KG
11365
988

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TG 11365. 9F8

Scale W - Correction to scale 1 = +0.1

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All series reductions in this book made with magns.
on scale of HC 170.

Underlinings as far as 148

From p. 148, underlinings checked by F.C.

A few early yellow series were first reduced by Ptg. magnitudes. When these have been re-reduced by means of Ptv. magnitudes, a green "Y" is put at the head of the correct column of reductions.

In general, Scale U was used for MC plate blue
" W " " " " " yellow
" O " " " MD "

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IFd 11365-986

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b8

Additional Measures

Jan 8, 1913

Se U

MC 1811

			Diff.	curve	magn.
Stan. ft stars -	28	9.0	3.59	4.76	13.76
	29	9.1		4.78	13.88
	30	9.5		4.86	14.36
	31	9.9		4.95	14.85
			Diff.		
Obl.	20	8.0	+4.69		
	25	8.9	4.83		
	21	8.3	4.52		
	23	8.5	4.70		
	26	9.3	4.89		
	27	9.7	4.85		

MC 1831 Bris. Com.

Obl.	28	9.4
	20	7.7
	27	9.1
	23	8.7
	21	7.9
	25	8.7
	26	9.1
	24	9.5
	29	9.3
Stan.	2	

Wrong / Obs
Meas. should
be p.c.

C10

* MC 1831

		Diff.		
Obl.	5	5.7	+1.19	
	6	5.8	1.18	
	9	7.4	1.30	
	11	8.7	1.22	
	8	6.8	1.30	
	10	~~6.9~~ 6.7	1.19	
	12	8.7	1.03	
				magn.
	13	9.7	0.97	~~10.14~~
	14	9.5	1.02	~~10.52~~
	15	9.8	1.14	~~10.94~~
			curve	magn.
Stan.	1	5.2	+1.14	6.34
	3	5.4	1.16	7.0 6.56
	2	5.8	1.21	7.01
	5	7.0	1.24	8.24
	7	7.0	1.24	8.24
	4	6.7	1.22	7.42
	6	Im. dup.		
	8	7.9	1.20	9.10
	10	8.4	1.13	9.53
	9	8.1	1.17	9.27
	11	8.9	1.07	9.97
	12	9.1	1.05	10.15
	13	9.3	1.03	10.33
	14	9.9	1.00	10.90

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So many ff. images near bas. of p.c
ident. difficult - images poor.

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C 6 Prismatic Companions

Sc U

Jan 8 1913

WC 1841

			Diff.
Bd.	5	5.2	+1.19
	8	7.1	1.00
	9	7.8	0.90
	10	8.0	0.89
	11	8.5	0.92
	12	8.8	0.93
	13	9.2	0.97
	14	9.5	1.02
	15	9.9	1.04

		curve	magn.
St.	14	9.0 + 0.94	9.94
	3	6.2 1.09	7.29
	10	7.8 0.91	8.71
	15	8.9 0.93	9.83
	17	9.7 1.02	10.72
	13	8.7 0.91	9.61
	5	6.7 1.01	7.71
	12	8.3 0.90	9.20
	4	6.2 1.09	7.29
	7	7.2 0.97	8.17
	9	7.4 0.94	8.34
	6	7.0 0.99	7.99
	1	5.3 1.20	6.50
	8	7.3 0.95	8.25
	11	8.1 0.90	9.00
	16	9.1 0.95	10.05
Neresheimer	2	5.3 1.20	6.50
	17	9.3 0.98	10.28
	18	9.1 1.03	10.13

reject this star. Do not know what star was meas. here. No. 17 correctly measured above. Per. E.S.S. Jan. 21, '13.

			Diff.
Bd. ff stars	20	8.0	+4.59
	21	8.2	4.62
	25	8.9	4.83
	23	8.5	4.70
	27	9.8	4.75
	26	9.3	4.89

		curve	magn.
St.	27	8.1 + 4.60	12.70
	28	8.3 4.62	12.92
	29	8.2 4.61	12.81
	30	8.7 4.68	13.38
	31	9.1 4.76	13.86
	32	9.5 ? 4.84	14.34 ?
	33	9.9 4.91	14.81

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B2

Sc. W

Jan 8, 1912

AC 13552

		Diff.	curve	magn.			curve	magn.
Obl.	1r	6.2	0.14	7.34	4	7.1	+0.32	7.42
	3	5.3	+0.44		9	7.6	0.48	8.08
	3r	7.8	0.53	8.43	14	8.5	0.75	9.25
	4	5.8	0.11		6	7.5	0.44	7.94
	2r	7.1	0.31	7.41	12	8.2	0.66	8.86
	6	6.8	0.18		8	7.5	0.44	7.94
	8	7.6	0.50		11	8.3	0.69	8.99
	5	6.3	0.09		18	8.3	0.69	8.99
	4r	8.1	0.63	8.73				
	15	9.8	1.14					
	12	8.8	0.93					
	9	8.1	0.60					
	5r	8.9	0.86	9.76				
	14	9.5	1.02					
	10	8.2	0.69					
	13	9.2	0.97					
	11	8.5	0.92					

		curve	magn.
	6r	9.2	+~~0.96~~	10.16
Slām.	19	9.7	1.11	10.81
	1	6.2	0.14	6.34
	18	9.3	1.00	10.30
	2	6.8	0.24	7.04
	17	9.2	0.96	10.16
	15	8.7	0.80	9.50
	3	6.9	0.26	7.16
	5	7.3	0.38	7.68
	16	8.9	0.86	9.76
	10	8.1	0.63	8.73
	7	7.3	0.38	7.68

Cofined. explefit "r" stars.

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Plates taken December 12, 1912.

Scale 11:20

January 14, 1913.

MC 2313 Pole L.

Diff.			P.10 MC 2318	P.12 MC 2324		P.C.	MC 2318	MC 2324	Mean		Diff.
	5					5.3	5.7	5.9	5.63	3 1 3	+0.76
	6					6.2	6.3	6.4	6.30	1 0 1	0.68
	8					7.4	7.4	7.5	7.43	0 0 1	0.67
	9					8.2	8.0	8.2	8.13	1 1 1	0.57
+4.06	10	4.8	4.7	5.0		4.83	0 1 2				
4.29	11	5.1	5.0	5.3		5.13	0 1 2				
4.06	12	5.6	5.4	6.0		5.67	1 3 3				
4.20	13	5.9	5.7	6.3		5.97	1 3 3				
4.37	14	6.2	5.85	6.4		6.15	0 3 2				
4.47	15	6.5	6.1	6.8		6.47	0 4 3				
4.49	16	6.9	6.4	7.0		6.77	1 4 2				
4.29	17	7.3	7.0	7.3		7.20	1 2 1				
4.12	18	8.0	7.5	7.9		7.80	2 3 1				
4.11	19	8.3	8.0	8.2		8.17	1 2 0				
4.19	20	8.5	8.2	8.5		8.40	1 2 1				
4.20	23	9.2	8.8	9.0		9.00	2 2 0				
4.10	25	9.9	9.5	9.5		9.63	3 1 1				
4.29	26	.	9.9	9.9		9.90	. 0 0				

7.5	8.5	9.5	8.43	1 1 1	0.46						
9.2	8.7	9.2	9.03	2 3 2	0.39						
9.7	9.1	9.5	9.43	3 3 1	0.30						
∴	9.7	9.9	9.80	. 1 1	0.37						

3	0	6
4	4	4
-0.08	0.00	+0.15

6	8	54
3	4	4
+0.20	-0.20	+0.12

2	11	12
5	5	5
-0.04	-0.22	+0.24
4	13	7
4	4	4
+0.10	-0.32	+0.18
7	9	40
4	4	5
+0.18	-0.18	0.00
	7	
	5	
	-0.14	

Cf ued.

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Plates taken December 12, 1912 – cont.

Scale K.

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Mc 2314 20 K L.

alt. +2°2

	sc.	curve	magn.	P.C.		magn.
1	4.0	+		7.7	+0.59	8.29
2	5.1	+4.30	9.40	8.7	0.46	9.16
3	5.2	4.29	9.49	8.8	0.44	9.24
4	6.2	4.23	10.43	9.9	0.38	10.18
5	5.4 5.5	4.28	9.73	9.3	0.36	9.66
6	6.2	4.23	10.43	9.9	0.38	10.18
7	6.9	4.21	11.11			
8	7.3	4.20	11.50			
9	7.7	4.20	11.90			
10	8.1	4.18	12.28			
11	8.3	4.18	12.48			
12	8.7	4.17	12.84			
13	9.2	4.17	13.37			
14	9.8	4.17	13.47			
15	9.8	4.18	13.98			

Mc 2315 8 K L.

alt. +20

	curve	magn.	P.C.	curve	magn.
1	3.9		7.1	+0.65	7.75
2	5.4	+4.28	9.68	9.3	0.36	9.66
3	5.4	4.28	9.68	9.4	0.35	9.75
4	6.4	4.22	10.62			
5	6.7	4.21	10.91			
6	~~6.9~~ 7.0	4.20	11.20			
7	7.3	4.20	11.50			
8	7.9	4.20	12.10			
9	8.1	4.18	12.28			
10	8.1	4.18	12.28			
11	8.8	4.18	12.96			
12	8.9	4.18	13.06			
13	9.3	4.17	13.47			
14	9.8	4.18	13.98			
15	9.9	4.18	14.08			

No. 5 is brighter than No. 4. on above pl.

MGR

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Plates taken Dec. 12, 1912 cont.

Scale 2. copied. January 14, 1913 copied.

Mc 2316 69 K L.
alt +17

		curve	Magn.		P.C.	Magn.
1	3.2			6.7	+0.69	7.39
2	3.9			6.8	0.58	7.38
3	4.8	+4.32	9.12	8.7	0.45	9.15
4	5.3	4.29	9.59	9.8	0.30	10.10
5	5.6	4.27	9.87			
6	6.3	4.22	10.52			
7	6.8	4.21	11.01			
8	7.7	4.20	11.40			
9	7.7	4.20	11.90			
10	8.2	4.18	12.38			
11	8.8	4.16	12.96			
12	9.1	4.16	13.26			
13	9.3	4.17	13.47			
14	9.4	4.17	13.57			
15	9.8	4.18	13.98			

Mc 2317 45 K L
alt +1.22

		curve	Magn.		P.C.	Curve	Magn.
1	4.1	+4.39	8.49	7.2	+0.64	7.84
2	4.8	4.32	9.12	7.9	0.56	8.46
3	4.8	4.32	9.12	8.3	0.52	8.82
4	5.0	4.31	9.31	8.8	0.44	9.24
5	5.3	4.28	9.58	9.2	0.39	9.59
6	6.2	4.23	10.43	9.9	~~0.31~~ 0.28	~~10.21~~ 10.18
7	6.3	4.22	10.52			
8	6.2 6.20	4.23	10.43			
9	7.2	4.20	11.40			
10	8.0	4.20	12.20			
11	8.2	4.18	12.38			
12	8.5	4.18	12.68			
13	8.9	4.16	13.06			
14	9.3	4.17	13.47			
15	9.7	4.18	13.88			

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MOR.

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Scale u.

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see P. 7 for reduction.

	Mc 2318	Pole L.	Mc 2319. 46 K alt +22		L
		P.C.	sc.	h.74 mean.	P.C. h.74
5		5.7	1 B. 3.0		6.2 6.20 0.72 6.92 7.04
6		6.3	2 3.9 3.9 3.9000		7.0 7.05 0.66 7.71 84
8		7.4	3 4.7 4.7 4.33 9.03 16		8.2 8.20 0.53 8.73 86
9		8.0	4 5.4 4.28 9.68 31		9.8 0.30 10.10 23
10	4.7	8.3	5 5.8 4.25 10.05 13		9.9 0.28? 10.18 31
11	5.0	8.7	6 6.2 4.24 10.44 57		
12	5.4	9.1	7 6.4 4.22 10.62 75		
13	~~5.7~~ 5.7	9.7	8 6.9 4.21 11.11 25		
14	5.8 5.9		9 7.7 4.20 11.90 12.04		
15	6.1		10 8.3 4.17 12.47 61		
16	6.4		11 8.3 4.17 12.47 61		
17	7.0		12 9.0 4.16 13.16 30		
18	7.5		13 9.1 4.16 13.26 40		
19	8.0		14 9.5 4.17 13.67 81		
20	8.2		15 10.0 4.18 14.18 37		
23	8.8		α Br.		5.6 0.76 6.36 46
25	9.5		γ 3.2		6.3 0.71 7.01 13
26	9.9		δ 4.1 4.38 8.48 61		7.2 0.64 7.84 37

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Scale 11 Copied January 14, 1913. Copied.

			Mc 2320 alt. +.23			22K L			Mc 2321 alt. +.21			9K L.		
			p.74			p.74			p.75			P.C. p.75	Mean curve	
			2c.1 curve			P.C curve			curve					
		1	3.2 3.1 ~~2.85~~ ~~6.90~~			6.7 6.6 0.69	7.32	1	2.9 2.9			5.9	5.8 5.85 10 0.74	6.59
+4.38	8.48	2	4.1 4.1 ~~2.70~~ ~~6.80~~			7.3 6.9 0.66	7.76	2	4.0 4.0 3.9			7.1	7.1 7.1 7.10 000 0.65	7.75
4.29	9.54	3	5.3 5.2 ~~2.51~~ ~~7.76~~			9.2 9.1 0.39	9.54	3	4.2 4.8	4.34	8.84	8.1	8.1 8.1 8.10 000 0.54	8.64
4.28	9.58	4	5.3 5.3 ~~2.50~~ ~~7.80~~			9.2 9.4 0.36	9.66	4	4.9	4.31	9.21	8.7	0.46	9.16
4.23	10.43	5	6.2	2.37	8.57	10.0		5	5.3	4.28	9.59	9.2	0.38	9.58
4.21	10.91	6	6.7	2.32	9.02			6	5.4	4.28	9.68	9.4	0.34	9.78
4.20	11.40	7	7.2	2.26	9.46			7	6.3	4.23	10.53	h.s.		
4.20	11.90	8	7.7	2.26	9.96			8	7.1	4.20	11.30			
4.19	12.19	9	8.0	2.28	10.28			9	7.8	4.20	12.00			
4.18	12.38	10	8.2	2.29	10.49			10	8.1	4.19	12.29			
4.16	13.06	11	8.9	2.34	11.24			11	8.2	4.18	12.38			
4.17	13.37	12	9.2	2.37	11.57			12	8.4	4.18	12.58			
4.17	13.47	13	9.3	2.38	11.68			13	9.1	4.17	13.27			
4.17	~~13.81~~	14	9.7	2.42	12.12			14	9.4	4.17	~~13.57~~			
4.18	14.08	15	9.9	2.43	12.33			15	9.9	4.18	14.08			
		α	~~3.2~~ 3.2	2.91	6.11	5.9	+0.74	6.64	β	3.1			6.2 0.72	6.92
		γ	3.6	2.82	6.42	6.1	0.73	6.83	γ	3.0			6.1 0.72	6.82
4.31	9.31	δ	5.0	2.55	7.55	7.9	0.56	8.46	δ	Br.			5.3 0.78	6.08
4.39	8.49	ε	4.1	2.71	6.81	7.4	0.62	8.02	ε	3.2			6.3 0.71	7.01

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Plates taken December 12, 12.

Scale 11.

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January 14, 1913 -

	Mc 2323 alt. +.23			161 Ps L.			Mc 2324 L Pole. See P. 7 for reduct.	
				P.C.				P.C.
1	4.8	4.7	4.33	9.08 .21	8.1	0.54	8.64 .77	5 .59
2	4.8 .9	4.31	9.21 .34	8.1	0.54	8.64 .77	6.	6.4
3	5.1	4.30	9.40 .53	9.0	0.41	9.41 .54	8	7.5
4	5.3	4.29	9.59 .72	9.2	0.38	9.58 .71	9	8.2
5	6.0	4.24	10.24 .37	9.9			10 5.0	8.5
6	6.4	4.22	10.62 .75				11 5.3	9.2
7	7.3	4.20	11.50 .63				12 6.0	9.5
8	7.1	4.20	11.30 .44				13 6.3	9.9
9	7.8	4.20	12.00 .14				14 6.4	
10	8.2	4.19	12.39 .53				15 6.8	
11	8.3	4.18	12.48 .62				16 7.0	
12	8.8	4.17	12.97 13.11				17 7.3	
13	9.3	4.17	13.47 .61				(7) 18 7.89	
14	9.3	4.17	13.47 .61				19 8.2	
15	9.9	4.18	14.08 .22				20 8.5	
1							23 9.0	
							25 9.5	
							26 9.9	

12:35

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Plates taken Dec 4

Se. U

Jan 15, 1913

MC 2303 Pole.

Cont. from Bk 39: 213

	Sc 1	P 1
5		5.3
6		6.1
8		7.4
9		8.2
10	4.7	8.5
11	5.2	9.1
12	5.7	9.5
13	6.0	9.9
14	6.3	
15	6.7	
16	7.1	
17	7.3	
18	7.8	
19	8.1	
20	8.3	
21	8.5	
~~22~~		
23	9.0	
~~24~~		
25	9.7	
26	10.0	

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Plates taken Dec. 7, 1912.

Scale 2

January 15, 1913. copied.

MC 2292 Pole L.

MC 2293 122K L

	P.C. Diff.		MC2297 P.16		mean.		MC 2293 P.C. 7		Curve	Magn.		Curve	Magn.
	⊥1.04	5					5.3 ~~5.4 5.35 ⊥0~~	1					
	0.83	6					6.0 ~~6.3 6.15 2 1~~	2	5.0	+4.10	9.10	8.7	+0.44 9.14
	0.65												
Star Images	~~P.C.~~ 0.60	8	MC2297 P.16		mean.		7.4 ~~7.5 7.45 0 1~~	3	5.3	4.10	9.40	9.7	0.22 9.98
Diff.	~~Diff.~~	9					8.0 ~~8.2 8.10 1 1~~	4	5.9	4.11	10.01		
+4.04	+054	10	4.9	4.8	4.85	1 0	8.3 ~~8.4 8.35 0 1~~	5	6.1	4.12	10.22		
4.17	+0.07	11	5.3	5.2	5.25	1 0	9.3 ~~9.4 9.35 1 0~~	6	6.3	4.13	10.43		
4.08	0.13	12	5.7	5.6	5.65	1 0	9.5 ~~9.7 9.60 1 1~~	7	6.9	4.16	11.06		
4.07	0.17	13	6.2	6.0	6.10	1 1	9.9 ~~10.1 10.00 1 1~~	8	7.3	4.19	11.49		
4.17		14	6.5	6.2	6.35	1 2		9	7.7	4.21	11.91		
4.29		15	~~7.2~~ 6.8	6.5	6.65	2 1	5 +1.14	10	7.9	4.22	12.12		
4.16		16	7.2	7.0	7.10	1 1	6	11	8.5	4.27	12.77		
3.94		17	7.4	7.1	7.55	2 1	8	12	8.8	4.30	13.10		
4.02		18	7.9	7.9	7.90	0 0	9	13	9.1	4.34	13.44		
4.18		19	8.1	8.1	8.10	0 0	10	14	9.7	4.42	14.12		
4.29		20	8.3	8.3	8.30	0 0	11	15	10.0	4.48	14.48		
4.45		23	8.8	8.7	8.75	0 1	12		−15° 13 28 48			8.6	
4.48		25	9.3	9.2	9.25	1 0	13						
4.44		26	9.8	9.7	9.75	0 1	14						
		27											

Reject Star 6. Inspection of plate shows it nearly as faint as Star 7. May 22, 1918.

5 / 5	3 / 5	1 / 4	0 / 4
+0.10	−0.06	+0.02	.00
1 / 4	1 / 4	2 / 4	0 / 4
+0.02	−0.02	+0.05	.00
1 / 5	2 / 5	3 / 8	0 / 4
+0.02	−0.04	+0.04	.00
7 / 14	6 / 14		
+.05	−0.04		

M.D.R.

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Plates taken Dec. 7, 1912.

Scale 11-

copied.

copied.

January 15, 1913.

	MC 2294 11 K L			P.C.	Curve	Magn.	MC 2295 27 K.			P.C.	curve	
		Curve	Magn.				alts +.23					
1	B.			5.3	+1.10	6.40	4.8	+4.10	8.90	8.6	0.42	9.02
2	3.2	..	..	6.9	0.28	7.68	5.2	4.10	9.30	9.1	0.38	9.43
3	4.3	+4.10	8.40	8.2	0.21	8.71	5.2	4.10	9.30	9.1	0.38	9.43
4	5.2	4.10	9.30	9.3	0.32	9.62	5.4	4.11	9.51	+0.0	n.s. ?	
5	5.9	4.11	10.01	9.7	0.24	9.94	6.2	4.12	10.32			
6	6.3	4.13	10.43	n.s.			6.3	4.13	10.43			
7	6.6	4.14	10.74				6.9	4.16	11.06			
8	6.7	4.15	10.85				7.2	4.18	11.38			
9	7.2	4.18	11.38				9.7	4.21	11.91			
10	7.4	4.19	11.59				8.0	4.23	12.23			
11	8.1	4.23	12.33				8.4	4.26	12.66			
12	8.8	4.30	13.10				8.7	4.30	13.00			
13	9.1	4.34	13.44				9.0	4.33	13.33			
14	9.3	4.37	13.67				9.4	4.38	13.78			
15	10.0	4.48	14.48				9.9	4.45	14.35			

M.O.R.

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Plates taken Dec. 7, 1912.

Object.

Scale 11.

January 15, 1913.

Mc 2296 12 4K L

alt. 19

Mc 2297 Pole L.

see P. 47 for reduction.

		Curve	Magn.	P.C.				P.C.	add +0.2 for reduction with plates 2298-2302
	1	4.3	+4.10	8.40	8.2	+0.51	8.71	5.2	5.4
R.C. almost sup.	2	5.3	4.10	9.40	9.8	0.22	10.02	6.1	6.3
	3	~~4.7~~ 5.7	4.11	9.81	?	..		7.3	7.5
	4	5.0	4.10	9.10	9.1	0.46	9.56	8.0	8.2
	5	6.3	4.12	10.43				8.2	8.4
	6	6.3	4.13	10.43				9.2	9.4
	7	7.0	4.17	11.17				9.5	9.7
	8	7.1	4.21	11.91				9.9	10.1
	9	8.0	4.23	12.23					
	10	8.3	4.26	12.56					
	11	8.2	4.24	12.44					
	12	8.7	4.30	13.00					
	13	9.0	4.33	13.33					
	14	9.8	4.44	14.24					
	15	9.9	4.47	14.37					

5		
6		
8		
9		
10	4.8	
11	5.7	
12	5.6	
13	6.0	
14	6.2	
15	6.5	
16	7.0	
17	7.7	
18	7.9	
19	8.1	
20	8.3	
23	8.7	
25	9.2	
26	9.7	

M.OR.

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Plates taken Dec. 7, 1912 –

Scale 2

January 15, 1913

	mc2299 5 11 K L alt. +2.1 see p 48 add +0.1		P.C. add +0.2		mc2300. 75 K alt. +.14				P.C add −0.1		
						0.0 curve	magn.				
1	5.1	5.2	8.9	9.1	1	4.0	4.28	8.28 .41	7.1	7.2	0.72	7.92 .05
2	4.9 +.95 5.0 +.10	5.05	8.9	9.1	2	4.2	4.27	8.47 .60	7.1	7.8	0.58 .9	8.39 .52
3	5.4	5.5	½		3	4.9	4.25	9.15 .28	8.9	9.0	0.31	9.31 .44
4	5.9	6.0			4	5.2	4.24	9.44 .57	9.1	9.23	0.26	9.46 .59
5	6.2	6.3			5	6.1	4.24	10.34 .47	n.s.			
6	6.2	6.3			6	6.4	4.24	10.64 .77				
7	7.1	7.2			7	6.4	4.24	10.64 .77				
8	7.2	7.3			8	7.1	4.27	11.37 .51				
9	7.1	7.8			9	7.3	4.28	11.58 .72				
m. unit	10 8.2	8.3			10	7.9 8.70	4.32	12.22 .86				
	11 8.3	8.4			11	8.1 8.7	4.37	13.07 .21				
	12 8.8	8.9			12	8.2	4.34	12.54 .68				
	13 9.0	9.1			13	8.3	4.34	12.64 .78				
	14 9.3	9.4			14	9.3	4.43	13.73 .87				
	15 9.9	10.0			15	9.7	4.47	14.17 .31				

m.O.R.

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13 + 15 : C1.

S.U.

Jan 16, 1918

Ab 10371

		curve	magn.
1	6.2	+0.72	6.92
2	7.1	0.95	8.05
3	7.4	1.02	8.42
4	7.3	1.00	8.30
5	7.5	1.06	8.56
6	7.8	1.14	8.94
7	8.1	1.21	9.31
8	8.3	1.26	9.56
9	8.5	1.30	9.80
10	8.5	1.30	9.80
11	8.8	1.36	10.16
12	8.9	1.38	10.28
13	9.1	1.40	10.50
14	9.3	1.43	10.73
15	9.5	1.45	10.95
16	9.8	1.48	11.28

Ab.

3	5.2	+0.54
4	5.4	0.51
6	6.2	0.78
8	7.2	0.90
9	7.8	0.90
10	7.9	0.99
11	8.7	1.22
12	8.5	1.23
13	8.8	1.37
14	9.1	1.42
15	9.5	1.44
16	9.8	1.46

Copied.

The above plate is poor - film defective -

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1913phae.proj..989L

1' $3\frac{1}{2}$ + 15. = C2.

Scale U

10:20

January 17, 1913

MC 2261

Preceding Images.

		curve	Magn.				
on edge	1						
"	2						
	3	3.2	.				
	4	3.7	.			Mean Corr for alt. −.02	
	5	3.8	.				
	6	4.2	.		Foll im. P.21	Mean.	
	7	4.7	+4.31	9.01	9.02	9.02 01 00	
	8	4.7	+4.31	9.01	9.02	9.02 01 02	
	9	4.3	.	.	.		
	10a	5.7	4.84	10.54	10.54	10.54	
	11	4.9	4.42	9.32	9.31	9.32 00 01	
	12	5.2	4.51	9.77	9.93	9.85 08 08	
	13	5.2	4.51	9.77	10.40	9.08 31 32	
	14	5.9	4.93	10.83	10.94	10.88 05 06	
	15	5.9	4.93	10.83	10.94	10.88 05 06	
	16	6.0	4.94	10.94	11.14	11.04 10 10	
	17	6.7	4.88	11.58	11.14	11.36 22 22	
	18	~~6.3~~ 6.2	4.94	11.14	11.24	11.19 05 05	
	19	7.0	4.81	11.81	11.74	11.78 03 04	
	20	7.4	4.69	12.09	12.23	12.16 07 07	
	21	7.3	4.72	12.02	12.31	12.16 18 15	
	22	7.0	4.54	12.54	12.46	12.50 04 04	
	23	8.1	4.53	12.63	12.72	12.68 05 04	
	24	8.3	4.51	12.81	13.10	12.96 15 15	
	25	8.3	4.51	12.81	12.72	12.76 05 04	
	26	9.0	4.49	13.49	13.49	13.49 .. 00	

P.C.	curve	Magn.	Foll. in P.21	Mean.
5.7	+ 1.22	6.92	7.12	7.02 10 10
5.9	1.22	7.12	7.22	7.17 05 05
6.2	1.22	7.42	7.32	7.37 05 05
7.1	1.13	8.23	8.23	8.23 00 00
7.0	1.15	8.15	7.98	8.06 09 08
7.6	1.10	8.70	8.80	8.75 05 05
8.2	1.09	9.29	9.19	9.24 05 05
8.1	1.09	9.19	9.09	9.14 05 05
8.7	1.10	8.80	9.09	8.94 14 15
9.7	1.07	10.77	10.77	10.77 00 00
9.1	1.06	10.16	10.06	10.11 05 05
9.1	1.06	10.16	10.77	10.46 30 31
9.7	1.07	10.77	10.87	10.82 05 05
9.9	1.07	10.97	↓	10.97 ≈

Assume that 3 times the exp. give a diff. of one magn. Then the preceding mags (exp. 3x) should be corrected by ∓ 0.06 to reduce them to the scale of the following mags and of the Pole Exp. (exp. 1x)

TM O.R.

cont on next page.

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$3^h + 15 = C^2$.

Scale 11.

January 17, 1912.

		Mc 2261		Preceding Im. cont.				
		9.3		P.21 Mean				
St. Seq. cont.	27	~~9.8~~	4.48	13.78	13.68	13.73	05	05
	28	9.8	4.51	14.31	14.30	14.30	01	00

			Diff.
Polar Seq.	5	5.2	+ 1.19
	6	5.7	1.28
	8	6.9	1.20
	9	8.7	1.00
	10	8.1	0.79
	11	8.3	1.12
	12	8.7	1.03
	13	9.0	1.17
	14	9.5	1.02
	15	9.9	1.04
	16		
	17		
	18		
	19		
	20		
	21		
	23		
	25		
	26		
	27		

		Diff.	
ww. unit.	9		
	10	4.6	+ 4.29
	11	5.0	4.42
	12	5.3	4.43
	13	5.5	4.67
	14	5.7	4.82
	15	5.9	5.04
	16	6.2	5.06
	17	6.7	4.79
	18	7.0	4.92
	19	7.7	4.58
	20	8.2	4.39
	21	8.5	4.32
	23	8.9	4.50
	25	9.2	4.53
	26	9.7	4.49
	27	10.0	4.55

Im. large - diff. to measure - hazy

M.O.R.

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1' 3h +15

Scale 4.

January 17, 1913.

Following Images.

MC 2261

St. Seg.				P.C.	curve	magn.
N edge	1	.	curve magn.	5.9	+1.22	7.12
" "	2	.		6.0	1.22	7.22
	3	3.2	.	6.1	1.22	7.32
	4	3.9	.	7.1	1.13	8.23
	5	4.1	.	6.8	1.18	7.98
	6	4.2	.	7.1	1.10	8.80
	7	4.7	+4.32 9.02	8.1	1.09	9.19
	8	4.7	4.32 9.02	8.0	1.09	9.09
	9	4.3	.	8.0	1.09	9.09
	10	5.7	4.84 10.54	9.7 8.1	1.07	10.77
	11	4.9	4.41 9.31	9.0	1.06	10.06
	12	5.3	4.63 9.93	9.7	1.07	10.77
	13	5.6	4.80 10.40	9.8	1.07	10.87
	14	6.0	4.94 10.94	F.		
	15	6.0	4.94 10.94			
	16	6.2	4.94 11.14			
	17	6.2	4.94 11.14			
	18	6.3	4.94 11.24			
	19	6.9	4.84 11.74			
	20	7.6	4.63 12.23			
	21	7.7	4.61 12.31			
	22	7.9	4.66 (5.) 12.46			
	23	8.2	4.61 (.52) 12.72			
	24	8.6	4.50 13.10			
	25	8.2	4.52 12.72			
	26	9.0	4.49 13.49			
	27	9.2	4.48 13.68	No. 10 - fainter than nos 11 + 12 - evidently correct identification. (11.04)		
M.O.R.	28	9.8	4.50 14.30			

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1913phae.proj..989L

22

J'

B2 = 4 00 + 45.0

Scale 2

January 17, 1913.

Mc 2039

					Diff.	P.C.	Diff.
Polar Seq.	5					7.0	-0.61
	6					7.3	-0.32
Star purpose P.C.	8					sup.	
	9					9.0	-0.30
	10	5.4			3.49 + 0.99	9.3	-0.41
	11	6.2			3.221	9.7	-0.28
	12	6.6			3.13	7	
	13	6.9			3.27		
	14	7.3			3.221		
	15	7.5			3.44		
	16	7.7			3.56		
	17	8.0	remeas. 8.1	8.05	01 3.44		
	18	8.2	8.3 8.5	8.35	01 3.61		
	~~19~~	~~8.1~~	8.5	8.5	3.18		
	20	8.5	8.5	8.50	00 4.09		
	21	8.7	8.6	8.65	10 4.17		
	23	9.0			4.20		
	25	9.5			4.23		
	26	99			4.29		

Wr plate marked for 19 see below.

remeas.	17	8.1
see above for means.	18	8.3
	19	8.5
	20	8.5
	21	8.6

No. 19 - wr. star marked, so 2 prec. and 2 following stars were remeasured with the correct No 19 and the mean of the prec. + foll. measures was taken. Jan. 17, 1912 from Miss Leavitt.

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J1

B2 = 4 + 45°

Scale 2

January 17, 1913

MC 2039

		B.	curve	magn.	P.C.	curve	magn.	curve	Magn.
	1				6.7	+0.50	7.20	-0.50	6.20
too far from centre	2				7.1	0.52	7.62	-0.48	6.62
" "	3	4.1			7.2	0.53	7.73	-0.47	6.73
	4	4.1			7.1	0.52	7.62	-0.48	6.62
" "	5	*			7.8	0.51	8.31	-0.43	7.37
" "	6				7.9	0.51	8.41	-0.42	7.48
	7	4.3			7.8	0.51	8.31	-0.43	7.37
	8	5.0	+3.61	8.61	8.0	0.50	8.58	-0.42	7.58
	9	5.2	3.53	8.73	7.9	0.51	8.41	-0.43	7.41
	10	5.3	3.51	8.81	8.3	0.60	8.90	-0.41	7.89
	11	5.1	3.51	8.61	8.7	0.61	9.31	-0.39	8.31
	12	5.3	3.51	8.81	8.9	0.62	9.52	-0.38	8.52
	13	5.2	3.54	8.74	9.2	0.63	9.83	-0.37	8.83
	14	5.4	3.49	8.89	9.3	0.64	9.94	-0.36	8.94
	15	5.9	3.34	9.24	9.3	0.64	9.94	-0.36	8.94
	16	5.8	3.36	9.16	9.3	0.64	9.94	-0.36	8.94
	17	6.2	3.27	9.47	9.8	0.65	10.45	-0.35	9.45
	18	6.3	3.24	9.54	9.9	0.65	10.55	-0.35	9.55 / 9.54
	19	6.2	3.27	9.47	Reject				
	20	6.3	3.24	9.54	Reject				
	21	7.2 7.20	3.30	10.50					
	22	6.9	3.22	10.12					
	23	6.7	3.21	9.91					
	24	6.9	3.22	10.12					
	25	7.8	3.53	11.33					
	26	7.8	3.53	11.33					
MOR.	27								

			magn.
27	8.1	+3.67	11.77
28	7.8	3.53	11.33
29	8.5	3.88	12.38
30	9.1	4.14	13.24
31	9.3	4.21	13.51
32	9.8	4.32	14.12

Nos. 19 and 20 measured much too bright. H.S.L. Sept. 17, 1913

11:35

cont. →

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Plates taken Nov. 30, 1912 - (see Bk 39:

Scale 1" =

January 20, 1913. Copied

10:15

MC 2227 Pole L.

	Fwit - Second mean.		P.C.	
5			5.3	1
6			6.0	.3
8			7.2	1
9			7.8	0
10	4.9	2	7.9	1
11	5.2	1	8.7	1
12	5.6	1	9.0	2
13	6.0	1	9.3	2
14	6.1	1	10.0	2
15	6.7	2		-.13
16	7.0	2		9
17	7.2	2		-0.14
18	7.7	2		
19	8.1	1		
20	8.3	1		
23	8.7	1		
25	9.0	0		
26	9.3	0		
27	9.8	1		
		-.16		
		15		
		-0.11		

MC 2230 30 K

	alt. +15 sub. -0.1	curve reading.	Magn.	P.C.	sub -0.1	curve	magn.
1	4.0	3.9	.	6.9	6.8	+1.04	7.84 .97
2	4.7	4.6	+4.30	8.80 .93	7.9	7.8	0.92 8.72 .85
3	4.9	4.8	4.20	9.00 .13	8.2	8.1	0.90 9.00 .13
4	5.3	5.2	4.22	9.42 .55	9.1	9.0	0.89 9.89 10.02
5	6.1	6.0	4.30	10.30 .43	9.3	9.2	0.90 10.10 .23
6	6.2	6.1	4.30	10.40 .58	9.5	9.4	0.92 10.32 .45
7	6.3	6.2	4.31	10.51 .64	7.		
8	6.8	6.7	4.34	11.04 .18			
9	7.3	7.2	4.46	11.66 .80			
10	7.6	7.5	4.53	12.03 .17			
11	8.1	8.0	4.62	12.62 .76			
12	8.3	8.2	4.66	12.86 13.00			
13	8.7	8.6	4.74	13.34 .48			
14	8.9	8.8	4.78	13.58 .72			
15	9.3	9.2	4.88	14.08 .22			

M.O.R.

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Plates taken Dec. 12, 1912. 2nd Series.

Scale 2

January 20, 1913

Mc 2328 Pole 2.

~~alt. +0.1~~

P.C.

	mc 2333 p 28	Meas.		Diff.		Meas.			
5						5.4	5.3	5.35	0.1 +0	+1.04
6						6.3	6.0	6.15	1 2	0.83
8						7.8 5	7.2	7.35	1 2	0.75
9						8.2	7.9	8.05	2 1	0.65
10	4.8	4.9	4.85	0 1	+4.04	8.5	8.0	8.25	3 2	0.64
11	5.3	5.2	5.25	1 0	4.17	~~8.3~~ 9.0	8.7	8.85	2 1	0.57
12	5.7	5.5	5.60	1 1	4.13	9.1	9.1	9.40	3 3	0.33
13	6.0	6.0	6.00	0 0	4.17	n.s.	9.7	9.7	2	0.47
14	6.3	6.2	6.25	1 0	4.27		10.0	10.0	2	0.52
15	6.7	6.6	6.65	1 0	4.29					
16	7.2	7.0	7.10	1 1	4.16					
17	7.5	7.2	7.35	1 2	4.14					
18	8.0	7.7	7.85	2 1	4.07					
19	8.2	8.1	8.15	0 1	4.13					
20	8.7	8.2	8.45	3 2	4.14					
23	9.1	8.7	8.90	2 2	4.30					
25	9.7	9.1	9.25	2 1	4.48					
26	9.9	9.2	9.55	3 4	4.64					
27		9.8	9.8	0	4.75					

4)24 +.10 4)-6 -.15

3)+8 +.27 3)-6 -.20

7)+12 +.17 7)-17 -.17

3	0	
5	5	
+0.06	0.00	
5	4	
4	4	
+0.12	-0.10	
10	10	
5	5	
+0.20	-0.20	

14)+18 +.13 14)-14 -.10

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Scale 11

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	Mc 2329 3K L. +.+14			P.E			Mc 2330 10K L. alt +21			P.C		
	curve		Magn.		curve	Magn.	curve		Magn.		curve	magn.
1	4.1	+ 4.24	8.34	7.7	0.76 ~~4.44~~	8.48 ~~11.84~~	13.			5.8	+0.93	6.13
2	4.1	4.24	8.34	7.7	0.76 ~~4.44~~	8.48 ~~11.84~~	4.2	+4.23	8.43	7.3	0.70	8.05
3	6.4	4.13	10.53	n.s.			5.2	4.16	9.36	8.9	0.54	9.44
4	7.2 (7.20 oo)	4.13	11.33	n.s.			5.3	4.16	9.46	9.2	0.50	9.70
5	6.4 (6.40 oo)	4.13	10.53	n.s.			6.4	4.13	10.53	9.9	0.43	10.33
6	7.2	4.13	11.33				7.1	4.13	11.23			
7	7.4	4.13	11.53				7.3	4.13	11.43			
8	8.1	4.18	12.28				8.0	4.16	12.16			
9	8.5	4.24	12.74				8.3	4.20	12.50			
10	8.8	4.30	13.10				8.3	4.20	12.50			
11	9.0	4.35	13.35				8.9	4.39	13.29			
12	9.0	4.35	13.35				9.4	4.52	13.92			
13	9.3	4.48	13.78				9.2	4.43	13.63			
14	9.7	4.68	14.38				9.8	4.73	14.53			
15	9.8	4.73	14.53				10.0	4.84	14.84			

M.O.P.

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Plates taken Dec. 12, 1912 cont. 2nd series

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Mc 2331 19 Ks

alt. +.21

	curve	magn.	P.C.	magn.
1	4.0	+4.25	7.2	+0.76
2	5.0	4.17	8.7	0.56
3	6.4	4.13	n.s.	
4	7.2	4.13		
5	7.4	4.13		
6	8.2	4.19		
7	8.2	4.19		
8	8.3	4.20		
9	8.8	4.30		
10	8.9	4.33		
11	9.0	4.35		
12	9.3	4.48		
13	9.5	4.56		
14	9.8	4.73		
15	10.0	4.84		

Mc 2332 18 Ks L

alt. +2.2

	curve	magn.	P.C.	curve	magn.
1	B.		5.3	+1.00	6.30
2	3.9	+4.25	6.7	0.83	7.53
3	5.2	4.17	8.7	0.55	9.25
4	5.4	4.16	9.2	0.50	9.70
5	5.6	4.15	9.2	0.50	9.70
6	6.3	4.13	9.9	0.43	10.33
7	7.1	4.13			
8	7.2	4.13			
9	7.9	4.16			
10	8.1	4.18			
11	8.1	4.18			
12	8.7	4.24			
13	9.1	4.39			
14	9.8	4.73			
15	9.8	4.73			

MOR

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Plates taken Dec. 12, 12. 2nd Series.

Scale x

January 20, 1913.

Mc 2333 Pole L.

		P.C.
5		5.3
6		6.0
8		7.2
9		7.9
10	4.9	8.0
11	5.2	8.7
12	5.5	9.1
13	6.0	9.7
14	6.2	10.0
15	6.6	
16	7.0	
17	7.2	
18	7.7	
19	8.1	
20	8.2	
23	8.7	
25	9.1	
26	9.2	
27	9.8	

M.O.R.

11:14

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Plates taken Dec 12, 12 cont. 2nd Series

Scale U

January 22, 1913

9:35 Mc 2333 Pole L Remeasured.

		mc 2339 P.32	Mean.		Diff.
5					
6					
8					
9					
10	4.7	4.7	4.70	00	+4.19
11	5.2	5.2	5.20	00	4.22
12	5.5	5.5	5.50	00	4.23
13	5.9	5.9	5.90	00	4.21
14	6.2	6.3	6.25	01	4.27
15	6.6	6.5	6.55	01	4.39
16	7.0	6.9	6.95	01	4.31
17	7.3	7.3	7.30	00	4.19
18	7.7	7.7	7.70	00	4.22
19	8.1	8.0	8.05	10	4.23
20	8.3	8.2	8.25	10	4.34
23	8.8	8.7	8.75	01	4.45
25	9.2	9.0	9.10	11	4.63
26	9.6	9.4	9.50	11	4.69
27	10.0	9.8	9.90	11	4.65

5.3	5.3	5.30	00	+1.09	
6.2	6.2	6.20	00	0.18	
7.3	7.3	7.30	00	0.80	
7.8	7.9	7.85	01	0.85	
8.1	8.1	8.10	00	0.79	
8.9	8.7	8.80	11	0.62	
9.2	9.2	9.20	00	0.53	
9.5	9.1	9.60	11	0.57	
9.9	9.9	9.90	00	0.62	

0 1
5 5
0.00 +0.02

0 1
4 4
+0.00 +0.02

0 0
5 5
0.00 0.00 copied

1 2
5 5
+0.02 -0.04

4 4
5 5
+0.08 -0.08.

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Scale 11

January 22, 1913.

	Mc 2334 a 2 L. alt. +.07				Mc 2335 49 K L. alt. +.18				
	Sc.1	Curve	Magn.	P.C.	Curve	Magn.	Sc.1	Curve	Magn.	P.C.	Curve	Magn.
1	B.			5.2	+1.03	6.23	5.2	+4.23	9.43	9.2	+0.60	9.80
2	B			5.7	0.99	6.69	5.3	4.23	9.53	9.2	+0.60	9.80
too far from centre 3	.			6.1	0.96	7.06	5.4	4.23	9.63	9.8	0.53	10.33
" " " 4	.			6.3	0.94	7.24	6.3	4.23	10.53	n.s.		
" " " 5	.			6.8	0.89	7.69	6.1	4.22	10.32			
" " " 6	.			7.0	0.87	7.87	6.4	4.23	10.63			
8a = 7	4.3	+4.28	8.58	7.9	0.76	8.66	7.0	4.24	11.24			
8b = 8	4.3	4.28	8.58	8.1	0.73	8.83	7.4	4.24	11.64			
9	4.3	4.28	8.58	8.1	0.73	8.83	7.6	4.25	11.85			
10	4.8	4.26	9.06	8.3	0.71	9.01	8.1	4.31 ~~0.81~~	12.41			
" " " 11	.			8.9	0.63	9.53	8.4	4.37	12.77			
12	5.2	4.23	9.43	9.3	0.59	9.89	8.7	4.44	13.14			
13	5.2	4.23	9.43	9.8	0.53	10.33	9.1	4.54	13.64			
14	5.3	4.23	9.53	9.9	0.52	10.42	9.8	4.74	14.54			
15	5.7	4.22	10.12				10.0	4.81	14.81			
16	6.1	4.22	10.32									
17	6.1	4.22	10.32									
18	7.1	4.24	11.34									
19	7.3	4.24	11.54									
20	7.1	4.24	11.34									
21	7.4	4.24	11.64									
22	8.1	4.31	12.41									
23	8.7 ~~8.7~~ 8.70	4.44	13.14									
24	8.6	4.42	13.02									
25	8.7	4.44	13.14									
26	9.3	4.59	13.89									

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Mc 2336 24 Ks. L.

alt +.14

	curve	Magn.	P.C.	curve	Magn.
1	3.8		6.8	+0.89	7.69
2	4.9	+4.25	9.15	8.1	0.73	8.83
3	5.0	4.24	9.24	8.2	0.72	8.92
4	5.2	4.23	9.43	9.0	0.62	9.62
5	5.7	4.23	9.93	9.7	0.54	10.24
6	6.4	4.23	10.63	n.s.		
7	7.1	4.24	11.34			
8	7.2	4.24	11.44			
9	7.3	4.24	11.54			
10	8.1	4.31	12.41			
11	8.3	4.36	12.66			
12	8.7	4.44	13.14			
13	9.3	4.59	13.89			
14	9.7	4.72	14.42			
15	9.9	4.78	14.68			

Mc 2337 50K L.

alt +.20

	curve	Magn.	P.C.	curve	Magn.
1	3.3		6.6	+0.91	7.51
2	4.4	+4.27	8.67	7.9	0.76	8.66
3	5.2	4.23	9.43	9.1	0.61	9.71
4	6.2	4.22	10.42	9.9	0.62	10.52
5	7.1	4.23	11.33			
6	7.2	4.24	11.44			
7	7.5	4.24	11.74			
8	8.0	4.30	12.30			
9	8.1	4.32	12.42			
10	8.7	4.44	13.14			
11	8.6	4.43	13.03			
12	9.2	4.57	13.77			
13	9.3	4.59	13.89			
14	9.7	4.72	14.42			
15	9.7	4.72	14.42			

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MC 2338 26K.

Alt +2'2

	B.	Curve	Magn.	P.C.	
1				5.2	+1.02 6.21
2	6.2			6.3	0.94 7.24
3	4.7	+4.26	8.9 8.96	8.6	0.68 9.28
4	5.1	4.24	9.34	9.1	0.61 9.71
5	5.9	4.23	10.13	9.8	0.53 10.33
6	6.3	4.23	10.53	n.s.	
7	7.1	4.24	11.34		
8	7.4	4.24	11.64		
9	8.1	4.32	12.42		
10	8.3	4.35	12.65		
11	8.3	4.35	12.65		
12	9.2	4.67	13.77		
13	9.4	4.63	14.03		
14	9.3	4.59	13.89		
15	9.5	4.66	14.16		

MC 2339 Pole L.

See P. 29 for reduction.

	P.C.
5	5.3
6	6.2
8	7.3
9	7.9
10 4.7	8.1
11 5.2	8.7
12 5.5	9.2
13 5.9	9.7
14 6.3	9.9
15 6.5	
16 6.9	
17 7.3	
18 7.1	
19 8.0	
20 8.2	
23 8.7	
25 9.0	
26 9.4	
27 9.8	

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Plates taken Dec 12, 12. 3rd ~~2nd~~ series.

Scale U

Friday January 24 1913.

9:30

MC 2340

		MC 2344 P.35	MC 2351 P.39	Mean.	Diff.
9					
10	4.8	4.7	4.7	4.73 1 0 0	+4.16
11	5.3	5.2	5.2	5.23 1 0 0	4.19
12	5.6	5.4	5.6	5.53 1 1 1	4.20
13	6.0	5.9	5.9	5.93 1 0 0	4.24
14	6.3	6.3	6.2	6.27 0 0 1	4.25
15	6.5	6.5	6.6	6.53 0 0 1	4.41
16	6.9	7.0	6.9	6.93 0 1 0	4.33
17	7.2	7.3	7.2	7.20 0 1 1	4.29
18	7.6	7.7	7.7	7.67 1 0 0	4.25
19	7.8	7.9	7.8	7.83 0 1 0	4.45
20	8.2	8.3	8.2	8.27 1 0 1	4.32
23	8.7	8.7	8.7	8.70 0 0 0	4.50
25	9.1	9.0	9.0	9.03 1 0 0	4.70
26	9.5	9.4	9.4	9.43 1 0 0	4.76
27	9.9	9.8	9.8	9.83 1 0 0	4.72

4 1 0
5 5 5
+0.08 -0.02 0.00

1 2 0
5 5 5
-0.02 +0.04 0.00

3 1 0
5 5 5
+0.04 0.02 +0.00

6 2 0
15 15 15
+0.04 +0.01 000

		MC 2344 P.35	MC 2351 P.39	Mean	Diff.
P.C					
5	5.2	5.2	5.2	5.20 0 0 0	+1.19
6	6.2	5.7	6.1	6.00 2 3 1	0.98
8	7.3	7.2	7.2	7.23 1 0 0	0.81
8	8.0	7.8	7.9	7.90 1 1 0	0.80
	8.2	7.9	8.1	8.07 2 2 0	0.82
	8.7	8.3	8.8	8.60 1 3 2	0.82
	9.0	8.8	9.2	9.00 0 2 2	0.73
	9.5	9.3	9.5	9.43 1 1 1	0.74
	9.9	9.7 +0.0	9.9	9.93 0 1 0	0.59
		10.0		10.0 a	

4 3 1
4 4
+0.10 -0.10 +0.03

4 9 6
5 5 5
+0.08 -0.18 +0.12

8 13 7
9 9 9
+0.09 -0.14 +0.08

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mc 2342 B3 6 40+45-

alt +.18

		curve	magw.	B.C	curve	Magw.		B.C	curve	magw.
too far from centre	1			5.7	+1.04	6.74 .86	21	8.9	+4.54	13.44 .58
" "	2			5.7	1.04	6.74 .86	28	9.0	4.51	13.51 .71
" "	3			6.3	0.97	7.27 .80	29	9.2	4.63	13.83 .97
	4	3.1	.	6.3	0.97	7.27 .80	30	9.1	4.60	13.70 .84
	5	3.2	.	6.1	1.00	7.10 .83	31	9.5	4.71	14.21 .35
	6	3.3	.	6.6	0.96	7.56 .67	32	9.9	4.83	14.73 .87
" "	7			6.7	0.95	7.65 .78				
	8	4.0	+4.16	8.16 .29	7.2	0.91	8.11 .24			
	9	4.3	4.16	8.46 .57	7.8	0.85	8.65 .78			
	10	4.9	4.18	9.08 .21	8.8	0.76	9.56 .69			
	11	4.8	4.18	8.98 9.71	8.9	0.75	9.65 .78			
	12	5.0	4.18	9.18 .31	8.9	0.75	9.65 .78			
	13	5.3	4.19	9.49 .62	9.2	0.72	9.92 10.05			
	14	5.2	4.19	9.39 .52	9.7	0.66	10.36 .49			
	15	5.3	4.19	9.49 .62	9.9	0.64	10.54 .67			
	16	5.4	4.20	9.60 .73						
	17	5.8	4.21	10.01 .14						
	18	6.0	4.22	10.22 .35						
	19	6.1	4.22	10.32 .45						
	20	6.3	4.24	10.54 .67						
	21	6.4	4.24	10.64 .77						
	22	7.3	4.32	11.62 .76						
	23	8.0	4.39	12.39 .53						
	24	8.2	4.41	12.61 .75						
	25	8.6	4.47	13.07 .21						
	26	8.7	4.49	13.19 .33						

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Scale 2.

	Mc 2343 - alt. +16			76 R.			Mc 2344 Pole. See P. 33 for reduction.	
		curve	Magn.	P.C.	curve	Magn.		P.C.
1	4.2	+4.16	8.36	7.1	+0.92	8.02	5	5.2
2	4.3	4.16	8.46	7.3	0.90	8.20	6	5.7
3	4.9	4.18	9.08	8.0	0.84	8.84	8	7.2
4	5.2	4.19	9.39	8.8	0.76	9.56	9	7.8
5	5.3	4.19	9.49	9.0	0.74	9.74	10 4.7	7.9
6	6.2	4.23	10.43	9.8	0.64	10.44	11 5.2	8.3
7	6.3	4.23	10.53				12 5.4	8.8
8	6.9	4.28	11.18				13 5.9	9.3
9	7.1	4.30	11.40				14 6.3	9.7
10	7.2	4.31	11.51				15 6.5	10.0
11	7.4	4.34	11.74				16 7.0	
12	8.0	4.38	12.38				17 7.3	
13	8.2	4.41	12.61				18 7.7	
14	8.7	4.49	13.19				19 7.9	
15	9.0	4.56	13.56				20 8.3	
16	9.5	4.72	14.22				23 8.7	
17	9.8	4.80	14.60				25 9.0	
							26 9.4	
							27 9.8	

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Scale "

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January 24, 1913.

MC 2345 D5 9-15

alt. -.19

		curve	Magn.	P.C.	curve	magn.			curve	Magn.
Not far from center	1			6.3	+0.98	7.28	28	8.7	+4.49	13.19
" "	2			6.4	0.98	7.38	29	~~8.9~~ 8.70	4.54	13.44
" "	3			6.3	0.98	7.28	30	8.7 8.7	4.49	13.19
" "	4			6.8	0.94	7.74	31	9.2	4.53	13.73
" "	5			7.4	0.89	8.29	32	9.3	4.66	13.96
6	4.2	+ 4.16	8.36	7.8	0.85	8.65	33	9.5	4.72	14.22
7	4.3	4.16	8.46	8.0	0.83	8.83	34	9.7	4.76	14.46
8	4.6	4.17	8.77	8.0	0.83	8.83	35	~~4~~		
9	5.2	4.19	9.39	8.6	0.78	9.38				
10	5.2	4.19	9.39	8.8	0.76	9.56				
11	5.2	4.19	9.39	8.8	0.76	9.56				
12	5.3	4.19	9.49	9.2	0.73	9.93				
13	5.9 5.90 5.9	4.22	10.12	9.2	0.73	9.93				
14	5.8 5.80 5.8	4.20	10.00	9.4	0.70	10.10				
15	6.2 6.25 6.3	4.23	10.48	9.8	0.54 (6.4)	10.34				
16	5.8 5.95 6.1	4.22	10.17	9.7	0.66	10.36				
17	6.3	4.24	10.54							
18	6.6	4.26	10.86							
19	6.4	4.24	10.64							
20	7.3	4.32	11.62							
21	7.2	4.31	11.51							
22	7.7	4.36	12.06							
23	7.9	4.38	12.28							
24	8.1	4.40	12.50							
25	8.2	4.41	12.61							
26	8.5	4.45	12.95							
27	8.7	4.49	13.19							

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Scale 11 January 24, 1913. copied

Mc 2347 101 K

alt: +0.6

	Curve	Magn.	P.C.	Curve	Magn.
1	3.9	·	7.0	+0.93	7.98
2	4.7	+4.18	8.88	8.2	0.81	9.01
3	4.6	4.11	8.71	8.2	0.81	9.01
4	5.1	4.19	9.29	9.2	0.73	9.93
5	5.7	4.20	9.90	9.3	0.71	10.01
6	5.9	4.21	10.11	9.9	0.64	1054
7	6.7	4.21	10.97	※ n.s.		
8	7.3	4.32	11.62			
9	7.9	4.38	12.28			
10	8.3	4.43	12.73			
11	8.7	4.50	13.20			
12	9.0	4.56	13.56			
13	9.1	4.69	13.70			
14	9.5	4.71	14.21			
15	9.9	4.83	14.73			

Mc 2348 126 K.

alt. -18

	Curve	Magn.	P.C.	Curve	Magn.
1	3.3	+4.16	6.3	+0.98	7.28
2	4.3	+4.16	8.46	7.1	0.86	8.56
3	5.1	4.18	9.28	9.0	0.74	9.74
4	5.3	4.19	9.49	9.3	0.71	10.01
5	5.7	4.20	9.90	9.4	0.70	10.10
6	6.2	4.23	10.43	n.s.		
7	7.0	4.29	11.29			
8	7.0	4.29	11.29			
9	7.8	4.36	12.16			
10	8.0	4.38	12.38			
11	8.3	4.42	12.72			
12	8.6	4.47	13.07			
13	9.0	4.56	13.56			
14	9.2	4.63	13.83			
15	9.8	4.80	14.60			

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Mc 2349. 53 K.
alt. +2°

	curve	magw.	P.C.	curve	magw.
1	4.1 + 4.18	8.88	8.0	+ 0.83	8.83
2	5.1 4.18	9.28	9.0	0.75	9.75
3	5.3 4.19	9.49	9.0	0.75	9.75
4	5.3 4.19	9.49	9.3	0.70	10.00
5	5.4 4.20	9.60	9.7	0.66	10.36
6	5.9 4.22	10.12	9.8	0.64	10.44
7	6.9 4.29	11.19			
8	7.1 4.30	11.40			
9	7.2 4.31	11.51			
10	7.2 4.31	11.51			
11	7.8 4.36	12.16			
12	8.2 4.41	12.61			
13	8.2 4.41	12.61			
14	8.6 4.47	13.07			
15	9.3 4.66	13.96			

Mc 2350 29 K
alt. + 2°

	curve	magw.	P.C.	Curve	Magw.
1	3.0		6.3	+ 0.98	7.28
2	~~3.0~~ 4.0	4.16	8.16	9.3 6.3	0.90	8.20
3	5.1	4.18	9.28	8.3	0.80	9.10
4	5.3	4.19	9.49	9.0	0.74	9.74
5	6.1	4.22	10.32	9.9	0.64	10.54
6	6.2	4.23	10.43			
7	6.3	4.24	10.54			
8	7.0	4.30	11.30			
9	7.7	4.36	12.06			
10	7.8	4.37	12.17			
11	8.2	4.41	12.61			
12	9.0	4.57	13.57			
13	9.2	4.62	13.82			
14	9.7	4.76	14.46			
15	9.6 9.60	9.64	14.34			

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Scale 11.

January 24, 1913.

	Mc 2351	Pole see P. 33 for reduction.
		P.C.
5		5.2
6		6.1
8		7.2
9		7.9
10	4.7	8.1
11	5.2	8.8
12	5.6	9.2
13	5.9	9.5
14	6.2	9.9.
15	6.6	
16	6.9	
17	7.1	
18	7.7	
19	7.8	
20	8.21	
23	8.87	
25	9.0	
26	9.4	
27	9.8	

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70: 55 Interrupted to mark plate.

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Plates taken Dec. 16, 1913.

Scale 11

January 28, 1913.

10 : 10

MC 2354 Pole

	Mc 2359 P.43	Mc 2365 P.46	Mean.			Diff.
5						
6						
8						
9						
10	4.6	5.2	4.7	4.83	2 4 1	+4.06
11	5.3	5.4	5.2	5.30	0 1 1	4.12
12	5.6	5.9	5.4	5.63	0 3 2	4.10
13	6.0	6.3	5.9	6.07	1 2 2	4.10
14	6.3	6.7	6.3	6.43	1 3 1	4.09
15	6.6	7.0	6.5	6.70	1 3 2	4.24
16	7.0	7.4	7.0	7.13	1 3 1	4.13
17	7.3	7.5	7.3	7.37	1 1 1	4.12
18	7.7	8.0	7.8	7.83	1 2 0	4.09
19	8.1	8.3	8.1	8.17	1 1 1	4.11
20	8.3	8.7	8.3	8.43	1 3 1	4.16
23	8.7	9.1	8.9	8.90	2 2 0	4.30
25	9.3	9.7	9.2	9.40	1 3 2	4.33
26	9.7	·	9.7	9.70	0 · 0	4.49
27	n.s.					

P.C.	Mc 2359	Mc 2365	Mean			Diff.
5.3	5.5	5.2	5.33	0 2 1		+1.06
6.1	6.5	6.1	6.23	1 3 1		0.75
7.4	7.8	7.3	7.50	1 3 2		0.60
8.2	8.5	8.1	8.27	1 2 2		0.43
8.3	8.8	8.2	8.43	1 4 2		0.46
9.1	9.3	9.1	9.17	1 1 2		0.25
9.5	9.8	9.4	9.57	1 2 2		0.16
9.9	def.		9.9	a		0.27

3	10	6
11	4	4
-.08	+.25	-.15

3	7	5
3	3	3
-.10	+.23	-.17

6	17	11
6.7	7	7
-.09	+.28	-.16

4	13	7
5	5	5
-0.08	+.26	-0.14

4	9	4
4	4	4
-.10	+.22	-.10

5	9	4
5	4	5
-.10	+.22	-.18

3		
14	31	15
14	13	14
-.09	+.24	-.11

mo.R.

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Scale 11

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Mc 2355 alt. +0.6

98K.

Mc 2356 alt. -.1

10 84

	curve.	Magn.	P.C.		Magn.		Curve.		Magn.	P.C.	curve	Magn.
1	B.		52	+1.06	6.26 .35	1	3.1			6.3	+0.81	7.11 .24
2	4.0		7.7	0.53	8.23 .36	2	too far			6.8	0.71	7.51 .64
3	5.1	+4.10 9.20 .38	9.1	0.33	9.43 .56	3	3.7			6.9	0.69	7.59 .72
4	5.3	4.10 9.40 .53	9.2	0.30	9.50 .63	4	4.2	+4.12	8.32 .45	7.3	0.61	7.91 8.24
5	5.8	4.10 9.90 10.03	9.9	0.18	10.08 .21	5	4.1			7.8	0.52	8.32 .45
6	6.4	4.10 10.50 .63				6	4.7	4.11	8.81 .94	8.1	0.47	8.59 .70
7	7.2	4.11 11.31 .45				7	4.6	4.11	8.71 .84	8.2	0.46	8.66 .79
8	7.3	4.11 11.41 .55				8	4.8 4.95 5.1	4.10	9.05 .18	8.3	1414	8.74 .87
9	7.9	4.14 12.04 .20				9	4.6 4.55 4.5	4.11	8.66 .79	7.9	0.50	8.40 .53
10	8.3	4.17 12.47 .61				10	4.9	4.10	9.00 .13	8.7	0.38	9.08 .21
11	8.8	4.27 13.07 .21				11	5.1	4.10	9.20 .33	9.0	0.34	9.34 .47
12	9.1	4.34 13.44 .58				12	5.3	4.10	9.40 .53	9.4	0.27	9.67 .80
13	9.5	4.42 14.06 3 14.92				13	5.3	4.10	9.40 .53	9.3	0.28	9.58 .71
14	9.7	4.46 14.16 .20				14	6.0	4.10	10.10 .23	9.9	0.17	10.07 .20
15	9.9	4.50 14.40 .54				15	6.0	4.10	10.10 .23	junk.		
						16	5.4 5.5 5.7	4.10	9.65 .78	9.8	0.20	10.00 .13
						17	6.3	4.10	10.40 .53			
						18	6.2	4.10	10.30 .43			
						19	6.2	4.10	10.30 .43			
						20	6.7	4.10	10.80 .93			
						21	7.1	4.11	11.21 .35			
						22	7.2	4.11	11.31 .45			
						23	7.7	4.12	11.82 .96			
						24	7.3	4.18	11.41 .55			
						25	8.1 8.10 8.1	4.06 .1	12.26 .40			

cont over.

Images dense.

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Plates taken Dec. 16, 1912. cont

Scale

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Mc 2356 D4 cont.

alt. -.19 cont.

cont from prec. page.		190 1'	curve	magn.
	26	7.8 - 8.0	+4.14	12.04
	27	8.6	4.23	12.83
	28	8.7	4.26	12.96
	29	8.7	4.26	12.96
	30	8.9	4.29	13.19
	31	9.2	4.35	13.55
	32	9.4	4.39	13.79
	33	9.7	4.46	14.16
	34	9.7	4.46	14.16
	35	n.s.		

cont:

		curve	magn.
27	9.8	+4.48	~~14.28~~ 42
28	n.s.		

Mc 2357 C4.

alt +.16

		curve	magn.
1	B		
2	3.0		
3			
4	3.6		
5	4.1		
6	4.3	+4.12	8.42
7	4.3	4.12	8.42
8	5.0	4.10	9.10
9	5.1	4.10	9.20
10	5.6	4.10	9.70
11	5.6	4.10	9.70
12	5.7	4.10	9.80
13	5.7	4.10	9.80
14	6.3	4.10	10.40
15	6.7	4.10	10.80
16	6.8	4.10	10.90
17	7.3	4.10	11.40
18	7.5	4.10	11.60
19	7.8	4.12	11.92
20	8.2	4.17	12.37
21	8.1	4.16	12.26
22	8.4	4.19	12.59
23	8.5	4.22	12.72
24	8.9	4.29	13.19
25	9.2	4.35	13.55
26	9.5	4.42	13.92

P.C.	curve	magn.
5.3	+1.04	6.34
6.3	0.81	7.11
6.3	0.81	7.11
6.9	0.68	7.58
8.0	0.48	8.48
7.5 sup?		
8.2	0.46	8.66
8.3	0.44	8.74
9.0	0.34	9.34
9.9	0.18	10.08
9.9	0.18	10.08
9.9	0.18	10.08
n.s.		

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Scale K

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Mc 2359 Pole see P. 40 for reduction

	Dec.	curve	magn.
5			
6			
8			
9			
10	5.2	+4.10	9.30
11	5.4	4.10	9.50
12	5.9	4.10	10.00
13	6.3	4.10	10.40
14	6.7	4.10	10.80
15	7.0	4.10	11.10
16	7.4	4.10	11.50
17	7.5	4.10	11.60
18	8.0	4.15	12.15
19	8.3	4.18	12.48
20	8.7	4.22	12.92
23	9.1	4.34	13.44
25	9.7	4.46	14.16
26	n.s.		

P.C.	curve	magn.
5.5	+0.99	6.49
6.5	0.76	7.26
7.8	0.52	8.32
8.5	0.40	8.90
8.8	0.36	9.16
9.3	0.28	9.58
9.8	0.20	10.00
n.s.		

Mc 2361 54 K.

		curve	magn.
1	3.7		
2	3.6		
3	5.2	+4.10	9.30
4	5.2	4.10	9.30
5	5.9	4.10	10.00
6	6.2	4.10	10.30
7	6.2	4.10	10.30
8	7.1	4.10	11.20
9	7.2	4.10	11.30
10	8.1	4.16	12.26
11	8.6	4.24	12.84
12	8.9	8.8 4.28	13.13
13	8.7	8.8 4.26	13.01
14	9.2	4.35	13.55
15	9.7	4.46	14.16

P.C.	curve	magn.
6.3	+0.81	7.11
7.2	0.62	7.82
8.9	0.36	9.25
9.0	0.34	9.34
10.0	0.16	10.16

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Scale K

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Mc 2362 102 K
alt. +06

	Curve	Magn.		Pc	Curve	Magn.
1	B			5.9	+0.90	6.80
2	3.8			6.9	0.68	7.58
3	4.9	+4.10	9.00	8.3	0.44	8.74
4	5.1	4.10	9.20	8.7	0.38	9.08
5	5.4 (6.00 ↓)	4.10	9.50	9.3	0.28	9.58
6	6.1 5.9	4.10	10.10	9.9	0.18	10.08
7	6.1	4.10	10.20	10.0	0.16	10.16
8	6. 7.8	4.18	11.93			
9	8.0	4.14	12.14			
10	8.1	4.16	12.26			
11	8.4	4.19	12.59			
12	8.7	4.26	12.96			
13	9.0	4.32	13.32			
14	9.5	4.42	13.92			
15	9.8	4.48	14.28			

Examined Aug. 1, 1913 evidently in false focus

Reject W.S. 15 a.

Mc 2363 D6
alt. -18

	Curve	Magn.		Pc	Curve	Magn.
1				6.1	+0.85	6.95
2				6.3	0.81	7.11
3	3.3			6.3	0.81	7.11
4				6.6	0.74	7.34
5	4.0			7.1	0.64	7.74
6	4.1			7.3	0.61	7.91
7	4.0			7.6	0.55	8.15
8				7.7	0.53	8.23
9	4.3	+4.12	8.42	8.0	0.49	8.49
10	4.7	4.11	8.81	8.3	0.44	8.74
11	4.8	4.11	8.91	8.3	0.44	8.74
12	~~5.2~~	~~4.10~~	~~9.30~~	9.1	0.32	9.42
13	5.1	4.10	9.20	9.0	0.33	9.33
14	5.2	4.10	9.30	8.9	0.35	9.25
15	5.3	4.10	9.40	9.0	0.33	9.33
16	5.3	4.10	9.40	9.3	0.28	9.58
17	6.0	4.10	10.10	9.9	0.18	10.08
18	6.1	4.10	10.20			
19	6.6 (6.60)	4.10	10.70			
20	~~6.7~~ 6.5 (6.55)	4.10	10.70			
21	6.4 6.7	4.10	10.65			
22	7.2 (7.30)	4.10	11.30			
23	7.3 7.3 (7.20 ↓)	4.10	11.40			
24	7.1 7.3	4.10	11.30			
25	7.3	4.10	11.40			

Cont on next page.

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Scale 11.

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Mc 2363 D6 cont

alt. - 18

		curve	Magn.
26	7.8	+4.13	11.93
27	7.7	4.12	11.82
28	8.2	4.17	12.37
29	8.4	4.20	12.60
30	8.5 (8.50) 8.5 (8.30 ∞)	4.23	12.73
31	8.3 8.3	4.18	12.48
32	8.5	4.23	12.73
33	8.5	4.23	12.73
34	8.9	4.29	13.19
35	9.2	4.35	13.55
36	9.4	4.39	13.79
37	9.1	4.46	14.16
38	F.		

Mc 2364 C6

alt. + 17

	too far from center	curve	Magn.
1			
2			
3			
4	3.2		
5			
6	4.0		
7			
8			
9	4.2	+4.12	8.32
10	4.3	4.12	8.42
11	5.1 (5.20 ⊥)	5.3 4.10	9.30
12	4.9 (5.00 ⊥)	5.1 4.10	9.10
13	5.2	4.10	9.30
14	5.3	4.10	9.40
15	5.2	4.10	9.30
16	6.1	4.10	10.20
17	6.1	4.10	10.20
18	6.3	4.10	10.40
19	6.3	4.10	10.40
20	6.5	4.10	10.60
21	6.7	4.10	10.80
22	~~5.8~~ 7.0	4.10	11.10
23	7.2	4.10	11.30
24	7.3	4.10	11.40
25	7.8	4.13	11.93

cont on next page.

BC

	Curve	Magn.
56	+0.91	6.57
6.1	0.85	6.95
6.3	0.81	7.11
6.3	0.81	7.11
6.4	0.79	7.19
7.2	0.62	7.82
8.1 (8.10 ∞) 8.1 (7.30 ∞)	0.47	8.57
7.3 7.3 (7.10)	0.61	7.91
7.7 7.7	0.53	8.23
7.9	0.50	8.40
8.9	0.35	9.25
8.3	0.44	8.74
9.0	0.34	9.34
9.7	0.22	9.92
9.3	0.28	9.58

ft

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Plates taken Dec. 16, 1912.

Scale x

January 28, 1913.

	MC 2364 cont C6			MC 2365 Pole. see p. 40 for reduction	
	Cont from prec. page -	curve	Magn.		P.C.
26	8.1	+4.16	12.26	5	5.2
27	8.3	4.18	12.48	6	6.1
28	8.6	4.23	12.83	8	7.3
29	8.5	4.22	12.72	9	8.8
30	9.0	4.31	13.31	10 4.7	8.2
31	9.4	4.39	13.79	11 5.2	9.1
32	9.3	4.37	13.67	12 5.4	9.4
33	9.8	4.48	14.28	13 5.9	def.
34	9.8	4.48	14.28	14 6.3	n.s.
				15 6.5	
				16 7.0	
				17 7.3	
				18 7.8	
				19 8.1	
				20 8.3	
				23 8.9	
				25 9.2	
				26 9.7	
				27 ?.	

MOR.

11:45

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Plates taken Dec. 7, 1912 - remeasured -

Sec. U — Plotted. — January 31, 1913 - — Plotted

9:10

Mc 2297 Pole.

First-2nd meas. — 1st-2nd meas.

Diff.		Mc 2297 P.16 Mean	Mc 2297 P.14	Mc 2303 P.50 Mean	P.C.	Mc 2297 P.16	Mean	n/c. 2292	m 2303 P.50 Mean	Diff.
	5				5.2	0 54	5.30 11	5.3	5.25 5.30 .28 02 03	+1.11
	6				6.2	1 6.3	6.25 01	6.0	6.20 6.22 03 02	0.78
	8				7.4	1 7.5	7.45 01	7.4	7.40 7.42 03 02	0.68
	9				8.3	3 8.2	8.25 10	8.0	8.10 8.20 .18 07 05 08	0.52 0.60
+4.19	10	4.7 1 4.8	4.9	4.65 4.70 05 05	8.5	3 8.4	8.45 10	8.3	8.50 8.48 03 02	0.41
4.37	11	5.2	5.3	4.9 5.05 21	9.3	1 9.7	9.50 35 10 22	9.3	9.15 9.25 10 10	0.17
4.23	12	5.6	5.7	5.4 5.50 11	9.8	3 10.1	9.7 9.90 7 01 21	9.5	9.45 9.60 15 10	0.13
4.22	13	6.0	6.2	5.9 5.95 01		12	10.1 .2.7	9.9	9.90 10.00 10 10	0.17
4.22	14	6.9 1 6.2 6.25 10	6.5	6.35 6.30 05 05		1 -0.17	.2.1			
4.39	15	6.5	6.8	6.6 6.55 10					.15 .15 4 4 +.038 -.04	
4.31	16	7.0	7.2	6.9 6.95 01						
4.04	17	7.7	7.4	7.2 7.45 32					.32 .32 4 4 +.08 -.08	
4.12	18	7.8 1 7.9 7.85 01	7.9	7.75 7.80 05 05					.47 -.47 8 8 +.06 -.06	
4.23	19	8.1	8.1	8.0 8.05 10						
4.34	20	8.3	8.3	8.2 8.25 10						
4.50	21 23	8.7 ~~9.25~~ 87	8.8	8.7 8.70 00						
4.43	25	9.3 1 9.2 9.25 10	9.3	9.45 9.30 05 05						
4.44	26	9.7 0 9.7 9.7 00	9.8	9.8 9.75 10						
4.55	27	10.0		10.0 a						

a
5
0.00

3 3
5 5
+.06 -.06

.25 = 35
4 4
+.06 -0.088

05 05
5 5
+.01 +.01

6 6
14 14
+.04 -.04

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Plates taken Dec. 7, 1912. remeasured.

Scale U

January 31, 1913. copied

MC 2298 C5 9+15

alt. +16

		1st	2nd	meas.	C.C.	1st	2nd	meas.
too far from center	1	~~6.0~~			6.0	0		5.8
	2		40		7.1	7.0	2	7.1
" " "	3				6.7	6.7	2	6.7
too far from center	4	4.1	2		7.3	0		7.1
	5		4.8		7.9	1		8.1
	6		5.0		~~8.6~~	~~8.5~~	0	8.7
	7	4.1 ~~8.1~~	1	4.7	8.2	8.3	5	8.5
	8		5.4		9.1	5		9.4
	9		5.3		9.3	3		9.4
	10	5.3	1	5.5	9.5	3		9.6
	11		5.4		9.7	0		9.5
	12		5.8		10.0	.		.
	13	5.6	2	5.5				
	14	5.9	1	5.6				
	15	6.2	1	6.4				
	16		5	6.8				
	17	~~5.8~~ 5.5 ~~-0.05~~		7.2				
	18	-0.10		7.2				
	19			7.4				
	20			7.8				
	21			8.2				
	22			8.4				

+0.21

23	9.0
24	9.1
25	9.8
26	9.8
27	10.1

MC 2298, 2299, 2310, 2301

mean star, -0.05 p.c. +0.09

MC 2302, 2303 star +0.20 p.c. +0.10

MC 2299 5 I.K.

alt. +21

		1st	2nd	meas.	P.17	Diff	P.C.		P.17	Magn
	1	5.2	1	5.2	5.20	~~curve~~ ~~magn~~ 9.20	4.24	9.2	9.2 3 9.1	9.15 curve +0.27
	2		5.05				4.24	8.9	p. 0 9.1	9.00 +0.31 1
	3		5.5				4.24	m.s.	3	1.9.4 2
	4	5.8	1	6.0	5.90		4.24	m.s.	2 -0.15	2.9.31
	5		6.3				4.24			10.54
	6		6.3				4.24			10.54
	7	7.2	1	7.2	7.20		4.28			11.48
	8		7.3				4.28			11.58
	9		7.8				4.31			12.11
	10	8.2	0	8.3	8.25	0	4.34			12.59
	11		8.4				4.35			12.75
	12		8.9				4.38			13.28
	13	9.2	2	9.1	9.15	0	4.40			13.55
	14	9.4	1	9.4	9.40	0	4.44			13.84
	15	9.9	0	10.0	9.95	0	4.50			14.45

7.4 -0.06

Companions poorly defined. difficult to measure.

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Scale 11

January 31, 1913 -

Mc 2300 75K
alt. +.14

	1st.	2nd meas.	P.C.
1	40	.0	7.0 .1
2			8.1 .4
3			8.8 .1
4	52	.0	9.2 .1
5			R.n.s. .3
6			.4
7	6.8	.4	-0.08
8			
9			
10	8.0	.1	
11			
12			
13	8.3	.0	
14	9.3	.0	
15	9.5	.2	
		.3	
		.1	
		~~-0.15~~	
		-0.04	

Mc 2301
alt. +2.2

	1st.	2nd meas.	P.C.
1	B.		6.1 .2
2			6.3 .1
3			6.3 .0
4	3.7		7.2 .1
5			7.2 .0
6			7.2 Edge.
7	4.1		7.3 .4
8			8.0 .2
9			~~8.0~~ 8.1 .1
10			8.1 .2
11			sup.
12			9.3 ~~.8~~ .1
13	5.2	.1	9.2 .1
14	5.4	.3	9.1 .1
15	5.6	.3	~~7.3~~
16		~~.5~~	.11 ~~.4~~
		.3	
17		+0.17	.13
18			+0.08
19			
20			
21			
22			
~~23~~			

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Plates taken Dec. 7, 1912. Measd.

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Scale 1°. January 31, 1913.

Mc 2302 53 K

alt. +22

Mean		curve	Magn.		1st-2nd meas.		mean
4.85	0.1	4.25	9.10	1	4.8	2	4.9
5.0		4.24	9.24	2			5.0
5.2		4.24	9.44	3			5.2
5.60	0.0	4.24	9.84	4	5.6	1	5.6
6.1		4.24	10.34	5			6.1
6.1		4.24	10.34	6			6.1
7.15	1.0	4.28	11.43	7	7.1	2	7.2
7.2		4.28	11.48	8			7.2
7.6		4.30	11.90	9			7.6
7.75	±1	4.30	12.05	10	7.6	4	7.9
8.0		4.36	12.36	11			8.0
8.4		4.34	12.74	12			8.4
8.65	1.0	4.36	13.01	13	8.7	0	8.6
9.05	1.0	4.40	13.45	14	9.1	0	9.0
9.70	0.0	4.48	14.18	15	9.7	1	9.7
						10	
							7.
							+0.14

P.C.		see below	
8.7	2	8.8	8.85
9.2	1	9.2	9.20
9.2	1	9.2	9.20
9.9	0	9.8	9.85
n.s.			
		4	
		4	
		+0.10	

Mc 2303 Pole L.

			P.C.	Mc 2303 39:213	Mean
5			5.3	0	5.25 1.0
6			6.2	1	6.20 0.0
8	Mc 2303 Pole 39:213 Mean		7.4	1	7.40 0.0
9			8.1	1	8.10 0.0
10	4.7	2 4.6 4.65 1.0	8.4	3	8.50 1.1
11		4.9	9.2	0	9.15 0.1
12		5.4	9.5	0	9.45 1.0
13		5.9	10.0	1	9.90 1.2
14	6.3	4 6.4 6.35 1.0			7.5
15		6.6			8
16		6.9			+0.09
17		7.2			
18	7.8	2 7.7 7.75 0.1			
19		8.0			
20		8.2			
21					
23	8.7	8.7			
25	9.3	4 9.4 9.35 1.0			
26	9.8				
27	n.s.				
		12			
		4			
		+30			

Pris Comp. Mc 2302

	curve	Magn.	
1	8.85	0.34	9.19
2	9.20	0.26	9.46
3	9.20	0.26	9.46
4	9.85	0.10	9.95

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Taken Dec. 1, 1912 –

Scale 11

January 31, 1913.

MC 2240 few plates remeasured and 24, 26, and 27
alt. -18 measured. Latter plats were omitted in first measurement.
(See Bk 39 : 187

22	7.2	
23	7.6	7.7
24	7.3	7.3
25	8.0	
26	8.0	
27	8.3	
28	8.7	
29	8.8	

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Plates taken Jan. 9, 1913.

Scale U. Plotted February 3, 1913

10:50 M 2418 Pole L

	mc 24 23 P55	mc 24 29 P57	Mean.	Diff.
5				
6				
8				
9				
10	4.6	4.7 ~~5.3~~ 4.6	4.63 0.1 0	+4.26
11	5.2	5.1 5.1	5.13 1.0 0	4.29
12	5.4	5.4 5.4	5.40 0.0 0	4.33
13	5.9	5.9 5.9	5.90 0.0 0	4.27
14	6.2	6.2 6.3	6.23 0.0 1	4.29
15	6.5	6.5 6.6	6.53 0.0 1	4.41
16	6.9	7.0 7.1	7.00 ± 0.1	4.26
17	7.1	7.2 7.2	7.17 ± 0.0	4.32
18	7.4	7.5 7.7	7.53 ± 0.2	4.39
19	8.0	8.1 8.1	8.07 ± 0.0	4.21
20	8.3	8.3 8.3	8.30 0.0 0	4.29
23	8.7	8.7 8.7	8.70 0.0 0	4.50
25	9.1	9.1 9.15	9.12 0.0 1	4.61
26	9.8	9.6 9.7	9.70 1.0 1	4.49
27	ns.	10.0. .		4.55

mc 24 23	mc 24 29	Mean	Diff.
5.3	5.4 5.3	5.33 0.1 0	+1.06
6.2	6.2 5.9	6.10 1.1 2	0.88
7.3	7.2 7.3	7.27 0.1 0	0.83
8.0	8.0 7.9	7.91 0.0 1	0.73
8.2	8.2 8.2	8.20 0.0 0	0.69
8.7	8.7 8.7	8.70 0.0 0	0.72
9.1	9.0 9.3	9.13 0.1 2	0.60
9.8	9.8 9.9	9.83 0.0 1	0.34
.	10.0 .	10.0 . ~~0~~ .	0.52

$\frac{42+1}{+.02}$ $\frac{42+1}{+.02}$ $\frac{42-3}{-.05}$

$\frac{42-5}{.00}$ $\frac{42-1}{-.02}$ $\frac{42+3}{+.08}$

$\frac{8\,2+1}{+.01}$ $\frac{42\,0}{.00}$ $\frac{8\,2\,0}{.00}$

$\frac{52+1}{+.02}$ $\frac{52+1}{+.02}$ $\frac{52+1}{+.02}$

$\frac{42-3}{-.08}$ $\frac{42\,0}{.00}$ $\frac{42+4}{+.10}$

$\frac{52\,0}{.00}$ $\frac{52-1}{-.02}$ $\frac{52+1}{+.02}$

$\frac{142-2}{-.01}$ $\frac{142\,0}{.00}$ $\frac{142+6}{+.04}$

mar.

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Scale K

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February 3, 1913. Copied.

Mc 2419 3K
alt. +.14

	curve	Magn.	P.C.	Magn.
1	4.3 + 4.32	8.62	7.6 + 0.77	8.37
2	4.2 4.32	8.52	7.9 0.74	8.64
3	6.3 4.29	10.59	n.s.	
4	6.95 7.0 6.9 4.30	11.25		
5	6.35 6.3 6.4 4.29	10.64		
6	7.2 4.32	11.52		
7	7.3 4.32	11.62		
8	7.9 4.35	12.25		
9	8.3 4.39	12.69		
10	8.8 4.34	13.14		
11	9.0 4.45	13.45		
12	8.85 8.8 8.9 4.44	13.29		
13	9.7 4.53	14.23		
14	9.9 4.55	14.45		
* 15	9.45 9.4 9.5 4.50	13.95		

Mc 2420. 48K
alt. +.21

	B.	Curve	Magn.	P.C.	Curve	Magn.
1				5.4	+ 1.04	6.44
2	5.0	+ 4.28	9.28	8.9	0.63	9.53
3	5.6	4.28	9.88	9.7	0.53	10.23
4	6.35 6.4 6.3	4.28	10.63	n.s.		
5	6.30 6.3 6.3	4.28	10.58			
6	6.45 6.4 6.5	4.29	10.74			
7	7.1	4.31	11.41			
8	7.3	4.32	11.62			
9	8.0	4.36	12.36			
10	8.2	4.38	12.58			
11	8.4	4.40	12.80			
12	9.0	4.45	13.45			
13	9.1	4.46	13.56			
14	9.2	4.48	13.68			
15	9.8	4.54	14.34			

* No. 15 seems to be correctly marked, but is brighter than 14.

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Series taken Jan. 9. 1913.

Scale u

corrected

February 3, 1913.

corrected

Mc 24 21 10K Mc 24 22 19Ks.

alt. +.20 alt. +.21

		curve	Magn.		curve	Magn.		curve	Magn.
1	13			5.7 +1.00		6.70	1 4.0 +4.34	8.34	7.9 0.74 8.64
2	4.3	+4.32	8.62	7.9 0.74		8.64	2 5.1	4.29	9.39 8.9 0.63 9.53
3	5.3	4.28	9.58	9.1 0.60		9.70	3 6.4	4.29	10.69 n.s.
4	5.3	4.28	9.58	9.1 0.60		9.70	4 7.2	4.32	11.52
5	6.4	4.29	10.69	~~11.5~~ 10.0 0.48		10.48	5 7.9	4.35	12.25
6	6.9	4.30	11.20				6 8.3 8.25 8.2	4.38	12.63
7	7.2	4.32	11.52				7 8.2 8.20 8.7	4.38	12.58
8	7.7	4.34	12.04				8 8.7	4.43	13.13
9	8.4	4.40	12.80				9 8.7	4.43	13.13
10	8.7	4.43	13.13				10 9.1	4.46	13.56
11	9.0	4.45	13.45				11 9.2	4.48	13.68
12	9.4	4.50	13.90				12 9.7	4.53	14.23
13	9.7	4.53	14.23				13 9.7	4.53	14.23
14	9.9	4.56	14.46				14 9.9	4.55	14.45
15	9.9	4.56	14.46				15 10.0	4.57	14.57

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Scale U

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Mc 2423 P.

Mc 2424 181 La - scratched.

alt. + 2.2

		P.C.		Curve	Magn.	P.C.		Magn.
5		5.4	1	B		5.3	1.05	6.35
6		6.2	2	3.0		6.9	0.85	7.75
8		7.2	3	5.0 5.00 5.0	+4.29 9.29	8.9 8.90 8.9	0.63	9.53
9		8.0	4	5.3 5.30 5.3	4.28 9.58	9.8 9.75 9.7	0.52	10.27
10	4.7	8.2	5	5.3	4.28 9.58	9.7	0.53	10.23
11	5.1	8.7	6	6.2	4.29 10.49			
12	5.4	9.0	7	7.2	4.32 11.52			
13	5.9	9.8	8	7.2	4.32 11.52			
14	6.2	10.0	9	7.7	4.34 12.04			
15	6.5		10	8.0	4.36 12.36			
16	7.0 7.00 7.0		11	8.1	4.37 12.47			
17	7.0 7.2		12	8.7	4.43 13.13			
18	7.5		13	9.1	4.46 13.56			
19	8.1		14					
20	8.3		15	9.9	4.55 14.45			
23	8.7							
25	9.1		scratch across 14 - not meas.					
26	9.6							
27	10.0							

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Scale 11

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	Mc 2425 alt. +2.1			49 K			Mc 2427 alt. +2.2			50 K.		
		curve	Magn.		curve	Magn.		curve	Magn.	Pc.		
1	5.1	4.29	9.39	9.2	0.60	9.80	1 3.3			7.0	0.84	7.84
2	5.2	4.29	9.49	9.2	0.60	9.80	2 5.0	4.29	9.29	9.1	0.60	9.70
3	5.9	4.28	10.18	9.9	0.50	10.40	3 5.6	4.28	9.88	9.3	0.58	9.88
4	6.3 6.25	4.28	10.53	n.s.			4 6.3	4.29	10.59	n.s.		
5	6.0 5.95	4.28	10.23				5 7.1	4.31	11.41			
6	7.0	4.30	11.30				6 7.2	4.32	11.52			
7	7.1	4.31	11.41				7 7.8	4.34	12.14			
8	7.7	4.34	12.04				8 8.1	4.37	12.47			
9	8.1	4.37	12.47				9 8.4	4.40	12.80			
10	8.3	4.39	12.69				10 8.8	4.44	13.24			
11	8.7	4.43	13.13				11 8.9	4.44	13.34			
12	8.8	4.44	13.24				12 9.3	4.49	13.79			
13	9.1	4.46	13.56				13 9.5	4.50	14.00			
14	9.8	4.54	14.34				14 9.8	4.54	14.34			
15	9.9	4.55	14.45				15 9.8	4.54	14.34			

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Series taken Jan. 9, 1913 –

Scale U. copied February 3, 1913.

	Mc 2428			24 Ks. alt. 7.10			Mc 2429 Pole	
	curve	magn.	P.C.	Curve	Magn.		P.C.
1	3.6		7.1	0.83	7.93	5	5.3
2	4.3	+4.32	8.62	~~8.8~~ 8.3	0.70	9.00	6	6.9
3	4.6	4.30	8.90	8.7 8.7	0.65	9.35	8	7.3
4	5.2	4.29	9.49	9.3	0.58	9.88	9	7.9
5	6.1	4.29	10.39	9.9	0.50	10.40	10 4.6	8.2
6	6.8	4.30	11.10				11 5.1	8.7
7	7.6	4.33	11.93				12 5.4	9.3
8	~~7.4~~ 7.55 21	7.7 4.33	11.88				13 5.9	9.9
9	8.0	4.36	12.36				14 6.3	
10	8.3	4.39	12.69				15 6.6	
11	9.0	4.45	13.45				16 7.1	
12	9.3	4.49	13.79				17 7.2	
13	~~9.0~~	9.7 4.53	14.23				18 7.1	
14	9.9	4.55	14.45				19 8.1	
15	10.0	4.57	14.57				20 8.3	
							23 8.7	
							25 9.1 9.15 9.2	
							26 ~~9.9~~ 9.7	
							27 ~~8.~~	

wr. also marked.

12:05

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1913phae.proj..989L

Series taken Jan. 9, 1913. 2nd Series.

Plotted. February 6, 1913

Scale U

2:45

Mc 2430 Pole L

	Mc2435 P.61	Mc2441 P.64	mean	Res.	Diff.
5					
6					
8					
9					
10	4.1	4.6	4.6	4.63	1 0 0	+4.26
11	5.1	4.9	5.1	5.03	1 1 1	4.39
12	5.4	5.3	5.4	5.37	0 1 0	4.36
13	5.9	5.6	5.9	5.80	1 2 1	4.37
14	6.1	6.2	6.2	6.17	1 0 0	4.35
15	6.4	6.4	6.4	6.40	0 0 0	4.54
16	6.8	6.8	6.7	6.77	0 0 1	4.49
17	7.2	7.1	7.1	7.13	1 0 0	4.36
18	7.6	7.5	7.4	7.50	1 0 1	4.42
19	7.9	7.9	7.9	7.90	0 0 0	4.38
20	8.3	8.3	8.1	8.23	1 1 1	4.36
23	8.7	8.8	8.7	8.73	0 1 0	4.47
25	9.2	9.2	9.1	9.17	0 0 1	4.56
26	9.6	9.8	9.7	9.70	1 1 0	4.49
27	10.0	.	.	10.00	0 . .	4.55

Mc2435	Mc2441	mean	Diff.
5.2	5.2	5.3	5.27 0 0 1	+1.16
5.9	5.9	6.0	5.93 0 0 1	1.05
7.3	7.3	7.3	7.30 0 0 0	0.80
8.1	8.0	8.2	8.10 0 1 1	0.60
8.3	8.2	8.4	8.30 0 1 1	0.59
9.3	9.2	9.0	9.17 1 0 2	0.25
9.6	9.7	9.3	9.53 1 2 2	0.23
10.0	10.0	9.8	9.93 1 1 1	0.24

0 1 3
4 4 4
.00 -.02 +.08

3 2 4
4 4 4
+.08 +.05 -.10

3 1 1
8 8 8
+.04 +.02 -.01

2 4 2
5 5 5
+0.04 -0.08 +0.04

2 0 2
4 4 4
+0.05 0.00 -0.05

0 3 2
5 5 5
.00 +.06 -.04

4 1 1
14 14 14
+0.03 -.01 -.01

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	Mc 2431 alt. +.20			51 K			Mc 2432 alt. +.21			27 K.		
		curve	Magn.	P.C.				curve	Magn.	P.C.	Curve	Magn.
1	5.0 4.95 4.9	+4.33	9.28	9.0	+0.32 +0.39	9.32	1 4.8	+4.32	9.12	89	0.35	9.25
2	4.7 4.75 4.8	4.32	9.07	8.7	0.39	9.09	2 5.1	4.34	9.44	92	0.29	9.49
3	5.4	4.36	9.76	9.9	0.18	10.08	3 4.9 4.90 4.9	4.32	9.22	89	0.35	9.25
4	5.4	4.36	9.76	scrubbed			4 5.3	4.34	9.64	n.s.		
5	5.8	4.38	10.18				5 6.1	4.39	10.49			
6	6.2	4.39	10.59				6 6.3	4.40	10.70			
7	6.7	4.41	11.11				7 6.9	4.41	11.31			
8	7.2	4.43	11.63				8 7.3	4.44	11.74			
9	7.5	4.45	11.95				9 8.0	4.47	12.47			
10	8.3 8.30 8.3	4.49	12.79				10 8.3	4.49	12.79			
11	8.3 8.30 8.3	4.49	12.79				11 8.4	4.49	12.89			
12	8.8	4.50	13.30				12 8.7	4.50	13.20			
13	9.5	4.50	14.00				13 8.9	4.50	13.40			
14	9.1	4.50	14.20				14 9.7	4.51	14.21			
15	9.9	4.51	14.41				15 9.8	4.51	14.31			

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Mc 2433 100 K.
alt. +.06

	Curve	Magn.	P.C.	curve	Magn.
1	4.1	4.29? 8.39?	76 8.60	0.55	8.15
2	4.3	+4.30 8.60	86 86 8.20	0.41	9.01
3	4.3	4.30 8.60	82 82	0.50	8.70
4	5.2	4.34 9.54	9.1	0.30	9.40
5	5.1	4.34 9.44			
6	5.4	4.36 9.76			
7	6.1	4.39 10.49			
8	6.3	4.40 10.70			
9	7.1	4.42 11.52			
10	7.3	4.44 11.74			
11	7.3	4.44 11.74			
12	7.3	4.44 11.74			
13	8.2	4.48 12.68			
14	8.6	4.50 13.10			
15	9.2	4.50 13.70			

Mc 2434 52 K.

	curve	magn.			magn.
1	~~4.4~~ 3.9		6.9	+0.82	7.72
2	4.0	+4.32 8.32	7.1	0.77	7.87
3	4.7	4.33 9.03	8.4	0.46	8.86
4	5.4	4.36 9.76	9.9	0.18	10.08
5	5.4	4.36 9.76	9.9	0.18	10.08
6	5.9	4.38 10.28			
7	6.3	4.40 10.70			
8	7.1	4.42 11.52			
9	7.4	4.44 11.84			
10	7.9	4.47 12.37			
11	8.3 8.30	4.49 12.79			
12	8.2 8.35	8.3 4.49 12.79			
13	8.7	4.50 13.20			
14	8.7	4.50 13.20			
15	9.1	4.50 13.60			

Remeas. by O. May, 8, 1916.

	scl
5	4.8
6	5.4
7	5.9

No error in above measures.

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Mc 2435 Pole

See P. 58 for reduction.

Mc 2436 C5 L.

alt. + 16

		Pc.	too far from center			curve	magn.
5		5.2	1 .	Curve	Magn.	6.0	+1.02 / 7.02
6		5.9	2 3.7			6.9	0.82 / 7.72
8		7.3	3 .			6.9	0.82 / 7.72
9		8.0	4 .			7.1	0.77 / 7.87
10	4.6	8.2	5 4.6	+4.32	8.92	8.1	0.53 / 8.63
11	4.9	9.2	6 4.7 4.7 (4.70)	4.32	9.02	8.3	0.49 / 8.79
12	5.3	9.7	7 4.3 4.3 (4.30)	4.30	8.60	8.1	0.53 / 8.63
13	5.6	10.0	8 4.9	4.33	9.23	8.9	0.34 / 9.24
14	6.2		9 5.0	4.33	9.33	9.1	0.30 / 9.40
15	6.4		10 5.1	4.34	9.44	sup.	
16	6.8		11 5.2	4.34	9.54	9.3	0.21 / 9.51
17	7.1		12 5.4	4.36	9.76	9.8	0.20 / 10.00
18	7.5		13 5.8	4.38	10.18	10.0	0.17 / 10.17
19	7.9		14 5.8	4.38	10.18	10.0	0.17 / 10.17
20	8.3		15 6.2	4.40	10.60		
23	8.8		16 6.8	4.41	11.21		
25	9.2		17 7.0	4.42	11.42		
26	9.8		18 7.2	4.43	11.63		
27	n.s.		19 7.3	4.44	11.74		
			20 7.3	4.44	11.74		
			21 8.0	4.47	12.47		
			22 8.6	4.50	13.10		
			23 8.7	4.50	13.20		
			24 9.2	4.50	13.70		
			25 9.3	4.50	13.80		
			26 9.8 →	4.51	14.31		
			27 .				
			28				

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Mc 2437 R 77 R

	curve	magn.	P.C.	Curve	Magn.
1	4.2 + 4.30	8.50	7.8	0.60	8.40
2	5.0 4.33	9.33	9.2	0.28	9.48
3	5.3 4.35	9.65	9.7	0.21	9.91
4	6.7 4.41	11.11			
5	7.3 4.44	11.74			
6	7.3 4.44	11.74			
7	8.1 4.47	12.57			
8	8.4 4.49	12.89			
9	8.8 4.50	13.30			
10	8.9 4.50	13.40			
11	9.0 4.50	13.50			
12	9.2 4.50	13.70			
13	9.5 9.45 9.4 4.50 9.35	13.95			
14	9.4 9.3 4.50	13.85			
15	9.9 4.51	14.41			

Mc 2438 B 4 = 9 20 + 45

alt. + .22

		curve	magn.	P.C.	curve	magn.
1	B.			5.8	+1.07	6.87
2	.			6.3	0.96	7.26
3	.			6.3	0.96	7.26
4	.			6.9	0.83	7.73
5	.			7.1	0.77	7.87
6	off edge					
7	.			7.7	0.64	8.34
8	4.3	+4.30	8.60	8.0	0.56	8.56
9	4.7	4.33	9.03	8.1	0.54	8.64
10	4.8	4.33	9.13	8.6	0.41	9.01
11	5.1	4.34	9.44	8.9	0.34	9.24
12	5.3	4.35	9.65	9.3	0.26	9.56
13	5.1 5.05	5.0 4.34	9.39	8.9	0.34	9.24
14	5.4	4.36	9.76	9.8	0.20	10.00
15	5.4	4.36	9.76	9.8	0.20	10.00
16	6.1	4.39	10.49			
17	6.3	4.40	10.70			
18	6.2	4.40	10.60			
19	6.4	4.40	10.80			
20	7.1 7.10 7.1	4.43	11.53			
21	6.3 6.30 6.3	4.40	10.70			
22	7.2	4.43	11.63			
23	7.5	4.44	11.94			
24	7.4	4.44	11.84			
25	7.8	4.46	12.26			
26	8.1	4.48	12.58			
27	8.3	4.49	12.79			

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Mc 2438 cont. B4.

				Re.
28.	1	B	8.7 4.50	13.20
29	2		8.7 4.50	13.20
30	3		8.8 4.50	13.30
31	4		9.3 4.50	13.80
32	5		9.9 4.51	14.41
33	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			

Mc 2440. 78 K

Corr. +.16.

	Curve	Magn.	Re.	Curve	Magn.
1	4.8	+4.33	9.13	8.8	+0.37	9.17
2	5.3	4.35	9.65	9.3	0.26	9.56
3	5.6	4.36	9.96	9.4	0.25	9.65
4	5.9	4.38	10.28	9.8	0.20	10.00
5	6.6	4.40	11.00			
6	6.8	4.41	11.21			
7	7.2	4.44	11.64			
8	7.9	4.46	12.36			
9	8.2	4.48	12.68			
10	8.5	4.50	13.00			
11	8.8	4.50	13.30			
12	9.3	4.50	13.80			
13	9.3	4.50	13.80			
14	9.8	4.51	14.31			
15	10.0	4.51	14.51			

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Mc 2441 Pole L-

See P. 58 for reduction.

5		5.3
6		6.0
8	"	7.3
9	"	8.2
10	4.6	8.4
11	5.2	9.0
12	5.4	9.3
13	5.9	9.8
14	6.2	
15	6.4	
16	6.7	
17	7.1	
18	7.4	
19	7.9	
20	8.1	
23	8.7	
25	9.1	
26	9.7	
27	"	

MOR.

4:04

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Scale 1.

February 10, 1913

9.40 Mc 2445 Pole L.

	Mc 2450 P.68	Mc 2450 P.71	Mean.	Diff.	B.C.	P.68	P.71	Mean.	Diff.
5					5.3	5.3	5.4	5.33 0 0 1	+1.06
6					6.2	6.1	6.2	6.17 0 1 0	0.81
8					7.6	7.3	7.3	7.40 2 1 1	0.70
9					8.5	8.1	8.1	8.23 3 1 1	0.47
10	4.7	4.8	4.6	4.70 0 1 1	+4.19	8.8	8.4	8.2	8.47 3 1 3	0.42
11	5.1	5.2	4.9	5.07 0 1 2	4.35	9.3	9.0	8.8	9.03 3 0 2	0.39
12	5.4	5.4	5.1	5.30 1 1 2	4.43	9.8	9.4	9.1	9.43 4 0 3	0.30
13	6.0	6.0	5.7	5.90 1 1 2	4.27	n.s.	9.9	9.5	9.70 3 2 2	0.47
14	6.3	6.3	5.9	6 5.17 1 1 3	4.35	.	.	9.9	9.9 . . 2	0.62
15	6.7	6.7	6.3	6.51 1 1 3	4.37					
16	7.1	7.1	6.7	6.91 1 1 3	4.39					
17	7.4	7.3	7.1	7.27 1 0 2	4.22					
18	8.0	7.7	7.7	7.80 1 1 1	4.12					
19	8.3	8.1	8.1	8.17 1 1 1	4.11					
20	8.7	8.3	8.3	8.43 3 1 1	4.16					
23	9.2	8.7	8.9	3 3 2 0 8.97 2 3 1	7 4.23					
25	9.9	9.1	9.2	9.40 5 3 2	4.33					
26	?	9.7	9.8	9.75 . 1 0	4.44					
27		10.0			4.55					

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Mc 2446 4K

alt. +.14

	curve	magn.		O.C.	curve	magn.
1	3.1	.		6.2	0.83	7.03
2	4.0	.		7.3	0.66	7.96
3	5.1	+4.36	9.46	9.0	0.42	9.42
4	5.3	4.34	9.64	9.3	0.40	9.70
5	6.1	4.28	10.38	n.s.		
6	6.4	4.25	10.65			
7	7.3	7.25 7.2 4.20	11.45			
8	7.2	7.20 7.2 4.20	11.40			
9	7.9	7.90 7.9 4.16	12.06			
10	7.7	7.55 31 7.7 4.19	11.74			
11	8.0	4.16	12.16			
12	8.6	4.20	12.80			
13	9.0	4.24	13.24			
14	9.2	4.28	13.48			
15	9.8	4.47	14.27			

Mc 2447 52K.

alt. +.22

	curve	magn.		O.C.	curve	magn.
1	3.8	.		6.9	0.71	7.61
2	3.9	.		7.3	0.65	7.95
3	4.9	+4.38	9.28	8.9	0.42	9.32
4	6.0	4.28	10.28	n.s.		
5	6.2	4.27	10.47			
6	6.2	4.27	10.47			
7	6.7	4.24	10.94			
8	7.3	4.20	11.50			
9	8.1	4.16	12.26			
10	8.2	4.19	12.37			
11	8.7	4.21	12.91			
12	9.0	4.25	13.25			
13	9.1	4.26	13.36			
14	9.2	4.28	13.48			
15	9.8	4.46	14.26			

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MC 2448 C5 alt. +.17

		curve	magn.
Trofan from c.	1		
	2	4.0	
	3		
	4		
	5	4.6 4.70	+4.41 9.01
	6	4.7 4.7 4.15	4.40 9.10
	7	4.8 4.7	4.40 9.15
	8	5.2	4.35 9.55
	9	5.2	4.35 9.55
	10	5.3	4.34 9.64
	11	5.3	4.34 9.64
	12	5.7	4.30 10.00
	13	5.7	4.30 10.00
	14	5.8	4.30 10.10
	15	6.3	4.26 10.56
	16	6.7	4.24 10.94
	17	7.1	4.20 11.30
	18	7.2	4.20 11.40
	19	7.3	4.20 11.50
	20	7.6	4.18 11.78
	21	8.1	4.17 12.27
	22	8.3	4.18 12.48
	23	8.7	4.21 12.91
	24	8.9	4.23 13.13
	25	9.2	4.29 13.49
	26	9.3	4.30 13.60
	27	9.8	4.46 14.26
m O.R.	28	10.0	4.54 14.54

	curve	magn.
1	6.1	+0.84 6.94
2	7.3	0.66 7.96
3	7.2	0.67 7.87
4	7.4	0.63 8.03
5	8.2 8.65	0.50 8.70
6	8.7 8.6 8.30	0.44 9.09
7	8.3 8.3	0.49 8.79
8	9.1	0.41 9.51
9	9.1	0.41 9.51
10	9.2	0.41 9.61
11	9.7	0.40 10.11
12	9.9	0.40 10.31
13	10.0	0.41 10.41
14	10.0	0.41 10.41

MC 2449 12K. L

		curve	magn.
	1	4.0 3.95 3.9	6.9 6.9 +0.72 7.62
	2	4.1 4.2 4.15 4.50	7.8 7.8 7.80 8.65 0.56 8.36
	3	4.3 4.7	+4.42 8.92 8.6 8.7 0.44 9.09
	4	5.2	4.34 9.54 9.7 0.41 10.11
	5	5.9	4.30 10.20
	6	6.1	4.28 10.38
	7	7.1	4.20 11.30
	8	7.1	4.20 11.30
	9	7.7	4.18 11.88
	10	8.4	4.18 12.58
	11	9.0	4.25 13.25
	12	9.1	4.26 13.36
	13	9.4	4.33 13.73
	14	9.7	4.43 14.13
	15	9.9	4.49 14.39

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MC 2450 See P. 65.	Pole L	MC 2451 9 20 +45 B4 alt. +.22			P	Curve	Magn.
5	5.3	1 3.0			6.2	+0.82	7.02
6	6.1	2 .			6.3	0.81	7.11
8	7.3	3 39			6.4	0.80	7.20
9	8.1	4 .			7.1	0.68	7.78
10 7.8	8.4	5 .			7.2	0.67	7.87
11 5.2	9.0	6 on edge on film.			.	.	
12 5.4	9.4	7 .			7.8	0.56	8.36
13 6.0	9.9	8 4.30 4.3	+4.45	8.75	8.1	0.51	8.61
14 6.3		9 4.25 4.2 4.3	4.46	8.71	8.0	0.53	8.63
15 6.7		10 4.9	4.38	9.28	8.7	0.44	9.14
16 7.1		11 5.2	4.34	9.54	9.3	0.40	9.70
17 7.3		12 5.1	4.36	9.46	9.2	0.41	9.61
18 7.7		13 5.1	4.36	9.46	9.1	0.41	9.51
19 8.1		14 5.4	4.33	9.73	9.9	0.41	10.31
20 8.8		15 6.1	4.28	10.38			
23 8.7		16 6.1	4.28	10.38			
25 9.1		17 6.4	4.25	10.65			
26 9.1		18 6.2	4.28	10.48			
27 10.0		19 6.4	4.25	10.65			
		20 7.2	4.20	11.40			
		21 ~~5.7~~ 6.4	4.25	10.65			
		22 7.3	4.20	11.50			
		23 7.7	4.18	11.88			
		24 7.9	4.16	12.06			
		25 7.8	4.17	12.97			
		26 8.1	4.17	12.27			

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MC 2451 B4 cont.

			curve
27	8.4	+4.19	12.59
28	8.5	4.18	12.48
29	8.8	4.22	13.02
30	8.9	4.23	13.13
31	9.5	4.36	13.86
32	9.9	4.49	14.39

MC 2452 29 K

alt. +.23

	Curve	Magn.		curve	Magn.
1	3.7		6.6	+0.76	7.36
2	4.2		7.1	0.59	8.29
3	5.1	+4.36	9.46	8.9	0.42	9.32
4	5.3	4.34	9.64	9.3	0.41	9.71
5	6.1	4.28	10.38	9.9	0.41	10.31
6	6.4	4.25	10.65			
7	6.3	4.25	10.55			
8	7.1	4.20	11.30			
9	7.9	4.16	12.06			
10	8.1	4.17	12.27			
11	8.4	4.18	12.58			
12	9.5	4.36	13.86			
13	9.7	4.43	14.13			
14	9.9	4.49	14.39			
15	10.0	4.54	14.54			

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	MC 2453 alt. +.16			101 K			MC 2454. 78 K.						
		curve	Magw.		P.C.			curve	Magw.		P.C.		Magw.
1	4.1			7.4	+0.64	8.04	1	5.0	+4.36	9.36	8.9	+0.42	9.32
2	4.7	+4.40	9.10	8.6	0.44	9.04	2	5.4	4.33	9.73	9.3	0.41	9.71
3	4.8	4.39	9.19	8.5	0.45	8.95	3	5.7	4.31	10.01	9.7	0.41	10.11
4	5.7	4.31	10.01	9.5	0.41	9.91	4	5.8	4.30	10.10	9.9	0.41	10.31
5	6.2	4.27	10.47	n.s.			5	6.3	4.26	10.56			
6	6.2	4.27	10.47				6	6.9	4.22	11.12			
7	6.8	4.23	11.03				7	7.2	4.20	11.40			
8	7.7	4.18	11.88				8	7.8	4.17	11.97			
9	7.9	4.16	12.06				9	8.3	4.18	12.48			
10	8.6	4.20	12.80				10	8.7	4.21	12.91			
11	9.1	4.27	13.37				11	9.1	4.26	13.36			
12	9.3	4.31	13.61				12	9.5	4.36	13.86			
13	9.7	4.43	14.13				13	9.8 (9.80)	4.46	14.26			
14	9.8	4.46	14.26				14	9.7 (9.75) 9.8	4.44	14.19			
15	n.s.						15	10.0	4.54	14.54			
γ =							α	3.2	.		6.2	+0.83	7.03
α =							β	3.7	.		6.8	0.73	7.53
δ =							γ	~~5.0~~ 4.2	.		8.1 9.4	0.51	8.61
ε =							δ	5.2	4.34	9.54	9.1	0.41	9.51

MOR

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Series taken Jan. 12, 1913.

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Scale U

February 10, 1913.

	Mc 2455 Alt. +.22			54K.			Mc 2456 Pole See P. 65.	
	B.	Curve Magn.		P.C.	Curve	Magn.		
1				6.4	+0.80	7.20	5	5.4
2	4.0			7.2	0.66	7.86	6	6.2
3	4.6 4.45 4.3	4.43	8.88	8.9	0.42	9.32	8	7.3
4	4.2 4.25 4.3	4.46	8.71	8.7	0.44	9.14	9	8.1
5	5.2 5.15 5.1	4.35	9.50	9.7 9.70 9.7	0.41	10.11	10 4.6	8.2
6	5.1 5.10 5.1	4.36	9.46	9.8	0.41	10.21	11 4.9	8.8
7	5.1	4.31	10.01	n.s.			12 5.1	9.1
8	7.0	4.21	11.21				13 5.7	9.5
9	7.1	4.20	11.30				14 5.9	9.9
10	8.4	4.19	12.59				15 6.3	
11	9.0	4.25	13.25				16 6.7	
12	9.2	4.28	13.48				17 7.1	
13	9.3	4.30	13.60				18 7.7	
14	9.5	4.36	13.86				19 8.1	
15	9.9	4.49	14.39				20 8.3	
16							23 8.9	
17							25 9.2	
							26 9.8	
							27 n.s.	

11:05

Images poor - large & poorly defined not comp. with scale.

M.O.R.

Images on this plate are poor, large and poorly-defined.

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Scale 1.

February 10, 1913.

Mc 2433 Ft stars remeasured with additional stars

See P. 60 of this book.

		P.C.
14	8.7	
15	9.3	
16	9.8	
17	9.8	
18	10.0	
edge of fe. α	3.2	6.7
β	3.4	6.7
γ	4.2	7.9
δ	4.1	8.0
ε	4.3	8.2

Mc 2434 52K.

14	8.9
15	9.3
16	9.7
17	9.8
18	10.0
α	
β	
γ	

MOR

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Scale R

February 10, 1913.

Mc 2435 Ft. pole stars remeasured.
(see preceding page)

	1st.	2nd meas. P.61
20	8.3	0
23	8.7	1
25	9.2	0
26	9.8	0
27	n.s.	

1
4
+0.02

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Additional plates measured on following plates.

Scale II.

February 14, 1913

Mc 2319 46.1K

See P. 10.

1st meas (p. 10) - 2nd meas.

		P.C.		P.C.
α	B.	5.7	5.6	
~~δ~~				
γ	3.3 3.2	6.4	6.3	
δ	4.2 4.1	7.3	7.2	
reversed. 1	3.1 - 3.0	6.3 1	6.2	
2	4.0 1 3.9	7.2 2	7.1	
3	4.8 1 4.7	8.3 1	8.2	
4				

2)-2 / -10

Correction: -.1

3)-4 / -12

-.1

Mc 2320 22.1K.

See P. 11

		P.C.	
γ	3.6	6.3	
~~α~~	3.2 6.1	6.1	
ε	4.1	7.6	
δ	5.0	8.1	
1	3.7 5	6.8	1
2	4.1 0	7.1	2
3	5.2 1	9.3	1
4	8.3 0	9.6	4

4)-4 / -.10

Correction: No correction

4)-8 / -20

-.2

M. O.

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Additional plates measured.

Scale K. February.

	Mc 2321 9K See P. 19		Mc 2431 51 K		Mc 2440 18 K	
	1st meas (p.11) − 2nd meas	Pc.	1st meas (p.11) − 2nd meas	Pc.		
α			α B.	5.3	α 3.2	6.7
β	3.1	6.2	β 4.0 from center	7.1	β 3.1	6.2
			δ on edge	7.2	1 5.1	8.9
ε	3.2	6.3	ε on edge	5.8	2 5.4	9.7
δ	B	5.3	γ 3.1	6.1	3	
γ	3.0	6.1	1 4.8	8.9		
1	2.9 .0	5.8 1	2 4.9	8.9		
2	3.9 .1	7.1 0	3 5.4	9.2		
3	4.8 .6	8.1 0				
4						
	3)−.5 = −.17	3)1 = +.03				

Correction to be applied: .0 0.0

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1913phae.proj..989L

L' plates taken Jan. 21, 1913

Plotted.

Scale W YELLOW February 15, 1913 Series 25

9:50 L' Mc 2483 Pole *Yellow Series. Re-reduce*

Y Y Y

Diff.	Curve	Magn.		sc.1	sc.2		Mean.	P.79 Mc2488	Mean.		Diff.	P.C.	P.79 Mc2488.		Diff.	Diff.
+2.93	+2.90	6.40	5	2.9	3.0		3.0	.40	3.50	55	+2.89	8.6	8.6	8.60 00	-2.21	-2.17
2.48	2.69	7.19	6	4.1	4.2		4.2	4.8	4.50	33	2.48	9.1	9.1	9.40 33	-2.42	-2.48
2.81	2.56	7.78	8	5.1	5.2	5.0	5.10 1 1	5.35	5.22	12 13	2.88			3/2 -.15	3/2 15	
2.56	2.41	8.59	9	6.1	6.2	6.1	6.15 01	6.20	6.18	03 02	2.52	9+				
2.26	2.32	8.94	10	6.4	6.5	6.9	6.70 22	6.55	6.62	08 07	2.27			3/2 -.15	3/2 -.15	
2.05	2.18	9.49	11	7.2 (7.3)	7.2 (7.3)	7.2	7.27 00	7.35	7.31	04 04	2.11					
2.06	2.15	9.67	12	7.5	7.6	7.5	7.55 01	7.50	7.52	03 02	2.21					
2.10	2.09	10.07	13	7.8	7.9	8.0	7.95 10	8.00	7.98	03 02	2.19					
2.12	2.08	10.20	14	8.0	8.1	8.2	8.15 10	8.1	8.12	03 02	2.40					
2.16	2.05	10.53	15	8.3	8.4	8.5	8.45 01	8.5	8.48	03 02	2.46					
2.04	2.04	10.94	16			8.9	8.9	8.9	8.90	0 0	2.36					
1.94	2.04	11.14	17			9.1	9.1	9.1	9.10	0 0	2.39					

P.C.	Curve	Magn.
5	-2.23	6.37
6	-2.37	7.03

	sc.1	sc.2		Mean	~~Curv Magn.~~	Mean		Curv	Magn.	Curve	Magn.
4r	7.3	7.4	7.4	7.40 00	~~226 9.66~~ 8.05	7.72	32 33	2.27	9.99	+2.11	9.83
5r	7.5	7.6	7.6	7.60 00	~~226 9.86~~ 7.50	7.55	05 05	2.26	9.81	2.15	9.70
6r	6.8	6.9	6.9	6.90 00	~~227 9.19~~ 7.00	6.95	05 05	2.27	9.22	2.26	9.21
7r	7.3	7.4	7.5	7.45 01	~~226 9.71~~ 7.50	7.48	03 02	2.26	9.74	-2.16	9.64
8r			8.1	8.1	~~228 10.38~~ 8.10	8.10	0 0	2.28	10.38	2.08	10.18
9r			8.5	8.5	~~231 10.81~~ 8.7	8.60	1 1	2.32	10.92	2.04	10.64

Diff.	Curve	Magn.		sc.1	sc.2	Mean		Mean		Diff.
2.14	2.04	11.84	19	9.8	9.8	9.8	~~243 12.23~~	9.8	2	2.48
2.01	2.04	11.59	18		9.4	9.4	238 9.7	9.55	2 1	2.37

ch.W

23/4 -.58 23/4 +.58

7/5 +.14 5/5 -.10

5/4 -.12 3/4 +.08

21/13 -.16 21/17 +.16

M.O.R.

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L' Series taken Jan. 21. 13.

Yellow Series. Re-reduce

YELLOW

Sc. W.

February 15, 1913. Series 25

Mc 2484 46K

Mc 2485 22K.

Curve	Magn. (y alt. cor. +.11)		sc.1	sc.2			P.C.	Magn.		sc.1	sc.2			no P.C.	Curve	Magn. (y alt. Corr. +.12)
+2.57	7.77	1	5.1	5.2	5.2	5.20 .00	2.52	7.72	1	5.6	5.7	5.4	5.55 .12	3.90 2.47	8.02	+2.51 6.06
2.46	8.26	2	5.7	5.8	5.8	5.80 .00	2.43	8.23	2	5.7	5.8	5.8	5.80 .01	2.43	8.23	2.46 8.26
2.41	8.56	3	6.1	6.2	6.1	6.15 .01	2.38	8.53	3	7.1	7.2	7.2	7.20 .00	2.26	9.46	2.21 9.41
2.26	9.16	4	6.8	6.9	6.9	6.90 .00	2.27	9.17	4	7.8	7.9	8.1	8.00 .11	2.27	10.27	2.09 10.09
2.19	9.49	5	7.2	7.3	7.3	7.30 .00	2.26	9.56	5			8.6		2.31	10.91	2.04 10.64
2.08	10.13	6	7.9	8.0	8.1	8.05 .01	2.28	10.28 (33)	6			8.7		2.32	11.02	2.04 10.74
2.04	10.64	7	~~8.82~~	8.6	8.6	8.60 .00	2.31	10.91	7			9.2		2.37	11.57	2.04 11.24
2.04	10.94	8		8.9		8.9	2.34	11.24	8			9.9		2.43	12.33	2.04 11.94
2.04	11.74	9		9.7		9.1	2.34 (42)	12.12	9							
		10							10							

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Series L' taken Jan. 21, 1913 –

YELLOW

Yellow Series. Re-reduced

Scale W

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Series 25

L' Mc 2486 C2 Mc 2487 B2

	pc.1	pc.2	P.C.	Curve	Magn.	pc.1	pc.2	P.C.	Curve	Magn.
1	Use for form centres		9.1	-2.33	6.77	1	42	B.	9.1	-2.33	6.77
2			9.3 9.30	-2.36	6.94	2		Mean	9.1	.	.
3	4.1	42 B. –	8.4 8.45	-2.20	6.25	3			9.8	.	.
4	5.3	5.4 5.4	n.s. +2.53		7.93	4	5.0	5.1 5.2 5.15	+2.53	7.68	9.9	.	.
5			9.7	.	.	5			n.s. +2.58		7.73		
6	5.3	5.4 5.4	2.53		7.93	6			n.s.	.	.		
7	6.2	6.3 6.4	2.36		8.71	7	5.3	5.4 5.35	2.50	7.85	2.54		7.89
8	6.4	6.5 6.6	2.33		8.88	8	6.2	6.3 6.25	2.36	8.61	2.39		8.64
9	5.3	5.4 5.4 5.8	2.54		7.87	9	6.4	6.5 6.45	2.34	8.79	2.35		8.80
10	9.5	7.6 7.9 7.75	2.11		9.86	10	6.7	6.8 6.9 6.85	2.27	9.12	2.27		9.12
11	6.4	6.5 6.4 6.45	2.34		8.79	11	6.1	6.2 6.20	2.37	8.57	2.40		8.60
12	7.3	7.4 7.4 7.400	2.17		9.57	12	7.0	7.1 7.3 7.20	2.26	9.46	2.21		9.41
13	7.2	7.3 7.3 7.300	2.18		9.48	13	7.0	7.1 7.3 7.20	2.26	9.46	2.21		9.41
14		8.3	2.07		10.37	14	7.2	7.3 7.3 7.30	2.26	9.56	2.18		9.48
15		8.3	2.07		10.37	15	7.6	7.7 7.7 7.70	2.27	9.97	2.12		9.82
16		8.4	2.06		10.46	16	6.9	7.0 7.0 7.00	2.26	9.26	2.24		9.24
17		8.8	2.04		10.84	17	7.3	7.4 7.6 7.50	2.26	9.76	2.16		9.66
18	7.9	8.0 8.1 8.050	2.08		10.13	18	7.9	8.0 7.9 7.95	2.28	10.23	2.09		10.04
19		9.1	2.04		11.14	19		8.4	2.30	10.70	2.06		10.46
20		9.9	2.04		11.94	20		8.5	2.31	10.81	2.05		10.55
21		9.7	2.04		11.74	21		8.6	2.31	10.91	2.04		10.64
22						22		8.7 8.00	2.32	11.02	2.04		10.74
23						23		8.0 8.0 8.40	2.28	10.28	2.09		10.09
24						24		8.4 8.4	2.30	10.70	2.06		10.46
25						25		8.9	2.34	11.24	2.04		10.94
26						26		9.7	2.42	12.12	2.04		11.74
27						27		9.9	2.44	12.34	2.04		11.94
28						28		n.s.					

* Wrong star measured. Star measured is 10a as marked on Mc 3959

C. Dec. 17. 1915

MR.

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YELLOW Yellow lines Re-reduce

Scale W

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Series 25

Mc 2488 P.

See P. 76.

Mc 2489 a 1

Y

Y

			sc.1	sc.2	Mean	P.C.	Curve	Magn	sc.1	sc.2			P.C.	Curve	Magn.
6.73	2.13	4.00 5	3.9	4.0	B. 4.0	86	+2.61	7.61	1 4.9	5.0		+2.54	7.54	9.8	. .
7.38	2.58	4.80 6	4.7	4.8	B. 4.8	97	2.59	7.64	2 5.0	5.1 5.0	5.05	2.54	7.59	9.7	. .
7.85	2.50	5.35 8	5.3	5.4	5.3 5.35	n.s.	.	.	3 .					8.50±1 8.4 8.6	−2.21 6.29
8.57	2.37	9	6.1	6.2	6.2 6.20	00	2.72	7.12	4 4.3	4.4	B.	2.64	7.04	perf.	. .
8.88	2.33	10	6.4	6.5	6.6 6.55	10	.	.	5 .					n.s.	
9.61	2.26	11	7.3	7.4	7.3 7.35	01	2.39	8.64	6 6.2	6.3	6.25	6.2 2.37	8.62		
9.76	2.26	12	7.4	7.5	7.5 7.50	00	2.36	8.76	7 6.3	6.4	6.40	6.4 2.35	8.75		
10.28	2.28	13	7.9	8.0	8.0 8.00	00	2.39	8.64	8 6.2	6.3	6.20	6.2 2.37	8.62		
10.39	2.29	14	8		8.1		2.36	8.71	9 6.3	6.4	6.35	6.3 2.36	8.71		
10.80	2.30	15			8.5		.	.	10 .						
11.24	2.34	16			8.9		2.23	9.33	11 7.0	7.1	7.10	7.1 2.26	9.36		
11.46	2.36														
Curve image		17			9.1		2.12	9.87	12 7.7	7.8	7.75	7.7 2.26	10.01		
very close to															
12.12	2.42	18			9.7		2.19	9.44	13 7.2	7.3	7.25	7.2 2.26	9.51		
		19			n.S.		2.08	10.18	14 7.9	8.0	8.10	8.2 2.29	10.39		
							2.09	10.04	15 7.9	8.0	7.95	7.9 2.28	10.23		
10.38	2.28	4n	7.9	8.0	8.1 8.05		2.21	9.41	16 7.1	7.3	7.20	7.2 2.26	9.46 9.51		
9.76	2.26	5n	7.4	7.5	7.5 7.50		2.05	10.55	17 ~~7.2~~			8.5 2.30	10.80		
9.26	2.26	6n	6.8	6.9	7.1 7.00		2.04	10.84	18			8.8 2.33	11.13		
9.76	2.26	7n	7.3	7.4	7.6 7.50		2.04	10.74	19 ~~8.4~~			8.1 2.32	11.02		
10.39	2.29	8n	7.9	8.0	8.2 8.10		2.04	11.24	20			9.2 2.37	11.57		
11.02	2.32	9n			8.7 8.7		2.04	11.14	21 0			9.1 2.36	11.46		
							2.04	11.34	22			9.3 2.38	11.68		
							2.04	11.74	23			9.7 2.42	12.12		
									24						

11:10

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Plates taken Feb. 2, 1913 -
Plotted.

Scale K.

February 18, 1913

2:50

Mc 2524

	P.84 Mc 2529	Meaw.		Diff.
5				
6				
8	P.84			Diff.
9	Mc 2529	Meaw.		
10	4.8 5.2	5.00	± 2	+3.89
11	5.1 5.4	5.25	± 2	4.17
12	5.4 5.9	5.65	± 3	4.08
13	5.9 6.1	6.05	± 1	4.17
14	6.2 6.7	6.45	± 3	4.07
15	6.5 7.1	6.80	± 3	4.14
16	6.9 7.2	7.05	± 2	4.21
17	7.2 7.5	7.35	± 1	4.14
18	7.8 8.0	7.90	± 1	4.02
19	8.0 8.2	8.10	± 1	4.18
20	8.3 8.5	8.40	± 1	4.19
23	8.9 9.0	8.95	± 0	4.25 ~~3.89~~
25	9.2 9.7	9.45	± 3	4.28
26	9.8	9.8	a.	4.39
27	n.s.			

10-13 6/4 8/4 -0.15 +0.20

14-18 9/5 10/5 -0.18 +0.20

19-25 5/4 5/4 -0.12 +0.12 copied

all 20/13 23/13 ∓.15 +.18

	P.84 Mc 2529	Meaw		Diff.
5.4	6.1	5.75	± 3	+0.64
6.2	6.7	6.45	± 3	0.53
7.3	8.1	7.90	± 4	0.40
8.1	8.7	8.40	± 3	0.30
8.3	8.9	8.60	± 3	0.29
9.0	9.2	9.10	± 1	0.32
9.3	9.8	9.55	± 2	0.18
9.9		9.9	a	0.27

5-9 13/4 13/4 -0.32 +0.32

10-12 7/3 6/3 -0.23 +0.20 copied.

20/7 19/7 -.29 +.27

M.A.R.

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Series taken Feb. 2, 1913

copied February 18. 1913.

Scale 11-

Mc 2525 1023-15 (Series 26)

			curve	Magn.	P.C.		Magn.	cont.
	1				6.9	0.46	7.36	28 9.8 4.35 14.15
1 is far from c.	2	.			7.3	0.41	7.71	29 nts.
near edge.	3	.			* 6.4	0.40	* 7.80	
	4	.			7.3	0.41	7.71	
	5	.			7.2	0.43	7.63	
	6	.			7.8	0.36	8.16	
	7	4.9	+4.07	8.97	8.2	0.32	8.52	
	8	.			8.0	0.33	8.33	
	9	4.8	4.06	8.86	8.7	0.28	8.98	
	10	.			8.7	0.28	8.98	
	11	5.3	4.08	9.38	9.2	0.25	9.45	
	12	5.4	4.08	9.48	9.6	0.23	9.83	
	13	5.7 (5.55)	5.4 4.09	9.64	9.3 (9.30)	0.24	9.54	
	14	5.7	4.10	9.80	9.8	0.22	10.02	
	15	6.3	4.12	10.42				
	16	6.2	4.12	10.32				
	17	6.7	4.13	10.83				
	18	7.2	4.14	11.34				
	19	7.3 (7.30)	4.14	11.44				
	20	7.3	7.3 4.14	11.44				
	21	8.1	4.18	12.28				
	22	8.2	4.19	12.39				
	23	8.2	4.19	12.39				
	24	8.9	4.24	13.14				
	25	8.9	4.24	13.14				
	26	9.0	4.25	13.25				
	27	9.3	4.29	13.59				

Cont →

* Star 3 p.c. Looked up by Miss O'Reilly. Could not be either 7.4 or 6.4. Her estimate was 6.9. Reject, as there was probably a mistake in measuring or recording.
H.S.L. March 30, 1915.

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MC 2526 C 2

				P.C.					
too far on edge from centre.	1	.			6.1	0.55	6.65	21	9.1	4.26	13.36
on edge	2	.			6.3	0.53	6.83	28	9.3	4.29	13.59
	3	3.6			6.4	0.52	6.92	29	9.5	4.31	13.81
	4	4.1			7.2	0.48	7.62	30	9.9	4.36	14.26
	5	.			7.1	0.43	7.53				
	6	.			7.7	0.36	8.06				
	7	4.7	+4.06	8.76	8.3	0.32	8.62				
	8	.			8.3	0.32	8.62				
	9	5.0	4.07	9.07	8.6	0.30	8.90				
	10	5.7 (5.80) 5.9	4.10	9.90	9.8 (9.85) 9.9	0.20	10.05				
	11	5.3	4.08	9.38	9.2	0.24	9.44				
	12	5.3	4.08	9.38	9.4	0.24	9.64				
	13	5.8	4.10	9.90	9.9	0.20	10.10				
	14	6.3	4.12	10.42							
	15	6.3	4.12	10.42							
	16	6.9	4.13	11.03							
	17	7.1 (6.95) 6.8	4.14	11.09							
	18	6.8 (6.85) 6.9	4.14	10.98							
	19	7.2	4.14	11.34							
	20	7.9	4.17	12.07							
	21	7.7 (7.70) 7.7	4.16	11.86							
	22	8.0	4.18	12.18							
	23	8.2	4.20	12.40							
	24	8.2	4.20	12.40							
	25	8.3	4.20	12.50							
	26	9.0	4.25	13.25							

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Scale 4.

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Mc 2527 — 9K — Mc 2528 — 11 9K (3 (10-14.7)

alt +20 — alt -2

Pc

	B. curve											
1	B. curve			5.8	+0.62	6.42	1	4.3	+4.06		8.1	0.23	8.43
2	3.2			6.9	0.46	7.36	2	4.7	4.06	8.76	8.7	0.29	8.99
3	4.2			8.0	0.33	8.33	3	5.2	4.08	9.28	9.2	0.24	9.44
4	4.7	4.06	8.76	8.7	0.28	8.99	4	5.3	4.08	9.38	9.7	0.23	9.93
5	5.1	4.08	9.18	8.7	0.28	8.99	5	5.9	4.10	10.00	10.0	0.20	10.20
6	5.2	4.08	9.28	9.3	0.24	9.54	6	6.3	4.12	10.42			
7	6.2	4.11	10.31				7	6.8	4.13	10.93			
8	7.0	4.13	11.13				8	7.1	4.14	11.24			
9	7.8	4.16	11.96				9	7.7	4.16	11.86			
10	8.2	4.18	12.38				10	7.7	4.16	11.86			
11	8.2	4.19	12.39				11	8.7	4.24	12.94			
12	8.4	4.21	12.61				12	9.0	4.26	13.26			
13	9.0	4.25	13.25				13	9.7	4.34	14.04			
14	9.8	4.35	14.15				14	9.9	4.36	14.26			
15	9.9	4.35	14.25				15	9.9	4.36	14.26			

B

ε

δ

γ

6.1 0.56 6.66 +4.11 10.21

6.2 0.54 6.74 4.12 10.32

5.3 4.08 9.38

5.7 0.64 6.34 4.10 9.80

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Series lateen Feb. 2, 13.

Scale X

February 18, 1913.

Mc 2529 Pole See P. 80 for reduction.

		D.C.
5		6.1
6		6.7
8		8.1
9		8.7
10	5.2	8.9
11	5.4	9.2
12	5.9	9.8
13	6.1	
14	6.7	
15	7.1	
16	~~7.5~~ 7.2	
17	7.5	
18	8.0	
19	8.2	
20	8.5	
23	~~8.5~~ 9.0	
25	9.7	
26	t.f.	

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Series taken Feb. 2, 13.

Scale 11

February 19, 1913

11:10 Mc 2529 Pole Remeasured

	Mc 2533 P.88		meaw.	Diff.	Mc 2535 P.88		meaw.	Diff.
5					6.1	5.3	5.70 4 4	+0.69
6					6.8	6.2	6.50 3 3	0.48
8					8.0	7.8	7.90 1 1	0.80
9					8.7	8.5	8.60 1 1	0.10
10	5.1	5.0	5.05 10	~~+1.84~~ 3.84	8.9	8.8	8.85 10	0.04
11	5.4	5.4	5.40 00	4.02	9.1	9.3	9.20 1 1	0.22
12	5.7	5.9	5.80 1 1	3.93	9.5	9.9	9.85 0 1	-0.12
13	6.1	6.2	6.15 1 0	4.02				
14	6.4	6.7	6.55 2 1	3.97				
15	6.7	7.2	6.95 3 2	3.99				
16	7.2	7.4	7.30 1 1	3.96				
17	7.5	7.7	7.60 1 1	3.89				
18	7.9	8.0	7.95 1 0	3.97				
19	8.1	8.2	8.15 1 0	4.13				
20	8.3	8.5	8.40 1 1	4.19				
23	8.9	9.1	9.00 1 1	4.20				
25	9.5	9.5	9.50 0 0	4.23				
26	10.0	9.9	9.95 0 1	4.24				
27								

9 9
4 4
+0.22 -.22

0 2
3 3
.00 +.01

9 1
7 1
+.13 -.10

4
8 2
5 5
-0.08 +.04

6 4
4 4
-.15 +.10

3 1
5 5
-.06 +0.02

8
12 7
14 14
-.09 +.05

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Scale R

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Mc 2530 6K

	curve		magn.	O.C.
1	5.8	+ 3.92	9.72	9.9 − 0.05 = 9.85
2	6.1	3.95	10.05	m.s.
3	6.3	3.97	10.27	
4	6.7	4.00	10.70	
5	7.1	4.03	11.13	
6	7.2 8.00	4.04	11.24	
7	8.0	8.0 4.12	12.12	
8	7.7 7.70	7.7 4.10	11.80	
9	8.2	4.14	12.34	
90	8.3	4.14	12.44	
11	8.7	4.17	12.87	
12	9.0	4.20	13.20	
13	9.3	4.22	13.52	
14	9.6	4.24	13.84	
15	9.9	4.28	14.18	

Mc 2531 96K.

	curve		magn.	P.C.		
1	4.6 4.50 4.4	+1	3.82	8.32	8.7	+0.07 −0.43 = 8.77 8.63
2	4.3 4.30 4.3	.00	3.80	8.10	8.7	+0.07 = 8.77 8.63
3	4.9		3.86	8.76	9.7	−0.03 = 9.67
4	5.1		3.88	8.98	9.7	−0.03 = 9.67
5	5.9		3.93	9.83	10.0	−0.06 = 9.94
6	6.2		3.96	10.16		
7	7.1		4.03	11.13		
8	7.7		4.10	11.80		
9	8.2		4.14	12.34		
10	8.6		4.17	12.77		
11	8.9		4.19	13.09		
12	8.9		4.19	13.09		
13	9.2		4.21	13.41		
14	9.8		4.27	14.07		
15	9.9		4.28	14.18		

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Scale U. February 19, 1913.

Mc 2533 C3=5+15

				P.C.						
1	B.			5.6	+0.69	6.29	27	8.1	4.13	12.23
too far from center 2	.			5.9	0.61	6.51	28	8.3	4.14	12.44
3	.			6.1	0.55	6.65	29	8.9 (8.95)	4.19	13.14
4	3.1	.		6.3	0.50	6.80	30	9.8	4.27	14.07
5	.			6.6	0.42	7.02				
6	3.3	~~+3.77~~		6.7	0.40	7.10				
7	4.0	+3.77	7.77	7.2	0.30	7.50				
8	4.2 (4.15) 4.1	3.78	7.93	8.3	0.28	7.58				
9	4.7 (4.70) 4.7	3.84	8.54	8.2	0.14	8.34				
10	4.3 (4.30) 4.3	3.80	8.10	7.8	0.20	8.00				
11	4.7	3.84	8.54	8.2	0.14	8.34				
12	5.2	3.89	9.09	8.9	0.04	8.94				
13	5.1	3.88	8.98	8.4	0.12	8.52				
14	5.3	3.90	9.20	9.1	0.03	9.13				
15	5.6	3.91	9.51	9.7	-0.03	9.67				
16	5.9	3.94	9.84	9.9	-0.05	9.85				
17	5.9	3.94	9.84							
18	6.0	3.94	9.94							
19	6.2	3.96	10.16							
20	6.3	3.97	10.27							
21	6.4	3.99	10.39							
22	6.6	4.00	10.60							
23	7.2	4.04	11.24							
24	7.1	4.03	11.13							
25	7.4	4.06	11.46							
26	7.5	4.07	11.57							

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Series taken Feb. 2, 13

Scales.

February 19, 1913.

Mc 25 35 Pole

See page 85

5		5.3
6		6.2
8		4.8
9		~~7.8~~ 8.5
10	5.0	8.8
11	5.4	9.3
12	5.9	9.9
13	6.2	
14	6.7	
15	7.2	
16	7.4	
17	7.7	
18	8.0	
19	8.2	
20	8.5	
23	9.1	
25	9.5	
26	9.9	
27		

Cu

~~5.83~~

5.93

4.93

4.57

4.47

4.27

4.12

4.00

3.84

3.73

3.50

3.43

3.08

11.45

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MD
Series taken Dec. 12, 1912.

Scale 0.

February 25, 1913

9.26 MD 2340 Pole –

In	Magn (corr)		Dec. 1	Dec. 3.	MD 2344 p 91	MD 2351 p 95	Mean	Res.	Diff.
~~5.83~~		5	B		B	B	~~+17~~		
5.83	7.~~03~~ 16	6	1.2		1.1	1.2	1.17	0 1 0	+5.81
4.93	8.~~13~~ 26	8	3.2		3.1	3.2	3.17	0 1 0	4.93
4.57	8.~~47~~ 90	9	4.2		4.1	4.1	4.13	1 0 0	4.57
4.47	~~8.96~~ 9.10	10	4.5		4.2	4.3	4.33	2 1 0	4.58
4.23	~~9.58~~ 9.66	11	5.3		5.3	5.2	5.27	0 0 1	4.15
4.12	~~9.89~~ 9.95	12	5.1		5.8	5.5	5.67	0 1 2	8.06
4.00	~~10.29~~ 10.34	13	6.2		6.2	6.1	6.17	0 0 1	4.00
3.84	~~10.76~~ 10.77	14	6.8		6.4	6.6	6.60	2 2 0	3.92
3.73	11.06 7	15	~~7.2~~	7.2	6.8	7.1	7.03	2 2 1	3.91
3.50	11.~~53~~ 4	16		7.9	7.2	7.3	7.47	4 3 2	3.79
3.43	11.68 7	17		8.1	8.0	8.0	8.03	1 0 0	3.46
3.08	12.3~~1~~ 2	18		9.1	8.5	8.7	8.77	3 3 1	3.15
		19		9.7	9.4	9.1	9.40	3 0 3	2.88
		20		n.s.	9.9	9.4	9.65	3 2	2.94
		23				n.s.		2 3 2	
		25						5 5 5	
								+0.04 -0.06 -0.04	
								4 4 3 1	
								4 4 4	
								+0.10 -0.08 -0.05	
								11 3 8	Copied.
								4 5 5	
								+0.28 -0.06 -0.16	
								17 ~~19~~ 12	
								13 14 14	
								+.13 -.06 -.09	

MoL

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MD 2341 124 K.

	DC.1	DC.3	Curve	Magn.
1	4.8		+4.39	9.19
2	6.1		4.03	10.13
3	6.8		3.84	10.64
4	5.2 5.1 (5.15)		4.26	9.41
5		7.1	3.53	11.23
6		7.1 7.4 (7.25)	3.70	10.95
7		8.7	3.17	11.87
8		9.2 8.9 (9.55)	3.11	12.66
9		8.3	3.01	12.31
10		9.3	3.01	12.31
11		9.5	2.95	12.45
12		9.9	..	..
13				
14				
15				

MD 2342 B3

	DC.1	DC.3	Curve	Magn.
1	1.2		+5.80	7.00
2	1.3		5.75	7.05
3	1.9		5.49	7.39
4	2.1		5.40	7.56
5	2.2		5.37	7.57
6	3.1		4.98 5.31	8.28 8.41
7	2.9		5.05	7.95
8	3.9		4.68	8.58
9	4.2		4.58	8.78
10	5.0		4.81	9.31
11	5.2		4.26	9.46
12	5.5		4.17	9.67
13	5.2 5.2 (5.20)		4.26	9.46
14	5.2 5.2 (5.20)		4.26	9.46
15	6.2		4.00	10.20
16	6.4		3.95	10.35
17	6.3		3.98	10.28
18	6.3		3.98	10.28
19	6.9		3.81	10.71
20		7.7	3.67	11.07
21		7.3 7.7 (7.50)	3.63	11.13
22		9.0	3.12	12.12
23		9.2	3.05	12.25
24		9.8	3.82	13.62
25		10.0	..	..

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MD 2343 76 K.

	sc 1	sc 3	Curve	Magn.
1	3.2		+4.91	8.11
2	3.9		4.68	8.58
3	5.1		4.89	9.49
4	5.2		4.26	9.46
5	6.0		4.04	10.04
6	6.9		3.81	10.71
7		7.1	3.76	10.86
8		8.2	3.39	11.59
9		8.3	3.36	11.66
10		8.7	3.22	11.92
11		8.7	3.22	11.92
12		9.5	2.93	12.43
13		9.9	"	"
14				
15				

MD 2344.

Sept. 89 Pole

	sc 1	sc 3	Cu	Magn (corr)
5	B			
6	1.1			
8	3.1		4.96	8.19
9	4.1		4.60	8.83
10	4.2	4.3 4.25 0.1	4.56	8.94
11	5.3		4.24	9.67
12	5.8		4.10	10.03
13	6.2		3.99	10.32
14	6.4		3.94	10.47
15	6.8		3.84	10.77
16	7.2		3.73	11.07
17	8.0		3.46	11.60
18	8.5		3.30	11.94
19	9.4		2.97	12.51
20	9.9			
23				
25				

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Scale 0.

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MD 2345 105

			Curve	Magn.
1	2.1		+5.40	7.50
2	2.9	3.1 3.00	5.00	8.00
3	2.8	2.8 2.80	5.10	7.90
4	3.1		4.97	8.07
5	4.0		4.65	8.65
6	4.1		4.61	8.71
7	4.2		4.58	8.78
8	4.8		4.38	9.18
9	5.1		4.29	9.39
10	5.6	5.30	4.15	9.75
11	5.3	5.3	4.23	9.53
12	5.8		4.10	9.90
13	6.2		4.00	10.20
14	6.2		4.00	10.20
15	7.2	7.1 7.15 6.80	3.74	10.89
16	6.7	6.9	3.85	10.65
17	7.2		3.72	10.92
18	7.3		3.70	11.00
19	7.9	7.9	3.50	11.40
20	8.9	8.45	3.16	12.06
21	8.2	8.7	3.30	11.75
22	9.1		3.08	12.18
23	9.8		2.82	12.62?
24				

MD 2347 6 ~~6~~ K.

			Curve	Magn.
1	5.3		+4.23	9.53
2	6.1		4.02	10.12
3	6.3		3.98	10.28
4	6.9		3.81	10.71
5	7.1		3.77	10.89
6	~~7.3~~	8.2 8.85	3.39	11.39
7		9.0 8.7 8.70	3.17	12.02
8		8.7 8.7	3.22	11.92
9		9.1	3.10	12.27
10		9.7	2.87	12.57
11		9.8	2.82	12.62?
12				
13				
14				
15				

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MD Series taken Dec. 12, 1912.

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MD 2347 Dec. 101 K. MD 2348 12 6K.

		Curve	Magn.			Curve	Magn.
1	3.7	+4.92	8.12	1	2.2	+5.58	7.58
2	4.2	4.58	8.78	2	4.1	4.60	8.70
3	4.3	4.55	8.85	3	5.4	4.20	9.60
4	5.2	4.86	9.46	4	6.0	4.04	10.04
5	5.8	4.10	9.90	5	6.8	3.85	10.65
6	5.9	4.08	9.98	6	7.2	3.72	10.92
7	7.2	3.72	10.92	7	8.7 8.3	3.39	11.89
8	8.3	3.36	11.66	8	8.2 8.3	3.38	11.63
9	8.7	3.16	12.06	9	9.3	3.01	12.31
10	10.0	..	..	10			
11				11			
12				12			
13				13			
14				14			
15							

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1913phae.proj..989L

M10 Series taken Dec. 12, 12

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M10 2349 53K.

			Curve	Magn.
1	4.2		+4.58	8.78
2	5.1		4.29	9.39
3	5.2		4.26	9.46
4	5.9		4.08	9.98
5	6.2		4.00	10.20
6	6.3		3.98	10.28
7		7.9	3.50	11.40
8	8	8.2	3.39	11.59
9		8.4	3.32	11.72
10		8.9	3.16	12.06
11		9.1	3.09	12.19
12		9.5	2.92	12.42
13		NS.		

M10 2350 29K.

		Curve	Magn.
1	2.2	5.38	7.58
2	3.1	4.98	8.08
3	4.8	4.38	8.78
4	5.1	4.29	9.39
5	6.2	4.00	10.20
6	6.9	3.81	10.71
7	6.8	3.83	10.64
8	7.8	3.52	11.32
9	9.1	2.87	12.57
10	9.9	..	..
11			
12			
13			
14			
15			
16			
17			

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MD Series taken Dec. 12, 12

Scale 0. February 25, 1913.

MD 2351 Pole

sup. 89

5	B.	Cu Magn (corr)	
6	1.2	5.80	7.13
8	3.2	4.92	8.24
9	4.1	4.61	8.84
10	4.3	4.52	8.95
11	5.2	4.26	9.59
12	5.5	4.17	9.80
13	6.1	4.00	10.23
14	6.6	3.88	10.61
15	7.1	3.77	11.08
16	7.3	3.70	11.14
17	8.0	3.46	11.60
18	8.7	3.24	12.08
19	9.1	3.08	12.32
20	9.7	2.97	12.51.
23	n.s.		

11:10

Interrupted to make a plate.

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1913phae.proj..989L

1st MD series taken Dec. 12, 1912.

1.35 Scale O

Thursday February 27, 1913

MD 2313 P.

		MD 2318 λ 99	MD 2324 λ 102	Mean	Reid	Diff.
5	B	13	13			
6	1.3	1.2	2.1	1.53	2 3 6	+5.45
8	3.7	3.2	4.1	3.67	0 5 8 (4)	4.43
9	4.3	4.3	5.0	4.53	2 2 5	8.17 (4)
10	5.2	4.9	5.2	5.10	1 2 1	3.79
11	5.4	5.4	5.8	5.53	1 1 3	3.89
12	6.2	6.2	6.2	6.20	0 0 0	3.53
13	6.7	6.9	6.9	6.83	1 1 1	3.34
14	7.1	7.3	7.1	7.17	1 (1) 2 0 (1)	3.35
15	7.7	7.7	7.8	7.63	2 1 2	3.31
16	7.9	8.3	8.2	8.13	2 2 1	3.13
17	8.3	8.7	9.0	8.67	4 0 3	2.82
18	9.4	9.1	9.5	9.33	1 2 2	2.59
19	9.9	10.0	9.9	9.95	1 0 .	2.33
20	m s					

3	12	16
4	4	4
-0.08	-0.30	+0.40
5	2	5
5	5	5
-0.10	+0.04	+0.10
6	0	6
4	4	3
-0.15	0.00	+0.20
14	10	24
13	13	19
-.11	-.08	+.220

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Scale 0 Copied February 27, 1913.

MD 2314 20K

#		Curve	Magn.
1	3.9	+4.36	8.26
2	5.2	3.90	9.10
3	5.3	3.87	9.17
4	~~7.05~~ ~~7.2~~ 6.20	~~3.37~~ ~~3.36~~	10.42
5	6.2	3.61 ~~4.00~~	9.81
6	7.0	3.39	10.39
7	8.1	3.03	11.13
8	8.9	2.76 ~~3.16~~	11.66
9	9.1	2.68 ~~3.09~~	11.78
10	9.7	2.44 ~~2.86~~	12.14
11	9.9	~~2.38~~ 2.46	12.23
12	n.s.		
13			
14			
α	2.1	5.11	7.21
ε	2.9	4.75	7.65
ζ	4.0	4.31	8.31
δ	2.8	4.80	7.60

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MD 2315. 8K. alt +.20

		Curve	Magn.
1	3.1	+4.67	7.77
2	6.2	3.61	9.81
3	6.2	3.61	9.81
4	7.2	3.32	10.52
5	7.3	3.30	10.60
6	7.8	3.13	10.93
7	~~7.6~~ 8.5	2.90	11.40
8	9.5	2.52	12.02
9	9.7	2.44	12.14
10	9.9	2.38	12.28

α	B.		
ε	2.9	4.75	7.65
β	B.		
γ	1.0	5.75	6.75
δ	B		

MD ~~2521~~ 2316 69K. alt. +.17

		Curve	Magn.
α=1	2.6	+4.89	7.49
2	3.1	4.67	7.77
3	5.1	3.93	9.03
4	6.2	3.61	9.81
5	~~6.9~~ 6.9	3.42	10.32
6	7.4	3.27	10.67
7	8.0	3.08	11.58
8	9.0	2.71	11.71
9	9.7	~~2.94~~ 2.44	~~11.64~~ 12.14
10	10.0	2.32	12.32
11			

α	2.6	4.89	7.49
γ	4.6	4.09	8.69
δ	3.2	5.07	7.27
β	3.1	4.67	7.78

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MO
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	MO 2317	45K.	MO 2318 P.
			Sept. 96
	Curve	Magn.	
1	3.9	+4.36	8.26	5 B.
2	4.3	4.19	8.49	6 1.2
3	5.1	3.93	9.03	8 3.2
4	5.2	3.90	9.10	9 4.3
5	6.1	3.65	9.75	10 4.9
6	6.9	3.41	10.31	11 5.4
7	7.2	3.32	10.52	12 6.2
8	7.3	3.30	10.60	13 6.9
9	8.3	96 2.78	26 11.08	14 7.3
10	9.8	+0 2.34	20 12.14	15 7.7
11				16 8.3
12				17 8.7
13				18 9.1
14				19 10.0
15				
16				
17				
18				
α	1.2 ~~2.2~~	5.61	6.81	
ε	4.3	4.20	8.50	
β	2.0	5.17	7.17	
δ	2.45 2.2	2.7 4.94	7.39	

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1st MD Series taken Dec 12, 1912.

Scale 0.

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MD 2319 46K
alt. +.22

		Curve	Magn.
1	2.1 = β	+5.10	7.20
2	3.2	4.62	7.82
3	4.3 = ε	4.19	8.49
4	6.4	6.3 3.~~48~~ 5.3	10.~~16~~ 03
5	6.2	6.3 3.60	9.85
6	7.7	3.16	10.86
7	7.9	3.10	11.00
8	8.1	3.03	11.13
9	9.9	2.33 6	12.28 6
10	~~F.~~		
11			
12			
α	β.		
1 = β	2.1	5.10	7.20
γ	2.1	5.10	7.20
3 = ε	4.3	4.19	8.49
δ	3.2	4.62	7.82

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MD 2320 22K.
alt. +.23.

		Curve	Magn.
1 = β.		~~4.67~~	
2	3.1	+4.67	7.77
3	5.3	3.86 ~~4.50~~	9.16 ~~9.80~~
4	5.3	3.86 ~~4.50~~	9.16 ~~9.80~~
5	6.8	3.49 4	10.29 4
6	7.8	3.15	10.95
7	8.1	3.02	11.12
8	9.8	3.40	12.20
9	~~= 10.0~~	2.~~43~~ 3	12.~~43~~ 13
10			
α	1.3	5.58	6.88
1 = β	2.1	4.83	7.53
γ	2.1	5.10	7.20
ε	3.3	4.~~56~~ 59	9.89 7
δ	4.2	4.22	8.42

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1913phae.proj..989L

1st M△ Series taken Dec. 12, 1912.

Scale O. Cepheid February 27, 1913. Cepheid

M⊙2321 9K. M⊕2322 47K.

alt. +.21 alt. +.22

		Curve	Magn.			Curve	Magn.
α = 1				1	2.1 (2.00) 1.9	+5.16	7.16
	2	3.1	+4.67	7.77	2 1.9 (2.00) 2.1	5.16	7.16
	3	4.1	4.28	8.38	3 6.1	3.64	9.74
	4	4.3	4.19	8.49	4 6.7	3.49	10.19
	5	5.4	3.84	9.24	5 6.9	3.41	10.31
	6	5.8	3.72	9.52	6 8.0	3.07	11.07
	7	7.2	3.32	10.52	7 8.1	3.03	11.13
	8	7.7	3.18	10.88	8 9.2	2.63	11.83
	9	8.9	2.76	11.66	9 ∫.		
Rec. covered pt. ?	10	9.8 3	2.40	12.20	10 ∫.		
	11						
1 = α		2.0	5.16	7.86			
	β	2.1	5.10	7.20			
	γ	1.9	5.21	7.11			
	δ	1.89	5.21	7.11			
	ε	2.2	5.06	7.26			

Film badly streaked ..covering ∫ objects.

M.O.R.

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MA
1st Series taken Dec. 12, 1912.

Scale 0. Copied February 27, 1913.

MD 2323 16 KS.

alt +.20

		Curve	Magn.
1	4.1	+4.27	8.37
2	4.1	4.27	8.37
3	5.1	3.93	9.03
4	5.3	3.87	9.17
5	6.3	3.59	9.89
6	7.7	3.18	10.88
7	8.8	2.79	11.59
8	8.9	2.75	11.65
9	9.3	2.60	11.90
10	9.8	2.40	12.20
11			

MD 2324 Per

See p. 96

5	Q.
6	2.1
8	4.1
9	5.0
10	5.2
11	5.8
12	6.2
13	6.9
14	7.1
15	7.8
16	8.2
17	9.0
18	9.5
19	n.s.
20	

This Series seems to be most unsatisfactory. Plates have many defects and films are streaked covering very faint stars.

Per E.F.C.

MOR.

11:15.

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1913phae.proj..989L

MD Series taken Dec. 16, 1912.

Scale 0.

February 28, 1913.

2:35- MD 2354 Pole.

		MD 2359 N 106	Mean	Diff.
5	B.	1.2	1.20 .0	5.19
6	2.1	2.2	2.15 1 0	4.83
8	4.1	4.2	4.15 1 0	3.95
9	5.1	5.1	5.10 0 0	3.60
10	5.3	5.3	5.30 0 0	3.59
11	~~5.5~~ 5.7	6.1	5.90 2 2	3.52
12	6.2	6.4	6.30 1 1	3.43
13	6.7	6.8	6.75 1 0	3.42
14	7.3	7.2	7.25 ~~0~~ 1 (1 0)	3.27
15	8.0	8.3	8.15 2 1	2.79
16	8.2	8.7	8.45 2 3	2.81
17	9.0	9.1	9.05 0 1	2.44
18	9.5	9.5	9.50 0 0	2.42
19	∓	R.S.		
20				

2 0
3 4
-.04 .00

3 3
5 5
-.06 +.06

4 5
4 4
-.10 +.12

9 8
12 13
-.08 +.06

M.O.R.

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MD 2355 98K.
alt. +.06

		Curve	Magn.
1	B.		
2	4.1	+3.96	8.06
3	5.6	3.59	9.19
4	6.1	3.50	9.60
5	6.3	3.48	9.78
6	7.2	3.23	10.43
7	8.2	2.84	11.04
8	9.0	2.53	11.53
9	9.6	2.29	11.89
10	9.9	~~2.14~~	~~12.04~~
11	n.s.		

MD 2356 D4 (7-15)
alt. -.19

		Curve	Magn.
1	B		
2	B		
3	B.		
4	B.		
5	1.0	+5.83	6.33
6	1.2	5.29	6.49
7	1.2	5.29	6.49
8	2.0 2.0 (2.00)	4.80	6.81
9	1.2 1.3 (1.25)	5.25	6.50
10	2.0	4.81	6.81
11	2.2	4.71	6.91
12	2.7	4.50	7.20
13	2.9	4.42	7.32
14	3.7 3.7 (3.70)	4.17	7.81
15	3.9 3.8 (3.85)	4.05	7.90
16	3.1 3.2 (3.15)	~~4.32~~	7.47
17	4.2	~~4.92~~	8.12
18	4.1	3.96	8.06
19	4.2	3.92	8.12
20	4.8	3.76	8.56
21	5.2	3.67	8.87
22	6.7	3.56	9.26
23	5.9 (5.55)	3.52	9.42
24	5.3 5.8	3.60	9.15
25	6.4	3.46	9.86
26	6.2 6.3 (6.25)	3.48	9.78

		Curve	Magn.
27	7.0	3.30	10.30
28	7.2	3.23	10.43
29	7.3	3.20	10.58
30	8.7	2.66	11.36
31	8.9	2.57	11.47
32	9.3	2.41	11.71
33	9.8	~~2.20~~	~~12.08~~
34	~~10.0~~	..	..

cont. above

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M 02357 C4 (+15) alt. +.16

		Curve	Magn.
1	1.0	+5.40	6.40
2	2.2	4.71	6.91
3	2.1	4.77	6.87
4	3.1	4.34	7.44
5	4.3	3.90	8.20
6	4.2	3.92	8.12
7	4.8	3.77	8.57
8	5.1	3.69	8.79
9	5.4	3.61	9.01
10	~~6.3~~ 6.25 ~~6.2~~ 6.20	3.49	9.74
11	6.1 6.3	3.49	9.69
12	6.2 6.25 6.3	3.49	9.74
13	6.8	3.36	10.16
14	7.2	3.23	10.43
15	8.0	2.91	10.91
16	~~7.3~~ 8.1	2.88	10.98
17	8.7	2.66	11.36
18	9.1	2.50	11.60
19	9.9	~~2.14~~ ..	12.04
20	10.0	..	
21	↓		

M 02358 +5K alt. +.16

		Curve	Magn.
1	4.1	+3.97	8.07
2	4.8	3.77	8.57
3	5.4	3.61	9.01
4	5.7	3.57	9.27
5	7.1	3.04	10.14
6	8.1	2.87	10.97
7	8.9	2.57	11.47
8	~~8.6~~ 93	2.42	11.72
9	9.9	~~2.14~~ ..	~~12.04~~
10	↓		
11			

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1913phae.proj..989L

Series taken Dec. 16, 1912.

Scale 0.

February 28, 1913.

MD 2359 Pole.

Sup. 103

MD 2360* 6K.

		2nd sc	Curve	Magn.
1		1 7.1	+ 3.28	10.38
2		2 7.7	3.05	10.75
3		3 8.2	284	11.04
4		4 8.7	2.66	11.36
5	1.7	5 9.0	2.53	11.53
6	2.2	6 ?.		
7		7 n.s.		
8	4.2			
9	5.1			
10	5.3			
11	6.1			
12	6.4			
13	6.8			
14	7.2			
15	8.3			
16	8.7			
17	9.1			
18	9.5			
19	n.s.			

* Cloud on acct of clouds.
Exp 4½ ~

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1913phae.proj..989L

Series taken Dec. 16, 1912.

Scale 0. Cepheid.

MD 2361 54 K.

alt. +.22

		Curve	Magn.
1	2.1	+4.77	6.87
2	3.1	4.34	7.44
3	5.1	3.69	8.79
4	5.2	3.67	8.87
5	6.8	3.36	10.16
6	6.9	3.33	10.23
7	7.7	3.01	10.71
8	8.9	2.58	11.48
9	9.1	2.50	11.60
10	↓		

February 28, 1913 – Cepheid.

MD 2362 102 K

alt. +.06

		Curve	Magn.
1	2.0	+4.81	6.81
2	3.2	4.30	7.50
3	5.0	3.71	8.71
4	5.2	3.67	8.87
5	5.9	3.52	9.42
6	6.7	3.39	10.09
7	7.2	3.23	10.43
8	8.1	2.88	10.98
9	9.9	~~2.14~~	~~12.04~~
10	n.s.		

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MD 2363 D6, (11-15) MD 2364 C7 (11+15)

	MD 2363 alt. −18			MD 2364 alt. +14		
		Curve	Magn.		Curve	Magn.
1	2.0	+4.81	6.81	1.0	+5.40	6.40
2	2.3	4.47 (6.8)	6.77 (9.8)	1.2	5.29	6.49
3	2.3	4.47 (6.8)	6.77 (9.8)	2.3	4.67	6.97
4	3.0	4.39	7.39	2.3	4.67	6.97
5	3.3 (3.90)	4.27	7.57	2.9	4.42	7.32
6	3.8 4.0 (3.65)	4.02	7.92	3.2 (4.45)	4.30	7.50
7	~~3.3~~ 3.6 3.7	4.12	7.77	4.3 4.6	3.85	8.30
8	4.1	4.96 (3)	8.06 (8)	3.9	4.02	7.92
9	~~4.2~~	~~4.92~~ (3)	~~8.12~~ (8)	4.0	4.10	8.00
10	5.1	~~3.59~~ (6)	~~8.69~~ (7)	4.1	3.96	8.06
11	5.2 (5.85)	~~3.57~~ (6)	~~8.87~~ (8)	5.2 (5.00)	3.67	8.87
12	5.9 5.8	3.53	9.38	4.9 5.1	3.71	8.71
13	5.3	3.64	8.94	5.3	3.64	8.94
14	5.4	3.61	9.81	6.1	3.50	9.60
15	5.6.	3.59	9.19	5.9 ~~bad~~	3.52	9.42
16	6.1	3.50	9.60	6.7	3.39	10.09
17	6.8	3.36	10.16	7.2 (8.00)	3.23	10.43
18	7.1	3.28	10.38	8.0 8.0 (7.30)	2.91	10.91
19	~~6.7~~ 7.3	3.20	10.50	7.3 7.3 (7.75)	3.20	10.50
20	7.4	3.18	10.58	7.7 7.8	3.01	10.76
21	7.9	2.96	10.86	8.1	2.88	10.98
22	8.7	2.65	11.35	8.3	2.81	11.11
23	8.7	2.66	11.35	8.9	2.58	11.48
24	8.8	2.60	11.40	9.8	2.21	12.01
25	9.1 (9.75)	2.50	11.60	9.9	~~2.12~~	~~12.02~~
26	9.8 9.7 (9.35)	2.21	11.96	7.		
27	9.4 9.3	2.40	11.75			
28	9.9	~~2.12~~	~~12.02~~			

M.O.R.

3.50

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1913phae.proj..989L

Series taken Feb. 6, 1913.

Scale 2.

March 18, 1913.

MC 2570. Pole

						P.C.			Mean	Resid.		Diff.
5						5.4	5.4	5.3	5.37	0	0	1	1.02
6						6.1	6.2	6.0	6.10	0	1	1	0.88
8						7.3	7.4	7.2	7.30	0	1	1	0.80
9		AC 2575 h.111	AC 2581 h.113	Mean	Resid.	8.0	8.0	8.1	8.03	0	0	1	0.67
10	4.7	4.8	4.7	4.73	0 1 0	4.16	8.3	8.3	8.3	8.30	0	0	0	0.56
11	5.2	5.2	5.2	5.20	0 0 0	4.22	8.7	8.8	9.1	8.87	2	1	2	0.55
12	5.5	5.5	5.6	5.53	0 0 1	4.20	9.1	9.0	sup.	9.05	1	0	.	0.68
13	6.0	5.9	6.0	5.97	0 1 0	4.20	9.5	9.5	9.3	9.43	1	1	1	0.74
14	6.3	6.3	6.2	6.27	0 0 1	4.25	10.0	9.9	10.0	9.97	0	1	0	0.55
15	6.6	6.5	6.6	6.57	0 1 0	4.37								
16	6.9	6.9	6.9	6.90	0 0 0	4.36								
17	7.3	7.3	7.3	7.30	0 0 0	4.19								
~~16~~														
~~17~~														
18	7.5	7.7	7.7	7.63	1 1 1	4.29								
19	8.1	7.9	8.1	8.03	1 1 1	4.25								
20	8.3	8.2	8.3	8.27	0 1 0	4.32								
23	8.9	8.7	8.7	8.77	1 1 1	4.43								
25	9.2	9.0	9.0	9.07	1 1 1	4.66								
26	9.9	9.4	9.3	9.53	4 1 2	4.66								
27		9.9	10.0	9.95	1 0	4.60								

0 2 2
4 4 4
0.00 +.05 -0.05

0 1 1
5 5 4
.00 -0.02 +.02

0 1 1
9 9 8
.00 +.01 -0.01

0 0 0
5 5 5
.000 .00 .00

0 1 2
5 5 5
.00 -.02 +.04

6 5 4
4 5 5
+.15 -.10 -.08

6 6 2
14 15 15
+0.04 -0.04 -.01

MOR.

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1913phae.proj..989L

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Scale X. Copied March 18, 1913.

Mc 2571 13 K.
(Seq. selected by E. F. C.)

	Curve	Magn.	P.C.	Magn.
1	4.0	+4.19	8.19	7.0 +0.73 7.73
2	5.1	4.19	9.29	8.9 +0.60 9.50
3	6.3	4.23	10.53	10.0 +0.60 10.60
4	7.0	4.27	11.27	
5	7.5	4.30	11.80	
6	7.7	4.32	12.02	
7	8.1	4.37	12.47	
8	8.3	4.39	12.69	
9	8.5	4.42	12.92	
10	8.7	4.46	13.16	
11	9.0	4.51	13.51	
12	9.6	4.64	14.24	
13	9.8	4.69	14.49	
14	9.8	4.69	14.49	
Reject: probably a def.	~~15~~ 10.0	4.72	14.72	

Mc 2572 Neb. Orion *.

		P.C.
1	4.7	8.4
2	5.1	9.2
3	5.3	9.2
4	6.0	9.8
5	6.3	
6	6.6	
7	6.9	
8	7.8	
9	8.1	
a	8.3	
b	tp.	
c	8.7	
d	tp.	
e	tp.	
f		

* Seq. does not come in center of pl. - nearer edge. Images are ill focus. Plate to be rejected?

M.O.R.

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1913phae.proj..989L

Series taken Feb. 6, 1913.

Scale 11.

Copied March 18, 1913.

	Mc 2594			23 Ks.			Mc 2595 Pole. Sec. 109	
		alt. 7.21						
		Curve	Magn.	P.C.	Curve	Magn.	P.C.	
1	3.2			6.3	+0.83	7.13	5	5.4
2	3.9			7.0	0.73	7.73	6	6.2
3	4.3	+4.19	8.49	8.3	0.61	8.91	8	7.4
4	5.1	4.19	9.29	9.6	0.60	10.20	9	8.0
5	5.4	4.20	9.60	9.9	0.60	10.50	10 4.8	8.3
6	6.1 (6.00)	5.9 4.21	10.21				11 5.2	8.8
7	6.5 (6.0)	4.21	10.21				12 5.5	9.0
8	6.4 (6.35)	6.3 4.23	10.58				13 5.9	9.5
9	7.0	4.28	11.28				14 6.3	9.9
10	7.4	4.30	11.70				15 6.5	
11	8.3	4.39	12.69				16 6.9	
12	8.7	4.46	13.16				17 7.3	
13	9.0	4.51	13.51				18 7.7	
14	9.5	4.62	14.12				19 7.9	
15	~~9.5~~ (10.0)	4.72	14.72				20 8.2	
							23 8.7	
							25 9.0	
							26 9.4	
							27 9.9	

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	Mc 2577 96 Ks.			ac			Mc 2579 98K.			PC		
		Curve	Imagn.		Curve	Imagn.		Curve	Imagn.		Curve	Imagn.
1	3.6	.		6.4	+0.81	7.21	1 B.	.		5.2	+1.03	6.23
2	4.9	+4.19	9.09	8.0	0.64	8.64	2 4.2 5.20	+4.19	8.39	7.3 8.85	0.70	8.00
3	5.2	4.20	9.40	8.9	0.60	9.50	3 5.2 5.2	4.20	9.40	9.0 8.1	0.60	9.45
4	5.3	4.20	9.50	9.1	0.60	9.70	4 5.4 5.40	4.20	9.60	~~9.8~~	Imps:	
	~~3.6~~. imp. on P.C.?											
5	6.3	4.23	10.53 9.3				5 5.6	4.20	9.80	9.9		
6	7.1	4.28	11.38				6 6.4	4.23	10.63			
7	7.2	4.29	11.49				7 6.9	4.26	11.16			
8	8.0	4.36	12.36				8 7.3	4.29	11.59			
9	8.2	4.38	12.58				9 7.6	4.31	11.91			
10	8.4 8.95	4.41	12.81				10 8.0	4.35	12.35			
11	9.0 8.9 8.90	4.50	13.45				11 8.4	4.40	12.80			
12	8.8 9.0	4.50	13.40				12 8.9	4.50	13.40			
13	9.3	4.58	13.88				13 9.1	4.53	13.63			
14	9.9	4.71	14.61				14 9.3	4.58	13.88			
15	9.9	4.71	14.61				15 9.7	4.66	14.36			

M.C.R.

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Lewis taken Feb. 6, 1913.

Grade U

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Mc 2580 123K. Mc 2581 Pole

(Seq. selected by E. F. S.)

Seq. p. 109

	Curve	Magn.		P.C.	Magn.		P.C.
1	4.2	+4.19	8.39	7.3	+0.70	8.00	5 53
2	5.0	4.19	9.19	8.2	0.62	8.82	6 6.0
3	5.8	4.21	10.01	9.1	0.60	9.70	8 7.2
4	6.2	4.22	10.42	n.s.			9 8.1
5	6.6	4.24	10.84				10 8.3
6	7.1	4.28	11.38				11 9.1
7	7.25 7.3 7.30	4.28	11.53				12 Ruf.
8	7.3 7.3	4.29	11.59				13 9.3
9	7.8	4.33	12.13				14 10.0
10	8.1	4.34 6	12.44 6				15
11	n.s. 8.3	4.39	12.69				16
12	8.5	4.42	12.92				17
13	8.7	4.46	13.16				18
14	9.1	4.53	13.63				19
15	9.3	4.58	13.88				20
16	9.5	4.62	14.12				23
17	9.8	4.69	14.49				25
							26
							27

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1913phae.proj..989L

Series taken Feb. 6. 1913.

11.05 Scale 2.

Monday March 24, 1913

MC 2583 Pole.

		MC 2588 p.116	MC 2594 p.119	Mean		Diff.
5						
6						
8						
9						
10	4.7	4.9	4.7	4.77	1 1 1	+4.12
11	5.3	5.2	5.2	5.23	1 0 0	4.19
12	5.6	5.6	5.5	5.57	0 0 1	4.16
13	6.1	6.0	5.9	6.00	1 0 1	4.17
14	6.3	6.2	6.2	6.23	1 0 0	4.29
15	6.7	6.7	6.6	6.67	0 0 1	4.27
16	7.1	7.0	6.9	7.00	1 0 1	4.26
17	7.4	7.1	7.2	7.23	2 1 0	4.26
18	4.8	7.3	7.5	7.53	3 2 0	4.39
19	7.9	7.9	8.0	7.93	0 0 1	4.35
20	8.3	8.2	8.2	8.23	1 0 0	4.36
23	8.7	8.7	8.7	8.70	0 0 0	4.50
25	9.0	9.0	9.0	9.00	0 0 0	4.73
26	9.3 9.2	9.4	9.5	9.48	1 0 1	4.79
27	9.9	9.8	9.7	9.80	1 0 1	4.75 ~~5.17~~

			Mean		Diff.
5.3	5.2	5.3	5.27	0 1 0	+1.12
6.0	6.0	6.0	6.00	0 0 0	0.98
7.2	7.2	7.3	7.23	0 0 1	0.87
7.9	8.0	7.9	7.93	0 1 0	0.77
8.1	8.1	8.1	8.10	0 0 0	0.79
8.7	8.8	8.6	8.70	0 1 1	0.72
9.1	9.1	9.0	9.07	0 0 1	0.66
9.5	9.9	9.4	9.60	1 3 2	0.57
9.8	.	9.8	9.80	0 . 0	0.72

0 0 1
4 4 4
.00 .00 .02

1/5 4 4/5
-.02 +.10 -.08

1 4 3
9 8 9
-.01 +.05 -0.03

2 1 3
5 5 5
+.04 +.02 -.06

6/5 3/5 1/5
+0.12 -.06 -.02

1/5 0/5 0/5
+.02 .00 .00

9/15 2/15 4/15
+0.06 -.01 -.03

copied.

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Scale 2.

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	Mc 2585		101 K.			Mc 2586		126 K.		
		Curve	Imagn.	P.e.	Curve	Imagn.		Curve	Imagn.	P.e.	Curve	Imagn.
1	4.0	.	.	7.2	+0.86	8.06	3.8	.	.	6.6	+0.91	7.51
2	4.9 4.7 (4.80 / 4.85)	+4.14	8.93	8.1	0.78	8.88	4.9 4.7 (4.80)	+4.13	8.93	7.9 7.9 (7.90 / 9.05)	0.79	8.69
3	4.8 4.9	4.14	8.99	8.3	0.76	9.06	5.3 5.3 (5.30)	4.17	9.47	9.1 9.0	0.69	9.74
4	5.4	4.18	9.58	9.0	0.69	9.69	5.8	4.20	10.00	9.7	0.62	10.32
5	5.7	4.20	9.90	9.7	0.63	10.33	6.1	4.22	10.32	10.0	0.60	10.60
6	5.9	4.21	10.11	9.8	0.62	10.42	6.9	4.30	11.20			
7	6.6	4.26	10.86				7.2	4.33	11.53			
8	7.3	4.34	11.64				7.3	4.34	11.64			
9	7.6	4.38	11.98				8.0	4.44	12.44			
10	8.87	4.59	13.29				8.2	4.49	12.69			
11	8.9	4.64	13.54				8.6 (8.65)	4.58	13.18			
12	9.0	4.65	13.65				8.6 8.7	4.59	13.24			
13	9.2	4.70	13.90				9.2	4.69	13.89			
14	9.8	4.83	14.63				n.s.!	.	.			
15	9.9	4.89	14.77				9.8	4.84	14.64			

Comp. for 2. Image large -

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Scale Y.

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	Mc 2587			54K.			Mc 2588 Orle.		
		Curve	Imagn.	O.C.	Curve	Imagn.		Curve Imagn.	O.C.
1	3.2	.	.	6.2	+0.97	7.17	5 ~~5.2~~	.	5.2
2	3.7 4.95	.	.	6.9 8.70	0.89	7.79	6	.	6.0
3	4.9 5.0 5.15	+4.15	9.16	8.7 8.7 8.5.0	0.71	9.41	8	.	7.2
4	5.2 5.1 5.90	4.17	9.32	8.3 8.7	0.73	9.23	9	.	8.0
5	5.9 5.9	4.21	10.11	9.8	0.61	10.41	10 4.9	.	8.8
6	~~5.8~~ 6.1	4.22	10.32	9.9	0.60	10.50	11 5.2		8.8
7	6.3	4.24	10.54				12 5.6		9.1
8	7.1	4.31	11.41				13 6.0		9.9
9	7.3	4.34	11.64				14 6.2		
10	8.0 ~~8.65~~	4.44	12.44				15 6.7		
11	8.7 8.5 8.50	4.58	13.18				16 7.0		
12	8.5 8.5 8.60	4.56	13.06				17 7.1		
13	8.5 8.7	4.58	13.18				18 7.3		
14	9.0	4.66	13.66				19 7.9		
15	9.3	4.71	14.01				20 8.2		
							23 8.7		
							25 9.0		
							26 9.4		
							27 9.8		

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Scale 11 Copied March 24, 1913.

Mc 2590 C6 11+15°

	Curve	Magn.		P.C. Curve	Magn.				Magn.
too far from center 1	.	.		5.4 near edge	+1.07	6.47	27	8.2 8.20 8.2	+4.49	12.69
" " 2	.	.		5.9	1.00	6.90	28	8.1 8.15 8.2	4.48	12.63
" " " 3	.	.		6.3	0.95	7.25	29	8.2 8.20 8.2	4.49	12.69
4	3.2	.		6.3	0.95	7.25	30	9.0	4.65	13.65
" " " 5	.	.		6.3	0.95	7.25	31	9.0	4.65	13.65
6	4.0	.		7.0	0.88	7.88	32	9.1	4.68	13.78
" " 7	4.0	.		7.5	0.82	8.32	33	9.8	4.84	14.64
too very diffuse 8	.	.		7.3 7.30 7.3	0.85	8.15				
9	4.3	.		7.3 7.30 7.3	0.85	8.15				
10	4.3	.		7.8	0.80	8.60				
11	4.1	4.13	8.83	8.3	0.76	9.06				
12	4.8 5.00	4.14	8.94	8.3	0.76	9.06				
13	5.1 4.9	4.16	9.16	8.6	0.72	9.32				
14	5.3 5.25 5.2	4.17	9.42	8.9	0.70	9.60				
15	4.9 4.95 50	4.15	9.10	9.1	0.69	9.79				
16	5.3	4.17	9.47	9.1	0.69	9.79				
17	5.7	4.20	9.90	9.8	0.61	10.41				
18	6.2	4.23	10.43							
19	6.1	4.23	10.33							
20	6.2	4.23	10.43							
21	6.2	4.23	10.43							
22	6.4	4.24	10.64							
23	6.9	4.30	11.20							
24	7.1	4.31	11.41							
25	7.5	4.36	11.86							
26	7.6	4.38	11.98							

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Series taken Feb. 6, 1913.

Scale 4. Copied

March 24, 1913 Copied

Mc 2591 127 K.
(Seq. selected by E.F.S.)

		Curve	Magn.	P.C.	Curve	Magn.
						att. -19
1	4.9	+4.15	9.05	8.9	+0.10	9.60
2	5.1	4.16	9.26	8.9	+0.10	9.60
3	5.8	4.20	10.00	9.9	+0.51	10.41
4	6.2	4.23	10.43			
5	6.3	4.24	10.54			
6	7.1	4.32	11.42			
7	7.9	4.42	12.32			
8	8.1	4.47	12.57			
9	8.6	4.58	13.18			
10	9.0	4.65	13.65			
def.	~~11 9.2~~	~~4.69~~	~~13.89~~			
12	9.3	4.71	14.01			
def.	~~13 9.7~~	~~4.81~~	~~14.57~~			
14	9.8	4.83	14.63			
(no number 15)	15					

Mc 2592 79 K.
(Seq. selected by E.F.S.)

		Curve	Magn.	P.C.	Curve	Magn.
						att. +16
1	4.0	.	.	9.1	+4.87	7.77
2	4.3	.	.	8.2	0.77	8.97
3	5.2	+4.17	9.37	9.1	0.69	9.79
4	5.3	4.18	9.48	9.2	0.68	9.88
5	6.0	4.21	10.21	~~1~~	.	.
6	5.9	4.21	10.11	10.0	0.60	10.60
7	6.7	4.28	10.98			
8	7.3	4.34	11.64			
9	7.9	4.42	12.32			
10	8.1	4.47	12.57			
11	8.3	4.51	12.81			
12	8.9	4.63	13.53			
13	9.2	4.69	13.89			
14	9.3	4.71	14.01			
15	~~9.8~~	4.83	~~14.63~~	Prob. a def.		

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1913phae.proj..989L

Series taken February 6, 1913.

Scale 4. Copied March 24, 1913.

	Mc 2593 (Selected by E.F.L.) Curve	Magn.		103K. Curve	Magn.		Mc 2594 Pole (Sect. 114)	
1	4.3	.	.	7.4	+0.83	8.23	5	5.3
2	4.7	+4.13	8.83	8.0	0.79	8.79	6	6.0
3	5.3	4.18	9.48	9.2	0.78	9.98	8	7.3
4	6.1	4.22	10.32	9.7	0.62	10.32	9 7.3	7.9
5	6.2	4.23	10.43	10.0	0.60	10.60	10 4.7	8.1
6	7.1	4.31	11.41				11 5.2	8.6
7	7.3	4.34	11.64				12 5.5	9.0
8	7.9	4.42	12.32				13 5.9	9.4
9	8.2	4.49	12.69				14 6.2	9.8
10	8.7	4.59	13.29				15 6.6	
11	8.7	4.59	13.29				16 6.9	
12	9.1	4.68	13.78				17 7.2	
13	9.3	4.71	14.01				18 7.5	
14	9.8	4.84	14.64				19 8.0	
Prismatic companion of 5	9.8	4.84	14.64				20 8.2	
							23 8.7	
							25 9.0	
							26 9.5	
							27 9.7	

M O R.

12:35.

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1913phae.proj..989L

Selected plate near North Pole.

Scale M.O.

March 21, 1913.

10:05

	Ac 13546 L				Ac 13498 L			
	curve	Magn.		ac-Obsn. White Red	curve	Magn.		ac-Obsn. White Red
1	4.0	+2.10	6.10	22	4.2	+2.10	6.30	18
2	6.0	2.81	8.81	71	6.5	2.04	8.54	44
3	6.2	2.76	8.96	08	6.9	2.07	8.97	09
4	6.1	2.79	8.89	68	6.7	2.05	8.75	54
5	4.9	2.91	7.81	126	5.4	2.01	7.41	86
6	6.1	2.79	8.89	69	7.0	2.08	9.08	88
7	7.0				7.2	2.09	9.29	32
8	6.0	2.81	8.81	03	6.4	2.03	8.43	35
9	6.3	2.74	9.04	12	6.9	2.07	8.97	05
10	6.1	2.79	8.89	125	6.3	2.03	8.33	69
11	7.1				7.3	2.10?	9.40	73
12	4.3	2.80	7.10	29	5.3	2.01	7.31	08
13	4.3	2.80	7.10	02	5.2	2.02	7.22	14
14	3.8	2.63	6.43	117	4.2	2.10	6.30	104
15	5.4	2.92	8.31	30	6.7	2.05	8.75	14
16	5.1	2.92	8.02	118	6.0	2.01	8.01	17
17	5.9	2.84	8.74	56	6.4	2.03	8.43	25

+65
−59
8)+6
+.008

7)+632
+.903

+59
−61
8)−2
−.002

9)+575
+.639

MOR.

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1913phae.proj..9991

Selected Stars cont.

Scale 0.

March 27, 1913.

	Ac 13217 L				Ac 13685. L			
	curve	Magn.	ac-Ptm. White	ac-Ptm. Red	curve	Magn.	ac-Ptm. White	ac-Ptm. Red
1	3.2	3.28	6.48	00	2.6	4.13	6.13	25
2	6.8	2.20	9.00	90	5.3	3.48	8.78	68
3	6.7	2.23	8.93	05	5.3	3.48	8.78	10
4	6.9	2.14	9.04	83	5.3	3.48	8.78	57
5	4.3	3.01	7.31	76	4.0	3.75	7.75	120
6	6.8	2.19	8.99	79	5.2	3.50	8.70	50
7	7.7				6.3	3.29	9.59	62
8	6.1	2.50	8.60	18	5.3	3.48	8.78	00
9	6.1	2.50	8.60	32	5.2	3.50	8.70	22
10	5.9	2.56	8.46	82	4.8	3.56	8.36	72
11	8 9.6				6.4	3.27	9.67	100
12	4.3	3.01	7.31	08	3.2	3.99	7.19	20
13	4.1	3.06	7.16	08	3.1	4.01	7.11	13
14	3.1				2.1			
15	6.2	2.47	8.67	06	5.2	3.50	8.70	09
16	5.3	2.74	8.04	20	4.2	3.57	7.81	03
17	6.9	2.15	9.05	87	5.2	3.50	8.70	52

{ Error of a unit. Time obs'r peculiar

+39
−58
8) −19 6h+497
−.024 +.828

5
+40
−52
8) −12 8)+581
−.015 +.726
−.002

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Selected Stars cont

Scale W

March 27, 1913.

Ac 13819 L'

	Ac. 2	curve	Magn.	ac-Ptm. White	Red
1	7.2	-0.67	6.53	05	
2	8.7	-0.21	8.49		39
3	9.1	-0.08	9.02	14	
4	8.1	-0.21	8.48		28
5	7.5	-0.56	6.94		39
6	8.6	-0.24	8.36		16
7	9.1	-0.08	9.02		05
8	8.8	-0.18	8.62	16	
9	9.0	-0.11	8.89	03	
10	8.4	-0.30	8.10		46
11	8.9	-0.14	8.76		09
12	7.9	-0.45	7.45	06	
13	7.5	-0.57	6.93	15	
14	6.4	.			.
15	8.8	-0.19	8.61	00	
16	8.4	-0.30	8.10	26	
17	8.4	-0.30	8.10		08

+51
-34
8) +17
+.021

+182
-8
8) +174
+.218

Ac 13783 L'

	Ac 2	curve	Magn.	ac-Ptm White	Red
1	7.3	-0.86	6.44	04	
2	9.0	-1.09	7.91		19
3	n.s.	-		.	
4	9.3	-1.12	8.18		03
5	7.3	-0.86	6.44		11
6	9.3	-1.12	8.18		02
7	n.s.	.			.
8	9.8?	-1.29	8.51	27	
9	n.s	.		.	
10	8.7	-1.05	7.65		01
11	9.7	-1.17	8.53		14
12	n.s.	-0.		.	
13	8.1	-0.98	7.12	04	
14	6.3	.			.
15	8.3	-1.00	7.30	[13]	
16	9.0	-1.09	7.91	07	
17	8.7	-1.06	7.64		54

+11
-262

+1
-103
7) -102
-.146

Plate is very poor. Images are slightly elongated and plate has more defects than stars.

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	Ab 13819 L' (Bk. 40: 122 copies)	Ab 13921 L' (Bk. 40: 145 copies)	Ab 13931 L' (Bk. 40: 146 copies)	Ab 13941 L1 (Bk. 42: 71 copies)	Ab 13948 L1 (Bk. 42: 71 copies)	~~Mean~~						Phm - Magn.
	Magn.	Magn.	Magn.	Magn.	Magn.	Mean	Resid.					
1r	..	..	..	5.43	5.38	5.40	.	.	.	03	02	-14
2r	6.94	663	661	6.77	6.60	6.71	23	08	10	06	11	-16
5	6.53	6.48	6.41	6.49	6.49	6.48	05	00	07	01	01	00
6	6.93	7.11	7.07	7.04	7.01	7.03	10	08	04	01	02	+03
7	7.45	7.11	7.34	7.44	7.58	7.38	07	27	04	06	20	+01
9	8.61	8.73	8.63	8.43	8.47	8.57	04	16	06	14	10	+04
3r	8.10	7.78	7.49	7.86	7.86	7.82	28	04	33	04	04	-18
4r	8.49	8.55	8.17	8.29	8.31	8.36	13	19	19	07	05	-15
5r	8.76	8.79	8.97	9.30	9.24	9.01	25	22	04	29	23	-34
+87° 15	8.10	8.02	7.92	7.86	7.86	7.95	15	07	03	09	09	-11
+87° 12	8.10	8.02	7.92	7.86	8.01	7.98	12	04	06	12	03	+20
+88° 2	8.49	8.27	8.00	8.14	8.31	8.24	25	03	24	10	07	-14
+88° 115	9.02	8.79	8.75	9.00	9.10	8.93	09	14	18	07	17	-05
+88° 105	8.36	8.55	8.17	8.43	8.31	8.36	00	19	19	07	05	-16
+88° 90	9.02	..	9.30	9.30	9.24	9.22	20	.	08	08	02	-25 -30
+88° 86	8.62	8.73	8.63	8.43	8.31	8.54	08	19	09	11	22 (3)	+24
+88° 80	8.99	8.90	9.08	9.30	8.93	9.04	05	14	04	26	11	+12

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Scale U

March 29, 1913.

Mc 2602

Pole.

		Mc 2607 h.127	Mc 2613 h.131	Mean	Red.	Diff.	B.C.	Mean	Red	Diff.
5							5.4	5.4	5.3	5.37	0 0 1	1.02
6							6.1	6.1	6.0	6.07	0 0 1	0.91
8							7.3	7.3	7.4	7.33	0 0 1	0.77
9							8.2	8.1	8.1	8.13	1 0 0	0.37
10	4.7	4.8	4.8	4.77	1 0 0	4.12	8.4	8.3	8.3	8.33	1 0 0	0.56
11	5.2	5.2	5.1	5.17	0 0 1	4.25	8.9	8.8	8.7	8.73	0 1 0	0.69
12	5.6	5.6	5.4	5.53	1 1 1	4.20	9.1	9.3	8.8	9.07	0 2 3	0.66
13	6.0	5.9	6.0	5.97	0 1 0	4.20	9.9	9.8	9.9	9.87	0 1 0	0.30
14	6.3	6.3	6.3	6.30	0 0 0	4.22						
15	6.7	6.7	6.5	6.63	1 1 1	4.31						
16	7.1	7.1	6.9	7.03	1 1 1	4.23						
17	7.4	7.3	7.1	7.27	1 0 2	4.22						
18	7.7	7.6	7.5	7.60	1 0 1	4.32						
19	8.1	7.8	7.9	7.93	2 1 0	4.35						
20	8.3	8.2	8.3	8.27	0 1 0	4.32						
23	8.7	8.6	8.7	8.67	0 1 0	4.53						
25	9.2	9.1	9.1	9.13	1 0 0	4.66						
26	9.5	9.5	9.5	9.50	0 0 0	4.69						
27	10.0	9.9	9.9	9.93	1 0 0	4.62						

1 0 1
4 4 4
+.02 .00 -.02

1 2 3
4 4 4
+.02 +.05 -.08

2 2 4
8 8 8
+.02 +.02 -.05

0 0 2
5 5 5
.00 .00 -.04

6 1 5
5 5 5
+.12 +.02 -.10

2 2 0
5 5 5
+.04 -.04 .00

8 1 7
15 15 15
+0.05 -.01 -.05

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MC 26 03 120 K. (4h 13 - 15.0) MC 2604 24 K.

Adopted No. on MC 4392		att.-19 Curve	Magn.	P.E.	Curve	Magn.		att.-22 Curve	Magn.		Curve	Magn.
1	1	4.6	.	8.8	+0.57	9.37	1	3.2 4.95	.	6.7	+0.82	7.52
2	2	5.0	+4.19	9.1	+.51	9.61	2	5.2 4.7	+4.19	8.7	0.58	9.28
3	3	5.3	4.21 +1.04	9.7	+.42	10.12	3	5.1	4.20	9.1	0.51	9.61
•	4	6.1	4.26	n.s.			4	5.7	4.23	9.8	0.40	10.20
•	5	6.3	4.27				5	5.9	4.24	10.0	0.39	10.39
5	6	6.7	4.29				6	6.6	4.29			
•	7	7.0	4.30				7	7.1	4.31			
•	8	7.2	4.31				8	7.2	4.32			
•	9	7.9	4.39				9	7.7	4.37			
•	10	8.6	4.48				10	8.3	4.44			
•	11	8.7	4.49				11	8.4	4.45			
•	12	8.9	4.52				12	8.7	4.49			
•	13	9.2	4.58				13	9.1	4.57			
•	14	9.5	4.63				14	9.3	4.60			
•	15	9.8	4.69				15	9.7	4.67			

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	MC 2605		91K		*MC 2606		103 = 5-15			
					alt. -.18					
		Curve	Imagn.	Curve	Imagn.		Curve	Imagn.	PC.	Curve	Imagn.
Star sup. m.p.c.	1 4.8	+4.18	8.98	8.7	.	1 3.0	.		6.3	+0.88	7.18
	2 5.0 4.85 4.1	4.19	9.04	8.4	+0.62	9.02	2.	.	6.3	0.88	7.18
	3 5.3	4.21	9.51	9.1	0.51	9.61	3.	.	6.1	0.90	7.00
	4 5.6	4.23	9.83	9.9	0.39	10.29	4 3.7	.	6.6 4.60 6.6	0.83	7.43
	5 6.0	4.25	10.25				5.	.	6.8	0.81	7.61
	6 6.2	4.27	10.47				6.	.	6.8	0.81	7.61
	7 6.7	4.31	11.51				7.	.	7.3	0.76	8.06
	8 7.7	4.36	12.06				8 4.1	.	7.3	0.76	8.06
	9 8.0	4.40	12.40				9 4.3 4.80	.	8.0	0.68	8.68
	10 8.4	4.45	12.85				10 4.9 4.1 4.70	+4.18	8.98	8.2	0.65	8.85
	11 8.4	4.45	12.85				11 4.7 4.1	4.17	8.87	8.2	0.65	8.85
	12 8.9	4.52	13.42				12 ~~5.4~~ 4.9	4.19	9.09	~~9.0~~ 8.8	0.57	9.37
	13 9.0	4.53	13.53				13 5.2	4.20	9.40	9.0	0.53	9.53
	14 9.8	4.69	14.49				14 5.8	4.23	10.03	9.8	0.40	10.20
	15 9.9	4.71	14.61				15 5.4	4.21	9.61	9.2	0.50	9.70
							16 5.9	4.24	10.14	9.8	0.40	10.20
							17 6.1 6.80	4.26	10.36			
							18 ~~6.9~~ 6.7 6.35	4.30	~~11.10~~			
							19 6.4 6.3	4.27	10.62			
							20 6.4	4.28	10.68			
							21 6.7 7.95	4.29	10.99			
							22 7.9 8.0 7.40	4.39	12.34			
							23 7.4 7.4	4.33	11.73			
							24 8.0	4.40	12.40			
							25 8.3	4.44	12.74			
							26 8.3	4.44	12.74			

Prismatic companions poor. Large + hazy.
Plate 2606. Nos. 2, 3, 5, 6 + 7 are too far from centre of plate
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Scale 4.

March 29, 1913.

Mc 2606 cont.

		Curve	Magn
27	8.9	+4.52	13.42
28	8.8	4.50	13.30
29	9.1	4.56	13.66
30	9.3	4.60	13.90
31	9.4	4.61	14.01
32	9.8	4.69	14.49

Mc 2607 Pole.

Sequ. 124

		O.C.
5		5.7
6		6.1
8		7.3
9		8.1
10	4.8	8.3
11	5.2	8.8
12	5.6	9.3
13	5.9	9.8
14	6.3	
15	6.7	
16	7.1	
17	7.3	
18	7.6	
19	7.8	
20	8.2	
23	8.6	
25	9.1	
26	9.5	
27	9.9	

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Mc 2608 C3 = 5+15-

		Curve	Imagn.	P.C.	Curve	Imagn.		cont.	Curve	Imagn.
1	B.			5.3	+1.04	6.34	27	8.2	+4.42	8.62
too far from Centre. 2	.			5.9	0.93	6.83	28	8.6	4.48	13.08
" " " 3	.			6.2	0.90	7.10	29	9.0	4.54	13.94
4	B.			6.3	0.88	7.18	30	9.7	4.67	14.37
" " " 5	.			6.3	0.88	7.18	31	9.9	4.71	14.61
6	3.7			6.8	0.81	7.61				
7	3.9			7.1	0.78	7.88				
8	4.1			7.2 7.95-	0.76	8.06				
9	4.0 4.05- 3.8 4.1			7.9 8.0	0.68	8.63				
10	4.2			7.7	0.70	8.40				
11	4.2			8.1	0.66	8.76				
12	4.3			8.3	0.64	8.94				
13	4.3			8.3	0.64	8.94				
14	4.3			9.0	0.52	9.52				
15	5.1	+4.20	9.30	9.2	0.50	9.70				
16	4.9 5.00 4.95- 5.1	4.19	9.19	9.2	0.50	9.70				
17	5.3	4.21	9.51	9.2	0.50	9.70				
18	5.3	4.21	9.51	9.3	0.49	9.79				
19	5.3	4.21	9.51	9.7	0.41	10.11				
20	5.7	4.23	9.93							
21	6.0	4.25	10.25							
22	5.9	4.25	10.15							
23	6.3	4.27	10.57							
24	6.7	4.29	10.99							
25	6.6 6.60 6.6	4.29	10.89							
26	7.1	4.31	11.41							

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Mc 2609 97K. Mc 2610 23 Ks.

		Curve	Magn.		Curve	Magn.
27	8.2					
28	8.6					
29	9.0					
30	9.7					
31	9.9					
1	B.			5.4	+1.02	6.42
2	5.1	+4.20	9.30	9.0	0.52	9.52
3	5.2	4.20	9.40	9.1	0.51	9.61
4	6.1	4.26	10.36	9.9	0.39	10.29
5	6.3	4.27	10.57			
6	6.8 7.0	4.30	11.10			
7	7.0	4.30	11.30			
8	7.3	4.32	11.62			
9	8.0	4.40	12.40			
10	8.2	4.42	12.62			
11	8.4	4.45	12.85			
12	9.1	4.56	13.66			
13	9.5	4.62	14.12			
14	9.7	4.67	14.37			
15	~~7.5~~ 10.0	4.72	14.72			

		Curve	Magn.
1	8.1	.	
2	4.0	.	
3	4.9	+4.19	9.09
4	5.3	4.20	9.50
5	5.9	4.24	10.14
6	6.3 6.25	4.27	10.57
7	6.2 6.3	4.27	10.52
8	6.7	4.29	10.99
9	7.2	4.31	11.51
10	7.8	4.38	12.18
11	8.3	4.44	12.74
12	8.7	4.49	13.19
13	8.9	4.52	13.42
14	9.4	4.60	14.00
15	9.8	4.69	14.49

	Curve	Magn.
6.2	+0.90	7.10
7.2	0.78	7.98
8.1	0.77	8.87
9.2	0.50	9.70
9.7	0.41	10.11

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Scale 11.

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	Mc 2611			25K.			Mc 2612			25 Kx.		
		Curve	Imagn.		Curve	Imagn.		Curve	Imagn.		Curve	Imagn.
1	B.			6.0	+0.91	6.91	1 B.			5.3	+1.04	6.34
2	3.2	.		6.7	0.82	7.52	2 B.2.9	.	Inv. Sufa. in P.C.			
3	4.6	.		8.2	0.65	8.85	3 4.6	.		7.9	0.69	8.59
4	5.7	+4.23	9.93	9.4	0.49	9.89	4 5.2	+4.20	9.40	9.1	0.51	9.61
5	6.3	4.27	10.57				5 5.2	4.20	9.50	9.3	0.49	9.79
6	6.7	4.29	10.99				6 5.8	4.23	10.03	9.6	0.44	10.04
7	7.3	4.32	11.62				7 6.1	4.26	10.36	9.9	0.39	10.29
8	7.7	4.37	12.07				8 6.3	4.27	10.57			
9	7.8	4.38	12.18				9 6.7	4.29	10.99			
10	8.1	4.41	12.51				10 6.9	4.30	11.20			
11	8.5	4.47	12.97				11 7.3	4.32	11.62			
12	8.9	4.49	13.19				12 8.0	4.40	12.40			
13	9.1	4.56	13.66				13 8.6	4.48	13.08			
14	9.7	4.67	14.37				14 9.4	4.60	14.00			
15	9.9	4.78	14.61				15 9.5	4.63	14.13			
16							16 9.8	4.69	14.49			

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Scale X. March 29, 1913.

	Mc 26 13.	Dole
	Seep. 124	
5		5.3
6		6.0
8		7.4
9		8.1
10	4.8	8.3
11	5.1	8.7
12	5.4	8.8
13	6.0	9.9
14	6.3	
15	6.5	
16	6.9	
17	7.1	
18	7.5	
19	7.9	
20	8.3	
23	8.7	
25	9.1	
26	9.5	
27	9.9	

M.O.R.

12:05

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1913phae.proj..989L

Series taken Feb. 7, 1913.

Scale 11.

Wednesday April 2, 1913.

9:55 Mc 2614 Pole.

		Mc 2619 p.135	Mc 2625 p.138	Mean	Resid	Diff.
5						
6						
8						
Stars susp. on P.C. 9						
10	4.9	4.8	4.7	4.80	1 0 1	4.09
11	5.5	5.6	5.3	5.47	0 1 2	3.95
12	5.8	5.8	5.7	5.77	0 0 1	3.96
13	6.2	6.2	6.1	6.17	0 0 1	4.00
14	6.5	6.4	6.4	6.43	1 0 0	4.09
15	6.9	6.9	6.8	6.87	0 0 1	4.07
16	7.2	7.3	7.2	7.23	0 1 0	4.03
17	7.5	7.6	7.5	7.53	0 1 0	3.96
18	8.0	8.0	7.9	7.97	0 0 1	3.95
19	8.1	8.2	8.2	8.17	1 0 0	4.11
20	8.5	8.5	8.4	8.47	0 0 1	4.12
23	8.8	8.8	8.8	8.80	0 0 0	4.40
25	9.5	9.4	9.2	9.37	1 0 2	3.36
26	9.9	9.8	9.9	9.87	0 1 0	4.32
27		h.s.				

2 1 5
5 5 5
+.04 +.02 -.10

0 2 2
4 4 4
.00 +.05 -.05

0 1 3
5 5 5
.00 -.02 -.06

2 2 10
14 14 14
+.01 +.01 -.07

P.C.

			Mean	Resid	Diff.
5.3	5.4	5.3	5.33	0 1 0	+1.06
6.2	6.2	6.1	6.17	0 0 1	0.81
7.3	7.4	7.6	7.43	1 0 2	0.67
susp.	8.2	8.2	8.20	0 0 0	0.56
8.7	8.4	8.6	8.57	1 2 0	0.32
9.2	8.9	9.1	9.07	1 2 0	0.35
9.5	9.5	9.5	9.50	0 0 0	0.23
9.9	9.9	10.0	9.93	0 0 1	0.24

1 1 1
3 4 4
-.03 +.02 +.02

2 4 1
4 4 4
+.05 -.10 +.02

1 3 2
7 8 8
+.01 -.04 +.02

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Scale K.

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Mc 2615 99K.

		Curve	Imagn.
1	4.3	~~4.00~~ ~~+3.94~~	~~8.30~~ .43
2	4.1	3.99	~~8.69~~ .82
3	5.0	3.99	~~8.99~~ 9.12
4	5.3	3.98	~~9.28~~ .41
5	5.6	3.98	~~9.58~~ .71
6	6.1	4.00	10.70 .83
7	7.2	4.01	11.21 .35
8	7.1	4.06	11.76 .90
9	~~8.1~~ 8.3	4.14	12.44 .58
10	~~8.2~~ 8.1	4.20	12.96 13.04
11	9.1	4.27	13.37 .51
12	9.3	4.31	13.61 .75
13	9.1	4.39	14.09 .23
14	n.s.		
15	n.s.		

	B.C.	Curve	Imagn.
1	8.2	+0.48	~~8.68~~ .81
2	8.9	0.35	~~9.25~~ .38
3	~~9.0~~	0.33	~~9.33~~ .46
4	9.5	0.25	~~9.75~~ .88
5	9.8	0.20	10.00 .13
6	n.s.		

Mc 2616 27K.

		Curve	Imagn.
1	4.8	+3.99	~~8.79~~ .92
2	5.3	3.98	~~9.28~~ .41
3	5.2	3.98	~~9.18~~ .31
4	5.4	3.98	~~9.38~~ .51
5	6.1	3.98	10.08 .21
6	6.3	3.99	10.29 .42
7	6.8	4.00	10.80 .93
8	7.2	4.01	11.21 .35
9	8.1	4.10	12.20 .34
10	8.0 8.10 8.2	4.10	12.20 .34
11	8.5	4.17	12.67 .81
12	8.1	4.20	~~12.90~~ 13.04
13	8.1	4.20	~~12.90~~ 13.04
14	9.4	4.33	13.73 .87
15	9.1	4.40	14.10 .24

	B.C.	Curve	Imagn.
1	8.5	+0.40	~~8.90~~ 9.03
2	9.3	0.29	~~9.59~~ .72
3	8.1	0.38	~~9.08~~ .21
4	9.9	0.20	10.10 .23
5	n.s.		

Images on this plate are very poor

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Series taken Feb. 6, 1913.

Scale 11.

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Mc 2617 124K.

		Curve	Magn.	B.C.	Curve	Magn.
1	5.1	+3.98	9.08 .21	8.9	+0.35	9.25 .38
2	6.1	3.98	10.08 .21	9.8	0.20	10.00 .13
3	6.2 5.30	3.99	10.19 .32	n.s.		
4	5353	3.98	9.28 .41	8.8	0.37	9.17 .20
5	7.0	4.00	11.00 .14			
6	7.1	4.01	11.11 .25			
7	7.3	4.03	11.33 .47			
8	8.2	4.11	12.31 .45			
9	8.2	4.11	12.31 .45			
10	8.6	4.19	12.79 .93			
11	8.8	4.21	13.01 .15			
12	9.1	4.27	13.37 .51			
13	9.2	4.29	13.49 .63			
14	9.9	4.43	14.33 .47			
15						

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Mc 2618 28K.

		Curve	Magn.	B.C.	Curve	Magn.
1	4.7	+3.99	8.69 .32	8.0	+0.50	8.50 .63
2	5.7	3.98	9.68 .31	9.8	0.20	10.00 .13
3	5.6	3.98	9.58 .71	9.7	0.21	9.91 10.04
4	6.1	3.98	10.08 .21	9.9	0.19	10.09 .22
5	6.3	3.99	10.29 .42			
6	6.8 6.70 6.6	4.00	10.70 .83			
7	6.7 6.55 6.4	3.99	10.54 .67			
8	7.1	4.01	11.11 .25			
9	7.2	4.01	11.21 .35			
10	8.1	4.10	12.11 .25			
11	8.1	4.10	12.20 .34			
12	8.2	4.11	12.31 .45			
13	8.5	4.17	12.67 .81			
14	9.1	4.27	13.37 .51			
15	9.4	4.32	13.72 .86			
16	9.9	4.44	14.34 .48			

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Series 2614 —

Scale 4

April 2, 1913. Capid

	Mc 2619 Bole		Mc 2620 C5			9 + 15		
	See p. 132,							
				Curve	Imagn.	P.C	Curve	Imagn.
			to fortuna cents.					
5		5.4	1			6.0	+0.90	6.90
6		6.2	2 3.9	4.00	8.03 7.90	6.9	0.71	7.61
8		7.4	3			6.9	0.71	7.61
9		8.2	4			7.3	0.64	8.07 7.94
10	4.8	8.4	5 4.3	4.00	8.43 8.30	7.9	0.51	8.54 8.41
11	5.6	8.9	6 4.8	3.99	8.92 8.79	8.6	0.40	9.13 9.00
12	5.8	9.5	7 4.7	3.99	8.82 8.69	8.3	0.46	8.89 8.76
13	6.2	9.9	8 5.2	3.98	9.21 8.18	9.0	0.33	9.46 9.33
14	6.4	n.s.	9 5.3	3.98	9.41 9.28	9.2	0.30	9.63 9.50
15	6.9		10 5.4	3.98	9.51 9.38	9.5	0.25	9.88 9.75
16	7.3		11 5.3	3.98	9.41 9.28	9.3	0.29	9.72 9.59
17	7.6		12 5.5	3.98	9.61 9.48	9.9	0.20	10.23 10.10
18	8.0		13 5.6	3.98	9.71 9.58	1.		
19	8.2		14 5.9	3.98	10.01 9.88			
20	8.5		15 6.3	3.99	10.42 10.29			
23 27	8.8		16 6.8	4.00	10.93 10.80			
25	9.4		17 7.0	4.00	11.14 11.00			
26	8		18 7.1	4.01	11.25 11.11			
28	9.5		19 7.3	4.03	11.47 11.33			
24 31	n.s		20 7.7	4.07	11.91 11.77			
21			21 8.0	4.09	12.09			
			22 8.3	4.14	12.58 12.44			
			23 8.5	4.17	12.81 12.67			
			24 8.7	4.20	13.04 12.90			
			25 9.1	4.27	13.51 13.37			
			26 9.4	4.33	13.87 13.73			
			27 9.8	4.40	14.30			
			28	4.42				

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Series 3614 –

Scale U.

Capella April 2 1913. Capella.

Mc 2621 125 K

	AC's	Curve	Magn.		Curve	Magn.
1	5.2	+3.98	9.18	9.0	+0.32	9.32
2	5.4	3.98	9.38	9.1	0.21	9.41
3	5.9	3.98	9.88	9.9	0.19	10.09
4	6.2	3.99	10.19			
5	6.3	3.99	10.29			
6	6.8	4.00	10.80			
7	6.9	4.00	10.90			
8	7.3	4.03	11.33			
9	7.6	4.05	11.65			
10	8.1	4.10	12.20			
11	8.6	4.19	12.79			
12	8.8	4.21	13.01			
13	9.2	4.29	13.49			
14	9.7	4.39	14.09			
15	9.9	4.44	14.34			

Mc 2622 B4 = 9 20 +40°

alt. +23

		Curve	Magn.		Curve	Magn.
1	3.0			6.2	+0.87	7.07
2				6.4	0.83	7.23
3				6.3	0.85	7.15
4				7.1	0.68	7.78
5				7.1	0.68	7.78
6	on edge of film					
7				7.4	0.61	8.01
8	4.2	+4.00	8.20	8.0	0.50	8.50
9	4.2	4.00	8.20	8.0	0.50	8.50
10	4.1	3.99	8.09	8.1	0.38	9.08
11	5.2	3.98	9.18	9.1	0.38	9.41
12	5.3	3.98	9.28	9.2	0.30	9.50
13	5.1	3.98	9.08	9.0	0.32	9.32
14	5.4	3.98	9.38	9.3	0.29	9.59
15	5.8	3.98	9.78	9.7	0.21	9.91
16	6.1	3.98	10.08			
17	6.4 (6.40) 6.4	3.99	10.39			
18	6.2 (6.20) 6.2	3.99	10.19			
19	6.7	4.00	10.70			
20	7.2 (6.45)	4.01	11.21			
21	6.4 6.5	3.99	10.44			
22	7.3	4.02	11.32			
23	7.9	4.09	11.99			
24	7.8	4.08	11.88			
25	7.9	4.09	11.99			
26	8.1	4.10	12.20			

MOR

cont. → 11:55

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Series 2614 -

Scale K. April 2, 1913 - Cloud

MC 2622 B4.9 20 +45° · MC 2623. 101 K

		Curve	Magn.
27	8.7	+4.20	12.90
28	8.7	4.20	12.90
29	9.0	4.26	13.26
30	9.1 9.40	4.27	13.37
31	9.3 9.5	4.32	13.72
32	9.8	4.40	14.20
33	?		

			Curve	Magn.
1	4.0 4.75		+4.00	8.00
2	4.7	4.8 4.35	3.99	8.74
3	4.3	4.4	3.99	8.34
4	5.2		3.98	9.18
5	5.7 5.70		3.98	9.68
6	5.6	5.8	3.98	9.68
7	7.1		4.01	11.11
8	7.7		4.06	11.76
9	8.1		4.18	12.20
10	8.9		4.24	13.14
11	9.3		4.31	13.61
12	9.8 9.85		4.40	14.20
13	9.8	9.9	4.41	14.26
14	no. 14		.	.
15	" 15		.	.

B.C.	Curve	Magn.
7.4	+0.61	8.01
8.4	0.42	8.82
8.3	0.46	8.76
9.2	0.30	9.50
9.9	0.20	10.10
m.s.	.	

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Lewis 2614-

Scale II.

Capiet.

April 2, 1913.

	Mc 2624			78K			Mc 2625	Pole
		Curve	Magn.		Curve	Magn.		
β=1	5.0	+3.99	8.99	8.1	+0.39	9.09		
2	5.3	3.98	9.28	9.4	0.28	9.68	5	5.3
3	5.8 5.8	3.98	9.78	~~7.8~~ 9.8	0.20	10.00	6	6.1
4	~~5.6~~ 5.9	3.98	9.88	9.9	0.19	10.09	8	7.6
5	6.7 6.7	4.00	10.70				9	~~7.~~ 8.7
6	~~6.4~~ 6.7	4.00	10.70				10 4.7	8.6
7	7.1	4.01	11.11				11 5.3	9.1
8	7.8	4.08	11.88				12 5.7	9.5
9	8.2	4.11	12.31				13 6.1	10.0
10	8.5	4.17	12.67				14 6.4	
11	9.1	4.27	13.37				15 6.8	
12	9.2	4.29	13.49				16 7.2	
13	9.7	4.39	14.09				17 7.5	
14	9.8	4.41	14.21				18 7.9	
15	9.9	4.44	14.34				19 8.2	
							20 8.4	
1=β							23 8.8	
α	B.			6.3	0.84	7.14	25 9.2	
γ	.			6.1	0.88	6.98	26 9.9	
δ	.			8.1	0.49	8.59		
ε	~~5.1~~	3.99	9.09	~~9.0~~ 9.4	0.32	9.32		

See p. 132

Several interruptions

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Series 26 ~~+4~~ 26 37.

Scale 2:40

April 8, 1913.

MC 2626 Pole.

		MC 2631 P.142	MC 637 P.143	mean		Diff.	P.C.	mean	
5							6.1 6.1 5.9	6.03	1 1 1 +0.36
6							6.8 6.9 6.9	6.87	1 0 0 +0.11
8							8.3 8.0 8.1	8.13	2 1 0 -0.03
9							8.9 8.9 8.7	8.83	1 1 1 -0.13
10	5.6	5.3	5.3	5.40	2 1 1	+349.	9.3 9.1 9.0	9.13	2 0 1 -0.24
11	6.1	5.6	5.7	5.80	3 2 1	3.62	9.8 9.5 9.5	9.60	2 1 1 -0.18
12	6.5	6.0	6.2	6.23	3 2 0	3.50	10.0 10.0	10.00	0 0 -0.27
13	6.9	6.2	6.5	6.53	4 3 0	3.64			
14	7.2	6.5	6.9	6.87	3 4 0	3.65			
15	7.6	7.0	7.3	7.30	3 3 0	3.64			
16	8.0	7.30	7.7	7.67	3 4 0	3.59			
17	8.3	7.7	7.8	7.93	4 2 1	3.56			
18	8.7	8.0	8.2	8.30	4 3 1	3.62			
19	9.1	8.3	8.5	8.63	5 3 1	3.65			
20	9.4	8.5	9.0	8.98	4 5 0 ~~5 4 1~~	3.62			
28	9.8	9.3	9.2	9.43	4 1 2	3.77			
25	10.5	9.7	9.9	9.80	4 1 1	3.93			
26									

3 1 2
4 4 4
+.08 +.02 -.05

4 1 2
2 3 3
+.20 -.08 -0.07

4 0 4
6 1 1
+1.2.00 -0.06

12 8 2
4 4 4
+.30 -.20 -.05

17 16 2
5 5 5
+.34 +.32 -0.04

13 10 42
3 4 4
+.43 -.25 -.05

42 34 6
12 13 13
+.35 -.26 -0.05

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Series 2626 – 2637.

Cepheids.

Scale N

April 8, 1913

MC 2627 — 06 = 11 – 15°

Alt. –18

DB.

	Sc 1	Curve	Magn.		Curve	Magn.	No.	Sc 2	Curve	Magn.
two far from centre	1			6.7	+0.19	6.89	27	8.3	+3.60	11.90
" " (nearer edge)	2			7.3	+0.07	7.37	28	8.9	3.65	12.55
two far from centre	3			7.3	+0.07	7.37	29	9.1	3.70	12.80
	4			7.3	+0.07	7.37	30	9.2	3.72	12.92
	5	4.7		8.7	-0.13	8.57	31	9.5	3.80	13.30
	6	~~5.0~~ 4.8		8.6	-0.12	8.48	32	9.5	3.80	13.30
	7	4.3 4.6		8.4	-0.09	8.31	33	9.8	3.89	13.69
" " "	8			8.9	-0.15	8.75	34	9.9	3.94	13.84
	9	5.1		9.0	-0.16	8.84	35	9.9	3.94	13.84
	10	5.2		9.1	-0.17	8.93	36	n.s.		
	11	5.2		9.9	-0.20	9.70				
15a = 12		5.9	+3.57	9.47	9.9	-0.20	9.70			
	13	6.0	3.57	9.57						
	14	5.7 5.65 5.6	3.57	9.22						
	15	5.6 5.65 5.7	3.57	9.22						
	16	6.3	3.58	9.88						
	17	6.3	3.58	9.88						
	18	6.7	3.59	10.29						
	19	7.1	3.59	10.69						
	20	7.0 7.05 7.1	3.59	10.64						
	21	7.3	3.60	10.90						
	22	7.8	3.60	11.40						
	23	8.1	3.60	11.70						
	24	8.1	3.60	11.70						
	25	8.3	3.60	11.90						
	26	8.7	3.63	12.33						

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cont.

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1913phae.proj.0661

Series 2626 – 2637

Scale 1

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	MC 2628 alt. +20		13 K. P.C.		MC 2629 alt. -18		127 K. P.C.	
		Curve Magn.		Curve Magn.		Curve Magn.		Curve Magn.
1	4.2 4.1	~~3.56~~	7.1 7.3 (7.20)	+0.08 7.28 (44)	5.4	+3.56 8.96 (9.07)	9.8	-0.20 9.60 (73)
2	5.2 5.3		9.1 9.0 (9.05)	-0.17 8.88 (9.01)	5.7	3.57 9.27 (40)	9.9	-0.20 9.70 (83)
3	5.4	+3.56 8.96 (9.07)	9.8	-0.20 9.60 (78)	7.0	3.59 10.59 (72)		
4	5.5	3.56 9.06 (17)	9.9	-0.20 9.70 (83)	7.1	3.60 10.70 (80)		
5	6.3	3.58 9.88 (10.01)			7.3	3.60 10.90 (11.04)		
6	7.1	3.60 10.70 (83)			8.0	3.60 11.60 (74)		
7	7.4	3.60 11.00 (14)			8.3	3.60 11.90 (12.04)		
8	7.8.9	3.60 11.50 (61)			8.7	3.63 12.33 (47)		
9	8.2	3.60 11.80 (94)			9.3	3.75 13.05 (19)		
10	9.1	3.70 12.80 (94)			9.7	3.88 13.58 (70)		
11	9.3	3.75 13.05 (19)			n.s.			
12	9.6	3.83 13.43 (67)			9.9	3.94 13.84 (75)		
13	9.8	3.89 13.69 (83)						
14	t.f.							
15	10.0				9.9			

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Series 2626–2637

Decker Cyril April 8, 1913.

MC 2630 alt. +.17

	Curve	Magn.	
1	4.7		
2	5.1		
3	5.9	+3.57	9.47
4	6.1	3.58	9.68
5	6.8	3.59	10.39
6	6.9	3.59	10.49
7	7.2	3.60	10.80
8	B 7.9	3.60	11.50
9	8.1	3.60	11.70
10	8.6	3.62	12.22
11	9.0	3.68	12.68
12	9.0	3.68	12.68
13	9.7	3.86	13.56
14	9.8	3.89	13.69
15	n.s.		

79K.

P.C.	Curve	Magn.
8.1	-0.04	8.06
9.1	-0.17	~~8.93~~ 9.06
9.9	-0.20	9.70

MC 2631 Orbe –

See P. 139.

	P.C
5	6.1
6	6.9
8	8.0
9	8.9
10	9.1
11	9.5
12	10.0
13	6.2
14	6.5
15	7.0
16	7.4 7.2
17	7.7
18	8.0
19	8.3
20	8.5
23	~~8.5~~ 9.3
25	9.7

M.O.R.

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1913phae.proj.0001

Series 2626 – 2637

Scale R. Capricornus April 8, 1913. Capricornus

	Mc 2632 55 K. alt. +2.2			Pe.	Curr	Magn.	Mc 2633 31 K. alt. +2.2			Pe.	Curr	Magn.
	Curr	Magn.					Curr	Magn.				
1	5.4	+3.56	8.96	9.8	-0.20	9.60	1 3.9			7.1	+0.11	7.21
2	5.1	3.56	9.26	9.9	-0.20	9.70	2 4.1			7.8	-0.01	7.79
3	5.9	3.57	9.47	9.9	-0.20	9.70	3 4.1			8.6	-0.12	8.48
4	6.6	3.59	10.19				4 5.4	+3.56	8.96	9.8	-0.20	9.60
5	7.1	3.60	10.70				5 6.1	3.58	9.68			
6	7.3	3.60	10.90				6 6.3	3.58	9.88			
7	8.0	3.60	11.60				7 6.8	3.59	10.39			
8	8.2	3.60	11.80				8 7.3	3.60	10.90			
9	8.3	3.60	11.90				9 7.9	3.60	11.50			
10	8.7	3.63	12.33				10 8.5	3.61	12.11			
11	9.0	3.68	12.68				11 8.8	3.64	12.44			
12	9.7	3.86	13.56				12 9.0	3.68	12.68			
13	9.8	3.89	13.69				13 9.2	3.72	12.92			
14	10.0						14 9.8	3.89	13.69			
15	10.0						~~15 9.9~~	3.94	13.84			

defect.

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1913phae.proj..989L

Series 2626 - 2637

Scale 11. Cpicl. April 8, 1913. Cpicl.

Mc 2634 103K.

	Curve	Magn.	P.C.	Curve	Magn.
1	4.8		8.1	-0.04	8.06
2	5.2		9.1	-0.17	8.93
3	5.9	+3.57	9.47	9.9	-0.20	9.70
4	6.3	3.58	9.88
5	7.0	3.60	10.60
6	7.1	3.60	10.70
7	7.9	3.60	11.50
8	8.3	3.60	11.90
9	8.8	3.64	12.44
10	9.0	3.68	12.68
11	9.2	3.72	12.92
12	9.8	3.89	13.69
13	9.9	3.94	13.84
14	n.s.		
15			

Mc 2635 80 K.

	Curve	Magn.	P.C.	Curve	Magn.
1	3.9		6.8	+0.16	6.96
2	4.2		7.3	+0.07	7.37
3	4.6		8.1	-0.04	8.06
4	5.0		8.9	-0.15	8.75
5	5.6	+3.57	9.17	9.8	-0.20	9.60
6	6.2	3.58	9.78	n.s.		
7	6.3	3.58	9.88
8	7.1	3.60	10.70
9	7.6	3.60	11.20
10	7.7	3.60	11.30
11	8.7	3.63	12.33
12	9.1	3.70	12.80
13	9.7	3.85	13.55
14	9.4	3.76	13.11
15	9.8	3.89	13.69

M.O.P.

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1913phae.proj.0001

Series 2626 - 2637

Scale 11. Copied April 8, 1913.

	Mc 2636 alt +1		5K		Mc 2637 Pole. See P. 139	
	Curve	Magn.	P.C.	Curve	Magn.	
1	4.3		8.0	-0.03	7.97	5
2	5.1		8.9	-0.15	8.75	6
3	5.1		8.9	-0.15	8.75	8
4	5.6	+3.57	9.17	9.4	-0.19	9.21	9
5	6.3	+3.58	9.88	n.s.		10 5.3
6	6.3	+3.58	9.88			11 5.1
7	7.0	+3.60	10.60			12 6.2
8	7.8	+3.60	11.40			13 6.5
9	7.9	3.60	11.50			14 6.9
10	8.1	3.60	11.70			15 7.3
11	8.9	3.66	12.56			16 7.7
12	9.2	3.72	12.92			17 7.8
13	9.8	3.89	13.69			18 8.2
*14	~~9.8~~	~~3.89~~	~~13.69~~			19 8.5
15	10.0	3.98	13.98			20 9.0
						23 9.2
						25 9.9
						26

5	5.9
6	6.9
8	8.1
9	8.7
10	9.0
11	9.5
12	10.0

*Upon reexamination - no. 14 was found to be a defect.

M. Ok.

3:55

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1913phae.proj..989L

Selected Stars near the North Pole.

Scale W

April 9, 1913

	Ac 13931			L' Pole.			Ac 13921			L' Pole.		
		Means.			ac-Ptm.			Means.			ac-Ptm.	
(See below for stars 1–5)	Ac 2	Ac 2<8.5		Curve magn.	White	Red	Ac 2			Curve magn.	White	Red
+5	7.7			~~7.01~~ ~~6.69~~		14	1	7.4		-0.92	6.48	00
6	8.7	8.8	8.75 10	-0.58	8.17	03	2	9.8 5	9.4 9.45 10	-1.18	8.27	17
7	9.2	9.4	9.30 11	2.00	9.30	33						
8	8.9	9.1	9.00 11	-0.37	8.63	~~0.15~~	3	9.9	9.9 9.90 00	-1.11	8.79	09
9	9.3	9.1	9.20 11	-0.12	9.08	16	4	9.7	9.7 9.70 00	-1.15	8.55	34
10	8.3			-0.81	7.49	15	5	7.6		-0.97	6.63	08
11	9.1	9.2	9.15 10	-0.18	8.97	30	6	9.7	9.7 9.70 00	-1.15	8.55	35
12	8.2			-0.86	7.34	05	1	ns.				
13	8.0			-0.93	7.07	01	8	9.9	9.8 9.85 10	-1.12	8.73	05
14	6.8						9	10.0	10.0 10.00 00	-1.10	8.90	02
15	9.0	9.0	9.00 00	-0.37	8.63	02	10	8.9	9.0 8.95 10	-1.17	7.78	14
16	8.6	8.6	8.60 00	-0.68	7.92	08	11	9.9	9.9 9.90 00	-1.11	8.79	12
17	8.6	8.6	8.60 00	-0.68	7.92	26	12	8.2		-1.09	7.11	28
1	7.5			-1.09	6.41	07	13	8.2		-1.09	7.11	03
2	8.6	8.7	8.65 01	-0.65	8.00	10	14	6.3				
3	9.0	9.1	9.05 01	-0.30	8.75	13	15	9.9	9.8 9.85 10	-1.12	8.73	12
4	8.7	8.8	8.75 10	-0.58	8.17	04	16	9.1	9.3 9.20 11	-1.18	8.02	18
×5	7.6		7.66 10	-1.04	6.54	06	17	9.1	9.3 9.20 11	-1.18	8.02	16

+26	+69		+33	+120
−41	−58		−44	−16
8 | −15	8 | +11		8 | −11	7 | +104
−.019	+.014		−.014	+.149

MOR.

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1913phae.proj..999L

Series 2645 – 2656

April 12, 1913.

Scale II

3:35

Mc 2645 Pole

	see Mc 2645 p. 14		Mean.	Diff.
5				
6				
8				
9			Mean.	Diff.
10	5.4	5.4	5.40 .00	+3.49
11	5.7	5.7	5.70 .00	3.72
12	6.1	6.1	6.10 .00	3.63
13	6.5	6.5	6.50 .00	3.67
14	7.1	7.1	7.10 .00	3.42
15	7.5	7.5	7.50 .00	3.44
16	7.8	7.9	7.85 .01	3.41
17	8.0	8.1	8.05 .01	3.44
18	8.3	8.5	8.40 .11	3.52
19	8.6	8.7	8.65 .01	3.63
20	9.0	9.0	9.00 .00	3.59
23	9.5	9.5	9.50 .00	3.70
25	10.0	9.9	9.95 .11	3.78
26				

.0	.0
4	4
.00	.00
1	3
5	5
-.02	+.06
.0	.0
4	4
.00	.00
1	3
13	13
-.01	+.02

G.C. – Mean.

6.3	6.3	6.30 .00	+0.09
7.1	7.2	7.15 .10	-0.17
8.4	8.7	8.55 .21	-0.45
9.1	9.3	9.20 .11	-0.50
9.3	9.5	9.40 .11	-0.51
9.8	9.9	9.85 .01	-0.43
9.9	10.0	9.95 .10	+0.22

4	2
4	4
-.10	+.05
2	2
3	3
-.07	+.07
6	4
7	7
-0.09	+0.06

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1913phae.proj..989L

Series 2645 – 2656.

Scale K. Copied April 12, 1913. Copied.

Mc 2646 Alt. +.16 13K.

		Curve	Magn.	P.C.	Curve	Magn.
	1	4.7	+3.86	8.56	8.0	-0.36	7.64
	2	5.9	+3.64	9.54	9.8	-0.41	9.39
	3	7.2	+3.47	10.67	N.S.		
	4	7.9	3.46	11.36			
	5	~~8.2~~	3.48	11.68			
	6	8.5	3.52	12.02			
	7	~~8.7~~	3.54	12.24			
	8	8.8	3.56	12.36			
	9	9.3	3.66	12.96			
	10	~~8.9~~ 9.5	3.70	13.20			
	11	9.7	3.74	13.44			
Rejct	12	9.8	3.76	13.56			
Rejct	13	10.0	3.81	13.81			
	14	N.S.					
	15						

Mc 2647 Alt. +.79. 14K.

	Curve	Magn.	P.C.	Curve	Magn.
1	3.2		63	+0.09	6.~~21~~ 99
2	5.2	+3.76 8.96	9.1	-0.49	8.61
3	5.4	+3.72 9.12	9.3	-0.48	8.82
4	6.0	3.63 9.63	9.9	-0.39	9.51
5	~~6.2~~	3.59 9.79			
6	7.2	3.47 10.67			
7	7.5	3.45 10.95			
8	7.9	3.46 11.36			
9	8.2	3.48 11.68			
10	8.8	3.56 12.36			
11	9.0	3.62 12.62			
12	9.1	3.63 12.73			
13	9.7	3.74 13.44			
14	9.9	3.79 13.69			
15	10.0	3.81 13.81			

There is no image of No. 12 on this plate and No. 13 is doubtful. Reject both observations

M. O R

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1919phae.proj.0001

Series 3645-3656

Scale N.

"Copied" April 12, 1913.

MC 3648 B3 = 6 40 +45°

		Curr Magn.	P.C.	Curr	Magn.		Curr Magn.
1			6.4		6.55	27 9.1	3.63 12.73
too far from center 2			6.7	+0.05 -0.05	6.65	28 9.5	3.70 13.20
" " 3			7.3	-0.20	7.10	29 9.6	3.72 13.32
4	4.1		7.6	-0.29	7.36	30 9.7	3.74 13.44
5	4.3		7.3	-0.19	7.06	31 9.7	3.74 13.44
" " 6	6		8.0	-0.36	7.64	32 9.9	3.79 13.69
" " " 7	7		7.9	-0.35	7.55	33 10.0	3.81 13.81
8	5.1	+3.77 8.87	8.9	-0.49	8.41		
9	5.2	+3.76 8.96	9.2	-0.48	8.72		
10	5.7	3.67 9.37	9.8	-0.41	9.39		
11	5.7	3.67 9.37	9.7	-0.43	9.27		
12	5.9	3.64 9.54	9.8	-0.41	9.39		
13	6.1	3.61 9.71	n.s.				
14	6.2	3.59 9.79	10.0	-0.36	9.64		
15	6.3	3.58 9.88					
16	6.9	6.7 3.61 10.31					
17	6.7	3.62 10.22					
18	6.7	3.62 10.22					
19	7.0	3.59 10.49					
20	7.1	3.58 10.58					
21	7.3	3.56 10.76					
22	8.1	3.47 11.67					
23	8.6	8.3 3.51 11.96					
24	8.4	8.4 3.50 11.90					
25	9.0	3.62 12.62					
26	9.0	3.62 12.62					

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1913phae.proj..989L

Series 2645 - 2656.

Scale 11. Copied. April 12, 1913.

	Mc 2649. att. +17			C4 7+15		Mc 2650 See P. 146	Pole
	Curve	Magn.		PC.	Curve Magn.		P.E.
1	3.1			6.7	-0.04 6.66	5	6.3
2	3.2			6.8	-0.07 6.73	6	7.2
3				7.1	-0.15 6.95	8	8.1
4	4.1			7.7	-0.31 7.39	9	9.3
5	4.1	3.86	8.56	8.1	-0.39 7.71	10 5.4	9.5
6	4.1	3.86	8.56	8.2	-0.41 7.79	11 5.1	9.9
7	5.0	3.79	8.79	8.8	-0.47 8.33	12 6.1	10.0
8	5.1	3.77	8.87	8.9	-0.49 8.41	13 6.5	N.S.
9	5.3	3.74	9.04	9.2	-0.49 8.71	14 7.1	
10	5.8	3.65	9.45	9.9	-0.39 9.51	15 7.5	
11	6.2 6.15 6.1	3.60	9.75			16 7.9	
12	5.9 6.00 5.9	3.64	9.54			17 8.1	
13	6.2	3.59	9.79			18 8.5	
14	6.9	3.51	10.41			19 8.7	
15	7.1	3.48	10.58			20 9.0	
16	7.1	3.48	10.58			23 9.5	
17	7.8	3.45	11.25			25 9.9	
18	8.0	8.46	11.46				
19	8.1	3.47	11.57				
20	8.3	3.50	11.80				
21	8.7	3.55	12.25				
22	8.9	3.59	12.49				
23	9.1	3.62	12.72				
24	9.7	3.74	13.44				
25	9.8	3.76	13.56				
26	N.S. 10.0	3.81	13.81				
27	N.S.						

Mc 2649 att. +17

6's far from centre 3.

Light 6's from 6 continue.

4:30.

MOR.

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1913phae.proj..9891

Series 2645 - 2646.

Scale 11.

April 14, 1913.

11:10. Mc 2650 Pole. Remeasured.

						G.C.	Mean.		Diff.
5						6.2 6.1	6.15	0 1	+0.24
6						7.3 7.2	7.25	1 0	-0.27
8						8.8 8.1	8.45	4 3	-0.35
9						9.2 8.9	9.05	2 1	-0.35
10	5.6	5.3	5.45	2 1	+3.44	9.4 9.1	9.25	2 1	-0.36
11	6.0	5.7	5.85	2 1	3.57	9.9 9.5	9.70	2 2	-0.28
12	6.1 6.20	6.3 6.1	6.15	0 5 1 5	3.58	ns. 9.9	9.9	- 2	-0.17
13	6.7	6.6	6.65	1 0	3.52				
14	7.1	7.0	7.05	1 0	3.47				
15	7.5	7.4	7.45	1 0	3.49				
16	7.8	7.6	7.70	1 1	3.56				
17	8.1	7.9	8.00	1 1	3.49				
18	8.4	8.3	8.35	0 1	3.57				
19	8.6	8.4	8.50	1 1	3.78				
20	9.0	8.9	8.95	0 1	3.64				
23	9.3	9.3	9.30	0 0	3.90.				
25	9.8	9.7	9.75	0 1	3.98				
26	ns.								

Mc 2656 P mean

7 5
4 4
+.18 -.12

4 3
2 2
+.20 -.15

11 8
6 6
+14 -.13
.18

5 3
4 4
+.12 -.08

4 3
5 5
+.08 -.06

1 3
4 4
+.02 -.08

10 9
13 13
+.08 -.07

MQ.

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1913phae.proj..989L

Series 2645 - 2656

Scale 1

Apid

April 14, 1913

Apid

Mc 2651 123K.

alt. 18

		curve	magn.	Pc.			
Image	Pc.	from			8.30		8.12
1	5.1	-		8.384	-0.36	7.99	
2	5.4	3.53	9.06 8.93	9.3	-0.31	9.12 8.99	
3	6.2	3.52	.85 9.72	n.s.			
4	6.9	3.51	.54 10.41				
5	7.4	3.52	11.05 10.92				
6	7.9	3.56	.60 11.46				
7	8.0	3.59	.73 11.59				
8	8.3	3.63	12.07 11.93				
9	8.7	3.71	.55 12.41				
10	8.9	3.75	.79 12.65				
11	8.9	3.75	.79 12.65				
12	9.2	3.83	.17 13.03				
13	9.7	3.97	.81 13.67				
14	9.9	4.02	14.06 13.92				
15	10.0	4.04	.18 14.04				
16	?						

Mc 2652 1K.

alt. 7.01

				Pc.		
1	4.0			7.0	-0.18	.94 6.82
2	6.3	3.52	.95 9.82			
3	6.3	3.52	.95 9.82			
4	6.7	3.52	.36 10.22			
5	6.9	3.51	.54 10.41			
6	7.4	3.52	11.06 10.92			
7	8.1	3.60	.84 11.70			
8	8.4	3.65	.19 12.05			
9	8.5	3.66	.30 12.16			
10	9.1	3.80	13.04 12.90			
11	9.6	3.93	.67 13.53			
12	~~9.9~~	4.02	~~14.06 13.92~~			
13	10.0	4.04	.18 14.04			
14	n.s.					
15						

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1913phae.proj..989L

Series 2645 - 2656.

Scale U

Cepheids

April 14, 1913.

Cepheids

me 2653 28 K

alt + 2.2

				O.C.		
1	5.1			8.8 -0.37	8.43	.56
2	5.9	3.53	9.43 .56	9.9 -0.22	9.68 .81	
3	6.2	3.52	9.72 .85			
4	6.3	3.52	9.82 .95			
5	6.4	3.52	9.92 1.05			
6	7.5	3.53	11.03 .17			
7	7.3 7.3	3.52	10.82 .96			
8	8.6	3.53	11.13 .27			
9	7.7 7.7	3.54	11.24 .38			
10	8.5	3.67	12.17 .31			
11	8.7	3.71	12.41 .55			
12	8.9	3.75	12.65 .79			
13	9.1	3.80	12.90 13.04			
14	9.8	3.99	13.79 .93			
15	9.9	4.02	13.92 14.06			
16	ns.					

me 2654 17 K

alt - 1?

				O.C.		
1	5.3			9.2 -0.32	8.88	9.21
2	6.3	3.52	9.82 .95	#9		
3	6.8	3.51	10.31 .44			
4	5.9 5.85 5.8	3.53	9.38 .51	10.0 -0.20	9.80	.73
5	7.1	3.54	11.24 .38			
6	7.6	3.54	11.14 .28			
7	8.1	3.60	11.70 .84			
8	8.7	3.71	12.41 .55			
9	8.9	3.75	12.65 .79			
10	9.0	3.78	12.78 .92			
11	9.5	3.90	13.40 .54			
12	9.3	3.86	13.16 .30			
13	9.7	3.96	13.66 .80			
14	9.9	4.02	13.92 14.06			
15						
16						

S m.OR.

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1913phae.proj..989L

Series 2645-56

Scale x. cloudy. April 14, 1913.

	MC 2655			11K.			MC 2656 Pole. See P. 151	
				Qc.				
1	4.9			8.76	-0.38	8.22 .35	5	6.1
2	5.9	3.53	9.43 .58	9.8	-0.23	9.57 .70	6	7.2
3	6.3	3.52	9.82 .95				8	8.1
4	7.1	3.51	10.61 .74				9	8.9
5	7.8 7.80 7.8	3.55	11.35 .79				10 5.3	9.1
6	7.5 7.6	3.53	11.08 .22				11 5.7	9.5
7	8.3	3.64	11.94 12.08				12 6.1	9.9
8	8.7	3.70	12.40 .54				13 6.6	
9	9.2	3.83	13.03 .17				14 7.0	
10	9.1	3.80	12.90 13.04				15 7.4	
11	9.3	3.86	13.16 .30				16 7.6	
12	9.4	3.88	13.28 .42				17 7.9	
13	9.8	3.99	13.79 .93				18 8.3	
14	9.9	4.02	13.92 14.06				19 8.4	
15	∫.						20 8.9	
							23 9.3	
							25 9.7	
							26 ∫.	

Images on this plate are not circular!

M.O.R.

12:00

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1913phae.proj..989L

Series 7657 – 2668

Scale 4.

April 16, 1913

11:13

Mc 7657 Pole.

Pe.

5					5.54	5.4	5.3	5.37	0 0 1	Diff. +1.02
6					6.6	6.7	6.3	6.53	1 2 2	0.45
8	~~7.5~~				7.5	7.5	7.4	7.47	0 0 1	0.63
9	Mc 7662 Mc 7668 P.157 P.160			Mean	Diff.	8.4	8.1	8.0	8.17	2 1 2	0.53
10	5.2	4.6	5.2	~~5.00~~ 5.00	2 4 2 +3.89	8.7	8.7	8.3	8.57	1 1 3	0.32
11	5.6	5.1	5.1	5.47	1 4 2 3.95	9.3	9.2	9.3	9.27	0 1 0	0.15
12	5.9	5.6	6.0	5.83	1 2 2 3.90	9.8	9.8	9.8	9.80	0 0 0	−0.07
13	6.3	6.0	6.3	6.30	1 2 1 3.97	10.0	10.0	.	10.00	0 0 .	+0.17
14	6.7	6.3	6.6	6.53	2 2 1 3.99						
15	7.0	6.7	7.2	6.97	0 3 2 3.97						
16	7.3	7.0	7.5	7.27	0 3 2 3.99						
17	7.5	7.3	7.7	7.50	0 2 2 3.99						
18	8.0	7.9	8.2	8.03	0 1 2 3.89						
19	8.3	8.3	8.4	8.33	0 0 1 3.95						
20	8.6	8.7	8.6	8.63	0 1 0 3.96						
23	9.1	9.2	9.0	9.10	0 1 1 4.10						
25	9.7	9.7	9.7	9.70	0 0 0 4.03						
26	10.0	.	10.1	10.05	0 . 1 4.14						
27											

3	1	6
4	4	4
+.08	+.02	−.15
1	0	3
4	4	3
.02	.00	−.10
4	1	9
8	8	7
+.05	+.01	−.13

7	14	8
5	5	5
+.14	−.28	+.16
0	9	8
~~5~~ 4	4	4
.00	−.22	+.20
0	2	1
5	4	5
.00	+.05	+.02
7	21	17
14	13	14
+.05	~~8~~ −.16	+.12

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Series 2657-

Scale 11.

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Mc 2658 10 2 K

Alt. +.56

		Curve	Magn.		P.C	Curve	Magn.
1	3.0	.			6.3	+0.80	7.10 .23
2	4.1	.			7.9	+0.58	8.40 .53
3	4.8	+3.94	8.74 .87		8.7	+0.34	9.04 .17
4	5.0	3.94	8.94 9.07		9.0	0.27	9.27 .40
5	5.3	3.94	9.24 .87		9.1	0.88	9.78 .91
6	6.0	3.95	9.95 10.08		n.s.	.	
7	6.1	3.95	10.05 .18				
8	7.2	3.96	11.16 .30				
9	8.3	4.00	12.30 .44				
10	8.6	4.01	12.61 .75				
11	8.9	4.03	12.93 13.07				
12	9.0	4.04	13.04 .18				
13	9.3	4.06	13.36 .50				
14	9.9	4.12	14.02 .16				
15	n.s.	.					

Mc 2659 13 K.

Alt. +.21

		Curve	Magn.			Curve	Magn.
1	3.9	.			7.4	+0.90 .59	8.49 7.99
2	4.8	+3.94	8.74 .87		8.9	0.29	9.19 .32
3	4.7 4.75 4.8	3.94	8.69 .82		9.1	0.24	9.34 .47
4	5.1	3.94	9.04 .17		9.2	0.21	9.41 .54
5	5.9	3.94	9.84 .97		9.9	0.03	10.06 9.93
6	6.8	3.95	10.75 .88				
7	6.9	3.95	10.85 .99				
8	7.3	3.96	11.26 .40				
9	7.7	3.97	11.67 .81				
10	8.1	4.01	12.71 .85				
11	9.0	4.03	13.03 .17				
12	9.2	4.04	13.24 .38				
13	9.7	4.10	13.80 .94				
14	9.8	4.11	13.91 14.05				
15	10.0	4.13	14.13 .27				

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1919phae.proj..0691

Series 2657-

Scale 11. Copied April 16, 1913.

	Mc 2660 alt. + 12 Curve	Magn.		55K. C.e Curve	Magn.		(Mc 2661 wrong region taken) Curve	Magn.	Mc 2662 P. See P. 155
1	5.3	+3.94	9.24	9.1	+0.24	9.34	5	~~5.4~~	5.4
2	5.5	3.94	9.44	9.3	0.19	9.49	6	~~6.1~~	6.1
3	5.8	3.94	9.74	9.7	0.08	9.78	8		7.5
4	6.6	3.95	10.55				9		8.1
5	7.1	3.96	11.06				10	4.6	8.7
6	7.3	3.96	11.26				11	5.1	9.2
7	8.0	3.99	11.99				12	5.6	9.8
8	8.1	3.99	12.09				13	6.0	10.0
9	8.5 8.40	8.3 4.00	12.40				14	6.3	
10	8.3 8.40	8.5 4.00	12.40				15	6.7	
11	8.7	4.01	12.71				16	7.0	
12	9.3	4.05	13.35				17	7.3	
13	n.s.						18	7.9	
14 trace of 14	~~9.9~~ 9.80	4.12	14.02				19	8.3	
15	9.8 9.8	4.11	13.91				20	8.7	
							23	9.2	
							25	9.7	
							26	n.s.	

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Series 2657 –

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Mc 2663 · 56K. alt. +22

		Curve	Magn.	Pc.	Curve	Magn.
1	4.3	+3.93	8.23	7.7	+0.52	8.22
2	4.7	3.94	8.64	8.1	0.46	8.56
3	5.2	3.94	9.14	8.9	0.28	9.18
4	5.9	3.94	9.84	9.8	0.06	9.86
5	6.4	3.95	10.35			
6	7.1	3.96	11.06			
7	7.4	3.97	11.37			
8	8.0	3.99	11.99			
9	8.7	4.01	12.71			
10	9.1	4.04	13.14			
11	9.2	4.04	13.24			
12	9.3	4.05	13.35			
13	9.4	4.07	13.47			
14	9.7	4.10	13.80			
15	9.9	4.12	14.02			

Mc 2664 80K alt. +17

		Curve	Magn.	Pc.	Curve	Magn.
1	3.6			6.9	+0.69	7.59
2	3.8			7.3	0.61	7.91
3	4.2	3.94	8.14	8.0	0.49	8.49
4	4.2 4.3	3.94	8.19	8.1	0.51	9.03
5	4.7	3.94	8.64	9.1	0.24	9.34
6	5.7	3.94	9.64	9.8	0.06	9.86
7	5.8	3.94	9.74	9.9	0.03	9.93
8	6.1	3.95	10.05	10.0	0.0	10.03
9	7.8	3.98	11.78			
10	7.9	3.99	11.89			
11	8.7	4.01	12.71			
12	9.1	4.04	13.14			
13	8.9 9.1	4.03	13.03			
14	9.7	4.10	13.80			
15	10.0	4.13	14.13			

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Series 2657 –

Scale U. Copied April 16, 1913 – Copied

	Mc 2665 alt. +14			5K			Mc 2666. 104 K. alt. +06					
		Curve	Magn.	D.C.	Curve	Magn.		Curve	Magn.	D.C.	Curve	Magn.
1	4.1	.		7.6	+0.55	8.15	1 7.2	.		7.8	+0.~~05~~ 50	~~7.85~~ 8.30
2	4.3	+3.94	8.24	8.2	0.43	8.63	2 5.3	+3.94	9.24	9.3	0.19	9.49
3	4.9	3.~~95~~94	~~8.84~~ 8.84	9.1	0.24	~~9.34~~ 9.34	3 5.9	3.94	~~9.84~~ 9.84	9.8	0.06	9.86
4	5.2	3.94	9.14	9.1	0.24	~~9.34~~ 9.34	4 6.4	3.95	10.35			
5	5.8	3.94	9.74	9.8	0.06	9.86	5 7.2 6.8 7.00	3.96	10.96			
6	5.9	3.94	9.84				6 6.8 7.0 6.90	3.96	10.86			
7	6.4	3.95	10.35				7 7.2	3.96	11.16			
8	7.2	3.96	11.16				8 8.0	3.99	11.99			
9	7.9	3.99	11.89				9 8.1	3.99	~~12.09~~ 12.09			
10	8.1	3.99	12.09				10 8.5	4.01	12.51			
11	9.1	4.04	13.14				11 9.1	4.04	13.14			
12	9.3	4.05	13.35				12 9.8 9.35	4.04	13.24			
13	9.8	4.11	13.91				13 9.3 9.4	4.06	13.41			
14	n.s.	.	.				14 9.8	4.11	13.91			
15	10.0	4.13	14.13				15 10.0	4.13	14.13			

Monday December 29, 1913

D.C. of No. 2 remeasured. 8.7.

12.05 Growing darker. rain all day.

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Series Mc 2657 - 2668.

Scale K. Copied. April 16, 1913.

Mc 2667 32 K. Mc 2668

alt. +23

See P. 150

			Curve	Magn.			Curve	Magn.		
	5.00				P.C.	7.90	50	8.40		P.C.
1	5.0	5.0	+3.94	8.94	7.9	7.9	+0.05	7.95	5	5.3
2	5.0		3.94	8.94	8.6		0.36	8.96	6	6.3
3	6.1		3.95	10.05	9.9		0.03	9.93	8	7.4
4	6.9		3.96	10.86					9	8.0
5	7.2		3.97	11.17					10	8.3
6	7.4		3.97	11.37					11	9.3
7	8.1		3.99	12.09					12	9.8
8	8.3		4.00	12.30					13	
9	8.1		4.01	12.71					14	
10	9.2		4.04	13.24					15	
11	9.2		4.04	13.24					16	
12	9.3		4.06	13.36					17	
13	9.5		4.08	13.58					18	
14	7.		.	.					19	
15	9.9		4.12	14.02					20	
									23	
									25	
									26	

m 0.

12.40

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1913phae.proj..0891

Series Mc 2675-

Scale K

9.55

April 19, 1913.

MC 2675

Mean 2675, 2680

		Pos C 2680 r 163	Pos C 2676 r 167	Mean	Diff	P.C.	Mean	Diff.
	5					5.4 5.30 5.2 5.4	5.33 1 1 1	+1.06
	6					6.0 5.85 5.7 6.2	5.97 0 3 2	1.01
	8					7.3 7.10 6.9 7.3	7.17 1 3 1	0.93
D.ff	9					7.8 7.75 7.7 7.8	7.77 0 1 0	0.93
4.14	10	4.6 4.65 4.7	4.3	4.53 1 2 2	+4.36	8.0 7.95 7.9 8.0	7.97 0 1 0	0.92
4.42	11	5.0 5.00 5.0	4.5	4.83 2 2 3	4.59	8.5 8.45 8.4 8.4	8.43 1 0 0	0.99
4.38	12	5.3 5.35 5.4	4.6	5.10 2 3 5	4.63	9.0 8.90 8.8 8.6	8.80 2 0 2	0.93
4.42	13	5.6 5.75 5.9	4.9	5.47 1 4 6	4.70	9.5 9.35 9.2 9.0	9.23 3 0 2	0.94
4.47	14	6.1 6.05 6.0	5.1	5.73 4 3 6	4.79	10.0 9.95 9.9 9.5	9.80 2 1 3	0.92
4.64	15	6.3 6.30 6.3	5.4	6.00 3 3 6	4.94	. . 9.7	9.7 . . a	1.24
4.66	16	6.6 6.60 6.6	5.9	6.37 2 2 5	4.89	. . 10.0	10.0 . . a	1.26
4.59	17	6.9 6.90 6.9	6.4	6.73 2 2 3	4.76			
4.57	18 20	7.4 7.35 7.3	7.0	7.23 2 1 2	8.69			
4.38	19 23	7.9 7.99 7.9	7.4	7.73 2 2 3	4.55			
4.44	20 25	8.2 8.15 8.1	8.0	8.10 1 0 1	4.49			
4.70	23 26	8.5 8.50 8.5	8.7	8.57 1 1 1	4.63			
4.68	35	9.1 9.05 9.0	9.0	9.03 1 0 0	4.70			
4.74	26	9.5 9.45 9.4	9.2	9.37 1 0 2	4.82			
4.60	27	10.0 9.95 9.9	9.8	9.90 1 0 1	4.65			

2 8 4
4 4 4
+.05 -.20 +.10

8 0 1
5 0 5
+.16 .00 -.14

10 8 3
9 9 9
+.11 -.09 -.03

10 14 22
5 5 5
+.20 +.28 -.44

11 10 19
5 5 5
+.22 +.20 -.38

3 1 3
5 5 5
+.06 -.02 -.06

24 2 3 44
15 15 15
+.16 +.15 +.29

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Series 8675 -

Scale 11

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April 19, 1913

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Mc 2677 127 K.

Mc 2678 .74 K.

		Curve	Imagn.		A.C.	Curve	Imagn.			Curve	Imagn.		B.C.	Curve	Imagn.
1	4.7	+4.50	9.20		7.7	+0.95	~~8.65~~ 7.75	1	B.				5.3	+1.06	6.36 4.24
2	4.8	4.53	9.33		7.9	+0.94	~~8.84~~ 6.96	2	4.2	+4.32	8.52		7.6	+0.95	~~8.55~~ 6.65
3	5.2	4.67	9.87		8.8	+0.92	~~9.72~~ 7.88	3	4.7	4.50	9.20		8.0	+0.94	~~8.94~~ 7.06
4	5.3	4.69	9.99		8.9	+0.92	~~9.82~~ 7.88	4	4.9	4.59	9.49		8.8	+0.92	~~9.72~~ 7.88
5	5.4	4.71	10.11		9.1	+0.86	~~10.56~~ 8.84	5	5.1	4.64	9.74		8.9	+0.92	~~9.82~~ 7.98
6	6.2	4.83	11.03					6	5.7	4.79	10.49				
7	6.2	4.83	11.03					7	5.8	4.80	10.60				
8	6.8	4.77	11.57					8	6.2	4.83	11.03				
9	7.1	4.70	11.80					9	7.0	4.72	11.72				
10	7.5	4.60	~~11.70~~ 11.74					10	7.2	4.68	~~12.02~~ 11.88				
11	8.2	4.54	12.74					11	7.9	4.54	12.44				
12	~~9.3~~ 8.6	4.59	13.19					12	7.8	4.56	12.36				
13	~~8.1~~ 8.7 ~~8.9~~	4.60	13.30					13	8.1	4.54	12.64				
14	9.0	4.65	13.65					14	~~8.9~~ 8.7	4.60	13.30				
15	9.3	4.69	13.99					15	8.9	4.63	13.53				
								16	9.3	4.69	13.99				
								17	9.5	4.73	14.23				
								18	9.7	4.78	14.48				

was marked at first

Added Stars on duplication this plate.

Images elongated and film is very defective.
Plate shows very faint stars ∴ 3 more were selected.

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Series 2675 -

Scale u Copied. April 19, 1913.

	Mc 2679			98K.			Mc 2680 Prelim.	
							See p. 161	
	Curve	Magn.		C - c.	Curve	Magn.		
1	B.			5.0	+1.09	6.89 3.91	5	5.2
2	4.1	+4.30	8.40 .53	6.9	+0.98	7.88 3.92	6	5.1
3	4.8	4.53	9.33 .46	8.1	+0.94	9.04 7.16	8	6.9
4	5.2	4.67	9.87 10.00	def.	.	.	9	7.1
5	5.3	4.69	9.99 10.12	9.2	+0.98	10.10 8.36	10 4.1	7.9
6	5.1	4.79	10.49 .62	9.8	+0.86	10.66 8.94	11 5.0	8.5 8.40 8.3
7	6.3	4.83	11.13 .27				12 5.4	8.8
8	6.8	4.78	11.58 .72				13 5.9	9.2
9	7.2	4.68	11.88 12.02				14 6.0	9.9
10	7.4	4.61	12.01 .15				15 6.3	
11	8.2	4.54	12.74 .88				16 6.6	
12	8.5	4.57	13.07 .21				17 6.9	
13	8.7	4.60	13.30 .44				18 7.3	
14	9.1	4.66	13.76 .90				19 7.9	
15	9.5	4.73	14.23 .37				20 8.1	
additional stars plotted on this plate	16	9.8	4.80 14.60 .74				23 8.5	
							25 9.0	
							26 9.4	
							27 9.9	

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Series 2675-

Scale 1.

Copied April 19, 1913.

Mc 2681 A3 21h +75°.

		Curve	Imagn.	B.C.	Curve	Imagn.			Curve	Imagn.
too near edge	1			6.5	+0.99	7.49 5.51	26	8.1	+4.54	.78 12.64
too far from centre	2			6.6	+0.99	7.59 5.61	27	8.2	4.54	.88 12.74
" " "	3			6.9	+0.98	7.88 5.92	28	8.4	4.56	13.10 12.96
" " "	4			7.0 6.55	+0.98	7.98 6.02	29	8.7	4.60	.44 13.36
" " "	5			6.3 6.8	+0.99	7.54 5.56	30	8.9	4.63	.67 13.53
" " "	6			7.8	+0.94	8.74 6.86	31	9.0	4.65	.79 13.65
	7	4.4	+4.41	7.7	+0.94	8.64 6.76	32	9.3	4.70	.14 14.00
	8	4.8	4.53	8.1	+0.94	9.04 7.16	33	9.4	4.78	.62 14.48
	9	4.35 4.50	4.57	8.2	+0.98 4	9.14 7.26	34	9.9	4.83	.87 14.73
	10			8.3	+0.93	9.23 7.37				
	11	4.7	4.58	8.3	+0.93	9.23 7.37				
	12	5.2	4.67	8.9	+0.98 1	9.81 7.99				
	13	5.1	4.64	8.9	+0.98 1	9.81 7.99				
	14	5.4	4.70	9.3	+0.98 4	10.20 8.34				
*	15	6/5.2	4.67 .83	9.0	+0.98 1	9.91 8.09				
	16	5.9	4.80	n.s.						
	17	6.2	4.83							
	18	6.1	4.83							
	19	6.3	4.83							
	20	6.3	4.83							
	21	7.1	4.70							
	22	7.1	4.70							
	23	7.3	4.65							
	24	7.5	4.60							
	25	7.1	4.57							

Cont →

MOR.

* Star 15: 5.2 evidently a mistake for 6.2
p.c. wrong image? p.c. barely seen. Right mag.?
W.S.A. Jan. 16, 1915

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1913phae.proj..989L

Series 2670-

Scale ½. Copied.

mc 2682 C4 7+15-

Obs. +17

		Curve	Magn.		P.C.	Curve	Magn.			Curve	Magn.
1	B.				5.0	1.05 +0.99	6.69 3.91	24	9.3	+4.70	1408
2	B.				5.4	+1.05	6.45 4.35	28	9.8	4.80	1460
3	.				6.1	+1.01	7.11 5.09	29	n.s	.	.
4	3.8	+4.19	8.12 7.99		6.3	+1.00	7.30 5.30				
5	4.0	4.26	8.26		6.8	+0.98	7.78 5.82				
6	4.1	4.30	8.40		6.8	+0.98	7.78 5.82				
7	4.3	4.37	8.67		7.3	+0.97	8.27 6.33				
8	4.6	4.49	9.09		7.6	+0.95	8.50 6.65				
9	4.7	4.50	9.20		8.2	+0.94	9.14 7.26				
10	5.2	4.67	9.87		8.8	+0.92	9.72 8.38				
11	5.2	4.67	9.87		8.7	+0.92	9.62 7.78				
12	5.3	4.69	9.99		9.1	+0.92	10.01 8.19				
13	5.4	4.71	10.11		9.3	+0.90	10.20 8.40				
14	5.9	4.80	10.70		9.8	+0.86	10.66 8.94				
15	6.2	4.80	11.03		n.s.						
16	6.3	4.83	11.13								
17	6.2 6.25 6.3	4.83	11.08								
18	7.0	4.72	11.72								
19	7.2	4.68	11.88								
20	7.3	4.65	11.95								
21	7.3	4.65	11.95								
22	7.6	4.59	12.19								
23	8.1	4.54	12.64								
24	8.5	4.57	13.07								
25	8.9	4.62	13.52								
26	8.9	4.62	13.52								

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1913phae.proj..989L

Series 9645–9686.

Scale 11.

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	MC 9683 alt. −18			123K			MC 9684 5 alt. +20			12K.		
		Curve	Imagn.		Curve	Imagn.		Curve	Imagn.		Curve	Imagn.
1	4.0	+4.27	8.27 .40	6.9	+0.98	7.88 ~~5.92~~	1	3.2		6.3	+1.00	7.30 ~~5.30~~
2	4.2	4.32	8.52 .65	7.1	+0.94	8.04 ~~6.76~~	2	3.9	+4.21	8.11 .24	6.8	+0.98 ~~5.82~~ 7.78
3	5.0	4.60	9.60 .73	8.8	+0.92	9.72 ~~7.88~~	3	4.1	4.50	9.20 .03	8.2	+0.94 ~~7.26~~ 9.14
4	5.3	4.69	9.99 10.12	9.8	+0.86	10.66 ~~8.94~~	4	5.3	4.69	9.99 10.02	9.0	+0.91 ~~8.09~~ 9.91
5	6.0	4.81	10.81 .95	n.s.			5	6.2	4.83	11.83 .17		
6	6.2	4.83	11.03 .17				6	6.4	4.82	11.22 .36		
7	6.7	4.78	11.48 .62				7	7.0	4.72	11.72 .86		
8	~~6.2~~ 6.6	4.80	11.40 .54				8	7.1	4.70	11.80 .94		
9	6.8	4.78	11.58 .72				9	7.3	4.65	~~11.95~~ 12.09		
10	7.4	4.61	12.01 .15				10	7.8	4.57	12.27 .41		
11	7.9	4.54	12.44 .68				11	8.2	4.54	12.74 .86		
12	8.0	4.54	~~12.54~~ .68				12	8.4	4.56	12.96 13.10		
13	8.2	4.54	12.74 .88				13	8.7	4.60	13.30 .44		
14	8.9	4.63	13.53 .67				14	9.5 9.45 9.4	4.72	14.17 .31		
15	~~8.8~~ 9.0	4.64	13.64 .78				15	9.1 9.10 9.1	4.67	13.77 .91		
16	9.3	4.69	13.99 14.13									
17	9.5	4.73	14.23 .37									
18	9.9	4.83	14.73 .87									

W.S. has measured additional stars selected on this plate (No. 18)

Images not good.

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Series 2675 - 2686

Scale X

April 19, 1913 -

Mc 2685 Pole.

Seep. 161

5		5.4
6		6.2
8		7.3
9		7.8
10	4.3	8.0
11	4.5	8.4
12	4.6	8.6
13	4.9	9.0
14	5.1	9.85
15	5.4	9.7
16	5.9	10.0
17	6.4	
18	7.0	
19	7.4	
20	8.0	
23	8.7	
25	9.0	
26	9.2	
~~29~~	9.8	
~~44~~		

Images poor - large + poorly defined.

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1913phae.proj..989L

Scale R

April 22, 1913

3:55

H 628

	Rc.1	Rc.2	Mean	
1	8.1	8.4	7.7	8.05 4±
2	8.2 (8.5)	8.2 (8.5)	8.9	8.63 1±3
3	8.1	9.0	8.2	8.60 4±
4	8.0	8.3	8.1	8.20 1±
5	7.1	7.4	7.2	7.30 1±
6	7.1	7.4	7.3	7.35 0±
7	6.0	6.3	B.	6.3
8	7.8	8.1	8 7.0	8.05 10
9	8.0	8.0	8.3 8.3 7.9	8.17 11±
10	6.9	7.2	7.0	7.10 1±
11	7.0	7.3	7.1	7.20 1±

H 629

	Rc.1	Rc.2	
1	7.2	7.5	
2	7.2	7.5	
3	7.3	7.6	
4	7.9	8.2	
5	tp.		
6	8.2	8.5	8.2 8.35 1±
7	8.8	9.1	8.9 9.00 1±
8	8.1	8.4	8.2 8.30 1±
9	7.0	7.3	
10	7.2	7.5	
11	7.1	7.4	
12	6.2	6.5	

Images poor.

MOR

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1913phae.proj..989L

Scale R

April 22, 1913 -

		H 630				H 631			
		pc. 1	pc. 2	Magn.		pc. 1	pc. 2	Mean.	
	1	9.19	9.8	9.60	2 2	9.2	9.5	10.0	9.75 3 2
	2	9.19	10.0	9.70	3 3	9.3	9.6	10.0	9.80 2 2
	3	9.2	9.5	10.0	9.75 3 2	9.3	9.6	10.0	9.80 2 2
double min.	4	t.p.	t.p.			9.2	9.5	9.1	9.30 2 2
	5	8.3	8.6	8.3	8.45 2 1	7.2	7.5		
	6	7.2	7.5			8.0	8.3	8.1	8.20 1 1
	7	8.2	8.5	8.8	8.65 1 2	7.1	7.4		
	8	9.0	9.3	9.1	9.20 1 1	8.2	8.5	8.2	8.35 1 2
double	9	t.p.				8.2	8.5	8.3	8.40 1 1
"	10	t.p.				8.3	8.6	8.7	8.75 2 1
	11					8.2	8.5	9.0	8.75 3 2

Mar.

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1913phae.proj..989L

Scale R-

April 22, 1913.

H 624 Polaris.

	sc.1	sc.2		
1	8.184	8.1	8.25	2 1
2	8.184	8.2	8.~~35~~ 30	1 1 ~~2~~
3	8.083	8.1	8.20	1 1
4	7.1		8.0	
5	7.0		7.3	
6	7.1		7.4	

H 636

	sc.1	sc.2		
1	6.7	7.0		
2	7.3	7.6		
3	8.083	8.1	8.20	1 1
4	8.184	8.3	8.35	0 1
5	8.8	9.1	9.1 9.10	0 0
6	8.285	8.9	8.70	2 2
7	8.386	9.0	8.80	2 2
8	8.184	8.1	8.25	2 1
9	8.184	8.2	8.30	1 1
10	8.285	8.1	8.30	2 2
11	8.7	9.0	9.0 9.00	0 0

mar

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1913phae.proj..989L

Scale R

April 22, 1913.

	H 638				H 639			
	pc.1	pc.2			pc.1	pc.2		
1	8.1	8.4	8.8	8.3 8.50 1 3 2	6.2	6.5	6.5	
2	8.1	8.4	8.2	8.30 1 1	8.0	8.3	8.1	8.20 1 1
3	8.0	8.3	8 2	8.25 1 0	7	8	8.1	8.1
4	8.3	8.6	8.1	8 35 2 3	9	0	9.3	8.9 9.10 2 2
5	8.9	9.2	8.9	9 05 2 1	8.8	9.1	9.1	9 10 0 0
6	8.9	9.2	9.1	9.15 0 1	8.1	9.0	8.9	8.95 0 1
7	8.1	9.0	9.0	9.00 0 0	8.9	9.2	9.1	9.15 0 1
8	8.9	9.2	9.1	9.15 0 1	8.3	8.6	8.9	8.15 2 1
9	7	8	8.1	8.1	8.2	8.5	8.3	8.40 1 1
10	8.0	8.3	8.1	8.20 1 1	8.1	8.4	8.1	8.25 2 1
11	6.9	7.2		7.2	7.0	7.3		7.3

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1913phae.proj..989L

Scale R

April 22, 1913

H 696

	dc 1			
1	8.1 7.8	7.2	7.5	7.80 33
2	7.2	7.5		
3	7.3	7.6		
4	7.3	7.6		
5	7.0	7.3		
6	~~7.5~~ 7.2	7.5		

3:45

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1919phae.proj..999L

Scale R

April 23, 1913

4:10

H 626

	Rc.1	Rc.2	P.172 H626	Mean	
1	8.0	8.3 7.8? 8.00	3 3	7.80	7.90 10 10
2	7.3	7.6		7.5	7.55 0 1
3	7.3	7.6		7.6	7.60 0 0
4	8.1	8.4		7.6	8.00 4 4
5	7.1	7.4		7.8	7.35 0 1
6	7.2	7.5		7.5	7.50 0 0

H 639

	Rc.1	Rc.2			P.171	Mean	
1	6.3	6.6			6.5	6.55	0 1
2	7.9	8.2			8.20	8.20	0 0
3	7.3	7.6			8.1	7.85	2 3
4	8.9	9.2 ~~8.7 9.0~~	9.10	1 1	9.10	9.10	0 0
5	8.3	8.6 9.0	8.80	2 2	9.10	8.95	15 15
6	~~9~~ 8.1	9.0 9.0	9.00	0 0	8.95	8.98	02 03
7	9.1	9.4 9.1	9.25	2 1	9.15	9.20	05 05
8	8.2	8.5 9.0	8.75	3 2	8.75	8.75	0 0 0 0
9	8.2	8.5 8.3	8.40	1 1	8.40	8.40	0 0 0 0
10	8.1	8.4 8.2	8.30	1 1	8.25	8.28	02 03
11	7.1	7.4	7.4		7.3	7.35	0 1

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1913phae.proj..989L

Scale R.

April 23, 1913.

	H638						H636						P.170.	
	RC1	RC2		P.171	Mean		RC1	RC2					Mean.	
1	8.184	8.8	8.60	2 2	8.50	8.55 .15 .05	1	6.8	7.1				7.0	7.05 .10
2	8.083	8.2	8.35	1 0	8.30	8.28 .03 .02	2	7.9	8.2				7.6	7.90 .33
3	8.184	8.2	8.30	1 1	8.35	8.28 .02 .03	3	8.1	8.4	8.3	8.35	0 1	8.20	8.28 .07 .08
4	8.184	8.3	8.35	0 1	8.35	8.35 .00 .00	4	8.3	8.6	8.7	8.65	0 1	8.35	8.50 .15 .15
5	8.285	9.0	8.75	3 2	9.05	8.90 .15 .15	5	9.0	9.3	9.1	9.20	1 1	9.10	9.15 .05 .05
6	8.588	9.1	9.05	2 1	9.15	9.10 .05 .05	6	8.8	9.1	9.1	9.10	0 0	8.10	8.90 .20 .20
7	8.386	9.1	8.85	2 3	9.00	8.92 .01 .08	7	8.3	8.6	9.0	8.80	2 2	8.80	8.80 .0. .00
8	~~7.2~~ 8.1 9.0	9.2	9.10	1 1	9.15	9.12 .02 .03	8	8.2	8.5	8.3	8.40	1 1	8.25	8.32 .08 .07
9	7.2	7.5			8.1	7.80 .3 .3	9	8.3	8.6	8.3	8.45	2 1	8.30	8.38 .07 .08
10	8.0	8.3	8.15	1 2	8.70	8.18 .03 .02	10	8.2	8.5	8.2 8.1	8.35	1 2	8.30	8.32 .03 .02
11	7.0	7.3			7.2	7.25 .10	11	8.6	8.9	9.1	9.00	1 1	9.00	9.00 .0 .00

mOR.

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1913phae.proj.0880

Scale R

April 23, 1913 —

H 631

	pc.1	pc.2		P.170.	Mean		
1	8.2	8.5	8.35	1	8.25	8.30	05 05
2	8.2	8.5	8.35	1	8.30	8.32	03 02
3	8.0	8.3	8.1	8.20	1	8.20	8.20 00 00
4	7.3	7.6			8.0	7.80	02 2
5	7.2	7.5 —			7.3	7.40	11
6	7.1	7.4			7.4	7.40	00

H 631

	pc.1	pc.2			P.169	Mean.	
1	9.1	9.4	9.9	9.65	2	3	9.70	9.70	05 05
2	9.3	9.6	10.0	9.80	2	2	9.80	9.80	00 00
3	9.3	9.6	9.9	9.75	2	1	9.80	9.78	03 02
4	9.1	9.4	9.7	9.55	2	1	9.30	9.42	13 12
5	7.7	8.0	~~7.80~~				7.5	7.75	2 3
6	8.1	8.4	8.1	8.25	2	1	8.20	8.22	03 02
7	7.0	7.3					7.4	7.35	1 0
8	~~8.9~~ t.p.						8.35	8.35 double	a
9	t.p.						8.40	8.40	a
10	t.p.						8.75	8.75	a
11	8.9	9.2	8.9	9.05	2	1	8.75	8.90	15 15

mon.

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1913phae.proj..989L

Scale R

April 23, 1913.

H 630

	Rc.1	Rc.2		P.169		
1	9.2	9.5	9.8	9.65	1 2	9.60 9.62 03 02
2	9.2	9.5	9.8	9.65	1 2	9.70 9.68 03 02
3	9.3	9.6	9.7	9.65	01	9.75 9.70 05 05
4	tf.					. .
5	8.2	8.5	8.1	8.60	1 1	8.45 8.52 08 01
6	7.2	7.5				7.20 7.35 12
7	double					8.65 8.65 a
8	"					9.20 9.20 a
9	"					.
10	"					

H 629

	Rc.1	Rc.2			P.168 Meaw	
1	7.1	7.4			7.5	7.45 01
2	7.1	7.4			7.5	7.45 01
3	7.2	7.5			7.6	7.55 1 0
4	8.1	8.4	8.2	8.30 1 1	8.2	8.25 10
5	tf.					.
6	8.1	8.4	8.2	8.30 1 1	8.35	8.32 02 03
7	8.4	8.1	9.0	8.85 1 2	9.00	8.92 01 08
8	8.1	8.4	8.1	8.25 2 1	8.30	8.28 03 02
9	7.1	7.4			7.3	7.35 0 1
10	7.3	7.6			7.5	7.55 0 1
11	7.3	7.6			7.4	7.50 1 1
12	*6 7.1	6 7.4			6.5	6.45 0 1

*Remeasured Apr. 24, '13.
Error of unit

Images poor

M.O.R.

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1913phae.proj..9891

Scale R-

April 23, 1913-

628

	sc.1	sc.2		B.168	Mean		
1	8.28	8.7	8.60	11	8.05	8.32	28 29
2	8.68	9 8.3	8.60	33	8.63	8.62	02 01
3	8.38	6 8.7	8.65	01	8.60	8.62	03 02
4	8.08	3 8.2	8.25	10	8.20	8.22	03 02
5	7.2	15			7.30	7.40	11
6	7.0	13			7.35	7.32	01
7	5.9	6.2			6.3	6.75	01
8	7.3	7.6			8.05	7.82	22
9	7.9	8.2			8.17	8.18	01
10	6.9	7.2			7.10	7.15	01
11	7.1	7.4			7.20	7.30	11

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1913phae.proj..989L

Scale U. April 24, 1913

3:00 MC 3233 Pinacyanol Pole Class L²

Screen R1 + mat

	Ac.²	Ptm Diff.	Curve	Magn.
5	4.8	+1.63	+1.72	6.52
6	5.3	1.71	1.64	6.94
8	6.5	1.47	1.41	7.91 ~~2.88~~
9	7.7	0.91	1.05	8.75
10	7.8	1.16⁴	1.02	8.82
11	8.3	1.00	0.91	9.21
12	9.0	0.54	0.84	9.84
13	9.4	0.80	0.83	10.23
14	9.5	0.94	0.84	10.34
15	9.9	0.88	0.86	10.76
16				
17				

		Curve	Magn.
4r	6.3	+1.47	7.77
2r	t fp.		
~~3r~~			
5r	6.3	1.47	7.77
6r	7.4	1.14	8.54
7r	8.3	0.91	9.21
8r	9.1	0.83	9.93
9r	9.6	0.83	10.43
4a	8.9	0.84	9.74
5a	8.2	0.92	9.12
10r	N.S.		

MOR.

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1013phae.proj.0000

Scale u

April 24, 1913.

MC 3231 Pole. Guacajarol Screen R 1 + mat.

		Ptn Diff.	Curve	Magn.
5	4.1	+1.73	+1.73	6.43
6	5.3	1.71	1.70	7.00
8	6.4	1.57	1.51	7.91
9	7.5	1.11	1.10	8.60
10	8.1	0.84	0.84	8.94
11	8.5	0.80	0.77	9.27
12	8.9	0.64	0.73	9.63
13	9.4	0.85	0.74	10.14
14	9.7	0.74	0.77	10.47
15	t.f.			
16				
2r	4.2		+1.77	5.97
4r	6.3		1.54	7.84
5r	6.3		1.54	7.84
6r	7.6		1.07	8.67
7r	8.3		0.82	9.12
8r	9.1		0.73	9.83
9r	n.s.		~~0.74~~	
4a	8.1		0.74	9.44
5a	8.1		0.74	9.44

MOR.

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1913phae.proj..989L

Scale 2.

April 24, 1913.

Mc 2519 Pole L^2.

		Ptm Diff.	Curve	Imagn.
5	4.1	+1.73	+1.79	6.49
6	5.3	1.71	1.70	7.00
8	6.5	1.47	1.36	7.86 ~~8.89~~
9	8.0 8.1 7.9 8.05	0.61	0.75	8.75
10	8.0 8.1	0.89	0.73	8.78
11	8.6	0.70	0.67	9.27
12	9.0	0.84	0.71	9.71
13	9.5 9.3 9.40	0.85	0.89	10.09
14	9.5	0.94	0.82	10.32
15	9.9	0.88	0.94	10.84
16				
2N	4.2	.	.	
4N	6.3	~~+1.44~~	+1.44	7.74
5N	6.5		1.36	7.86
6N	7.8		0.81	8.61
7N	8.4		0.66	9.06
8N	9.1		0.73	9.83
9N	9.7		0.87	10.57
4S	8.6		0.66	9.26
5S	8.6		0.66	9.26

Mc 3229 L^2 Primary. Screw R1

		Ptm Diff.	Curve	Imagn.
5	4.6	+1.83	+1.73	6.33
6	5.4	1.61	1.66	7.06
8	6.4	1.57	1.44 1.66	7.84 7.86
9	~~6.7~~ 7.8	0.81	0.91	8.71
10	8.1	0.84	0.77	8.87
11	8.7	0.60	0.58	9.28
12	9.1	0.44	0.59	9.69
13	9.5	0.75	0.69	10.19
14	9.7	0.74	0.75	10.45
15	n.g.			
16				
2N	4.2		.	
4N	6.21		+1.50	7.70
5N	6.7		1.34	8.04
6N	7.9		0.86	8.76
7N	8.6		0.63	9.23
8N	9.1		0.75	10.45
9N	9.8		0.78	10.58
4S	9.1		0.59	9.69
5S	8.7		0.58	9.28

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1913phae.proj..0001

Scale

April 24. 1913

~~Mt 3-2-32~~ L' Screen Mt no mat

5.
6
8
9
10
11
12
13
14
15
16

2r
4r
5r
6r
7r
8r
9r
4s
5r

M.O.R.

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1913phae.proj..989L

L'

Scale 4

April 25, 1913.

Mc 3230 Orle (Cruiseyard (Screen R: no mat.) L'

		Phm. Diff.	Curve	Magn.
5	3.9	+2.53	+2.71	6.61
6	4.3	2.71	2.62	6.92
8	5.7	2.27	2.26	7.96
9	6.8	1.81	1.87	8.67
10	7.2	1.74	1.74	8.94
11	7.7	1.68	1.59	9.29
12	8.2	1.34	1.50	9.70
13	8.7	1.55	1.44	10.14
14	9.0	1.44	1.41	10.41
15	9.4	1.38	1.39	10.79
16	9.7	1.37	1.38	11.08
17	3.			
2N	3.7?		+2.76	6.46
~~3N~~			~~2.38~~	
4N	5.3		2.38	7.68
5N	6.1 6.10		2.12	8.22
6N	7.1		1.77	8.87
7N	7.9		1.56	9.46
8N	8.7		1.44	10.14
9N	9.0		1.41	10.41
4P	6.0		1.53	9.53
5P	8.1		1.51	9.61

MOR.

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1913phae.proj..9891

L' mc

Scale 11

April 25, 1913.

	MC 3232 Princeton L' Screen 24 - no mat				MC 3234 L'			
		Ptm. Diff.	Curve	Magn.		Ptm. Diff.	Curve	Magn.
5	3.9	+2.53	+2.53	6.43	5 4.0	+2.43	+2.57	6.57
6	4.6	2.41	2.42	7.02	6 4.7	2.31	2.46	7.16
8	5.7	2.27	2.22	7.92	8 5.4	2.57	2.31	7.71
9	6.7	1.91	1.93	8.63	9 6.7	1.91	1.95	8.65
10	7.2	1.74	1.77	8.97	10 7.2	1.74	1.79	8.99
11	7.7	1.60	1.61	9.31	11 7.7	1.60	1.63	9.33
12	8.2	1.34	1.53	9.75	12 8.1	1.44	1.54	9.64
13	8.5	1.75	1.53	10.03	13 8.7	1.55	1.44	10.14
14	8.9	1.54	1.50	10.40	14 9.0	1.44	1.40	10.40
15	9.2	1.58	1.49	10.69	15 9.4	1.38	1.37	10.77
16	9.9	1.17	1.45	11.35	16 9.9	1.17	1.31	11.21

Inside large 2R.

				2R.			not comparable with scale.
4R	5.6	2.25	7.85	4R	5.8	2.21	8.01
5R	6.0	2.15	8.15	5R	6.3	2.07	8.37
6R	7.1	1.79	8.89	6R	7.2	1.80	9.06
7R	8.0	1.57	9.57	7R	8.1	1.54	9.64
8R	8.8	1.51	10.31	8R	8.9	1.41	10.31
9R	9.0	1.50	10.58	9R	9.5	0.85	10.35
4Q	8.1	1.56	9.66	10R	n.s.	~~1.51~~	
5Q	8.0	1.57	9.57	4Q	8.2	1.51	9.71
				5Q	8.1	1.53	9.63

MOR

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1913phae.proj..989L

L^2

Scale a

April 28, 1913

	Mc 3231 Pole Pinacyanol	Mc 2519 Pole Pinacyanol Screen R 14 mm
8	6.4	6.7
9	7.8	7.9
4½	6.3	6.4
5½	6.2	6.9
+88° 2	6.3	6.4
+88° 115	8.2	8.7
+88° 105	6.3	6.8
+88° 90	7.7	8.4

Miss Brooks.

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1913phae.proj..989L

L 2

Sc. U

April 28. 1913

	InC 3229	InC 3233
8	6.7	6.6
9	7.8	7.7
42	6.3	6.3
52	6.8	6.5
+88° 2	6.3	6.2
+88° 115	8.3	8.1
+88° 105	6.4	6.3
+88° 90	8.0	7.8

Miss Brooks.

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1913phae.proj..989L

So W April 1913

	MC 2528	P.C
5	3.9	8.1
6	4.3	8.7
8	4.9	9.7
9	5.4	f
4a	4.7	9.6
5a	4.9	9.5
+88° 2	4.7	9.4
+88° 115	6.1	
105	4.9	9.8
90	5.7	
10	5.7	
11	6.2	
12	6.6	
13	7.2	
14	7.7	
15	8.1	
16	8.5	
17	8.7	
18	9.2	
19	9.7	
20	10.0	
4p		
5p		
6p	5.4	
7p	6.2	
8p	7.2	
9p	n.s	
4a	6.8	
5a	6.6	

Br. stars do not compare well with scale images - large and spread out

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1913phae.proj..989L

Stars near the North Pole.

Scale W

May 7, 1913

2:45 Mc 1294 14 stars. Images 1 only.

Diff. from comet		Rec. 1	Diff →		Curve	Magn.		P.C.	Diff.	Curve	Magn.	Diff.	Mean.
Plate													
+87°	12	4.1	4.2		+198	3.67	6.18 7.87	9.3		-1.60	7.70	0	7.86
+365 +87	15	4.2	4.3 3.64	+354	+194	365	6.24 7.95 7.89	9.7	-1.86	-1.70	8.00	-1.75	7.94
3.45	5	3.0	3.1 3.48	338		3.84	6.94	7.6	-1.121	-1.06	6.54	-1.05	6.70
3.51 +88	2	4.2	4.3		+194	3.65	6.24 7.95	9.9		-1.75	8.15		7.94
3.51	9	5.0	5.1 3.61	3.51	+169	3.56	6.79 8.66	10.0	-1.39	-1.77	8.23	+0 -1.39	8.64
3.75 +88°	115	5.1	5.2 3.76	3.68	+166	3.55	6.86 8.78 5	n.s.					8.82
+88	105	4.1	4.2		+198	3.67	6.18 7.87	9.7		-1.70	8.00		7.98
+88	90	5.1	5.2		+166	3.55	6.86 8.75	n.s.					8.82
3.88	6	3.1	3.2 3.98 +	3.88	1.	3.82	7.02	8.3	-1.221	-1.39	7.01	-1.221	7.06
3.54 +88°	86	5.1	5.2 3.68	3.58	+166	3.55	5.24 8.75	n.s.					8.72
3.72 +88	80	5.1	5.2 3.89	3.72	+166	3.55	5.08 8.75						8.82

+4.021	7 +2	3.2	3.3 4.19	4.09	3.80		7.10	2.89	-1.51	-1.48	7.42	-1.58	7.17
	3R	3.2	3.3		3.80		7.10	2.90		-1.50	7.50		7.47
	5R	4.2	4.3		3.65 +198	6.28	7.95	9.1 4.2		-1.54	7.56		8.06
	2R	2.1	2.2		401		6.21	7.3		-1.45	5.85		6.30
	4R	4.2	4.3		3.65 +194	6.24	7.95	9.5		-1.65	7.85		7.94
	1R	(B)						6.4					

M.OR

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1913phae.proj..989L

Scale. 2"

May 7, 1913 -

Mc 1406

Images 2 meas.

Diff. from mean			Sc 1		Diff.	Magn.	P.C.	Curve	Magn.	
						8.90				
+3.62	+88.	80	5.25.3 ~~3.72~~	3.62	+3.60	~~7.22~~	n.s.			
						8.70				
3.64	+88	86	5.05.1 ~~3.78~~	3.68	3.60	~~7.28~~				
	+88	90	5.25.3		3.60	8.90				
4.02		87	3.23.3 ~~4.19~~	4.09	3.94	7.24	8.9?	-1.51	-1.58	7.32 -1.58
	+88	105	4.34.4		3.70	8.10				
3.65	+88	115	5.25.3 ~~3.68~~	3.58	3.60	8.90				
	+88	2	4.14.2		3.72	7.92				
3.61		9	4.96.0 ~~2.41~~	3.61	3.62	8.62				
4.35		5	2.12.2 ~~4.38~~	4.28	4.25	6.45	7.8	-1.32	-1.35	6.45 -1.75
	+87	12	4.04.1		3.74	7.84	n.s.			
3.75	+87	15	4.14.2 ~~3.74~~	3.64	3.72	7.92	n.s.			
3.98		6	3.03.1 ~~4.08~~	3.98	4.00	7.10	8.7	-1.62	-1.54	7.16 -1.62
		3R	4.04.1		3.74	7.84	9.1		-1.62	7.48
		5R	4.44.5		3.68	8.18	n.s.			
		2R	2.02.1		4.28	6.38	7.8		-1.35	6.45
		4R	4.14.2		3.72	7.92	n.s.			
		1R	not on pl.							

M.OR.

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1913phae.proj..989L

Scale W

May 7, 1913.

MC 1910

17 Stars. Images 3, 4, 5.

Images 3.

			sc.1	sc.2	Diff.	curve Mags.	P.C.	Corrected Diff.
+87	12		6.970			+0.78	7.78	
+87	15		7.172		+0.77 0.64	0.74	7.94	0.75
	5		5.2 5.3		1.38 1.18	1.21	6.54	1.25
	9		7.9 8.0		0.71 0.61	0.58	8.58	0.61
	6		6.2 6.3		0.88 0.78	0.95 0.88	7.25	0.78
	7		6.3 6.4		1.09 0.99	0.92	7.32	0.92
+88°	80		9.0	9.0	-0.08 -0.08	0.34	9.34	-0.08
+88	86		8.1	8.1	+0.68 0.68	0.54	8.64	0.64
+88	90		8.2	8.2		0.51	8.71	
+88	105		7.172			0.74	7.94	
88°	115		8.1	8.1	+0.78 0.78	0.54	8.64	0.75
+88	2		7.1			0.75	7.85	

1N	3.9 4.0	n.s.	
3N	6.1 6.2	0.97	7.17
5N	7.4 7.5	0.68	8.18
2N	5.0 5.1	1.28	6.38
4N	7.0 7.1	0.75	7.85

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1913phae.proj..989L

Scale W

May 7, 1913

Mc 1910

17 stars. Images 3, 4 + 5

			sc 1	sc 2 Diff.		Diff	Images 4. Cor.	Cor. Diff
		7	4.041	~~+339~~	3.29	+3.49	7.59	+3.22
		6	3.334	~~346~~	3.68	3.62	7.02	3.68
+88	80	5	9 6.0	~~3.02~~	2.92	3.14	9.14	2.92
+88	86	4	7.148	~~4.08~~	398	3.35	8.15	3.74
		9	5.152	~~3.51~~	3.41	3.38	8.48	3.41
+87°	15	4	1.142	~~3.44~~	3.64	3.46	7.66	3.75
+87°	12	4	0 4.1			3.49	7.59	
		5	2.9 30	~~3.58~~	3.48	3.72	6.72	3.55
+88	2	4	1 4.2			3.46	7.66	
+88	115	5	1 5.2	~~3.48~~	3.68	3.38	8.48	3.76
+88	105	4	1 4.2			3.47	7.67	
+88	90	5	1 5.2			3.38	8.48	

1r	1.8 2.0	3.98	5.98
3r	3.0 3.1	3.69	6.79
5r	4 3 4.4	3.42	7.82
4r	4.0 4.1	3.49	7.59
2r	2.1 2.2	3.92	6.12

MOR

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1913phae.proj..989L

Scale W

May 7, 1913.

Mc 1910

17 stars. Images 3, 4 + 5

		pc 1	pc 2			Curve	Images 5 Magn.	
+87°	12	6.8	7.0			+0.81	8.81	
+87	15	7.0	7.1	~~+0.84~~	0.74	0.78	7.88	+0.85
	5	5.1	5.2	~~1.38~~	1.38	1.28	6.48	1.35
	9	7.9	8.0	~~0.71~~	0.61	0.57	8.57	0.61
+88°	2	7.0	7.1			0.78	7.88	
+88°	115	8.1	8.2	~~0.78~~	0.68	0.51	8.71	0.70
+88	105	7.1	7.2			0.76	7.96	
+88	90	~~8.2~~	8.2			0.51	8.71	
+88	86	~~8.2~~	8.2	~~0.58~~	0.58	0.51	8.71	0.6
+88	80		8.1	~~0.22~~	0.22	0.41	9.11	0.21
	7	6.4	6.5	~~0.99~~	0.89	0.92	7.42	0.82
	6	6.1	6.2	~~0.98~~	0.88	1.00	7.20	0.8

4 n	7.0	7.1	0.78	7.88
2 n	5.0	5.1	1.26	6.36
3 n	6.2	6.3	0.97	7.27
5 n	7.7	7.8	0.61	8.41
1 n	4.0	4.1		

more

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1913phae.proj..989L

Scale W

May 7, 1913

MC 1946

17 plates Images 3, 4, 5.

		pc. 1	pc. 2		curve	Images 3.
near edge	+88° 80	n.s.	.	Dm.	ent. diff.	
" "	+88 86	7.778	~~+1.08~~	0.98	+1.16	8.96
	+88 90	7.778	.		+1.14	8.94
	4	5.152	~~2.29~~	2.19	1.91	7.11
	6	5.152	~~1.98~~	1.88	1.91	7.11
	+88 105	6.364			1.51	7.91
	+88 115	7.374	~~1.58~~	1.48	1.24	8.64
	+88 2	6.465			1.48	7.98
	5	4.344	~~2.18~~	2.08	2.21	6.21
	9	7.172	~~1.61~~	1.41	1.28	8.48
	+87 15	6.465	~~1.44~~	1.34	1.48	7.98
	+87 12	6.263			1.54	7.84
	3R	4.950			1.99	6.99
	5R	6.566			1.44	8.04
	2V	4.142			2.29	6.49
	4R	6.263			1.54	7.84
	1R	3.0 3.1			.	.

MOR.

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1913phae.proj..989L

Scale W

May 7, 1913.

MC 1946

Images 4

		Mc. 1	Diff.		curve	Magw.	Mean.
	6	3.13 2	+3.94	388	+4.10	7.30	7.16
	7	2.9 3.0	4.49	4.39	4.13	7.13	7.36
+88	80	+p.					9.14
+88	86	3.8 3.9	4.98	488	3.96	7.86	8.00
+88	90	4.1 4.2			3.91	8.11	8.30
+88	105	3.2 3.3			4.08	7.38	7.52
+88	115	4.9 5.0	3.98	3.88	3.99	8.79	8.64
+88	2	4.1 4.2			3.91	8.11	7.88
	5	2.1 2.2	4.08	4.38	4.32	6.52	6.62
	9	4.7 4.8	3.91	3.81	3.80	8.60	8.54
+87	15	4.0 4.1	3.84	3.74	3.92	8.02	7.84
					4.16	7.06	
*+87	12	2.8 2.9			*Mistake of instr. should be 28 E.F.S.		7.32

1N	B.			5.98
3N	1.8 2.0	4.38	6.28	6.54
5N	3.8 3.9	3.95	7.85	7.84
2N	1.8 2.0	4.38	6.38	6.25
4N	3.7 3.8	3.98	7.78	7.64

M.O.R.

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1913phae.proj..989L

Scale W

May 7, 1913.

mc1946

17 Stars Images 3, 4 & 5

Images 5.

		rc 1	rc 2	Diff		curve	Magn.	Corr. Diff
m edge	+88 80	n.s.						
	+88 86	7.8	7.9	~~0.98~~	+0.88	0.98	8.88	+0.84
	+88 90	~~8.1~~	8.1			0.94	9.04	
Re-examined may 26'13 5.3	7	5 2	5.3	~~2.19~~	2.09	0.63	5.93	2.02
" " 5.6	6	5.8 2	5.3	~~1.88~~	1.78	0.63	5.93	1.78
	+88 105	6.4	6.5			1.29	7.79	
	+88 115	7.7	7.8	~~1.18~~	1.08	1.00	8.80	1.15
	+88 2	6.4	6.5			1.29	7.79	
	9	9.2	7.3	~~1.41~~	1.31	1.09	8.39	1.21
Re-examined may 26'13 5.0	5	4.8	4.9	~~1.68~~	1.58	1.76	6.66	1.65
	+87 15	6.8	6.9	~~1.04~~	0.94	1.19	8.09	1.05
	+87 12	6.3	6.4			1.32	7.72	
	5N	7.0	7.1			1.14	8.24	
	1N	3.1	3.2			.	.	
	2N	4.1	4.2			1.98	6.18	
	4N	6.4	6.5			1.29	7.79	
	3N	4.8	4.9			1.76	6.66	

M.O.R.

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1913phae.proj..989L

Scale ~~4~~ 2

May 7, 1913.

Mc 348 17 stars. (class 2)

					mags.	Corr	Diff	Corr mags	P.C.	Diff.	Corr	Mags	Corr Diff Corr mags Mean
	7	B.							5.2	2.19	+203	7.23	+2.12 2.07 7.27 7.16
+88	80	B.							7.0	1.92	-1.79	8.79	1.92 1.82 8.82 8.79
+88	86	B.							6.9	1.88	1.80	8.70	1.84 1.78 8.68 8.73
+88	90	4.1 ~~B~~			+4.01	8.11		4.10 8.20	7.7				
	6	B.							4.9	2.18	2.07 +1.97	6.97	2.18 2.12 7.02 7.08
	9								7.0	1.61	1.80	8.80	1.61 1.82 8.82 8.79
+87	15	3.0 ~~3~~	4.84	4.84	7.84	+4.95	4.93	7.93	6.0	1.84	1.90	7.90	1.95 1.95 7.95 7.95 corr
+87	12	B							7.0	~~1.18~~	1.80	8.80	1.82 1.82 8.79
	5	B.							4.7	1.78	2.11	6.81	1.85 2.15 6.85 6.76
+88	2								6.9		1.80	8.70	1.83 8.73 8.70
+88	105	~~6.7~~							6.7		1.82	8.52	1.85 1.55 8.62
+88	115	7.1	1.78	1.78	8.88	+1.85	1.85	8.95					8.86
	3R	3.8		4.27	8.07			4.33 8.13	6.7		1.82	8.52	1.85 8.55 8.54
	5N	4.3		3.87	8.17			3.95 8.25	8.0				
wedge pl.	1R	~~5.3~~							5.3		2.01	7.31	2.05 7.35
	2R	5.							5.8		1.93	7.73	1.98 7.78 7.69
	4R								7.0		1.80	8.80	1.82 8.82 8.84

MOR

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1913phae.proj..989L

Scale 4 May 7, 1913.

MC 345 17 stars (Class 2)

			P.C.	Diff.	Curve	Magn.	Diff f Cor mag.	Curve	Magn.
		2c.1							
+87°	15	B.	6.1	+1.74	+1.85	7.95	+1.85	1.85	7.95
+87	12		7.0		1.78	8.78		1.76	8.76
	9		7.0	1.61	1.78	8.78	1.61	1.76	8.76
	5	+	4.7	1.78	2.04	6.74	1.85	1.78	6.68
+88°	2		6.9		1.78	8.68		1.78	8.68
	6		5.2	1.88	1.98	7.18	1.88	1.95	7.15
+88°	115		7.1	1.78	1.98	8.88	1.85	1.75	8.85
+88°	105		6.9		1.98	8.68		1.78	8.68
+88°	90		8.0						
	7	B	5.1	2.29	1.99	7.09	2.22	1.95	7.05
+88	80		7.0	1.92	1.78	8.78	1.92	1.76	8.76
+88	86		6.9	1.88	1.78	8.68	1.9	1.78	8.68
	2N		5.7		1.90	7.60		1.90	7.60
	4N		7.1		1.78	8.88		1.75	8.85
	5N	4.3	8.2						
not rpt.	1N								
	3N	B.	6.4		1.82	8.22		1.82	8.23

MOR

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Scale II

May 7, 1913 –

Mc 1186

17 stars. (Class 2)

		RC.1		Curve	Magw.	O.C.	Diff.	Curve	Magw.
+88°	86	5.0	3.78	+3.80	8.80	8.2	0.58	+0.30	8.50
+88	80	5.0	3.92	3.80	8.80	8.2	0.72	0.30	8.50
+88	90	5.3		3.74	9.04	9.1		0.14	9.24
+88	105	4.9		3.82	8.72	8.2		0.30	8.50
+88	115	5.1	3.78	3.78	8.88	8.7	0.18	0.22	8.92
	4R	5.0		3.80	8.80	8.3		0.28	8.58
	2R	4.0		4.03	8.03	7.1		0.52	7.62
	3R	4.7		3.86	8.56	8.1		0.31	8.41
	1R	3.1		4.28	7.38	6.1		0.79	6.89
	5R	5.8		3.68	9.28	9.8		.	.
	7	3.0	4.39	4.31	7.31	6.8	0.59	0.60	7.40
	6	2.8	+4.28	4.36	7.16	6.4	+0.68	0.71	7.11
	9	5.0	3.61	3.80	8.80	8.3	0.31	0.28	8.58
+88	2	4.9		3.82	8.72	8.2		0.30	8.50
+87	15	4.1	3.74	4.00	8.10	7.7	0.14	0.40	8.10
+87	12	4.7		3.86	8.56	8.2		0.30	8.50
	5	B.				5.4	1.08	1.01	6.41

MOR.

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Scale 4.

May 7, 1913.

Mc 462

17 plates, images 1 and 5.

Images 1.

		pc.1	pc.2	curve	magn.	G.C.	Diff from	curve	magn.	Curve	magn.	Curve	Magn.
	+88°.80	4.7	4.22	+4.01	8.71			4.22		4.15		5.95 +4.09	8.79
	+88°.86	4.7	4.08	+4.01	8.71			4.24		4.15		5.85 4.09	8.79
—	+88 90	4.54		4.00	9.40								
	4	3.2	4.19	4.08	7.28		4.12		3.19		6.8	4.03	7.23
	6	3.1	+3.98	4.09	7.19			3.98		3.12		6.22 4.03	7.13
—	+88° 105	4.9		4.00	8.90					4.25		7.15 4.10	9.09
wrong star	+88 112	4.9		4.00	8.90					4.20		7.15 4.10	8.90
—	+88 2	4.3		4.03	8.33					3.94		5.24 4.08	8.38
	9	4.3	4.31	4.03	8.33			4.31		3.94		5.24 4.08	8.38
—	+87 12	4.3		4.03	8.33					3.94		5.24 4.08	8.38
	+87 15	4.1	3.74	4.02	8.12			3.85		3.82		7.92 4.07	8.17
	+88 115	5.0	3.88	4.00	9.00			3.95					
—	3N	4.3		4.01	8.31					3.94		5.24 4.08	8.38
—	5N	5.3		4.00	9.30								
—	4N	4.8		4.00	8.80					4.19		7.99 4.09	8.89
—	2N	4.1		4.02	8.12					3.82		7.92 4.07	8.17
—	1N												

MOR.

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Scale U

May 7-1913 —

M 0462

17 plate Images 1 + 5.

Images 5 —

				curve Magn.		P.C.	curve	Magn.	Mean		
+88°	80	5.0	+3.92	+3.98	8.98	+3.92	4.01	9.01	8.90	11	11
									8.93	08	08
+88	86	4.8	3.98	4.00	8.80	3.94	4.05	8.85	8.82	03	03
									8.85	00	00
+88	90	5.3		3.94	9.24		3.99	9.29	9.29	.	a
									9.29	.	a
	7	3.1	4.29	4.19	7.29	4.22	4.22	7.32	7.28	05	04
	6	3.0	4.08	4.20	7.20	4.08	4.23	7.23	7.18	05	05
+88°	185	4.9	3.98	3.99	8.89	4.05	4.03	8.93	9.01	08	08
+88	105	4.7		4.01	8.71		4.06	8.76	8.92	16	17
+88	2	4.2		4.07	8.27		4.12	8.32	8.35	03	03
	5	R.				n.s.					
	9	4.2	4.41	4.07	8.27	4.41	4.12	8.32	8.35	03	03
+87	12	4.2		4.07	8.27		4.12	8.32	8.35	03	03
+87	15	3.9	3.94	4.10	8.00	4.05	4.15	8.05	8.11	06	06
	1r	Off plate.									
	2r	4.1		4.08	8.18		4.13	8.23	8.20 8.57	03	03
	3r	4.7		4.01	8.71		4.06	8.76	8.57	19	17
	4r	4.9		3.99	8.89		4.03	8.93	8.91	02	02
	5r	5.5 4.7									

Images on this plate (462) large - bright - difficult to meas.

MOR.

4.25

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Tuesday, May 20, 1913

Scale 21

Mlo 3,87 Pole L² Screen R1 + mat

17 stars.

		sc. 1	Diff.	sc. 2	Curve magn.	P. lo	MC 3183 p 203	MC 3185 p 202	MC 3233 p 207	MC 3231 p 208	MC 3229 p 209	Mean	Residuals
7		6.7	+0.69	1.01	7.71		7.53	7.71	7.48	7.42	7.49	7.56	15 03 15 08 14 07
near edge	1r	3.1		.	.	7.3	.	.	.	.		.	
	3r	5.3	~~1.61~~	1.62	6.92		7.08	6.96	6.85	6.89	6.95	6.94	02 14 02 09 05 01
	6	5.4	1.68	1.58	6.98		7.08	7.08	6.85	7.13	6.95	7.01	03 07 07 16 12 06
	5r	6.7		1.01	7.71		7.65	7.71	7.78	7.61	7.84	7.72	01 07 01 06 11 12
near edge	+88° 80	8.9	0.02	-0.01	8.89		8.86	8.88	8.98	8.91	9.00	8.92	03 06 04 06 01 08
"	+88° 86	9.0	-0.22	-0.06	8.94		8.92	8.92	8.92	8.91	8.97	8.93	01 01 01 01 02 04
"	+88° 90	7.9		0.49	8.39		8.33	8.37	8.36	8.32	8.59	8.39	00 06 02 03 07 20
	+88° 105	6.9		0.94	7.84		7.65	7.71	7.48	7.42	7.78	7.65	19 00 06 17 23 13
	+88° 115	8.2	0.68	0.33	8.53		8.50	8.48	8.59	8.50	8.59	8.53	00 03 05 06 03 09
	4r	6.4		1.15	7.55		7.65	7.71	7.53	7.42	7.55	7.57	02 08 14 04 15 02
	2r	4.3		.	.	9.0	.	.	6.24	6.18	6.33	6.25	. . . 01 07 08
	+88° 2	6.4		1.15	7.55		7.59	7.66	7.41	7.42	7.55	7.53	02 06 13 12 11 02
	5	4.7	1.74	1.84	6.54	9.7	6.41	6.48	6.48	6.42	6.52	6.48	06 07 00 00 06 04
	9	8.0	0.61	0.45	8.45		8.33	8.30	8.49	8.45	8.44	8.41	04 08 11 08 04 03
	+87° 12	6.2		1.23	7.43		7.26	7.26	7.41	7.37	7.42	7.36	07 10 10 05 01 06
	+87° 15	7.0	0.84	0.90	7.90		7.98	7.96	7.95	7.99	8.01	7.96	06 02 00 01 ~~03~~ 05

J. L. M.

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Tuesday, May 20, 1913

Scale 96

Mk 3186 Pole L' Screen M

17 stars.

		sc.	Diff.	Curve	Magn.	P. C.
from image	7	4.9	+2.49	2.10	7.00	
	6	5.1	1.98	2.04	7.14	
	1r	3.2		.	.	6.7
	5r	6.9		1.50	8.40	
	3r	4.7		2.15	6.85	
near edge	+88° 80	7.7	1.22	1.23	8.93	
"	+88° 86	7.7	1.08	1.23	8.93	
"	+88° 90	7.2		1.40	8.60	
	+88° 105	6.1		1.76	7.86	
	+88° 115	7.1	1.78	1.44	8.54	
	4r	5.9		1.82	7.72	
from image	2r	3.9		2.35	6.25	8.6
	+88° 2	6.0		1.80	7.80	
	5	4.3	2.18	2.25	6.55	8.9
	9	7.0	1.61	1.47	8.47	
	+87° 15	6.6	1.74	1.60	8.20	
	+87° 12	5.8		1.85	7.65	

deflection film

J. C. M.

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Tuesday, May 20, 1913

Scale 11. Mt 3185 Pole L^2 Screen R1 + mat.

17 stars.

			Diff	Curve	mag.	
	7	6.9	+0.49	0.81	7.71	P.6.
edge	1r	..		.	.	7.8
	3r	5.7		1.26	6.96	
	6	5.9	1.18	1.18	7.08	
	5r	6.9		0.81	7.71	
near edge	+88° 80	9.0	-0.08	-0.12	8.88	
" "	+88° 86	9.1	-0.32	-0.18	8.92	
	+88° 90	8.0		0.37	8.37	
	9	7.9	+0.71	0.40	8.30	
	+88° 105	6.9		0.81	7.71	
	+88° 115	8.2	0.68	0.28	8.48	
	4r	6.9		0.81	7.71	
	2r	4.3		.	.	8.8
	+88° 2	6.8		0.86	7.66	
	5	5.0	1.48	1.48	6.48	9.9
	+87° 12	6.2		1.06	7.26	
	+87° 15	7.3	0.54	0.66	7.96	

Film defective.

J.C.M.

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Tuesday, May 20, 1913

Scale		Mb 3183	Diff.	Curve	mag.	Pole	L^2 Screen R + mat in holder
							17 stars.
	7	6.7	+0.69	0.83	7.53	P.b	
	3r	6.0		1.08	7.08		
edge	1r	..		.	.	7.7	
	6	6.0	1.08	1.08	7.08		
	5r	6.9		0.75	7.65		
Near edge	+88°80	8.9	0.02	-0.04	8.86		
"	+88°86	9.0	0.22	-0.08	8.92		
"	+88°90	8.0		0.33	8.33		
	+88°105	6.9		0.75	7.65		
	+88°115	8.3	0.58	0.20	8.50		
	4r	6.9		0.75	7.65		
	2r	4.3		.	.	8.9	
	+88° 2	6.8		0.79	7.59		
	5	5.0	1.48	1.41	6.41	9.8	
	9	8.0	0.61	0.33	8.33		
	+87°15	7.4	0.44	0.58	7.98		
	+87°12	6.3		0.96	7.26		

Film defective

J.C.M.

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1913phae.proj..989L

Tuesday, May 20, 1913

Mb 3184 — Pole L' — Screen M + no mat — 17 stars

Scale 2l

			Diff.	Curve	Magn.	P.C.	Diff.	Mb 3186	Mb 3232	Mb 3230	Mean.
Remeasured May 21, '13	5.7	7	5.0	+2.39	2.12	7.12			7.00	7.39	7.22	7.18
		3r	4.9		2.16	7.06			6.85	7.02	..	6.98
edge		1r	..		.	.	6.9		..	..	..	..
		6	5.3	1.78	2.01	7.31	9.8	-2.72	7.14	7.02	..	7.16
		5r	6.8		1.43	8.23			8.40	7.91	7.95	8.12
+88°		80	8.0	0.92	0.97	8.97			8.93	9.01	8.82	8.93
+88°		86	7.9	0.88	1.00	8.90			8.93	9.01	8.75	8.90
+88°		90	7.2		1.29	8.49			8.60	8.65	8.53	8.57
+88°		105	6.2		1.67	7.87			7.86	7.64	7.80	7.79
+88°		115	7.3	1.58	1.25	8.55			8.54	8.65	8.75	8.62
		4r	6.1		1.70	7.80			7.72	7.44	7.00	7.49
		2r	too faint				8.7		6.25	..	6.40	6.32
+88°		2	6.1		1.70	7.80			7.80	7.78	7.44	7.70
Remeasured May 21, '13	4.7	5	4.7	1.78	2.24	6.94	9.0	-7.52	6.55	6.52	6.49	6.52
		9	7.3	1.31	1.25	8.55			8.47	8.59	8.68	8.57
+87°		15	6.7	1.14	1.48	8.18			8.20	7.85	7.88	8.03
+87°		12	5.7		1.85	7.55			7.65	7.30	7.08	7.40

Film defective

J. C. M.

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1913phae.proj..989L

Tuesday, May 20, 1913

Scale 2. Mc 3075 Pole L′ with screen M.
17 stars.

		Diff	Curve	Magn.	P.C.
edge	1r	. .	.	.	7.5
	7	4.7	+2.69	2.25	6.95
	6	4.9	2.18	2.18	7.08
	3r	4.9		2.18	7.08
too near edge	+88° 80	. .		.	.
" "	+88° 86	. .		.	.
	+88° 90	7.3		1.34	8.64
	+88° 105	6.2		1.78	7.98
	+88° 115	7.8	1.08	1.13	8.93
	4r	6.2		1.78	7.98
	2r	5.0:		2.15	7.15
	+88° 2	6.1		1.80	7.90
	5	4.6	1.88	2.28	6.88
	9	7.2	1.41	1.39	8.59
	+87° 12	6.0		1.84	7.84
	+87° 15	too faint.		.	
	5r.	6.9		1.51	8.41

9.0

Very defective plate.

J.C.M.

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Tuesday, May 20, 1913

Scale 2. MC 3074 Pole L' with screen M.

17 stars.

		Diff.	Curve	Magn.	P.C.	Pty. – Ptn. White	Pty. – Ptn. Red
edge	1r	. .	.	.	7.3		
	7	5.0	+2.39	2.10	7.10	29	
	6	5.3	1.78	2.01	7.31	23	
	3r	5.2		2.04	7.24		40
	5r	6.7		1.70	8.40		27
too near edge	+88° 80	. .		.	.		
" "	+86° 86	. .		.	.		
	+88° 90	7.2		1.60	8.80		17
	+88° 105	6.2		1.81	8.01		19
	+88° 115	7.2	1.68	1.60	8.80	08	
	4r	6.2		1.81	8.01		20
	2r	4.9		2.12	7.02	93	47
	+88° 2	6.2		1.81	8.01		09
	5	4.7	1.78	2.17	6.87	9.7 39	
	9	7.1	1.51	1.61	8.71	10	
	+87° 12	5.3		2.01	7.31		87
	+87° 15	5.9	1.94	1.87	7.77	07	

+72	+47
−44	−219
6)+28	8)−172
+05	−.21(5)

J.C.M.

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~~Tuesday~~ Wednesday, May 21, 1913

Mb 3233 Pole L² Screen R mat in holder
17 stars.

Scale 4.

		Diff.	Curve	magn.	P.C.
7	6.3	+1.09	1.18	7.48	
3r	5.3		1.55	6.85	
+88° 80	9.0	-0.08	-0.02	8.98	
+88° 86	8.9	-0.12	0.02	8.92	
+88° 90	7.8		0.56	8.36	
5r	6.8	+.178	0.98	7.78	
6	5.3		1.55	6.85	
+88° 105	6.3		1.18	7.48	
+88° 115	8.2	0.68	0.39	8.59	
4r	6.4		1.13	7.53	
2r	4.3		1.94	6.24	9.0
+88° 2	6.2		1.21	7.41	
9	8.0	0.61	0.49	8.49	
+87° 15	7.1	0.74	0.85	7.95	
+87° 12	6.2		1.21	7.41	
5	4.7	+1.78	1.78	6.48	9.8
Off plate 1r	..		.	.	

Film defective.

J. C. M.

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1913phae.proj..989L

Wednesday, May 21, 1913

Scale 24 Mb 3231 Pole L 2 Screen R 1 + mat.
17 stars.

		Diff.	Curve	Magn.	P. Co.
7	6.3	+1.09	1.12	7.42	
6	5.8	1.28	1.33	7.13	
5r	6.6		1.01	7.61	
3r	5.4		1.49	6.89	
+88° 80	8.9	0.02	0.01	8.91	
+88° 86	8.9	-0.12	0.01	8.91	
+88° 90	7.8		0.52	8.32	
+88° 105	6.3		1.12	7.42	
+88° 115	8.1	0.78	0.40	8.50	
4r	6.3		1.12	7.42	
2r	4.3		1.88	6.18	8.9
+88° 2	6.3		1.12	7.42	
5	4.7	+1.78	1.72	6.42	9.8
9	8.0	0.61	0.45	8.45	
+87° 12	6.2		1.17	7.37	
+87° 15	7.2	0.64	0.79	7.99	
off plate 1r	..		.	..	

Film defective

J. B. M.

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Wednesday, May 21, 1913

Scale 2 Mc 3229 Pole L 2 Screen R 1 mat in holder 17

		Diff.	Curve	Magn.	Phc
6	5.3	+1.78	1.65	6.95	
7	6.2	1.19	1.29	7.49	
5r	6.8		1.04	7.84	
3r	5.3		1.65	6.95	
+88°80	9.1	-0.18	-0.10	9.00	
+88°86	9.0	-0.22	-0.03	8.97	
+88°90	8.2		0.39	8.59	
+88°105	6.7		1.08	7.78	
+88°115	8.2	+0.68	0.39	8.59	
4r	6.3		1.25	7.55	
2r	4.3		2.03	6.33	9.0
+88° 2	6.3		1.25	7.55	
5	4.6	1.88	1.92	6.52	defective
9	7.9	0.71	0.54	8.44	
+87° 12	6.1		1.32	7.42	
+87° 15	7.1	0.74	0.91	8.01	
off plate 1r	..		.	. .	

J 6.7 m

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1913phae.proj..989L

Wednesday, May 21, 1913

Mb 3230 Pole L' Screen M + no mat.

Scale 21. 17 stars.

		Diff.	Curve	Magn.	P.C.	Diff.
7	5.0	2.39	2.22	7.22		
6	too faint	.	.	9.3		222
5r	6.0		1.95	7.95		
3r	too faint	.	.	9.1		
+88° 80	7.2	1.72	1.62	8.82		
+88° 86	7.1	1.68	1.65	8.75		
+88° 90	6.8		1.73	8.53		
+88° 105	5.8		2.00	7.80		
4r	4.7		2.30	7.00		
2r	3.9		2.50	6.40	8.3	
+88° 2	5.3		2.14	7.44		
5	4.0	2.78	2.49	6.49	8.7	222
9	7.0	1.61	1.68	8.68		
+87° 12	4.8		2.28	7.08		
+87° 15	5.9	1.94	1.98	7.88		
+88° 115	7.1	1.78	1.65	8.75		

off plate 1r

Plate defective

J.C.M.

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Wednesday, May 21, 19

Mb 3232 Pole L' Screen M + no mat.

Scale 2t

17 stars.

			Diff.	Curve	Magn.	P.C.	
pon image	6	4.7	2.38	2.32	7.02	9.0	-1.92
~~two~~ pon	7	~~two pon~~ 5.2	2.19	2.19	7.39	9.8	-2.41
	5r	6.0		1.91	7.91		
	3r	4.7		2.32	7.02	9.0	
+88°	80	7.7	1.22	1.31	9.01		
+88°	86	7.7	1.08	1.31	9.01		
+88°	90	7.1		1.55	8.65		
+88°	105	5.6		2.04	7.64		
+88°	115	7.1	1.78	1.55	8.65		
	4r	5.3		2.14	7.44		
	2r	two pon				8.2	
+88°	2	5.8		1.98	7.78		
	5	4.0	2.48	2.52	6.52	8.8	-2.32
	9	7.0	1.61	1.59	8.59		
+88°	12	5.1		2.20	7.30		
+87	15	5.9	1.94	1.95	7.85		

off plate 1r.

Plate defective - Images poor.

J.C.M.

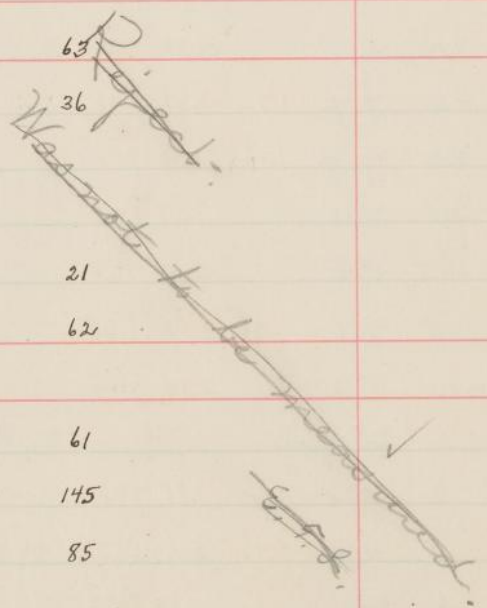
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Wednesday, May 21, 1913

Scale 2l M 63073 Pole L' instant screen 17 stars

		Curve	Magn.	Pb.	Diff.	Ptg.-Ptm. White	Red.
edge	1r	..	-	6.8			
	6	3.6	+3.48 3.56	7.16	7.3 -0.22	08	
	7	3.8	3.59 3.60	7.40	7.7 -0.31	01	
	5r	5.4	3.90	9.30			63
	3r	4.3	3.70	8.00	8.9		36
edge of plate	+88° 80	4.7	4.22 3.78	8.48		44	
" "	+88° 86	4.7	4.08 3.78	8.48		30	
	+88° 90	5.3	3.88	9.18			21
	+88° 105	5.0	3.82	8.82			62
	+88° 115	5.2	3.68 3.86	9.06		18	
	4r	5.0	3.82	8.82			61
	2r	4.3	3.70	8.00	7.9		145
	+88° 2	5.1	3.85	8.95		85	85
	5	3.0	3.48 3.45	6.45	6.3 +0.18	03	
	9	4.9	3.71 3.81	8.71	9.8 -1.19	10	
	+87° 12	4.3	3.70	8.00	9.0		18
	+87° 15	..			8.8		



+37	+473
-77	-18
7)-40	8)+455
-06	+57

Images do not compare well with scale images.

J.C.M.

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Wednesday June 4, 1913

Scale U.

Mc 1406 Image 1.

			Curve magn.	Ptg-Ptn. White stars	Ptg-Ptn. Red stars	P.C.	Diff	Curve magn.
6	3.3	+3.78	3.66	6.96	12	8.6	-1.58	-1.49	7.11
7	3.9	3.49	3.66	7.56	17	9.0	-1.61	-1.68	7.32
5	2.9	3.58	3.67	6.57	09	7.3	-0.82	-0.85	6.45
9	5.2	3.41	3.65	8.85	24				
+88°80	5.2	3.72	3.65	8.85	07				
+88°86	4.8	3.98	3.65	8.45	33				
+88°90	5.8		3.64	9.44		47			
+88°105	5.2		3.65	8.85		65			
+88°115	5.2	3.68	3.65	8.85	03				
+88°2	5.0		3.65	8.65		55			
+87°15	4.3	3.54	3.66	7.96	12				
+87°12	5.2		3.65	8.85		67			
2r	4.2		3.66	7.86		131			
3r	4.9		3.65	8.55		91			
4r	5.3		3.65	8.95		74			
5r	6.1		3.64	9.74		107			

+6.37 / 8 = +.80

M.O.R.

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Wednesday, June 4, 1913.

Scale U

MC 1405

		Diff.	Curve	Magn.	Ptg. − Ptm. White stars	Red stars		Curve	Magn.
5	7B						7.2	−0.72	−0.64	6.56
6	3.0	4.08	4.15	7.15	07		8.0	−0.92	−0.89	7.11
7	3.2	4.19	4.10	7.30	09		8.1	−0.71	−0.91	7.19
9	4.6	4.01	3.89 4.04	8.49 8.64	12 03		n.s.			
(see below) +87°15	4.2 4.20 4.2 mean	3.64	3.93	8.13	29		9.2 9.15 9.1	−1.31	−1.20	7.95
+87°12	4.8	4.85	3.85	8.70		52				
+88 11S	5.2	3.68	3.80	9.00	12					
+88 10S	5.1		3.82	8.92		72				
+88 9o	5.1		3.75	9.45		48				
+88 8S	4.7	4.08	3.87	8.57	21					
+88 8o	4.9	4.02	3.84	8.74	18					
*+87 15	4.2		(3.93 | 8.13)			9.1		−1.18	7.92
2N	4.2		3.93	8.13		158	9.1		−1.18	7.92
4N	5.1		3.82	8.92		71				
3N	4.8		3.85	8.65		101				
5N	5.8									
+87°12	4.9									
+88° 2	4.8		3.85	8.65		55				
Ffpe. 1N										

+51 +48 7)+84 +99

+48 −54 60 7)−12 −02

7)557 +80

a.n.w + m.o.r.

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Wednesday June 4, 1913.

Scale U

Mc 1794 Images 2.

				Curve	magn.	Ptg.– Mute stars	Ptm. Red stars	P.C.			
+88°	11	5.3	3.58	3.64	8.94	06					
+88	10	5.2		3.65	8.85		65				
+88	9	6.1		.	.		.				
+88	8	4.9 (def.) P.C.	3.88	3.70	8.60	18					
	5	6.3	~~0.18~~			.			~~−0.78~~		
	6	3.0	4.08	4.11	7.11	03		7.8	−0.72	−0.72	7.08
	7	3.3	4.09	4.02	7.32	07		8.2	−0.81	−0.81	7.39
	9	4.9	3.71	3.70	8.60	01					
+87°	15	4.3	3.64	3.82	8.12	28		8.8	−0.96	−0.95	7.85
+87	12	5.0		3.68	8.68		50				
+88	2	4.9		3.70	8.60		50				
+88	8	5.2	3.72	3.65	8.85	07					
	4r	5.3		3.64	8.94		73				
	2r	4.3		3.82	8.12		157				
	3r	5.2		3.65	8.85		121				
Ark.	1r	3.3?		4.02	7.32?		207 (67)	7.3		−0.60?	6.70
	5r	6.2		.	.						

+37 · 7)723
+103
−33
7)+4 · omitting 1r
+01 · 6)516
+86

Star No. 5 — 6.3 assumed to be P.C. measure.

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Wednesday June 4, 1913.

Scale N

mc 1164

		Curve	Magn.	Ptg.	Ptm.	Plate Red.	Plate sup. on P.C.	Curve	Magn.
5	B								
6	3.1	3.98	3.97	7.07	01		7.0	+0.08	-0.04	6.96
7	3.2	4.19	3.99	7.19	20		7.3	+0.09	-0.12	7.18
9	4.7	3.91	4.36	9.06	45					
~~10~~	~~30~~									
+88 80	4.3	4.62	4.29	8.59	33		9.5	-0.58	-0.42	9.08
" 86	4.2	4.58	4.26	8.46	32		8.9	-0.12	-0.39	8.51
" 90	5.2									
" 105	4.3		4.29	8.59		39	9.2		-0.40	8.80
" 115	4.3	4.58	4.29	8.59	29		9.3	-0.42	-0.41	8.89
1 " 2	4.3		4.29	8.59		49	9.3		-0.41	8.89
+87 12	4.3		4.29	8.59		41	9.2		-0.40	8.80
" 15	4.0	3.84	4.21	8.21	37		8.7	-0.86	-0.38	8.32
near edge 1N	B.						7.2		-0.09	7.11
5N	5.8									
3N	4.2		4.26	8.46		82	9.3		-0.41	8.89
4N	4.3		4.29	8.59		38	~~9.0~~ 9.3		-0.41	8.89
2N	4.1		4.24	8.34		179	8.1?		-0.29	7.81

bright, but there is no appearance of any plate superposed on P.C.

+82 6)428 +71
-1145 71)-32 -05

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