KG
11365
991

KG11365,991

Series reductions as far as page 211 in this book were made with magns. on scale of H.C. 170.

~~Series~~ Magns. depending on scale measures 9.7 and fainter (13.7 and fainter with scale R) have been underlined in this book for plates taken in Series, and wherever copied.

In general, Scale U was used for MC series plates.

All MC Series in this book were reduced
with "old" magnitudes of HC 170.

KG 11365.991

HARVARD
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JUL 17 1956

Scale measures of ε Aurigae + other stars
(Stars marked on AI 5561)

Sc. "O"

Apr. 4, 1913

* AI 2008

	Sc 1
ε	1.1
η	1.0
ζ	3.1
ρ	3.3
d Persei	1.9
59 "	2.3
ε	1.2

	Reading	η-R
η	1.0	
ρ	3.3	2.3
ζ	3.1	2.1
59	2.3	1.3
ε	1.15	

Mean ρ. ζ. 59

ε 1.15 0.15 × 2.00 = $\frac{0.30}{1.90}$ = 0.16 + 3.05 = 3.21

* Images slightly elongated.

* AI 1998

ε	2.1
η	1.2
ζ	3.1
ρ	3.3
d Persei	2.0
59 "	~~2.9~~ 3.1
ε	2.1

η	1.2	
ρ	3.3	2.1
ζ	3.1	1.9
59	3.1	1.9
ε	2.10	

ε 2.10 0.90 × 2.00 = $\frac{1.80}{1.97}$ = 0.91 + 3.05 = 3.96

* Images slightly elongated.

AI 2014

ε	2.1
η	1.1
ζ	3.2
ρ	3.8
d Persei	2.2
59	4.1
ε	2.1

η	1.1	
ρ	3.8	2.7
ζ	3.2	2.1
59	4.1	3.0
ε	2.10	

ε 2.10 1.00 × 2.00 = $\frac{2.00}{2.60}$ = 0.77 + 3.05 = 3.82

Scale measures of ϵ Aurigae &c

Sc. "O"

Apr 4, 1913

AI 2067

ϵ 1.1
η 1.0
ζ 3.1
ρ 3.1
Corner d 1.2 ?. Image elongated
" 59 3.1 Image elongated.
ϵ 1.2

η – Reading

η 1.0
ρ 3.1 2.1
ζ 3.1 2.1
59 3.1 2.1
ϵ 1.15 0.15 × 2.00 = $\frac{0.30}{2.10}$ = 0.14 + 3.05 = 3.19
Mean $\rho \zeta 59$

AI 1980

ϵ 1.2
η B.
ζ 2.9
ρ 3.0
d ? Image too much elongated to meas
59 3.2 Image elongated
ϵ 1.2

AI 1919

ϵ 1.8
η 1.1
ζ 3.1
ρ 3.3
d 2.1
59 3.2
ϵ 1.7

η 1.1
ρ 3.3 2.2
ζ 3.1 2.0
59 3.2 2.2
ϵ 1.75 0.65 × 2.00 = $\frac{1.30}{2.13}$ = 0.61 + 3.05 = 3.66

Images on 1919 fairly good.

Scale measures of ε Aurigae (cont)

Sc. 0

Apr. 4, 1913

AI 775

				Reading	η − R	
ε	2.1		η	1.2		
η	1.2		ρ	3.2	2.0	
ζ	3.1		ζ	3.1	1.9	
ρ	3.2		59	3.1	1.9	
"d"	2.1 ?	Image elongated	ε	2.10	0.90	$\times 2.00 = \frac{1.80}{1.93} = 0.93 + 3.05 = 3.98$
59	3.1					
ε	2.1					

AI 649

ε	1.2		η	1.0		
η	1.0		ρ	32	2.2	
ζ	3.1		ζ	3.1	2.1	
ρ	3.2		59	2.3	1.2	
"d"	1.1 ?	Image elongated	ε	1.25	0.25	$\times 2.00 = \frac{0.50}{1.83} = 0.27 + 305 = 3.32$
59	2.3					
ε	1.3					

AI 659

ε	2.1	η	1.8		
η	1.8	ρ	3.2	1.4	
ζ	3.2	ζ	3.2	1.4	
ρ	3.2	59	3.2	1.4	
d	2.0	ε	2.10	0.30	$\times 2.00 = \frac{0.60}{1.40} = 0.43 + 305 = 3.48$
59	3.2				
ε	2.1				

Scale measures of ε Aurigae (cont).

Sc. "0"

Apr. 5 1913

AI 2106

ε 2.1
η 1.3
ζ 3.3
ρ 3.2
d Persei 2.0
59 " 3.2
ε 2.2

	Reading	η-R
η	1.3	
ρ	3.2	1.9
ζ	3.3	2.0
59	3.2	1.9
ε	2.15	

$0.85 \times 2.00 = \frac{1.70}{1.93} = 0.88 + 3.05 = 3.93$

AI 2098

ε 2.1
η 1.2
ζ 3.2
ρ 3.2
(Persei, "d" 2.1 Image elong.
" 59 3.2
ε 2.1

	Reading	η-R
η	1.2	
ρ	3.2	2.0
ζ	3.2	2.0
59	3.2	2.0
ε	2.10	

$0.90 \times 2.00 = \frac{1.80}{2.00} = 0.90 + 3.05 = 3.95$

AI 2177

ε
η
ζ
ρ
d
59
ε

Images too elongated to meas.

Scale measures of ε Aurigae (cont)

Sc. "O"

Apr 5, 1913

AI 2959

ε 2.1
η 2.0
ζ 4.1
ρ 4.1
δ 2.1
59 4.2
ε 2.2

	Reading.	η − R
η	2.0	
ρ	4.1	2.1
ζ	4.1	2.1
59	4.2	2.2
ε	2.15	0.15

$0.15 \times 2.00 = \frac{0.30}{2.13} = 0.14 + 305 = 3.19$

AI 3110

ε 2.1
η 1.9
ζ 4.1
ρ 4.1
δ 2.1 Image elong.
59 4.0 " "
ε 2.2

η	1.9	
ρ	4.1	2.2
ζ	4.1	2.2
59	4.0	2.1
ε	2.15	0.25

$0.25 \times 2.00 = \frac{0.50}{2.17} = 0.23 + 305 = 3.28$

AI 4209

ε 2.9
η 2.1
ζ 4.3
ρ 4.4
δ 3.0
59 4.6
ε 2.8

η	2.1	
ρ	4.4	2.3
ζ	4.3	2.2
59	4.6	2.5
ε	2.85	0.75

$0.75 \times 2.00 = \frac{1.50}{2.33} = 0.64 + 3.05 = 3.69$

Scale measures of ε Aurigae (cont)

Sc. "O"

Apr 5, 1913

aI 4259

ε 4.1
η 3.1
ζ 5.3
ρ 5.3
"d" 4.0
59 5.5
ε 4.1

	Reading	η-R
η	3.1	
ρ	5.3	2.2
ζ	5.3	2.2
59	5.5	2.4

ε 4.10 $1.00 \times 2.00 = \frac{2.00}{2.27} = 0.88 + 3.05 = 3.93$

aI 4187

ε 3.0
η 2.3
ζ 5.0
ρ 4.9
d 2.9
59 4.6
ε 2.9

η	2.3	
ρ	4.9	2.6
ζ	5.0	2.7
59	4.6	2.3

ε 2.95 $0.65 \times 2.00 = \frac{1.30}{2.53} = 0.51 + 3.05 = 3.56$

aI 4239

ε ~~1.9~~ 2.0
η 1.7
ζ 3.9
ρ 3.7
d 1.9
59 3.4
ε 1.9

η	1.7	
ρ	3.7	2.0
ζ	3.9	2.2
59	3.4	1.7

ε 1.95 $0.25 \times 2.00 = \frac{0.50}{1.97} = 0.25 + 3.05 = 3.30$

Scale measures of ε Aurigae (cont)

Sc. 0

Apr. 7, 1913

AI 3305

ε 1.9
η 1.1
ζ 3.1
ρ 3.2
d 2.1 Im. elong.
59 3.2
ε 2.0

	Reading	η−R
η	1.1	
ρ	3.2	2.1
ζ	3.1	2.0
59	3.2	2.1

ε 1.95 $0.85 \times 2.00 = \frac{1.70}{2.07} = 0.82 + 3.05 = 3.87$

AI 3427

ε 2.0
η 1.0
ζ 3.2
ρ 3.1
d Im. elong.
59 3.2 "
ε 1.9

	Reading	η−R
η	1.0	
ρ	3.1	2.1
ζ	3.2	2.2
59	3.2	2.2

ε 1.95 $0.95 \times 2.00 = \frac{1.90}{2.17} = 0.88 + 3.05 = 3.93$

AI 4249

Images poor

ε 1.3
η 2.0
ζ 3.2
ρ 3.1
d Im. too poor
59 " " "
ε 1.3

Scale measures of ε Aurigae.

Sc O

Apr 7, 1913

aI 11118

ε 1.9
η 2.1
ζ 3.9
ρ 4.1
d 2.2
59 3.7
ε 1.8

η 2.1
ρ 4.1 2.0
ζ 3.9 1.8
59 3.7 1.6
ε 1.85 $-0.25 \times 2.00 = \frac{-0.50}{1.80} = -0.28 + 3.05 = 2.77$

aI 10613

ε 1.1
η Br.
ζ 2.8
ρ 2.7
d Im. elong.
59 3.1
ε 1.0

aI 548

ε 2.1
η 1.3
ζ 3.2
ρ 3.2
d 1.8
59 3.2
ε 2.1

η 1.3
ρ 3.2 1.9
ζ 3.2 1.9
59 3.2 1.9
ε 2.10 $0.80 \times 2.00 = \frac{1.60}{1.90} = 0.84 + 3.05 = 3.89$

Scale measures of ε Aurigae (cont.)

Sc. O

Apr 7, 1913

AI 7629

ε 2.4
η 1.2
ζ 4.1
ρ 4.1
d 2.8? Im. elong.
59 4.2 " "
ε 2.3

η 1.2
ρ 4.1 2.9
ζ 4.1 2.9
59 4.2 3.0
ε 2.35 1.15 × 2.00 = $\frac{2.30}{2.93}$ = 0.78 + 3.05 = 3.83

AI 7706

ε 2.4
η 1.3
ζ 4.1
ρ 4.0
d 2.9? Im. elong.
59 4.3
ε 2.6

η 1.3
ρ 4.0 2.7
ζ 4.1 2.8
59 4.3 3.0
ε 2.50 1.20 × 2.00 = $\frac{2.40}{2.83}$ = 0.85 + 3.05 = 3.90

AI 9190

ε 4.1
η 3.2
ζ 7.0
ρ 5.9
d 4.9
59 5.9
ε 4.0

η 3.2
ρ 5.9 2.7
ζ 7.0 3.8
59 5.9 2.7
ε 4.05 0.85 × 2.00 = $\frac{1.70}{3.07}$ = 0.55 + 3.05 = 3.60

Scale measures of ε Aurigae (cont).

S.c.O

Apr 8, 1913

A I 4393

ε 1.9
η 1.0
ζ 3.1
ρ 3.2
δ Im. along.
59 3.9
ε 1.9

η 1.0
ρ 3.2 2.2
ζ 3.1 2.1
59 3.9 2.9
ε 1.90 $0.90 \times 2.00 = \frac{1.80}{2.40} = 0.75 + 3.05 = 3.80$

A I 4524

ε 1.9
η 1.1
ζ 3.1
ρ 3.1
δ 1.2
59 3.0
ε 1.8

η 1.1
ρ 3.1 2.0
ζ 3.1 2.0
59 3.0 1.9
ε 1.85 $0.75 \times 2.00 = \frac{1.50}{1.97} = 0.76 + 3.05 = 3.81$

A I 4764

ε 2.0
η B 1.0?
ζ 2.9
ρ 3.1
δ 1.8 Im along.
59 3.1
ε 1.8

η 1.0
ρ 3.1 2.1
ζ 2.9 1.9
59 3.1 2.1
ε 1.90 $0.90 \times 2.00 = \frac{1.80}{2.03} = 0.89 + 3.05 = 3.94$

Scale measures of ε Aurigae (cont.)

Sc. 0

Apr 9, 1913

AI 4784

ε 2.1
η 0.9
ζ 3.1
ρ 3.2
d: 2.1 Im. elong.
59 3.9 " "
ε 2.0

η 0.9
ρ 3.2 2.3
ζ 3.1 2.2
59 3.9 2.0
ε 2.05 $1.15 \times 2.00 = \frac{2.30}{2.50} = 0.92 + 3.05 = 3.97$

AI 4812

ε 1.1
η 1.2
ζ 2.1
ρ 2.0
d 0.9
59 1.9
ε 1.1

η 1.2
ρ 2.0 0.8
ζ 2.1 0.9
59 1.9 0.7
ε 1.10 $-0.10 \times 2.00 = \frac{0.20}{0.8} = 0.25$

AI 4866

ε 3.0
η 1.9
ζ 4.2
ρ 4.1
d 3.1
59 4.3
ε 3.0

η 1.9
ρ 4.1 2.2
ζ 4.2 2.3
59 4.3 2.4
ε 3.00 $1.10 \times 2.00 = \frac{2.20}{2.30} = 0.96 + 3.05 = 4.01$

Scale measures of ε Aurigae

Sc. 0 Apr 9, 1913

AI 5270

ε	3.0	η	3.0	
η	3.0	ρ	5.1	2.1
ζ	5.1	ζ	5.1	2.1
ρ	5.1	59	4.9	1.9
d	2.9	ε	3.00	$0.00 \times 2.00 = \frac{0.00}{2.03} = 0.00 + 3.05 = 3.05$
59	4.9			
ε	3.0			

AI 5486

ε	2.0	η	2.0	
η	2.0	ρ	3.1	1.1
ζ	3.2	ζ	3.2	1.2
ρ	3.1	59	3.2	1.2
d	1.9	ε	2.05	$0.05 \times 2.00 = \frac{0.10}{1.17} = 0.09 + 3.05 = 3.14$
59	3.2			
ε	2.1			

AI 6728

ε	2.8	η	1.9	
η	1.9	ρ	4.0	2.1
ζ	4.1	ζ	4.1	2.2
ρ	4.0	59	4.1	2.2
d	2.9	ε	2.85	$0.95 \times 2.00 = \frac{1.90}{2.17} = 0.88 + 3.05 = 3.93$
59	4.1			
ε	2.9			

Scale measures of ε Aurigae (cont.)

Sc 0

Apr 9, 1913

AI 7128

ε 1.9
η 0.9
ζ 3.1
ρ 3.1
d 1.9
59 3.2
ε 1.8

η 0.9
ρ 3.1 2.2
ζ 3.1 2.2
59 3.2 2.3
ε 1.85 $0.95 \times 2.00 = \frac{1.90}{2.23} = 0.85 + 3.05 = 3.90$

AI 7262

ε 1.9
η 1.0
ζ 3.0
ρ 3.0
d 1.1
59 3.1
ε 1.8

η 1.0
ρ 3.0 2.0
ζ 3.0 2.0
59 3.1 2.1
ε 1.85 $0.85 \times 2.00 = \frac{1.70}{2.03} = 0.84 + 3.05 = 3.89$

AI 7265

ε 2.1
η 1.1
ζ 3.~~7~~1
ρ 3.~~[illegible]~~2
d 2.1 Wong.
59 3.4
ε 2.1

η 1.1
ρ 3.2 2.1
ζ 3.1 2.0
59 3.4 2.3
ε 2.10 $1.00 \times 2.00 = \frac{2.00}{2.10} = 0.95 + 3.05 = 4.00$

Scale measures of ε Aurigae

Sc O

Apr 10, 1913

aI 7289

ε 2.8
η 1.7
ζ 4.1
ρ 3.9
d 2.9
59 4.2
ε 2.9

η 1.7
ρ 3.9 2.2
ζ 4.1 2.4
59 4.2 2.5
ε 2.85 $1.15 \times 200 = \frac{2.30}{2.37} = 0.97 + 3.05 = 4.02$

aI 7446

ε 1.2
η B
ζ 2.2
ρ 2.1
d 1.2 Im. elong.
59 3.1
ε 1.1

η B
ρ 2.1
ζ 2.2
59 3.1
ε 1.15

aI 7473

ε 2.0
η 1.0
ζ 3.0
ρ 3.0
d 1.9 Elong.
59 3.2 ''
ε 1.9

η 1.0
ρ 3.0 2.0
ζ 3.0 2.0
59 3.2 2.2
ε 1.95 $0.95 \times 2.00 = \frac{1.90}{2.07} = 0.92 + 3.05 = 3.97$

Scale measures of ε Aurigae (cont)

Sc. 0

Apr 10, 1913

AI 9726

ε	1.2
η	13
ζ	3.1
ρ	2.9
α	3.0
59	3.8
ε	1.3

AI 11174

ε	2.1
η	1.8
ζ	3.7
ρ	3.9
α	2.2
59	3.3
ε	2.1

η	1.8	
ρ	3.9	2.1
ζ	3.7	1.9
59	3.3	1.5
ε	2.10	

0.30 × 2.00 = $\frac{0.60}{183}$ = 0.33 + 305 = 3.38

AI 9621

ε	2.1
η	1.1
ζ	3.2
ρ	3.1
α	1.9
59	3.3
ε	2.1

η	1.1	
ρ	3.1	2.0
ζ	3.2	2.1
59	3.3	2.2
ε	2.10	

1.00 × 2.00 = $\frac{2.00}{2.10}$ = .95 + 3.05 = 3.98

Scale measures of ε Aurigae (cont).

Sc O

Apr 10, 1913

AI 11072

ε 3.2
η 3.3
ζ 5.2
ρ 5.3
d 3.9
59 5.3
ε 3.4

η 3.3
ρ 5.3 2.0
ζ 5.2 1.9
59 5.3 2.0
ε 3.30 $0.00 \times 2.00 = \frac{0.00}{1.97} = 0.00 + 3.05 = 3.05$

AC 5832

ε B
η B
ζ 1.1
ρ 1.0
d B
59 1.0
ε B

Scale M

AC 5937

ε 1.2
η B
ζ 2.2
ρ 2.0
d 1.7
59 2.2
ε 1.2

Images too bright for Sc. "O".

Scale measures of ε Aurigae (cont)

Sc. M

Apr 10, 1913

AC 5970

ε 1.9
η 1.0
ζ 2.7
ρ 2.6
d 2.2
59 2.8
ε 1.9

η 1.0
ρ 2.6 1.6
ζ 2.7 1.7
59 2.8 1.8
ε 1.90 0.90 × 2.00 = $\frac{1.80}{1.70}$ = 1.06 + 3.05 = 4.11

AC 6091

ε 1.2
η B
ζ 2.2
ρ 2.0
d 2.1
59 2.2
ε 1.2

AC 5610

ε 1.3
η B
ζ 2.2
ρ 2.2
d 2.1
59 2.2
ε 1.3

Scale measures of ε Aurigae (cont)

Sc. M.

Apr 10, 1913

AC 5689

ε 2.2
η 1.1
ζ 3.2
ρ 3.1
d 2.7
59 3.3
ε 2.1

η 1.1
ρ 3.1 2.0
ζ 3.2 2.1
59 3.3 2.2
ε 2.15 $1.05 \times 2.00 = \frac{2.10}{2.10} = 1.00 + 3.05 = 4.05$

AC 5748

Dark plate but images good

ε 2.3
η 1.2
ζ 3.3
ρ 3.2
d 3.1
59 3.6
ε 2.2

η 1.2
ρ 3.2 2.0
ζ 3.3 2.1
59 3.6 2.4
ε 2.25 $1.05 \times 2.00 = \frac{2.10}{2.17} = 0.97 + 3.05 = 4.02$

AC 5783

ε 1.9
η 1.0
ζ 2.8
ρ 2.7
d 2.1
59 2.7
ε 1.9

η 1.0
ρ 2.7 1.7
ζ 2.8 1.8
59 2.7 1.7
ε 1.90 $0.80 \times 2.00 = \frac{1.60}{1.73} = 0.99 + 3.05 = 4.05$

Scale measures of ε Aurigae.

Sc. Q.M.

Apr 12, 1913

	Ab 5389
ε	1.7
η	B
ζ	2.1
β	2.1
d Persei	1.9
59 "	2.3
ε	1.7
	Ab 5325
ε	1.8
η	B
ζ	2.1
β	2.2
d Pers.	2.1
59 "	2.3
ε	1.7
	AC 4740
ε	1.8
η	B
ζ	2.2
β	2.1
d Pers.	2.3
59 "	2.6
ε	1.9

Scale measures of ε Aurigae.

Sc. M

Apr 12, 1913

AC 4798

ε 2.1
η 1.2
ζ 3.1
ρ 2.9
d Pers. 2.3
59 " 3.3
ε 2.2

η 1.2
ρ 2.9 1.7
ζ 3.1 1.9
59 3.3 2.1
ε 2.15 $0.95 \times 2.00 = \frac{1.90}{1.90} = 1.00 + 3.05 = 4.05$

AC 4816

ε $3.\overset{7}{2}$
η 2.7
ζ 4.3
ρ 4.3
d Pers. 3.7
59 " 4.7
ε 3.7

η 2.7
ρ 4.3 1.6
ζ 4.3 1.6
59 4.7 2.0
ε 3.70 $1.00 \times 2.00 = \frac{2.00}{1.73} = 1.02 + 3.05 = 4.07$

AC 2002

ε 2.2
η 1.1
ζ 3.0
ρ 2.9
d Pers. 2.2
59 " 3.1
ε 2.3

η 1.1
ρ 2.9 1.8
ζ 3.0 1.9
59 3.1 2.0
ε 2.25 $1.15 \times 2.00 = \frac{2.30}{1.90} = 1.02 + 3.05 = 4.07$

Scale measures of ε Aurigae

Sc. M

Apr 12, 1913

AC 2164

ε 2.2
η 1.0
ζ 3.0
ρ 2.8
d Pers 2.3
59 " 3.0
ε 2.4

η 1.0
ρ 2.8 1.8
ζ 3.0 2.0
59 3.0 2.0
ε 2.30 $1.30 \times 2.00 = \frac{2.60}{1.93} = 1.03 + 3.05 = 4.08$

AC 2322

ε 1.7
η B
ζ 2.1
ρ 1.9
d Pers 1.9
59 " 2.0
ε 1.6

AC 2958

ε 1.2
η B
ζ 2.2
ρ 2.0
d Pers 1.3
59 " 1.9
ε 1.3

Scale measures of ε Aurigae.

Sc M

Apr 12, 1913

AC 3218

ε	2.~~1~~9	2.2
η	1.3	1.0
ζ	3.1	3.0
ρ	3.2	2.9
d Pers		2.0
59 "		3.1
ε		2.1

Reject. glass side up

AC 3229

ε	2.2
η	1.1
ζ	3.0
ρ	2.8
d Pers	2.3
59 "	3.2
ε	2.3

η	1.1	
ρ	2.8	1.7
ζ	3.0	1.9
59	3.2	2.1
ε	2.25	

1.15 × 2.00 = $\frac{2.30}{1.90}$ = 1.02 + 3.05 = 4.07

AC 3425

ε	3.1
η	2.0
ζ	3.9
ρ	3.8
d Pers	3.7
59 "	4.1
ε	3.0

η	2.0	
ρ	3.8	1.8
ζ	3.9	1.9
59	4.1	2.1
ε	3.05	

1.05 × 2.00 = $\frac{2.10}{1.93}$ = 1.01 + 3.05 = 4.06

Scale measures of ε Aurigae (cont)

S e M

Apr 17, 1913

AC 3985

ε 2.1
η 1.3
ζ 3.1
ρ 3.2
d Pers. 3.1
59 " 3.3
ε 2.3

η 1.3
ρ 3.2 1.9
ζ 3.1 1.8
59 3.3 2.0
ε 2.20 $0.90 \times 2.00 = \frac{1.80}{1.90} = 0.95 + 3.05 = 4.00$

AC 4131

ε 1.8
η B
ζ 2.6
ρ 2.3
d Pers 2.2
59 " 2.7
ε 1.7

AC 4153

ε 1.9
η 1.0
ζ 2.2
ρ 2.2
d Pers 2.1
59 " 2.7
ε 1.9

η 1.0
ρ 2.2 1.2
ζ 2.2 1.2
59 2.7 1.7
ε 1.90 $0.90 \times 2.00 = \frac{1.80}{1.37} = 1.03 + 3.05 = 4.08$

Scale measures of ε Aurigae (cont)

Sc M:

Apr 17, 1913

AC 4527

ε 1.3

η B

ζ 2.2

ρ 2.1

d Pers 2.0

59 " 2.3

ε 1.2

AC 4632

ε 1.9

η B ~~0.0~~

ζ 2.9

ρ 2.3

d Pers 2.3

59 " 3.0

ε 1.7

AC 6153

ε 2.1

η 1.6

ζ 3.6

ρ 3.8

d Pers 3.1

59 " 3.3

ε 2.2

η 1.6

ρ 3.8 2.2

ζ 3.6 2.0

59 3.3 1.7

ε 2.15 $0.55 \times 2.00 = \frac{1.10}{1.97} = 0.56 + 3.05 = 3.61$

Scale measures of ε Aurigae

Sc M.

Apr. 16, 1913

AC 6747

ε 1.8
η 1.0
ζ 2.8
ρ 2.6
δ Pers. 2.3
59 " 3.1
ε 1.9

η 1.0
ρ 2.6 1.6
ζ 2.8 1.8
59 3.1 2.1
ε 1.85 0.85 × 2.00 = $\frac{1.70}{1.83}$ = 0.93 + 305 = 3.98

AC 67~~47~~55

ε 2.0
η 1.0
ζ 2.9
ρ 2.7
δ Pers. 2.3
59 " 3.1
ε 1.9

η 1.0
ρ 2.7 1.7
ζ 2.9 1.9
59 3.1 2.1
ε 1.95 0.95 × 2.00 = $\frac{1.90}{1.90}$ = 1.00 + 3.05 = 4.05

AC 6768

ε 2.0
η 1.0
ζ 2.9
ρ 2.8
δ Pers. 2.3
59 " 3.1
ε 2.0

η 1.0
ρ 2.8 1.8
ζ 2.9 1.9
59 3.1 2.1
ε 2.00 1.00 × 2.00 = $\frac{2.00}{1.93}$ = 1.04 + 3.05 = 4.09

Scale measures of ε Aurigae.

Sc M

Apr 16, 1913

AC 6768

ε 2.0
η 1.0
ζ 2.9
ρ 2.6
d Pers 2.3
59 " 3.2
ε 2.1

η 1.0
ρ 2.6 1.6
ζ 2.9 1.9
59 3.2 2.2
ε 2.05 1.05 × 2.00 = $\frac{2.10}{1.90}$ = 1.11 + 3.05 = 4.06

AC 6788

ε 2.2
η 1.3
ζ 3.2
ρ 3.2
d Pers 3.1
59 " 3.7
ε 2.2

η 1.3
ρ 3.2 1.9
ζ 3.2 1.9
59 3.7 2.4
ε 2.20 0.90 × 2.00 = $\frac{1.80}{2.07}$ = 0.87 + 3.05 = 3.92

AC 6935

ε 2.0
η 0.9
ζ 3.0
ρ 2.9
d Pers 2.9
59 " 3.2
ε 1.9

η 0.9
ρ 2.9 2.0
ζ 3.0 2.1
59 3.2 2.3
ε 1.95 1.05 × 2.00 = $\frac{2.10}{2.13}$ = 0.99 + 3.05 = 4.04

Scale measures of ε Aurigae

Sc M

Apr 17, 1913

AC 12003

ε	2.8	η	2.1		
η	2.1	ρ	3.8	1.7	
ζ	4.1	ζ	4.1	2.0	
ρ	3.8	59	4.1	2.0	
d Pers	3.2	ε	2.85		$0.75 \times 200 = \frac{1.50}{1.90} = 0.78 + 3.05 = 3.83$
59 "	4.1				
ε	2.9				

AC 12081

ε	2.2	η	1.3		
η	1.3	ρ	3.1	1.8	
ζ	3.3	ζ	3.3	2.0	
ρ	3.1	59	3.3	2.0	
d Pers	3.1	ε	2.15		$0.85 \times 200 = \frac{1.60}{1.93} = 0.83 + 3.05 = 3.88$
59 "	3.3				
ε	2.1				

AC 10774

ε	3.2				
η	2.2	η	2.2		
ζ	4.3	ρ	4.2	2.0	
ρ	4.2	ζ	4.3	2.1	
d Pers	3.4	59	4.3	2.1	
59 "	4.3	ε	3.15		$0.95 \times 200 = \frac{1.90}{2.07} = 0.92 + 3.05 = 3.97$
ε	3.1				

Scale measures of ε Aurigae

Sc M

Apr ~~17~~ 23, 1913

AC 10898

ε 3.2
η 2.3
ζ 5.1 4.9
ρ 4.7
d Pers. 4.3
59 " 5.1
ε 3.3

η 2.3
ρ 4.7 2.4
ζ 5.1 2.8
59 5.1 2.8
ε 3.25 0.95 × 2.00 = $\frac{1.90}{2.33}$ = 0.82 + 3.05 = 3.87

AC 11286

ε 1.9
η 1.0
ζ 3.0
ρ 2.6
d Pers 2.2
59 " 2.9
ε 1.8

η 1.0
ρ 2.6 1.6
ζ 3.0 2.0
59 2.9 1.9
ε 1.85 0.85 × 2.00 = $\frac{1.70}{1.83}$ = 0.93 + 3.05 = 3.98

AC 10932

ε 2.2
η 1.3
ζ 3.3
ρ 3.1
d Pers 2.9
59 " 3.2
ε 2.1

η 1.3
ρ 3.1 1.8
ζ 3.3 2.0
59 3.2 1.9
ε 2.15 0.85 × 2.00 = $\frac{1.70}{1.90}$ = 0.89 + 3.05 = 3.94

Scale measures of ε Aurigae

Sc M

May 17, 1913

AC 6944

ε	2.1	η	1.2		
η	1.2	ρ	2.3	1.1	
ζ	2.3	ζ	2.3	1.1	
ρ	2.3	59	2.7	1.5	
59	2.7	ε	2.15	0.95	× 2.00 = $\frac{1.90}{1.23}$ = 1.54 + 3.05 = 4.59
ε	2.2				

AC 11295

ε	1.3	η	1.0		
η	1.0	ρ	22	1.2	
ζ	2.9	ζ	29	1.9	
ρ	2.2	59	2.7	1.7	
59	2.7	ε	1.45	0.45	× 2.00 = $\frac{0.90}{160}$ = 0.56 + 305 = 3.61
ε	1.6				

AC 11502

ε	2.1	η	1.3		
η	1.3	ρ	3.2	1.9	
ζ	3.3	ζ	3.3	2.0	
ρ	3.2	59	3.3	2.0	
59	3.3	ε	2.15	0.85	× 2.00 = $\frac{1.70}{1.97}$ = 0.86 + 3.05 = 3.91
ε	2.2				

Scale measures of ε Aurigae.

S. M. May 17, 1913

AC 4960

ε 2.2 7

η 1.3

ζ 3.3

ρ 3.2

59 3.7

ε 2.3

η 1.3

ρ 3.2 1.9

ζ 3.3 2.0

59 3.7 2.4

ε 2.25 $0.95 \times 2.00 = \frac{1.90}{2.10} = 0.90 + 3.05 = 3.95$

AC 7912

ε 2.2

η 1.1

ζ 3.2

ρ 2.9

59 3.3

ε 2.2

η 1.1

ρ 2.9 1.8

ζ 3.2 2.1

59 3.3 2.2

ε 2.20 $1.10 \times 2.00 = \frac{2.20}{2.10} = 1.05 + 3.05 = 4.10$

AC 7205

ε 1.8

η 1.0

ζ 2.4

ρ 2.3

59 2.4

ε 1.7

η 1.0

ρ 2.3 1.3

ζ 2.4 1.4

59 2.4 1.4

ε 1.75 $0.75 \times 2.00 = \frac{1.50}{1.37} = 1.09 + 3.05 = 4.14$

Measures of ε Aurigae

Sc M

May 20, 1913

AC 7151

ε 2.2
η 1.3
ζ 3.2
ρ 3.1
59 3.3
ε 2.3

η 1.3
ρ 3.1 1.8
ζ 3.2 1.9
59 3.3 2.0
ε 2.25 $0.95 \times 200 = \frac{1.90}{1.90} = 1.00 + 3.05 = 4.05$

AC 6964

ε 2.1
η 1.2
ζ 3.2
ρ 2.9
59 3.3
ε 2.1

η 1.2
ρ 2.9 1.7
ζ 3.2 2.0
59 3.3 2.1
ε 2.10 $0.90 \times 200 = \frac{1.80}{1.93} = 0.93 + 3.05 = 3.98$

AC 9860

ε 1.9
η 1.0
ζ 2.9
ρ 2.7
59 3.0
ε 1.8

η 1.0
ρ 2.7 1.7
ζ 2.9 1.9
59 3.0 2.0
ε 1.85 $0.85 \times 200 = \frac{1.70}{1.87} = 0.91 + 3.05 = 3.96$

Measures of ε Aurigae

Se. M

May 20, 1913

ac 9701

ε 2.3
η 1.3
ζ 3.4
ρ 3.1
59 3.7
ε 2.2

η 1.3
ρ 3.1 1.8
ζ 3.4 2.1
59 3.7 2.4
ε 2.25 $0.95 \times 2.00 \quad \frac{1.90}{2.10} = 0.90 + 3.05 = 3.95$

ac 9278

ε 1.9
η 1.0
ζ 3.0
ρ 2.6
59 2.9
ε 1.8

η 1.0
ρ 2.6 1.6
ζ 3.0 2.0
59 2.9 1.9
ε 1.85 $0.85 \times 2.00 = \frac{1.70}{1.83} = 0.93 + 3.05 = 3.98$

ac 9171

ε 3.3
η 2.4
ζ 5.2
ρ 4.3
59 5.2
ε 3.4

η 2.4
ρ 4.3 1.9
ζ 5.2 2.8
59 5.2 2.8
ε 3.35 $0.95 \times 2.00 = \frac{1.90}{2.50} = 0.76 + 3.05 = 3.81$

Sc. M

Measures of ε Aurigae

May 20, 1913

AC 9132

ε 2.3
η 1.3
ζ 4.2
ρ 4.0
59 4.2
ε 2.3

η 1.3
ρ 4.0 2.7
ζ 4.2 2.9
59 4.2 2.9
ε 2.30 $1.00 \times 2.00 = \frac{2.00}{2.83} = 0.71 + 3.05 = 3.76$

AC 9054

ε 2.9
η 1.9
ζ 3.9
ρ 3.7
59 3.9
ε 2.8

η 1.9
ρ 3.7 1.8
ζ 3.9 2.0
59 3.9 2.0
ε 2.85 $0.95 \times 2.00 = \frac{1.90}{1.93} = 0.98 + 3.05 = 4.03$

AC 4408

ε 1.9
η 1.0
ζ 2.8
ρ 2.9
59 2.9
ε 1.8

η 1.0
ρ 2.9 1.9
ζ 2.8 1.8
59 2.9 1.9
ε 1.85 $0.85 \times 2.00 = \frac{1.70}{1.87} = 0.91 + 3.05 = 3.96$

Measures of ε Aurigae

Sc M

May 20, 1913

AC 4573

ε 2.3
η 1.3
ζ 3.9
ρ 3.7
59 3.9
ε 2.4

η 1.3
ρ 3.7 2.4
ζ 3.9 2.6
59 3.9 2.6
ε 2.35 $1.05 \times 200 = \frac{2.10}{2.53} = 0.83 + 3.05 = 3.88$

AC 4597

ε 1.9
η 1.0
ζ 3.1
ρ 2.9
59 3.2
ε 1.9

η 1.0
ρ 2.9 1.9
ζ 3.1 2.1
59 3.2 2.2
ε 1.90 $0.90 \times 200 = \frac{1.80}{2.07} = 0.87 + 3.05 = 3.92$

AC 5170

ε 1.8
η 1.0
ζ 2.1
ρ 2.1
59 2.3
ε 1.7

η 1.0
ρ 2.1 1.1
ζ 2.1 1.1
59 2.3 1.3
ε 1.75 $0.75 \times 200 = \frac{1.50}{1.15} = 1.30 + 3.05 = 4.35$

Measures of ε Aurigae

May 20, 1913

Sc M

AC 5262

ε 2.0
η 1.0
ζ 3.0
ρ 3.0
59 2.9
ε 1.9

η 1.0
ρ 3.0 2.0
ζ 3.0 2.0
59 2.9 1.9
ε 1.95 $0.95 \times 2.00 = \frac{1.90}{1.97} = 0.96 + 3.05 = 4.01$

AC 5282

ε 1.9
η 1.0
ζ 2.9
ρ 2.9
59 2.9
ε 2.0

η 1.0
ρ 2.9 1.9
ζ 2.9 1.9
59 2.9 1.9
ε 1.95 $0.95 \times 2.00 = \frac{1.90}{1.90} = 1.00 + 3.05 = 4.05$

AC 5297

ε 3.1
η 2.8
ζ 4.7
ρ 4.9
59 5.0
ε 3.1

η 2.8
ρ 4.9 2.1
ζ 4.7 1.9
59 5.0 2.2
ε 3.10 $0.30 \times 2.00 \; \frac{60}{2.07} = 0.29 + 3.05 = 3.34$

Measures of ε Aurigae

Sc M

May

ac 5320

ε	2.1	η	1.3	
η	1.3	ρ	2.9	1.6
ζ	3.1	ζ	3.1	1.8
ρ	2.9	59	3.2	1.9
59	3.2	ε	2.05	0.75 x 200 = $\frac{1.50}{1.77}$ = 0.85 + 3.05 = $\overset{3}{\cancel{4}}$.90
ε	2.0			

~~ac~~
~~ε~~
~~η~~
~~ζ~~
~~ρ~~
~~59~~
~~ε~~

~~ac~~
~~ε~~
~~η~~
~~ζ~~
~~ρ~~
~~59~~
~~ε~~

Measures of ε Aurigae

Se M

Oct. 13, 1914

aI 5270

ε 4.0
η 4.0
ζ 6.1
ρ 6.2
59 5.8
ε 4.1

η 4.0
ρ 6.2 2.2
ζ 6.1 2.1
59 5.8 1.8
ε 4.05 0.05 × 200 = $\frac{0.10}{2.03}$ = 0.05 + 3.05′ = 3.10

aI ~~5320~~ 11072

ε 5.1
η 5.1
ζ 6.7
ρ 6.7
59 6.6
ε 5.2

η 5.1
ρ 6.7 1.6
ζ 6.7 1.6
59 6.6 1.5
ε 5.15 0.05 × 200 = $\frac{0.10}{1.57}$ = 0.06 + 3.05′ = 3.11

aI 11174

ε 3.7
η 3.6
ζ 5.2
ρ 5.2
59 5.0
ε 3.7

η 3.6
ρ 5.2 1.6
ζ 5.2 1.6
59 5.0 1.4
ε 3.70 0.10 × 200 = $\frac{0.20}{1.53}$ = 0.13 + 3.05′ = 3.18

ε Aurigae

Se m

Oct 14, 1914

aI 5320

ε	3.7
η	3.9
ζ	5.7
ρ	5.5
59	5.3
ε	3.7

η	3.9	
ρ	5.5	1.6
ζ	5.7	1.8
59	5.3	1.4
ε	3.70	$-0.20 \times 2.00 = \frac{0.40}{1.60}$

aI 5486

ε	3.6
η	~~5.7~~ 3.4
ζ	5.2
ρ	5.1
59	4.8
ε	3.6

η	3.4	
ρ	5.1	1.7
ζ	5.2	1.8
59	4.8	1.4
ε	3.60	$0.20 \times 2.00 = \frac{0.40}{1.63} = 0.25 + 3.05 = 3.30$

ab 5262

ε	2.0
η	1.0
ζ	3.0
ρ	3.0
59	2.9
ε	2.0

η	1.0	~~2~~
ρ	3.0	2.0
ζ	3.0	2.0
59	2.9	1.9
ε	2.00	$1.00 \times 2.00 = \frac{2.00}{1.97} = \overset{1}{2.02} + 3.05 = 4.07$

ε Aurigae

Sem Oct. 14, 1914

~~ac 5282~~

~~ε 1.9~~
~~η 1.0~~
~~ζ 2.9~~
~~ρ 2.9~~
~~59 2.9~~
~~ε 2.0~~

~~Wr plate.~~

ac 5282

ε 1.9
η 1.0
ζ 3.1
ρ 3.0
59 3.1
ε 1.9

η	1.0	
ρ	3.0	2.0
ζ	3.1	2.1
59	3.1	2.1
ε	1.90	$0.90 \times 2.00 = \frac{1.80}{2.07} = 0.87 + 3.05 = 3.92$

ac 5297

ε 3.1
η 2.7
ζ 4.9
ρ 4.7
59 5.0
ε 3.1

η	2.7	
ρ	4.7	2.0
ζ	4.9	2.2
59	5.0	2.3
ε	3.10	$0.40 \times 2.00 = \frac{0.80}{2.17} = 0.37 + 3.05 = 3.42$

ε Aurigae

3c M

Oct 14, 1914

Ac 5320

ε	1.9
η	1.1
ζ	2.9
ρ	3.1
59	3.2
ε	1.9

η	1.1	
ρ	3.1	2.0
ζ	2.9	1.9
59	3.2	2.1
ε	1.90	$0.80 \times 2.00 = \cancel{2}\frac{1.60}{2.00} = 0.80 + 3.05 = 3.85$

1913phae.proj...992I

Tuesday June 10, 1913.

Scale U. Series 2768-2779.

10:45. MC 2768 Pole

	Sc	MC 2773 p.53	MC 2779 p.56	Mean		Diff	B.C.			Mean		Diff
5	~~57~~						5.7	5.7	5.8	5.73	001	+0.66
6							6.3	6.3	6.3	6.30	000	0.68
8							8.0	8.1	8.2	8.10	101	0.00
9							8.7	8.8	8.8	8.77	100	-0.07
10	5.0	4.7	4.7	4.80	2 1 1	+4.09	8.9	9.0	9.1	9.00	101	-0.11
11	5.4	5.0	5.1	5.17	2 2 1	4.25	9.3	9.5	9.7	9.50	202	-0.08
12	5.7	5.3	5.7	5.57	1 3 1	4.16	9.8	9.9	10.0	9.90	101	-0.17
13	6.1	6.0	6.0	6.03	1 0 0	4.14	n.s.					
14	6.5	6.2	6.2	6.30	2 1 1	4.22						
15	6.9	6.6	6.7	6.73	2 1 $\overset{0}{1}$	4.21	n.s.					
16	7.2	7.1	7.0	7.10	1 0 1	4.16						
17	7.5	7.4	7.3	7.40	1 0 1	4.09						
18	8.0	7.9	7.9	7.93	1 0 0	3.$\overset{9}{\cancel{8}}$9						
19	8.3	8.1	8.1	8.17	1 1 1	4.11						
20	8.7	8.5	8.7	8.63	1 1 1	3.96						
23	9.2	9.1	9.1	9.13	1 0 0	4.07						
25	9.8	9.7	9.7	9.73	1 0 0	4.00						
26	n.s.	7.	n.s.	.	. . .	.						

M.O.R.

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Scale U. alt. +.06 Series 2768-2779. alt. +.22

	MC 2769			104 K.		
		Curve	Magn.	P.C.	Curve	Magn.
1	4.3	+4.19	8.~~49~~ .62	8.0	+0.11	8.~~60~~ 41 .24
2	5.4	4.18	9.~~58~~ .71	9.7	−0.15	9.~~43~~ 55 .68
3	6.0	4.17	10.~~17~~ .30	n.s.	.	.
4	6.9	4.12	11.~~02~~ .16			
5	7.1 7.1 7.10	4.11	11.~~21~~ .35			
6	6.9 6.9 6.90	4.12	11.~~02~~ .16			
7	7.1	4.11	11.~~21~~ .35			
8	7.7	4.09	11.~~79~~ .93			
9	7.9	4.08	~~11.98~~ 12.12			
10	8.2	4.05	12.~~25~~ .39			
11	9.3 9.3 9.30	3.99	13.~~29~~ .43			
12	9.2 9.2 9.20	4.00	13.~~20~~ .34			
13	9.9	3.98	~~13.88~~ 14.02			
14	9.8	3.99	13.~~79~~ .93			
15	n.s.	.	.			

	MC 2770.			32 Ks.		
		Curve	Magn.	P.C.	Curve	Magn.
1	B.	.	.	6.1	+0.61	6.~~71~~ .82
2	3.1	.	.	6.6	0.48	7.~~08~~ .21
3	4.1	.	.	7.9	0.14	8.~~04~~ .17
4	4.0	.	.	7.7	0.18	~~7.88~~ 8.01
5	5.4	+4.18	9.~~58~~ .71	9.7	−0.15	9.~~55~~ .68
6	5.7	4.18	~~9.88~~ 10.01	10.0	−0.18	9.~~82~~ .95
7	6.3 6.2 6.25	4.15	10.~~40~~ .53			
8	6.2 6.3 6.25	4.15	10.~~40~~ .53			
9	6.3	4.15	10.~~45~~ .58			
10	7.1	4.11	11.~~21~~ .35			
11	7.3	4.10	11.~~40~~ .54			
12	8.0	4.07	12.~~07~~ .21			
13	8.2	4.05	12.~~25~~ .39			
14	8.5	4.03	12.~~53~~ .67			
15	8.6	4.02	12.~~62~~ .76			

M.R.

Series 2768 - 2779

copied

Scale u. alt. -.18 June 10, 1913.

		Mc 2771			207 13-15 Pc.						
			Curve	Magn.		Curve	Magn.			Curve	Magn.
too far from centre	1	.			6.9	+0.38	7.28 .41	27	8.9	+4.00	~~12.90~~ 13.04
" " "	2	.			7.1	0.32	7.42 .55	28	9.5 9.35	3.99	13.49 .63
" " "	3				7.7	0.18	~~7.88~~ 8.01	29	9.3 9.4	4.00	~~13.35~~ .49
	4	4.2	+4.19	8.39 .52	8.0	0.11	~~8.11~~ .24	30	9.8	3.99	~~13.79~~ .93
"	5	4.1	.	.	7.8 7.9 7.85	0.14	~~7.99~~ 8.12	31	9.9	3.98	~~13.88~~ 14.02
" " " "	6	.	.	.	7.3 7.2 7.25	0.29	7.54 .67	32			
" " "	7		.	.	8.0	0.11	~~8.11~~ .24				
" " "	8		.	.	8.7	-0.02	8.68 .81				
" " " "	9	.	.	.	8.7 8.55	-0.02	8.68 .81				
" " " "	10	.	.	.	8.4 8.7	0.00	~~8.55~~ .68				
" " " "	11	.	.	.	9.8	-0.16	9.64 .77				
	12	5.3	4.18	9.48 61	9.8	-0.16	9.64 .77				
	13	5.3	4.18	9.48 61	9.8	-0.16	9.64 .77				
wrong star	14	5.3 ~~6.9 6.8~~	4.18	9.48 .61	9.7	-0.15	9.55 .68				
	15	5.8	4.18	~~9.98~~ 10.11	n.S.						
	16	5.7	4.18	~~9.88~~ 10.01							
	17	6.1	4.16	10.26 .39							
	18	6.6	4.13	~~10.73~~ .86							
	19	6.8	4.12	~~10.92~~ 11.06							
	20	7.1	4.11	11.21 .35							
	21	7.9	4.08	~~11.98~~ 12.12							
	22	7.3 7.6 7.45	4.10	~~11.55~~ .69							
	23	7.9	4.08	~~11.98~~ 12.12							
	24	8.2	4.05	12.25 .39							
	25	8.3	4.04	12.34 .48							
	26	8.5	4.02	12.52 .66							

~~Correct star marked for 14.~~

M.OR. Cont. →

Series 2768-2779.
copied.

Scale U.   alt. + .17 June 10. 1913.

Mc 2772   C7 = 13 + 15-)   Mc 2773 - Pole.

					P.C	– Curve	Magn.		Seep. .50	P.C.
too far from centre	1	·			6.2	+0.59	.91 6.79	5		5.7
" " " "	2	·			7.1	0.32	.55 7.42	6		6.3
" " " "	3	·	Curve	Magn.	7.4	0.26	.79 7.66	8		8.1
	4	4.0	·		7.7	0.18	8.01 7.88	9		8.8
	5	4.1.	·		8.1	0.09	.32 8.19	10	4.7	9.0
	6	4.70 4.7 4.7	4. +0.19	9.02 8.89	8.70 8.7 8.7	-0.02	.81 8.68	11	5.0	9.5
	7	4.25 4.2 4.3	4.19	.57 8.44	8.90 8.9 8.9	-0.06	.97 8.84	12	5.3	9.9
	8	5.2	4.19	.52 9.39	9.8	-0.16	.77 9.64	13	6.0	
" " " "	9	·	·	·	9.8	-0.16	.77 9.64	14	6.2	
	10	5.3	4.19	.62 9.49	9.9	-0.17	.86 9.73	15	6.6	
	11	5.6	4.18	.91 9.78	9.8	-0.16	.77 9.64	16	7.1	
	12	5.7	4.18	10.01 9.88				17	7.4	
	13	6.2	4.16	.49 10.36				18	7.9	
	14	6.3	4.15	.58 10.45				19	8.1	
	15	6.3	4.15	.58 10.45				20	8.5	
	16	6.6	4.13	.86 10.73				23	9.1	
	17	7.2	4.10	.44 11.30				25	9.7 ← (scratched)	
	18	7.3	4.10	.54 11.40				26	f.	
	19	7.5	4.10	.74 11.60						
	20	8.0	4.07	.21 12.07						
	21	8.3	4.04	.48 12.34						
	22	8.9	4.00	13.04 12.90						
	23	9.2	4.00	.34 13.20						
	24	9.7	3.99	.83 13.69						
	25	9.8	3.99	.93 13.79						
	26	9.9	3.98	14.02 13.88						

Series 2768–2779.

Scale U — copied. Alt. –.28 — June 10, 1913. — copied — alt. +.17

Mc 2774 2K (Mc 2775 qual. B) Mc 2776 82K

		Curve	Magn.	P.C.	Curve	Magn.		U		Curve	Magn.	P.C.	Curve	Magn.
1	4.3	+4.19	.62 8.49	8.7	–0.02	.81 8.68	1	3.55 ~~9~~ 3.4	3.7	.	.	6.25 6.2 6.3	+0.56	1 .93 6.80
2	4.7	4.19	9.02 8.89	9.2	–0.10	.23 9.10	2	5.1 5.10	5.1	+4.19	.42 9.29	9.7	–0.15	.68 9.55
3	5.1	4.19	.42 9.29	9.7	–0.15	.68 9.55	3	4.9	4.90 4.9	4.19	.32 9.09	9.7	–0.15	.68 9.55
4	5.3	4.19	.62 9.49	9.7	–0.15	.68 9.55	4	~~4~~ 5.7		4.18	10.01 9.88			
5	5.7	4.18	10.01 9.88	9.9	–0.16	.87 9.74	5	6.1		4.16	.39 10.26			
6	6.3	4.16	.59 10.46				6	6.7		4.13	.97 10.83			
7	7.2	4.10	.44 11.30				7	7.1		4.11	.35 11.21			
8	7.7	4.09	.93 11.79				8	7.7		4.09	.93 11.79			
9	8.1	4.06	.30 12.16				9	8.1		4.06	.30 12.16			
10	8.2	4.05	.39 12.25				10	8.2		4.05	.39 12.25			
11	8.3	4.04	.48 12.34				11	8.7		4.01	.85 12.71			
12	8.7	4.01	.85 12.71				12	9.1		4.00	.24 13.10			
13	9.0	4.00	.14 13.00				13	9.7		3.99	.88 13.69			
14	9.3	4.00	.44 13.30				14	9.9		3.99	14.03 13.89			
15	9.5	3.99	.63 13.49				15	n.s.		.	.			

too

MOR.

Series 2768 – 2779

copied.

Scale u   alt. + .22   June 10, 1913.

MC 2778   B6   14   40+45°

		Curve	Magn.	Pc.	Curve	Magn.			Curve	Magn.
1	B.			6.0	+0.66	.77 6.66	27	8.7	+4.01	.85 12.71
too far from centre 2				6.1	0.61	.82 6.71	28	9.1	4.00	.24 13.10
" " " " 3				6.2	0.58	.90 6.78	29	9.2	4.00	.34 13.20
" " " " 4				6.3	0.55	.97 6.85	30	9.4	3.99	.53 13.39
" " " " 5				6.5	0.50	.13 7.00	31	9.4	3.99	.53 13.39
" " " " 6				7.2	0.30	.63 7.50	32	9.8	3.99	.93 13.79
" " " 7				7.7	0.17	8.00 7.87				
8	4.2	+4.19	.52 8.39	8.1	0.09	.32 8.19				
9	4.8	4.19	9.12 8.99	8.7	−0.02	.81 8.68				
10	4.9	4.19	.22 9.09	9.0	−0.09	9.04 8.91				
11	5.1	4.19	.42 9.29	9.2	−0.10	.23 9.10				
12	5.2	4.19	.52 9.39	9.7	−0.16 5	.68 9.55				
13	5.3	4.18	.61 9.48	9.8	−0.16	9 .77 8.64				
14	5.9	4.17	.20 10.07							
15	6.0	4.17	.30 10.17							
16	6.0	4.17	.30 10.17							
17	6.1	4.16	.39 10.26							
18	6.3	4.15	.58 10.45							
19	6.4	4.13	.97 10.83							
20	6.7	4.13	.97 10.83							
21	7.3	4.10	.54 11.40							
22	7.6	4.09	.83 11.69							
23	7.9 7.51	4.08	12.12 11.98							
24	7.4 7.7	4.09	1 .78 12.64							
25	8.2 7.90	4.05	.39 12.25							
26	7.9 7.9	4.08	12.12 11.98							

M.O.R.

cont →

Series 2768-2779.

Scale u-

June 10, 1913.

	Mc 2779 See p. 50	
5		5.8
6		6.3
8		8.2
9		8.8
10	4.7	9.1
11	5.1	9.7
12	5.7	10.0
13	6.0	
14	6.2	
15	6.7	
16	7.0	
17	7.3	
18	7.9	
19	8.1	
20	8.7	
23	9.1	
25	9.7	
26	Fns.	

M.OR

12:05

Scale U. September 9, 1913

11:55 MC 24125. T′ C 5 $9^{h}+15^{\circ}$

Corr. for eye. −.06
alt. +.10

Following Images.

Corr. for eye. −.06
alt. +.10

	sc.1	sc.2	Curve	Magn.	P.C.	curve	magn.
two far from centre 1	.				5.8	+1.37	7.17
2	3.3		.		6.7	1.22	7.92
" " " 3	.				6.9	1.20	8.10
" " " 4	.				6.8	1.21	8.01
5	$\overset{4}{8}$.0		4.$\overset{6}{5}$5	8.65	7.5	1.11	8.61
6	$\overset{4}{7}$.3		4.62	8.92	7.8	1.10	8.90
7	4.3		4.62	8.92	7.7	1.10	8.80
8	4.6		4.58	9.18	8.2	1.10	9.30
9	4.8		4.56	9.36	8.5	1.11	9.61
10	5.3		4.53	9.83	8.9	1.16	10.06
11	5.2		4.53	9.73	8.7	1.13	9.83
12	$\overset{5}{4}$.2		4.53	9.73	8.7	1.13	9.83
13	$\overset{5}{4}$.3		4.53	9.83	9.0	1.18	10.18
14	$\overset{5}{4}$.3		4.53	9.83	9.3	1.20	10.50
15	6.0		4.54	10.54	f.		
16	6.3		4.56	10.86			
17	4.7		4.62	11.32			
18	6.7		4.62	11.32			
19	6.9		4.64	11.54			
20	7.2		4.69	11.89			
21	7.8		4.79	12.59	n.s.		
22	7.8		4.79	12.59			
23	7.9		4.82	12.72			
24	~~8.3~~	8.3	4.90	13.20			
25		9.0	5.08	14.08			
26		9.0	5.08	14.08			

M.O.R.

Scale U

September ~~9~~ 10, 1913.

	MC 24 15 cont. T′					Following Images.
						J
	sc.1	sc3				
27	9.2	1	9.2	5.14	14.34	
28	9.5	9.395	9.50	5.24	14.74	
29	f					

Polar	sc.1	sc.2	sc.3	Cr.170 Diff.	P.C. sc 3	Cr.170. Diff.
5					5.2	+1.19
6					5.4	1.58
8					6.8	1.30
9					7.7	1.00
10	4.7			4.69	7.8	1.09
11	4.9			4.32	8.3	1.12
12	5.3			4.43	8.6	1.13
13	5.6			4.59	9.0	1.17
14	6.0			4.52	9.3	1.22
15	6.3			4.64	7.5	
16	6.7			4.56		
17	6.9			4.59		
18	7.3			4.62		
19	sup.			4.69		
20	7.9			4.69		
23	8.2			5.00		
25	8.7			5.03		
26	9.0			5.19		
27	9.5	sc.3 9.749	9.7022	4.85		
28	f.					

M.O.W.

12:40

Scale II   Sept 11, 1913.

11—   MD 2415   T.   C5 = 9h +15°

Following images

Corr. for exp. −.06
" alt. +.10

	sc.1	sc.2	sc.3	Curve	Magn.	~~P.C.~~
1	4.2			+2.82	7.02	
2	4.9			2.91	7.81	
3	5.2			2.96	8.16	
4	5.2			2.96	8.16	
5	5.6			3.00	8.60	
6	6.1			3.06	9.16	
7	6.1			3.06	9.16	
8	6.3			3.09	9.39	
9	6.3			3.09	9.39	
10	6.5			3.11	9.61	
11	6.7			3.14	9.84	
12	6.9			3.16	10.06	
13	7.1			3.18	10.28	
14	7.3			3.20	10.50	
15	7.8			3.28	11.08	
16	8.0			3.30	11.30	
17		8.5		3.35	11.85	
18		8.4		3.34	11.74	
19		8.3		3.33	11.63	
20		8.7		3.38	12.08	
21		9.1	9.0 9.2 9.15 1.0	3.44	12.59	
22		9.3	9.1 9.3 9.30 .00	3.46	12.76	
23		9.4	9.3 9.5 9.45 .01	3.48	12.93	
24		~~8~~9.7	9.5 9.7 9.70 .00	~~4.00~~ 3.50	13.20	

M.O.K.

Scale U Sept 11, 1913.

	MD 24°15					Cont
	Sc.1	Sc.3				
5	3.6					+2.79
6	4.2					2.78
8	5.3					2.80
9	5.7					3.00
10	5.8					3.09
11	6.3					3.12
12	6.7					3.03
13	7.0					3.17
14	7.2					3.32
15	7.7					3.24
16	7.9 Sc.2					3.36
17	8.1					3.39
18	8.5					3.42
19	9.0	8.7	8.9	8.95	.01	3.33
20	9.3	8.9	9.1	9.20	.11	3.39
23	9.6	9.5	9.7	9.65	.01	3.55
25	F.					

M.O.R.

Scale ⓞ. Sept 11, 1913.

ME 3415 T′ 9 + 15 = C5.

Corr. for exp. −.06
" " alt. +.10

pc.1 sc.3

					curv	Magn.
	1	4.2			2.99	7.19
	2	5.1			2.95	8.05
	3	4.9			2.96	7.86
	4	5.2			2.95	8.15
	5	6.2			2.90	9.10
	6	6.2			2.90	9.10
	7	6.2			2.90	9.10
	8	6.8			2.86	9.66
	9	7.2	6.8	7.00 .22	2.84	9.84
	10	7.1	7.0	7.05 .10	2.84	9.89
wrong star meas.	11	6.9	~~7.7~~ rej.	6.90 .00 6.9	2.85	9.75
	12		7.3	7.25 .10 7.2	2.82	10.07
	13		7.9		2.77	10.67
	14		8.1		2.74	10.84
	15		9.0		2.67	11.67
	16		9.4		2.61	12.01

Standard Regions.

Scale O. Sept. 11, 1913.

ME $\overset{2}{+}$415 cont. C5 = 9 + 15°

		sc.1	sc.3		Diff.
	3	2.7			+3.04
	4	2.9			3.01
	5	3.3			3.09
	7	4.3			2.88
	6	4.1			2.88
	8	5.2			2.90
	9	5.7			3.00
	10	5.9			2.99
	11	6.4			3.02
	12	7.0			2.73
	13	7.4			2.77
	14	7.9			2.62
w.s.	15	~~7.0~~ 8.2			2.74
	16	8.5			2.76
	*17	9.0	8.7	8.85 2.1	~~2.49~~
	1r	3.2	3.04	6.24	2.64
	2r	4.3	2.99	7.29	
	3r	5.2	2.95	8.15	
	4r	6.0	2.91	8.91	
	5r	7.1	2.83	9.93	
	*17	8.7			
	6r	7.3	2.82	10.12	
	18	~~7.0~~			

Plotted O.

Measures of Sequence for C11 = 21 + 15

Scale u

1:10

September 12, 1913.

	Mc 1420			T'	C11 =		
	Corr. for exp. −.06 alt. .00				P.C Sc.2	curve	Magn.
1	B.	curve	Mag.		5.3	1.60	6.90
2	B.				5.4	1.60	7.00
3	B.				6.1	1.54	7.64
4	3.3				6.4	1.50	7.90
5	3.6	4.74	8.34		7.68	1.47	8.27
6	$\overset{3}{5}.8$	4.79	8.59		7.1	1.42	8.52
7	3.9	4.80	8.70		7.7	1.35	9.05
8	4.1	4.85	8.95		7.8	1.34	9.14
9	4.1	4.85	8.95		7.9	1.33	9.23
10	4.3	4.89	9.19		8.1	1.30	9.40
11	4.9	5.00	9.90		8.7	1.23	9.93
12	4.6	4.95	9.55		8.6	1.24	9.84
13	4.50 11 4.6 4.4	4.93	9.43		8.7	1.23	9.93
14	4.20 10 4.3 4.2	4.88	9.13		8.7	1.23	9.93
15	5.0	5.00	10.00		9.0	1.18	10.18
16	5.1	5.02	10.12		9.2	1.15	10.35
17	5.3	5.04	10.34		f		
18	5.3	5.04	10.34		f.		
19	6.0	5.14	11.14				
20	5.9	5.12	11.02				
21	6.4	5.20	11.60				
22	6.3	5.18	11.48				
23	6.2	5.17	11.37				
24	6.8	5.26	12.06				
25	6.9	5.26	12.16				
26	7.1	5.30	12.40				
27	7.3	5.32	12.62				

M.O.R.

Scale U

September 12, 1913.

Mc 1420 cont.

		sc 2				
	28	7.8	5.40	13.20		
	29	8.0	5.42	13.42		
	30	8.3	5.48	13.78		
	31	8.9	5.58	14.48		
	32	8.7	5.54	14.24		
	33	9.1	5.62	14.72		
	34	9.3	5.64	14.94		
	35	10.0 sc. 1	5.74	15.74		
					P.C.	
Polar	5				4.8	1.59
	6				5.4	1.58
	8				6.5	1.60
	9				7.1	1.60
	10	4.2		4.69	7.7	1.19
	11	4.4		5.02	8.3	1.12
	12	4.7		5.03	8.4	1.33
	13	5.2		4.97	9.0	1.17
	14	5.3		5.22	n.s.	
	15	5.9		5.04		
	16	6.0		5.26		
	17	6.4		5.09		
	18	6.9		5.02		
w.s.	19	~~6.8~~ 7.0		5.28		
w. unit	20	$\overset{7}{8}.3$		5.29		
	23	7.8		5.40	289.3	5.67
	25	~~9.0~~ 8.3		5.43	29 9.8	5.72
	26	~~9~~ 8.5		5.69		
M.O.R.	27	9.0		5.55		

Measures of seq. for B9 = 22 to +45.0

Scale O

September 12, 1913.

Ac 13627

Polar		Sc1		Diff.
	3	2.9		+2.84
	4	3.0		2.91
	5	3.3		3.09
	6	3.8		3.18
	8	5.2		2.90
	9	6.0		2.70
defective image	10	.		
	11	6.9		2.52
	12	7.4		2.33
	13	7.9		2.27
	14	8.0		2.52
	15	8.3		2.64
uncertain about star.	16	9.③?		2.26?
	1r	4.1		
	2r	4.9		
	3r	6.1	6.1	
	4r	6.1	6.3	
	5r	7.1		
	6r	7.7		
	7r	8.1		
	8r	9.0		
	9r	9.0		

M.O.R.

Scale O. September 12, 1913 –

Ac 13627 T' cont.

not known which exposure is preceding and which following.
Apply mean correction for alt. and no correction for exp.

Corr. for alt. –0.4

		St. Sequence.		Magn.
	1	3.3	3.06	6.36
	2	3.9	3.08	6.98
	3	4.0	3.08	7.08
	4	4.1	3.06	7.16
	5	4.2	3.06	7.26
	6	4.7	3.00	7.70
	7	5.2	2.91	8.11
	8	5.2	2.91	8.11
	9	5.3	2.90	8.20
	10	5.7 6.5	2.82	8.52
	11	6.20 6.3 6.1	2.71	8.91
	12	5.85 5.7 6.0	2.79	8.64
	13	6.2	2.71	8.91
	14	6.7	2.61	9.31
	15	7.00 7.0 7.0	2.56	9.56
	16	6.70 6.7 6.7	2.62	9.32
	17	7.1	2.54	9.64
	18	7.3	2.51	9.81
	19	Sup.	.	
Im. not circular	20	.	.	
	21	8.2	2.37	10.57
	22	8.5	2.32	10.82
	23	8.7	2.29	10.99
	24	8.9	2.26	11.16
	25	9.0	2.24	11.24
	26	9.3	2.20	11.50
M.O.R.	27	n.S.	.	

≠ 2.23

Standard Regions.

Scale M — September 17, 1913

11:47 MD 2403 — B3 = 6 40 +45

Following images

Corr. for exp. −.06
ret +.04

	sc.1	sc.2	sc.2	Curve		Magn.	
1	2.9	3.1		.			
2	3.2	3.4		.			
3	3.3	3.5		.			
4	3.7	3.9 3.7	3.80	11 .			
5	3.6 ~~3.85~~ 3.4	3.3		..			
6	4.2	4.4		2.83	2.86	7.26	7
7	4.0	4.2		2.80	2.82	7.02	
8	4.8	5.0		2.92	2.94	7.94	
9	8 5.1	5.3		2.96	2.99	8.29	
10	5.9	6.1		3.05	3.08	9.18	
11	5.8	6.0		3.04	3.07	9.07	
12	6.1	6.3		3.08	3.10	9.40	
13	6.3	6.5		3.10	3.11	9.61	
14	6.3	6.5		3.10	3.11	9.61	
15	7.1 6.9 7.0	7.05			3.16	10.21	
16		7.3	7.25 7.2		3.18	10.43	
17	6.9 7.1	l			3.16	10.26	
18		7.3			3.18	10.48	
19		7.7			3.21	10.91	
20		8.2			3.25	11.45	
21		8.3			3.28	11.58	
22		8.3			3.28	11.58	
23		9.3			3.35	12.65	
24		9.6			3.40	13.20	
25		9.8			3.40	13.20	
26		9.9			3.40	13.30	

M.O.R.

Scale M- September 17, 1913.

MD 2403

Polar

	sc. 1	sc. 2	Diff.
5	1.6	1.8	~~4.79~~ 4.59
6	4.0	4.2	~~2.98~~ 2.78
8	4.7	4.9	3.20
9	5.4	5.6	3.10
10	5.7	5.9	2.99
11	6.1	6.3	3.12
12	6.4	6.6	3.13
13	6.8	7.0	3.17
14	~~6.3~~	7.3	3.22
15		7.7	3.24
16		8.0	3.26
17		8.3	3.19
18 ~~8~~		8.7	3.22
19		9.0	3.28
20		9.3	3.29
23		9.8	3.40
25			

M.O.R.

Scale 0. ✱ September 17, 1913

		Mc 2403		Polar
		sc.1		
	1	4.0	1~	4.2
	2	4.3 4.2	2~	5.3
	3	3.8 4.0	3~	~~7~~6.1
	4	5.2 5.3	4~	6.8
W.S. marked.	5	~~3.8 3.7~~ 5.0	5~	8.0 8.0
	6	5.5	6~	7.8 7.8
	7	5.3	7~	
	8	6.7 6.3	8~	9.4
	9	6.9 6.9	9~	f.
W.S. star marked.	10	~~5.7 5.7~~ 7.0	3	
	11	7.8 7.8	4	3.3
	12	8.1	5	4.7
W.S. star marked.	13	8.1 ~~8.8~~ ~~8.7~~	6	4.8
	14	8.1	8	6.2
	15	8.3	9	6.7
	16	-	10	6.9
	17	8.7	11	7.2
	18	9.2	12	7.7
	19	9.8	13	8.1
	20	10.0	14	8.4
			15	8.7
			16	9.1
			17	9.3
			18	9.8
			19	
			20	

✱ Reject these measures as wrong star was marked for several stars. See Ld Bk 42 p. 185 for measures.

M.C.R.

Series 2816 – 2821.

Scale U. September 27, 1913.

11– Mc 2816 Pole.

P.C.

	sc.1	sc.3	Mc 2821 P.72 Mean			Diff.	sc.	sc.3						Diff.
5							5.8			54	5.60	22		+0.79
6							6.3			6.3	6.30	00		+0.68
8							7.8			7.7	7.75	01		+0.35
9							8.6			8.2	8.40	22		+0.30
10	4.9	4.7	4.80	11		+4.09	8.9			8.5	8.70	22		+0.19
11	5.3	5.1	5.20	11		4.22	9.3	9.3 9.1	9.30	9.20	9.25	05	05	+0.17
12	5.7	54	5.55	12		4.18	9.7	9.7 9.5	9.70	9.60	9.65	05	05	+0.08
13	6.2	5.8	6.00	22		4.17								
14	6.3	6.0	6.15	12		4.37								
15	6.7	6.2	6.45	32		4.49								
16	7.0	6.6	6.80	22		4.46								
17	7.4	7.1	7.25	21		4.24								
18	7.9	7.5	7.70	22		4.22								
19	8.2	7.8	8.00	22		4.28								
20	8.5	8.2	8.35	12		4.24								
23	8.9	8.8	8.85	10		4.35								
25	9.5	9.50 00 9.3 9.5	9.15		9.32 18 17	4.41								
26	10.0	9.95 .01 9.9 *9.7	9.85		9.90 05 .05	4.29								
27														

4 5
4 4
+.10 −.12

30 30
3 3
+.10 −.10

7).70 7)−.80
+.10 −11
(all)

6 8
5 5
+.12 −.16

9 7
4 4
+.22 −.18

5).63 5)−.62
+.13 −.12
copied.

+.15 −.15
14)2.13 14)−.212
14 14
73 72

Plotted. O.

M.O.R.

H.

Series 2816 – 2821.

Scale U.   copied.   September 17, 1913.   copied.

Mc 2817 17 Ks   Mc 2818 12° K 4 13 – 15.0

alt. +.19   Pc.   alt. –.31

	Sc.1 Sc3	curve		Sc3			Magr.
1	5.3	✓ 4.20	.63 9.50	9.7	9.70 9.5 9.7 9.60 1.1	+0.09	92 79 9.61
2	5.3	4.20	.63 9.50	9.5	9.5 9.7	+0.10	83 8.70 9.50
3	6.1	4.28	.57 10.38				
4	6.2	4.28	61 10.48				
5	6.8	4.31	.25 11.11				
6	7.0	4.32	.46 11.32				
7	7.2	4.32	.66 11.52				
8	7.7	4.33	17 12.03				
9	8.3	4.34	.78 12.64				
10	8.7	4.34	.18 13.04				
11	8.7	4.34	.18 13.04				
12	9.0	89 ~~9.2~~ 9.1	~~.18~~ 9.05 .01	4.32	.51 13.37		
13	x.						
14	9.1	9.2 9.4	~~.36~~ 9.25 .12	4.32	.71 13.59		
15	9.5	9.5 9.7	~~.73~~ 9.60 .11	4.31	14.05 ~~13.91~~		

no Star seen, must have marked a defect?

	Sc.1	Sc3 curve		Pc. Sc3.		
1	5.0	4.18	.31 9.48	8.9	+0.18	21 9.08 ~~8.72~~
2	5.3	4.21	.64 9.51	9.3 9 19.3 9.30	+0.14	57 +4 9.16
3	5.9	4.46	.29 10.46	n.s.		
4	6.4	4.29	.82 10.69			
5	7.1	4.32	.56 11.42			
6	7.3	4.32	76 11.62			
7	7.4	4.33	87 11.73			
8	7.7	4.33	17 12.03			
9	8.1	4.34	.58 12.44			
10	9.0	4.33	3 .47 12.33			
11	8.9	4.33	.37 13.23			
12	8.7	4.33	.17 13.03			
13	9 8.6	4.31	14.05 ~~13.91~~			
14	9.9	10.0 9.8 9.95 .10 4.31	.40 14.26			
15	7.					

M.O.R.

Series 2816-2821

copied

Scale U

September 27, 1913.

Mc 2819 | 72 K | alt. +.11

Mc 2820 B.

Mc 2821 Pole.

Sc 3 Diff. Magn. P.C.

1 B. ↓ + 58 +0.80 $\overset{.71}{6.60}$ 8 58a
2 5.4 4.22 $\overset{.75}{9.62}$ n.s.
3 5.8 4.25 $\overset{.18}{10.05}$
4 5.8 4.25 $\overset{.18}{10.05}$
5 6.1 4.28 $\overset{.51}{10.38}$
6 6.3 4.29 $\overset{.72}{10.59}$
7 6.7 4.31 $\overset{.15}{11.01}$
8 7.2 4.32 $\overset{.66}{11.52}$
9 7.9 4.33 $\overset{.37}{12.23}$
10 8.1 4.34 $\overset{.58}{12.44}$
11 8.4 4.34 $\overset{.88}{12.74}$
12 9.0 8.$\overset{8.95}{9}$ 8.9 4.33 $\overset{.42}{13.28}$
13 9.1 8.9 $\overset{9.10}{9.1}$ 4.32 $\overset{.56}{13.42}$
14 9.0 8.8 $\overset{9.00}{9.0}$ 4.32 $\overset{.46}{13.32}$
15 9.7 9.8 10.0 9.85 ⊥0 4.31 $\overset{.30}{14.16}$

sc 3

5
6
8
9
10 4.7
11 5.1
12 5.4
13 5.8
14 6.0
15 6.2
16 6.6
17 7.1
18 7.5
19 7.8
20 8.2
23 8.8
25 9.2 $8.9^{9.1}$ 9.15 0 1
26 9.7 $9.8^{10.0}$ 9.85 1 2
27

SC 3

5.4
6.3
7.7
8.2
8.5
9.2 9.0 9.2 9.20 0 0
9.7 $9.3^{9.5}$ 9.60 1 1
f.

11:40

M.O.R.

Series 3979 – 3984.

Scale U

October 7, 1913

10:06 Mc 3979 Pole

~~sc.3~~

Diff.			Mc3984 P.76.	Mean		Diff
	5					
	6					
	8					
	9					
+4.59	10	4.3	5.3	4.80	5 5	+4.09
4.72	11	4.7	5.7	5.20	5 5	4.22
4.63	12	5.1	6.0	5.55	5 4	4.18
4.47	13	5.7	6.5	6.10	4 4	4.07
4.72	14	5.8	7.2	6.50	7 7	4.02
4.74	15	6.2	7.5	6.85	6 7	4.09
4.76	16	6.5	7.7	~~6~~ 7.10	6 6	4.16
4.79	17	6.7	7.9	7.30	6 6	4.19
4.82	18	7.1	8.3	7.70	6 6	4.22
4.98	19	7.3	8.5	7.90	6 6	4.32
4.09	20	8.5	8.7	8.60	1 1	3.99
4.50	23	8.7	9.25	8.98	28 27	4.22
4.83	25	8.9	9.95	9.42	52 53	4.31
4.89	26	9.3	sc.3 9.1 9.3	9.30	00 9.30 a	4.89
4.75	27	9.9	9.5 9.7	9.80	1 1 9.80 a	4.75

	P.C P.76			Superseded	Diff
5.8	6.8	6.30	5 5	+0.09	0.59
6.4	7.5	6.95	6 ~~5~~ 5	0.03	0.58
7.5	8.5	8.00	5 5	0.10	0.60
8.1	9.05	8.58	5 4	0.12	0.60
8.3	9.35	8.82	5 6 ~~4~~	0.07	0.59
8.8		8.8	a	0.62	0.62
9.1	8.8 9.0 9.05 1 0	9.05	~~1~~ 1 0?	0.68	0.68
9.5	9.7 9.9 9.70 2 2	9.70	~~4~~ 2 2?	0.47	0.47
n.s.					

Mc 3984 not to be included

Per. N.S.L. Oct. 7, 1913.

(No. 20 discordant. Not included on curve.
See plotting sheet page 21.)

October 14, 1913

Remeas. sc.2
19 ~~7.5~~
20 7.9 7.8
23 8.5

M.O.R.

Series 3979 – 3984

Scale U

copied Card October 7, 1913. copied Card

Mc 3980 118 K

Alt. -19

	Sc. Sc 3	Curve	Magn.	Sc 3	Curve	Magn.
1	3.9	4.57	.60 8.47	7.3	0.59	7.89
2	4.2	4.60	.93 8.80	7.3	0.59	7.89
3	4.2	4.60	.93 8.80	7.8	0.58	8.38
4	4.7	4.65	.48 9.35	8.7	0.57	9.27
5	5.0	4.67	.80 9.67	9.05 ~~8.95~~ 01 9.1 9.0 8.9	0.57	6 9.52
6	5.9	4.73	.76 10.63	n.s.		
7	6.2	4.74	11.08 10.94			
8	6.2	4.74	11.08 10.94			
9	6.3	4.75	.19 11.05			
10	7.2	4.81	.15 12.01			
11	7.7	4.84	12.54			
12	8.3	4.84	.68 13.14			
13	9.25 10 9.2 9.3 9.0	4.81	.20 14.06			
14	9.30 9.3 9.3 9.1	4.81	.25 14.11			
15	~~9.76 01~~ 9.7 ~~9.8 9.5~~	~~4.80~~	~~14.55~~ dif.? Reject.			

Mc 3981 94 K

alt +0'5

	Sc 3	Curve	Magn.	P.C. sc 3	Curve	Magn.
1	405 40 10 4.1 3.8	4.58	.76 8.63	690 00 6.9 6.9	0.59	.62 7.49
2	4.1	4.59	.82 8.69	7.9	0.58	.61 8.48
3	4.3	4.60	9.03 8.90	8.2	0.57	.90 8.77
4	5.3	4.69	10.12 9.99	9.50 6 11 00 9.5 9.5 9.7	0.58	1 31 10.08
5	5.8	4.72	.65 10.52	10.05 9.95 01 10.0 9.9 10.1	0.60	6 78 10.56
6	6.3	4.75	.19 11.05			
7	6.7	4.79	.63 11.49			
8	7.2	4.81	.15 12.01			
9	7.5	4.82	.46 12.32			
10	7.6	4.83	.57 12.43			
11	8.0	4.84	.98 12.84			
12	8.1	4.84	13.08 12.94			
13	8.7	4.83	.67 13.53			
14	9.20 9.4 9.0 9.2	4.81	.15 14.01			
15	9.30 9.2 9.4 9.0	4.81	.25 14.11			
16	9.80 9.7 9.9 9.5	4.79	.73 14.59			

MOR

Series 3979 - 3984.

Copied Card.

October 7, 1913.

Copied Card.

Scale U

	MC 3982			C2. 3+15 alt +16 B.C.				MC 3983. alt. -18			D2 P.C.		
				Sc. 3.								Curve	Magn.
too far from c.	1.	Curve	Magn.	6.7	0.59	.42 7.29	1.	Sc. 3			7.3. Sc. 3.	0.59	8.02 7.89
" " " "	2.			6.7	0.59	.42 7.29	2.		Curve	Magn.	8.1 8.2 8.15 ± 1.0	0.58	.86 8.73
	3 3.8	4.55	.48 8.35	6.9	0.59	.62 7.49	3.				7.5 7.7 7.60 ± 1.1	0.58	.31 8.18 Elong.
	4 4.1	4.59	.82 8.69	7.7	0.58	.41 8.28	4.				8.3	0.58	9.01 8.88
	5 4.1	4.59	.82 8.69	7.8	0.58	.51 8.38	5.				8.1	0.58	81 8.68
	6 4.3	4.60	9.03 8.90	8.5	0.57	.20 9.07	6.				8.5	0.57	.20 9.07
	7 4.4	4.61	.14 9.01	8.5	7 0.59	.20 9.07	7 4.6	4.64	.37 9.24		8.9	0.57	.60 9.47
	8 4.6	4.63	.36 9.23	8.9	0.57	60 9.47	8.				8.7 8.8 8.75 ± 1.0	0.57	.45 9.32
	9 4.7	4.65	.48 9.35	8.9	0.57	.60 9.47	9 4.8	4.66	.59 9.46		9.7 9.5 9.7 9.70 ± 2 9.63 9.9	0.59	42 10.29 ~~10.22~~
	10a ~~10~~ 5.7	4.70	.33 10.20	n.s.			10a ~~10~~				9.5 9.8 9.8 9.45 ± 10.0	0.59	3 47 10.24
	11 5.2	4.69	10.02 9.89	9.5 9.8 9.65 ± 10.0	0.59	3 47 10.24	11 5.2	4.69	10.02 9.89		9.7 9.8 9.75 ± 10.0	0.59	4 57 10.34
	12 5.3	4.69	10.12 9.99	9.7 9.8 9.75 ± 10.0	0.59	4 57 10.24	12 5.4	4.70	23 10.10		f.		
	13 5.8	4.72	.65 10.52	n.s.			13 5.9	4.72	.75 10.62				
	14 5.8	4.72	65 10.52				14 5.9	4.72	.75 10.62				
	15 6.1	4.73	.97 10.83				15 6.2	4.75	11.09 10.95				
	16 6.2	4.75	11.09 10.95				16 6.2	4.75	11.09 10.95				
	17 6.5	4.77	.41 11.27				17 6.4	4.77	.31 11.17				
	18 6.7	4.79	.63 11.49				18 7.4	4.82	.36 12.22				
	19 7.0	4.80	.94 11.80				19 7.7	4.84	.68 12.54				
	20 7.2	4.81	.15 12.01				20 7.7	4.84	.68 12.54				
	21 7.4	4.82	.36 12.22				21 8.1	4.84	13.08 12.94				
	22 7.8	4.83	.77 12.63				22 8.7	4.83	.67 13.53				
	23 8.0	4.84	.98 12.84				23 8.5	4.84	.48 13.34				
	24 8.3	4.84	28 13.14				24 8.9	4.82	86 13.72 ~~13.72~~				
	25 8.3	4.84	.28 13.14				25 9.3 9.3 9.80 9.5	4.81	2 35 14.11		26 9.7 9.5 9.70 Sc. 3 9.7	4.80	.64 14.50
	26 8.7	4.82	.66 13.52								27 n.s.		
	27 9.1 9.20 ± 9.1	4.82	16 14.02	9.9 9.9 9.90 9.9									
	28 9.3 9.5 9.60 9.5	4.80	44 14.30	30 ~~11.6~~ 9.7	4.79	14.69							
	29 9.7 9.5 9.70 9.7	4.80	64 14.50	31 n.s.									

Nos. 1, 2, 3, 4, 5, 6, 8, 10 are too far from centre of plate.

M.O.R.

Series 3979 – 3984.

Scale M.

October 7, 1913.

	Mc 3984	Pole.
	ac.3	Pc.
5	~~[illegible]~~	~~5.4~~ 6.8 n.s.
6		7.5
8		8.5
9		9.0 8.9 9.1 9.05 0 1
10	5.3	9.2 9.3 9.5 9.35 2 1
11	5.7	n.s.
12	6.0	
13	6.5	
14	7.2	
15	7.5	
16	7.7	
17	7.9	
18	8.3	
19	8.5	
20	8.7	
23	9.2 9.1 9.3 9.25 0 1	
25	9.8 9.9 10.1 9.95 2 1	

Does not show faint stars!!

11.26

M.O.R.

Series 2884 – 2895

Sc W   Oct. 11, 1913

10 – 30   Mc 2884' - Pole.

Sc. 2   Sc. 3   PC   Diff ~~Mean~~   ~~Diff.~~

5   6.2   6.2 Mean.. 6.20 00   +0.19

6   6.7   6.7 6.70 00   0.28 ~~0.37~~

8   7.8   7.8 7.80 00   0.30 ~~0.82~~

9   Mc 2889 8.80   8.5   8.5 8.50 00   0.20   Diff

10 4.8   4.8 8.8   8.9 8.85 = 01   +0.04   4.80 00   4.09

11 5.3   5.3 9.4 9.5 9.7 9.55 21 9.45 9.50 05 05   −0.08   5.30 00   4.12

12 5.6   5.7 9.9 9.7 9.9 9.90 00 9.85 9.88 02 03   −0.15   5.65 01   4.08

13 6.1   6.1   6.10 00   4.07

14 6.5   6.4   6.45 10   4.07

15 6.7   6.9   6.80 11   4.14

16 7.1   7.1   7.10 00   4.16

17 7.5   7.3   7.40 11   4.09

18 8.0   7.9   7.95 01   3.97

19 8.3   8.2   8.25 10   4.03

20 8.6   8.5   8.50 00   4.09

23 9.0 9.1 9.3 9.15 21 9.05   9.10 05 05   4.10

25 9.6 9.5 9.7 9.65 01 9.50 $9.\overset{5}{6}8$ 07 08   4.15

26 10.0 9.8 10.0 10.00 00 9.95   9.98 02 03   4.21

27 n.s.

8 0
0 4
4
.00 .00

7
08 07
3 3
+.02 −.02

all 07 07
7 7
+.01 −.01

1 1
5 5
+.02 +.02

0 1
4 4
.00 −.02

24 16
5 5
+.05 −.03

copied.

34 16
14 14
$+.06^{2}$ −.01

ScU

Copied.

Oct 11 1913

Copied.

MC 2885 51K ~~99K~~ P.C.

	Scale 2		Scale 3	Corr. for		+.22
1	5.2	4.11	9.31 .44	9.3	-0.04	9.26 39
2	5.2	4.11	9.31 .44	9.3	-0.04	9.26 39
3	6.0	4.10	10.10 .23			
4	6.1	4.09	10.19 .32			
5	6.3	4.08	10.38 .51			
6	6.9	4.06	~~10.96~~ 11.09			
7	7.3	4.06	11.36 .50			
8	7.3	4.06	11.86 .3 50			
9	8.0	4.08	12.08 .22			
10	8.55 12 8.7 8.4			4.09	12.64 .78	
11	8.58 8.5 8.5			4.09	12.59 .73	
12	9.08 111 9.2 9.0		9.0 8.8	4.11	13.18 .32	
13	8.90 00 8.9 8.9			4.10	13.00 .14	
14	9.7	9.85 12 10.0	9.8	4.19	14.04 .18	
15						
α				6.2	0.20	6.40 .50
β				8.1	0.20	8.30 .43
γ				6.7	0.27	6.97 7.10
δ				7.8	0.23	8.03 .16
ε				6.3	0.22	6.52 .66

MC 2886 99K

	Scale 2		Scale 3		P.C.			+06	
1	4.3	4.17 ta	8.47 .60	~~12.64~~	8.3				
2	4.7	4.14	8.84 .97	~~12.98~~ wrong star	~~9.7~~	8.9	0.05	~~8.95~~ 9.08	
3	4.9	4.12	9.02 .15	~~13.14~~	9.0	8.9 ~~8.99~~ 9.1	9.05	0.01	9.06 19
4	5.3	4.10	9.40 .53	~~12.50~~					
5	5.4	4.10	9.50 .63	~~12.60~~					
6	6.7	4.06	10.76 .89	~~14.82~~					
7	7.0	4.06	11.06 .20	1					
8	7.6	4.07	11.67 .81						
9	8.2	4.08	12.28 .42						
10	8.3	4.08	12.38 .52						
11	8.9	4.10	13.00 .14						
12	9.0	~~4.10~~	9.2 9.4	9.20	22	4.12	13.32 .46		
13	9.8	9.8	9.7 9.9	9.87 9.3	001	4.18	~~13.95~~ 14.01 15		
14	9.3	9.4	9.5 9.7	9.47	2 1 2	4.14	13.61 75		
15	Too ft.								

Images slightly elongated.

M. A. G. Rec.

Series 2884 - 2889.

Copied. Oct. 11, 1913 R Cancri. Copied.

Sc. le MC 2887 P.C. 1K : MC 2888 var. 108 Pl.

	Scale 2	Scale 3	Corr	+.02		Scale 2		Corr.			+.16	
1	Too bright		6.3 0.22	65 6.52	a	Off plate						
2	5.4		4.10	63 9.50	b							
3	6.0		4.10	.23 10.10	c						Curve	Magn.
4	6.1		4.09	.32 10.19	d	Too far from center				6.9	0.28	31 7.18
5	6.6		4.06	.79 10.66	e	" " "				7.7	0.24	8.07 ~~7.94~~
6	7.1		4.06	.30 11.16	f	4.1		4.18	.41 8.28	8.0	0.21	.34 8.21
7	7.5		4.06	.70 11.56	g	4.2		4.18	.51 8.38	8.3	0.16	.59 8.46
8	8.0		4.08	.22 12.08	h	4.0		4.19	.32 8.19	7.6	0.26	.99 7.86
9	8.2		4.08	.42 12.28	k	Too far from center				8.6	0.11	84 8.71
10	8.7		4.10	.94 12.80	l	B				8.1	0.20	43 8.30
11	9.0	9.10 .1 9.2 9.0	4.12	.36 13.22	m	5.1		4.11	.34 9.21			
12	9.8	9.75 .1 9.7 9.5	4.18	14.07 ~~13.93~~	n	5.0		4.11	.24 9.11			
13	9.9	9.95 .0 10.0 9.8	4.20	29 14.15	o	5.3		4.11	.54 9.41			
14	10.0	10.05 .01 10.1 9.9	4.20	39 14.25	p	5.6		4.10	83 9.70			
15	N.S.				q	5.6	5.7 5.65 .01	4.10	88 ~~9.75~~			
					r	7.0	7.0 7.00 .00	4.06	.20 11.06			
					s	6 ~~7~~.8	6.9 6.85 .01	4.06	11.05 ~~10.91~~			
					t	7.9	7.9 7.90 .00	4.07	12.11 ~~11.97~~			
					u	7.8		4.07	12.01 ~~11.87~~			
					w	8.7		4.09	.93 ~~12.79~~			
					var. 6.9			4.06	11.10 10.96			

M.a.G. Rec

Oct. 11, 1913.

Sc u	MC 2889 Scale 2	Scale 3	Pole P.C.	~~P.C.~~ Scale 3	
5			6.2		
6			6.7		
8			7.8	~~7.8~~	
9			8.5		
10	4.8		8.9		
11	5.3		9.2	9.5	9.7 9.45 2 3
12	5.7		9.7	9.8	10.0 9.85 1 2
13	6.1				
14	6.4				
15	6.9				
16	7.1				
17	7.3				
18	7.9				
19	8.2				
20	8.5				
23	9.0	8.9	9.1 9.05 0 1		
25	9.4	9.4	9.6 9.50 1 1		
26	9.9	9.8	10.0 9.95 1 0		
27	√V.S				

M.a. G. Rec.

Series 2884 – 2895

Scale U

October 14, 1913

11:15 MC 2889 Pole. Remeas.

	SC 3	Mc 2895 P. 84		PC sc 3		Mean.	Diff.
5				6.0	6.0	6.00 00	+0.39
6				6.7	6.7	6.70 00	+0.28
8		Mean.	Diff.	8.0	8.1	8.05 01	+0.05
9				8.7	8.7	8.70 00	0.00
10	4.8	4.7 4.75 01	+4.14	9.0 8.9 9.1 9.05 01	8.9	8.98 07 .08 (?)	-0.09
11	5.3	5.3 5.30 00	4.12	9.5 9.5 9.7 9.60 11	9.50	9.55 05 05	-0.13
12	5.7	5.6 5.65 10	4.08	9.9 9.8 10.0 9.95 10	9.85	9.90 05 05	-0.17
13	6.1	6.1 6.10 00	4.07	n.s.		0 4 .00	
14	6.4	6.4 6.40 00	4.12				
15	6.7	6.7 6.70 00	4.24				
16	7.2	7.1 7.15 01	4.11				
17	7.5	7.5 7.50 00	3.99				
18	8.1	7.9 8.00 11	3.92				
19	8.5	8.3 8.40 11	3.88				
20	8.7	8.5 8.60 11	3.99				
23	9.1 8.9 9.1 9.10 00	9.05 9.08 02, 03	4.12				
25	9.6 9.7 $\overset{9}{9.8}$ $9.7\overset{5}{2}$ $\overset{2}{\pm}1$	9.45 $\overset{60}{9.58}$ $\overset{5}{12}$, $\overset{5}{13}$	$4.1\overset{3}{5}$				
26	9.8 10.0 10.2 10.00 2 2	9.90 9.95 05, 05	4.24				
27	n.s. ~~10.0~~						

1/5 1/5

+.02 -.02

1/4 2/4

+.02 -.05

42/5 43/5

+.08 -.09

62/14 73/14 copied.

+.04 -.05

0/4 1/4

.00 +.02

17/3 18/3

+.06 -.06

all 17/3 18/3 copied.

+.06 -.06

M.O.R.

Series 2884 – 2895

Copied

Scale II

October 14, 1913.

Copied.

	Mc 2890. V 113			Corr alt. +.10			Mc 2891 12K.		Corr. alt. +.20		P.C. *
	sc.1	Curve	Magn.								
a	.			6.3	0.35	6.65 .76	1	4.1 4.1 4.10 00	4.20	8.30 .43	7.4 7.7 7.55 ±1 0.15 8.~~70~~ 7.80 7 83
b	3.6	~~4.20~~		7.0	0.24	7.~~24~~ 37	2	4.2 4.3 4.25 01	4.19	8.~~44~~ .57	8.3 8.5 8.40 ±1 0.00 8.40 53
c	3.7	.		7.3	0.19	7.~~49~~ .62	3	4.8	4.14	~~8.94~~ 9.07	sc.3 9.1 9.0 9.2 9.15 ±0 −0.07 9.06 11
d	4.3	4.18	8.~~48~~ 61	8 9.5	−0.01	8.~~49~~ .62	4	5.8	4.10	~~9.90~~ 10.03	
e	5.3	4.11	9.~~41~~ .54	9.5 9.2 9.4 9.45 10	−0.12	9.~~33~~ .46	5	6.4	4.08	10.~~48~~ .61	
f	4.9	4.13	9.~~03~~ 16	9.3 8.9 9.1 9.20 12	−0.10	9.~~10~~ .23	6	6.7	4.07	10.~~77~~ .90	
g	6.2	4.09	10.~~29~~ 42				7	7.5	4.0~~1~~3	11.5~~1~~3 67	
h	6.2	4.09	10.~~29~~ 42				8	7.6	4.01	11.~~61~~ .75	
k	6.3	4.08	10.~~38~~ .51				9	7.8	4.01	11.~~81~~ .95	
l	6.9 6.9 6.90 00	4.06	~~10.96~~ 11.10				10	8.5	4.00	12.~~50~~ .64	
m	6.7 6.9 6.80 ±1	4.06	~~10.86~~ 11.00				11	8.9	4.03	~~12.93~~ 13.07	
n	7.7	4.02	11.~~72~~ .86				12	9.5 9.2 9.4 9.45 10	4.12	13.57 .71	
o	8.3	4.00	12.~~30~~ 44				13	9.7 9.8 10.0 9.85 12	4.20	14.05 .19	
p	8.3	4.00	12.~~30~~ 44				14	ns.			
q	8.8	4.01	12.~~81~~ 95				15	~~v~~ ns.			
r	9.5 9.3 9.5 9.50 03	4.13	9.63 13 77								
Var.	5.3	4.11	9.~~41~~ .54								

two

Star sup. on P.C. of No. 1? Bright.

M.O.R.

Series 2884 – 2895.

Scale II Copied. October 14, 1913. Copied.

83
7
7.80
8.70
.53
.40
17
9.06

two far from centre

	MC 2892			Alt. Corr.	C5 9+15. +.17	Curve Magn. 13		
					G.C.			
1	6.				6.7	0.30	6.40	7.00
2	4.0	4.20	8.20	33	8.0 7.9 7.95	0.04	7.91	9 812
3	·				7.5 7.5 7.50	0.15	7.35	6 78
4	·				7.8	0.10	7.70	9 8.03
5	4.1	4.16	8.86	.99	8.8	-0.05	8.75	.88
6	4.8	4.14	8.94	9.07	9.5 9.3 8.7 9.1 9.30 2.02 SC.3	-0.10	9.20	33
7	5.2	4.12	9.32	45	9.0 8.8 9.0 9.00 0.0	-0.08	8.92	9.05
8	5.3	4.11	9.41	.54	9.5 9.3 9.5 9.50 0.0	-0.13	9.37	.50
9	5.3	4.11	9.41	.54	9.7 9.8 10.0 9.85 1.2	-0.18	9.67	.80
10	5.7	4.10	9.80	.93				
11	5.4	4.11	9.51	64	n.s.			
12	5.9	4.10	10.00	.13				
13	6.1	4.09	10.19	.32				
14	6.2	4.09	10.29	.42				
15	6.9	4.06	10.96	11.10				
16	7.1	4.05	11.15	.29				
17	7.4	4.04	11.44	58				
18	7.6	4.02	11.62	.76				
19	7.5	4.02	11.52	.66				
20	8.1	4.00	12.10	.24				
21	8.3	4.00	12.30	.44				
22	8.6	4.00	12.60	.74				
23	9.2 8.7 8.9 9.05 2.1	4.22 4.26	13.11	.25				
24	9.3 9.2 9.4 9.35 1.0	4.10	13.45	59				
25	9.9 9.7 9.9 9.90 0.0	4.22	14.12	.26				

	MC 2893			Alt. Corr. +.23	29K. G.C.			
1	3.8	·			7.3	0.20	7.10	5 63
2	4.3	4.18	8.48	.61	8.2	0.02	8.18	35 22
3	5.2	4.12	9.32	.45	9.3 9.1 9.3 9.30	-0.10	9.20	.33
4	5.3	4.12	9.42	.55	9.7 9.7 9.9 9.80	-0.17	9.63	.76
5	6.3	4.08	10.38	.51				
6	6.7	4.07	10.77	.90				
7	6.9	4.06	10.96	11.10				
8	7.3	4.04	11.34	.48				
9	8.1	4.00	12.10	.24				
10	8.3	4.00	12.30	.44				
11	8.5	4.00	12.50	.64				
12	9.7 9.5 9.7 9.70 0.0	4.18	13.88	14.02				
13	n.s.							
14	n.s.							
15								

M.O.R.

Series 2884 – 2895.

Scale U

Copied

October 14, 1913.

	Mc 2894	7 K.	Mc 2895	Pole.
	Alt. Corr.	−.29		
		Sc 3	See P. 81	Pc.
P.C. 1 from image.	1 5.3 4.11 $\overset{.54}{9.41}$	9.3 9.5 $\overset{0}{9.2}$ 9.25 −0.10 $\overset{.28}{9.15}$	5	6.0
	2 5.4 4.11 $\overset{.64}{9.51}$	9.7 9.5 9.7 9.70 −0.16 $\underline{\overset{.67}{9.54}}$	6	6.7
	3 $\overset{6.20}{6.16\,3}$ 4.09 $\overset{.42}{10.29}$		8	8.1
	4 $\overset{6.00}{6.06.0}$ 4.10 $\overset{.23}{10.10}$		9	8.7
	5 6.7 4.07 $\overset{.90}{10.77}$		10 4.7	8.9
	6 7.0 4.06 $\overset{.20}{11.06}$		11 5.3	9.5 9.3 9.5 9.50 .00
	7 7.1 4.05 $\overset{.29}{11.15}$		12 5.6	9.8 9.7 9.9 9.85 .01
	8 7.4 4.03 $\overset{.57}{11.43}$		13 6.1	
	9 8.0 4.00 $\overset{.14}{12.06}$		14 6.4	
	10 8.1 4.00 $\overset{.24}{12.10}$		15 6.7	
	11 8.5 4.00 $\overset{.64}{12.50}$		16 7.1	
	12 8.5 4.00 $\overset{.64}{12.50}$		17 7.5	
	13 9.0 8.8 9.0 9.00 4.06	$\overset{.20}{13.06}$	18 7.9	
	14 9.3 9.0 9.2 9.25 4.09	$\overset{.48}{13.34}$	19 8.3	
	15 9.8 9.7 9.9 9.85 4.20	$\underline{\overset{.19}{14.05}}$	20 8.5 Sc 3	
			23 9.0 8.9 9.1 9.05 .01	
			25 9.4 9.3 9.5 9.45 .01	
			26 9.8 9.8 10.0 9.90 $\underline{1.1}$	
			27 F.	

M.O.R.

Series 52.
Series 2908 – 2919.

Scale U

October 21, 1913

10:15

Mc 2908 | Pole

	sc.3	Mc 2913		Mean	Diff.
5		P.87			
6					
8			Mc 2919		
9			P.89		
10	4.3	4.7	4.7	4.57 3 1 1	+4.32
11	4.7	5.0	5.0	4.90 2 1 1	4.52
12	4.9	5.3	5.3	5.17 3 1 1	4.56
13	5.3	5.7	5.7	5.57 3 1 1	4.60
14	5.8	5.9	6.1	5.93 1 0 2	4.59
15	6.21	6.2	6.4	6.27 1 1 1	4.67
16	6.5	6.5	6.7	6.57 6 1 1	4.69
17	6.9	6.8	7.1	6.93 0 1 2	4.56
18	7.5	7.5	7.5	7.50 0 0 0	4.42
19	8.2	8.2	7.9	8.10 1 1 2	4.18
20	8.6	8.5	8.3	8.47 1 0 2	4.12
23	9.1 9.0 9.2 9 15 10	9.05	8.9	9.03 12 02 13	4.17
25	9.7 9.5 9.7 9.7 00	9.50	9.45	9.55 15 05 10	4.18
26	7.	10.05	9.95	10.00 · 05 05	4.19

P.C. sc.3	P.87	P.89	Mean	Diff.
5.3	5.3	5.3	5.30 0 0 0	+1.09
6.2	6.1	6.0	6.10 1 0 1	0.88
7.7	7.5	7.2	7.47 2 0 3	0.63
8.7	8.1	8.0	8.27 4 2 3	0.43
8.9	8.3	8.2	8.47 4 2 3	0.42
9.2 9.1 9.2 9.25 01	8.9	8.8	8.98 27 08 18	0.44
9.7 9.5 9.7 9.70 00	9.35	9.30	9.45 25 10 15	0.28
n.s.	9.95	9.85	9.90 · 05 05	0.27

7 8 2 1
4 4 4
+.18 -.05 -.18

92 33 68
3 4 4
+.31 -.08 -.17

all 7)162 53 138
+.233 8 8
-.07 -.17

copied.

12 4 6
5 5 5
-.02 +.08 +.~~12~~ 01

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

47 12 68
4 5 5
+.12 +.02 -.14 copied.

33 22 58
13 14 14
+.03 ±.02 -.04

Mo

Series 52
Series 2908 - 2919

copied

Scale U

October 21, 1913.

MC 2909 | 13 - 15° | D7

P.C.

Att. .18

			Curve	Magn.	SC.³	Curve	Magn.			Curve	Magn.
too far from centre	1	.			6.8	0.75	68 7.55	27	8.7	4.15	.99 12.85
" " " "	2	.			6.7	0.77	.60 7.47	28	9.15 01 9.2 8.9 9.1	4.15	.44 13.34
" " " "	3	.			7.1	0.70	93 7.80	29	9.10 11 9.0 9.0 9.2	4.15	.39 13.25
	4	4.1	4.41	64 8.51	8.7	0.57	40 8.27	30	9.70 06 9.7 9.5 9.7	4.16	14.00 13.86
	5	3.8	.		7.3	0.65	8.08 7.95	31	9.90 9.9 9.7 9.9	4.18	.22 14.08
" " " "	6	.			7.10 07 7.1 7.1	0.70	93 7.80	32	n.s.		
" " " "	7	.			7.7	0.57	.40 8.27	33			
" " " "	8	.			7.9	0.55	.58 8.45				
" " " "	9	.			8.3	0.48	.91 8.78				
" " " "	10	.			8.3	0.48	.91 8.78				
" " " "	11	.			8.8	0.40	.33 9.20				
	12	4.8	4.49	42 9.29	t.p.	.					
	13	4.9	4.50	53 9.40	9.20 00 9.3 9.1 9.3	0.32	75 9.62				
	14	4.75 10 4.7 4.8	4.48	36 9.23	9.60 11 9.7 9.3 9.5	0.28	10.01 9.88				
	15	5.20 11 5.3 5.1	4.54	87 9.74	9.80 11 9.7 9.7 9.9	0.26	.19 10.06				
	16	4.95 01 5.0 4.9	4.50	58 9.45	n.s.	.					
	17	5.3	4.56	99 9.86	n.s.	.					
	18	6.0	4.60	.73 10.60							
	19	6.2	4.60	.93 10.80							
	20	6.4	4.60	.14 11.00							
	21	7.0	4.53	67 11.53							
	22	7.1	4.51	.75 11.61							
	23	7.7	4.35	19 12.05							
	24	7.8	4.32	.26 12.12							
	25	8.2	4.21	.55 12.41							
	26	8.3	4.19	.63 12.49							

Images not good.

M.O.R.

Series 52
Series 2908– 2919

Copied.

Scale U.

October 21, 1913.

	Mc 29 11			33 K.	Mc29 13. Pole	
	alt. +.73			P.C		
		Curr	Magn.			
1	3.6			7.0 0.71 84 7.71	5	5.3
2	4.2	4.41	74 8.61	8.7 0.41 24 9.11	6	6.1
3	4.3	4.42	85 8.72	9.25 10 9.2 9.1 9.0 0.34 62 9.49	8	7.5
4	5.3	4.55	98 9.85	n.s.	9	8.1
5	5.6	4.58	.31 10.18		10 4.7	8.3
6	6.1	4.60	.83 10.70		11 5.2	8.9
7	8.0	4.26	.40 12.26		12 5.3	3 9.1 ~~11~~ 9.2 9.4 9.35 1.0
8	8.6	4.16	.90 12.76		13 5.7	9.9 9.8 10.0 9.95 1.0
9	8.9	4.15	3 .19 12.05		14 5.9	
10	9.20 9.3 9.1 9.1	4.15	.49 13.35		15 6.2	
11	n.s.				16 6.5	
12	9.45 0.1 4.5 9.4 9.3	4.15	.74 13.60		17 6.8	
13	n.s.				18 7.5	
14					19 8.2	
15					20 8.5	
					23 9.5 8.9 9.1 9.05 0.1	
					25 9.5 9.3 9.5 9.50 0.0	
					26 Trace 10.0 9.9 10.1 10.05 0.1	

Series 52

Series 2908 – 2919.

Scale u

copied. October 21. 1913.

		Mc 2916			15 + 15			C8		
							att. 1.17			
				P.C.					~~2~~ 3 AC	
									Curve	Magn.
too far from centre.	1	.	Curve	Magn.	6.1	Curve 0.88	Magn. 7.11 ~~6.98~~	27	8.9	4.14	13 ~~.04~~ ~~20~~ 18
" " "	2	.			6.1	0.88	7.21 ~~6.98~~	28	9.1 9.3 9.30 2 2 9.5	4.14	13 ~~.44~~ .58
	3	3.7			7.2 7.2 7.20 7.4 .5	0.68	8.08 ~~7.95~~	29	9.2 9.5 9.45 ~~2~~ 3 9.7	4.15	13 ~~.60~~ .74
" " "	4	.			6.4	0.82	~~7.22~~ .35	30	n.s.		
" " "	5	..			6.9	0.74	~~7.64~~ .77	31			
" " "	6	4.0			7.1	0.70	~~7.80~~ .93	32			
on Edge. (P.C.) " "	7	~~4~~.			8.6?	0.42	~~9.02~~ .15 2.				
	8	~~3~~4.1	4.40	~~8.60~~ .63	8.1	0.50	~~8.60~~ .73				
	9	4.1	4.40	~~8.50~~ .63	8.3	0.48	~~8.78~~ .91				
	10	4.6	4.45	~~9.05~~ .18	9.5 9.5 9.60 9.7	0.29	~~9.89~~ 10.02 R				
	11	4.6	4.45	~~9.05~~ .18	8.9	0.38	~~9.28~~ .41				
	12	4.7	4.47	~~9.17~~ .30	9.2 9.0 9.20 9.2	0.34	~~9.54~~ .67				
	13	5.0	4.52	~~9.52~~ .65	9.2 9.5 9.45 3 9.7	0.31	~~9.76~~ .89				
	14	5.1	4.53	~~9.63~~ .76	f.						
	15	5.3	4.55	~~9.85~~ .98	n.s.						
	16	5.7	4.59	~~10.29~~ .42							
	17	5.6	~~4.60~~ .58	~~10.20~~ ~~.18~~ 31							
	18	5.8	4.60	~~10.40~~ .53							
	19	5.9	4.60	~~10.50~~ .63							
	20	5.6	4.58	~~10.18~~ .31							
	21	6.7	4.59	~~11.29~~ .43							
	22	7.2	4.48	~~11.68~~ .82							
	23	7.2	4.48	~~11.68~~ .82							
	24	7.2	4.48	~~11.68~~ .82							
	25	7.6	4.38	~~11.98~~ 12.12							
	26	8.1	4.24	~~12.34~~ .48							

Star 10 is as bright as No. 11 and brighter than No. 12 (i.e. normal) on primary exposure. Image apparently defective. Reject

All Images on Plate are poor

M.O.R.

Series 52

Series 2908 – 29.9

copied

Scale 4.

October 21, 1913 –

Mc 2918 4 + 75. Mc 2919 Pole.

alt. – 33

		Mc 2918	Curve	Magn.	P.C.	Curve	magn.	Mc 2919	Pole
	1	3.8			7.0	0.72	7.~~72~~ 85	5	5.3
	2	3.7			7.2	0.68	~~7.88~~ 8.01	6	6.0
	3	3.3			6.7	0.78	7.~~48~~ 61	8	7.2
	4	3.7			7.1	0.70	7.~~80~~ 93	9	8.0
too far from c.	5	.			8.7	0.42	9.~~12~~ 25	10 4.7	8.2
	6	4.1	4.40	8.~~50~~ 63	8.9	0.38	9.~~28~~ 41	11 ~~[illegible]~~ .5.0	8.8
	7	4.3	4.42	8.~~72~~ 85	8.9	0.38	9.~~28~~ 41	12 5.3	9.2 ~~[illegible]~~ 9.2 9.4 9.30 1 1
	8	4.2	4.41	8.~~61~~ 74	8.6	0.43	9.~~03~~ 16	13 5.7	9.8 9.7 9.9 9.85 0 1
	9	4.2	4.41	8.~~61~~ 74	8.7	0.42	9.~~12~~ 25	14 6.1	
″ ″ ″	10	.			8 8.7	0.42	* 9.~~12~~ 25	15 6.4	
	11	4.7	4.47	9.~~17~~ .30	9.8 9.7 9.85 9.9 .01	0.26	10.~~11~~ 24	16 6.7	
	12	5.3	4.55	9.~~85~~ .98	.			17 7.1	
	13	5.2	4.54	9.~~74~~ 87	n.s.			18 7.5	
	14	5.9	4.60	10.~~50~~ .63				19 7.9	
	15	5.8	4.60	10.~~40~~ 53				20 8.3	
	16	6.1	4.60	10.~~70~~ .83				23 8.9	
	17	6.6	4.59	11.~~19~~ 33				25 9.5 9.2 9.4 9.45 1 0	
	18	7.1	4.52	11.~~62~~ .76				26 9.9 9.8 10.0 9.95 1 0	
	19	6.9 7.0 6.95 1.0	4.55	11.~~50~~ .64					
ct	20	7.8	4.33	12.~~13~~ 27					
	21	7.7	4.35	12.~~05~~ .19					
	22	8.6	4.16	12.~~76~~ .90					
wr. star 1st.	23	~~7.5 7.5~~ 8.8	4.15	~~12.95~~ 13.09					
	24	9.1 8.9 9.10 9.1	4.15	13.~~25~~ .39					
	25	9.4 9.3 9.45 9.5	4.15	13.~~60~~ .74					
	26	9.8 9.8 9.90 1.0 10.0	4.18	14.~~08~~ .22					

* Star 10 wrong image measured. Reject.
Star image north of p.c. measured

M.O.R

Sc B 1st Exp. Oct 28, 1913

		468 B Sc 1	Sc 2	610.	5 1st Exp.	p.96 3d Exp.	1 p.97 4th Exp.	Mean	Resid. 5 3 1	Diff.
R (5th p. Exp.)	7	2.8 25			25	25	26	2.53	0 0 1	5.79
R ″	21	6.9 6.6	6.7	6.65 01	6.65	6.40	6.35	6.47	18 07 12	7.01
R	8	2.9 26			26	26	24	2.53	1 1 2	6.60
R	14	4.3 40	40	4.00 00	4.00	4.05	3.90	3.98	02 07 08	7.02
Towards edge of film → R	12	3.2 29			29	29	28	2.87	0 0 ⊥	7.63
R	13	3.6 3.3			3.3	3.4	3.3	3.33	0 1 0	7.46
	15	4.7 44	43	4.35 0⊥	4.35	4.70	4.65	4.57	22 13 08	6.60
	16	5.1 4.8	4.8	4.80 00	4.80	4.80	4.90	4.83	03 03 07	6.69
	17	5.3 50	5.1	5.05 01	5.05	5.10	5.05	5.07	02 03 02	6.84
	23.	–	~~7.0~~		7.0	7.1 ~~5.45~~	7.1	7.07	⊥ 0 0	6.90
	22		7.3		7.3	7.2 ~~5.90~~	7.1	7.20	1 0 ⊥	6.62
	18	6.0 5.7	5.7	5.70 00	5.70	5.45 ~~6.15~~	5.40	5.52	18 07 12	6.81
	19	6.2	6.0		6.0	5.90	6.05	5.98	02 08 07	6.~~9~~74
	29		9.1		9.1	8.9	.	9.00	1 ⊥ .	.
	31		F		F	F	.	F	F F .	.
	27		8.7		8.7	8.5	8.3	8.50	2 0 2	6.36
	28		9.0		9.0	8.8	8.7	8.83	2 0 ⊥	6.39
	24		7.3		7.3	7.2	7.2	7.23	1 0 0	7.01
	26		8.2		8.2	7.7	7.9	7.93	3 2 0	6.84
	25		7.9		7.9	7.5	7.5	7.63	3 ⊥ ⊥	6.98
	30		F		F	9.3	.	9.3	F a .	.
	20	6.3 6.0	6.1	6.05 01	6.05	6.15	6.20	6.13	08 02 07	6.70
	~~21~~					~~6.40~~				

Late afternoon. Sight poor.

See pp. 96, 97 Exps. 4, 3, 2 & 1.

Series 100

Scale M. October 29, 1913.

10 —

	Mc 3580	Pole.		
	Sc.1 Sc.2	Mc 3585	Diff.	Sc.1 Sc.2
5		0.95		3.1 3.3
6				6.1 6.3 6.3 6.30 .00
8				7 7.5
9				8.1
10	3 5.2 3.4	3.5 3.45 .01	+ 5.44	8.3
11	3.7 3.9	3.9 3.90 .00	5.52	def.
12	4.14 3 4.6 4.45 .12	4.50 4.48 .03 .02	5.25	9.1
13	4.7 4.9 5.1 5.00 .11	5.05 5.02 .02 .03	5.15	9.5
14	5.3 5.5 5.5 5.50 .00	5.45 5.48 .02 .03	5.04	9.9
15	5.9 6.1 6.1 6.10 .00	5.90 6.00 .10 .10	4.94	f.
16	6.2 6.4 6.5 6.45 .01	6.40 6.42 .03 .02	4.84	
17	6.7 6.9 6.7 6.80 .12	6.70 6.75 .05 .05	4.74	
18	7.2	7.15 7.18 .02 .03	4.74	
19	7 7.4	7.3 7.35 .01	4.93	
20	7.7	7.8 7.75 .10	4.84	
23	8.1	8.2 8.15 .10	5.05	
25	8.9	8.9 8.90 .00	4.83	
26	9.3	9.4 9.35 .10	4.84	
27	9.7	9.9 9.80 .11	4.15	
28	f.			

$\frac{03}{5}$ $\frac{12}{5}$
-.01 +.02

$\frac{20}{5}$ $\frac{30}{5}$
+.04 -.06

$\frac{4}{5}$ $\frac{1}{5}$
-.08 +.02

all → -23 -08
15 15
-.02 -.01

copied.

Reject prismatic companions for this series. They are discordant on Polar plates by about a magnitude, perhaps on account of dew collecting on prism.

L. Oct. 29, 1913

M.O.R.

Series 100

copied.

Scale M.

October 29, 1913.

MC 3581						21 + 15 C11
	Sc.1	Sc.2				P.C. Reject.
1	B.			Curve Magn.		5.5 5.3
2	1.3				.	5.8 5.6
3	1.2		.		.	6.9 6.7 6.8 6.85 1 0
4	2.1				.	6.5 6.3 6.5 6.50 0 0
5	2.3				.	sc.2 7.2
6	2.3				.	7.3
7	2.2				.	7.7
8	2.7				.	8.7
9	3.2			5.67	9.00 8.87	8.5
10	3.3			5.65	9.08 ~~8.95~~	8.3
11	3.3			5.65	9.08 8.95	9.5 9.1 9.30 2 2
12	3.7			5.51	.34 9.21	8.9
13	3.7			5.51	.34 9.21	9.1
14	4.1 4.3	4.3	4.30 0 0	5.33	.76 9.63	9.2
15	4.5 4.3	4.7	4.60 1 1	5.22	.95 9.82	9.7
16	5.3 5.1	5.3	5.30 0 0	5.07	.50 10.37	n.S.
17	5.5 5.3	5.5	5.50 0 0	5.03	66 10.53	
18	5.3 5.1	5.5	5.40 1 1	5.05	58 10.46	
19	5.9 5.7	5.7	5.80 1 1	4.98	91 10.78	
20	5.9 5.7	5.9	5.90 0 0	4.97	11.01 ~~10.87~~	
21	6.3 6.1	6.4	6.35 1 0	4.90	39 11.26	
22	6.4 6.2	6.7	6.55 2 1	4.87	58 11.42	
23	6.5 6.3	6.7	6.60 1 1	4.87	61 11.47	
24	~~7.2~~	7.2		4.86	.20 12.06	
25		7.3		4.86	.30 12.16	
26		7.5		4.86	.50 12.36	
27		7.7		4.86	70 12.56	

alt +.16

	Sc.2	Curve	Magn.
28	8.0	4.86	13.00 ~~12.86~~
29	8.3	4.86	.30 13.16
30	8.7	4.85	.69 13.56
31	9.0	4.85	.99 13.85
32	9.3	4.84	.28 14.14
33	n.S.		

M.O.R.

Series 100

Copied.

Scale m.

October 29, 1913.

MC 3582 11 Ks

Reject P.C.

Alt. + 2'2

	Sc.1	Sc.2		Curve	Magn.	Sc.2
1	7.0					7.3
2	7.0					7.4
3	3.1		~~5.70~~	5.70	8.~~80~~ 93	8.1
4	4.2 4.4	4.2	4.30 1 1 5.13 ~~5.23~~	5.34	9.~~64~~ 77	9.8
5	4.7 4.9	5.1	5.00 1 1	5.13	10.~~13~~ 26	n.s.
6	5.4 5.6	5.5	5.550 1	5.03	10.~~68~~ 71	
7	5.9 6.1	6.1	6.1000	4.94	11.~~04~~ 18	
8	6.2 6.4	6.4	6.4000	4.89	11.~~29~~ 43	
9		7.2		4.87	12.~~07~~ 21	
10	~~7.5~~	7.5		4.86	12.~~36~~ 50	
11		8.0		4.86	~~12.86~~ 13.00	
12		8.5		4.86	13.~~36~~ 50	
13		8.9		4.85	13.~~75~~ 89	
14		9.5		4.84	14.~~34~~ 48	
15		~~7.5~~ 9.9		4.84	14.~~74~~ 88	

M.O.R.

Series 100 Copied.

Scale M. October 29, 1913 –

Mc 3584 66 K Alt. + 22

P.C.

	sc.1	sc.2				Curve	Magn.	sc.1	sc.2
1	3.3 3.5					5.58	9.~~08~~ 21		n.s.
2	4.2 4.4	4.6	4.50	1	1	5.25	9.~~75~~ 88		~~8.7~~?
3	5.3 6.6	5.5	5.50	0	0	5.03	10.~~53~~ 66		
4	5.5 5.7	6.1	5.90	2	2	4.97	~~10.87~~ 11.00		
5	6.0 6.2	6.2	6.20	0	0	4.~~84~~ 92	11.~~07~~ 12 26		
6	5.9 6.1	6.3	6.20	1	1	4.~~87~~ 92	11.~~27~~ ~~12~~ 26		
7	6.9 7.1	7.1	7.10	0	0	4.87	~~11.97~~ 12.11		
8		7.2				4.86	12.~~06~~ 20		
9		7.8				4.86	12.~~66~~ 80		
10		~~7~~ 8.3				4.86	13.~~16~~ 30		
11		8.7				4.85	13.~~55~~ 69		
12		8.8				4.85	13.~~65~~ 79		
13		9.1				4.84	~~13.94~~ 14.08		
14		9.7				4.84	14.~~54~~ 68		
15		9.9				4.84	14.~~74~~ 88		

No P.C. for no. 1 bright enough to have comp. but none seen.

M.O.R.

Series 100.

Scale M.

October 29, 1913.

	Mc 3585 – Pole					P.C.		
	sc.1	sc.2				sc.1	sc.2	
5						6.2	6.5	5
6						7.	7.1	
8							8.3	
9							8.9	
10	3.3	3.5					9.0	
11	3.7	3.9					9.3	
12	4.1	4.3	4.7	4.50	22		n.S.	
13	4.8	5.0	5.1	5.05	01			
14	5.2	5.4	5.5	5.45	01			
15	5.7	5.9	5.9	5.90	00			
16	6.3	6.5	6.9	6.40	11			
17	6.5	6.7	6.7	6.70	00			
18	7.0	7.2	7.1	7.15	01			
19			7.3					
20			7.8					
23			8.2					
25			8.9					
26			9.4					
27			9.7					

Reject prismatic companions for this series. See p. 91.

Measure MD Series (Miss Mackie)

M.O.R.

See p. 90 for 10th Exp

Nov 4, 1913

Sc P

7th Exp. Full aperture

3d Exp.

			468 P = 6 10						468 P			
			Sc1	Sc2			Corr.	Diff.	Sc1	Sc2		
	R	7	0.9	0.6					2.8	2.5		
Near edge of Pl.	R	8	1.1	0.8					2.9	2.6		
	R	12	1.8	1.5					3.2	2.9		
	R	13	2.1	1.8					3.7	3.4		
	R	14	2.7	2.4					4.3	4.0	4.1	4.05 0 1
		15	2.9	2.6					5.0	4.7	4.7	4.70 0 0
		16	3.1	2.8					5.1	4.8	4.8	4.80 0 0
		17	3.3	3.0			3.00	8.91	5.4	5.1	5.1	5.10 0 0
		18	3.7	3.4			3.40	8.93	5.7	5.4	5.5	5.45 0 1
		19	3.9	3.6			3.60	9.12	6.2	5.9	5.9	5.90 0 0
		20	4.0	3.7			3.70	9.13	6.5	6.2	6.1	6.15 0 1
	R	21	4.2	3.9	3.8	3.85 1 0	3.85	9.63	6.7	6.4	6.4	6.40 0 0
		22	4.7	4.4	4.3	4.35 0 1	4.35	9.47		7.2		
		23	4.9	4.6	4.5	4.55 0 1	4.55	9.42		7.1		
		24	5.0	4.7	4.7	4.70 0 0	4.70	9.54		7.2		
		25	5.3	5.0	4.9	4.95 0 1	4.95	9.66		7.5		
		26	5.5	5.2	5.1	5.15 0 1	5.15	9.62		7.7		
		27	5.8	5.5	~~6.0~~ 5.5	5.50 0 0	5.49	9.37		8.5		
		28	6.0	5.7	5.8	5.75 1 0	5.74	9.48		8.8		
		29	6.3	6.0	6.1	6.05 0 1	6.02			8.9		
		30	6.5	6.2	6.2	6.20 0 0	6.17			9.3		
		31	6.7	6.4	6.5	6.45 0 1	6.41			f		
		32		7.0			6.94					
		33		7.2			7.16					
		34		7.5			7.46					
Double?		35		8.2 8.5			R					
		36		8.1			8.61					
		37		f			f					

Faintest images do not compare well with scale images

Nov 5, 1913

S. P ~~4~~ 2 th Exp. Aperture 14 inches ~~5th~~ 1st Exp.

			468 P Sc1		Sc2		Corr.	Diff.	Sc1		Sc2	
	R	7	2.7	24			.	.	2.9	26		
Near edge	R	8	3.0	27			2.72	6.42	2.7	24		
	R	12	3.6	33			3.32	7.19	3.1	28		
	R	13	4.0	37			3.70	7.09	3.6	33		
	R	14	4.3	40	4.0	4.00 00	4.00	7.00	4.1	38	4.0	3.90 ±1
		15	4.6	43	4.3	4.30 00	4.30	6.87	4.9	46	4.7	4.65 01
		16	4.7	44	4.5	4.45 01	4.45	7.07	5.2	49	4.9	4.90 00
		17	5.2	49	4.9	4.90 00	4.90	7.01	5.4	51	5.0	5.05 10
		18	5.6	53	5.3	5.30 00	5.31	7.02	5.7	54	5.4	5.40 00
		19	6.1	58	5.9	5.85 01	5.87	6.85	6.3	60	6.1	6.05 01
		20	6.3	60	6.1	6.05 01	6.07	6.76	6.5	62	6.2	6.20 00
	R	21	6.5	62	6.3	6.25 01	6.27	7.21	6.7	64	6.3	6.35 01
		22			7.0		7.03	6.79			7.1	
		23			6.9		6.93	7.04			7.1	
		24			7.1		7.14	7.10			7.2	
		25			7.3		7.34	7.27			7.5	
		26			7.7		7.76	7.01			7.9	
		27			8.3		8.37	6.49			8.3	
		28			8.7		8.78	6.44			8.7	
		29			9.0		9.10	.			Difficult	
		30			9.3		9.40	.			"	
		31			f ?		f?	.				

Nov 5, 1913

Sc P ✓ 1st Exp (Right to left.) ✓ 2d Exp. Full aperture

463 P = 6.10 463 P

Mean 1st, 3d, 5th Exp.

		Sc 1	Sc 2	3d	5th	Mean	Resid.	Sc. 1		Cor. Exp. 2 Plot 17	Diff.		Diff.
R	7	2.8 25		2.7	2.4	2.53	0 2 1	0.9 06					5.79
Near edge of Pl. R	8	2.7 24		2.5	2.4	2.43	0 1 0	1.2 09					6.70
R	12	3.1 2.8		2.9	2.9	2.87	1 0 0	1.9 16					7.63
R	13	3.4 3.1		3.4	3.3	3.27	2 1 0	2.1 18					7.52
R	14	4.1 3.8	3.9 3.85 01	3.90	3.6	3.78	07 12 18	2.6 2.3					7.22
	15	4.6 4.3	4.3 4.30 00	4.30	3.90	4.17	13 13 27	2.8 2.5					7.00
	16	4.8 4.5	4.4 4.45 10	4.60	4.35	4.47	02 13 12	3.0 2.7					7.05
	17	5.2 4.9	4.9 4.90 00	5.00	4.70	4.87	03 13 17	3.2 2.9					7.04
	18	5.7 5.4	5.3 5.35 01	5.55	5.35	~~5.17~~ 5.42	~~18 38~~ 07 13 07	3.6 3.3		3.30	8.44	9.03	6.91
	19	6.0 5.7	5.7 5.70 00	5.85	5.75	5.77	07 08 02	3.8 3.5		3.50	8.53	9.22	6.95
	20	6.3 6.0	6.1 6.05 01	6.15	6.20	6.13	08 02 07	3.9 3.6		3.60	8.67	9.23	6.70
R	21	6.5 6.2	6.2 6.20 00	6.20	6.45	6.28	08 08 17	4.0 3.7	3.7 3.70 00	3.70	9.17	9.78	7.20
	22		7.1	7.1	7.2	7.13	0 0 1	4.6 4.8	4.2 4.25 10	4.25	9.01	9.57	6.69
	23		6.9	7.1	7.3	7.10	2 0 2	4.3 4.0	4.0 4.00 00	4.00	9.45	9.97	6.87
	24		7.2	7.2	7.3	7.23	0 0 1	4.8 4.5	4.4 4.45 10	4.45	9.43	9.79	7.01
	25		7.5	7.4	8.0	7.63	1 2 4	5.1 4.8	4.8 4.80 00	4.80	9.29	9.81	6.98
	26		7.9	7.7	8.2	7.~~27~~ 93	0 2 3	5.3 5.0	5.0 5.00 00	5.00	9.31	9.77	6.84
	27		8.3	8.3	9.0	8.53	2 2 5	5.7 5.4	5.3 5.35 01	5.35	9.34	9.51	6.33
	28		8.5	8.7	F	8.60	1 1 F	5.9 5.6	6.1 5.80 2 3	5.80	9.26	9.42	6.62
	29		9.0	9.0	F	9.00	0 0 F	6.3 6.0	6.1 6.05 01	6.05	9.32		
	30		9.3 ?	F	.	9.3?	a a F	6.5 6.2	6.3 6.25 01	6.25	9.64		
	31							6.9 6.5	6.5 6.50 00	6.57	.71		
	32								7.0	7.02			
	33								7.2	7.23			
	34								7.5	7.55			
	35							*	dbl? 8.1 9.0	R			
	36								8.6	8.69			
	37								9.3	9.42			

Reject, as images are apparently superposed.

Nov 5, 1913

Sc β — 3^{d} Exp. (2 written above the 3) — 4^{th} Exp. Aperture 14 in.

			463 β					463 β					
			Sc 1					Sc 1		Sc 2		Corr. Exp. 4 Oct. 17	Diff.
	R	7	3.0	27				3.0	27				
Near edge of Pl.	R	8	2.8	25				3.1	28				
Image poor	R	12	3.2	29			Im. elong.	3.6	33			3.30	7.20
" "	R	13	3.7	34			" "	3.9	36			3.60	7.19
	R	14	4.2	39	3.9	3.90 00		4.3	40	4.1	4.05 01	4.05	6.95
		15	4.6	43	4.3	4.30 00		4.7	44	4.3	4.35 0⊥	4.35	6.82
		16	4.9	46	4.6	4.60 00		5.0	47	4.7	4.70 00	4.70	6.82
		17	5.3	50	5.0	5.00 00		5.3	50	4.9	4.95 0⊥	4.95	6.96
		18	5.9	56	5.5	5.55 0⊥		5.8	55	5.4	5.45 10	5.45	6.88
		19	6.1	58	5.9	5.85 01		6.0	57	5.8	5.75 ⊥0	5.75	6.97
		20	6.4	61	6.2	6.15 ⊥0		6.3	60	6.1	6.05 01	6.0~~5~~4	6.79
	R	21	6.5	62	6.2	6.20 00		6.5	62	6.2	6.20 00	6.18	7.30
		22			7.1					7.1		7.01	6.81
		23			7.1					6.9		6.83	7.14
		24			7.2					7.0		6.92	7.32
		25			7.4					7.3		7.20	7.41
		26			7.7					7.5		7.39	7.38
		27			8.3					8.1		7.96	6.90
		28			8.7					defective.			
		29			9.0					9.0		8.80	
		30			f					f ?			

Nov 6, 1913

Sc. P ✓ 5th Exp.

463 P

		8c1				
R	7	2.7	24			
R	8	2.7	24			
R	12	3.2	29			
R	13	3.6	33			
R	14	3.9	36			
	15	4.2	39	3.9	3.90	00
	16	4.7	44	4.3	4.35	01
	17	5.0	47	4.7	4.70	00
	18	5.7	54	5.3	5.35	01
	19	6.0	57	5.8	5.75	10
	20	6.5	62	6.2	6.20	00
R	21	6.7	64	6.5	6.45	01
	22			7.2		
	23			7.3		
	24			7.3		
	25			8.0		
	26			8.2		
	27			9.0		
	28			8		
	29			$\hat{8}$		

Image of 5th exp is poor - especially in faint stars - indistinct & hazy

Measures for Color Index

Sc U

Nov 10, 1913

	MC4236	Diff.	curve Magn.		PC		PC			Curve Magn		P.C. Mc-Ptm
5					5.3	Reject.	5.3	Images elongated	1.18	1.16	6.46	02
6					6.1		6.1		0.98	0.98	7.08	00
8					8.0 ~~6.1~~		7.1			0.89	7.99	
9					8.7		7.7		0.91	0.90	8.60	01
7					6.5		6.5		0.89	0.90	7.40	01
10	~~5.3~~						8.0		0.94	0.92	8.92	
11							8.6		0.70	0.99	9.59	
12							8.3		1.24	0.95	9.25	
13							9.0		1.25	1.01	10.01	
14	5.3	5.14	5.10^{4}	$\overset{10}{8}$.40^{4}								
15	5.7	5.08	5.04	10.74								
16	6.1	4.97	4.94	11.04								
17	6.3	4.88	4.89	11.19								
18	7.2	4.73	4.72	11.92								
19	7.5	4.72	4.71	12.21								
20	7.9	$4.\overset{75}{68}$	4.74	12.64								
23	8.5	4.84	4.82	13.32								
25	9.1											
26	9.6											
27	–											

+01
−03
4) −02
−00

Images poor. Prismatic comp. elongated

Measures for Color Index

Dell

Nov 10, 1913

			MC 4236			Oc	curve		
		4p				9.0	1.00	10.00	
		5p				9.4	1.04	10.44	
		6p	5.6	5.08	10.68	9.9			
		9p	9.3						
		2n				5.4	1.13	6.53	02
		4n				7.3	0.90	8.20	01
	88	115				8.2 +0.28	0.94	9.14	
		105				7.4	0.90	8.30	
		90				8.1	0.94	9.04	
		80				8.0 +0.92	0.93	8.93	
		86				8.1 +0.68	0.94	9.04	
		3n				6.5	0.90	7.40	24
		5n				8.0	0.92	8.92	25
		6n				8.8	1.00	9.80	
		7n	4.8			9.3	1.03	10.33	
		8n	5.3	5.14	10.44	9.9			
		9n	5.9	4.99	10.89				
		10n	7.2	4.72	11.92				
		11n	7.5	4.71	12.21				
		12n	7.9	4.74	12.64				
Near edge } elongated	87	12							
		15							
		2	7.7			7.1	0.89	7.99	

Images poor

S. U Nov 10, 1913

MC 4235

	6		67
84	12		8.1
	15		8.0
	5		6.1
	8		8.2
	7		9.3
	9		9.0
	10	4.6	def
	14	6.3	
	11	50	
	12	5.3	
	13	5.7	
	15	6.7	
	16	7.1	
	17	7.5	
	18	8.1	
	19	8.7	
	20	9.1	
	23	9.8	
	25		
	26		
	27		
	6		
	4D	5.3	
	5D	5.9?	
	6D	6.4	
	9D	4.5	

Bell Nov 10, 1913

MC 4235

88 2		8.3
115		9.3
4n		8.2
2n		6.3
10 5		8.3
90	4.7	~~7.9~~ 7.8
3n		~~9.1~~
5n	4.3 ?.	9.1
6n	4.9	
7n	5.3	
8n	6.2	
9n	7.1	
10n	8.4	
11n	8.7	
12n	7	
Too near edge { 88	86	
	80	

Images poor

Sc C 2d Exp. Full Light Nov 10, 1913

MW 469 C (See B 45 for 1st exp.) C 10

		Sc1		Sc2			Corr.	Diff.
R	7	1.0	07					
R	8	1.3	10					
R	12	1.9	16					
R	13	2.1	18					
R	14	2.3	20					
	15	2.7	24					
	16	2.9	26					
	17	3.1	28					
	18	3.4	31				31	9.23
	19	3.7	34				34	9.32
R	20	3.9	36				36	9.23
R	21	4.0	37				37	9.78
	22	4.6	43	4.2	4.25	10	4.25	9.57
	23	4.7	44	4.3	4.35	01	4.35	9.62
	24	4.9	46	4.6	4.60	00	4.60	9.64
	25	5.2	49	4.9	4.90	00	4.90	9.71
	26	5.4	51	5.0	5.05	10	5.05	9.72
	27	5.7	54	5.4	5.40	00	5.40	9.46
	28	6.0	57	5.7	5.70	00	5.71	9.51
	29	6.4	61	6.1	6.10	00	6.11	
	30	6.5	62	6.2	6.20	00	6.22	
	31	6.6	63	6.3	6.30	00	6.32	
	32			7.1			7.13	
	33			7.3			7.33	
	34			7.5			7.53	
	35			8.1			8.14	
	36			8.3			8.34	
	37			9.2?			9.27?	

De 8 ✓ 3d. Exp. Nov 10, 1913

MW 469 8 (C 10) . . . . . .

		Se1	Se2		
R	7	2.8	25		
R	8	3.0	27		
R	12	3.6	33		
R	13	3.7	34		
R	14	4.2	3.9	40	3.95 ± 0
	15	4.7	4.4	43	4.35 0 1
	16	4.9	4.6	4.7	4.65 0 1
	17	5.3	5.0	5.0	5.00 0 0
	18	5.7	5.4	5.4	5.40 0 0
	19	6.2	5.9	5.9	5.90 0 0
R	20	6.5	6.2	6.2	6.20 0 0
R	21	6.7	6.4	6.3	6.35 0 1
	22			7.1	
	23			7.0	
	24			7.2	
	25			7.5	
	26			7.7	
	27			8.3	
	28			8.7	
	29			9.0	
	30			9.3	

See Bk. 45, p. 71.

De P   4th Exp   Nov 10, 1913

MW 469 P (c 10) Mic Gauze Screen

			Sc 1		Sc 2			Corr.	Diff.
	R	7	2.7	2.4					
Near edge	R	8	2.6	2.3					
" "	R	12	3.2	2.9				2.91	7.59
" "	R	13	3.6	3.3				3.31	7.48
	R	14	4.1	3.8	3.8	3.80	00	3.80	7.20
		15	4.3	4.0	3.9	3.95	01	3.95	7.22
		16	4.6	4.3	4.3	4.30	00	4.30	7.22
		17	5.1	4.8	4.8	4.80	00	4.80	7.11
		18	5.5	5.2	5.3	5.25	01	5.24	7.09
		19	6.0	5.7	5.7	5.70	00	5.68	7.04
	R	20	6.3	6.0	6.0	6.00	00	5.98	6.85
	R	21	6.7	6.4	6.3	6.35	01	6.33	7.15
		22			7.1			7.03	6.79
		23			7.0			6.94	7.03
		24			7.3			7.22	7.02
		25			7.5			7.41	7.20
		26			7.8			7.70	7.07
		27			8.2			$8.\overset{0}{\cancel{1}}7$	$6.\overset{7}{\cancel{8}}9$
		28			im Dufer.				
		29			f			f	
		30			f.			f	

S c B ✓ 5th Exp. Nov 10, 1913

M W 469 B = C 10

		Sc1		Sc2		
R	7	2.9	2.6			
R	8	3.0	2.7			
R	12	3.3	3.0			
R	13	3.6	3.3			
R	14	4.2	3.9	3.9	3.90	00
	15	4.6	4.3	4.3	4.30	00
	16	4.9	4.6	4.7	4.65	01
	17	5.3	5.0	5.0	5.00	00
	18	5.7	5.4	5.3	5.35	01
	19	6.3	6.0	6.0	6.00	00
R	20	6.5	6.2	6.2	6.20	00
R	21	6.7	6.4	6.5	6.45	01
	22			7.2		
	23			7.2		
	24			7.3		
	25			7.5		
	26			7.7		
	27			8.2		
	28			8.7		
	29			F		

See Bk. 45, p. 71.

Sc P 1st Exp. Nov 11, 1913 ~~2d~~ 4th Exp

	*	470 P	C₁₀
	7	~~3.2~~ ~~3.0~~	
Near edge	8	~~3.1~~	
" "	12	+p	
" "	13	+p	
	14		
	15		
	16		
	17		
	18		
	19		
	20		
	21		
	22		
	23		
	24		
	25		
	26		
	27		
	28		

Images in this exposure are too poor to measure. Upper part hazy-not comp with scale.

			470 P Sc 1		Sc 2		
	R	7	1.3				
Near edge	R	8					
" "	R	12	B ~~1.7~~				
" "	R	13	B				
	R	14	~~2.3~~	2.0			
		15	2.7	2.4			
		16	2.9	2.6			
		17	3.1	2.8			
		18	3.6	3.3			
		19	3.9	3.6			
	R	20	4.2	3.9	3.9	3.90	00
	R	21	4.5	4.2	4.3	4.25	01
		22	5.1	4.8	4.7	4.75	01
		23	5.1	4.8	4.8	4.80	00
		24	5.3	5.0	5.0	5.00	00
		25	5.7	5.4	5.3	5.35	01
		26	6.0	5.7	5.8	5.75	10
		27	6.3	6.0	5.9	5.95	01
		28	6.7	6.4	6.5	6.45	01
		29			7.1		
		30			7.3		
		31			7.7		
		32			8.0		
		33			8.2		
		34			8.5		
		35			8.9		
		36					

x Very poor images on this plate

Plate Rejected for Abs. Magn. Use fourth exp. for Relative Magn.

De B 3d Exp. Nov 11, 1913

4796 B

7 2.3

Near edge 8 tp

12 tp

13 +p

14 tp

15

16

17

18

19

20

21

22

23

24

25

26

27

Images not comp. with scale images

Se P 1st Exp. Nov 12, 1913

		656 P = 4 + 15				p.113	p.115	Mean		Diff.
		Se1	Se2							
	6	3.0 2.7			2.7	2.7	2.7	2.70	0 0 0	6.66 ~~8.36~~
	8	3.1 2.8			2.8	2.9	2.8	2.83	0 1 0	6.05
	9					2.9	2.9	2.90	. 0 0	6.42
	12	3.6 3.3			3.3	3.8	3.6	3.57	3 2 0	6.45
	13	4.1 3.8	3.8	0 0	3.80	4.3	3.9	4.00	20 30 10	6.17
On edge of film	14					.	,			
" " " "	15					.	,			
	16	5.0 4.7	4.7	0 0	4.70	4.90	4.95	4.85	15 05 10	6.26
	17	5.3 5.0	5.0	0 0	5.00	5.05	5.20	5.08	08 03 12	6.42
	18	5.7 5.4	5.3	0 1	5.35	5.20	5.25	5.27	08 07 02	6.67
	19	6.1 5.8	5.7	0 1	5.75	6.05	6.05	5.95	20 10 10	6.16
	20	6.3 6.0	6.1	0 1	6.05	6.25	6.20	6.17	12 08 03	6.31
	21	6.0 5.7	5.8	1 0	5.75	5.65	5.85	5.75	00 10 10	6.71
	22	6.7 6.4	6.3	0 1	6.35	6.25	6.25	6.28	07 03 03	6.47
R	23	+.h			q	6.45	6.5	6.48	q 03 02	6.56
R	24	6.9 6.6	7.2	3 3	6.90	7.2	7.1	7.07	17 13 03	6.50
R	25		7.3		7.3	7.5	7.5	7.43	1 1 1	6.47
R	26		7.5		7.5	7.7	7.8	7.67	2 0 1	6.44
R	27	Im super.			R	8.0	8.1	8.05	R 0 1	.
R	28		8.2		8.2	8.3	8.3	8.27	1 0 0	6.61
R	29		9.0		9.0	8.9	9.0	8.97	0 1 0	6.43
R	30		F		F	F		F		F

No correction need be applied for ~~distance~~ order of exp. The first exposure is slightly brighter than the others.

As supplementary stars were not measured and all faint stars of regular sequence are dist. from centre, this plate cannot be used. H. S. L. Nov. 3, 1914.

Sc P ✓ 2 I. Eff Nov 18, 1913

6 5 6 P Full ap.

		Sc 1		Sc 2		Diff.
11 50	6	1.0		0.7		7.66
	8	1.2		0.9		7.98
	12	2.1 ~~2.1~~		1.8		8.22
	13	2.3		2.0		8.17
On edge of film	14					.
" " " "	15					.
	16	2.9		2.6		8.51
	17	3.1		2.8		8.70
	18	3.1		2.8		9.14
	19	3.6		3.3		8.81
	20	3.7 ~~4.1~~		3.8		8.68
	21	3.3		3.0		9.46
	22	4.1		3.8		8.95
R	23	3.3		3.0		10.04
R	24	4.3	4.0	4.1	4.05 0 1	9.52
R	25	4.7	4.4	4.3	4.35 0 1	8.55
R	26	4.9	4.6	4.6	4.60 0 0	9.51
R	27	5.3	5.0	5.1	5.05 0 1	.
R	28	5.4	5.1	5.1	5.10 0 0	9.78
R	29	5.8	5.5	5.4	5.45 1 0	9.95
R	30	~~6.4~~	6.1	6.1	6.10 0 0	9.72
R	31	6.7	6.4	6.5	6.45 0 1	.
R	32	7.0	6.7	6.7	6.70 0 0	.
R	33			7.4		.
R	34			7.8		.
R	35			8.2		.
R	36			8.8		.

12 20

Plate not marked. All stars found from chart.

Sc θ 3d Exp ✓ Nov 18, 1913

			656 θ Sc 1		Sc 2		
12 30		6	3.0	2.7			2.7
		8	3.2	2.9			2.9
		9	3.2	2.9			2.9
		12	4.1	3.8			3.8
		13	4.6	4.3			4.3
On edge of film		14					
" " " "		15					
		16	5.2	4.9	4.9	0 0	4.90
		17	5.3	5.0	5.1	0 1	5.05
		18	5.5	5.2	5.2	0 0	5.20
		19	6.3	6.0	6.1	0 1	6.05
		20	6.5	6.2	6.3	0 1	6.25
		21	5.9	5.6	5.7	0 1	5.65
		22	6.5	6.2	6.3	0 1	6.25
Poor image	R	23	6.7	6.4	6.5	0 1	6.45
	R	24		7.2			
	R	25		7.5			
	R	26		7.7			
	R	27		8.0			
	R	28		8.3			
	R	29		8.9			
	R	30		f			

January 5, 1914

Sc B 4th ✓ Eff. ap. 14 in

11 30 656 B

		Sc 1	Sc 2			Diff.
	6	2.8	25			5.86
	8	3.1	28			6.08
	12	3.6	33			6.72
	13	4.0	37			6.47
	9	3.1	28			6.52
	14	On edge of film				.
	15	"	"	"	"	.
	16	4.6	43			6.81
	17	5.0	47	4.7	4.70 00	6.80
	18	5.3	50	5.0	5.00 00	6.94
	19	5.7	54	5.3	5.35 01	6.76
	20	6.1	58	5.9	5.85 01	6.63
	21	5.6	53	5.3	5.30 00	7.16
	22	6.3	60	6.0	6.00 00	6.75
R	23		6.3			6.74
R	24		6.5 ~~4.3~~	W.S		7.07
R	25		7.2			6.70
R	26		7.5			6.61
R	27		7.5			.
R	28		8.2			6.68
R	29		8.7			6.70
R	30		F.			F

January 5, 1914

De B 5 ~~4th~~ Exp.

656 B = 7^h + 15

	Sc 1		Sc 2		
6	3.0	2.7			2.7
8	3.1	2.8			2.8
12	3.9	3.6			3.6
9	3.2	2.9			2.9
13	4.2	8.9			8.9
On edge of film 14					
" " " " 15					
16	5.2	4.9	5.0	1 0	4.95
17	5.5	5.2	5.2	0 0	5.20
18	5.5	5.2	5.3	0 1	5.25
19	6.3	6.0	6.1	0 1	6.05
20	6.5	6.2	6.2	0 0	6.20
21	6.1	5.8	5.9	0 1	5.85
22	6.5	6.2	6.3	0 1	6.25
23			6.5		6.5
24			7.1		7.1
25			7.5		7.5
26			7.8		7.8
27			8.1		8.1
28			8.3		8.3
29			9.0		9.0
30					

12 05

January 7, 1914

Sc B 1st Eff

		2418 (Dick)			7+15		
11 50		Sc 1	Sc 2		p.119	Mean.	~~Sc~~ Diff.
R On edge of film	6	4.3				4.3 a .	4.06
R " " " "	8	4.7				4.7 a .	4.18
	9	5.0 4.7	4.7	4.70 0 0	4.70	4.70 00 00	4.62
	12	5.4 5.1	5.1	5.10 0 0	5.00	5.05 05 05	4.97
R	13	5.7 5.4	5.3	5.35 01	5.00	5.18 17 18	4.99
Near edge from im 14							
" " " " 15							
	16	6.3 6.0	6.1	6.05 01	5.70	5.88 17 18	5.23
R	17	6.3			5.95	6.12 18 17	5.38
R	18	6.5			6.2	6.35 1 2	5.59
	19	6.8			6.7	6.75 0 ⊥	5.36
	20	7.1			7.1	7.10 0 0	5.38
	21	6.9			7.2	7.05 ⊥ 2	5.41
	22	7.3			7.5	7.40 ⊥ 1	5.35
R	23	7.3			7.3	7.30 0 0	5.74
R	24	7.7			7.7	7.70 0 0	5.87
	25	8.1			8.2	8.15 ⊥ 0	5.75
	26	8.3			8.5	8.40 ⊥ 1	5.71
	27	8.7			8.8	8.75 ⊥ 0	.
	28	9.1			9.1	9.10 0 0	5.78
	29	F			F?	F?	
	30						

Faint images not comparable with scale images

January 7, 1914

Sc 8 2d. Exp.

2418 (Sick) 7 + 15 CH Prelim. Magn. − X

			Sc 1		Sc 2				Diff.
Near edge, Along	Rj	6	2.0	1.7				1.7	6.66
" " "	Rj	8	2.2	1.9				1.9	6.98
		9	2.9	26				26	6.72
		12	3.3	30				3.0	7.02
Reject		13	3.3	3.0				3.0	17 7.~~02~~
Near edge		14	~~8~~						
" "		15							
		16	3.8	35				3.5	7.61
Reject		17	3.9	36				3.6	7.90
Reject		18	4.0	3.7				3.7	8.24
		19	4.6	4.3	4.3	4.30	00	4.30	7.81
		20	4.8	4.5	4.4	4.45	10	4.45	8.03
		21	5.0	4.7	4.6	4.65	10	4.65	7.81
		22	5.2	4.9	4.8	4.85	10	4.85	7.90
Reject		23	4.3 ~~5.6~~	4.0	4.1	4.05	01	4.05	8.99
Reject	W.S	24	5.0 3.3	4.7 ~~3.0~~	4.7	4.70	00	4.70	8.87
		25	5.7	5.4	5.3	5.35	01	5.35	8.55
		26			5.7			5.7	8.41
		27			6.1			6.1	.
		28			6.3			6.3	8.58
		29			6.7			6.7	8.70
Reject		30			6.9			6.9	8.92
		31			7.2			7.2	
		32			7.5			7.5	
		33			7.7			7.7	
		34			8.1			8.1	
		35			8.5			8.5	
2	30	36			9.0			9.0	

Images of stars marked reject are too faint.

January 7, 1914

De 8 3d Exp

2	20	2418 (Lick) 7+15			
					Diff.
Reject Near edge. Along.	6				
Reject " " "	8				
	9	3.9 3.6		3.6	5.72
	12	4.3 4.0		4.0	6.02
R	13	4.3 4.0		4.0	6.17
Near edge along	14	~~4.0~~			
" " "	15				
	16	5.0 4.7 ~~5.0~~ 4.7	4.70000	4.70	6.41
R	17	5.2 4.9 4.9	4.90000	4.90	6.60
R	18	5.2 4.9 4.9	4.90000	4.90	7.04
	19	5.6 5.3 5.3	5.30000	5.30	6.81
	20	6.0 5.7 5.7	5.70000	5.70	6.78
	21	5.9		5.9	6.56
	22	6.1		6.1	6.65
R	23	5.9		5.9	7.14
R	24	6.3		6.3	7.~~54~~ 27
	25	6.7		6.7	7.20
	26	6.9		6.9	7.21
	27	7.1		7.1	.
	28	7.3		7.3	7.58
	29	7.5		7.5	7.90
30	30	8.2		8.2	[7.62]
	31	8.~~4~~ 5		8.5	
	32	9.0		9.0	

See Remark p. 117

January 7, 1914

De θ   4th Exp

2418 (Dick) 7+15

		Sc1	Sc2	
On edge	6			
" "	8			
	9	$5.0^{4.7}$	4.7	4.70 0 0
	12	$5.3^{5.0}$	5.0	5.00 0 0
	13	$5.3^{5.0}$	5.0	5.00 0 0
Near edge Images o + p	14			
" "	15			
	16	$6.0^{5.7}$	5.7	5.70 0 0
	17	$6.2^{5.9}$	6.0	5.95 1 0
	18		6.2	
	19		6.7	
	20		7.1	
	21		7.2	
	22		7.5	
	23		7.3	
	24		7.7	
	25		8.2	
	26		8.5	
	27		8.8	
	28		9.1	
	29		F	

2   45

√

24-in Reflector   For Correction for Distance.

Series   7 Plates. Exposures 15m, 1m

Blue   H.S. Reg. C 10   Star 7

Move northward in Declination, as follows:

19h 0m +11°.0

~~Exp~~ Plate	
1	0'.0
2	4.0
3	8.0
4	12.0
5	16.0
6	20.0
7	24.0

JUN 26 1914

June 22, 1914. H.S.L.

Series 154

D. M

Nov 15 1913

MC 4178 Cole

			Se 1	Se 2	Diff.	Curve	Magn.				Diff.	Curve	Magn.		
3	50	5								~~5.8~~ 4	+1.66	1.72	6.52	04	
		6								5.2	+188	1.69	6.89	19	
		7								5.8	+159	1.62	7.42	03	
		8								6.7		~~5.01~~ 1.53	8.23	.	
		9								7.2	+141	1.49	8.69	08	
		10	~~3.0~~ 36	3.2	+5.74	5.66	8.86			7.5	+144	1.47	8.97		
		11	3.4	3.6	5.70	5.66	9.26			7.8	1.50	1.44	9.24		
		12	3.7	3.9	5.64	5.65	9.55			8.2	1.34	1.41	9.61		
		13	4.2	4.4	5.85	5.60	10.00			8.7	1.55	1.38	10.08		
		14	4.8	5.0	5.44	5.49	10.44 9			9.1	1.34	1.35	10.45		
		15	5.2	5.4	5.38	5.33	10.73			9.5	$1.\overset{2}{3}8$	1.34	10.84		
		16	5.7	5.9	5.17	5.17	11.07								
		17	6.1	6.3	4.88	5.05	11.35								
		18	6.6	6.8	5.13	5.05	11.85								
		19	6.9 7.1	7.15 7.0 7.2	5.07	5.12	12.27								
		20		7.5	5.15	5.24	12.74								
		~~21~~													
		~~22~~													
		23		7.9	5.44	5.38	13.28								
		~~24~~													
		25		8.3											
		26		8.7 ~~8.9~~											
		27		9.0											
		28	~~9.4~~	9.4											
		29	~~9.9~~	9.9											
+87	15	2.2			5.64	5.63	7.83	-01		6.3	1.54	1.58	7.88	04	
+88	80	3.3			5.62	5.66	8.96	04		7.3	1.62	1.48	8.78	14	
	86	3.1			5.68	5.66	8.76	-02		7.1	1.68	1.50	8.60	18	
	115	3.3			5.58	5.66	8.96	08	+12 -3 9 +02	7.5	1.38	1.47	8.97	09	+28 -51 -23 -03

Sc M Apr 15, 1913

MC 4178

		Scl	Curve	Magn.					
87	12	3,13.3	5.66	8.96	78	7.3	1.48	8.78	60
	15	2,0 22	~~5.66~~			6.3	~~1.58~~	~~7.~~	
88	2	3,0 3.2	5.66	8.86	76	7.3	1.48	8.78	68
	115	3,1 3.3				7.5	~~1.47~~		
	105	3.2-3.4	5.66	9.06	86	7.5	1.47	8.97	77
	90	3.9 4.1	5.63	9.73	76	8.2	1.41	9.61	64
	86	2.9 3.1				7.1	~~1.50~~		
	80	3,1 3.3				7.3	~~1.48~~		

4r	3,1 3.3	5.66	8.96	75	7.5	1.47	8.97	76
2r	2.2 2.4	5.64	8.04	149	6.3	1.58	7.88	133
3r	3.2-3.4	5.66	9.06	142	7.3	1.48	8.78	114
5r	4.2-4.4	5.60	10.00	133	8.7	1.38	10.08	141
6r	4.7 4.9	5.51	10.41		9.0	1.36	10.36	
7r	5.2-5.4	5.33	10.73		9.5	1.34	10.84	
8r	5.7 5.9	5.17	11.07					
9r	6.3 6.5	5.02	11.52					
10r	7.2	5.14	12.34					
11r	7.5	5.24	12.74					
12r	8.1							

8) 815
+1.02

8) 733
+.92

4D	4,1 4.3	5.61	9.91	8.5	1.40	9.90	
6D	5.3 ?5.5?	5.30	10.80	9.3	1.35	10.65	
6D	5.3 5.5	5.30	10.80	9.5	1.34	10.84	
9r	8.9						

4 25

Ld. Recorder

Sc W   Nov 17, 1913

10   10   Mc 4244 Pol. Iso.

		Sc1		Diff.	Curve magn.		Diff.	Curve magn.
	5					6.2	+0.28	
	6					6.9	+0.18	
	7					7.5	-0.11	
	8					7.8		
	9					8.7	~~+0.09~~ -0.09	
	10	3.8 3.9		5.04	4.97	9.0	-0.06	
	11	4.2 4.3		5.00	4.89			
	12	4.7 4.8		4.74	4.80			
	13	5.2 5.3		4.95	4.70			
	14	5.7 5.8		4.64	4.61			
	15	6.2 6.3		4.48	4.50			
	16	6.5 6.6		4.47	4.48			
	17	6.8 6.9		4.28	4.48			
	18	7.3 7.4		4.53	4.51			
	19	7.7 7.8	7.65 2i1 7.5	4.57	4.55			
	20		8.0	4.65	4.60			
	23		8.7	4.64	4.70			
	25		9.2					
	26		9.8					
From foll. page. +87	15					8.0	-0.06	
	115	~~3.9~~ 3.8		5.08	4.99	9.1	-0.22	
	80	4.1		4.82	4.92	9.1	-0.18	
	86	4.0		4.78	4.95	9.2	-0.42	

Se W

Nov 17, 1913

MC +244

		Sc 1			Curve	Magn.	MC-Ptm Red	PC	Curve	magn.	
	1r							4.9	·	·	
	2r							6.7	+0.23	6.43	13
	3r							7.7	-0.02	7.68	04
	4r	2.9	3.0		·			8.3	-0.12	8.18	03
	5r	3.7	3.8		4.99	8.79	12	9.1	-0.20	8.90	23
	6r	3.9	4.0		4.95	8.95		9.3	-0.20	9.10	
	7r	4.8	4.9		4.77						
	8r	5.7	5.8		4.61						
	9r	6.3	6.4		4.49						
	10r	7.7	7.8		4.57						
	11r	7.9	8.0		4.60						
		Sc 2									
	12r	8.7									
Near edge 87	12							7.8	-0.04	7.76	42
" "	15							8.0	-0.07	7.93	
88	2	2.2	2.4	2.3	·	·	·	8.1	-0.09	8.01	09
	115	3.7	3.9	3.8	4.99	8.79		9.1	-0.19	8.91	
	105	2.9	3.1	3.0	·	·	·	8.3	-0.12	8.18	02
	90	3.9	4.1	4.0	4.95	8.95	02	9.2	-0.20	9.00	03
On edge	86	3.9	4.1	4.0	4.95	8.95		9.2	-0.20	9.00	
" "	80	4.0	4.2	4.1	4.93	9.03		9.1	-0.20	8.90	
	6p	5.9	6.1	6.0							
	4p	4.8	5.0	4.9							
	5p	4.9?		5.0?							
	9p	F									

+30
−69
8)−39
−.05

+12
−2
2)+10
+.05

5)−4
−.01

+12

10 45

Sc U Nov 17, 1913

11 26 MC 4193 Ode

		Sc2	Sc3		Curve	Magn.		Pc		Curve	Magn.	
	5							5.2	+1.28	1.28	6.48	00
	6							5.7	1.38	1.30	7.00	07
	7							6.1	1.29	1.33	7.43	04
	8							6.5		1.35	7.85	
	9							7.2	1.41	1.39	8.59	02
	10	Sc1 4.1		4.84	4.54	8.64		7.5	1.44	1.40	8.90	
	11	4.6		4.70	4.67	9.27		7.9	1.40	1.40	9.30	
	12	5.0		4.54	4.76	9.76		8.3	1.24	1.40	9.70	
	13	5.3		4.95	4.82	10.12		8.7	1.55	1.40	10.10	
	14	5.5		4.94	4.86	10.36		9.0	1.44	1.39	10.39	
	15	5.8		4.98	4.92	10.72		9.3 9.35 1.0. 9.2 9.4	1.43	1.38	10.73	
	16	6.1		4.97	4.98	11.08		9.7 9.70 00 9.5 9.7	1.37	1.38	11.08	
	17	6.4		4.78	5.02	11.42		9.9 9.95 10 10.0 9.8	1.23	1.36	11.31	
	18	6.8		5.13	5.09	11.89						
	19	7.1		5.12	5.12	12.22						
	20	7.4		5.15	5.17	12.57						
	23	7.9		5.44	5.23	13.13						
	25	8.3			.	.						
	26	8.6			.	.						
	27	8.9			.	.						
	28	9.2	9.		.	.						
	29	9.5	9.50 00 9.3 9.5		.	.						
	30	10.0	10.05 01 9.9 10.1		.	.						
(from foll page) +87°	15	3.9	~~4.1~~	+3.94	4.49	8.39	55	6.8	1.04	1.37	8.17	33
+88	80	4.3	~~4.5~~	4.62	4.60	8.90	02	7.5	1.42	1.40	8.90	02
	86	4.2	~~4.4~~	4.58	4.58	8.78	00	7.3	1.48	1.40	8.70	08
	115	4.3	~~4.5~~	4.58	4.60	8.90	02	7.4	1.48	1.40	8.80	08
							+57 −2 4) 55 +.14					+37 −27 8) +10 +.01

S. U.　　　　Nov 17, 1913

	MC 4193		Curve	Magn.		O.C.		Curve	Magn.	
	1r									
	2r					6.3		1.34	7.64	109
	3r					7.3		1.40	8.70	106
	4r	4.3	4.60	8.90	69	7.3		1.40	8.70	49
	5r	4.9	4.74	9.64	97	8.4		1.40	9.80	113
	6r	5.2	4.80	10.00		8.8		1.40	10.20	
	7r	5.6	4.88	10.48		9.1	9.10 〃 8.9 9.1	1.39	10.49	
	8r	5.9	4.94	10.84		9.5	9.50 〃 9.3 9.5	1.38	10.88	
	9r	6.3	5.01	11.31						
	10r	7.2	5.15	12.35						
	11r	7.5	5.19	12.69						
	12r	7.9	5.23	13.13						
87°	12	4.3	4.60	8.90	72	7.3		1.40	8.70	52
	15	3.9	~~4.19~~	~~8.39~~		6.8		~~1.37~~		
88°	2	4.2	4.57	8.77	67	7.3		1.40	8.70	60
	11 5	4.3	~~4.60~~			7.4		~~1.40~~		
	10 5	4.2	4.57	8.77	57	7.3		1.40	8.70	50
	90	4.7	4.70	9.40	43	8.2		1.40	9.60	63
	86	4.2	~~4.57~~			7.3		~~1.40~~		
	80	4.3	~~4.60~~			7.5		~~1.40~~		
	7p	4.9	4.74	9.64		8.5		1.40	9.90	
	6p	6.0	4.96	10.96						
	9p	8.7								

8) 602
+ 75

6) 405
+ 68

12　　15

Interrupted twice – Ld. Rec.

Se U Nov 17, 1913

2 +5 MC 4257 Pole

				Curve	magn.				Curve	magn.	
	5						5.3	+1.18	1.25	6.55	07
	6						5.8	1.28	1.28	7.08	00
	7						6.1	1.29	1.28	7.38	01
	8						6.5		1.26	7.76	
	9						7.3	1.31	1.19	8.49	12
	10	4.2	+ 4.74	4.59	8.79		7.6	1.34	1.14	8.74	
	11	4.7	4.60	4.66	9.36		8.2	1.10	1.05	9.25	
	12	5.0	4.54	4.71	9.71		8.7	0.84	1.00	9.70	
	13	5.3	4.95	4.76	10.06		9.1	1.15	0.98	10.08	
	14	5.5	4.94	4.80	10.30		9.5	0.94	0.96	10.46	
	15	5.9	4.88	4.89	10.79		9.9	0.88	0.94	10.84	
	16	6.1	4.97	4.94	11.04						
	17	6.3	4.88	4.99	11.29						
	18	6.8	5.13	5.11	11.91						
	19	7.1	6.12	5.23	12.33						
	20	7.3	.3 5.85	5.30	12.60						
	23	7.8	5.54	5.51	13.31						
	25	8.2		·	·						
	26	8.5		·	·						
	27	9.0	9.05 ·· 8.9 9.1	·	·						
	28	9.4	9.40 ·· 9.2 9.4	·	·						
	29	9.8	9.85 ·· 9.7 9.9	·	·						
+87	15	3.9	3.94	·	·		6.5	+1.34	1.26	7.76	08
+88	80	4.3	4.62	4.60	8.90	02	7.8	1.12	1.11	8.91	01
	86	4.2	4.58	4.59	8.79	01	7.7	1.08	1.12	8.82	04
	115	4.3	4.58	4.60	8.90	02	7.9	0.98	1.10	9.00	12
						+3 −2 3)+1 +.00					+23 −32 8)−9 −.01

Sc U

Nov 17, 1913

MC 4257 Pole.

		Sc2	Sc3			OC			
	1r								
	2r					6.3	1.28	7.58	102
	3r					7.4	1.18	8.58	94
	4r					7.7	1.12	8.82	61
	5r	5.0	4.71	9.71	104	8.9	1.00	9.90	123
	6r	5.3	4.76	10.06		9.5	9.50 °° 9.39.5 0.96	10.46	
	7r	5.5	4.80	10.30					
	8r	5.8	4.87	10.67					
	9r	6.4	5.00	11.40					
	10r	7.2	5.25	12.45					
	11r	7.6	5.44	13.04					
	12r	8.1	·	·					
87°	12	4.2	4.59	8.79	61	7.3	1.19	8.49	31
	15	3.9 ~~6.5~~				6.5	~~1.26~~	~~7.76~~	
88°	2	4.1	4.56	8.66	56	7.2	1.20	8.40	30
	115	4.3				7.9	~~1.10~~	~~9.00~~	
	105	4.2	4.59	8.79	59	7.9	1.10	9.00	80
	90	4.8	4.68	9.48	51	8.3	1.04	9.34	37
	86	4.2				7.7	~~1.12~~	~~8.82~~	
	80	4.3				7.8	~~1.11~~		
	4p	5.1	4.73	9.83		9.1	0.98	10.08	
	6p	5.9	4.89	10.79					
	9p	8.7	·						

5) 331
+.66

8) 558
+70

3 70

Ld. Red.

Sc U Nov 26, 1913

10 oo MC 4302 Pole

			Diff.	O.C.	Diff.
5	3.9		2.58	8.1	- 1.62
6	4.3		2.78	8.4	-1.32
7	4.6		2.79	8.9	-1.51
8	4.9		.	9.5	.
9	6.2	6.10 ± 6.0	2.51		
10		6.2 ~~6.5~~	2.74		
11		7.0	2.30		
12		7.4	2.14		
13		8.0	2.25		
14		8.4	2.04		
15		8.7	2.08		
16		9.0	2.07		
17		9.3	1.88		
18		9.8	2.13		
19		10.0	2.22		
20					
23					
25					
26					

Nov 26, 1913

	Mc 4302			Diff.		Curve	Magn.		Diff		Curve	Magn.
Near edge 87	15	5.2		2.64				9.7	−1.86			
" "	12	4.3			2.75	7.05	113	9.1		−1.62	7.48	70
88	2	4.9			2.65	7.55	55	9.5		−1.70	7.80	30
	115		6.7	2.18								
	105		5.1		2.60	7.70	50					
	90		6.1		2.42	8.52	45					
Near edge	86		6.2	2.58								
" "	80		6.3	2.62								
	1r											
	2r	3.2						7.2				
	3r	4.1			2.78	6.88	76	8.5		−1.50	7.00	64
	4r		5.0		2.63	7.63	58	9.7		−1.73	7.97	24
	5r		5.1		2.60	7.70	97	9.7		−1.73	7.97	70
	6r		6.1									
	7r		7.2									
	8r		8.1									
	9r		8.7									
	10r											
	6p		8.3									
	4p		7.4									
	a		7.9									
	b		8.4									
	c		8.9									
	d		8.9									
	e		9.2									
	f		9.5 ?									

7)−494
−71

5)−258
−52

omitting 3r, 87°12, 88°90

omitting 3r etc

4)−260
−65

3)−124
−41

11 30

Sell Nov 26, 1913

MC 43900, Pinacyanol Screen R1

		Sc 2	Diff	Curve	Magn.		
	5	4.7	1.78				
	6	5.3	1.78				
	7	6.1	1.29				
	8	6.8					
	9	7.9	0.71				
	10	8.2	0.74				
	11	8.7	0.60				
	12	9.1	0.44				
	13	9.5	0.75				
	14	9.9	0.54				
Near edge 81	15	6.9	0.94				
" "	12	5.9		1.40	7.30	88	
88	2	6.8		1.04	7.84	26	
	115	8.5	0.38				
	105	7.0		0.95	7.95	25	
	90	8.0		0.71	8.71	26	
Near edge	86	8.1	0.68				
" "	80	8.3	0.62				
	2p	~~4.2~~	Sul 4.7				9.0
	4p	6.8		1.04	7.84	37	
	3p	~~5.4~~	54	1.61	7.01	63	
	5p	6.9		1.00	7.90	77	
	6p	7.8					
	7p	8.7					
	8p	9.5					
	4p	8.8					
	6p	8?					

7)342
-49

4)165
-41

Sc a & 1st Exp. Nov 29, 1913

10 Bu MC 4350 ~~97~~

		Sc 2	Diff.	Curve	magn.	
	5	6.7	−0.22			
	6	7.2	−0.12			
	7	7.5	−0.11			
	8	8.3				
	9	8.9	−0.29			
	10	9.1	−0.16			
	11	9.7	−0.40			
	12	F				
	13					
87	12	8.6		−0.30	8.30	12
	15	8.1	−0.26			
88	2	8.9		−0.32	8.58	48
	115	9.2	−0.32		~~8.88~~	
	105	9.1		−0.34	8.76	56
	90	9.9		−0.40	9.50	53
Near edge	86	9.1	−0.32			
" "	80	9.3	−0.38			
p132	2r					111
	3r					76
	4r					46
	5r					

7) 402
+57

omitting 3r, +87°12, +88°90

4) 261
+65

Sc U 1st Exp. Nov 29, 1913

MC 4350

		Curve	magn.	
2n	7.9	−0.24	7.66	111
3n	8.7	−0.30	8.40	76
4n	9.0	−0.33	8.67	46
5n	10.0			
Hp	10.0			

Sc RU 2d Exp. Nov 29, 1913

MC 4350

	Sc 2	Diff.	Curve	Magn.	PC
5	5.2	1.28			8.7
6	6.1	0.98			
7	6.5	0.89			
8	6.9	·			
9	7.4	1.21			
10	7.7	1.24			
11	8.2	1.10			
12	8.5	1.04			
13	8.9	1.35			
14	9.2	1.24			
15	9.5	1.28			
16	9.9	1.17			
Near edge 8°7 12	7.2		1.23	8.43	35
" " 15	6.3	1.54			
8°8 2	7.3		1.24	8.54	44
115	7.6	1.28		~~8.88~~	
105	7.3		1.24	8.54	34
90	8.1		1.25	9.35	38
86	7.2	1.58			
80	7.3	1.62			

8)507
+.63

5)365
+.73

Sell 2d Exp (cont) Nov 29, 1913

MC 4350

		curve	magn.	
Sm, scratched	2n 6.7?	1.21	7.91	136
	3n 8.2	1.23	8.43	79
	4n 7.7	1.24	8.64	43
	5n 8.5	1.25	9.75	108
	6n 8.8			
	7n n.s.?			

4s 8.7

De U 3d. Exp. Nov 29, 1913

MC 4350

			Diff.			
	5	4.6	1.88	1.92	6.52	
	6	5.0	2.08	2.08	7.08	
	7	5.3	2.09	2.19	7.49	
	8	5.~~7~~ 9				
	9	6.3	2.31	2.38	8.68	
	10	6.5	2.44			
	11	7.1	2.20			
	12	7.4	2.14			
	13	7.7	2.55			
	14	8.1	2.34			
	15	8.3	2.48			
	16	8.5	2.57			
	17	8.8	2.38			
	18	9.3	2.63			
	19	9.7	2.52			
Near edge	87 12	6.2		2.37	8.57	39
" "	15	5.3	2.54			
	88 2	6.1		2.36	8.46	36
	115	6.2	2.68			
	105	6.2		2.37	8.57	37
	90	6.8		2.41	9.21	24
near edge	86	6.0	2.78			
" "	80	6.7	2.72			

8)442
+.55

5)297
+.59

Sell 3d Exp Nov 29, 1913

MC 4350

2n	5.2	2.16	7.36	81
3n	6.1	2.36	8.46	82
4n	6.3	2.38	8.68	47
5n	7.2	2.43	9.63	96
6n	7.3	2.44		
7n	8.1	2.49		
8n	8.5	2.50		
4p	7.3	2.44		
6p	8.2	2.50		
ȧ	8.5	2.50		
d	9.5	2.58		
e	9.8	2.60		
b	9.7	?		

Se U   10^m Exp   Dec 1, 1913

11 45   MC 4376   Ode

			Diff			
	5	6.7	−0.22			
	6	7.8	−0.22			
	7	7.6	−0.21			
	8	8.3				
	9	9.0	−0.39			
	10	9.4	−0.46			
	11	9.8	−0.50			
	12	F				
87	15	8.3	−0.46			
	12	8.9		−0.34	8.56	38
88	2	8.8		−0.32	8.48	38
	115	9.1	−0.22			
	105	9.1		−0.36	8.74	54
	90	9.9		−0.47	9.43	46
	86	9.1	−0.32			
	80	9.2	−0.28			
	2 n	8.1		−0.28	7.82	127
	3 n	8.9		−0.33	8.57	93
	4 n	9.3		−0.38	$8.\overset{9}{8}2$	71
	5 n	10.0		−0.49	9.51	84

$8\overline{)551}$
+.69

$5\overline{)374}$
+.75

Se U 2d in Eff Dec, 1913

MC 4376 (Cont)

		Diff.	
5	5.1	1.38	8.9
6	5.9	1.18	
7	6.2	1.19	
8	6.7	.	
9	7.3	1.31	
10	7.5	1.44	
11	8.1	1.20	
12	8.5	1.04	
13	8.9	1.35	
14	~~10~~ 9.3	1.14	
15	9.7	1.08	
16	10.0	1.07	

89° 15	6.5	1.34	+°		
12	7.3		1.38	8.68	50
88° 2	7.2		1.39	8.59	49
115	7.7	1.18			
105	7.7		1.33	9.03	83
90	8.1		1.29	9.39	42
86	7.2	1.58			
80	7.4	1.52			

Se U 2d Eff Dec 1, 1918

MC 4376

2n	6.1	1.36	7.46	91
3n	7.2	1.39	8.59	95
4n	7.7	1.33	9.03	821
5p	8.4	1.25	9.65	98
6n	8.7	1.21		
7n	9.8	1.10		
4p	8.6	1.22		

8) 590
+.74

5) 403
+.81

Dell 3d Eff. Dec 1, 1913

3	05	MC 4376					
		Scl	Diff		PC		
	5	4.2	2.28		7.3	∓0.82	
	6	4.6	2.48		7.8	−0.72	
	7	4.9	2.49		8.3	−0.91	
	8	5.3	.		9.3		
	9	6.0	2.61		9.9	−1.29	
	10	6.3	2.64				
	11	6.7	2.60				
	12	7.1	2.44				
	13	7.5	2.75				
	14	7.8	2.64				
	15	8.2	2.58				
	16	8.5	2.57				
	17	8.7	2.48				
	18	9.1	2.~~7~~83				
	19	9.5	2.72				
	20	9.9	2.75				
84	15	5.7	2.64 ~~2.60~~	8.7		−0.86	
	12	5.7	2.64	9.7 −1.21849 31	8.34		16
88	2	6.0	2.65		8.65		55
	115	6.2	2.68				
	105	6.1	2.66		8.76		56
	90	6.3	2.67		8.97		00
	86	5.9	2.98				
	80	6.1	2.82				

$$\frac{2)1.26}{+.63}$$

3

Se U 3d Eff. Dec, 1913

MC 4376

2n	5.1	2.61	7.71	116	8.4 −0.90 7.50 +.95
3n	5.9	2.65	8.55	91	
4n	6.2	2.67	8.87	66	
5n	6.7	2.68	9.38	71	
6n	7.2				
7n	7.5				
8n	8.2				
9n	8.7				
4D	7.1				
6D	8.1				
10n	9.3				
11n	9.9				
a	8.4				
a²	8.9				
d	9.2				
e	9.5				
b	9.5				
c	9.7				

3 35

8) 471
+.59

5) 364
+.73

Afternoon quite dark

Sc. U Dec 7, 1913

10 00 MC 4333 Pole (Violet-Green)

	Sc.	Diff.		
5	3.0	3.48	5.9	+0.58
6	3.3	3.78	6.4	+0.68
7	3.6	3.79	6.7	+0.69
8	4.2		7.3	
9	4.6	4.01	7.9	+0.71
10	4.7	4.24	8.2	+0.74
11	5.1	4.20	8.7	+0.60
12	5.4	4.14	9.1	+0.44
13	5.9	4.35	9.5	9.50 00 9.3 9.5 9.5 1.0 + 0.75
14	6.3	4.14	9.9	9.8 0.0 +0.49
15	6.6	4.18		
16	6.9	4.17		
17	7.2	3.98		
18	7.7	4.23		
19	7.9	4.32		
20	8.2	4.45		
23	8.7	4.64		
25	9.2	90		
26	9.7?	~~75~~		

Se U

Dec 2, 1913

MC 4333 (cont)

	Sc1	Sc2 Diff				Sc			Curve		
87 15	4.1	3.74	3.89			7.1		+0.74			
87 12	5.1		4.12	9.22	104	8.2	02		+0.69	8.89	71
88 2	4.7		4.02	8.72	62	8.0	10		+0.70	8.70	60
105	5.0		4.10	9.10	90	8.3			+0.68	8.98	78
115	5.0	3.88	4.10			8.3		+0.58			
90	5.3		4.14	9.44	41	8.9			+0.65	9.55	58
86	4.6	4.18				8.1		+0.68			
80	4.8	4.12				8.1		+0,82			
2n	4.3		3.93	8.23	168	7.2			+0.70	7.90	135
3n	5.0		4.10	9.10	146	8.2			+0.69	8.89	125
4n	5.1		4.12	9.22	101	8.3			+0.68	8.98	77
5n	5.6		4.18	9.78	111	9.0			+0.64	9.64	97
6n	5.9	6.0				9.5	9.50 00 9.3 9.5		+0.60		
7n		6.3									
8n		6.7									
9n		7.2									
10n		8.0									
11n		8.6									
12n		8.9									

8) 829
+1.04

8) 701
+88

5) 532
+1.06

5) 447
+89

Sc U

Dec 2, 1913

MC 4333 (cont)

	Sc 2	
4s	5.3	
6s	6.3	
9s	9.8	9.7
a¹	6.6	
a²	7.7	
b	8.0	
c	8.3	
d	8.1	
e	8.3	
f	8.1	
g	8.7	
h	9.3	9.1
k	9.5	9.5
l	9.1 ?	
m	9.1	9.0
n	?	
o	9.7	9.5
p	?	
q	10.0	9.9

10 50

Sc U Dec 4, 1913

10 45 Mc 4335 (Binocular Sc. R1)

			Diff.				
	5	4.6	1.88				9.3
	6	5.0	2.08				
	7	5.4	1.99				
	8	6.3	·				
	9	7.2	1.41				
	10	7.5	1.44				
	11	8.1	1.20				
	12	8.4	1.14				
	13	8.9	1.35				
	14	9.2	1.24				
	15	9.5	1.28				
	16	9.9	1.17				
87	12	5.6		1.83	7.43	75	
	15	6.4	1.44				
88	2	6.2		1.68	7.88	22	
	115	8.1	0.78				
	105	6.3		1.64	7.94	26 ~~03~~	
	90	7.3		1.38	8.68	29	
	86	7.2	$1.\overset{5}{\cancel{4}}8$				
	80	7.7	1.22				
From foll. page	2	3.9	·	·			
	3	4.8		2.03	6.83	81	
	4	6.1		1.70	7.80	41	
	5	6.5		1.59	8.09	58	

7) −3.32
−.47

4) −1.47
−.37

Sc U Dec 4, 1913

MC 4335

2n	3.9	8 9.7
3n	4.8	9.7
4n	6.1	
5n	6.5	
6n	7.4	
7n	8.1	
8n	8.7	
9n	9.5	
10n	n.s	
6p	9.1	
4p	8.3	
ȧ	9.0	
ã	9.7	
b	9.9?	

11 30

Sc U Dec 5, 1913

9 15 MC 4352 (Crystal Violet Screen)

	Sc 1	Sc 2	Curve		
5	3.2	+3.28	3.15	6.4	+0.08
6	3.9	3.18	3.24	7.2	-0.12
7	4.3	3.09	3.28	7.5	-0.11
8	4.8			8.3	
9	Sc 2 5.3	3.31	3.33	8.9	-0.29
10	Scratched.			9.3	-0.36
11	5.9	3.40		9.7	-0.40
12	6.1	3.44			
13	6.5	3.75			
14	6.8	3.64			
15	7.2	3.58			
16	7.5	3.57			
17	7.8	3.38			
18	8.2	3.73			
19	8.5	3.72			
20	8.9	3.75			
23	9.3	4.04			
~~24~~					
25	9.8				
26	F				

J. C. W. Dec. 5, 1913

MC 4352 (cont)

				Curve	magn				Curve	magn	
87°	12	5.3		3.39	8.69	5~~8~~1	9.0		-0.31	8.69	51
	15	4.8 ~~5.0~~	3.04				8.2	-0.36			
88	2	5.1		3.37	8.47	37	8.9		-0.30	8.60	50
	115	5.3	3.58				9.2	-0.32			
	105	5.4		3.40	8.80	60	9.2		-0.33	8.87	67
	90	6.1		3.48	9.58	61					
Near edge	86	5.2	3.58				89	-0.12			
" "	80	5.4	3.52				9.3	-0.38			
	2 r	4.9		3.35	8.25	170	8.1		-0.22	7.88	133
	3 r	5.~~4~~6		3.42	9.02	138	9.2		-0.33	8.87	123
	4 r	5.4		3.40	8.80	59	9.2		-0.33	8.87	66
	5 r	6.4		3.50	9.90	123					
	6 r	6.6									
	7 r	6.9				699 8)~~706~~ +887					~~7~~6)490 ~~+70~~ +82
	8 r	7.4									
	9 r	7.9									
	10 r	8.3				5)449 +~~90~~ ~~88~~ +90					4)316 +79
	11 r	8.9									
	12 r	9.7									
	4 p	6.4									
	6 p	7.2									
	9 p	F									

Sc U

Dec 5, 1913

Mc 4352 (cont)

	Sc 2
a^1	7.4
a^2	8.3
b	8.5
c	8.8
d	8.5
e	8.7
f	9.0
g	9.7
h	9.9 ?
k	10.0
l	9.8
m	9.2
n	?
o	9.9
p	
q	f
r	

10 20

S c U 2d Exp. 10s Dec 5, 1913

11 30 MC 4354 Orb

		Scr		Curve	Magn.		
	5	5.8	+0.18				6
	6	6.1	+0.98				
	7	6.5	0.89				
	8	7.2					
	9	8.1	0.51				
	10	8.3	0.64				
	11	8.8	0.50				
	12	9.2	0.34				
	13	9.7	0.55				
	14	10.0	0.44				
87°	12	7.9	~~0.77~~	0.58	8.48	30	
	15	7.1	0.74				
88	2	7.8		0.60	8.40	30	
	115	8.4	0.48				
	105	8.3		0.50	8.80	60	
	90	9.0		0.46	9.46	49	
	86	8.2	0.58				
	80	8.3	0.62				

Sc U 2d Exp. Dec 5, 1913

MC 4354 cont

		curve	magn.	
2n	6.9	0.78	7.68	113
3n	8.3	0.50	8.80	116
4n	8.3	0.50	8.80	59
5n	9.2	0.45	9.65	98
6n	9.5			
7n	n.s			
8n	n.s			
4D	9.3			
6D	n.s			

8)555
+69

5)360
+72

Sc U 3d Exp 50 s Dec 5, 1913

MC 4354

	Sel			Curve magn.				
5	43		218				8.0	-1.52
6	4.9		218				8.7	-1.62
7		5.3	209				9.2	-1.81
8		5.8						
9		6.3	2.31					
10		6.5	2.44					
11		7.2	2.10					
12		7.7	1.84					
13		8.1	215					
14		8.4	2.04					
15		8.7	2.08					
16		9.1	1.97					
17		9.6	1.58					

87° 12	6.4	~~224~~	2.30	8.70	52
15	5.6	224	2.26		
88 2	6.2		2.31	8.51	41
115	6.7	218			
105	6.3		2.31	8.61	41
90	7.1		2.24	9.34	37
86	6.4	2.38			
80	6.9	2.02			

12

Sell 3d Exp Dec 5, 1913

MC 4354

		Curve	Magn.	
2m	5.2	2.23	7.43	88
3m	6.3	2.31	8.61	97
4m	6.5	2.30	8.80	59
5m	7.7	2.16	9.86	119
6m	8.1			
7m	8.5			
8m	9.0			
9m	10.0?			
4s	8.0			
6s	9.2			
9s	F			

12 30

8)534
+67

5)348
+70

Se U

Dec 8, 1913

MC 4351 Cole (Crystal Violet Screen)

	Se1	Se2	Diff	P.C	
5	B			5.2	1.28
6	3.1		3.98	5.9	1.18
7	3.3		4.09	6.2	1.19
8	3.6 ~~3.5~~			6.5	
9	4.2		4.41	7.1	1.51
10	4.3		4.64 ~~5.00~~	7.3	1.64
11	4.7		4.60 ~~84~~ ~~4.7[illegible]~~	7.9	1.40
12	5.0		4.54 ~~5.25~~	8.2	1.34
13	5.3		4.95	8.7	1.55
14	5.5		4.94	9.0	1.44
15	5.8		4.98	9.3	1.48
16	6.2		4.87	9.7	1.37
17	6.3		4.88	9.9	1.28
18	6.7		5.23		
19		6.9	5.32		
20		7.3	5.35		
23		7.8	5.54		
25		8.2			
26		8.5			
27		8.9			
28		9.2			
29		9.6			
30		9.9			

Sc U

Dec 8, 1913

MC 4351

		Sc 1	Sc 2	Curve	Magn.	MC-Ptm. Red	PC		Curve	Magn.	MC-Ptm. Red
	87° 12	4.3		4.58	8.88	70	7.1		1.52	8.62	44
	15	3.3?	4.54	4.13			6.2	1.64			
	88 2	4.2		4.55	8.75	65	7.2		1.52	8.72	62
	115	~~6.1~~ 4.3	4.58				7.5	1.38			
	105	4.3		4.58	8.88	68	7.5		1.51	9.01	81
	90	4.8		4.73	9.53	56	8.0		1.79	9.49	52
Near edge	86	4.2	4.58				7.2	+1.58			
" "	80	4.3	4.62				7.5	1.42			
	1r										
	2r	3.1		4.33	8.03	148	6.2		1.38	7.58	103
	3r	4.3		4.58	8.88	124	7.3		1.52	8.82	118
	4r	4.3		4.58	8.88	67	7.5		1.51	9.01	80
	5r	5.2		4.85	10.05	138	8.6		1.45	~~9~~10.05	138
	6r	5.3		4.87	10.17		8.8		1.44	10.24	
	7r	5.6		4.95	10.55		9.0		1.42	10.42	
	8r	6.0		5.05	11.05		1				
	9r	6.5		5.19	11.69						
	10r		6.9	5.28	12.18						
	11r		7.5	5.40	12.90						
	12r		8.1								

8)736.
~~+105~~
+92

~~)534~~
8)578
~~+72~~
+.85

Dell Dec 8, 1913

MC 4351

	Sc 2		
4D	4.7		8.6
5D	5.6		
6D	5.8		
9D	8.9		
a¹	6.2		
a²	6.9	–	
b	7.2		
c	7.3		
d	6.9		
e	7.2		
f	7.2		
g	8.0		
h	8.7		
k	7.8		
l	8.0		
m	8.3		
o	9.0:		
p			
q	8.6		
r			

Series 3723 – 3728 = 114

Dec 9, 1913

Se W

10:23 MC 3723 Pole.

Reject See Journal P146.
Ac.

		P.162	Mean	Diff.		
5						6.3
6						6.8
8	~~4.2~~	~~4.2~~				7.8
9	~~4.7~~	~~4.8~~				8.1
10	4.9	4.9	4.90	00	3.99	8.1
11	5.2	5.0	5.10	11	4.32	8.7
12	5.7	5.3	5.50	22	4.23	9.0
13	6.0	5.8	5.90	11	4.27	9.5
14	6.3	6.1	6.20	11	4.32	9.9
15	6.5	6.5	6.50	00	4.44	
16	6.9	6.9	6.90	00	4.36	
17	7.2	7.1	7.15	01 ±0	4.34	
18	7.6	7.5	7.55	±01	4.37	
19	7.85 01 7.8 7.9	7.7	7.78	07 08	4.50	
20	8.15 01 8.2 8.1	7.9	8.02	13 12	4.57	
23	w.s. ~~8.6~~ 83	8.4	8.35	±0	4.85	
25	8.50 00 8.5 8.5	8.9	8.70	20 20	5.03	
26	8.9	9.3	9.10	22	5.09	
27	9.2	9.7	9.45	23	5.10	
28	9.6	.	9.6	2 .	5.37	
29	9.9	.	9.9	2 .	5.62	
30	f					

5 5
5 5
+.10 −.10

07 28
5 5
+.01 −.06

70 70
5 5
−.14 +.14

all
20 20
15 15
+.01 −.01 copied.

M.O.R.

Series 114

Scale U

Copied.

Card. December 9, 1913.

MC 3724

115 K

(Corr. +.13)

		Curve	Magn.		P.c.
1	4.3	4.18	8.48	.61	7.8
2	5.1	4.21	9.31	.44	9.0
3	5.3	4.22	9.52	.65	9.5
4	5.4	4.22	9.62	.75	9.7
5	5.7	4.25	9.95	10.08	9.9
6	6.2	4.29	10.49	.62	
7	6.6	4.33	10.93	11.07	
8	6.7	4.34	11.04	.18	
9	7.1	4.41	11.51	.65	
10	7.7	4.55	12.25	.39	
11	7.9	4.61	12.51	.65	
12	8.1	4.68	12.78	.92	
13	9.0	5.06	14.06	.20	
14	9.1	5.12	14.22	.36	
15	9.5	5.30	14.80	.94	
~~16~~					
~~17~~					
~~18~~					
~~19~~					
~~20~~					

M.O.R.

Series 114

Scale U | Copied. Card. | December 9, 1913.

Mc 3725 | 43K.

Corr. alt. +.21

		Curve	Magn.	P.C.
1	4.0	4.18?	~~8.18?~~ .31	7.9
2	5.20 1.1 5.3 5.1	4.21	9.~~41~~ .54	9.1
3	5.20 1.1 5.1 5.3	4.21	9.~~41~~ .54	9.8
4	5.5	4.22	9.~~72~~ .85	
5	6.1	4.28	10.~~38~~ .51	
6	6.1	4.28	10.~~38~~ .51	
7	6.6	4.33	~~10.93~~ 11.07	
8	7.1	4.40	11.~~50~~ .64	
9	7.40 1.1 7.5 7.3	4.47	~~11.87~~ 12.01	
10	7.40 1.1 7.3 7.5	4.47	~~11.87~~ 12.01	
11	7.9	4.61	12.~~51~~ .65	
12	8.7	4.92	13.~~62~~ .76	
13	8.9	5.02	~~13.92~~ 14.06	
14	9.2	5.16	14.~~36~~ .50	
15	9.7	5.40	15.~~10~~ .24	

Images on this plate not circular.

M.O.R.

Series 114

Scale II

copied.

Card December 9, 1913

MC 3726

3K -

+14

		Curve	magn.	P.C.
1	4.4	4.18	8.58 .71	8.3
2	4.7	4.20	~~8.90~~ 9.03	8.9
3	5.0	4.20	9.~~20~~ .33	n.s.
4	5.1	4.21	9.~~31~~ .44	? doubtful.
5	5.3	4.22	9.~~52~~ .65	
6	6.1	4.28	10.~~38~~ .51	
7	6.6	4.3~~7~~3	~~10.97~~ 3 11.07	
8	6.7	4.34	11.~~04~~ .18	
9	7.0	4.39	11.~~39~~ .53	
10	7.2	4.43	11.~~63~~ .77	
11	7.6	4.53	12.~~13~~ .27	
12	7.9	4.61	12.~~51~~ .65	
13	~~8.5~~ 7.9	4.61	12.~~51~~ .65	
14	8.3	4.75	13.~~05~~ .19	
15	8.2	4.71	12.91 13.05	
16	9.3	5.21	14.~~51~~ .65	
17	9.6	5.36	~~14.96~~ 15.10	

Images elongated

M.O.R.

Series 114

Copied

Scale u Card December 9, 1913.

Mc 3727 8 K.

Corr. alt. +20

		Curve			P.C.
1	4.2	4.18	8.~~38~~ .51		8.7
2	5.1	4.21	9.~~31~~ .44		9.9
3	5.1	4.21	9.~~31~~ .44		9.8
4	5.7 5.4 5.55 ± 2	4.23	9.~~78~~ .91		n.s.
5	5.5 – 5.6 5.55 ± 0	4.23	9.~~78~~ .91		
6	6.1	4.28	10.~~38~~ .57		
7	6.3	4.30	10.~~60~~ .73		
8	6.7	4.34	11.~~04~~ .18		
9	7.1	4.40	11.~~50~~ .64		
10	7.6	4.52 ~~5.02~~	12.~~12~~ .26		
11	8.4	4.79	13.~~19~~ .33		
12	8.3	4.75	13.~~05~~ .19		
13	9.1	5.12	14.~~22~~ .36		
14	9.4	5.26	14.~~66~~ .80		
15	9.8	5.48	15.~~28~~ .42		
α	3.0				7.0
γ	3.1				7.3
δ	3.1				7.3
ε	3.9				8.2
β	2.9				6.9

M.O.R.

Series 114.

Scale U

December 9, 1913.

	Mc 3728	Pole	
	See P.157.		
5			7.3
6			8.1
8	4.2		9.0
9	4.8		9.8
10	4.9		n.s.
11	5.0		
12	5.3		
13	5.8		
14	6.1		
15	6.5		
16	6.9		
17	7.1		
18	7.5		
19	7.7		
20	7.9		
23	8.4		
25	8.9		
26	9.3		
27	9.7		
28	f.		

MOR.

Series 132

Se. U December 11, 1913

2 05 MC 3937 Pole

		mc 3942 P.162	mc ~~3948~~ P.~~144~~	P.161		Diff.
5	3.0?	3.1	2.9	3.0	3.00 0 0	~~5.89~~ 3.39
6	3.3	3.3	3.2	3.3	3.30 0 0	3.68
8	4.2	4.1	3.9	4.1	4.15 0 1	3.95
9	4.6	4.6	4.3	4.4	4.50 1 1	4.20
10	4.6	4.7	4.3	4.6	4.60 0 0	4.29
11	5.0	5.1	4.7	5.0	5.00 0 0	4.42
12	5.3	5.4	5.0	5.3	5.30 0 0	4.43
13	5.7	5.9	5.3	5.8	5.75 1 0	4.42
14	6.2	6.2	5.6	6.1	6.05 0 1	4.47
15	6.~~3~~ 2	6.5	5.9	6.4	6.30 1 1	4.64
16	6.5	6.9	6.1	6.7	6.60 1 1	4.66
17	6.7	7.1	6.3	6.9	6.80 1 1	4.69
18	7.1	7.5	6.8	7.3	7.20 1 1	4.72
19	Defective	7.7	7.1	7.5	7.5 . a	4.78
20	7.7	7.9	7.4	7.7	7.70 0 0	4.89
23	8.2	8.3	8.3	8.3	8.25 0 1	4.95
25	8.7	8.7	9.2	8.7	8.70 0 0	5.03
26	9.2	9.25 0 1 9.1 9.3 9.30	9.9	9.30	9.28 03 02	4.91
27	9.7	9.70 0 0 9.5 9.7 9.90	.	9.85	9.78 08 07	4.77
28	F					

S.C		P.142	P.74	P.161		Diff.
6.2		6.1	5.7	6.1	6.15 0 1	0.24
6.6		6.5	6.2	6.5	6.55 0 1	0.43
7.7		7.5	7.1	7.7	7.70 0 0	0.40
8.2		8.0	7.7	8.1	8.15 0 1	0.55
8.3		8.1	8.0	8.2	8.25 1 0	0.64
8.7		8.5	8.4	8.7	8.70 0 0	0.72
9.0	9.05 0 1 8.9 9.1	8.9	8.7	9.05	9.05 0 0	0.68
9.5	9.50 0 0 9.3 9.5	9.50	9.1	9.45	9.48 02 03	0.69
9.9	9.95 1 0 9.8 10.0	9.95	9.7	9.85	9.90 05 05	0.62

0 3
4 4
.00 −.08

17 08
5 5
+.03 −.02

17 38
9 9
+.02 −.04

5-9 1 2
4 4
+.02 −.05

1 1
5 5
−.02 +.02

4 4
5 5
−.08 +.08

11 ~~10~~ 19
4 ~~4~~ 4
−.03 ~~+.02~~ +.05

all −.51 +49
18 18
−.03 +.03

Series 132

Se U

Copied.

Card. December 11, 1913

MC 3938 = 138 K

Corr. for alt. -.18

	Se 1		Curve	magn.	Se 2	Se 3		
1	4.0		3.94	8.07 7.94	7.0		0.41	.54 7.41
2	Se 2 4.6		4.18	.91 8.78	8.2		0.56	.89 8.76
3	5.9		4.54 3	.3 56 10.44	9.8	9.85 01 9.7 9.9	0.70	.68 10.55
4	6.0		4.55	.68 10.55				
5	6.2		4.60	.93 10.80				
6	6.6		4.68	.42 11.28				
7	7.1		4.76	12.00 11.86				
8	7.4		4.81	.35 12.21				
9	7.9		4.90	.94 12.80				
10	8.3		4.93	.37 13.23				
11	8.6		4.94	.68 13.54				
12	9.2	9.70 00 9.0 9.2	4.92	.25 14.12				
13	9.3	9.35 1.0 9.2 9.4	4.92	.41 14.27				
14	9.5	9.50 00 9.3 9.5	4.91	.55 14.41				
15	9.7	9.70 00 9.5 9.7	4.90	.74 14.60				

Series 132

Se U

Copied

Card.

MC 3939 = 12 Ks.

Corr. for alt. +.21

1	4.2		4.02	.35 8.22
2	4.7		4.21	9.04 8.91
3	5.1		4.34	.57 9.44
4	5.9		4.53	.56 10.43
5	6.3		4.62	11.06 10.92
6	7.0		4.75	.89 11.75
7	7.2		4.78	12.12 11.98
8	7.5		4.83	.47 12.33
9	7.9		4.90	.94 12.80
10	8.2		4.93	.27 13.13
11	8.5		4.94	.58 13.44
12	8.9		4.94	.98 13.84
13	9.1	9.10 oo 8.9 9.1	4.93	.17 14.03
14	9.5	9.50 oo 9.3 9.5	4.91	.55 14.41
15	9.7	9.80 ⊥1 9.7 9.9	4.90	.84 14.70

Se1	Se3		
8.1		0.55	.78 8.65
8.6	8.65 01 8.5 8.7	0.61	.39 9.26
9.3	9.30 oo 9.1 9.3	0.67	10.10 9.97

Series 132

Sa U

copied

Card.

December 11, 1913

MC 3940 = 41 K

Corr for [illegible] +.22

1	4.0		3.93	7.93	8.06
2	4.6		4.18	8.78	.91
3	4.9		4.28	9.18	.31
4	5.2		4.37	9.57	.70
5	5.7		4.49	10.19	.32
6	5.9		4.53	10.43	.56
7	6.3		4.62	10.92	11.06
8	6.7		4.70	11.40	.54
9	7.1		4.76	11.86	12.00
10	7.4		4.81	12.21	.35
11	7.5		4.83	12.33	.47
12	8.2		4.93	13.13	.27
13	9.0	9.00 0.0 8.8 9.0	4.93	13.93	14.07
14	9.4	9.45 0.1 9.8 9.5	4.91	14.36	.50
15	9.9	9.90 0.0 9.7 9.9	4.89	14.79	.93

7.1		0.43	7.53	.66
8.1		0.55	8.65	.78
8.5		0.60	9.10	.23
8.9		0.64	9.54	.67
9.5	9.45 10 9.~9.4	0.69	10.14	.27

3

Series 132

Sc U December 11, 1913

MC 3942 Pole

	Se.1		Se.2 PC Se.3
5	3.0 ~~4.6~~	See P. 163	6.1 ~~8.2~~
6	3.3		6.5
8	4.1		7.7
9	4.4		8.1
10	4.6		8.2
11	5.0		8.7
12	5.3		9.0 8.9 9.1 9.05 01
13	5.8		9.4 9.3 9.5 9.45 01
14	6.1		9.8 9.7 9.9 9.85 01
15	6.4		
16	6.7		
17	6.9		
18	7.3		
19	7.5		
20	7.7		
23	8.3		
25	8.7		
26	9.3 9.1 9.3 9.30 00		
27	9.8 9.7 9.9 9.85 01		
28			

3 30

Series 132

Se U   Dec 12, 1913

10 30 MC 3942 Cole

	Se1		Se2	Se3
5	3.1	See P. ~~163~~ 194	6.1	
6	3.3		6.5	
8	4.1		7.5	
9	4.6		8.0	
10	4.7		8.1	
11	5.1		8.5	
12	5.4		8.9	
13	5.9		9.5	9.3 9.5 9.50 ȯ o
14	6.2		9.9	9.8 10.0 9.95 ⊥ o
15	6.5			
16	6.9			
17	7.1			
18	7.5			
19	7.7 Se2			
20	7.9			
23	8.3			
25	8.7			
26	9.3	9.1 9.3 9.30 ȯȯ		
27	9.9	9.7 9.9 9.90 ȯo		
28	F			

copied Series 132

Se U Card. Dec 12, 1913

MC 3943 91 K

	Se1	Se2	Corr. for all +.17		Se2			
1	4.0		4.07	20 8.07	7.2		0.76	8.09 7.96
2	4.4	~~6.4~~	4.27	80 8.67	8.7		0.90	73 9.60
3	5.0		4.45	58 9.45	9.0	9.05 01 8.9 9.1	0.88	10.06 9.93
4		5.4	4.53	10.06 9.93				
5		5.7	4.60	43 10.30				
6		6.4	4.71	5 ~~24~~ 11.11				
7		7.1	4.82	12.06 11.92				
8		7.8	4.88	82 12.68				
9		8.1	4.88	13.12 12.98				
10		8.4	4.86	2 40 13.26				
11		9.30 00 9.3 9.1 9.3	4.71	15 14.01				
12		9.50 00 9.5 9.3 9.5	4.66	30 14.16				
13		9.60 ±1 9.5 9.5 9.7	4.65	39 14.25				
14		9.85 01 9.8 9.7 9.9	4.60	59 14.45				
15		10.00 16 9.9 9.9 10.1	4.56	70 14.56				

Series 132

Se U   copied   Card.

Dec. ~~18~~ 2, 1913

MC 3944 = 139 K

	Se1	Se2		corr. for alt	−.18	Se2			
1	4.1			4.12	.35 8.22	6.7		0.68	.51 7.38
2	4.7			4.37	.20 9.07	8.0		0.87	9.00 8.87
3	4.9			4.42	.45 9.32	* 7.7		0.90 ~~0.83~~	9.60 73 ~~8.53~~
4		5.5		4.56	.19 10.06	9.8	9.85 .01 9.7 9.9	0.78	.76 10.63
5		5.7		4.61	.44 10.31				
6		6.0		4.65	.78 10.65				
7		6.3		4.70	.14 11.00				
8		6.7		4.78	.62 11.48				
9		6.9		4.80	.84 11.70				
10		7.2		4.84	.18 12.04				
11		7.6		4.87	.61 12.47				
12		8.1		4.88	1312 12.98				
13		8.5		4.85	49 13.35				
14		8.7		4.84	.68 13.54				
15		9.1	9.0 9.2 9.15 10	4.74	14.03 13.89				
16		9.5	9.3 9.5 9.5000	4.66	.30 14.16				

* Remeas. June 3, 1914.

8.7   Error of a unit in above meas.

Series 132

Se U

Copied

Card. Decd ~~13~~ 12, 1913

MC 3945 = 19 K

	Se 1	Se 2	Curve	Corr. for alt. +20
1	4.3		4.20	.63 8.50
2		5.0	4.45	.58 9.45 ~~8.75~~
3		5.3	4.51	.94 9.81
4		5.7	4.61	.44 10.31
5		6.1	4.67	.90 10.77
6		6.3	4.70	.14 11.00
7		6.5	4.75	.39 11.25
8		6.8	4.78	72 11.58
9		7.1	4.82	12.06 11.92
10		7.5	4.87	.51 12.37
11		7.9	4.88	.92 12.78
12		8.3	4.87	.31 13.17
13		8.7	4.83	.67 13.53
14		9.2 9.25 01 9.1 9.3	4.73	14.12 13.98
15		9.8 9.90 ⊥1 9.8 10.0	4.59	.63 14.49

Se 2		Curve	Magn.
7.9		0.85	88 8.75
8.7		0.90	.73 9.60
9.0	9.00 8.8 9.0	0.88	10.01 9.88
9.5	9.45 10 9.2 9.4	0.83	.41 10.28
9.8	9.90 ⊥1 9.8 10.0	0.77	.80 10.67

Se U

Copied. Series 132

Card Dec ~~13~~, 1913

MC 3946 Corr for alt + .06

115 K

	Sc1	Sc2	Curve	Magn.
1	4.1		4.12	.35 8.22
2	4.8		4.40	.33 9.20
3		5.2	4.48	.81 9.68
4		5.3	4.51	.94 9.81
5		5.5	4.56	.18 10.05
6		5.9	4.64	.67 10.54
7		6.2	4.68	11.02 10.88
8		6.5	4.75	.39 11.25
9		7.1	4.82	12.06 11.92
10		7.5	4.87	.51 12.37
11		7.8	4.88	.82 12.68
12		8.1	4.87	13.11 12.97
13		8.8	4.82	.76 13.62
14		9.2 9.25 0.1 9.3 9.1	4.72	14.11 13.97
15		9.7 9.70 9.7 9.6	4.63	.47 14.33

Sc2	Sc.3.		Curve	Magn.
7.2			0.75	8.08 7.95
8.3			0.90	.33 9.20
9.0	9.1 8.9	9.05 0.1	0.87	10.05 9.92
9.3	9.3 9.1	9.30 0.0	0.85	.28 10.15
9.5	9.4 9.2	9.45 1.0	0.84	.42 10.29
9.9	10.0 9.8	~~9.95~~ 1.0	0.75	.83 10.70

copied. Series 132

Se U

Card Dec 12, 1913

MC 3947 43 K Corr for Alt. +.23

	Se1	Se2	Se.3	Curve	Magn.	Corr.	Se2	Curve	Magn.	Corr.
1	3.7			3.93	7.63	76	6.9	0.70	7.60	73
2		5.1		4.47	9.57	70	8.3	0.90	9.20	.33
3		5.3		4.51	9.81	.94	8.5	0.90	9.40	.53
4		5.7		4.61	10.31	.44	8.9	0.89	9.79	.92
5		6.2		4.68	10.88	11.02				
6		6.4		4.72	11.12	.26				
7		6.8		4.79	11.59	73				
8		7.1		4.82	11.92	12.06				
9		7.3		4.86	12.16	.30				
10		7.5		4.87	12.37	.51				
11		8.0		4.88	12.88	13.02				
12		8.5		4.85	13.35	3.49				
13		8.9		4.80	13.70	84				
14		9.3 9.30	9.1 9.3	4.71	14.01	.15				
15		9.7 9.65	9.7 9.6	4.64	14.29	.43				

Series 132

Sc U

Dec 12, 1913

MC 3948 Cole

		P.168	mean		
5	2.9	3.1	3.00	1 1	3.39
6	3.2	3.3	3.25	0 1	3.73
8	3.9	4.1	4.00	1 1	4.10
9	4.3	4.6	4.45	1 2	4.25
10	4.3	4.7	4.50	2 2	4.39
11	4.7	5.1	4.90	2 2	4.52
12	5.0	5.4	5.20	2 2	4.53
13	5.3	5.9	5.60	3 3	4.57
14	5.6	6.2	5.90	3 3	4.62
15	5.9	6.5	6.20	3 3	4.74
16	6.1	6.9	6.50	4 4	4.76
17	6.3	7.1	6.70	4 4	4.79
18	6.8	7.5	$7.\overset{15}{20}$	4 3	$4.7\overset{7}{\cancel{2}}$
19	7.1	7.7	$\overset{4}{7}.50$	3 3	4.88
20	7.4	7.9	7.65	2 3	4.94
23	8.3	8.3	8.30	0 0	4.90
25	9.2	8.7	8.95	2 3	4.78
26	9.9	9.30	9.60	3 3	$\overset{4}{\cancel{5}}.59$
27	F	9.90	9.90	· a	4.65

	P.168			
5.7	6.1	5.90	2 2	0.49
6.7	6.5	6.35	2 1	0.63
7.1	7.5	$7.\overset{30}{\cancel{25}}$	2 2	0.80
7.7	8.0	7.85	1 2	0.85
8.0	8.1	8.05	0 1	0.84
8.4	8.5	8.45	0 1	0.97
8.7	8.9	8.80	1 1	0.93
9.1	9.50	9.30	2 2	0.87
9.7	9.95	9.80	1 1	0.72

7 7
4 4
~~18~~ 18
-.02 +.02

4 56
5 5
-.08 +.12

11 13
9 9
-.1/A^{2} +.0^{14}

3 5
4 4
-.08 +.12

12 12
5 5
-.02 +.02

18 17
5 5
-.03 +.03

copied.

11 59

3 3
4 4
+.08 -.08

30 31
18 19
-.02 +.02

Images poor - hazy - especially fainter ones.

Series 118

Se U

Dec 16, 1913

10 50

MC 3770 (Pole)

	Se1	Se2	Se.3?	MC3776	Mean		Diff.	Se2 O.C	Se.3?	MC3775	Mean		Diff.
5								5.3		5.4	5.35	1 0	1.04
6								5.9		5.9	5.90	0 0	1.08
8								6.9		7.0	6.95	1 0	1.15
9								7.3		7.5	7.40	1 1	1.30
10	4.1			4.2	4.15	1 0	4.74	7.4		7.7	7.55	2 1	1.34
11	4.4			4.7	4.55	2 0	4.87	8.0		8.1	8.05	0 1	1.37
12	4.7			5.0	4.85	1 2	4.88	8.3		8.5	8.40	1 1	1.33
13		5.1		5.2	5.15	1 0	5.02	8.9		9.05	8.98	08 07	1.19
14		5.4		5.5	5.45	0 1	5.07	9.3	9.2 9.0 9.25 1 0	9.30	9.28	03 02	1.24
15		5.7		5.8	5.75	1 0	5.19	9.7	9.7 9.5 9.70 0 0	9.45	9.58	12 13	1.36
16		6.1		6.2	6.15	1 0	5.11	10.0	10.1 9.9 10.05 0 1	10.00	10.02	03 02	1.24
17		6.2		6.5	6.35	2 1	5.14						
18		6.7		6.9	6.80	1 1	5.12						
19		7.1		7.2	7.15	1 0	5.13						
20		7.4		7.5	7.45	0 1	5.14						
23		7.9		8.0	7.95	1 0	5.25						
25		8.4		8.5	8.45	0 1	5.28						
26		8.9		8.8	8.85	1 0	5.34						
27		9.2	9.2 9.0 9.20 0 0	9.10	9.15	05 05	5.40						
28		9.5	9.5 9.3 9.50 0 0	9.45	9.48	02 03	5.49						
29		9.9	10.0 9.3 9.95 1 0	9.95	9.95	00 00	5.57						

3 1
34 4
-.08 +.02

3 3
3 3
-.10 +.10

04 06
4 4
+.01 -.02

-~~+~~.56 34
11 11
-~~+~~.05 +.03

6 4
6 6
-.10 +.07

5 3
5 5
-.10 +.06

07 02
6 6
+.01 +[illegible]

-1.03 +.72
17 17
-.06 +.04

copied.

Sc U

copied

Series 118

Dec 16, 1913

MC 3771 U Cephei

Alt. + .10

	Sc 1	Sc 2 See P. 187	P.e. Sc 2
a	2.9		5.7
b	3.1		5.6
c	3.3		6.0
d	4.1		7.1
e	3.6		6.3
f	4.1		7.2
g	4.3		7.2
h		4.7	8.1
k	4.3		7.7
l		5.7	9.1
m		5.1	8.5
n		5.3	8.8
o		5.3	8.7
p		5.4	8.7

Series 118

Dc U copied Card.

Dec 16, 1913

MC 3772 = 2K Alt. +.14

	Sc1	Sc2	Sc.3?	Curve	Magn.	Sc	Sc.3?	Curve	Magn
1	3.9			4.70	8.~~60~~ .73	7.1		1.19	8.~~29~~ .42
2	4.0			4.73	8.~~73~~ .86	7.2		1.20	8.~~40~~ .53
3	4.6			4.86	9.~~46~~ .59	8.0		1.26	9.~~26~~ .39
4	4.6			4.86	9.~~46~~ .59	8.1		1.27	9.~~37~~ .50
5	4.9			4.91	9.~~81~~ .94	Im. Dupl.			
6		5.3		4.98	10.~~28~~ .41	9.2	9.0 9.2 920 00	1.31	10.~~51~~ .64
7		6.1		5.09	11.~~19~~ .33				
8		6.3		5.11	11.~~41~~ .55				
9		6.5		5.13	11.~~63~~ .77				
10		6.7		5.15	11.~~85~~ .99				
11		6.7		5.15	11.~~85~~ .99				
12		7.2		5.18	12.~~38~~ .52				
13		7.3		5.20	12.~~50~~ .64				
14		8.1		5.29	13.~~39~~ .53				
15		7.7		5.24	~~12.94~~ 13.05				
16		9.0	8.8 9.0 900 00	5.~~2~~7 ·3	14.~~37~~ .51				
17		9.7	9.5 9.7 970 00	5.50	15.~~20~~ .34				

Series 118

Se U

Dec 16, 1913 Copied.

Card

Me 3773 = 20 K

Alt + .22

	Se1	Se2	Curve	Magn	Se2 PC	Curve	Magn
S = 1	3.9		4.70	.73 8.60	7.1	1.19	.42 8.29
2	4.7		4.89	.72 9.59	8.1	1.27	.50 9.37
3	4.8		4.90	83 9.70	8.1	1.27	.50 9.37
4		5.4	5.00	.53 10.40	9.1 ~~8.7~~	1.30	.53 10.40
5		5.3	4.98	41 10.28	8.7	1.29	10.12 ~~9.99~~
6		5.6	5.03	.76 10.63	9.3	1.31	.74 10.64
7		6.1	5.10	.34 11.20			
8		6.3	5.11	.55 11.41			
9		6.5	5.12	.76 11.62			
10		7.3	5.20	.64 12.50			
11		7.5	5.21	.85 12.71			
12		8.1	5.29	.53 13.39			
13		8.3	5.30	.74 13.60			
14		8.7	5.35	.19 14.05			
15		9.3	5.42	.86 14.72			
α					6.1	1.10	.33 7.20
β					6.3	1.12	.55 7.42
γ	3.7		4.66	.49 8.36	6.7	1.15	.98 7.85
δ	4.0		4.72	.85 8.72	7.1	1.19	.42 8.29
ε	4.8		4.90	.83 9.70	8.1	1.27	.50 9.37
ζ	4.2		7 4.27	9 9.10 8.47	7.2	1.20	.53 8.40

Series 118

Copied

Card.

Sell

Dec 16, 1913

MC 3774 = 92 K

alt +.06

	Se1	Se2	Curve	Magn.
1	4.1		4.75	8.~~85~~ .98
2	4.3		4.79	9.~~09~~ .22
3	4.3		4.79	9.~~09~~ .22
4		5.1	4.95	10.~~05~~ .18
5		5.7	5.05	10.~~75~~ 88
6		5.7	5.05	10.~~75~~ 88
7		6.2	5.11	11.~~31~~ .45
8		6.5	5.12	11.~~62~~ .76
9		6.8	5.15	~~11.95~~ 12.09
10		7.2	5.19	12.~~39~~ .53
11		7.4	5.20	12.~~60~~ .74
12		7.7	5.24	~~12.94~~ 13.08
13		8.1	5.29	13.~~39~~ .53
14		9.0	5.37	14.~~37~~ .51
15		9.5	5.46	~~14.96~~ 15.10

SC	Curve	Magn.
6.6	1.15	7.~~75~~ 88
7.0	1.18	8.~~18~~ 31
7.3	1.20	8.~~50~~ .63
8.5	1.28	9.~~78~~ .91
9.3	1.31	10.~~61~~ .74
9.5	1.32	10.~~82~~ 96

Series 118

Se U

Dec 16, 1913

9

	Me 3775 Cole			P.e.	
	Se 1	Se 2	Se 3	Se 2	Se 3
5				5.4	
6				5.9	
8				7.0	
9				7.5	
10	4.2			7.7	
11	4.7			8.1	
12		5.0		8.5	
13		5.2		9.0	9.1 8.9 9.05 0.1
14		5.5		9.3	9.3 9.1 9.30 0.0
15		5.8		9.5	9.4 9.2 9.45 1.0
16		6.2		10.0	10.0 9.8 10.00 0.0
17		6.5			
18		6.9			
19		7.2			
20		7.5			
23		8.0			
25		8.5			
26		8.8			
27		9.1	9.1 8.9 9.10 0.0		
28		9.5	9.4 9.2 9.45 1.0		
29		9.9	10.0 9.8 9.95 1.0		
30					

12 10

See page 175

Series 118

Se U Series 118 Dec 18, 1913

9 50 MC 3775 Pole

	Se1	Se2	Se3	MC3781	Mean.	Diff.	Pc Se2	Se3	MC3781		Mean.	Diff.
5							5.4		5.3	5.3	5.35 01	1.04
6							6.1		5.9	5.9	6.00 11	0.98
8							7.1		6.9	6.9	7.00 11	1.10
9							7.7		7.4	7.4	$7.\overset{5}{3}5$ 1 2	1.15
10	4.3			4.3	4.30 0 0	~~2.09~~ 4.59	7.8		7.7	7.7	7.75 01	1.14
11	4.7			4.7	4.70 0 0	~~2.28~~ 4.72	8.3		8.3	8.3	8.30 0 0	1.12
12	$5.\overset{1}{0}$	5.0 5.05 1 0		4.9	4.98 07 08	4.75	8.5		8.7	8.7	8.60 11	1.13
13		5.3		5.2	5.25 1 0	4.92	9.1	$\overset{9.1}{8.9}$ 9.10 0 0	9.10	9.10	9.10 00 00	1.07
14		5.6		5.5	5.55 01	4.97	9.3	$\overset{9.4}{9.2}$ 9.35 1 0	9.50	9.50	9.42 07 08	1.10
15		5.9		5.8	5.85 1 0	5.09	9.6	$\overset{9.5}{9.3}$ 9.55 01	n.S.	n.S	9.55 a .	1.39
16		6.3		6.1	6.20 11	5.06	9.9	$\overset{9.9}{9.7}$ 9.90 0 0			9.90 a .	1.36
17		6.5		6.3	6.40 11	5.09						
18		6.9		6.7	6.80 11	5.12						
19		7.3		$7.\overset{1}{5}$	7.20 11	5.08						
20		7.7		$\overset{7.5}{8.0}$	7.60 11	4.99						
23		8.0		$8.\overset{0}{4}$	8.00 00	5.20						
25		8.5		8.4	8.45 10	5.28						
26		8.7		8.7	8.70 00	5.49						
27		9.1	$\overset{9.0}{8.8}$ 9.05 1 0	9.20	9.12 07 08	5.43						
28		9.5	$\overset{9.5}{9.3}$ 9.50 0 0	9.45	9.48 02 03	5.49						
29		9.9	$\overset{10.0}{9.8}$ 9.96 1 0	9.85	9.90 05 05	5.62						
30		F										

3 5
4 4
+.08 -.12

17 08
5 5
-.03 +.02

13 42
9 9
+.01 -.05

27 18
6 6
+.04 -.03

5 5
5 5
+.10 -.10

10 0
6 6
+.02 .00

87 68
17 17
+.05 -.04

copied

Series 118

Copied

Card.

Sell

Dec 18, 1913

MC 3776 = B1 1 20 + 45 OC alt. + .22

		Sc 1	Sc 2	Sc 3	Curve	Magn.	Sc 2	Sc 3	Curve	Magn.
	1	2.9			.		~~6.1~~ 5.4		0.99	6.~~39~~ 49
Too far fr. C.	2						6.1		1.05	7.~~15~~ .28
On edge of film	3						6.1		1.05	7.~~15~~ .28
" " " "	4						6.3		1.06	7.~~36~~ .49
	5	3.3			.		6.3		1.06	7.~~36~~ .49
	6	3.7			.		6.7		1.09	7.~~79~~ .92
	7	4.0			.		7.3		1.11	8.~~41~~ .54
	8									
	9	4.3			4.58	~~8.88~~ 9.01	7.5		1.12	8.~~62~~ .75 ~~32~~
Im. almost super.	10	4.1 ?			4.52	8.~~62~~ .75	?		.	
	11	4.1			4.52	8.~~62~~ .75	7.5		1.12	8.~~62~~ .75
	12	4.1			4.52	8.~~62~~ .75	7.7		1.12	8.~~82~~ .95
	13	4.6			4.68	9.~~28~~ .41	7.9		1.11	9.~~01~~ .14
	14	4.7			4.71	9.~~41~~ .54	7.8		1.12	8.~~92~~ 9.05
	15		5.0		4.80	9.~~80~~ 93	8.9		1.10	10.~~00~~ .13
	16		5.3		4.89	10.~~19~~ .32	9.3		1.09	10.39 .52
	17		5.3		4.89	10.~~19~~ .32	9.1	8.9 9.1 9.10 00	1.10	10.~~20~~ .33
	18		5.3		4.89	10.~~19~~ .32	9.2	9.0 9.2 9.20 00	1.09	10.~~29~~ 42
	19		5.7		4.99	10.~~69~~ 82	9.8	9.7 9.9 9.85 01	1.06	10.91 11.05
	20		5.7		4.99	10.~~69~~ .82	9.9	9.8 10.0 9.95 10	.	.
	21		5.7		4.99	10.~~69~~ .82	9.9	9.7 9.9 9.90 00	.	.
	22		6.1		5.05	11.~~16~~ .29				
	23a		6.3		5.08	11.38 .52				
	24		6.5		5.10	11.~~60~~ .74				
	25		6.7		5.11	11.~~81~~ .95				
	26		7.0		5.12	12.~~12~~ 26				
	26a		7.1		5.12	12.~~22~~ 36				
	b		7.2		5.12	12.32 46				
	27		7.8		5.18	~~12.98~~ 13.12				
	28		7.9		5.19	13.09 ~~.31~~ 23				

	Sc 2	Sc 2	Curve	Magn.
29	8.1		5.22	13.~~32~~ 46
30	8.4		5.28	13.~~68~~ .82
31	8.7		5.35	14.~~05~~ 19
32	9.0	8.8 8.90 1!	5.40	14.~~30~~ 44
33	9.8	9.7 9.75 02	5.58	~~14~~ 15.~~33~~ 47
34	n.s.		.	.
35	n.s.		.	.
36	n.s.		.	.

Images slightly elongated

Series 118

Se U

Dec 18, 1913 Copied

Card.

+ .22

Alt + ~~[illegible]~~

MC 3777 = 21 K

	Se1	Se2	Se3	Curve	Magn.	PC Se2	Se3		Curve	Magn.
1	3.2		.			5.6			1.00	6.~~80~~ .91
2	3.1			.		6.2			1.05	7.~~25~~ .38
3	4.3			~~80~~ 4.58	~~8.88~~ 9.01	8.0			1.11	9.~~11~~ .24
4	4.7			4.70	9.~~40~~ .53	8.6			1.10	9.~~70~~ .83
5		5.1		4.83	~~9.93~~ 10.06	9.0	8.9 9.1	9.05 0.1	1.09	10.~~14~~ .27
6		5.0		4.80	9.~~80~~ .93	9.1	9.0 9.2	9.15 1.0	1.09	10.~~24~~ .37
7		5.6		4.97	10.~~57~~ .70					
8		6.1		5.05	11.~~15~~ .29					
9		6.7		5.10	11.~~80~~ .94					
10		7.2		5.12	12.~~32~~ 46					
11		7.7		5.16	~~12.86~~ 13.00					
12		8.1		5.22	13.~~32~~ .46					
13		8.7		5.35	14.~~05~~ 19					
14		8.9	.	5.40	14.~~30~~ 44					
15		9.7	9.5 9.7 9.70 00	5.55	15.~~25~~ 39					
α	3.1			.	.	5.3			.	
β	3.7			.	.	6.2			1.05	7.~~25~~ 38
γ	2.9			.	.	5.3			.	

January 12, 1915

Star	Sc 1	P.C.
6	5.7	~~8.5~~ ws. F 9.7
7	5.7	
5	5.4	

"Star 6 is certainly fainter than 5, and could not be measured 5.0 Original measure is a mistake. Reject."

W Recorder.

Series 118

Bell Dec 18, 1913 Copied. Card.

MC 3778 = 93 K alt. +.06 PC

	Se1	Se2	Se3	Curve	Magn.	Se2	Se.3?	Curve	Magn.
1	4.1			4.52	8.~~82~~ 95	7.2		1.10	8.30 43
2	4.6			4.68	9.~~28~~ .41	8.2		1.11	9.~~31~~ .44
3		5.2		4.86	10.~~06~~ .19	9.1	8.9 9.1 9.10 0.0	1.09	10.~~19~~ .32
4		5.4		4.92	10.~~32~~ .45	9.8	9.7 9.9 9.85 0.1	1.07	~~10.92~~ 11.06
5		6.1		5.05	11.~~15~~ .29				
6		6.4		5.09	11.~~49~~ 63				
7		6.8		5.11	~~11.91~~ 12.05				
8		7.2		5.12	12.~~32~~ .46				
9		7.3		5.12	12.~~42~~ .56				
10		7.7		5.16	~~12.86~~ 13.00				
11		8.0		5.20	13.~~20~~ .34				
12		8.3		5.25	13.~~55~~ .69				
13		8.3		5.25	13.~~55~~ 69				
14		9.0	8.7 8.9 8.95 0.1	5.42	14.37 .51				
15		9.5	9.2 9.4 9.45 1 0	5.51	~~14.96~~ 15.10				

Series 118

Se U

Dec 18, 1913 Copied

Card.

MC 3779 = 70 K att + 17 Sc

	Se1	Se2	Se3	Curve	Magn.
1	3.1				
2	3.3				
3	4.6			4.68	9.~~28~~ .41
4		5.3		4.88	10.~~18~~ .31
5		6.1		5.05	~~11~~.~~15~~ .29
6		6.3		5.08	11.~~38~~ .52
7		6.5		5.10	11.~~60~~ .74
8		6.5		5.10	11.~~60~~ .74
9		7.2		5.12	12.~~32~~ .46
10		7.9		5.19	13.~~09~~ .23
11		8.5		5.30	13.~~80~~ .94
12		8.9		5.40	14.~~30~~ .44
13		9.0	8.8 9.0 9.00 00	5.42	14.~~42~~ .56
14		9.3	9.0 9.2 9.25 10	5.46	14.~~71~~ .85
15		9.5	9.3 9.5 9.50 00	5.51	15.~~01~~ .15

Se2	Se3	Curve	Magn.
6.1		1.05	7.~~15~~ 28
6.3		1.06	7.~~36~~ .49
8.1		1.11	9.~~21~~ .34
9.1	8.9 9.1 9.10 00	1.11	10.~~21~~ .34

Series 1,8

Bell

Dec 18, 1913

Copied

Card.

MC 3980 = 46 K Alt. +22

	Sc 1	Sc 2	Sc 3	Curve	Magn.	Sc 2	Sc 3	Curve	Magn.
1	3.1			.		6.1		1.05	7.~~15~~ .28
2	3.8			.		6.9		1.10	8.~~00~~ .13
3	4.3			4.58	~~8.88~~ 9.01	7.9		1.11	9.~~01~~ .14
4		5.7		4.87	10.~~07~~ .20	9.3	9.1 9.3 9.30 00	1.09	10.~~39~~ .52
5		5.3		4.89	10.~~19~~ .32	9.2	9.0 9.2 9.20 00	1.09	10.~~29~~ .42
6		5.6		4.97	10.~~57~~ .70				
7		5.9		5.01	~~10.91~~ 11.05				
8		6.3		5.08	11.~~38~~ .52				
9		7.1		5.12	12.~~22~~ .36				
10		7.5		5.13	12.~~63~~ .77				
11		7.5		5.13	12.~~63~~ .77				
12		8.3		5.26	13.~~56~~ .70				
13		8.4		5.28	13.~~68~~ .82				
14		8.7		5.36	1~~3~~.~~06~~ 4 .20				
15		9.2	8.9 9.10 9.15 0.1	5.43	14.~~53~~ .67				
α	2.7			.		5.5		1.00	6.~~50~~ .60
J	3.3			.		6.2		1.05	7.~~25~~ .38
S	4.0			.		6.9		1.10	8.~~00~~ .13

Series 118

Copied.

Card.

Sc U

Dec 18, 1913

MC 3771 U Cephei

		Sc1	Sc2	Sc3 Curve	Magn.	Sc Sc2	Alt + 10 Curve	Magn.
Soo fap C	α	B				52	.	.
" " " "	β	B				50	.	.
	a	30		.		55	1.05	6.~~56~~ .66
	b	31		.		56	1.06	6.~~66~~ .77
	c	33		.		59	1.09	~~6.99~~ 7.42
	d	42		4.77	~~8.97~~ 9.10	71	1.19	8.~~29~~ .42
Soo fap C	b′	31		.	.	56	1.06	6.~~66~~ .80
" " " "	c′	33		.	.	62	1.12	7.~~32~~ .45
	d′	38		4.68	8.~~48~~ .61	65	1.13	~~6.63~~ 7.76
	e	37		4.65	8.~~35~~ .48	63	1.12	7.~~42~~ .55
	f	42		4.77	~~8.97~~ 9.10	73	1.20	8.~~50~~ .62
	g	43		4.79	9.~~09~~ .22	73	1.20	8.~~50~~ .63
	h	47		4.88	9.~~58~~ .71	81	1.27	9.~~37~~ .50
	k	43		4.79	9.~~09~~ .22	75	1.21	8.~~71~~ .84
	l		56	5.03	10.~~63~~ .76	91	1.30	10.~~40~~ .53
	m		52	4.97	10.~~17~~ .30	87	1.29	~~9.99~~ 10.12
	n		53	4.99	10.~~29~~ .42	87	1.29	~~9.99~~ 10.12
	o		53	4.99	10.~~29~~ .42	87	1.29	~~9.99~~ 10.12
	p		56	5.03	10.~~63~~ .76	89	1.30	10.~~20~~ .33
	q		59	5.07	~~10.97~~ 11.11			
	r		62	5.11	11.~~31~~ .45			
	s		63	5.11	11.~~41~~ .55			
	t		66	5.13	11.~~73~~ .87			
	m′		50	4.93 ~~5.08~~	9.93 10.06 ~~10.08~~	85	1.28	9.78
	h′		43	7 4.98	9.08 21 ~~9.28~~	75	1.22	8.72

Having comp. scale meas., ~~then~~ reduced this plate with pole plates 3770–3775 p. ~~185~~ 175

Remeasured as only part of the sequence was marked when plate was measured before. See p. 176.

Series 118

Sc 11

Dec 18, 1913

	MC 3781 Cole				Sc	
	Sc 1	Sc 2	Sc 3		Sc 2	Sc 3
5					5.3	
6					5.9	
8					6.9	
9					7.4	
10	4.3				7.7	
11	4.7				8.3	
12		4.9			8.7	
13		5.2			9.1	8.9$^{9.1}$ 9.10 0 0
14		5.5			9.5	9.3$^{9.5}$ 9.50 0 0
15		5.8			n.s	
16		6.1				
17		6.3				
18		6.7				
19		71				
20		7.5				
23		8.0				
25		8.4				
26		8.7				
27		9.2	$\overset{9.2}{9.0}$ 9.20 0 0			
28		9.5	$\overset{9.4}{9.2}$ 9.45 1 0			
29	~~9.6~~	9.8	$\overset{9.9}{9.7}$ 9.85 0 1			
30		f				

See page 181

12 10

Series 137

Sc U

Dec 20, 1913

11 50

MC 3985 Pole

	Se 1	Se 2	Se 3	M^c_{3990}	Mean	Diff.	Se 2	Se 3	M^c_{3990}	Mean	Diff.
5							6.2		6.3	6.25 0 1	0.14
6							6.7		6.9	6.80 1 1	0.18
8							7.8		7.9	7.85 0 1	0.25
9							8.3		8.5	8.40 1 1	0.30
10	5.0			4.8	4.90 1 1	3.99	8.6		8.7	8.65 0 1	0.24
							9.10 0 0	9.1			
11	~~5.4~~	5.4		5.1	5.25 2 1	4.17	9.1	8.9	dif.	9.10 a ·	0.32
							9.45 1 0	9.4			
12		5.9		5.4	5.65 3 2	4.08	9.5	9.2	9.5	9.48 03 02	0.25
							9.95 1 0	10.0			
13		6.1		5.7	5.90 2 2	4.27	9.9	9.8	9.9	9.92 03 02	0.25
14	~~6.3~~	6.3		6.1	6.20 1 1	4.32					
15		6.7		6.4	6.55 1 2	4.39					
16		7.1		6.9	7.00 1 1	4.26					
17		7.3		7.2	7.25 1 0	4.24					
18		7.7		7.7	7.70 0 0	4.22					
19	~~8.0~~	8.0		8.0	8.00 0 0	4.28					
20		8.3		8.3	8.30 0 0	4.29					
23		8.7		9.0	8.85 1 2	4.35					
		9.15 1 0	9.2								
25		9.1	9.0	9.5	9.38 2 17 ~~33~~ 18	4.41					
		9.50 0 0	9.5								
26		9.5	9.3	9.9	9.70 20 20	4.49					
		9.90 0 0	9.9								
27		9.9	9.7	·	9.90 a ·	4.65					

2 4
4 4
-.05 +.10

0 10
9 3
.00 +.03

2 5
7 7
-.03 +.07

9 7
5 5
+.18 -.14

3 3
4 4
+.08 -.08

copied.

47 58
5 5
-.09 +.12

-35 .42
14 14
+.02 -.03

Series 137 Copied

Bell

Dec 20, 1913

Card

MC 3986 = 88 K

	Sc 1	Sc 2	Sc 3		
1	3.3			Curve	Magn.
2	4.1		5.5	3.90	8.~~00~~ 13
3	4.3			3.93	8.~~23~~ .36
4	4.8			4.02	8.~~82~~ .95
5		5.3		4.10	9.~~40~~ .53
6		5.7		4.17	~~9.87~~ 10.00
7		6.2		4.25	10.~~46~~ .58
8		7.0		4.26	11.~~26~~ .40
9		7.3		4.25	11.~~55~~ .69
10		7.9		4.25	12.~~16~~ .29
11		8.1		4.28	12.~~38~~ .52
12		8.3		4.29	12.~~59~~ .73
13		9.05 0 9.0	9.1 8.9	4.38	13.~~43~~ .57
14		9.30 0 0 9.3	9.3 9.1	4.42	13.~~72~~ .86
15		9.70 0 0 9.7	9.7 9.5	4.52	14.~~22~~ .36

Bx alt +.16

	Curve	Magn.
6.1	0.12	6.~~22~~ 31
7.7	0.26	~~7.96~~ 8.09
Im. sup.	.	.
8.3	0.28	8.~~58~~ .71

Series 137 copied

Sc U

Dec 20, 1913

Card.

MC 3987 112 K

	Sc 1	Sc 2	Curve	Magn.
1	4.3		3.93	8.23 .36
2		~~4.9~~ 5.2	4.08	9.28 .41
3		5.6	~~5~~4.15	~~10~~9.75 .88
4		6.1	~~5~~4.23	10.33 .46
5		6.6	~~5~~4.28	~~10.88~~ 11.01
6		6.9	~~5~~4.27	~~12.17~~ 11.31
7		7.1	~~5~~4.26	~~12.36~~ 11.50
8		7.5	~~5~~4.25	~~12.75~~ 11.89
9		7.8	~~5~~4.25	~~12.06~~ .19
10		8.1	~~5~~4.28	~~12.38~~ .52
11		8.3	~~5~~4.28	~~12.58~~ .72
12		8.5	~~5~~4.30	~~12.80~~ .94
13		8.7 9.05 0	~~5~~4.31	~~14.01~~ 13.15
14		9.0 8.9 9.14 9.45 1.0	~~5~~4.38	~~14.43~~ 13.57
15		9.5 9.2 9.4	~~5~~4.48	~~14.93~~ 14.07

PC Alt. +.06

Sc 2	Curve	Magn.
7.9	0.27	~~8.17~~ .30
8.7	0.29	~~8.99~~ 9.12
9.7	0.24	~~9.94~~ 10.07

Series 137 copied

Dell

Dec 20, 1913

Card.

Mc 3988 = 40K Soo 8 rov ~~alt +.22~~

Mc 3989 = 7K

	Sc 1	Sc 2	Sc 3	Curve	Magn.
1	4.7			4.00	8.~~70~~ 83
2	4.9			4.03	~~8.93~~ 9.06
3		5.3		4.10	9.~~40~~ .53
4		5.6		4.15	9.~~75~~ 88
5		5.7		4.16	9.~~86~~ .99
6		6.0		4.22	10.~~22~~ .35
7		6.1		4.23	10.~~33~~ .46
8		6.5		4.28	10.~~78~~ .91
9		7.0		4.26	11.~~26~~ .40
10		7.2		4.25	11.~~45~~ 59
11		7.0		4.26	11.~~26~~ .40
12		7.5		4.24	11.~~74~~ .88
13		8.0		4.26	12.~~26~~ .40
14		8.3		4.28	12.~~58~~ .72
15		8.7		4.32	13.~~02~~ 16
16		9.05 0 9.0	9.1 8.9	4.38	13.~~43~~ .57
17		9.500 9.5	0 9.5 9.3	4.48	~~13.98~~ 14.62

Pc alt +.14

Sc 2	Sc 3	Curve	Magn.
8.2		0.28	8.~~48~~ 61
8.5		0.28	8.~~78~~ 91
9.5000 9.5	9.5 9.3	0.26	9.~~76~~ 89
9.50 0 9.5	0 9.5 9.3	0.26	9.~~76~~ .89
9.900 9.9	0 9.9 9.7	0.23	10.~~13~~ .26

Series 137

Sc U

Dec 20, 1913

MC 3990 Pole

	Sc 1	Sc 2	Sc 3		PC
5					6.3
6					6.9
8					7.9
9~~8~~					8.5
10~~9~~	4.8				8.7
~~10~~					
11	5.1				Ref.
12		5.4			9.5
13		5.7			9.9
14		6.1			
15		6.4			
16		6.9			
17		7.2			
18		7.7			
19		8.0			
20		8.3			
23		9.0			
25	~~9.5~~	9.5.			
26	~~9.9~~	9.9			
27	N.S				

See page 189

Series 137

Sell

Dec 22 1913

9 45

	Mc 3990 Bole Sc1	Sc2	Sc3	Mc3996	Mean			Diff	8c Sc2		Mc3996	Mean			Diff
5									6.2		6.2	6.20	0	0	0.19
6									6.8		6.7	6.75	0	1	0.23
8									7.9		7.8	7.85	1	0	0.25
9									8.5		8.5	8.50	0	0	0.20
10	4.6			4.9	4.85	0	1	4.04	8.7		8.7	8.70	0	0	0.19
11	5.2			5.2	5.20	0	0	4.22	St. sufr.		9.10	9.10	.	a	0.32
12		5.5		5.5	5.50	0	0	4.23	9.7	9.70 0 0 9.7 9.5 10.00 0 0 10.0	9.50	9.60	10	10	0.13
13		5.8		5.9	5.85	0	1	4.32	10.0	9.8	9.90	9.95	05	05	0.27
14		6.1		6.2	6.15	1	0	4.37							
15		6.5		6.5	6.50	0	0	4.44							
16		6.9		7.0	6.95	1	0	4.31							
17		7.1		7.1	7.10	0	0	4.39							
18		7.7		7.5	7.60	1	1	4.32							
19		8.0		7.9	7.95	0	1	4.33							
20		8.4		8.2	8.30	1	1	4.29							
23		8.9		8.6	8.75	1	2	4.45							
25		9.45 1 0 9.5 9.95 1 0	9.4 9.2 10.0	9.20	9.32	13	12	4.41							
26		9.9	9.8	9.45	9.70	25	25	4.49							
27		f		9.90	9.90	a	.	4.65							

1 1
4 4
+.02 -.02

15 15
3 3
+.05 -.05

25 25
7 7
+.04 -.04

1 2
5 5
-.02 +.04

0 1
4 4
.00 -.02

58 77
5 5
+.12 -.15

48 67
14 14
+.03 -.05

copied.

Series 137

Sc U

Dec 22, 1913

Copied

Mc 3991 = 9 Ks

	Se 1	Se 2	Se 3 ~~Mc 3996~~ Curve	Magn.
1	3.3			
2		4.9	4.10	.13 9.80
3		5.3	4.21	.64 9.51
4		5.8	4.32	.25 10.~~12~~
5		6.1	4.38	.61 10.~~48~~
6		6.3	4.40	.83 10.~~70~~
7		6.5	4.40	11.04 ~~10.90~~
8		6.8	4.39	.33 11.~~19~~
9		7.2	4.36	.70 11.~~56~~
10		7.5	4.34	.98 11.~~84~~
11		8.1	4.32	.56 12.~~42~~
12		8.5	4.35	.99 12.~~85~~
13		8.9	4.40	.44 13.~~30~~
14	9.25 9.3	10 9.2 9.0	4.43	.82 13.~~68~~
15	9.70 9.7	00 9.7 9.5	4.49	.33 14.~~19~~

PC Alt +.221

Se 2		Curve	Magn.
6.3		0.26	67 ~~.26~~ 6.56
8.7		0.20	9.03 ~~8.90~~
9.95 9.9	1.00 9.8	0.24	32 10.19

Images not circular. —

Series 137

Copied.

Sc U

Dec 22, 1913

Card.

MC 3992 = 10 K D

	Se1	Se2	Se3 Curve	Magn.
1	4.3		·	
2	4.7		·	
3	4.9		4.10	~~9.00~~ .13
4		5.3	4.22	~~9.52~~ .65
5		6.2	4.39	~~10.59~~ .72
6		6.5	4.40	~~10.90~~ 11.04
7		7.0	4.38	~~11.38~~ .52
8		7.1	4.37	~~11.47~~ .61
9		7.3	4.35	~~11.65~~ .79
10		7.5	4.34	~~11.84~~ .98
11		7.9	4.32	~~12.22~~ 36
12		8.3	4.35	~~12.65~~ 79
13		8.8	4.38	~~13.18~~ .32
14	9.3	9.30000 9.3 9.1	4.44	~~13.74~~ .88
15	9.7	9.70000 9.7 9.5	4.50	~~14.20~~ .34

8c Alt. + .2/2

		Curve	Magn.
7.7		0.21	~~7.91~~ 8.04
7.5		0.21	~~7.71~~ .84
8.3		0.20	~~8.50~~ .63
9.1	9.10000 9.1 8.9	0.20	~~9.30~~ .43

Series 137

Sell Dec 22, 1913 Copied Card

MC 3993 - 12 Kp

	Se1	Se2	Se3	Curve	Magn.
1	4.7			4.03	8.~~73~~ 86
2		5.1		4.17	9.~~27~~ .40
3		5.5		4.26	9.~~81~~ 94
4		6.3		4.40	10.70 .83
5		6.5		4.40	~~10.90~~ 11.24
6		7.1		4.37	11.~~47~~ .61
7		7.3		4.35	11.~~65~~ .79
8		8.0		4.32	12.~~32~~ .46
9		8.2		4.33	12.~~53~~ .67
10		8.4		4.35	12.~~76~~ .89
11		8.9		4.39	13.~~29~~ .43
12		9.05 9.1	1.0 9.0 8.8	4.40	13.~~45~~ .59
13		9.70 9.7	0.0 9.7 9.5	4.50	14.~~20~~ .34
14		9.70 9.7	0.0 9.7 9.5	4.50	14.~~20~~ .34
15		9.95 9.9	1.0 10.0 9.8	4.55	14.~~50~~ .64

PC Alt. +.21

Se2		Curve	Magn.
8.3		0.20	8.~~50~~ 63
9.05 9.0	0.1 9.1 8.9	0.20	9.~~25~~ .38
9.75 9.8	0.2 9.7 9.5	0.22	~~9.97~~ 10.10

Series 137

Sc U

Dec 22, 1913 Copied

Card

MC 399 ✝ - 19 K

Pc alt. +20

	Sc 1	Sc 2	Sc 3 Curve	Magn.	Sc 2	Curve	Magn.
1	4.6		4.00	8.~~60~~ 73	8.3	0.20	8.~~50~~ 63
2		5.3	4.21	9.~~51~~ .64	9.1	0.20	9.~~30~~ .43
3		5.5	4.26	9.~~76~~ 89	9.4	0.21	9.~~61~~ 74
4		6.1	4.37	10.~~47~~ .60			
5		6.3	4.40	10.~~70~~ 83			
6		6.5	4.40	~~10.90~~ 11.04			
7		7.0	4.38	11.~~38~~ .52			
8		7.2	4.36	11.~~56~~ .70			
9		7.5	4.34	11.~~84~~ .98			
10		7.9	4.32	12.~~22~~ .36			
11		8.2	4.33	12.~~53~~ .67			
12		8.8	4.38	13.~~18~~ .32			
13		9.0	4.40	13.~~40~~ .64			
14		9.5	4.46	~~13.96~~ 14.10			
15		9.9	4.54	14.~~44~~ .58			

Series 137

Bell

Dec 22, 1913

Copied.

Card

MC 3995 = Neujmin Comet

alt. +.12

	Se 1	Se 2	Se 3 Curve	Magn.	Se 2	Curve	Magn.
1	4.7				7.9	0.20	8.~~10~~ 23
2		5.7	4.30	10.~~00~~ .13			
3		6.7	4.39	11.~~09~~ .23			
4		7.0	4.38	11.~~38~~ .52			
5		7.3	4.35	11.~~65~~ .79			
6		7.5	4.34	11.~~84~~ .98			
7		7.9	4.32	12.~~22~~ .36			
8		8.1	4.32	12.~~42~~ .56			
9		8.6	4.36	~~12.96~~ 13.10			
10		8.8	4.38	13.~~18~~ .32			
11		8.9	4.39	13.~~29~~ .43			
12	9.10 9.1	9.1 8.9	4.41	13.~~51~~ .65			
13	9.20 9.2	9.2 9.0	4.42	13.~~62~~ .76			
14	9.45 9.5	9.4 9.2	4.46	~~13.91~~ 14.05			
15	9.70 9.7	9.7 9.5	4.50	14.~~20~~ .34			

Images poor.

Series 137

Se ll

Dec 22, 1913

	MC 3996 Pole			PC
	Se 1	Se 2	Se 3	Se 2
5				6.2
6				6.7
8				7.8
9				8.5
10	4.9			8.7
11		5.2		9.10 00 9.1 9.1 8.9
12		5.5		9.50 00 9.5 9.5 9.3
13		5.9		9.90 00 9.9 9.9 9.7
14		6.2		
15		6.5		
16		7.0		
17		7.1		
18		7.5		
19		7.9		
20		8.2		
23		8.6		
25		9.20 00 9.2 9.2 9.0		
26		9.45 10 9.4 9.5 9.2		
27		9.90 00 9.9 9.9 9.7		

11 20 See page ~~195~~ 194

Series 144

Sc II 4060 - 4071 (Very poor plates - all)

Dec 23, 1913

10 20 MC 4060 Pole PC

	Sc1	Sc2	Sc3 MC4065	Mean			Diff	PC Sc2		MC4065	Mean			Diff
5								5.9		5.2	6.55	3	4	0.84
6								6.5		5.7	6.10	4	4	0.88
8								7.3		7.4	7.35	1	0	0.75
9								7.8		8.0	7.90	1	1	0.80
10	~~4.6~~	4.3	4.0	4.15	1	2	4.74	8.0		8.3	8.15	2	1	0.74
11		4.7	4.3	4.50	2	2	4.92	8.3		8.7	8.50	2	2	0.92
12		5.1	4.6	4.85	~~25~~ 3	2	4.88	8.7		905	8.88	18	17	0.85
								9.10 0 0	9.1					
13		5.5	4.8	5.15	3	4	5.02	9.1	8.9	9.50	9.30	20	20	0.87
								9.50 0 0	9.5					
14		5.7	5.3	5.50	2	2	5.02	9.5	9.3	9.90	9.70	20	20	0.82
								9.90 0 0	9.9					
15		6.0	5.7	5.85	2	1	5.09	9.9	9.7	.	9.90	α	.	1.04
16		6.2	6.0	6.10	1	1	5.16							
17		6.5	6.3	6.40	1	1	5.09							
18		6.9	6.9	6.90	0	0	5.02							
19	~~7.2~~	7.2	7.3	7.25	0	1	5.03							
20		7.5	7.5	7.50	0	0	5.09							
23		8.0	8.1	8.05	0	1	5.15							
25		8.5	8.9	8.70	2	2	5.03							
26		8.9	9.20	9.05	15	25	5 1 2 4.94							
		9.30 0 0 9.3												
27		9.3 9.1	9.70	9.50	20	20	5.05							
		9.85 0 1 9.9												
28		9.8 9.7	.	9.85	α	.	5.12							
29		f												

5 7
4 4
+.12 -.18

98 87
5 5
-.20 +.17

48 17
9 9
-.05 +.02

11 12
5 5
+.22 -.24

11 40

4 2
5 5
+.08 -.04

55 65
5 5
-.11 +.13

Pole not in center. Images poor

95 75
15 15
+.06 -.05

Series 144

Sc U　　Dec 23, 1913　　Copied.

		MC 4061 = a3					BC alt +.11						
		Sc1	Sc2	Sc3	Curve	Magn.	Sc2	Curve	Magn.		Sc2	Curve	Magn.
Too far fr C	1						6.3	$0.\overset{8}{\cancel{7}}2$	7.12	29	8.1	5.10	13.20
" " " "	2						6.3	$0.\overset{8}{\cancel{7}}2$	7.12	30	8.3	5.10	13.40
" " " "	3						6.7	$0.\overset{8}{\cancel{7}}1$	7.51	31	8.7	5.09	13.79
	4	4.1			4.81	8.91	6.5	$0.\overset{8}{\cancel{7}}2$	7.32	32	9.10 oo 9.1 9.1 8.9	5.08	14.18
Im. near edge	5						6.9	$0.\overset{8}{\cancel{7}}0$	7.70	33	8.9	5.09	13.99
	6						7.3	$0.\overset{8}{\cancel{7}}0$	8.10	34	9.30 oo 9.3 9.3 9.1	$\overline{5.07}$	14.37
	7	4.1			4.81	8.91	7.5	$0.\overset{8}{\cancel{7}}0$	8.30	35	9.70 oo 9.7 9.7 9.5	5.07	$\underline{14.77}$
	8	4.2			4.83	9.03	7.8	$0.\overset{8}{\cancel{7}}0$	8.60	36			
	9	4.3			4.85	9.15	7.9	$0.\overset{80}{\cancel{79}}$	8.70	37			
	10	4.6			4.89	$9.4\overset{9}{\cancel{6}}$	8.1	$0.\overset{80}{\cancel{79}}$	8.90	38			
	11	4.6			4.89	$9.4\overset{9}{\cancel{6}}$	8.0	$0.\overset{8}{\cancel{7}}0$	8.80	39			
	12	4.6			4.89	$9.4\overset{9}{\cancel{6}}$	8.2	$0.\overset{8}{\cancel{7}}0$	9.00	40			
	13	4.6			4.89	$9.4\overset{9}{\cancel{6}}$	8.2	0.80	9.00				
	14		4.6		4.89	$9.4\overset{9}{\cancel{6}}$	8.5	0.81	9.31				
	15		5.3		5.00	$\overset{10}{\cancel{9}}.30$	9.00 oo 9.0 9.0 8.8	0.84	9.84				
	16		5.3		5.00	10.30	9.25 o 9.3 9.2 9.1	0.86	10.11				
	17		5.3		5.00	10.30	9.10 oo 9.1 9.1 8.9	0.85	9.95				
	18		5.3		5.00	10.30	Im. sup.						
	19		5.8		5.05	10.85	9.95 1o 10.0 9.9 9.8	0.95	$\underline{10.90}$				
	20		5.9		5.05	10.95							
	21		6.1		5.06	11.16							
	22		6.2		5.06	11.26							
	23		6.5		5.08	11.58							
	24		6.9		5.09	11.99							
	25		6.9		5.09	11.99							
	26		7.2		5.10	12.30							
	27		7.7		5.10	12.80							
	28		7.7		5.10	12.80							

Series 144

Copied

Scll

Dec. 23, 1913

agn.
.20
.40
.79
.18
99
.37
.77

	MC 4062 b 17 Se1	Se2	Se3 Curve	Magn.	SC Se2	alt. +.10 Curve	Magn.
1	3.1				6.2	0.83	7.02
2	3.2				6.2	0.83	7.02
3	3.9		4.79	8.69	6.8	0.81	7.61
4	4.0		4.80	8.80	6.7	0.81	7.51
5	4.1		4.81	8.91	7.1	0.80	7.90
6	4.1		4.81	8.91	7.2	0.80	8.00
7	4.2		4.83	9.03	7.5	0.80	8.30
8	4.3		4.85	9.15	8.3	0.81	9.11
9	4.6		4.89	9.49	8.3	0.81	9.11
10	4.7		4.90	9.60	8.3	0.81	9.11
11	4.9		4.94	9.84	8.8	0.83	9.63
12	4.9		4.94	9.84	8.9	0.84	9.74
13	4.6		4.89	9.49	8.7	0.82	9.52
14	4.4 ^		4.86	9.26	8.8	0.83	9.63
15	4.9		4.94	9.84	9.1 9.10 00 9.1 89	0.85	9.95
16		5.3	5.00	10 ~~9~~.30			
17		5.3	5.00	10 ~~9~~.30			
18		5.7	5.03	10 ~~9~~.73			
19		5.7	5.03	10 ~~9~~.73			
20		5.9	5.05	10 ~~9~~.95			
21		6.2	5.06	11.26			
22		6.7	5.08	11.78			
23		6.7	5.08	11.78			
24		7.2	5.09	12.29			
25		7.2	5.09	12.29			
26		7.9	5.10	13.00			
27		8.0	5.10	13.10			
28		8.3	5.10	13.40			

			Curve	Magn.
29	8.3		5.10	13.46
30	8.9		5.09	13.99
31	9.2	9.20 0 0 9.2 90	5.08	14.28
32	9.3	9.30 00 9.3 9.1 10.0 !! 10.1	5.07	14.37
33	9.9	9.9	5.06	15.06
34	n.s.			

Images poor. bright ones dense. ft ones hazy.

Series 144

Sell

Dec 23, 1913

copied

139 K.

Mc 4062 Too poor

Mc 4064 23 10 — 14.7

	Se1	Se2	Se3 Curve	magn.
1	4.0		4.80	8.80
2	4.3		4.85	9.15
3	4.7		4.90	9.60
4		5.1	4.97	10 ~~9~~.07
5		5.3	5.00	10.30
6		6.1	5.06	11.16
7		6.0	5.06	11.06
8		6.1	5.06	11.16
9		6.3	5.07	11.37
10		7.1	5.09	12.19
11		7.6	5.10	12.70
12		7.9	5.10	13.00
13		8.3	5.10	13.40
14		8.8	5.09	13.89
15		9.30°° 9.3 9.3 9.1	5.08	14.38

Pc alt. −.18

Se2	Curve	Magn.
6.7	0.81	7.51
7.7	0.80	8.50
8.5	0.81	9.31
9.30°° 9.3 9.3 9.1	0.87	10.17
9.85° 9.90 9.8 9.7	0.93	10.78

Images poor. not in center of plate

Series 144

Sell

Dec 23, 1913

	MC 4065 Pole Se1	Se2	Se3	BC Se2
5				5.2
6				5.7
8				7.4
9				8.0
10	4.0			8.3
11	4.3			8.7
				9.05 0' 9.1
12	4.6			9.0 8.9
				9.50 00 9.5
13		48		9.5 9.3
				9.90 00 9.9
14		5.3		9.9 9.7
15		5.7		
16		6.0		
17		6.3		
18		6.9		
19		7.3		
20		7.5		
23		8.1		
25		8.9		
		9.20 00 9.2		
26		9.2 9.0		
		9.70 00 9.7		
27		9.7 9.5		

See page 201

Images poor

Series 144

SeKU

Dec. 27, 1913

10 15

	MC 4065 Ofe Se 1	Se 2	Se 3 MC 4071	Mean			Diff	Oc Se 2		MC 4071	Mean			Diff
5								5.2		5.3	5.25	0	1	1.14
6								5.8		6.1	5.95	2	1	1.03
8								7.7		7.1	7.40	3	3	0.70
9								8.2		7.7	7.95	2	3	0.75
10	4.1		4.2	4.15	1	0	4.74	8.5		8.0	8.25	3	2	0.64
11	4.3		4.7	4.50	2	2	4.92	8.9		8.5	8.70	2	2	0.72
12	4.6		5.0	4.80	2	2	4.93	9.2	9.20 0 0 9.2 9.0	8.9	9.05	15	15	0.68
13	4.9		5.5	~~5~~5.20	3	3	4.97	9.7	9.70 0 0 9.7 9.5	9.20	9.45	25	25	0.72
14		5.2	5.9	5.55	4	3	4.97	10.0	10.05 0 1 10.1 9.9	9.45	9.75	30	30	0.77
15		5.5	6.2	5.85	3	4	5.09			9.95	9.95	.	a	0.99
16		5.9	6.5	6.20	3	3	5.06							
17		6.3	6.7	6.50	2	2	4.99							
18		6.9	7.1	7.00	1	1	4.92							
19		7.2	7.5	7.35	2	1	4.93							
20		7.6	7.8	7.70	1	1	4.89							
23		8.3	8.2	8.25	1	0	4.95							
25		8.7 9.30 0 0 9.3	8.7	8.70	0	0	5.03							
26		9.3 9.1	9.10	9.20	10	10	4.99							
27		9.7	9.50	9.60 ~~9.50~~	10	10	4.95							
			9.90	9.90	.	a	5.07							

3 4
4 4
+.08 -.10

120 110
5 5
+.24 -.22

150 150
9 9
+.17 -.17

12 10
5 5
-.024 +.020

11 11
5 5
-.022 +.022

20 10
5 5
+.04 -.02

-210 200
15 15
-.14 +.13

Series 144

Se ll Dec 27, 1913 Copied

MC 4066 = 9.1 K

	Se 1	Se 2	Curve	Magn.
1	4.0			
2	4.3		4.86	9.16
3	4.7		4.91	9.61
4		5.4	4.98	10.38
5		5.7	5.00	10.70
6		6.1	5.00 ~~4.99~~	11.10
7		6.6	5.00 ~~4.99~~	11.60
8		7.6	4.99	12.59
9		8.1	4.99	13.09
10		8.3	4.99	13.29
11		8.7	5.00	13.70
12	9.10 9.1	9.1 8.9	5.00	14.10
13	9.30 9.3	9.3 9.1	5.00	14.30
14	9.45 9.4	9.5 9.3	5.00	14.45
15	9.95 9.9	10.0 9.8	5.00	14.95

alt +.16

	Curve	Magn.
9.1	0.81	7.91
8.3	0.69	8.99
8.7	0.69	9.39
9.3	0.71	10.01
9.7	0.77	10.47

Series 144

Sell

Dec 27, 1913

Copied.

MC 4067 = 9h K TT Pegasi. +26 4746 alt. +.21

			Curve	Magn.		Curve	Magn.
a	3.2				6.1	1.00	$\overset{7}{2}$.10
b	4.0				7.2	0.79	7.99
c	4.7		4.91	9.61	8.5	0.69	9.19
d	5.3		4.98	10.28			
e	5.7		5.00	1$\overset{0}{2}$.70			
f	5.9		5.00	10.90			
g	6.2		5.00	11.20			
h	6.7		5.00	11.70			
k	6.9		5.00	11.90			
l	7.1		4.99	12.09			
m	7.7		4.99	12.69			
n	8.1		4.99	13.09			
o	8.5		4.99	13.$\overset{4}{8}$9			
p	8.8		4.99	13.79			
	9.30 ° °	9.3					
q	9.3	9.1	5.00	14.30			
	9.35 ≥	9.5					
r	9.2	9.3	5.00	14.35			
	9.70 ° °	9.7					
s	9.7	9.5	5.00	14.70			

Series 144 Copied

Sell Dec 27, 1913

	~~MC~~ 4068 = 68			K	Pc	alt + .17	
	Se1	Se2	Se3 Curve	Magn.	Se2	Curve	Magn.
1	3.1				6.2	0.97	7.17
2	4.0				7.2	0.79	7.99
3	4.2		4.85	9.05	7.5	0.75	8.25
4					7.9	0.71	8.61
5	4.9		4.92	9.82	8.9	·7 0.~~8~~0	·6 9.~~7~~0
6		5.7	5.00	10.70			
7		6.2	5.00	11.20			
8		6.8	5.00	11.80			
9		7.2	4.99	12.19			
10		7.7	4.99	12.69			
11		8.5	4.99	13.49			
12	9.1000 9.1	9.1 8.9	5.00	14.10			
13	9.3000 9.3	9.3 9.1	5.00	14.30			
14	9.7000 9.7	9.7 9.5	5.00	14.70			
15	9.950 9.9	10.0 9.8	5.00	14.95			

Series 144

Sell Dec 27, 1913 Copied

MC 4069 Too poor

MC 4070 = 44 K

			Curve	Magn.
1	4.3		4.86	9.16
2	4.4		4.87	9.27
3	4.8		4.92	9.72
4		5.1	4.95	10.05
5		5.3	4.97	10.27
6		5.8	5.00	10.80
7		6.0	5.00	11.00
8		5.3	4.97	10.28
9		5.9	5.00	10.90
10		6.1	5.00	11.10
11		6.3	5.00	11.30
12		6.7	5.00	11.70
13		6.9	5.00	11.90
14		7.7	4.99	12.69
15		8.7	5.00	13.70
		9.05 0 1 9.1		
16		9.0 9.9	5.00	14.05
		9.50 0 0 9.5		
17		9.5 9.3	5.00	14.50

8C

alt + 2.21

	Curve	Magn.
7.2	0.80	8.00
7.7	0.73	8.43
8.3	0.69	8.99
8.9	0.70	9.60
Im. sup.		
9.35 1 0 9.4		
9.3 9.2	0.71	10.06
9.30 0 0 9.3		
9.3 9.1	0.70	10.00
9.50 0 0 9.5		
9.5 9.3	0.73	10.23

Jan. 30, 1915.

MD 4070 examined for order of 7, 8, and 9. On MD plate 8 is fainter than 7, and brighter than 9. It cannot be assumed that there is a mistake of a unit in measure of 8 on MC 4070.

Series 144

Sell

Dec 27, 1913

MC 4071 Ople

5			5.3
6			6.1
8			7.1
9			7.7
10 4.7			8.0 ~~6.7~~
11 4.7			8.5
12	5.0		8.9
13	5.5		9.20 00 9.2 9.2 9.0
14 ~~4~~	5.9		9.45 1 0 9.4 9.5 9.2
15	6.2		9.95 1 0 10.0 9.9 9.8
16	6.5		
17	6.7		
18	7.1		
19	7.5		
20	7.8		
23	8.2		
25	8.7		
26	9.10 00 9.1 9.1 8.9		
27	9.50 00 9.5 9.5 9.3		
28	9.90 00 9.9 9.9 9.7		
29	4.		

See page 206

te

11 25

All reductions of series to here made using Ptg. Magns. of HC 170 ("old" magns.)

Sc B 1st Eff. January 7, 1914

2	50		2391 ~~2418~~ (Sick)	7^h + 15 ~~(Sup 116)~~	
				Sc1	Sc2
On edge of film			6		
" " " "			8		
			9	3.1	
			12	3.3	
		R	13	3.3	
		R	14	3.1	
		R	15	3.3	
			16	4.1	
		R	17	4.1	
		R	18	4.3	
		R	19	4.8	
		R	20		5.2
		..	21		5.3
		R	22		5.3
		R	23		5.2
		R	24		5.5
		R	25		6.1
			26		6.3
			27		6.7
			28		7.0
			29		7.4
		R	30		7.9
			31		8.2
			32		8.7
3	07		33		9.2

Sc R Oct. 6, 1914

3 30 MW 388 B Sc7 13 + 15

		1st Exp. Sc1	Sc2	1st Exp.	2d Exp.	5th Exp.	Mean	Diff.
R	17	6.1 6.4		6.4	6.2	6.2	6.27 1 1̲ 1̲	5.37
Dbl. R	20			dbl.	dbl.	dbl.	dbl.	dbl.
R	21	8.7 9.0	8.95 0 1̲ 8.9	8.95	9.00	8.95	8.97 0̲2̲ 03 0̲2̲	3.90
R	27		12.30 1 1̲ 12.4 12.2	12.30	12.40	12.70	12.47 1̲7̲ 0̲7̲ 23	2.22
	28		12.2	12.2	12.30	12.30	12.27 0̲7̲ 03 03	2.79
.. ~~R~~ 6.7 7.0	18	6.9 7.0	7.00 0 0	7.00	6.9	7.0	6.97 0 ⊥ 0	4.77
	29		12.95 0 1̲ 13.0 12.9	12.95	12.95	13.20	13.03 0̲8̲ 0̲8̲ 17	2.34
.. ~~R~~	30		13.30 ⊥ 1 13.2 13.4	13.30	13.25	13.60	13.38 0̲8̲ 1̲3̲ 22	2.51
	31		13.75 0 ⊥ 13.8 13.7	13.75	13.90	f	13.82 0̲7̲ 08 f	2.40
	32		13.95 ⊥ 0 13.9 14.0	13.95	.	.	13.95 a̲ . .	.
R	26		11.70 0 0 11.7 11.7	11.70	11.70	11.85	11.75 0̲5̲ 0̲5̲ 10	2.56
R	15	4.8 5.1		5.1	5.2	5.3	5.20 ⊥ 0 1	5.84
R	23		9.7	9.7	9.8	q	9.75 ⊥ 0 q	3.70
Image R near.	24		11.05 0 1 11.0 11.1	11.05	10.9	q	10.98 07 0̲8̲ q	2.90
... ~~R~~	25		10.95 ⊥ 0 10.9 11.0	10.95	11.05	11.25	11.08 1̲3̲ 0̲3̲ 17	3.01
... ~~R~~	19	7.0 7.3		7.3	7.2	7.4	7.30 0 ⊥ 1	4.73
..... ~~R~~	22	8.9 9.2	9.15 0 1̲ 9.1	9.15	9.10	9.15	9.13 02 0̲3̲ 02	4.13
Too poor	16			q	q		q	q
Too poor	14			q	q		q	q

De R ✓ 2nd Exp Full light Oct 6, 1914

388 O 67 - 13 + 15

		Sc 1	Sc 2		Corr.	Diff.
Near edge t.p. R	14			.	.	
R	15	1.0		1.3	.	
Near edge t.p. R	16			.	.	
R	17	1.2		1.5	.	
	18	3.0		3.3	.	
	19	3.1		3.4	.	
Dbl. R	20	~~3.6~~		.	.	
R 3.2 3.5	21	3.6 89		3.70 7 22	.	
	22	4.0		4.3	.	
R	23	3.8		4.1	.	
R	24	4.1		4.4	.	
	25	5.0		5.3	.	
R	26	5.2		5.5	.	
R	27	5.9		6.2		
6.3 6.6	28	6.7 7.0		~~7.0~~ 6.80 00	~~7.03~~ 6.83	8.83 2
	29	7.3		7.6	7.63	7.74
	30	7.8		8.1	8.12	7.77
	31	8.2 8.5	8.6	8.55 10	8.57	7.65
	32	8.7 9.0	9.0	9.00 00	9.02	.
	33		10.0 9.9	9.95 01	9.97	.
	34		10.3	10.3 2.	10.32	.
	35		10.9 11.0	10.95 10	10.98	.
	36		12.0 11.9	11.95 01	11.98	.
	37		12.3 12.6	12.45 12	12.49	.
	38		13.2 13.2	13.20 00	13.24	.
	39		13.8 13.9	13.85 01	13.90	.
	40					

4

De R 3d 11 Eff Oct 6, 1914

388 B 67 - 13 + 15

			Sc 1	Sc 2			
Near edge t p	R	14					
	R	15	4.9 5.2				
Near edge t p	R	16					
	R	17	5.9 6.2				
		18	6.6 6.9				
		19	6.9 7.2				
Dbl.	R	20	~~8.7~~				
	R	21	8.7 9.0	9.0		9.00	00
		22	8.8 9.1	9.1		9.10	00
	R	23		9.8			
	R	24		10.9			
		25		11.1	11.0	11.05	10
	R	26		11.7	11.7	11.70	00
	R	27		12.5	12.3	12.40	11
		28		12.3	12.3	12.30	00
		29		12.9	13.0	12.95	10
		30		13.3	13.2	13.25	10
		31		13.9	13.9	13.90	00
		32		?			

4 30

Interrupted 15m

Dc R ✓ 4th Eff Mic Sauer Oct 7, 1914

9 35 388 θ 67 13+15

			Sc 1		Sc 2			Corr.	Diff.
Near edge t p		14				.			
	R	15	4.9$^{5.2}$			5.2		.	.
Near edge t p		16							.
	R	17	5.9$^{6.2}$			6.2		6.23	5.41
		18	6.7$^{7.0}$			7.0		7.02	4.72
		19	7.0 7.3			7.3		7.31	4.72
Dbl.	R	20				.		.	.
	R	21	8.8$^{9.1}$	9.05 1 0 ~~8.8.8 1 1~~	9.0	9.05		9.05	3.82
		22	8.9$^{9.3}$	9.05 2 1 ~~8.40~~ 2 0	8.9	9.05		9.05	4.21
	R	23			9.9		9.9	9.89	3.56
	R	24			tp		q	q	q
		25		0 0	11.2	11.2	11.20	11.16	2.93
	R	26		1 0	11.7	11.8	11.75	11.70	2.61
	R	27		1 0	12.7	12.8	12.75	12.68	2.01
		28			tp		q	q	q 2.30
		29		1 0	13.1	13.2	13.15	13.07	~~1.99~~
		30			tp		q	q	q
		31			14.0?		14.0?	13.91?	2.31?

Se R 5th Exp Oct 7, 1914

388 8 Se1 67 Se2 13 + 15

Man edge tp		14			
	R	15	5.0 5.3		
Man edge tp		16			
	R	17	5.9 6.2		
		18	6.7 7.0		
		19	7.1 7.4		
Dbl	R	20			
	R	21	8.7 9.0	8.9	8.95 0 ⊥
		22	8.9 9.2	9.1	9.15 0 ⊥
	R	23		tp	
	R	24		tp	
		25		11.2 11.3	11.25 0 1
	R	26		11.8 11.9	11.85 0 1
	R	27		12.7 12.7	12.70 0 0
		28		12.3 12.8	12.30 0 0
		29		13.2 13.2	13.20 0 0
		30		13.5 13.7	13.60 ⊥ 1
		31		f	

10

Images poor except in centre of plate.

Se P ✓1st Exp Oct 7, 1914

10 25 398 B 67 1.~~34~~ 15

			Sc1			Sc2		1st Exp. q	3d Exp. q	5th Exp.	Mean q . . .	Diff. q
Near edge of p 14												
	R	15	4.1	38	3.85 01	3.9		3.85	4.00	.	3.92 07 08 .	7.12
Near edge of p 16								q	q	.	q . . .	q
	R	17	4.7	44	4.40 0 0	4.4		4.40	4.35	4.4	4.38 02 03 02	7 ~~6~~.26
	R	18	5.2	4.9	4.85 10	4.8		4.85	4.85	4.8	4.83 02 02 03	6.91
	R	19	5.3	5.0	5.05 01	5.1		5.05	5.05	5.4	5.17 12 12 23	6.86
Dbl.	R	20	~~6.4~~			~~6.1~~		dbl.	dbl.	dbl.	dbl. . . .	dbl.
		21	6.4	6.1	6.10 0 0	6.1		6.10	6.20	6.3	6.20 10 00 10	6.67
		22	6.7	6.4	6.35 01	6.3		6.35	6.35	6.7	6.47 12 12 23	6.79
	R	23				7.1		7.1	7.0	q	7.05 1 0 .	6.40
Poor image	R	24				8.0		8.0	8.0	q	8.00 q 0 0 .	5.88
		25				7.9		7.9	7.8	7.6	7.77 1 0 2	6.32
		26				8.1		8.1	8.0	8.0	8.03 1 0 0	6.28
		27			8.15 ⊥ 0	8.1	8.2	8.15	8.2	8.2	8.18 03 02 02	6.51
		28			8.80 11	8.9	8.7	8.80	8.7	8.5	8.67 13 03 17	6.39
Scratched		29				9.2		9.2	9.0	9.1	9.10 1 ⊥ 0	6.27
Im. super.		30						.	9.2	F	9.2 . a .	6.69

Sc B 2d Exp ✓ Oct 7, 1914

398 B 107 13+15 Full aperture.

		Sc 1	Sc 2	Corr.	Diff.
Too poor	14			g	
	15	B		B	
Too poor	16			g	
R	17	2.1 ? 1.8 ?		.	
R	18	2.7 2.4		.	
R	19	2.9 2.6		.	
Dbl	20			dbl.	
3.3 3.0	21	3.6 3.3	3.15 ±1	.	
	22	3.3 3.0		.	
R	23	3.7 3.4		.	
R	24	3.9 3.6		.	
	25	4.1 3.8	3.80 00 3.8	.	
	26	4.6 4.3	4.25 10 4.2	.	
	27	5.0 4.7	4.70 00 4.7	.	
	28		4.8	.	
	29		5.6	5.71	9.66
	30		5.9	6.00	9.89
R	31		6.60 ±1 6.7 6.5	6.67	9.55
	32		6.9	6.95	
	33		7.0	7.05	
	34		7.2	7.23	
	35		7.45 ±2 7.3 7.6	7.47	
	36		7.7	7.71	
	37		8.60 ±1 8.5 8.7	8.57	
	38		F	F	
	39		n.s	.	
	40		n.s	.	

Dc 8 ✓ 3d E½ Oct 7, 1914

398 P for 13+15

Too poor		14				
	R	15	4.3	4.0	4.00 0 0	4.0
Too poor		16				
	R	17	4.7	4.4	4.35 0 1	4.3
	R	18	5.1	4.8	4.85 0 1	4.9
	R	19	5.3	5.0	5.06 0 1	5.1
Dbl.		20				
		21	6.5	6.2	6.20 0 0	6.2
		22	6.6	6.3	6.35 1 0	6.4
	R	23				7.0
	R	24				8.0
		25				7.8
		26				8.0
		27				8.2
		28				8.7
		29				9.0
		30				9.2

11 20

Sc B ✓4th Exp Oct. 7, 1914

398 B ap. 14 inches

			Sc1	Sc2	Corr.	Diff.
	R	17	4.4 4.1			
	R	18	5.0 4.7			
	R	19	5.3 5.0		90 4.~~7~~	1 7.93
Dbl.		20			dbl.	dbl.
		21	6.3 6.0		5.94	6.93
		22	6.3 6.0		5.94	7.32
	R	23	6.5 6.2	6.50 3 3 6.8	6.46	6.99
t.p.	R	24			q.	q.
		25		7.6	7.60	6.49
		26		7.7	7.70	6.61
		27		8.0	8.00	6.69
		28		8.3	8.31	6.75
		29		8.9	8.94	6.43
		30		f	f	f

Se8 ✓ 5½ Exp Oct ~~8~~ 7 1914

398 8

		Sc1		Sc2
R	17	4.7	4.4	
R	18	5.1	4.8	
R	19	5.7	5.4	
Dbl	20			
	21			6.3
	22			6.7
t.p	23			
t.p	24			
	25			$\overset{7}{6}$.6
	26			8.0
	27			8.7
	28			8.5
	29			9.1
	30			f

Se R 1st Ex Oct. 7, 1914 3d 2d Exp 8m

11 30		Sd 2395 Sc1	C1 Sc2			Exp.4	Mean		Sd 2395 Sc1		Sc2	
	17	8.8 9.1	9.1		9.10	9.15	9.12 02 03		6.1			6.4
	19		10.1		10.1	10.1	10.10 00 00		7.1			7.4
	21		10.8	10.9	10.85	11.0	10.92 07 08		8.1			8.4
	21 a		11.3		11.3	11.2	11.25 05 05	21a	8.9	9.2	9.1	9.15
	R 23		11.7		11.7	12.0	11.85 15 15	R 23	8.7	9.0	9.0	9.00
	24		12.0	12.1	12.05	11.9	11.98 07 08	24	8.9	9.2	9.2	9.20
Scratched	26		12.3	12.5	12.40	12.3	12.35 05 05				9.5	
	27		12.9	13.0	12.95	12.8	12.88 07 08				10.1	
	28		13.0	13.1	13.05	13.1	13.08 03 02				10.8 10.9	10.85
	29		13.4		13.4	13.2	13.30 10 10				10.9 11.0	10.95
	30		13.8	13.9	13.85	13.7	13.78 07 08				12.2	
	31		F			13.9?	13.9? . a				12.3	
	32		F								12.7	
	33		F						Im sup.?			
	34		F								13.5	
	35		F								F ?	
	36		F								13.7 Dy-	
	~~37~~											
	~~38~~											
	~~39~~											
	~~40~~								8.7		9.1	
	22		12.1			11.90	12.00 10 10					

2d Exp. 64m

Sc R 3d Exp. Oct 8, 1914 4th Exp

9 - 20 So 2395 (cont) 2d meas. Book 46:220

		Sc 1	Sc 2				Sc 1	Sc 2	
w.s	17	4.7 ~~6.2~~		5.0	4.6	4.80	8.9 92	9.1	9.15
	19	5.8		6.1	6.0	6.05		10.1	
6.0 6.3	21	6.1		~~6.4~~ 6.35	6.4	~~6.40~~ 6.38		11.0	
	21a	6.2		6.5				11.2	
	22	6.3		6.6	~~6.7~~ 6.6	~~6.65~~ 6.60		12.0	11.8 11.90
R	23	6.2		6.5	6.4	6.45		12.0	
	24	6.4		6.7				11.9	
	26	7.1		7.4				12.3	
	27	7.2		7.5				12.8	
	28	7.8		8.1				13.1	
	29	8.2		8.5				13.2	
	30	8.3 8.6	8.7	8.65				13.7	
	31		9.3					13.9 ?	
	32		10.1					f	
	33		11.0	10.9	10.95				
	34		11.2						
Ink dot over image.	35								
	36		12.0	11.9	11.95				
	37		12.3						
	38		12.7						
	39		12.9	13.1	13.00				
	40		13.4						
	41		13.7						
	42		13.9						
	43		f						
	44								

10 05