

KG
1365
218

K.8

Zones.

No 8

From April 8th to
1853.

KG 11365.218

H 370

 9^2 R 8.14.31.5

Dec +0.18.12"

yr. 565

7.8 R 8.21.36.50

Dec +0.11.03.7

KG-11365.218



1853 April 8th

Loni 46

R 8^h 15^m 0^h 10
0^h 20

C.B. 9.49.00 Bar. 29.890 - 66° Ex. 46.5'
 10.57.00 29.874 64 44.0

8.08.57.2 55.2 8.08.55.20

9.24.5 28.6 8.9.28.55

9.56.7 0.7 8.10.00.70

10.8.9 12.9 8.10.12.90

B

10.31.9 35.9 8.10.35.90

10.50.9 54.9 8.10.54.90

10.57.2 1.2 8.10.1.20

11.22.3 26.4 8.11.26.35

11.27.9 31.8 8.11.31.85

12.59.6 3.6 8.13.03.60

Windy

14.04.7 8.6 8.14.08.65

B B

14.27.3 31.2 8.14.31.25

14.48.6 52.6 8.14.52.60

15.39.5 43.5 8.15.43.50

16.2.3 6.4 8.16.06.35

17.08.4 12.4 8.17.12.40

17.10.6 14.5 8.17.14.55

D

20.17.5 21.5 8.20.21.50

20.32.5 36.4 8.20.36.45

21.4.2 8.2 8.21.08.20

21.32.0 36.4 8.21.36.05

* y g 241

W

46

41

1.02

12 8.58

12.13 1.69

12 2.29

B

12 7.25

12 -0.12

11 6.59

12 0.19

11.12 1.10

12.13 6.53

Windy

12 10.33

B B

W 8 8.13 2

11 7.08

12 9.43

12 10.09

11 3.02

12 3.02

9 10.10

S

12 1.53

12.13 8.47

12 0.58

9 1.03

NS

2

2w; last

Affect

Dec. doubt. ns

dup. 12" s.p.

W

8..22..28.2 32.1
22..42.7 46.5

8.. 22.. 32.15
8.. 22.. 46.60

Ink failed

31..30.2 —
31..42.6 46.5
31..47.5 57.5
8..32..07.8 11.8

BD

33..01.0 4.9
35..41.3 —

36..

37..11.8 15.8
37..48.4 52.6

DDB

38..36.5 40.3
39.. 4.8 8.7
39..10.0 14.2
40..42.9 46.9
44..16.1 19.1

Clouds

46..21.3 25.2
46..21.2 25.2

47..20.6 24.6
51.. 20.7 24.7
52..39.6 43.1
53.. 53.2 57.2
56.. 52.9 57.0

8.. 31.. 34.80
8.. 31.. 46.55
8.. 31.. 57.50
8.. 32.. 11.80

8.. 33.. 04.95 —
8.. 35.. 45.30

8.. 37.. 15.80
8.. 37.. 52.50

8.. 38.. 40.40
8.. 39.. 08.75
8.. 39.. 14.10
8.. 40.. 46.90
8.. 44.. 19.10

8.. 45.. 25.25
8.. 46.. 25.20

8.. 47.. 24.60
8.. 57.. 24.70
8.. 52.. 43.10
8.. 53.. 57.20
8.. 55.. 56.95

11 9.17

11 8.46

12 1.00

12 8.50

B

11 4.35

10 8.32

10 1.17

12 2.52

12-13 0.19

12 1.37

12 7.36

12 8.17

12 7.37

12 4.45

12 9.32

B

12 9.24

12 9.37

~~12 5.123~~~~11 3.50~~~~11 8.44~~

DDB

11.12 6.35

12 5.28

10 0.49

12 3.31

11 8.45

clonels

12 10.39

12 8.23

Mag. uncertain - waken

12 10.34

12 9.29

12 7.39

12 8.25

13 7.24

Very few stars -

scattered

2 lost

no

2 more lost

conf 13^{on} 12^{on} m f

46

8..59..13.3 17.2 8..59..17.25

8 59..59.9 3.9 9..00..03.90

9 01..54.6 58.6 9..01..58.60

~~41.4~~ ~~45.4~~

02..41.4 45.4 9..02..45.4

DD

3..38.9 38.0 9..03..37.95

13 6.24
12 8.26
11 2.04
cloudy
10 9.18
DD
12 4.33

April 9th 1853 Zone 47R 8^h 14^m 0^s 18
0^m 20

Clear & calm

This zone is much less rich in stars than
the average

9.07.30 Bar. 29.800 67 Ext. 51.5
 11.18.00 " 29.867 68 47.3

8..14..27.7 31.7 8..14..31.70

14. 3.4^h 52.9 8..14..52.75⁵⁰

15. 3.9 43.9 8..15..43.90

16. 2.6 6.6 8..16..06.60

B

17. 8.7 8..17..12.70

17. 10.9 14.9 8..17..14.90

17. 12.9 16.8 8..17..16.85

20. 18.0 — 8..20..22.00

20. 33.0 36.9 8..20..36.95

20. 47.4 51.4 8..20..51.40

21. 4.5 8.4 8..21..08.45

21. 32.3 36.3 8..21..36.30

BDB

22. 42.8 46.8 8..22..46.80

23. 5.9 9.7 8..23..09.80

23. 21.7 26.7 8..23..25.70

Ink!

24. 03.3 7.3 8..24..07.30

47

m
 . 8" 8" 11
 . 11.12 7" 05
 . 12 9" 40
 + 12 10" 06

B

. 11 3" 00
 . 12 2" 59
 + 9 10" 07

Very few stars

. 12 1" 49
 . 12 8" 44
 + 11 - 0" 33
 . 12 0" 56
 . 9 1" 00

BDB

. 11 9" 13
 . 11 8" 44
 . 12 0" 58
 . 11.12 8" 47
 . 11.12 4" 32
 . 10 8" 27
 . 12 3" 46
 . 9 1" 15
 . 12 2" 49

D

red 1st star in Z of zone 46 $R 8^h 14^m 52^s$
 $Dec + 0^h 18^m 12^s$

2 win lost
 m
 m

2nd win lost
 several 12 mag. lost

m 11
 Comp. 13 5th p.

orange color

47

8..27..17.4 21.4 8.. 27.. 21.40

27..55.5 59.5 8.. 27..59.50

Smk!

30..17.2 21.2 8.. 30.. 21.20 -

31 Smk! 46.7 8.. 31.. 46.70 -

31 51.7 8.. 31.. 57.70 -

32..54.4 58.5 8.. 32.. 58.45 -

34..23.8 27.7 8.. 34.. 27.75 -

35.. 46.6 8.. 35.. 45.60 -

36..18.9 22.9 8.. 36.. 22.90 -

37..12.1 16.1 8.. 37.. 16.10 -

37..40.2 44.1 8.. 37.. 44.15 -

37..48.8 52.6 8.. 37.. 52.70 -

8.. 37 - 56.7 8.. 37.. 56.70 -

DDD

38..36.6 40.6 8.. 38.. 40.60 -

39.. 5.0 9.0 8.. 39.. 09.00 -

39..10.5 14.4 8.. 39.. 14.45 -

40..42.0 46.2 8.. 40.. 46.10 -

40..43.3 47.2 8.. 40.. 47.25 -

41..00.7 4.7 8.. 41.. 04.70 -

41..7.5 11.5 8.. 41.. 11.50 -

B

41..29.1 33.0 8.. 41.. 33.05 -

42..7.2 11.1 8.. 42.. 11.15 -

44..15.6 19.4 8.. 44.. 19.50 -

45..21.6 25.6 8.. 45.. 25.60 -

46..21.3 25.3 8.. 46.. 25.30 -

46..22.0 26.1 8.. 46.. 26.05 -

D

47..17.7 21.7 8.. 47.. 21.70 -

47

.12 0.15
 .11 1.34
 .12 7.33
 .12 2.38
 x 11.12 10.25
 .11 8.16
 .11 7.34
 .11 4.12
 .11 9.29
 2B
 .12 8.11
 .11 9.22
 .12 9.14 ~~cont.~~
 .11.12 9.34
 .11 3.39
 x 11.12 - 0.21
 .10.11 5.19
 .10 3.47
 .10 8.42
 .12 6.43
 DDD
 .9 6.33
 .11 5.24
 .8 0.47
 .12 5.30
 .11 3.27
 .12 1.36
 .12 5.50
 B
 .12 6.03
 .13 9.45
 Very noisy
 .10.11 8.48
 x 11 10.34
 .11 8.21
 .12 8.32
 D
 x 12 10.23

2nd win lost
 ns
 comp. of 12^m 4^m p.

ns

1st win lost

reddish
 yellowish ns

ns

ns

Done 47

847.20.9 24.8
 7. 38.6 42.5
 7. 57.7 1.7
 60. 24.9 28.9
 50. 28.6 32.6

D B

57. 00.9 4.9
 51. 7.0 10.9
 51. 20.9 24.8
 52. 39.4 43.3
 52. 51.3 55.4
 53. 53.5 57.5
 53. 55.0 58.9

B

55. 53.1 57.0
 56. 36.9 40.9
 56. 49.0 53.1
 57. 15.2 19.1
~~58. 18.7 22.7~~
 58. 18.7 22.7

B B

59. 13.6 17.6
 9. 50.6 54.6
 9. 00. 22.0 25.9
 1. 00.1 4.2
 1. 30.2 34.2
 1. 54.9 58.9
 2. 41.8 45.7
 3. 22.5 —
 3. 34.2 38.3

D

3. 59.5 3.4
 5. 40.0 44.0
 6. 10.7 14.6
 6. 35.3 39.1
 6. 44.7 48.6
 6. 52.9 56.9
 7. 58.6 2.6c

8. 47. 24.85
 8. 47. 42.55
 8. 48. 01.70
 8. 50. 28.90
 8. 50. 32.60

8. 57. 04.90
 8. 57. 10.95
 8. 57. 24.85
 8. 52. 43.35
 8. 52. 55.35
 8. 53. 57.50
 8. 53. 58.95

8. 55. 57.05
 8. 56. 40.90
 8. 56. 53.05
 8. 57. 19.25
 8. 58. 22.70

8. 59. 17.60
 8. 59. 54.60
 9. 00. 25.95
 9. 01. 04.15
 9. 01. 34.20
 9. 01. 58.90
 9. 02. 45.75
 9. 03. 26.50
 9. 03. 38.25

9. 04. 03.45
 9. 05. 44.00
 9. 06. 14.65
 9. 06. 39.20
 9. 06. 48.65
 9. 06. 56.90
 9. 08. 02.60

* 11.12 10.30
 • 12 6.07
 • 12 3.05
 • 12 3.52
 • 12 3.20

DB

• 12.13 2.52
 • 12.13 5.56
 • 12 9.36
 • 10.11 7.37
 • 12 4.30
 • 10.11 8.22
 • 12 6.02

B

• 12 7.20
 • 13 1.45
 • 12 1.31
 • 12 2.39

No stars above 18 mag.

• 12 9.48
 BB

• 11.12 6.19

* 12.13 2.40

12 2.01

11 8.23

12.13 8.20

9.10 2.01

9 9.15

12 10.40

11 4.31

D

12.13 2.26

12 9.56

11.12 3.37

11 7.07

11 3.30

11 5.33

9.10 5.06

Lone Hy.

9..09..08.2 12.2e
 9..17.6 21.6
 D

12..24.6 28.5

13..50.1 54.3

13..51.7 55.6

14..22.6 —

14..35.5 39.6

15..08.0 11.9

15..23.8 27.8

D

16..34.6 38.5

17..35.2 39.2

18..27 6.6

19..01.8 —

19..10.7 14.6

20..1.9 5.9

20..37.6 41.7

20..39.8 43.8

B

21..17.3 21.2

23 16.7

24..00.2 4.2

24..52.8 56.8

27..1.8 5.7

28..00.9 4.9

28..57.3 1.6

BBD

30..19.8 23.7

31..54.1 58.1

32..47.8 51.8

33..43.9 —

35..14.6 18.5

35..35.1 39.1

36..25.7 29.7

36..52.8 56.9

37..36.6 40.6

9..09..12.20

9..09..21.60

9..12..28.55

9..13..54.20

9..13..55.65

9..14..26.60

9..14..39.50

9..15..11.95

9..15..27.80

9..16..38.55

9..17..39.20

9..18..06.65

9..19..05.80

9..19..14.65

9..20..05.90

9..20..41.65

9..20..43.80

9..21..21.25

9..23..16.70

9..24..04.20

9..24..56.80

9..27..05.75

9..28..04.90

9..29..01.40

9..30..23.75

9..31..58.10

9..32..57.80

9..33..47.90

9..35..18.55

9..35..39.10

9..36..29.70

9..36..56.90

9..37..40.60

BDB

12 6.28

12 6.58

Vacancy

11.12 10.33

12.13 1.34

12 2.16

* 12 10.19

7 1.44

12 1.39

* 12 10.19

D

12 3.10

10 1.52

11.12 8.01

12 4.00

11 6.37

10.11 8.03

12 0.27

12.13 0.48

B

* 11.12 10.32

12 6.25

12 0.43

11 0.40

* 9.10 -0.14

9.10 7.22

11 4.27

BDD

* 9 10.14

12 6.23

12 3.05

12 9.42

12 9.40

12.13 5.16

10 5.41

12 0.02

8 2.27

2nd m. best

2nd m. best

ms

2nd m. best

yellow

9.. 38.. 40.7 44.7

L

40.. 44.9 48.9

41.. 56.6 00.4

42.. 09.5 13.5

42.. 29.2 33.2

44.. 11.9 15.9

BB

45.. 19.7 23.8

45.. 54.2 58.0

46.. 37.8 41.8

47.. 00.0 3.9

47.. 16.6 20.6

48.. 21.9 25.8

48.. 44.2 48.1

49.. 04.3 8.3

49.. 29.9 33.9

49.. 30.8 34.9

50.. 4.7 8.6

50.. 40.1 —

50.. 43.9 47.9

51.. 22.6 26.7

D

52.. 50.3 54.5

53.. 18.7 22.7

56.. 54.1 58.2

57.. 25.0 29.0

58.. 41.9 45.9

58.. 51.5 55.5

59.. 2.4 6.4

59.. 22.9 26.9

9 59.. 29.6 33.6

10 0.. 21.6 25.6

BBB

5.. 06.2 10.2

5.. 28.3 32.3

6.. 31.0 34.9

6.. 31.3 35.3

Done 47

9.. 38.. 44.70

9.. 40.. 48.90

9.. 42.. 00.50

9.. 42.. 13.50

9.. 42.. 33.20

9.. 44.. 15.90

9.. 45.. 23.75

9.. 45.. 58.10

9.. 46.. 41.80

9.. 47.. 03.95

9.. 47.. 20.60

9.. 48.. 25.85

9.. 48.. 48.15

9.. 49.. 08.30

9.. 49.. 33.90

9.. 49.. 34.85

9.. 50.. 08.65

9.. 50.. 44.10

9.. 50.. 47.90

9.. 51.. 26.65

9.. 52.. 54.40

9.. 53.. 22.70

9.. 56.. 58.15

9.. 57.. 29.00

9.. 58.. 45.90

9.. 58.. 55.50

9.. 59.. 06.40

9.. 59.. 26.90

9.. 59.. 33.60

10.. 00.. 25.55

10.. 05.. 10.20

10.. 05.. 32.30

10.. 06.. 34.95

10.. 06.. 35.30

done 47.47

12 5.39

22

11 9.37

11 3.50

12.13 6.28

12 4.06

11 7.23

B B

12 5.10

11.12 4.42

11 3.55

9 7.07

12 3.56

11 8.19

13 5.09

8.9 3.57

12 0.03

11 1.40

11 7.02

12 9.53

12 6.15

12 5.24

5

13 6.34

12 7.12

12.13 8.11

10 4.03

12.13 6.56

* 12 10.06

12 8.49

12.13 7.10

12 5.11

* 4 10.36

B B

12 2.13

11 0.27

13 3.24

12 4.38

yellow

no

2 m test no

2 8 possibly 10.46 sig between wires

ms

Zone 47.

10 06 — 41.6	10..06..41.60
8..09.0 12.9	10..08..12.95
8..23.9 27.9	10..08..27.90
10..24.4 28.4	
10..24.4 28.4	10..10..28.40
11..2.2 6.1	10..11..06.15
11..10.0 13.9	10..11..13.95
11..17.0 21.1	10..11..21.05
13..6.6 10.4	10..13..10.45
14..16.7 20.7	10..14..20.70
15..54.9 58.8	10..15..58.85
16..20.1 24.1	10..16..24.10
17..1.6 5.5	10..17..05.55
17..17.1 21.0	10..17..21.05
17..56.3 00.2	10..18..00.25
19..6.2 10.2	10..19..10.2
20..24.5	
20..24.5 28.5	10..20..28.50

Zone 47

10' to 20'

1st in list

11 0.20

12 2.24

13 1.57

Very few stars

12 8.31

12 1.07

12.13 2.18

12.13 8.18

12.13 3.01

12 6.15

No stars above 18 mag.

~~12~~ 4.10

12.13 9.03

12 4.45

9 10.28

12 2.40

12 1.00

13.

11 1.14

n zip

April 15

Zone 48

R 8^h 20' 0^s 10'
To 0^s 20'Zero of Pos 90^h 02
used 90^h 02^m 30^s

Clear

Clouds caused interruptions

EC 10^h 08^m 30^s
12^h 25^m 00^sBar 30.138-66
30.349-65Est Hr 39.1
35.28^h 14^m 27.9 31.9 8^h 14^m 31.9014^m 48.9 53.0 14^m 52.95

DB

15^m 39.8 43.8 15^m 43.8016^m 46.2 50.0 16^m 50.1016^m 2.7 6.7 16^m 6.90

D

17^m 08.8 — 17^m 12.8017^m 11.0 15.0 17^m 15.0017^m 13.0 16.9 17^m 16.9520^m 18.1 22.2 20^m 22.1520^m 33.1 36.9 20^m 37.0020^m 47.5 51.6 20^m 51.5521^m 4.5 8.5 21^m 08.5021^m 32.4 36.3 21^m 36.35

DB

22^m 28.6 32.5 22^m 32.5522^m 43.0 46.9 22^m 46.9023^m 05.9 9.8 23^m 9.8523^m 21.7 25.7 23^m 25.7023^m 46.6 ~~50.6~~ 23^m 50.6023^m 50.6 — 23^m 54.6024^m 3.6 7.5 24^m 7.55

D

24^m 27.3 31.4 24^m 31.35

8 8.12

11 7.06

B

12 9.41

12 -0.13

12 10.08

B

11 3.01

12 3.00

9.10 10.08

12 1.51

12 8.45

11 -0.33

11 0.57

8 1.01

DB

11.12 9.14

11 8.45

12 0.58

12 8.49

11 10.11

11.12 4.03

9 8.28

B

12 0.16

dark emp 13 12" m f

2 min best

no

no

emp. 12 7.5" s p

2 min best

redshift no 2 w best

48

8..25.06.8 10.7 8..25.10.75

25..50.0 53.9 25..53.95

26..08.7 12.6 26..12.65

27..18.4 21.4 27..21.40

27..55.4 57.6 27..59.60

28..31.8 35.8 28..35.80

28..45.3 49.3 28..49.30

BBB BBB

30..17.3 21.3 30..21.30

31..30.7 34.7 31..34.70

31..43.0 46.9 31..46.95

31..47.8 51.8 31..51.80

32..8.0 12.0 32..12.00

33..01.4 Ink!! 33..05.40

DD ~~34..27.70~~

34..23.7 27.7 34..27.70

35..41.6 45.6 35..45.60

36..02.7 6.6 36..6.65

36..19.1 22.9 36..22.95 23.00

37..12.2 16.1 37..16.15

37..40.2 44.0 37..44.10

37..48.9 52.9 37..52.90

37.. — 56.8 37..56.80

38..36.8 40.7 38..40.75

39 Ink!! 9.1 39.. 9.10

39..10.4 14.5 39..14.45

B

40..42.3 46.2 40..46.25

40..43.3 47.2 40..47.25

41..00.7 4.6 41..4.65

41..7.6 11.6 41..11.60

41..29.4 33.3 41..33.35

42..07.2 11.2 42..11.20

44..15.5 19.5 44..19.50

45..21.6 25.5 45..25.55

46..21.5 25.4 46..25.45

12 3.47

9 1.17

12 2.50

12 0.17

11 1.36

12 7.34

12 2.40

BBB

11.12/0.25

11.12 8.16

11.12 7.35

12 4.14

11 9.30

12 8.12

11 9.28

DS

12 9.15

12 9.35

12 3.40

12 -0.21

10 5.21

10 3.48

10 8.42

12 6.45

10 6.34

11 5.26

7.6 0.47

B

12 5.31

11 5.29

12 1.38

12 5.52

12 6.03

13 9.45

10.11 8.43

11 10.37

11.12 8.22

comp 12^{my} 4" n f

Dini lost

ms

ms

8,, 46,, 22.1 26.1 8,, 46,, 26.10

D B D

47,, 21.1	25.0	47,, 25.05
47,, 38.5	42.5	47,, 42.50
47,, 57.8	1.8	47,, 1.80
50,, 24.9	29.0	50,, 29.05
50,, 28.7	32.7	50,, 32.70
51,, 1.1	5.0	51,, 4.95
51,, 7.0	10.9	51,, 10.95
51,, 20.9	24.9	51,, 24.90
52,, 39.6	43.4	52,, 43.50
52,, 51.5	55.4	52,, 55.45
53,, 53.5	57.6	53,, 57.55
53,, 54.9	58.9	53,, 58.90
55,, 53.2	57.2	55,, 57.20

B

56,, 36.9	40.9	56,, 40.90
56,, 49.2	53.1	56,, 53.15
57,, 15.2	19.2	57,, 19.20
58,, 18.9	22.9	58,, 22.90
59,, 13.6	17.6	59,, 17.60

D

8,, 59,, 50.6	54.6	8,, 59,, 54.60
9,, 00,, 22.0	25.9	9,, 00,, 25.95
1,, 00.3	4.2	1,, 04.25
1,, 54.8	58.8	1,, 58.80
2,, 41.7	45.7	2,, 45.70
3,, 22.4	26.2	3,, 26.30
3,, 34.3	38.3	3,, 38.30
3,, 59.3	3.3	4,, 3.30
4,, 40.7	44.7	4,, 44.70
6,, 10.5	14.5	6,, 14.50
6,, 35.2	39.1	6,, 39.15
6,, 44.7	48.7	6,, 48.70
6,, 52.8	56.9	6,, 56.85

B

7,, 58.5	2.6	7,, 2.55
8,, 8.2	12.2	8,, 12.20

11.12 8.83
 9.03.0
 12 10.33 *cent*
 12 6.07
 12 3.06
 12 3.54
 12 3.22
 13 2.53
 12 5.48 *cent*
 11 9.27 *cent*
 11 7.38
 12.13 4.32
 11 8.23
 12 6.03
 12 7.21
 10
 13 1.46
 12 1.32
 12 2.39
 12 9.49
 11 6.21
 10
 12 2.41

 .12 2.62
 .11 8.25
 .9.10 2.02
 .9 9.17
 .12 10.41
 .11 4.33
 .13 2.28
 .11.12 - 0.16
 .11 3.39
 .10 7.08
 .10 3.82
 .10.11 5.35
 10.11 5.35
 .9.10 5.09
 .12 6.29

9^h 09^m 17.6 21.6 9^h 9^m 21.60
 12 24.6 28.5 12^h 28.55
 14^h 35.4 39.3 14^h 39.35

DD B

16^h 34.6 38.5 16^h 38.55
 17^h 35.1 39.1 17^h 39.10
 18^h 2.5 6.6 18^h 6.55
 19^h 10.5 14.4 19^h 14.45
 20^h 1.7 5.7 20^h 5.70
 20^h 37.6 41.6 20^h 41.60
 23^h 12.7 16.7 23^h 16.70
 23^h 59.9 3.9 24^h 3.90
 24^h 52.7 56.7 24^h 56.70
 27^h 1.5 5.5 27^h 5.50

D

28^h 00.9 4.8 28^h 4.85
 30^h 19.6 23.5 30^h 23.55

Wolken!

44^h 11.8 15.7 44^h 15.75
 45^h 19.7 23.5 45^h 23.60
 45^h 54.0 58.0 45^h 58.00
 46^h 37.7 41.6 46^h 41.65
 46^h 59.8 3.8 46^h 3.80
 47^h 16.5 20.4 47^h 20.45

B

48^h 21.5 25.6 48^h 25.55
 49^h 4.3 8.3 49^h 8.30
 49^h 29.9 33.7 49^h 33.80
 49^h 30.7 34.7 49^h 34.70
 50^h 04.7 8.6 50^h 08.65
 50^h 39.8 43.9 50^h 43.95
 50^h 43.5 47.6 50^h 47.55
 52^h 22.4 26.4 52^h 26.40
 53^h 18.4 22.5 53^h 22.45
 56^h 54.0 57.9 56^h 57.95
 57^h 24.7 28.7 57^h 28.70

48

.12 6.169

.11 10.36

.9 1.146

1 clunch

DOB

.12 3.11

.10 1.53

.11 8.103

.10 6.39

.10.11 8.103

.12 0.27

.12 6.27

.12 0.44

.12 0.42

.11 5-0.13

D

.11 7.23

.9 10.15

Walther

.11 7.26

.12 5.11

.11.12 4.45

.12 3.57

.18 7.09

.12 3.58

B

.11 8.20

.9 3.59

.13 0.05

.12 1.41

.11 7.03

.12 9.54

.12 6.16

.12 9.50

.12 7.12

.12 8.12

.10 4.05

yellow

m)

48

9 ^h 58 ^m 41.7	45.7	9 ^h 58 ^m 45.70
58 ^m 51.2	55.2	58 ^m 55.20
59 ^m 2.2	6.1	59 ^m 6.15
9 ^h 59 ^m 29.4	33.3	9 ^h 59 ^m 33.35
10 ^h 0 ^m 21.4	25.3	10 ^h 0 ^m 25.35
4 ^m 27.7	31.8	4 ^m 31.75
5^m 6.0	10.0	
5 ^m 6.0	10.0	5 ^m 10.00
5 ^m 28.0	31.9	5 ^m 31.95
6 ^m 30.7	34.8	6 ^m 34.85
6 ^m 31.2	35.3	6 ^m 35.25
6 ^m 37.2	41.2	6 ^m 41.20

20

7 ^m 9.0	12.9	7 ^m 12.95
8 ^m 8.6	12.6	8 ^m 12.60
10 ^m 24.0	27.9	10 ^m 27.95
11 ^m 1.8	5.8	11 ^m 5.80
11 ^m 9.7	13.6	11 ^m 13.65
11 ^m 17.0	20.9	11 ^m 20.95

18

13 ^m 06.1	10.0	13 ^m 10.05
14 ^m 16.4	20.2	14 ^m 20.30
15 ^m 54.4	58.4	15 ^m 58.40
16 ^m 19.8	23.7	16 ^m 23.75
17 ^m 08.3	^{m.b}	17 ^m 5.30
17 ^m 16.7	20.6	17 ^m 20.65
17 ^m 56.0	59.9	17 ^m 59.95

48

BOB

$\times 12$ 6.56
 $\times 12$ 10.06
 $\times 11$ 18.50
 $\times 12$ 5.11

 $\times 4$ 10.36
 $\times 12.13$ 0.54

Vacancy

$\times 12$ 2.14
 $\times 11.12$ 0.27
 $\times 12$ 3.24
 $\times 11.12$ 4.39
 $\times 11$ 0.20

D

$\times 12$ 1.00
 $\times 13$ 2.26
 $\times 12$ 8.32
 $\times 12$ 1.08
 $\times 11.12$ 2.19
 $\times 12$ 8.19
 B

$\times 12$ 3.03
 $\times 12$ 6.17
 $\times 12$ 4.14
 $\times 12.13$ 9.04

$\times 12$ 4.47
 $\times 9$ 10.29
 $\times 12$ 2.42
 $\times 12$ 1.02
 $\times 11$ 1.14

D 503

on

Zone 49

N.B. - Zone 48 brings up the work to the point of commencement in April 1852 - Zone 49 will begin at the end of Zones 1-2 & 3 - namely -

R 11^h 54^m Dec 0^o 00'

Lo R 0^h 10'

Zone ~~48~~ will commence as follows

R 12^h 58 - Dec 0^h 10'

Lo 0^h 20'

Zone 49

First star is 8th - 9th - double 13th mag 6th -

1853, R 11^h 52^m 53^s.40

Dec + 0^h 07^m 32^s

A star 10th follows by 31.5^s & is 2^h 23^m S of it.

See end of this book

✓ 11.52.48.6	52.6	11. 52.48.6 52.60
✓ 53.19.8	23.8	53.23.80
53.56.5	00.4	54.00.45
54.13.4	17.4	54.17.40
B		
56.35.7	39.6	56.39.65

49

April 27

8.6.12.12.00	Bar. 30.150	63	Exp. 48.1
14.14.00	30.182	64	44.2

9 7.31
 11 5.07
 11.12 8.17

12 5.52

B Vacuumy windy

13 9.36

comp 15 mg. 5" s. f.

11. 57.18.3 22.3 11. 57. 22.30
58.34.0 37.9 58. 37.95

58.44.9 48.8 58.48.85
59.15.4 19.3 59.19.35

D

12. 00.20.9 24.9 00.24.90
1. 16.9 20.9 1. 20.90
1. 50.1 54.1 1. 54.10
2. 03.2 7.1 2. 7.15

BB

2. 43.2 47.2 2. 47.20
4. 43.9 47.9 4. 47.90
5. 49.9 53.9 5. 53.90
6. 17.1 21.1 6. 21.10

D

7. 24.2 28.1 7. 28.15
8. 19.2 23.1 8. 23.15
9. 26.1 28.9 9. 29.00
9. 42.6 46.5 9. 46.50
11. 3.8 7.8 11. 7.80

BB

11. 46.6 50.6 11. 50.60
11. 53.9 57.9 11. 57.90
12. 18.9 22.8 12. 22.85

BDD

12. 54.4 58.4 12. 58.40
13. 40.2 44.2 13. 44.20
14. 31.6 35.6 14. 35.60

B

16. 44.8 48.8 16. 48.80
17. 29.6 33.6 17. 33.60
17. 45.3 — 17. 49.30
17. 57.2 1.2 18. 1.20

DBD

22. 06.7 10.7 22. 10.70
22. 32.3 36.1 22. 36.20

45

12 5.38

12 10.04

~~12~~

13 8.06

9.10 0.04

D

10.11 9.26

10 3.27

8 3.37

9.10 2.43

B B

10.11 4.42

12.13 0.41

12 7.09

7 10.38

D

9 9.22

12.13 9.14

11 6.45

12 6.17

6 1.44

B

12 8.17

12 10.12

9.5 8.58

B D D

12 0.20

11 9.54

11 3.08

B

12 6.58

12 5.18

12.13 6.37

12 9.26

D B D

10 9.20

10 0.12

2 min lost

12, 23, 27.1 31.1 12, 23, 31.10

24, 00.5 4.3 24, 4.40

~~26, 42.4 46.7~~

25, 42.9 46.7 25, 46.80

26, 2.9 6.8 26, 6.85

27, 50.6 54.6 27, 54.60

DB

28, 25.8 29.7 28, 29.75

~~29, 46.4~~ 29, 46.40

29, 49.9 53.9 29, 53.90

30, 54.4 58.3 30, 58.35

31, 56.9 01.1 31, 1.00

32, 37.5 41.5 32, 41.55

B

33, 40.5

33, 47.8 51.6 33, 51.70

35, 20.9 24.8 35, 24.85

~~36, 44.2 48.1~~

35, 44.2 48.1 35, 48.15

D

39, 04.3 8.3 39, 08.30

43, 7.8 11.7 43, 11.76

43, 14.9 18.8 43, 18.85

43, 55.9 0.0 43, 59.95

BB

44, 18.0 23.0 44, 23.00

44, 54.2 58.2 44, 58.20

45, 62.0 55.9 45, 58.95

46, — 41.0 46, 41.00

47, 22.7 26.6 47, 26.65

47, 56.0 59.9 47, 59.95

48, 50.1 54.1 48, 54.10

D

52, 00.7 4.6 52, 04.65

52, 47.2 51.1 52, 51.15

53, 46.4 50.5 53, 50.45

54, 20.8 24.6 54, 24.80

49

11 5.08

11 7.47

Remarkable ^{configuration} compo. 4 stars 13 mag in parallelogram

12 10.03

12 7.57

12. 4.28

D B

9 6.00

11 7.01

11.12 10.31

12.13 4.13

12 9.33

12 6.20

B

12 4.27

11 5.27

11.12 2.22

Mag. 9.50

12.13 5.33

D

8.9 8.26

8.9 2.52

12 4.35

11 6.33

B B

10 9.55

12 4.23

9 2.05

10 8.13

12 1.38

12 10.24

12 2.13

D

11.12 6.49

12 3.10

12 9.52

12 8.02

1st win lost -

N. a faint nebulae

Wipe 1 Dec 10" too large & redish

1st win lost -

comp. 12 mag. 4' s. p.

12..54..32.9	36.9	12..54..36.90
54..54.9	58.9	54..58.90
35..12.7	16.7	55..16.70

D

57..02.3	6.3	57..06.30
----------	-----	-----------

B

58..04.9	8.8	58..08.85
12..58.35.2	39.0	12..58.39.10
13..00.34.6	38.6	13..00.38.60

2..28.8	32.8	2..32.80
---------	------	----------

3..9.6	13.6	3..13.60
--------	------	----------

3..41.7	45.7	3..45.70
---------	------	----------

D B

4..28.7	32.7	4..32.70
---------	------	----------

4..57.8	1.7	5..1.75
---------	-----	---------

5..7.6	11.5	5..11.55
--------	------	----------

5..47.2	51.1	5..51.15
---------	------	----------

B

6..27.2	31.3	6..31.25
---------	------	----------

7—	55.7	7..55.70
----	------	----------

9..54.7	58.6	9..58.65
---------	------	----------

B D S

10..34.1	38.1	10..38.10
----------	------	-----------

11..47.0	51.0	11..51.00
----------	------	-----------

12..11.0	14.9	12..14.95
----------	------	-----------

12..48.6	52.6	12..52.60
----------	------	-----------

14..2.4	6.4	14..6.40
---------	-----	----------

D

16..29.5	33.5	16..33.50
----------	------	-----------

16..7.7	11.6	16..11.65
---------	------	-----------

16..49.9	53.9	16..53.90
----------	------	-----------

18..22.9	26.8	18..26.85
----------	------	-----------

19..29.6	33.6	19..33.60
----------	------	-----------

19..30.2	34.2	19..34.20
----------	------	-----------

19..49.2	53.3	19..53.25
----------	------	-----------

B

21..40.8	44.8	21..44.80
----------	------	-----------

13 7.46

12 5.34

9 - 0.14

D

7 3.40

B

12 3.58

10 8.57

12 2.18

9 10.02

10 7.12

12 3.17

DB

12 3.18

11.12 1.50

12 1.29

12 2.41

B

12 5.18

12 1.12

6 5.58

BDD

12 5.06

12 7.46

12 6.56

13 6.10

12 7.47

D

12 5.28

9 2.69

12 8.03

12 9.24

12 1.21

12 3.56

12 1.52

B

12 3.55-

2 wins. 1 early

1st win lost

m

13..22..21.3	25.3	13..22..25.30
23..23.9	27.8	23..27.85
24..8.0	11.9	24..11.95
24..31.3 ^{1st rain}		24..35.30
25..2.6	6.7	25..6.70 65
25..15.6	19.6	25..19.60
25..23.2	27.0	25..27.10
27..08.3	12.3	27..12.30
BD B		
28..07.7	11.9	28..11.80
28..23.6	—	28..27.60
29..40.6	44.6	29..44.60
30..11.3	15.2	30..15.25
30..36.7	40.7	30..40.70
32..45.0	49.0	32..49.00
34..14.8	18.7	34..18.75
36..03.9	8.0	36..7.95
36..46.7	50.7	36..50.70
D		
37..34.3	38.3	37..38.30
39..1.4	5.5	39..5.45
40..16.7	20.8	40..20.75
40..21.9	25.9	40..25.90
40..45.0	48.9	40..48.95
40—	52.5	40..52.50
41..40.0	44.1	41..44.05
BD		
42..52.5	56.4	42..56.45
44..32.6	36.6	44..36.60
44..46.4	50.3	44..50.35
45..31.3	35.2	45..35.25
46..37.2	41.2	46..41.20
DD		
46..52.9 ^{1st 2nd rain}	55	46..56.90
47..15.9	19.9	47..19.90
48..13.7	17.6	48..17.65
50..20.8	24.9	50..24.85

12 1..33

12 10..14

12 3..46

12 8..10

12 9..00

11/12 4..32

10 8..33

3 9..24

B D B

12 2..32

10 10..32

12 5..38

10 7..28

12 9..20

12 9..15

11 1..52

12 3..07

12 8..42

B D

12 0..20

10 8..47

10 8..23

12 9..55

12 5..59

10 8..45

11 9..27

B D

11 4..27

12 7..07

10 18..40

12 2..20

12 8..26

D D.

12 -0..22

12 4..20

13 4..23

12 6..40

ms

suspected double

2nd win lost

ms

1st win lost

49

/ 13.52.03.4 7.3 13.52.07.35

12 → 6.40

12 1.06

8 4.51

April 28

Zone 50 = 49 repeated

E.C. 10. 53.30 Bar 30.134 65° Ext. 53.4
 " 1. 12.00 " 30.136 63 49.3

11. 52. 48.2 52.2 11. 52. 52.20

53. 19.5 23.5 11. 53. 23.50

53. 56.1 0.2 11. 54. 00.15

54. 13.0 16.9 11. 54. 16.95

B

11

56. 35.2 39.1 11. 56. 39.15

57. 17.8 21.8 11. 57. 21.80

58. 33.5 37.4 11. 58. 37.45

D

11. 58. 14.9 18.8 11. 59. 18.85

12. 00. 20.6 24.4 12. 00. 24.50

1. 16.7 20.7 12. 1. 20.70

1. 49.8 53.9 12. 1. 53.85

2. 2.9 6.9 12. 2. 06.90

2. 42.8 46.8 12. 2. 46.80

BD

4. 43.5 47.5 12. 4. 47.50

5. 49.6 53.6 12. 5. 53.60

6. 16.6 20.8 12. 6. 20.65

7. 23.6 27.8 12. 7. 27.70

D

8. 18.6 22.6 12. 8. 22.60

9. 24.7 28.7 12. 9. 28.70

9. 42.2 46.2 12. 9. 46.20

11. 3.4 7.6 12. 11. 07.50

Nov 50

9 7.29
11 5.05
12 8.14
12 5.50

B very few stars

13 9.33
13 5.36
x 13 10.01

D

10.1 0.01

11 9.24 cert.
10 3.26
8 3.34
10 2.42
11 4.40

B5

Stars very unsteady

13 0.37
13 7.08
x 8 10.37
9 9.22

D

13 9.10 R uncertain
12 6.42
12 6.15
6 1.43

Zone 50

12..11.46.1 50.2

12..11..50.15

12..18.6 22.6

12..22.60

B

12..~~57.8~~ 57.8

12..57.80

13..39.8 43.8

13..43.80

14..31.2 35.1

14..35.15

16..44.5 48.3

16..48.40

17..28.9 32.8

17..32.85

17..66.8 00.5

18..00.65

BDB

22..06.5 10.5

22..10.50

22..31.8 35.8

22..35.80

23..26.7 30.7

23..30.70

23..59.8 3.8

24..03.80

D

25..42.3 46.2

25..46.25

26..2.3 6.3

26..06.30

27..50.2 54.2

27..54.20

28..25.3 29.2

28..29.25

29..42.0 45.9

29..45.95

29..49.6 53.4

29..53.50

B

30..54.0 57.9

30..57.95

31..56.6 0.8

32..00.70

32..37.0 41.0

32..41.00

33..36.1 40.0

33..40.05

33..47.3 51.3

33..51.30

35..20.5 24.5

35..24.50

few stars

39..04.0 7.9

39..07.95

DDD

43..07.3 11.2

43..11.25

43..14.5 18.8

43..18.60

43..55.7 59.7

43..59.70

44..18.7 22.6

44..22.65

13 8.13

3 8.57

B

12 0.18

11 9.53

11.12 3.05

12 6.56

12 5.16

12 9.24

B D B

10 9.19

10 0.10

11 5.07

12 7.44

D

symmetrical arrangement of four stars in parallelogram

x 12 10.01

12.13 7.53

12 4.24

9 5.57

12 6.59

x 12 10.30

B

13 4.10

13 9.30

12 6.18

11.12 4.23

11 5.23

12 2.18

Vacuumy - very few stars

8.9 8.25

D D D

No stars above 18 mag.

8.9 2.51

12 4.32

12 6.52

10.11 9.54

1st win list

Group

sig. between wins

Lone 50.

12..44..53.8 57.8

45..51.6 55.4

46..36.5 40.5

47..22.3 26.3

47..56.7 59.4

48..49.6 53.6

Vacancy

50..46.9 50.7

50 — 55.3

51..50.8 —

52..00.4 4.3

52..46.7 50.7

DB

53..46.0 49.8

54..20.2 24.2

54..32.4 36.2

54..54.4 58.4

55..12.2 16.3

B

57..01.9 5.9

58..4.3 8.2

58..34.7 38.7

BB

13..00..34.1 38.2

2..28.3 32.3

3..08.9 12.9

3..41.2 45.2

4..28.3 32.2

4..57.3 1.3

5..6.9 10.9

5..46.9 50.9

6..26.9 30.9

D

9..54.1 57.9

10..33.7 37.6

14..2.0 6.9

15..29.1 33.0

15..46.7 —

12..44..57.80

45..55.50

46..40.50

47..26.30

47..59.55

48..53.60

50..50.80

50..55.30

51..54.80

52..04.35

52..50.70

53..49.90

54..24.20

54..36.30

54..58.40

55..16.25

57..05.90

58..08.25

58..38.70

13..00..38.15

02..32.30

03..12.90

03..45.20

04..32.25

05..01.30

05..10.90

05..50.90

06..30.90

09..58.00

10..37.65

14..05.95

15..33.05

15..50.70

5'0

12 4.20

9 2.02

11 8.12

12 1.36

12 10.20

12 2.10

Vacuumy

12 6.45

12 2.24

12 3.04

11.12 6.47

12 3.08

DB

12 9.49

12 7.58

13 7.43

12 5.31

9 - 0.17

DB

7.8 3.37

12 3.56

10 8.56

DB

12 2.15

9 10.00

10 5.08

12 3.16

12 3.15

11.12 1.47

12 1.26

12 2.39

12 5.17

DB

12 5.56

12 5.02

13 7.43

13 5.26

13 7.22

15 off. 2 m. h. 2
comp 12 m. 13.5. f.

Is this a new star?

2 m. h. 2

Lone 50

13..16..07.2 11.0 13..16..11.10

16..49.6 53.5 16..53.55

18..22.5 26.4 18..26.45

B

19..29.2 33.2 19..33.20

19..29.7 33.7 19..33.70

19..49.0 52.9 19..52.95

21..40.4 44.4 21..44.40

22..20.9 24.9 22..24.90

24..7.6 11.5 24..11.55

24..30.8 34.7 24..34.75

D

25..2.2 6.2 25..06.20

26..15.3 19.3 25..19.30

26..22.9 26.9 25..26.90

27..08.0 11.8 27..11.80

28..07.3 11.3 28..11.30

28..22.9 27.0 28..27.95

29 40.0 44.1 29..44.05

B

30..10.8 14.8 30..14.80

30 36.3 40.4 30..40.35

32..44.7 48.6 32..48.65

34..14.6 18.4 34..18.50

36..03.7 7.7 36..07.70

36..46.3 50.3 36..50.30

37..33.9 37.9 37..37.90

B B B

39..01.0 5.0 39..05.00

40..16.2 20.1 40..20.15

40..21.7 25.5 40..25.60

40..44.7 — 40..48.70

40..48.2 52.0 40..52.10

41..39.6 43.4 41..43.50

42..52.0 56.0 42..56.00

D

44..32.4 36.2 44..36.30

Zone 50

9 2.58
 13 8.00
 12 9.22
 B
 11.12 1.19
 11.12 3.52
 12 1.49
 12 3.53
 12 1.30
 12 3.44
 13 5 8.08

D
 12 8.58
 11.12 4.31
 11 8.31
 4 9.20
 12.13 2.29
 X 9 10.32
 12 5.37
 B

10 7.27
 11.12 9.18
 12 9.14
 11 1.50
 12 3.05
 12 8.40
 12 0.18

B B B 4
 10 8.46
 10 8.21
 13 9.54
 12 3.56
 11 8.44
 12 9.26
 11 4.24

D
 12 7.05

m

duplex?

2nd min last - m

Lone 50

13..44..46.0 49.8 13..44..49.90

45..30.8 34.9 45..34.85

46..36.8 40.7 46..40.75

B

47..15.6 19.7 47..19.65

48..13.2 17.3 48..17.25

50..20.8 24.6 50..24.70

Wm 50

12 8.38

12 2.19

12 8.28

B

Xa 12 -0.24

- 12 4.17

- 13 4.20

- 12 1.04

- 8 4.49

This zone is remarkable

1st for the large number of bright stars

2nd for the small number of small stars

13.50

11.23

2.27

13.52

11.27

2.25

The disparity in the proportion of small stars was more striking to the eye & mind than appears on paper by comparison of observations - I have little doubt that the involuntary tendency was to overestimate the 12th magnitudes & perhaps the 10th & 11th arising from the fact of our in some measure estimating being biased in judging of the magnitudes of stars by the relative number

5 Argem

13.27 03.32

9.21

13.27 12.53

89.49.37.4

55.9

89.50.33.3

0.09.26.7

May 2nd

Wone 51

A = 2.30 East

Zero of Pot 90.00.30
 and 90.01.30

E.C. 11.15.00 Bar. 30.180 62 Exp. 48.6
 1.30.00 30.200 59 44.1

R 15.47.20^m Dec 0.00'
 to 15.47 0.10

Clear & calm - Both the illumination & the focus were badly
 adjusted - The R's are not as good as usual on this account.

13.47.15.8 19.8- 13.47.19.80
 48.13.5 17.4 48.17.45

50.20.6 24.5 50.24.55
 52.2.9 6.9 52.06.90

55.20.6 24.5 55.24.55
 55.47.9 51.9 55.57.90
 57.15.1 18.9 57.19.00

DDB

58.00.3 4.3 58.04.30
 13.58.52.5 56.6 13.58.56.55
 14.1.38.3 42.1-14.01.42.20
 1.49.7 53.8 1.53.75
 2.17.6 21.7 2.21.65

DB

3.34.5 38.5 3.38.50
 3.58.3 2.3 4.02.30
 4.39.3 43.4 4.43.35

D

5.41.2 45.3 5.45.25
 6.15.0 19.1 6.19.05
 6.46.6 50.4 6.50.50
 7.1.6 5.5 7.05.50
 7.28.2 32.1-14.7.32.15

Wone 51

~~9 4.53~~
 B Telescope reset
 x 12 - 0.19
 x 12 4.22
 Utell's in pane's
 x 13 4.25
 x 13 6.41 K
 Stars less than 13 mag.
 13 1.08
 9 4.53
 12 0.24
 D.D.B.
 12 5.02
 13 4.39
 12 9.44
 12 9.05
 8 2.47
 B
 11 1.04
 12 2.32
 12 10.40
 D
 11 10.23
 12 5.53
 10 5.14
 12 0.08
 12 2.23

= a of Zone 50

Trupe 25. R 14.02.22.4
 Dr. + 0.02. 43.2
 yellow

None 51

14..9..33.7 37.6 - 14..09..37.65

DB

10..2.8 6.8 10..06.80

11..18.4 22.5 11..22.45

11..40.2 43.9 11..44.05

12..11.1 15.1 12..15.10

12..27.4 31.4 12..31.40

12..41.0 46.0 12..45.00

B

15..10.7 14.6 15..14.65

D

Ink failed

33..11.1 15.0 - 14..33..15.05

34..00.9 34..04.90

14..36..05.6 9.6 36..09.60

B

36..37.8 41.7 36..41.75

37..24.4 28.3 37..28.35

37..52.6 56.1 37..56.10

None 51

12 3.47
D B

12 6.56

13 1.23

12 10.33

13 2.07

12 4.06

12 10.13

B

9-8 2.07

D

13 4.58

12 7.47

12 2.32

13 3.54

12 6.29

B B

13-0.08

10 2.21

10 7.51

12-0.20

B

9 6.25

12 8.17

11 1.59

11 1.58

D D D

11 9.14

13 9.40

12 6.32

11 5.03

12 3.00

12 5.43

B

10.11 0.21

11 2.45

11.12 0.06

14..38..49.6 53.6 — 14.. 38..53.60

39..00.4 4.6

39..04.50

39..15.4 19.4

39..19.40

D

39..54.2 58.2

39..58.20

43..12.8 16.8

43..16.80

44..48.3 52.3

44..52.30

46.. 2.4 6.3

46..06.35

46..10.7 14.7

46..14.70

B

46..53.7 57.6

46..57.65

47..17.2 21.2

47..21.20

48..30.6 34.4

48..34.50

50..26.1 30.0

50..30.05

50..43.8 —

50..47.80

49

50..49.6 —

50..53.60

50..54.2 58.3

50..58.25

51.. 6.4 10.6

51..10.45

51.. 8.4 13.0

51..13.05

D

51..43.9 47.9

51..47.90

51..50.8 54.8

51..54.80

52.. 2.8 6.8

52..06.80

52..20.2 24.2

52..24.20

B B

53..53.3 57.1

53..57.20

54..00.2 4.2

54..04.20

D D B

55..11.1 14.9

55..15.00

55..33.6 37.4

55..37.50

55..43.8 47.7

55..47.75

55..47.2 51.2

55..51.20

B

57..49.2 53.4

57..53.30

58..49.7 49.7

58..49.70

59.. 4.1 8.0

59..08.05

59..28.4 32.3

59..32.35

Wm 51

12 1.47

11 3.23

12 7.51

D

12 7.45

9 3.10

12 7.11

12 8.22

9 10.40

B

12 8.20

12 2.57

12 7.30

11 0.32

12 10.11

Stellarium accensus

12 2.37

11 2.11

11 5.57

D

12 8.13

12 6.16

11 8.05

12 8.36

B B

12 4.44

12 5.03

D D B

13 1.00

11 3.04

11.12 2.56

11 4.18

B

12 4.14

12 10.28

13 9.31

12.13 5.16

2nd inst2nd in box

ms

comp. 13m 7" n.f.

ms

ms

14..59.43.7 47.7 ~ 14..59..47.70

15..00..49.7 53.7 15..00..53.70

1..52.2 56.2 1..56.20

1..54.8 58.7 1..58.75

B

2..28.8 28.7 2..27.75

5..1.6 5.6 5..05.60

5..47.4 51.2 5..57.30

6..39.9 43.8 6..43.85

B D B

7..03.4 7.4 7..07.40

8..9.7 13.6 8..13.65

9..32.2 36.2 9..36.20

10..4.4 8.2 10..08.30

10..50.1 54.1 10..54.10

D

11..44.9 48.9 11..48.90

12..44.6 48.5 12..48.55

13..13.9 17.9 13..17.90

13— 22.7 13..22.70

B

16..19.9 23.8 16..23.85

17..4.8 8.7 17..08.75

18..55.8 59.8 18..59.80

19..3.2 7.4 19..07.30

20..20.1 24.2 20..24.15

D D

21..28.8 32.6 21..32.70

21..38.7 42.7 21..42.70

21..39.7 43.7 21..43.70

22..2.1 6.0 22..06.05

23..16.4 20.4 23..20.40

23..24.3 28.2 23..28.25

25..1.6 5.6 25..05.60

25..12.6 16.5 25..16.55

B

28..09.9 13.9 ~ 15 ..28..13.90

Mon 57

12 2.17
 11.12 1.55
 12 8.17
 12 2.59
 B B
 11 3.35
 8.9 10.25
 12 6.13
 10 10.37
 B B B
 11.12 -0.10
 12 9.31
 12 1.00
 10 8.25
 6.7 4.43
 B
 12 10.18
 10.11 4.35
 13 5.57
 13 6.56
 B
 11 5.54
 12 10.09
 12 2.28
 11.12 10.07
 12 7.22
 B B
 11.12 2.34
 11.12 4.30
 11 2.27
 12 6.51
 12 4.42
 12 8.51
 11 10.03
 11 1.48
 B
 12 7.26

Zone 51

15..29..09.9 13.9 ~ 15..29..13.90

30..7.8 11.8 30..11.80

B

30..36.7 39.⁶~~8~~ 30..39.65

31..00.9 4.9 31..04.90

31..27.3 31.1 31..31.20

32..16.3 20.6 32..20.45

32..41.0 45.0 32..45.00

34..11.5 15.5 34..15.50

34..41.3 45.3 34..45.30

34..48.7 52.8 34..52.75

D

36..46.9 50.9 36..50.90

37..41.8 45.8 37..45.80

38..57.4 1.4 38..01.40

39..17.9 21.9 39..21.90

39..58.8 2.8 ~~40~~..02.80

41..22.2 26.2 41..26.20

42..7.6 11.6 42..11.60

42..8.8 12.8 42..12.80

B

45..08.8 12.9 45..12.85

45..11.2 15.0 45..15.10

46..8.6 12.8 46..12.70

47..19.2 23.2 47..23.20

47..44.2 48.2 ~ 15 ..47..48.20

June 51

4.17
12 4.38
B

12 3.23

12 5.37

8 10.27

11 9.02

12 7.32

12 4.20

10 3.09

11 8.13

SS

12 6.02

12 9.27

13 5.07

13 5.50

12 9.04

12 8.23

11.12 8.51

11.12 4.10

B

10 5.23

10.11 0.57

11 6.54

12 6.52

12 2.29

13 8.53

12 0.46

B B B

12.18 2.53

11 3.06

12 5.27

12.20 5.50

12 6.22

SS SS

May 4 Pm.

Wone 52 = 51 repeated.

2C 12..11..00 Bar 30.176 60 Ent 43.5
 14..18..00 30.170 58 42.4 -

R 13..47 0..00
 to 15..53 0..10

Zero of pos 90..01 H = 1..45 E
 merid 90..02

Sky partially obscured through whole zone - in consequence faint illumination was necessary. & the observations were not quite as good as usual

13..52.03.7 7.7 ~ 13..52.07.70
 55..21.2 25.2 55..25.20
 56..48.6 52.5 55..52.55
 B
 57..15.8 19.8 57..19.80
 58..00.8 4.8 58..04.80
 13..58..53.1 57.0 58..57.05
 14..00..25.2 29.1 14..00..29.15

* k

D
 1..38.8 42.8 1..42.80
 1..50.4 54.1 1..54.25
 2..18.3 22.3 2..22.30
 3..35.1 39.0 3..39.01⁵
 3..59.0 2.9 3..02.95

DD
 5..41.9 45.7
 6..47.1 51.1
 5..45.80
 6..51.10

11..40.4 44.6 11..44.45
 12..27.9 31.9 12..31.90
 12..41.6 45.5 12..45.55
 15..11.1 15.1 15..15.10

DB
 16..05.3 9.3 16..09.30
 16..25.8 29.8 16..29.80
 17..6.3 10.4 17..10.35

Yom 52

13 6.40

13 1.06

9 4.52

B

12 0.26

12 5.00 cert.

13 4.36

13 2.20

D

12 9.43

12 9.00

8 2.45

11/12 1.02

12 2.30

DD

Stars less than 18

x 13 10.22 cert

12 5.11

Starless field - large

x 12 10.31

13 4.04

x 13 10.10

8 2.05

DB

12 8.57

12 7.44

12 2.30

14..18..19.0 23.1 ~ 14..18..23.05

18..47.4 51.4 18..57.40

20..16.1 19.9 20..20.00

20..30.0 33.9 20..33.95

B

23..02.7 6.6 23..06.65

25..14.6 18.6 25..18.60

26..10.4 14.4 26..14.40

DD

26..41.1 45.0 26..45.05

27..53.6 57.6 27..57.65

28..32.3 36.2 28..36.25

29..49.1 53.1 29..53.10

30..38.2 42.1 30..42.15

30..52.7 56.6 30..56.65

BB

33..11.7 15.6 33..15.65

36..6.2 10.1 36..10.15

36..38.3 42.1 36..42.20

BBB

37..24.9 28.9 37..28.90

37..52.8 56.8 37..56.80

38..50.2 54.2 38..54.20

39..1.0 4.9 39..04.95

39..16.8 19.8 39..19.80

39..54.7 58.6 39..58.65

B

43..13.8 17.6 43..17.20

44..48.8 52.7 44..52.75

46..2.9 6.9 46..06.90

46..11.2 15.1 46..15.15

46..54.1 58.0 46..58.05

47..17.9 21.9 47..21.90

DB

48..30.9 34.9 ~ 14..48..34.90

$$13 \cdot 3.53$$

$$\begin{array}{r} 13 \\ \times 13 \\ \hline 13 \end{array} \begin{array}{r} 6.28 \\ - 0.07 \\ \hline \end{array}$$

$$11 \cdot 2.18$$

fleeing clouds

$$10 \cdot 7.49$$

$$12 \cdot -0.19$$

$$10 \cdot 6.23$$

D D

$$12 \cdot 8.13$$

$$12 \cdot 1.58$$

$$11 \cdot 1.57$$

$$11 \cdot 9.10$$

$$13 \cdot 9.39$$

$$12 \cdot 6.30$$

$$\text{B B}$$

$$12 \cdot 5.42$$

$$13 \cdot 5.41$$

$$11 \cdot 0.19$$

$$\text{B B D}$$

$$12 \cdot 2.43$$

$$12 \cdot 0.05$$

$$12 \cdot 1.45$$

$$11.12 \cdot 3.20$$

$$12.13 \cdot 7.50$$

$$12 \cdot 7.42$$

$$\text{B}$$

$$10 \cdot 3.08$$

$$12 \cdot 7.09$$

$$12 \cdot 8.19$$

$$9.10 \cdot 10.38$$

$$12 \cdot 8.18$$

$$12 \cdot 2.49$$

$$\text{D B}$$

$$12 \cdot 7.28$$

14, 50..26.6 30.6 — 14.. 50..30.60

50 ~~48.2~~ 48.2

50..48.20

51.. 9.6 13.6

51..13.60

51..44.3 48.7

51..48.50

51..51.4 55.4

51..55.40

52.. ~~7.2~~ 7.2

52..07.20

B B

53..53.9 57.8

53..57.85

54..00.9 4.9

54..04.90

55..34.1 38.1

55..38.10

55..44.1 48.1

55..48.10

55 — 51.7

55..57.70

D

57..07.8 11.8

57..11.80

57..49.9 53.9

57..53.90

59..28.8 32.8

59..32.80

14, 59..44.2 48.2

59..48.20

B

15..00..50.3 54.3

15.. 00..54.30

1..52.7 56.7

1..56.70

1.. ~~58.9~~ 24.3

1..58.90

2..24.3 28.2

2..28.25

5.. 2.1 6.1

5..06.10

5..47.8 51.8

5..51.80

6..40.1 44.1

6..44.10

7.. 4.1 8.1

7..08.10

D B D

8..10.2 14.2

8..14.20

10.. 4.9 8.9

10..08.85

10..50.7 54.7

10..54.70

11..45.3 49.3

11..49.30

12..45.1 49.0

12..49.05

D

16..20.5 24.5

16..24.50

17.. 5.6 9.6

17..09.60

18..56.2 00.4

18..00.30

19..03.9 7.9

19..07.90

. 11 0..30
 x 12 10..11
 . 11 5..57
 . ~~12~~ 8..12
 . 12 6..14
 . 11 8..02
 13 13
 . 13 4..42
 . 13 5..02
 . 11-12 3..03
 . 12 2..55
 . 11-12 4..17
 D
 . 13 3..44
 . 12 4..12
 . 13 5..14
 . 12 2..14

B
 . 12 1..53
 . 13 8..15
 . 12 2..58
 . 11.12 3..33
 x 9 10..26
 . 13 6..12
 x 10 10..36
 x 12 - 0..12

D B S
 . 13 9..30
 . 11.12 8..22
 . 7 4..41
 x 13 10..17
 . 10.11 4..34

D
 . 11 5..53
 x 13 10..08
 . 13 2..24
 x 12 10..08

Calends

2nd Cor

Many stars lost of 11th & 12th mag

1st Cor

comp. 14 mag. 12th S. P.

19..20..20.8 24.7~ 15..20..24.75

D

21..29.3 33.3

21..33.30

21..40.2 44.3

21..44.25

23..17.1 21.0

23..21.05

23..24.9 28.9

23..28.90

25..2.0 6.0

25..06.00

25..13.2 17.2

25..17.20

BDB

28..10.6 14.5

28..14.58

29..10.6 14.6

29..14.60

30..08.2 12.4

30..12.30

30..36.2 40.2

30..40.20

31..1.5 5.4

31..05.45

31..27.7 31.9

31..31.80

32..17.2 21.2

32..21.20

32..41.3 45.4

32..45.35

B

34..12.0 15.9

34..15.95

34..41.9 45.7

34..45.80

34..49.0 53.0

34..53.00

36 — 51.5

36..57.50

BBB

37..42.3 46.2

37..46.25

38..57.9 1.9

38..01.40

39..18.5 22.5

39..22.50

B

39..59.2 3.1

40..03.15

41..22.7 26.7

41..26.70

42..08.0 12.0

42..12.06

42..9.2 18.2

42..13.20

acc. break

47..19.8 23.7

47..23.75

47..44.6 48.6

47..48.60

48..22.4 26.6

48..26.50

49..9.9 13.9

49..13.40

49..49.2 53.3

49..53.25

.12 7.20
②

.12 2.31

.11.12 2.24

.12.13 4.40

.12 8.50

x 11 10.02

.12 1.47

BBB

.12 7.24

.12 4.15

.12.13 4.37

.12 3.20

.12 5.35

x 8 10.27

.12 9.01

.12 7.30

B

.12 4.17

.11 3.06

.12 8.11

6.00

BBB

.12 9.53 cent

.12.13 5.06

.13 3.49 cent

B

.12 9.03

.12 8.22

.12 8.48

.12 4.09

.11 6.52

.12 6.39

.12 2.27

.13 8.50

.12 0.46

.13 2.52

ms 1st min lost

ms

None 52

15..51.21.7 25.7 ~ 15..57..25.70

51..56.4 00.4 52..00.40

52..20.9 24.9 52..24.90

52..30.9 34.8 52..34.85

55..7.8 11.7 55..11.75

BBB

Wife 1043

K

Zone 52.

DB

11 3.05-

12 5.25-

13 5.49

12 6.20

9 -0.06

B0303

JR 15.55-10.8

5m - 0.08

Zone 53

May 9, 1853

E.C. 12.22.00 Bar. 29.960 alt. Th. 62 Ext. 54.9
 2.35.00 29.960 66 52.0

May 9th

R. 12^h 58 0^o 10'
 to 0^o 20'

H 40^m E
 Ang of Pol 90^o 00'

58 — 59.2

12.59 no mark 41.5

13.00.41.6 45.6

~~2.28.8 32.9~~

2.28.8 32.9

5. 2.6 6.6

D

6.59.7 3.5

7. 8.3 12.4

8. 40.9 44.8

8.51.3 55.2

8.52.4 56.2

9.00.6 4.6

BB

10.08.2 12.1

10. 11.5 15.4

12. 2.9 6.9

13. 45.7 49.8

14. 00.0 4.0

14 — 9.7

14.31.7 36.7

D

14.53.1 57.1

16.40.1 44.1

First star is 10th Zone 627
 1853. R 12.58.55.3 0^o 17^m 26^s

11 7.26

10 10.12

11 8.19

B

9 0.02

13 6.04

D

12 5.59

12 1.06

12 6.00

12 7.21

(8 taken)

12 7.27

(8.00)

12 5.03

ms

B B

11 2.47

12 6.16

13 7.57

ms

9 1.12

13 8.18

17 min last

12 4.50

12 3.58

D

8 1.29

12 2.01

13., 16., 52.1 55.0

17 2.6 6.6

17., ~~17.6~~ 17.5

17., 17.6 21.5

17., 24.7 28.7

14., 9.3 13.2

DDB

19., 59.2 3.2

20., 53.1 57.1

22., 11.9 15.8

22., 23.9 27.9

22., 48.7 52.7

B

24., 36.1 40.1

25., 9.1 13.3

27., 8.6 12.5

D

28., 23.6 27.6

28., 46.3 50.3

29., 32.5 36.4

30., 26.2 30.2

30., 36.8 40.8

BB

31., 28.1 31.9

32., 21.9 25.9

32., 27.7 31.7

32., 38.8 42.8

33., 28.4 32.3

34., 15.5 19.6

B

35., 25.7 29.6

35., 47.3 51.3

37., 20.1 24.1

BDB

38., 19.9 23.8

38., 36.4 40.5

38., 47.7 51.6

38., 57.9 1.9

2m 53

12 2.10

12 2.20

10 7.05

12 2.30

12 9.00

9 8.45

BDB

10 2.03

11 6.36

12 0.32

11 0.14

13 -0.30

B

10 5.31

11 3.43

3 -0.37

D

9 0.32

11 1.08

12 0.51

11.12 5.43

12 -0.41

BDB

12 5.16

12 5.59

12 7.18

12 5.27

12 0.55

12 10.11

B

12 5.49

12 8.07

12 7.28

BDB

11.12 3.37

11 8.56

9.10 6.50

1.34 4.56

53

B

13..39.39.9 43.9
 40..00.9 4.8
 40..22.1 26.1
 41. 4.5 8.5
 41..25.2 29.2
 41..40.0 44.0
 D
 42..52.8 56.9

circuit broken

46..17.0 21.0
 46..55.6 59.6

B D

47.49.4 53.4
 48..33.0 36.9
 48.34.1 38.0
 48.41.7 45.7

D

49.18.7 22.8
 49.34.3 38.3
 49.37.8 41.8
 50..08.2 12.3
 50. 10.2 14.2
 52..49.9 53.9
 54. 44.0 47.9
 55..17.0 20.9

B

56..26.8 30.5

56..30.65

57. 11.2 ~~15~~

57..15.4 19.3

13. 57.37.1 41.0

D D D

14.01..02.5 6.4

1. 14.4 18.2

1. 38.7 42.7

B

12 7.07

12 4.04

12 -0.03

12 0.24

13 1.29

11 -0.20

(-30 and Nov 29-1950)

D

12 4.27

12 2.59

12 0.59

12 4.51

13 4.23

12 7.46

12 4.49

B D

12 1.22

11.12 3.23

9 9.46

12 3.21

D

10 8.32

12 7.36

12.13 7.54

11.12 7.26

12.13 4.24

12 10.24

11 4.17

12 6.38

B

9 10.45

11 3.57

9 4.56

12 0.42

D D D

Vagraney!

12 9.43

12 7.36

12 -0.17

Comp. 13 mag. 6" s. p.
last win = Break

2nd win last
no reddish

14..01..59.7 3.7
2..11.3 15.4

B D

3..22.1 26.1

4..14.5 18.5

~~4..39.1 43.0~~

4..39.8 43.7

5..41.8 45.8

B

7..25.2 29.0

8..36.9 40.9

9..53.9 57.9

10..25.9 29.9

11..17.1 21.0

11..40.3 44.3

D

12..17.2 21.3

B

12..41.3 45.3

13..20.6 24.6

13..51.6 55.5

14..57.3 1.2

15..30.9 34.7

D B

17..00.0 4.2

17..30.2 34.1

17..32.2 36.1

B B D

18..43.2 47.2

18..43.9 47.9

19..10.9 15.0

20..14.9 18.9

20..26.2 30.2

21..22.4 26.4

21..51.1 55.2

22.. 3.3 7.2

B

23..27.9 31.9

10.11 1.47

12 3.10

B D

13 6.33

12 0.21

13 0.24

12 0.35

10 0.20

B

12 4.50

10 9.33

13 3.03

13 0.04

11 7.45

12 0.30

D

12 8.13

B

12 0.09

12 3.16

12 7.37

10 9.53

11.12 8.38

D B

12 1.51

12 9.40

12 5.17

B B D

12 0.59

11.12 3.28

13 0.20

12 2.09

12 8.20

10 9.30

11 6.08

12 5.47

B

11 9.50

5-3

DDD

14_n 24.14.3 18.324_n 22.6 26.7

31 24.5 28.5

33_n 15.6 19.634_n 03.3 7.1

DBDBDB

35_n 53.6 57.537_n 13.2 17.337_n 38.7 42.7

38 2.3 6.3

B

39_n 13.1 17.139_n 32.6 36.539_n — 40.539_n 58.9 2.940_n 13.7 17.6

BB

41_n 17.3 21.342_n 11.1 15.143_n 18.3 22.444_n 42.6 46.545_n 53.6 57.646_n 11.1 15.246_n 14.2 18.247_n 18.0 22.1

BD

49_n 11.7 16.749_n — 19.849_n 52.2 56.250_n 22.9 26.850_n 44.2 48.251_n 21.0 24.9

B

52_n 07.2 11.152_n 44.2 48.153_n 33.9 37.9

53

D D D

a/1 3, 11

12.13 0, 39

10 8, 20

Neb. 5.00 smooth & full star small faint neb.

10.11 4, 23

10 1, 53

D B D B D B

10 5, 33

12 1, 05

12 7, 07

8 5, 39

B

11 5, 12

10 5, 06

12 6, 09

9 10, 33

12 9, 29

B B

12 7, 19

13 -0, 07

10 1, 58

10 3, 09

11.12 3, 32

9 0, 41

8 2, 01

12 10, 13

B B

12 7, 46

11.12 10, 18

12 3, 11

11 3, 26

12.13 0, 12

9 4, 55

B

11 2, 10

12 -0, 12

9.10 3, 16

(5.26 taken Dec. 4th)1st un. list no

no

1st un. list

14. 53.43.4 47.4

56. 33.8 37.9

X 56. 37.7 41.7

57. 15.8 19.8

58. 3.9 7.9

14 58.45.9 50.1

D

15. 00.20.4 24.6

X 0. 21.0 24.9

1. 9.9 13.9

1. 21.8 26.7

2. 5.9 9.5

2. 20.6 24.6

3. 23.5 27.5

3. 35.9 39.9

B

2
The
De

None 53

11 8.56
 13 7.53
 10 8.28

a small meteor passed through the field

10 4.12
 13 2.21
 12 ~~8.26~~ 0.26

(2)

13 1.30
 11.12 1.55
 11 3.15
 11.12 7.21
 12 9.09
 12 0.21
 11.12 5.16
 11.12 9.45

B

8 0.27

no

At 13 a 2nd beginning on Cylinch
 at 14.58m but only for whole
 seconds affected -

A round neb. precedes * a ⁵ and 4' north
 A fainter elongated pul. * a ⁵ and is 4' north
 A pretty bright neb.
 Another in same δ with * a and precedes ^{m s} 2.30

1853 May 11

Zone 54 = 53 repeated

Bad seeing - apparently hazy

R 12.58 to
Air 0° 10' to 0° 20'Calms & clear Zero of Pos 90.00
and 90.00E.C. 12.12.32 Bar. 30.100 66° Ext. 46.6
14.45.00 30.110 60 41.3

12.58.54.8 58.8 12.58.58.80

59.37.2 41.1 59.41.15

B

13.00.41.3 45.2 13.00.45.25

2.28.7 32.7

5.2.5 6.2

6.59.6 3.4

7.08.2 12.2

BB

8.40.9 44.9

8.57.3 55.1

8.52.1 56.1

9.00.3 4.4

10.8.0 12.0

10 — 15.3

D

12.02.8 6.8

13.45.6 49.7

14.00.0 3.8

14.5.9 9.7

14.31.7 35.6

14.53.2 57.2

16.39.8 43.9

16.52.1 55.9

17.2.6 6.4

17.10.8 14.3

17.17.2 21.3

54

11 7.27
10.11 10.13

B

.17 8.19

.9 0.03

.18 6.06

.12.13 6.00

.13 1.03

.12 13.03

.12.13 6.01

.12.13 8.23 cent

.12.13 8.29 cent

.12 5.01

.11 2.46

.12 6.15

D

.13 7.58

.9-10 1.13

.12 8.18

.12 4.00

.12 3.59

.8 1.31

.12.13 2.00

.12.13 2.10

.12.13 2.20

.11 2.06

.13 2.30

Pwin look

no

13, 17, 24.5 28.7

18, 9.2 13.2

D B

19, 59.2 3.2

20, 53.0 56.9

22, 11.8 15.7

22, 23.7 27.7

B D B

22, 46.6 62.5

24, 36.0 40.0

25, 9.0 12.9

27, 8.3 12.3

B

28, 23.5 27.5

28, 46.2 50.2

29, 32.3 36.3

30, 26.2 30.3

30, 36.5 40.6

31, 28.1 32.0

D

32, 21.9 25.8

32, 27.7 31.6

32, 38.8 42.7

33, 28.3 32.3

34, 15.7 19.5

35, 25.3 29.4

36, 47.3 51.3

B B

37, 19.9 24.2

38, 19.7 23.7

38, 36.4 40.5

38, 47.6 51.6

40, 00.8 4.8

40, 45.0 48.9

B

41, 24.9 29.2

41, 40.0 44.0

.12 9.01
 .9 8.44
 DB
 .11 2.05
 .12 6.37
 .12 0.32
 .11 0.14
 BDB
 x .13 -0.30
 .10 5.32
 .12 3.43
 x .13 -0.36
 B
 .9 0.54
 .12 1.07
 .12.13 0.51
 .12 5.45
 x .11.12 -0.40
 .12 5.17
 D
 .12 6.00
 .12 7.19
 .13 5.29
 .12 0.55
 x .12 10.12
 .12.13 5.40
 .12 8.09
 BB
 .12 7.30
 .12 3.56
 .11 8.59
 .9.12 6.50
 .13 4.05
 .13 2.08
 B
 .13 1.29
 x .11 -0.3 percent

13., 42., 53.0 57.0

43., 49.0 53.1

43., 50.5 54.2

44., 39.5 43.3

44., 44.7 48.9

46., 17.1 21.1

46., 55.7 59.5

D

47., 49.5 53.4

48., 33.0 36.9

48., 34.1 —

48., 42.0 45.8

49., 18.9 22.8

49., 34.4 38.4

49., 38.1 41.7

50., 8.3 12.2

50., 10.2 14.2

52., 49.9 53.9

54., 43.9 47.9

55., 16.9 20.9

B

56., 26.8 30.9

57., 11.2 15.1

57 — 19.2

13., 57., 37.0 40.9

D

14., 01., 02.5 6.4

1., 14.2 18.2

1., 38.6 42.6

1., 59.7 3.8

2., 11.2 15.2

D B

3., 22.0 26.1

4., 14.5 18.3

4., 39.1 43.0

4., 39.5 43.6

54 152

.13 4.26
 .13 3.00
 .12.18 0.58
 .12 4.51
 .13 4.24
 .13 7.48
 .11.12 4.49

DS

.12 1.24
 .12 3.22
 .9 9.46
 .13 3.20
 .10 8.33

Very bad seeing

.12 7.36
 .12.13 7.57
 .12.13 7.27
 .12 4.26
 .12 10.26
 .11 4.18
 .13 6.38

DS

* 9 10.45
 .11 3.52
 .8 4.55
 .12 0.42

DS

.12 9.44
 .12 7.36
 * 13 -0.17
 .11 1.46
 .12 3.11

DS

* 13 6.37
 .12 0.24
 .13 1.23
 .12 0.37

no 2 min reject

MS

amp .13 mag, 5" S. p

Main reject

MS

14.06. 41.9 45.9

7. 24.9 29.0

8. 37.2 41.1

9. 53.9 57.8

B

11. 17.0 21.0

11. 40.7 44.3

12. 17.6 21.6

12. 41.4 45.5

D B

13. 20.7 24.7

13. 51.8 55.7

14. 57.5 1.5

15. 81.0 85.0

17. 00.1 4.1

17. 10.0 13.9

17. 30.3 34.2

17. 32.5 36.4

B

18. 43.2 47.2

18. 44.0 47.9

19. 10.9 15.3

D B

20. 15.0 18.9

20. 26.2 30.2

21. 22.3 26.3

21. 51.2 55.2

22. 3.4 7.3

D

23. 28.2 32.2

24. 14.3 18.3

24. 22.7 26.7

B

26. 01.5 5.4

26. 18.5 22.5

26. 46.6 50.6

27. 53.0 56.9

B D B

.10 0.23

.12 4.51

.10 9.33

.13 3.05

B

.11 7.47

.12 0.31

.12 8.13

.12 0.09

B B B

.12 3.17

.12 7.40

.10 9.52

.11 8.40

.12 1.32

12 4.12

.12 9.12

.12 5.18

B

.11 1.00

.11 3.29

.13 0.21

B B

.12 2.09

.12 8.22

.9.10 9.32

.12 6.10

.12 5.48

B

.11 9.50

.11 3.11

.12 0.40

B

2.12 3.26

.13 4.24

.12 7.47

11.12 9.07

B B B

14..29..08.6	12.7
29..26.8	30.9
30..06.2	10.0
30.. 43.7	47.6
30..24.6	28.5
B	
33..15.7	19.8
34..3.3	7.2
35..53.6	57.7
37..13.4	17.4
B B	
37—	42.5
38..02.3	6.3
D	
39..13.2	17.1
39..32.7	36.6
39—	40.3
39..59.0	2.9
40..13.8	17.8
D B	
41..17.3	21.3
42..11.1	15.2
43..18.6	22.4
44..42.4	46.4
45..53.7	57.8
46..11.1	15.1
46..14.4	18.2
B	
47..18.0	22.0
49..11.9	15.8
49..18.9	15.8
49—	19.9
49..52.3	56.2
50..23.0	26.9
50..44.2	48.2
51..21.0	25.0

.12 5.48

.11 8.29 cent-

~~13 8.11~~

.11.12 3.52

.11 8.21

B

.10 4.24

.12 1.53

.10 5.34

.12 1.06

B B

.12 7.10

.8 5.32

D

1st wire lost

.11 5.13

.10 5.26 cent

.12 6.11

.8 10.33

.12 9.30

D B

1st wire lost

.12 7.19

x .13 -0.06

.10 1.59

.10 3.10

10.11 3.32

.8 0.41

.7.8 2.00

B

no

.12 10.15-

~~12 7.46~~

.12 7.48

.11 10.17

.12 3.12

.12 3.26

.13 0.11

9 4.56

1st wire lost

14.52.07.1 11.1

52.44.2 48.1

53.34.0 37.9

53.43.3 47.2

B

55.34.0 38.1

56.37.7 41.7

DBD

57.15.7 19.7

58.3.8 7.8

14 58.46.4 50.3

15. 00. 20.4 24.4

15. 00. 20.4 24.4

1. 09.7 13.7

1. 21.7 25.7

B

2. 05.7 9.6

2. 20.7 24.4

54

.12 2, 21

x .13 - 0, 11

.10 3, 17

.12 4, 55

B

.12 7, 56

.10 8, 30

> DBD
acc. wanting?

.13 2, 22

.13 0, 26

.13 1, 33

11.12 1, 57

11 3, 15

12 7, 23

B

12 9, 11

12 0, 22

12 5, 19

B

12 9, 46

11.12 4, 50

DBD

8 0, 27

reel

2.07 20.7^s~
4.06

	R	h	m	
Zone 1	10 ^h 14	to	11 ^h 40	0 ^s 00' - 0 ^s 10'
2	10 ^h 14		11 ^h 53	0 ^s 00 0 ^s 10
3	10 ^h 14		11 ^h 54	0 ^s 00 0 ^s 10
4	10 ^h 17		11 ^h 59	0 ^s 10 0 ^s 20
5	10 ^h 17		11 ^h 23	0 ^s 10 0 ^s 20
6	11 ^h 13		13 ^h 02	0 ^s 20 0 ^s 20
7	11 ^h 13		12 ^h 58	0 ^s 10 0 ^s 20
8	18 ^h 06		19 ^h 42	0 ^s 00 0 ^s 10
9	18 ^h 06		19 ^h 55	0 ^s 00 0 ^s 10
10	18 ^h 06		19 ^h 44	0 ^s 10 0 ^s 20
11	18 ^h 06		19 ^h 41	0 ^s 10 0 ^s 20

12 ^h 58 ^m	11 ^h 54 ^m	10 ^h 14 ^m
627	425	0 ^s 20'
Vacant	1-223	0 ^s 10' 0 ^s 00'

Filling up of the zones from 0^s 00' to 0^s 10' Beginning in R 11.54
 " " 0^s 10 to 0^s 20 " " 12.58

Zone 54 = 53	12 ^h 58 to 15 ^h 02'	0 ^s 10' to 0 ^s 20'
52 = 51	13 ^h 47 to 15 ^h 55	0 ^s 00 0 ^s 10
55 - 56	15 ^h 02 to 17 ^h 02	10' to 20'
57 - 58	17 ^h 02 18 ^h 30	10' to 20'
59 - 60	to begin at end of 51 & 52	

