

KG  
11365  
872

HENRY DRAPER MEMORIAL.

*Catalogue of Chart Plates taken at Cambridge  
in Draper Telescope*

*Dec. -  $22.5^{\circ}$  -  $20.0^{\circ}$  -  $17.5^{\circ}$  &c to  $+12.5^{\circ}$*

*No. 56*



RG11365.872





KG 11365. 872





1862phae,proj.,-4737  
Early Henry Draper Memorial

(mostly Mrs. Fleming)

66 volumes























4

Dec. - 22.5°

No. No. No. Ref. to Ref. to  
 Q. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars. Meas. Ident.

Peche Plates	<sup>h</sup> <sup>m</sup>	2601	1711	33
taken in Peru	0 10	2803	1885	c 2
are here put in		2631	1710	2
with blue ink.	<sup>h</sup> <sup>m</sup>	2728	1861	3
and also green	0 30	2691	1717	2
ink.		2860	1874	2
		2933	1870	2
	<sup>h</sup> <sup>m</sup>	2761	1858	3
	0 50	2804	1885	3
		2963	1865	3
	<sup>h</sup> <sup>m</sup>	2841	1887	3
	1 10	11921	4028	3
		11054	4625	3
		14006	4620	3
	<sup>h</sup> <sup>m</sup>	2613	1710	3
	1 30	12436	4407	3
		14757		
	<sup>h</sup> <sup>m</sup>	2604	1713	2
	1 50	2805	1886	2
		3040	1750	3
	<sup>h</sup> <sup>m</sup>	2765	1858	3
	2 10	11927	4348	3
		14125	4632	4
	<sup>h</sup> <sup>m</sup>	2699	1862	4
	2 30	10009	-	3
		11835	4331	3i
		14473	4696	3
	<sup>h</sup> <sup>m</sup>	2639	1714	2
	2 50	2862	1871	3
		9965	4160	3i
		12154	-	3
	<sup>h</sup> <sup>m</sup>	2905	1885	3
	3 10	2906	1853	3
		10669	4146	3
		11957	4352	3
		12615	4427	4



0.0		8226	3778	3
0.2		12344	4792	3
0.2	-20	13603		3
0.5		8226	3778	21
		5495	3802	3
1.4		8497	3501	3
1.5		8226	3778	21
0.5		11615	6	3
0.4	-20	14106	4630	4
0.8		h m		
0.8		0 50	12130	3
			14239	46354

1.5		h m		
1.5	-20	1 50	11944	74057 3
			171061	4626 3

3.2	-20	h m		
		3 10	14481	46923

6

Dec. - 22.5°

No. No. No. Ref. to Ref. to  
 R.A. Plate Box Letter St. Lt. F.M. & C. F. ch. Stars Meas. Ident.

h m  
 3 30 2621 1709 B 3

2983 1872 4

17346 1661 4

h m  
 3 50 2937 1866 3

11552 4344 3

h m  
 4 10 2579 1708 2

2947 1867 4

h m  
 4 30 3026 1751 4

11979 4354 3

14604

h m  
 4 50 148 1150 4

12455 4413 4

h m  
 5 10 2647 1715 3

2916 1868 3

h m  
 5 30 2628 1709 3

12731 4447 3

h m  
 5 50 2655 1715 3

12531 4419 3

h m  
 6 10 460 1226 2

12492 4415 3

h m  
 6 30 2840 1854 3

10505 4200 3



11.8 - 12.1 10. 11.535 4691.5

Dec - 22.5°

No.	No.	No.	Ref to	Ref to
R.A. Plate	Box	Letter	St. Lt.	F. M. & C. F. ch. Star. Meas. Ident
6.7 - 22.5	6 50	10826	42053	

7.0 - 25.9

h	m			
7	10	107	1124	4

7.1 - 25.7

h	m			
		200	1160	5

h	m			
		2671	1844	1

7.1 - 22.5

h	m			
7	30	10734		3

h	m			
7	50			

8.1 - 22.3

h	m			
8	10	10530		4
		10703	4213	6

8.3

h	m			
8	30	3077	1747	4
		7177		3
		10558		2
		12582	4425	4

8.4 - 22.5

9.0 - 24.2

h	m			
8	50	155	1149	5
		10991	4324	4
		12739	4446	4

8.9

h	m			
9	10	2674	1844	2
		12623	4430	2

9.2

h	m			
9	30	989		4
		10875	4210	3

9.3

h	m			
9	50	12857	4571	4



7.2  $\frac{4}{10}$  12499 4416 4

No. No. Dec. - 22.5°  
 B.A. Plate Box Letter H. Lt. F. M. & C. Feb. Star Meas. Ident.

10<sup>h</sup> 10<sup>m</sup> 3426 1927 C 2

3557 1969 2

7420 3  
 13243 4481 3

10.2 - 23

10<sup>h</sup> 30<sup>m</sup> 7568 3635 2

10.6

13284 4497 3

11.0 - 38.0

10<sup>h</sup> 50<sup>m</sup> 328 1129 2

11.9

10.5 - 23

11188 4545 3

13696 3

11.2 - 23

11<sup>h</sup> 10<sup>m</sup> 9513 3983 3

13286 4493 3

11.6

- 23

11<sup>h</sup> 30<sup>m</sup> 9259 = 5

11600 4226 3

13648 3

12.0 - 24.0

11.8 - 23.0

11<sup>h</sup> 50<sup>m</sup> 421 1215 3

13565 4588 3

12.2

12.2 - 23

12<sup>h</sup> 10<sup>m</sup> 11046 4231 3

13653 2

- 23

12<sup>h</sup> 30<sup>m</sup> 13257 4553 3

12.4

12.4 - 23

12<sup>h</sup> 50<sup>m</sup> 9527 3737 2

9527 3737 3

10556 4281 3

13584 3

13.1 A.A.

13<sup>h</sup> 10<sup>m</sup> 6029 3.0

7880 3614 3

9523 3737 3

11230 4

13931 3

13.3 - 23.0

13.3 - 23





Dec. - 22.5°

No. No. No. Ref. to Ref. to  
 R.A. Plate Box Letter St. Lt. F.M.B. F.Ch. Stars Meas. Ident.  
 h. m.

13 30 3685 2040 C2

6434<sup>1</sup> 2<sup>1</sup>

14071 4627 3

13.8-28.0

h m  
 13 50 3552 1970 2

13.8-27.3

3788 2029 2

13.8-28.0

3595 1984 2

13.8-27.5

3677 1992 3

h m  
 14 10 6062<sup>1</sup> - 4<sup>1</sup>

7385 - 3

9206 3943 3

11270 4254 4

14278 4652 4

14.2

14.2

h m  
 14 30 7644 3649 3

10361 4201 2

11277 - 4

16232 4503 3

14.6

14.6 - 23

h m  
 14 50 13300 4507 3

14.9

R.A. 15.0

R.A. 15.0

- 14.8

h m  
 15 10 6408<sup>1</sup> 3<sup>1</sup>  
 6409<sup>1</sup> 3<sup>1</sup>  
 9387 3967 3

15.1-22.0

6322 2429 3

15.1-21.7

8581 2881 3

15.3

h m  
 15 30 6395<sup>1</sup> 3<sup>1</sup>

6204<sup>1</sup> 3<sup>1</sup>

13120 31

13355 4482 3

15.4 - 23

- 23

15.6

h m  
 15 50 9531 3985 3

9267 4307 2

15.8-22.7

6308 2430 3

R.A. 16.1

6658<sup>1</sup> 3<sup>1</sup>

15.9

h m  
 16 10 11245 4251 3

16.3-24.0

1389 1559 2

16.0-30

1407 1557 3

6087<sup>1</sup> 3<sup>1</sup>

16.1-22.5

10214 4099 3

16.2

h m  
 16 30 11806 4246 3

- 23.0

7600 3665 2

4992 4063 3

10359 4482 3



13.50

13.8

7624

3

13.8

7977

40613

13.8

11267

3

15.2

15 10

11589

74298

3

15.4

13110

3

15.2 - 28

13335

4508

4

15.3 - 23

13969

3

15.3 - 22

14286

4656

3

15.5 - 28

15 50

11246

15.9

13340

4508

3

16.2 - 23

16 10

74034

Dec. - 22.5°

No. No. No. Ref. to Ref. to  
 R.A. Plate Box Letter St. Lt. F. M. & C. F. ch Stars Meas. Ident.

h. m.  
 16 50 7670 - 3

R.A. 16.9

6074<sup>1</sup> 3<sup>1</sup>

10661 4071 4

12113 3

h m 13494 4614 4

17.0 - 24.2

17 10 1354 1483 3

9205 3307 4

9208 3307 3

13533 4572 3

17.2

h m

17 30 6749<sup>1</sup> -

6092 3

13580 4616 3

h m

17 50 7574 3739 3

8713 3854 4

9210 3307 3

17.9

18.1 - 23.3

h m 9353 4045 3

18 10 6135<sup>1</sup> 4<sup>1</sup>

7694 - 2

18.2

13536 4572 4

h m

18 30 6114<sup>1</sup> 4<sup>1</sup>

9211 3307 4

13580 4581 4

h m

18 50 10040 4069 3

13539 4563 3

18.8

h m

19 10 9246 3307 4

14089 4625 3

19.1 - 22.2

R.A. 19.4

h m 6158<sup>1</sup> 4<sup>1</sup>

9257 4050 4

19 30 6174 2

9258 3733 4

14092 4629 3

19.4 - 22.5

h m

19 50 6176<sup>1</sup> 4<sup>1</sup>6597<sup>1</sup> 3<sup>1</sup>

9259 4046 3

13546 4562 3

19.5 - 22.9



17.9 - 23 17 50 13345 44487 3

19.2 19 10 12549 4421 3  
19.2 - 23 12549  
19.2 - 23 14549

Dec. - 22.5°

No. No. No. Ref. to Ref. to  
 R.A. Plate Pos. Letter St. Lt. F. M. & C. Fch. Star Meas. Ident.

20 10 6143 3  
 9242 3307 4  
 13671 3

20.2-23

20.4-23.4

20.2

20 30 9270 4050 3  
 10972 3  
 11808 4332 4  
 14514 4689 4  
 14297 4655 1

Dec. - 22.6

20 50 6189 4  
 6019 4

10.9

20.8-23

20.8-23

9952 4053 3  
 10995 4234 3  
 12747 4449 4  
 12745 3

21 10 6558 2  
 643 3

21.1 - 23

21.2-23

8534 3525 3  
 14215 4642 3  
 1066 4072 3  
 11211 4245 3

21 30 6306 3

- 23

- 23

10177 4095 3  
 11252 4  
 13914 3

21 50

R.A. 21.9

6028 4  
 6150 4

21.9

21.8-23

9924 4055 3  
 11248 3  
 13718 4

22 10 6327 3

22.2-22.5

22.2-23

22.2

22.2-23

10299 4  
 12592 4425 3  
 10271 4498 3  
 13597 3

22 30 10510 4153 3

22.6-23

- 23

11290 4  
 13686 3

22 50 6363 3  
 6387 3

918 4023 3

R.A. 23.1

22.7

23.2-23.5

23.2

23.2

23 10 6462 2  
 11610 2

10506 4152 3

11866 4342 4

13427 4495 3

R.A. 23.4

6538 2



20.2 - 23 <sup>h</sup> 10 13671  
 20.2 - 23 13901 3

20.8 - 23 <sup>h</sup> 10 12759  
 20.9 13817 4503 3

22.2 - 23 13833 3  
 22.2 - 23 22 10 13919 3  
 22.1 - 23 14408 4670 4  
 22.2 - 23 14516 4689 3

22.8 22 50 12559 4422 3  
 22.8 - 23 13958  
~~22.8 - 23~~ ~~14458~~  
 22.8 - 23 14458 4695 3

Dec. - 22.5°

	No.	No.		No.	Ref. to	Ref. to
R. A. Plate	Box	Letter	St. Lt.	F. M. & C	Fch. Star	Mean. Ident.
23.6 - 23.5	23	30	10307	408	3	
- 23			122101		3	
- 23			13964		3i	
- 23			14557			
RA. 23.7			6715		2 <sup>1</sup>	
RA. 23.7			6716	1	2 <sup>1</sup>	
23.8 - 23	23	50	9143		4	
			12124		4	
			14319			





Dec. - 20°

No.	No.	No.	Ref. to	Ref. to
A. A. Plate	Box	Letter	St. Lt.	F. M. & C. F. ch. Stars
h m				
0 0	271	1165	33	
	402	1213	3	
	333	1208	3	
	1971	1705	c 2	
h m				
0 20	3821	1761	2	
h m				
0 40	528	1280	1	
	1859	1681	3	
h m				
1 0				
h m				
1 20	531	1281	4	
h m				
1 40				
h m				
2 0	577	1275	4	
h m				
2 20				
h m				
2 40	1815	1667	1	
	1884	1684	2	
h m				
3 0				

0 - 20.8





Dec. - 20°

	No.	No.		No.	Ref. to	Ref. to
R.A. Plate	Box	Letter	St. Lt.	F. M. & C.	Fch.	Star Near Ident.
3 <sup>h</sup> 20 <sup>m</sup>	1887	1684	C 2			
	1960	1691	1			

h m  
3 40

h m  
4 0 427 1214 4

h m  
4 20

4.7-20.7  
4.8-18

h m  
4 40 591 1275 3  
14632

h m  
5 0

h m  
5 20 1949 1690 4

h m  
5 40

6.0-20.7

h m  
6 0 243 1168 4  
375 1209 B3

6.4-20.6

h m  
6 20 608 1272 4



Dec. - 20°

No.	No.	No.	Refts	Ref. to
P.A. Plate	Box	Letter	St. Lt.	F. M. Her. F. Ch.
6 40	615	1273	A 4	Star Meas. Ident.

h m  
7 0

h m  
7 20 397 1212 3  
860 1284 A 4

7.5 - 22.5

7.8

h m  
7 40 10917 4215 5  
13013 8

h m  
8 0 873 1423 4

h m  
8 20

h m  
8 40 895 1412 4

h m  
9 0

h m  
9 20 812 1293 3  
1000 1409 3  
1104 1494 1  
h m  
9 40 898 1411 4





Dec. - 20°

No. No. No. Ref. to Ref. to  
 P. d. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Meas. Ident

h m  
 10 0 621 1301 B3  
 1152 1496 3  
 961 1401 3

h m  
 10 20 1105 1494 2  
 1069 1498 3  
 1139 1498 3

h m  
 10 40 754 1289 2  
 1127 1493 B3  
 1024 1419 A4  
 1146 1497 C2  
 1082 1415 2

h m  
 11 0

h m  
 11 20 791 1286 2  
 1203 1479 B3  
 918 1412 B3

h m  
 11 40 971 1405 3

h m  
 12 0 363 1210 3

h m  
 12 20

h m  
 12 40 1347 1484 3

h m  
 13 0

<sup>no.</sup> <sup>no.</sup> <sup>no.</sup> <sup>Ref.to</sup> <sup>Ref.to</sup>  
 A.A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

<i>h</i>	<i>m</i>			
10	40	1168	1478	2
		3449	1939	2
		1234	1481	2
		3558	1969	2
		2747	1719	33



Dec. - 20°

No.	No.	No.	Ref. to	Ref. to	
P.A.	Plate	Box	Letter	St. Lt. F. M. & C. F. Ch. Stars.	Meas. Ident
13	20	760	1288	62	
		992	1409	3	

13.3-21.0

h m  
13 40

h m  
14 0 633 1276 21  
1067 1490 3  
1479 1575 3

h m  
14 20

h m  
14 40 747 1287 4

h m  
15 0

h m  
15 20 905 1411 3

h m  
15 40

h m  
16 0 767 1288 3  
1483 1575 3  
1711 1654 3

h m  
16 20



Dec. - 20

No. No. No. Ref. to Ref. to  
 R.A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Meas. Ident.  
 h m 938 1401 A 4  
 16 40

h m  
17 0

h m  
17 20 1249 1481 2  
1697 1655 2

h m  
17 40

h m  
18 0 1254 1481 2  
1690 1654 3  
6688 ~~2545~~ 3

18-1-20

h m  
18 20

h m  
18 40 1732 1663 2  
2089 1701 3

h m  
19 0

h m  
19 20 1625 1648 2  
2090 1701 4

h m  
19 40





Dec. - 20°

	No.	No.		No.	Ref. to	Ref. to
C.A. Plate	Box	Letter	St. Lt.	F. M. & C. Fch.	Star	Meas. Ident.
<sup>h m</sup>						
20 0	1568	1570	B3			

Should have been <sup>h m</sup> 20 20 6699 2539 3  
20.7 Out in Dec.

<sup>h m</sup>  
20 40 1400 1558 3  
6540 2536 2

20.6 - 19.5  
20.6 - 19.5

6661 motion box  
<sup>h m</sup>  
21 0 6740 2558 3

<sup>h m</sup>  
21 20 1571 1570 2  
2193 1724 3  
1764 1665 2  
2120 1703 2

<sup>h m</sup>  
21 40

22.0 - 20.7 <sup>h m</sup> 22 0 1403 1557 3  
22.0 - 20.6 1426 1481 4

<sup>h m</sup>  
22 20

22.7 - 20.7 <sup>h m</sup> 22 40 1702 1655 2  
1852 1681 3

<sup>h m</sup>  
23 0

20.6 - 19.5 20 40 6778 2556 3



Dec. - 20°

No.	No.	No.	Ref. to	Ref. to
C. A. Plate	Box	Letter	St. Lt.	F. M. & C. F. Ch. Stars
23	20	1783	1666	B3

No.	No.	No.	No.	No.
23	40	1858	1659	3



Dec. - 17.5°

		No.	No.		No.	Ref. to	Ref. to
		Plate	Box	Letter	St. Lt.	F. M. & C. F. Ch.	Star
							Mean, Ident.
0.1	h m	6950	3461	3			
	0 10	2032	1693	C 2			
		2780	1859	B 3			
		2360	1849	C 2			
		2859	1874	B 3			
		2681	1712	C 2			
0.2 - 18	h m	12262					
	0 30	2729	1861	3			
		2881	1874	2			
0.4	h m	12605	4429	4			
	0 50	2128	1703	3			
		2781	1859	3			
		2978	1864	2			
	h m	3923	3892	2			
	1 10	2846	1853	3			
		2997	1868	2			
1.2		11829	4329	4			
1.21		11862	4342	3			
1.1 - 18	h m	14112	4631	3			
	1 30	2125	1703	3			
		3022	1741	3			
		2279	1759	A 4			
Dec - 18.8		2901	1885	2			
1.9 - 17.6	h m	6964	3460	2			
1.8	1 50	10455	4144	3			
1.8		12607	4427	4			
		14246	4649	4			
	h m						
	2 10	2103	1702	2			
		2359	1849	3			
1.1 - 18		14380	4618	3			
	h m						
	2 30	11950	4357	4			
-18		14720					
	h m						
	2 50	2308	1752	3			
2.8 - 18		12611	4429	4			
2.8 - 18		14724					
	h m						
	3 10	3729	3859	3			
3.2		10756	4188	3			
3.2 - 18.0		11626	?	3			
3.2 - 18		14596					



0.2 - 13 <sup>100</sup> 0 10 12263 4374 32  
 0.21 - 13 12264 4375 32  
 0.1 - 13 14269 4652 3  
 -13 0 30 14618

0.7 0.50 9963 - 3  
 0.8 12702 4444 3  
 0.5 - 14491<sup>+</sup> 4693 3  
 14

1.3 1496 2801 3  
 1.2 - 13 14564

1.3 <sup>100</sup> 1.30 12205 4367 3  
 - 14273 4652 3

no. No. Dec. -17.5°  
 P.A. Plate Box Letter St. Lt. F.M. & C. Fch. Stars Ref. to Ref. to  
 h. m. Near. Ident.

3 30 2077 1700 C1

2384 1847 3

3001 1863 20

h m 12618 4427 3

3 50 2968 1864 3

11934 4350 3

h m  
 4 10 2034 1693 2

2580 1708 2

2982 1872 4

h m 1193 4412 3

4 30 12456 4412 3

14755

-18

h m  
 4 50 2107 1699 2

12164 3

12729 4439 4

4.8

4.9

h m  
 5 10 10650 1417 3

14577

5.2

5.2 -18

h m  
 5 30 2078 1700 2

10663 3

14678

-18

h m  
 5 50 12632 4432 4

5.8

h m  
 6 10 2663 1738 4

2833 1854 4

h m  
 6 30 2877 1874 2

36-150  
34 -15

1659 1982 3  
14329 4691 3

#1  
#2

10691 - 3  
12727 4446 3



Dec. - 17.5°

No. No. No. Ref. to Right  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Meas. Ident.

6 50 12465 4412 3

7 10 10525 - 3  
 10902 4218 3

7 30 2043 1696 3  
 12577 4424 3

7 50 8926 3892 3  
 16946 4419 3

8 10 2152 1721 3  
 10531 - 3

8 30 3091 1746 3  
 918 - 3  
 10909 4221 3

8 50 13237 4483 4

9 10 10909 4214 3  
 10931 4219 3  
 13608 - 3

9 30 9190 - 3  
 13672 - 3

9 50 11152 4242 4



Dec. -17.5°

No. No. No. Ref. to Ref. to  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Mess. Ident

10.1  
 10.2 -18  
 10 10 9552 3635 2  
 13612 3

h m  
 10 30 7569 3635 2  
 7585 3658 2  
 10976 4222 3  
 13640 3

h m  
 10 50 13559 4562 4

h m  
 11 10 9512 3983 3  
 11057 4231 4  
 13424 3

h m  
 11 30 2482 1729 3  
 9258 3  
 11448 4272 3  
 13245 4553 3

Dec. -17.3  
 11.8  
 11.8 -18  
 11 50 6030 3<sup>v</sup>  
 6031 3<sup>v</sup>  
 11043 3  
 13649 3

h m  
 12 10 13292 4506 3

h m  
 12 30 11095 4235 3  
 13881 3<sup>i</sup>

h m  
 12 50 7826 3737 3  
 9751 4236 3  
 11093 4245 3  
 13658 3

h m  
 13 10 9520 3985 3  
 11581 4293 3<sup>i</sup>  
 13258 4499 4





Dec. - 17.5°

No. No. No. Ref. to Ref. to  
 P.A. Plate Box Letter St. Lt. F. M. & C. Fch. Stars Mean Ident.

13 30 6435 3

~~6116 2404 4~~

14817 4622

13 50 9970 4061 3

6366 2433 3

11453 4274 3

13297 4506 3

14 10 6063 4

7384 3

13661 3

14 30 9910 4063 4

11457 4275 3

7645 2659 3

11276 1

11459 4275 3

11586 4293 3

14441 4673 3

14 50 10894 4212 3

11955 4520 3

11587 4293 3

13787 3

15 10 73304 4507 3

6396 3 3

6205 3 3

9386 2964 3

15 30 9953 4062 3

11281 3

14027 4622 4

15 50 6054 3

6098 21

10183 4096 3

11960 4020 3

13261 4220 3

13307 4507 3

16 10 6196 3

7579 3638 2

11024 4067 3

11592 4293 3

13975 34

16 30 9991 4063 3

11025 3

13738 3i

15739 3





46

Dec. - 17.5°

R.A. Plate No. No. Letter St. Lt. F. M & C. F. Ch. Stars Mean Ident  
 h. m.

16 50 6075 3

16.7 - 130

10032 4068 3

16.9 - 15

13569 3

7.1

9547 4044 3

17.2

17 10 11207 4248 3

17.1 -

14082 4628 3

17 30 6594 2

9404 3965 3

-18

13991 4

17 50 7573 3739 1

8714 3734 3

17.8

9274 3307 4

18.1 - 180

13574 4563 3

18 10 6136 3

9822 4045 4

7693 3

18 30 6115 1404 4

9880 4045 4

-18

14744

18 50 9944 4057 3

10039 4069 4

18.87 - 177

12546 4420 3

18.1 - 18

14857 4627 3

19 10 9239 3307 3

13591 4579 4

19.1

R.A. 19.4

6159 4

19 30 7837 3733 3

13937 4547 3

-18

19 50 6177 3

6591 3

-18.4

8714 3734 3

19.8

9822 4045 4

12585 4426 4

18.2 - 16.3 17.50 14033 14234

18.2 - 16.3 17.50 3  
 18.2 - 18 13936 3  
 18.2 - 16 14033  
 18.2 - 16 14044 14234  
 18.2 - 16 14044 14234

19.2 - 16.1 17.50 13771 13778 3

19.8 - 18 19.50 13898 3  
 19.8 - 18 13896 3

Dec. -17.5°

No. No. No. Ref. to Ref. to  
 R. A. Plate Box Letter St. Lt. F. M. & C. Fch. Star Meas. Ident

20 10 6144 3  
 13504 4602 3  
 10,045 4070 3

20.1-17.5

20.1-17.5

20.1

20 30 13586 4579 3  
 13596 4579 3

Ra. 20.7

6190 3

20 50 7751 4058 4

20.8-18.5

6515 2540 3  
 6620 4

Ra. 21.1

20.8-16

20.8-18

21 10 6552 3  
 12537 4421 3  
 6044 3

8531 3725 3  
 10067 4072 3

21.4

21.2-18

21 30 12589 4425 3  
 6307 3  
 6756 2

10191 4098 3  
 13474 4616 4

-18

21 50 10496 4157 3

22.0-16.8

21.8-18

12748 4449 4  
 13320 4503 3

Ra. 22.1

6343 2

22 10 7483 3691

22.1-20

6925 2587 3

22.3-16.5

22.3-17.5

22.4-18.0

22.4

-18

-18

22 30 7484 3690 2  
 8038 3763 2  
 10511 4153 3

11261 3  
 13721 3  
 14453 4678 3

22 50 6053 3  
 6388 3

9735 4623 3

Ra. 23.1

22.8

23.1-17.5

23.1-18

23.3

-18

23.2-18

23 10 6463 2  
 12596 4426 3

10503 4133 3  
 12120 1 4

12749 4447 3

14557

Ra. 23.4

Ra. 23.4

6539 2

6706 3



20.7 - 18.3 20 50 6698 2560 3  
 20.8 - 17.0 6725 2562 2

20.9 - 17.0 20 50 6662 not in bd  
 20.8 - 15 13906 3

22.2 - 17.7 22 10 10298 4117 4  
 22.1 - 15 11821 4332 4  
 22.2 - 15 13951 3

22 30

22.8 - 22 50 14505 4655 4  
 22.7 14050 4624 3

Dec. -17.5°

No. No. No. Ref. to Ref. to  
 B. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Meas. Ident.

23.8

 $\begin{matrix} R & m \\ 2 & 3 & 30 \end{matrix}$ 

23.6 - 190

9742 - 3

16308 41213

12599 44263

14230 46353

14232 46483

23.4

 $\begin{matrix} 3 \\ 2 & 4 & 50 \end{matrix}$ 

6606 ✓ 3 ✓

12562 44223

~~14460~~ 46953

23.8

23.8 - 190





Dec. - 15°

Q.A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Meas. Ident

No.	No.	No.	Ref. to	Ref. to
0	0	258	1165	4

0.0 - 16.0

h m  
0 20 119 1045 3

0.3 - 16.0

353 1210 A 4

0.7 - 15.9

h m  
0 40 1628 1648 2

h m  
1 0 530 1280 3

1.5 - 13

h m  
1 20 14750

h m  
1 40 260 1165 3

h m  
2 0

h m  
2 20 334 1208 3

2.3 - 15.8

510 1220 3

2.3 - 14.4

119 1045 3

h m  
2 40 446 1227 3

h m  
3 0 435 1217 4



Dec. - 15°

<sup>No.</sup>  
 R. A. Plate <sup>No.</sup> Box Letter <sup>No.</sup> St. Lt. F. M. & C. F. ch. <sup>No.</sup> Stars <sup>Ref. to</sup> Meas. <sup>Ref. to</sup> Ident.

<sup>h m</sup>  
 3 20

3.7-15.6 <sup>h m</sup> 3 40 604 1273 5

<sup>h m</sup>  
 4 0

<sup>h m</sup>  
 4 20 267 1166 3

<sup>h m</sup>  
 4 40

<sup>h m</sup>  
 5 0 1149 1149 3  
 239 1168 3

5.0-16.0

<sup>h m</sup>  
 5 20

<sup>h m</sup>  
 5 40 293 1163 4

<sup>h m</sup>  
 6 0 379 1208 4

6.3-15.7

<sup>h m</sup>  
 6 20 461 1226 2  
 1888 1683 2  
 1934 1688 3





Dec. - 15<sup>o</sup>

No. Ref. to Ref. to  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. State. Meas. Ident.  
 h. m.  
 6 40

7.0 - 15.6

h m  
 7 0 248 1171 4

h m  
 7 20

h m  
 7 40 845 1414 3

h m  
 8 0

h m  
 8 20 300 1162 4

h m  
 8 40

h m  
 9 0 157 1149 4

9.0 - 15.7

254 1167 4

h m  
 9 20

9.8 - 14.0

h m  
 9 40 282 1164 4





Dec. - 15°

No. No. No. Ref. to Ref. to  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Star Meas. Ident  
 10 8

L m  
 10 20 398 1213 2

734 1290 B 3

L m  
 10 40 1120 1495 4

11.0-15.7

L m  
 11 0 310 1162 2  
 1195 1476 2  
 362 1209 B 3  
 1238 1481 3  
 478 1225 C 2

11.5-14.5

L m  
 11 20 1242 1554 3

11.4

L m  
 11 40 626 1301 3  
 1210 1480 2

11.8-17.3

11.8-17.4

L m  
 12 0 400 1213 3  
 6030 3  
 6031 3

L m  
 12 20 920 1412 3  
 924 1284 3  
 1288 1561 1

L m  
 12 40

L m  
 13 0 483 1224 2  
 973 1405 3



Dec. - 15<sup>o</sup>

	no.	No.		No.	Ref. to	Ref. to
R.A.	Plate	Box	Letter	St. Lt.	F.M. & C.	Fch. Staw
h m					Mean	Ident.
13 20	1387	1555	B3			

h m			
13 40	926	1403	3

h m	
14 0	

h m			
14 20	1282	1562	3
	1458	1483	2

h m	
14 40	

h m			
15 0	1359	1483	2
	1460	1486	3

h m	
15 20	

15.5

59.16' 4'

h m			
15 40	1136	1498	1
	1480	1575	4

h m			
16 0	1572	1647	2

h m			
16 20	1278	1562	3
	1331	1563	2
	1390	1559	3

17.14, 16.54 3, 3

16.4-15.5





Dec. - 15<sup>o</sup>

No. No. No. Ref. to Ref. to  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.  
 h. m.  
 16 40

h m  
 17 0 1355 1483 4  
 17.2 - 15.3 5956<sup>1</sup> 3<sup>1</sup>

h m  
 17 20 1542 1567 2

h m  
 17 40 1200 1476 3  
 1658 1651 C2  
 1555 1571 B3  
 17 19 1645 C2  
 1594 1645 B3  
 17.7 - 15.2 h m 59170<sup>1</sup> 3<sup>1</sup>  
 18 0

h m  
 18 20 1558 1571 2  
 17 25 1645 2

h m  
 18 40  
 18.8 - 15.3 5996<sup>1</sup> 3<sup>1</sup>

h m  
 19 0 1545 1569 3  
 1738 1663 2

h m  
 19 20

h m  
 19 40 1581 1647 2  
 1750 1664 3  
 19.7 - 15.5 5947<sup>1</sup> 3<sup>1</sup>





Dec. - 15°

	No.	No.	No.	Ref. to	Ref. to
P. A. Plate	Box	Letter	St. Lt.	F. M. & C. Fch.	Star Meas. Ident.
h. m.					
20 0					

h m			
20 20	1578	1570	2
	1758	1664	4

h m			
20 40	4166	2105	2

21.0-15.6

h m			
21 0	1346	1484	2
	2027	1622	B 3
	1639	1649	A 4
	2174	1723	B 3
	1778	1666	3
h m			
21 20	1801	1668	C 2

21.7-15.8

h m			
21 40	1584	1647	3
	14221	4648	3
	1679	—	3

h m	
22 0	

h m			
22 20	1436	1486	3

h m	
22 40	

h m			
23 0	1613	1647	3

P.A. <sup>no.</sup>Plate <sup>no.</sup>Box <sup>no.</sup>Letter <sup>Ref. to</sup>H. <sup>Ref. to</sup>L. <sup>Ref. to</sup>F. <sup>Ref. to</sup>M. & <sup>Ref. to</sup>C. <sup>Ref. to</sup>F. <sup>Ref. to</sup>ch <sup>Ref. to</sup>Star <sup>Ref. to</sup>Weav. <sup>Ref. to</sup>Ident.

<sup>h</sup>  
21 0 2486 1731 3  
5257 2283 C2  
4316 2123 B3  
5286 2273 C2  
4991 2246 B3

Dec. - 15°

No.	No.	No.	Ref. to	Ref. to
P. A. Plate	Box	Letter	St. Lt.	F. M. & C. F. Ch.
23	20		Star	Meas. Ident.

23.7-15.7

23 40 256 1165 4





Dec. - 12.5°

No. No. *Plate* *Box* *Letter* *St. Lt.* *F. M. & C. F. Ch.* *Star* *Mean.* *Ident.*  
 h m 6951 3461 31  
 0 10 2602 1711 A 4  
 6909 2 2  
 6344 1 1  
 10567 3  
 11915 4347 3  
 h m 13604 3  
 0 30 2692 1717 4  
 8453 3502 3  
 11619 2 32  
~~11605~~  
 h m  
 0 50 2760 1712 3  
 2964 1865 4  
 8922 3892 3  
 9962 4659 3  
 h m 12129 2 4  
 1 10 2822 1887 3  
 114153 4615 3  
 14007 4620 3  
 1195 3841 3  
 h m 11720 4348 3  
 1 30 2614 1713 4  
 12699 4443 4  
~~11447~~  
 h m  
 1 50 2606 1711 3  
 2806 1886 2  
 3041 1750 5  
 h m 10434 4144 4  
 2 10 2766 1858 4  
 11926 4645 3  
 14124 4631 4  
 h m  
 2 30 2700 4  
 11534 4331 4  
 14472 4696 4  
 h m  
 2 50 2640 1714 3  
 12210 4367 4  
 14340 4661 3  
 5728 3559 3  
 h m  
 3 10 2907 1873 4  
 6916 3  
 8691 3850 2  
 11956 4352 3  
 12614 4429 3  
 14478 4492 3

0.0 - 1.0 0.10 14105 1630.3

0.5 0.50 14238 1635.4

1.8 - 1.9

to m.

1.50 11943 14352.3

1.8 - 1.9

14060 11626.4



Dec. - 12.5°

P.A.	No.	No.	Letter	St.	Lt.	F.M.C.	F.ch.	No.	Ref. to	Ref. to
									Stars	Meas.
h. m	3 30	2622	1709	B 3						
		14345	14161	3						
		2984	1872	4						

h. m	3 50	2938	1866	4
		14551	4344	3
		14436	4674	3

h. m	4 10	2581	1708	2
		2948	1866	4
		1702	3353	3
		10674	4177	4
h. m	4 30	11975	4354	4
		12621	4429	3
		14603		

h. m	4 50	2189	1725	3
------	------	------	------	---

h. m	5 10	2364	1845	2
		2648	1715	B 3
		2404	1841	3
		2890	1809	3
		2577	1736	3

h. m	5 30	2529	1710	3
		3380	1931	3
		3378	1929	A 4
		5338	2295	C 2
		3379	1931	B 3
h. m	5 50	5339	2295	A 4
		2656	1715	C 2
		12460	4412	3

h. m	6 10	12491	4415	3
------	------	-------	------	---

h. m	6 30	2841	1854	4
------	------	------	------	---

R. A <sup>no.</sup> Plate <sup>no.</sup> Box Letter St. Lt. F. M. & C. F. ch. <sup>no.</sup> Stars <sup>Ref. to</sup> Meas. <sup>Ref. to</sup> Ident.

111 — 4 10 14534 4691 3

h na  
5 30 5340 2295 3  
16262 + 2  
14534

Dec. -12.5°

No. No. No. Ref. to Ref. to  
 P.A. Plate Box Letter St. Lt. F.M. & C. Fch. Stars Mess. Ident.  
 h m  
 6 50 10974 - 3

h m  
 7 10 2672 1739 2  
 11226 4416 3  
 12496 4416 3

h m  
 7 30 14816

h m  
 7 50 8924 3892 3  
 6122 2404 3  
 8025 2799 4  
 10915 4215 3

h m  
 8 10 14817

h m  
 8 30 9177 - 4

h m  
 8 50 10900 4224 3

h m  
 9 10 2675 1844 2  
 13680 3

h m  
 9 30 13289 4481 3

h m  
 9 50 10967 4221 3





Dec. - 12.5°

Mr. R.A. Plate Box Letters St. Lt. F. M. & C. Fch. Stars Meas. Ident

h m 10 10 9251 4  
13242 4481 3

h m 10 30 3278 1745 2

3448 1934 2

3493 1975 2

h m 10 50 13245 4481 3

h m 11 10 9511 3983 3

4226 4

13700 3

h m 11 30 9257 5

10969 4226 3

13616 3

h m 11 50 13289 4493 3

6032 3

7500 3983 3

h m 12 10 11092 4235 3

13121 2

13622 3

h m 12 30 13250 4553 3

h m 12 50 9925 3737 4

9750 4481 4

11580 4292 3

13657 2

h m 13 10 9505 3982 3

11097 4235 3

12930 3





Dec. - 12.5°

No. Ref. to Ref. to  
 P.A. Plate Box Letter St. Lt. F. M. & C. Fch. Stars Meas. Ident.  
 h. m

13 30

13.5-12.5

6486 ✓ 2 ✓

11452 4274 3

- 13

13328 4504 4

13 50

13.5 - 12

9979 4662 2

14118 4632 3

14 10

14.2 - 13

7353 - 3 ✓

114179 4653 4

14.2

6064 3 ✓

14 30

14.4

9959 4653 3

14.2

11269 4254 3

11274 4254 4

14.5-12.5

6423 1

- 13

13331 4504 3

14 50

14.8

11023 4227 3

14.8

13301 4507 4

15 10

15.2

9385 3964 4

15.2 - 13

11590 4294 3

13334 4503 3

15.3 - 13

6397 1 3 ✓

15 30

15.4

9982 4662 3

13356 4487 3

15 50

15.8-13

10184 4096 4

6053 1 3 ✓

16.0 - 12.5

10023 4067 4

16.1

7651 3659 3

16.1

16 10

7578 3638 2

16.2

11897 4346 3

16.2

Dec-13

16 30

-128

6197 ✓ 3 ✓

11.5

7598 3665 2

-13

7599 3665 1

9990 4663 3

13980 4

15.5 15 50 11247 - 8  
15.8 13241 4538.3  
16.0 14033 4623.4

Dec. - 12.5°

No. No. No. Ref. to Ref. to  
 R. A. Plate Box Letter St. Lt. F. M. & C. Fch. Stars Mean Ident.  
 h. m.

16.8-13 6076 4

16.8-13 6104 2

h m 7669 3657 2

17.1-13.2 17 10 9144 4044 3

17.2 11034 3

17.2-13 13986 4

h m 17 30 4164 2105 3

9296 3965 3

13499 4614 3

h m 17 50 3873 2043 1

4321 2123 2

4002 2095 2

17.8-11.8 4039 2089 3

h m 5974 3

18.1 18 10 9851 4045 3

18.2-12.6 6137 3

7692 3

18.4 h m 9579 4048 3

18 30 13579 4581 3

18.5-13 6116 3

18.6-8 6117 3

h m 18 50 6546 3

Dec-13 18 50 6546 3

1880 3739 3

9943 4057 3

10035 4068 3

18.8 h m 13540 4563 3

19 10 9235 3307 3

RA. 19.4 6160 4

h m 19 30 7155 4050 3

7836 3737 3

19.4-13.2 8474 3816 3

13664 43

19.7-13 6178 3

h m 19 50 6596 3

7681 3

9860 4016 3

19.8 13547 4562 4



16.7-130	16 50	10031	4065	3
16.5		12111		32
16.5		13112		3
16.5		13495	4614	3

17 10

17 30

	17	50	7572	3739	21
			9677	3207	4
			6122	2404	5
17.5-13			12116		4
17.5-13			13746		32
			13747		3
18.1-130	18	10	10224	-	3
18.1-13.5			10225	-	3
18.2-13			13727		4

18 30

18.7-130 9917 4054 3

19.1	19 10	12550	4421	3
19.2-13		10634		3

Dec. - 12.5°

<sup>No.</sup> R.A. Plate <sup>No.</sup> Box Letter <sup>No.</sup> St. Lt. <sup>Ref. to</sup> F. M. & C. F. Ch. <sup>Ref. to</sup> Stars <sup>Mass.</sup> <sup>Ident.</sup>

<sup>h m</sup> 20 10 6145 4<sup>i</sup>

20.1 - 12.5

10448 4142 3

20.4 - 13.0

20 30

9892 4049 3  
 11809 4221 3  
 13716 4332 4  
 13716 3

20.8 - 13

20 50

6191 4

20.9 - 13

6021 3<sup>i</sup>

20.8 - 13

6547 3

21 10

8555 3803 4  
 7476 3803 3

21.2 - 13

6045 3

21.4

8723 3556 3

21.4 - 13.0

21 30

10,051 4071 3

- 13.4

11253 4

21.5 - 13

6308 3

- 13

13913 3

21 50

10497 3

21.8 - 13

6276 4

22.1

8742 3

22.2 - 12.6

22 10

11217 3

22.2 1

10297 4117 4

22.4 - 13

12536 4462 3  
 14263 4651 3

22 30

10572 4153 2

- 13

11288 3

- 13

13685 3

22 50

22.8 - 13

6256 3

22.0 - 12.7

6399 3

23.1 - 13

6464 2

- 12.8

9734 4020 3

23.0 - 13.0

23 10

9658

23.1 - 13.0

10540 4126 3

23.2

11293 3

23.2 - 13

12997 3

23.2 - 13

14747

R.A. 23.4

6540 2

20.1-130 20 10 9898 4051 4  
 20.2-13 13670 3  
 20.2-13 13912 3

20 30

20.8 20 50 9950 4058 4  
 20.8-13 13316 4508 3

21.2-135 21 10 10068 4072 4  
 21.2 11210 5  
 21.2-13 13714 3

21 30

21.8-13 <sup>to m</sup> 21.57 13757 3

22.7-130 <sup>to m</sup> 22 50 11611 4 3  
 22.8 13 12558 44223  
 22.8-13 13957 3  
 22.8 — 14454 46953



Dec. - 12.5°

No.	No.	No.	Ref. to	Ref. to
P. A. Plate	Box	Letter	St. Lt.	F. M. & C. F. Ch.
23 30	6707	3i	Star	Meas. Ident.

23.4 - 12.5  
- 16.3  
- 13  
- 10

10341 4166 2  
12274 4374 3  
13963  
14360

23 50 6605<sup>✓</sup> 3<sup>1</sup>

23.8 - 13.7  
23.8 - 10

9744 - 3  
12601 14427 4  
14318 14655 3



Dec. - 10°

Q. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Mess. Ident

h m 269 1166 B 3

337 1206 3

h m 410 1214 A 4  
0 20

h m 40 411 1214 4

h m  
1 0

h m 20 557 1278 1  
1860 1681 B 3  
1657 1651 C 2

1.3-11.0

h m 1795 1668 2  
1 40

h m 2 0 578 1281 5

h m  
2 20

h m 2 40 1816 1667 1  
1885 1684 2

h m  
3 0





Dec. - 10°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Shaw Meas. Ident.  
<sup>L m</sup>  
 3 20

<sup>L m</sup>  
 3 40

<sup>L m</sup>  
 4 0 428 1214 3

<sup>L m</sup>  
 4 20

4.7-10.8

<sup>L m</sup>  
 4 40 592 1275 3

<sup>L m</sup>  
 5 0

<sup>L m</sup>  
 5 20 1950 1690 2

<sup>L m</sup>  
 5 40

<sup>L m</sup>  
 6 0 124 1045 4

192 1152 4

244 1169 B3

<sup>L m</sup>  
 6 20 609 1272 14





Dec. - 10°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.  
<sup>h m</sup>  
 6 40 616 1272 B3

<sup>h m</sup>  
 7 0 129 1045 4  
 2895 1869 B 3  
 2450 1847 C 1  
 3305 1936 B 3  
 2777 1859 C 2

<sup>h m</sup>  
 7 20 862 1282 2

<sup>h m</sup>  
 7 40

<sup>h m</sup>  
 8 0 377 1210 3  
 874 1423 4

<sup>h m</sup>  
 8 20

<sup>h m</sup>  
 8 40 896 1411 5

<sup>h m</sup>  
 9 0 813 1293 3

<sup>h m</sup>  
 9 20 814 1293 4  
 1001 1409 4

<sup>h m</sup>  
 9 40 10957 4212 4



Dec. - 10°

R.A.	<sup>h</sup> <sup>m</sup>	<sup>no.</sup> Plate	<sup>no.</sup> Box	Letter	St.	Lt.	F.	M.	& C	F.ch.	<sup>no.</sup> Star	Ref. to Meas.	Ref. to Ident.
10	0	622	1301	B3									
		962	1405	3									
		1106	1494	3									

<sup>h</sup> <sup>m</sup>  
10 20

<sup>h</sup> <sup>m</sup>  
10 40

755	1289	2
1239	1481	2
1128	1493	3

<sup>h</sup> <sup>m</sup>  
11 0

1189	1476	3
------	------	---

<sup>h</sup> <sup>m</sup>  
11 20

330	1208	3
972	1405	3
792	1286	3
1204	1479	A 4
919	1412	B 3

<sup>h</sup> <sup>m</sup>  
11 40

<sup>h</sup> <sup>m</sup>  
12 0

390	1211	4
-----	------	---

<sup>h</sup> <sup>m</sup>  
12 20

<sup>h</sup> <sup>m</sup>  
12 40

1348	1484	3
1176	1498	3

<sup>h</sup> <sup>m</sup>  
13 0





Dec. - 10°

<sup>No.</sup>  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Star Mess. Ident.  
<sup>h m.</sup>  
 13 20 761 1288 C 2

<sup>h m</sup>  
 13 40 10885 4213 3

<sup>h m</sup>  
 14 0 590 1274 4  
 7515 3044 3  
 7697 3

<sup>h m</sup>  
 14 20

<sup>h m</sup>  
 14 40 1380 1555 3

<sup>h m</sup>  
 15 0

<sup>h m</sup>  
 15 20 906 1411 2  
 1481 1575 3  
 5917 3 ✓  
<sup>h m</sup>  
 15 40

<sup>h m</sup>  
 16 0 768 1288 4  
 6226 3

<sup>h m</sup>  
 16 20

16.4 - 10.5 5935 2 ✓





Dec. - 10°

No.	No.	No.	Ref. to	Ref. to
P. A.	Plate	Box	Letter	St. Lt.
16 40	939	1401	A 4	

17.1-10.4

h m  
17 0

5957'

2i'

h m  
17 20

1543 — 3

1698 1655 2

h m  
17 40h m  
18 0

1253 1481 2

1691 1654 3

h m  
18 20

18.4

h m  
18 40

1733 1663 3

18.8-10.5

5998'

3'

h m  
19 0h m  
19 20

1741 1663 2

2092 1701 3

h m  
19 40

19.8-10.5

5948'

3'



Dec. - 10°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>No.</sup>  
 P.A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Near. Ident  
 20 0 1569 1570 33

<sup>h m</sup>  
 20 20

20.6

<sup>h m</sup> <sup>7349</sup> <sup>3612</sup> <sup>37</sup>  
 20 40 7350 3612 37  
 1401 1558 3

<sup>h m</sup>  
 21 0

<sup>h m</sup>  
 21 20 1570 1570 4

<sup>h m</sup>  
 21 40

<sup>h m</sup>  
 22 0

<sup>h m</sup>  
 22 20 1424 1485 3

22.7 - 10.6  
<sup>h m</sup> 22 40 1703 1655 2  
 2123 1703 3  
 2197 1761 4  
<sup>h m</sup> 23 0



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1882phae.proj...873F

Dec. - 10°

	No.	No.	No.	Ref. to	Ref. to
	P. A. Plate	Box	Letter	St. Lt.	F. M. & C. F. ch. Stars Meas. Ident.
<sup>h</sup> 23	<sup>m</sup> 20	1784	1666	B3	
		1790	—	3	

<sup>h</sup> 23 <sup>m</sup> 40





Dec. - 7.5°

	No.	No.	No.	Refto	Refto
	P. A. Plate	Box	Letter	St. Lt. F. M. & C. F. Ch. Stars	Mear. Ident.
h. m.	6765	1706	B 3		
0 10	1994	1706	B 3		
	6908		2		
	2682	1712	4		
	4294	2132	3		
h m					
0 30	2730	1861	4		
	7416	2653	3		
	9492	3055	3		
	12604	4427	3		
h m	1446	4671	3		
0 50	2129	1703	3		
	2782	1712	3		
	2979	1864	4		
h m	3921	3890	3		
1 10	2998	1863	2		
	4670	2166	A 4		
	3100	1748	C 2		
	4296	2133	3		
h m					
1 30	2126	1703	3		
	2902	1885	3		
	2280	1759	3		
	3023	1761	A 4		
	2375	1842	4		
h m					
1 50	3128	1748	2		
	4342	2113	3		
	4693	2183	4		
h m					
2 10	2140	1720	3		
	2379	1842	4		
	3205	1942	3		
h m					
2 30	2595	1710			
	4877	2258	3		
	3232	1946	3		
	5263	2283	3		
	4741	2180	3		
h m					
2 50	5414	2300	A 4		
	2335	1856	C 2		
	2863	1871	4		
h m					
3 10	3280	1937	2		
	5326	22	B 3		
	4307	2136	3		
	4827	2175	3		
	5005	2252	3		
	6915				

0.4 - 70  
0.4 - 9.3

0.4 -

no.      no.  
R.A. Plate Box Letter

0.1-7.5      0 10 7477 2661 3  
 0.1-7.0      9445 2966 3  
 0.1-8.5      9465 2967 2  
 0.1-9.0      10566 3  
 0.1-  
 14164 4641 3

0 30

0.7-8.3      9961 4059 3

0 50 7324 2649 3

0.8      12701 4444 3

0.8      ~~14236 4649 4~~

1.3      1524 1861 3

0.8-8      14703

1.2      1 10 11860 2 4

1.2-8      11868 4343 3

1.1-8      14111 4631 3

1.4-7.3      1 30 7422 2653 3

1.4-7.2      9430 2965 3

1.4-  
 9565 3046 3

1.4-  
 11970 4357 3

1.4-  
 14274 4652 3

1.8-8.3      1 50 7484 2664 3

1.8-7.5      9499 3036 4

1.8      10483 1144 3

1.8      12609 4429 3

1.8      14245 4649 4

2.1-6.6      2 10 7472 2662 2

2.2-4.7      9451 2966 3

2.2-  
 10331 3195 4

2.2-  
 14329 4658 3

2.4-7.0      2 30 5455 2289 3

2.4-6.9      9394 2956 3

2.5-7.5      9568 3037 3

2.5-  
 9605 3041 2

2.5-  
 10236 3210 2

2.5-  
 11949 4357 4

2.5-  
 12153 4 3

2.5-  
 14723

2.8-8      20 50

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2.4-7.6  
 2 30 10460 3288 2  
 -8 14719



20 Dec. -  $7.5^{\circ}$

	No.	No.	No.	Ref. to	Ref. to
	R. A. Plate	Box	Letter	St. Lt.	F. M. K. C. F. ch. Stars Meas. Ident
h. m.					
3 30	2076	1700	C 2		
	3002	1863	B 3		
	2385	1847	3		
	5026	2254	3		
	4916	2262	3		
h. m.	5044	2282	3		
3 50	2969	1864	3		
	4980	2266	3		
	3290	1937	3		
	4897	2260	3		
h. m.	9548	3046	3		
4 10	2035	1696	3		
	4832	2121	3		
	2582	1708	3		
	5201	2237	A 4		
	2829	1853	4		
h. m.	9564	3044	3		
4 30	5032	2254	3		
	4638	3	2		
	5291	2293	4		
h. m.	2108	1699	2		
4 50	5320	2281	A 4		
	4967	2266	C 2		
	5321	2281	B 3		
	5085	2266	3		
h. m.	9541	3057	3		
5 10	2917	1868	3		
	5446	2307	3		
	5183	2236	3		
	5418	2300	3		
h. m.	66	1042	3		
5 30	4984	2265	3		
	2079	1700	C 2		
	5297	2292	B 3		
	4701	2169	3		
h. m.	5370	2286	3		
5 50	3131	1943	3		
	5621	2312	3		
	5207	2242	3		
	5395	2299	3		
h. m.	2664	1738	2		
6 10	5375	2286	B 3		
	2834	1854	A 4		
	5442	2297	B 3		
	5098	2268	3		
h. m.	5672	2342	3		
6 30	5483	2307	3		
	5511	2309	3		
	9859	3114	3		
	10,091	3134	3		
	10,303	3216	3		



3.5-8.4 3 30 9500 3036 4  
 0.4 -8  
 12617 4429 32  
 14528 4691 3  
 14677

3.8-7.5 3 50 10,238 3211 20  
 3.8-7.0 10,462 3288 21  
 3.8-6.7 10,674 3296 21  
 3.8-6.4 11,013 4349 3  
 3.8-6.1 11,567

4.10 8761 3  
 4.1 10,672 4179 3  
 4.2 12619 4430 3  
 4.2-8 14625

4 30 12028 4363 3  
 14754

4.8-8 4 50 14631

5.2-6.6 5 10 9612 3049 3

5.5-8.0 5 30 10,239 3211 3  
 5.4-6.5 10,463 3288 3  
 5.4-6.0 10,546 3278 3  
 10,675 3298 3  
 10,859 - 4  
 10,260 - 4  
 5.4-8.0 5 50 10,261 4419 3  
 5.9 12530

6.1-8.2 6 10 10,240 3210 3  
 6.1-6.5 10,464 3287 3  
 6.2 12409 4433 4

6.3-7.0 6 30 10680 3300 3  
 6.4-7.2 10,323 3195 3  
 6.5-7.3 10,892 3422 3

Dec. - 7.5°

	No.	No.	No.	Ref. to	Ref. to
P.A. Plate	Box	Letter	St. Lt.	F. M. & C. F. ch	Star Meas. Ident.
h. m					
6 50	2926	1870	B 3		
	5759	2352	3		
	5423	2300	3		
	5536	2305	3		
h. m					
7 10	5045	2249	3		
	5448	2297	3		
	5562	2315	3		
h. m					
7 30	12091	3799	4		
	3113	1742	3		
	4931	2267	3		
	3144	1943	C 2		
	5489	2306	B 3		
	3425	1980	3		
h. m					
7 50	5162	2240	3		
	12775	4463	3		
	5517	2309	3		
	5650	2345	3		
h. m					
8 10	2153	1721	3		
	4989	2246	4		
	9125	3307	4		
	9127	3307	5		
h. m					
8 30	3092	1746	3		
	5549	2304	3		
	8037	2795	4		
	10,906	3412	4		
h. m					
8 50	13965	4456	3		
	5550	2304	3		
	5741	2346	3		
	8064	2803	3		
h. m					
9 10	3121	1742	4		
	8243	2808	4		
	10,952	4217	3		
	13607		3		
h. m					
9 30	3319	1935	4		
	8089	2792	3		
	12748	4097	2		
	12799	4094	1		
	12800	4105	2		
h. m					
9 50	13886	4446	2		
	5662	2343	3		
	5810	2355	3		
	5880	2358	3		
	5983	2371	4		

7.3 - 6.7

7.9

8.1

8.4

8.4 - 7.0

8.5 - 7.2

8.5 - 8.0

9.1 - 7.0

9.6 - 7.5

no.      no.  
R.A. Plate Box Letter

6.8 - 7.2			7911		3
6.8 - 8.0	6	50	10,241	3210	3
6.8 - 6.8			10,465	3287	3
			10,681	3300	4

7.1 - 2.0	7	10	8007	2799	3
7.1 - 7.0			9871	3109	3
7.1 - 6.8			10,307	3215	3
7.2 - 7.0			10,806	3416	3
			12573	4423	3

	h m				
7.4 - 7.0	7	30	5802	2353	3
7.5 - 8.0			10,030	3208	3
7.4 - 6.9			10,242	3211	3
7.4 - 7.0			10,466	3287	3
			10,682	3300	3

			8725		
	7	50	8200	2814	4

8.1 - 7.5	8	10	8059	2803	4
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8	30				
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8.8 - 6.7	8	50	10471	3280	3
			12668	4432	3
			13236	4431	3
8.8 - 7.9			12619	3987	4i

9	10				
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9.4 - 7.6	9	30	14098	4512	3
9.5 - 7.9			14210	4524	3

	9	50	8223	2815	3
			13558	4562	3
9.7 - 7.5			14136	4517	1



Dec. - 7.5

	No.	No.	No.	No.	No.	Ref. to	Ref. to
P.A. Plate	Box	Letter	St.	Lt.	F.M. & C.	F.Ch.	Star Meas. Ident.
10.1	10	10	3354	1930	B3		
10.2-6.5			8458	2874	3		
			5058	2248	3		
			5993	2372	3		
10.4-7.5	10	30	3453	1934	4		
			8237	2808	3		
			13282	4493	3		
	10	50	5593	2314	3		
10.8-7.0			8250	2865	3		
10.8-6.6			10481	3196	3		
10.8	11	10	3458	1977	4		
11.1-7.0			8290	2864	4		
11.2			13285	4497	4		
11.4-6.7			6124	2404	3		
	11	30	2526	1839	3		
			5228	2236	3		
11.4-7.0			8444	2868	3		
	11	50	3572	1981	3		
11.8-8			6033		3		
11.8-6.5			6034		3		
12.1	12	10	3483	1939	4		
12.1-7.0			8416	2867	3		
12.2	12	30	3416	1927	4		
			3465	1977	3		
	12	50	3611	1986	3		
			7593	3658	2		
12.8-6.5	13	10	3519	1973	3		
13.1-6.5			6346	2416	3		
13.1-6.7			8498	2876	4		

10.1-68 10 10 6038 2409 3

10.1-68 6172 2433 3

10.1-71 8218 2815 3

10.1-71 8409 2871 4

10 30

10.8-66 10 50 10481 3196 3

10.8-8

13695

3

11 10

11.5-65 11 30 10575 3277 3

11 50 7197 3952 3

11.5

11 50

13566 4563 3

11.8-70 6163 2422 3

11.8-68 8383 2856 3

11.8-65 10486 3194 3

12 10

12.5-68 12 30 8555 2884 2

12.8-66 12 50 8433 2856 3

12.8-65 10490 3194 3

12.8-8

13625

3

13 10



Dec. - 7.5°

No. No. No. Ref. to Ref. to  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Meas. Ident.  
 13 30 3563 1981 B3

13.4-6.6

6437 4  
6363 2417 2

13.7-6.8

h m  
13 50 3494 1975 4

13.8-6.5

8559 2884 4

13.9

13.8

h m  
14 10 3618 1987 3

14.1-6.6

h m  
14 30 6287 2432 2

14.5-8

6424 3

14.5-7.0

h m  
14 50 6352 2416 4

14.8-7.0

6303 2430 3

14.8-7.0

h m  
15 10 3478 1978 1

15.3-8

3501 1976 3  
6398 3

15.2

h m  
15 30 5724 2349 2  
6246 3

15.4-6.9

6269 2435 4

15.4

h m  
15 50 3202 1942 3

16.1

15.9

h m  
16 10 3181 1745 3

3951 2100 3

16.4-7.7

h m  
16 30 3745 2034 4

-7.7

7597 3665 2

16.4-7.0

8831 2925 3



13.4-8.1 13306153 2406 3  
 11582 4293 3  
 13.4-6.3 8472 2873 4  
 10780 3290 2  
 11170 3241 3  
 13 50

13.5-7.8 11057 3513 4

14.1-6.8 14 10 8491 2675 4  
 14.2-8 13660 3

14.4-8 14 30 8530 2877 30  
 114440 3  
 14.6-7.0 12745 4097 4

14.8-6.6 14 50 8547 2880 3  
 14.8-8 13700 3

15.2 9334 3964 4

15.1 15 10 8553 2883 3  
 15.2-8 13303 4507 3  
 15.1-6.6 10837 3291 3  
 15.4-6.6 15 30 8657 2935 3

15.8-6.8 15 50 15 50 6370 2433 3  
 10195 4096 20  
 10186 4096 20  
 13308 4508 3  
 15.8 10022 4165 4  
 16.0-8.0

16.1 1577 3638 2  
 -6.5 6388 2434 4  
 16 10 12973 3  
 16.2-8 8623 2888 3  
 16.1-6.5 10881, 3416 3

16.4 16 30 9929 4063 3  
 13737 3

Dec. - 7.5°

No. No. No. Ref. to Ref. to  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Star Mess. Ident.

16.8-8	h m	16 50	4079	2112	C1
			6077		3
16.8-8			6105		3
17.1	h m	17 10	3853	2046	2
17.1-8.3			6755		2
17.1-7.0			6665	2547	3
17.2	h m	17 30	4171	2103	3
17.4-7.0			6556	2537	3
17.5-7.0			6571	2538	3
	h m	17 50	4062	2110	2
			6592		3
R.A. 18.1	h m	18 10	3869	2045	2
18.2-7.7			6121		3
18.2-8			6122		3
18.4	h m	18 30	4085	2109	3
18.6			6117		3
18.4-7.0			6618	2551	3
18.4-7.0			8790	2908	3
18.4-7.0			9153	2977	3
	h m	18 50	4333	2115	3
			3794	2029	3
			4520	2194	3
			4034	2094	3
	h m	19 10	4664	2172	3
			3973	2098	3
19.1-7.0			6611	2551	3
19.1-7.9			8751	2931	4
19.4-8.3			6161		4
	h m	19 30	3960	2099	3
			8780	2928	3
19.5-7.0			6179		4
19.7-8	h m	19 50	4192	2104	4
			4235	2126	4
19.8-8.1			6681	2545	3



<sup>no.</sup> <sup>no.</sup> <sup>no.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 B. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

16 50-70 16 50 6626 2549 3  
 8684 2937 3  
 8980 2969 3

17.1-70 17 10 8628 2889 3  
 8921 2916 2  
 17.1-68 8946 2915 3  
 17.1-70 9047 2977 3  
 17.1-70 10219 3  
 17.1-75 12291 4628 3

17.4-70 17 30 8698 2938 3  
 8862 2923 3  
 17.4-70 8995 2912 3  
 17.4-70 10999 3494 3  
 17.4-70 13990 3

17.8-69 17 50 6606 2543 2  
 17.8-70 8744 2931 3  
 8894 2910 3  
 17.8-6.8 9102 2960 3  
 17.8 13573 4568 3

18.1-80 18 10 7550 4044 3  
 18.1-70 6596  
 18.1-82 8726 2933 3  
 18.1-70 8952 2918 2  
 18.1-70 9022 2974 3  
 18.1-6.9 9104 2960 3

18.7-81 18 30 9216 4044 3

18 50 4839 2173 3  
 7288 2645 3  
 4751 2264 2  
 8677 2937 3  
 5999 3  
 8842 2926 4

18.8-83

18.8-8

18.8-70

19 10 7879 3  
 7581 3727 3  
 7470 3816 4

18.8-70 6511 2540 3  
 18.8-7.3 8734 2932 3  
 18.8-70 6590 2541 3

18.8-70 6677 2544 3

18.8-70 6845 2567 3  
 18.8-7.3 8733 2933 3

19 50 7001 2585 3  
 7182 2636 3

19.8-67 9059 2922 3

19.8-70 7161 2956 3

19.8-69 7358 2955 3  
 7500 2955 3

18 10 10023 3

18.2-8 13935 3

18.3 14042 4623 3

18.3 14043 4624 3

18 50 9160 2956 3

9414 2964 3

9415 2964 3

18.8 2345 4421 4

18.1 21056 4627 3

19.10 9136 2979 3

19.1 13590 4572 3

19 30 9047 2955 4

-659588 3043 3

9029 2974 3

-8 13636 3

19.8 19 50 12586 4425 4

117.8 10730 3



Dec. - 7.5°

	No.	No.				No.	Ref to	Ref to
	R.A.	Plate	Box	Letter	St.	Lt.	F. M. & C. F. ch.	Stars Meas. Ident
20.1-7.1	h m	20 10	4042	2089	B3			
20.2-8			9081	2971	3			
20.1-7.0			6146		5			
20.6-8.5			9480	3057	2			
20.6-7.0	L m	20 30	3980	2097	3			
			4177	2125	4			
20.5-7.0			8797	2908	4			
20.7-8	L m	20 50	4152	2104	4			
			7117	2630	4			
20.8-8			6022		3			
20.8-8			6548		3			
21.1-6.5	L m	21 10	4130	2105	4			
21.2-8			7169	2634	3			
			6046		3			
21.1-7.0			6831	2566	3			
21.2	L m	21 30	4425	2185	3			
			4709	2117	3			
			4482	2116	3			
	L m	21 50	4553	2120	3			
			4281	2129	3			
			7397	2655	4			
			4458	2190	3			
			8881	2921	3			
21.8-8	L m	22 10	4503	2192	3			
			6277		3			
			4095	2112	3			
			4820	2175	A 4			
			4523	2194	B 3			
	L m	22 30	4594	2120	3			
22.4-7.0			4288	2132	4			
			9485	3054	3			
			4406	2124	3			
22.5-8	L m	22 50	4363	2135	3			
			4883	2257	3			
			4463	2190	A 4			
			6564		2			
22.8-8	L m	23 10	4528	2195	3			
			6364		3			
			4206	2103	3			
			4413	2122	3			
			4559	2161	3			
			4599	2164	3			
			4713	2182	3			

20.1-80	20 10	7597	4051	4	20 10	10447	4143	3
20.1-70		6872	2574	3	20.1	13510	4602	3
20.1-70		7052	2579	3	20.1	13535	4581	3
20.1-70		7164	2633	3				
20.2-70		8700	2941	3	20 30	13595	4579	3
20.3-70	20 30	7553	3610	4				
20.3-70		9893	4019	4				
20.5		6943	2588	3				
		7064	2578	3				
		7288	2645	3				
20.7-60	20 50	7359	3612	4	20.8	20 50	12532	4442 3
20.8-70		9041	2976	3				
20.8-70		6876	2572	3				
20.8-70		9590	3040	3				
20.8-70		6972	2570	3				
20.8-70		9322	2953	3				
21.1-70	21 10	6831	2566	3	21.10	14069	4072	3
21.1-70		7313	2648	3	21.2-8	12570	4425	3
21.1-70		8851	2924	3	21.2-8	13745		3
21.1-69		9344	2957	3				
21.1-69		9481	3057	2				
21.1-70		9847	3113	3				
21.4-70	21 30	6810	2534	3	21 30	10192	4098	3
		7033	2580	3	-8	13457	4616	4
		7328	2649	3	-	13451	4673	4
21.4-73		8825	2925	3				
		9362	2958	3				
21.5-70		9594	3041	3				
21.8-69	21 50	7094	2627	3	21 50	9365	2959	2
22.0-75		7222	2639	3		9579	3058	3
22.1-70		7210	2638	3		9848	3116	3
22.1-8		7211	2638	3		10198	4157	3
22.8-70		6345		3i	21.8-8	13319	4503	3
22.1-70	22 10	9039	2976	3				
		6898	2571	2	22 10	9368	2958	
22.1-70		7341	2646	3	22.1-70	9579	3039	3
22.1-70		8917	2916	3	22.1-8	10066	3120	3
22.1-8.1		9117	2958	2	22.2-78	10296		3
22.4-70	22 30	7073	2629	3	22.2-8	11822	4337	4
22.4-70		8973	2968	3	22.2-8	13950		4
22.8-7.1	22 50	8858	2923	3	22 30	10513	4153	3
		7148	2633	3	-8	12594	4426	3
		7228	2643	3	-5	13720		4
22.8-68		6390		3i	-	14452	4678	3
R.A. 23.1		7368	2651	3i	22 50	9580	3039	2
22.8-60		6563		2		10067	3120	4
	23 10	9438	2963	3	22.8	12577	4426	34
					22.8	14306	4655	4
23.1	23 10	6992	2589	3	22.9	14049	4624	3
23.1-72		7305	2647	3				
23.1-70		7385	2656	3				
23.1-70		8974	2968	3				
23.1-70		9400	2956	3				



Dec. - 7.5°

R. A. Plate No. No. Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

h m 6541 3 ✓  
 23 30 4181 2125 B 3  
 5121 2242 3  
 4392 2119 3  
 4574 2163 2  
 h m 4438 2187 3  
 23 50 5232 2233 3  
 4578 2163 3  
 4734 2180 3  
 6604 ✓ 25

77-50 4024 3

23.8 - 6.5

7080 2626 3  
 7262 2642 3

23.8 - 8.5

9127 2978 3  
 9206 2964 3

23.8 - 89

9509 3055 2  
 10,068 3120 20



234-7.5  
23.4-7.0  
23.4-6.8  
23.5-7.0  
23.8

23 30 7043 2579 3  
7353 2651 3  
7404 2654 3  
9383 2954 3  
9486 3054 2  
9598 3041 3  
23 50 12123

234-7.5  
23 30 10342 4131 2  
12.200 4867 4  
23.1 14231 4648 4  
23.8 14459 4695 4

$h \approx 10 \ 29.8 \ -38^{\circ} 54' ( )$

B 10996, 7442. 6125. 4815

7512 11172

B 7924.

Dec. - 5°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Star Meas. Ident  
<sub>h m</sub>  
<sub>0 0</sub>

<sub>h m</sub>  
 0 20 229 1169 3  
 354 1210 3

<sub>h m</sub>  
 0 40

<sub>h m</sub>  
 1 0 539 1281 4

1.5 - 6 <sub>h m</sub>  
 1 20 2592 1708 2

<sub>h m</sub>  
 1 40 261 1165 3

2.2 - 4.2 <sub>h m</sub>  
 2 0 10,293 3216 3

2.1 - 4.5 <sub>h m</sub>  
 10,690 3299 2

<sub>h m</sub>  
 2 20

<sub>h m</sub>  
 2 40

<sub>h m</sub>  
 3 0 436 1217 4





Dec. - 5°

No. No. No. Ref. to Ref. to  
 G. A. Plate Box Letter St. Lt. F. M. & G. F. Ch. Stars Meas. Ident.  
 3 20

3.7-5.6  $\begin{matrix} L \\ h \end{matrix} m$   
 3 40 605 1273 4

$\begin{matrix} L \\ h \end{matrix} m$   
 4 0

4.3-5.9  $\begin{matrix} L \\ h \end{matrix} m$   
 4 20 453 1226 3  
 674 1305 A4

$\begin{matrix} L \\ h \end{matrix} m$   
 4 40

5.0-5.6  $\begin{matrix} L \\ h \end{matrix} m$   
 5 0 240 1168 3

5.2-7.5 10651 9175 4

$\begin{matrix} L \\ h \end{matrix} m$   
 5 20 55 987 4  
 73 1042 4  
 56 987 4  
 5.5-6.0 179 1156 2C  
 57 987 A4  
 5.5-6.1  $\begin{matrix} L \\ h \end{matrix} m$  2019 1160 5  
 5 40 41 992 C 2  
 135 1048 A 4  
 58 987 B 3  
 5.5-6.0 178 1156 C 2  
 5.5-6.0 71 987 A 4  
 $\begin{matrix} L \\ h \end{matrix} m$   
 6 0 384 1211 B 3

6.3-5.7  $\begin{matrix} L \\ h \end{matrix} m$   
 6 20 462 1226 3  
 1935 1688 3

6.5-5.5 2493 1732 4

QA. <sup>no.</sup>Plate <sup>no.</sup>Box <sup>no.</sup>Letter <sup>Ref. to</sup>St. <sup>Ref. to</sup>Lt. <sup>no.</sup>F. M. & C. F. ch. <sup>no.</sup>Stare <sup>no.</sup>Meas. <sup>no.</sup>Ident.

5.5-4.5	<sup>h</sup> 5	<sup>m</sup> 20	647	1303	3
5.5-4.5			2564	1739	3
			749	1289	3
5.5-4.5			2776	1859	3
5.5-5.5			2565	1845	3
5.4	<sup>h</sup> 5	<sup>m</sup> 40	237	1168	3
			294	1163	C 2
			238	1168	A 4
			638	1303	4
			294	1163	C 2
			2891	1845	B 3

Dec. - 5°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident  
<sup>P. m.</sup>  
 6 40

<sup>h m</sup>  
 7 0    249    1169    3  
       2449    1758    3  
       891    1411    3  
       2236    1755    3

7.3-5.8

<sup>h m</sup>  
 7 20    465    1212    3

<sup>h m</sup>  
 7 40    847    1292    3

<sup>h m</sup>  
 8 0

<sup>h m</sup>  
 8 20    301    1162    3  
       1092    1417    A 4  
       957    1407    B 3  
       988    1405    3  
<sup>h m</sup>  
 8 40    999    1409    2  
       6136    2405    4

8.8-6.5

<sup>h m</sup>  
 9 0    279    1167    4

<sup>h m</sup>  
 9 20

<sup>h m</sup>  
 9 40    283    1164    5





Dec. - 5<sup>o</sup>

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. Ch State Meas. Ident.  
 100

<sup>h m</sup>  
 10 20 1025 1418 4

<sup>h m</sup>  
 10 40

<sup>h m</sup>  
 11 0 399 1213 3  
 1196 1476 3  
 1240 1554 4  
<sup>h m</sup>  
 11 20 327 1129 3

11.5 - 6.5

6136 2405 3  
<sup>h m</sup>  
 11 40 627 1301 3  
 1211 1480 4

<sup>h m</sup>  
 12 0 422 1215 4

<sup>h m</sup>  
 12 20 1289 1560 3  
 1386 1559 3

<sup>h m</sup>  
 12 40

<sup>h m</sup>  
 13 0 422 1215 4

13.1 - 6.5

6130 2405 3





Dec. - 5°

No. No. No. Ref. to Ref. to  
 G. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Star Meas. Ident  
 h. m.  
 13 20

h m  
 13 40 928 1403 4

h m  
 14 0

h m  
 14 20 1283 1562 4

h m  
 14 40

h m  
 15 0 1360 1563 3  
 1461 1483 2

h m  
 15 20

15.5 5918<sup>v</sup> 3<sup>v</sup>

h m  
 15 40 1415 1481 3

h m  
 16 0

h m  
 16 20 1333 1482 3

1391 1559 2

1675 1652 3

16.4-5.5 5936<sup>+</sup> 3<sup>+</sup>



Dec. - 5°

P.A. Plate Box Letter St. Lt. F.M. & C. F. ch. Stars Meas. Ident.  
 h. m. No. No.  
 16 40

h. m.  
 17 0 1356 1483 3  
 17 17 1661 3  
 17.1-5.5 5958 2  
 h. m.  
 17 20

h. m.  
 17.7-5.8 17 40 1201 1476 3  
 1595 1570 2  
 1718 1661 3  
 17.7-5.8 h. m. 5972 3  
 18 0

h. m.  
 18 20 1559 1571 3

h. m.  
 18 40

h. m.  
 19 0 1341 1482 3  
 1659 1651 4  
 1494 1574 4  
 1867 1682 2  
 1546 1569 4  
 h. m.  
 19 20

h. m.  
 19 40 1582 1647 3  
 1751 1664 3  
 19.8-6° 5976 3



<sup>no.</sup>  
 A.A. Plate    <sup>no.</sup> Box Letter    <sup>no.</sup> St. Lt.    <sup>no.</sup> F. M. & C.    <sup>Ref. to</sup> F. ch.    <sup>Ref. to</sup> Stars    <sup>Ref. to</sup> Meas.    <sup>Ref. to</sup> Ident

<sup>h</sup>	<sup>m</sup>			
19	0	2044	1694	3
		2272	1724	3
		2082	1699	A4
		2410	1841	C2
		2172	1722	B3

Dec. - 5°

No. No. No. Ref. to Ref. to  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident  
 h. m.  
 20 0

20.1 - 40

h m  
 20 20 1579 1570 3

20.5 - 5

20.3 - 43

20.4 - 45

h m  
 20 40 2243 1753 3  
 2599 1711 C 1  
 2468 1729 B 3  
 3888 2044 C 2  
 2502 1731 B 3  
 h m 3983 2097 3  
 21 0 1345 1482 A 4

h m  
 21 30

21.7 - 5.7

h m  
 21 40 1379  
 1680 1652 3

22.2 - 3.0

h m  
 22 0 115211 4284 1

h m  
 22 20 1851 1681 3  
 1609 1647 3

h m  
 22 40

h m  
 23 0

R.A. <sup>no.</sup> Plate <sup>no.</sup> Box <sup>no.</sup> Letter <sup>Ref. to</sup> St. <sup>Ref. to</sup> Lt. <sup>Ref. to</sup> F. M. & C. F. ch. Stars <sup>Ref. to</sup> Meas. <sup>Ref. to</sup> Ident.

20.5-60 20 20 118.5 4062 4

	<sup>h</sup>	<sup>m</sup>			
	20	40	3991	2097	4
			4969	2245	3
20.6-46			4551	2120	3
			9422	2965	3
			6538	2535	2
20.6-50			7339	2646	3
			4683	2116	4
			6793	2555	4
20.6-44			7220	2639	3
20.6-45			1916	2956	3
<u>Sub 34</u>					
21.8-40			7363		3



Dec. - 5<sup>o</sup>

	No.	No.				No.	Ref. to	Ref. to
P. A. Plate		Box	Letter	St. Lt.	F. M. & C. F.	ch.	Stars	Mean. Ident.
23 20								

23 40



Dec. - 2.5°

No. No. No. Refs. Ref. to  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident

h m  
 0 10 2632 1710 B 3

2726 1861 4

6907 2

h m  
 0 30 2693 1716 3

9526 3056 3

11620 6 3

~~14104~~

h m  
 0 50 2759 1858 3

4750 2181 3

2965 1865 A 4

5127 2243 C 2

4226 2130 B 3

h m  
 1 10 2823 1887 3

4689 2183 C 1

3127 1748 2

4696 2183 B 3

4295 2132 3

h m  
 1 30 4872 2258 3

2615 1713 A 4

9380 2954 3

12780 4443 3

~~14749~~

h m  
 1 50 2607 1713 3

5133 2243 3

3042 1750 A 4

4343 2113 3

h m  
 2 10 2767 1858 3

4697 2169 3

3039 1751 A 4

4921 2262 C 2

4452 2185 B 3

h m  
 2 30 5117 2241 3

2701 1862 A 4

11833 2 4531 3

1447 4692 4

h m  
 2 50 2641 1714 2

5003 2251 B 3

4588 2162 3

5196 2237 3

4944 2247 3

h m  
 3 10 5461 2289 3

2909 1851 C 2

3 06 8934 2

4308 2133 3

13865 4434 3

5241 2285 3

8537 2878 2

13940 4444 2

13996 4451 3



R.A. <sup>no.</sup> Plate <sup>no.</sup> Box Letter St. Lt. F. M. & C. F. Ch. Stars <sup>no.</sup> Ref. to <sup>Ref. to</sup> Meas. Ident.

0.1-1.9	0 10	7427 2659 3	0 10	10625 3202 3
		7491 2664 3		14104 4630 3
0.1-3.5		9487 3054 3		
0.1		10357 3202 3		
0.2-3		11916 4348 3		
2.2	0 30	11925 4249 3	0 30	

0.8-3.2	0 50	7392 2656 3	0 50	
		7472 - 2		
0.5-3		12138 1 3		
0.8-3		14237 4635 3		

1-2.0	1 10	7412 2654 3	1 10	10330 3202 3
		7427 2659 3		11-2.5 10661 4175 3
1.3	1 30	9985 3125 2		1.2-3 11919 4348 3
1.2-3.7		10247 3211 3		1.1-1 14052 4630 3
1.1-3.5		10519 3303 3		1.2 14003 4630 3
1.1-2.2	1 30		1 30	

1.9-3.0	1 50	10432 4144 4	1 50	
1.8		11942 4350 3		
1.8 -		14059 4626 3		

2.1-3.0	h m	10,183 3112 2	2 10	10226 3118 2
	2 10	5382 2287 2		10,315 3196 3
2.1-2.5		9292 - 2		10,346 3202 4
		5637 2303 2		114123 4631 3
2.2-3.0		10,155 3201 4	2.1 -	
		572 3		
2.2-3.0		10,160 3219 3	2 30	
2.2-2.6	2 30	10194 3112 3		

2.8-3.5	2 50	10,501 3285 2	2.5-50	
2.8-2.0		10,534 3306 3		
2.8-2.0		10,676 3298 3		
2.9		12435 4389 3		
2.8 -		14339 4631 3		
3.1-3.3	3 10	9534 3057 3	3 10	14245 4579 4
3.3		11955 4352 3		
3.21		12613 4429 3		
3.1 -		124719 4692 3		
3.1-2.0		13899 4445 3		
		14161 4458 3		
		14106 4512 2		
		4115 4516 3		
		14180 4516 3		

Dec. - 2.5°

No. Ref. to Ref. to  
 P.A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

3.4-1.9  
 3.4-33  
 3.5-3.5-  
 3.4-3

h m  
 3 30 2623 1709 A 4  
 9501 3036 3  
 9540 3057 3  
 10,083 3107 3  
 14044 4661 3

h m  
 3 50 2939 1866 4

h m  
 4 10 2583 1708 2  
 5247 2285 B 3  
 2949 1867 3  
 5349 2296 A 4  
 4833 2121 B 3

h m  
 4 30 4639 2169 2  
 5404 2204 B 3  
 5033 2254 3  
 5474 2290 3  
 5332 2295 3

h m  
 4.50 4696 2169 3  
 5365 2282 A 4  
 4968 2266 C 2

48-1.7

h m  
 5 10 5086 2266 3  
 9574 3047 3  
 2649 1715 4

h m  
 5 30 2562 1739 3

4702 2169 4

8016 2798 4

h m  
 5 50 2657 1715 3  
 5208 2234 4

h m  
 6 10 3106 1740 4

h m  
 6 30 2842 1887 4

8031 2796 3i  
 14220 4244 4

6.4-2.0



3 30

3.87  
3.17 - 23 50 11380 41344 3  
14435 4674 3

4 10 10675 3529 3

5766 3

10675 4177 4

12726 4446 3

14533 4697 4

4.1  
4.21  
4.1 - 3

4.5 - 3.5

4.4 - 3.0

4.4 - 2.0

- 3

4 30 10,084 3107 30  
10,261 32101 2  
10,535 3306 4  
11978 4354 3  
14682

4.8 - 3.0

4.9

4 50 10,088 3420 4  
11587 4344 3



Dec. - 2.5°

No. No. No. Ref. to Ref. to  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

h. m. 6 50 3138 1943 3 3

5733 2345 4  
 81022 2796 4

h. m. 7 10 2673 1844 2

5735 2345 B 3

5046 2249 3

5860 2358 3

5627 2312 3

h. m. 7 30 4932 2267 4

8149 2807 3

h. m. 7 50 3114 1740 3

5765 2352 3

5163 2241 3

h. m. 8 10 4990 2245 3

5543 2311 3

h. m. 8 30 3313 1934 3

5894 2362 3

h. m. 8 50 5656 2302 3

5789 2351 3

h. m. 9 10 2676 1844 2

3348 1932 4

h. m. 9 30 5792 2351 3

8206 2814 3

h. m. 9 50 5774 2352 3

5868 2364 3

h. m. 9 50 5907 2365 3

8333 2858 3

h. m. 9 50 5774 2352 3

5868 2364 3

h. m. 9 50 5907 2365 3

8333 2858 3

h. m. 9 50 5774 2352 3

5868 2364 3

h. m. 9 50 5907 2365 3

8333 2858 3

h. m. 9 50 5774 2352 3

5868 2364 3

h. m. 9 50 5907 2365 3

8333 2858 3

h. m. 9 50 5774 2352 3

5868 2364 3

h. m. 9 50 5907 2365 3

8333 2858 3

h. m. 9 50 5774 2352 3

5868 2364 3

h. m. 9 50 5907 2365 3

8333 2858 3

6 50

7.1-2.0	7 10	8007	2799	3
7.1-1.6		10,027	3133	2
7.1-1.8		10,683	3298	3
7.1-3.5		10,950	3433	2
7.2		12496	4416	4

7 30

7.8-1.4	7 50	8082	2794	3
		10,374	3204	4
		10,684	3298	3

8.1-2.5	8 10	8169	2806	3
8.2		11170	4243	3

8.5-1.7	8 30	10768	3307	4
		12581	4424	4

8

8.8-3.1	8 50	10000	3125	3
8.8-1.5		10563	3278	3

9.1-2.5	9 10	8388	2870	3
9.2-3		13679		3

9.5-1.5	9 30	10,245	3211	3
---------	------	--------	------	---

9.5-1.5		10,851	3431	3
3		13691		3

9.8-1.0	9 50	10,040	3206	2
---------	------	--------	------	---



Dec. - 2.5°

No. No. No. Ref. to Ref. to  
 C. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Star Meas. Ident

h. m. 10 10 5059 2248 B 3

10.1 - 2.0

6054 2370 3

10.1 - 1.5

8196 2813 3

10.2 - 3

h m 10 30 5966 2402 3

10.5 - 1.5

6008 2369 3

10.7 - 2.0

8287 2864 3

h m 10 50 3526 1976 3

10.8 - 1.5

6191 2420 3

11.1 - 1.9

6023 2407 3

h m 11 10 5175 2255 3

11.1 - 1.6

6207 2421 3

11.1 - 2.0

8366 2861 3

h m 11 30 5229 2236 3

5987 2371 3

8506 2885 3

h m 11 50 6146 2406 3

- 1.9°

8401 2871 3

11.8

18288 4493 3

12.1 - 1.8

h m 12 10 6179 2420 3

12.1 - 1.5

6277 2436 4

12.2 - 1.8

8429 2855 4

h m 12 30 5852 2357 2

12.4 - 1.5

6213 2437 4

12.4 - 2.0

8418 2867 3

h m 12 50 993 1409 3

3625 1987 3

1150 1496 3

5600 2313 C 2

3204 1942 1

h m 13 10 7592 3658 2

927 1403 4

3473 1978 3

13.1 - 1.5

6333 2428 3

13.2 - 1.6

8537 2878 3

13.1 - 3.0

10,820 3415 3



10.1 - 1.5 10 10 10769 3307 3

10.4 - 1.5 10 30 10480 3196 2  
10641 3

10.8 - 1.7 10 50 8339 2858 3  
10.8 - 1.6 10,571 3277 3  
10.8 - 1.5 10,709 3296 3  
10.8 13561 4562 3

11.2 - 3 11 10 13699 3

11 30 13615 3

11. 50

12.1 - 2.5 12 10 10622 3302 3  
12.2 - 3 10620 3

12.4 - 2.5 12 30 10623 3308 3  
12.5 - 3.1 10626 3415 3

12.8 - 2.5 12 50 725 3729 3  
746 456 3  
8567 2882 2  
10,624 3302 3  
11,172 4245 3  
13249 4553 3  
12.8 - 2 13656 2  
12.8 - 3

13.2 - 3 13 10 13929 3

Dec. - 2.5°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 R.A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Meas. Ident.  
<sup>h. m</sup>  
 13 30 3639 1989 B 3

13.4 - 1.8 6204 2421 3

13.7 - 1.6  
<sup>h m</sup>  
 13 50 3658 1991 2

13.8 - 1.8 6220 2418 3

13.8  
<sup>h m</sup>  
 14 10 8540 2883 3

14.1 - 2.0 6359 2417 4

14.4 - 2.9  
<sup>h m</sup>  
 14 30 6444 2527 2

14.5 - 3 6425 2 2

14.4 - 1.5  
<sup>h m</sup>  
 14 50 6339 2431 3

14.8 - 3.3  
<sup>h m</sup>  
 15 10 3182 1745 3

15.2 - 3.0 6246 3 3

15.2 - 2.4 6399 3 3

15.3 - 3 5919 3 3

15.4 - 1.8 6345 1990 3

15.4 - 1.8 6269 2435 4

15.4 - 2.5 6331 2428 3

15.8 6050 2 2

15.8 - 1.6 6451 2529 3

16.1 7576 3608 2

16.1 - 2.0 6523 2534 3

16.1 - 2.0 8784 2928 4

16.2 3763 2035 2

16.2 4104 2109 2

16.2 6199 3 3

16.2 7596 3665 2

Dec - 3

13.4-1.5 13 30 6297 2436 4  
 13.5-1.5 6584 2582 3  
 13.4-1.8 8486 2875 3

13.30 13257 4499 3  
 13.3 13327 4584 3

13.7 9905 4053 3  
 11553 2 3  
 13.8-1.5 13 50 10587 3284 3  
 13.8-1.5 10722 3293 4  
 13.8-3.0 10825 3414 3  
 13.8-3 11076 4626 3

14 10

14.4-2.0 14 30 8572 2882 3  
 11275 4254 4  
 11555 4293 3  
 13330 4504 3

14.8 14 50 13299 4507 3

15.5-1.6 15 10 6438 2528 3  
 15.5-1.6 6450 2529 3  
 15.1-2.0 10939 3408 3  
 15.1 11591 4293 3  
 15.1 14021 4622 4  
 15.4-1.6 15 30 8691 2938 3  
 15.4-3.5 10924 3421 3  
 15.4-3 13357 4487 3

15.9 15 50 11245 3  
 15.8 13342 4487 3  
 16.0 14032 4622 3

16.0-3.0 16 10 11021 4066 3

~~16.2-3 16 2 14032~~

16.4 8705 3849 3  
 9188 4063 3

16.4-2.0 6494 2534 2  
 16.4-2.0 6580 2541 3

16.4-1.6 8774 2929 3  
 16.5 11344 4457 3



Dec. - 2.5°

R.A. Plate <sup>No.</sup> Box <sup>No.</sup> Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

h. m. 16 50 4100 2111 B3

16.8-3 6078<sup>4</sup> 4<sup>1</sup>16.8-3 h. m. 6106<sup>4</sup> 3<sup>1</sup>  
6752<sup>4</sup> 3<sup>1</sup>

17 10 4273 2129 3

17.1-20 6638 2550 21

17.2-1.9 8664 2936 3

h. m. 17 30 4274 2129 3

17.4-1.7 6557 2537 3

17.4-2.0 8808 2909 4

17.7-1.9 h. m. 5973 - 3

17 50 4279 2129 3

6656 2546 13

h. m. 18 10 7690 - 3

18.1-2.0 6574 2538 3

18.1-2.5 10122 - 3

h. m. 18 30 3861 2046 3

18.4-2.0 9054 2977 3

18.7-1.9 5973<sup>1</sup> 3<sup>1</sup>18.5-3 6118<sup>4</sup> 3<sup>1</sup>h. m. 18 50 6688<sup>4</sup> 3<sup>1</sup>

4108 2112 3

4121 2108 3

18.8-3 6520<sup>4</sup> 2<sup>1</sup>

h. m. 19 10 4137 2107 5

7609 - 2<sup>1</sup>

9236 3207 4

6162<sup>4</sup> 4<sup>1</sup>

h. m. 19 30 4146 2106 5

8768 2929 21

8819 2920 3

9507 3058 21

h. m. 19 50 4234 2127 3

6180<sup>4</sup> 3<sup>1</sup>7679 3657 3<sup>1</sup>

9855 4046 4

6804 2554 3

19.8-2.2

16.8 - 1.5	16 50	7667	2657	3
16.8 - 1.5		8719	2943	4
16.7 - 3.0		10,946	3406	3
16.7 - 3.0		10,129		4
16.7 - 3.0		10,030	4665	3
17.1 - 2.0	17 10	8947	2915	3
17.1 - 1.7		9,120	2979	2
17.1 - 2.5		10,217	-	2
17.1 - 2.5		10,248	-	2
16.8		13,496	4614	3
17.2 - 3		13,985		3
17.4 - 2.0	17 30	9154	2959	3
		10,498	4614	3
17.8	17 50	8836	2926	4
17.8 - 3		12,118		3
		13,745		3
18.1 - 2.0	18 10	6688	2545	3
18.1 - 1.8		8761	2930	3
18.1 - 2.0		8953	2918	3
18.1 - 2.0		9023	2974	3
18.2 - 1.5		9354	2955	3
- 2.0				
18.5 - 2.0	18 30	6585	2541	3
18.4 - 2.0		8813	2920	2
		13,578	4551	3
18.8 - 2.0	18 50	6647	2546	3
		8869	2922	4
18.8 - 1.8		8986	2969	2
18.8 - 1.5		9339	2957	3
18.8		12,571	4563	3
19.1 - 2.0	19 10	8899	2911	4
19.2 - 3		12,631		2
19 30				
19 50		7183	2635	4
19.8 - 1.5		8845	2924	4
19.8 - 3		9624	3051	3
		13,597		3



Dec. - 2.5°

No. No. No. Ref. to Ref. to  
 P.A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

20 10 4126 2105 A 4

20.2-3

6147 4

8875 2921 4

20 30 4199 2127 4

9082 2940 3

9178 2946 3

20.7-3

6193 32 4

20.6-20

20 50 9875 3124 3

4246 2131 2

9479 2969 3

4322 2123 4

6701 1

20.8-3

6023 32 4

20.8-3

20 50 6549 3

21 10 4251 2130 1

4422 2122 3

21.2-3

21 30 4665 2165 4

6047 4 4

4510 2193 3

7142 2132 3

6310 3

21.5-20

21 50 7007 2582 2

4155 2104 2

4374 2118 3

6346 - 32 4

6313 - 4 4

9482 2969 3

22 10 4096 2109 3

4431 2186 2

4570 2162 3

22 30 4289 2132 3

4842 2173 3

4388 2118 3

4526 2195 3

22 50 4378 2118 3

9482 3054 2

4556 2161 3

6391 3 1

4992 2246 2

6566 3 1

23 10 4207 2101 3

4531 2196 3

4731 2121 3

6542 3

R.A. 23.1

23 10 4207 2101 3

4531 2196 3

4731 2121 3

6542 3

R.A. 23.4



20.1-3.0	20 10	8479	3807	3
20.1-1.5		9589	3045	3
20.1-2.6		10446	4143	3
20.2-3		13669		3
20.2-3		13903		3
20.4-20	20 30	9419	2964	3
-3		13710		4
20.5	20 50	7364	3613	3
21.0		7365		3
20.9-1.0		7366		3
20.9-1.0		7367		3
20.8-3.0		9087	2971	3
20.8-2.1	21 10	7192	21636	2
21.1-2.0		8905	2911	4
21.1-1.6		9577	3039	3
21.1-2.5		10070	4072	3
21.1		12097		3
21.2-3		13713		3
	21 30	7235	2639	3
		8936	2914	4
21.5-1.6		9578	3047	3
21.5-3.3		10193	4048	3
21.5-3		11257		3
		13712		3
	21 50	6986	2589	3
		7299	2644	3
		7379	2650	4
21.8-2.9		8911	2911	3
22.1		8144		3
21.8-2.0	22 10	9366	2959	3
		7290	2645	3
22.1-2.2		8941	2914	3
22.1-1.5		9559	3044	3
22.1-3.5		10,005	3199	2
22.2-2.5		10295		4
22.4-2.0	22 30	7074	2629	3
22.4-1.8		7255	2642	2
		9097	2960	3
22.4-2.1		9483	2961	3
22.5-3.3		10,042	3206	4
22.4-2.5		10335		3
	22 50	7015	2583	3
		7175	2635	3
		7442	2658	3
22.8-1.8		9253	2967	3
23.0-3.3		9116	2961	2
		9425	2965	3
	23 10	7040	2579	3
		7196	2637	3
23.1-3.5		10,044	3206	4
23.1-2.9		10538		3
23.2		11292		3
23.2-3		13996		3

20.5-3 2030 16674  
 20.1- 14097 46293  
 20.5-3 14551

21 30 13912 4

21 50 11499 4152 3  
 21.5-2 13716

22 10 114264 4651 3 22 1-3

22 30-3 12273 4376 3  
 -3 13654 3

22 50 -3.5 10,043 3206 4  
 10,198 4098 4  
 22.7 11612 2 3  
 22.9-3.1 12347 4393 4  
 22.8-3 13956 3

Dec. - 2.5°

*P. A. Plate* <sup>no.</sup> *Box* <sup>no.</sup> *Letter* *St. Lt.* *F. M. & C. F. ch* *Star* *Meas.* *Ident.*  
*L. m*

23 30 4182 2125 A4

23.4 6929 2588 21

23.4 - 1.5 7320 2649 3

23.4 - 1.8 9233 2945 3

*L m* 9597 3041 3  
 23 50 4143 2103 3

4490 2191 3

5259 2234 3

6603 22 3

7374 2650 3

7128 2634 3

9205 2964 3

9373 2967 3

23.7 - 20

23.8 - 19

23.8 - 21

23.4 - 2.6	23 30	10543	4157	21
- 3		13962		3
- 3		14705		
23.7 - 3.0		10546	4157	2
23.8 - 3.5	23 50	9599	3041	21
23.8 - 3		10,045	3206	3
		14817	4657	4



Dec. 0°

<sup>No.</sup>  
<sup>no.</sup>  
<sup>Ref. to</sup>  
<sup>Ref. to</sup>  
<sup>Ref. to</sup>  
 P. A. Plate Box Letter St. Lt. F. M. C. F. ch. Stars Mess. Ident.

<sup>h m</sup>  
 0 0 175 1156 C 2  
 211 1171 2  
 176 1156 2  
 204 1171 B 3  
 184 1158

<sup>h m</sup>  
 0 20 226 1169 3  
 195 1158 A 4

196 1158 4

<sup>h m</sup>  
 0 40 338 1208 2

1629 1648 3

<sup>h m</sup>  
 1 0

<sup>h m</sup>  
 1 20 392 1212 4

558 1278 C 2

451 1227 C 2

1796 1668 2

452 1226 3

<sup>h m</sup>  
 1 40 1862 1682 2

<sup>h m</sup>  
 2 0 369 1209 3

1797 1668 1

1861 1682 4

<sup>h m</sup>  
 2 20 358 1207 2

5235 2233 B 3

359 1210 C 1

441 1227 A 4

<sup>h m</sup>  
 2 40 339 1207 C 2

468 1225 A 4

1886 1684 2

<sup>h m</sup>  
 3 0 370 1210 3

455 1226 3

R.A. Plate Box Letter St. Lt. F. M. & C. F. ch. State Meas. Ident.

no.	no.		
333	1168	A4	
316	1161	B3	
234	1172	B3	
4615	2167	3	
259	1167	3	
4688	2183	3	
270	1166	A4	
4818	2184	2	

0.0-0.9

0.0+0.6

0.1+0.6

2 Dec. 0°

<sup>No.</sup> <sup>No.</sup>  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Star Meas. Ident.  
<sup>h. m.</sup>  
 3 20 340 1206 C 2  
 490 1223 2

<sup>h. m.</sup>  
 3 40 360 1209 2

<sup>h. m.</sup>  
 4.0 - 0.8 4 0 371 1210 4  
 429 1217 B 3  
 372 1210 B 3  
 4.0 - 1.0 515 1221 C 2  
 394 1212 A 4  
<sup>h. m.</sup>  
 4 20 447 1227 B 3

<sup>h. m.</sup>  
 4.7 - 0.8 4 40 361 1209 3  
 593 1275 A 4

<sup>h. m.</sup>  
 5 0

<sup>h. m.</sup>  
 5.5 + 0.3 5 20 341 1207 2  
 676 1306 A 4  
 5.3 - 0.6 343 1206 2  
 5.3 - 1.0 1951 1690 B 3  
 5.3 + 0.6 383 1211 B 3  
<sup>h. m.</sup>  
 5 40 448 1227 3  
 5.6 - 1.5 566 1277 A 4

<sup>h. m.</sup>  
 6.0 - 0.7 6 0 123 1045 4  
 6.0 - 0.8 320 1129 B 3  
 169 1151 C 2  
 221 1172 A 4  
 6.2 + 2.5 12490 4116 4  
 6.3 - 1.0 6 20 610 1272 4





Dec. 0°

No.	No.	No.	Ref. to	Ref. to
P.A. Plate	Box	Letter	St. Lt.	F. M. & C. F. ch. Star Meas. Ident.
h m				
6 40	617	1272	A 4	

h m				
7 0	128	1045	5	

h m				
7 20	322	1129	2	

	474	1224	2	
--	-----	------	---	--

	475	1224	2	
--	-----	------	---	--

h m				
7 40	863	1423	2	

	10744	4219	3	
--	-------	------	---	--

h m				
8 0	324	1129	3	

	405	1212	A 4	
--	-----	------	-----	--

h m				
8 20	875	1423	4	

h m				
8 40	325	1129	2	

	406	1214	4	
--	-----	------	---	--

	967	1405	4	
--	-----	------	---	--

h m				
9 0				

h m				
9 20	815	1293	2	

	1003	1409	5	
--	------	------	---	--

h m				
9 40				





Dec. 0°

<sup>No.</sup>  
 P.A. Plate Box Letter St. Lt. F. M. & C. F. ch. <sup>No. Ref. to</sup> Star <sup>Ref. to</sup> Meas. Ident.

<sup>h. m.</sup>  
 10 0 326 1129 B 3  
 707 1291 C 2  
 407 1213 A 4  
 965 1405 B 3  
 623 1301 B 3

<sup>h. m.</sup>  
 10 20

<sup>h. m.</sup>  
 10 40 347 1207 1  
 1129 1493 3

<sup>h. m.</sup>  
 11 0 420 1215 4  
 708 1291 C 2

<sup>h. m.</sup>  
 11 20 352 1127 2  
 793 1286 2  
 1205 1480 4  
<sup>h. m.</sup>  
 11 40

<sup>h. m.</sup>  
 12 0 389 1211 5  
 709 1296 C 2  
 710 1291 2  
<sup>h. m.</sup>  
 12 20

<sup>h. m.</sup>  
 12 40 1175 1478 3  
 1295 1565 3  
 1349 1484 4  
<sup>h. m.</sup>  
 13 0 630 1301 4  
 11165 3499 20

$$10.0 + 0.7$$

R.A.	<sup>no.</sup> Plate	<sup>no.</sup> Box	Letter	St.	Lt.	F.	M.	&C.	Fch.	Stars	<sup>no.</sup> Meas.	Ref. to	Ref. to
<sup>h</sup> R	<sup>m</sup> m											Ident.	
10	0	1107											B3

Dec. 00

No. No. No. Refs to Ref to  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident  
 pr. m.

$$18.3 + 0.6$$

lv. m  
13 20 762 1288 C2

 $13.4 \pm 1.0$ 

1299 1565 4

 $13.3 + 1.0$ 

1388 1555 3

L m  
13 40

14.0 + 0.7

h m  
14 0 634 1276 3

 $14.0 + 1.0$ 

1066 1490 3

h m  
14 20

 $14.7 + 0.6$ 

h m  
14 40 1381 1555 4

15 0 $15.4 + 1.0$ 

h m  
15 20 934 1403 5

$$15.2 + 0.6$$

1409 1557 3

h m  
15 40

 $16.0 \pm 0.6$ 

h m  
16 0 769 1288 2

 $16.0 + 0.7$ 

1712	1654	3
1484	1575	3

 $16.0 + 1.0$ 

1576 1647 2

h m

16 20

 $16.4 - 0.4$ 

5937 ✓ 3 ✓



13.4 - 1.8

13.5

7402 2616 13

Dec. 0°

No. No. No. Ref. to Ref. to  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

16.6 + 1.0  
 16 40 857 A4  
 16.7 + 0.7 940 1401 4

17.0 - 0.7  
 17 0 1043 1218 3  
 17.1 - 0.3 5959 3 ✓

17.3 + 0.8  
 17 20 1544 — 4

17 40

18.1 + 1.0  
 18 0 1013 1420 3  
 1252 1481 3  
 18.0 + 0.8 1692 1653 3  
 18 20

18.8 - 0.5  
 18 40 1734 1662 3  
 6000 3 ✓

19 0

19 20 1742 1663 3

19 40

19.7 - 1  
 5977 3 ✓





Dec. 0°

No.	No.	No.	Ref. to	Ref. to
P.A.	Plate	Box	Letter	St. Lt. F. M. & C. F. ch. Stars Meas. Ident.
20 0	1597	1646	3	
	1906	1687	4	

h m  
20 20

h m  
20 40 1908 1686 3

h m  
21 0 1909 1686 4  
1906 1687 3

21.4-1.0 h m 21 20 1414 1558 3

21.5 0 h m 21 40 1909 1686 4  
+1.0 1906 1687 3

h m  
21 40

22.0-1.0 h m 22 0 1423 1481 3  
1686 1653 1

h m  
22 20

h m  
22 40 1514 1566 2

22.7-0.7 1704 1655 3

h m  
23 0 227 1171 3

2/5

Dec. 0°

<sup>No.</sup> <sup>No.</sup>  
 P.A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.  
<sup>h. m.</sup>  
 23 20 1791 1668 C 2

1855 1681 4  
 12272 4376 31

<sup>h. m.</sup>  
 23 40 142 1150 5  
 163 1151 B 3  
 228 1171 3





Dec. + 2.5°

RA. 0.1

No. No. No. Ref. to Ref. to  
 R.A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Near. Ident

h. m. 6906 3  
 0 10 1995 1706 C 2  
 4225 2126 A 4  
 2683 1712 B 3

2935 1866 3  
 h. m.  
 0 30 2731 1861 4

2450 3507 3  
 5451 3502 3  
 h. m. 7417 2653 3  
 0 50 2130 1720 4  
 4720 2182 4  
 2783 1712 B 3

2980 1870 3  
 h. m. 2999 1863 3  
 1 10 4641 2116 3  
 3101 1748 C 2  
 4973 2245 B 3  
 4297 2133 A 4

h. m.  
 1 30 2139 1720 3  
 2376 1842 4

3024 1761 4  
 h. m.  
 1 50 3129 1744 3  
 5191 2237 3  
 4344 2113 3

4694 2183 3

h. m.  
 2 10 2141 1720 3  
 4723 2120 3  
 2386 1842 3  
 4910 2262 3  
 3206 1945 3

h. m. 4979 2265 3  
 2 30 3233 1946 3

4742 2180 3

4878 2258 4

h. m.  
 2 50 2864 1871 4

RA. 3.1

6933 3

h. m.  
 3 10 3271 1950 3  
 4309 1712 C 2  
 4849 2256 B 3  
 5327 228 3  
 5006 2251 3  
 9474 - 3  
 10,097 3214 3

3.1 + 2.0  
 3.1 + 1.8



no. no. no. Ref. to Ref. to  
R.A. Plate Box Letter St. Lt. F.M.L.C. F.ch Stars Meas. Ident.

0 10 7466 2662 3  
7478 2661 3  
9446 2966 3  
9466 2967 2  
10,524 3301 3  
10565 4161 4  
0.4 + 1.8 0 30 9493 3055 3  
12608 4429 3  
14461 4695 3

0.8 + 1.8 0 50 9533 3045 3  
12151 3  
14701

1.7 + 1.9 1 10  
1.3 8432 3801 3  
1.2 11631 3  
1.2 11573 4043 3  
1.1 14110 4651 3  
1.4 + 1.6 1 30 9128 2979 2  
1.4 + 1.1 9265 2967 3  
1.4 + 3.0 9431 2965 2  
1.5 + 3.0 9566 3046 3  
1.4 12204 4367 3  
14709  
1.8 + 3.4 1 50 7485 2664 3  
1.9 + 3.5 9498 3045 3  
10451 4141 3  
1.8 12610 4429 4  
1.8 14244 4649 5

2.1 + 2.5 2 10 5236 2287 4  
9452 2966 3  
1348 3801 2  
12209 4367 3  
14328 4653 3

2.4 + 3.0 2 30 9395 2956 2  
9569 3037 3  
10,054 4071 3  
11943 4307 3  
14718

2.9 2 50 12209 4367 3  
14722

3.1 + 3.4 3 10 10,536 3306 3  
11622 4243 3  
14574  
3.1 + 2.8 13898 4445 2



Dec. + 2.5°

P.A.	No.	No.	Letter	St. Lt.	F. M. & B.	F. ch.	Star	No. Ref. to	Ref. to
								Meas.	Ident.
3 30	2075	1700	C	2					
	4917	2262	B	3					
	2380	1842	C	2					
	5027	2254	B	3					
	3003	1863		3					
h m	5345	2282		3					
3 50	2970	1864	A	4					
	4981	2265		3					
	9549	3053		3					
	10,537	3306		3					
h m									
4 10	2004	1704		1					
	2830	1854	A	4					
	2036	1696	B	3					
	2584	1708		2					
h m									
4 30	4640	2170		2					
	5034	2254		3					
	5292	2293		3					
h m									
4 50	2109	1699		2					
	5087	2266		3					
	5322	228		3					
h m									
5 10	2918	1868		3					
	2919	1868		4					
	14375								
h m									
5 30	2080	1700		3					
	4703	2120		3					
	5298	2292		4					
h m									
5 50	3132	1943		3					
	5209	2234		4					
h m									
6 10	2022	1694		3					
	2665	1738		4					
	2835	1854		4					
h m									
6 30	3382	1928		4					
	8041	2795		3					
	11030								

3 30 12616 4427 4

3 50 11932 4349 3  
14368

4 10 8699 3  
10673 4179 3  
11974 4353 3  
14624

4.5 + 20 4 30 10253 3224 2  
4.4 + 30 16547 3278 3  
12457 3  
12728 4446 4  
14753

4 50

5 10

5.4 + 3.3 5 30 9437 2963 3  
14676

5.8 5 50 12459 4406 3

6.1 + 3.0 6 10 8002 2786 3

6 30

Dec. + 2.5°

<sup>no.</sup> <sup>no.</sup> <sup>no.</sup> Ref. to Ref. to  
 J. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars, Meas. Ident.  
 6 50 2927 1870 A4  
 12464 4412 3

7.1 + 3.4	<sup>h m</sup> 7 10	3112	1740	3
7.1 + 3.2		5047	2249	3
		5563	2315	3
7.4 + 3.5	<sup>h m</sup> 7 30	3145	1944	2
7.5 + 3.5		5803	2353 B	3
		4933	2267	3
7.5 + 3.4		5490	2306	3
7.8 + 3.4	<sup>h m</sup> 7 50	5164	2241	3
		5518	2309	3
		5651	2344	3?
	<sup>h m</sup> 8 10	2154	1722	2
8.1 + 3.3		5633	2303	3
8.1 + 3.0		8060	2803	3
8.5 + 3.2	<sup>h m</sup> 8 30	3093	1767	3
8.4 + 3.3		8269	2863	3
8.4 + 3.2		9975	3198	3
8.5 + 3.1		10243	3211	3
8.8 + 3.3	<sup>h m</sup> 8 50	5551	2304	3
8.8 + 3.5		5742	2346	4
9.1 + 3.2		6032	2407	3
9.1 + 3.3	<sup>h m</sup> 9 10	5715	2349	3
9.1 + 3.0		8244	2808	4
9.2 + 3.3		10953	3219	3
9.2		13206		3
	<sup>h m</sup> 9 30	3320	1935	3
9.5 + 3.4		5745	2346	3
+2.0		6017	2370	2
9.8 + 3.6	<sup>h m</sup> 9 50	5663	2302	3
9.8 + 3.4		5811	2355	3
9.8 + 3.4		5881	2361	3
		8224	2815	4



6 50

7.1 + 3.2	7 10	9872	3109	2
7.1 + 3.0		10,308	3215	3
7.1 + 3.5		10,807	3416	3
7.1		12574	4424	4

7.4 + 3.5	7 30	10,631	3208	2
7.4 + 3.5		10,467	3287	3
7.5 + 3.5		10,685	3300	3

7 50 8201 2814 4

8.1 + 3.5	8 10	10,687	3300	3
8.1 + 3.3		10,846	3431	3
8.2 + 3.5		10,902	3422	3

8 30

8.8 + 3.2	8 50	8350	2860	3
8.8 + 3.5		10,221	3118	3
8.8 + 3.3		10,472	3280	3
8.8 + 3.5		10,688	3300	3
8.8		13235	4481	3

9 10

9.5 + 3.5	9 30	10,862	3405	3
9.4 + 3		13238	4483	4

9 50

Dec. + 2.5°

<sup>No.</sup> <sup>No.</sup>  
 P.A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

10 10 3355 1930 B3  
 8442 2868 3  
 5060 2248 2

10.1 + 3.2  
 10.1 + 3.4

5994 2372 3?  
 10 30 3454 1934 4

10.4 + 3.0

8238 2808 3

10.3

+ 3  
 + 32°

7508 2983 3  
 13283 4493 3  
 10 50 6059 2410 3

10.8 + 3.4

6063 2410 3

10.8

8251 2865 3  
 10 10 408 1214 4

3459 1977 3

11.1 + 3.6

5176 2255 3

11.5 + 3.5

11 30 5695 2343 3  
 13246 4481 3

11.4 + 3.4

8443 2868 3

11.4 + 3.5

10,576 3277 3  
 11 50 3573 1981 2

11.8 + 3.0

6164 2422 3

11.8 + 3.0

8384 2856 3  
 12 10 3484 1939 3

12.1 + 3.0

6198 2419 4

12.1 + 2.5

8436 2869 3

12.2

11457 4273 3  
 13654 3  
 12 30 3466 1977 3

12.4 + 3.5

6111 2403 3

12.5 + 3.0

6257 2415 4  
 12 50 3612 1985 3

12.8 + 3

7747 4026 3  
 6314 2431 2  
 13294 4506 3

8434 2869 3  
 13 10 3649 1990 4

13.1 + 3.0

7502 2982 3

13.2 + 3.0

8499 2876 3

13.2 + 3

11229 4553 3

$10.1 + 3.5$  10 10 6039 2409 3  
 $10.1 + 3.0$  6173 2423 3  
 $10.1 + 3.0$  8219 2815 3  
 $10.1 + 3.0$  8377 2856 3  
 $10.4 + 3.0$  10 30 8473 2873 3

$10.1 + 3$  10 10 13241 4481 3

$10.8 + 3.5$  10 50 10482 3196 3  
 $10.8$  13683 3  
 $10.8$  13694 3

$+ 3.4$  11.10 6082 2412 3  
 $11.1 + 3.3$  8410 2871 3  
 $11.2$  11225 3  
 $11.2$  13923 3

11 30

$11.8 + 3.5$  11 50 10487 3194 3  
 $11.8 + 3.0$  13565 4563 2

12 10

12 30 8556 2884 2  
 12673 3

$12.8 + 3.5$  12 50 10491 3194 3  
 $12.8 + 3.3$  10720 3293 3

13 10



Dec. + 2.5°

No. No. No. Ref. to Ref. to  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.  
 h. m.

13.3 + 3.0	h. m.	13 30	3564	1981	B 3
13.4 + 3.5			6283	2432	3
13.8 + 3.3			6064	2417	3
13.8 + 3.2	h. m.	13 50	3495	1975	3
			13295	4506	3
			6262	2435	4
			8560	2884	3
14.2 + 2.5	h. m.	14 10	3619	1986	3
			6321	2429	3
14.4 + 3.0	h. m.		7907	4851	3
14.5 + 2.5	h. m.	14 30	6288	4254	3
14.5 + 2			6426		2
14.4 + 3.5			7802	3731	4
+ 3	h. m.		6353	2416	3
14.8 + 3	h. m.	14 50	13262	4498	3
14.8 + 3.4			7866	3738	3
			13263	4499	3
			6305	2430	3
15.0 + 2	h. m.		1425		1
15.3 + 2.3	h. m.	15 10	3780	2033	2
15.1 + 3.5			5977	2371	3
			4033	2094	3
15.5 + 3.4	h. m.	15 30	6400		3
15.5 + 3.2			5725	2349	2
			6247		3
			6270	2435	3
			8658	2935	3
15.8 + 3.5	h. m.	15 50	10799	3412	5
15.8 + 2			10710	4213	3
15.8 + 2.0	h. m.	16 10	6371	2433	3
			13309	4508	3
			6049		3
			10187	4096	3
16.1 + 3.0	h. m.	16 30	3952	2041	2
16.4 + 2			4083	2112	3
			7575	3638	2
			6592	2542	4
			6200		3
			3746	2036	4
			7595	3665	2
			7666	3637	3
			8706	3849	3
16.5 + 3.2			8832	2925	3

13.5 + 3.5 13 30 10,704 3293 3  
 13.4 + 3.3 10,869 3430 3

13.4

11,222 4257 3  
~~11,469 4276 3~~

13 50

14.1 + 3.5 14 106395 2434 3  
 14.1 + 3.1 8492 2675 4

14.2

12624

14.4 + 3.2 14 30 10836 3291 3

14.8 + 3.5 14 50 6461 2532 2

14.8 + 3.3 10876 3430 2

15.1

15 10

8461 3107 3

15.1 + 2.5 62221 - 30

15.2 + 3.4 6239 2437 3  
 15.1 + 3.3 10,838 3291 4

15.4

9912 4057 4

15.2 + 3 13333 4528 3

15.1 + 3.0 6468 2532 3

15.1 + 3.5 6510 2540 3

15.1 + 3.5 6869 2574 2

15.1 + 3.2 8582 2881 2

15.1 + 3.4 8609 2887 3

15.1 + 3.2 8683 2987 4

15.14 14077 4227 5

16.1 + 3.1 16 10 8624 - 2

16.1 + 3.3 8804 2909 3

16.4

9787 4063 3

16.1 + 2.3 10820 4666 3

16.2 + 3.5 10882 3416 3

16.2

11898 4346 3

16 30 13726 3

16.2 16 10 13974 4

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Dec. + 2.5°

R.A. Plate Box Letter St. Lt. F. M. & C. F. ch Stars Meas. Ident.

h. m. 16 50 4113 2108 B3

16.8 + 2

6079 3

16.8 + 3.0

6627 2549 3

h. m. 17 10 3854 2047 3

6753 3

17.1 + 3.0

6469 2532 3

17.4 + 3.2

h. m. 17 30 4172 2103 4

17.5

6088 3

6748 3

h. m. 17 50 4063 2110 3

6918 3

18.0 + 2

6123 3

h. m. 18 10 3870 2045 3

18.1 + 3.3

6597 2543 3

18.1 + 2.0

10221 - 3

18.4

18.3

h. m. 18 30 4086 2109 3

18.6 + 2

6119 3

18.5 + 3.0

6619 2551 4

h. m. 18 50 4122 2107 4

18.8 + 2.0

6001 3

18.8 + 2.7

6687 3

h. m. 19 10 3974 2098 3

19.3

6163 3

h. m. 19 30 3961 2099 3

19.4 + 3.0

9508 3036 2

19.7 + 2

6181 4

h. m. 19 50 4193 2104 3

19.8 + 2.7

6003 3

7002 2585 4

7648 7657 3

9557 4046 4



16.8 + 3.5 16 50 8685 2937 4

16.8  
16.7 + 2.4  
16.5 + 3

10028 4067 3  
13314 4568 3

17.1 + 3.2 17 10 8629 2889 3

17.1 + 3.0  
17.1 + 3.1

8922 2917 3  
9048 2977 3  
10216 3

17.1

114080 4623 3

17.5 + 3.3 17 30 11000 3494 3

13989 3

17.8 + 3.0 17 50 6607 2543 3

17.8

8745 2931 4  
10372 4363 3

18.1 + 3.0 18 10 8727 2933 5

18.1 + 3.2

9105 2960 3

18.1 + 3.0

10220 4

18.4 + 3.2

8791 2908 4

18.5 + 2.0 18 30 6585 2541 3

18.2

13904 3

18.7 + 1.5 18 50 9914 4624 4

18.8 + 3.2

8843 2926 3

9340 2957 3

18.8

12544 4421 3

18.1

14055 4623 3

19.1 + 3.0 19 10 6612 2551 3

19.1 + 3.2

8752 2931 4

19.1 + 3.0

9138 2957 3

19.1

13559 4577 3

19.5 + 3.0 19 30 6827 2566 3

8781 2928 3

9030 2975 3

9348 2955 3

19.8 + 3.0 19 50 6860 2576 3

7002 2585 4

9060 2972 3

9115 2961 3

9359 2958 4

19.8 + 3.0

19.8 + 3.0

19.8

13729 3

Dec. + 2.5°

No. Ref. to Ref. to  
 R. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

20.2 + 30	h m	4043	2089	B 3
20.2 + 2		8701	2941	3
20.1 + 30		6148		4
20.5 + 30		9091	2970	3
	h m	6944	2054	4
20 30		4005	2096	4
7280 2		4336	2115	4
7424 30		4165	2106	4
		4484	2191	B 3
		4178	2125	A 4
20 50	h m	4428	2121	B 3
		4153	2104	A 4
20.7 + 2		6194		2
20.8 + 2		6024		4
20.8 + 2		7118	2630	3
		6550		2
21 10	h m	4131	2105	3
21.1 + 30		7314	2648	3
21.1 + 30		4684	2166	4
21.2 + 2		9345	2957	3
		6048		3
21.4 + 30	h m	4259	2128	3
		9363	2958	?
		4483	2186	4
		12553	4422	3
21.5 + 2		6311		3
21 50	h m	4156	2104	3
		4522	2194	3
		4459	2185	3
21.8 + 30		8882	2921	3
21.8 + 2		4504	2192	4
	h m	6314		3
22 10		4097	2109	3
		4595	2120	3
		4410	2124	3
		4821	2175	A 4
		4524	2195	B 3
22 30	h m	6580		3
		4142	2103	3
		4485	2191	3
		6562		2
22 50	h m	4364	2135	3
7369 3		4884	2257	3
		4464	2190	3
		7240	2639	3
22.8 + 2		4529	2195	3
	h m	6366		3
23 10		4208	2101	3
23.2 + 16		10,069	3120	3
		4414	2116	3
		4560	2161	3
		4600	2164	3
		4714	2182	A 4



R.A. <sup>no.</sup> Plate <sup>no.</sup> Box Letter St. Lt. P. M. & C. F. ch. Star <sup>no.</sup> <sup>Ref. to</sup> Mess. <sup>Ref. to</sup> Ident.

20.1	9840	4043	3
20.1	15571	4602	3
20.1	6873	2576	4
20.2 + 3.2	13584	4581	4
20.1 + 2.5	8699	2941	4
20.5 + 3.0	4802	2184	4
20.5 + 3.3	6792	2563	3
	5111	2244	3
	6850	2575	4
	5230	2236	3
20.8	6537	2535	2
20.8 + 3.0	6877	2573	3
20.8 + 3.0	7205	2637	4
20.5 + 3.0	8738	2932	2
20.5 + 3.0	8798	2928	3
21.1 + 3.0	6832	2566	3
21.1 + 3.3	7170	2635	3
21.1 + 3.0	7273	2652	3
21.1 + 3.3	8852	2924	3
20.8 + 2.9	9042	2977	3
21.4 + 3.0	6811	2563	4
21.4 + 3.0	88216	2925	3
21 50	6973	2570	3
	7095	2627	3
	7223	2643	3
	7398	2653	3
21.8 + 2.8	9040	2976	3
22.1 + 3.0	6899	2571	3
22.1 + 3.0	6376		3
22.10	6599		2
22.1 + 3.0	7212	2638	3
22.1 + 3.0	7342	2650	4
22.1 + 2.5	18975	2968	3
22.1 + 3.0	9877	3124	4
22.2 + 1.5	10244		4
22.4 + 2.5	7354	2651	4
22.4 + 2.9	8972	2968	3
22.4 + 2.9	9146	2958	2
22.4 + 2.5	9522	3058	3
22.4 + 2.5	10534	4156	3
22 50	6392		3
	6955	2586	3
	6961	2586	3
	7149	2633	3
	7154	2633	3
	7229	2643	3
23.1 + 3.0	6993	2585	3
23.1 + 3.0	7100	2628	3
23.1 + 2.5	7306	2648	3
23.1 + 3.0	7386	2655	3
23.1 + 3.0	8918	2916	4
23.2 + 2.0	9101	2960	3
23.1 + 3.3	9401	2962	3

20 30	9164	2956	2
20.4	9273	2948	3
20.4	9514	3036	3
	13574	4579	3

20 50	9557	3046	3
20.8	13015	4508	3

21 10	10071	4072	3
21.3	12591	4435	3
21.2	13944		3

21 30	10194	4098	4
	14459	4674	3

21 50	9367	2958	3
	10100	4152	4
21.8	13318	4508	3

22.2	22 10	12553	
22.2		13949	4

22.8 + 2.9	8859	2923	3
22.7	9439	2963	3
	10197	4098	3
22.8	12619	4443	4
22.8	14307		3
22.9	14043	4624	3
23 10	10537	4155	3
	12119		3
	14746		3



Dec. + 2.5°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.

<sup>h m.</sup>  
 23 30 4183 2102 B3  
 5122 2242 3  
 4393 2119 3

<sup>h m</sup>  
 23 50 4439 2186 3  
 5233 2233 3  
 4579 2163 3  
 4735 2180 3

23.8 + 2

6071 2

7081 2626 3

23.8 + 3.0

7263 2642 3

23.7 + 2.5

9126 2978 2

9270 2978 3

23.8 + 1.4

9374 2955 3

10,070 3120 4

23 30 6708' 2iv

23.4 + 33	7077	2629	3
23.4 + 34	7332	2646	3
23.4 + 30	7405	2654	3
23.4 + 20	9271	2948	3
23.4 + 32	9384	2961	3
23.4 + 2.5	10544	4157	21
23.4	14315	4657	3i

23.7 + 2.5	23 50	10547	4157	3
23.8		12602	4427	3
23.8		14453	4645	3

7 Dec. + 5°

	no.	no.	no.	Ref. to	Ref. to
P. A. Plate	Box	Letter	St. Lt. F.	M.B. F. ch	Stars Meas. Ident.
h m					
0 0					

h m				
0 20	332	1208	3	
	355	1210	A4	
	356	1210	C2	

h m  
0 40

1.0 + 5.8

h m				
1 0	541	1281	5	

h m				
1 20	3851	2047	3	

h m				
1 40	262	1165	4	

h m  
2 0

h m				
2 20	120	1046	3	

h m  
2 40

h m				
3 0	437	1217	4	





Dec. + 5°

No.	No.	No.	Ref. to	Ref. to
P.A. Plate	Box	Letter	St. Lt.	F. M. & C. F. Th. Stars
h m			Meas.	Ident.
3 20				

h m  
3 40 606 1273 4

h m  
4 0

h m  
4 20 454 1226 4

h m  
4 40

h m  
5 0 241 1168 2  
2334 1724 2  
336 1208 2

h m  
5 20 1973 1705 3

5.7 + 5.8

h m  
5 40 295 1163 4

h m  
6 0 395 1213 4

h m  
6 20 348 1207 2  
3277 1947 3  
463 1212 3

1936 1685 3

2893 1869 3

6.5 + 5.5





Dec. + 5°

<sup>no.</sup> <sup>no.</sup> <sup>no.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.  
 h. m.  
 6 40

h m  
 7 0 250 1152 3  
 892 1424 A4

h m  
 7 20

h m  
 7 40 848 1413 4

h m  
 8 0

h m  
 8 20 302 1162 3  
 958 1407 A4

h m  
 8 40

9.0 + 6.0

h m  
 9 0 278 1167 4  
 476 1224 C2  
 350 1207 C2  
 5828 2360 B3  
 378 1206 A5

9.4 + 4.0

h m  
 9 20 8090 2792 3

9.7 + 5.7

h m  
 9 40 1108 1494 3



Dec. + 5°

<sup>no.</sup> <sup>no.</sup> <sup>no.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. Ch. Stars Meas. Ident.  
 h m  
 10 0

h m  
 10 20 1036 1419 4

h m  
 10 40

h m  
 11 0 286 1164 4

h m  
 11 20 5901 2362 3  
 5924 2366 4

11.7 + 5.6 h m 11 40 628 1301 2  
 11.7 + 6.0 1212 1477 3  
 11.7 + 6.0 1243 1554 4  
 h m 12 0 409 1214 4

12.5 + 2.3 h m 12 20 1291 1562 3  
 1174 4235 3

h m  
 12 40

13.0 + 6.0 h m 13 0 484 1224 2  
 1070  
 13.0 + 6.0 631 1213 2  
 1151 1496 B3  
 13.0 + 6.0 974 1406 A4  
 1060 1488 3



13.1 + 3.5 6131 2405 3

Dec. + 5°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P.A. Plate Box Letter St. Lt. F.M. & C. F.ch. Star Meas. Ident.  
 h m  
 13 20

12.7 + 6.0  
 h m  
 13 40 929 1403 4

h m  
 14 0

14.3 + 6.0  
 h m  
 14 20 1179 1493 3  
 14.3 + 6.0  
 1459 1483 2  
 14.3 + 6.0  
 6413 - 2  
 14.3 + 6.0  
 h m 6431 - 3  
 14 40

15.0 + 6.0  
 h m  
 15 0 1462 1483 2  
 15.0 + 5.7  
 1517 1573 4  
 15.0 + 5.7  
 1506 1566 3  
 15.2 + 5.7  
 h m  
 15 20 932 1403 4  
 15.4 + 4.5  
 5920 4

h m  
 15 40 1416 1558 3

h m  
 16 0

h m  
 16 20 1334 1564 2

16.3 + 5.8  
 1392 1559 3  
 16.3 + 5.9  
 1674 1652 3  
 16.4 + 4.6  
 5938 3

14.3 + 6.0	14	20	6456	2528	30
14.3 + 5.6			6482	2538	4
14.3 + 6.0			6505	2537	3
14.3 + 6.0			6625	2549	3
14.3 + 6.0			6685	2545	2
14.3 + 5.5			8598	2879	3
14.3 + 6.0			9019	2976	3
14.3 + 5.0			10995	3492	3



Dec. + 5°

<sup>no.</sup> <sup>no.</sup> <sup>no.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P. A. Plate Box Letter St. Lt. F. M. & C. F. ch. Star Meas. Ident.  
<sup>h. m.</sup>  
 16 40

<sup>h m</sup>  
 17.0 + 5.7 17 0 1716 1661 3  
 17.2 + 5° 5960<sup>1</sup> 4<sup>1</sup>

<sup>h m</sup>  
 17 20

<sup>h m</sup>  
 17.7 + 5.8 17 40 1596 1570 3  
 1720 1645 4  
 17.7 + 4.3 5974<sup>1</sup> 3  
<sup>h m</sup>  
 18 0

<sup>h m</sup>  
 18 20 1560 1571 4

<sup>h m</sup>  
 18.7 + 5.6 18 40 2083 1699 3  
 2348 1848 3  
 18.7 + 5.8 2171 1722 3  
 2369 1848 3  
 18.7 + 5.9 2252 1754 3  
<sup>h m</sup>  
 19 0 1547 1569 3  
 19.0 + 5.6 1739 1663 3

<sup>h m</sup>  
 19 20

<sup>h m</sup>  
 19 40 1583 1647 3  
 19.7 + 5.7 1752 1664 4  
 19.8 + 4.0 5978<sup>1</sup> 3<sup>1</sup>

1882 June 27 p. 1. 973F

C.A. <sup>no.</sup>Plate <sup>no.</sup>Box Letter St. Lb. F. M. & C. F. ch <sup>no.</sup>Stew. <sup>Ref. to</sup>Mead <sup>Ref. to</sup>Ident

<sup>h</sup> 18	<sup>m</sup> 40	3753	2034	4
		4591	2120	3
		4840	2173	4

Dec. + 5°

No.	No.	No.	Ref. to	Ref. to
R.A.	Plate	Box	Letter	St. Lt.
h. m.			F. M. & C.	F. Ch. Stare
20 0				Wear. Ident.

20.4 + 6.6

h	m			
20	20	1503	1574	3
		6724	2560	3

h m  
20 40

h m  
21 0 1412 1557 3

h m  
21 20

21.5 + 6.0  
21.6 + 6.0

h	m			
21	40	1378	1555	3
		1681	1652	3

h m  
22 0

22.3 + 5.6

h	m			
22	20	1513	1566	4

h m  
22 40

h m  
23 0 1614 1647 4





Dec. + 5°

	No.	No.					No.	Ref. to	Ref. to
P.A.	Plate	Box	Letter	St.	Lt.	F. M. & C.	F. ch.	Stars	Meas. Ident.
h. m.									
23	20								

h	m			
23	40	1600	1646	3





Dec. + 7.5°

no. no. no. Ref. to Ref. to  
 P.A. Plate Box Letter St. Lt. F.M. & C. F.ch. Stars Meas. Ident.

h. m. 0 10 2633 1710 A 4

4824 2175 4

9257 2967 3

9488 3054 2

h. m. 0 30 2694 1716 3

2861 1874 4

h. m. 0 50 2762 1858 3

2966 1864 4

4958 4059 3

7393 2655 3

h. m. 1 10 2824 1853 3

4873 2258 3

4298 2133 3

10660 4175 3

4691 2183 3

h. m. 1 30 2616 1713 5

6734 31 3

6735 3

h. m. 1 50 2608 1713 3

5134 2243 3

4345 2113 3

h. m. 2 10 2768 1858 4

4738 2180 3

6738 2 2

h. m. 2 30 2702 1862 4

11924 4049 3

10053 4071 3

h. m. 2 50 4589 2162 2

9909 3135 3

10448 3287 3

h. m. 3 10 2910 1872 3

4853 2256 2

5242 2285 3

h. m. 3 20 9535 3057 2

5180 2236 3

h. m. 2 50 4589 2162 2

9909 3135 3

10448 3287 3

h. m. 3 10 2910 1872 3

4853 2256 2

5242 2285 3

h. m. 3 20 9535 3057 2

5180 2236 3

4589 2162 2

9909 3135 3

10448 3287 3

h. m. 3 10 2910 1872 3

4853 2256 2

5242 2285 3

$0.0 + 7.0$  0 10 8209 3719 3  
 $0.1 + 7.9$  10,444 3213 3  
 $0.2 + 7.0$  10,504 4161 3  
 $0.2$  11917 4345 3  
 $0.1$  14163 4641 4  
 $0.3$  14183 4636 4  
 $0.4 + 6.9$  0 30 9527 3056 3  
 $0.5 + 8.0$  10,504 3285 3  
~~11621~~  
~~14183~~

$0.8 + 6.6$  0 50 9471 - 3  
 $0.8 + 8.0$  10,445 3280 3  
 $0.5$  12127 1 3  
 $0.9$  14031 4625 4  
 $0.8$  14236 4649 4

$1.1 + 8.0$  1 10 7325 2649 3  
 $1.1 + 7.5$  7428 2653 3  
 $1.1 + 8.3$  9600 3041 3  
 $1.1 + 6.5$  10,052 3108 3  
 $1.1 + 8.3$  10,360 3281 3  
 $1.1 + 8.0$  10,505 3285 3  
 $1.4 + 8.0$  1 30 9381 2954 3  
~~11578~~ 4292 32  
~~14748~~

$1.9 + 7.3$  1 50 9908 3128 4  
 $1.8$  10,506 3285 3  
 $1.8$  10450 4041 3  
 $1.8$  11653 2 3  
 $1.8$  11941 4057 3  
 $1.8$  14058 4625 3  
 $2.1 + 8.0$  2 10 10447 3287 2  
 $2.1$  14122 4632 4

$2.3 + 8.0$  2 30 10,520 3304 3  
 $2.4$  11532 4331 4  
~~14471~~ 4696 4

$2.8$  2 50 10448 3287 3  
 $2.8$  12152 2 3  
 $2.8$  14338 4621 3

$3.1 + 8.0$  3 10 10,521 3304 3  
 $3.1 + 1.8$  10,497 3274 3  
 $3.2$  11655 2 3  
 $3.3$  11957 4352 4  
 $3.1$  ~~14471~~ 4692 32



Dec. + 7.5°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P.A. Plate Box Letter St. Lt. F.M. & C. F. ch. Stars Meas. Ident.

3 30 2624 1709 A 4

4919 2262 3

3.4 + 7.0

h m 9539 3057 3

3 50 2886 1886 1

3291 1937 4

5080 2249 3

3.8 + 8.1

h m 9609 3043 3

4 10 2585 1702 1

5202 2237 B 3

2950 1867 3

5350 2296 A 4

4860 2256 B 3

h m 4 30 4641 2170 3

5035 2254 3

5405 2301 3

h m 4 50 4634 2169 3

5366 2286 3

4635 2169 3

4.8 + 8.3

h m 5088 2266 3

h m 9575 3047 3

5 10 2650 1715 4

5.1 + 6.5

10,438 3280 3

h m 5 30 4704 2183 4

4985 2265 3

h m 5 50 2658 1715 4

5.8 + 7.9

8017 2798 4

10440 3213 3

h m 6 10 3087 1746 3

5099 2268 3

3107 1740 3

5376 2282 A 4

3276 1950 B 3

6.5 + 8.3

h m 6 30 2843 1887 3

3383 1931 2

6.5 + 8.5

5467 2290 3

6.4 + 8.6

5484 2307 3



3.5 + 6.5 3 30 10,551 3278 3  
 3.1 14343 4353 3

3.8 + 8.5 3 50 10,085 3107 3  
 3.8 + 6.6 10,522 3361 3i  
 3.8 11574 4344 3  
 3.1 14434 4676 3

4.1 + 8.6 4 10 10,299 3216 3  
 4.1 10676 4174 3  
 4.2 11967 4352 3

4.4 + 6.9 4 30 10,523 3301 4  
 4.9 11886 4345 3i  
 12027 4361 3  
 14691

4.8 + 6.0 4 50 10,089 3206 3  
 4.9 11886 4345 3i

5 10

5 30

5.8 5 50 14682

6.2 6 10 12408 4402 4

6.4 + 8.0 6 30 8032 2796 3i  
 6.4 + 8.3 9860 3114 3  
 6.4 + 6.5 10,092 3134 3i  
 6.4 + 8.0 10,302 3216 4  
 6.4 + 8.0 10,324 3195 4

Dec. +7.5°

			no.	no.		no.	Ref. to	Ref. to			
			Plate	Box	Letter	St. Lt.	F. M. B.	F. ch.	Stars	Meas.	Ident.
	h m	6 50	3139	1943	A 4						
			8023	2796	4						
	h m	7 10	5848	2249	3						
			5861	2358	3						
			5628	2303	C 2						
			5736	2345	3						
	h m	7 30	4935	?	2						
			6081	2411	4						
			8150	2807	3						
	h m	7 50	5165	2241	3						
			5683	2342	3						
			5766	2354	4						
	h m	8 10	5544	2311	3						
			5709	2348	3						
			8170	2806	3						
	h m	8 30	3314	1934	3						
			5895	2362	4						
			8191	2813	4						
	h m	8 50	839	1414	3						
			5657	2302	3						
			8028	2859	3						
	h m	9 10	2677	1716	2						
			3349	1930	4						
			8207	2814	5						
	h m	9 30	5689	2343	3						
			5794	2351	3						
			8232	2809	3						
	h m	9 50	5775	2352	3						
			5869	2364	3						
			5908	2365	3						
			8334	2858	3						



6 50

7.1 + 7.9  
7.1 + 8.37 10 8008 2798 4  
10,028 3133 37.4 + 8.0  
7.4 + 8.4  
7.4 + 8.57 30 10,327 3195 3  
10,558 3306 3i  
10,686 3360 2i  
12,579 4424 3

7 50 8084 2793 3

8.1 + 8.5

8 10 10,032 3198 2  
10,216 3225 3  
10,378 3279 3i

8.1 + 8.6

8 30 72580 44243

8.8 + 7.5  
8.88 50 10,001 3199 3  
10,564 3277 3i  
12,667 4435 4

9.2

9 10 10,678 3 3

9.4 + 8.5  
9.4 + 8.4  
9.5 + 8.39 30 10,035 3208 2  
10,246 3211 3  
10,852 3420 2i

9.8 + 8.0

9 50 11181 4242 3



Dec. + 7.5°

		No.	No.			No.	Ref. to	Ref. to		
P.A.	h m.	Plate	Box	Letter	St. Lt.	F. M. & C.	F. ch.	Stars	Meas.	Ident.
	10 10	5061	2248	B3						
		6055	2408	3						
		8262	2866	3						
h m	10 30	5967	2402	4						
		8288	2864	3						
		10976	4222	3						
h m	10 50	2443	1760	4						
		3527	1973	3						
		6024	2407	4						
h m	11 10	5177	2255	1						
		8367	2861	3						
		9253	4221	3						
h m	11 30	6125	2404	4						
		8507	2855	2						
		10977	4224	3						
		13614		3						
h m	11 50	7179	3734	4						
		7496	6992	3						
		6147	2406	4						
		13287	4493	3						
		8402	2871	3						
h m	12 10	6180	2420	3						
		6278	2435	3						
		8430	2855	3						
h m	12 30	5853	2357	2						
		6214	2418	3						
		6292	2436	3						
h m	12 50	3626	1987	3						
		5601	2313	3						
		9748	4026	3						
		11071	4245	3						
h m	13 10	3472	1978	3						
		6334	2428	3						
		11096	1235	3						
		13927		3						
		13928		3						

10.1 + 8.5 10 10 10,770 3307 3.2  
 10.2 13610 8

10 30

10.8 + 8.4 10 50 6192 3421 3 10.5 10 50 13562 4588 3  
 10383 3193 3  
 10.8 + 8.9 10,572 3277 3  
 10.8 + 8.3 10,710 3296 4  
 10.8 + 8.3 11,456 4245 5  
 11.2 11 10 13698 3

11 30

12.0 11 50 13724

12.2 + 8.5 12 10 10,779 3290 2  
 12.1 + 8.5 10,863 3289 3  
 12.2 13619 2

12.4 + 8.1 12 30 8419 2867 4  
 12.3 4227 7  
 + 8 13252 4553 3

12 50

13 10



Dec. + 7.5°

Q.A. Plate <sup>No.</sup> Box Letter <sup>No.</sup> St. Lt. F. M. & C. F. Ch. Stars <sup>No.</sup> Ref. to <sup>Ref. to</sup> Meas. Ident.

h. m. 13 30 3640 1989 C 2

13.4 + 7.0

9265 3  
10912 3413 3

h. m. 13 50 3659 1990 2

13.4 + 8.5

6298 2430 3

13.8 + 8.1

8541 2883 3

14.1 + 8.6

h. m. 14 10 6366 2417 2

14.1 + 8.8

6433 2528 2

14.4

14.2 + 8

h. m. 14 30 9906 4053 4  
13260 4499 3  
7801 3731 3

14.5 + 7.4

6427 3

14.4 + 8.3

6340 2428 3

14.8 + 8.5

h. m. 14 50 10862 4210 1  
6382 2434 4

14.8 + 7

6401 3

15.0

15.2 + 8.5

h. m. 15 10 7867 3738 3  
11021 14227 3  
3184 1745 2

15.2 + 7.8

6248 3

15.1

15.4

h. m. 15 30 7424 1 1  
9381 3964 3  
9911 4054 3

15.5 + 7

3646 1990 3  
14025 1 1  
5921 1

+ 8.3

6401 2426 2

h. m. 15 50

15.8 + 7.4

6099 3

15.8 + 8.0

6453 2531 3

16.1 + 8.1

h. m. 16 10 7574 3638 2  
9154 3307 4  
6524 2534 3

16.4

16.2

h. m. 16 30 9986 4063 3  
10938 4218 3  
4105 2109 2

16.5 + 7

6201 3

7594 3665 2

16.4 + 8.3

6581 2541 4



13 30

13.8 + 8.5	13 50	10,588	3303	3
13.8 + 8.5		10,723	3294	3
13.8		11,265	4256	3
13.6		11,073	4625	3

14.1 + 8.5	14 10	10,783	3311	2
14.1 + 7.5		10,913	3413	3

14.5 + 8.3	14 30	6445	2529	3
14.4 + 8.5		8573	2882	3i
+ 8		13329	4504	3

14.8 + 8.5	14 50	10,629	3302	3
14.8 + 6.6		10,784	3311	3
		10,919	3421	3

15.1 + 8.4	15 10	10,940	3408	3
15.2 + 8		13302	4507	3

15.4 + 8.0		6439	2529	3
------------	--	------	------	---

15 30	8692	2938	3i
-------	------	------	----

15.5 + 6.8		10,925	3421	3
------------	--	--------	------	---

15.8 + 7.5	15 50	10188	4097	3i
15.8 + 8		13343	4487	3
16.0		14007	4623	3

16.0 + 7.0		10019	4067	3
16.1 + 8.0	16 10	8785	2928	3
<del>16.0</del>		<del>14007</del>		

16.4 + 8.3	16 30	8776	2929	3
		13979		3i

Dec. +7.5°

<sup>No.</sup> <sup>No.</sup> <sup>No.</sup> <sup>Ref. to</sup> <sup>Ref. to</sup>  
 P.A. Plate Box Letter St. Lt. F.M. & C.F. Ch. Stars Meas. Ident.

<sup>h. m.</sup>  
 16 50 4101 2110 B3

<sup>h.</sup>  
 16.7 + 8.3  
 16.8 + 7.4

6080<sup>✓</sup> 32<sup>✓</sup>  
 7665 3662 31<sup>✓</sup>  
 9159 3307 3

17.1 + 8.4

<sup>h. m.</sup>  
 17 10 4243 2130 3

17.1 + 8.2  
 17.1 + 8.1  
 17.1 + 7.5

8665 2936 4  
 9131 2979 2  
 10215 4104 3  
 11032

17.4 + 8.2

<sup>h. m.</sup>  
 17 30 4275 2131 4

17.6 + 7

6129<sup>✓</sup> 3<sup>✓</sup>  
 8466 3807 3  
 9392 3964 4

17.8 + 8.4

<sup>h. m.</sup>  
 17 50 4280 2129 2

17.8 + 8.0

7868 3738 32<sup>✓</sup>  
 9273 3307 3  
 6657 2546 3  
<sup>h. m.</sup>  
 18 10 4036 2094 3

18.2 + 7.3

6124<sup>✓</sup> 3<sup>✓</sup>  
 9158 3307 4

18.4 + 7.3  
 18.2

7875  
<sup>h. m.</sup>  
 18 30 3862 2046 3  
 13725

18.6 + 7

6120<sup>✓</sup> 3<sup>✓</sup>  
 8466 3807 3

18.5 + 8.0

6629 2549 3  
<sup>h. m.</sup>  
 18 50 4109 2108 4

18.8 + 7.3

6519<sup>✓</sup> 3<sup>✓</sup>

18.8 + 8.0

6648 2550 3  
<sup>h. m.</sup>  
 19 10 4138 2107 4

19.3 + 7

7107 320 32<sup>✓</sup>  
 9234 3307 3  
 1658 320 32<sup>✓</sup>

19.3 + 7

6164<sup>✓</sup> 32<sup>✓</sup>  
<sup>h. m.</sup>  
 19 30 4147 2106 4

19.4 + 7.8

7832 3737 32<sup>✓</sup>  
 8769 2929 2

19.4

9439 3971 3  
<sup>h. m.</sup>  
 19 50 6182<sup>✓</sup> 4<sup>✓</sup>

19.8 + 8.1

7677 320 32<sup>✓</sup>  
 9856 4045 3  
 4225 2126 4

19.8 + 8.0

6805 2556 4

19.8 + 8.1

8846 2924 4



16.8 + 80 16 50 6508 2540 3

16.8 + 80 8720 2941 4

16.8 + 8.3 16,947 3408 3

16.8 12110 3

17.2 17 10 12,954 32

17.2 14,738

17.4 + 80 17 30 8810 2909 3

17.4 + 8.3 8996 2915 3

17.4 + 8.2 9155 2959 3

13497 4613 3

17.8 + 8.5 17 50 8837 2926 4

17.8 12114 32

17.8 12115 3

17.8 12744 3

18.1 + 80 18 10 6575 2541 3

18.1 + 80 6689 2545 3

18.1 + 7.7 8762 2930 4

18.2 + 8.5 9355 2955 3

18.4 + 80 18 30 8814 2920 3

18.4 + 80 9055 2977 3

13577 4563 3

14742

18.7 9913 4654 3

18.8 + 8.3 18 50 8870 2922 3

18.8 9341 2957 3

18.8 13542 4563 3

19.2 19 10 12630 3

19.4 + 80 19 30 8820 2920 5

19.8 19 50 13678 32



Dec. + 7.5°

No. No. No. Ref. to Ref. to  
 P.A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Max. Ident.  
 h. m.

20 10 4127 2105 B 3

20.2 + 7 6149 4

20.4 + 8.2 4201 2127 3

4370 2136 3

20.5 + 7 6303 3

20.7 + 8.1 4247 2131 2

4323 2123 3

6551 2

20.8 + 7 4427 2185 3

6026 3

20.8 + 7 4423 2122 4

6304 3

21.1 + 7 6865 2156 2

21.1 + 8.0 8906 2191 3

21.3 + 7.0 11268 2148 3

21.2 4260 2128 3

4511 2193 3

4710 2117 3

6312 4

21.5 + 7 4282 2129 4

6315 3

21.8 + 7 6377 3

11215 3

22.1 + 7 4098 2110 2

4432 2186 2

4571 2162 4

6563 3

R.A. 22.4 4290 2132 4

22.4 + 6.5 10046 3107 3

6700 1

11286 3

R.A. 22.7 6709 3

4379 2118 3

9254 2967 4

4557 2161 3

22.8 + 8.4 9596 3041 3

4993 2246 3

22.8 + 8.0 6393 2

4209 2101 4

23.1 + 8.2 4252 2130 3

4997 2265 3

23.4 + 7 6544 3

20.1	20 10	9471	2976	32	20.2	20 10	10268	3
		7053	2578	4				
		8876	2921	5				
20.1 + 8.0		9587	3043	3				
20.1 + 7.7		10444	4143	3				
	20 30	7027	2583	4				
20.4 + 8.0		9083	2971	3				
20.5 + 8.0		9591	3043	3				
20.5 + 7.5		10240	-	3				
		11811	4332	4				
		13709	-	3				
20.8 + 8.3	20 50	9088	2971	3	20.1	20 50	14076	46293
20.8 + 8.2		9558	3047	3				
		9842	3117	3				
		8524	2803	3				
		9945	4057	3				
20.8 + 8.0		6920	2672	4				
20.8 + 8.0		6965	2586	3				
21.1 + 8.4	21 10	7188	2636	3	21.1 + 8.0	21 10	9346	2957 32
21.5 + 7.0		7315	2648	3			9592	3043 3
21.5		8477	3807	32	21.2		10712	3
	21 30	7008	2682	3		21 30	9843	3117 3
		7143	2632	3			10195	4098 4
		7236	2639	3			10911	3
21.4 + 8.4		7329	2649	3			14552	
21.5 + 8.0		8937	2914	4	2			
		11255	-	4				
	21 50	6987	2589	3		21 21.4	50	10315 - 20
		7193	2636	3		21.5	13715	3
21.8 + 8.3		7300	2647	4		22.0	13918	32
		7380	2650	4				
21.8 + 7.9		8912	2916	4				
21.8 + 8.0		9878	3124	3				
	22 10	6926	2589	3	22 10	12593		22.2
22.1 + 8.2		7291	2645	3	22.1	11449	4678	3
22.1 + 8.0		8942	2915	4		145314		22.2
22.2 + 8.2		9595	3041	32				
22.2 + 7.0		10293	-	4				
					22.4	10533	4158	
22.4 + 8.2	22 30	6932	2588	3	22 30	10348	-	3
22.5 + 8.0		7124	2631	3		12594	4426	3
		7241	2641	3		13719		3
22.5 + 8.0		7256	2642	2				
22.4 + 6.8		9096	2971	3				
22.5 + 8.2		9560	3047	3				
22.8 + 8.1	22 50	7016	2583	3	22 50	10196	4098	4
		7176	2635	3	22.7	11613	-	3
		7443	2658	3	22.8	12598	4426	4
		7375	2650	3	22.8	13955		4
23.0 + 8.0	23 10	6838	2567	3				
		7197	2637	3				
23.1 + 7.0		9100	2970	3				
23.1 + 8.0		9879	3124	3				
23.2 + 6.3		10047	3107	32				
23.1 + 7.0		10266	4158	3				
23.2		13995	-	32				



Dec. + 7.5°

no.	no.	Ref. to	Ref. to
P. A. Plate	Box Letter	St. Lt.	F. M. & C. F. ch. Stars
23 30	4184	2102	A4

23.4 + 82  
23.4 + 80  
23.4 + 79

6930 2588 3  
7321 2649 3  
9234 2945 4  
23 50 4491 2191 3

4715 2182 4

23.8 + 7

6072 3  
7129 2631 3  
9207 2964 3  
10,048 3107 3j

23.8 + 6.4



234 + 82  
234 + 75

23 30 9984 3207 21  
10545 4187 21  
12199 4367 32  
13061 3  
14706

23.8  
23.8

23 50 12122 3  
14316 46573

Dec. +10°

h m.	no.	no.	no.	Ref. to	Ref. to
	Plate	Box	Letter	St. Lt.	F. M. & C. F. ch.
0 0	268	1166	A4	Star	Meis. Ident

h m  
0 20

h m  
0 40 1635 1648 3  
1939 1690 2

h m  
1 0

h m  
1 20 317 1161 3  
559 1277 A4

h m  
1 40

h m  
2 0 449 1227 2  
467 1225 A4  
1798 1668 3

h m  
2 20

h m  
2 40

h m  
3 0 7021 2583 3

2.0 + 10.6

3.1 + 11.5





Dec. +10°

<sup>no.</sup> <sup>no.</sup> <sup>no.</sup> <sup>Ref to</sup> <sup>Ref to</sup>  
 R.A. Plate Box Letter St. Lt. F. M. & C. F. ch. Stars Meas. Ident.  
<sup>h m</sup> 3 20 442 1227 A 4

<sup>h m</sup>  
 3 40

<sup>h m</sup>  
 4 0 430 1217 3

<sup>h m</sup>  
 4 20 516 1221 2

<sup>h m</sup>  
 4 40 719 1271 5

<sup>h m</sup>  
 5 0 373 1209 4

5.4+10.6

<sup>h m</sup>  
 5 20 611 1273 5

<sup>h m</sup>  
 5 40

<sup>h m</sup>  
 6 0 122 1046 4

170 1152 C2

245 1168 A4

<sup>h m</sup>  
 6 20





















1882plate.jpg, .873F