KG
11365
993

KG11365,993

Corrections for Scale R

Scale 1 correction +0.3

Series reductions in this book as far as page 94 are made with magns. on scale of HC 170.

Underlines entered for MC Plates through page 209, and also entered in Books for Series Plates. F.C. Dec. 2, 1914.

KG 11365-993

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Sc. R

Sept 27, 1913

	H788							H789						
	Sc 1	Sc 2		P.33			Sc 1		Sc 2					
1	8.1 8.4	8.3	8.35	8.5	8.42	07 08			11.1			11.1	11.10	
2	9.1 9.4	9.4	9.40	9.6	9.50	10 10			11.3			11.3	11.30	
3	9.1 9.4	9.6	9.50	9.7	9.60	10 10			11.1			11.1	11.10	
4		10.3		$1\overset{\circ}{1}.2$	10.25	10	:		10.9			11.0	10.95	⊥0
5		10.3		$1\overset{\circ}{1}.2$	10.25	10			9.2			9.3	9.25	01
6		10.1		~~9.4~~ $1\overset{\circ}{1}.1$	10.10	00			9.3			9.5	9.40	⊥1
7		9.3		9.4	9.35	⊥0	8.1	8.4	8.3	8.35	0 1	8.45	8.40	05 05
8		9.4		9.4	9.40	00	8.1	8.4	8.3	8.35	0 1	8.45	8.40	05 05
9		—		–					9.3			9.3	9.30	0 0
10		—							9.3			9.3	9.30	0 0
11		—							9.1			9.15	9.12	02 03
12		—							9.0			9.10	9.05	0 1

Sc R

Sept 24, 1913

	H790 Sc 1	Sc 2	P.34		H791 Sc 1	Sc 2	P.34	
1		9.3	9.3	9.30 00	7.3 7.6		7.7	7.65 0 1
2		9.3	9.3	9.30 00		9.1	9.2	9.15 1 0
3		9.1	9.20	9.15 1 0		9.3	9.3	9.30 0 0
4		9.0	9.00	9.00 00		11.0	10.9	10.95 * 0 1
5		11.2	11.3	11.25 01		11.2	11.1	11.15 0 1
6		11.2	11.3	11.25 01		10.9	10.9	10.90 00
7		10.9	10.8	10.85 10		11.0	11.1	11.05 01
8		11.0	10.8	10.90 11		9.1	9.3	9.20 1 1
9		10.0	?	10.0 $\frac{a}{r}$		9.3	9.3	9.30 00
10		10.1	10.0	10.05 10	8.4 8.7	8.8 8.75	8.9	8.88 13 12
11	8.0 8.3	8.3 8.30	8.30	8.30 00 00	8.2 8.5	8.6 8.55	8.7	8.62 07 08
12	8.1 8.4	8.3 8.35	8.30	8.32 03 02				

Sc R Sept 29, 1913

	H792						H793			
	Sc 2	Sc 1					Sc 1	Sc 2		
1	9.1			9.10	9.10	00	7.2 7.5		7.5	7.50 00
2	9.3			9.3	9.30	00		9.1	9.2	9.15 10
3	9.1			9.05	9.08	02 03		9.0	9.1	9.05 01
4	8.9	8.48.7 8.80	11	9.10	8.95	15	15 :	11.0	11.0	1100 00
5	11.1			11.1	11.10	00		11.1	11.2	11.15 10
6	11.1			11.2	11.15	10		11.0	10.9	10.95 01
7	10.8			10.9	10.85	01		10.9	10.9	10.90 00
8	10.8			10.9	10.85	01		9.7	9.7	9.70 00
9	9.2			9.15	9.18	02 03		10.0	10.0	10.00 00
10	9.2			9.15	9.18	02 03		9.1	9.2	9.15 10
11		7.3 7.6		7.7	7.65	01		9.1	9.3?	9.20? 11

Sc R

Sept 29, 1913

		H794					H795			
	Se1	Se2	P.36			Se1	Se2			
1	-	9.3	9.3	9.30	00	7.3 7.6		7.6	7.60	00
2		9.7	9.7	9.70	00		9.1	9.3	9.20	1̲1
3		9.2	9.1	9.15	01̲		9.3	9.4	9.35	1̲0
4		9.1	9.2	9.15	1̲0		11.0	11.0	11.00	00
5		11.0	11.0	11.00	00		11.2	11.2	11.20	00
6		11.2	11.2	11.20	00		10.9	11.0	10.95	1̲0
7		11.0	11.0	11.00	00		11.0	11.2	11.10	1̲1
8		11.1	11.0	11.05	10		9.3	9.3	9.30	00
9		9.2	9.2	9.20	00		9.5	9.5	9.50	00
10		9.2	9.2	9.20	00		9.5	9.3	9.40	11̲
11	7.3	7.6	7.5	7.55	01̲		9.4	9.5	9.45	01

Sc R

Sept 29, 1913

	H796 Sc1	Sc2	Φ.37		H797 + Sc1	Sc2	Φ.37	
1		9.3	9.3	9.30 00	8.2 8.5		86	8.55 ⊥0
2		9.3	9.3	9.30 00	8.2 8.5		86	8.55 ⊥0
3		9.7	9.7	9.70 00		10.1	10.2	10.15 ⊥0
4		9.7	9.7	9.70 00		10.1	?	10.1 $\overset{a}{=}$ ·
5		11.0	11.0	11.00 00		11.0	11.1	11.05 01
6		11.0	11.0	11.00 00		11.1	11.1	11.10 00
7		10.9	10.8	10.85 10		11.1	11.2	11.15 ⊥0
8		10.9	10.8	10.85 10		11.1	11.2	11.15 ⊥0
9		9.1	9.2	9.15 ⊥0		11.0	11.0	11.00 00
10		9.1	9.3	9.20 ⊥1		11.1	11.0	11.05 10
11	7.3 7.6		7.6	7.60 00		10.1	10.1	10.10 00
12						10.1	10.1	10.10 00

+ Images not specially good

Sc R. Sept 30, 1913

H798: Images poor. Not circular.

	H798	Sc1	H799 Sc2							
1		8.3 8.6	8.7	8.65	01	8.95	8.80	15	15
2			10.1			10.1	10.10	0 0	
3			10.1			9.9	10.00	1 1	
4			10.2			10.1	10.15	0 1	
5			11.1			10.9	10.00	1 1	
6			11.1			11.0	11.05	10	
7			11.9			11.9	11.90	0 0	
8			11.1			11.1?	11.10?	0 0	
9			10.3			10.3	10.30	0 0	
10			10.3			10.2	10.25	10	

Sc R

Sept 29, 1913

	H800 Sc1	H800 Sc2	P.39			H801 Sc1	H801 Sc2	P.39	
1		10.3	10.3	10.30	00	8.2 8.5	8.5 8.50	8.65	8.58 08 07
2		10.3	10.3	10.30	00		10 ~~9~~.2	10.2	10.20 00
3		10.1	10.0	10.05	10		9.0	~~10~~9.1	9.05 01
4		11.1	11.1	11.10	00		11.1	10.9	11.00 11
5		11.0	11.0	11.00	00		11.1	11.0	11.05 10
6		11.7	11.4	11.55	12		11.1	11.0	11.05 10
7		11.0	11.1	11.05	01		11.3	11.3	11.30 00
8		10.3	10.5	10.40	11		11.3	11.3	11.30 00
9		10.2	10.3	10.25	01		11.1	10.9	11.00 11
10	8.3 8.6	8.7 8.65	9.3	8.98	43		11.1	10.9	11.00 11
11	8.3 8.6	8.7 8.65	9.3	8.98	43		11.2	11.0	11.10 11

H801. No.2

wr. unit.

Remeas. Oct. 20, 13.

Sc R

Oct 4, 1913

	H781 Sc1	Sc2		H782 Sc1	Sc2	
1		10.3	10.3 10.30 00		10.9	10.8 10.85 10
2		11.3	11.1 11.20 11		10.9	10.9? 10.90? 00
3		10.1	10.1 10.10 00		11.1	11.1 11.10 00
4		10.1	10.1 10.10 00		11.3	11.3 11.30 00
5	8.3 8.6	8.7 8.65 01	8.85 8.75 10 10	9.0 9.3	9.2 9.25 10	9.2 9.22 03 02
6	8.3 8.6	8.6 8.60 00	8.85 8.72 12 13		9.5	9.3 9.40 1 1
7	7.1 7.4		7.5 7.45 01	8.1 8.4	8.3 8.35 01	8.20 $\overset{8}{9}$28 07 08
8	7.2 7.5		7.5 7.50 00		9.2	9.10 9.15 05 05
9	t.p.		t.p.		9.3	9.3 9.30 0 0
10	t.p.		9.3? 9.3? a			
11	t.p.		9.3? 9.3? . a			

Sc R

Oct 4, 1913

	#785 Sc 1	Sc 2			#986 Sc 1	Sc 2	
1		11.3		11.2 11.25 10		9.3	9.3 9.30 00
2		11.5		11.5 11.50		9.3	9.3 9.30 00
3		10.8		10.9 10.89 01		11.0	11.0 11.00 00
4		10.9		10.9 10.90 : :		11.0	11.0 11.00 00
5		9.4		9.6 9.50 11 :		11.2	11.3 11.25 01
6		9.7		9.9 9.80 11 : : :		11.2	11.5 11.35 21
7	8.1 8.4	8.3	8.35 01	8.20 8.28 07 08 : : .		10.3	10.1 10.30 11
8	8.3 8.6	8.7	8.65 01	8.50 8.58 07 08) :		10.3	10.2 10.25 10
9	8.9 9.2	9.3	9.25 01	9.25 9.25 0	8.1 8.4	8.5 8.45 01	8.50 8.48 03 02
10	8.9 9.2	9.3	9.25 01	9.25 9.25			

Se R

Oct 4, 1913

	#787					#802				
	Se 1	Se 2				Se 1	Se 2			
1		11.1	11.1	11.10			11.1	11.1	11.10	00
2		11.5	11.3	11.40			11.2	11.1	11.15	01
3		11.1	10.9	11.00	11		11.2	11.1	11.15	01
4		11.1	11.0	11.05	10		11.1	?	11.1	a.
5		10.0	9.9	9.95	01		11.2	11.2	11.20	00
6		10.1	10.0	10.05	10		11.1	11.0	11.05	10
7	8.0 8.3	8.3 8.30	8.30	8.30	00		11.1	11.0	11.05	10
8		9.3	9.3	9.30	00		10.1	10.1	10.10	06
9		9.5	9.5	9.50			10.0	10.1	10.05	01
10						8.7 9.0	9.0 9.00	8.9	8.95	05 05

Se R Oct. 8, 1913

	H803	H804 Se1	Se2	8.25		
1	Images too faint?		11.2	11.1	11.15	0 ⊥
2			12.0 ?	11.7?	11.85?	2 ⊥
3			11.3	11.2	11.25	1 0
4			11.3	11.2	11.25	1 0
5			10.2	10.2	10.20	0 0
6			10.3	10.2	10.25	1 0
7		8.8 9.1	9.2 9.15 10	9.05	9.10	05 05
8			11.1	11.1	11.10	0 0
9			11.1	10.9	11.00	1 ⊥

Se R

Oct 8, 1913

	H 806					H 807				
	Se 1	Se 2				Se 1	Se 2	P.24		
1		11.3	11.1	11.20	1 1		11.2	11.2	11.20	0 0
2		11.5	11.3	11.40	1 1		11.1	11.2	11.15	1 0
3		11.3	11.2	11.25	1 0	8.3 8.6	8.7 8.65	8.65	8.65	00 00
4		11.3	11.2	11.25	1 0		10.2	10.1	10.15	0 1
5		~~10.3~~ 10.9	10.8	10.85	1 0		10.2	10.2	10.20	0 0
6		~~10.2~~ 11.0	10.9	~~11.00~~ 10.95	1 1		11.3	11.1	11.20	1 1
7		10.1	10.0	10.05	1 0		11.3	11.3	11.30	0 0
8		10.1 ?	10.0?	10.00?	0 0		11.1	11.1	11.10	0 0
9	8.7 9.0	9.0 9.00	8.95	8.98	02 03		11.1	11.1	11.10	0 0
10		11.2		11.2	a .					
11		11.2		11.2	a .					

SeR

Oct 9, 1913

		H808				H809		
		Se1	Se2		Se1	Se2		
	1	11.3	11.5	11.40 1 1		11.7	11.7	11.70 0 0
	2	11.5	11.7	11.60 1 1		12.0	12.0	12.00 0 0
	3	11.3	11.3	11.30 0 0		11.3	11.2	11.25 1 0
	4	11.3	11.3	11.30 0 0		11.3	11.2	11.25 1 0
	5	10.3	10.3	10.30 0 0		10.3	10.2	10.25 1 0
	6	10.7	10.5	10.60 1 1		10.5	10.3	10.40 1 1
	7	9.1	9.05	9.08 02 03		9.1	9.20	9.15 1 0
	8	11.2	10.9	11.05 2 1		12.3	11.1	11.20 1 1
~~Poor image~~	9	?				Scratched.		

ScR

Oct-10, 1913

H 810

Images too poor

H 811

	Sc1	Sc2			
1		11.1	11.1	11.10	0 0
2		11.3	11.3	11.30	0 0
3		12.0	12.1	12.05	0 1
4		12.1	12.3	12.20	1 1
5		12.0	12.1	12.05	0 1
6		12.0	12.1	12.05	0 1
7		11.0	10.9	10.95	0 1
8		11.1	11.0	11.05	1 0
9	9.0 9.3	9.3 9.30	9.3	9.30	0 0

ScR Oct 10, 1913

	#814 Sc1	Sc2				#815 Sc1		Sc2				
1	8.3 8.6	8.7	8.65	8.95	8.80 15 15	8.3	8.6	8.7	8.65	01	8.55	8.60 05 05
2		10.1		10.1	10.10 00			10.1			10.09	10.05 10
3		10.2?		?	10.2? a.			10.1			10.12	10.10 00
4		11.3		11.3	11.30 00			11.3			11.3	11.30 00
5		11.3		11.3	11.30 00			11.5			11.6	11.55 10
6		11.3		11.2	11.25 10			11.3			11.3	11.30 00
7		11.1		11.2	11.15 10			11.2			11.3	11.25 01
8		10.1		10.2	10.15 10			10.3			10.2	10.25 10
9		10.2		10.3	10.25 01			10.3			10.2	10.25 10

Sc R

Oct 10, 1913

	#816 Sc1	Sc2			#817 Sc1	Sc2	9.20	
1		11.3	11.3	11.30 00		11 ~~12~~.3	11.2	11.25 10
2		11.5	11.3	11.40 1⊥		11 ~~12~~.1	11.3	11.20 ⊥1
3		11.1	11.3	11.20 ⊥1		11 ~~12~~.0	11.1	11.05 01
4		11.1	11.1	11.10 00		11 ~~12~~.0	11.1	11.05 01
5		10.1	10.1	10.10 00		9.9	9.9	9.90 00
6		10.1 ?	10.1	10.10? 00		10.0	10.0	10.00 00
7	8.0 8.3	8.3 8.3	8.40	8.35 05 05	8.1 8.4	8.3 8.35	8.50	8.42 01 08
8		9.7	9.9	9.80 ⊥1		9.9	9.8	9.85 10
9		10.0	10.0	10.00 00		10.0	10.0	10.00 00
10		10.2	10.3	10.25 01		10.2	10.3	10.25 01
11		10.0	10.0	10.00 00		10.0	10.0	10.00 00

SeR

Oct 14, 1913

	#817		#816	
	Se1	Se2	Se1	Se2
1		11.2		11.3
2		11.3		11.3
3		11.1		11.3
4		11.1		11.1
5		9.9		10.1
6		10.0		10.1
7	8.2	8.5	8.1 8.4	8.4 8.40
8		9.8		9.9
9		10.0		10.0
10		10.3		10.3
11		10.0		10.0

Se R

Oct 14, 1913

	#815				#814			
	Se1	Se2			Se1		Se2	
1	8.2 8.5	8.6	8.55	1 0	8.6	8.9	9.0	8.95
2		10.0					10.1	
3		10.1					?	
4		11.3					11.3	
5		11.6					11.3	
6		11.3					11.2	
7		11.3					11.2	
8		10.2					10.2	
9		10.2					10.3	
10		—					—	

Sc R

Oct 15, 1913

#811

	Sc 1	Sc 2
1		11.1
2		11.3
3		12.1
4		12.3
5		12.1
6		12.1
7		10.9
8		11.0
9		9.3

#810

Images too poor

ScR

Oct 15, 1913

				H 809					H 808	
		Sc 1		Sc 2			Sc 1		Sc 2	
	1			11.7					11.5	
	2			12.0					11.7	
	3			11.2					11.3	
	4			11.2					11.3	
	5			10.2					10.3	
	6			10.3					10.5	
	7	8.9	9.2	9.2	9.20	. .	8.7	9.0	9.1	9.05
	8			11.1					10.9	
Im. scratched.	9			—	.				?	Elong.

ScR Oct 15, 1913

	H 807			H 806		
	Sc1	Sc2		Sc1	Sc2	
1		11.2			11.1	
2		11.2			11.3	
3	8.3 8.6	8.7	8.65—		11.2	
4		10.1			11.2	
5		10.2			10.8	
6		11.1			10.9	
✓7		11.3			10.0	
✓8		11.1			10.0?	
9		11.1		8.6 8.9	9.0	8.95 ⊥ 0

Sc R Oct 15, 1913

	H 804			H 803
	Sc 1	Sc 2		
1		11.1		
2		11.7?		Images too poor.
3		11.2		
4		11.2		
5		10.2		
6		10.2		
7	8.9 9.0	9.1	9.05 01	
8		11.1		
9		10.9		

Sel

Oct 15, 1913

	H 802 Se1	H 802 Se2	H787 Se1	H787 Se2
1		11.1		11.1
2		11.1		11.3
3		11.1		10.9
4		?		11.0
5		11.2		9.9
6		11.0		10.0
7		11.0	8.0 8.3	8.3 8.30
8		10.1		9.3
9		10.1		9.5
10	8.6 8.7	8.9 8.90		

ScR Oct 15, 1913

	H 786					H 785				
	Sc 1		Sc 2			Sc 1		Sc 2		
1			9.3					11.2		
2			9.3					11.6		
3			11.0					10.9		
4			11.0					10.9		
5			11.3					9.6		
6			11.5					9.9		
7			10.1			7.9	8.2	8.2	8.20	00
8			10.2			8.1	8.4	8.6	8.50	11
9	8.2	8.5	8.5	8.50	00	8.9	9.2	9.3	9.25	01
10						8.9	9.2	9.3	9.25	01

ScR

Oct 15, 1913 :

	H782					H775					
	Sc1		Sc2			Sc1		Sc2			
1			10.8					10.7			~~10.6~~
2			10.9 ?					11.0			
3			11.1					10.3			
4			11.3					10.1 ?			
5			9.2			8.9	9.2	9.2	9.20		
6			9.3			8.9	9.2	9.2	9.20		
7	7.9	8.2	8.2	8.20	00	8.0	8.3	8.2	8.25	10	
8	8.7	9.0	9.2	9.10	11	7.9	8.2	8.2	8.20	00	
9			9.3					9.6			
10								9.6			

Se R

Oct 15, 1913

	H 774 Se 1	Se 2		H 773 Se 1	Se 2	
1	7.1 7.4				10.1	
2	7.1 7.4				10.1	
3		+.p			10.0	
4		"			10.1	
5		10.7		Poor	?	
6		10.9		Poor	?	
7		10.3			10.7	
8		10.2			11.0 f	0.1
9	9.0 9.3	9.3 9.30			10.3	
10	9.0 9.3	9.3 9.30			10.3	
			Poor	11	?	
			Poor	12	9.3?	
				13 7.3 7.6		
				14 7.3 7.6		

Images poor

SeR Oct 15, 1913

	H 772			H 771		
	Sc 1	Sc 2		Sc 1	Sc 2	
1	7.2 7.5			9.0 9.3	9.3	9.30
2	7.3 7.6			9.0 9.3	9.3	9.30
3		9.7			10.7	
4		9.1			11.0	
5		10.8			10.7	
6		10.7			10.5	
7		10.3		9.0 9.3	9.3	9.30
8		10.3		9.0 9.3	9.3	9.30
9	8.9 9.2	9.3	9.25 .01	8.1 8.4	8.3	8.35
10	8.9 9.2	9.3	9.25 .01	7.9 8.2		
11		10.3				
12		10.7				
13		10.3				
14		10.2				

SeR

Oct 15, 1913

	H 770				H 766			
	Sc 1	Sc 2	See Bk 42:170					See Bk 42:169.
1		11.0			85 8.8	8.9	8.85	
2		10.5			85 8.8	8.9	8.85	
3		10.5		Poor		?		
4		10.5		Poor		?		
5		9.5				12.0		
6		9.5				12.1		
7	80 8.3	8.3	8.30 00			12.0		
8	8.1 8.4	8.3	8.35 0 1			12.1		
9		9.3				10.7		
10		9.3				10.7		
				11		10.7		

ScR

Oct. 15, 1913

	H765			H781		
	Sc 1	Sc 2	See Bk 42:169	Sc 1	Sc 2	
1		9.6			10.3	
2		9.6			11.1	
3		10.4			10.1	
4		10.3			10.1	
5		12.0		8.5 8.8	8.9	8.85 .01
6		12.1		8.5 8.8	8.9	8.85 .01
7		12.0		7.2 7.5		
8		12.0		7.2 7.5		
9		10.7			th ~~9.3~~?	
10		10.7			9.3?	
11		10.6			9.3?	

DeR Oct 15, 1913

	H788 Sc 1	Sc 2		H789 Sc 1	Sc 2
1	8.7		8.5		11.1
2		9.6			11.3
3		9.7			11.1
4		11.2			11.0
5		11.2			9.3
6		11.1			9.5
7		9.4		8.7 8.5	8.4 8.45 10
8		9.4		8.7 8.5	8.4 8.45 10
9		—			9.3
10					9.3
11				8.9 9.2	9.1 9.15 0 1
12				8.9 9.2	9.0 9.10 1 1

Remeas. Oct. 18, '13.
Error of units.

SaR Oct 17, 1913

	H 790					H 791		
	Sc1		Sc2			Sc1	Sc2	
1			9.3			7.4		7.7
2			9.3				9.2	
3	8.9	9.2	9.2	9.20	00		9.3	
4	8.7	9.0	9.0	9.00	00	:	10.9	
5			11.3				11.1	
6			11.3				10.9	
7			10.8				11.1	
8			90.8				9.3	
9			?				9.3	
10			10.0				8.9	
11	8.0	8.3	8.3	8.30	00		8.7	
12	8.6	8.3	8.3	8.30	00			

SeR

Oct 17, 1908

	H792						H793			
	Sc 1		Sc 2			See Page 4	Sc 1		Sc 2	See P. 6.
1	8.8	9.1	9.1 i	9.10	00		7.2	7.5		
2			9.3						9.2	
3	8.7	9.0	9.1	9.05	01				9.1	
4	8.8	9.1	9.1	9.10	00				11.0	i
5			11.1						11.2	
6			11.2						10.9	
7			10.9						10.9	
8			10.9						9.7	
9	8.9	9.2	9.1	9.15	01				10.0	
10	8.9	9.2	9.1	9.15	01				9.2	
11	7.4	7.7							9.3 ?	

SeR

Oct 17, 1913

Page 7

	#794		#795	
	Sc 1	Sc 2	Sc 1	Sc 2
1		9.3	7.3 7.6	
2		9.7		9.3
3		9.1		9.4
4		9.2		11.0
5		11.0		11.2
6		11.2		11.0
7		11.0		11.2
8		11.0		9.3
9		9.2		9.5
10		9.2		9.3
11	7.2 7.5			9.5

Se R

Oct 17, 1913

	H796	H797 Se1	H797 Se2	
1	9.3	8.3 8.6		See Page 8
2	9.3	8.3 8.6		
3	9.7		10.2	
4	9.7		?	
5	11.0		11.1	
6	11.0		11.1	
7	10.8		11.2	
8	10.8		11.2	
9	9.2		11.0	
10	9.3		11.0	
11	7.3 7.6		10.1	
12			10.1	

Sc R

Oct 17, 1913

#798

Images too faint

#799

	Sc 1	Sc 2	
1	8,7 9.0	8,9	8 9 5 0 1
2		10,1	
3		9,9	
4	:	10,1	
5		10,9	
6		11,0	
7		11,9	
8		11,1 ?	
9		10,3	
10		10,2	

Sc R

Oct 17, 1913

	#800 Sc 1	Sc 2		#801			
1		10.3	See P. 10	8.3	8.6	8.7	8.65
2		10.3				10.2	
3		10.0				~~10~~ 9.1	
4		11.1				10.9	
5		11.0				11.0	
6		11.4				11.0	
7		11.1				11.3	
8		10.5				11.3	
9		10.3				10.9	
10		~~8.9~~ 9.3				10.9	
11		~~8.9~~ 9.3				11.0	

wr. unit.

Remeas. Oct. 20, '13.

? ? ? ?

Reject the entire series after 2901. Do not remeasure. L. March 14 '14.

Should be another curve made for MC 2901 & foll. plates. They were measured on another day. Series was divided.

Reduce in usual way for a divided series — later another reduction is to be made

Series 2896 — 2907 Series 51

Sa U Oct 17, 1913 S

2 30 Mc 2896 - Pole.

	Sc 2	Sc 3			Pc				Mc 2901 P.44	Mean.		Diff.	Mc 2901 P.44
5					5.9								7.7
6					6.6								8.5
8					7.9								9.90
9					8.7								
10	4.8				9.0	8.8 9.0	9.00	00	5.3	5.05	23	3.84	
11	5.3				9.5	9.3 9.5	9.50	00	5.7	5.50	22	3.92	
12	5.6				9.9	9.7 9.9	9.90	00	6.0	5.80	22	3.93	
13	6.1								6.5	6.30	22	3.87	
14	6.5								6.9	6.70	22	3.82	
15	6.7								7.2	6.95	32	3.99	
16	7.1								7.5	7.30	22	3.96	
17	7.4								7.8	7.60	22	3.89	
18	7.8								8.3	8.05	23	3.87	
19	8.2								8.7	8.45	23	3.83	
20	8.5								9.05	8.78	32	3.81	
23	9.0	8.9 9.1	9.05	01					9.45	9.25	20 20	3.95	
25	9.4	9.3 9.5	9.45	01					9.90	9.68	23 22	4.05	
26	9.9	9.7 9.9	9.90	00					~~9.90~~	9.90	a .	4.29	not plotted on account of systematic difference between measures on plates.
27	W.S												

8c U   copied S   Oct 17, 1913   copied. S

Mc 2897 – 127 K

	Sc2	Sc3	Curv.	Magn.	Cor. for alt. .20
1	5.3		3.87	9.17	.30
2	5.3		3.87	9.17	.30
3	6.2		3.85	10.05	.18
4	6.6		3.86	10.46	.59
5	7.1		3.87	10.97	11.11
6	7.8		3.88	11.68	.82
7	8.4		3.90	12.30	.44
8	8.7		3.92	12.62	.76
9	9.0	9.05 0.1 8.9 9.1	3.96	13.01	.15
10	9.7	9.70 0.0 9.5 9.7	4.01	13.71	.85
11	~~9.9~~ 9.1	9.95 1.0 ~~9.8 10.0~~	~~4.04~~	~~13.99~~ def.	
12	n.s				
13	"				
14	"				
15	"				

Mc 2898 – 56 K   PC

	Sc2	Sc3	Curv.	Magn.	Cor. for alt. +.22
1	4.6		3.89	8.49	.62
2	4.6		3.89	8.49	.62
3	5.3		3.87	9.17	.30
4	5.6		3.86	9.46	.57
5	6.7		3.86	10.56	.69
6	7.2		3.87	11.07	.21
7	7.5		3.88	11.38	.52
8	8.0		3.89	11.89	12.03
9	9.0	9.05 0.1 8.9 9.1	3.95	13.00	.14
10	9.2	9.25 0.1 9.1 9.3	3.97	13.22	.36
11	9.5	9.50 0.0 9.3 9.5	3.99	13.49	.63
12	9.8	9.75 0.1 9.5 9.7	4.01	13.76	.90
13	9.8	9.85 0.1 9.7 9.9	4.03	13.88	14.02
14	10.0	10.05 0.1 9.9 10.1	4.06	14.11	.25
15	n.s				

Plate does not show faint stars.

Sell Copied. S Oct 17, 1913 ~~Entered.~~ Copied S

Mc 2899 - 80K

	Se 2	Se 3		Cor. for alt. +.13
1	4.7		3.90	.33 9.1 8.10
2	4.3		3.90	.33 8.20
3	4.6		3.89	.62 8.49
4	5.1		3.87	9.10 8.97
5	5.6		3.86	.59 9.46
6	6.0		3.85	.98 9.85
7	6.4		3.86	.39 10.26
8	6.9		3.87	.90 10.77
9	7.7		3.88	.72 11.58
10	7.8		3.88	.82 11.68
11	8.8		3.93	.87 12.73
12	9.4	9.40 0.0 9.2 9.4	3.99	.53 13.39
13	9.5	9.50 0.0 9.3 9.5	3.99	.63 13.49
14	9.7	9.70 0.0 9.5 9.7	4.01	.85 13.71
15	9.9	9.95 1.0 9.8 10.0	4.04	14.13 13.99

Mc 2900 - 129 K

	Se 2	Se 3		Cor. for alt. .72 -.18
1	4.7		3.89	8.59
2	4.7		3.89	.72 8.59
3	5.3		3.87	.30 9.17
4	5.5		3.86	.49 9.36
5	6.1		3.85	10.08 9.95
6	6.6		3.86	.59 10.46
7	6.7		3.86	.69 10.56
8	7.0		3.87	11.01 10.87
9	7.3		8 3.89	8 32 11.19
10	7.7		3.88	.72 11.58
11	8.1		3.89	12.13 11.99
12	8.9		3.94	.98 12.84
13	9.2	9.15 0.1 8.9 9.1	3.97	.26 13.12
14	9.5	9.50 0.0 9.3 9.5	3.99	.63 13.49
15	9.7	9.70 0.0 9.5 9.7	4.01	.85 13.71

Sc u Oct 17, 1913

	MC 2901 Sc 2	Sc 3	Pole PC	θ
5			7.7	
6			8.5	
8			9.9	9.7 9.9 9.90 00
9			f	
10	5.3			
11	5.7			
12	6.0			
13	6.5			
14	6.9			
15	7.2			
16	7.5			
17	7.8			
18	8.3			
19	8.7			
20	9.0	8.9 9.1 9.05 01		
23	9.4	9.3 9.5 9.45 01		
25	9.9	9.7 9.9 9.90 00		
26	f			
27	n.s			

Prismatic companions faint.

Series 2896 – 2907   Series 51 (cont.)

Scale	Mc 2901				Pc	Mc 2907 Pole P.49	P.49
5					7.7		7.9
6					8.4		9.1
8					9.7 9.5		
9					F		
10	5.7		3.87	9.07		5.8	
11	5.6		3.86	9.46		6.1	
12	6.0		3.85	9.85		6.5	
13	6.4		3.86	10.26		7.0	
14	6.8		3.87	10.67		7.4	
15	7.1		3.87	10.97		7.8	
16	7.5		3.88	11.38		8.2	
17	7.7		3.88	11.58		8.5	
18	8.2		3.89	12.09		9.0	
19	8.5		3.90	12.40		9.3	
20	8.8		3.93	12.73		9.7	
23	9.3	9.40 1.1 9.3 9.5	3.99	13.39			
25	9.7	9.70 0.0 9.5 9.7	4.01	13.71			

Sc U

copied S

Oct 20, 1913

copied. S

MC 2902 (No 130 Y 12^h 46 + 6)

				Corr. for alt +.12	OC	
a	Off Pl.					
b	4.7		3.90	8.10	9.1	9.0
c	4.0		·	·	9.1	9.1
d	4.3		3.90	8.20	9.5	9.3
e	4.3		3.90	8.20		
f	4.6		3.89	8.49		
g	4.9		3.88	8.78		
h	5.3		3.87	9.17		
k	5.3		3.87	9.17 a		
l	6.1		3.85	9.95		
m	5.7		3.86	9.56		
n	6.3		3.86	10.16		
o	6.6		3.86	10.46		
p	7.0		3.87	10.87		
q	7.4		3.88	11.28		
r	8.0		3.88	11.88		
s	8.2		3.89	12.09		
t	8.5		3.90	12.40		
u	8.9		3.94	12.84		
w	9.3	9.300.0 9.1 9.3	3.97	13.27		

Sonfon for C.

MC 2903 32 Kx

		Corr. for alt	Pe
1	3.0	· +.22	8.3
2	3.6	·	9.0
3	4.3	3.90 8.20	9.5
4	4.6	3.89	8.49
5	5.7	3.86	9.56
6	6.1	3.85	9.95
7	6.3	3.86	10.16
8	6.7	3.86	10.56
9	6.4	3.86	10.26
10	7.3	3.88	11.18
11	7.5	3.88	11.38
12	8.2	3.89	12.09
13	8.5	3.90	12.40
14	8.7	3.92	12.62
15	8.8	3.93	12.73

Scale copied. S | Oct 20, 1913 copied. S

Mc 2904		57 K Corr. for alt. +23		Mc 2905		Corr. for alt. +17	81 K
1	4.9	3.88	8.78	1	3.9	·	pe 91
2	5.3	3.87	$9.1\overset{7}{2}$	2	4.6	3.89	8.49
3	5.7	3.86	9.56	3	6.4	3.86	10.26
4	6.3	3.86	10.16	4	7.2	3.87	11.07
5	6.3	3.86	10.16	5	7.7	3.88	11.58
6	7.0	3.87	10.87	6	7.7	3.88	11.58
7	7.5	3.88	11.38	7	8.4	3.89	11.99
8	8.1	3.89	11.99	8	8.4	3.90	12.30
9	8.3	3.89	12.19	9	8.5	3.90	12.40
10	8.5	3.90	12.40	10	8.7	3.92	12.62
11	8.7	3.92	12.62	11	9.1	3.95	* 13.05
12	9.3	3.97	13.27	12	9.3	3.97	* 13.27
13	9.5	3.99	13.49	13	9.7	4.01	13.71
14	9.8	4.03	13.83	14	9.9	4.03	* 13.93
15	f		f	~~15~~			

* Nos. 11, 12 + 14 apparently defects.
Reject H. S. L. Jan. 24, 1914

Se U copied S Oct 20, 1913

MC 2906 14 K

Corr. for alt. +.20

1	6.3	3.86	10.16
2	6.8	3.86	10.66
3	7.0	3.87	10.87
4	7.3	3.88	11.18
5	7.5	3.88	11.38
6	8.2	3.89	12.09
7	8.5	3.90	12.40
8	8.9	3.94	12.84
9	9.1	3.96	13.06
10	9.5	4.00	13.50
11	9.8	4.02	13.82
12	9.9	4.03	13.93
13	n.s.		
14			
15			

Plate does not show fl- stars.

Se U Oct 20, 1913

Mc 2907 Pole.

5	~~5~~	7.9
6		9.1
8		
9		
10	5.8	
11	6.1	
12	6.5	
·13	7.0	
14	7.4	
15	7.8	
16	8.2	
17	8.5	
18	9.0	
19	9.3	
20	9.7	
23	ns?	

Plate does not show H stars in Seq.

ScR

Oct-22, 1913

		H 762		H 764	
		Sc 1	Sc 2	Sc 1	Sc 2
	1		10.3		12.1
	2		10.3		12.2
	3		10.2		12.0
	4		10.2		11.9
	5	8.8	9.1		11.1
	6	8.8	9.1		11.1
	7	7.3			10.0
	8	7.2			10.0
	9	8.7	9.1		10.9
B[illegible]	10		9.2?		11.0
	11	8.7	9.1		11.0
B[illegible]	12		9.2?		11.3

1913phaet.proj..994L

Series 99.

Scale U.

Oct 4 27, 1913

9:55 Mc 3569 Pole

S

S

PC.

								Mean.	Diff.
5			P.54	Mean	Diff.	sup.	6.2	6.21 a -	+0.19
6			Mc			6.9	6.21 6.8	6.85 10	+0.13
8			3574.			7.9	6.8 7.9	7.90 00	+0.20
9						8.5	7.9 8.4	8.45 10	0.25
10	4.7		4.8	4.75 1 0	4.14	8.7 Sc.3	8.4 sup.	8.7 a ·	0.19
11	5.3		5.3	5.30 00	4.12	9.1 8.9 9.1 9.10 00	9.25	9.18 08 07	0.24
12	5.6		5.4	5.50 11	4.23	9.4 9.1 9.3 9.35 01	9.65	9.50 15 15	0.23
13	6.0		6.0	6.00 00	4.17	9.9 9.5 9.7 9.80 11	·	9.80 a ·	0.37
14	6.4		6.5	6.45 01	4.07	n.s.			
15	6.7		6.7	6.70 00	4.24				
16	7.1		6.9	7.00 11	4.26				
17	7.3		7.3	7.30 00	4.19				
18	7.8		7.7	7.75 01	4.17				
19	8.0		7.9	7.95 01	4.33				
20	8.3		8.3	8.30 00	4.29				
23	8.7	Sc 3	8.8	8.75 10	4.45				
25	9.0	8.9 9.1 9.05 01	9.05	9.05 00 00	4.68				
26	9.5	9.3 9.5 9.50 00	9.50	9.50 00 00	4.69				
27	9.9	9.7 9.9 9.90 00	·	9.90 a ·	4.65				

Mc 3579 Pole Rejected See note in journal.

M.O.R.

Series 99

Scale U- copied S · October 24, 1913. S copied.

Mc 3570 133 K

Corr. for Alt. −.19

	ec.							
1	4.3	4.17	8.47	.60	8.9			
2	5.3	4.16	9.46	.59	9.5 9.2 9.4 9.45 1.0			
3	5.4	4.16	9.56	.69	9.1 9.5 9.7 9.70 0.0			
4	5.4	4.16	9.56	.69	9.8 9.7 9.9 9.85 0.1			
5	6.2	4.18	10.38	.51	P.C.			
6	6.7	4.20	10.90	11.04	1. 7.9	0.20	8.10	.23
7	6.8	4.20	11.00	.14	2. 9.45	0.29	9.74	.87
8	6.9	4.21	11.11	.25	3. 9.70	0.31	10.01	14
9	7.3	4.24	11.54	.68	4. 9.85	0.33	10.18	31
10	7.7	4.28	11.98	12.12				
11	8.0	4.31	12.31	.45				
12	8.3	4.38	12.68	.82				
13	8.4	4.40	12.80	.94				
14	9.1 9.0 9.2 9.15 1.0 (Sc3)	4.57	13.72	.86				
15	~~7.5~~ 8.9 8.5 8.7 8.80 1.1 (Sc2)	4.49	13.29	.43				
(16 added on this pl.) 16	9.5 9.3 9.5 9.50 0.0 (Sc.3)	4.66	14.16	.30				

Mc 3571 134 K

Corr. for alt. −.18

1	4.1	4.17	8.27	.40	7.8	0.20	8.00	13
2	4.6	4.16	8.76	.89	8.6	0.23	8.83	96
3	5.0	4.16	9.16	.29	9.0 9.0 9.10 1	0.26	9.36	39
4	5.0	4.16	9.16	.29	~~9~~ 8.7	0.31 0.24	8.94 10.04	14
5	5.3	4.16	9.46	.59	m.s.			
6	5.9	4.17	10.07	.20	P.C's remeas. by Sd.			
7	5.9	4.17	10.07	.20	1 7.4			
8	6.7 6.6 6.65 1.0	4.20	10.85	.99	2 8.3			
9	6.2 6.2 6.20 0.0	4.18	10.38	.51	3 8.9			
10	6.7	4.20	10.90	11.04	4 9.5			
11	~~8~~ 7.6	4.28	11.88	12.02	all elongated.			
12	8.7 7.4 7.7 7.55 2.1	4.26	11.81	.95				
13	8.0	4.31	12.31	.45				
14	8.7	4.47	13.17	.31				
15	8.7	4.47	13.17	.31				
16	9.0 8.9 9.1 9.05 0.1 (Sc3)	4.54	13.59	.73				
17	9.3 9.1 9.3 9.30 0.0	4.61	13.91	14.05				

Assume mistake of a unit for No. 4
H.S.L. May 16, 1918.

Images on this plate are slightly elongated. Not in centre of plate.

Images very poor and ecg. not in centre.

M.OR.

Series 99

Scale U   copied   S   October 24, 1913   copied S

Mc 35 7 2   11 0 R.

Cov. for alt. +.06

1	5.4	4.16	9. 9.56	.69	9.30 ⋅⋅ 9.3 9.19 3	0.28	9.58	71
2	5.35 1 0 5.3 5 4	4.16	9.51	.64	98 0 11 9.7 9.7 9 9	0.32	10.12	.25
3	6.2	4.18	10.38	.51				
4	6.3	4.18	10.48	.61				
5	7.0	4.21	11.21	.35				
6	7.3	4.24	11.54	.68				
7	8.0	4.31	12.31	.45				
8	8.3	4.38	12.68	82				
9	8.7	4.47	13.17	.31				
10	8.9	4.50	13.40	.54				
11	sc 3 9.3 9.1 9 3 9.30 00 →	4.61	13.91	14.05				
12	9.5 9 3 9 5 9.50 00	4.66	14.16	.30				
13	9.7 9.5 9 7 9.70 00	4.72	14.41	.55				
14	9.7 9.5 9 7 9.70 00	4.71	14.41	.55				
15	sc 2 9.7 9.9 9.8 10.0 9.87 ±01	4.76	14.63	.77				

Mc 35 7 3   1 K. s?   (18h 56m − 0.6)

Cov. for alt. +.05

1	4.1	4.17	8.27	.40	7.3	0.19	7.49	62
2	5.1	4.16	9.26	.39	8.9	0.25	9.15	28
3	6.0	4.17	10.17	.30	~~9.2 7.~~ f.			
4	6.2	4.18	10.38	.51	n.s.			
5	6.4	4.19	10.59	.72				
6	7.2	4.23	11.43	.57				
7	7.3	4.24	11.54	.68				
8	7.3	4.24	11.54	.68				
9	7.9	4.30	12.20	.34				
10	8.7	4.46	13.16	.30				
11	9.0 8.8 9.0 9.00 00	4.53	13.53	.67				
12	9.1 8.9 9.1 9.10 00	4.56	13.66	80				
13	9.5 9.2 9.4 9.45 10	4.66	14.11	.25				
*14	(9.8 9.7) reject. See note below.							
15	10.0 9.8 10.0 10.00 00	4.80	14.80	.94				

* Star 14 probably a defect. New star 14 selected. Oct 31, 1913. H.S.L.

M.O.R

Series 99.

Scale u

October 24, 1913. S copied.

	Mc 3574	Pole P.C.	Mc 3575-63 K		Corr. for alt. +.22	Rc 3
5		6.2	1 4.9	4.16	9.06 .19	9.1 9.0 9.2 9.15 1.0 ~~4.54~~ 0.27 9.42 .55 *
6		6.8	2 5.0	4.16	9.16 .29	9.0 8.9 9.1 9.05 .01 0.26 9.31 .44 *
8		7.9	3 5.3	4.16	9.46 .59	9.5 9.3 9.5 9.50 .00 0.30 9.80 .93
9		8.4	4 5.7	4.17	9.87 10.00	9.8 9.5 9.7 9.75 .01 0.32 10.07 .20
10	4.8	sup.	5 6.1	4.18	10.28 .41	
11	5.3	9.2 9.1 9.3 9.25 .01	6 6.3	4.18	10.48 .61	
12	5.4	9.7 9.4 9.6 9.65 .10	7 6.5	4.19	10.69 .82	
13	6.0	~~7~~ n.s.	8 6.8	4.20	11.00 .14	
14	6.5		9 7.4	4.25	11.65 .79	
15	6.7		10 7.6	4.28	~~11.88~~ 12.02	
16	6.9		11 8.1	4.34	12.44 .58	
17	7.3		12 8.3	4.38	12.68 .82	
18	7.7		13 8.5	4.42	~~12.92~~ 13.06	
19	7.9		14 9.0 8.8 9.0 9.00 .00	4.53	13.53 .67	
20	8.3		15 9.9 9.8 10.0 9.95 .10	4.79	14.74 .88	
23	8.8					
25	9.0 8.9 9.1 9.05 .01					
26	9.5 9.3 9.5 9.50 .00					
27	ns.					

* MC3575. Reject Stars 1 and 2 p.c. Probably the wrong images were measured. Faint star images were prismatic companions might easily have been mistaken for the latter, which are much too bright for the above measures. P.C. of Star 1 is between Stars 11 and 12. P.C. of star 2 about equal to star 12.

M.O.R.

copied magn. but not P.C. magn. Dec. 20, 1913.

Series 99.

copied

P.C. magn. not copied – discordant.

Scale U

S October 24, 1913. S.

Mc 3576 C10 19+15

Corr. for Alt. +.17

					P.C.	Curve		
1	3.3	4.20 ε	7.50	.63	6.3	0.18	6.48	.58
2	4.0	4.17 ε	8.17	.30	7.1	0.18	7.28	.41
3	.				7.1	0.18	7.28	.41
4	.				7.3	0.18	7.48	.61
5	.				8.1 8.2 8.15	0.21	8.36	49
6	.				double .	.	.	
7	4.1	4.17	8.27	.40	7.7	0.19	7.89	8.02
8	~~6.0~~ 5	4.16	9.16	.29	Sup.	.	.	
9	5.2	4.16	9.36	.49	9.1 8.8 9.05 9.0 SC 3	0.26	9.31	44
10	5.4	4.16	9.56	.69	9.2 9.0 9.20 9.2	0.27	9.47	60
11	5.9	4.17	10.07	20				
12	6.1	4.17	10.27	.40				
13	6.3	4.18	10.48	61				
14	6.4	4.19	10.59	72				
15	6.5	4.19	10.69	.82				
16	7.1	4.23	11.33	.47				
17	7.3	4.24	11.54	.68				
18	7.6	4.28	~~11.88~~	12.02				
19	8.1	4.34	12.44	.58				
20	8.3	4.38	12.68	.82				
21	8.7	4.47	13.17	.31				
22	9.0 8.9 9.1 9.05 .01	4.54	13.59	.73				
23	9.2 9.0 9.2 9.20 .00	4.59	13.79	93				
24	9.8 9.5 9.7 9.75 .1	4.72	14.47	61				
25	9.8 9.7 9.9 9.85 .1	4.76	14.61	75				
26	f.							

Mc 3577 6 KS.

Corr. for Alt. +.18

		Curve				Curve	Magn.	
1	4.0	4.17	8.17	.30	7.2	0.18	7.38	.51
2	5.3	4.17	9.47	.60	8.9	0.25	9.15	.28
3	5.9	4.17	10.07	20	9.8 9.7 9.9 9.85 .1	0.33	10.18	.31
4	6.1	4.17	10.27	40				
5	6.5	4.19	10.69	.82				
6	7.1	4.22	11.32	46				
7	7.1	4.22	11.32	.46				
8	7.7	4.28	~~11.98~~	12.12				
9	7.8	4.30	12.10	.24				
10	8.2	4.36	12.56	.70				
11	8.8	4.48	13.28	.42				
12	9.2 9.1 9.3 9.25 .01	4.60	13.85	.99				
13	9.7 9.5 9.7 9.70 .00	4.71	14.41	.55				
14	9.5 9.4 9.6 9.55 .10	4.68	14.23	.37				
15	9.6 9.5 9.7 9.65 .01	4.70	14.35	.49				

.55 7.42

.44 7.31

.93 9.80

20 .07 10.17

too far from centre (3, 4)

double f. (6)

Region not in centre of pl.

M.O.R.

copied.

Series 99.

Scale II. S October 24, 1913.

MC 3578 111K

Cor. for alt. +.06

		Curve	Magn.	Sc.3	Curve	Magn.
1	4.2	4.17	8.37 .60	7.8	0.18	7.~~48~~ .61
2	5.3	4.16	9.~~47~~ .6 59	9.2 9.15 9.8 9.1	0.26	9.~~41~~ .64
3	~~6.3~~ 6.1	4.17	10.~~27~~ 40	n.s.		
4	6.3	4.18	10.~~48~~ .61			
5	6.3	4.18	10.~~48~~ 61			
6	7.2 7.15 7.1	4.22	11.~~37~~ .51			
7	6.8 6.85 6.9	4.~~31~~ 2	11.~~46~~ 0 20			
8	7.5	4.27	11.~~77~~ 12.01			
9	8.0	4.32	12.~~32~~ .46			
10	8.4	4.40	12.~~80~~ .94			
11	8.9	4.50	13.~~40~~ 54			
12	9.1 9.10 8.9 9.1	4.56	13.~~66~~ .80			
13	9.1 9.15 9.0 9.2	4.57	13.~~72~~ 86			
14	9.5 9.50 9.3 9.5	4.66	14.~~46~~ 60			
15	9.8 9.75 9.5 9.7	4.73	14.~~48~~ 62			

11:30.

Nov. 4 - 1913 Series 103.

S S

Scale U

3:05 Mc 3602 Pole

										P.61	Mean	Diff.
5				Mc 3601?			6.0			6.1	6.05 01	+0.34
6				P.61			6.5			6.4	6.45 10	0.53
8							7.5			7.5	7.50 00	0.60
9					Mean	Diff.	8.0			8.1	8.05 01	+ 0.65
10	4.7			4.6	4.65 10	+ 4.24	8.2			8.2	8.20 00	0.~~7~~69
11	5.2			4.7	4.95 23	+ 4.47	8.5			8.7	8.60 11	+ 0.82
12	5.5			5.2	5.35 12	+ 4.38	8.8			9.0	8.90 11	0.83
13	5.8			5.6	5.70 11	4.47	9.2	RC3 9.0 9.2	9.20 00	9.30	9.25 05 05	0.92
14	6.0			5.7	5.85 21	4.67	9.5	9.3 9.5	9.50 00	9.60	9.55 05 05	0.97
15	6.3			6.0	6.15 12	~~5~~4.79	9.7	9.8 10.0	9.85 10	10.05	9.95 10 10	0.99
16	6.7			6.3	6.50 22	4.76						
17	6.9			6.5	6.70 22	4.79						
18	7.3			6.9	7.10 22	4.82						
19	7.7			7.2	7.45 32	4.83						
20	7.9			7.5	7.70 22	4.89						
23	8.2			8.1	8.15 ~~10~~ 01	5.05						
25	8.7			8.9	8.80	4.93						
26	9.1	RC 3 8.9 9.1	9.10 00	9.15	9.12 02 03	5.07						
27	9.4	9.3 9.5	9.45 01	9.50	9.48 03 02	5.07						
28	9.7	9.7 9.9	9.90 00	9.90	9.90 00 00	5.07						
29	1.											

1 2
5 5
+.02 +.04

40 40
5 5
−.08 +.08

30 60
10 10
−.03 +.06

7 7
5 5
+.14 −.14

copied.

12 12
6 6
+.20 −.20

−15 05
5 5
−.03 +.01

all 175 185
16 16
+.11 −.12

MOR

Series 103.

Scale U.

copied November 4, 1913.

Mc 36014 S

Corr. for Alt. +.22

			Sc. Readings	Magn.
1	4.1			
2	4.1			
3	4.3			
4	5.2		4.42	.75 9.62
5	5.6		4.53	.26 10.13
6	6.0		4.62	.75 10.62
7	6.2		4.67	11.00 10.87
8	6.5		4.73	.37 11.23
9	7.3		4.86	30 12.16
10	7.7		4.91	75 12.61
11	8.1		4.96	.20 13.06
12	8.5		4.99	.63 13.49
13	8.9		5.01	14.05 13.91
14	9.5	3C.3 9.4 9.6 9.55 1.0	5.03	.72 14.68
15	9.9	9.8 96 9.8 985 1.0	5.04	15.03 14.89

11 Ks S

P.C.		Sc. Readings.	Magn.
7.1		0.54	77 7.64
7.3 :		0.57	8.00 7.87
7.7		0.63	.46 8.33
8.7		0.80	.63 9.50
9.5	SC.3 9.1 9.3 9.40 1.1	0.95	.48 10.35
~~[illegible]~~ 10.0	9.8 10.0 10.00 0.0		

M.O.R.

Series 103.

Scale U. Copied. S November 4, 1913. S

MC 3605 18 K

Corr. for Alt. +.20

			Sc. Readings	Magn.
1	4.7		4.30	13 9.00
2	4.9		4.35	38 9.25
3	5.4		4.47	10.00 9.87
4	6.1		4.55	78 10.65
5	6.3		4.59	11.03 10.89
6	7.0		4.82	96 11.82
7	6.9		4.80	84 11.70
8	7.2		4.84	18 12.04
9	7.7		4.91	75 12.61
10	8.0		4.95	13.09 12.95
11	8.7		5.00	84 13.70
12	8.9		5.01	14.05 13.91
13	9.1	sc.3 8.9 9.1 9.10 0 0	5.02	26 14.12
14	9.3	9.1 9.3 9.30 0 0	5.03	47 14.33
15	9.8	9.7 9.9 9.85 0 1	5.04	15.03 14.89

P.C.

		Sc. Readings	Magn.
8.3		0.73	16 9.03
8.5		0.77	40 9.27
9.3	sc.3 8.9 9.1 9.20 1 1	0.90	23 10.10
n.S.			

M.O.R.

Series 103

Scale M copied November 4, 1913.

Mc 3606 S 9ₒ K S

Corr. for Alt +.17

			Sc. Readings	Magn.
1	4.1			
2	4.1			
3	4.7		4.30	9.00 .13
4	5.0		4.37	9.37 .50
5	5.5		4.50	10.00 .13
6	6.4		4.72	11.12 .26
7	6.7		4.77	11.47 .61
8	$\overset{7}{8.0}$		4.82	11.82 .96
9	7.2		4.84	12.04 18
10	7.8		4.93	12.73 .87
11	8.1		4.96	13.06 .20
12	8.3		4.97	$\overset{7}{13.20}$ .44
13	8.5		4.99	13.49 .63
14	9.2	Sc. 3 8.9 9.1 9.15 0.1	5.02	14.17 .31
15	9.7	9.5 9.7 9.70 0.0	5.04	14.74 .88

one unit.

P.C.

		Sc. Readings	Magn.
7.3		0.57	7.87 8.00
7.4:		0.58	7.98 8.11
8.2		0.72	8.92 9.05
8.8		0.82	9.62 .75
9.8	Sc. 3 9.5 9.7 9.75 0.1		

M.O.R.

Series 103.

Scale U

November 4, 1913.

See P. 57 for reduction.

	Mc 3607	Pole.
		P.C.
5		6.1
6		6.4
8		7.5
9		8.1
10	4.6	8.2
11	4.7	8.7
12	5.2	9.0
13	5.6	9.3 sc.3 9.1 9.3 9.30 00
14	~~6.5~~ 5.7	9.7 9.3 9.5 9.60 11
15	6.90	~~9~~ 10.0 9.9 10.1 10.05 01
16	6.3	
17	6.5	
18	6.9	
19	7.2	
20	7.5	
23	8.1	
25	~~9.0~~ 8.9	
26	9.1 sc.3 9.0 9.2 9.15 10	
27	9.5 9.3 9.5 9.50 00	
28	9.9 9.7 9.9 9.90 00	

M.O.R.

3
~~4~~:50

Measures for Color Index.

Scale M.

November 8, 1913.

~~8.45~~ 9:02 | Mc 4232 | Iso | Screen M.

P.C.

		sc.1	Diff.	curve		Magn.	White Stars Mc-Ptm	sc.2		curve	Magn.	White Stars Mc-Ptm
	5	B.	.					5.4	+1.08	+1.19	6.59	11
	6	B.	.					6.1	:0.98	0.89	6.99	09
	7	1.3 1.5	+5.89	6.09	72	7.59	20	6.9	0.49	0.60	7.50	11
	8	1.7 1.9	−	6.04	8.07	7.94	.	7.3	.	0.50	7.80	
	9	2.3 2.5	6.41	5.99	.62	8.49	12	8.3	0.31	0.31	8.61	00
	10	2.9 3.1	5.84	5.92	.15	9.02		8.5	0.44	0.28	8.78	
	11	3.2 3.4	5.90	5.88	.41	9.28		~~8.1~~ 9.1	0.20	0.18	9.28	
	12	3.6 3.8	5.74	5.84	.77	9.64		9.0 n.s.				
	13	4.1 4.3	5.95	5.78	.21	10.08		n.s.				
	14	4.5 4.7	5.74	5.71	.54	10.41						
	15	5.1 5.3	5.48	5.54	.97	10.84						
	16	5.4 5.6	5.47	5.41	.15	11.01						
	17	5.9 6.0 5.7 5.8 5.95 ±.10	5.23	5.28	.37	11.23						
	18	7.2 7.0 7.0 6.8 7.10 ±.12	4.83	4.92	.16	12.02						
		sc.2										
	19	7.3	4.92	4.87	.31	12.47						
see next page	20	8.0	4.65	4.76	.90	12.76						
		sc.1										
+87°	12	1.4 1.6		6.08	.81	7.68		7.1		0.54	7.64	
	15	1.7 1.9	5.94	6.04	8.07	7.94	10	7.4	0.44	0.48	7.88	04
+88	2	1.6 1.8		6.04	.97	7.84		7.3		0.50	7.80	
	80	2.4 2.6	6.32	5.98	.71	8.58	34	8.6	0.32	0.25	8.85	07
	86	2.3 2.5	6.28	5.99	.62	8.49	29	8.5	0.28	0.28	8.78	00
	90	2.7 2.9		5.94	.97	8.84		8.8		0.22	9.02	
	105	2.1 2.3		6.00	.43	8.30		7.9		0.38	8.28	
	115	2.8 3.0	5.88	5.92	9.05	8.92	04	8.8	0.08	0.22	9.02	14
							−75	sc.1				+40
near edge	1 r	.					+34	3.8 4.0				−16
							6) −41					8) +24
							−.07					+.03

M.O.R.

Measures for Color Index.

Scale M. November 8, 1913

Mc 4232 cont.

					Red Stars. Mc. Ptm.	P.C.	curve	Magn.	Red stars. P.C. Mc-Ptm.
2r	B.		~~6.0~~ Magn.			5.3	+1.23	6.53	02
3r	13 15		6.09	7.59	05	6.8	0.63	7.43	21
4r	20 22		6.01	8.21	00	7.4	0.48	7.88	33
5r	26 28		5.95	8.75	08	8.0	0.36	8.36	31
6r	31 33		5.90	9.20		8.9	0.21	9.11	
7r	37 39		5.83	9.73		n.s.			
8r	44 46		5.72	10.32					
9r	53 55		5.46	10.96					
10r	~~7.2~~	7.2	4.89	12.09					
11r		7.2	4.89	12.09					
12r		8.0	4.76	12.76					
4a	33 35		87 5.90	37 9.40		9.3	0.14	9.44	
5a	39 41		5.80	9.90		n.s.			
6a	47 49		5.68	10.58					
9a	~~9~~	9.4	Diff. ~~+4.84~~	~~4.68~~					
23		8.5	+4.84	4.68	13.18				
25	~~9.0~~	9.0							
26		9.5							
27		n.s.							
+87° 12			7.68		50			7.64	54
+88 2			7.84		26			7.80	30
90			8.84		13			9.02	05
105			8.30		10			8.28	08
					-.94 +18 7) -.76 -.11				-1.71 +13 8) -1.58 -.20

M.O.R.

Measures for Color Index.

Scale M. November 8, 1913.

		Mc 4229			Iso, Screen I.							P.C.
		pc.1 : pc.2		Diff.				P.C.				Mc - Ptm.
Mc - Ptm.	5	~~43~~ t.p.		.		Curve Magn.		~~6.0~~ 7.2	-0.72	-0.71	6.49	01
White Stars.	6	t.p.		.				~~5.8~~ 8.7	-1.32	-1.29	7.11	03
.	7	t.p.		.				8.9	: -1.51	-1.53	7.37	02
.	8	4.8 5.0		.		3.04	8.04					+04
18	9	5.5 5.7		2 ~~3.41~~	2.91	2.73	8.43					-02 3) +02
	10	6.2 6.4		2.14 ~~3.44~~	2.54	2.41	8.81					+.01
	11	7.2 7.4		2.10	1.90	2.04	9.44					
	12		7.5	2.04		2.01	9.51					
	13		8.2	2.05		1.80	10.00					
	14		9.0	1.44		1.53	10.53					
	15		~~8.2~~ 9.5	1.28		1.39	10.89					
	16		F	.								
	17											
	18											
	19											
	20											

	+87	12	4.1 4.3	~~3.14~~			
14 ~~14~~		15	4.7 4.9	~~3.14~~	2.94	3.08	7.98
	+88	2	4.3 4.5			.	
00		80	6.4 6.6	~~2.52~~	2.32	2.32	8.92
01		86	6.1 6.3	2.68	2.48	2.47	8.77
		90	6.3 6.5			2.38	8.88
		105	5.0 5.2			2.94	8.14
04		115	6.4 6.6	~~2.48~~	2.28	2.32	8.92

+18
-19 * 5) -01
-.00

M.O.R.

cont on next page. Dark day-light-pro

Measures for Color Index.

Scale M. November 8, 1913.

Mc 4229 cont. (Iso. Screen Q)

	sc.1	sc.2	curve	Magn.	Red Stars. Mc-Ptm.	P.C.			B.C. Mc-Ptm.
1r					.	6.1 7	.		
2r	2.8	3.0	.		.	7.3	-0.76	6.54	01
3r	3.3	3.5	.		.				
4r	4.7	4.9	3.08	7.98	23				
5r	5.4	5.6	2.78	8.38	29				
6r	6.3	6.5	2.38	8.88					
7r	7.2	7.4	2.04	9.44					
8r		8.5	1.70	10.20					
9r		9.0	1.53	10.53					
10r									
11r									
12r									
4s	7	7.4	2.04	9.44					
5s	~~4.5~~	7.5	2.01	9.51					
6s	.	8.5	1.70	10.20					
9s		~~8.7~~ .							
+87 12				.	.				
+88 2				.	.				
+88 90				8.88	09				
105				8.14	06				

4) -.67

-.17

M.O.R.

Measures for Color Index

Sc M Nov 8, 1910

MC 4230 (Ipo. Screen M)

	Sc1	Sc2	Diff	curve	mag	MC-Ptm		Diff	curve	
5'	2.1	2.3	+4.18	+4.18	6.48	~~6.4~~ 00	7.3	−0.82	−0.82^{3}	6.78
6	2.8	3.0	4.08	4.08	7.08	00	8.5	−1.42	−1.43	7.07
7	3.1	3.3	4.09	4.02	7.32	07				
8	4.3	4.5		3.68	8.18	-				
9	5.1	5.3	3.31	3.41	8.71	10				
10	5.2	5.4	3.54	3.38	8.78					
11	6.1	6.3	3.00	2.89	9.19					
12	6.9	7.1	2.44	2.45	9.55					
13		8.0	2.25	2.25	10.25					
14		8.2	2.24	2.28^{3}	10.43					
15		8.5	2.28	2.22	10.72					
16		8.9	2.17	2.21	11.12					
17		9.1								
18		f								

+88 80	6.2	6.4	~~2.52~~	2.83	9.23	31
86	5.3	5.5	3.28	3.34	8.84	06
90	5.9	6.1		3.01	9.11	
105	4.1	4.3		3.74	8.04	
2	4.1	4.3		3.74	8.04	
87 12	3.3^{4}	3.9		3.88	7.78	
15	3.3^{4}	3.9	3.94	3.88	7.78	06
88 115	5.3	5.5	3.38	3.34	8.84	04

+.47
−.17
8) +.30
White Stars. +.04

Meas. for Color Index

Sc M

Nov 8, 1913

MC 4230

		Sc 1 B		curve	magn	mc - Ptm.	Red Stars.	Sc curve
On edge	1n					.		6.1 .
	2n	2.0	2.2	4.20 ?	6.40	15		7.9 -1.13 6.77
	3n	3.1	3.3	4.01	7.31	33		
	4n	4.2	4.4	3.71	8.11	10		
	5n	4.7	4.9	3.54	8.44	23		
	6n	5.7	5.9	3.14	9.04	.		
	7n	6.4	6.6	2.70	9.30	.		
	8n	Sc.2 7.5	~~77~~	$2.\overset{3}{\cancel{8}}4$	$9.\overset{8}{\cancel{7}}4$	.		
	9n	8.5		2.22	10.72			
	10n	f						
	11n	n.s						
	12n	n.s						
	4p	6.9	7.1	2.45	9.55			
	5p	7.2		2.40	9.60			
	6p	8.1		2.24	10.34			
	9p	n.s						
from prec page	+88° 2				8.04	06		
	+87 12				7.78	40		
	+88°, 105				8.04	16		
	+88° 90				9.11	14		

-143
+14
8) -129
-.16

Measures for Color Index

S. e. M

Nov 8, 1913

Mc 4234 Pinayend - R1

		Sc1	Sc2			curve	Magn.	mc-Ptm. White Stars.
	5	3.2	3.4	~~3.98~~	3.08	3.16	6.56	08
	6	4.1	4.3		2.78	2.62	6.92	16
	7	5.2	5.4		1.99	2.09	7.49	10
	8	5.9	6.1		·	1.79	7.89	:
	9	7.0	7.2		1.41	1.33	8.53	08
	10		7.2		1.74	1.33	8.53	
	11		8.1		1.20	$\overset{.3}{1.04}$	9.13	
	12		8.5		1.04	1.03	9.53	
	13		8.9		1.35	1.11	10.01	
	14		9.2		1.24	1.19	10.39	
	15		9.5		1.28	1.27	10.77	
	16		9.8		1.27	1.37	11.17	
	17		·		·		·	
87	15	6.1	6.3		1.54	1.70	8.00	16
	12	5.0	5.2			2.17	7.37	
88	105	6.0	6.2			1.75	7.95	
	115		8.0		0.88	1.05	9.05	17
	80		8.1		0.82	1.03	9.13	21
	86		8.1		0.68	1.03	9.13	35
	90		7.5			1.23	8.73	
	2	5.9	6.1			1.79	7.89	

+107
−24
8)+83
+.10

Measures for Color Index

Se M

Nov 8, 1913

MC 4234 (cont)

		Sc1	Sc2	curve	Magn	Mc-Ptm. Red Stars.	
On edge +p	1p						
	2p	2.1	2.3	.		.	8!
	3p	3.9	4.1	2.74	6.84	80	
	4p	6.0	6.2	1.75	7.95	76	
	5p	6.0	6.2	1.75	7.95	72	
	6p	7.1	7.3	1.29	8.59		
	7p		8.0	1.06^5	9.05		
	8p		8.9	1.11	10.01		
	9p		9.3?	1.21	10.51?		
	10p		ns	.			
	11p						
	12p						
	4s		8.1	1.04	9.14		
	5s		8.3	1.00	9.30		
	6s		9.0	1.13	10.13		
	9s		f				
+87°	12				7.37	81	
+88	105				7.95	75	
+88	90				8.73	24	
+88	2				7.89	21	

7) -329

-.47

Measures for Color Index

Sc M

Nov 8, 1913

MC 4233

		Sc1	Sc2		curve	magn.	MC-Stm. white	Red Stars
	5	5,153		+1.18	+1.40	6.70	2.22	
	6	6,06.2		+0.88	+0.72	6.92	16	
	7	7.274		−0.01	0.00	7.40	01	
	8		7.9		−0.21	7.69	:	
	9		9.1	−0.49	−0.52	8.58	03	~~03~~
	10		9.3		−0.56	8.74		
	11							
87° ~~78~~	12	7.072			+.10	7.30		.88
	15		8.2	−0.36	−0.30	7.90	06	
88	115		9.5	−0.62	−0.59	8.91	03	
	105		7.9		−0.21	7.69		51
	2		7.5		−0.06	7.44		66
	90		9.0		−0.50	8.50		47
	2 r	3,037						
	3 r	5,355			+1.25	6.75		89
	4 r		7.7		−0.14	7.56		65
	5 r		8.0		−0.23	7.77		90

+32
−19
6) +13
+.02

7) −496
−.71

Poor Plate. Poor Sight—

De B 1st Exp. 3d. Bk. 43,106/43,108 Nov 10, 1913

		MW 409 B				1st Exp.	3d Exp.	5th Exp.	Mean.	Resid.	Diff.
Near edge	R	8	2.9 26			26	25	27	2.67	1 0 0	6.46
	R	7	2.8 25			25	25	26	2.53	0 0 1	5.79
	R	12	3.1 28			28	33	30	3.03	2 3 0	7.47
	R	13	3.7 34			34	34	33	3.37	0 0 1	7.42
	R	14	4.2 39			39	3.95	390	3.92	02 03 02	7.08
		15	4.6 43	4.2	4.25 1 0	4.25	4.35	4.30	4.30	05 05 00	6.87
		16	5.0 47	4.6	4.65 1 0	4.65	4.65	4.65	4.65	00 00 00	6.87
		17	5.3 50	5.0	5.00 00	5.00	5.00	5.00	5.00	00 00 00	6.91
		18	5.5 52	5.2	5.20 0 0	5.20	5.40	5.35	5.32	12 08 03	7.01
		19	6.1 58	5.9	5.85 0 1	5.85	5.90	6.00	5.92	07 02 08	6.80
	R	20	6.3 60	6.1	6.05 0 1	6.05	6.20	6.20	6.15	10 05 05	6.68
	R	21	6.6 63	6.3	6.30 0 0	6.30	6.35	6.45	6.37	07 02 08	7.11
		22		7.1		7.1	7.1	7.2	7.13	0 0 1	6.69
		23		7.0		7.0	7.0	7.2	7.07	1 1 1	6.90
		24		7.2		7.2	7.2	7.3	7.23	0 0 1	7.01
		25		7.3		7.3	7.5	7.5	7.43	1 1 1	7.18
		26		7.5		7.5	7.7	7.7	7.63	1 1 1	7.14
		27		7.8		7.8	8.3	8.2	8.10	3 2 1	6.76
		28		8.1		8.1	8.7	8.7	8.50	4 2 2	6.72
		29		8.7		8.7	9.0	f	8.85	1 2 f	
		30		9.0		f	9.3		9.3	f a .	
		31		9.1		f			f		

See Bk. 43, pp. 106 & 108, 3d & 5th Exposures.

Series 152

Scale M.

November 12, 1913

MC 4154 Pole

S

10:33

Mean 4154, 4159	Diff	Magn. March, 1914		rc1	Mc 4159 P.76	Mc 4165 P.81	Mean		Diff	P.C	P.76	P.81	Mean		Diff.
			5							Ac1. 52 54	5.8	5.4	5.53	1 3 1	0.86
			6							5.8 6.0	.6.4	6.1	6.27	2 2 1 ~~3 1 2~~	0.81
			8							Ac2 7.3	7.5	7.3	7.37	1 1 1	0.73
			9							7.8	8.1	7.8	7.90	1 2 1	0.80
3.45	05 05	5.57	10	3.2 3.4	3.5	3.1	3.33	1 2 2	5.56	8.1	8.3	8.1	8.17	2 1 1	0.72
3.85	05 05	5.70	11	3.6 3.8	3.9	3.4	3.70	1 2 3	5.72	8.5	8.7	8.5	8.57	1 1 1	0.85
4.30	10 10	5.56	12	4.0 4.2	4.4	3.9	4.17	0 2 3	5.56	9.0	9.1	8.9	9.00	0 1 1	0.73
4.85	05 05	5.45	13	4.6 4.8	4.9	4.2	4.63	2 3 4	5.54	9.5	9.7	9.3	9.50	0 2 2	0.67
5.25	05 05	5.40	14	5.0 5.2	5.3	4.5	5.00	2 3 5	5.52	9.9	10.0	.	9.95	1 0 .	0.57
5.55	05 05	5.58	15	5.3 5.5	5.6	4.9	33 5.~~47~~	3 3 4	5.61						
5.95	05 05	5.45	16	5.7 5.9	6.0	5.3	5.73	2 3 4	5.53						
6.32	07 08	5.31	17	6.0 6.2 6.3 6.75 01	6.40	6.10	6.25	00 15 15	5.24						
6.72	07 08	5.34	18	6.4 6.6 6.7 .6650 1	6.80	6.50	~~6.67 02 13 13~~ ~~6.02 07 24 6~~ 6.65	00 15 15	5.27						
7.05	15 15	5.37	19	6.7 6.9 6.9 6.90 00	7.20	6.80	6.97	01 23 17	5.31						
7.15	05 05	5.58	20	7.1	7.2	7.1	7.13	0 1 0	5.46						
7.60	10 10	5.74	23	7.5	7.7	7.85	7.68	18 02 17	5.52						
8.10	10 10	5.77	25	8.0	8.2	8.95	8.38	438 18 57 5 3 6	5.35						
8.55	15 15	5.78	26	8.4	8.7	9.5	8.87	5 2 6	5.32						
8.95	05 05	5.74	27	8.9	9.0	9.9	9.27	4 3 6	5.28						
9.55	25 25	5.56	28	9.3	9.8	.	9.55	3 2 .	5.42						
9.9	2 .	5.76?	29	9.9	.	.	9.9	2 . .	5.62						

$\frac{5}{4}$ $\frac{8}{4}$ $\frac{4}{4}$
−.12 +.15 −.10

$\frac{3}{5}$ $\frac{5}{5}$ $\frac{5}{4}$
−.06 +.10 −.12

$\frac{8}{9}$ $\frac{13}{9}$ $\frac{9}{8}$
−.09 +.14 −.11

Star	Mean 4154, 4159		Mar. 1815 Diff
5	5.60	20, 20	0.89
6	6.20	20, 20	0.91
8	7.40	10, 10	0.83
9	7.95	15, 15	0.88
10	8.20	10 10	0.82
11	8.60	10, 10	0.95
12	9.05	05, 05	0.81
13	9.60 ~~9.50~~	10, 10 ~~20, 20~~	0.70
14	9.85	05, 05	0.70
14			

$\frac{6}{5}$ $\frac{12}{5}$ $\frac{17}{5}$
+.12 +.24 −.034

$\frac{33}{6}$ $\frac{123}{6}$ $\frac{127}{6}$
+.06 +.20 −.21

$\frac{176}{5}$ $\frac{46}{5}$ $\frac{194}{4}$
−.37 −.09 +.48

$\frac{83}{16}$ $\frac{197}{16}$ $\frac{103}{15}$
−.05 +.12 −.07

copied.

−30 +30
5
−.06 +.06

−44 +46
6
−.07 +.08

−65 +65
5
−.13 +.13

M o R

1915phae.prol..994L

Series 152

rejected

Card.

Scale M.

November 12, 1913.

MC 4155 B9 22 40+45

Cor. for alt. +22

S S

		Sa.1 Rc2	Scurn Reading.	Magn.	P.C. Rc 2 8.90 2.2	Scurn Readings.	Magn.
	1	B.			6.1 5.7	0.83	85 6.73
w.s.	2	B.			~~5.4~~ 5.9	0.83	.85 6.73
	3	1.0 1.2			6.0	0.83	.95 6.83
	4	1.0 1.2			6.0	0.83	.96 6.83
	5	1.2 1.4			6.2	0.82	.15 7.02
	6	1.0 1.2			6.85 1.0 6.9 6.8	0.78	76 7.63
	7	2.1 2.3			6.9	0.78	.81 7.68
	8	2.0 2.2			7.3	0.77	.20 8.07
	9	2.3 2.5			7.2	0.77	8.10 7.97
	10	2.1 2.3			7.7	0.78	.61 8.48
Double Rejected	11	3.1 3.3	5.60	8.90 ~~5.60~~	8.1	0.79	.62 9.49
	12	3.9 3.1	5.60	.83 8.70	8.1	0.80	9.03 8.90
	13	3.1 3.3	5.60	9.03 8.90	8.1	0.80	9.03 8.90
6! wi. star	14	~~6.1~~ 3.3 3.5	5.60	23 9.10	8.1	0.79	.62 9.49
	15	3.7 3.9	5.60	.63 9.50	8.9	0.77	.80 9.67
	16	3.9 4.1	5.60	83 9.70	8.8	0.78	.71 9.58
	17	4.0 4.2	5.59	.92 9.79	9.1	0.74	.97 9.84
	18	4.3 4.5	5.58	.21 10.08	9.5	0.67	.30 10.17
	19	4.2 4.4	5.58	10.11 9.98	9.8	0.60	.53 10.40
	20	4.7 4.9	5.56	59 10.46			
	21	5.2 5.4	5.52	11.06 10.92			
	22	5.3 5.5	5.51	.15 11.01			
	23	5.9 6.1 6.45 .01	4 5.57	71 5 11.67			
	24	6.2 6.4 6.5 6.40 .21	4 5.56	12.05 11.91 ~~12.01~~			
	25	6.1 6.3 6.5	4 5.56	12.00 8 11.96			
	26	7.1	4 5.53	67 5 12.63			

	Rc 7	Scurn Reading.	Magn.
27	7.3	5.41	85 12.71
28	7.5	5.40	13.04 12.90
29	7.3	5.41	85 12.71
30	7.7	5.39	.23 13.09
30a	8.1	5.38	13.48 62
31	8.3	5.38	13.68 82
32	8.5	5.38	14.02 13.88
33	8.7	5.39	.23 14.09
34	8.7	5.39	.23 14.09
35	9.3	5.43	.87 14.73
36	9.5	5.45	15.09 14.95
37			

M.O.R.

Series 152

Scale M. copied S Card. November 12, 1913.

Mc 4157 | 139 K. | S

Corr. for alt. -.18

	pc.1	pc.2	Curve	Magn.	
1	2.9	3.1	5.60	83 8.70	9‡
2	3.9	4.1	5.60	.83 9.70	
3	4.1	4.3	5.58	10.01 9.88	c
4	5.2	5.4	5.52	11.86 10.92	
5	5.7	5.9	5.49	.53 11.39	
6	5.7	5.9	5.49	.53 11.39	
7	6.0 6.2	6.75 01 6.3	5.47	86 12.72	
8	6.3 6.5	6.50 00 6.5	5.46	12.10 11.96	
9	7.0 7.2	7.75 01 7.3	5.41	.80 12.66	
10		7.3	5.41	85 12.71	
11		8.1	5.38	.62 13.48	
12		8.5	5.38	14.02 13.88	
13		8.9	5.40	44 14.30	
14		9.1	5.40	64 14.50	
15	9‡	9.5	5.45	15.09 14.95	

P.C.	Curve	Magn.
7.3	0.77	20 8.07
8.9 :	0.77	.80 9.67
9.5	0.67	.30 10.17

9‡ n.s.

M.O.R.

Series 152

Copied · Card.

Scale M. November 12, 1913.

Mc 4158 S 91 K

S

Corr. for alt.
+.17

	pc.1 pc.2	Curve	Magn.
1	2.7 2.9		
2	3.8 4.0	5.60	73 9.60
3	4.0 4.2	5.59	92 9.79
4	4.9 5.1	5.54	77 10.64
	.5350 1.		
5	5.2 5.4 5.3	5.52	11.01 10.87
	.625 1 2		
6	5.9 6.1 6.4	5.47	86 11.72
	.7.05 1 2		
7	6.7 6.9 7.2	5.43	62 12.48
8	7.5	5.40	13.04 12.90
9	8.0	5.38	52 13.38
10	8.4	5.38	92 13.78
11	~~8.7~~ 8.7	5.39	23 14.09
12	8.9	5.40	44 14.30
13	9.1	5.40	64 14.50
14	9.3	5.43	87 14.73
15	9.5	5.45	15.09 14.95

9.c.

	Curve	Magn.
7.9	0.79	82 8.~~69~~
8.8	0.78	71 9.~~58~~
9.1	0.74	97 9.~~84~~
9.4	0.60	54 10.~~40~~
f.		f

M.O.R.

Series 152

Scale M-

November 12, 1913 -

Mc 4159 Pole

wr. unit.

	ac 1	ac 2		Curve	
1					
5					
6					
8					
9					
10	~~2~~ 3 .3	3.5		5.60	9.10
11	3.7	3.9		5.60	9.50
12	4.2	4.4		5.58	9.98
13	4.7	4.9		5.56	10.46
14	5.1	5.3		5.53	10.83
15	5.4	5.6		5.51	11.11
16	5.8	6.0		5.48	11.48
17	6.1	6.3	6.40 ⊥1 6.5	5.46	11.86
18	6.5	6.7	6.80 ⊥1 6.9	5.45	12.25
19	6.9	7.1	7.20 ⊥1. 7.3	5.42	12.62
20			7.2	5.42	12.62
23			7.7	5.39	13.09
25	8.4		8.2	5.38	13.58
26			8.7	5.39	14.09
27			9.0	5.40	14.40
28			9.8	5.48	15.28
29			1		
30					

P.C.

ac 1	ac 2	Curve	
	5.8	0.84	6.64
	6.4	0.81	7.21
	7.5	0.78	8.28
	8.1	0.80	8.90
	8.3	0.80	9.10
	8.7	0.79	9.49
	9.1	0.74	9.84
	9.7	0.62	10.32
	10.0	0.57	10.57

M.O.R.

Series 152

Copied

Card.

Scale M.

November 12, 1913.

Mc 4160 S 116 K. S

	sc.1	sc.2				Corr. for alt. −.18
1	2.7	2.9		Curve		
2	3.2	3.4		5.60	9.00	13
3	4.0	4.2		5.59	9.79	92
4	4.3	4.5	4 5 5 1 0 4.6	5.58	10.13	26
5	5.3	5.5	5.60 1 1 5.7	5.51	12.11	1 25
6	6.1	6.3	6.30 0 0 3 6.3	5.47	11.77	91
7			7.1	5.43	12.53	67
8			7.9	5.39	13.29	43
9			8.2	5.38	13.58	.72
10			8.5	5.38	13.88	14.02
11			9.0	5.40	14.40	.54
12			9.2	5.41	14.61	.75
13			9.5	5.45	14.95	15.09
14			9.5	5.45	14.95	15.09
15			9.7	5.47	15.17	.31

P.C. sc.2	Curve	Magn.	
7.3	0.78	8.08	.21
8.0	0.79	8.79	.92
8.9	0.77	9.67	80
9.0	0.75	9.75	88

n.S.

Remeas. Jan. 25, 1917.

sc.2

13 9.~~5~~6

14 9.2

15 9.7

14 is certainly brighter than 13.

M.O.R.

Series 1521

Copied.
Card.

Scale m. November 12, 1913.

Mc 4161 S   44 K.   S

Corr. for Alt. +.22

	Sc.1	Sc.2	Curve	Magn.	
ε = 1	2.9	3.1	5.60	8.70	.89
γ = 2	3.0	3.2	5.60	8.80	.93
3	3.3	3.5	5.60	9.10	.23
4	3.9	4.1	5.60	9.70	.83
5	4.0	4.2	5.59	9.79	.92
6	4.8	5.0	5.55	10.55	.68
7	4.9	5.1	5.54	10.64	.77
8	5.1	5.3	5.53	10.83	.96 7
9	5.2	5.4	5.52	10.92	11.06
10	5.9	6.1 6.3 6.70 ± 1	5.47	11.67	.81
11	6.3	6.5 6.5 6.50 00	5.46	11.96	12.10
12	6.2	6.4 6.7 6.49 .9	5.46	11.86	12.00
13		6.7	5.45	12.15	.29
14		7.3	5.41	12.71	.85
15 ~~15~~		8.2 .3	5.38	13.58	.72
16		8.7	5.39	14.09	.23
17		9.4	5.44	14.84	.98

P.C.

Sc.2	Curve	Magn.	
7.2	0.78	7.98	8.14
7.7	0.78	8.48	.61
8.3	0.80	9.10	.23
8.5	0.80	9.30	.43

Sup.

F.

		Sc.1			
α	B.	4.0 4.2 .			
β	B.	5.2 5.4	0.87	6.27	.36
2 = γ					
1 = ε					
δ	2.0 2.2 .	6.3 6.5	0.80	7.30	.43

M.O.R.

Series 1521

Copied. Card.

Scale M November 12, 1913.

Mc 4162 S 68 K S

Cor. for alt. +.16.

	Dc.1	Dc.2		Curve	Magn.	
1	1.3	1.5		.	.	
2	2.1	2.3		.	.	
3	2.7	2.9		.	.	
4	3.1	3.3		5.60	8.90	9.03
5	4.3	4.5		5.58	10.08	.21
6	5.9	6.1	6.30 1 1 6.3	5.47	11.67	.80
7	6.1	6.3	6.30 0 0 6.3	5.46	11.76	.89
8	6.7	6.9	7.05 1 0 7.1	5.44	12.44	.56
9			7.3	5.41	12.71	.85
10			7.9	5.38	13.28	.42
11			8.5	5.38	13.88	14.02
12			9.0	5.40	14.40	.54
13			8.9	5.39	14.29	.43
14			9.3	5.42	14.72	.86
15			9.5	5.44	14.94	15.08

Dc.2	Curve	Magn.	
5.5	0.86	6.36	.46
6.8	0.78	7.58	.71
7.4	0.78	8.18	.31
8.0	0.79	8.79	.92
9.3	0.70	10.00	.13

J.

M.O.R.

Series 152

Copied.

Card.

~~Bd~~ Scale m.

November 12, 1913.

	MC 4168 4					S C 1		I + 15				S	
		Corr. for Alt. +.13						P.C.					
		sc.1	sc.2	Curve	magn.			sc.1	sc.2	Curve			
	1	1.2	1.4	.	.			5.8	6.0	0.83	6.83	.95	
too far from centre	2	.						6.1	6.3	0.81	7.11	.24	
	3	1.9	2.1	.	.			6.1	6.3	0.81	7.11	.24	
	4	.						6.8	7.0	0.78	7.78	.91	
	5	2.3	2.5	.	.				sc.2 7.2	0.78	7.98	8.11	
	6	2.9	3.1	5.60	8.70	83	extrap		7.2	0.78	7.98	8.11	
	7	3.0	3.2	5.60	8.80	.93	extrap		7.2	0.78	7.98	8.11	
	8	3.1	3.3	5.60	8.90	9.03			8.2	0.80	9.00	.13	
	9	3.2	3.4	5.60	9.00	.13			7.8	0.78	8.58	.71	
double star	10	3.7	3.9	5.60	9.50	.63			8.5	0.80	9.30	.43	
	11	3.7	3.9	5.60	9.50	63			8.1	0.80	8.90	9.03	
	12	4.3	4.5	5.58	10.08	21			8.4	0.80	9.20	.33	
	13	4.3	4.5	5.58	10.08	21			9.0	.5 0.78	9.75	.88	
	14	4.9	5.1	5.54	10.64	.77			9.1	0.74	9.84	.97	
	15	5.0	6.2	5.54	10.74	87			n.s.	.	.		
	16	5.2	5.4	5.53	10.93	11.07			n.s.	.	.		
	17	5.3	5.5	5.51	11.01	15			~~9.0~~ 7.	~~0.72~~	~~9.92~~		Assume wrong ~~star~~ image measured. Plate examined Aug. 11, 1914. W.
	18	6.1	6.30 00 6.3 6.3	5.47	11.77	.91							
	19	6.2	6.45 01 6.4 6.5	5.46	11.91	12.05							
	20	7.0	7.25 01 7.2 7.3	5.42	12.67	81							
	21		7.4	5.40	12.80	.94			sc.2				
	22		8.00 12 8.1 7.9	5.38	13.38	52		27	8.9	5.39	14.29	.43	
	23		7.90 00 7.9 7.9	5.38	13.28	42		28	9.1	5.41	14.51	.65	
	24		7.85 01 7.8 7.9	5.39	13.24	.38		29	9.3	5.43	14.73	.87	
	25	.	8.3	5.38	13.68	82		30	9.8	5.48	15.28	.42	
	26		8.7	5.39	14.09	.23		31					

→ cont.

M.O.R.

Series 152

Scale M.

November 12, 1913.

	Mc4165	Pole –
		P.C.
	sc1 sc2	sc.1
5		5.2 5.4
6		5.9 6.1
		sc.2
8		7.3
9		7.8
10	2.9 3.1	8.1
11	3.2 3.4	8.5
12	3.7 3.9	~~9~~ 8.9
13	4.0 4.2	9.3
14	4.3 4.5	
15	4.7 4.9	
16	5.1 5.3	
	6.10 2.2	
17	5.7 5.9 6.3	
	6.50 2.2	
18	6.1 6.3 6.7	
	6.80 1.1	
19	6.5 6.7 6.9	
20	7.1 7.85 1.2	
	7.8 8.0	
23	7.7 ~~9.4~~	
	8.95 0.1	
25	9.0 8.9	
26	9.5	
27	9.9	
28	n.s.	

M o R

12:27.

Sc ll
#

Measures for Color Index

Nov 13, 1913

MC 4283

Sc !

Sc		Diff.	curve	Magn. Mc-Ptm. White stars.			curve	magn.	Mc-Ptm.
5					6.4	+0.08	+0.03	6.43	05
6					7.1	-0.02	-0.01	7.09	01
7					7.3	+0.09	-0.02	7.28	11
8					8.1	.	-0.03	8.07	.
9					8.7	-0.09	-0.02	8.68	07
10	5.7	+3.24	3.29	8.99	8.9	+0.04	0.00	8.90	.
11	6.1	3.20	3.19	9.29					
12	6.5	3.04	3.19	9.69					
13	6.8	3.45	3.21	$\overset{10}{9}.01$					
14	7.1	3.34	3.26	10.36					
15	7.4	3.38	$3.\overset{32}{28}$	$10.\overset{72}{68}$					
16	defective								
17	7.9	3.28	3.44	11.34					
18	8.3	3.63	3.60	11.90					
19	8.5	$3.7\overset{2}{8}$	3.72	12.22					
20	8.7	$3.\overset{9}{8}95$	3.88	12.58					
23	9.1	4.24	4.20	13.30					
25	9.5			.					
26	10.0			.					

From foll. page.					
+87	15	8.44	60	8.17	33
+88	80	8.74	18	8.69	23
	86	8.74	04	8.79	01
	115	8.93	05	8.90	02
			+ 65		+ 44
			- 22		- 39
			4) + 43		8) + 05
			+ .11		+ .01

u
SH

Measures for Color Index

Nov 13, 1913

Mc 4283

		Sc2		curve	magn	Mc-Ptm.					Mc-Ptm. P.C. Red stars.
88	115	5.6	3.28	3.33	8.93		8.9	-0.02	0.00	8.90	
	105	5.7		3.29	8.99	+0.79	9.0		0.00	9.00	+80
	2	5.3		3.44	8.74	64	8.7		-0.01	8.69	59
	86	5.3	3.48	3.44	8.74		8.8	-0.02	-0.01	8.79	
	80	5.3	3.62	3.44	8.74		8.7	+0.25	-0.01	8.69	
87	12	5.7		3.29	8.99	81	8.9		-0.00	8.90	72
	15	4.8	3.04	3.64	8.44		8.2	-0.36	-0.03	8.17	
	90	6.0		3.21	9.21	24					
	2r	4.9		3.61	8.51	+1.96	8.2		-0.03	8.17	162
	3r	5.7		3.29	8.99	1.35	8.9		0.00	8.90	126
	4r	5.9		3.23	9.13	0.92	8.9		0.00	8.90	69
	5r	6.4		3.19	9.59	1.92					
	6r	6.8		3.21	10.01						
	7r	7.2		3.28	10.48						
	8r	7.6		3.27	10.87						
	9r	8.0		3.48	11.48						
	10r	8.4		3.66	12.06						
	11r	8.7		3.88	12.58						
	12r	9.0		4.11	13.11						
	4b	$\overset{6}{7}.3$		3.19	9.49						
	5b	7.2		3.38	10.48						
	6b	7.3		3.29	10.59						
	9r	F									

8) 763
+.95 Red stars.

6) 568
+.95

Measures for Color Index

Sell

Nov. 13, 1913

MC 4284

									Mc - Ptm. white.
5					6.3	+0.18	0.30	6.60	12
6					6.7	0.38	0.32	7.20	06
7					7.0	0.39	0.33	7.33	06
8					7.9		0.34	8.24	~~37~~.
9		Diff.	curve		8.5	0.11	0.31	8.81	20
10	5.1	+3.84	3.94	9.04	defective				
11	5.4	3.90	3.88	9.28	9.0	+0.30 ~~-0.06~~	0.30	9.30	
12	5.8	3.74	3.86	9.66	9.5	+0.04	0.29	9.79	
13	6.2	4.05	3.90	10.10	9.9	+0.35	0.27	10.17	
14	6.5	3.94	3.94	10.44					
15	6.8	3.98	4.00	10.80					
16	7.0	4.07	4.04	11.04					
17	7.3	3.88	4.13 ~~3.63~~	11.43 ~~10.93~~					
18	7.7	4.23	4.30 ~~3.84~~	12.04 ~~11.54~~					
19	7.8	4.42	4.30 ~~3.89~~	12.19 ~~11.69~~					
20	8.0	4.65	4.52	12.52					
23	8.5	4.84							
25	8.9								
26	9.2								
27	9.8								

+87	15	65 8.~~14~~	81 ~~+30~~		7.84	00
+88	80					
	86	~~83~~ ~~8.14~~ 6.65	~~05~~ ~~64~~ 13		8.43	35
	115	8.90	02		8.91	03
		3).70 ~~88~~ +.23	32 -~~07~~ -32	3)~~37~~ +12		+35 -47 7) -12 -.02

Measures for Color Index

Bell Nov 13, 1913

Mc 4284

			Diff.	435	-65	Mc-Ptm Red			curve	magn.	Mc-Ptm Red
87	15	4.3	3.54	435 ~~384~~	8.44		75	+0.34	0.34	7.84	
	12	4.9		4.00	8.90	+72	83		0.32	8.62	44
88	2	4.9		4.00	8.90	80	85		0.31	8.81	71
	115	4.9	3.98	4.00	8.90		86	0.28	0.31	8.91	
	105	5.3		.89 ~~3.94~~	.19 ~~9.24~~	99 ~~+04~~	85		0.31	8.81	61
	90	5.4		3.89	9.29	32	89 ~~87~~		0.30	9.20	23
	86	4.3	4.48	435 ~~384~~	83 ~~8.44~~ 865		defective? 81	0.68	0.33	8.43	
	80 defective.										
	2r	4.4?		4.29 ~~3.89~~	.6 8.29	2.14 ~~1.74~~	77		0.34	8.04	1.49
	3r	5.0		3.98	8.98	1.34	83		0.32	8.62	98
	4r	5.2		3.91	9.11	90	87		0.31	9.01	80
	5r	5.9		3.87	9.77	110	~~9.7~~				
	6r	6.1		3.89	9.99		95		0.29	9.79	
	7r	6.5		3.94	10.44						
	8r	6.9		4.02	10.92						
	9r	7.3		4.13 ~~3.63~~	11.43						
	10r	7.9		4.46	12.36						
	11r	8.2		4.69	12.89						
	12r	8.7									
	4p	5.8		3.87	9.67		9.3		0.30	9.60	
	5p	6.1		3.98	10.68						
	6p	6.9		4.02	10.92						
	9p										

8) 831
+1.04

8) 796
+1.00

Red stars.

7) 526
+.75

B.C.

November 14, 1913

Scale U.

Color Index:

12:13 Mc 4242 L'

		sc.1	Diff.		curve	Magn.	MC-Ptm.	sc.2	Diff.	curve	Magn.	
	5	.						7.9	-1.42	-1.41	6.49	01
	6	.						8.9	-1.82	-1.85	7.05 ~~7.05~~	03
	7	.						9.9	-2.51	-2.45	7.45	06
	8	5.0										
	9	5.7	2.91		2.91	8.61	00					
	10	6.0	2.94		2.87	8.87						
	11	6.4	2.90		2.82	9.22						
	12	7.1	2.44		2.74	9.84						
	13	7.5	2.75		2.66	10.16						
	14	7.8	2.64		2.60	10.40						
	15		8.3	2.48	2.45	10.75						
	16		9.0	2.07	2.20	11.20						
	17		9.3	1.88	2.09	11.39						
	18		9.8	2.13	1.91	11.71						
near edge +87	15	5.2		2.64	2.91	8.11	27					
near edge +88	80	6.1		2.82	2.86	8.96	04					
" "	86	5.9		2.88	2.88	8.78	00					
	115	6.1		2.78	2.86	8.96	08					

5) 39
+.08

+07
-03
3) +04
+.01

M.O.R.

November 14, 1913.

Scale u

Color Index

Mc 4242 cont.

near edge	1n	.				6.7	.		
	2n	B.	2.9			7.8	-1.38	6.42	13
	3n	4.7	2.91	7.61	03				
	4n	5.1	2.91	8.01	20				
	5n	5.4	2.91	8.31	36				
	6n	6.2	2.85	9.05					
	7n	6.8	2.78	9.58					
	8n	7.8	2.60	10.40					
	9n	8.3	$2.4\overset{6}{5}$	10.76					
	10n	n.s.							
	11n								
	12n								
	4p	6.9	2.76	9.66					
	5p	.							
	6p	8.3	2.46	10.76					
	9p	n.s.							
near Edge. +87	12	~~8~~4.9	2.91	7.81	37	n.s.			
+88	2	4.9	2.91	7.81	29	n.s.			
	90	6.1	2.86	8.96	01				
	105	5.2	2.91	8.11	09				
				7)	-135				
					-.19				

M.O.R.

12.27

Series 103 continued fr. p 61

Dell

Dec 13, 1913:

10 00

MC 3607 S

M6 3613 Page 94

	Se1	Se2				S
5	3.1					
6	3.3	8				
8	3.7					
9	4.1					
10	4.3		4.3	4.30	0 0	4.59
11	4.7		4.7	4.70	0 0	4.72
12		5.1	5.1	5.10	0 0	4.63
13		5.4	5.3	5.35	0 1	4.82
14		5.7	5.5	5.65	1 1/3	4.92
15		6.1	5.9	~~6.05~~ 6.00	1 1	4.94
16		6.3	6.2	6.25	1 0	5.01
17		6.6	6.5	6.55	0 1	4.94
18		7.1	6.9	7.00	1 1	4.92
19		7.3	7.2	7.25	1 0	5.03
20		7.7	7.5	~~7.65~~ 7.60	1 1	4.99
23		8.2	8.3	8.25	0 1	~~4.57~~ 4.95
25		8.7	8.8	8.75	1 0	4.98
26		9.2	9.3	9.25	0 1	4.94
27		9.7	9.9	9.80	1 1	4.75
28		7	7			

1/5 +.02 2/5 -.04

4/5 +.08 3/5 -.06

1/5 -.02 2/5 +.04

4/15 +.03 3/15 -.02

P.C. M6 3613 S

6.1	6.2	6.15	1 0	0.24
6.4	6.5	6.45	0 1	0.53
7.7	7.7	7.70	0 0	0.40
8.2	8.3	8.25	0 1	0.45
8.3	8.5	8.40	1 1	0.49
8.7	9.0	8.85	1 2	0.57
9.1	9.5	9.30	2 2	0.43
9.6	9.9	9.75	2 1	0.42

1/4 -.021 2/4 +.05

6/4 -.15 6/4 +.15

1/8 -.09 8/8 +.10

copied.

Series 103

Sc U   copied.   Dec 19 1913

Mc 3608   S   114 K   Corr. alt. +.06

	Sc 1	Sc 2	Curve	Magn.
1	3.1			
2	3.3			
3	4.3		4.58	9.01 8.88
4	4.9		4.72	.75 9.62
5		7 5.~~4~~	4.87	.70 10.57
6		5.9	4.90	.93 10.80
7		6.2	4.93	.27 11.~~13~~
8		6.3	4.94	.38 11.~~24~~
9		6.8	4.97	91 11.~~77~~
10		7.1	4.98	.22 12.~~08~~
11		7.7	4.99	.83 12.~~69~~
12		8.2	4.98	.32 13.~~18~~
13		8.7	4.95	.79 13.~~65~~
14		9.1	9.05 10 9.0 4.91	14.10 ~~13.96~~
15		9.7	9.60 1'1 4.84 9.5	.58 14.~~44~~

P.C Sc 2		Curve	Magn.
6.3		0.37	.78 6.67
6.5		0.38	7.00 6.88
7.7		0.44	.27 8.~~14~~
8.7		0.47	.30 9.~~17~~
9.7	9.60 1'1 9.5	0.44	.17 10.~~04~~
9.9	9.80 1'1 9.7	0.42	.35 10.~~22~~

Copied.

Series 103

Se 11 S Dec. 18, 1913 S S

MC 3609 = B9 Corr. alt. +23

		Se 1	Se 2	Curve	Magn.	S.C.	Curve	Magn.
	1	3.1				6.1	0.36	~~6.46~~ .56
Too faint for C.	2					6.3	0.37	~~6.67~~ .78
" " " "	3					6.3	0.37	~~6.67~~ .78
" " " "	4					6.6	0.39	~~6.99~~ 7.12
	5	3.6				6.6	0.39	~~6.99~~ 7.12
	6	3.6				6.7	0.40	~~7.10~~ .23
	7	3.9				6.8	0.40	~~7.20~~ .33
	8	4.1				7.2	0.42	~~7.62~~ .75
	9	4.0				7.2	0.42	7.62 .75
	10	4.2				7.7	0.44	~~8.14~~ .27
	11	4.2				7.7	0.44	~~8.14~~ .27
	12	4.2				7.9	0.44	~~8.34~~ .47
	13	4.6		4.65	~~9.25~~ .38	8.3	0.46	~~8.76~~ .89
	14	4.7		4.67	~~9.37~~ .50	8.3	0.46	~~8.76~~ .89
	15	4.9		4.72	~~9.62~~ .75	8.7	0.47	~~9.17~~ .30
	16	4.9		4.72	~~9.62~~ .75	8.9	0.47	~~9.37~~ .50
	17		5.1	4.75	~~9.85~~ .98	9.05 2 1 9.2 8.9	0.46	~~9.51~~ .64
	18		5.1	4.75	~~9.85~~ .98	9.25 1 0 9.3 9.2	0.45	~~9.70~~ .83
	19		5.2	4.77	~~9.97~~ 10.10	9.20 1 1 9.3 9.1	0.46	~~9.66~~ .79
	20		5.3	4.80	~~10.10~~ .23	9.40 1 1 9.5 9.3	0.44	~~9.84~~ .97
	21		5.3	4.80	~~10.10~~ .23	9.50 0 0 9.5 9.5	0.43	~~9.93~~ 10.06
	22		5.6	4.85	~~10.45~~ .58			
	23		5.8	4.88	10.68 .81			
	24		6.2	4.93	~~11.13~~ .27			
	25		6.3	4.94	~~11.24~~ .38			
	26		6.5	4.95	~~11.45~~ .57			
	27		6.7	4.96	11.66 .80			
	28		7.3	4.98	~~12.28~~ .42			
	29		7.3	4.98	~~12.28~~ .42			

	Se 2		Curve	Magn.
30	7.8		4.99	~~12.79~~ .93
31	8.3		4.98	~~13.28~~ .42
32	8.6		4.96	~~13.56~~ .70
33	9.1	9.00 1 1 8.9	4.93	~~13.93~~ 14.07
34	9.5	9.40 1 1 9.3	4.87	~~14.27~~ .41
35	9.7	9.65 1 0 9.6	4.83	~~14.48~~ .62
36	f			

Copied Series 103

Sc II S Dec 13, 1913 S

MC 3610 = 42 K Corr. alt. +.23

	Sc 1	Sc 2	Curve	Magn.		PC	Curve	Magn.
1	4.0		4.65	9.~~25~~ .38		8.0	0.45	8.~~45~~ .58
2		5.1	4.75	9.~~85~~ .98		9.1	0.46	9.~~56~~ .69
3		5.2	4.78	~~9.98~~ 10.11		9.1	0.46	9.~~56~~ .69
4		5.4	4.82	10.~~22~~ .35				
5		6.1	4.92	11.~~02~~ .16				
6		6.2	4.92	11.~~12~~ .26				
7		6.7	4.96	11.~~66~~ .80				
8		7.2	4.98	12.~~18~~ .32				
9		7.5	4.99	12.~~49~~ .63				
10		7.9	4.99	~~12.89~~ 13.03				
11		8.0	4.99	~~12.99~~ 13.13				
12		8.4	4.98	13.~~38~~ .52				
13		8.9	4.93	13.~~83~~ .97				
14		9.3	4.88	1~~3~~4.~~18~~ .32				
15		9.7	4.81	14.~~51~~ .65				

copied   Series 103

Se U   S   Dec 13, 1913   S   S

MC 3611 b 12   Corr. alt. +17

Probaufn. C.

	Se1	Se2	Curve Magn.			PC	Curve Magn.		
1	3.1					6.2	0.37	6.57	.68
2						6.7	0.40	7.10	.23
3	3.6					6.5	0.39	~~6.89~~	7.02
4	4.0					6.9	0.41	7.31	.44
5	4.1					7.2	0.42	7.62	.75
6	4.2					7.3	0.43	7.73	.86
7		w.s ~~5.9~~							
8									
9	4.6		4.65	9.25	.38	8.2	0.47	8.67	.80
10	4.6		4.65	9.25	.38	8.3	0.47	8.77	.90
11		4.7	4.68	9.38	.51	8.7	0.48	9.18	.31
12		4.9	4.72	9.62	.75	8.95 0 1 9.0 8.9	0.47	9.42	.55
13		5.1	4.75	9.85	.98	9.20 1 1 9.3 9.1	0.46	9.66	.79
14		5.3	4.80	10.10	.23	9.25 1 0 9.3 9.2	0.46	9.71	.84
15		5.2	4.78	9.98	10.11	9.00 1 1 9.1 8.9	0.47	9.47	.60
16		5.4	4.82	10.22	.35	9.75 0 1 9.8 9.7	0.42	10.17	.30
17		5.7	4.87	10.57	.70				
18		6.3	4.94	11.24	.38				
19		6.3	4.94	11.24	.38				
20		6.9	4.97	11.87	12.01				
21		7.1	4.98	12.08	.22				
22		7.8	4.99	12.79	.93				
23		7.9	4.99	~~12.89~~	13.03				
24		8.1	4.99	13.09	.23				
25		8.1	4.99	13.09	.23				
26		8.3	4.98	13.28	.42				
27		8.7	4.96	13.66	.80				
28		8.5	4.97	13.47	.61				

	Se2	Curve Magn.		
29	9.05 2 1 9.2 8.9	4.91	~~13.96~~	14.10
30	9.60 1 1 9.7 9.5	4.84	14.44	.58
31	F			
32	ws			
33	ws			
34	ws			

copied. Series 103

Sc U S Dec 13, 1913 S S

MC 36₁₂ = D12 Corr. alt -18

	Sc1	Sc2	Curve	Magn.	PC	Curve	Magn.
1	4.1				7.5	0.4~~4~~ 3	8.06 7.93
2							
3	4.3		4.59	9.02 8.89	7.7	0.44	8.~~14~~ .27
4	4.2				8.0	0.45	8.~~45~~ .58
Sonfan f. C 5					7.7	0.44	8.~~14~~ .27
6	4.6		4.65	9.~~26~~ .38	8.3	0.46	8.~~76~~ .89
7	4.6		4.65	9.~~25~~ .38	8.5	0.47	~~8.97~~ 9.10
8	4.7		4.67	9.~~37~~ .50	8.5	0.47	~~8.97~~ 9.10
9	4.7		4.67	9.~~37~~ .50	8.7	0.47	9.~~17~~ .30
10		5.0	4.74	9.~~74~~ .87	8.95 0 1 9.0 8.9	0.47	9.~~42~~ .55
11		5.1	4.76	9.~~86~~ .99	9.00 1 1 9.1 8.9	0.47	9.~~47~~ .60
12		5.0	4.74	9.~~74~~ .87	9.10 1 1 9.2 9.0	0.46	9.~~56~~ .69
13		5.2	4.77	~~9.97~~ 10.10	9.10 1 1 9.2 9.0	0.46	9.~~56~~ .69
14		5.3	4.80	10.~~10~~ .23	9.60 1 1 9.7 9.5	0.43	10.~~03~~ .16
15		5.3	4.80	10.~~10~~ .23	9.80 0 0 9.8 9.8	0.42	10.~~22~~ .35
16		5.4	4.82	10.~~22~~ .35	9.85 1 0 9.9 9.8	0.42	10.~~27~~ .40
17		6.1	4.92	11.~~02~~ .16			
18		6.1	4.92	11.~~02~~ .16			
19		6.1	4.92	11.~~02~~ .16			
20							
21		6.7	4.97	11.~~67~~ .81			
22		6.8	4.98	11.~~78~~ .92			
23		7.2	4.98	12.~~18~~ .32			
24		7.3	4.98	12.~~28~~ .42			
25		7.5	4.99	12.~~49~~ .63			
26		7.5	4.99	12.~~49~~ .63			
27		7.7	4.99	12.~~69~~ .83			
28		8.3	4.99	13.~~29~~ .43			

	Sc2	Curve	Magn.
29	8.3	4.98	13.28 .42
30	8.7	4.95	13.~~65~~ .79
31	8.85 2 1 9.0 8.7	4.94	13.~~79~~ .93
32	9.00 1 1 9.1 8.9	4.93	~~13.93~~ 14.07
33	9.10 1 1 9.2 9.0	4.91	14.~~01~~ .15
34	9.40 1 1 9.5 9.3	4.87	~~13.27~~ 4. 41
35	9.60 1 1 9.7 9.5	4.85	14.~~45~~ .59
36	9.85 1 0 9.9 9.8	4.79	14.~~64~~ .78
37	F		
38	F		
39	ns		
40	F ? ~~10.0~~		
41	ns		
42			

Series 103

Sa U

Dec 13, 1913

MC 3613 Pole

	Sc 1	Sc 2	PC
5			6.2
6			6.5
8			7.7
9			8.3
10	4.3		8.5
11	4.7		9.0
12	5.1		9.5
13	5.3		9.9
14	5.5		
15	5.9		
16		6.2	
17		6.5	
18		6.9	
19		7.2	
20		7.5	
23		8.3	
25		8.8	
26		9.3	
27		9.9	
28		F	

See page 88.

12 50

Beginning here, series reductions made using Revised Magns.

Series 68

Bell

February 9, 1914

10:12 MC 3115 Pole

5
6
8
9

		ac.2	ac.2	MC3120	Mean		Diff.
		5.7	5.75 1 0 5.8	5.95	5.85	10 10	0.64
		6.7	6.60 1 6.5	6.50	6.55	05 05	0.56
		8.0	8.00 0 0 8.0	8.10	8.05	05 05	0.18
		8.7	8.70 0 0 8.7	8.80	8.75	05 05	0.08
		9.0	9.00 0 0 9.0	9.00	9.00	00 00	0.02
		9.8	9.80 0 0 9.8	9.5	9.65	15 15	−0.10
		f.		9.9	9.90	· a	−0.04

10/3 −.03 10/3 +.03

10/3 +.03 10/3 −.03

00/6 .00 00/6 .00

			MC3120	Mean		Diff.
10	4.8		4.7	4.75	0 1	4.27
11	5.3		5.0	5.15	1 2	4.40
12	5.6		5.4	5.50	1 1	4.36
13	6.1		6.0	6.05	1 0	4.25
14	6.5		6.4	6.45	1 0	4.20
15	6.8		6.5	6.65	2 1	4.43
16	7.1		7.0	7.05	1 0	4.35
17	7.5		7.4	7.45	1 0	4.18
18	8.0	7.95 0 1 7.9	8.00	7.98	03 02	4.08
19	8.2	8.20 0 0 8.2	8.25	8.22	02 03	4.20
20	8.5	8.60 1 1 8.7	8.65	8.62	02 03	4.11
23	8.9	9.00 1 1 9.1	9.15	9.08	08 07	4.26
25	9.8	9.75 9 1 9.7	9.75	9.75	00 00	4.12
26	n.s.		n.s.			

3/4 +.08 4/4 −.10

47/5 +.09 08/5 −.02

12/4 −.03 13/4 +.03

all +65/13 +.05 −35/13 −.03

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10:20

M.O.R.

Series 68

copied.

Dell

February 9, 1914

MC 3116 128 K 12^h — 15 OC   Alt. -18

	Sc1	Sc2		Curve	Magn.	Sc2		Curve	Magn.
1	42			4.34	[illegible] 8.54	82	8.25 0 1 83	0,15	.39 8.40
2	46			4.33	9.06 8.93	89	8.85 1 0 88	0.05	9.03 8.90
3	46			4.33	9.06 8.93	9.0	9.00 0 0 90	0.03	.16 9.03
4		53		4.31	.77 9.64	9.8	9.85 0 1 99	-0.10	88 9.75
5		57		4.29	10.12 9.99				
6		61		4.28	.51 10.38				
7		67		4.28	.61 10.48				
8		65		4.26	.89 10.76				
9		72		4.23	.57 11.43				
10		75		4.22	.86 11.72				
11		82	8.15 0 1 81	4.20	.49 12.35				
12		89	8.80 1 1 87	4.18	13.12 12.98				
13		92	9.10 1 1 90	4.17	.41 13.27				
14		95	9.50 0 0 95	4.17	.81 13.67				
15		98	9.80 0 0 98	4.16	14.10 13.96				

Series 68

Dell February 9, 1914 Copied

MC 3117 D7 alt -.18

				Curve	Magn.	8C		Curve	Magn.				Curve	Magn.
Tofanf. C	1					6.9	6.95 1 0 7.0	0.42	7.37	30	9.7	9.75 1 0 9.8	4.16	13.91
" " " "	2					7.2	7.20 0 0 7.2	0.37	7.57	31	9.9	9.90 0 0 9.9	4.15	14.05
" " " "	3					7.7	7.60 1 1 7.5	0.28	7.88	32	n.s			
	4	4.1		4.34	8.44	8.1	8.00 1 1 7.9	0.20	8.20					
	5	4.1		4.34	8.44	7.9	7.85 1 0 7.8	0.24	8.09					
" " " "	6					7.6		0.28	7.88					
" " " "	7					8.1		0.18	8.28					
" " " "	8					8.3		0.14	8.44					
" " " "	9					8.3		0.14	8.44					
	10	4.3		4.33	8.63	8.7		0.08	8.78					
" " " "	11	4.9		4.32	9.22	9.8		-0.09	9.71					
	12	5.3	5.30 0 0 5.3	4.31	9.61	9.9		-0.10	9.80					
	13	5.6	5.60 0 0 5.6	4.29	9.89									
	14		5.6	4.29	9.89									
	15		3.9	4.28	10.18									
	16		5.6	4.29	9.89									
	17		6.1	4.28	10.38									
	18		6.4	4.27	10.67									
	19		6.8	4.25	11.05									
	20		7.0	4.24	11.24									
	21		7.5	4.22	11.72									
	22		7.5	4.22	11.72									
	23		7.9	4.20	12.10									
	24		8.1	4.20	12.30									
	25		8.3	4.20	12.50									
	26		8.5	4.19	12.69									
	27		8.9 8.85 1 0 8.8	4.18	13.03									
	28		9.2 9.25 0 1 9.3	4.17	13.42									
	29		9.2 9.36 1 1 9.4	4.17	13.47									

Series 68 copied

Sell February 9, 1914

		M C 3118 b7			alt. +.17		Pc			
		Sv1	Sv2					6.15 0 1	Curve	Magn.
Too faint for C	1				Curve	Magn.	6.7	6.1	0.60	6.75
" " " "	2						7.0	7.10 1 1 7.2	0.40	7.50
" " " "	3						7.7	7.80 1 1 7.9	0.24	8.04
	4	4.1			4 2.34	8.44	8.1	8.10 0 0 8.1	0.18	8.28
	5	4.3			4 2.33	8.63	8.3	8.30 0 0 8.3	0.14	8.44
	6	4.7			4.32	9.02	8.8		0.07	8.87
Too faint for C	7				4.D		9.1		0.01	9.11
	8		5.3		4.31	9.61	9.7		-0.08	9.62
" " " "	9						9.9		-0.10	9.80
	10		5.5		4.30	9.80 ~~10.12~~				
	11		5.7		4.29	9.99				
	12		5.9		4.28	10.18				
	13		6.3		4.28	10.58				
	14		6.5		4.27	10.77				
	15		6.8		4.25	11.05				
	16		6.9		4.24	11.14				
	17		7.2		4.23	11.43				
	18		7.4		4.23	11.63				
	19		7.8		4.20	12.00				
	20		8.1		4.20	12.30 ~~12.03~~				
	21		8.7		4.19	12.89				
	22		9.1		4.18	13.28				
	23		9.5	9.40 1 1	9.3 4.17	13.57 ~~14.05~~				
	24		9.7	9.75 1 0	9.8 4.16	13.91				
	25		9.9	9.90 0 0	9.9 4.16	14.06				
	26		9.9	9.90 0 0	9.9 4.16	14.06				
	27		9.9	9.95 1 0	10.0 4.15	14.10				
	28		n.s.							
	29									

Series 68 copied

Dell February 9, 1914

MC 3119 33K Alt. +.23 PC

	Sc 1	Sc 2			Curve	Magn.		Curve	Magn.
1	3.9				4.35	8.25	7.9	0.22	8.12
2	4.8				4.33	9.13	9.8	-0.08	9.72
3		5.2			4.31	9.51			
4		6.3			4.28	10.58			
5		6.5			4.27	10.77			
6		6.9			4.24	11.14			
7		8.5			4.19	12.69			
8		8.9	8.85 1.0	8.8	4.18	13.03			
9		9.3	9.30 0.0	9.3	4.17	13.47			
10		9.7	9.75 1.0	9.8	4.16	13.91			
11		9.9	9.90 0.0	9.9	4.16	14.06			
12		n.s							
13		n.s							
14		n.s							
15		n.s							

Series 68

Bell February 9, 1914

MC 3120 Pole

12:04

		P.C. sec2
5		5.9 5.95 1 0 6.0
6		6.5 6.50 0 0 6.5
8		8.1 8.10 0 0 8.1
9		8.8 8.80 0 0 8.8
10	47	9.0 9.00 0 0 9.0
11	5.70	9.5
12	5.4	9.9
13	6.0	
14	6.4	
15	6.5	
16	7.0	
17	7.4	
18	8.0 8.00 0 0 8.0	
19	8.2 8.25 0 1 8.3	
20	8.7 8.65 1 0 8.6	
23	9.1 9.15 1 0 9.2	
25	9.8 9.75 0 1 9.7	
26	n.s.	

12 09 See page 95

M.O.R

12:09

Series 68

Sc. U

February 12, 1914

MC 3120

10.08

	Sc.			MC3126	Mean		Diff.
5							
6							
8							
9							
10	4.7			4.9	4.80	1 1	4.22
11	5.0			5.3	5.15	2 1	4.40
12	5.3			5.7	5.50	2 2	4.36
13	5.8			6.0	5.90	1 1	4.40
14	6.3			6.5	6.40	1 1	4.25
15	6.5			6.9	6.70	2 2	4.38
16	7.1			7.2	7.15	1 0	4.26
17	7.3			7.50	7.40	1 1	4.23
18	7.9	7.95 1 0	8.0	8.10	8.02	07 08	4.04
19	8.3	8.30 0 0	8.3	8.30	8.30	00 00	4.12
20	8.7	8.60 1 1	8.5	8.70	8.65	05 05	4.08
23	9.3	9.25 1 0	9.2	9.30	9.28	03 02	4.06
25	9.9	9.85 1 0	9.8	7	9.85	a .	4.02

6/4 5/4
-.15 +.12

10.13

5/4 4/4
-.12 +.10

15/4 15/4
-.04 +.04

125/10 105/12
-.10 +.09

copied.

P.C

			MC3126	Mean		Diff.
5.8	5.80 0 0	5.8	5.90	5.85	05 05	0.64
6.4	6.45 0 1	6.5	6.50	6.48	03 02	0.63
8.2	8.15 0 1	8.1	8.10	8.12	03 02	0.11
8.8	8.85 0 1	8.9	8.90	8.88	03 02	-0.05
9.0	900 0 0	9.0	9.25	9.12	12 13	-0.10
9.4			9.75	9.52	12 13	+0.03
9.9				9.90	a .	-0.04

05/3 05/3
-.02 +.021

27/3 28/3
-.09 +.09

32/6 33/6
-.05 +.06

Series 68

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Bell

February 17, 1914

MC 3121 = 58k

PC Alt. + .22 ch. 14

	Sc 1	Sc 2			Curve	Magn.		Curve	Magn.
1	5.0				4.37	9.37	9.0	-0.03	~~9.10~~ 8.97
2	5.3				4.35	9.65	9.7	-0.04	9.66
3		5.6			4.33	~~10.06~~ 9.93			
4		6.2			4.30	10.50			
5		7.2			4.21	11.41			
6		7.5			4.18	11.58			
7		8.0			4.14	12.14			
8		8.2	8.25 0.1	8.3	4.11	12.36			
9		8.7	8.70 0.0	8.7	4.09	12.79			
10		9.5	9.50 0.0	9.5	4.04	13.54			
11		9.8	9.85 0.1	9.9	4.02	~~14.01~~ 13.87			
12		9.7	9.75 1.0	9.8	4.03	13.78			
13		ns							
14		ns							
15		ns							

Series 68 Copied

Se U February 12, 1914

MC 3122 82 K VBC alt. +.17

	Se1	Se2	Curve	Magn.	6.60 1 ±		Curve	Magn.
1	3.7				6.7	6.5	+0.49	7.~~09~~ [illegible]
2		5.1	4.37	9.~~47~~ 80	9.5	9.60 1 1 9.7	-0.04	9.~~64~~ [illegible]
3		5.3	4.35	9.~~66~~ 78	9.7	9.70 0 0 9.7	-0.04	9.~~66~~ [illegible]
4		5.7	4.33	10.~~03~~ [illegible]				
5		6.1	4.30	10.~~40~~ 53				
6		6.5	4.28	10.~~78~~ [illegible]				
7		7.0	4.23	11.~~23~~ 57				
8		7.5	4.18	11.~~68~~ [illegible]				
9		8.05 01 8.0 8.1	4.13	12.~~18~~ 52				
10		8.30 0 0 8.3 8.3	4.12	12.~~41~~ 55				
11		8.70 0 0 8.7 8.7	4.09	12.~~79~~ 73				
12		9.25 0 1 9.2 9.3	4.05	13.~~30~~ [illegible]				
13		n.s						
14		n.s						
15		n.s						

Poor Plate, images elongated - reject?

Series 68 Copied.

Dell February 12, 1914

MC 3123 166K 8C alt. +.06

	Sc 1	Sc 2	Curve	Magn.		Curve	Magn.
1	46		4.39	8.99	8.7	-0.01	8.69
2		5.1	4.37	9.47	9.7	-0.04	9.66
3		5.3	4.35	9.65	9.8	-0.04	9.76
4		5.9	4.32	10.22			
5		6.2	4.30	10.50			
6		6.5	4.28	10.78			
7		7.2	4.21	11.41			
8		7.5	4.19	11.69			
9		7.7	4.17	11.87			
10		8.30000 83 83	4.11	12.41			
11		8.4011 85 83	4.10	12.50			
12		585000 87 85	4.10	12.60			
13		8.7000 87 87	4.09	12.79			
14		87510 87? 88	4.09	12.79 84			
15		NS?					

Series 68

Dell

February 12, 1914

Copied

MC 3124 B6 alt +.22 PC

		Sc1	Sc2	Curve Magn.		PC		Curve Magn.				Curve Magn.
	1	13.				605 01 60 61	4.30	Curve Magn. 30	065 ~~6.65~~ 6.70	9.95 0 1 10.0 9.9	4.01	14.10 13.96
Trapez f. C	2			Curve Magn.		6.20 00 67 67	4.30	0.61	83 6.81 31	N.S		
" " " "	3					6.30 00 63 63	4.29	0.57	99 6.87			
" " " "	4					6.55 0 1 66 65	4.28	0.50	.18 7.05			
" " " "	5					7.10 00 71 71	4.21	0.35	.58 7.45			
" " " "	6	38				77	4.17	0.20	8.03 7.90			
" " " "	7	39		4.43	.46 8.33	79	4.15	0.15	.18 8.05			
	8	43		4.40	.83 8.70	82	4.12	0.09	.42 8.29			
	9		48	4.39	.32 9.19	88	4.09	-0.02	.91 8.78			
	10		49	4.38	.41 9.28	90	4.08	-0.03	9.10 8.97			
	11		53	4.36	.79 9.66	99	4.01	-0.04	.99 9.86			
	12		54	4.35	.88 9.75	99	4.01	-0.04	99 9.86			
	13		57	4.32	.15 10.02							
	14		60	4.31	.44 10.31							
	15		62	4.30	.63 10.50							
	16		61	4.30	.53 10.40							
	17		64	4.28	.81 10.68							
	18		64	4.28	.81 10.68							
	19		71	4.22	.46 11.32							
	20		71	4.22	.46 11.32							
	21		75	4.18	.82 11.68							
	22		80	4.14	.28 12.14							
	23		82	4.12	.46 12.32							
	24		79	4.15	.19 12.05							
	25		83	4.11	.55 12.41							
	26		800 00 80 80	4.14	.28 12.14							
	27		8.75 1 0 87 88	4.09	98 12.84							
	28		9.40 1 1 93 95	4.05	59 13.45							
	29		9.70 0 0 97 97	4.03	.87 13.73							

Series 68

copied

Bell

February 12, 1914

Mc 3125 34 K Alt. + 72

	Sc1	Sc2	Curve	Magn.			Curve	Magn.
1	38				7.7	7.60 1 1 75	0.22	7.82
2	42		4.41	8.61	8.1	8.00 1 1 79	0.14	8.14
3	46		4.39	8.99	8.9	9.00 1 1 91	-0.03	8.97
4	49		4.38	9.28	9.1	9.15 1 0 92	-0.04	9.11
5		57	4.33	10.03				
6		61	4.30	10.40				
7		67	4.26	10.96				
8		75	4.18	11.68				
9		79	4.15	12.05				
10		825 0 1 82 83	4.11	12.36				
11		8.50 0 0 85 85	4.10	12.60				
12		9.20 1 1 93 91	4.06	13.26				
13		9.75 0 1 98 97	4.02	13.77				
14		9.80 0 0 98 98	4.02	13.82				
15		n.s.						

Davis 68

Dcll February 12, 1914

	MC 3126 Bole			Bc		
5				5.9	5.90 0 0	5.9
6				6.4	6.50 1 1	6.6
8				8.1	8.10 0 0	8.1
9				9.0	8.90 1 1	8.8
10	4.9			9.3	9.25 1 0	9.2
11	5.3			9.8	9.75 0 1	9.7
12		5.7				
13		6.0				
14		6.5				
15		6.9				
16		7.2				
17		7.50 0 0 7.5	7.5			
18		8.10 0 0 8.1	8.1			
19		8.30 0 0 8.3	8.3			
20		8.70 0 0 8.7	8.7			
23		9.30 1 1 9.4	9.2			
25		F				
~~26~~						

12 15

Series 55

Sell 2945 — 2~~9~~50 February 17, 1914

	Se 1	Se 2	MC2950	mean			Diff.	PC			mC2950				Diff.
MC2945 - 5								5.7	5.70 0 0	57	6.15	5.92	22	23	0.57
10 20 6								64	6.45 0 1	65	6.65	6.55	10	10	0.56
8								77	7.75 1 0	7.8	8.20	7.98	23	22	0.25
9								87	8.65 1 0	86	8.95	8.80	15	15	0.03
10		51	5.2	5.15	1	0	3.87	9.0	8.95 0 1	89	9.30	9.12	7 18	18	-0.10
11		54 ~~57~~	5.7	5.55	2	1	4.00	95	9.50 0 0	95	9.9	9.70	2	2	-0.15
12		59	6.2	6.05	1	2	3.81	99	9.85 1 0	98		9.85	a	.	+0.01
13		63	6.7	6.50	2	2	3.80								
14		67	7.1	6.90	2	2	3.75								
15		71	7.5	7.30	2	2	3.78								
16		74	7.9	7.65	2	3	3.75								
17		77	8.1	7.90	2	2	3.73								
18		83	8.50	8.40	1	1	3.66								
19		85	8.45 1 0 8.65 84	8.55	10	10	3.87								
20		87	8.65 1 0 8.95 86	8.80	15	15	3.93								
23		91	9.15 1 0 9.35 92	9.25	10	10	4.09								
~~24~~															
25		97	9.70 0 0 9.75 97	9.72	02	03	4.15								
26		100	10.00 00 n.S 100	10.00	a	.	4.33								
27		n.S.													

10 10
4 4
-.15 +.18

37 38
2 2
-.18 +.19

107 108
6 6
-.18 +.18

8 7
5 5
-.16 +.14

95 105
6 6
-.16 +.18

12 13
2 2
-.06 +.06

187 188
13 13
-.14 +14

copied

Series 55

Sc 11 February 17, 1914 copied

Mc 2946 130 K Alt -.19 Sc

	Sc 1	Sc 2			Curve	Magn. 9.01
1	4.9				3.98	8.88
2		5.2			3.93	.26 9.13
3		5.6			3.88	.61 9.48
4		6.0			3.84	.97 9.84
5		6.2			3.81	x9.14 9.01
6		6.5			3.79	.42 10.29
7		7.1			3.74	.98 10.84
8		7.3			3.73	.17 11.03
9		7.2			3.74	11.08 ~~10.94~~
10		7.5			3.73	.87 ~~11.23~~
11		8.3	8.40 1 1	8.5	3.82	.36 12.22
12		8.3	8.30 0 0	8.3	3.80	.24 12.10
13		8.6	8.55 0 1	8.5	3.85	.54 12.40
14		9.0	9.00 0 0	9.0	3.96	13.10 ~~12.96~~
15		9.5	9.55 1 0	9.6	4.15	.84 13.70

Sc 2			Curve	Magn.
8.7	8.70 0 0	8.7	0.05	.88 8.75
9.1	9.10 0 0	9.1	-0.05	.18 9.05
9.7	9.70 0 0	9.7	-0.14	.67 9.56
10.0	10.00 0 0	10.0	-0.15	.98 9.85

Remeas. Jan. 25, 17.

Sc 2	13	8.6
	14	9.1
	15	9.4

Very poor images!

Dell

Series 55 February 17, 1914 copied

		Mc 2947 = 68						Bc	Alt. +.17									
											Curve	Magn.						
Too far f. C	1							67	6.60 1 1	65	0.50	7.10	30				Curve	Magn.
" " " "	2					Curve	Magn.	67	6.70 0 0	67	0.49	7.19	31					
	3	40						79	7.85 1 0	78	0.27	8.12	25a	85	8.40 1 1	83	3.82	12.22
On edge of pl.	4							74	7.35 0 1	73	0.38	7.73	27a	97	9.60 1 1	95	4.16	13.76
" " " "	5							77	7.60	75	0.33	7.93	29a	n.s.				
	6	43				4.05	8.35	78			0.28	8.08	~~6a~~	~~85~~				
	6a							84			0.14	8.54						
On extreme edge	7							—			~~0.11~~							
	8	47				4.00	8.70	89			0.00	8.90						
	9	49				3.98	8.88	91			-0.05	9.05						
	10		56			3.88	9.48	98			-0.14	9.66						
	11		54			3.90	9.30	97			-0.14	9.56						
	12		55			3.89	9.39	99			-0.15	9.75						
	13		55			3.89	9.39	99			-0.15	9.75						
	14		57			3.86	9.56											
	15		63			3.80	10.10											
	16		63			3.80	10.10											
	17		67			3.78	10.48											
	18		67			3.78	10.48											
	19		67	6.60 1 1	65	3.78	10.38											
	20		65			3.79	10.29											
	21		76			3.74	11.34											
	22		78			3.75	11.55											
	23		78			3.75	11.55											
	24		80			3.76	11.76											
	25		83			3.80	12.10											
	26		85	8.60 1 1	81	3.87	12.47											
	27		92	9.10 1 1	90	3.99	13.09											
	28		3															
	29		97	9.75 1 0	98	4.20	14.09 13.95											

Series 55

copied.

Date February 17, 1914

MC 2948 = 59 K

8C alt. +.22

	Se 1	Se 2	Curve	Magn.	8C		Curve	Magn.
1	40				7.65 0.1 76	77	0.30	~~8.18~~ 7.95
2	48		3.99	~~.72~~ 8.79	8.70 0.0 87	87	0.05	~~.85~~ 8.75
3	53 5.25 1.0	52	.93 3.~~82~~	.18 9.~~22~~	9.15 0.1 92	91	-0.06	~~.22~~ 9.09
4		53	.92 3.~~80~~	.2 9.~~20~~	9.35 0.0 93	94	-0.10	~~.35~~ 9.25
5		55	.8 3.~~79~~	.3 9.~~29~~	9.85 1.0 99	98	-0.14	~~.84~~ 9.71
6		60	.83 3.~~75~~	.83 9.~~75~~				
7		63	.80 3.~~74~~	.10 10.~~04~~				
8		65	.80 3.~~74~~	.30 10.~~24~~				
9		67	.78 3.~~75~~	.8 10.45				
10		72	.75 3.~~77~~	~~11.07~~ 5 10.99				
11		74	.73 3.~~84~~	.13 11.~~27~~				
12		79 7.95 1.0	80 3.76	~~.85~~ 11.71				
13		83 8.30 0.0	83 3.80	~~.24~~ 12.10				
14		87 8.75 1.0	88 3.89	~~.75~~ 12.64				
15		90 9.00 0.0	90 3.96	~~13.~~ 12.96				
16		95 9.50 0.0	95 4.12	13.62				

Series 55

copied.

Bell

February 17, 1914

IMC 2949 = 83 K

BC Alt. +.17 ch W

	Sc 1	Sc 2			Curve	Magn.		Curve	Magn.
1		5.0			3.96	8.96	9.1	-0.05	9.06
2		5.9			3.84	9.74	9.9	-0.15	9.75
3		6.3			3.80	10.10			
4		6.7			3.78	10.48			
5		7.1			3.75	10.85			
6		7.4			3.74	11.14			
7		7.8			3.75	11.55			
8		8.3			3.80	12.10			
9		8.7			3.88	12.58			
10		8.9			3.92	12.82			
11		9.2	9.15 0±	9.1	4.00	13.15			
12		9.3	9.25 1.0	9.2	4.0~~7~~4	13.~~32~~ 27			
13		9.5	9.50 0.0	9.5	4.12	13.62			
14		9.8	9.75 0±	9.7	4.21	13.96			
15		9.9	9.90 0.0	9.9	4.27	14.17			

Series 55

Dell February 17, 1914

Mc 2950 Bole

5				6.2	6.15 0 1	6.1
6				6.6	6.65 0 1	6.7
8				8.3	8.20 1 1	8.1
9				9.0	8.95 0 1	8.9
10	5.2			9.3	9.30 0 0	9.3
11	5.7			9.9		
12	6.2					
13	6.7					
14	7.1					
15	7.5					
16	7.9					
17	8.1					
18	8.5	8.50 0 0	8.5			
19	8.7	8.65 1 0	8.6			
20	9.0	8.95 0 1	8.9			
23	9.4	9.35 0 1	9.3			
25	9.7	9.75 1 0	9.8			
26	NS					

See page 109.

12

Series 71

Bell February 28, 1914 Copied:

2 20 Mc 3148 = 25 Kp BC Alt. −.01 ch W

		Se 1	Se 2	Curve	Magn.	Se 2 .01	Curve	
	1	B		.	.	5.95 6.0 5.9	+0.88	6.83
DBl?	2	3.2		.	.	Star close to comp. cannot meas.	.	.
	3	4.8		+4.36	9.16	8.70 .00 8.7 8.7	0.42	9.12
	4		5.4	4.41	9.81	9.95 .10 9.9 10.0	0.30	10.25
	5		5.7	4.42	10.12 9.8	9.75? .01 9.9? Br. st. close to comp.	0.30	10.05?
	6		6.1	4.42	10.52		ch W	
	7		6.1	4.42	10.52			
	8		6.7	4.41	11.11			
	9		7.1	4.40	11.50			
	10		7.25 .01 7.2 7.3	4.40	11.65			
	11		8.10 .00 8.1 8.1	4.42	12.52			
	12		8.35 .10 8.3 8.4	4.44	12.79			
	13		9.25 .01 9.2 9.3	4.56	13.81			
	14		9.85 .01 9.8 9.9	4.70	14.55			
	15		f					

ch W

Series 71

Dell

February 28, 1914 Copied

MC 3149 = 125 K Not to be meas.

MC 3150 = R Leonis Min. 116 ✓ alt. +.22 chW

				Curve	Magn.		Curve	Magn.
Off plate.	a			·	·	~~53~~	·	·
	b	B		·	·	5.35 1.0 53 54	+0.95	6.30
On edge of film.	c			·	·		·	·
	d	30		·	·	6.15 1.0 61 62	0.85	7.00
	e	39		·	·	7.20 0.0 72 72	0.67	7.87
	f			·	·	6.75 0.1 68 67	0.74	7.49
	g	42		·	·	8.60 1.1 87 85	0.44	9.04
	h	40		·	·	7.95 1.0 79 80	0.54	8.49
	k	41		·	·	80	0.53	8.53
	l	43		·	·	88	0.40	9.20
	m		49	+4.37	9.27	97	0.31	10.01
	n		48	4.36	9.16	97	0.31	10.01
	o		49	4.37	9.27	95	0.33	9.85
	p		5.6	4.42	10.02			chW
	q		6.2	4.42	10.62			
	r		6.3	4.42	10.72			
	s		7.0	4.40	11.40			
	t		8.1	4.42	12.52			
	u		8.50 1.1 86 84	4.45	12.95			
	w		9.00 0.0 90 90	4.52	13.52			
	x		8.90 0.0 89 89	4.51	13.41			
	y		9.30 0.0 93 93	4.57	13.87			
	d		9.90 0.0 99 99	4.71	14.61			
	z		78	4.41	12.21			
					chW			

Series 71

Bell

February 28, 1914 :

Mc 3151 I — Leonis Min 20 K PC alt. + 22 ch W

Visual seq
Red ink

Adopted Des.			Scz	Curve	Magn.
a	f =	a	6.4	+4.42	10.82
b	g =	b	6.9	4.41	11.31
c	h =	c	7.1	4.40	11.50
d	k =	d	7.0	4.40	11.40
e	p =	e	8.5	4.46	12.96
f	n =	f	8.0	4.42	12.42
g	o =	g	8.3	4.43	12.73

f
g
h
k
p
n
o

Ptg. seq

						Curve	Magn.
α	a	5.1	4.39	9.49	9.5	+0.33	9.83
β	b	5.3	4.40	9.70	9.8	0.30	10.10
γ	c	5.8	4.42	10.22			ch W
δ	d	6.3	4.42	10.72			
ε	e	6.7	4.41	11.11			

ch W

See note on cover of I 30116

Series 71

Bell   February 28, 1914

Difference between MC 3152 and mean of MC 3152 and MC 3108		MC 3152 Pole Sc1	Sc2	Diff.	Diff. between MC 3152 and mean of MC {3152 + 4246	BC Sc2	Diff
	5					5.75 1 0 5.7 5.8	0.74
	6					6.30 0 0 6.3 6.3	0.81
	8					7.45 1 0 7.5 7.4	0.78
	9					8.50 0 0 8.5 8.5	0.33
+0.10	10	4.6		4.42	-0.30	8.80 0 0 8.8 8.8	0.22
+0.05	11		5.1	4.45	-0.35	9.2	0.35
0.00	12		5.4	4.46	-0.35	9.7	0.16
-0.10	13		6.0	4.30	-0.60		
-0.05	14		6.3	4.35	-0.42		
0.00	15		6.6	4.48	-0.45		
-0.05	16		7.0	4.40	-0.65		
+0.10	17		7.2	4.43	-0.55		
+0.10	18		7.7	4.36	-0.55		
+0.08	19		8.0	4.42			
+0.03	20		8.25 0 1 8.2 8.3	4.48			
+0.13	23		8.75 1 0 8.7 8.8	4.59			
+0.13	25		9.15 1 0 9.1 9.2	4.72			
+0.18	26		9.50 0 0 9.5 9.5	4.83			
+0.10	27		9.85 1 0 9.9 9.8	4.84			
15| +0.80							
+ .05							

3   20

The measures on this page show a systematic difference from those on page 124 for the same plate. As the mean is small, however, readings on other plates measured Feb. 28 need not be corrected, but may be reduced by means of the curves used for the ~~second~~ half of the series, measured March 2. H.S.L. Oct. 8, 1914

Series 71

Sell

March 2, 1914

1m 15	MC 3152	Ode.		Oc	
	Se1	Se2		Se2	
5				5.6	5.7 5.65 01
6				6.2	6.2 6.20 00
8				7.9	8.0 7.95 10
9				8.3	8.5 8.40 11
10	4.7			8.8	8.7 8.75 01
11		5.1		9.4	
12		5.4		9.8	
13		5.9			
14		6.2			
15		6.6			
16		6.9			
17		7.3			
18		7.8		See page 124	
		8.05 10			
19		8.1 80			
		8.30 60			
20		8.3 83			
		8.85 01			
23		8.8 89			
		9.30 00			
25		9.3 93			
		9.75 10			
26		9.7 98			
27		F			

Series 71

Bell

March 2, 1914

Copied.

MC 3153 = R Urs. Maj

PC

Alt +.17

		Sc 1	Sc 2			Sc 2					
	a	3.1				6.2	6.2	6.30	00	0.83	7.03
	b					7.3	7.2	7.25	10	0.67	7.92
Off plate	c										
Near edge	d					7.1	7.1	7.10	00	0.69	7.79
Off plate.	e										
Near the edge.	f					7.5	7.3	7.40	11	0.64	8.04
	g	4.2 ·				8.1	8.0	8.05	10	0.52	8.57
	h	4.0 ·				7.6				0.61	8.21
Too far for C	k	4.9 ~~4.37~~		4.31	9.27	9.5				0.33	9.83
" " " "	l	~~4.9~~ ·				8.7				0.42	9.12
	l'	4.9 ~~4.37~~		4.31	9.27	8.9				0.39	9.29
	m		5.3	4.40	9.70	9.9				0.30	10.20
	m'		5.9	4.41	10.31						
	n		5.5	4.41	9.91						
	o		5.7	4.41	10.11						
	o'		6.2	4.41	10.61						
	o^2		6.4	4.40	10.80						
	p		6.5	4.40	10.90						
	q		6.9	4.40	11.30						
	r		7.4	4.40	11.80						
	s		8.1	4.41	$1\overset{2}{3}.51$						
	t		8.45 10 8.5 8.4	4.44	12.89						
	u		9.00 00 9.0 9.0	4.52	13.52						
	u'		9.45 10 9.5 9.4	4.60	14.05						
No w marked on I or C plate	w										
	x		9.80 00 9.8 9.8	4.68	14.48						
	y		n.s								

Series 71

copied

Bell

March 2, 1914

MC 3154 W Leonis

Alt. +.17

Too faint for c
Image poor

a	4.3			
b	4.0			
c		5.2	4.40	9.60
d				
e		5.7	4.41	10.11
f		6.2	4.41	10.61
g		6.0	4.41	10.41
h		6.5	4.41	10.91
k		6.6	4.40	11.00
l		6.9	4.40	11.30
m		6.5	4.41	10.91
n		8.2	4.42	12.62
o		8.5	4.45	12.95
p		8.5	4.45	12.95
q		8.7	4.49	13.19
r		9.0	4.52	13.52
s		9.4	4.59	13.99

Series 71

copied

SU

March 2, 1914

DOK

MC 3155 SU Draconis alt. + .18

	Sc 1	Sc 2							
a	4.7		4.34	9.04	8.5 ?	Br. star near.		0.46	8.96
b		5.4	4.40	9.80	9.5	9.7	9.60 1.1	0.31	9.91
c		5.6	4.41	10.01	9.7	9.8	9.75 1.0	0.30	10.05
d		6.1	4.41	10.51					
e		5.7	4.41	10.11	9.9	9.8	9.85 1.0	0.30	10.15
f		6.3	4.41	10.71					
g		6.7	4.40	11.10					
h		7.1	4.40	11.50					
k		7.4	4.40	11.80					
l		7.5	4.40	11.90					
m		8.1	4.42	12.52					
n		8.50 0.0 8.5 8.5	4.45	12.95					
o		8.60 1.1 8.7 8.5	4.47	13.07					
p		8.85 1.0 8.9 8.8	4.50	13.35					
q		9.30 0.0 9.3 9.3	4.57	13.87					
r		9.75 0.1 9.8 9.7	4.67	14.42					

Series 71

Dull

March 7, 1914 Copied

MC 3156 Z Draconis OC Alt. +.15

		Sc1	Sc2			20K			
	a	47			4.34	9.04	9.2	0.35	9.55
	b		53		4.40	9.70	9.7	0.31	10.01
	c		56		4.40	10.00			
	d		60		4.41	10.41			
	e		62		4.41	10.61			
	f		67		4.40	11.10			
	g		79		4.40	12.30			
	h		83		4.43	12.73			
~~Position marked~~	k		8.40 85	1.1 83	$4.4\overset{4}{2}$	12.84			
l′ =	l		8.35 84	0.1 83	4.44	12.79			
m′ =	m		8.95 90	0.1 89	4.51	13.46			
m =	n		9.15 92	0.1 91	4.54	13.69			
	o		9.50 95	0.0 95	4.61	14.11			
	p		9.75 97	1.0 98	4.67	14.42			
	~~q~~		~~97~~						
	f′		72		4.40	11.60			

Series 71

copied.

Sell

March 2, 1914

MC 3157 = R Comae Ber. RC Alt. +.18 (Chart - Vol 37)

		Sc1	Sc2			Sc 2					
	a	47				7.3	7.3	7.30	0.0	0.65	7.95
	b	43				7.9	8.0	7.95	1.0	0.54	8.49
	c	42				7.9	7.9	7.90	0.0	0.56	8.46
	d	46		4.34	8.94	8.3	8.3	8.30	0.0	0.49	8.79
Too faint fr. C	e	42				8.2	8.2	8.20	0.0	0.50	8.70
	f	46		4.34	8.94	8.3					
Too faint fr. C	g	46		4.34	8.94	9.0					
	h		5.7	4.41	10.11						
	k		5.5	4.41	~~10~~9.91	9.3					
	l		5.7	4.41	10.11	9.9					
	m		5.8	4.41	10.21	10.0					
	n		6.1	4.41	10.51						
	o		6.6	4.40	11.00						
	p		6.8	4.40	11.20						
	q		7.60 1.1 7.7 7.5	4.40	12.00						
	r		7.85 1.0 7.9 7.8	4.40	12.25						
	s		7.95 0.1 8.0 7.9	4.40	12.35						
	t		8.70 0.0 8.7 8.7	4.48	13.18						
	u		9.60 1.1 9.5 9.7	4.63	14.23						

Series 71

Sall March 2, 1914

9

	MC 3158 Se 2		B.118 → Mc 3152	mean	Diff.	BC			B.118	Mean	Diff
5						5.6	5.7	5.65 01	5.65	5.65 00 00	0.84
6						6.2	6.3	6.25 01	6.20	6.22 03 02	0.89
8						7.4	7.5	7.45 01	7.95	7.70 25 25	0.53
9						8.1	8.3	8.20 11	8.40	8.30 10 10	0.53
10	4.7		4.7	4.70 00	+4.32	8.4	8.7	8.55 21	8.75	8.65 10 10	0.37
11	5.2		5.1	5.15 01	4.40	9.0	9.1	9.0 a .	9.4	9.20 2 2	0.35
12	5.4		5.4	5.40 00	4.46	9.5	9.5	9.5 a .	9.8	9.65 1 2	0.21
13	5.9		5.9	5.90 00	4.40	9.9	9.9	9.9 a .		9.9 a .	0.40
14	6.3		6.2	6.25 10	4.40						
15	6.6		6.6	6.60 00	4.48						
16	7.0		6.9	6.95 01	4.45						
17	7.3		7.3	7.30 00	4.33						
18	7.8		7.8	7.80 00	4.26						
19	8.1		8.05	8.08 02 03	4.34						
20	8.3	8.25 82 10	8.30	8.28 03 02	4.45						
23	8.9	8.90 00 89	8.85	8.88 02 03	4.46						
25	9.3	9.25 10 92	9.30	9.28 03 02	4.59						
26	9.6	9.60 00 96	9.75	9.68 08 07	4.65						
27	10.0	9.95 01 99	f.	9.95 a .	4.74						

35/4 −.09 33/4 +08

40/3 −.13 50/3 +.17

72/7 +.10 83/7 +.12

1/5 +.02 1/5 −.02

01/6 −.00 ~~02/6 :00~~ 11/6 −.02

09/3 −.03 06/3 +.03

00/14 .00 15/14 −.01

copied.

Series 158

Sell

March 11, 1914

9 45 MC 4246 Pole

	Sc 1		Sc 2	MC 4251 mean	Diff.	PC			Diff.
5						5.4	6.35 01 5.3	5.55 5.45 10 10	1.04
6						6.2	6.20 00 6.2	6.15 6.18 02 03	0.93
8						7.1	7.10 00 7.1	7.20 7.15 05 05	1.08
9						7.7	7.70 00 7.7	7.60 7.65 05 05	1.18
10	4.3			4.3 4.30 00	4.72	7.9	7.95 10 8.0	7.90 7.92 03 02	1.10
11	4.7			4.8 4.75 10	4.80	8.5		8.1 8.30 20 20	1.25
12	5.0			5.1 5.05 01	4.81	8.9		8.5 8.70 2 2	1.16
13	5.3			5.5 5.40 11	4.98	9.2		9.0 9.10 1 1	1.20
14	6.0	5.95 01	5.9	5.8 5.88 07 08	4.77			9.3 9.30 a	3 1.25
15			6.1	6.2 6.15 10	4.93				
16			6.3	6.4 6.35 10	5.05				
17			6.7	6.6 6.65 10	4.98				
18			7.2	7.1 7.15 01	4.91				
19			7.5	7.4 7.45 10	4.97				
20			7.7	7.5 7.60 11	5.13				
23			8.1	8.10 00 8.1 7.9 8.00 11	5.3 4.74				
25			8.5	8.45 10 8.4 8.30 8.38 07 08	5.49				
26			8.8	8.85 01 8.9 8.70 8.78 07 07 08	5.55				
27			9.2	9.20 00 9.2 9.10 9.15 05 05	5.54				
28			9.5	9.60 11 9.7 9.45 9.52 08 07	5.59				
29			F	9.90 9.90 a	5.76				

08 07
4 4
-.02 +.02

53 52
4 4
+.13 -.13

45 45
8 8
+.06 -.06

10-14 13 12
5 5
-.03 +.02

15-20 3 2
6 6
+.05 -.03

copied.

21-27 29 31
4 4
+.07 -.08

all 38 32
16 16
+.02 -.02

28- 08 07
1 1
-.08 +.07

Series 158

Dell 2+. March 11, 1914 Copied. Card.

MC 4247 = 71 k. Alt. +.16 Bc

	Sc1	Sc2	Curve	Magn.		Curve	Magn.
1	47		4.77	9.47	82	1.18	9.38
2		56	4.86	10.46	94	1.30	10.70
3		64	4.97	11.37			
4		63	4.95	11.25			
5		68	5.04	11.84			
6		70	5.08	12.08			
7		73	5.14	12.44			
8		77	5.21	12.91			
9		80	5.27	~~.41~~ 13.27			
10		8.35 0 1 84 83	5.36	~~.86~~ 13.71			
11		8.40 1 1 85 83	5.37	.91 13.77			
12		8.70 0 0 87 87	5.45	14.15			
13		8.95 0 1 90 89	5.51	~~.60~~ 14.46			
14		9.30 0 0 93 93	5.60	~~15.04~~ 14.90			
15 = Pr.		9.85 1 0 ~~99 98~~	5.75	15.60			

Series 158

Sc U

March 11, 1914

Copied.

Card.

MC 4248 Pleiades

Oc alt. cor. +20

	Sc1	Sc2	Curve	Magn.	Oc		Curve	Magn.
i'	4.2		4.72	8.92	7.7	7.60 1 1 7.5	1.11	8.71
k'	1	6.3	4.95	11.25				
f	3.1		.		6.3	6.25 1 0 6.2	1.02	7.27
j5		5.8	4.88	10.68	9.0	9.05 0 1 9.1	1.28	10.33
b	4.0		4.71	8.71	7.2	7.20 0 0 7.2	1.08	8.28
e'	2.9		.		5.9	5.85 1 0 5.8	0.99	6.84
e	B		.		5.5		0.98	6.48
j4	4.9		4.80	9.70	8.7		1.23	9.93
j3	4.7		4.78	9.48	8.1		1.17	9.27
j2	4.6		4.77	9.37	8.0		1.16	9.16
j1		5.3	4.83	10.13	9 8.~~7~~		1.23	9.93
a'	B		.		4.1		0.97	5.07
b'	B		.		4.3		0.97	5.27
g	3.2		.		6.2		1.02	7.22
h	3.7		.		6.7		1.04	7.74
j	4.3		4.73	9.03	7.7		1.12	8.82
k	.	5.4	4.84	10.24	9.2		1.28	10.48
m'		7.7	5.21	12.91				
l		7.9	5.08	12.08				
o		8.9	5.49	14.39				
m		7.5	5.18	12.68				
l'		7.7	5.11	12.31				
n		8.4	5.37	13.77				
r	ns		.					
p		9.8	9.80 0 0 9.8 5.74	15.54				
q	ns		.					
s	ns		.					
t	ns		.					

Series 158

Bell March 11, 1914 Copied Card

Mc 4249 = 95 K Alt to 5 PC

	Sc1	Sc2		Curve	Magn.		Curve	Magn.
1	4.3			4.73	9.03	77	1.11	8.87
2	4.3			4.73	9.03	78	1.13	8.93
3	4.7			4.78	9.48			
4		67		4.90	10.90			
5		62		4.93	11.13			
6		64		4.97	11.37			
7		65		4.99	11.49			
8		68		5.03	11.83			
9		71		5.10	12.20			
10		73		5.13	12.43			
11		7.9006 79	79	5.25	13.15			
12		8.3000 83	83	5.35	13.65			
13		8.6510 87	86	5.42	14.07			
14		9.5000 95	95	5.16	14.66			
15		9.8000 98	98	5.23	15.03			

Series 158

Sc U March 17, 1914 Copied. Card.

MC 4250 = 17 KD 8C Alt. +22

	Sc 1	Sc 2	Curv	Magn.		Curv	Magn.
1	49		4.80	.83 9.70	85	1.20	83 9.70
2		52	4.82	.15 10.02	87	1.22	.1005 9.92
3		54	4.84	.37 10.24	92	1.29	62 10.49
4		56	4.85	.58 10.45	97	1.34	18 11.04
5		62	4.93	.27 11.13			
6		64	4.97	.51 11.37			
7		63	4.95	.39 11.25			
8		67	5.02	.86 11.72			
9		72	5.12	.46 12.32			
10		76	5.19	.93 12.79			
11		78	5.23	.17 13.03			
12		80	5.27	.41 13.27			
13		8.3000 83 83	5.34	.78 13.64			
14		8.60 1 1 85 87	5.42	.16 14.02			
15		8.85 0 1 88 89	5.49	.48 14.34			
16		9.00 0 0 90 90	5.52	.66 14.52			
17		9.50 0 0 95 95	5.65	.29 15.15			
18		9.80 0 0 98 98	72 5.62	.66 15.52			

Images fan-elongated. Reject?

Series 158

Bell

March 11, 1914

Me 4251 Cole			Bc
	Sc1	Sc2	
5			5.55 0 1 5.6 5.5
6			6.15 0 1 6.2 6.1
8			7.20 0 0 7.2 7.2
9			7.60 1 1 7.7 7.6
10	4.3		7.90 0 0 7.9 7.9
11	4.8		8.1
12	5.1		8.5
13		5.5	9.0
14		5.8	9.3
15		6.2	
16		6.4	
17		6.6	
18		7.1	
19		7.4	
20		7.5	
23		7.9	
25		8.30 0 0 8.3 8.3	
26		8.70 0 0 8.7 8.7	
27		9.10 0 0 9.1 9.1	
28		9.45 0 1 9.4 9.5	
29		9.90 0 0 9.9 9.9	

See page 125

11 45

Thursday March 12, 1914

Scale U

Series 158

Mc 4251 Pole

9:50

	sc.1+2	sc.2	Mc 4257	Mean		Diff.
5						
6						
~~8~~						
9						
10	4.3		4.3	4.30	0 0	4.72
11	4.8		4.6	4.70	1 1	4.85
12	5.0		5.0	5.00	0 0	4.86
13	5.3		5.3	5.30	0 0	5.00
14	5.7		5.6	5.65	1 0	5.00
15	6.2		5.9	6.05	2 1	5.03
16	6.3		6.2	6.25	1 0	5.15
17	6.7		6.5	6.60	1 1	5.03
18	7.2		6.9	7.05	2 1	5.01
19	7.3		7.2	7.25	1 0	5.17
20	7.5		7.4	7.45	1 0	5.28
23	~~8.1~~ 7.9		7.95	7.92	02 03	5.42
25	8.4	8.30 1 1 8.2	8.30	8.30	00 00	5.57
26	8.7	8.70 0 0 8.7	8.70	8.70	00 00	5.63
27	9.1	9.15 1 0 9.2	9.15	9.15	00 00	5.54
28	9.7	9.60 1 1 9.5	9.60	9.60	00 00	5.51
29	10.0	9.95 0 1 9.9	7	9.95	a .	5.71

2 1
5 5
+.04 −.02
8 3
6 6
+.13 −.05
02 03
4 4
−.06 +.08
0 0
1 1
.00 .00
98 37
16 16
+.06 −.02

copied.

PC sc2	sc2	Mc 4257	Mean	13 12	Diff.
5.4	5.55 2 1 5.7	5.30	5.42	~~07 08~~	1.07
6.3	6.30 0 0 6.3	6.20	6.25	05 05	0.86
6.9	7.00 1 1 7.1	7.35	7.18	18 17	1.05
7.7	7.70 0 0 7.7	7.80	7.75	05 05	1.08
8.0	7.95 0 1 7.9	8.00	7.98	03 02	1.04
8.4		8.4	8.40	0 0	1.15
8.7		8.9	8.80	1 1	1.06
nj. ~~8.7~~ 9.0		9.2	9.10	1 1	1.20
9.8		9.7	9.75	0 1	~~0.92~~ ~~1.10~~
4.					

05 05
4 4
−.01 +.01

23 30 12
5 5 5
−.05 +.06 +.02

28 17
9 9
−.03 +.02

M.O.R –

10 –

Series 158

Sell   March 12, 1914   Copied.   Card.

Mc 4252 = .B2   BC   Alt. +22

	Sel	Se2	curve	magn.		curve	magn.
1	3.1		.		6.20 0.0 62 62	+1.00	7.20
2	3.3		.		6.30 0.0 63 63	1.00	7.30
3	3.7		4.67	8.37	6.45 10 65 64	1.01	7.46
4	4.2		4.72	8.92	6.80 1.1 69 67	1.03	7.83
5	4.1		4.71	8.81	6.85 0.1 68 69	1.04	7.89
6	4.2		4.73	8.93	7.20 0.0 7.2 72	1.07	8.27
7	4.3		4.74	9.04	7.1	1.06	8.16
8	4.3		4.74	9.04	7.3	1.08	8.38
9	4.6		4.79	9.39	7.5	1.08	8.58
10		4.7	4.80	9.50	8.1	1.10	9.20
11		4.7	4.80	9.50	7.9	1.09	8.99
12		4.7	4.80	9.50	8.0	1.10	9.10
13		4.7	4.80	9.50	8.1	1.10	9.20
14		4.9	4.83	9.73	8.4	1.10	9.50
15		5.2	4.88	10.08	8.5	1.10	9.60
16		5.4	4.90	10.30	8.7	1.10	9.80
17		5.8	4.97	10.77	9.2	1.08	10.28
18		5.9	4.98	10.88	9.3	1.07	10.37
19		6.1	5.01	11.11	9.5	1.04	10.54
20		6.3	5.04	11.34	9.7	1.01	10.71
21		6.3	5.04	11.34	9.9	0.99	10.89
22		6.5	5.07	11.57			
23		6.4	5.06	11.46			
24		6.5	5.07	11.57			
25		7.2	5.22	12.42			
26		7.3	5.25	12.55			
27		7.3	5.25	12.55			
28		7.6	5.32	12.92			
24c		6.5	5.07	11.57			

			curve	magn.
29	79		5.40	13.30
30	8.75 0.1 82	83	5.50	13.75
31	8.70 0.0 87	87	5.57	14.27
32	9.00 1.1 89	91	5.60	14.60
33	9.80 0.0 98	98	5.63	15.43
34	9.95 0.1 100	99	5.64	15.59
35	n.s ?			

Series 158

Sc U March 12, 1914 Copied Card.

MC 4253 = 121 K PC alt. -18

	Sc1	Sc2	curve	mag.					
1	3.2				6.2	6.0	6.10 1 1	+1.00	7.10
2	3.8		4.68	8.48	6.4	6.3	6.35 0 1	1.00	7.35
3	4.2		4.72	8.92	7.2	7.1	7.15 0 1	1.06	8.21
4		5.0	4.84	9.84	8.8	8.7	8.75 0 1	1.10	9.85
5		5.3	4.89	10.19	9.0	9.0	9.00 00	1.09	10.09
6		5.6	4.93	10.53	9.1		9.1 a.	1.09	10.19
7		5.9	4.98	10.88	9.7		9.7 a.	1.01	10.71
8		6.2	5.02	11.22					
9		6.4	5.05	11.49					
10		6.7	5.10	11.80					
11		6.9	5.15	12.05					
12		7.1	5.19	12.29					
13		7.3	5.25	12.55					
14		7.9	5.40	13.30					
15		8.25 01 82 8.3	~~4.45~~ 5.50	13.78					
16		8.75 1 0 8.7 8.8	5.58	14.33					
17		9.40 1 1 9.3 9.5	5.61	15.01					
18		9.75 1 0 9.7 9.8	5.63	15.38					
19		9.90 00 9.9 9.9	5.64	15.54					

Series 158

Bell March 17, 1914 Copied. Card.

MC 4254 = D3 Pc att. -20

		cur		curve	magn.	5.80 1.1		curve	
	1	3.0		·		5.7	5.9	0.97	6.77
Near edge	2			·		5.7		0.96	6.76
Near edge	3	3.1		·		5.7	5.70 0.0 5.7	0.96	6.66
	4	37		4.66	8 9.36	6.3	6.25 1.0 6.2	1.00	7.25
	5	39		4.69	8.59	6.4	6.40 0.0 6.4	1.00	7.40
Near edge	6	~~4~~ 36		4.65	8.25	63		1.00	7.30
	7	4.0		4.70	8.70	67		1.02	7.72
	8	41		4.71	8.84	67		1.02	7.72
	9	43		4.74	9.04	75		1.08	8.58
	10	43		4.74	9.04	77		1.09	8.79
	11	43		4.74	9.04	77		1.09	8.79
	12	43		4.74	9.04	79		1.10	9.00
	13	47		4.80	9.50	82		1.10	9.30
	14		.50	4.84	9.84	87		1.10	9.80
	15		52	4.88	10.08	88		1.10	9.90
	16		53	4.89	10.19	90		1.10	10.10
	17		57	4.95	10.65	93		1.07	10.37
	18		57	4.95	10.65	97		1.01	10.71
	19		59	4.98	~~11.02~~ 10.88	98		1.00	10.80
	20		60	5.00	11.00	98		1.00	10.80
	21		63	5.04	11.34				
	22		71	5.19	12.29				
	23		63	5.04	11.34				
	24		67	5.10	11.80				
	25		72	5.21	12.41				
	26		77	5.36	13.06				
	27		79	5.40	13.30				
	28		79	5.40	13.30				

29	8.3		5.50	13.80
30	8.7	8.60 1.1 8.5	5.56	14.16
31	8.9	8.80 1.1 8.7	5.58	14.38
32	9.1	9.05 1.0 9.0	5.60	14.65
33	9.5	9.40 1.1 9.3	5.61	15.01
34	9.5	9.45 1.0 9.4	5.61	15.07
35	f			

Plate on which sequence is marked cannot be found. Br. plate marked for ~~am 4579~~ am 5215

Series 158

Sc U. March 12, 1914 Copied

MC:42558s = b3 PC. +16

	Sc 1	Sc 2	curve magn.				
1	30		.		5.7	0.96	6.66
2	32		.		5.9	0.97	6.87
3	33		.		6.2	1.00	7.20
4	32		.		6.2	1.00	7.20
5	33		.		6.3	1.00	7.30
6	36		4.65 e	8.25	6.5	1.01	7.51
7	38		4.68 e	8.48	6.8	1.03	9.83
8	41		4.71	8.81	7.2	1.08	8.40
9	43		4.74	9.04	7.5	1.08	8.58
10	43		4.74	9.04	7.7	1.09	8.79
11	43		4.74	9.04	7.8	1.09	8.89
12	4.7		4.80	9.50	8.1	1.10	9.20
13	4.8		4.81	9.61	8.0	1.10	9.10
14	5.2	5.150 1 5.1	4.87	10.62	9.1	1.09	10.19
15		5.4	4.90	10.30	9.0	1.09	10.09
16		5.4	4.90	10.30	9.1	1.09	10.19
17		5.7	4.96	10.66	9.5	1.04	10.54
18		5.8	4.97	10.77			
19		5.8	4.97	10.77			
20		6.1	5.01	11.11			
21		6.0	5.00	11.00			
22		6.1	5.01	11.11			
23		6.4	5.06	11.46			
24		6.7	5.10	11.80			
25		6.8	5.13	11.93			
26		6.9	5.15	12.05			
27		7.4	5.28	12.68			
28		7.8	5.39	13.19			
28a 7.7		7.7	5.36	13.06			

Card.

28b	81		5.46	13.56
29	8.25 10 83	82	5.50	13.75
30	8.70 00 8.7	8.7	5.57	14.27
31	9.15 10 9.1	92	5.60	14.75
32	9.50 00 9.5	95	5.61	15.11
26a	7.1		5.19	12.29
26b	7.4		5.27	12.67
33	9.7 9.70 00	9.7	5.63	15.33

Davis 158

Bell March 17, 1914 Copied Card.

		Mc 4256 S.S Gem.					ρC			+20	
		Sc1		Sc2							
	a	4.3			4.74	~~77~~ 9.04	7.9	7.7	7.80 1 1	1.09	8.89
	a¹	4.6			4.79	~~57~~ 9.39	8.2	8.1	8.15 0 1	1.10	9.35
Dbl.	b				:		8.8 9.0		8.8 9.0	1.10 1.09	9.90 10.09
	c	4.9			4.83	~~56~~ 9.73	8.5	8.3	8.40 1 1	1.11	9.51
	c¹	5.3	5.30 00	5.3	4.89	~~32~~ 10.19	9.0	8.9 ~~9.1~~	w.s 8.95 0 1	1.10	10.08
	c²			5.6	4.94	~~67~~ 10.54	9.2	9.1	9.15 0 1	1.08	10.23
	d			5.7	4.95	~~78~~ 10.65	9.3			1.06	10.36
	e			6.1	5.00	~~24~~ 11.10	9.7			1.01	10.71
	f			6.7	5.10	~~94~~ 11.80					
	g			7.2	5.21	~~55~~ 12.41					
	h			7.5	5.30	~~97~~ 12.80					
	k			7.90 00 7.9 7.9	5.40	~~47~~ 13.30					
	l			8.30 00 8.3 8.3	5.50	~~94~~ 13.80					
	m			8.60 1 1 8.7 8.5	5.57	~~31~~ 14.17					
	n			8.95 0 1 9.0 8.9	5.59	~~64~~ 14.54					
	o			9.40 1 1 9.3 9.5	5.61	~~15~~ 15.04					

[illegible]

Series 158

Scale U. March 12, 1914

MC 4257 Pole. PC

	Sc 1	Sc 2	PC
5			5.30 0 0 5.3 5.3
6			6.20 0 0 6.2 6.2
8			7.35 1 2 7.5 7.2
9			7.80 0 0 7.8 7.8
10	4.3		8.00 0 0 8.0 8.0
11	4.6		8.4
12		5.0	8.9
13		5.3	9.2
14		5.6	9.1
15		5.9	
16		6.2	
17		6.5	
18		6.9	
19		7.2	
20		7.4	
23		7.95 1 0 7.9 8.0	
25		8.30 0 0 8.3 8.3	
26		8.70 0 0 8.7 8.7	
27		9.15 1 0 9.1 9.2	
28		9.60 1 1 9.5 9.7	
29		F	

See page 131

12 45

Interrupted for 1/2 hour

Series $\overset{9}{\cancel{1}}65$

9 Sc U
20
~~9.30~~

March 18 1914

MC 4779		Mc4784 P.145	Mean	Diff.	a¹	Mean	Mc4784	a²	Mean	Diff.
5	~~33~~				5.6	5.50 11	5.30	5.4	5.40 10 10	+1.09
6					6.2	6.25 ~~xa~~ 01	6.30	6.3	6.28 03 02	0.83
8					7.2	7.20 00	7.15	7.2	7.18 02 03	1.05
9					7.5	7.50 00	7.55	7.5	7.52 02 03	1.31
10	4.7	4.8	4.75 10	+4.27	8.1	8.00 11	7.90	7.9	7.95 05 05	1.07
11	5.3	5.2	5.25 10	4.30	8.1	8.20 11	8.20	8.3 elong	8.26 00 00	1.35
12	5.6	5.5	5.55 01	4.31	8.5	8.5 a.	8.50	t.p.	8.50 00 00	1.36
13	6.1	6.0	6.05 10	4.25	8.7	8.80 11	8.80	8.9	8.80 00 00	1.50
14	6.3	6.3	6.30 00	4.35	9.2	9.2 a.	9.15	t.p.	9.18 02 03	1.47
15	6.5	6.6	6.55 10	4.53	9.2	9.2 a.	9.55	t.p.	9.38 18 17	1.70
16	7.0	~~7.2~~ 6.9	6.95 01	4.45	9.7	9.70 00	9.70	9.7	9.70 00 00	1.70
17	7.3	~~7.6~~ 7.2	7.25 10	4.38	9.9	9.90 00	9.90	9.9	9.90 00 00	1.73
18	7.8	7.6	7.70 11	4.36	f.	f. . .	.	f.		
19	7.9	7.7	7.80 11	4.62	n.s.			n.s.		
20	8.2	8.0	8.18 11	4.63						
23	8.5 85 8.50 00	8.5	8.50 00	4.84						
25	8.8 89 8.85 01	8.80	8.82 03 02	5.05						
26	9.1 9.1 9.10 00	9.15	9.12 02 03	5.21						
27	9.5 9.4 9.45 10	9.45	9.45 00 00	5.24						
28	9.9 9.8 9.85 10	9.75	9.80 05 05	5.31						
29	f. f. f.	10.00	10.00 . a	5.66						

07
4
+.02

08
4
-.02

07
5
+.01

08
5
-.02

18
3
-.06

17
3
+.06

04
12
.00

01
12
.00

1
5
+.02

1
5
-.02

3
6
+.05

4
6
-.07

01
4
+.00

01
4
.00

05
1
.05

05
1
-.05

~~05~~
46
16
+.03

5
54
16
-.03

copied.

M.O.R.

Bell Copied Series 1$\overset{9}{6}$5

Card.

March 18, 1914

Copied.

MC 4780 = B2 alt. +.19

	Sc1	Sc2	curve	mag.	a'	← Mean.		→	a²
1	3.3		·		6.1	6.15 ±10	0.95	7.10	6.2
2	3.8		·		6.1	6.15 ±10	0.95	7.10	6.2
3	4.0		·		6.3	6.25 10	0.95	7.$\overset{2}{\cancel{1}}$0	6.2
4	4.2		·		6.7	6.75 ±10	0.97	7.72	6.8
5	4.3		4.$\overset{2}{\cancel{1}}$6	8.56	6.8	6.85 01	0.98	7.83	6.9
6	4.3		4.$\overset{2}{\cancel{1}}$6	8.56	7.0	6.95 0±1	1.00	7.95	6.9
7	4.3		4.$\overset{2}{\cancel{1}}$6	8.56	7.0	6.95 0±1	1.00	7.95	6.9
8	4.3		4.$\overset{2}{\cancel{1}}$6	8.56	7.2	7.25 01	1.06	8.31	7.3
9	4.6		4.$\overset{2}{\cancel{1}}$6	8.86	7.3	7.40 ±11	1.10	8.50	7.5
10		4.9	4.$\overset{2}{\cancel{1}}$7	9.17	7.8	7.85 01	1.22	9.07	7.9
11		5.1	4.$\overset{2}{\cancel{1}}$7	9.37	7.7	7.80 ±11	1.20	9.00	7.9
12		5.3	4.$\overset{2}{\cancel{1}}$7	9.57	8.0	8.05 01	1.27	9.32	8.1
13		5.2	4.$\overset{2}{\cancel{1}}$7	9.47	8.1	8.05 10	1.27	9.32	8.0
14		5.4	4.$\overset{2}{\cancel{1}}$7	9.67	8.2	8.25 01	1.32	9.57	8.3
15		5.7	4.$\overset{2}{\cancel{1}}$8	9.98	8.5	8.60 ±11	1.40	10.00	8.7
16		5.6	4.$\overset{2}{\cancel{1}}$8	9.88	8.3	8.40 ±11	1.37	9.77	8.5
17		6.1	4.30	10.40	9.0	9.00 00	1.51	10.51	9.0
18		6.1	4.30	10.40	9.1	9.20 ±11	1.57	10.77	9.3
19		6.3	4.33	10.63	9.3	9.30 00	1.59	10.89	9.3
20		6.5	4.36	10.86	9.5	9.50 00	1.66	11.16	9.5
21		6.7	4.39	11.09	9.7	9.$\overset{80}{70}$ ±11	1.75	11.55	9.9
22		6.7	4.39	11.09	9.8	9.80 00	1.75	11.55	9.8
23		6.9	4.41	11.31	9.8	9.80 00	1.75	11.55	9.8
24		7.05 ±21 6.8 7.1	4.44	11.49	F			F	
25		7.7	4.58	12.28					
26		7.7	4.58	12.28					
27		7.8	4.60	12.40					
28		7.9	4.63	12.53					
29		8.2	4.74	12.94	Over				

Series 1$\overset{9}{6}$5

Bell March 18, 914 Copied

M^c 4780 cont

att. +.19

30	8.7	8.5	8.60	11	4.90	13.50
31	9.3	9.2	9.25	10	5.16	14.41
32	9.7	9.5	9.60	11	5.32	14.92
33	9.9	9.9	9.90	00	5.46	15.36
24a	7.3				4.49	11.79
31a	9.7	9.5	9.60	11	5.32	14.92
34	9.9	10.0	9.95	10	5.49	15.44

Sell Copied

9
Series 165

March 18, 1914 Copied. Card.

Mc 4781 = a1

Alt +.12

	Sec1	curve.	Sec2	magn	Sec2 a¹	Sec2 a²			curve	mag.
1	3.8	·			6.3	6.5	6.40	⊥1	0.95	7.35
2	4.0	·			6.5	6.5	6.50	0̇0	0.95	7.45
3	4.1	·			6.3	6.5	6.40	⊥1	0.95	7.35
4	4.7	4.26		8.46	6.5	6.7	6.60	⊥1	0.96	7.56
4a	4.7	4.26		8.46						
5	4.3	4.26		8.56	6.8	6.8	6.80	0̇0	0.98	7.78
6	4.6	4.26		8.86	7.2	7.4	7.30	⊥1	1.08	8.38
7	4.8	4.27		9.07	7.3	7.5	7.40	⊥1	1.10	8.50
8	4.6	4.26		8.86	7.5	7.5	7.50	0̇0	1.13	8.63
9	4.7	4.26		8.96	7.5	7.7	7.60	⊥1	1.15	8.75
10	5.3	4.27	5.35 ⊥0 5.4	9.62	8.3	8.5	8.40	⊥1	1.37	9.77
11		4.27	5.3	9.57	8.1	8.3	8.20	⊥1	1.30	9.50
12		4.28	5.6	9.88	8.5	8.5	8.50	0̇0	1.39	9.89
13		4.28	5.7	9.98	8.7	8.7	8.70	0̇0	1.44	10.14
14		4.31	6.1	10.41	8.9	9.1	9.00	⊥1	1.52	10.52
15		4.32	6.3	10.62	sup.	9.2	9.2	·≗	1.57	10.77
16		4.32	6.3	10.62	9.3	9.5	9.40	⊥1	1.62	11.02
17		4.36	6.5	10.86	9.5	9.5	9.50	0̇0	1.66	11.16
18		4.40	6.8	11.28	9.7	9.7	9.70	0̇0	1.73	11.43
19		4.41	6.9	11.31	9.7	9.9	9.80	⊥1	1.75	11.55
20		4.45	7.1	11.55	9.9	10.0	9.95	⊥0	1.80	11.75
21		4.47	7.2	11.67						
22		4.58	7.7	12.28						
23		4.63	7.9	12.53						
24		4.74	8.2	12.94						
25		4.79	8.3	13.09						
26		4.86	8.5	13.36						
27b		5.05	9.0	14.05						
28		5.19	9.3	14.49						
27a										

	Sec2	a¹		a²
29	9.7	5.38		**15.08**
30	ns?			
31	9.9			
9a	5.0	4.26 9.26	7.7	
9b	5.2	4.27 9.47	7.9	
4b				

		mag.
7.80 ⊥1		9.01
7.9	1.21	
7.95 ⊥0		9.19
8.0	1.24	

5 00

Getting very dark

Images of a¹ + a² are elongated

Series. 1$\overset{9}{8}$5

Sell — March 18, 914 — copied — Card.

φ MC 4782 = D 3 — alt. -.30

		Se/cs		curve	magn.	á	mean		curve	á²	magn.
	1	3.7		·		6.3	6.25	10	0.95	6.2	~~7.15~~ 7.28
On edge of pl.	2	4.0		·		5.0	4.95	0⊥	1.00	4.9	5.95
" " " "	3	4.1		·		5.1	5.10	00	1.00	5.1	6.10
	4	4.3		4.26	8.56	6.3	6.30	00	0.95	6.3	7.25
	5	4.3		4.26	8.56	6.3	6.35	⊥0	0.95	6.4	7.30
Near edge of pl.	6	4.3		4.26	8.56	5.9	5.90	00	0.96	5.9	6.86
" " " "	7	4.3		4.26	8.56	6.3	6.30	00	0.96	6.3	7.26
	8	4.4		4.26	8.66	6.8	6.85	01	0.98	6.9	7.83
	9	4.7		4.26	8.96	7.3	7.40	⊥1	1.10	7.5	8.60
	10	4.9		4.27	9.17	7.6	7.60	⊥1	1.15	7.7	8.75 8.63
	11		5.0	4.27	9.27	7.5	7.5	≟ ·	1.13		defective.
	12		5.1	4.27	9.37	7.7	7.80	⊥1	1.20	7.9	9.00
	13		5.3	4.27	9.57	7.9	7.95	⊥0	1.24	8.0	9.1$\overset{9}{4}$
	14		5.7	4.28	9.98	8.4	8.45	01	1.38	8.5	9.83
	15		5.9	4.30	10.20	8.7	8.70	00	1.44	8.7	10.14
	16		5.9	4.30	10.20	8.7	8.80	⊥1	1.47	8.9	10.27
	17		6.1	4.31	10.41	8.9	8.95	⊥0	1.50	9.0	10.45
	18		6.3	4.33	10.63	9.2	9.35	≟1	1.61	9.5	10.96
	19		6.5	4.36	10.86	9.3	9.40	⊥1	1.62	9.5	11.02
	20		6.7	4.39	11.09	9.5	9.60	⊥1	1.69	9.7	11.29
	21		7.0	4.43	11.43	9.9	9.90	00	1.78	9.9	11.68
	22		7.6	4.55	12.15						
	23		7.2	4.47	11.67						
	24		7.3	4.49	11.79						
	25		8.1	4.70	12.80						
	26		8.3	4.79	13.09						
	27		8.5	4.86	13.36						
	28		8.5	4.86	13.36	Thunder shower. dark					
	29		8.6	4.89	13.49						

Series 1~~6~~95

Se U

March 18, 1914 copied

MC 4782

alt. -.80

			magn.
30	8.8	4.98	13.78
31	9.1	5.10	14.20
32	9.3	5.19	14.49
33	9.7	5.38	15.08
34	9.9	5.47	15.37
35	~~F~~ 9.9	5.47	15.37
36	F		
37			
38			
39			

Series 1 9 ~~4~~ 5

Sc U March 18, 1914 copied

Card.

MC 4783 = 73 k att. +.13

	Sc 1	Sc 2			a¹		a²	Magn.
1	4.1				6.7 6.75 ⊥0	0.97	6.8	7.72
2		5.1	4.27	9.37	8.2 8.20 00	1.30	8.2	9.50
3		6.1	4.31	10.41	9.2 9.25 01	1.58	9.3	10.83
4		7.2	4.47	11.67				
5		6.6	4.37	10.97	9.5 9.50 00	1.66	9.5	11.16
6		7.5	4.54	12.04				
7		7.9	4.63	12.53				
8		8.0	4.66	12.66				
9		8.3	4.79	13.09				
10		8.55 ⊥0 8.5 8.6	4.88	13.43				
11		8.75 0⊥ 8.8 8.7	4.96	13.71				
12		9.25 01 9.2 9.3	5.16	14.41				
13		9.60 ⊥1 9.5 9.7	5.32	14.92				
14		9.60 ⊥1 9.5 9.7	5.32	14.92				
15								

Series 1~~6~~95

Sell

March 18, 1914

Mc 4784 Pole

	Sc 1	Sc 2				a¹	Mean		a²
5						5.3	5.30	00	5.3
6						6.3	6.30	00	6.3
8						7.2	7.15	01	7.1
9						7.5	7.55	10	7.6
10	4.8					7.9	7.90	00	7.9
11	L	5.2				8.2	8.20	00	8.2
12		55				8.5	8.50	00	8.5
13		6.0				8.7	8.80	11	8.9
14		6.3				9.1	9.15	10	9.2
15		6.6				9.4	9.55	21	9.7
16		6.9				9.7	9.70	00	9.7
17		7.2				9.9	9.90	00	9.9
18		7.6							
19		7.7							
20		8.0							
23		85							
25		8.8	8.8	8.80	00				
26		9.2	9.1	9.15	01				
27		9.5	9.4	9.45	10				
28		9.8	9.7	9.75	01				
29		10.0	10.0	10.00	00				

See P.138

11 40

Series 11~~6~~95

Sc U

March 19, 1914

9 35 Mc 4784 Pole.

Diff.		Sc 1		Sc 2	Mc 4790	Mean.	a¹		Mc 4790	a²	Mean.	Diff.
	5						5.3	5.30 00	5.40	5.3	5.35 05 05	+1.14
	6						6.1	6.15 10	6.15	6.2	6.15 00 00	0.96
	8						7.0	7.10 11	7.20	7.2	7.15 05 05	1.08
	9				7.154		7.5	7.50 00	7.65	7.5	7.58 08 07	1.25
+4.22	10	4.7			4.9	4.80 11	7.8	7.85 01	7.90	7.9	7.88 03 02	1.14
4.35	11	5.3	5.30 00	5.3	5.1	5.20 11	8.2	8.25 01	8.25	8.3	8.25 00 00	1.30
4.35	13			6.0	~~5.8~~ 5.9	5.95 01	8.9	8.95 10	8.70	~~8.7~~ 9.0 mistake in recording.	8.82 13 12	1.48
4.31	12			5.6	5.5	5.55 01	~~8.7~~ 8.5	8.60 11	8.50	~~9.0~~ 8.7	8.55 05 05	1.31
4.40	14			6.2	6.3	6.25 01	9.0	9.10 11	8.95	9.2	9.02 08 07	1.63
4.53	15			6.5	6.6	6.55 10	9.3	9.40 11	9.25	9.5	9.32 08 07	1.76
4.50	16			6.9	6.9	6.90 00	9.7	9.70 00	9.60	9.7	9.65 05 05	1.75
4.58	17			7.0	7.1	7.05 01	9.8	9.85 01	9.70	9.9	9.78 07 08	1.85
4.56	18			7.5	7.5	7.50 00			9.9		9.9 a .	2.16
4.72	19			7.7	7.7	7.70 00						
4.83	20			7.9	7.9	7.90 00						
5.06	23			8.30 00 83 83	8.25	8.28 02 03						
5.19	25			8.70 00 87 87	8.65	8.68 02 03						
5.33	26			9.05 10 9.1 9.0	8.95	9.00 05 05						
5.21	27			9.50 00 9.5 9.5	9.45	9.48 02 03						
5.36	28			9.75 10 9.7 9.8	9.75	9.75 00 00						
5.66	29			10.00 10.0 10.0		10.00 a .						

18/4 -.04 17/4 +.04.

23/5 +.04 22/5 -.04

20/3 +.07 20/3 -.07

25/12 +.02 25/12 -.02

0/5 .00 1/5 -.02

1/6 -.02 1/6 +.02

11/4 +.03 14/4 -.04

00/1 .00 00/1 .00

01/16 .00 14/16 -.01

copied

Series 1~~8~~95

Bell March 19, 1914 copied. Card.

MC 4785 = 9.7K alt +.01

	Sc 1	Sc 2			a¹			a²	magn.	
1	3.6				5.9	5.95 ±.10	~~0.96~~ 1.00	6.0	6.91	6.95
2		5.2	4.27	9.47	7.8	7.90 ±.1	~~1.24~~ 1.20	8.0	9.14	9.10
3		5.2	4.27	9.47	7.9	7.95 ±.10	~~1.24~~ 1.22	8.0	9.19	9.17
4		6.1	4.3~~7~~8	10.4~~7~~8	8.7	8.85 ±.12	~~1.48~~ 1.49	9.0	10.33	10.34
5		6.4	.43 ~~4.34~~	.83 ~~10.74~~ .95	9.8	9.70 ±.11	~~1.73~~ 1.93	9.8	11.43	11.63
6		6.6	.48 ~~4.37~~	1.08 ~~10.97~~	9.9	9.90 .00	~~1.78~~ 2.05	9.9	11.68	11.95
7		7.1	.60 4.~~45~~	.70 11.~~55~~						
8		7.3	.66 ~~4.49~~	.96 ~~11.79~~						
9		7.5	.72 4.~~53~~	12.22 ~~12.03~~						
10		8.2	.96 ~~4.74~~	13.16 ~~12.94~~						
11		8.50 0.0 8.5 8.5	5.07 ~~4.86~~	.57 13.~~36~~						
12		8.60 ±.1 8.5 8.7	5.10 ~~4.90~~	13.70 ~~13.50~~						
13		8.80 .00 8.8 8.8	5.18 ~~4.98~~	.9 13.~~7~~8						
14		9.05 .01 9.0 9.1	.25 5.~~07~~	.30 14.~~13~~						
15		9.60 ±.1 9.5 9.7	.9 5.3~~2~~	.9 14.9~~2~~						

9
Series 165 Copied

Bell March 19, 1914 Card.

Me 4786 = 26 K alt. + .2'2

	Se1	Se2			a¹				a²	magn.	
1	3.7				5.3	5.30 0.0	~~0.99~~	1.01	5.3	6.29	6.31
2	4.1				6.3	6.35 1.0	~~0.95~~	1.00	6.4	7.30	7.35
3		5.3	4.27 ~~4.27~~	9.47 ~~9.47~~	8.1	8.20 1.1	~~1.31~~	1.27	8.3	9.51	9.47
4		5.5	4.30 ~~4.28~~	9.80 ~~9.48~~	8.7	8.80 1.1	~~1.44~~	1.49	8.9	10.27	10.29
5		6.1	8 4.31	8 10.41	9.0	9.05 0.1	~~1.53~~	1.58	9.1	10.58	10.63
6		6.4	.43 ~~4.34~~	.83 ~~10.44~~	9.5	9.60 1.1	~~1.70~~	1.87	9.7	11.30	11.47
7		6.9	.55 ~~4.44~~	.45 ~~11.34~~	9.7	9.70 0.0	~~1.73~~	1.93	9.7	11.43	11.63
8		7.5	.72 ~~4.54~~	.22 ~~12.04~~							
9		7.9	.84 ~~4.63~~	.74 ~~12.53~~							
10		8.1	.92 ~~4.70~~	13.02 ~~12.80~~							
11		8.40 1.1 8.5 8.3	5.02 ~~4.82~~	.4 13.22							
12		9.00 0.0 9.0 9.0	.24 ~~5.05~~	.24 ~~14.05~~							
13		9.15 0.1 9.2 9.1	.27 ~~5.12~~	.42 ~~14.27~~							
14		9.50 0.0 9.5 9.5	.37 ~~5.24~~	.87 ~~14.49~~							
15		9.70 0.0 9.7 9.7	.42 ~~5.38~~	.12 ~~15.08~~							

Series 1~~6~~95

Bell March 19, 1914 Copied. Card.

MC 4787 B3 Copied. Alt. +.221

Mean edge.

			Sc	burx	Sc 2		a¹		a²		
		1	3.9	.			5.0	5.05 01	5.1	1.03	6.08
		2	3.9	.			5.3	5.40 ⊥1	5.5	1.01	6.41
		3	3.9	.			5.3	5.30 00	5.3	1.01	6.31
		4	4.0	.			6.3	6.30 00	6.3	1.00	7.30
		5	4.0	.			6.3	6.30 00	6.3	1.00	7.30
4.22	8.42	6	4.2	4.26		8.46	6.7	6.70 00	6.7	1.02	7.72
4.22	8.42	7	4.2	4.26		8.46	6.5	6.60 ⊥1	6.7	1.00	7.60
4.23	8.53	7a	4.3	4.26		8.56	7.1	7.10 00	7.1	1.06	8.16
4.23	8.53	8	4.3	4.26		8.56	7.3	7.30 00	7.3	1.10	8.40
4.24	8.94	9	4.7	4.26		8.96	8? 7.9	7.90 ⊥1	8.0	1.20	9.10
4.26	9.16	10		4.27	4.9	9.17	8.1	8.15 ⊥0	8.2	1.26	9.41
4.27	9.37	11		4.27	5.1	9.37	8.2	8.25 01	8.3	1.30	9.55
4.27	9.47	12		4.28	5.2	9.48	8.5	8.50 00	8.5	1.36	9.86
4.28	9.58	13		4.28	5.3	9.58	$\overset{8.7}{\cancel{9.2}}$	8.75 ⊥0	$\overset{8.8}{\cancel{9.2}}$	1.45	10.20
4.29	9.69	14		4.28	5.4	9.68	9.0	9.05 01	9.1	1.59	10.64
4.32	10.02	15		4.28	5.7	9.98	9.2	9.10 1⊥	9.0	1.62	10.72
4.38	10.48	16		4.31	6.1	10.41	9.2	9.23 001	9.2 9.3	1.68	10.91
4.37	10.37	17		4.30	6.0	10.30	9.2	9.20 00	9.2	1.67	10.87
4.40	$10.6\overset{0}{2}$	18		4.31	6.2	10.51	9.5	9.50 00	9.5	1.81	11.31
4.40	10.60	19		4.31	6.2	10.51	9.7	9.70 00	9.7	1.93	11.63
4.45	10.95	20		4.36	6.5	10.86	9.8	9.85 01	9.9	2.02	11.87
4.50	11.20	21		4.39	6.7	11.09					
4.58	11.58	21a		4.43	7.0	11.43					
4.62	11.82	22		4.47	7.2	11.67					
4.80	12.60	22a		4.60	7.8	12.40					
4.84	12.74	23		4.63	7.9	12.53					
4.93	13.03	24		4.70	8.1	12.80					
4.93	13.03	25		4.70	8.1	12.80					
4.96	13.16	26		4.74	8.2	12.94					
5.00	13.30	27		4.79	8.3	13.09					
5.07	13.67	28		4.86	8.5	13.36					
5.07	13.57	29		4.86	8.5	13.36					

30	8.5			~~1.36~~ 5.07	13.57
31	9.0	9.00 00	9.0	5.23	14.23
32	9.2	9.20 00	9.2	5.29	14.49
33	9.2	9.25 01	9.3	5.30	14.55
34	9.7	9.75 ⊥0	9.8	5.43	15.18
35	10.0	9.95 01	9.9	5.47	15.42

Series 1$\overset{9}{\cancel{6}}$5

Sell March 19, 1914 Copied

Card

MC 4788 b4 Copied alt. +.15

Magn.		Sa1	Sc2	curve	a'		a²		Diffs. [illegible] a²
	1	32		.	5.7	5.80 ⊥1	5.9	1.00	6.80
	2	$\frac{38}{37}$		.	6.1	6.10 00	6.1	1.00	7.10
.	3	39		.	6.0	6.05 01	6.1	1.00	7.05
	4								
8.42	4a	42		4.22	6.7	6.60 11	6.5	1.00_6	7.60
8.42	5	42		4.22	~~6.7~~ 7.1	7.10 00	~~6.7~~ 7.1	1.08	8.16
8.63	6	44		4.23	7.2	7.20 00	7.2	$\overset{98}{1.06}$	$\overset{28}{8.34}$
8.53	7	43		4.23	7.3	7.45 12	7.6	1.12	8.57
8.95	8	47		4.25	7.5	7.60 11	7.7	1.15	8.75
9.05	9	48		4.25	7.8	7.80 00	7.8	1.19	8.99
9.47	9a		52	4.27	8.0	8.05 01	8.1	1.24	9.29
9.80	10		55	4.30	8.3	8.30 00	8.3	1.30	9.60
10.01	11		57	4.31	8.3	8.40 11	8.5	1.34	9.74
9.69	12		54	4.29	8.5	8.50 00	8.5	1.36	9.86
10.01	13		57	4.31	8.7	8.70 00	8.7	1.44	10.14
10.48	14		61	4.38	9.1	9.15 10	9.2	1.63	10.78
10.71	15		63	4.41	9.3	9.40 11	9.5	1.76	11.16
10.95	16		65	4.45	9.7	9.70 00	9.7	1.93	11.63
11.20	17		67	4.50	9.7	9.75 10	9.8	1.97	11.72
11.44	18		69	4.54					
11.82	19		72	4.62					
12.22	20		75	4.72					
11.82	21		72	4.62					
12.88	22		80	4.88					
13.03	23		8.1	4.93					
13.57	24		85	5.07					
13.43	25		8.40 11 85	83 5.03					
13.57 13.84	25a		85	5.07					
Neg. susp. on 25 b?	25b		87?.	5.14					
13.84	26		87	5.14					
Dbl. 13.98	27 a		88	5.18					
14.30	b		91 9.05 10	9.0 5.25					

	9.70 00			
28	9.7	9.7	5.42	15.12
	9.90 00			
29	9.9	9.9	5.46	15.36

Series 1~~6~~95

Dell March 19, 1914 Copied.

Card.

MC 4789 D4 alt..28 6

Copied.

	Se1	Se2			a'				a²
1	39				6.1	6.15 ⊥0	1.00	7.15	6.2
2	43		4.23	8.53	6.3	6.30 00	1.00	7.30	6.3
3	43		4.23	8.53	6.4	6.35 0⊥	1.00	7.35	6.3
4	44		4.23	8.63	6.5	6.60 ⊥1	1.00	7.60	6.7
5	44		4.23	8.63	7.1	7.15 ⊥0	1.07	8.22	7.2
6	47		4.24	8.94	7.3	7.30 00	1.10	8.40	7.3
7	47		4.24	8.94	7.3	7.30 00	1.10	8.40	7.3
8	49		4.26	9.16	7.7	7.70 00	1.16	8.86	7.7
9	47		4.24	8.94	7.3	7.30 00	1.10	8.40	7.3
10	49		4.26	9.16	7.7	7.70 00	1.17	8.87	7.7
11		5.1	4.27	9.37	8.1	8.10 00	1.26	9.36	8.1
12		5.3	4.28	9.58	8.3	8.40 ⊥1	1.34	9.74	8.5
13		5.3	4.28	9.58	8.5	8.50 00	1.36	9.86	8.5
14		5.7	4.32	10.02	8.7	8.80 ⊥1	1.48	10.28	8.9
15		5.9	4.34	10.24	8.8	8.90 ⊥1	1.51	10.41	9.0
16		5.7	4.32	10.02	8.5	8.60 ⊥1	1.40	10.00	8.7
17		5.9	4.34	10.24	9.0	9.00 00	1.57	10.57	9.0
18		6.1	4.38	10.48	9.0	9.10 ⊥1	1.62	10.72	9.2
19		6.1	4.38	10.48	9.2	9.25 01	1.69	10.94	9.3
20		6.3	4.41	10.71	9.3	9.30 00	1.73	11.03	9.3
21		6.7	4.50	11.20	9.8	9.85 01	2.02	11.87	9.9
22		6.9	4.55	11.45					
23		7.1	4.60	11.70					
24		7.3	4.65	11.95					
25		7.3	4.65	11.95					
26		7.5	4.72	12.22					
27		8.1	4.93	13.03					
28		8.0	4.88	12.88					
29		8.4	5.03	13.42					

					magn
30	5.07	85			13.57
31	5.07 12	86	8.65 01	87	13.72 87
32	5.14	87	8.70 00	87	13.84
33	5.22	9.0	8.95 0⊥	89	14.17
34	5.35	94	9.45 01	95	14.80
35	5.42	97	9.70 00	9.7	15.12
36	5.43	98	9.75 0⊥	9.7	15.18
37	5.49	10.0	10.00	10.0	15.49

See P. 154

Series 1$\overset{9}{\cancel{0}}$5

Bell March 19, 1914

Mc 4790 Pole

			a¹	a²
5			5.4 5.40 00	5.4
6			6.2 6.15 01	6.1
8			7.2 7.20 00	7.2
9			7.6 7.65 01	7.7
10	4.9		7.9 7.90 00	7.9
11		5.1	8.2 8.25 01	8.3
12		5.5	8.5 8.50 00	8.5
13		5.9	8.7 8.70 00	8.7
14		6.3	8.9 8.95 ⊥0	9.0
15		6.6	9.2 9.25 01	9.3
16		6.9	9.5 9.60 ⊥1	9.7
17		7.1	9.7 9.70 00	9.7
18		7.5	9.9 9.9	—
19		7.7		
20		7.9		
23		8.25 10 8.3 8.2		
25		8.65 21 8.8 8.5		
26		8.95 01 9.0 8.9		
27		9.45 10 9.5 9.4		
28		9.75 0⊥ 9.8 9.7		
29				

1 ov

- 30m

See P. 146.

Series 199

Se. M

March 31, 1914 copied

Card

Mc 4829 : 43K Alt. -.16

		Se1.	Se2	curve magn.			Sq2 a	copied	Curve		Sq.2 a²	OC		
10.20	1	2.7 2.9				1	6.3	6.40 ±1	2.05	8.45	6.5	6.3	2.01	8.31
	2	4.1 4.3		1 5.64	9 9.84	9.91	8.0	8.05 01	1.84	9.89	8.1	8.2	1.65	9.85
	3	4.3 4.5		58 5.~~64~~	10.1 9.91	10.08	8.3	8.30 00	1.81	10.11	8.3	8.5	1.61	10.11
	4	4.9 5.1		2 5.54	6 10.44	10.62	8.7	8.70 00	1.80	10.50	8.7	9.0	1.60	10.60
	5	5.7 5.9		49 5.~~50~~	4 11.70	11.39	9.5	9.40 ±1	1.78	11.18	9.3	9.9	1.72	11.62
	6	5.7 5.9		49 5.~~50~~	4 11.70	11.39	9.7	9.60 ±1	1.79	3 11.59	9.5			
	7	6.4 6.6		5 5.4~~6~~	12.0 ~~11~~.86	12.05	9.8	9.80 00	1.80	11.60	9.8			
	8	6.7 6.9 6.9000 ~~6.80 ±1~~	6.9	5.46	3 12.26	12.36	10.0	9.95 0±1	1.81	11.76	9.9			
	9		7.2	5.50	12.70	12.70	nd.							
	10		7.3	5.53	12.83	13.83								
	11		7.7	5.55	13.25	13.75								
	12		8.7	5.66	14.36	14.36								
	13		8.9	5.68	14.58	14.58								
	14		9.5	5.73	15.23	15.73								
	15		9.8	5.76	15.56	15.56								
	~~16~~													

Series 199 Copied

Sc M

March 31, 1914

Card

		m	b H830 Sc.1	curve		b 2 Sc.2	curve		alt. +.05 a'	a²		Sc.2 a.1	Copied	curve		Sc.2 a.2
10.41		1	1.0	.		5.1	2.14	7.24	9.3	9.3	no curve	4.2	4.20 oo	2.17	6.37	4.2
		2	1.3	.		5.3	2.13	7.43	9.5	9.5		4.2	4.25 oi	2.17	6.42	4.3
		3	2.1	.		5.9	2.07	7.97				5.2	5.20 oo	2.14	7.34	5.2
		4	2.3	.		6.2	2.0$\overset{2}{8}$	8.2$\overset{2}{0}$				5.9	6.00 ⊥1	2.10	8.10	6.1
		5	2.3	.		6.1	2.04	8.14				5.3	5.45 ⊥2	2.13	7.$\overset{58}{43}$	5.6
		6	2.8	.		7.1	1.85	8.95				6.2	6.30 ⊥1	2.06	8.36	6.4
9.02	5.82	7	3.0 32	~~5.85~~	~~8.85~~ 9.0	7.3	1.80	9.10				7.1	7.10 oo	1.97	9.07	7.1
9.1$\overset{0}{4}$	5.80	8	3.1 33	~~5.83~~	~~8.93~~ 9.1	7.3	1.80	9.10				7.2	7.25 oi	1.94$\overset{5}{}$	9.20	7.3
9.19	5.79	9	3.2 34	~~5.81~~	9.$\overset{2}{0}$1	7.5	1.75	9.25				7.3	7.25 io	1.95	9.20	7.2
9.26	5.76	10	3.3 35	~~5.80~~	9.$\overset{3}{1}$0	7.7	1.72	9.42				7.3	7.40 ⊥1	1.92	9.32	7.5
9.58	5.68	11	3.7 39	~~5.72~~	9.$\overset{6}{4}$2	8.3	1.64	9.94				8.0	8.05 oi	1.84	9.89	8.1
10.00	5.60	12	4.2 44	~~5.62~~	~~9.82~~ 10.0	8.7	1.60	10.30				8.1	8.20 ⊥1	1.82	10.02	8.3
10.44	5.54	12a	4.7 49	~~5.56~~	10.$\overset{4}{2}$6	9.1	1.60	10.70			12a	8.5	8.60 ⊥1	1.80	10.40	8.7
10.53	5.53	13	4.8 50	~~5.55~~	10.$\overset{5}{8}$5	9.3	1.61	10.91				8.7	8.80 ⊥1	1.80	10.60	8.9
10.72	5.52	14	5.0 52	~~5.53~~	10.$\overset{7}{5}$3	9.5	1.64	11.14				8.9	8.9.oo	1.79	10.69	8.9
10.81	5.51	15	5.1 53	~~5.52~~	10.$\overset{8}{1}$2	9.8	1.70	11.50				9.1	9.10 oo	1.79	10.89	9.1
11.00	5.50	16	5.3 55	~~5.51~~	~~10.81~~ 11.0							9.3	9.30 oo	1.78	11.08	9.3
11.39	5.49	17	5.7 59	~~5.50~~	11.$\overset{4}{2}$0							9.5	9.50 oo	1.79	11.29	9.5
11.49	5.49	18	5.8 60	~~5.50~~	11.$\overset{5}{3}$0							9.7	9.70 oo	1.80	11.50	9.7
11.76	5.46	19	6.1 63	~~4.98~~ 5.4	11.$\overset{7}{5}$8							9.8	9.90 ⊥1	1.80	11.70	10.0
12.26	5.46	20	6.6 68	~~5.45~~	~~12.05~~ 2							n.d.				
v	~~5.46~~	21	6.7 69 6.9 o⊥1 .oo	5.46		6.9	12.36									
		22		5.49		7.1	12.59									
		23		5.50		7.2	12.7$\overset{0}{2}$									
		24		5.51		7.3	12.81									
		25		5.56		7.8	13.36									
		26		5.60		8.1	13.70									
		27		~~5.65~~		8.5 8.50 oo 8.5	~~14.15~~					8.2	Remeasured April 22, 1914.	~~+.0~~ +.3		
		28		5.69		7.3 wrong meas. 9.0	14.69					8.7				
11.07		29		~~5.69~~		9.0 9.00 oo 9.0	14.69					8.7		+.3 24.6		

Sc.2			
30	5.70	9.3	15.00
31	5.76	9.8	15.56

Sc M

Series 199

March 31, 1914

Mc.C. 4831 Pole

	Diff.	+	Sc 1		Sc.2	Mc4834 P.160	Mc4840 P.166	Mean	
11.14		+							
		5							
		6							
		8							
		9				↓			
	+5.69	10	3.2	3.4		3.3	3.3	3.33	1 0 0
	5.75	11	3.7	3.9		3.8	3.7	3.80	1 0 1
	5.63	12	4.1	4.3		4.2	4.2	4.23	1 0 0
	5.50	13	4.7	4.9		4.8	4.7	4.80	1 0 1
	5.48	14	5.2	5.4		5.1	5.0	5.17	2 1 2
	5.55	15	5.5	5.7		5.5	5.4	5.53	2 0 1
	5.47	16	5.9	6.1		5.90	5.80	5.93	2 0 1
	5.60	17	6.0	6.2		6.0	5.9	6.03	2 0 1
	5.49	18	6.5	6.7		6.6	6.4	6.57	1 0 2
	5.40	19	7.0	7.2 7.25 01	7.3	6.9	6.9	7.02	2 3 12 (12)
	5.43	20			7.5	7.2	7.2	7.30	2 1 1
	5.57	23			7.9	7.7	7.7	7.77	1 1 1
	5.67	25			8.3	8.1	8.2	8.20	1 1 0
	5.73	26			8.7	8.6	8.5	8.60	1 0 1
	5.72	27			9.0	9.0	8.9	8.97	0 0 1
	5.68	28			9.5	9.5	9.3	9.43	1 1 1
	5.79	29			9.9	9.9	9.8	9.87	0 0 1
10.32		30			[illegible]	.	.		

	Sc² a¹	Mean a¹, a²	Mc 4834.	mc 4840	Sc² a²
5	4.7	4.65 10	3.95	4.05	4.6
6	5.2	5.25 01	5.05	4.95	5.3
8	6.1	6.15 10	6.00	6.05	6.2
9	6.7	6.75 10	6.85	6.85	6.8
10	7.2	7.20 00	7.10	7.05	7.2
11	7.8	7.80 00	7.60	7.50	7.8
12	8.1	8.15 10	8.00	8.05	8.2
13	8.7	8.60 11	8.40	8.50	8.5
14	9.0	9.00 00	8.90	8.95	9.0
15	9.3	9.30 00	9.15	9.25	9.3
16	9.5	9.60 11	9.50	9.50	9.7
17	9.9	9.95 10	9.80	9.90	10.0

MEAN$_3$ a¹ − a²

5	4.22	43	27	17	+2.27
6	5.08	17	03	13	2.03
8	6.07	08	07	02	2.16
9	6.82 7.12	07	03	03	2.01
10	7.12	08	02	07	1.90
11	7.63	17	03	13	1.92
12	8.07	08	07	02	1.79
13	8.50	10	10	00	1.80
14	8.95	05	05	00	1.70
15	9.23	07	08	02	1.85
16	9.53	07	03	03	1.87
17	9.88	07	08	02	1.75

P.C.

Sc.2			Mean	Diff
4.7	.46	4.3 ~~4.0~~	4.53 2 1 2 ~~4.43 3 1 4~~	+2
5.2	4.8	4.7 ~~5.0~~	4.90 3 1 2 ~~5.00 2 2 0~~	2.
6.5	6.1	6.0 ~~6.1~~	6.20 3 1 2 ~~6.23 3 1 1~~	2.0
7.2	6.9	6.9 ~~6.9~~	7.00 2 1 1 ~~7.10 2 1 1~~	1.7
7.5	7.20	7.2 ~~7.1~~	7.30 2 1 1 ~~7.27 2 1 2~~	1.7
7.9	.	7.7 ~~7.0~~	7.80 1 . 1 ~~7.70 2 . 2~~	1.8
8.2	8.3	8.3 ~~8.1~~	8.27 1 0 0 ~~8.30 0 1 1~~	1.6
8.7	8.8	8.7 ~~8.5~~	8.73 0 1 0 ~~8.67 0 1 2~~	1.6
9.1	9.1	9.0 ~~9.0~~	9.07 0 0 1	1.5
9.3	9.5	9.3 ~~9.2~~	.7 1 1 1 9.33 ~~0 2 1~~	1.7
9.7	.	9.7 ~~9.5~~	9.70 0 . 0 ~~9.60 1 1~~	1.8
9.9	.	9.9 ~~9.7~~	9.9 2 .. ~~9.70 0 0~~	1.7
n.s.	.			

5-9	$\frac{6}{5}$ +.12	$\frac{2}{5}$ −.02	$\frac{4}{5}$ −.08
10-14	$\frac{113}{6}$ +.02 +.19	$\frac{22}{6}$ −.04	$\frac{72}{6}$ −.12
15-20	$\frac{3}{4}$ +.08	$\frac{2}{4}$ −.05	$\frac{3}{4}$ −.08
21-	$\frac{1}{2}$ +.05	$\frac{1}{2}$ +.05	$\frac{2}{2}$ −.10
all	$\frac{213}{17}$ +.13	$\frac{42}{17}$ −.2	$\frac{162}{17}$ −.10

$\frac{61}{4}$ +.15	$\frac{34}{4}$ −.08	$\frac{29}{4}$ −.07
$\frac{38}{5}$ +.08	$\frac{27}{5}$ −.05	$\frac{22}{5}$ −.04
$\frac{24}{3}$ +.07	$\frac{19}{3}$ −.06	$\frac{+01}{3}$ .00
$\frac{120}{12}$ +.10	$\frac{~~72~~}{12}$ $\frac{80}{12}$ −.06 −.06	$\frac{50}{12}$ −.04

5-9	$\frac{10}{4}$ +.02	3 $\frac{7}{4}$ 8 −.08	$\frac{7}{4}$ −.18
	$\frac{2}{5}$ +.04	$\frac{0}{4}$ 00	$\frac{3}{5}$ −.06
	$\frac{1}{2}$ 00	$\frac{1}{2}$ 00	$\frac{1}{2}$ 00
all	$\frac{11}{11}$ +.10	$\frac{2}{10}$ −.02	$\frac{11}{11}$ −.10

copied

S— Recorder

Series 199

Se. M.

March 31, 1914

copied

Card.

11   #0   Mc 4833 = a1   alt +.12   Copied.

Diff.			Sc1	curve	Sc2	Qc				a'					a²	No.		curve	
		1	1.8	·		5.3	2.13	2.13	7.43	5.1	5.10	00	2.15	7.25	5.1	27b	8.7	5.66	14.36
+2.06	1.96	2	1.9	·		5.5	2.11	2.11	7.61	5.3	5.30	00	2.14	7.44	5.3	28	9.0	5.69	14.69
2.11	2.21	3	1.9	·		5.3	2.13	2.13	4 7.63	5.2	5.15	0⊥	2.14	7.29	5.1	29	9.3	5.70	15.00
2.00	2.03	4	2.0	·		5.5	2.13	2.11	7.61	5.3	5.30	00	2.14	7.44	5.3	27a	8.9	5.68	14.58
1.73	1.83	4b	2.3	·		5.9	2.10	2.07	7.97	5.7	5.70	00	2.11	7.81	5.7	30	n.s.		
1.75	1.72	4c	2.5 2.3	·		6.2	2.07	2.02	8.22	5.8	5.85	01	2.10	7.95	5.9	31	9.8	5.76	15.56
1.85	1.75	5	2.9 2.7	·		6.7	2.02	1.93	8.63	6.2	6.25	01	2.07	8.32	6.3				
1.66	1.59	6	3.1 2.9	·4 5.87?	4 8.97?	6.7	2.02	1.93	8.63	6.5	6.50	00	2.04	8.54	6.5				
1.63	1.57	7	3.1 2.9	·4 5.87?	·4 8.97?	6.9	2.00	1.89	8.79	6.5	6.50	00	2.04	8.54	6.5				
1.58	1.58	8	3.1 2.9	·4 5.87?	·4 8.97?	6.9	2.00	1.89	8.79	6.7	6.60	1⊥	2.03	8.63	6.5				
1.75	1.71	9	3.2 3.0	~~1~~.82 5.85	2 9.05	7.1	1.97	1.86	8.96	6.9	6.95	⊥0	1.99	8.94	7.0				
1.80	1.70	9a	3.4 3.2	·79 5.82	·19 9.~~22~~	7.3	1.94	1.81	9.11	6.9	7.00	⊥1	1.98	8.98	7.1				
1.73	1.73	10	3.8 3.6	0 5.75	0 9.55	7.7	1.86	1.69	9.59	7.7	7.70	00	1.89	9.59	7.7				
		11	4.0 3.8	·66 5.~~70~~	·66 9.~~70~~	8.0	1.85	1.67	9.67	7.9	7.90	00	1.86	9.76	7.9				
		12	4.2 4.0	3 5.66	3 9.86	8.2	1.82	1.65	9.85	8.0	8.05	01	1.84	9.89	8.1				
		13	4.3 4.1	0 5.65	0 9.95	8.3	1.64		9.94	8.2	8.20	00	1.82	10.02	8.2				
		14	4.5 4.3	·58 5.64	:08 10.14	8.7	1.60		10.30	8.5	8.50	00	1.80	10.30	8.5				
		15	4.9 4.7	4 5.56	4 10.48	9.1	1.60		10.70	8.7	8.80	⊥1	1.80	10.60	8.9				
		16	5.3 5.1	5.52	10.82	9.7	1.68		11.38	9.1	9.10	00	1.79	10.89	9.1				
		17	5.4 5.2	5.51	10.91	9.7	1.68		11.38	9.3	9.30	00	1.78	11.08	9.3				
		18	5.5 5.3	5.54 0	11.04 0	9.8	1.70		11.50	9.5	9.50	00	1.78	11.28	9.5				
		19	5.5 5.3	5.54 0	11.04 0					9.5	9.60	⊥1	1.80	11.40	9.7				
		20	5.9 5.7	·49 5.50	·39 11.40					9.8	9.85	01	1.80	11.65	9.9				
		21	6.2 6.2000 6.0	·7 5.48	·7 11.68 6.2														
		22	6.9 6.95⊥0 6.7	5.47	12.42 7.0														
		23		5.50	12.70 7.2														
		24		5.53	13.03 7.5														
		25		5.57	4 13.27 7.9														
		26		5.62	13.82 8.2														

12   40

Interrupted.

Series 199

Sc M

March 31, 1914

3 00 MC 4834 Pole

	Sc1	Sc2		a^1	mean	a^2	Sc1 CC Sc2
5				4.0	3.95 0⊥	3.9	4.6
6				5.0	5.05 01	5.1	4.8
8				6.0	6.00 00	6.0	6.1
9				6.9	6.85 10	6.8	6.9
10	3.1 3.3		~~5.8~~	7.1	7.10 00	7.1	7.1 7.20 ⊥1 7.3
11	3.6 3.8			7.5	7.60 ⊥1	7.7	Scratched.
12	4.0 4.2			8.0	8.00 00	8.0	8.3
13	4.6 4.8			8.3	8.40 ⊥1	8.5	8.8
14	4.9 5.1			8.9	8.90 00	8.9	9.1
15	5.3 5.5			9.1	9.15 ⊥0	9.2	9.5
16	5.7 5.9 5.90 00	5.9		9.5	9.50 00	9.5	Scr.
17		6.0		9.8	9.80 00	9.8	
18		6.6					
19		6.9					
20		7.2					
23		7.7					
25		8.1					
26		8.6					
27		9.0					
28		9.5					
29		9.9					

Series 199

De M

March 31, 1914 copied

Card.

MC 4835 = b4 att +.17

	Sc1		Sc2	Pt			a'	mean	curve	a²	Diff. Sn. magn.
1	Bn.			4.8	2.16	6.96	4.9	4.90 00	2.15	4.9	7.05
2	1.6 1.8	.		5.2	2.13	7.33	5.1	5.15 10	2.14	5.2	7.29
3	1.7 1.9	.		5.2	2.13	7.33	4.9	4.95 10	2.15	5.0	7.10
4	2.0 2.2	.	Magn.	5.7	2.09	7.79	5.3	5.40 11	2.13	5.5	7.53
4 4a	2.1 2.3	.		5.9	2.07	7.97	5.8	5.75 01	2.11	5.7	7.86
5	2.3 2.5	.		6.3	2.01	8.31	6.3	6.30 00	2.06	6.3	8.46
6	2.3 2.5	.		6.5	1.98	8.48	6.2	6.25 01	2.07	6.3	8.32
7	2.7 2.9	.		6.8	1.90	8.70	6.3	6.40 11	2.05	6.5	8.45
8	3.0 3.2	5.82	9.02	7.1	1.85	8.95	6.9	7.00 11	1.99	7.1	8.99
9	3.2 3.4	5.79	9.19	7.7	1.72	9.42	~~8.7~~ 7.3	7.40 11	1.92	7.5	9.32
9a	3.3 3.5	5.76	9.26	7.9	1.68	9.58	~~8.1~~ 7.7	7.70 00	1.89	~~8.1~~ 7.7	9.59 (No 10)
10	3.8 4.0	5.66	9.66	8.3	1.64	9.94	8.1	8.10 00	1.83	8.1	9.93
11	4.0 4.2	5.62	9.82	8.3	1.64	9.94	8.2	8.20 00	1.82	8.2	10.02
12	4.0 4.2	5.62	9.82	8.5	1.61	10.11	8.3	8.30 00	1.81	8.3	10.11
13	4.3 4.5	5.58	10.08	8.7	1.60	10.30	8.5	8.50 00	1.80	8.5	10.30
14	4.7 4.9	5.54	10.44	9.2	1.60	10.80	8.9	8.95 10	1.79	9.0	10.74
15	5.0 5.2	5.52	10.72	9.5	1.64	11.14	9.2	9.25 01	1.78	9.3	11.03
16	5.1 5.3	5.51	10.81	9.7	1.68	11.38	9.5	9.50 00	1.78	9.5	11.28
17	5.6 5.8	5.50	11.30				9.7	9.80 11	1.80	9.9	11.60
18	6.0 6.2	5.47	11.67				9.9	9.90 00	1.80	9.9	11.70
19	6.3 6.5	5.45	6.50 00 6.5	11.95							
20		5.49	7.1	12.59							
21		5.45	6.7	12.15							
22		5.49	7.1	12.59							
23		5.54	7.5	13.04							
24		5.59	8.0	13.59							
25		5.65	8.5	14.15							
a		5.62	8.2	13.82							
26		5.66	8.7	14.36							
		5.67	8.9	14.57							
27		5.65	8.5	14.15							
27a		5.66	8.7	14.86							

Cont.

27b	8.7	5.66	14.36
28	9.2	5.70	14.90
29	9.5	5.73	15.23

Series 199

Se M March 31, 1914 : Copied

Card.

MC 4836 = B3

Att. +.22 copied

		Sc.1	Sc.2		Pc curve			a' sc.1 (E.S.L.)		Diff. Grating	a² sc.1	No			
												~~7~~	80		
Near edge	1	1.7 1.9	.		5.0	2.15	7.15	3.9 4.10	~~5.64~~ 2.16	6.26	3.9	29	~~8.7~~	5.59	13.5
	2	1.7 1.9	.		5.2	2.13	7.33	4.2 4.40	~~5.60~~ 2.16	6.56	4.2	30	8.8	5.60	13.7
" "	3	1.7 1.9	.		5.3	2.13	7.43	4.2 4.40	~~5.60~~ 2.16	6.56	4.2	31	8.2	5.62	13.8
	4	2.0 2.2	.		5.7	2.09	7.79	5.3 5.50	~~5.50~~ 2.13	7.63	5.3	32	8.9	5.68	14.5
14	5	1.9 2.1	.		5.7	2.09	7.79	5.3 5.50	~~5.50~~ 2.13	7.63	5.3	33	8.5	5.65	14.1
	6	2.2 2.4	.		6.1	2.04	8.14	5.7 6.00	~~5.99~~ 2.10	8.10	5.9	34	9.3	5.70	15.0
	7 7a	2.7 2.9	.		6.7	1.94	8.64	6.7 6.40	2.05	8.45	6.2	35	9.5	5.73	15.2
	8	2.9 3.1	5.83	8.93	7.0	1.88	8.88	6.3 6.50	2.04	8.54	6.3				
	9	3.0 3.2	5.81	8.01 9	7.1	1.85	8.95	6.7 6.80	2.00	8.80	6.5				
								sc.2			sc.2				
	10	3.2 3.4	5.79	9.19	7.5	1.75	9.25	7.7 7.60	1.90	9.50	7.5				
	11	3.3 3.5	5.76	9.26	7.5	1.75	9.25	7.5 7.60	1.90	9.50	7.7				
	12	3.8 4.0	5.66	9.66	8.1	1.66	9.96	7.9 7.95	1.86	9.81	8.0				
Switched	13	4.1 4.3	5.61	9.91	8.3	1.64	9.94	8.2 8.20	1.82	10.02	8.2				
	14	4.3 4.5	5.58	10.08	8.5	1.61	10.11	8.3 8.30	1.81	10.11	8.3				
	15	4.6 4.8	5.55	10.35	8.7	1.60	10.30	8.7 8.70	1.80	10.50	8.7				
	16	4.7 4.9	5.54	10.44	9.0	1.60	10.60	8.9 8.95	1.79	10.74	9.0				
	17	4.9 5.1	5.52	10.62	9.1	1.60	10.70	8.9 8.90	1.79	10.69	8.9				
	18	5.0 5.2	5.51	10.71	9.3	1.61	10.91	9.1 9.10	1.78	10.88	9.1				
	19	5.2 5.4	5.51	10.91	9.5	1.64	11.14	9.3 9.40	1.78	11.18	9.5				
	20	5.7 5.9	5.49	11.39	9.8	1.70	11.50	9.7 9.70	1.80	11.50	9.7				
	21	5.9 6.1	5.48	11.58	9.9	1.74	11.64	9.9 9.85	1.80	11.65	9.8				
	21a	6.1 6.3	5.47	11.77											
	22	6.3 6.5	5.45	11.95 7.4				9.8 9.80	1.80	11.60	9.8				
	22a	6.5 6.7	5.45	12.15 6.7 6.70 oo							9.8				
	23	6.9 7.1	5.49	12.59 7.1 7.10 oo				9.9ª	1.81	11.71					
	24		5.50	12.70 7.2											
	25		5.51	12.81 7.3											
	26		5.53	13.03 7.5											
	27		5.57	13.47 7.9											
	28		5.56	13.36 7.8											

Series 199

De M

March 31, 1914

Card

MC 4837 $6^h\ 40^m + 30.0$ Alt. +2.1

		Sc1.		Sc2	Pc			a¹	a²			
13.59	1	2.9 3.1	5.83	8.93	7.1	1.84	8.94	7.1	7.2	7.15 1.0	1.96	9.11
13.70	2	2.8 3.0	5.85	8.85	7.3	1.81	9.11	7.3	7.3	7.30 0.0	1.94	9.24
13.82	3	3.7 3.9	5.68	9.58	8.2	1.64	9.84	8.3	8.3	8.30 0.0	1.81	10.11
14.58	var. rej. ~~4~~	~~5.0~~ 5.2	~~5.52~~	~~10.72~~	9.1	1.60	10.70	9.0	9.1	9.05 0.1	1.78	10.83
14.15	5	5.7 5.9	5.49	11.39	9.7	1.68	11.38	9.7	9.8	9.75 1.0	1.80	11.55
15.00	6	6.4 6.6	5.45	$1\overset{2}{1}.05$								
15.23	7	6.8 1.00	5.48	7.0	12.48							
	8		5.53	7.5	13.03							
	9		5.63	8.3	13.93							
	10		5.67	8.7	14.37							
	11		5.69	9.0	14.69							
	12		5.70	9.1	14.80							
	13		5.73	9.5	15.23							
	14		5.74	9.7	15.44							
	15		5.77	9.9	15.67							

Series 199 Copied

Se M

March 31, 1914

Card.

MC 4838 = D4

Alt. -.19

Copied

Magn.		Se1		Se2		Pc			a^1		a^2			M		curve	magn.
	1	1.3	1.5	·		5.1	2.14	7.24	5.2	5.15 01	5.1	2.14	7.29	29	7.9	5.57	13.47
·	2	1.7	1.9	·		5.7	2.09	7.79	5.3	5.30 00	5.3	2.14	7.44	30	8.2	5.62	13.82
·	3	1.9	2.1	·		5.9	2.06	7.96	5.7	5.70 00	5.7	2.11	7.81	31	8.5	5.65	14.15
·	4	2.2	2.4	·		6.1	2.04	8.14	5.9	5.90 00	5.9	2.10	8.00	32	8.8	5.67	14.47
·	5	2.3	2.5	·		Too close to another object			6.1	6.10 00	6.1	2.08	8.18	33	9.2	5.70	14.90
8.84	6	2.8	3.0	5.84		6.9	1.89	8.79	6.7	6.70 00	6.7	2.02	8.72	34	9.3	5.71	15.01
8.93	7	2.9	3.1	5.83		7.1	1.85	8.95	6.9	6.90 00	6.9	2.00	8.90	35	9.7	5.74	15.44
8.93	8	2.9	3.1	5.83		7.3	1.81	9.11	7.1	7.15 10	7.2	1.96	9.11	36	9.8 ?	5.76	15.56
8.84	9	2.8	3.0	5.84		7.3	1.81	9.21	6.9	6.95 18	7.0	1.99	8.94				
9.02	10	3.0	3.2	5.82		7.5	1.75	9.25	7.5	7.50 00	7.5	1.91	9.41				
9.19	11	3.2	3.4	5.79		7.8	1.70	9.50	7.7	7.75 10	7.8	1.88	9.63				
9.66	12	3.8	4.0	5.66		8.5	1.61	10.11	8.3	8.30 00	8.3	1.81	10.11				
9.74	13	3.9	4.1	5.64		8.5	1.61	10.11	8.3	8.40 11	8.5	1.80	10.20				
9.91	14	4.1	4.3	5.61		8.7	1.60	10.30	8.7	8.70 00	8.7	1.80	10.50				
10.08	15	4.3	4.5	5.58		9.0	1.60	10.60	8.9	8.90 00	8.9	1.79	10.69				
10.08	16	4.3	4.5	5.58		9.0	1.60	10.60	8.7	8.75 10	8.8	1.80	10.55				
10.44	17	4.7	4.9	5.54		9.3	1.62	10.92	9.0	9.05 01	9.1	1.78	10.63				
10.35	18	4.6	4.8	5.55		9.1	1.60	10.70	8.9	8.85 10	8.8	1.79	10.64				
10.44	19	4.7	4.9	5.54		9.1	1.60	10.70	9.1	9.10 00	9.1	1.78	10.88				
10.81	20	5.1	5.3	5.51		9.5	1.64	11.14	9.3	9.30 00	9.3	1.78	11.08				
11.10	21	5.4	5.6	5.50		9.7	1.68	11.38	9.8	9.75 01	9.7	1.79	11.54				
11.58	22	5.9	6.1	5.48		9.9	1.73	11.63	9.8	9.80 00	9.8	1.80	11.60				
11.72	23	6.3	6.25 01	5.47	6.3				9.9	9.95 10	10.0	1.81	11.76				
11.86	24			5.46	6.4												
12.15	25			5.45	6.7												
12.1~~7~~5	26			5.45	6.7												
12.70	27			5.50	7.2												
12.81	28			5.51	7.3												

Series 199

Sa M

March 31, 1914

MC 4839 h 8 40 + 20 alt + 18

	Sc 1		Sc 2		Pc			a¹	a²				
1	2.1 2.3	.			6.2	2.02	8.22	6.1	6.2	6.15	±0	2.08	8.23
2	3.7 3.9	5.68		9.58	7.9	1.69	9.59	7.7	7.7	7.70	00	1.89	9.59
3	3.6 3.8	5.70		9.50	8.1	1.66	9.76	8.0	8.1	8.05	01	1.84	9.89
4	5.1 5.3	5.51		10.81	9.7	1.68	11.38	9.1	9.3	9.20	±1	1.78	10.98
5	5.3 5.5	5.50		11.00	9.8	1.70	11.50	9.5	9.5	9.50	00	1.78	11.28
6	6.1 6.3 6.9000	5.47		11.77				9.7	9.7	9.70	00	1.79	11.49
7	6.7	5.46	6.9	12.36									
8		5.50	7.2	12.70									
9		5.54	7.7	13.24									
10		5.60	8.1	13.70									
11		5.63	8.3	13.93									
12		5.65	8.5	14.15									
South 13		5.67	8.9	14.57									
north 13 a?		5.70	9.3	15.00									
14		5.74	9.7	15.44									
15		5.77	9.9	15.67									

Two stars marked 13 (meas both)

Series 199

Se M

March 31, 1914

MC 4840 Pole

	Sc 1	Sc 2	BC	a¹	a²
5			4.3 ~~4.20 11~~	41 4.05 10	40
6			4.7 ~~4.80 11~~	4.9 4.95 10	50
8			6.0	6.0 6.05 01	6.1
9			6.9	6.8 6.85 01	6.9
10	3.1 3.3		7.2	7.0 7.05 01	7.1
11	3.5 3.7		7.7	7.5 7.50 00	7.5
12	4.0 4.2		8.3	8.0 8.05 01	8.1
13	4.5 4.7		8.7	8.5 8.50 00	8.5
14	4.8 5.0		9.0	8.9 8.95 10	9.0
15	5.2 5.4		9.3	9.3 9.25 10	9.2
16	5.6 5.8 5.80 00	5.8	9.7	9.5 9.50 00	9.5
17		5.9		9.9 9.90 00	9.9
18		6.4			
19		6.9			
20		7.2			
23		7.7			
25		8.2			
26		8.5			
27		8.9			
28		9.3			
29		9.8			
30		5			

See P. 158

5 30

Series 220

So. W.   April 3, 1914

10.50

Diff.	Mb 5078	Sc 1	Pole Sc 2	mc 5083 0.171 Mean			P.b.			mc 5083		
	5						5.4	5.35 01	5.3	5.35	5.35 00 00	+1.14 ~~+1.14~~ Diff.
	6						5.9	5.95 10	6.0	6.00	5.98 03 02	+1.13
	8						7.2	7.15 01	7.1	7.10	7.12 03 02	1.11
	9						7.8	7.75 01	7.7	7.70	7.72 03 02	1.11
4.72	10	4.3		4.3	4.30	00	8.0	7.95 01	7.9	8.00	7.98 03 02	1.04
4.85	11	~~8~~4.7		4.7	4.70	00	8.5			8.6	8.55 10	1.00
4.86	12	5.0		5.0	5.00	00	8.9			9.0	8.95 10	0.91
4.85	13	5.4		5.5	5.45	01	9.4			9.5	9.45 01	0.85
4.95	14	5.7		5.7	5.70	00	9.7			9.8	9.75 10	0.90
5.08	15	6.0		6.0	6.00	00						
5.10	16	6.3		6.3	6.30	00						
5.13	17	6.5		6.5	6.50	00						
5.06	18	7.0		7.0	7.00	00						
5.17	19	Sc. 2 7.2		7.3	7.25	01						
5.23	20	7.5		7.5	7.50	00						
5.14	23	8.2	8.20 00	8.2 8.20	8.20	00 00						
5.17	25	8.7	8.70 00	8.7 8.70	8.70	00 00						
5.25	26	9.1	9.05 10	9.0 9.10	9.08	03 02						
5.19	27	9.5	9.50 00	9.5 9.50	9.50	00 00						
5.21	28	9.9	9.90 00	9.9 9.90	9.90	00 00						
	29	7										

00 96 0
5 5 5
.00 +.01 .00

3 1
4 4
-.08 +.02

3 1
9 4
-.03 +.02

0 1
5 5
.00 +.02

0 1
6 6
.00 +.02

03 02
34 34
-.08 +.00

0 0
21 21
.00 .00

03 22
16 16
.00 +.01

copied

Series 220

Copied

Sc. W.
11.04

April 3, 1914

Card

M.B. 5079 D6 alt -.18 P.B.

	Sc 1		Sc 2			
1	3.7	3.9	.			
2	3.9	4.1	.			
3	3.3 ?	3.5	.			
4	3.6	3.8	.			
5	4.1	4.3	~~4.44~~	.	9.94	.
6	4.0	4.2	~~4.44~~	.	8.94	.
7	4.0	4.2	~~4.44~~	.	8.94	.
8	4.3	4.5	4.78	4.74	9.28	9.04
9	4.1	4.3	4.74	.	9.04	.
10	4.2	4.4	4.16	.	9.16	.
11	4.3	4.5	4.77	4.74	9.27	9.04
12	4.2	4.4	4.16	.	9.16	.
13	4.4	4.6	4.79	4.76	9.39	9.16
14	4.3	4.5	4.77	4.74	9.27	9.04
15	4.7	4.9	4.84	4.81	9.74	9.51
16	5.0	5.2	4.90	4.86	10.10	9.86
17	5.3	5.5	4.95	4.92	10.45	10.22
18	5.3	5.5	4.95	4.92	10.45	10.22
19	5.7	5.9	4.99	4.97	10.89	10.67
20	5.7	5.9	4.99	4.97	10.89	10.67
21	6.2	6.4	5.04	5.02	11.44	11.22
22	6.5	6.7	5.08	5.06	11.78	11.56
23	6.8	7.0	5.12	5.09	12.12	11.89
24	6.7	6.9	5.10	5.08	12.00	11.78
25			5.13	7.1	12.23	
26			5.13	7.1	12.23	
27			5.14	7.4	12.54	

Sc. 2.	curve	magn.	
5.80 00 5.8	1.16	6.96	5.8
6.15 10 6.1	1.15	7.30	6.2
6.35 10 6.3	1.15	7.50	6.4
6.30 00 6.3	1.15	7.45	6.3
7.05 10 7.1	1.11	8.16	7.0
7.1	1.11	8.21	
7.2	1.11	8.31	
7.7	1.07	8.77	
7.7	1.07	8.77	
7.9	1.05	8.95	
8.2	1.01	9.21	
8.3	1.00	9.30	
8.7	0.97	9.67	
8.7	0.97	9.67	
8.9	0.94	9.84	
9.1	0.93	10.03	
9.5	0.89	10.39	
9.8	0.87	10.67	

W.S.

Sc. 2				curv
28	7.8		+	5.17
29	8.1			5.19
30	8.1			5.19
31	8.3			5.20
32	8.5			5.21
33	8.5			5.21
34	8.7			5.21
35	9.1	9.10 00 9.1		5.2
36	9.3	9.25 10 9.2		5.2
37	9.4	9.45 01 9.5		5.2
38	9.7	9.75 10 9.8		5.2
39	9.8	9.85 01 9.9		5.2

Series 220

Sc. U. April 3, 1914 Card

M.C. 5080 11h 00m +5° P.C. alt +11

curve	magn.
5.17	12.97
5.19	13.29
5.19	13.29
5.20	13.50
5.21	13.71
5.21	13.71
5.21	13.91
5.20	14.30
5.20	14.45
5.20	14.65
5.20	14.95
5.20	15.05

	Sc 1		Sc. 2								
1	4.0						6.9	7.1	7.00 ±1	1.12	8.12
2	4.6	4.79				9.39	8.6	8.5	8.55 0.1	0.99	9.54
3			5.3	4.92		10.22	9.3	9.2	9.25 10	0.90	10.15
4			5.7	4.97		10.67	10.0	9.9	9.95 0.1	0.86	10.81
5			6.3	5.04		11.34	n.s.				
6			6.5	5.06		11.56					
7			6.9	5.10		12.00					
8			7.1	5.13 →		12.23					
9			7.5		5.16	12.66					
10			7.95 ±0 7.9	8.0	5.18	13.13					
11			8.35 2.1 8.2	8.5	5.20	13.55					
12			8.70 0.0 8.7	8.7	5.20	13.90					
13			9.15 ±0 9.1	9.2	5.20	14.35					
14			9.75 ±0 9.7	9.8	5.20	14.95					
15			9.90 0.0 9.9	9.9	5.20	15.10					

Series 220

Sc. U. April 3, 1914 Card.

Mb 5081 $11^h 00^m$ −10°.0 Sc. 2. P. b. alt −.08

	Sc 1	Sc 2								
1	3.1:		.		5.3	5.2	5.2$\overset{5}{0}$ 00	1.16	6.$\overset{41}{36}$
2	4.1		.		7.4	7.7	7.55 21	1.09	8.64
3	5.1		4.88	9.98	9.1	9.2	9.15 10	0.92	10.07
4	5.3		4.92	10.22	9.7:	9.8	9.75 10	0.87	10.62
5	~~6.3~~	6.3	5.04	11.34	n. d.				
6	~~6.8~~	6.8	5.09	11.89					
7		7.0	5.11	12.11					
8		7.3	5.14	12.44					
9		8.2.	5.19	13.39					
10	~~8.5~~	8.5. 8.3 8.40 11	5.20	13.60					
11		8.8. 8.9 8.85 01	5.20	14.05					
12		9.1. 9.2 9.15 10	5.20	14.35					
13		9.3. 9.6 9.45 12	5.20	14.65					
14		9.7. 9.5 9.60 11	5.20	14.80					
15		9.8 9.8 9.80 00	5.20	15.00					

Series 220

Sc U. April 3, 1914

M b 5082 → Too poor to measure P. b

M b. 5083 Pole

		Sc 1	Sc 2					
	5					5.4	5.35 o1	5.3
	6					6.1	6.00 i1	5.9
	8					7.1	7.10 oo	7.1
	9					7.7	7.70 oo	7.7
	10	4.3				8.0	8.00 oo	8.0
	11	4.7				8.6		
	12	5.0				9.0		
	13	5.5				9.5		
	14	5.7				9.8		
	15	6.0				F		
	16	6.3						
	17	6.5						
	18		7.0					
	19		7.3					
	20		7.5					
	23		8.1	8.20 1i 8.3				
	25		8.7	8.7	8.70 oo			
	26		9.1	9.1	9.10 oo			
	27		9.5	9.5	9.50 oo			
	28		9.9	9.9	9.90 oo			
12.00	29		F					
	30							

See P. 167

Series 220

April 7, 1914

Diff	Sc. W.	Sc 1	Sc 2		M.G. 5083 Pole		P.G.				Mean			Diff
11.00	5				Mc 5089		4.8	4.75 01	4.7	5.75	5.25	50	50	+1.24
	6				P.177		6.2	6.15 01	6.1	6.35	6.25	10	10	0.86
	8						7.3	7.25 10	7.2	7.45	7.35	10	10	0.88
Diff	9					Mean.	7.9	7.80 11	7.7	8.00	7.90	10	10	0.93
+4.57	10	4.3			4.6	4.45 12	8.1	8.10 00	8.1	8.20	8.15	05	05 ~~20~~	0.87
4.50	11	5.0			5.1	5.05 01	8.5			8.7	8.60	1	1	0.95
4.46	12	5.3			5.5	5.40 11	9.0			9.1	9.05	0	1	0.81
4.60	13	5.5			5.9	5.70 22	9.5			9.7	9.60	1	1	0.70
4.60	14	~~5.8~~	5.8		6.3	6.05 23	9.9			100	9.95	1	0	0.70
4.83	15		6.0		6.5	6.25 23	9							
4.90	16		6.3		6.7	6.50 22								
4.83	17		~~7.0~~	6.5	7.1	6.80 33								
				6.75 32										
4.94	18		~~7.3~~ 6.5	7.0	7.5	7.12 31	38							
4.77	19		~~7.3~~	7.5	7.8	7.65 1 2								
4.83	20			7.8	8.00	7.90 1 1								
				8.15 01										
5.02	23		8.2	8.1	8.50	8.32 17	18							
				8.70 00										
5.05	25		8.7	8.7	8.95	8.82 ~~8.78~~ 12 ~~18~~	13							
				9.10 00										
5.11	26		9.1	9.1	9.35	9.22 12	13							
				9.50 00										
5.07	27		9.5	9.5	9.75	9.62 12	13							
				9.80 00										
5.31	28		9.8	9.8	~~9.80~~	9.80 a								
	29													
	30													

$\frac{85}{5}$ -.17 $\frac{85}{5}$ +.17

$\frac{30}{4}$ -.08 $\frac{3}{4}$ +.08

$\frac{115}{9}$ -.13 $\frac{115}{9}$ +.13

$\frac{6}{5}$ -.12 $\frac{9}{5}$ +.18

$\frac{127}{6}$ -.21 $\frac{148}{6}$ +.25

$\frac{53}{4}$ -.13 $\frac{57}{4}$ +.14

copied

$\frac{240}{15}$ -.16 $\frac{295}{\cancel{1111}}$ +.20

Series 220

Copied

Sc. U. April 7. 1914 Card.

M.b. 5084 79 Y. P.b alt. +16

	Sc 1	Sc 2								
1	4.1				7.3	7.2	7.25	10	0.90	8.15
2	4.3		4.55	8.85	8.0	8.1	8.05	01	0.88	8.93
3		4.8	4.53	9.33	8.9	8.8	8.85	10	0.86	9.71
4		5.0	4.53	9.53	9.1	9.1	9.10	00	0.82	9.92
5		5.7	4.60	10.30	9.7	9.8	9.75	10	0.72	10.47
6		6.0	4.64	10.64	F					
7		6.3	4.72	11.02						
8		6.7	4.80	11.50						
9		7.1	4.88	11.98						
10		7.50 00 7.5 7.5	4.93	12.43						
11		7.90 11 7.8 8.0	4.99	12.89						
12		8.15 21 8.0 8.3	5.01	13.16						
13		8.70 00 8.7 8.7	5.09	13.79						
14		9.05 01 9.0 9.1	5.12	14.17						
15		n.s.								

Series 220

Sc. U. April 7. 1914 : Copied

	M.B. 5085			31 K.	alt. + 22		P.b.	+22			Card.	
	Sc 1		Sc 2									
1	3.6	.					6.3	6.4	6.35	10	0.94	7.29
2	4.1	.					7.1	7.1	7.10	00	0.90	8.00
3	4.3	4.55					7.9 :	7.7	7.80	11	0.88	8.68
4			4.9		4.53	9.43	8.7	8.7	8.70	00	0.87	9.57
5			5.4		4.56	9.96	9.2	9.2	9.20	00	0.81	10.01
6			5.5		4.57	10.07	9.8					
7			6.0		4.64	10.64	10.0					
8			6.4		4.74	11.14						
9			6.7		4.81	11.51						
10			7.3		4.91	12.21						
11			7.1		4.87	11.97						
12			7.9		4.99	12.89						
13			8.1		5.01	13.11						
14			8.30 00 8.3.	8.3	5.04	13.34						
15			8.50 00 8.5.	8.5	5.06	13.56						
16			9.10 00 9.1.	9.1	5.12	14.22						
17			9.50 00 9.5.	9.5	5.15	14.65						
18			9.85 10 9.9	9.8	5.16	15.01						

Series 220

copied

Sc. U. April 7, 1914

Card.

M b 5086 D 7 alt. –.18 P. b.

	Sc 1	Sc 2						
1	3.7		.		6.1510 6.1	0.95	7.10	6.2
2	3.8	~~6.3~~	.		6.30 00 6.3	0.94	7.24	6.3
3	4.0		.		6.50 00 6.5	0.92	7.42	6.5
4	4.1		.		7.10 12 7.2	0.90	8.00	7.0
5	4.1		.		6.90 00 6.9	0.90	7.80	6.9
6	4.1		.		6.9	0.90	7.80	
7	4.2		.		7.2	0.89	8.09	
8	4.2		.		7.7	0.88	8.58	
9	4.3		4.55	8.85	7.5	0.89	8.39	
10	4.3		4.55	8.85	7.7	0.89	8.59	
11	4.3		4.55	8.85	7.9	0.88	8.78	
12		4.8	4.53	9.33	8.7	0.87	9.57	
13		4.8	4.53	9.33	8.7	0.87	9.57	
14	4.9	~~4.9~~	4.53	9.43	8.9	0.86	9.76	
16		5.0	4.53	9.53	9.2	0.81	10.01	
15		5.2	4.54	9.74	9.2	0.81	10.01	
17		5.2	4.54	9.74	9.7	0.72	10.42	
18		5.6	4.58	10.18	9.9	0.69	10.59	
19		6.0	4.64	10.64	h.3.			
20		6.2	4.69	10.89				
21		6.7	4.81	11.51				
22		6.5	4.76	11.26				
23		6.9	4.84	11.74				
24		7.1	4.88	11.98				
25		7.6	4.94	12.54				
26		7.8	4.98	12.78				
27.		8.0	5.00	13.00				

28	8.2	see below
29	8.3	
30	8.8	8.8
31	9.1	9.0
32	9.1	9.2
33	9.4	9.2
34	9.7	9.5
35	9.9	9.8
36	[illegible]	

28	8.2	5.02	13.22
29	8.3	5.04	13.34
30	8.80	5.10	13.90
31	9.05	5.12	14.17
32	9.15	5.13	14.28
33	9.30	5.14	14.44
34	9.60	5.16	14.76
35	9.85	5.16	15.01 ~~14.96~~
36			

Series 220

Copied

Sc. U

April 7, 1914

Card

~~Mb 5087 81 R. Too poor to measure~~

Mb 5088 33 R alt. +.22. P. B.

	Sc 1		Sc 2	
1	4.1 .			
2	4.7	4.53	9.23	
3	Sc 2 5.0	4.53	9.53	
4	5.8	4.61	10.41	
5	6.1	4.67	10.77	
6	6.4	4.73	11.13	
7	7.5	4.93	12.43	
8	8.1	5.01	13.11	
9	8.5	5.06	13.56	
10	8.75 01 8.8.	5.10	13.85	8.7
11	9.00 00 9.0	5.11	14.11	9.0
12	8.95 ~~10~~ 01 9.0	5.11	14.06	8.9
13	9.8? 9.8 ? :	5.16	14.96?	?
14	9.70 00 9.7	5.16	14.86	9.7
15	9.85 01 9.8	5.16	15.01	9.9

6.8	R.B.	6.9	6.85	01	0.90	7.65
8.0		8.1	8.05	01	0.88	8.93
8.7 :		8.5	8.60	11	0.88	9.48
9.7		9.7	9.70	00	0.73	10.43
9.9		9.9	9.90	00	0.69	10.59
J						

12

Series 220

Sc. U. April 7, 1914

	Mo	5089 Sc. 1	Pole Sc. 2			P. b.		
	5					5.7	5.75 10	5.8
	6					6.3	6.35 10	6.4
	8					7.4	7.45 01	7.5
	9					8.0	8.00 00	8.0
	10	4.6				8.2	8.20 00	8.2
	11	5.8	5.1			8.7		
	12		5.5			9.1		
	13		5.9			9.7		
	14		6.3			10.0		
	15		6.5					
	16		6.7					
	17		7.1					
	18		7.5					
	19		7.8					
	20		8.1	7.9	8.00 11			
	23		8.5	8.5	8.50 00			
	25		9.0	8.9	8.95 01			
	26		9.4	9.3	9.35 01			
	27		9.8	9.7	9.75 01			
12.44	28		Fl					
	29							
	30							

Series 228

Sc. U. April 9, 1914

M.G. 5184 Pole V. b.

Diff		Sc.1	Sc.2	Mc 5189 P.182	Mc 5195 P.186	Mean							Mean		Dif
10.40	5							5.3	5.30 00	5.3	5.35	5.30	5.32	02 03 02	Dif
	6							6.0	5.90 1 1	5.8	5.80	5.80	5.83	07 03 03	1.
	8							7.1	7.00 1 1	6.9	6.75	6.95	6.90	10 15 05	1.3
	9							7.7	: 7.70 00	7.7	7.25	7.55	7.50	20 25 05	1.3
+4.85	10	4.2		4.1	4.2	4.17	0 1 0	7.9	7.95 1 0	8.0	7.50	7.75	7.73	22 23 02	1.2
4.88	11		4.7	4.6	4.7	4.67	0 1 0	8.3			8.0	8.2	8.17	1 2 0	1.
4.73	12		5.1	5.0 ~~5.4~~	5.3	5.13	0 1 2	8.7			8.3	8.5	8.50	2 2 0	1.
4.93	13		5.3	5.4 ~~5.3~~	5.4	5.37	1 0 0	9.1			8.7	8.9	8.90	2 2 0	1.
5.12	14		5.6	5.3 ~~5.80~~	5.7	5.53	1 2 2	9.5			9.0	9.2	9.23	3 2 0	1.4
5.21	15		5.9	5.80 ~~6.1~~	5.9	5.87	0 1 0	9.8			9.3	9.5	9.53	3 2 0	1.5
5.23	16		6.2	6.1 ~~6.3~~	6.2	6.17	0 1 0	10.0			9.7	9.9	9.87	1 2 0	1.
5.20	17		6.5	6.3	6.5	6.43	1 1 1				9.9		9.9	· 2 ·	1.
5.13	18		7.0	6.9	6.9	6.93	1 0 0								
5.22	19		7.3	7.1	7.2	7.20	1 1 0								
5.26	20		7.7	7.2	7.5	7.47	2 3 0								
5.37	23		8.1	7.7	8.1	7.97	1 3 1								
5.43	25		8.7	8.5	8.56 7 1 1 1	8.5			8.15	8.60	8.44	13 29 16			
5.56	26		8.9		8.80 1 1	8.7			8.55	8.95	8.77	03 22 18			
5.57	27		9.1		9.05 1 0	9.0			9.00	9.30	9.12	07 12 18			
5.58	28		9.5		9.50 0 0	9.5			9.50	9.60	9.53	03 03 07			
5.74	29		9.9		9.90 0 0	9.9			9.90	9.95	9.92	02 02 03			
	30														

35	40	05
4	4	4
+.09	-.10	+.01
102	103	02
5	5	5
+.20	-.21	.00
4	4	0
2	2	2
+.20	-.20	.00
177	183	07
11	11	11
+.17	-.17	+.01

0	5	4 ~~5~~
5	5	5
.00	-.10	+.~~10~~ 08
5	1	1
6	6	6
+.08	-.12	+.02
19	93	62
4	4	4
+.05	-.23	+.16
05	05	10
2	2	2
-.02	-.02	+.05
64	150	122
17	17	17
+.04	-.09	+.07

copied.

Copied Series 228

So U. April 9, 1914 Card.

M. B. 5185 80 R. alt. +17 P. B.

Diff		Sc 1		Sc 2										
1.17	1	3.7	.	~~8.7~~				6.3	6.3	6.30	00	1.24	7.54
1.28	2	3.9	.					6.4	6.5	6.45	01	1.24	7.69
1.33	3	4.1	4.84				8.94	6.7	6.9	6.80	11	1.27	8.07
1.33	4	4.2	4.85				9.05	7.7	7.8	7.75	10	1.33	9.08
1.29	5		4.99	5.1			10.09	9.2	8.3	8.25	01	1.36	9.61
1.~~4~~38	6		5.06	5.6			10.66	9.0				1.44	10.44
1.36	7		5.07	5.7			10.77	9.5				1.50	11.00
1.40	8		5.11	6.0			11.11	9.8				1.54	11.34
1.42	9		5.20	6.7			11.~~27~~90	n.s.					
1.55	10		5.20	6.7			11.~~27~~90						
1.53	11		5.29	7.4			12.69						
1.73	12		5.39	8.0			13.39						
	13		5.37	7.9			1~~4~~3.27						
	14		5.39	8.0			13.39						
	15		5.47	8.5	8.50 00	8.5	13.97						
	16		5.50	8.8	8.75 0.1	8.7	14.25						
	17		5.54	9.0	9.00 00	9.0	14.54						
	18		5.64	9.5	9.50 00	9.5	15.14						
	19		5.68	9.7	9.75 10	9.8	15.43						

2
3
5
2

05
4
+.01

02
5
.00

0
2
.00

07
11
+.01

Series 228

Sc. U. April 9, 1914 Card.

M.b. 5186 12h. 40m +60°.0 P. alt. +20

	Sc 1	Sc 2									
1	3.3:			·		6.4	6.3	6.35	0.1	1.24	7.59
2	4.2			4.85	9.05	7.5	7.7	7.60	1.1	1.31	8.91
3		5.0		4.97	9.97	8.5	8.5	8.50	0.0	1.40	9.90
4		5.9		5.10	11.00	9.8:	9.7	9.75	0.1	1.53	11.28
5		6.2		5.15	11.35	n.s.					
6		6.6		5.20	11.80						
7		7.1		5.25	12.35						
8		7.3		5.27	12.57						
9		7.7		5.34	13.04						
10		8.0		5.40	13.40						
11		8.7	8.60 1.1 8.5	5.49	14.09						
12		8.9	8.85 1.0 8.8	5.52	14.37						
13		9.2	9.20 0.0 9.2	5.58	14.78						
14		9.7	9.70 0.0 9.7	5.67	15.37						
15		n.s.	10.0 · a 10.0 ?	5.72	15.72						

Series 228

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Sc. U. April 9, 1914

Card

M.B. 5187 ∴ 57 R. alt. +22 P.L.

	sc. 1	sc. 2							
1	4.1		4.84	8.94	7.1	7.1	7.10 00	1.28	8.38
2	4.3		4.86	9.16	7.7	7.5	7.60 1.1	1.31	8.91
3	4.7		4.92	9.62	8.3	8.2	8.25 10	1.36	9.61
4		5.2	5.00	10.20	8.7	8.7	8.70 00	1.41	10.11
5		5.3	5.01	10.31	8.8	8.9	8.85 01	1.42	10.29
6		5.7	5.07	10.77					
7		5.8	5.09	10.89					
8		6.2	5.14	11.34					
9		6.8	5.21	12.01					
10		7.1	5.25	12.35					
11		7.3	5.27	12.57					
12		7.7	5.34	$1\overset{3}{2}.04$					
13		8.0	5.39	13.39					
14		8.1	5.41	→	13.51				
15		8.3	8.30 00 8.3	5.44	13.74				
16		8.6	8.7 8.65 01	5.49	14.14				
17		9.0	9.1 9.05 01	5.55	14.60				
18		9.5	9.5 9.50 00	5.64	15.14				
19		9.7	9.7 9.70 00	5.67	15.37				
20		9.9	9.9 9.90 00	5.70	15.60				

Series 228

Sc. U. April 9, 1914

M. b.	5189 Sc 1	Pole Sc 2		P. b.		
5				5.3	5.4	5.35 ⊥0
6				5.8	5.8	5.80 00
8				6.7	6.8	6.75 ⊥0
9				7.3:	7.2	7.25 10
10	4.1			7.5	7.5	7.50 00
11		4.6		8.0		
12		5.0		8.3		
13		5.4		8.7		
14	5.3			9.0		
15		5.9	5.80 1⊥ 5.7	9.3		
16		6.1		9.7		
17		6.3		9.9		
18		6.9				
19		7.1				
20		7.2				
23		7.7				
25		8.1	8.15 ⊥0 8.2			
26		8.6	8.55 0⊥ 8.5			
27		9.0	9.00 00 9.0			
28		9.5	9.50 00 9.5			
29		9.9	9.90 00 9.9			
30						

See P. 178

Series 228

copied

Sc U.

April 9, 1914

Card.

M.B 5191 Too poor to measure P.B.

		M.B.^{a_1} 5192	B.^{a_2}6			P.B.				+.22
	1	3.0	·	·		5.2	5.25 01	5.3	1.16	6.41
near Edge of Plate	2	*^{3}2.0	·	·		5.3	5.30 00	5.3	1.16	6.46
near Edge of Plate	3	3.1		·		5.3	5.30 00	5.3	1.16	6.46
	4	3.7		·		5.4	5.40 00	5.4	1.17	6.57
" " " "	5	3.6		·		5.7	5.90 22 ~~5.85 1~~	6.1	1.21	7.11
	6	3.8		·		6.2			1.23	7.43
	7	3.9		·		6.5			1.24	7.74
	8	4.0		4.84	8.84	6.9			1.28	8.18
	9	4.1		4.84	8.94	7.2			1.29	8.49
	10	4.3		4.87	9.17	7.9			1.33	9.23
	11	4.6		4.90	9.50	8.1			1.34	9.44
	12	4.7		4.92	9.62	8.5			1.39	9.89
	13	4.8		4.94	9.74	8.5			1.39	9.89
	14		5.1	4.99	10.09	9.0			1.44	10.44
	15		5.3	5.02	10.32	9.2			1.46	10.66
	16		5.3	5.02	10.32	9.5			1.50	11.00
	17		5.7	5.07	10.77	9.7			1.53	11.23
	18		5.4	5.04	10.44	9.7			1.53	11.23
	19		6.2	5.14	11.34	9.9			1.55	11.45
	20		6.0	5.11	11.11					
	21		6.5	5.19	11.69					
	22		6.7	5.20	11.90					
	23		7.1	5.25	12.35					
	24		6.9	5.22	12.12					
	25		7.3	5.27	12.57					
	26		7.0	5.23	12.23					
	27		7.3	5.27	12.57					

See below ↓

28	7.8	
29	8.0	
30	8.2	
31	8.4	8.5
32	8.7	8.6
33	9.2	9.3
34	9.4	9.5
35	9.7	9.7

		curve	
28	7.8	5.35	13.15
29	8.0	5.40	13.40
30	8.2	5.42	13.62
31	8.45 01	5.46	13.91
32	8.65 10	5.50	14.15
33	9.25 01	5.59	14.84
34	9.45 01	5.63	15.08
35	9.70 00	5.67	15.37

* 3.0 assumed, as brightest image on scale is 3.0

Series 228

Sc. U. April 9, 1914

Card

M. b. 5193 14 38 +30.3 P. b. alt. +.21

	Sc 1	Sc 2							
1	4.1		4.84	8.94	6.8	6.9	6.85 01	1.27	8.12
2	4.3		4.87	9.17	7.8	8.0	7.90 11	1.33	9.23
3	~~4~~	4.7	4.92	9.62	8.2	8.4	8.30 11	1.37	9.67
4		5.2	5.00	10.20	9.3	9.2	9.25 10	1.47	10.72
5		5.8	5.09	10.89	9.9	9.8	9.85 10	1.54	11.39
6		6.1	5.13	11.23					
7		6.5	5.19	11.69					
8		6.9	5.22	12.12					
9		7.5	5.30	12.80					
10		8.1	5.40	13.50					
11	8.50 00 8.5	8.5	5.47	13.97					
12	8.80 11 8.9	8.7	5.51	14.31					
13	9.15 01 9.2	9.1	5.57	14.72					
14	9.55 10 9.5	9.6	5.64	15.19					
15	9.75 9.8	9.7	5.68	15.43					

Series 228

April 9, 1914

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M. C. 5194 10612				alt. +05		P. C.		Card.	
1	sc1 4.2		4.85	9.05	7.2	7.1	7.15 01	1.28	8.43
2	4.3		4.87	9.17	7.7	7.7	7.70 00	$1.3\overset{2}{3}$	9.02
3	4.3		4.87	9.17	7.8	7.7	7.75 01	1.33	9.08
4	~~5~~	5.1	4.99	10.09	8.9	8.8	8.85 10	1.42	10.27
5		5.2	5.00	10.20	8.7	8.7	8.70 00	1.41	10.11
6		5.3	5.01	10.31					
7		6.1	5.14	11.24					
8		6.3	5.16	11.46					
9		6.4	5.18	11.58					
10		7.1	5.25	12.35					
11		6.7	5.20	11.90					
12		7.3	5.27	12.57					
13		7.5	5.30	12.80					
14		7.5	5.30	12.80					
15		7.4	5.29	12.69					
16		8.0	5.39	13.39					
17		8.0	5.39	13.39					
18		8.3 8.30 00 8.3	5.44	13.74					
19		8.6 8.65 01 8.7	5.50	14.15					
20		9.0 9.00 00 9.0	5.54	14.54					
21		9.4 9.35 01 9.3	5.61	14.96					
22		9.7 9.60 11 9.5	5.65	$1\overset{5}{4}.25$					

Series 228

Sc. U. April 9, 1914

Mb. 5195	Sc 1	Pole Sc 2			P.le.		
5					5.3	5.3	5.30 00
6					5.8	5.8	5.80 00
8					6.9	7.0	6.95 ⊥0
9					7.5:	7.6	7.55 ⊥0
10	4.2				7.7	7.8	7.75 ⊥0
11		4.7			8.2		
12		5.3			8.5		
13		5.4			8.9		
14		5.7			9.2		
15		5.9			9.5		
16		6.2			9.9		
17		6.5					
18		6.9					
19		7.2					
20		7.5					
23		8.1				See page 178	
25		8.7	8.5	8.60 1 ⊥			
26		9.0	8.9	8.95 0 1			
27		9.3	9.3	9.30 00			
28		9.5	9.7	9.60 ⊥1			
29		9.9	10.0	9.95 ⊥0			
30							

10.14 Series 131

Sc. U. April 14, 1914

Diff.	M.C. 3925 Pole	Sc 1	Sc. 2		Mc3930 P.191		P.C.
	5						5.4
	6						6.3
	8						7.3
	9						7.7
4.77	10	4.3			4.2	4.25 10	8.0
4.80	11		4.7		4.8	4.75 10	8.5
4.81	12		5.0		5.1	5.05 01	9.0
5.00	13		5.3		5.3	5.30 00	9.5
5.00	14		5.7		5.6	5.65 10	9.8
5.13	15		6.0		5.9	5.95 01	[illegible]
5.15	16		6.3		6.2	6.25 10	
5.03	17		6.7		6.5	6.60 11	
5.01	18		7.2		6.9	7.05 21	
5.20	19		7.3		7.1	7.20 11	
5.18	20		7.7		7.4	7.55 12	
			8.30 00				
5.14	23		8.3	8.3	8.10	8.20 10	10
			8.75 10				
5.15	25		8.7	8.8	8.70	8.72 03	02
			9.25 01				
5.18	26		9.2	9.3	9.05	9.15 10	10
			9.75 01				
4.99	27		9.8	9.7	9.65	9.70 05	05
			10.05 10				
5.09	28		10.1	10.0	10.00	10.02 03	02
	29						
	30						

		Mc3930 P.191	mean			Diff.
5.4	5.40 00	5.35	5.38	02	03	+1.11
6.2	6.25 10	5.90	6.08 ~~35~~	17	18	1.03
7.3	7.30 00	7.20	7.25	05	05	0.98
7.7	7.70 00	7.75	7.72	02	03	1.11
7.9	7.95 01	7.95	7.95	00	00	1.07
		8.3	8.40	11		1.15 ~~1.25~~
		8.7	8.85	21		1.01 ~~1.16~~
		9.2	9.35	12		0.95 ~~1.10~~
		9.5	9.65 ~~9.75~~	21		1.00 ~~1.15~~
		9.9	9.9	2		1.18

22 4 +.05	23 4 -.06
6 5 +.12	5 5 -.10
82 9 +.09	73 9 -.08

1 5 +.02	1 5 +.02
6 5 +.12	6 5 -.12
28 4 +.07	27 4 -.07
03 1 +.03	02 1 -.02
101 16 +.06	79 16 +.05

copied

Series 131

Sc. U. April 14, 1914 copied Card.

M.B. 3926 U. Serpentis $18^h 11^m.1 - 15° 33'$ P.B. All. −.32

Dec. adopted April 16, 1914		Sc 1	Sc 2										
α	α	3.8				.		6.9	6.9	6.90	00	1.04	7.94
β	B	4.1				4.71?	8.81?	7.1	7.1	7.10	00	1.05	8.15
a′	a	4.3				4.74	9.04	8.2	8.2	8.20	00	1.07	9.27
a	a vio	4.2				4.72	8.92	8.1	8.1	8.10	00	1.07	9.17
b	b	4.3				4.74	9.04	8.7	8.7	8.70	00	1.06	9.76
c	c	4.8				4.84	9.64	*9.1 ~~8.1~~				1.05	10.15
d	d		5.2			4.91	10.11	9.2				1.05	10.25
d′	e ~~vio~~		5.2			4.91	10.11	9.1				1.05	10.15
d^2	f		5.3			4.93	10.23	9.4				1.05	10.45
f	f vio		6.3			5.06	11.36						
d^3	g		6.1			5.04	11.14						
k	k		7.1			5.11	12.21						
l	l		7.7	7.60 1.1	7.5	5.14	12.74						
m	m		8.1	8.10 00	8.1	5.17	13.27						
n	n		8.5	8.50 00	8.5	5.16	13.66						
o	o		9.1	9.10 00	9.1	5.12	14.22						
p	p		9.5	9.40 1.1	9.3	5.09	$1\overset{4}{8}.49$						
e	e vio		6.6			5.08	11.68						

* Error of unit. Decided by J.C.M. May 5, 1914

Series 131

Sc. U. U April 14, 1914 Copied Card.

M. B. 3927 N Scuti alt. -.19 V. B.

	Sc 1	Sc 2							
a	3.8		.		6.9	6.8	6.85 10	1.04	7.89
b	4.3		4.74	9.04	7.5	7.5	7.50 00	1.05	8.55
c		5.2	4.91	10.11	9.7	9.7	9.70 00	1.07	10.77
d		4.9	4.86	9.76	9.7	9.8	9.75 ±0	1.07	10.82
e		6.7	5.09	11.79					
e'		6.7	5.09	11.79					
d'		5.8	5.01	10.81					
f		7.2	5.12	12.32					
g		7.7	5.15	12.85					
h		8.0	5.16	13.16					
k		8.1	5.17	13.27					
l		8.2	5.17 →	13.37					
m		8.7	8.70 00 8.7 5.15	13.85					
n		8.7	8.85 ±2 9.0 5.14	13.99					
o		9.1	9.15 ±0 9.2 5.11	14.26					
p		9.3	9.40 ±1 9.5 5.09	14.49					
q		9.5	9.60 ±1 9.7 5.07	14.67					

B.

Remeasured Wed. May 20, 1914.

d 4.9 9.8 M.O.R. Rec.

Series 131

Sc. U. April 14, 1914 copied Card.

M.b.	3928 Sc 1	U. Sc 2	Sagittae		206 V	P.b. alt. + 17		Card.	
a δ	3.2		.		5.4	5.4	5.40 00	1.09	6.49
b γ	β		.		5.2	5.2	5.20 08	1.09	6.29
c ν	3.7		.		6.7	6.5	6.60 11	1.04	7.64
d	4.1		4.71	8.81					
e	3.6		.		6.5	6.5	6.50 00	1.04	7.54
f	3.4		.						
g	3.6		.		6.7	6.3	6.50 22	1.04	7.54
h	4.3		4.74	9.04					
k	4.1		4.71	8.81					
l	3.7		.	.					
s		5.8	5.01	10.81					
t		6.1	5.04	11.14					
u		6.8	5.10	11.90					
w		7.1	5.11	12.21					
x		7.5	5.14	12.64					
y		8.05 01 8.0 . 8.1	5.17	13.22					
z		8.30 00 8.3 . 8.3	5.17	13.47					
β		9.05 01 9.0 . 9.1	5.12	14.17	.				
z		8.70 00 8.7 8.7	5.14	13.84					
ζ		4.9	~~5.1~~ 4.86	9.76	~~8.9~~				
m		5.0	4.88	9.88	~~9.0~~				
n		4.9	4.86	9.76	~~9.2~~				
p		5.3	4.94	10.24	~~9.3~~				
q		5.1	4.90	10.00	~~9.3~~				
r		5.3 .	4.94	10.24					
γ		9.25 01 9.2 9.3	5.10	14.35					

Series 131

Sc U. April 14, 1914

M. B. 3930 Pole

	Sc.1	Sc.2				P.B.			
5						5.4	5.3	5.35	01
6						5.8	6.0	5.90	11
8						7.2	7.2	7.20	00
9						7.7	7.8	7.75	10
10	4 ~~5~~.2					7.9	8.0	7.95	10
11		4.8				8.3			
12		5.1				8.7			
13		5.3				9.2			
14		5.6				9.5			
15		5.9				9.9			
16		6.2							
17		6.5							
18		6.9							
19		7.1							
20		7.4							
23		8.1	8.1	8.10	00				
25		8.7	8.7	8.70	00				
26		9.1	9.0	9.05	10				
27		9.7	9.6	9.65	10				
28		10.0	10.0	10.00	00				
29									
30									

11 20

Series 131

Sc. U. April ~~14~~ 15, 1914 Copied. Card.

2.37 M.b. 3931 RX Draconis 19h P.D. Alt +18

	Sc1	Sc2							
a		5.2	4.93	10.13	9.2	9.3	9.25 01	1.31	10.56
b		5.2	4.93	10.13	9.1	9.1	9.10 00	1.29	10.39
c		5.9	5.02	10.92	n.s.				
d		5.3	4.94	10.24	9.5.				
e		6.3	5.08	11.38					
f		6.5	5.10	11.60					
g		6.7	5.13	11.83					
h		7.2	5.19	12.39					
k		7.5	5.21	12.71					
l		8.0	5.25	13.25					
m		8.3	5.27	13.57					
n		8.5	5.28	13.78					
o		8.60 11 8.7 8.5	5.29	13.89					
p		8.75 01 8.8 8.7	5.30	14.05					
q		9.05 01 9.0 9.1	5.29	14.34					
r		9.50 00 9.5 9.5	5.26	14.76					
s		9.85 01 9.8 9.9	5.24	15.09					
α	3.8				6.7	6.5	6.60 11	1.00	7.60
β	4.1		4.80	8.90	7.2	7.1	7.15 01	1.04	8.19
γ	4.7		4.85	9.55	7.9	8.0	9.95 10	1.15 ~~1.34~~	9.10

11.59

Series 131

Sc. U.

April 15, 1914

	M.C. 3930 Pole Sc 1	Sc 2	Mc 3936 P.198	Mean			Diff.	P.L.	Mean		P.196	Mean			Diff.
5								5.4	5.40 00	5.4	5.45	5.42	02	03	+1.07
6								6.2	6.20 00	~~7.2~~ 6.2	6.10	6.15	05	05	0.96
8								7.2	7.20 00	7.2	7.20	7.20	00	00	1.03
9								7.7	7.70 00	7.7	7.75	7.72	02	03	1.11
10	4.2		4.2	4.20 00 ~~4.2~~			4.82	7.9	7.95 1 0	8.0	7.90	7.92	03	02	1.10
11	4.7		4.7	4.70 00			4.85	8.3			8.2	8.25	1	0	1.30
12		5.0	5.0	5.00 00			4.86	8.7			8.5	8.60	1	1	1.26
13		5.3	5.4	5.35 1 0			4.95	9.1			8.9	9.00	1	1	1.30
14		5.6	5.7	5.65 0 1			5.00	9.5			9.3	9.40	1	1	1.25
15		5.9	6.1	6.00 1 1			5.08				9.5	9.5	·	a	1.58
16		6.3	6.3	6.30 00			5.10								
17		6.5	6.5	6.50 00			5.13								
18		6.9	6.9	6.90 00			5.16								
19		7.2	7.2	7.20 00			5.22								
20		7.5	7.55	7.52 02 03			5.21								
23	8.10 00 8.1	8.1	8.05	8.08	02	03	5.26								
25	8.60 1 1 8.7	8.5	8.50	8.55	05	05	5.32								
26	9.05 1 0 9.1	9.0	8.95	9.00	05	05	5.33								
27	9.50 00 9.5	9.5	9.40	9.45	05	05	5.24								
28	9.90 00 9.9	9.9	9.90	9.90	00	00	5.21								
29															
30															

01	01
4	4
.00	.00
43	32
5	5
+.09	-.06
44	31
9	9
+.05	-.03

1	1
5	5
-.02	+.02
12	13
6	6
-.02	+.02
17	18
4	4
+.04	-.04
00	00
1	1
.00	.00
05	05
16	16
.00	.00

copied.

Series 131

copied

Sc. -U.

April 15, 1914

Card

M.	b. 3932 Sc. 1	b10 Sc. 2			P. b.		Alt. +.10	
1	B.		.		5.50 1.1 5.6	5.4	5. 1.01	6.51
2	3.2		.		6.10 00 6.1	6.1	1.00	7.10
3	3.3		.		6.10 00 6.1	6.1	1.00	7.10
4	3.2		.		6.30 00 6.3	6.3	1.00	7.30
5	3.9		.		6.95 0.1 7.0	6.9	1.02	7.97
6	3.7		.		Im. sup.		.	
7	3.8		.		7.0		1.03	8.03
8	4.1		4.80	8.90	7.7		1.12	8.82
9	4.3		4.81	9.11	8.2		1.19	9.39
10	4.3		4.81	9.11	8.5		1.24	9.74
11		4.7	4.86	9.56	9.0		1.29	10.29
12		5.1	4.91	10.01	9.3		1.31	10.61
13		5.2	4.93	10.13	9.7		1.34	11.04
14		5.6	4.99	10.59	9.9		1.34?	11.24
15		5.6	4.99	10.59	H			
16		6.1	5.04	11.14				
17		6.5	5.10	11.60				
18		7.2	5.19	12.39				
19		7.5	5.21	12.71				
20		7.7	5.23	12.93				
21		* 7.1	5.26 ~~5.18~~	~~12.36~~ ~~12.28~~ 13.36	ch. W.			
22		8.85 2.1 9.0 8.7	5.29	+ 13.14				
23		8.80 1.1 8.7 8.9	5.29	14.09				
24		9.15 0.1 9.2 9.1	5.29	14.44				
25		9.65 10 9.7 9.6	5.25	14.90				
26		9.90 00 9.9 9.9	5.23	15.13				
27		H						
28								

* Looked up this plate. Made independent measure, 8.3. Above measure error of a unit. M.O.R. July 18, 1914.

Series 131

Copied

Sc. U.

April 15, 1914

Card.

M. B. 3933, D 11 alt. - 18

	Sc. 1	Sc. 2		
1	3.2		.	
2	3.2		.	
3	8		.	
4	3.3		.	
5	4.0		~~4.80~~	
6	3.7		.	
7	3.8		.	
8	3.9		.	
9	4.0		~~4.80~~	
10	4.1		4.80	8.90
11	4.1		4.80	8.90
12	4.2		4.80	9.00
13	4.2		4.80	9.00
14		4.4	4.82	9.22
15		5.4	4.96	10.36
16		5.1	4.92	10.02
17		5.1	4.92	10.02
18		5.3	4.94	10.24
19		5.2	4.93	10.13
20		5.2	4.93	10.13
21		5.6	4.99	10.59
22		5.4	4.95	10.35
23		5.4	4.95	10.35
24		5.3	4.94	10.24
25		6.2	5.07	11.27
26		6.1	5.05	11.15
27		6.3	5.08	11.38
28		6.3	5.08	11.38

Edge of Plate

P. B.				Magn.
6.2	6.15 o1	6.1	1.00	7.15
6.3	6.30 oo	6.3	1.00	7.30
6.4	6.35 o1	6.3	1.00	7.35
6.5	6.50 oo	6.5	1.00	7.50
6.5	6.60 11	6.7	1.00	7.60
6.6			1.00	7.60
6.7			1.01	7.71
6.9			1.02	7.92
7.2			1.05	8.25
7.4			1.08	8.48
7.5			1.09	8.59
7.9			1.15	9.05
8.1			1.18	9.28
8.5			1.23	9.73
8.9			1.28	10.18
9.1			1.29	10.39
9.1			1.29	10.39
9.3			1.31	10.61
9.5			1.33	10.83
9.3			1.31	10.61
9.5			1.33	10.83
9.7			1.33	11.03
9.9			1.34	11.24
9.8			1.34	11.14
R.S.				

Sc. 2			
29	7.0		5.16
30	7.2		5.19
31	7.5		5.21
32	7.8		5.23
33	7.8		5.23
34	8.1		5.26
35	8.3		5.27
36	8.2		5.27
		8.70 oo	
37	8.7	8.7	5.29
		8.70 oo	
38	8.7	8.7	5.29
		8.80 11	5.30
39	8.7	8.9	
		9.50 oo	5.25
40	9.5	9.6	
		9.85 10	5.23
41	9.9	9.8	

Magn.

29	12.16
30	12.39
31	12.71
32	13.03
33	13.03
34	13.36
35	13.57
36	13.47
37	13.99
38	13.99
39	14.10
40	14.75
41	15.08

12 55

Series 131

Copied.

Sell

Apr 15, 1914

Card.

1 ov	MC3934		18 K			PC	Alt. +.20				
		Sec 1	Sec 2			Sec 2					
	1	4.1		4.80	8.90	7.7	7.8	7.75	⊥0	1.12	8.87
	2	4.2		4.81	9.01	8.0	8.0	8.00	00	1.17	9.17
	3		5.0	4.90	9.90	8.9	8.9	8.90	00	1.28	10.18
	4		5.7	5.00	10.70	9.7	9.5	9.60	1⊥	1.33	10.93
	5		5.9	5.02	10.92						
	6		6.7	5.12	11.82						
	7		6.9	5.15	12.05						
	8		7.1	5.18	12.28						
	9		7.5	5.21	12.71						
	10		7.8	5.24	13.04						
	11		8.20 00 82 82	5.26	13.46						
	12		8.65 010 8.7 8.6	5.29	13.94 ~~14.04~~						
Defect near	13		9.00 00 9.0 9.0	5.29	14.29						
	14		9.30 00 9.3 9.3	5.27	14.57						
	15		9.60 ⊥1 9.6 9.7	5.25	14.85						

Series 131

Sell

Apr. 15, 1914

Copied

Mc 3935	66K SC 2		alt +.212		PC SC 2					Card.
1	4.8		4.87	9.67	8.3	8.3	8.30	00	1.20	9.50
2	5.3		4.94	10.24	8.7	8.7	8.70	00	1.26	9.96
3	5.8		5.00	10.80	9.5	9.7	9.60	11	1.33	10.93
4	5.9		5.02	10.92	9.9	9.9	9.90	00	1.34	11.24
5	6.1		5.04	11.14						
6	6.3		5.08	11.38						
7	6.5		5.10	11.60						
8	7.1		5.18	12.28						
9	7.5		5.21	12.71						
10	7.9		5.24	13.14						
11	8.30 8.3	60 8.3	5.27	13.57						
12	8.45 8.5	10 8.4	5.28	13.73						
13	9.10 9.1	00 9.1	5.29	14.39						
14	9.45 9.5	10 9.4	5.26	14.71						
15	9.80 9.8	00 9.8	5.24	15.04						

Series 131

Dell Apr 15, 1914

1:22 MC 3936 Bole.

5					5.3	5.6	5.45	⊥2
6					6.1	6.1	6.10	00
8					7.2	7.2	7.20	00
9					7.7	7.8	7.75	⊥0
10	4.2				7.9	7.9	7.90	00
11	4.7				8.2			
12	5.0				8.5			
13	5.4				8.9			
14	5.7				9.3			
15	6.1				9.7⁵			
16	6.3				n.s.			
17	6.5							
18	6.9							
19	7.2							
20	7.5	7.6	7.55	⊥0				
23	8.0	8.1	8.05	01				
25	8.5	8.5	8.50	00				
26	8.9	9.0	8.95	⊥0				
27	9.5	9.3	9.40	1⊥				
28	9.9	9.9	9.90	00				

MOR.

1:29

11.58

Sc. U.

Series 198

May 1st 1914

M 6 4815 | Pole | | P. C.

	Sc 1		Sc 2			
5						
6				Mc		
8				4820		
9				Mean	Diff.	
10	4.7	4.3	4.50	2 2 +	4.52	
11	5.0	4.7	4.85	2 1	4.70	
12	5.4	5.1	5.25	2 1	4.61	
13	5.5	5.4	5.45	1 0	4.85	
14	5.8	5.7	5.75	0 1	4.90	
15	6.1	6.1	6.10	0 0	4.98	
16	6.6	6.4	6.50	1 1	4.90	
17	6.7	6.7	6.70	0 0	4.93	
18	7.1	7.2	7.15	1 0	4.91	
19	7.5	7.5	7.50	0 0	4.92	
20	7.8	7.80	7.80	0 0	~~4.93~~	4.93
23	8.3 8.20 1 1	8.1	8.20	8.30 0 0 0 0	~~5.14~~	5.14
25	8.8 8.70 1 1	8.6	8.75	8.72 02 03	~~5.12~~	5.15
26	9.1 9.10 0 0	9.1	9.30	9.20 10 10	~~5.03~~	5.13
27	9.4 9.35 0 1	9.3	9.80	9.58 23 22	~~4.69~~	5.11
28	9.8 9.80 0 0	9.8	9.80 a			5.31
29						
30						

	Sc 1		Mc 4820	Mean			Sc 2
5	5.3	5.30 0 0	5.60	5.45	15	15	5.3
6	5.8	5.75 0 1	5.95	5.85	10	10	5.7
8	6.9	6.95 1 0	7.20	7.08	13	12	7.0
9	7.3	7.30 0 0	7.10	7.50	20	20	7.8
10	7.5	7.50 0 0	8.00	7.75	25	25	7.5
11	8.0	8.05 0 1	8.40	8.22	17	18	8.1
12	8.5	8.50 0 0	8.95	8.72	22	23	8.5
13	8.8	8.70 1 1	9.30	9.10	20	20	9.0
14	9.1	9.45 1 0	9.60	9.38	23	22	9.2
15	9.7	9.60 1 1	9.90	9.75	15	15	9.5
16	9.9	9.9 a	9.9	a			9.9
17	H						H

				Diff.
5	6.3	6.7	6.50 2 2	-0.01
6	6.8	7.2	7.00 2 2	+0.11
8	8.1	8.4	8.25 1 2	-0.02
9	8.7	9.1	8.90 2 2	-0.07
10	9.1	9.3	9.20 1 1	-0.18 Bright Im.
11	9.5	9.8	9.65 2 1	-.20
12	9.9		9.9 a	-0.04
13	H			

Differences

S	Diff.
5	+1.04
6	1.26
8	1.15
9	1.33
10	1.27
11	1.33
12	1.14
13	1.20
14	1.27
15	1.33

$\frac{7}{4}$ $\frac{8}{4}$
-.18 +.20

$\frac{3}{2}$ $\frac{2}{2}$
-.15 +.10

$\frac{10}{6}$ $\frac{10}{6}$
-.17 +.17

5.9 $\frac{58}{4}$ $\frac{57}{4}$
-.14 +.14

10-14 $\frac{107}{5}$ $\frac{108}{5}$
-.21 +.22

15 $\frac{15}{1}$ $\frac{15}{1}$
-.15 +.15

$\frac{180}{10}$ $\frac{180}{10}$
-.18 +.18

copied.

$\frac{7}{5}$ $\frac{5}{5}$
+.14 -.10

$\frac{0}{6}$ $\frac{1}{6}$
.00 -.01

23-27 $\frac{35}{4}$ $\frac{35}{4}$
-.09 +.09

~~105~~

all $\frac{35}{15}$ $\frac{25}{15}$
+.02 -.02

copied

Series 198

Copied.

Scale U. May 1, 1914 : Card

	Mb H816		D.6		alt. 24					Pb.		
	Sc 1	Sc 2			A				A2			
1	4.1		.		5.65 01	5.6	1.12	6.72 7	5.7	7.1	+0.02	7.12
2	4.1		.		5.85 01	5.8	1.14	6.99	5.9	7.7	0.00	7.70
3	4.2		4.48	8.68	6.05 01	6.0	1.16	7.21	6.1	7.7	0.00	7.70
4	4.3		4.50	8.80	5.95 ⊥0	5.9	1.15	7.10	6.0	7.4	+0.01	7.41
5	4.3		4.50	8.80	6.90 ⊥1	6.8	1.20	8.10	7.0	8.1	-0.04	8.06
6	4.3		4.50	8.80	7.07	7.2 - 6.9	1.21	8.28	7.1	8.4	-0.05	8.35
7	4.4		4.53	8.93	7.00 ⊥1	6.9	1.21	8.21	7.1	9m almost sup.		
8	4.6		4.58	9.18	7.10 00	7.1	1.21	8.31	7.1	8.7	-0.07	8.63
9	4.6		4.58	9.18	7.20 00	7.2	1.21	8.41	7.2	8.5	-0.05	8.45
10		4.7	4.62	9.32	7.60 ⊥1	7.5	1.22	8.82	7.7	9.1	-0.09	9.01
11		4.7	4.62	9.32	7.80 ⊥1	7.7	1.22	9.02	7.9	9.3	-0.10	9.20
12 ~~+50~~ *		4.9	4.66	9.56	8.10 ⊥1	8.0	1.23	9.33	8.2	9.3	-0.10	9.20
13		5.1	4.69	9.79	8.25 10	8.3	1.23	9.48	8.2	9.7	-0.10	9.60
14		4.9	4.66	9.56	8.15 ⊥0	8.1	1.23	9.38	8.2	9.7	-0.10	9.60
15		5.2	4.72	9.92	8.15 ⊥0	8.1	1.23	9.38	8.2	9.8	-0.09	9.71
16		5.3	4.74	10.04	8.50 00	8.5	1.24	9.74	8.5	Fl		F
17		5.5	4.78	10.28	8.80 ⊥1	8.7	1.25	10.05	8.9			
18		5.9	4.84	10.74	9.15 ⊥0	9.1	1.26	10.46 1	9.2			
19		6.2	4.87	11.07	9.40 00	9.4	1.28	10.68	9.4			
20		6.2	4.87	11.07	9.70 00	9.7	1.30	11.00	9.7			
21		6.4	4.89	11.29	9.80 00	9.8	1.30	11.10	9.8			
22		6.5	4.90	11.40		Fl						
23		6.8	4.92	11.72								
24		6.9	4.94	11.84								
25		7.2	4.97	12.17								
26		7.4	4.99	12.39								
27		7.6	5.00	12.60								
28		7.9	5.02	12.92								

Curve
29- 8.1 5.04 13.14
30- 8.3 5.06 13.36
31- 8.5 5.07 13.57
32- 8.5 5.07 13.57
33- 8.3 5.06 13.36
34- 8.6 5.09 13.69
8.90 00 5.11 14.01
35- 8.9 8.9
9.30 5.16 14.46
36- 9.3 9.3
9.40 5.17 14.57
37- 9.4 9.4
9.50 5.19 14.69
38- 9.5 9.5
9.90 5.26 15.16
39- 9.9 9.9
40- n.s.

Images are poor.

* No mistake was made in marking no. 12 on this plate.
W Sept. 30, 1921.

Series 198

Scale U. May 1, 1914

~~Mb 4817 11h~~ 20m +25° Too poor to measure

Mb 4818 11h. 40m +25 alt. +.20

	Sc1	Sc2			a1				a2	P.b.		
1	3.8				5.8	5.80 0 0	1.13	6.93	5.8	7.1	+0.02	7.12
2	4.0				6.2	6.15 0 1	1.17	7.32	6.1	8.1	-0.04	8.06
3	4.3		4.50	8.80	7.2	7.20 0 0	1.21	8.41	7.2	8.9	-0.08	8.81
4		4.8	4.64	9.44	8.1	8.10 0 0	1.23	9.33	8.1	F		F
5		5.1	4.70	9.80	8.6	8.70 2 1	1.24	9.94	8.8			
6		5.8	4.82	10.62	9.1	9.20 2 1	1.27	10.47	9.3			
7		6.2	4.87	11.07	9.8	9.8 a	1.30	11.10	F			
8		6.7	4.91	11.61								
9		7.8	5.01	12.81								
10		8.1	5.04	13.14								
11		8.50 2.2 8.7 8.3	5.08	13.58								
12		8.60 1.1 8.7 8.5	5.09	13.69								
13		8.80 1.1 8.9 8.7	5.10	13.90								
14		9.05 1.0 9.1 9.0	5.13	14.18								
15		9.25 1.0 9.3 9.2	5.15	14.40								
16		9.3	5.16	14.46								
17		9.7	5.22	14.92								

1921.

Series 198

Scale U. May 1, 1914 : Card

Mb 4819 11h 40m +10 alt. +.13

	Sc 1	Sc. 2			a 1		curve		a 2	curve	P. b	
1	3.8		.		5.9	5.95 ±0	1.14	7.09	6.0	0.01	7.4	7.41
2	4.6		4.60	9.20	7.3	7.30 0.0	1.21	8.51	7.3	-0.09	9.0	8.91
3		5.1	4.70	9.80	8.2	8.30 0.0	1.23	9.43	8.2	-0.09	9.7	9.61
4		5.6	4.80	10 9.40	8.7	8.75 ±0	5 1.24	10.00	8.8		F	F
5		6.1	4.86	10.96	9.7	9.80 ±.1	1.30	11.10	9.9			
6		6.7	4.91	11.61	F				F			
7		7.3	4.98	12.28								
8		7.7	5.01	12.71								
9		8.1	5.03	13.13								
10		8.6	5.09	13.69								
11		8.80 0.0 8.8 8.8	5.10	13.90								
12		9.10 0.0 9.1 9.1	5.14	14.24								
13		9.60 ±.1 9.5 9.7	5.20	14.80								
14		9.70 0.0 9.7 9.7	5.23	14.93								
15		9.80 0.0 9.8 9.8	5.24	15.04								

Series 198

Scale U.

May 1, 1914

M.b. 4820 Pole

x	sc1	sc2		a1	a2	P.b
5				5.6 5.60 00	5.6	6.7
6				5.9 5.95 10	6.0	7.2
8				7.2 7.20 00	7.2	8.4
9				7.7 7.70 00	7.7	9.1
10	4.3			8.0 8.00 00	8.0	9.3
11		4.7		8.4 8.40 00	8.4	9.8
12		5.1		8.9 8.95 10	9.0	Ft
13		5.4		9.3 9.30 00	9.3	
14		5.7		9.5 9.60 11	9.7	
15		6.1		9.9 9.90 00	9.9	
16		6.4		Ft		
17		6.7				
18		7.2				
19		7.5				
20		7.8	7.8 7.80 00		See P. 197.	
23		8.2	8.2 8.20 00			
25		8.7	8.8 8.75 10			
26		9.3	9.3 9.30 00			
27		9.8	9.8 9.80 00			
28						
29						
30						

Series 198

Scale U.

May 5, 1914

12.00		Mc 4820 Sc 1	Sc 2	Pole			a 1		Mean		Diff	a 3	P.b.				Diff.
	5						5.3 5.30	5.20	5.25	05 05	1.24	5.3	~~6.7~~	6.8	6.75	10	-0.26
	6			Mc 4826			5.7 5.70	5.70	5.70	00 00	1.41	5.7	7.2	7.3	7.25	01	-0.14
	8			P. 210 Mean.			7.1 7.05	6.80	6.92	13 12	1.31	7.0	8.3	8.7	8.50	22	-0.27
Diff.	9						7.7 7.75	7.40	7.58	17 18	1.25	7.8	9.1	9.2	9.15	10	-0.32
+4.57	10	4.3		4.6	4.45	12	8.1 8.10	7.77	7.94	16 17	+1.08	8.1	~~9~~ Star sup.	9.5	9.5	a	-0.48
4.70	11		4.7	5.0	4.85	12	8.5 8.60	8.15	8.38	22 23	1.17	8.7	9.9	9.9	9.90	00	-0.35
4.61	12		5.2	5.3	5.25	01	9.0 9.05	8.65	8.85	20 20	1.01	9.1	F				
4.85	13		5.4	5.5	5.45	01	9.3 9.40	9.00	9.20	20 20	1.10	9.5					
4.95	14		5.7	5.7	5.70	00	9.7 9.70	9.25	9.48	22 23	1.17	9.7					
4.98	15		6.1	6.1	6.10	00	9.9 9.90	9.70	9.80	10 10	1.28	9.9					
5.05	16		6.3	6.4	6.35	10	F	9.90	9.90	a	1.50	F					
4.93	17		6.7	6.7	6.70	00		9.9	9.9	a	1.73						
4.86	18		7.2	7.2	7.20	00											
4.92	19		7.5	7.5	7.50	00											
4.91	20		7.8 · 7.9 7.85 01	7.8	7.82	03 02											
4.94	23		8.6 · 8.0 8.50 00	8.30	8.40	10 10											
4.92	25		9.1 · 9.1 9.10 00	8.80	8.95	15 15											
5.01	26		9.5 · 9.6 9.55 10	9.10	~~9.32~~ 9.38	23 22											
5.01	27		9.8 9.9 9.85 01	9.50	9.68	17 18											
5.31	28		F ~~9.9~~	9.80	9.80	a											

$\frac{4}{4}$ $\frac{3}{4}$
-.10 +.08

0
1
.00

all $\frac{4}{5}$ $\frac{3}{4}$
-.08 +.08

$\frac{35}{4}$ $\frac{35}{4}$
+.09 -.09

$\frac{104}{5}$ $\frac{103}{5}$
+.21 -.21

$\frac{10}{1}$ $\frac{10}{1}$
+.10 -.10

all $\frac{145}{10}$ $\frac{148}{10}$
+.14 -.15

$\frac{2}{5}$ $\frac{6}{5}$
-.04 +.12

$\frac{07}{6}$ $\frac{02}{6}$
-.01 -.00

$\frac{65}{4}$ $\frac{65}{4}$
+.16 -.16

$\frac{+38}{15}$ $\frac{07}{15}$
+.03 +.00

copied.

Series 198

Scale U. May 5, 1914 Card.

M b 4821 12h 00m +25° alt. +.19 P.b.

Diff.		Sc1	Sc2			a1			a2			
0.26	1	4.2		~~4.48~~	~~8.68~~	6.9 6.95 10	1.33 ~~1.20~~	8.28 ~~8.15~~	7.0	8.9	-0.32 ~~-0.08~~	8.58 ~~8.89~~
0.14	2		4.7	4.64 ~~4.62~~	9.34 ~~9.32~~	8.1 8.10 00	1.15 ~~1.23~~	9.25 ~~9.43~~	8.1	9.7	-0.40 ~~-0.09~~	9.30 ~~9.61~~
-0.27	3		5.1	4.72 ~~4.70~~	9.82 ~~9.80~~	8.5 8.60 11	1.11 ~~1.24~~	9.71 ~~9.84~~	8.7	9.9	-0.40 ~~-0.08~~	9.50 ~~9.82~~
-0.32	4		5.4	4.80 ~~4.76~~	10.20 ~~10.16~~	9.1 9.20 11	1.11 ~~1.26~~	10.31 ~~10.46~~	9.3			
-0.48	5		6.1	4.94 ~~4.86~~	11.04 ~~10.96~~	9.7 9.70 00	1.26 ~~1.30~~	10.96 ~~11.00~~	9.7			
0.35	6		6.4	4.96 ~~4.89~~	11.36 ~~11.29~~	9.8 9.85 01	1.36 ~~1.30~~	11.21 ~~11.15~~	9.9			
	7		6.6	4.96 ~~4.90~~	11.56 ~~11.50~~	9.9 9.90 00	1.40 ~~1.34~~	11.30 ~~11.24~~	9.9			
	8		7.1	4.97 ~~4.96~~	12.07 ~~12.06~~							
	9		7.7	4.96 ~~5.01~~	12.66 ~~12.71~~							
	10		8.0	4.95 ~~5.02~~	12.95 ~~13.02~~							
	11		8.55 0.1 8.6 . 8.5	4.95 ~~6.08~~	13.50 ~~13.63~~							
	12		8.75 1.0 8.7 . 8.8	4.96 ~~5.10~~	13.71 ~~13.85~~							
	13		9.15 0.1 9.2 . 9.1	4.99 ~~5.14~~	14.14 ~~14.29~~							
	14		9.50 00 9.5 . 9.5	5.04 ~~5.19~~	14.54 ~~14.69~~							
	15		9.80 00 9.8 9.8	5.09 ~~5.25~~	14.89 ~~15.05~~							

Series 198

Scale U. May 5, 1914 : Card.

M.D. 4822			12h 00m +10°					alt. + 1.0			P.b.		
	sc 1	sc 2				q 1		curve		q 2			
1	3.8		.			6.1	6.1000	1.38	7.48	6.1	7.7	-0.19	7.51
2	4.3		~~4.50~~ 4.52		8.82	7.2	7.2000	1.30	8.50	7.2	9.0	-0.33	8.67
3		4.7	~~4.62~~ 4.64		9.34	7.7	7.7510	1.21	8.96	7.8	9.8	-0.40	9.40
4		5.4	~~4.76~~ 4.80		10.20	7.9	7.9510	1.18	9.13	8.0	N.S.		
5		6.3	~~4.88~~ 4.95		11.25	9.7	9.7510	1.30	$11.0\overset{5}{2}$	9.8			
6		6.7	~~4.91~~ 4.96		11.66	9.8	9.8 = .	1.33	11.13	F			
7		7.0	~~4.95~~ 4.96		11.96								
8		7.2	~~4.97~~ 4.97		12.17								
9		7.5	~~5.00~~ 4.96		12.46								
10		7.5	~~5.00~~ 4.96		12.46								
11		7.9	.	4.95	12.85								
12		8.3000 8.3			8.3	4.95	13.25						
13		8.8521 9.0			8.7	4.97	13.82						
14		9.3 9.3 - 9.1			9.0	4.99	14.12						
15		9.30 9.3			9.3	5.00	14.30						
16		9.5000 9.5			9.5	5.04	14.54						

Images are very poor.

Series 198

Copied.

Scale U.

May 5, 1914

Card.

M.b. 4823 sc1	sc2	B5			alt. + .21 a1		Copied	a2			P.b.
1 3.7		.			5.8 5.85 01	1.36	7.21	5.9	7.8	-0.18	7.12
2 3.8		.			5.9 5.95 ⊥0	1.37	7.32	6.0	7.5	-0.18	7.32
3 4.2		4.50	8.70		6.6 6.65 01	1.37	8.02	6.7	*7.8	-0.16	*7.32
4 4.2		4.50	8.70		7.0 7.05 01	1.31	8.36	7.1	*7.6	-0.19	*7.41
5 4.2		4.50	8.70		7.2 7.20 00	1.30	8.50	7.2	8.7	-0.29	8.41
6 4.3		4.52	8.82		7.2 7.20 00	1.30	8.50	7.2	8.9	-0.32	8.58
7 4.3		4.52	8.82		7.7 7.80 ⊥1	1.20	9.00	7.9	9.7	-0.40	9.30
8 4.3		4.52	8.82		7.8 7.85 01	1.19	9.04	7.9	9.5	-0.39	9.11
9	4.7	4.64	9.34		7.7 7.70 00	1.21	8.91	7.7	9.7	-0.40	9.30
10	5.2	4.76	9.96		8.2 8.25 01	1.13	9.38	8.3	9.9	-0.40	9.50
10a	5.3	4.79	10.09		8.7 8.70 00	1.10	9.80	8.7			
11	*4.6	~~4.84~~ 61	~~10.44~~ 9.21		8.1 8.05 10	1.16	9.21	8.0	9.8	-0.40	*9.40
12	5.6	4.84	10.44		8.7 8.80 ⊥1	1.10	9.90	8.9			
13	5.6	4.84	10.44		8.9 9.00 ⊥1	1.11	10.11	9.1			
14	5.8	4.88	10.68		9.3 9.30 00	1.12	10.42	9.3			
15	5.6	4.84	10.44		9.3 9.30 00	1.12	10.42	9.3			
16	6.1	4.93	11.03		9.7 9.70 00	1.21	10.91	9.7			
17	5.9	4.90	10.80		17a 9.6 9.65 01	1.22	10.87	9.7			
					17b 9.7 9.72	1.27	10.97	sub.			
18	6.3	4.96	11.26		18 9.8 9.85 01	1.35	11.20	9.9			
19	6.8	4.97	11.77		9.9 9.90 00	1.40	11.30	9.9			
20	7.3	4.97	12.27								
21	7.2	4.97	12.17								
22	7.3	4.97	12.27								
23	7.7	4.95	12.65								
24	8.0	4.94	12.94								
25	8.0	4.94	12.94								
26	8.1	4.94	13.04								
27	8.1	4.94	13.04								
28	8.8	4.97	13.77								

*Should be 4.6

4.93 11.03 mag.
17b – 6.1
17c ~~7.7~~ 17a
7.7 4.95 12.65

9.15 4.99 14.14
29 – 9.2 9.1
9.50 5.04 14.55+
30 – 9.5 9.5
9.60 5.06 14.66
31 – 9.7 9.5
9.75 5.08 14.83
32 – 9.8 9.7
9.95 5.11 15.06
33 – 10.0 9.9
34 – 7.1

*10 a or 11 p.c.
Ident. uncertain.
Reject. H.S.L. Jan. 26, 1915

*Aimeas. Apr. 14, 1915
P.C. sc2
3 8.7
4 8.9
2 7.5 Miss Leland thinks above plans were wrongly recorded not
Rec. O. ~~error~~ wrong units.
*Reject p.c. for Stars 3 and 4. April 14, 1915.

Series 198

Scale U. May 5, 1914 : Card.

\ 10 Mb 4824 12h 20m +10° alt +.12 P.b.

	sc1	sc2			a1				a2	
1		4.7	4.64	9.34	4.87	9.0⊥1	1.18	9.08	8.0	9.8-0.40 9.40 O n
2		5.6	4.84	10.44	8.4	8.45 0 1	1.11	$9.\overset{5}{6}6$	8.5	
3		6.1	4.93	11.03	9.1	9.15⊥0	1.10	10.25	9.2	
4		6.3	4.95	11.25	9.5	9.50 0 0	1.18	10.68	9.5	
5		7.0	4.97	11.97	9.9	9.95⊥0	1.45	14.40	10.0	
6		7.2	4.97	12.17						
7		7.7	4.95	12.65						
8		8.0	4.94	12.94						
9		8.5	4.95	13.45						
10		8.8	4.97	13.77						
11		8.95 0 1 9.0 8.8	4.98	13.93						
12		9.15 0⊥ 9.2 9.1	4.99	14.14						
13		9.45 10 9.5 9.4	5.03	14.48						
14		9.50 0 0 9.5 9.5	5.04	14.54						
15		9.75⊥0 9.7 9.8	5.08	14.83						

Series 198

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Se ll

May 5, 1914

Card.

MC 4825 by

alt. +.16

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PC

		Se 1	Se 2			a¹				a²					
On edge of film.	1					on edge				On edge	~~1.37~~	7.1	-0.19	8.47	6.91
	2	4.1				5.9	5.85 01	1.37	7.22	5.9	1.19	7.9	-0.20	9.09	7.70
	3	4.3		4.52	8.82	6.2	6.20 00	1.3~~7~~8	7.58	6.2	1.13	8.3	-0.25	9.43	8.05
	4											~~9.1~~			
	5	4.3		4.52	8.82	6.7	6.80 21	1.35	8.15	6.9	1.10	9.1	-0.34	10.20	8.76
	6	4.3		4.52	8.82	7.1	7.10 ..	1.30	8.40	7.1	1.10	9.1	-0.34	10.20	8.76
	7		4.6	4.60	9.20	7.7	7.70 00	1.21	8.91	7.7	1.40	9.9	-0.40	~~12~~ 11.30	9.50
	8		4.9	4.68	9.58	7.9	8.05 21	1.16	9.16	8.1	1.40	9.9	-0.40	11.30	9.50
	9		5.1	4.72	9.82	8.2	8.25 01	1.14	9.39	8.3		f			
	10		5.3	4.78	10.08	8.7	8.75 10	1.10	9.85	8.8					
	11		5.5	4.82	10.32	8.7	8.70 00	1.10	9.80	8.7					
	12		5.4	4.80	10.20	8.9	8.95 10	1.10	10.05	9.0					
	13		5.7	4.8~~2~~6	10.5~~2~~6	9.2	9.25 01	1.11	10.36	9.3					
	14		6.0	4.91	10.91	9.5	9.60 21	1.21	10.81	9.7					
	15		6.1	4.93	11.03	9.5	9.60 21	1.21	10.81	9.7					
	16		6.3	4.95	11.25	9.8	9.80 00	1.34	11.14	9.8					
	17		6.3	4.95	11.25	f				f					
	18		6.5	4.96	11.46										
	19		7.0	4.97	11.97										
	20		7.2	4.97	12.17										
	21		7.7	4.95	12.65										
	22		8.1	4.94	13.04										
	23		8.3	4.95	13.25										
	24		8.8	4.97	13.77										
	25		8.95 01 9.0 8.9	4.98	13.93										
	26		9.05 01 9.0 9.1	4.99	14.04										
	27		9.25 01 9.2 9.3	5.00	14.25										
	28		9.75 01 9.8 9.7	5.08	14.83										
	29		9.90 00 9.9 9.9	5.10	15.00										

Series 198

Dell

May 5, 1914

2.00	Mc 4826	Cole							P.b
		sc1	sc2			a1		a2	
	5					5.1	5.20 ⊥i	5.3	6.8
	6					5.7	5.70 oo	5.7	7.3
	8					6.8	6.80 oo	6.8	8.7
	9					7.4	7.40 oo	7.4	9.2
	10		4.6			7.7	7.70 oo	7.7	9.5
	11		5.0			8.1	8.15 ⊥o	8.2	9.9
	12		5.3			8.6	8.65 oi	8.7	
	13		5.5			9.0	9.00 oo	9.0	
	14		5.7			9.2	9.25 oi	9.3	
	15		6.1			9.7	9.70 oo	9.7	
	16		6.4			9.8	9.90 ⊥i	10.0	
	17		6.7			9.9	9.9 ≗	F	
	18		7.2						
	19		7.5						
	20		7.8						
	23		8.3	8.3	8.30 oo		See page 204		
	25		8.8	8.8	8.80 oo				
	26		9.1	9.1	9.10 oo				
	27		9.5	9.5	9.50 oo				
2.08	28		9.8	9.8	9.80 oo				

G. E. S.