

KG  
11366  
v.649

*Astronomical Record*  
*Vol 1276*  
*From 1876, Aug. 9 to 1877 Jan. 11*  
Charles W. Sever, University Bookstore, Cambridge.



Nov. 12 last date of the morning Sta.  
Copied into the circle reading book.

330  
250  
4

1876, Aug. 9

W. A. R. obs. Zone

J. F. M. rec. both

No 1 = ~~1470~~ 15702 = ~~1471~~ 15713 = ~~1472~~ 1572



Aug 1876  
Morning

Amigne Reg. 1st. Sun Ch.

30 4 294 26.5 26.1 16.7.

B Janin 53- 152.8 49.3 48.7 44.5  
Reg. 1st. ✓

2 Quins 0 2 12.7 87.6 8 4.6

Aug 10 1876

W. & R. D. S. zone,  
 I. B. M. words both.

201 = 1473 1573  
 2 = 1474 1574

Aug 10 1876 morning

2 Janni 5-4 52.7 45.7 43.4 42.2

4 28

2 Allie 30 4 16.5 13.4 12.3 3.0

1.1  
1.1



Aug 12 1886

W. R. Duane

F. T. M. uses both.

207 = 1475 1575

2 -- 1476 1576



Aug 12 1896 Morning

2 Tami 10 0 32.6 33.3 32.9 29.5

Albuquerque RR

B<sup>2</sup> Orionis 45-182.4 18.3 20.2 16.7  
 foot - 15' in

B Tami 55-0 35.7 32.7 33.2 27.5





Aug 15/276

NRK Ous

J.F. M. du born

Run = 1478 1578

2 = 1479 1579

Aug 15/1876  
Morning

$\alpha$  Aquila 30 4 39.8 35.2 36.3 26.4  
Low - 1.51-326.

$\beta$  Tauri .53-1 6.3 1.9 2.9 58.3

$\alpha$  Orion 30 2 15.8 10.4 10.2 8.4  
5-48

Sent the South clock  
to Bond & Sons for repairs  
Observations from this date made  
with East clock



Aug 21  
 W & R obs home  
 & P M recs.

W = 1480 1580

2 = 1481 1581

Aug 21, 1876

Morning  
 & Morgan A.R.

B Orion 45 1 39.0 30.6 31.8 27.0  
 lost -  $A_{+2}$  &  $A_{+1}$

B Tauri 55 0 34.6 34.3 34.2 28.1



Aug 22 1876

W. R. D. S.

J. F. M. reads.

Nov = ~~1452~~ 1582

2 = ~~1453~~ 1583

Aug 22 1876 Morning

2 <sup>nd</sup> Gemini or	15	1	36.6	35.1	35.1	29.3
7 <sup>th</sup> 26	15	2	38.4	37.1	36.2	30.4
	lost 1 <sup>st</sup> wire					

2 <sup>nd</sup> Can. Min.	50	2	46.1	43.9	42.9	42.9
7 <sup>th</sup> 32	50	3	59.7	55.8	56.3	56.6

3 <sup>rd</sup> Gemini or	5	1	18.3	17.3	17.7	12.8
7 <sup>th</sup> 37	5	2	36.7	35.2	34.8	30.6



Aug 23 1886

not R. J. S. none

not = 1484 1584

1876, Aug, 24 Morning

$\alpha$ Can. Min	50	2	39.9	35.1	35.9	36.5
7 32	50	3	59.9	55.1	56.9	55.6

$\beta$ Gemmor	5	1	14.1	12.9	13.9	9.0
7 37	5	2	41.7			

No. 1 = 1584'

1876 Aug 26

NR obs more

no 1- 1475 1585

2- 1476 1586



Aug 26 morning

$\alpha$  Lyrae 30 4 23.8 22.1 21.6 13.8  
 5

$\beta$  Cassi 5 5 0 47.6 44.4 44.3 40.7  
 18

$\alpha$  Dra 5 0 24.28 38.3 38.3 36.0  
 48

$\beta$  Gem 5 1 49.6 47.1 46.6 42.6  
 37

7 37

Aug 24 1876 Morning

Reading 5.5 2 9.6 2.4 2.9 4.6  
6 3.9

---

2 Can. Min. 50 2 45.1 41.9 41.0 40.1  
7 32 50 4 7.6 3.7 3.3 2.6

$\mu\alpha = 1487$  1587

Aug 28 1876  
W & R obs none

2407 =	1488	1588
2 =	1489	1589
3 =	1490	1590



Aug. 28 1876 Morning

2 5 7. 30 3 44.8 43.0 42.4 34.3

3 18 55-0 44.8 42.7 42.4 37.7

2 Can. Min. 55-2 44.4 43 43 8.4  
6 39

2 Can. Min. 50 2 55.4 52.1 52.9 50.5  
7 32 50 3 57.6 53.6 54.7 53.2

3 Gemini 5 1 21.1 19.5 19.6 15.0  
7 37 5 2 44.1 42.6 41.6 37.5

Aug 29 1876  
WKR day zone

Nov - 1491 1591  
2 - 1492 1592

Aug 29 1876 Morning

x Canby	65	2	11.3	3.8	4.4	7.0
6 69						
x Gay mi	50	2	46.3	43.6	43.3	41.5
2 87						
Blsen	6	1	20.3	18.1	18.2	13.6
2 87						



Aug 30 1896

Wetrous none

$$m = 1493 \quad .1593$$
$$z = 1494 \quad 1594$$

Aug 30 1876 morning

Canary 55 2 11.4 3.8 5.3 3.9  
639

Span 52 3 0.1 66.6 57.7 64.8  
782

Bleem 5 1 20.7 20.2 20.0 14.9  
737 5 2 32.5 32.0 31.9 25.8

Received the same degree  
from Bond & Sons.

Let it about 4<sup>5</sup> feet

to

1876, Aug. 31, Morning

Can. Min 50 2 49.1 45.2 44.1 43.5  
7 32 50 3 3.1 58.6 58.2 57.8

B Geminor 5 1 16.4 14.8 13.6 9.9  
7 37 5 2 38.3 36.3 35.3 30.6

$Nr1 = 149, 7595$



Sept. 2 1896

WARR Mrs. home,

Nov = 1496 1596

2 = 1497 1597

3 = 1498 1598

Began to get as many as  
motions of Rhus in 5, 6 ph.

Mus in and Rhus in as  
possible each transit, as a means  
of finding the  
Equator Point-Correction

Sept. 2 1876 Morning

Can May 1 11  
 55 2 6.6 58.2 59.7 59.9

2 Lsem 15 2 15.9 13.5 12.4 6.6  
 Rij 151-5  
 7 326

exam min 60 4 3.0 58.3 59.0 59.6  
 7 32  
 Rij 151-5

Sept 3 1876

Woy

WARRAS Zone

No 1 = ~~1499~~ 1599

2 = ~~1500~~ 1600

3 = ~~1501~~ 1601

4 = ~~1502~~ 1602



Run 31076 Morning

1876phae.proj.1653R

X Can. 55 2 6.9 591 0.8 2.3

Gen. 15 1 25.2 23.1 22.9 17.9

726

Can. 50 2 49.9 47.0 46.5 46.0

732

Gen. 5 1 18.4 17.3 16.5 12.1

737 5 2 43.6 42.2 40.8 37.1

Sep. 4/1916 Morning 37R

$\beta$  Pami 55 0 44.8 41.5-40.3 38.7  
5-18

$\alpha$  Orion 0 2 14.1 10.7 9.8 9.2  
5-48

$\beta$  Gem 7 26 15 2 45.3 43.2 42.2 38.2  
Rej 151.5

$\alpha$  Cam. Min 50 2 47.6 43.9 43.2 43.5  
7 32 50 4 6.4 2.5 2.2 1.8

$\beta$  Geminor 5 1 17.4 16.6 14.9 10.8  
7 37 5 2 24.7 22.8 21.6 17.6

Mr 7-1603

Sept. 6 1876

M1 = ~~1504~~ 1604  
2 = ~~1545~~ 1605



Oct 2 1896  
W. R. D. 2. now

Nov = 1106 1606  
2 = 1507 1607  
3 = 1508 1608

Oct 2 Morning

5-1 begin for 1st in  
5 obs for ✓

2 Gen	15	136.2	39.1	37.0	29.3
726					

2 Cam	58	246.0	45.4	44.9	42.2
734					

2 Gen	5	2	39.2	41.6	39.5	38.7
757						

5	2	1.5	6.6	6.7	52.7
5	1	59.4	42.	51	

5	2	1.5	159.4	55.8	53.6	52.8	49.4
			4.2	1.9	58.5	57.1	53.9
		6.6			58.8	58.1	54.4
		6.7	51	2.1	46.1	45.8	42.1
		52.7	52.8	50.1			

1	48.8	44.2	44.7
	53.9	50.1	50.2
	55.2	50.7	50.9
	42.2	38.7	38.5

Oct 3 1876

W.R. Oles. none

I.T.M. records both,

Observed ~~temp~~ in circulation  
of wires. stars so observed are  
marked #

$101 = 1509$  1609  
 $2 = 1510$  1610  
 $3 = 1511$  1611



Oct-3 1876 Morning

51 Cephei 189. 9 obs for ✓

W. R. D. S.  
Semi. A. Long A., A.  
-2~~W. R. D. S.~~

Bless 5 1 275 30.6 291 229

Oct 9 1876

W. R. Ois.

No book seeing for now.

$$w_1 = 15.12 \quad 1612$$

$$2 = 15.13 \quad 1613$$

$$3 = 15.14 \quad 1614$$

$$4 = 15.15 \quad 1615$$

Oct 9 morning

51.6 cm 13.0 m for

stem. 15 1 33.9 38.2 35.1 23.8

x Can Min 50 2 44.6 48.2 43.8 38.0

stem.

Oct-10 1876

W. S. R. S. none

11 = 1516 1616

2 = 1517 1617

3 = 1518 1618

Oct-10 morning

5:16 am 14.0 S

~~15 1 2~~  
 15 1 27.0 31.8 28.3 19.1

~~15 1 2~~

15 1 32.1 36.5 33.3 34.4



Oct-11 1876

W. R. Riss,

Nov-1879 1619

~~2-1~~

Oct-12 1876

MAR, Ins. now.

Nov = 1520 1620  
2 = 1521 1621

Oct 15 1872

W & R M, none

No 1 = 1522 1622

2 = 1523 1623

3 = 1524 1624

4 = 1525 1625



Oct-15/1916 Muring

2 km-15 1 3 3.3 399 333 20.4

2 Can. km 50 3 57.3 553 494 406

Bloom.

2 Was. min A A 1,2,3,4,5 A, 1,2,3  
<sub>+1 +2</sub>  
 A 1,2,3-5,6,7,8

Oct-16 1876

W & R Obs. home.

No 1 - ~~A-26~~ 1626

Oct 17 1876

Mr. Roy none

W. F. H. 27 1627

2 = 1528 1628

3 = 1529 1629

4 = 1530 1630



Oct 17/1896 NPAQ  
Mowing

$\alpha$  Lep 50 2 41.3 44.6 377 28.2  
10<sup>th</sup> rej:  $\mu$   $\mu$   $\mu$

---

~~Not~~

~~2~~

$\beta$  Leonis 10 0.58.2 0.8 55.2 44.3  
11 42 A 8.9 A - 4 A - 2

$\alpha$  Urs. Min rej 3<sup>rd</sup> stroke for 2<sup>nd</sup>  $\delta$

Oct 1st 1876

W. R. Johnson

Nov - 1581 1631

2 - 1532 1632

Oct-15-1876 WTR

morning

2 Cap Mus 50 3 198 242 184 100  
 2 Gen 5 0 591 46 582 478  
 both A-2

2 His Mus A, 3 5-7 9 (1200 full)

2 Lev. 50 2 3.2 7.3 593 488

2 His Mus.  
 WTR = in working

J.R.M. = 25 " "

No 3 = 1533 1633



Oct-19 1876

W. S. R. obs. from.

M = 1534 1634

2 = 1535 1635

~~3 = 1536~~

Dec 24 1876

W. R. Dr. Brown

$\text{No} = 1136$  1636

$$2 = 1137 \quad 1637$$

$3 = 1538 \quad 1638$

J. R. M. ~~has~~ reads <sup>for</sup> with <sup>setting</sup> ~~and~~ B

Observed for inclination, at extreme  
ends of declination arc.

Oct 24 Monday

Leonis 50 1 21.5 23.0 21.3 13.7  
 Polaris 13 11  $(A_{-1}, A_1) A_{+1}, 1, 2, 3.$

1604-1539 1639

Adjusted illumination of  
micrometers.

Removed cores and cleaned pivots



Oct 25 1876

M. A. R. Obs. Room

No 1 = ~~1540~~ 1640

2 = ~~1541~~ 1641

~~3 = 1542~~

Observed pole stars for inclination  
of declination arm.

26 Sept. 2042

76 Decois 2051

7 " "

126 Sept. 2128

B " 2230

Oct 26 1876 Morning

$\alpha$  Hydrea 30 3 31.0 25.6 30.5 28.0

$A_{1234}^{521}$   $A_{12345}$   $A-1$   $A-2$

Seeing very good

$\alpha$  Lev, 50 1 24.7 25.2 26.6 10.2

Nov = 1542 1642

Oct 28 1876

Morning M.P. Rens.

$\alpha$  Leo 101 46.7 46.6 45.3 35.4  
 for  $\Delta 1 \times 2$   
 +2

Palais. 10 obs. for  $\checkmark$ 

Nov 1-1543 1643



Oct 29 1876

W. R. Johnson

W. R. Johnson, Jr. inclination

λ 125 min

B 125 min 21 27

31 " 22 32

C " 22 45

D " 23 3

E " 23 34

41 N. P. 23 42

1	1544	1644
2	1545	1645
3	1546	1646
4	1547	1647
5	1548	1648

Oct 29 1896

Morning

H. R. R.

W. L. R. 23 ms for ✓  
 Lost 1/2 and 1/2.

Hydrom 30 2 0.4 56.3 57.3 415.8  
 Res 1st 5

Leo  
~~100 52 2 15.3 143 146 6.0~~

P. Lewis 10 0 5.0 7.2 5.5 53.7  
 11 42 10 1 22.5 22.8 21.9 10.8

Oct 30 1876 W.R. Johnson

W1 = 7549 1649

2 = 1550 1650



Oct 31 NAR Dis.

Nov = 1551 1651

2 = 1552 1652

~~N Washington 1876 Nov. 4~~

~~19. 49~~

30	1	40.6	41.4	41.7	41.2	41.1
		44.8	45.1	45.6	45.5	44.9
		47.0	47.1	47.0	46.4	46.8
		28.4	29.6	30.0	29.4	29.9

~~A - 2 3, 4, 5~~





Oct 31 Morning

Hot

$\alpha$  Lepus 50 2 20.2 3 2.2 31.0 20.4

Polaris  $a_2$  for R.A. ~~44~~ A +2

1 14

33 Das for  $\checkmark$

2 Bootis	35	1	19.2	20.2	21.4	11.2
14 9	35	2	37.0	37.4	38.4	28.5

Perhaps the collimator has been set  
one revolution wrong for date Oct-29

30 31

1876, Nov. 1 Morning

Polaris

13 14

8 obs for 8

---

1201 - 1453 1653

Nov 2 1876 W. H. R.

W. H. R. des. Clouded up.

Vol = ~~1553~~ 1654



Nov 4 1876

W. A. R. Jones

No 1 = 1555 1655

2 = 1556 1656

Nov 5-1876

W.R. du noue.

Nov = ~~1557~~ 1657.  
2 = ~~1558~~ 1658

Nov 5-1876

~~50~~

50 2 34.8 36.2 34.7 25.0

x Lev

10 1

---



Nov 12 1876

R. A. R. Johnson,

W1 = ~~1559~~ 1659  
2 = ~~1560~~ 1660  
3 = ~~1561~~ 1661  
4 = ~~1562~~ 1662

Nov 12 1876 NAR  
 Morning

B Leo. 10<sup>h</sup> 1 4.4 3.8 2.0 5-2.6  
 11 42

---

Polaris Last 4 wires 5-50 for ✓  
 13 12

---

✓ Bort's	35 1	21.0	23.5	22.8	11.5
14.9	35 2	47.3	48.4	47.5	34.8

Nov 13 186

W. A. R. W. W. W. W. W.

M 7 = 1163 1663

2 = 1164 1664



Dec 4 1876 WSR. obs.

W01 = 1565 1665

2 = 1566 1666

" "



Dec 5 - Morning

2 big ins 13 ft

50 2 18.6  
17.2  
12.9  
1.0

lost - 1/2 123  
1/2 1

6 lbs of Knaackinger

14 9

35 1	47.7	51.8	45.1	30.0
35 2	41.8	45.3	38.3	24.2



Dec 1876

W. A. K. obs. from,

Nov = 1570 1670

2 = 1571 1671

3 = 1572 1672

4 = 1573 1673

Dec 1876

Morning 2 WK

B Lewis <sup>h m</sup> 1142

---

 10 = 26.6 278 218 8.4

2552

Dec 7/1876

Nov = ~~1174~~ 1674  
 2 = ~~1175~~ 1675  
 3 = ~~1176~~ 1676

W.R. 505.

Dec 7 Morning  
 Cor Serpentes 15 3 27.5 31.3 24.2 10.7  
 15 29

Cor Serpentes  
 1537 W.R.

10 50s of a morning for S



Dec 9 10<sup>56</sup> Morning

$\alpha$  Uruu Mu  $52$  238 236 223 204 202  
 Lost - 1st 3 u 312 302 287 291 274  
 242 219 229 218 202  
 317 23 07 592 580

$\alpha$  Uruu Mu  
 Lost - 1st 2 u  
 58 & 118 114 154 526

$\alpha$  Uruu Mu  
 15 29

15 3 32.3 372 278 108

Mr. R. W. 1677  
 No. 1 = 1577

Dec 10 1876 No. R.

Gave up on account of  
bad seeing.

No 1 = ~~1578~~ 1678

2 = ~~1579~~ 1679

Dec 12 1876 W & R. S.

W 1 = 1580 1680



Dec. 13, 1876 H. A. Row

W1 = ~~1581~~ 1681  
2 = ~~1582~~ 1682

Dr 014

W.R. Dr. /

W 1 = 1583 1683

2 = 1584 1684

174  
Dec 14 Morning

~~at~~

Polars 800s for ✓

✓ Brün

55 1 20.3 21.3 14.9 37

✓ Cor. Br.	15	3	20.3	26.8	15.6	56.9
15 29	15	4	42.7	47.1	35.5	19.8



Dreit Morning

& Boris 14<sup>h</sup> 9<sup>m</sup>

35-1 36.7 41.9 34.1 19.9 WR

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& Coranne 15 4 21.1 28.9 20.4 31 5.2. m  
 15-29 Mid wine fall

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NOT = 1585 1685

Dec 19 1876

W. R. Johnson.

No 1 = 1576 1686

2 = 1577 1687

3 = 1578 1688

Dec 19 Manning 1876

Plan 500 ft

x Bryans

55 1 1.75 5.1 56.2 43.0

x Porter 14<sup>th</sup> 5<sup>th</sup>

35 1 38.0 41.2 33.1 14.7

x Cor 15 2<sup>nd</sup>

15 4 42.5 47.8 38.0 23.0

Plan very bad



Due 20/12/16

W. R. O. S. none

W. 1 = 1589 1689

2 = 1590 1690

3 = 1591 1691

Dec 26 1876

Mon

very bad

2 Mr Min 6 ds for S

2 Virgins 5-5 2 7.5 7.3 1.9 48.2  
13 18

2 Boles 35 1 44.9 46.8 40.9 25.0  
14 9

2 Corn

15 29 15 8 37.2 41.3 32.7 17.2

6824 1776

W.R. Rom, now

W1 - ~~1592~~ 1692

2 - ~~1593~~ 1693

3 - ~~1594~~ 1694



Dec 24<sup>th</sup> Morning

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2 Portis Reg 105 ✓

35 2 45,2 50,7 43,5 29,5

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1876, Dec. 26 Morning

Cor. Bor.	15	3	28.9	36.7	28.0	10.8
<sup>hr</sup> 15 <sup>min</sup> 29	15	4	38.6	44.5	35.4	20.5

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L Serpenti	35	2	0.9	4.5	57.3	43.0
15 37			rej. 2nd S			

NW 1 = HF 95 - 1695

2 = HF 96 1696





1896  
Dec 27 Morning

2. We were 5 days for  
only 4 to observe for R.A.

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2. Bortle 149

351 46.3 498 422 28.3

No 1 = 1697

Jan 2 1877

W & R.

Went zone but found it too many clouds.

No 1 = ~~1597~~ 1698

2 = ~~1598~~ 1699

3 = ~~1600~~ 1700

4 = ~~1601~~ 1701

1477 Can. 2 Moving  
 & Hermin L.B. Nov  
 obs fr ✓

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& Vityurin

1318 } 55 1 9.2 P3 3.8 5.3

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& Bards

~~35 1 40.1 44.3 377 23.2~~

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Jan 3 1896 Morning

W.P.

Polaris  $\delta_1$  at  $\delta_2$  1233.4 (Lor 5-)

2 Prods  
14 9

35 1 33.3 36.3 29.4 14.2

2 Cor Bor. Use 2nd  $\delta$

15 4 21.7 27.2 17.2 0.1

Cherpts.  $\delta_1$  &  $\delta_2$

3 35 36.3 8.2 20 59.3

not = 140.4  
2 = 140.3

Jan 4 1877

W. R. , obs. home

Trouble with neck battery.

1107 =	<del>1604</del>	1704
2 =	<del>1605</del>	1705
3 =	<del>1606</del>	1706

Examined the inclination & found it correct.

Jan 4 1879 Morning

Polars 55h 45m  $\Delta 12$   $\Delta 1234$   
 $+1$   $+2$

2 Proles lost, st. transiting

$\begin{matrix} 1' & 1' & 5'' & 20 & 54.7 & 47.0 & 88.7 \\ 35-2 & & & & & & \end{matrix}$

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2 Sept. Md. m. & fall

$\begin{matrix} 35 & 38.4 & 11.3 & 4.3 & 50.0 \end{matrix}$

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Jan 10 1877 Morning

Polaris 500 ft

A 2 3 A 1 3 4 5  
+1 -1

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2 Bootis 25 3 15.8 18.7 24.0 21.8

---

2 Corona. A 40 ft.  
15.29 10 1 14.2 16.8 21.7 22.3

Jan 11/77 Monday

$\alpha$  Bootis 25 3 106 14.7 19.6 116.2  
 14 9 ~~147~~

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$\epsilon$  Lepentis 25 3 38.2 43.8 47.6 43.6  
 15 37





Polaris

~~Oct. 31~~ 1876

J. L. M.

5	3	29.2	24.6	19.7	15.9	10.1	4.5
		36.4	31.2	26.4	22.0	16.8	10.9
		36.7	31.5	26.9	21.7	15.7	9.6
		15.9	10.5	5.6	2.2	56.4	50.2
							1952

2	59.5	53.6	47.6	41.8	35.9	19.7
	4.8	0.3	54.5	47.1	42.5	25.4
	5.4	59.5	53.4	46.9	41.2	26.1
	45.5	40.7	33.2	27.1	22.1	11.8

18.2	14.7	12.8	10.5	9.2	7.3
23.4	19.9	18.7	16.9	15.3	13.7
23.5	20.1	17.4	16.5	13.6	13.3
4.4	1.2	58.9	57.1	55.6	53.5

5.3	2.9	1	59.8	59.6	58.5	57.3
11.8	9.2		5.6	4.2	5.5	2.9
11.8	9.4		6.6	4.9	4.4	3.0
51.7	50.4		46.9	46.0	45.6	43.8

56.1	55.1	55.0	54.6	53.4
1.8	0.3	59.7	0.2	1.7
2.6	0.8	1.1	1.6	2.5
42.9	41.3	41.6	41.6	42.2

544	539	538	539	547
17	0.1	59.2	59.1	0.9
0.8	0.3	59.7	0.0	1.0
412	40.6	41.1	40.6	42.8

Polaris L.C. 1314 1876, Nov. 1 morning

52	21.3	15.9	14.4	11.5	10.1
	26.1	21.3	19.9	16.4	15.1
	27.6	22.5	20.9	17.9	16.4
	9.6	4.2	2.6	0.0	58.4
	1.2	5.7	4.4		
	12.9	11.0	9.1		
	13.9	12.2	10.5		
	55.4	53.2	53.3		

42.95-13 20  
2980-13 20  
54.13-13 20



