Ill. Part

W.C.B.

S.P.B.		" "		" "		W.C.B.	
S Ophiuchi		α Scorpii		ϵ Urs. Min		α Aquilae	
13.		52.3	16	57	47.0	4	9.9
26.8		7.5		59	28.0		24.0
40.5		22.8		1	11.0		38.0
54.3		38.1		2	33.0		52.0
8.0		53.5		4	34.5		5.9
21.7		8.6		6	16.7		19.7
16 8 53.5	16 22	23.8	17	8	0.3	19 45	33.6
199.5		206.6			190.5		183.1
54.21		38.09			52.93		51.87
-2		-2			-2		-2
16 7 52.21	16 21	36.09	17	2	50.93	19 44	49.87

1850. Feb 13

 $a = -0.26$
 $b = -0.17$
 $c = -0.25$

Ill. Part

G. P. B.			β' Scorpii		δ Ophiuchi		α Scorpii		ϵ Urs. Min				
5 Urs. Min.													
15	47	37.5	28.8		17.0		56.4		16	57	57.5		
	48	44.8	43.4		31.0		11.6			59	32.2		
	49	51.6	57.8		44.6		26.7			1	14.5		
	50	59.5	12.4		58.5		42.0			2	37.0		
	52	7.8	57.0		12.0		57.5			4	38.8		
	53	14.3	41.6		25.8		12.5			6	21.0		
	54	22.0	15	58	56.4	8	39.6	16	22	28.1	17	8	4.0
		237.5	267.4		228.5		234.8				219.0		
		59.64	12.49		58.36		42.11				57.00		
		-2	-2		-2		-2				-2		
15	50	57.64	15	58	10.49	7	56.36	16	21	40.11	17	2	55.00

1850. Feb. 13

W.P.B.

Ill. East

L.P.B.

$a = -0.29$

$b = -0.13$

$c = -0.26$

Andromeda			Cassiopeae			Polaris			5 Urs Min S.P.			ε Urs Min S.P.		
1	20.3		2	17.0	0	39	54.0	3	47	36.7	4	57	49.0	
	36.0			41.2		48	44.5		48	44.5		59	32.2	
	51.5		3	31.4		57	31.2		49	52.1		1	13.8	
	7.0			36.0		6	20.6		50	59.3		2	56.0	
	22.7			54.5		15	11.8		52	7.0		4	37.2	
	38.6			19.0		24	2.0		53	14.1		6	19.0	
0	2	51.2	0	34	43.2	1	32	53.5	54	20.5		8	1.8	5
	230.3			210.3		44	37.6			234.2			20.90	
	7.19			30.04		6	22.51			59.17			55.57	
	-2			-2		-2			-2			-2		
0	2	5.19	0	33	28.04	1	6	20.51	3	50	57.17	5	2	53.57

1850. Feb. 13

L. P. B.

Ill. Part
W. C. B.

P.	δ Orionis	α Leporis	α Lyrae
0	10.3	54.4	28.6
2	24.0	8.8	46.0
8	37.7	23.5	3.5
0	51.5	37.6	21.0
2	5.2	52.3	39.0
0	18.9	6.5	56.0
5	26 32.55	28 21.2	18 34 13.7
90	180.1	204.3	234.8
57	51.44	37.76	20.69
	-2	-2	-2
57	5 25 49.445	27 35.7618	33 18.69

1850. Feb. 15/6

$$a = -0.28$$

$$b = -0.12$$

$$c = -0.26$$

Ill. Part

M.C.B.

x Hercules

39.6

53.6

7.5

21.7

36.0

50.0

4.2

212.6

21.80

-2

19.80

17

10

18

17

9

18

Feb. 17/18 1850.

$a = - 0.27$

$b = - 0.12$

$c = - 0.26$

H. 7 am

W. C. O. B.

 α Lyrae

2 83.9

51.0

9.0

26.3

44.0

1.4

18 34 18.8

184.4

26.34

-2

18 32 24.34

850. Feb. 19

B.P.B. "

Ill. Part

$a = -0.27$

$b = -0.12$

$c = -0.27$

 δ Geminor α^2 Geminor

4.5 52.5

19.0 8.0

33.8 24.0

48.8 40.5

3.5 56.7

18.0 13.0

33.1 29.0

160.7 223.7

48.67 40.53

-2 -2

46.67 38.53

1850. Feb. 21

$a = -0.26$

$b = -0.12$

$c = -0.28$

Ill. Part

B.P.B.

 α TauriStars of comp with δ ϵ Orionis

		18.0			59.5		43.8			39.3		37.0
		31.9			15.0		59.3			54.5		50.8
		46.2			29.5		14.5			9.7		4.5
		0.5			45.0		30.0			25.0		18.3
		15.0			1.0		45.3			40.5		32.0
		29.3			15.8		0.5			55.8		45.6
4	29	43.7	5	13	31.25	20	16.05	24	11.05	30	54.5	
		184.6			197.0		209.4			237.8		247.7
		0.66			45.29		29.91			25.71		18.24
		-2			-2		-2			-2		-2
4	28	58.66	5	12	43.295	19	27.915	23	23.115	30	16.24	

1850. Feb. 21

$$a = -0.26$$

$$b = -0.12$$

$$c = -0.28$$

Ill. Part

B. P. B.

 μ Geminor

50.8

5.5

20.5

35.3

50.2

5.0

6 16 20.0

187.3

35.33

-2

6 15 33.33

1850. Feb. 22.

$a = -0.26$

$b = -0.12$

$c = -0.28$

B.D.B.

All. East

 α TauriStars of Comp with β

		19.0		1.2		45.3		40.5		41.5
		33.3		15.5		0.2		56.5		56.6
		47.5		31.0		16.0		11.0		11.9
		2.0		46.5		31.2		26.5		27.3
		16.3		2.0		46.4		41.7		42.5
		30.4		17.0		2.0		57.0		57.3
4	29	44.95	13	32.05	20	17.35	24	12.65	28	13.5
		193.2		146.2		158.4		245.3		250.6
		1.91		46.46		21.20		26.47		27.23
		-2		-2		-2		-2		-2
4	28	59.915	12	44.465	19	29.205	23	24.475	27	25.23

1850: Feb. 22

$a = -0.26$

$b = -0.12$

$c = -0.28$

S.P.B.

Ill. Part

Stars of Comp with ♂

		34.0		21.4		58.5		—		18.0	
		49.4		36.8		13.9		—		33.0	
		4.7		51.8		29.5	$26^{\circ} 31'$	—		48.5	
		19.8		7.3		44.5		47.4 47.3		4.5	
		35.5		22.9		0.0		47.5 2.8		9.2	
		50.7		38.0		15.0		47.3 18.0		34.3	
5	32	6.05	38	53.0	5	44	30.55	45 47.1 33.2	5	53	49.5
		200.1		231.2			191.9				207.0
		20.01		7.31		44.56		47.32		3.86	
		-2		-2		-2		-2		-2	
5	31	18.01	38	5.31	5	43	42.565	44 45.32	5	53	1.86

1850. Feb. 22

L. P. B

M. Part

Stars of comp with μ μ Seminov

0		9.0			46.6			52.1	
0		24.5			8.83			6.9	
5		39.3			16.33			21.8	
5		55.0			31.5			36.5	
2		10.0			46.5			57.5	
3		25.0			1.7			6.5	
5	6	5	41.0	6	28	17.2	6	16	21.4
0		203.8			160.4			196.7	
6		54.83			31.49			36.67	
		-2			-2			-2	
6	6	4	52.88	6	27	29.49	6	15	34.67

1850. Feb. 23.

$a = -0.26$

$b = -0.12$

$c = -0.26$

Ill. 7 ant

B. P. B.

x Tauri

Stars of comp

with ♂

		20.3			2.0			46.5			41.8			42.5	
		34.5			17.7			1.4			56.9			57.3	
		48.5			32.0			17.0			12.3			13.0	
		3.0			47.0			32.3			27.6			28.2	
		17.3			2.8			47.7			42.9			43.7	
		31.8			18.3			3.0			58.0			58.8	
4	29	46.0	5	13	34.0	5	20	18.5	5	21	13.4	5	28	14.5	5
		201.4			153.8			166.4			252.9			258.0	
		3.06			47.69			32.34			27.56			28.29	
		-2			-2			-2			-2			-2	
4	29	1.06	5	12	48.69	5	19	30.34	5	20	25.54	5	27	26.29	5

1850 Feb. 23

S.D.B.

All. Rar

Stars of Comp with σ

5		35.0		22.5		0.3		—		48.9	3.0		
3		50.4		38.0		15.2	+26° 29'	—	+26°	2047.7	17.0		
0		51.8		53.0		30.0		—		48.8	33.5		
2		21.1		8.3		46.0		48.6 48.5		47.6	47.5		
7		36.6		24.0		0.8		48.5 3.8		48.2	3.5		
5		51.8		38.9		16.3		48.4 19.0		—	—		
5	32	7.0	5	38	54.5	5	44	31.5	5	45	48.4 34.5		
0		207.7		239.2		140.1				—	—		
29		21.10		8.46		45.74		48.47		48.24			
		-2		-2		-2		-2		-2			
29	5	31	19.10	5	38	6.46	5	43	43.74	5	44	46.47	46.24

1850 Feb. 23.

S. O. B.

Ill. 2 ant

$a = -0.26$

$b = -0.12$

$c = -0.28$

Stars of Comp with δ

184

	6.5		31.5	45.7		16.3		34.5		56.3					
	21.8		31.3	0.7		31.5		49.8		11.4					
	37.0	+26° 10'	31.4	16.1		46.8		5.1		27.0					
	52.2		31.4	31.3		1.5		20.3		42.3					
	7.5		31.4	46.7		17.3		35.5		57.5					
	23.0		31.0	1.5		32.0		51.0		12.5					
5	56	38.2	6	3?	—	6	4?	47.7	6	14	5.8	6	18	27.5	6
		186.2						198.1			202.0			234.5	
	52.31		31.33			1.87		20.29		42.07					
	-2		-2			2		-2		-2					
5	55	50.31	6	2	29.33	6	3	59.87	6	13	18.29	6	17	40.07	6

1850. 71. 23

S. P. B

"

Ill. 9 an

8 Gemini

3		5.8			47.4		10.3
4		20.7			2.3		24.8
0		35.9			17.5		39.7
3		51.1			32.6		54.5
5		6.5			47.8		9.5
		21.5			2.9		24.0
5	6	23	36.6	6	28	18.2	7 13 39.0
5		178.1			168.7		201.8
07		51.16			32.67		54.54
		-2			-2		-2
07	6	22	49.16	6	27	30.67	7 12 52.24

1850, Feb. 25

$a = -0.27$

$b = -0.12$

$c = -0.27$

L. P. B.

2 Jani

Mars Comp. Star

		22.0			3.2			48.3			43.3			44.2	
		36.3			18.5			3.4			58.5			59.5	
		50.5			34.1			18.6			13.9			14.8	
		4.8			49.4			33.8			29.3			30.0	
		19.0			4.5			49.3			44.5			45.5	
		33.3			19.8			4.6			59.6			0.5	
4	29	47.5	5	13	35.3	5	20	20.0	5	24	15.3	5	28	16.0	5
		213.7			164.8			178.0			264.4			210.5	
		4.81			49.26			34.00			29.20			30.07	
		-2			-2			-2			-2			-2	
4	29	2.81	5	12	47.26	5	19	32.00	5	23	27.20	5	27	28.07	5

1850. Feb. 25

B. D. B.

Alt. East

Mass Comp Stars

184

1.2		36.8		24.5		47.2	1.2		4.0		8.0			
5.5		52.0		39.5	+26° 29'	47.2	16.5		19.4		23.0			
5.8		7.5		55.0		47.3	31.9		34.8		38.6			
0.0		23.0		10.1		44	47.0	46.9	50.0		54.0			
5.5		38.0		25.5		—			5.5		9.1			
5.5		58.5		40.6		—			20.5		24.5			
0.5	5	32	9.0	5	38	56.3		—	5	45	36.0	5	56	40.0
5.5		219.8		251.5					170.2		197.2			
0.7		22.83		10.21		47.18			50.03		53.89			
		-2		-2		-2		~~44~~	~~48.03~~		-2			
0.7	5	31	20.83	5	37	8.21	44	45.18	5	44	48.03	5	55	51.89

1850. Feb. 25

S. O. D.

"

Ill. Part

Main Comp Stars

$a = -0.27$

$b = -0.12$

$c = -0.28$

"

47.1

2.0

17.6

32.8

48.1

3.7

6 3 19.0 6 4 3.5 49.5 6

170.3

32.90

-2

6 2 30.90 6 4 1.32 6

3.1 32.5

3.1 47.8

3.6 3.5

3.7 19.0

22.9 33.5

3.5 49.5 6

3.32

-2

1.32 6

36.6

51.6 +25° 20' 43.9 13.5

6.8

22.0

37.4

52.5

8.0

214.9

22.12

-2

20.12

44.0 58.5

43.9 13.5

43.8 28.6

44.1 44.0

—

—

—

43.95

-2

41.95 6

7.5

22.5

37.7

52.8

8.2

23.0

38.3

190.0

52.86

-2

50.8

1850. Feb. 25

S.O. P.

Ill. Part

49.0

4.0

19.0

34.5

49.5

4.8

6 26 20.0

180.8

34.40

-2

27 32.40

1850. Feb. 26.

S. Q. B.

S. Q. West

$a = -0.27$

$b = -0.12$

$c = -0.27$

α Tauri

Mars Comp Stars

184

		23.4		4.5		49.5		45.0		45.5					
		37.8		20.5		5.0		0.2		1.0					
		52.0		35.6		20.2		15.5		16.4					
		6.5		51.0		35.8		31.0		31.6					
		20.9		6.3		50.9		46.5		46.9					
		35.0		21.5		6.3		1.5		2.5					
4	29	49.5	5	13	36.5	5	20	21.5	5	24	16.5	5	38	17.7	5
		225.1			175.9			189.2			156.2			161.6	
		6.44			50.84			35.66			30.89			31.66	
		-2			-2			-2			-2			-2	
4	29	4.44	5	12	48.84	5	19	33.60	5	23	28.89	5	37	29.66	5

1850. Feb. 26

L.P.B

O.C. Hart

Mars Comp Stars

5		38.5		26.8		49.1	3.0		5.5		9.8
0		53.8		41.8		49.2	18.5		21.0		25.1
4		8.9		56.5	26 30	49.5	34.2		36.3		40.5
6		24.5		11.8		49.0	49.1		51.9		55.8
7		39.7		27.1		—			7.1		11.0
8		54.8		42.5		—			22.5		26.4
7	5	32	10.55	38	57.7	—	5	45	37.65	56	41.5
		230.7		263.2					181.9		210.1
6		24.39		11.89		49.20			51.70		55.74
		-2		-2		-2			-2		-2
6	5	31	22.39	5	38	47.20	5	44	49.70	5	55
											53.74

1850 Feb. 26

$$a = -0.27$$

$$h = -0.12$$

$C = 0.27$

S. Q. B.

Ill West

Mars Comp Stars

184	34.548.5	44.7	38.0	53.2	9.0
26° 10'	34.7 4.1	0.5	53.4	8.5	24.4
	34.7 19.4	15.3	8.4	23.5	39.5
	34.9 35.0	30.5	24.0	38.8	54.5
	34.7 50.0	45.6	39.1	54.0	9.8
	—	1.0	54.2	9.2	24.8
	6 5 16.4 6 9	9.5 6 19	24.6 6 23	40.0	6
	154.0	226.6	211.8	202.0	
	34.70	30.57	23.80	38.83	54.57
	-2	-2	-2	-2	-2
	32.70 6 4 28.57 6 8	21.80 6 18	36.83 6 22	52.57	6

1850 Feb. 26

B. P. B.

Sci. Men

30.8

6.0

21.0

36.0

51.3

6.4

6 28 21.5

193.0

36.14

-2

6 27 34.14

1850. Feb. 27

$a = -0.27$

$b = -0.12$

$c = -0.27$

Ill. West

G. P. B.

 α Tauri

25.5

40.0

54.3

8.5

22.8

37.0

51.2

239.3

8.47

-2

6.47

1850. March $\frac{1}{2}$

$a = -0.26$

$b = -0.13$

$c = +0.17$

B. O. B.

Ill. West

 α Lyrae

52.1

9.8

27.4

45.0

2.5

21.1

18 34 37.5

195.4

45.06

-2

18 33 43.06

850. March 4

$$a = -0.25$$

$$b = -0.14$$

$$c = +0.16$$

Alli West

G.P.B.

 α^2 geminor

9.3

25.5

41.8

58.0

14.5

30.8

46.7

226.6

58.09

-2

56.09

1850. March 5.

$a = -0.25$

$b = -0.14$

$c = +0.16$

S. D. B.

Ill. West

Mass Comp Stars

		59.5			47.0			55.5			47.6			36.0
		14.5			2.5			10.7			3.5			51.0
		30.0			17.8			26.0			14.0			6.0
		45.5			33.4			41.5			34.0			22.0
		0.7			48.5			56.8			49.5			36.6
		16.0			3.6			12.0			4.8			51.7
5	20	31.2	5	25	19.3	5	28	27.1	5	32	20.0	5	39	7.5
		197.4			172.1			229.6			178.6			210.8
		45.34			33.16			41.36			34.09			21.54
		-2			-2			-2			-2			-2
5	19	43.34	5	24	31.16	5	27	39.36	5	31	32.09	5	38	19.54

1850. March 5

E. D. B.

M. W. K.

$a = -0.25$

$b = -0.14$

$c = +0.16$

		"		"		"		"	
		Mass		Comp		Stars			
12.5	—	—	—	19.0	—	59.5	13.5	—	—
28.0	+26 29	—	—	34.6	—	59.1	28.5	15.14	4.5
43.5	—	—	—	50.1	+26 18	59.6	44.3	26 9	14.3 59.0
58.5	1.4 1.5	—	—	5.3	—	59.4	59.5	14.4	14.5
14.5	1.2 16.6	—	—	20.5	—	59.4	14.7	14.7	30.0
29.4	1.3 32.0	—	—	35.9	—	—	—	14.7	45.3
44.3	5 45.2 47.2 5 56	—	—	51.0	—	—	—	6 4	13.9 59.7
230.7	—	—	—	216.4	—	—	—	—	—
58.67	1.27	—	—	5.20	—	59.40	—	14.35	—
-2	-2	—	—	-2	—	-2	—	-2	—
56.67	5 44 59.27 5 56	—	—	3.20	—	59.40	6 4	12.35	—

1850. March 5

S. P. B.

Oll. Mont

2^d Gemini

		9.5	—			18.7		0.0		10.4
		24.5	—			33.5		15.4		26.8
		40.0	+25° 35'	—		48.7		30.5		42.9
		55.2	—			4.5		45.8		59.4
		10.5	48.2 3.5			19.3		0.7		15.6
		25.7	48.5 19.0			34.5		16.0		31.7
6	18	41.0	6 19 48.6 34.2	6	20	49.5	6 28	31.0	7 27	48.0
		206.4				208.7		139.4		224.8
		55.20	48.43			4.10		45.63		59.26
		-2	-2			-2		-2		-2
6	17	53.20	6 18 46.43	6	23	2.10	6 27	43.63	7 26	57.26

1850 March 9

$a = -0.26$

$b = -0.16$

$c = +0.16$

All West

L. P. B.

 α Persei

35.8

57.2

18.0

39.1

0.0

21.3

3 16 42.3

213.7

39.10

-2

3 15 37.10

1850. March 11.

$\alpha = -0.25$

$\delta = -0.16$

$\epsilon = +0.20$

G. P. B.

Ill. West

 α Tauri

Mars Comp Stars

		40.8			55.8			23.0			36.7			55.3
		55.4			11.0			38.4			51.7			10.5
		9.5			26.4			53.8			7.5			26.1
		23.8			41.8			9.0			22.5			40.6
		38.1			57.2			24.7			38.0			56.5
		52.3			12.5			39.5			52.5			11.5
4	20	6.5	5	32	27.9	5	45	55.5	6	5	8.0		14	27.0
		226.4			222.6			243.9			216.9			227.5
		23.77			41.80			9.13			22.41			41.07
		-2			-2			-2			-2			-2
4	29	21.77	5	31	39.80	5	45	7.13	6	4	20.41		13	39.07

1850 March 11.

$a = -0.25$

$b = -0.16$

$c = +0.20$

ell. West

S. D. D.

 μ Gemini

Mars Comp Stars

 δ Gemini

14.0

17.2

26.5

8.5

30.8

29.0

32.5

41.4

23.3

45.5

43.5

47.5

56.7

38.2

0.3

58.5

3.0

17.0

53.5

15.2

13.4

18.5

27.0

8.7

30.3

28.0

33.3

41.7

23.8

44.7

6 16 43.5 6 18 48.5 6 23 57.2 6 28 38.7 7 13 59.5 7

229.9

200.5

262.6

194.7

226.2

58.56

2.93

11.80

53.53

-2

-2

-2

-2

6 15 58.56 6 18 0.93 6 23 9.80 6 27 51.53 7

1850. March 11.

Ill. West

B.P.B.

2^h Gemini

0.8		18.2			
2.5		34.5			
0.3		50.9			
0.2		6.9			
0.3		23.4			
0.7		39.4			
0.5	7	27	55.9		
6.2			229.2		
			7.03		
			-2		
	7	27	5.03		

1850. March. 14

$a = -0.26$

$b = -0.16$

$c = +0.20$

Cl. West

M. C. B.

 α Yami α " *Aquilar*

6

37.4

51.5

6.0

20.4

34.8

49.

4

28

3.2

202.0

20.30

-2

4

27

18.30

30.7 3.0

30.4 16.5

30.3 30.3

30.6 44.5

31.0 58.8

30.6 12.2

30.60

-2

28.60

1850 March 19

$a = -0.29$

$b = -0.16$

$c = +0.22$

ell. West

W.C. B.		" "		" "		" "		" "	
α Tauri		α Aurigae		β Tauri		δ Orionis		ϵ Orionis	
—		—		6	17.0	—		8	10.3
—		52.2 12.8		33.0		35.4 8.		24.1	
+16° 12'	34.0 19.7	+45° 50'	52.5 32.8	48.5		-0° 25'	35.0 21.3	38.0	
34.4 34.4		52.5 52.6		4.1		34.0 34.0		51.7	
34.7 49.0		52.8 12.5		19.9		35.7 49.5		5.5	
34.6 3.2		52.9 32.3		35.4		35.8 3.3		19.1	
4	28 34.2 17.0	5	6 52.5 51.5	5	17	56.	36.1 17.2	5	29 32.8
				208.9				181.5	
34.38		52.57		4.13		35.33		51.64	
-2		-2		-2		-2		-2	
4	27 32.38	5	5 50.57	5	17	2.13	33.33	5	28 49.64

1850. March 20

$a = -0.29$

$b = -0.16$

$c = +0.20$

M.C.B.

J. G. B. West

M.C.B.		J. G. B.		J. G. B.		J. G. B.	
α Aurigae		β Orionis		Polaris		α Cygni	
4	54.9		11.9		—		40.3
	15.3		26.9	88 30 38.5	—		59.4
	35.3		40.8	0	5 5 43.2 55.5		18.6
	55.0		54.2	1	4 38.8 40.5		38.0
	14.5		8.0		—		57.4
	34.0		21.7		—		16.5
5	6	5	29	35.3	—	20	37
	262.8		199.8				266.2
	54.69		54.26		41.00		38.03
	-2		-2		-2		-2
5	5	5	28	52.26	1	4	39.00
	52.695					20	36
							36.03

1850. March 22

$a = -0.31$

$b = -0.16$

$c = +0.20$

J. A. West

G. P. B.

α Aurigae

+45° 50 0.2 20.8

0.2 40.5

0.2 0.3

0.3 20.0

5 0.4 39.8

0.26

-2

5 5 58.26

1850. March. 24

Ill. West

$$a = -0.30$$

$$b = -0.16$$

$$c = +0.20$$

W. C. B.

x Aurigae

5 7.1

26.9

46.6

6.2

26.0

45.6

5 7 5.2

43.6

6.23

-2

5 6 4.23

1850. March 25 A. 16

$a = -0.29$

$b = -0.15$

$c = +0.20$

Ill. West

m.e. Os.

"

 γ Aquilae α Aquilae

—

3

16.5

—

30.5

+10° 15'

—

44.6

—

58.8

38.3 52.2

13.0

38.2 6.1

26.3

38.1 20.0 19

44

40.1

229.8

38.20

58.54

-2

-2

36.20 19

43

56.54

1850 March ²⁵/₂₆

W.C.B.

All. War

$a = -0.29$

$b = -0.15$

$c = +0.20$

 α Lynae

1 33.0

50.3

8.0

25.5

43.0

0.5

18 33 18.0

174.3

25.47

-2

18 32 23.47

1850. March $\frac{28}{29}$

$a = -0.25$

$b = -0.13$

$c = -0.20$ Ill. West

S. O. B.

5 Aquilae

31.5

45.3

59.5

14.8

28.0

42.2

18 59 56.0

276.5

13.79

-2

18 59 11.79

1850. March. $\frac{29}{30}$

$$a = -0.21$$

$$b = -0.13$$

$$c = +0.20$$

Ill. West

W. C. B.

 α Lyrae

44.7

3.1

20.0

38.0

58.5

13.0

18 33 30.3

204.6

37.80

-2

18 32 35.80

1850, April 1 A.M.

$a = -0.24$

$b = -0.13$

$c = +0.20$ Ill. West

B. A. B.

 α Lyrae

49.0

6.8

24.3

42.0

59.4

17.0

18 33 34.5

233.0

41.86

-2

18 32 39.86

$$a \approx -0,23$$
$$b = -0.12$$
$$C \leq +0.20$$

M. C. B.

Went
S. P. B.

α Lyrae

B. Lyrae

x Cygni

+38 39

 $+ 33^{\circ} 11'$

13.6

83.4

512. 8

12.0

45.5 3.1

25.4 41.8

31.4

45.120.3

25.258.

50.6

18 33 45.338.0 18 4626.115.3 20 38 10.0

203.8

45.30

2556

11.97

- 2.

-2

-2

18 32 43.30 18 45 23.56 20 37 9.97

