KG
11365
950

XXVI

Standard Photographic Magnitudes

I' Plates.

KG11365 .950

Correction to first scale

I, B, + MA plates +0.2 scale from I 32811 Scale M

A, X, H, C -0.3 " " C 15350 Scale P

AC, AM plates with usual aperture Scale AC 8858 Scale N

Scale 1 correction = $-0.\overset{2}{8}$

" 2 " = $-0.\overset{4}{5}$

" 3 " = 0.0

Use altered correction after March 25, 1908. H. S. L. It was changed in Book XXIII in November, 1907, but not transferred to other books.

AC, AM plates with reduced aperture

AG plates Scale AC 8796 Scale O

Scale 1 corr. 0.0

" 2 " -0.3

" 3 " 0.0

Scale R, from C 17493, for C and MC plates

Scale $\underset{2}{1}$ correction, $+\underset{0.0}{0.3}$

(Do not use scale 2 for images brighter than 8.0) when measures are also made on Scale 1. Brighter images may be employed if Scale 1 is not used. Reductions made previous to Oct. 12, 1910 need not be altered.

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0.10

Thursday, November 21, 1907.

Copied R Lyncis Scale measures of T' plate

I34373

Polar Sequence

4	2.0 2.2		
12	3.6 3.8		
16	4.7 4.9 4.9	4.90	00
c²	5.6 5.8 5.7	5.75	01
~~d~~	~~5.9 6.1 6.6~~	~~6.35~~	~~22~~ See remark page 8
11	2.8 3.0	3.0	a.
a	2.6 2.8	2.8	a.
b	4.4 4.6 4.4	4.50	11
14a	4.9 5.1 4.8	4.95	12
c³	5.8 6.0 5.8	5.90	11
e	6.5 6.7 6.8	6.75	10
c'	5.3 5.5 5.3	5.40	11
f'	6.8 7.0 7.0	7.00	00
10	3.2 3.4	3.4	a.
l	9.8		
g	8.2		
k³	9.3		
f²	7.7		
h	8.5		
k'	8.9		
f³	8.0		
k⁴	9.6		
i	8.4		
k⁵	9.8		
k²	9.0		

Sequence for R Lyncis

a)	2.8 3.0		
c)	3.4 3.6		
g)	5.9 6.1 5.9	6.00	11
e)	4.8 5.0 4.8	4.90	11
b)	3.6 3.8	3.8	a.
f²)	5.5 5.7 5.7	5.70	00
h')	5.9 6.1 $\overset{6}{5}$.1	6.10	00
f')	5.1 5.3 5.3	5.30	00
k)	6.5 6.7 7.1	6.90	22
h²)	6.7 6.9 6.$\overset{8}{7}$	6.85	10
m)	6.9 7.1 7.1	7.10	00
l)	7.0 7.2 7.6	7.40	22
d)	4.1 4.3	4.3	a.
q)	8.9		
n)	7.6		
o²)	8.3		
r')	9.3		
t)	9.9		
r²)	9.6		
o')	7.8		
p)	* 7.8		
	9.9		

-7
+4
16)11. (±0.688
9
140
128 120 ±0.069

-6
+7
18)13 (±0.722
128
40
34 ±0.072

*This should be 8.8. Examined Oct. 10, 1912. L.

M. E. H.

Thursday, November 21, 1907

Sequence for R Lyncis

Prismatic companions

2nd scale

b	8.2
d	8.7
a	7.8
c	image defective
e	9.2
f'	9.4
f²	9.8
g	n.o

Polar Sequence

Prismatic companions

2nd scale

a)	7.4
b)	8.8
14a)	9.2
12)	8.6
16)	image defective
c')	9.5
10)	7.9
c²)	9.8
11)	8.1
c³)	10.0

0.40

M. E. H.

Thursday, November 21, 1907

1.55

Scale M

Polar Sequence Scale measures taken with and without shade glass

934780

a First set of images				B Second series of images			
c'	5.0 5.2 5.5	5.35	21	c'	5.8 6.0 5.9	5.95	01
19	6.2 6.4 6.7	6.55	21	18	6.9 7.1 7.2	7.15	10
c³	6.0 6.2 6.0	6.10	11	c²	6.6 6.8 6.7	6.75	01
e	6.8 7.0 7.0	7.00	00	d	7.0 7.2 7.5	7.35	21
c²	5.7 5.9 5.8	5.85	10	c³	6.8 7.0 6.9	6.95	01
18	6.3 6.5 6.5	6.50	00	19	7.0 7.2 7.2	7.20	00
d	6.7 6.9 6.8	6.85	10	e	7.6		
f²	8.0			f'	8.1		
g ~~f~~	8.6			f³	8.8		
k³	9.8			f²	8.7		
f'	7.6			g	9.2 im. poor		
h	8.7			h	9.3		
l	9.9			k'	10.1		
i	9.0			i	9.7		
f³	8.5						
k⁵	9.7						
k'	9.4						
k²	9.2						
k⁴	image defective						

-6
+1
12)7(±.583
60
100
96

±0.583

+5
-5
14)10(±0.714
98
20
14
60 ±0.071

M E H

Thursday, November 21, 1907

Scale M

Polar Sequence Scale measures taken with and without shade glass

934832

a First series of images					B Second series			
c'	3.9 4.1 4.3	4.10	00		c'	4.7 4.9 4.9	4.90	00
19	t.n.e				18	5.6 5.8 5.8	5.80	00
18	5.2 5.4 5.3	5.35	01		d	5.9 6.1 6.0	6.05	10
c³	4.9 5.1 5.0	5.05	10		c²	im def		
f'	6.5 6.7 6.6	* 6.65	10	measured below mean 6.68	c³	5.6 5.8 5.7	5.75	01
c²	4.8 4.7 4.7	4.70	00		e	6.2 6.4 6.6	6.50	11
d	4.9 5.1 5.5	5.30	12		f²	7.6	7.6	.a
f²	6.6 6.8 7.0	6.90	11		f'	6.9 7.1 7.3	7.20	11
e	5.7 5.9 5.8	5.85	10		g	8.5		
f³	7.3				k³	9.9		
f'	6.7	* measured above 6.68			i	9.2		
g	7.8				h	8.9		
k³	9.3				k'	9.6		
h	8.1				f³	8.2		
k'	8.9				k²	im. def		
i	8.5				k⁴	n. s.		
k⁴	9.8							
k²	9.1 image def							
l	9.9							
k⁵	9.8							

Prismatic companions

First series
2nd scale
c') 9.2
c²) 9.9
c³) ~~n.s.~~ 10.0 2 image very poor
18) 9.6

Second series
c') 9.7
c²) n. s.

Images not very good

+3
-3
12)6(±0.5

±0.05

-4
+6
16)10(±0.625
96
40
32

±0.062

2.30

M E H

23.45

Friday, November 22, 1907

Copied on sheets.

Copied R Lyncis Scale measures of T plates Repeated observations of I 34373 See page 4

Scale M

Qet. +0.04.

Diff.		Polar Sequence				p 4	Mean	Res	Sequence for R Lyncis				Page 4	Mean		curve readings	Magn.
+3.98	m. from	11	3.2 3.4			3.0	3.20	20 20	b	3.6 3.8			3.8	3.80	00	.	.
3.49		a	2.8 3.0			2.8	2.90	10 10	d	4.0 4.2			4.3	4.25	01	+ ~~3.60~~	~~7.85~~
3.59	n.l.	4	1.9 2.1			2.2	2.25	05 05	a	2.8 3.0			3.0	3.00	00	.	.
3.63		10	3.1 3.3			3.4	3.35	05 05	g	5.9 6.1 5.8	5.95	1 2	6.00	5.98	03 02	3.68	79 ~~7~~9.66
		16	4.8 5.0 5.1	5.05	0 1	4.90	4.98	07 08	e	4.6 4.8 4.9	4.85	0 1	4.90	4.88	03 02	3.60	.61 8.48
		12	3.7 3.9	3.9	a.	3.8	3.85	06 05	hm* c'	4.2 4.4	4.4	a.	3.6	3.60		.	.
3.60		b	4.3 4.5	4.5	a	4.50	4.50	00 00	f	5.4 5.6 5.6	5.60	0 0	5.70	5.65	05 05	3.66	44 9.31
3.51		c	4.9 5.1 5.6	5.35	3 2	5.40	38 5.42	03 02	h'	6.2 6.4 6.7	6.55	2 1	6.10	6.32	23, 22	3.70	.15 10.02
Reject. Film scratched Correct no. impossible.		~~d~~	~~6.4 6.6 5.9~~						f'	4.9 5.1 5.6	5.35	3 2	5.30	5.32	03 02	3.63	9.08 8.95
3.64		c²	5.6 5.8 5.8	5.80	0 0	5.75	5.78	02 03	h²	6.8 7.0 6.8	6.90	1 1	6.85	6.88	02 03	3.76	77 10.64
3.72		14a	4.9 5.1 4.9	5.00	1 1	4.95	4.98	02 03	m	7.3			7.10	7.15	01	3.79	11.08 10.94
		c	6.7 6.9	6.9	a.	6.75	6.82	08 07	o²	8.0			8.3	8.15	21	3.96	25 12.11
		f'	6.8 7.0 7.4	7.20	2 2	7.00	7.10	10 10	m	7.5			7.6	7.55	10	3.84	53 13.39
3.81 ~~3.78~~		c³	5.8 6.0 5.9	5.95	0 1	5.90	5.92	03 02	g'	8.7			8.9	8.80	11	4.17	13.11 12.97
3.84		f²	7.6			7.7	7.65	05 05	n²	9.6			9.6	9.60	00	4.40	.14 14.00
3.88		g	8.6			8.2	8.40	20 20	o'	7.8			7.8	7.80	00	3.87	81 11.67
4.38		k³	9.4			9.3	9.35	06 05	k	7.0			6.90	6.95	01	3.77	85 10.72
		i	8.7			8.4	8.55	15 15	n'	9.1			9.3	9.20	11	4.29	63 13.49
		k⁴	9.8			9.6	9.70	10 10	t	10.0			9.9	9.95	01	4.49	.58 14.44
3.92		f³	8.0			8.0	8.00	00 00	p	8.8			8.8	8.80	00	4.17	13.11 12.97
4.04		h	8.6			8.5	8.55	05 05	o	9.8			9.9	9.85	01	4.45	.44 14.30
4.25		k'	9.0			8.9	8.95	05 05	l	7.5 another star almost superposed			7.40	7.45	10	3.83	42 11.28
		l	10.0			9.8	9.90	10 10									
		k²	9.1			9.0	9.05	05 05									
4.39 Oct 10, '12		k⁵	9.8			9.8	9.80	00 00									

Oct. 12, 1912. O.R.

-8
+6
12) 14 (±1.167
12
20
12
80
72
±0.117

+6
-7
12) 13 (±1.083
12
100
96
40
36
±0.108

48) 32
±07

* Original marks of designation lost. Reject this measure. H.L. Dec 22, 1914.

M.E.H.

Friday, November 2, 1907

See page 5

Prismatic companions of I 34373 Repeated observations

Qet. +0.04

R Lyncis	2nd scale	P. 4.	Mean		curve reading	Magn.	Polar Sequence		P5		*	
b	8.1	8.2	8.15	1 0	-0.86	7.29	a	7.2	7.4	7.30	1 1	-0.91
d	8.7	8.7	8.70	00	-0.71	8.12 7.99	14a	9.3	9.2	9.25	0 1 ~~05 05~~	-0.55
f'	9.3	9.4	9.35	1 0	-0.52	96 8.83	4	im def				
im def. c	9.1	.					11	7.9	8.1	8.00	1 1	-0.82
def on film close to im. f²	9.9	9.8	9.85	10	-0.36	9.62 8.49	c'	9.2	9.5	9.35	1 2	-0.46
a	7.7	7.8	7.75	1 0	-0.95	92 6.80	b	8.9	8.8	8.85	0 1	-0.75
e	9.3	9.2	9.25	10	-0.54	84 8.71	12	8.7	8.6	8.65	0 1	
							16	9.3	R	9.3		no. def.
							c²	9.7	9.8	9.75	0 1	-0.33
							10	8.1	7.9	8.00	1 1	-1.02 ~~-0.82~~
							c³	10.1	10.0	10.05	0 1	-0.32

+8
-6
14
±0.08

* Residuals taken in reverse order.

Reductions made Oct. 10, 1912.

23.45

M.E.H.

0.40

Friday November 22, 1907

Copied

R Draconis Scale measures of T plates

9 34605.

Scale M

Polar Sequence				P.12.	Sequence for R Draconis				Mean.	Curve reading.	Magn.
a	1.5 1.7			3.2	b 3.0 3.2				3.20 00	..	
~~13~~	~~2.9~~			3.2	d 3.4 3.6				3.40 22	..	
10	2.0 2.2			3.9	g 3.7 3.9				3.90 00	..	
12	2.8 3.0			5.75	‡ h² 5.6 5.8 5.7	5.75	0⊥		5.75 0000	4.36	10.11
16	4.0 4.2			3.9	e 3.7 3.9	3.9	a.		3.90 00	..	
11	2.7 2.9			3.1	c 3.0 3.2	3.2	a.		3.15 10	..	
14a	3.9 4.1			4.1	f 3.9 4.1	4.1	a.		4.10 00	4.62	8.72
c	3.9 4.1			4.95	‡ h' 4.8 5.0 4.9	4.95	0⊥		4.95 0000	4.53 ~~4.62~~	9.48
d	5.8 6.0 5.8	5.90	⊥⊥	5.75	k 5.7 5.9 5.8	5.85	10		5.80 05 05	4.35 ~~4.55~~	10.15
c²	4.9 5.1 4.7	4.90	22	6.20	m 6.3 6.5 6.7	6.60	⊥1		6.40 20 20	4.19 ~~4.43~~	10.59
f'	6.9 7.1 7.0	7.05	10	6.2	l 6.1 6.3 6.5	6.40	⊥1		6.30 11	4.22	10.52
e	6.1 6.3 6.2	6.25	10	6.95	‡ n² 6.8 7.0 7.0	7.00	00		6.98 03 00	4.06	11.04
b	3.1 3.3	3.3	a.	6.70	* n 6.5 6.7 6.7	6.70	00		6.70 0000	4.13 ~~4.39~~	10.83
c³	5.2 5.4 5.4	5.40	00	2.9	a 2.7 2.9	2.9	a.		2.90 00	..	
f³	7.9			8.0	o² 7.8				7.90 11	4.04	11.94
f²	7.6			9.6	e 9.4				9.50 11	4.49 ~~4.22~~	13.99
g	8.0			8.2	p 8.5				8.35 21	4.17	12.52
k³	9.1			8.9	r 9.1				9.00 ⊥1	3 4.06	13.36
~~i~~	~~6.8~~			7.4	o' 7.6				7.50 ⊥1	4.00	11.50
l	9.8			8.5	q 8.5				8.50 00	4.22 ~~4.00~~	12.72
k'	8.9			9.6	u 9.6				9.60 00	4.50 ~~4.36~~	14.10
h	8.5			9.7	t 9.7				9.70 00	4.53	14.23
k⁴	9.6										
k²	9.0										
k⁵	9.9										

* Assumed intended for n' See note below ‡

bright star ~~sup~~ superposed on i. reject

-3
+3
10) 8 (±0.8
±0.08

-4.
+3
14) 7 (±0.5
±0.05

‡ { h' = h h² = h'
 n' = n n² = n' } according to latest notation
See note on cover of ref. plate March 1915 E.F.M.
I 23349
Also

M.E.H.

Friday, November 22, 1907

Prismatic companions

	R Draconis 2nd scale	P.12	Mean.		Curve	Magn.
d	8.6	8.5	8.55	01	-0.61	7.94
b	8.9	8.8	8.85	10	-0.55	8.30
im imperf g	9.6	9.2	9.40	22	-0.43	8.97
a	8.5	8.4	8.45	10	-0.62	7.83
c	8.8	8.6	8.70	1⊥	-0.57	8.13
e	9.3	9.2	9.25	10	-0.46	8.79
h'	9.8	9.9	9.85	01	-0.30	9.55
h²	10.2	"	10.2	a	-1.	
f	9.7	9.6	9.65	10	-0.35	9.30
k		10.1	10.1	a		

Polar Sequence
2nd scale

a	7.0
b	8.8
14a	8.9
10	7.7
16	9.2
12	8.4
11	7.9
c'	9.6
c²	9.9
d	9.9
c³	def

1.15

M.E.H.

3.34 Friday November 22, 1907

Copied R Draconis Repeated measurements see p.10

I 34605

Scale M

Diff.		Polar Sequence			P.10	Mean.		R Draconis				Prismatic companion Polar Sequence				Diff
+4.54	a	1.8 2.0			1.7	1.85	21	d)	3.0 3.2			a	7.0	7.00	00	-0.61
4.~~54~~ 60	14a	3.9 4.1			4.1	4.10	00	g)	3.7 3.9			b	8.7	8.75	01	-0.65
·	im poor 12	3.0 3.2			3.0	3.10	11	b)	3.0 3.2			14a	8.9	8.90	00	-0.20
·	16	3.9 4.1			4.2	4.15	10	l)	6.0 6.2			10	7.7	7.70	00	-0.72
4.1~~6~~ 3	10	2.1 2.3			2.2	2.25	10	a)	2.7 2.9			12	8.2	8.30	11	·
4.60	b	3.5 3.7			3.3	3.50	22	‡ h')	4.8 5.0 4.9	4.95	01	16	9.1	9.15	01	·
4.48	elongated im. poor 11	2.3 2.5			2.9	2.70	22	c)	3.7 3.9	3.9	a.	11	7.8	7.85	10	-0.67
4.~~19~~ 38	c^3	5.1 5.3 5.3	5.30	00	5.40	5.35	05 05	c)	2.9 3.1	3.1	a.	c'	8.3 9	9.45	21	-0.56
4.37	d	5.5 5.7 4.7 5	5.70	00	5.90	5.80	10 10	k)	5.7 5.9 5.6	5.75	12	c^2	9.7	9.80	11	-0.38 ~~-0.50~~
/	f'	6.7 6.9 6.9	6.90	00	7.05	6.98	08 01	‡ h^2)	5.6 5.8 5.7	5.75	01	c^3	9.9	9.9	a	-0.17
4.57	c^2	4.6 4.8 4.8	4.80	00	4.90	4.85	05 05	f)	3.9 4.1	4.1	a.	d)	10.1	10.00	11	-0.17
·	e	5.9 6.1 6.3	6.15	10	6.25	6.20	05 05	m)	6.3 6.5 5.9	6.20	33			20/12		
4.79	c'	3.9 4.1 ·	4.1	a.	4.1	4.10	00	‡ m')	6.5 6.7 6.7	6.70	00	R Draconis				
4.02	f^3	7.9			7.9	7.90	00	‡ m^2)	6.8 7.0 6.9	6.95	01	d)	8.5			
4.58	k^3	9.2			9.1	9.15	01	p)	8.2			b)	8.8			
4.08	g	8.4			8.0	8.20	22	n)	8.9			c)	8.6			
3.99	f^2	7.4 ~~6.9~~			7.6	7.50	11	t)	9.7			g)	9.2			
4.19	h	8.3			8.5	8.40	11	o')	7.4			a)	8.4			
·	k^2	9.0			9.0	9.00	00	o)	9.6			f)	9.6			
·	l	9.8			9.8	9.80	00	o^2)	8.0			l)	9.2			
4.35	k'	8.8			8.9	8.85	01	q)	8.5			h)	9.9			
·	k^4	9.7			9.6	9.65	10	u)	9.6			k)	10.1			
4.29	k^5	9.9			9.9	9.90	00	Light failing rapidly during measurements								

10) -1 (±0.1

±0.01

-8
+4
12) 12 (±.1,0

±0.1

4.00
3.34

M.E.H.

‡ See note for this symbol p.10

21.45 Monday. November 25, 1907

Copied S and T Ursae Majoris T' plate I 34768.

See also page 14

Scale M

	Polar Sequence			Curve reading	Magn.	T Ursae Majoris			P.14.	Mean	Prismatic companion Polar Sequence 2nd scale	
a	2.6	2.8		~~3.54~~		a	2.9	3.1	3.10	3.10		
b	4.3 4.5 4.3	4.40	11	3.54 3	9.88 9.98 75	h	5.8 6.0 6.0	6.00 ~~6.4~~	6.45	6.42	a 7.2	7.2
c^2	5.8 6.0 5.9	5.95	01	3.52	9.97 9.78 .64	g^3	5.7 5.9 6.2	6.0 .05 12	6.20	6.15	b 9.1	9.1
d	6.3 6.5 6.9	6.70	22	3.63	7.84 7.71	l	3.7 3.9	3.9	4.25	4.08	14a 9.8	9.8
14a	4.9 5.1 4.9	5.00	11	~~4~~.54 3	8.9 8.82	g	4.9 5.1 5.3	5.20 11	5.35	5.28	12 8.9	8.9
11	3.3	3.5	a.	3.59	10.57 10.74	l	6.8 7.0 7.0	7.00	7.3	7.15	16 10.0	10.0
c'	5.0 5.2 5.4	5.30	11	3.63	7.86 7.73 md	b	3.9 4.1 4.2	4.1	4.1	4.10	c' 10.0	10.0
12	3.9	4.1	a.	3.62	7.95 7.82	d	4.0	4.2	4.2	4.20	c^2 10.1	10.1
16	5.1 5.3 5.4	5.35	10	3.54	9.07 8.94	g'	5.0 5.2 5.0	5.10 11	5.70	~~5.95~~ 5.40	1st scale 1 3.7	3.9
c^3	5.8 6.0 6.2	6.10	11	3.54	8.97 8.84	f	4.9 5.1 5.1	5.10	5.50	5.30	10 8.2 11 8.6	8.2 8.6
e	6.7 6.9 6.9	6.90	00	3.57	10.58 10.45	k	6.7 6.9 6.7	6.80 11	6.95	6.88	S Ursae Majoris	
10	3.1	3.3	a	3.61	7.99 7.86 md	c	3.8	4.8	4.5	4.25	a 8.0 (see P. 14) for P.C.	
f^2	7.7		+6	3.54	8.76 89	g^2	5.2 5.4 5.0	5.20 22	5.35	5.22	c 9.7	
f^3	8.0		-8 16) 14 ±09	3.82	12.52 66	p	8.7		8.7	8.70	b im. of a star too near	
g	8.6			4.18 ~~3.99~~	14.12 13.98 ~~13.79~~	t	9.8		9.8	9.80	d 10.0	
k^3	9.7			3.84 5	12.89 12.74 5	q	8.9		8.9	8.90	e 8.9	
f'	7.2			3.66	11.36 .50	m	7.6		7.8	7.70	f 10.2	
h	8.8			3.90 ~~3.84~~	13.09 12.98 5	r	9.0		9.1	9.05		
defect ~~l~~	~~10.2~~			3.81	12.65 12.51	o	8.7		8.7	8.70 00		
i	9.0			3.92 ~~3.78~~	13.21 13.08 7	s n	9.0 8.0		9.3 8.3	9.15 21 8.15 21		
k^5	10.0			3.71	12.00 11.86	All images are poor measurements diff.						
k^2	9.6											
k'	9.3											
k^4	n.s.											

Images for S Ursae Majoris are too poor to measure

22.15

M.E.H.

Reductions made in red ink Oct. 12, 12. ~~[illegible]~~

22.15 Monday, November 25, 1907

[illegible] I and S Ursae Majoris Repeated measurements of I'plate I 34768

Scale M

Diff.		Polar Sequence					p13	mean	Rec	I Ursae Majoris					Prismatic comp Polar Sequence		p.13	mean		Diff
+3.49	a	2.8			3.0		2.8	2.90	11 ~~10 10~~	h	6.3$^{6.5}$	6.4	6.45	10	13.7	3.9	3.9	3.90	00	+
3.62	b	4.3	4.5	4.6	4.55	10	4.40	4.48	07 08	g	5.1$^{5.3}$	5.4	~~5.4~~ 3.5	10	a	7.2	7.2	7.20	00	-0.81
3.62	14a	4.8	5.0	5.3	5.15	21	5.00	5.08	07 08	a	2.9$^{3.1}$		3.10	~~00~~	14a	9.8	9.8	9.80	00	-1.10
3.68	11	3.3			3.5		3.5	3.50	00 ~~00 00~~	f	5.2$^{5.4}$	5.6	5.50	11	b	9.2	9.1	9.15	02	-1.05
3.50	c²	5.8	6.0	5.8	5.90	11	5.95	5.92	02 03	c	4.3$^{4.5}$		4.5		c¹	9.9	10.0	9.95	10	-1.06
3.45	d	6.6	6.8	6.7	6.75	01	6.70	6.72	03 02	g³	6.0$^{6.2}$	6.2	6.20	00	10	8.2	8.2	8.20	00	-1.22
3.13	10	3.0			3.2		3.3	3.25	01 ~~05 05~~	k	6.8$^{7.0}$	6.9	~~7.0~~ 6.95	01	16	9.9	10.0	9.95	10	+
3.47	c¹	5.4	5.6	5.5	5.55	01	5.30	5.42	13 12	d	4.0$^{4.2}$		4.2		12	8.9	8.9	8.90	00	
3.55	c³	6.0	6.2	6.3	6.25	01	6.10	6.18	07 08	g²	4.9$^{5.1}$	5.4	5.25	12	11	8.3	8.6	8.45	12	-1.27
.	16	5.1	5.3	5.3	5.30	00	5.35	5.32	02 03	b	3.9$^{4.1}$		4.1		c²	10.1	10.1	10.10	00	0.68
.	12	4.0	4.2	4.5	4.35	21	4.1	$\overset{4}{5}$.22	13 12	g¹	5.5$^{5.7}$	5.7	5.70	00	c³	n.s.				
.	e	6.7	6.9	6.9	6.90	00	6.90	6.90	00 00	e	3.8$^{4.0}$	4.5	4.25	23				20)0.3 6		
.	f¹ ~~15~~			7.0			+4 −8 18)12 ±07 7.2	7.10	11 ~~10 10~~	g		8.9			I Ursae Maj					
3.97	f³			7.9			8.0	7.95	10 ~~05 05~~	m		8.3			a	8.1 ~~8.5~~	8.0	8.05	10	8.0
3.73	g			8.5			8.6	8.55	10 ~~05 05~~	n		9.1			e	8.9	8.9	8.90	00	
4.18	k³			9.4			9.7	9.55	21 ~~15 15~~	m		7.8			f	10.2	10.2	10.20	00	
.	i			8.9			9.0	8.95	10 ~~05 05~~	p		8.7			c	9.6	9.7	9.65	01	
3.79	f²			7.7			7.7	7.70	00 ~~00 00~~	l		7.3			b	too poor				
3.79	h			8.8			8.8	8.80	00 ~~00 00~~	t		9.8			d	10.0	10.0	10.00	00	
3.90	k¹			9.3			9.3	9.30	00 ~~00 00~~	o		9.3								
.	k²			9.4			9.6	9.50	11 ~~10 10~~	o		8.7								
4.19	k³			n.s.			10.0	10.0	. a											
.	k⁴			n.s.																

+2)240
Av. Dev. ±06

P.C.	curve	magn
a	~~+1.28 9.72~~ -1.28	6.77
e	~~0.50~~ -1.16	7.74
f	-0.94	9.26
c	-1.$\overset{0}{1}$4	8.$\overset{6}{5}$1 8.74
d	-0.98	9.02 9.15

Means in red ink taken Oct 12, '12.

On this plate im for Polar Sequence are good, but not those for I Ursae Maj

22.40

M. E. H.

22.40 Monday, November 25, 1907

I Ursae Majoris I'plate I 34532

Polar Sequence

11	too poor
10	2.3
16	3.8
12	2.7
b	3.4
a	1.5
c¹	4.1
c³	im. def.

Images too poor to measure

Reject plate

M. E. H.

Monday, November 25, 1907

Reject these measures, as better results will be obtained from later measures, especially on Series plates.

T and S Ursae Majoris. I Plates I 34711 and I 34768. Measures of stars omitted in previous examination.

I 34711

	Polar Sequence				T Urs. Maj.				S Ursae Maj.		
11	3.7	3.9		g^2	5.9	6.0	6.05	g^3	6.6	6.7	6.75
16	5.8	5.9	5.95	g^3	6.5	6.8	6.75	p^2		9.5	
10	3.4	3.6		u	~~10.2~~	10.2					
12	4.2	4.6	4.50								

Prism. Comp.

11	8.9
12	9.3
16	10.1
10	8.5

I 34711 Second Measures

	Polar Sequence				T Urs. Maj.				S Urs. Maj.		
11	3.7	3.9		g^2	5.9	6.0.	6.05	g^3	6.6	6.9	6.85
16	5.9	5.9	6.00	u		10.2		p^2		9.4	
12	$\overset{4}{4}$.2	4.6	4.50	g^3	6.6	6.8	6.80				
10	3.3	3.5									

Prism. Comp.

11	8.9
12	9.3
16	10.1
10	8.6

Monday, November 25, 1907

Reject these measures. See Remarks page 16.

T and S Ursae Majoris. I Plate I 34718 Measures of additional stars

Polar Sequence

Diff.		~~I 34718~~		P.17 (below)		Mean		T Urs. Maj.				S Urs. Maj.		
+$\overset{5}{4}$.55	11	3.8		4.0	4.0	4.00	·00	g^2	5.9	6.3	6.20	g^3	6.6	6.8	6.86
5.55	16	$\overset{5}{.}$7	5.8	5.85	5.85	5.85	·00	g^3	6.5	$\overset{7}{6.8}$	6.70	p^2		9.6	
5.47	10	3.5		3.7	3.4	3.55	·15 ·15	u		10.0					
5.74	12	4.0	4.1	4.15	4.10	4.12	·03 ·02								

Prism. Comp. P.17 (below)

+0.70	11	8.8	8.9	8.85	·01
1.35	16	10.1	10.0	10.05	·10
0.41	12	9.4	9.5	9.45	·01
0.3$\overset{2}{2}$	10	8.7	8.7	8.70	·00

I 34718 Second measures

	Polar Sequence				T Urs. Maj.				S Urs. Maj.		
11	3.8	4.0		g^2	5.9	6.2	6.15	g^3	6.7	6.7	6.80
16	5.7	5.8	5.85	g^3	6.5	6.8	6.75	p^2	~~9.7~~	9.7	
12	3.9	4.1	4.10	u		10.0					
10	3.2	3.4									

Prism. Comp.

11	8.9
16	10.0
12	9.5
10	8.7

1.30 Monday, November 25, 1907

North Polar Sequence ~~I~~ plate I 34903

Scale M

copied

	a	I 34903 ·		
	b	2.7	2.9	
	10	1.5	1.7	
in elong	12	2.7	2.9	
"	16	3.2	3.4	
	14a	3.0	3.2	
	18	3.9	4.1	
	c'	3.5	3.7	
	d	4.2 4.4 4.7	4.55	21
	f'	5.3 5.5 5.6	5.55	10
	g	6.7 6.9 7.0	6.95	10
	c²	3.8	4.0	
	f²	5.9 6.1 6.3	6.20	11
	e	4.8 5.0 4.9	4.95	01
	f³	6.2 6.4 6.3	6.35	01
	11	1.8	2.0	+2 −7
	c³	4.0	4.2	12) 9 ±08
	19	4.2	4.4	
unit changed March 26, '08 H.S.L.	k³	~~7~~ 8 .6		
	k⁴	8.8		
	k'	7.9		
	l	9.0		
	i	7.4		
	k⁵	8.8		
	k²	7.9		
	h	7.5		
1.50	n	9.6		
M.E.H.	q	10.1		

m	9.1	
o	9.7	
p	9.9	

Prismatic companions

1	2.4		2.6		d	9.7
a	~~6.3~~ 5.7	6.0	5.95	10	f'	ms
12	6.9	7.3	7.20	11	18	9.5
10	~~5.6~~ 6.4	6.6	6.60	00		
2	t.n.e					
5	"					
3a	"					
4	"					
11	6.4	6.9	6.75	21		
9	5.7	5.9	5.90	00		
6	too poor		+2 −4 10) 6 ±06			
7	" "					
b		6.7*				
14a		8.3				
16		8.6				
19		9.5	Should be 7.7			
c'		8.6	apr. 8, 1908 per order of H.S.L.			
c³		9.5				
l		9.9				
c²		8.9				

Images on plate poor

1.50 Monday, November 25, 1907

copied

North Polar Sequence

Scale M I 32811

MA 275 second measure

				meas. with II 495	Mean	
	a	·				
	b	1.1 1.3			1.3	a.
	14a	1.7 1.9			1.9	a.
	12	t.p.				
	16	"				
	c'	1.6 1.8		1.3	1.55	23
	10	tb				
wrong star	~~19~~	~~3.1 3.3~~			3.3	a.
	c²	2.1 2.3		2.1	2.20	11
	d	2.5 2.7		2.4	2.55	12
	f'	2.9 3.1		3.5	3.30	22
	f³	4.2 4.4 4.6	4.50 11	4.30	4.40	11
	k³	6.8 7.0 7.1	7.05 01	6.40	6.72	33
	g	4.9 5.1 4.9	5.00 11	4.25	4.86	11
	c³	2.2 2.4		2.2	2.30	11
	e	2.7 2.9		3.0	2.95	10
	f²	3.7 3.9		3.7	3.80	11
	h	4.6 5.8 5.6	5.70 11	5.55	5.62	10
	i	5.6 5.8 5.9	5.85 01	5.70	5.78	01
	k⁴	· 6.9		6.90	6.90	00
	k'	5.9 6.1 6.4	6.25 12	5.90	6.08	13
	k²	6.4 6.6 6.5	6.55 01	6.25	6.40	22
wrong star	~~18~~	~~3.1 3.3~~	+7 −5 14) 12 ±08		3.3	a.
	k⁵	7.4		6.90	7.15	23
	n	8.3		7.8	8.05	32
2.08	r	9.6		8.9	9.25	43
M.E.H.	l	7.8		7.15	7.98	22

o	9.7	9.1	9.40	33
O	8.2	7.8	8.00	22
q	9.3	8.6	8.95	34
m	7.8	7.3	7.55	23
p	8.7	8.5	8.60	11
t	9.4	9.0	9.20	22
w	10.1	9.9	10.00	11
v	9.8	9.7	9.75	01
tu	9.6	9.3	9.45	21

Difficult to compare star images with scale

2.10. Monday, November 25, 1907

North Polar Sequence

Scale cut from b 15350

Scale P

b 17112

c^1	2.8	2.5		2.5	
d	3.7	3.4		3.4	
f^1	4.2	3.9		3.9	
c^2	3.8	2.7		2.7	
d	3.7	3.4		3.4	
f^2	4.9	4.6		4.6	
i	4.0	3.7		3.7	
g	5.6	5.3	5.2	5.25	1 0
k^3	6.7	6.4	6.7	6.55	2 1
f^3	5.2	4.9	4.9	4.90	0 0
c^3	3.4	3.1		3.1	a.
h	5.8	5.5	5.7	5.60	1 1
k^5	6.9	6.6	6.9	6.75	2 1
k^2	6.0	5.7	6.3	6.00	3 3
i	5.8	5.5	5.9	5.70	2 2
k^4	6.8	6.5	7.0	6.75	3 2
k^1	6.3	6.0	6.1	6.05	0 1
l			7.0		+12 −13 18)25 4 ±15
n			7.6		
r			9.2		
m			7.3		
s			9.2		
o			7.8		
q			8.7		
w			10.0		
u			9.4		
p			8.1		

2.20

M.E.H

v	9.7
t	9.1

Images difficult to compare with scale

2.20 Monday, November 25, 1907

copied North Polar Sequence

Scale P b 15350

It 149

	c^1	3.3	3.0		3.0	
	f^1	5.0	4.7	4.9	4.80	1 1
im. much elongated	c^2	3.8	3.5		3.5	a.
"	d	4.1	3.8	4.3	4.05	2 3
	f^3	5.9	5.6	5.9	5.75	2 1
	k^3	.		7.4	7.4	. a
	h	6.6	6.3	6.5	6.40	1 1
	f^2	5.7	5.4	5.5	5.45	0 1
	g	6.5	6.2	6.2	6.20	0 0
	i	6.8	6.5	6.6	6.55	1 0
im. el.	c^3	3.9	3.6		3.6	a.
	e	4.9	4.6		4.6	a.
	n		8.4			14)14 ±10
	r		9.3			
	k^1		6.9			
	l		7.8			
	o		8.3			
	q		9.5			
	k^2		7.1			
	k^5		7.7			
	m		7.9			
	s		9.8			
	u		im def			
	v		9.9			
	t		9.7			
2.30	p		8.8			
M.E.H	k^4		7.7			

23.25

Tuesday, November 26, 1907

S Cygni I' plate I 34329

copied

Scale M

Polar Sequence				see p.24 Sequence for S Cygni			Prismatic comp Polar Sequence	
a	2.0 2.2	2.2		g^2 5.9 6.1 5.9	6.00	1 ⊥	1	3.6 3.8
14a	4.8 5.0 4.7	4.85	2 ⊥	c 4.8 5.0 5.1	5.05	0 1	10	7.7
10	2.9 3.1	3.1		a 3.9 4.1	4.1	a.	a	7.5
b	3.9 4.1	4.1		g^3 6.4 6.6 6.6	6.60	0 0	b	$\overset{9}{8}$.1
c^3	5.7 5.9 5.8	5.85	1 0	f^2 6.9 7.1 7.1	7.10	0 0	14a	9.6
12	3.2 3.4	3.4		g^1 5.8 6.0 5.9	5.95	0 ⊥	12	8.6
16	4.5 4.7 4.9	4.80	⊥ 1	d 5.5 5.7 5.7	5.70	0 0	16	9.7
c^2	5.4 5.6 5.7	5.65	0 1	b 5.4 5.6 5.6	5.60	0 0	c^2	not certainly ident
e	6.6 6.8 6.7	6.75	0 ⊥	k 7.7	7.7	. a	c^1	9.6
c^1	4.7 4.9 4.8	4.85	1 0	f^1 6.6 6.8 6.8	6.80	0 0		
d	6.3 6.5 6.5	6.50	0 0	h 8.2				
f^1	7.2			p^1 8.9			S Cygni	
g	8.3			s 9.9			a	9.4
k^3	9.7			p^2 9.3			c	not certainly ident
f^2	7.7			o 8.3			e	10.1
f^3	8.0			m 7.9			b	9.6
i	8.7			q superposed with another star				
k^1	9.1			fl 7.7				
l	10.1			n 8.8				
h	8.6			r 9.6				
k^2	9.2			e 5.3 5.5 5.5	5.50	0 0		
k^5	9.9							
k^4	9.8							

-3
+6
14)9(±0.643
84
60
56
40
42
±0.064

-2
+2
18)4(±0.222
36
40
±0.022

23.50

M. E. H.

23.50

Tuesday, November 26, 1907

S Cygni I' plate I 34329 Repeated measurements

copied

Scale M

Mean.	P.22 3.1	Polar Sequence				Diff.
3.10 00	im el	10	2.9 3.1	3.1		+3.88
5.68 03 02	5.65	c^2	5.6 5.8 5.6	5.70	1 ⊥	3.74
3.35 0⊥	3.4	12	3.1 3.3	3.3		
4.85 05 05	4.80	16	4.8 5.0 4.8	4.90	1 ⊥	
6.48 02 03	6.50	d	6.2 6.4 6.5	6.45	0 1	3.69
4.85 0 0	4.85	c^1	4.6 4.8 4.9	4.85	0 1	4.04
2.20 00	2.2	a	2.0 2.2	2.2		4.19
4.90 05 05	4.85	14a	4.8 5.0 4.9	4.95	0 ⊥	3.80
6.80 05 05	6.75	e	6.7 6.9 6.8	6.85	1 0	
5.85 00 00	5.85	c^3	5.6 5.8 5.9	5.85	0 1	3.88
4.15 0⊥ 0	4.1	b	4.0 4.2	4.2		3.95
7.20 00	7.2	f^1	6.9 7.1 7.3	7.20	⊥ 1	
8.00 00	8.0	f^3	8.0			3.92
9.80 00	9.8	k^4	9.8			
8.30 00	8.3	g	8.3			3.98
8.80 00	8.7	i	8.9			
8.65 01	8.6	h	8.7			3.94
9.25 01	9.2	k^2	9.3			
7.70 00	7.7	f^2	7.7			3.99
9.65 10	9.7	k^3	9.6			4.08
9.10 00	9.1	k^1	9.1			4.10
10.05 10	10.1	l	10.0			
9.80 10	9.9	k^5	9.8			4.39

see p.24 Sequence for S Cygni			Prismatic companions Polar Sequence		P.22.		Diff.
b 5.4 5.6 5.6	5.60	0 0	1	3.6	3.8 3.8	3.80 00	
f^2 7.0 7.2 7.0	7.10	1 ⊥	a	6.9	7.5	7.20 33	-0.81
g^2 5.9 6.1 6.1	6.10	0 0	14a	9.6	9.6	9.60 00	-0.90
a 3.8 4.0	4.0	a.	b	8.9	9.1	9.00 ⊥1	-0.90
d 5.7 5.9 5.7	5.80	1 ⊥	12	8.4	8.6	8.50 ⊥1	
g^3 6.5 6.7 6.5	6.60	1 ⊥	16	9.5	9.7	9.60 ⊥1	
c 5.0 5.2 5.2	5.20	0 0	c^1	9.5	9.6	9.55 ⊥0	-0.66
e 5.5 5.7 5.5	5.60	1 ⊥	10	7.9	7.7	7.80 ⊥	-0.82
g^1 5.9 6.1 6.0	6.05	1 0					
f^1 6.7 6.9 6.9	6.90	0 0					
p^1 8.9							
s 9.9			S Cygni P.C.		P.22	Mean.	
l 7.7			d	9.7	9.6	9.65	1 0
n 9.0			a	9.3	9.4	9.35	⊥ 0
p^2 9.4			k-e	10.1	10.1	10.10	0 0
o 8.4							
k 7.5			a 9.35		curve reading -0.84	Magn. 8.51	
h 8.4			b 9.65		-0.85	8.80	
r 9.6			e 10.10				
m 7.8							

-4
+7
16)11(±0.688
96
140
128
12
±0.069

-4
+5
18)9(±0.5
±0.05

0.10

M. E. H.

I 34329.

Seq. for S Cygni

	copied from p.22	p.23	Mean.			Reading fr. curve.	Magn.
g^2	6.00	6.10	6.05	05	05	+ 3.75	9.80
c	5.05	5.20	5.12	07	08	3.83	8.95
a	4.1	4.0	4.05	1	0	~~3.~~	
g^3	6.60	6.60	6.60	00	00	3.74	10.34
f^2	7.10	7.10	7.10	00	00	3.77	10.87
g^1	5.95	6.05	6.00	05	05	3.75	9.75
d	5.70	5.80	5.75	05	05	3.78	9.53
b	5.60	5.60	5.60	00	00	3.79	9.39
k	7.7	7.5	7.60	01	01	3.81	11.41
f^1	6.80	6.90	6.85	05	05	3.75	10.60
h	8.2	8.4	8.30	1	1	3.90	12.20
p^1	8.9	8.9	8.90	0	0	4.01	13.91
s	9.9	9.9	9.90	0	0	4.25	14.15
p^2	9.3	9.4	9.35	1	0	4.10	13.45
o	8.3	8.4	8.35	1	0	3.91	12.26
m	7.9	7.8	7.85	1	0	3.84	11.69
q	sup.						
l	7.7	7.7	7.70	0	0	3.80	11.50
n	8.8	9.0	8.90	1	1	4.01	12.91
r	9.6	9.6	9.60	0	0	4.17	13.77
e	5.50	5.60	5.55	05	05	3.78	9.33

These reductions, also means and differences on preceding page, were made Oct. 10, 1912.
O.

I 34883 Seq. for S Cygni.

	fr. p. 26	p.27	Mean.			Reading fr. curve.	Magn.
b	5.85	5.95	5.90	05	05	+ 3.52	9.42
g^2	6.50	6.45	6.48	02	03	3.54	$\overset{10}{\cancel{9}}$.02
d	5.95	5.95	5.95	00	00	3.52	9.47
a	4.25	4.45	4.35	10	10	.	
g^3	6.85	6.80	6.82	03	02	3.57	10.39
c	5.40	5.60	5.50	10	10	3.50	9.00
g^1	6.30	6.35	6.32	02	03	3.54	9.86
f^1	7.15	7.10	7.12	03	02	3.59	10.71
e	5.80	5.75	5.78	02	03	3.51	9.29
k	7.6	7.7	7.65	0	1	3.62	11.27
p^1	9.0	9.3	9.15	2	1	3.84	12.99
r	9.8	9.9	9.85	0	1	4.16	14.01
m	8.2	8.0	8.10	1	1	3.66	11.76
n	9.1	9.2	9.15	1	0	3.84	12.99
s	10.0	10.0	10.00	0	0	4.24	14.24
f^2	7.5	7.4	7.45	1	0	3.61	11.06
o	8.6	8.6	8.60	0	0	3.73	12.33
h	8.5	8.5	8.50	0	0	3.71	12.21
l	7.7	7.7	7.70	0	0	3.63	11.33
p^2	9.5	9.4	9.45	1	0	3.97	13.42
q	9.7	9.8	9.75	1	0	4.08	13.63

The above reductions, also means + diff. on p. 26 were made Oct. 10, 1912.
O.

0.15

Wednesday, November 27, 1907

copied

Sequence for S Cygni. I' plate I 34883

Scale M

Polar Sequence			
10	2.6 2.8	2.8	
12	3.5 3.7	3.7	
d	6.0 6.2 6.7	6.45	$\underline{2}$ 3
16	5.2 5.4 5.5	5.45	0 1
a	2.1 2.3	2.3	
14a	5.1 5.3 5.2	5.25	1 0
im very poor 11	3.2 3.4	3.4	
c^2	5.6 5.8 5.8	5.80	0 0
f'	7.0 7.2 7.2	7.20	0 0
c'	5.3 5.5 5.6	5.55	$\underline{1}$ 0
b	4.1 4.3 4.7	4.50	$\underline{2}$ 2
e	6.8 7.0 7.0	7.00	0 0
c^3	6.0 6.2 6.2	6.20	0 0
k^4	10.0		
g	8.6		
k^3	9.7		
i	9.0		
f^2	7.9		
f^3	8.1		
h	8.7		
k'	9.2		
k^5	9.8		
k^2	9.2		

Sequence for S Cygni			
b	5.7 5.9 5.8	5.85	1 0
g^2	6.3 6.5 6.5	6.50	0 0
d	5.8 6.0 5.9	5.95	0 $\underline{1}$
a	3.9 4.1 4.4	4.25	$\underline{1}$ 2
g^3	6.8 7.0 6.7	6.85	2 $\underline{1}$
c	5.0 5.2 5.6	5.40	$\underline{2}$ 2
g'	5.9 6.1 6.5	6.30	$\underline{2}$ 2
f'	7.0 7.2 7.1	7.15	0 $\underline{1}$
e	5.6 5.8 5.8	5.80	0 0
k	7.6		
p'	9.0		
~~l~~	~~7.8~~		
r	9.8		
m	8.2		
n	9.1		
s	10.0		
f^2	7.5		
o	8.6		
h	8.5		
l	7.7		
p^2	9.5		
q	9.7		

Prismatic companions

Polar Sequence	~~Diff~~
1	3.9 4.1
a	7.6
b	9.0
14a	9.7
12	8.8
16	9.8
c'	9.8
10	8.2
11	8.4

S Cygni

a 9.8

c 10.2

$$\begin{array}{l} +7 \\ -5 \\ 18)\overline{12}\ (\pm 0.667 \\ \ \ \ \ 108 \\ \ \ \ \ 120 \end{array}$$

±0.067

$$\begin{array}{l} -8 \\ +9 \\ 18)\overline{17}\ (\pm 0.944 \\ \ \ \ \ 162 \\ \ \ \ \ \ 80 \\ \ \ \ \ \ 72 \\ \ \ \ \ \ \ 8 \end{array}$$

±0.094

0.35

M E H.

0.35

Wednesday, November 27, 1907

copied

Repeated measurements for S Cygni I' plate I 34883

Scale M

Mean	P.26	Polar Sequence				Diff
3.30 1 $\underline{1}$	3.4 im very poor	11	3.0 3.2	3.2		+3.88
3.70 0 0	3.7	12	3.5 3.7	3.7		
5.35 10 $\underline{10}$	5.45	16	4.9 5.1 5.4	5.25	$\underline{1}$ 2	
2.30 0 0	2.3	a	2.1 2.3	2.3	a ·	4.09
4.52 $\underline{02}$ 03	4.50	b	4.3 4.5 4.6	4.55	$\underline{1}$ 0	3.58
5.23 $\overset{2}{08}$ $\underline{03}$	5.25	14a	4.8 5.0 5.4	5.20	$\underline{2}$ 2	3.47
2.85 0 1	2.8	10	2.7 2.9	2.9		4.13
6.55 $\underline{10}$ 10	6.45	d	6.3 6.5 6.8	6.65	$\underline{1}$ 2	3.62
7.22 $\underline{02}$ 03	7.20	f'	7.0 7.2 7.3	7.25	0 1	·
5.80 00 00	5.80	c^2	5.7 5.9 5.7	5.80	1 $\underline{1}$	3.62
6.98 02 $\underline{03}$	7.00	e	6.8 7.0 6.9	6.95	0 $\underline{1}$	·
5.50 05 $\underline{05}$	5.55	c'	5.2 5.4 5.5	5.45	0 1	3.39
6.12 08 $\underline{01}$	6.20	c^3	5.9 6.1 6.0	6.05	1 0	3.61
8.25 $\underline{1}$ 2	8.1	f^3	8.4			3.67
10.05 01	10.0	k^4	10.1			
7.90 00	7.9	f^2	7.9			3.59
8.60 00	8.6	g	8.6			3.68
9.10 00	9.1	k^3	9.7			4.03
8.80 $\underline{1}$ 1	8.7	h	8.9			3.69
9.30 $\underline{1}$ 1	9.2	k'	9.4			3.90
9.00 00	9.0	i	9.0			/
9.25 01	9.2	k^2	9.3			
9.85 01	9.8	k^5	9.9			4.34

Sequence for S Cygni			
d	5.8 6.0 5.9	5.95	0 $\underline{1}$
g^2	6.2 6.4 6.5	6.45	0 1
a	$\overset{4}{5}$.2 4.4 4.5	4.45	0 1
e	$\overset{5}{6}$.5 5.7 5.8	5.75	$\underline{1}$ 0
g^3	6.6 6.8 6.8	6.80	0 0
c	5.4 5.6 5.6	5.60	0 0
g'	6.2 6.4 6.3	6.35	0 $\underline{1}$
f'	6.9 7.1 7.1	7.10	0 0
b	5.8 6.0 5.9	5.95	0 $\underline{1}$
f^2	7.4		
k	7.7		
p'	9.3		
l	7.7		
q	9.8		
h	8.5		
p^2	9.4		
o	8.6		
n	9.2		
r	9.9		
m	8.0		
s	10.0		

Prismatic companions

Polar Sequence		P.26 mean		Diff.
1	3.9 4.1	4.10	0 0	
a	7.5	7.55	0 $\underline{1}$	−1.16
b	8.9	8.95	0 $\underline{1}$	−0.85
14a	9.7	9.70	0 0	−1.00
10	8.1	8.15	0 $\underline{1}$	−1.17
c'	9.9	9.85	0 1	−0.96
12	8.8	8.80	0 0	
16	m.p	9.8	.a	
11	8.2	8.30	1 $\underline{1}$	−1.12

$16\,\overline{)6}$
0.024

S Cygni

		p.26	mean		curve reading
a	9.7	9.8	9.75	±0	−0.95
c	10.1	10.2	10.15	±0	

Magn.

a 8.80

$$\begin{array}{l} -7 \\ +10 \\ 18)\overline{17}\ (\pm 0.944 \end{array}$$

±0.094

$$\begin{array}{l} -4 \\ +2 \\ 18)\overline{16}\ (\pm 0.333 \\ \ \ \ \ \ 54 \\ \ \ \ \ \ \ 6 \end{array}$$

±0.033

12 55

M E H

0.45

Saturday, November 30, 1907

North Polar Sequence

Plate I 34835 Taken with and without shade glass

Scale M

	A	1st exposure				B.	2nd exposure		
	c'	4.6 4.8 4.9	4.85	01		c'	5.6 5.8 5.6	5.70	11̲
	f'	6.7 6.9 6.9	6.90	00		d	6.5 6.7 7.0	6.85	1̲2
	c^3	5.7 5.9 5.8	5.85	10		c^2	5.8 6.0 6.0	6.00	00
	18	5.8 6.0 5.9	5.95	01̲		l	6.9 7.1 7.3	7.20	1̲1
	d	6.0 6.2 6.0	6.10	11̲		19	6.7 6.9 6.8	6.85	1̲0
	f^2	7.2	7.2	a		c^3	6.1 6.3 6.5	6.40	1̲1
	l	6.3 6.5 6.6	6.55	10		18	6.4 6.6 6.7	6.65	01
	19	5.8 6.0 5.9	5.95	01̲		~~b~~	6.7		
	c^2	5.2 5.4 5.7	5.55	2̲1		f'	7.3		
	g	7.8				f^2	7.7		
	k^3	9.1				g	8.4		
	h	7.9				k^3	10.1		
	k^4	9.5				i	9.2		
	i	8.5				k^4	n.s		
	l	9.8				f^3	8.2		
	k'	8.7				h	8.8		
	k^5	9.7				k'	9.3		
	k^2	8.4^9				k^2	9.6		
	f^3	7.8^7							

+4
−6
168) 10
±0.05

+67
−4
14) 110
±0.078

1.00

M.E.H.

2.50

Saturday, November 30, 1907

copied

Sequence for R Draconis I' plate I 34962

Scale M

		Polar Sequence			P.30	R Draconis				Prismatic comparison Polar Sequence		Mean	Curve	Mag.
im very poor	a	2.1 2.3	2.3		4.0	d	3.8 4.0	4.0		1	3.6 3.8	4.00	.	.
"	b	3.9 4.1 4.1	4.10	00	6.85	l	6.7 6.9 6.7	6.80	11̲	a	7.3	6.82	+4.01	10.83
	12	3.8 4.0	4.0		4.20	c	3.7 3.9	3.9		b	8.8	4.05	.	.
	16	4.9 5.1 5.0	5.05	10	4.90	l	4.6 4.8 4.7	4.75	01̲	14a	9.1	4.82	.	.
	c^3	5.8 6.0 5.9	5.95	01̲	6.90*	m	6.8 7.0 6.9	6.95	01̲	16	9.4	6.92	4.04	10.96
	10	3.0 3.2	3.2		5.70	h'	5.5 5.7 5.7	5.70	00	12	8.1	5.70	3.67	9.37
	c^2	5.5 5.7 5.8	5.75	1̲0	3.9	a	3.5 3.7	3.7		10	7.9	3.80	.	.
m. poor	11	3.1 3.3	3.3		6.45	k	6.3 6.5 6.5	6.50	00	c'	9.2	6.48	3.90	10.38
	d	5.9 6.1 6.4	6.25	1̲2	5.25	f	4.9 5.1 5.4	5.25	1̲2	11	7.7	5.25	.	.
	f'	6.9 7.1 7.0	7.05	10	6.15*	h^2	6.0 6.2 6.2	6.20	00	c^2	9.5	6.18	3.80	9.98
	c'	$\overset{4}{5}.8$ 5.0 5.2	5.10	1̲1	4.1	b	$\overset{3}{4}.9$ 4.1	4.1		c^3	film def	4.10	.	.
	l	6.3 6.5 6.7	6.60	1̲1	4.90	g	4.8 5.0 4.9	4.95	01̲	d	n.s	4.92	.	.
	14a	4.7 4.9 4.8	4.85	10	7.05*	n'	6.8 7.0 6.9	6.95	01̲			7.00	4.05	11.05
	f^2	7.3			8.3	p	8.1			R Draconis		8.20	4.39	12.59
	g	7.9			8.9	r	8.8			d	8.7	8.85	4.45	13.30
	i	8.5			9.0	s	9.0			b	8.9	9.00	4.46	13.46
	k^4	9.1			8.6	q	8.4			a	8.4	8.50	4.42	12.92
	f^3	7.9			7.9*	o^2	7.9			c	8.7	7.90	4.31	12.21
	h	8.1			7.1*	n^2	7.2			l	9.3	7.15	4.09	11.24
	k'	8.9			9.7	u	9.4			f	film def in region	9.55	4.47	14.02
	k3	9.2			9.9	w	9.8			g	9.6	9.85	4.48	14.33
	k^5	9.7			7.6*	o'	7.7			h'	9.8	7.65	4.24	11.89
	k^2	8.9			9.7	t	9.5					9.60	4.48	14.08
	l	9.8												
	m	10.0												

(+7
−5
18) 12
±07)

See p. 30

3.15

+7
−5
18) 1.2 (±0.067
108
120

+3
−6
18) 9 (±0.05

* See note marked ‡, p. 10

M.E.H.

3.15

Saturday, November. 30, 1907

Star images brighter than c' (No. 10 of Polar Seq.) are not plotted. H.S.L. March 23, 1915.

R Draconis

copied I 34962 Remeasured

Scale M Diff.		Polar Sequence			P.29.	Mean		R Draconis				Prismatic comp. Polar Sequence			Diff
~~+.04~~	a	2.2 2.4	2.4		2.3	2.35	01	d	3.8 4.0	4.0		13.6	3.8	3.80 00	
~~+.00~~	b	3.9 4.1	4.1		4.10	4.10	00	g	4.7 4.9 4.9	4.90	00	a	7.3	7.30 00	-0.91
	12	3.7 3.9	3.9		4.0	3.95	10	l	6.6 6.8 6.9	6.85	01	b	8.7	8.75 10	-0.65
	16	4.9 5.1 4.9	5.00	1 1	5.05	5.02	02 03	a	3.7 3.9	3.9		14a	9.3	9.20 10	-0.50
	10	3.0 3.2	3.2		3.2	3.20	00	*h'	5.5 5.7 5.7	5.70	00	12	8.4	8.25 21	.
+3.79	c'	5.0 5.2 5.0	5.10	1 1	5.10	5.10	00,00	c	4.0 4.2	4.2		16	9.5	9.45 01	.
3.82	d	~~5.3~~ 6.1 6.3 6.6	6.45	1 2	6.25	6.35	10 10	k	6.2 6.4 6.5	6.45	01	c²	9.7	9.60 11	-0.18
3.62	c²	5.7 5.9 5.8	5.85	1 0	5.75	5.80	05 05	*h²	6.0 6.2 6.1	6.15	01	10	7.8	7.85 10	-0.87
.	f'	6.8 7.0 7.0	7.00	0 0	7.05	7.02	02 03	m	6.7 6.9 6.9	6.90	00	c'	9.1	9.15 10	-0.96
3.78	c³	5.8 6.0 5.9	5.95	0 1	5.95	5.95	00 00	l	4.8 5.0 4.8	4.90	11	11	7.9	7.80 10	-0.62
.	e	6.4 6.6 6.8	6.70	1 1	6.60	6.65	05 05	b	3.9 4.1	4.1				20) 11 ±0.055	
	11	3.1 3.3	3.3		3.3	3.30	00	f	5.1 5.3 5.2	5.25	10				
	14a	4.7 4.9 4.8	4.85	1 0	4.85	4.85	00 00	*m'	6.9 7.1 7.0	7.05	10				

Scale M Diff.		Polar Sequence		P.29.	Mean		R Draconis		R Draconis P.29		P Mean	Curve	Magn. ~~Diff.~~
4.44	h'	8.2	(16) 12 ±08)	8.1	8.15	01	p	8.3	d	8.7 8.8	8.75	-0.54	8.21
4.40	k'	8.7		8.9	8.80	11	t	9.7	b	8.9 8.9	8.90	-0.50	8.40
4.12	f³	7.7		7.9	7.80	11	o	9.0	e	9.3 9.3	9.30	-0.37	8.93
4.38	g	7.9		7.9	7.90	00	*o'	7.6	a	8.4 8.6	8.50	-0.61	7.89
4.48	k³	9.3		9.2	9.25	10	*o²	7.9	c	8.7 8.9	8.80	-0.53	7.27
.	i	8.4		8.5	8.45	01	u	9.7	g	9.6 9.5	9.55	-0.30	9.25
4.19	f²	7.3		7.3	7.30	00	q	8.6	h	9.8 9.9	9.85	-0.20	9.65
.	k⁴	9.3		9.1	9.20	11	r	8.9	R.	9.7	9.7a	-0.25	9.45
Supplementary star 9.3: to be plotted? - 4.48	l	9.9		9.8	9.85	10	w	9.9	h².	m.0	.	.	.
.	k²	9.1		8.9	9.00	11	*n²	7.1					
4.44	k⁵	9.8		9.7	9.75	01							
4.55	m	10.0		10.0	10.00	00							

+7
-5
16) 12 (±0.075
112
80

+5
-2
18) 7 (±0.038
54
160
144
16 ±0.039

3.35

M.E.H.

* See note marked ‡ on page 10

3.00

Monday March 2, 1908

North Polar Sequences of Plates with several exposures

Center 0 +90° Ordinary aperture Scale AC 8858

1½-inch eye-piece used

Scale N

A	AC 9043 +90°						B	Sequence at +85°		
1	1.2 ~~0.9~~1.0	.	~~0.9~~1.0	a . .	1)	2.0 1.~~7~~8 .	.	1.~~70~~8	a . .
8	t. faint 5.8 5.~~3~~4 5.3		5.3~~0~~5	. 0 ~~0~~1	2)	3.8 3.~~5~~6 4.0 3.~~5~~6	.	3.~~5~~60	00 .
2	3.4 3.~~1~~2 3.8 3.~~3~~4	.	3.~~2~~30	1 1 .	3a)	4.6 4.~~3~~4 4.8 4.~~3~~4	.	4.~~3~~40	00 .
3a	3.8 3.~~5~~6 3.8 3.~~3~~4	.	3.~~4~~50	1 1 .	4)	. 5.2 4.~~7~~8 4.9		4.8~~0~~5	. ~~1~~0 1
4	4.1 3.~~8~~9 4.7 4.~~2~~3	.	4.~~0~~10	2 2 .	8)	6.6 6.~~1~~2 5.8		~~5.85~~ 6.00	. ~~1~~2 2
13	7.9 7.~~4~~5 7.8		7.6~~0~~5	. ~~2~~1 2	13)	8.1 7.~~6~~7 7.7		7.~~65~~70	. 0 ~~1~~0
14a	8.5 8.~~0~~1 8.0		8.0~~0~~5	. ~~0~~1 0	14a)	8.7 8.~~2~~3 8.4		8.3~~0~~5	. 1 ~~1~~0
5	5.7 5.~~2~~3 4.9		5.~~05~~10	. 2 ~~1~~2	10)	7.1 6.~~6~~7 6.7		6.~~65~~70	. 0 ~~1~~0
16	8.6 8.~~1~~2 8.3		8.2~~0~~5	. ~~1~~0 1	6)	5.9 5.~~4~~5 5.4		5.4~~0~~5	. ~~0~~1 0
12	7.7 7.~~2~~3 7.1		7.~~25~~20	. ~~0~~1 1	14) impor	8.6 8.~~1~~2 7.8		~~8.05~~ 8.00	. ~~1~~2 2
15	8.8 8.~~3~~4 8.4		8.~~35~~40	. ~~1~~0 0	12)	7.8 7.~~3~~4 7.2		7.~~25~~30	. 1 ~~0~~1
10	6.9 6.~~4~~5 6.0		6.2~~0~~5	. ~~2~~3 2	16)	8.9 8.~~4~~5 8.5		8.~~45~~50	. 0 ~~1~~0
c²	8.9 8.~~4~~5 8.9		8.~~65~~70	. 2 ~~3~~2	11)	7.1 6.~~6~~7 6.3		6.~~45~~50	. 2 ~~1~~2
c³	9.2 8.~~7~~8 8.9		8.8~~0~~5	. ~~1~~0 1	c²)	9.3 8.~~8~~9 8.9		8.~~85~~90	. 0 ~~1~~0
17	9.8 8.~~8~~9 8.9		8.~~85~~90	. 0 ~~1~~0	d)	9.7 9.~~2~~3 9.7		9.~~45~~50	. 2 ~~3~~2
d	9.7 9.~~2~~3 9.0		9.~~10~~15	. 1 ~~1~~2	f')	superposed with another star			
f' e	10.0 9.~~5~~6 9.9		9.7~~0~~5	. 2 ~~2~~1	17)				
9	6.3 5.~~8~~9 5.7		5.~~85~~80	. ~~0~~1 1	15)	8.8 8.~~3~~4 8.6		8.~~45~~50	. 1 ~~2~~1
11	7.1 6.~~6~~7 6.9		6.~~85~~80	. ~~2~~1 1	5)	5.7 5.~~2~~3 5.4		5.3~~0~~5	. 1 ~~1~~0
6	6.4 ~~5.9~~ 6.0 5.9		5.9~~0~~5	. 0 ~~0~~1	7) impor	5.8 5.~~3~~4 5.5		5.4~~0~~5	. ~~1~~0 1
14	8.4 ~~7.9~~ 8.0 8.0		~~8.05~~ 8.00	. ~~1~~0 ~~0~~0	c³)	9.4 ~~8.9~~ 9.0 9.1		9.0~~0~~5	~~1~~0 ~~1~~1
7	6.8 6.~~3~~4 5.8		6.0~~5~~10	. 3 ~~2~~3	9)	5.9 5.~~4~~5 5.8		5.6~~0~~5	. ~~2~~1 2
e	9.7 9.~~2~~3 9.5		9.~~35~~40	. ~~2~~1 1	e)	9.8 9.~~3~~4 9.9		9.6~~0~~5	. ~~1~~2 3

-24
+25
44) 49 (±0.111
44
50
44
60
44
16

+19
-15
40) 34 (±0.085
320
20

3.30

M.E.H.

Monday, March 2, 1907

Copied

Distance in millimeters from center of plate

AC 9043

	A Exposure +90°	B Exposure +85°
a	1 -9	1- +22
B	2 ± 17	2 + 32
C	3a ∓ 24	3a ± 9
D	4 - 19	4 - 10
E	5 ± 15	5 31
F	6 + 10	6 38
b	7 + 17	7 46
a^1	8 - 10	8 20
a^2	9 ± 19	9 37
a^3	10 ± 9	10 32
a^4	11 + 11	11 39
a^5	12 ± 4	12 26
b^1	13 - 9	13 23
b^3	14 + 10	14 38
b^2	14a - 10	14a 23
c^1	15 + 3	15 28
c^4	16 ± 6	16 25
c^5	17 + 9	17 35
	c^2 + 4	c^2 31
	c^3 + 4	c^3 31
	d + 5	d 30
	e + 5	e 29
	f' 5	f' 29
	~~c' 4~~	

M.E.H.

0.25

Tuesday, March 3, 1907

North Polar Sequence Plate AC 9043 remeasured

~~Eye-piece~~ scale AC 8858 2 in. eye-piece

Scale N

	Exp +90°			Exp +85°
1	1.5 1.$\overset{3}{2}$	1.$\overset{3}{2}$	a	
2	3.6 3.$\overset{4}{8}$ 3.9 3.$\overset{5}{7}$	3.$\overset{4}{3}$5	$\overset{0}{1}$ $\overset{1}{0}$	
3a	4.0 3.$\overset{8}{7}$ 4.4 $\overset{4.0}{39}$	3.$\overset{9}{8}$0	1 1 8	
4	4.6 4.$\overset{4}{3}$ 4.9 4.$\overset{5}{4}$ 4.8	4.5$\overset{7}{0}$	2 1 $\overset{2}{3}$	
7	6.7 6.$\overset{3}{2}$ 6.2	6.2$\overset{5}{0}$	$\overset{1}{0}$ 0	
11	7.5 7.$\overset{1}{0}$ 6.9	$\overset{7.00}{6.95}$	$\overset{1}{0}$ 1	
14	8.6 8.$\overset{2}{1}$ 8.1	8.1$\overset{5}{0}$	0 $\overset{1}{2}$	
6	6.8 6.$\overset{4}{3}$ 6.0	6.$\overset{20}{15}$	$\overset{2}{1}$ 2	
c^2	9.0 8.$\overset{6}{5}$			
10	6.9 6.$\overset{5}{4}$ 6.7	6.$\overset{60}{55}$	$\overset{1}{2}$ 1	
15	8.7 8.$\overset{3}{2}$ 8.6	8.4$\overset{5}{0}$	$\overset{1}{2}$ 2	
5	5.8 5.$\overset{4}{3}$ 5.1	5.2$\overset{5}{0}$	$\overset{2}{1}$ 1	
12	$\overset{7}{6}$.8 7.$\overset{4}{3}$ 7.4	7.$\overset{40}{35}$	$\overset{0}{1}$ 0	
8	5.8 5.$\overset{4}{3}$ 5.6	5.$\overset{50}{45}$	1 $\overset{1}{2}$	
16	8.7 8.$\overset{3}{2}$ 8.2	8.2$\overset{5}{0}$	$\overset{1}{0}$ 0	
13	8.1 7.$\overset{7}{6}$ 7.9	7.$\overset{80}{75}$	$\overset{1}{2}$ 1	
9	6.8 6.$\overset{4}{3}$ 5.8	6.$\overset{10}{05}$	3 $\overset{3}{2}$	
14a	8.5 8.$\overset{1}{2}$ 8.3	8.$\overset{20}{15}$	$\overset{1}{2}$ 1	
17	9.2 8.$\overset{8}{7}$ 9.0	8.$\overset{90}{85}$	1 $\overset{1}{2}$	
c^3	9.2 8.$\overset{8}{7}$ 9.2	$\overset{9.10}{8.95}$	$\overset{2}{1}$ 2	
c^2	8.8 8.$\overset{4}{3}$ 8.9	8.65	$\overset{2}{1}$ 3	
d	9.3	9.3	a	
e	9.5	9.5	a	
f'	9.8	9.8	a	

+26

39)48 (±0.123

Measures made more easily with 2-inch eye-piece

M.E.H.

Wednesday, March 4, 1908

23.25

copied North Polar Sequence

Scale M

	a	I 35044 +90°		
	a	.		
	a^1	3.5 3.7	3.7	
im poor	B	1.2 1.4	1.4	
	E	2.7 2.9	2.9	
m. e	G	3.3 3.5	3.5	
	b^3	5.1 5.3 5.0	5.15	1 2
	F	3.5 3.7	3.7	
	a^4	3.8 4.0	4.0	
	c^5	6.7 6.9 6.8	6.85	1 0
	a^3	3.9 4.1	4.1	
	C	t. m. e		
	D	..		
	~~a^1~~	~~4.9~~		
	c^6	6.8 7.0 7.2	7.10	⊥ ⊥
	c^1	5.8 6.0 6.1	6.05	0 1
	c^7	7.0 7.2 7.4	7.30	⊥ 1
	c^4	5.8 6.0 5.7	5.85	2 ⊥
	a^5	4.7 4.9 4.8	4.85	1 0
	c^3	6.7 6.9 6.9	6.90	0 0
m e	a^2	3.7 3.9	3.9	a ..
	b^2	5.6 5.8 5.7	5.75	0 ⊥
	c^2	6.4 6.6 6.7	6.65	0 1
	b^1	4.9 5.1 5.3	5.20	± ⊥ 1
	d	7.3		
	f^1	8.0		
	g	8.7		
	i	9.4		

+10
−7
22)17(±0.077
154
160

e	7.8
f^2	8.6
h	9.5
f^3	8.9
k^1	9.8
k^2	10.0

M.E.H.

Wednesday, March 4, 1908

copied North Polar Sequence

Scale M

B	I 35044 + 85°		
C	t. m. e		
D	..		
G	.. ~~9.4~~		
a^2	..		
B	1.3 1.5	1.5	a ..
E	2.8 3.0	3.0 2.90	
c^4	5.9 6.2 6.1 6.1	6.10	0 0
a^5	4.8 5.0 5.2	5.10	⊥ 1
a^1	3.5 3.7	3.7	a.
b^1	4.8 5.0 5.1	5.05	0 1
b^2	5.7 5.9 5.7	5.80	1 ⊥
a^3	3.9 4.1 4.1	4.10	0 0
c^2	6.6 6.8 6.8	6.80	0 0
c^7	t. ff. 7.5	7.5	a
c^6	6.9 7.1 7.2	7.15	⊥ 0
c^1	5.8 6.0 6.0	6.00	0 0
c^5	6.8 7.0 7.1	7.05	0 1
b^3	5 4.7 5.9 5.8	5.85	1 0
F	3.5 3.7	3.7	a.
a^4	4.0 4.2	4.2	a.
c^3	6.8 7.0 7.0	7.00	0 0
f^1	8.4		
d	7.6		
f^2	8.8 ~~9.5~~		
e	7.7		
f^3	9.0		

0.0

i	9.7
g	9.4
h	9.5
k^1	10.1

+5
−3
22)8(±0.03

M.E.H.

4.00

Wednesday, March 4, 1908

North Polar Sequence Plate I 15253

Copied

taken with Iceland Spar

Scale M

I 15253

images no. 1

a	2.1	2.3	·	2.3	a ·
a'	4.7	4.9	4.8	4.85	1 0
b	3.8	4.0	·	4.0	a ·
b'	5.5	5.7	5.8	5.75	1 0
c	3.6	3.8	·	3.8	a ·
c'	5.9	6.1	6.5	6.30	2 2
d	4.1	4.3		4.3	a ·
d'	6.7	6.9	6.9	6.90	0 0
e	5.0	5.2	4.9	5.05	2 1
e'	6.8	7.0	7.2	7.10	1 1
f	5.9	6.1	5.9	6.00	1 1
f'	·		7.7	7.7	· a
p	6.2	6.4	6.7	6.55	2 1
q	6.6	6.8	7.0	6.90	1 1
r	7.0	7.2	7.3	7.25	0 1

+10
−9
20) 19 (±0.095
180
100

Images no 2.

a)	4.7	4.9	4.7	4.80	1 1
a'	6.9	7.1	7.4	7.25	1 2
b	5.6	5.8	5.7	5.75	0 1
b'	·		7.7	7.7	· a
c	5.9	6.1	6.3	6.20	1 1
c'	·		8.2	8.2	· a
d	6.4	6.6	6.9	6.75	2 1
d'	·		9.0	9.0	· a
e	6.8	7.0	7.0	7.00	0 0
e'	·		9.6		
f	·		7.9		
f'			m.s.		
p			8.9		
q			9.2		
r			9.8		

−6
+5
12) 11 (±0.092
108
20
24

M. E. H.

Wednesday, March 4, 1908

North Polar Sequence Plate I 15253

Copied

taken with Iceland Spar

Scale M

Images No 3

a	2.1	2.3	·	2.3	a ·
a'	4.4	4.6	4.8	4.70	1 1
b	3.0	3.2	·	3.2	a ·
b'	5.1	5.3	5.7	5.50	2 2
c	3.6	3.8	·	3.8	a ·
c'	5.8	6.0	6.4	6.20	2 2
d	4.2	4.4		4.4	a ·
d'	6.1	6.3	6.6	6.45	1 2
e	4.9	5.1	5.0	5.05	1 0
e'	6.9	7.1	6.9	7.00	1 1
f	5.8	6.0	5.9	5.95	0 1
f'	·		7.8	7.8	· a
p	6.7	6.9	6.8	6.85	1 0
q	·		7.0	7.0	· a
r			7.5	7.5	· a

+10
−8
16) 18 (±0.112
16
20
16

Images No 4

a	5.2	5.4	5.6	5.50	1 1
a'	7.0	7.2	7.6	7.40	2 2
b	5.8	6.0	5.9	5.95	0 1
b'	·		7.7	7.7	· a
c	6.2	6.4	6.7	6.55	2 1
c'	·		8.0	8.0	· a
d	6.7	6.9	7.2	7.05	1 2
d'	·		8.8	8.8	· a
e	·		7.6		
e'	·		10.0		
f	·		7.9		
f'			m.s.		
p			8.7		
q			9.0		
r			9.5		

+6
−7
10) 13 (±0.13
10
30

4.20

M. E. H.

22.00

Thursday, March 5, 1908

copied

North Polar Sequence I 15254 taken with Iceland Spar

Scale M

Images 1

a	2.0 2.2 ·	2.2	a ·
a'	4.7 4.9 4.7	4.80	1 1
b	2.6 2.8 ·	2.8	a ·
b'	5.1 5.3 5.8	5.55	3 2
c	3.4 3.6 ·	3.6	a ·
c'	5.9 6.1 6.6	6.35	3 2
d	3.9 4.1 ·	4.1	a ·
d'	6.5 6.7 6.9	6.80	1 1
e	4.7 4.9 4.6	4.75	1 2
e'	6.9 7.1 7.2	7.15	1 0
f	5.6 5.8 5.7	5.75	0 1
f'	· 7.6	7.6	· a
p	5.9 6.1 6.3	6.20	1 1
q	6.6 6.8 6.9	6.85	0 1
r	6.9 7.1 7.2	7.15	1 0

-14
+9
20)23 (±0.115
20
30
20
100

Images 2

a	4.6 4.8 4.7	4.75	0 1
a'	6.8 7.0 6.9	6.95	0 1
b	5.0 5.2 5.6	5.40	2 2
b'	7.0 7.2 7.3	7.25	0 1
c	5.9 6.1 6.3	6.20	1 1
c'	· 8.2	8.2	· a
d	6.2 6.4 6.9	6.65	2 3
d'	8.8	8.8	· a
e	6.8 7.0 7.2	7.10	1 1
e'	· 9.7		
f	· 7.8		
f'	n s		
p	8.7		
q	9.3		
r	10.0		

-8
+8
14)16 (±0.114
14
20
14
60
56

MEH

Thursday, March 5, 1908

copied

North Polar Sequence Plate I 15254 taken with Iceland Spar

Scale M

Images 3

a	2.0 2.2 ·		
a'	4.1 4.3 4.7	4.50	2 2
b	2.4 2.6	2.6	a ·
b'	4.9 5.1 5.6	5.35	3 2
c	3.7 3.9	3.9	a ·
c'	5.8 6.0 6.3	6.15	2 1
d	4.2 4.4 4.7	4.55	2 1
d'	6.0 6.2 6.8	6.50	3 3
e	4.8 5.0 5.3	5.15	2 1
e'	6.7 6.9 7.0	6.95	1 0
f	5.6 5.8 5.9	5.85	0 1
f'	7.0 7.2 7.5	7.35	2 1
p	6.2 6.4 6.6	6.50	1 1
q	6.8 7.0 7.0	7.00	0 0
r	· 7.7	7.7	· a

+13
-18
22)31 (±0.141
22
90
88
20

Images 4

a	5.3 5.5 5.6	5.55	1 0
a'	6.9 7.1 7.0	7.05	1 0
b	5.7 5.9 5.9	5.90	0 0
b'	7.0 7.2 7.2	7.20	0 0
c	6.0 6.2 6.6	6.40	2 2
c'	· 7.9	7.9	· a
d	6.7 6.9 6.9	6.90	0 0
d'	· 8.7	8.7	· a
e	7.0 7.2 7.3	7.25	0 1
e'	· 9.8	9.8	· a
f	7.7	7.7	· a
f'	n.s.	n.s	
p	8.0	8.0	· a
q	8.7	8.7	· a
r	9.7	9.7	· a

all measurements difficult

-3
+4
14)7 (±0.05

M.E.H.

Thursday March 5, 1908

copied North Polar Sequence Plate I 15251 taken with Iceland Spar.

Scale M

Images 1						Images 3					
a	5.9	6.1	6.2	6.15	⊥ 0	a	5.9	6.1	6.0	6.05	⊥ 0
b	6.0	6.2	6.4	6.30	⊥ 1	b	6.1	6.3	6.4	6.35	⊥ 0
c	6.0	6.2	6.2	6.20	0 0	c	6.1	6.3	6.4	6.35	⊥ 0
d	5.1	5.3	5.3	5.30	0 0	d	5.5	5.7	5.7	5.70	0 0
d'			7.7	7.7	. a	d'			7.6	7.6	. a
e	5.8	6.0	5.8	5.90	1 ⊥	e	6.2	6.4	6.6	6.50	⊥ 1

Images 1:
-3
+2
10) 5 (±0.05

Images 3:
-3
+2
10) 5 (±0.05

Images 2 2nd scale		Images 4 2nd scale	
a	7.9	a	8.0
b	8.0	b	8.1
c	$8.\overset{4}{2}$	c	8.1
d	7.9	d	7.8
d'	10.1	d'	10.1
e	8.7	e	8.3

M.E.H.

Thursday, March 5, 1908

copied North Polar Sequence Plate I 15$\overset{2}{\cancel{3}}$52 taken with Iceland Spar

Scale M

Images 1						Images 3					
a	2.2	2.4		2.4	a .	a	2.1	2.3		2.3	a .
a'	4.7	4.9	5.1	5.00	⊥ 1	a'	~~5.3~~ 4.9	5.1	5.3	5.20	⊥ 1
b	5.0	5.2	5.6	5.40	2̲ 2	b	5.6	5.3	5.6	5.45	⊥ 2
b'	7.0	7.2	7.2	7.20	0 0	b'	6.9	7.1	7.3	7.20	⊥ 1
c			7.2	7.2	. a	c			7.5	7.5	. a
d			7.4	7.4	. a	d			7.6	7.6	. a
e	6.4	6.6	6.8	6.70	⊥ 1	e	6.5	6.7	6.9	6.80	⊥ 1
f			7.5	7.5	. a	f	7.0	7.2	7.6	7.40	2̲ 2
h	6.6	6.8	7.0	6.90	⊥ 1	h	6.7	6.9	6.9	6.90	0 0

Images 1:
+5
-5
10) 10 (±0.10

Images 3:
-18
+7
12) 13 (±0.108
12
100
98

Images 2						Images 4					
a	4.9	5.1	5.1	5.10	0 0	a	5.3	5.5	5.5	5.50	0 0
a'			7.4		±00	a'			7.2		±00
b			7.5			b			7.3		
b'			9.8			b'			9.8		
c			9.7			c			9.4		
d			9.7			d			9.4		
e			8.9			e			8.7		
f			9.8			f			9.3		
h			8.8			h			8.7		

22.45

M.E.H.

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March 6, 1908.

North Polar Sequence ~~Plate H 234~~ Scale Measures

Scale from C 15350

Scale P	Plate H 234				Plate H 235					
c1	5.9	5.6	5.8	5.70 1 1	c1	4.2	$\overset{3}{\cancel{4}}.9$	c1	4.4	4.15 ~~2 3~~ 3 2
c2	6.5	6.2	6.2	6.20 0 0	c2	4.3	4.0	m	9.1	
c3	6.7	6.4	6.6	6.50 1 1	c3	4.5	4.2	p	7.0	
d	6.9	6.6	6.8	6.70 1 1	d	5.0	4.7	e	5.6	5.55 1 0
f1			7.5		f1	5.8	5.5	c3	4.3	4.25 0 1
$f\overset{3}{2}$			8.6	8)16 ±08	f3	6.7	6.4	f1	5.9	5.70 2 2
f2			8.0		f2	6.7	6.4	i	7.6	
e			7.0		e	5.8	5.5	k3	8.2	
g			9.1		g	too ft.		l	8.9	
h			9.4					k1	7.6	
i			9.5					d	4.6	4.65 $\overset{1}{0}$ $\overset{0}{0}$
k1			9.9					c2	4.2	4.10 1 1
Ident. uncertain k2			10.1					n	9.4	
Do not use								k4	8.7	
								h	7.0	
								f2	6.2	6.30 1 1
								k5	8.9	
								o	9.6	
								p	10.0	
								q	w.s	
								f3	6.7	6.55 2 1
								g	7.0	
								k2	7.9	16)19 ±11

H. I. S.

March 6, 1908

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North Polar Sequence Scale Measures

	Scale P	Plate H 236				
	c1	3.7	3.4	c1	too br.	
	d	4.0	3.7	c2	too br.	
	f1	4.9	4.6	c3	too br.	
~~Souler~~ should this be 6.7	* g	5.7	$\overset{6}{5}.4$	d	too br.	
	e	4.4	4.1	e	4.7	~~4.40 3 3~~
	c2	3.4	3.1	f3	6.2	
	f2	5.8	5.5	k3	7.9	
	h	6.9	6.6	i	7.0	
				l	8.5	
	Do not use the above			o	8.9	
	measures Evidently			k4	8.0	
	interrupted			f1	4.8	~~4.70 1 1~~
				h	6.7	~~6.65 1 0~~ 0 1
				k2	7.6	
				k5	8.2	
				n	9.1	
				q	9.8	
				m	85	
				k1	7.3	
				f2	5.6	~~5.55 1 0~~
				r	9.9	
				s	10.0	
				t	w.S.	~~6.40 0 0~~
				g	6.4	~~5.9 5 5~~
				p	9.5	10)10 ±10

H. I. S.

23.35

Wednesday, March 18, 1908.

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North Polar Sequence of plate AC 9284
Scale ^{N}AC 8858

Sequences at +80° and +85° meas. p. 48

✓	Exp +90		
f^3	10.0	10.0	. . a
a	-1.0	$-1.\overset{2}{\cancel{0}}$	
a'	$\overset{3}{4.7}$ $3.\overset{5}{4}$ 3.8 $3.\overset{4}{\cancel{3}}$.	$3.\overset{4}{\cancel{3}}5$	$\overset{1}{\cancel{0}}\overset{0}{\cancel{1}}$.
b'	. 6.1 $5.\overset{7}{\cancel{6}}$ 5.8	$5.7\overset{5}{\cancel{0}}$	.1 $\overset{0}{\cancel{1}}$
B	1.2 $\overset{1.0}{\cancel{0.9}}$	~~0.9~~ 1.0	
E	2.9 $2.\overset{7}{\cancel{6}}$	$2.\overset{7}{\cancel{6}}$	
C	2.3 $2.\overset{1}{\cancel{0}}$	$2.\overset{1}{\cancel{0}}$	
D	2.8 $2.\overset{6}{\cancel{5}}$	$2.\overset{6}{\cancel{5}}$	
F	3.7 $3.\overset{5}{\cancel{4}}$ 3.8 $3.\overset{4}{\cancel{3}}$	$3.\overset{4}{\cancel{3}}5$	$\overset{1}{\cancel{0}}\overset{0}{\cancel{1}}$.
g	4.0 $3.\overset{8}{\cancel{7}}$ 4.0 $3.\overset{6}{\cancel{5}}$	$3.\overset{7}{\cancel{6}}0$	1 1 .
a^3	4.7 $4.\overset{5}{\cancel{3}}$ 4.8 $4.\overset{4}{\cancel{3}}$ 4.7	$4.\overset{53}{\cancel{47}}$	$\overset{0\ 1\ 2}{\cancel{1\ 2\ 2}}$
a^2	4.9 $4.\overset{7}{\cancel{6}}$ 4.9 $4.\overset{5}{\cancel{4}}$ 4.7	$4.\overset{63}{\cancel{57}}$	$\overset{1\ 1\ 1}{\cancel{0\ 2\ 1}}$
$b^{\overset{2}{\cancel{3}}}$	6.6 $6.\overset{2}{\cancel{1}}$ 6.7	$6.4\overset{5}{\cancel{0}}$	.$\overset{2}{\cancel{1}}$ 3
a^4	4.9 $4.\overset{5}{\cancel{4}}$ 4.8	$4.6\overset{5}{\cancel{0}}$	.$\overset{1}{\cancel{2}}$ 2
$b^{\overset{3}{\cancel{2}}}$	7.0 $6.\overset{6}{\cancel{5}}$ 6.8	$6.\overset{70}{\cancel{65}}$	.1 $\overset{1}{\cancel{2}}$
c^2	7.8 $7.\overset{4}{\cancel{3}}$ 7.7	$7.5\overset{5}{\cancel{0}}$	.2 $\overset{1}{\cancel{2}}$
d	8.8 $8.\overset{4}{\cancel{3}}$ 8.6	$8.\overset{50}{\cancel{45}}$	.1 $\overset{1}{\cancel{2}}$
c^1	7.4 $\overset{70}{\cancel{6.9}}$ 6.9	$6.9\overset{5}{\cancel{0}}$	.0 $\overset{1}{\cancel{2}}$
c^6	8.8 $8.\overset{4}{\cancel{3}}$ 8.6	$8.\overset{50}{\cancel{45}}$	.1 $\overset{1}{\cancel{2}}$
a^5	5.8 $5.\overset{4}{\cancel{3}}$ $\overset{5}{\cancel{4}}.7$	$5.5\overset{5}{\cancel{0}}$	.2 $\overset{1}{\cancel{2}}$
c^3	8.5 $8.\overset{1}{\cancel{0}}$ 8.0	$8.0\overset{5}{\cancel{0}}$	.$\overset{1}{\cancel{0}}$ 0
f^1	. 9.3	9.3	. . a
c^4	7.6 $7.\overset{2}{\cancel{1}}$ 7.0	$7.\overset{10}{\cancel{05}}$	.1 $\overset{1}{\cancel{0}}$
c^7	8.8 $8.\overset{4}{\cancel{3}}$ 8.5	$8.4\overset{5}{\cancel{0}}$	.$\overset{0}{\cancel{1}}$ 1
e	9.1 $8.\overset{7}{\cancel{6}}$ 8.9	$8.\overset{80}{\cancel{75}}$	.$\overset{1}{\cancel{2}}$ 1
c^5	superposed		
f^2	9.7	9.7	. . a

+21
-17
38) 38 (±0.1

M.E.H

Wednesday, March 18, 1908.

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North Polar Sequence of AC 9284
Scale ^{N}AC 8858

✓	Exp +75°		
	Omit p of capitols		
a^1	t p $^{\text{2nd sc}}$		
a^2	5.3 $4.\overset{9}{\cancel{8}}$ 4.9	$4.\overset{90}{\cancel{85}}$	.0 $\overset{0}{\cancel{1}}$
a^3	5.6 $5.\overset{2}{\cancel{1}}$ 5.6	$5.\overset{40}{\cancel{35}}$	.$\overset{2}{\cancel{1}}$ 2
c^2	7.8 $7.\overset{4}{\cancel{3}}$ 7.9	$7.6\overset{5}{\cancel{0}}$	.$\overset{2}{\cancel{1}}$ 3
d	8.9 $8.\overset{5}{\cancel{4}}$ 8.9	$8.\overset{70}{\cancel{65}}$	2 $\overset{2}{\cancel{3}}$
c^3	8.5 $8.\overset{1}{\cancel{0}}$ 8.4	$8.2\overset{5}{\cancel{0}}$	.$\overset{1}{\cancel{1}}$ 2
a^5	6.0 $5.\overset{6}{\cancel{5}}$ 5.8	$5.\overset{70}{\cancel{65}}$	.1 $\overset{1}{\cancel{2}}$
c^4	7.7 $7.\overset{3}{\cancel{2}}$ 7.3	$7.\overset{30}{\cancel{25}}$	.0 $\overset{0}{\cancel{1}}$
c^1	7.8 $7.\overset{4}{\cancel{3}}$ 7.7	$7.5\overset{5}{\cancel{0}}$	.2 $\overset{1}{\cancel{2}}$
a^4	6.1 $5.\overset{7}{\cancel{6}}$ 5.7	$5.\overset{70}{\cancel{65}}$	.0 $\overset{0}{\cancel{1}}$
b^1	7.1 $6.\overset{7}{\cancel{6}}$ 6.7	$6.\overset{70}{\cancel{65}}$	.0 $\overset{0}{\cancel{1}}$
c^5	8.8 $8.\overset{4}{\cancel{3}}$ 8.6	$8.\overset{50}{\cancel{45}}$	.1 $\overset{1}{\cancel{2}}$
$b^{\overset{2}{\cancel{3}}}$	7.6 $7.\overset{2}{\cancel{1}}$ 7.2	$7.\overset{20}{\cancel{15}}$	$\overset{0}{\cancel{1}}$0
$b^{\overset{3}{\cancel{2}}}$	7.6 $7.\overset{2}{\cancel{1}}$ 6.8	$\overset{7.00}{\cancel{6.95}}$	.$\overset{2}{\cancel{1}}$ 2
c^6	8.8 $8.\overset{4}{\cancel{3}}$ 8.7	$8.5\overset{5}{\cancel{0}}$	2 $\overset{1}{\cancel{2}}$
c^7	superposed		
e	. 9.0	9.0	
f^1	9.7	9.7	
f^2	9.8	9.8	
f^3	superposed		

+15
-15
28) 30 (±0.109
28
200 ±0.107
196

0.15

M.E.H

0.15

Wednesday, March 18, 1908

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North Polar Sequence AC 9284

~~Distance from Center~~ 109

Scale N

Sequence ~~β2~~ 13 9^h $+72^\circ$

Exp + 90°

Dist from C. 109

		2nd sc				
a		4.7	4.~~2~~3	4.8	4.5~~2~~5	3 ~~8~~2
b ~~B~~		4.8	4.~~3~~4	4.8	4.~~55~~60	~~1~~2 2
f ~~F~~		7.8	7.~~8~~4	7.8	7.~~55~~60	~~3~~2 2
d ~~D~~		6.4	~~5.9~~6.0	5.7	5.8~~2~~5	~~+~~2 1
h ~~H~~		8.7	8.~~2~~3	8.1	8.~~15~~20	~~2~~1 1
c ~~C~~		5.5	5.~~2~~1	5.0	5.0~~2~~5	~~2~~1 0
l		·		9.6	9.6	
e ~~E~~		7.1	6.~~6~~7	6.7	6.~~65~~70	0 ~~+~~0
K		·		9.6	9.6	
g ~~G~~		8.6	8.~~1~~2	8.2	8.~~15~~20	~~1~~0 0
m ~~M~~				9.9	9.9	

measures almost impossible on account of poor images

+10
-9
16)19 (±0.119
16
30
16
140
144

Exp + 85°

Dist 75 millimeters

	2nd sc				
a	5.7	5.3	5.1	5.20	1 1
i	7.~~7~~8	7.4	6.9	~~6.75~~7.15	2 3
c	6.7	6.3	5.8	6.05	3 2
h	8.8	8.4	8.6	8.50	1 1
b	5.9	5.5	5.5	5.50	0 0
k	·		8.9	8.9	· a
d	7.0	6.6	6.3	6.45	2 1
f	7.7	7.3	6.9	7.10	2 2
g	8.0	7.6	7.7	7.65	0 1
l			9.7	9.7	
m	·		9.7	9.7	
n			10.0	10.0	

-10
+12
16)22 (±0.138
16
60
48
120
128

0.35

M.E.H.

Thursday, March 19, 1908

22.40

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Standard Sequence ~~β2~~ 13 9^h $+72^\circ$

Plate AC 9284

Scale N

exp + 80°

Dist 47 mill

	2nd sc				
a	5.8	5.4	~~4.4~~5	5.40	0 0
e	~~6~~7.6	7.2	7.6	7.40	2 2
c	6.8	6.4	~~4.8~~6.0	6.20	2 2
b	6.4	6.0	5.7	5.85	2 1
f	7.9	7.5	7.8	7.65	1 2
k	8.8	8.4	8.7	8.55	2 1
g	8.5	8.1	8.0	8.05	1 0
d	7.4	7.0	7.4	7.20	2 2
h	8.7	8.3	8.5	8.40	1 1
l	9.2	8.8	8.9	8.85	0 1
m			9.5	9.5	
n			9.7	9.7	
o		superposed			

-11
+14
10)25 (±0.25

Exp + 75

Dist from Centre 17 mill.

	2nd				
a	5.0	4.6	4.6	4.60	0 0
e	7.5	7.1	7.2	7.15	1 0
k	·		8.8	8.8	· a
f	7.9	7.5	7.7	7.60	1 1
b	5.7	5.3	5.2	5.25	1 0
d	6.7	6.3	5.9	6.10	2 2
h	8.8	8.4	8.6	8.50	1 1
c (diff almost superposed)	6.5	6.1	5.8	5.95	1 2
g	8.1	7.7	7.9	7.80	1 1
l	·		9.3	9.3	· a
n	P.		9.8	9.8	
m			9.6	9.6	
o			10.0	10.0	

-8
+7
16)15 (±0.094
144
60

M.E.H.

Thursday, March 19, 1908

North Polar Sequence of Plate AC 9284

copied

Scale N AC 8858   Exp. at +75° & +90° meas pp 44, 45

Exp +85°				Exp +80°			
B	1.8 1.~~5~~6	1.~~5~~6		B (im v.p.)	1.8 1.~~5~~6	1.~~5~~6	
E	3.7 3.~~4~~5	3.~~4~~5		E (im p)	3.9 3.~~6~~7	3.~~6~~7	
D	3.4 3.~~1~~2	3.~~1~~2		C (im v.p.)	3.4 3.~~1~~2	3.~~1~~2	
G	3.9 3.~~6~~7 4.5 4.~~2~~1	3.~~8~~90	2 2	D (m v.p.)	3.7 3.~~4~~5	3.~~4~~5	
a²	4.8 4.~~5~~6 5.2 4.~~7~~8 4.7	4.~~63~~70	1 1 ~~4~~0	a²	5.5 5.~~2~~1 4.8	4.9~~8~~5	1 ~~1~~2
F	3.8 3.~~5~~6 ~~3~~4.0 3.~~5~~6	3.~~5~~60	0 0	G (im good)	4.7 4.~~4~~5 4.8 4.~~2~~4	4.~~8~~45	~~0 1~~ 1 0
a	-0.8 -1.~~1~~0	-1.~~1~~0		F (im good)	4.5 4.~~2~~3 4.7 4.~~2~~3	4.~~20~~30	0 0
C	2.9 2.~~6~~7	2.~~6~~7		a	-0.9 -1.~~2~~1	-1.~~2~~1	
a'	4.4 4.~~1~~2 ~~5~~4.5 ~~5.2~~4.1	4.~~55~~15	~~5 4~~ 0 1	a'	5.1 4.~~6~~7 4.7	4.~~65~~70	0 ~~1~~6
a³	5.0 4.~~7~~8 ~~5~~4.8 ~~59~~44 4.8	4.~~93~~ ~~60~~67	~~2 4 1~~ 1 3 1	a⁴	5.9 5.~~4~~5 5.2	5.3~~0~~5	1 ~~1~~2
a⁴	4.8 4.~~3~~4 5.0	4.~~65~~70	3 ~~4~~3	b³	7.9 7.~~4~~5 7.3	7.~~35~~40	~~2~~1 1
b³	7.6 7.~~1~~2 7.3	7.~~20~~25	~~1~~0 1	c⁵	8.7 8.~~2~~3 8.6	8.4~~0~~5	~~2~~1 2
b'	7.3 6.~~8~~9 6.8	6.8~~0~~5	~~2~~1 0	a³	5.8 5.~~2~~4 5.3	5.3~~0~~5	0 ~~0~~1
c²	8.6 8.~~1~~2 8.4	8.~~25~~30	1 ~~2~~1	b'	7.7 7.~~2~~3 6.9	7.~~05~~10	2 ~~1~~2
d	9.1 8.~~7~~4 8.9	8.~~75~~80	~~2~~1 1	c'	8.4 ~~7.9~~80 7.8	7.~~85~~90	1 ~~0~~1
c'	7.9 7.~~4~~5 7.5	7.~~45~~50	0 ~~1~~0	c⁶	superposed with another star		
a⁵	6.9 6.~~4~~5 6.3	6.~~35~~40	~~2~~1 1	c⁷	9.1 8.~~6~~7 8.8	8.7~~0~~5	1 ~~1~~0
b²	7.8 7.~~2~~4 7.6	7.~~45~~50	1 ~~2~~1	c²	8.6 8.~~1~~2 8.1	8.~~10~~15	0 ~~0~~1
c⁷	9.0 8.~~5~~6 8.7	8.6~~0~~5	~~1~~0 1	b²	8.0 7.~~5~~6 7.5	7.5~~0~~5	0 ~~0~~1
c³	8.7 8.~~2~~3 8.6	8.4~~0~~5	~~2~~1 2	d	8.9 8.~~4~~5 8.8	8.6~~0~~5	~~2~~1 2
c⁵	8.9 8.~~4~~5 8.8	8.6~~0~~5	~~2~~1 2	a⁵	6.9 6.~~4~~5 6.2	6.3~~0~~5	1 ~~1~~2
f'	9.5	9.5		c³	8.7 8.~~2~~3 8.5	8.~~35~~40	~~2~~1 1
c⁴	8.0 7.~~5~~6 7.7	7.6~~0~~5	~~1~~0 1	c⁴	8.0 7.~~5~~6 7.8	7.~~65~~70	1 ~~2~~1
c⁶	8.8 8.~~2~~4 8.6	8.~~45~~50	1 ~~2~~1	~~c~~ f²	9.5	9.5	
e	9.~~4~~3	9.3	a	e	9.0	9.0	
f²	9.8	9.8	a	f'	9.3	9.3	
		+21 −17 38)38(±0.1		f³	im def		−18 +14 34)32(±0.094

23.45

M.E.H.

3.20   Thursday, March 19, 1908

Standard Sequence 2 10h +86.5

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Plate AC 9284

Scale N

Exp +90°							
Dist 22 mill (2nd)					m ~~l~~	9.4	
					p ~~n~~	superposed	
a	5.8 5.4 ~~4~~5.3	5.35	0 1		n ~~m~~	9.8	
c	6.9 6.5 6.1	6.30	2 2				
d	7.3 6.9 6.5	6.70	2 2				
f	7.9 7.5 7.6	7.55	1 0				
l ~~h~~	9.1 8.7 8.8	8.75	1 0				
e	7.6 7.2 7.1	7.15	0 1				
b	5.6 5.2 5.0	5.10	1 1				
g	8.2 7.8 7.8	7.80	0 0				
k ~~h~~	8.4 8.0 8.4	8.20	2 2				
m ~~l~~	9.3	9.3					
n ~~m~~	superposed						
p ~~n~~	10.1	10.1					
r ~~o~~	n.s		−11 +7 18)18(±0.1				

Exp +80°			
Distance 40 mill (2nd)			
d	6.9 6.5 6.2	6.35	1 2
a	5.8 5.4 5.2	5.30	1 1
f	8.2 7.8 7.8	7.80	0 0
k ~~h~~	8.9 8.5 8.7	8.60	1 1
c	7.0 6.6 6.6	6.60	0 0
b	5.9 5.5 5.7	5.60	1 1
e	7.6 7.2 7.0	7.10	1 1
g	8.2 7.8 7.8	7.80	0 0
l ~~k~~	8.9		
m ~~l~~	9.0		−6 +5 18)11(±0.069 96 140 144
n ~~m~~	9.6		
p ~~n~~	defect diff 10.1 ~~n.s~~		
r ~~o~~	n.s		

Exp +85°			
Dist 10 mill (2nd)			
a	5.0 4.6 4.9	4.75	2 1
b	superposed		
c	6.6 6.2 6.0	6.10	1 1
e	7.7 7.3 7.5	7.40	1 1
g	8.5 8.1 8.1	8.10	0 0
l ~~h~~	9.2	9.2	a
d	6.9 6.5 6.2	6.35	1 2
f	8.0 7.6 7.8	7.70	1 1
h	9.0 8.6 8.7	8.65	0 1

−7
+6
14)13(±0.093
126
40
43

3.55

Sequence altered April 1, 1908.
Stars h, o and q of the new sequence will have to be measured later.

Saturday March 21, 1908

North Polar Sequence

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Distances in Millimeters from Centre of Plate

AC 9284

	Exp. +90°	Exp. +85°	Exp. +80°	Exp. +75°
A	6	34	64	95
B	22	48	78	110
C	26	56	86	119
D	20	46	77	111
E	20	45	75	108
F	12	26	55	85
G	21	25	51	81
a^1	9	35	66	97
a^2	14	18	47	76
a^3	6	24	56	85
a^4	13	22	52	83
a^5	8	38	67	98
b^1	5	32	62	93
b^2	6	31	61	92
b^3	14	29	56	87
c^1	0	29	60	92
c^2	5	28	58	89
c^3	5	28	60	91
c^4	10	40	69	100
c^5	9	30	59	89
c^6	3	28	58	89
c^7	3		58	89
d			61	92

Monday, March 23, 1908

23.45

North Polar Sequence

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AC 9288

Scale N

Exp +90°

G	$\overset{4.8}{8.7}$ 4.6 5.2 4.8 4.9	4.77	$\underline{2}$ 0 1
D	3.7 3.5 4.0 $\overset{3}{4}.6$	3.55	$\underline{1}$ 0 ·
C	3.5 3.3	3.3	
B	2.2 2.0	2.0	
A	0.4 0.2	0.2	
E	4.3 4.1 4.6 4.2	4.15	$\underline{1}$ 0
F	4.7 4.5 4.9 4.5 4.6	4.53	0 0 1
a^1	4.8 4.4 4.8	4.60	· $\underline{2}$ 2
c^1	8.4 8.0 7.9	7.95	· 0 $\underline{1}$
a^5	6.8 $6.\overset{4}{2}$ 6.6	6.50	· $\underline{1}$ 1
c^4	8.6 8.2 8.2	8.20	· 0 0
a^3	5.7 5.3 5.5	5.40	· $\underline{1}$ 1
c^6	9.2	9.2	· · a
a^2	5.8 5.4 5.2	5.30	· 1 $\underline{1}$
a^4	5.9 5.5 5.6	5.55	· $\underline{1}$ 0
b^1	7.3 6.9 $\overset{6}{5}.9$	6.90	· 0 0
c^2	$\overset{7}{8}.5$ 8.1 $\overset{7}{8}.6$	$\overset{7}{8}.85$	· 3 $\underline{2}$
b^2	7.7 7.3 7.6	7.45	· $\underline{1}$ 2
b^3	8.1 $7.\overset{7}{8}$ 7.7	7.70	· 0 0
c^3	superposed		
c^5	9.0 8.6 8.9	8.75	· $\underline{2}$ 1
c^7	9.2	9.2	· · a
f^1	10.0	10.0	
d	9.5	9.5	
e	9.7	9.7	
f^2	10.2	10.2	

+13
-16
34)29(±0.085
272
180
170

Exp +85°

B	2.5 2.3	2.3	
E	4.6 4.4 ~~4.8~~	4.4	
G	5.0 4.8 4.9 4.5 4.8	$4.\overset{7}{6}0$	1 $\underline{2}$ 1
C	3.2 3.0 ~~3.1~~	3.0	
D	3.8 3.6 ~~3.9~~	3.6	
A	0.1 -0.1	-0.1	
F	4.8 4.6 4.8 4.4 4.5	4.50	1 $\underline{1}$ 0
a^1	4.8 4.8 4.4 4.5	4.45	· 0 1
b^1	7.2 7.6 7.2 6.7	6.95	· 2 $\underline{3}$
c^1	7.9 8.1 7.7 7.9	7.80	· $\underline{1}$ 1
a^3	5.8 5.6 5.2 4.8	5.00	· 2 $\underline{2}$
a^2	5.7 4.9 4.5 4.7	4.60	· $\underline{1}$ 1
a^4	6.0 5.6 5.6	5.60	0 0
b^3	8.6 8.2 8.0	8.10	· 1 $\underline{1}$
c^5	9.0	9.0	· · a
a^5	superposed		
c^4	8.6 8.2 8.3	8.25	· 0 1
c^7	9.4	9.4	· · a
b^2	8.2 7.8 7.8	7.80	· 0 0
c^2	8.7	8.7	
e	9.7	9.7	
f^1	superposed	~~+0.~~	
f^2	10.3	10.3	
c^3	8.9	8.9	
d	9.3	9.3	
c^6	superposed		

+12
-12
24)23(±0.096
216
140
144

M. E. H.

Monday, March 23, 1908

North Polar Sequence

AC 9288

Scale N

Copied

2.55

		Exp +80°						Exp +75° 2nd				
im v.p.n.l	B	3.5	3.3		3.3		B too poor					
im " " "	E	4.9	4.7		4.7		E "					
	C	4.0	3.8		3.8		C "					
" " " "	D	4.6	4.4		4.4		D "					
	F	·		5.0	5.0		A "					
	A	0.7	0.5		0.5		F	5.9	5.5	5.8	5.65	$\underline{1}$ 2
	g	6.8	$\overset{4}{6.6}$	5.9	6.15	· 2 $\underline{3}$	b^3	8.6	8.2	8.4	8.30	$\underline{1}$ 1
	a^4	7.0	$\overset{6}{6.8}$	6.7	6.65	· 0 1	a^1	6.4	6.0	5.6	5.80	2 $\underline{2}$
	b^3	8.7	$\overset{3}{8.5}$	8.0	8.15	· 1 $\underline{2}$	b^1	$\overset{7}{8.9}$	7.5	7.7	7.60	$\underline{1}$ 1
im v p	a^1	5.8	5.4	5.3	5.35	· 0 $\underline{1}$	c^1	8.8	8.4	8.7	8.55	$\underline{2}$ 1
	b^1	8.0	7.6	7.7	7.65	· 0 1	a^2	6.7	6.3	6.2	6.25	1 0
	c^1	8.7	8.3	8.4	8.35	· $\underline{1}$ 0	g	6.6	6.2	5.8	6.00	2 $\underline{2}$
	c^7	·		9.4	9.4	· · a	b^2	8.6	8.2	8.3	8.25	0 1
	a^2	6.0	5.6	5.9	5.75	· $\underline{2}$ 1	c^2	9.1	8.7	9.0	8.85	$\underline{1}$ 2
	a^3	6.6	6.2	5.7	5.95	· 2 $\underline{3}$	a^3	6.9	6.5	$\overset{5}{6.8}$	6.50	0 0
	b^2	8.6	8.2	7.6	7.90	· 3 $\underline{3}$	a^5	7.7	7.3	7.4	7.35	$\underline{1}$ 0
	c^2	9.0	8.6	8.8	8.70	· $\underline{1}$ 1	c^4	9.2	8.8	8.7	8.75	0 $\underline{1}$
	a^5	7.7	7.3	7.2	7.25	· 1 0	a^4	7.1	6.7	6.6	6.65	1 0
	c^4	8.9	8.5	8.7	8.60	· $\underline{1}$ 1	c^3	·		9.0	9.0	
	c^3	·		9.0	9.0		c^5			9.3	9.3	
	c^5			9.0	9.0		c^6			9.3	9.3	
	c^6			9.6	9.6		e			9.9	9.9	
	f^1			9.8	9.8		d			9.7	9.7	
	f^2			10.3	10.3	-17 +14 24)31(±0.129 24 70	f^1		t. p			
	d			9.4	9.4		c^7			9.7	9.7	+14 -12 26)26(±0.1
0.30	e			9.7	9.7	3.10						

M. E. H.

Monday, March 23, 1908

3.30

North Polar Sequence

copied

Distances in millimetres from centre of Plate

AC 9288

	Exp +90°	Exp +85	Exp +80	Exp +75
A	9	24	54	85
B	16	46	77	111
C	23	42	70	102
D	17	33	60	92
E	14	44	75	108
F	13	30	58	89
g	19	35	61	92
a^1	9	25	54	95
a^2	21	12	40	71
a^3	12	21	54	82
a^4	15	26	55	87
a^5	1	32	62	94
b^1	10	22	52	$\overset{4}{86}$
b^2	11	21	50	$\overset{2}{84}$
b^3	12	31	61	92
c^1	6	24	54	86
c^2	8	32	56	88
c^3	7	33	58	90
c^4	4	33	63	95
c^5	9	30	58	90
c^6	9	24	54	85
c^7	8	23	53	84
d	5	33	58	89

"The exp. at +90° is beyond centre, except B and E; C, D, F and G are nearly on line with centre." Copied from Reduction sheet, May 24, 1911.

M. E. H.

Monday, March 23, 1908

Standard Sequence ~~2~~9

Copied

Plate AC 9288 RA. = 5h 3 Dec. = + 78°

Scale N

0.04 Wednesday, March 25, 1908

Exp + 90° Dist 81 mm

	2nd se		
a	4.9 4.~~4~~5 4.8	4.6~~2~~5	~~2~~1 2
e	7.1 6.~~6~~7 6.6	6.6~~2~~5	~~2~~1 0
c*	6.8 6.~~2~~4 5.8	6.~~05~~10	3 ~~2~~3
k	8.8	8.8	. a
f	7.6 7.~~1~~2 7.4	7.~~25~~30	1 ~~2~~1
b	5.9 5.~~4~~5 5.6	5.5~~2~~5	1 ~~1~~0
g	8.1 7.~~6~~7 7.7	7.~~65~~70	0 ~~1~~0
d	6.7 6.~~2~~3 5.8	6.0~~2~~5	~~2~~3 2
h	8.7 8.~~2~~3 8.4	8.3~~2~~5	1 ~~1~~0
m	9.7	9.7	. a
l	9.2	9.2	. a
n	9.8	9.8	. a
o	n.o.		

Stopped on account of poor light

+10
-9
16)19(±0.119
16
30
16
140

Exp + 85° Dist 51 mm

	2nd		
a	5.8 5.~~3~~4 5.1	5.2~~0~~5	~~1~~2 1
d	7.5 7.~~0~~1 7.0	7.0~~0~~5	~~2~~1 0
g	8.7 8.~~2~~3 8.3	8.~~25~~30	0 ~~1~~0
b	6.3 5.~~8~~9 5.8	5.8~~0~~5	~~2~~1 0
c	6.9 6.~~4~~5 6.7	6.~~55~~60	~~2~~1 1
f	8.2 7.~~7~~8 7.9	7.8~~0~~5	~~1~~0 1
h	8.9 8.~~4~~5 8.7	8.~~55~~60	~~2~~1 1
e	7.7 7.~~2~~3 7.3	7.~~25~~30	0 0
k	8.9		
l	9.3		
m	9.6		
o	10.3		
n	9.8		

+7
-3
18)10(±0.062
96
40
32

.4.00

M E H

Wednesday, March 25, 1908

Standard Sequence ~~2~~+9

Copied

Plate AC 9288

Scale N

Exp + 80° Dist 22 mm

	2nd		
e	7.4 ~~6.9~~70 6.8	6.~~85~~90	1 ~~2~~1
g	8.6 8.~~1~~2 7.9	8.0~~2~~5	~~1~~2 1
a	4.8 4.~~3~~4 4.5	4.4~~2~~5	~~1~~0 1
c	5.9 5.~~4~~5 5.7	5.~~55~~60	~~2~~1 1
f	8.0 7.~~5~~6 7.8	7.~~65~~70	1 ~~2~~1
b	5.8 5.~~3~~4 5.0	5.~~15~~20	~~1~~2 2
d	7.2 6.~~7~~8 6.7	6.7~~2~~5	~~2~~1 0
h	8.9 8.~~4~~5 8.8	8.6~~2~~5	~~2~~1 2
k	9.2		
m	9.7		
o	superposed		
n	10.0		
l	9.6		

Images are poor on this exposure

-7
+11
16)18(±0.112
16
20
16
40
32

Exp + 75° Dist 13 mm

	2nd		
a	5.2 4.~~7~~8 4.9	4.8~~0~~5	~~1~~0 1
e	7.9 7.~~4~~5 7.3	7.~~35~~40	~~0 1~~1 1
c	6.6 6.~~1~~2 5.9	6.0~~2~~5	~~1~~2 1
f	8.2 7.~~7~~8 8.0	7.~~85~~90	1 ~~2~~1
b	5.9 5.~~4~~5 5.7	5.~~55~~60	~~2~~1 1
d	7.3 6.~~8~~9 6.4	6.~~60~~65	~~2~~3 2
g	8.7 8.~~2~~3 8.5	8.~~35~~40	~~2~~1 1
h	9.0 8.~~5~~6 8.9	8.7~~2~~5	2 ~~2~~1
k	9.6		
l	9.6		
m	10.0		
n	n.o.		
o	"		

Images extremely poor

+1
-9
16)20(±0.125
16
40
32
80

Wednesday, March 25, 1908

Standard Sequence ~~22~~10 7^h +78°

Copied

AC 9288

Scale N

Exp +90°

Dist 85

	2nd				
a	5.7	5.~~2~~3	5.0	5.1~~0~~5	1 ~~1~~2
d ~~k~~	6.5	6.~~2~~1	6.0	6.0~~0~~5	~~2~~1 0
f	7.9	7.~~4~~5	7.6	7.5~~0~~5	1 ~~1~~0
h	8.6	8.~~1~~2	8.4	8.~~25~~30	1 ~~2~~1
b	5.9	5.~~4~~5	5.7	5.~~55~~60	~~2~~1 1
e	7.1	6.~~6~~7	6.7	6.~~65~~70	0 ~~1~~0
k	9.1	8.~~6~~7	8.9	8.~~75~~80	~~2~~1 1
c	6.3	5.~~8~~9	5.8	5.8~~0~~5	~~2~~1 0
g	8.0	7.~~5~~6	7.8	7.~~65~~70	1 ~~2~~1
m			9.6	9.6	a
n	superposed				
o			~~m.o.~~ 9.9	9.9	a
l			9.5	9.5	a

−7
+7
18)14(±0.078
126
140

Exp +85°

Dist 54

	2nd				
a	5.9	5.~~4~~5	5.4	5.4~~0~~5	~~2~~1 0
d	7.8	7.~~8~~4	6.9	7.1~~0~~5	2 ~~2~~3
g	8.5	8.~~0~~1	8.5	8.~~25~~30	2 ~~3~~2
b	6.7	6.~~2~~3	5.9	6.~~05~~10	2 ~~1~~2
imp. c	7.0	6.~~5~~6	6.4	6.~~45~~50	1 ~~0~~1
f	8.5	8.~~0~~1	8.2	8.1~~0~~5	1 ~~1~~0
e	7.9	7.~~4~~5	7.7	7.~~55~~60	~~2~~1 1
h	8.9	8.~~4~~5	8.7	8.~~55~~60	~~2~~1 1
k			9.0	9.0	a
m			9.2	9.2	a

+10
−11
16)21(±0.131
16
50
48
20

M. E. H.

o	10.1
l	9.3
n	9.8

Exp +80

Dist 29 mm

a	4.9	4.~~4~~5	4.9	4.~~65~~70	2 ~~2~~2
e	7.9	7.~~4~~5	7.3	7.~~35~~40	~~2~~1 1
d	7.2	6.~~7~~8	6.7	6.7~~0~~5	0 ~~0~~1
b	6.0	5.~~5~~6	5.3	5.4~~0~~5	~~1~~2 1
f	8.2	7.~~7~~8	7.9	7.8~~0~~5	~~1~~0 1
c	5.9	5.~~4~~5	5.7	5.~~55~~60	~~2~~1 1
k	superposed				
h	8.9	8.~~4~~5	8.7	8.~~55~~60	~~2~~1 1
g	8.6	8.~~1~~2	8.4	8.~~25~~30	1 ~~2~~1
l			9.4		
o			n.o.		
n			10.0		
m			9.7		

+9
−8
16)17(±0.106
16
100
96

Wednesday, March 25, 1908

Standard Sequence ~~22~~10 7^h +78°

Copied

AC 9288

Scale N

Exp +75

Dist 24

	2nd				
a	5.8	5.~~8~~4	5.0	5.~~15~~20	~~1~~2 2
d	7.6	7.~~1~~2	6.8	~~6.95~~ 7.00	~~1~~2 2
f	8.9	8.~~4~~5	8.7	8.~~55~~60	~~2~~1 1
b	6.5	6.~~0~~1	5.9	~~5.95~~ 6.00	~~0~~1 1
e	7.9	7.~~4~~5	7.5	7.~~45~~50	0 ~~1~~0
c	6.2	5.~~7~~8	5.7	5.7~~0~~5	0 ~~0~~1
g	9.0	8.~~5~~6	8.8	8.~~65~~70	1 ~~2~~1
n			10.4		
k			9.~~3~~4		
o			n.o.		
h			9.0		
l			superposed		
m			9.8		

+7
−8
14)15(±0.171
14
100
98
20

1.15

M. E. H.

2.35

Thursday, March 2~~8~~6, 1908

North Polar Sequence

Copied

AC 9300

Scale N

	Exp +90°				Exp +85°		
A	0.6 0.4	0.4		B	2.3 2.1	2.1	
a^1	3.7 3.5 3.9 3.5	3.50	0 0	E	3.8 3.6	3.6	
C	2.3 2.1	2.1		A	0.5 0.3	0.3	
E	2.9 2.7	2.7		a^1	· 5.7 5.3 4.9	5.10	~~2~~ 2
G	4.0 3.8 4.5 4.1	3.95	2 1	C	3.7 3.5	3.5	
D ~~B~~	3.2 3.0	3.0		D	4.5 4.3	4.3	
F	3.7 3.5 3.9 3.5+	3.50	0 0	G	5.0 4.8 5.2 4.8 4.5	4.70	1 1 2
a^2	4.9 4.7 4.9 4.5 4.9	4.70	0 2 2	g	4.8 4.6 4.8 4.4 4.4	4.55 4.7	1 1 1
B	1.5 1.3	1.3		a^5	7.6 7.2 6.8	7.00	· 2 2
a^5	6 6.6 6.2 5.7	5.95	· 2 3	c^4	8.7 8.3 8.6	8.45	· 1 2
c^4	7 8.8 7.4 7.6	7.50	· 1 1	b^1	7.9 7.5 7.7	7.60	· 1 1
b^2	7.8 7.4 7.2	7.30	· 1 1	c^1	8.7 8.3 8.6	8.45	· 1 2
b^3	7.7 7.3 7.0	7.15	· 1 2	a^3	6.0 5.6 5.6	5.60	· 0 0
a^3	4.9 4.5 4.8	4.65	· 1 2	a^4	6.1 5.7 5.8	5.75	· 1 0
b^1	6.8 6.4 6.5	6.45	· 0 1	a^2	5.9 5.5 5.6	5.55	· 1 0
a^4	5.4 5.0 4.8	4.90	· 1 1	b^2	8.7 8.3 8.5	8.40	- 1 1
c^5	8.9 8.5 8.8	8.65	· 1 2	b^3	8.6 8.2 7.9	8.05	· 2 1
c^1	8.0 7.6 7.7	7.65	· 0 1	c^2	8.8	8.8	
c^3	8.8 8.4 8.6	8.50	· 1 1	c^7	9.6	9.6	
c^2	8.6 8.2 8.2	8.20	- 0 0	c^6	9.7	9.7	
c^6	9.1 8.7 9.0	8.85	· 1 2	c^3	9.4		
c^7	8.9	8.9		f^1	10.2		
d	9.1			d	9.8		
f^1	9.7			e	9.9		
e	9.6			f^2	m a		
f^2	10.1			c^5	superposed		

-16
+18
33)34(±0.103
33
188

+15
-15
26)30(±0.115
26
40
26
140
130

M. E. H

Thursday, March 26, 1908

North Polar Sequence

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AC 9300

Scale N

	Exp +80°				Exp +75			
C	tp			C	tp			
D	"			D	"			
B	2.2 2.0	2.0		B	"			
E	4.7 4.5 4.8 4.4 ·	4.45	1 0 ·	E	"			
F	· 5.0 4.6 4.9	4.75	· 2 1	A	"			
A	1.0 0.8	0.8		im v.p. F	5.8 5.4 5 6.3	5.35	0 1	
G	4.9 4.5 4.9	4.70	· 2 2	a^3*	6.8 6.4	6.4		6.20
a^5	7.5 7.1 7.5	7.30	· 2 2	b^3	7.9 7.5 7.8	7.65	1 2	
c^4	superposed	·		c^5	9.0 8.6 8.9	8.75	2 1	
a^1	6.0 5.6 5.6	5.60	0 0	a^1	t.p.			
b^1	7.8 7.4 7.7	7.55	~~2~~ 1	b^1	7.7 7.3 6.9	7.10	2 2	
c^1	8.6 8.2 8.5	8.35	2 1	G	5.9 5.5 5 6.5	5.50	0 0	
c^7	· 9.2	9.2		a^3*	6.2 5.8 6.2	6.00	2 2	6.20
a^2	6.8 6.4 5.9	6.15	~~2~~ 3	a^5	7.5 7.1 6.8	6.95	1 2	
a^4	6.6 6.2 5.7	5.95	2 3	c^4	8.6 8.2 8.2	8.20	0 0	
b^3	7.9 7.5 7.8	7.65	1 2	c^2	8.8 8.4 8.7	8.55	2 1	
im. pos a^3	6.9 6.5 6 5.7	6.60	1 1	a^2	6 8.0 5.6 5.7	5.65	0 1	
b^2	8.6 8.2 7.9	8.05	2 1	b^2	8.5 8.1 8.1	8.10	0 0	
c^5	9.2 8.8 9.1	8.95	2 1	~~b~~ a^4	6.8 6.4 6.4	6.40	0 0	
c^3	9.0 8.6 8.9	8.75	2 1	c^1	8.3 7.9 7.7	7.80	1 1	
c^2	8.8 8.4 8.6	8.50	1 1	c^3	8.9 8.5 8.8	8.65	1 2	
c^6	9.2 8.8 8.9	8.85	0 1	d	9.1	9.1	a	
f^1	9.7			f^1	im def perhaps 9.9	9.9	a	
d	9.3			e	9.6	9.6		
e	9.6			c^7	9.4			
f^2	superposed			c^6	8.9			
				f^2	ident not cer. perhaps superposed 10.2			

+21
-24
32)45(±0.141
32
130
128
20

-14
+13
28)27(±0.096
252
180
168

* a^3 measured twice; ~~take~~ use mean 6.20. Discordance probably due to distance of image from center of plate.

M. E. H

Thursday, March 26, 1908

Copied

Distance in millimeters from centre of plate

AC 9300

	Exp +90	Exp +85	Exp +80	Exp +75
A	4	31	63	94
B	23	35	61	91
C	25	51	82	~~8~~114
D	17	45	76	108
E	21	34	61	90
F	15	15	45	75
G	23	8	38	67
a^1	6	33	65	96
a^2	16	24	54	84
a^3	8	22	52	83
a^4	15	14	45	75
a^5	9	28	58	89
b^1	4	31	62	94
b^2	5	31	62	94
b^3	15	16	45	76
c^1	9	26	57	88
c^2	7	21	52	83
c^3	8	22	53	84
c^4	10	30	60	91
c^5	11	18	49	80
c^6	5	23	54	85
c^7	4	24	56	86
d				
e				
f^1	8	24	55	86
f^2				

3.35

M.E.H.

"Exp. at +90° is beyond centre except B, C, D and E." Copied from Reduction sheet.

4.30

Thursday, March 26, 1908

Standard Sequence ~~26~~ 18 1^h + 77°

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AC 9300

Scale N

	Exp +90				Exp +85		
	Dist 84 2nd				Dist 57 sc. 2		
a	5.7 5.3 5.5	5.40	$\underline{1}$ 1	b	7.4 7.0 6.9	6.95	0 $\underline{1}$
d	7.2 6.8 6.7	6.75	0 $\underline{1}$	g	8.9 8.5 8.6	8.55	$\underline{1}$ 0
h	8.4 8.0 8.4	8.20	$\underline{2}$ 2	c	7.8 7.4 7.5	7.45	0 1
l	9.3	9.3	a	a	6.9 6.5 6.3	6.40	1 $\underline{1}$
e	7.6 7.2 7.4	7.30	$\underline{1}$ 1	e	8.1 7.7 8.2	7.95	$\underline{3}$ 2
c	6.9 6.5 6.1	$6.\overset{3}{8}0$	$\overset{2}{3}$ $\underline{2}$	h	8.9 8.5 8.7	8.60	$\underline{1}$ 1
g	8.3 7.9 7.7	7.80	1 $\underline{1}$	d	8.0 7.6 7.6	7.60	0 0
b	6.3 5.9 5.8	5.85	1 0	f	7.9 7.5 7.7	7.60	$\underline{1}$ 1
f	7.7 7.3 7.0	7.15	1 $\underline{2}$	l	9.4		
k	8.7 8.3 8.6	8.45	$\underline{1}$ 2	k	9.0		
m	9.8	9.8	a	m	9.9		
n	n. a.			n	n. a.		

+11
−11
18)22(±0.122
18
40
36

−8
+6
16)14(±0.088
128
120
112

M.E.H.

Thursday, March 26, 1908

Standard Sequence ~~20~~ 18 12^{h} +77°

copied

aC 9300

Scale N

Exp +80° Dist 25				Exp +75 Dist 12			
					sc. 2		
b	6.8 6.4 5.9	6.15	2 3	a	5.9 5.5 5.1	5.30	2 2
d	7.6 7.2 6.9	7.05	2 1	c	7.0 6.6 6.4	6.50	1 1
k	9.1 8.7 8.9	8.80	1 1	f	8.3 7.9 7.7	7.80	1 1
f	7.9 7.5 7.7	7.60	1 1	k	· 9.1	9.1	· a
c	7.0 6.6 6.5	6.55	0 1	b	6.6 6.2 5.9	6.05	2 1
a	6.1 5.7 5.4	5.55	1 2	d	7.5 7.1 6.8	6.95	1 2
e	7.8 7.4 7.4	7.40	0 0	g	8.7 8.3 8.5	8.40	1 1
g	8.7 8.3 8.5	8.40	1 1	h	9.0 8.6 8.7	8.65	0 1
l	9.3	9.3	· a	e	7.9 7.5 7.7	7.60	1 1
h	8.9 8.5 8.7	8.60	1 1	l	9.4	9.4	
m	9.9			m	10.2	10.2	
n	n.a.			n	n.a.		

-11
+9
18)20(±0.111
18
20

-9
+10
16)19(±0.119
16
30
16
140
144

4.50

M.E.H.

Friday, March 27, 1908

North Polar Sequence.

3.38 copied

Scale N aC 8759 5 exposures. 3^{s}, 9^{s}, 27^{s}, 81^{s}, 243^{s}

A First Exp.

A	3.5 3.3 ~~3.7~~ 3.7 3.3	3.30	0 0 ·	
E	· 7.1 6.7 7.1	6.90	· 2 2	
B	6.0 5.6 5.6	5.60	· 0 0	
C	6.6 6.2 5.9	6.05	· 2 1	
b$'$	· 9.5	9.5	· · a	
a$'$	8.0 7.6 7.6	7.60	· 0 0	
D	7.5 7.1	~~7.1~~		6.60 sup. 75
F	7.8 7.4 7.7	7.55	· 2 1	
a^{4}	8.7 8.3 $\overset{8}{\cancel{7}}$.6	8.45	· 1 2	
G	8.1 7.7 7.6	7.65	· 1 0	
a^{3}	8.6 8.2 8.4	8.30	· 1 1	
a^{5}	9.0 8.6 8.8	8.70	· 1 1	
a^{2}	8.2 7.8 7.7	7.75	· 0 1	
c^{4}	10.0			
b^{3}	9.7			
b^{2}	9.9			
c$'$	10.2 uncertain			

+10
-9
~~21~~
22)19(±0.086
176
140
133

B Second Exposure

	2nd scale	3rd scale		
A	4.8 4.4	4.5	4.45	0 1
a^{3}	·	8.9	8.9	· a
D	7.6 7.2	7.7	7.45	2 3
B	6.8 6.4	6.6	6.50	1 1
E	8.4 8.0	7.8	7.90	1 1
a$'$	8.7 8.3	8.7	~~8.50~~ 8.48 sup. 75	~~2 2~~
a^{4}	·	9.4	9.4	· a
G	8.6 8.2	8.7	8.~~50~~45	3 3
C	7.7 7.3	7.0	7.15	1 2
F	8.7 8.3	8.5	8.40	1 1
a^{2}	8.8 8.4	8.7	8.55	2 1
c^{4}		,		
a^{5}		9.6	9.6	
b^{3}		,		
b$'$		9.8	9.8	
b^{2}		10.2	10.2	

+14
-13
18)27(±0.15
18
90
90

C Third Exposure

	2nd scale	3rd			
A	5.5 5.1	4.9	5.00	1 1	
a$'$	8.9 8.5	8.8	~~8.65~~ 8.9	~~1 2~~	sup. 75
~~D~~B	7.8 7.4	7.2	7.30	1 1	
E	8.7 8.3	8.6	8.45	1 2	
C	7.9 7.5	7.6	7.55	1 0	
D	7.6 8.$\overset{2}{4}$	8.3	8.$\overset{2}{3}$5	0 1	

+6
-6
12)12(±0.1

Third Exposure ~~cont~~

	2nd scale	3rd
F	·	8.7
a^{5}		10.1
a^{4}		9.7
G		9.0
a^{3}		image defective
a^{2}		9.0

Friday, March 27, 1908.

Copied North Polar Sequence.

AC 8759 5 exposures.

Fourth Exposure.

	2nd scale	3rd		
A	7.9 7.5	7.5	7.50	00
a'	·			
B	~~9.2~~	9.2		
C		9.8		
E		·		
D		·		

Do not include

Fifth Exposure

	2nd scale			
A	8.9 8.5	8.6	8.55	10

2) 1(±0.05

Do not include.

a.D.D.

Friday, March 27, 1908.

North Polar Sequence

copied

4.01

AC 8756 Six exposures 3, 9, 27, 81, 243, ~~729~~ 1

3, 9, 27, 81, 243, ~~729~~ 1 ^{s} ^{22} 9 ^{s}

Scale N

A ~~B~~ First Exposure

A	2.7 2.5 :		·	2.5	
B	4.2 4.0	4.7 4.3	4.0	4.10	121
C	:	5.6 5.2	5.5	5.35	·21
a'		7.6 7.2	7.3	7.25	·01
see page 75 * a⁵		8.8 8.4	8.6	~~8.50 11~~ 8.10	
F		7.7 7.3	6.9	7.10	·22
a³		8.2 7.8	7.7	7.75	·01
G		7.7 7.3	6.8	7.05	·32
b³		9.1 8.7	9.1	8.90	·22
a²		7.6 7.2	6.8	7.00	·22
D		6.7 6.3	6.0	6.15	·12
E		6.8 6.4	6.5	6.45	·01
a⁴		· 8.3 7.9	7.9	7.90	.00
b'		9.0 8.6	8.7	8.65	·01
c⁵			10.0		
c⁴			9.2		
b²			9.0		
c'			9.5		
c²			10.0		
c³			m.s		

+17
−16
27)33(±0.122
27
60
54
6

B Second Exposure

A	3.5 3.3 ·	·	3.3	
B	· 5.7 5.3	5.4	5.35	10
E	7.6 7.2	6.9	7.05	21
C	6.8 6.4	6.6	6.50	11
D	7.6 7.2	7.4	7.30	11
a'	8.0 7.6	7.8	7.70	11
b'	·	9.3	9.3	· a
a⁵	9.0 8.6	8.8	8.70	11
a²	8.2 7.8	7.7	7.75	01
G	8.4 8.0	7.9	7.95	01
F	8.2 7.8	7.8	7.80	00
a³	8.7 8.3	8.5	8.40	11
a⁴	8.8 8.4	8.7	8.55	21
c⁴		·		
b²		9.9		
b³		9.7		
c'		9.9		

−11
+8
22)19(±0.086
176
140
132
8

4.16
a.D.W.

Friday, March 27, 1908.

copied

North Polar Sequence

Scale N

AC 7756 ~~5~~ 6 exposures.

C Third Exposure.

A	4.7 4.5	·	4.5	a · ·
a³	~~8.9~~	9.4	9.4	· · a
a²	~~7.6~~ 9.0 8.6	8.8	8.70	· 1 1
a⁴	~~8.9~~ 8	9.5	9.5	· · a
a′	8.5 8.4	8.7	8.55	· 2 1
D	8.0 7.6	7.7	7.65	· 0 1
C	7.6 7.2	7.1	7.15	· 0 1
E	8.5 8.1	7.9	8.00	· 1 1
B	6.8 6.4	6.4	6.40	· 0 0
b′	·	9.8	9.8	· · a
F	8.8 8.4	8.6	8.50	· 1 1
G	9.0 8.6	8.7	8.65	· 0 1
b³		n.s.		
b²		n.s.		
a⁵		9.7	9.7	

+6
−6
16)13(0.075
80

D Fourth Exposure

2nd scale

A	5.9 5.5	5.6	5.55	1 0
D	7.9 8.5	8.9	8.70	2 2
E	9.0 8.6	8.8	8.70	1 1
B	7.8 7.4	7.4	7.40	0 0
C	~~7~~8.6 8.2	8.2	8.20	0 0
G	'	9.6		
a′	'	9.5		
F	·	9.4		
a³		9.8		
a²		9.6		
a⁴		10.1		

−4
+3
10)7(±0.07

E Fifth Exposure

3rd scale

A	~~7.6~~ 6.70 See page 75
a′	10.4 uncertain
E	9.8
B	8.5
C	8.9
D	9.5
F	image too poor.
G	10.3

F Sixth Exposure

2d 3d scale

A	~~7.8~~ 8.2 7.8	7.9	7.85	· 0 1
B	·	9.2	9.2	· · a
C	·	10.2	10.2	· · a

2)1(±0.05

Omit

4.28
A. D. W.

0.05

Saturday, March 28, 1908

copied

North Polar Sequence 1½ in eye-piece used

AC 7694 Scale from° AC 8796

A Exp 1

A	4.2	·	4.2	
B	5.9	6.4 6.1 5.9	5.97	1 1 1
E	·	7.8 7.5 7.7	7.60	· 1 1
C	6.8	6.9 6.6 6.8	6.73	1 1 1
D		7.3 7.0 7.3	7.15	· 2 1
a′		8.7 8.4 8.2	8.30	· 1 1
ly		8.9 8.6 8.5	8.55	· 0 1
F		8.7 8.4 8.3	8.35	· 0 1
a⁴		9.7 9.4 9.3	9.35	· 0 1
a⁵		10.1 9.8 9.9	9.85	· 0 1
a²		8.5 8.2 8.4	8.30	· 1 1
a³		9.2 8.9 8.9	8.90	· 0 0
b′		m.a.		

+8
−11
24)19(±0.079
168
220
216

B Second Exposure

A	5.8	6.4 6.1 5.8	5.90	1 2 1
B	·	7.9 7.6 7.6	7.60	· 0 0
a′		m.a. ~~9.6~~		
ly		m.a.		
F		"		
E		9.7 9.4 9.7	9.55	· 2 1
C		8.8 8.5 8.7	8.60	· 1 1
D		~~8~~9.7 9.4 9.4	9.40	· 0 0
a²		m.a.		

+4
−5
11)9(+0.082
88
38

+12
−16
35)28(±~~0.08~~
280

Saturday, March 28, 1908

copied

North Polar Sequence Scale $\overset{N}{\text{AC}}$ 8858 2 in eye-piece

AC 7666 Three exp 1ᵐ, 10ᵐ, 20ᵐ **For relative magn.**

This plate not used for Polar Seq. Abs. Magn.

	a First Exposure				B Second Exposure		
A	2.9 2.7 ·	2.7		A	3.3 3.1 ·	3.1	a ··
a'	· 7.7 7.3 7.3	7.30	·0 0	B	4.7 4.5 4.9 4.5 4.6	4.53	0 0 1
B	4.8 $\overset{6}{4.7}$ 4.9 $\overset{5}{4.6}$ 4.6	4.57	0 $\underline{1}$ 0	C	· 5.9 5.5 5.6	5.55	·$\underline{1}$ 0
C	· 5.8 5.4 5.6	5.50	·$\underline{1}$ 1	G	~~7.7~~ 7.7 7.3 7.0	7.15	·1 $\underline{2}$
G	7.7 7.3 7.3	7.30	·0 0	a⁴	~~8.4~~ 8.4 8.0 7.8	7.90	·1 $\underline{1}$
F	7.7 7.3 7.3	7.30	·0 0	b²	~~7.5~~ 9.2	9.2	·· a
b³	· 9.6	9.6	·· a	D	6.8 6.4 5.9	6.$\overset{1}{2}$5	·2 $\underline{3}$
a⁴	8.2 7.8 7.9	7.85	·0 1 ·	E	6.9 6.5 6.7	6.60	·$\underline{1}$ 1
D	6.7 6.3 6.0	6.15	·1 $\underline{2}$	a'	7, 7.7 7.3 7.5	7.40	·$\underline{1}$ 1
E	7.2 6.8 6.6	6.70	·1 $\underline{1}$	a⁵	8.6 8.2 8.1	8.15	·0 $\underline{1}$
a²	7.7 7.3 6.9	7.10	·2 $\underline{2}$	c⁴	· 9.2	9.2	·· a
a³	8.4 8.0 7.7	7.85	·2 $\underline{1}$	a³	· 8.2 7.8 7.7	7.75	·0 $\underline{1}$
a⁵	8.7 8.3 8.7	8.50	·$\underline{2}$ 2	F	7.6 7.2 $\overset{4}{7.3}$	7.30	·$\underline{1}$ 1
b'	8.9 8.5 8.7	8.60	·$\underline{1}$ 1	a²	$\overset{7.4}{~~6.7~~}$ 7.0 7.1	7.05	·0 1
b²	· 9.4	9.4	·· a	b³	· 8.9	8.9	·· a
c'	9.6		+4 −11 25)1622 ±0.09	b'	8.9 8.5 8.8	8.65	·$\underline{1}$ 2
c⁴	9.7 ·			c'	9.6	9.6	·· a
c²	10.0						
c³	·						+11 −13 25)24(±0.096 225 150 150
				a²	9.3		
				G	9.2		

	C Third Exposure sc.2					
A	5.8 5.4 5.7	5.55	·$\underline{2}$ 1	F	9.0	
a'	· 8.9	8.9	·· a	a⁴	9.8	
D	8.6 8.2 8.6	8.40	·$\underline{2}$ 2	a⁵	9.9	
B	7.6 7.2 6.9	7.05	·2 $\underline{1}$	b'	·	
a³	· 9.5	9.5	·· a			
C	8.0 7.6 7.7	7.65	·0 1			+17 +18 35)35(±0.1
E	8.8 8.4 8.6	8.50	·$\underline{1}$ 1			+7 −6 13 ±13

0.45

M. E. H.

Monday, March 30, 1908

2.40

North Polar Sequence

copied

I 28206 Eight exposures, 5ˢ, 10ˢ, 20ˢ, 40ˢ, 80ˢ, 160ˢ, 320ˢ, 640ˢ

Scale M

	A First Exposure						
	A	·				i 8.7	f' 7.6
						l 9.8	g 8.7
						k⁴ 9.7	k' 9.5
in v.p.	a'	1.7 1.9				k³ 9.6	l n.s.
	b'	3.6 3.8				k' 8.8	k² 9.7
	a³	2.5 2.7				k² 9.3	f³ 8.4
	G	t.n.e				m 10.2	k³ superposed
	F	1.9 2.1				k⁵ 9.7	k⁴ n.s.
	b³	3.8 4.0					
	a⁵	2.7 2.9					

		First Exposure (cont.)			B Second Exposure		
	c⁴	4.3 4.5 4.4	4.45	1 0	a' 2.3 2.5		
	a⁴	2.7 2.9			b' 4.0 4.2		
	b²	4.4 4.6			b² 4.7 4.9		
	C	·			c⁷ 6.8 7.0 6.8	6.90	1 $\underline{1}$
	E				a⁴ 3.1 3.3		
	c'	4.6 4.8 4.6	4.70	1 $\underline{1}$	c⁵ 5.9 6.1 $\overset{6.5}{~~5.4~~}$	6.30	$\underline{2}$ 2
	a²	t.n.e			c³ 6.4 6.6 6.6	6.60	0 0
	c⁵	5.3 5.5 5.8	5.65	$\underline{1}$ 2	e 6.7 6.9 7.0	6.95	$\underline{1}$ 0
	c²	5.6 5.8 5.6	5.70	1 $\underline{1}$	c⁶ 6.7 6.9 6.7	6.80	1 $\underline{1}$
	c³	5.7 5.9 5.7	5.80	1 $\underline{1}$	a² t.n.e		
	f'	6.7 6.9 6.8	6.85	1 0	c' 5.6 5.8 5.7	5.75	0 $\underline{1}$
	d	6.0 6.2 5.9	6.05	2 $\underline{1}$	c² 6.0 6.2 6.1	6.15	0 $\underline{1}$
Assumed to be 7.9 H.S.L. Apr. 1 '08 *	g	· $\overset{7}{8}$.9	$\overset{7}{8}$.9		d 6.8 7.0 6.8	6.90	1 $\underline{1}$
	e	6.2 6.4 6.7	6.55	$\underline{2}$ 1	b³ 4.8 5.0	5.0	a ·
	f²	6.9 7.1 7.4	7.25	$\underline{1}$ 2	a³ 3.2 3.4	3.4	
	c⁷	6.0 6.2 5.9	6.05	2 $\underline{1}$	a⁵ 3.7 3.9	3.9	
	c⁶	5.8 6.0 5.9	5.95	0 $\underline{1}$	c⁴ 4.9 5.1 5.4	5.25	$\underline{1}$ 2
	f³	· 9.7		+14 −10 22)24(±0.109 22 200 198	f² · 7.8		+7 −9 18)16(±0.089 144 160
M. E. H.	h	8.2			l 9.2		

Monday, March 30, 1908

copied North Polar Sequence

I 28206

Scale M

C Third Exposure

a^1	3.1 3.3		
b^1	5.2 5.4 4.9	5.15	2 3
b^2	5.7 5.9 5.7	5.80	1 1
a^3	3.6 3.8	3.8	
c^2	6.3 6.5 6.7	6.60	1 1
c^5	6.7 6.9 7.1	7.00	1 1
c^1	5.9 6.1 5.9	6.00	1 1
c^7	6.9 7.1 7.3	7.30	3 2
a^5	4.3 4.5	4.5	a
c^4	5.8 6.0 5.9	5.95	0 1
c^6	6.7 6.9 7.3	7.10	3 2
a^2	t m e		
c^3	6.7 6.9 6.9	6.90	0 0
d	7.0 7.2 7.5	7.35	3 1
7	3.0 3.2	3.2	a
b^3	5.6 5.8 5.7	5.75	0 1
a^4	3.9 4.1	4.1	a
e	7.8		
f^3	8.9		
f^2	8.6		
g	9.2		
f^1	7.9		
i	9.6		
h	9.5		
k^1	10.1		

+11
−13
22)26 (±0.118
22
40
22
180
176

D Fourth Exposure

a^1	3.6 3.8		
b^1	5.8 6.0 5.8	5.90	1 1
b^2	6.4 6.6 6.7	6.65	0 1
a^5	4.9 5.1 4.9	5.00	1 1
c^4	6.6 6.8 6.6	6.70	1 1
a^3	4.2 4.4 4.2	4.30	1 1
c^5	~~6.8~~ 7.7	7.7	a
c^2	7.0 7.2 6.8	7.00	2 2
a^4	4.6 4.8 4.9	4.85	0 1
c^1	6.6 6.8 6.9	6.85	0 1
c^6	7.6		
f^1	8.7		
f^3	9.7		
c^3	7.6		
e	8.3		
f^2	superposed		
g	9.6		
c^7	7.8		
d	8.4		
h	10.2		
b^3	5.9		
x	~~5.9~~		

+9
−6
16)15 (±0.094
144
60
64

M. E. H.

Monday, March 30, 1908

copied North Polar Sequence

I 28206

Scale M

E Fifth Exposure

a^1	3.7 3.9		
b^1	fogged		
b^2	7.2		
a^5	5.6 5.8 5.9	5.85	0 1
a^4	5.3 5.5 5.4	5.45	1 0
a^3	5.0 5.2 5.0	5.10	1 1
c^1	7.5		
c^7	8.6		
b^3	6.8		
c^2	7.9		
e	9.1		
c^3	7.9		
c^5	8.4		
c^6	8.3		
d	8.7		
c^4	7.1		
f^2	superposed		
f^3	10.1		
g	n s		
f^1	9.6		

+3
−1
6)4 (±0.067

F Sixth Exposure

A	1.9 2.1		
a^1	5.2 5.4 4.8	5.10	3 3
b^1	fogged		
b^2	7.8		
a^3	5.9 6.1 6.5	6.30	2 2
a^5	~~5.9~~ 6.7 6.9 6.7	6.80	1 1
a^4	6.0 6.2 6.5	6.35	2 1
c^7	9.3		
c^5	8.9		
b^3	7.8		
c^3	$8.\overset{7}{8}$		
e	9.8		
c^1	7.9		
f^1	10.1		
d	9.2		
c^2	8.5		
c^4	87.9		
c^6	9.7		

+7
−8
8)15 (±0.188

Remarks on I 28306 The images of A, a^1, a^3, a^4, 7, b^3, a^5, c^4 are always poor, particularly when bright.

Monday, March 30, 1908

North Polar Sequence Copied

I 28206

Scale M

	G Seventh Exposure			H Eigth Exposure	
A	2.2 2.4		A	2.9 3.1	
a^1	5.8 6.0 5.8	5.90 11	a^1	6.5 6.7 6.7	6.70 00
b^2	8.6		b^2	~~def.~~ 9.0	
a^3	6.7 6.9 6.9	6.90 00	a^3	7.7	
a^5	7.8		c^7	10.2	
a^4	6.8 7.0 6.8	6.90 11	c^2	9.7	
c^1	8.7		c^5	9.8	
c^6	9.7		b^3	8.8	
c^5	9.5		a^5	8.0	
b^3	8.4		c^4	9.1	
c^4	8.8		a^4	7.5	
c^2	9.3		c^3	10.0	
d	9.7		c^1	$9.\overset{3}{3}$	
c^3	9.5		d	10.2	
c^7	9.7		c^6	9.8	
b^1	fogged		b^1	fogged ~~8.5~~	ar. Dev. .00
e	10.1				
f		$\begin{array}{l}+2\\-2\\6\overline{)4}\end{array}$ (±0.666 ±0.067			

M. E. H.

Monday, March 30, 1908

Copied Prismatic Companions of Polar Sequence

I 28206

Scale M

A 1st Exp
a 3.7 3.9
a^1 6.8 7.0 7.0 7.00 00
b^1 8.6
b^2 8.9
a^5 8.4
c^4 9.7
a^4 7.9
c^5 10.1
a^3 7.8
c^1 9.5
c^2 9.7
c^3 10.0
b^3 ~~8~~ 9 .1 Unit changed April 9
F 6.9
G 9.4
a^2 7.4 ar. Dev. ±.00

B 2nd Exp
A 4.1 4.3
a^1 7.5
b^1 8.8
b^2 9.8
a^3 8.0
a^2 7.7
a^4 8.1
F 7.9
b^3 9.1

4.00
M. E. H.

a^5 8.9
c^4 superposed
c^1 ~~7.2~~ 10.0 changed April 9
c^2 n.s
c^5

C Third Exp
A 4.7 4.9 4.8 4.85 10
a^1 7.9
b^1 9.8
b^2 10.1
c^1 n.s
a^3 8.8
a^4 8.7
a^5 9.1
F 6.8 ar. Dev. ±.05
b^3 n.s
G superposed
a^2 8.3

D Fourth Exp
A 5.1 5.3 5.7 5.50 22
a^1 8.8
b^1 n.s
a^2 8.9
a^4 9.4 ar. Dev. ±.20
F 8.8

G 9.0
a^5 10.1
a^3 9.3

E Fifth Exp
A 5.9 6.1
a^1 ~~10.8~~ 9.4
b^1
a^2 9.7
a^4 10.0
a^3 9.8
G superposed
F 9.3
a^5 n.s

Sixth Exp
F A scale 2 6.9
a^1 9.8
a^3 ~~10.2~~ im. too poor Apr. 9
a^2 10.0
a^4 n.s.
F 9.8
G superposed

G Seventh Exp
A 7.3
a^1 n.s.

H Eigth Exp
A 7.9
a^1 n.s

Wednesday. April 1, 1908

Remeasurements I 28$\overset{2}{8}$06 Discordant Measures

First ~~Eighth~~ Exp

in n f b^1, 3.5 · 3.7 Prev. meas. 3.6 on first scale mean, 3.75

in p a^5 3.1 · 3.3 Prev. meas. 2.7 on first scale 3.10

" " b^2 3.9 4.1 4.2 4.15 1 0 Prev. meas. 4.4 on first scale 4.30

Fifth Exp

in p d^1 3.8 · 4.0 Prev. meas. 3.7 on first scale 3.95

Fourth Exp

b^3 5.9 6.1 6.10 00 Prev. meas. 5.9 on second scale 6.00

Second Exp

in p c^1 5.7 5.6 5.75 1 2 Prev. meas. 5.6, 5.7 5.75

" " a^5 3.7 · 3.9 Prev. meas. 3.7 on first scale 3.90

Sixth exp.

a^{1st} 4.7 4.9 4.90 00 Prev. meas. 5.2, 4.8

c^6 8.8 Measure of a^1 on first scale prev. meas. wrong.

Reject and employ last meas 4.90

Prev. meas. of c^6 9.7, obviously wrong. Reject.

The discordances, it will be seen, are not usually removed by second measure. They seem to be due to the poor quality of the images, caused by distance from center of plate, or by brightness

M. E. H.

Thursday, April 2, 1908

AC Plates

Remeasurement ~~I 28306~~ ~~Ant.~~ 8756 + 8759

AC 8756 2d scale 3d scale

Fifth exp. A 7.1 6.7 6.7 6.70 00 Prev. meas 7.6 reject

First exp. a^5 8.5 8.1 8.1 8.10 00 Prev. meas. 9.7 reject

AC 8759

First exp. D 6.9 6.5 6.7 6.60 1 1 Prev. meas. 7.1 reject

Second exp. a^1 8.8 8.4 8.5 8.45 0 1 " " 8.50 take mean

Third exp. a^1 · 8.9 8.9 . A " " 8.65 reject

2.25 Saturday, April 4, 1908

Copied North Polar Sequence Scale 8858

AC 9376

Scale N

	Exp +90				Exp +88°		
A	0.9 0.7	0.7		*A	2.0 1.8	1.8	
B	2.8 2.6	2.6		D	~~4.9~~ 5.5 5.1 4.9	5.00	1 1
E	5.4 5.0 4.8	4.90	1 1	C	4.3 4.1 5.5 4.1	4.10	0 0
C	3.9 3.7 4.3 3.9	3.80	1 1	E	5.8 5.4 5.4	5.40	0 0
D	4.8 4.7 4.9 4.5	4.60	1 1	B	3.2 3.0	3.0	a ·
a^1	~~5.9~~ 5.9 5.4 5.7	5.60	1 1	a^1	6.1 5.7 5.7	5.70	0 0
a^2	6.9 6.5 6.5	6.50	0 0	b^1	8.4 8.0 7.9	7.95	0 1
g	6.7 6.3 6.4	6.35	1 0	a^5	7.8 7.4 7.6	7.50	1 1
b^3	8.9 8.5 8.8	8.65	1 2	c^4	9.2	9.2	· a
a^5	7.8 7.4 7.7	7.55	2 1	a^3	7.3 6.9 6.3	6.60	3 3
c^4	9.4	9.3	· a	b^2	9.0 8.6 8.8	8.70	1 1
a^4	7.5 7.1 6.9	7.00	1 1	g	6.7 6.3 5.9	6.10	2 2
F	6.6 6.2 5.8	6.00	2 2	b^3	8.9 8.5 8.7	8.60	1 1
a^3	7.0 ~~8.4~~ 6.6 6.8	6.70	1 1	a^2	6.8 6.3 6.5	6.45	0 1
b^1	8.6 8.3 8.4	8.35	1 0	a^4	7.5 7.1 6.7	6.90	2 2
c^1	9.0			F	6.3 5.9 5.8	5.85	1 0
c^6	10.1			c^1	9.2		
b^2	9.2 ~~8.5~~			c^6	10.0		
c^5	9.8			c^2	9.9		
c^3	9.9			d	superposed		
c^7	10.4			c^3	10.0		
c^2	9.6			c^5	10.0		
		+11 −13 24) 24 (±0.1		c^7	10.4		

−12
+13
26) 25 (±0.096
234
1.56

3.00 Images difficult to compare with scale

* A reading should be 1.0

M.E.H

3.00 Saturday, April 4, 1908

Copied North Polar Sequence Distance from Centre

AC 9376 Thursday April 9, 1908

	Exp +90	Exp +88	Exp +86	Exp +82
x A	8	15	26	50
x B	19	28	40	63
x C	16	37	48	72
x D	19	28	40	63
x E	16	26	38	61
F	10	8	18	40
g	18	13	18	38
x a^1	10	18	28	52
a^2	18	11	12	33
a^3	8	5	16	40
a^4	11	5	15	38
x a^5	5	16	28	53
x b^1	8	14	25	49
x b^2	7	14	25	49
b^3	11	11	20	43
c^1	3	11	23	47
c^2	3	8	20	44
c^3	3	9	22	46
x c^4	7	18	30	55
c^5	7	8	21	44
c^6	4	8	20	44
c^7	5	9	22	44
d	2	10	23	47
	average dist 2	average dist 10	average 23	aver. 47

All stars excepting those marked x are beyond the centre of the plate

3.10

M.E.H

22.40

Thursday, April 9, 1908

North Polar Sequence Scale $\overset{N}{\text{AC}}$ 8858

Copied

Plate AC 9376

		Exp +86				Exp +82°.		
	A	1.1 0.9	0.9		A	1.3 1.1	1.1	
	B	3.5 3.3	3.3		B	3.7 3.5 $\overset{4}{\cancel{3}}$.2 3.8	3.65	⊥ 2
	E	6.0 5.6 5.7	5.65	0 1	C	5.7 5.3 4.9	5.10	2 2
imp	C	4.9 4.7 4.9 4.5 4.6	4.60	1 ⊥ 0	a¹	6.9 6.5 6.6	6.55	⊥ 0
	D	5.7 5.3 5.5	5.40	⊥ 1	b²	9.1 8.7 8.9	8.80	⊥ 1
	a¹	6.6 6.2 5.9	6.05	2 ⊥	a²	6.9 6.5 6.7	6.60	⊥ 1
	b¹	8.5 8.1 8.4	8.25	⊥ 2	a⁵	8.$\overset{5}{8}$ 8.$\overset{1}{0}$ 8.2	8.1$\overset{5}{\cancel{0}}$	⊥ $\overset{0}{1}$
	a⁵	8.3 7.9 8.0	7.95	⊥ 0	c⁴	9.1	9.1	. a
	c⁴	9.0	9.0	. a	G	6.8 6.4 6.4	6.40	0 0
	G	6.7 6.3 5.8	6.05	3 2	b³	8.9 8.5 8.9	8.70	2 2
	F	6.6 6.2 5.9	6.05	2 ⊥	a⁴	7.7 7.3 7.5	7.40	⊥ 1
	a²	6.9 6.5 6.5	6.50	0 0	b¹	8.7 8.3 8.5	8.40	⊥ 1
	b³	8.9 8.5 8.9	8.70	2 2	a³	7.6 7.2 7.0	7.10	1 ⊥
	a⁴	7.5 7.1 7.0	7.05	1 0	F	6.8 6.4 6.5	6.45	0 1
	b²	8.8	8.8	. a	D	6.6 6.2 5.9	6.05	2 ⊥
	a³	7.4 7.0 6.7	6.85	2 ⊥	E	6.3 5.9 6.0	5.95	⊥ 0
	c¹	9.0			c¹	9.2		
	c²	9.8			c²	9.6		
	c⁵	10.2			c⁵	9.8		
	c⁶	10.1			c³	9.9		
	c³	10.0			d	10.3		
	c⁷	10.5			c⁶	10.0		
	d	10.4			c⁷	10.2		

exhom

+17
−11
25) 28 (±0.112
25
30
25
5
±0.112

+15
−14
28) 27 (±0.096
252
180
168
12

M. E. H.

Thursday, April 9, 1908

North Polar Sequence

Copied

AC 9376

Scale N

	Exp +75 (2nd)		
F	7.3 6.9 6.7	6.80	1 ⊥
G	7.4 7.0 6.7	6.85	2 ⊥
b³	8.9 8.5 9.0	8.75	3 2
a²	7.1 6.7 6.$\overset{8}{\cancel{2}}$	6.75	⊥ 0
b¹	8.7 8.3 8.6	8.45	⊥ 2
a¹	7.0 6.6 6.7	6.65	0 1
a⁴	8.0 7.6 7.7	7.65	0 1
b²	9.2	9.2	. a
a³	7.7 7.3 7.3	7.30	0 0
a⁵	8.4 8.0 7.7	7.85	2 ⊥
c¹	9.3		
c⁴	9.7		
c⁵	10.1		
c²	9.7		
c³	superposed		
c⁶	10.2		
d	n.s.		
c⁷			

−8
+11
18) 19 (±0.105
18
100
90 ±0.106

Thursday, April 9, 1908

Standard Sequence ~~V~~ 14 9h +77°.5

copied

aC 9376

Scale N

Exp +80° Dist 9
scale 2

a	6.8	6.4	6.5	6.45	0 1
d	8.9	8.5	8.7	8.60	⊥ 1
b	7.6	7.2	7.0	7.10	i ⊥
e	.		9.0	9.0	. a
c	8.0	7.6	7.4	7.~~0~~ 5 0	i ⊥
f			9.9	9.9	. a
g	superposed				
h			10.3	10.3	. a

+4
−3
8) 7 (±0.088
64
60

Exp +84°
Dist 34
sc 2

a	7.6	7.2	7.2	7.20	0 0
d	8.8	8.4	8.8	8.60	2 2
b	7.9	7.5	7.7	7.60	⊥ 1
e	.		8.8	8.8	. a
c	8.2	7.8	7.8 5	7.65	2 ⊥
f			9.7	9.7	
g			9.8	9.8	
h			10.2	10.2	

+5
−4
8) 9 (±0.112

Exp +82
Dist 20 mm
sc 2

a	7.5	7.1	6.9	7.00	i ⊥
d	8.8	8.4	8.7	8.55	2 1
c	7.9	7.5	7.6	7.55	⊥ 0
f	.		9.7	9.7	. a
b	7.9	7.5	7.6	7.55	⊥ 0
e	9.1	8.7	8.9	8.80	⊥ 1
g			10.0		
h			10.2		
k			n.a.		

−6
+3
10) 9 (±0.09

Exp +86
Dist 45

a	7.5	7.1	7.3	7.20	⊥ 1
c	8.4	8.0	7.9	7.95	0 ⊥
e	.		9.1	9.1	. a
b	7.9	7.5	7.7	7.60	⊥ i
d	8.9	8.5	8.7	8.60	⊥ i
f			9.6		
g			9.9		
h			10.3		

−4
+3
8) 7 (±0.088

M.E.H.

Thursday, April 9, 1908

copied Standard Sequence ~~V~~ 14 9h +77°.5

aC 9376

Scale N

Exp +88
Dist 57

a	7.3	6.9	6.9	6.90	0 0
d	8.8	8.4	8.6	8.50	⊥ 1
b	7.8	7.4	7.5	7.45	0 1
e	.		9.0	9.0	. a
c	8.3	7.9	7.9	7.90	0 0
f			9.6		
g			9.9		
h			10.2		

+3
−1
8) 3 (±0.038
24
60

Exp +90 Dist 68

a	6.9	6.5	6.6	6.55	⊥ 0
d	9.0	8.6	8.8	8.70	⊥ 1
b	7.6	7.2	7.4	7.30	⊥ 1
e	.		9.0	9.0	. a
c	8.0	7.6	7.8	7.70	⊥ 1
f			9.8		
g			10.1		
h			n.a.		

−4
+3
8) 7 (±0.088

23.55

M.E.H.

23.55

Thursday April 9, 1908

copied

Distances in millimeters from Centre AC 9376

	Exp +75	Exp +84	Exp +80
A	65	38	62
B	110	51	76
C	119	60	85
D	110	51	75
E	108	49	73
F	85	28	52
G	81	22	48
a^1	67	40	63
a^2	76	22	45
a^3	85	28	52
a^4	83	26	49
a^5	98	40	64
b^1	94	36	60
b^2	92	35	60
b^3	86	31	54
c^1	92	35	66
c^2	90	32	55
c^3	92	34	57
c^4	100	42	59
c^5	89	32	56
c^6	90	33	55
c^7	90	32	56
d	93	35	59
	aver 92	average 35	average 58

0.0

3.25

Thursday, April 9, 1908

copied

North Polar Sequence

AC9376

Scale N	Exp +84				Exp +80		
A	1.4 1.2	1.2		A	1.9 1.7	1.7	
v.h B	3.6 3.4	3.4		B t.p			
E	6.0 5.6 5.7	5.65	0 1	E	6.7 6.3 6.0	6.15	1 2
v.h C	5.5 5.1 5.2	5.15	1 0	C	5.5 5.1 5.3	5.20	1 1
a^1	7.2 6.8 6.3	6.55	2 3	D	6.7 6.3 5.8	6.05	3 2
b^1	8.7 8.3 8.7	8.50	2 2	a^1	7.6 7.2 6.7	6.95	2 3
v.h D	5.8 5.4 5.5	5.45	0 1	b^1	8.8 8.4 8.7	8.55	2 1
G	6.8 6.4 6.4	6.40	0 0	a^5	8.5 8.1 8.2	8.15	1 0
a^4	7.8 7.4 7.3	7.35	0 1	c^4	9.2	9.2	. a
F	7.0 6.6 6.5	6.55	0 1	G	7.2 6.8 6.6	6.70	1 1
b^3	8.9 8.5 8.9	8.70	2 2	a^3	7.9 7.5 7.6	7.55	1 0
a^2	7.2 6.8 6.7	6.75	0 1	b^3	8.9	8.9	. a
b^2	9.1	9.1	. a	a^4	7.9 7.5 7.6	7.55	1 0
a^3	7.7 7.3 6.7	7.0	3 3	b^2	9.0	9.0	. a
a^5	8.6 8.2 8.3	8.25	0 1	a^2	7.4 7.0 7.0	7.00	0 0
c^1	9.4			F	7.5 7.1 6.6	6.85	3 2
c^5	10.0			c^1	9.3	9.3	. a
c^3	10.0			c^2	9.6		
c^2	9.8			c^5	10.1		
d	10.3			c^3	10.1		
c^7	10.2			c^6	10.0		
c^6	10.0			c^4			
c^4	9.4			c^7	n.a.		
				d	10.3		

+12
-14
24) 26 (±0.108
24
200
192
8

+12
-16
22) 28 (± 0.127
22
60
44
160
154

3.50

M.E.H

Tuesday, April 14, 1908

3.45

Copied

Standard Sequence 6 3^h +86.5

+90 can not be measured

Scale M

I 35230

+89

a	$\overset{3}{2}$.0 3.2 ·	3.2	
g	5.9 6.1 6.2	6.15	$\underline{1}$ 0
e	5.7 5.9 5.8	5.85	1 0
c	4.7 4.9 4.8	4.85	1 0
f	6.0 6.2 6.5	6.35	$\underline{2}$ 1
d	5.0 5.2 5.5	5.35	$\underline{2}$ 1
im v.p. b	3.8 4.0 ·	4.0	
l	7.7		
k	7.0		
p	9.2		
h	6.6		
ḿ	8.4		
o	8.9		
q	im def		
m	8.3		
r	9.6		
s	n.a	−5 +4 10)9(±0.09	

Dist 59

a 79 mm
b 850
c 45
d 21

Exp +88.

a	3.7 3.9 ·	3.9	a ·
g	5.9 6.1 6.4	6.25	$\underline{1}$ 2
c	3.9 4.1 ·	4.1	a ·
e	5.6 5.8 5.7	5.75	0 $\underline{1}$
h	6.7 6.9 6.8	6.85	1 0
b v.p.	3.6 3.8 ·	3.8	a ·
f	5.9 6.1 5.9	6.00	1 $\underline{1}$
k	7.0 7.2 7.5	7.35	$\underline{2}$ 1
d	5.1 5.3 5.1	5.20	1 $\underline{1}$
m	8.3		
l	7.7		
p	9.1		
q	9.7		
m	7.9		
o	8.9		
r	10.0		
s	n.a	+6 −6 12)12(±0.1	

Dist 38

a 60 mm
b 38
c 24
d 18 beyond centre

M.E.H.

Tuesday, April 14, 1908

Copied

Standard Sequence 6 3^h +86.5

Plate I 35230

Scale M

Exp +87

a	3.5 3.7 ·	3.7	
g	6.0 6.2 6.6	6.40	$\underline{2}$ 2
e	5.7 5.9 5.6	5.75	1 $\underline{2}$
h	6.7 6.9 6.9	6.90	0 0
f	5.8 6.0 5.9	5.95	0 $\underline{1}$
v.p. b	3.8 4.0 ·	4.0	a ·
c	4.0 4.2 ·	4.2	a ·
k	7.0 7.2 7.1	7.15	0 $\underline{1}$
d	5.5 5.7 5.6	5.65	1 0
l	7.7		
m	7.9		
o	8.8		
r	10.0		
~~k~~	~~7.1~~		
n	8.5		
q	9.5		
p	9.0	+4 −6 12)10(±0.083 96 4	

Dist 15

a 43 mm
b 35 beyond centre
c 6
d 35 beyond centre

Exp +86

a	$\overset{3}{2}$.5 3.7 ·	3.7	a ·
g	6.0 6.2 6.6	6.40	$\underline{2}$ 2
d	t.p.		
c	4.5 4.7 4.7	4.70	0 0
k	7.0 7.2 7.6	7.40	$\underline{2}$ 2
v.p. e	5.7 5.9 5.8	5.85	1 0
b	t.p.		
h	6.8 7.0 7.0	7.00	0 0
f	6.3 6.5 6.7	6.60	$\underline{1}$ 1
p	9.0		
~~k~~ n	8.4		
l	7.7		
m	8.0		
o	8.8		
q	9.7		
r	superposed	+6 −5 12)11(±0.092 108 20	
s	n.a		

Dist 14 beyond centre

a 34 mm
b 46 beyond centre
c 23 " "
d 57 " "

4.30

M.E.H.

21.50

Wednesday, April 15, 1908

copied

North Polar Sequence

Plate I 35230

Scale M

Exp +90

	A	·		
	a¹	2.4 2.6	2.6	a ·
	b¹	4.7 4.9 4.7	4.80	1 ⊥
	a³	3.0 3.2 ·	3.2	a ·
im pos	c⁴	5.8 6.0 5.8	5.90	1 ⊥
" "	a⁵	3.9 4.1 ·	4.1	a ·
	b²	5.5 5.7 5.7	5.70	0 0
	c¹	5.7 5.9 5.8	5.85	1 0
	c³	6.8 7.0 6.8	6.90	1 ⊥
	c⁶	6.7 6.9 6.8	6.85	1 0
	c²	6.0 6.2 6.0	6.10	1 ⊥
	c⁵	6.8 7.0 6.8	6.90	1 ⊥
	c⁷	7.0 7.2 7.0	7.10	1 ⊥
im def.	d	7.0 7.2 7.2	7.20	0 0
	f¹	7.8		
	i	9.1		
	k³	9.9		
	g	8.7		
	f²	8.3		
	f³	8.7		
	h	9.2		
	k¹	9.6		
	e	7.6		
	k²	9.9		

−6
+8
20)14(±0.07

Exp +89

a¹	2.5 2.7 ·	2.7	
b¹	4.2 4.4 4.8	4.60	2̲ 2
c¹	5.7 5.9 5.8	5.85	1 0
a⁵	t p		
c⁴	"		
b²	5.3 5.5 5.6	5.55	⊥ 0
a³	3.7 3.9 ·	3.9	
c⁷	6.9 7.1 7.2	7.15	⊥ 0
c³	6.7 6.9 6.8	6.85	1 0
c⁶	6.8 7.0 7.0	7.00	0 0
c²	6.1 6.3 6.6	6.45	⊥ 2
c⁵	6.6 6.8 6.6	6.70	1 ⊥
h	8.9		
d	superposed		
e	7.7		
f²	8.5		
g	im def		
k³	·		
k¹	9.9		
f³	8.7		
f¹	8.0		
~~h~~			
i	9.6		

+7
−6
16)13(±0.081
128
20
16
4

M.E.H

Wednesday, April 15, 1908

copied

North Polar Sequence

Plate I 35230

Scale M

Exp +88.

	A	·		
	a¹	2.3 2.5	2.5	
	b¹	4.5 4.7 4.5	4.60	1 ⊥
imp	c¹	5.0 5.2 5.8	5.50	3̲ 3
"	a³	3.5 3.7 ·	3.7	
	b²	5.1 5.3 5.6	5.45	⊥ 2
	c³	5.9 6.1 6.0	6.05	1 0
	c⁵	t p 5.7	5.7	· a
p	c²	5.6 5.8 5.8	5.80	0 0
	c⁴	4.3 4.5 5.0	4.75	3̲ 2
	c⁷	6.7 6.9 6.9	6.90	0 0
	d	6.9 7.1 7.0	7.05	1 0
	c⁶	6.5 6.7 6.8	6.75	⊥ 0
	a⁵	3.8 4.0 ·	4.0	a ·
	f¹	7.8		
	e	7.4		
	f²	8.6		
	g	super		
	i	9.6		
	f³	8.8		
	h	9.6		
	k¹	9.9		

−9
+10
18)19(±0.106
18
100
108

Measures almost impossible
Images very poor

Exp +87

a¹	3.0 3.2	3.2	
b¹	4.9 5.1 5.0	5.05	1 0
f²	5.5 5.7 5.8	5.7$\overset{5}{8}$	⊥ 0

−1
+1
4)2(±0.05

Wednesday, April 15, 1908

copied North Polar Sequence - Prismatic Companions

~~A~~ I 35230

Scale M

	Exp +90		
A	4.85.0 4.9	4.95	01
a^1	7.8		
b^1	9.2	±05	
b^2	9.8		
c^1	11.2		
a^3	8.1		
a^5	9.0		

	Exp +88.		
A	4.24.4 4.5	4.45	01
a^1	~~8.0~~ 8.0		
a^3	8.4		
a^5	9.1	±05	
c^1	10.0		
b^1	9.5		
b^2	9.8		

	Exp +89		
A	4.24.4 4.9	4.65	23
a^1	7.8	±25	
b^1	9.4		
b^2	9.$\overset{9}{8}$		
a^3	8.5		
a^5	9.0		
c^1	10.1		

	Exp +87		
A	4.04.2 4.3	4.25	01
a^1	8.0		
b^1	9.4		
b^2	9.8	±05	
a^3	8.1		
a^5	9.0		
c^1	10.0 ident doubtful		

M.E. H.

Wednesday, April 15, 1908

copied Distances from Centre

I 35230

	Exp +90	+89	+88	+87
A	19 bey cen	10	28	70
a^1	25 "	14	26	69
a^3	26 opp cen	34	52	93
a^5	24	48	63	84
b^1	21 bey cen	2	23	67
b^2	27 "	4	20	64
c^1	4	21	44	66
c^2	18	27	59	
c^3	18	29	62	
c^4	29	45	65	
c^5	3$\overset{2}{8}$	51	73	
c^6	14	30	51	
c^7	13	25	46	
d	15	36	59	
e	12	33	56	
f^1	14	35	58	
f^2	1$\overset{2}{0}$	34	56	
f^3	10	32	55	
g	12	31	53	
h	7	31	52	
i	8	31	52	
k^1	8	31	52	
k^2	8	31	52	
k^3	8	31	52	

22.45

M.E. H

Wednesday, April 15, 1908

0.05

Copied

Standard Sequence ~~24~~ 15 ~~13~~ 9 h +86

I 352.31

Scale M

	Exp +89				Exp +88		
a	3.8 4.0	4.0		a	3.9 4.1	4.1	
e	4.9 5.1 5.5	5.30	$\underline{2}$ 2	e	5.5 5.7 5.8	5.75	⊥ 0
c	4.6 4.8 4.9	4.85	0 1	b	4.1 4.3	4.3	
f	5.7 5.9 $\overset{5}{4}$.8	5.85	1 0	d	4.9 5.1 5.2	~~5.22~~ 5.15	⊥ 0
b	4.0 4.2	4.2		f	5.8 6.0 5.9	5.95	0 ⊥
h	6.0 6.2 6.3	6.25	0 1	l	6.8 7.0 7.0	7.00	0 0
d	t p			c	4.9 5.1 5.3	5.20	⊥ 1
~~f~~				g	6.0 6.2 6.1	6.15	0 ⊥
g	5.8 6.0 5.9	5.95	0 ⊥	k	6.6 6.8 6.7	6.75	0 ⊥
k	6.5 6.7 6.8	6.75	⊥ 0	h	6.2 6.4 6.6	6.50	⊥ 1
l	6.8 7.0 7.0	7.00	0 0	q	8.7		
o	8.3			r	9.2		
q	9.0			o	7.8		
m	7.0			s	9.7		
s	9.7			n	7.8		
n	7.7			m	7.5		
r	9.3			p	8.4		−~~6~~7 +2 16)9(±0.056 80 160
p	8.7		−4 +5 14)9(±0.064 84 60				

Dist 54		Dist 34 average
a 68	m 48	a 54
b 70		b 49
c 60		c 41
d 85		d 62
e 73		e 51
f 62		f 40
g 58		g 36
h 64		h 43
		m 26

M. E. H

Wednesday, April 15, 1908

copied

Standard Sequence ~~24~~ 15 9h +86°

Copied Bk 53:28 Sept 26. 1919

I 35231

Scale M

Sept 25 1919

	Exp +87				Exp +86°			Curve	Magn.
b	4.1 4.3	4.3		d	4.9 5.1 5.0	5.05	1 0	3.53	8.58
e	5.7 5.9 5.9	5.90	0 0	a v.p.	4.0 4.2	4.2		.	.
a	3.9 4.1	4.1		c	4.8 5.0 4.9	4.95	0 ⊥	3.72	8.67
d	5.3 5.5 5.6	5.55	⊥ 0	h	6.6 6.8 6.8	6.80	0 0	3.00	9.80
h	6.4 6.6 6.8	6.70	⊥ 1	b	4.0 4.2	4.2	a .	.	.
c	4.8 5.0 4.9	4.95	0 ⊥	e	5.7 5.9 5.7	5.80	1 ⊥	3.19	8.99
f	5.8 6.0 6.0	6.00	0 0	l	6.9 7.1 7.4	7.25	⊥ 2	3.04	10.29
l	6.9 7.1 7.2	7.15	⊥ 0	g	6.4 6.6 6.4	6.50	1 ⊥	2.99	9.49
g	$\overset{6.2}{5.6}$ 6.4 6.5	6.45	0 1	k	6.7 6.9 6.8	6.85	1 0	3.01	9.86
k	6.7 6.9 6.9	6.90	0 0	f	5.9 6.1 5.8	$\overset{5}{6}$.95	1 $\underline{2}$	3.13	9.08
n	7.9			m	7.9	7.9		3.20	11.10
q	9.1			o	8.4	8.4		3.32	11.72
m	7.6			r	9.4	9.4		3.59	12.99
r	9.4			p	8.7	8.7		3.39	12.09
p	8.8			m	7.5	7.5		3.10	10.60
s	9.8 ~~10.3~~	−4 +2 16)6(±0.038 48 120		q	9.0	9.0	−6 +7 16)13(±0.081 128 20	3.48	12.48
o	8.6			s	9.8	9.8		3.70	13.50

Dist.		Dist		
				f 13 beyond centre
a 47	aver 12	a 50	beyond centre	aver 14
b 54		b 59	" "	d 17 ordinary
c 17		c 27	" "	e 9 "
d 41		h 4	" "	
m 6		g 10	"	
e 31		l 13		
h 22		r 14	"	
f 20				
g 16				

0.50

Light changed rapidly - gathering clouds. a+b near edge, always poor

M. E. H

Thursday, April 16, 1908

0.45

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North Polar Sequence

Plot 3

I 35231

Scale M

no			Exp +90	Diff.	Sept 24. 1919 mean			Exp +89	mean	
1~~8~~2		A					a^1	t p		
5		a^1	2.7 2.9	3.59	2.9		b^1	"		
8		b^1	4.7 4.9 4.9	3.33	4.90	0 0	b^2	"		
9	v p	b^2	4.9 ~~5.3~~ 5.1 4.9	3.83	5.00	1 $\underline{1}$	a^5 p	4.2 4.4 4.9	4.65	$\underline{2}$ 3
1ₙ	v p	a^2	2.8 3.0		3.0		c^4 p	5.7 5.9 5.8	5.85	1 0
7		a^4	3.7 3.9	3.41	3.9		a^2 p	3.6 3.8	3.8	a.
2₂		F	3.0 3.2		3.2		a^4	3.9 4.1	4.1	a.
~~8~~ 3ₙ	v p	b^3	5.7 5.9 5.7		5.80	1 $\underline{1}$	c^5	6.4 6.6 6.7	6.65	0 1
5ₙ		c^5	6.6 6.8 6.8		6.80	0 0	c^2	6.1 6.3 6.6	6.45	$\underline{1}$ 2
6		a^3	3.7 3.9	3.21	3.9		a^3	3.3 3.5	3.5	a
4ₙ		c^6	6.7 6.9 6.8		6.85	1 0	b^3	5.6 5.8 5.7	5.75	0 $\underline{1}$
2ₙ	poor	a^5	4.4 4.6 4.5		4.55	0 $\underline{1}$	c^7	6.9 7.1 7.1	7.10	0 0
10		c^1	5.8 6.0 5.9	3.07	5.95	0 $\underline{1}$	c^3	6.7 6.9 6.8	6.85	1 0
12		c^3	6.6 6.8 6.8	3.06	6.80	0 0	c^1 p	5.8 6.0 5.9	5.95	0 $\underline{1}$
13		d	7.3	3.00	7.3	a	c^6	6.7 6.9 7.2	7.05	$\underline{1}$ 2
11		c^2	6.3 6.5 6.7	2.95	6.60	$\underline{1}$ 1	F	2.9 3.1	3.1	a.
6ₙ		c^7	7.0 7.2 7.3		7.25	0 1	h	9.0		+18 −6 18)1.6 ±.089
4ₙ	poor	c^4	5.8 6.0 5.9		5.95	0 $\underline{1}$	k^2	9.5		
20		h	9.0	3.73		−6 +5 22)11 ±.05	g	superposed		
23		k^1	9.7	3.64			f^3	8.6		
8ₙ		f^1	7.9				f^1	7.8		
18		f^3	8.7	3.36			d	7.0		
25		k^3	10.1	3.77			i	9.3		
11ₙ		i	9.3				k^3	9.9		
12ₙ		k^2	10.0				k^4	10.3		
7ₙ		l	7.7				l	super		
17		f^2	8.6 close to bright ste.	3.03			f^2	7.9		
M. E. H. 19		g	8.8	3.62			k^1	9.4		

Thursday, April 16, 1908

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North Polar Sequence

I 35231

Scale M

		Exp +88				Exp +87		
	a^4	3.5 3.7	3.7		F v p	3.3 3.5		
	F	2.9 3.1	3.1		b^3 "	4.9 5.1 5.2	5.15	$\underline{1}$ 0
p	b^3	5.6 5.8 5.7	5.75	0 $\underline{1}$	c^5	6.3 6.5 6.6	6.55	$\underline{1}$ 0
v p	c^5	6.6 6.8 6.8	6.80	0 0	a^4	3.9 4.1	4.1	4)−2 ±.05
	a^5	t p			a^2	t. p		
	c^4	"			a^3	3.9 4.1		
v p	c^1	5.8 6.0 5.8	5.90	1 $\underline{1}$				
	c^7	6.7 6.9 7.0	6.95	$\underline{1}$ 0				
p	c^2	6.0 6.2 6.6	6.40	$\underline{2}$ 2				
p	c^3	6.4 6.6 6.8	6.70	$\underline{1}$ 1				
p	c^6	6.9 7.1 7.0	7.05	1 0				
	d	6.9 7.1 6.9	7.00	1 $\underline{1}$				
v p	a^2	3.4 3.6	3.6	+6 −7 16)13 ±.081				
	a^3	3.7 3.9	3.9					
	f^3	8.5						
	k^3	9.9						
	f^1	7.6						
	f^2	8.1						
	h	8.8						
	l	p 7.0						
	g	8.7						
	k^1	9.4						
	i	9.1						
	k^4	10.1						
	k^2	9.6						

M. E. H.

Thursday, April 16, 1908

Copied

North Polar Sequence Distances

I 35231

	Exp +90	Exp +89	Exp +88.	Exp
A	25	40	60	
F	40	33 opp c.	37	53
a^1	32	48	67	
a^2	61 beyond centre	41 b. c.	29 b. c.	
a^3	20 " "	3	22	43
a^4	~~2~~40 " "	28 b. c.	26	41
a^5	25	45	66	
b^1	26	~~4~~38	56	
b^2	28	37	55	
b^3	43 b. c	39 opp c	46	61
c^1	2	23	44	
c^2	13 b. c	18	38	
c^3	14 opp c.	24	44	
c^4	32	52	73	
c^5	27 bey. c	26	40	59
c^6	8 bey c	14	35	
c^7	8 bey c	13	35	
d	11	26	47	
e	8	26	45	
f^1	~~10~~ 10 ~~to~~	~~16~~ 28	50	
f^2	11	29	50	
f^3	9	29	49	
g	8	26	45	
h	8	26	45	
i	8	26	45	
k^4	6	22		

1.20

M.E.H

Monday, April 20, 1908

North Polar Sequence

Scale Measures of Prismatic Companion of A

✓ I 34605

A 3.6

✓ I 34373

A 3.7

I 34313

A 3.5

23.30

Wednesday, May 13, 1908

Plot 5

Sept 27-1919

Corrected North Polar Sequence

I 35232

Take mean +~~86~~ 89° and +~~87~~ 90°

Sept 27 1919

Scale M	Diff	no.	+90	↓			no.	Exp +89	↓		no.	+90	+89	mean
5	3.54	a_5	2.6 2.8	2.8	~~2.8~~	a .	a^1_5	2.9 3.1	3.1	a .	5	2.80	3.10	2.95 $^{15\ 15}$
6	3.21	b^1_8	4.9 5.1 5.1	5.10	~~5.10~~	0 0	b^1_8	4.9 5.1 5.0	5.05	1 0	6	3.90	3.90	3.90 $^{0\ 0}$
8	3.15	c^1_{10}	5.8 6.0 5.9	5.95	~~5.95~~	0 ⊥	a^5	4.2 4.4 4.6	4.50	⊥ 1	8	5.10	5.05	5.08 $^{02\ 03}$
9	3.01	c^3_{12}	6.5 6.7 6.7	6.70	~~a~~	0 0	c^4	5.6 5.8 5.8	5.80	0 0	9	5.85	5.80	5.82 $^{03\ 03}$
10	3.07	b^2_9	5.7 5.9 5.8	5.85		1 0	c^1_{10}	5.8 6.0 5.9	5.95	0 ⊥	10	5.95	5.95	5.95 $^{0\ 0}$
11	3.05	c^5	6.4 6.6 6.7	6.65		0 1	c^5	6.7 6.9 6.8	6.85	1 0	11	6.60	6.40 ~~7.05~~	6.50 $^{1\ 1}$
12	3.14	f^1	7.7	7.7		. a	a^3_6	3.7 3.9	3.9	a .	12	6.70	6.75	6.72 $^{02\ 03}$
13	3.30	e	6.9 7.1 7.3	7.20		⊥ 1	b^2_9	5.7 5.9 5.7	5.80	1 ⊥	13	6.95	7.05	7.00 $^{05\ 05}$
17	3.78	a^5	4.7 4.9 4.7	4.80		1 ⊥	c^3_{12}	6.5 6.7 6.8	6.75	⊥ 0	17	7.80	7.90	7.85 $^{05\ 05}$
18	3.56	c^4	5.7 5.9 5.7	5.80		1 ⊥	e	7.0 7.2 7.3	7.25	0 1	18	8.50	8.50	8.50 $^{0\ 0}$
19	3.72	a^3_6	3.7 3.9	3.9		a .	c^2_{11}	6.1 6.3 6.5	6.40	⊥ ⊥	19	8.70	g	8.70
20	3.93	c^2_{11}	6.4 6.6 6.6	6.60		0 0	d_{13}	6.8 7.0 7.1	7.05	0 1	20	8.80	8.80	8.80 $^{0\ 0}$
23	3.94	b^3	.			.	f^1	~~7.7~~ 7.7		+7 -5 20)12	23	9.50	9.30	9.40 $^{1\ 1}$
25	4.12	d_{13}	6.8 7.0 6.9	6.95		0 ⊥	f^3_{18}	~~8.5~~ 8.5		±.06	25	9.80	9.70	9.75 $^{05\ 05}$
~~26~~	.	f^3_{18}	8.5			-5 +5 20)10 ±.05	g_{19}	superposed			26	g	g.	
		k^3_{25}	9.8				k^3_{25}	~~9.7~~ 9.7						
		g_{19}	8.7				f^2_{17}	7.9						
		k^1_{23}	9.5				k^4	9.8						
		l	10.3				~~g~~							
		i	9.0				i	9.1						
		f^2_{17}	7.8				l	10.3						
		k^4	10.0				k^1_{23}	9.3						
		h_{20}	8.8				h_{20}	8.8						
		k^2	9.7				k^2	sup						
		k^5_{26}	sup.				k^5_{26}	"						
		~~e~~	~~7.3~~				d^1							

M. E. H.

Wednesday May 13, 1908

Corrected North Polar Sequence – Prismatic Companions

I 35232

Take mean +~~86~~ 89° and +~~87~~ 90°

Scale M

no.		Exp +90 ↓			no.		Exp +89 ↓			no.	mean	Diff.
15	A_{12}	4.7 4.9 4.9	49.0	0 0	10	A	4.7 4.9 4.7	4.80	1 ⊥	5	~~4.85~~	~~05~~ 05
	a^1 5	7.8			5	a^1	7.7				~~7.75~~	~~05~~ 05
	b^1 8	8.6			8	b^1	9.1					
	b^2_9	9.8			9	b^2	9.7					
	a^5_{2N}	sup			6	a^3	8.3					
	c^4_{4N}	def			. 2N	a^5	8.9					
	c^1_{10}	9.8			4N	c^4	9.8					
	c^2_{11}	n.s			10	c^1	9.8					
	a^3 6	8.3			11	c^2	10.2					
					12	c^3	n.s					

no			mean			Diff.
5	7.80	7.70	7.75	05	05	-1.26
6	8.30	8.30	8.30	0	0	-1.19
8	8.60	9.10	8.85	25	25	-0.62
9	9.80	9.70	9.75	05	05	-0.92
10	9.80	9.80	9.80	0	0	-0.78
11	.	10.2	10.20	.	a	-0.65
12	.	.				

M. H.

Wednesday, May 13, 1908

Copied 36 53, 62 Sept 30-1919

Standard Sequence 24 15h +85°

Copied

I 35232 For p.c. see p.100

Take mean +86° and +87°

Scale M	+86°	+87°	Exp +86		↓		Exp +87		↓	mean +86 & 87		Curve	Mag
a	3.80	4.00	a	3.6 3.8	3.8	a.	a	3.8 4.0	4.0	a.	a 3.90	3.24	7.14
b	4.30	4.20	d	4.9 5.1 ~~5.8~~ 50	5.05	10	d	4.9 5.1 5.3	5.20	⊥1	b 4.25 ~~5.12~~	3.20	7.45
c	4.75	4.90	h	6.8 7.0 7.0	7.00	00	f	6 5.4 6.6 6.4	6.50	1⊥	c 4.82 ~~6.75~~	3.13	7.95
d	5.05	5.20	b	4.1 4.3	4.3	a.	b	4.0 4.2	4.2	a.	d 5.12 ~~4.25~~	3.10	8.22
e	5.85	5.85	g	6.5 6.7 6.8	6.75	⊥0	g	6.6 6.8 6.7	6.75	0⊥	e 5.85 ~~6.75~~	3.07	8.92
f	6.50	6.50	c	4.6 4.8 4.7	4.75	0⊥	k	6.9 7.1 6.9	7.00	1⊥	f 6.50	3.12	9.62
g	6.75	6.75	e	5.7 5.9 5.8	5.85	10	e	5.7 5.9 5.8	5.85	10	g 6.75	3.18	9.93
h	7.00	6.85	f	6.2 6.4 6.6	6.50	⊥1	h	6.7 6.9 6.8	6.85	10	h 6.92	3.23	10.15
k	7.25	7.00	k	7.0 7.2 7.3	7.25	01	c	4.8 5.0 4.8	$4.90	1⊥	k 7.12	3.30	10.42
l	.	.	m ~~l~~	7.6		+4	o ~~n~~	8.2		+6	l .		
m	7.60	7.60	p ~~o~~	8.7		−3 14)17	q ~~p~~	8.8		−5 14)11 ±0	m 7.60	3.46	11.06
n	8.00	7.60	r ~~q~~	sub		±.05	n ~~m~~	7.6			n 7.80	3.52	11.32
o	8.20	8.20	s ~~r~~	9.6			r ~~q~~	9.2			o 8.20	3.66	11.86
p	8.70	8.50	q ~~p~~	8.9			t ~~s~~	9.9			p 8.60	3.78	12.38
q	8.90	8.80	t ~~s~~	9.8			m ~~l~~	7.6			q 8.85	3.85 ~~3.84~~	12.70
r	9	9.20 ~~8.80~~	u ~~t~~	n a			s ~~t~~	9.7			r 9.20	3.98	13.18
s	9.60	9.70	n ~~m~~	8.0			u ~~t~~	n a			s 9.65	4.10	13.75
t	9.80	9.90	o ~~n~~	8.2			p ~~o~~	8.5			t 9.85	4.16	14.01
u	.	.											

images are poor

0.10

M.E.W

2.45

Wednesday, May 13, 1908

Copied

Distances from centre in millimeters

I 35232 ~~Pres~~

,	Exp +90		Exp +89	Standard Sequence	+86	+87
A	19		38	a	26	43
a^1	14		43	b	24	23
a^2			~~40~~	c	6	23
a^3	25 opp c		31	d	18	41
a^4				e	14	37
a^5	26 b c		18 opp c	f	18	38
b^1	20		40	g	9	27
b^2	23		44	h	11	34
c^1	3		19	k	6	25
c^2	19 b c		12	l	15	average 34 ~~29~~
c^3	13 b c		6	m		
c^4	26 b c		25 opp c	n		35
c^5	32 b c		17 b c	o		average 29
d ~~c^6~~	16 b c		5			
e ~~d^1~~	13		10 average			
f^1	13 b c average					
f^2						
f^3						
g						
h						
k						
l						
m						
n						
o						
p	1					
q						

a & b are on opp sides of centre

Wednesday, May 13, 1908

Copied Bk 53, 63

Copied

Standard Sequence 24 Prismatic Companions

I 35232

Take mean +86 and +87

Scale M

	Exp + 86 2nd sc.	Exp +87	mean	curve	magn	curve	magn.
a	8.2	8.0	8.10	~~1.16~~	~~9.26~~	-1.20	6.90
b	8.7	8.6	8.65	~~0.98~~	~~9.63~~	-1.02	7.63
c	9.6	9	9.60	~~0.78~~	~~10.38~~	-0.80	8.80
d	9.9	9.5	9.70	~~0.76~~	~~10.46~~	-0.78	8.92
e	9.9	9.9	9.90	~~0.74~~	~~10.64~~	-0.73	9.17
f	10.2	.	10.20	~~0.68~~	~~10.88~~	-0.68	9.52

Exp +87

b	8.6
e	9.9
a	8.0
f	m.s.
d	9.5
c	sup. bright image

3.05

M.E.H.

Monday, May 18, 1908.

Copied

Praesepe T' plate

3, 38

Scale M Plate I 35275. Prismatic Companions

Plate measured with following edge at top.

a	1.~~7~~5	1.7		1.7	
d	2.0	2.2		2.2	
l	6.3	6.5	6.7	6.60	
e	2.9	3.1		3.1	
h'	~~6.7~~ 2.8	3.0		3.0	
*n'	~~6.8~~ 6.7	6.9	6.7	6.80	10, 10
b	1.9	2.1		2.1	
p	6.8	7.0	7.0	7.00	00
o	6.9	7.1	7.0	7.05	10
f	3.0	3.2		3.2	
c	2.0	2.2		2.2	
h²	2.9	3.1	.	3.1	
*n'	6.8	7.0	6.8	6.90	11
k²	6.3	6.5	6.5	6.50	00
h³	3.2	3.4		3.4	
s			8.0	8.0	
h⁵	~~3~~4.9	5.1	4.9	5.00	11
r	6.9	7.1	7.4	7.25	12
k'	5.6	5.8	5.9	5.85	01
g	6.9	7.1	7.0	7.05	10
h⁴	3.8	4.0		4.0	
m	6.4	6.6	6.8	6.70	11
q	2.7	2.9		2.9	
n² ~~m~~ +			7.2	7.2	

n' measured twice Mean 6.85

$$\begin{array}{r} +9 \\ -5 \\ \hline 20)\,1.4 \\ \pm 0.07 \end{array}$$

	2nd scale
d	8.3
a	7.7
h'	9.2
~~h⁵~~	~~10.2~~
e	8.9
o	m.s.
k'	sup.
k²	too ft.
h²	9.4
b	8.3
g	9.0
c	8.6
f	9.4
h³	9.7
h⁴	sup.

n.s. Obj. meas. is a defect near pos. for p.c. May 25, '08

Prismatic companions very poor

Images are elongated, and difficult to measure. Very poor indeed. H.S.L.

3.57 A.J.C.

Monday, May 18, 1908.

copied

Praesepe. T plate.

3.57

Scale M Plate I 35275.

measured with 12^h at top.

Polar Sequence. Prismatic Companions

Images fair, nearly circular.

				A	4.1 4.3 4.1	4.20	10, 18
a'	2.2 2.4	2.4		a'	7.9		±10
b'	3.9 4.1 4.2	4.15	05, 05	b'	9.9		
c'	~~4~~.7 5.9 5.7	5.80	10, 10	a^3	8.7		
c^3	7.0 7.2 7.0	7.10	10, 10	c'	10.2		
a^5	3.2 3.4	3.4		a^5	9.3		
image poor c^4	5.0 5.2 5.7	5.45	25, 25	c^4	n.s.		
a^3	2.9 3.1	3.1		c^2	n.s.		
c^5	6.5 6.7 6.8	6.75	05, 05	b^2	10.0		
c^2	6.2 6.4 6.6	6.50	10, 10				
c^6	7.0 7.2 7.2	7.20	00, 00				
b^2	5.0 5.2 5.2	5.20	00, 00				
c^7	7.0 7.2 7.2	7.20	00, 00				
d	7.3		+7 −6 18)13(±.072 126 40 36				
f'	7.9						
f^3	8.9						
i	9.8						
f^2	8.5						
g	9.0						
k'	9.9						
e	7.7						
k^2	n.s.						

4.09 A. D. K.

Tuesday, May 19, 1908

2.50

copied

Praesepe I plate

I 35285

Scale M Polar Sequence

poor a'	2.8 3.0	3.0	a	Prismatic Companions	
a^5	3.9 4.1	4.1	a	A	3.9 4.1
c^4	4.9 5.1 5.5	5.30	2 2	a'	7.6 poor
c^2	5.6 5.8 5.7	5.75	0 1	a^5	8.7
d	6.4 6.6 6.8	6.70	1 1	c^4	9.8
a^3	3.2 3.4	3.4	a	c'	9.7
c^5	5.8 6.0 6.0	6.00	0 0	c^2	10.2
f'	7.0 7.2 7.2	7.20	0 0	a^3	7.9
c^3	5.8 6.0 5.9	5.95	0 1	b'	9.0
e	6.7 6.9 6.9	6.90	0 0	b^2	9.5
c^6	6.3 6.5 6.4	6.45	1 0		
b'	4.3 4.5 4.3	4.40	1 1		
c'	5.5 5.7 5.7	5.70	0 0		
c^7	6.3 6.5 6.8	6.65	1 2		
b^2	4.9 5.1 4.9	5.00	1 1		
g	8.5				
k^3	9.7		−8 +8 24)16(±.067 144 160		
f^2	7.6				
f^3	7.9				
h	8.7				
k^2	9.3				
i	8.9				
k'	sup				
k^5	9.9				
k^4	9.7				
l	10.0				

M. C. H.

Tuesday, May 19, 1908

Copied Praesepe I' plate

I 35285

Scale M Praesepe

Images elongated

Plate has preceding images at top

				a	7.4 (scale 2)
a	2.6 2.8	2.8	a ·	e	8.6
p	5.8 6.0 6.2	6.10	⊥ 1	d	8.0
d	3.1 3.3	3.3	a ·	b	7.7
h'	3.7 3.9	3.9	a ·	p	n.e
b	2.6 2.8	2.8	a ·	c	8.0
e	3.8 4.0	4.0	a ·	y	7.8
g	3.8 4.0	4.0	a ·	l	n e
l	6.0 6.2 5.9	6.05	2 ⊥	h'	8.6
x ~~*~~	~~2.8~~ 3.9 4.1	4.1	a ·	h⁵	9.7
h³	3.9 4.1	4.1	a ·	x	8.9
s	6.8 7.0 7.1	7.05	0 1	h³	9.0
h²	3.8 4.0	4.0	a ·	k²	n e
k²	5.7 5.9 5.8	5.85	1 0	h²	8.9
y	2.8 3.0	3.0	a ·	g	8.7
h⁵	4.8 5.0 4.9	4.95	0 ⊥	f	8.7
q	6.0 6.2 6.8	6.50	3 3	h⁴	9.4
h⁴	4.6 4.8 4.8	4.80	0 0	k'	sup
n'	5.9 6.1 5.9	6.00	1 ⊥		
c	3.0 3.2	3.2	a ·		
o	5.9 6.1 6.4	6.25	⊥ 2		
n²	5.9 6.1 6.6	6.35	3 2		
m	6.0 6.2 6.0	6.10	1 ⊥		
f	3.7 3.9	3.9	a ·		
r	6.3 6.5 6.9	6.70	2 2		
k'	5.6 5.8 5.7	5.75	0 ⊥		

Images much elongated

3.25

+16
-15
26)31(±.119
26
50

M. E. H.

Images extremely poor

Thursday, May 21, 1908

Copied Praesepe Cloudy, light steady but not bright

I 35285 remeasured

Scale M Praesepe

Preceding edge at top

a	2.6 2.8	2.8	a ·	~~m~~	~~6.3~~
g	3.6 3.8	3.8	a ·	~~h~~ ·	
k'	5.7 5.9 5.7	5.80	1 ⊥	a	7.2
b	2.9 3.1	3.1	a ·	h'	8.3
x	3.8 4.0	4.0	a ·	d	7.9
y	2.8 3.0	3.0	a ·	k'	n.e
o	5.9 6.1 6.5	6.30	2 2	h⁵	9.8
h³	4.0 4.2	4.2	a ·	c	8.0
s	6.9 7.1 7.2	7.15	⊥ 0	h²	8.8
h²	~~2~~3.8 ~~3~~4.0	~~3~~4.0	a ·	b	7.8
k²	5.7 5.9 5.9	5.90	0 0	e	8.6
c	2.9 3.1	3.1	a ·	h⁴	9.6
p	6.0 6.2 6.4	6.30	⊥ 1	h³	9.0
d	3.0 3.2	3.2	a ·	f	8.8
l	5.7 5.9 6.1	6.00	⊥ 1	g	8.7
e	3.8 4.0	4.0	a ·	y	7.8
h'	3.7 3.9	3.9	a ·	x	9.2
h⁴	~~3~~4.5 4.7 4.7	4.70	0 0		
h⁵	4.9 5.1 4.9	5.00	1 ⊥		
q	6.2 6.4 6.7	6.55	2 1		
n'	5.8 6.0 6.3	6.15	2 1		
m	6.4 6.6 6.3	6.45	2 ⊥		
n²	6.1 6.3 6.7	6.50	2 2		
f	3.8 4.0	4.0	a ·		
r	6.6 6.8 6.7	6.75	0 ⊥		

Examined & found a mistake of a unit May 22

Images much elongated

+12
-15
26)27(±.104
26
100
104

M. E. H.

Thursday, May 21, 1908

Copied

Praesepe

I 35285 Remeasured

Scale M	Polar Sequence			p 103	Prismatic Companions		p 103
a'	2.9 3.1	3.1		3.0	A	3.9 4.1	4.1
a³	3.4 3.6	3.6		3.4	a'	7.4	7.6
c³	5.8 6.0 6.3	6.15	$\underline{2}$ 1	5.95	a⁵	8.6	8.7
c⁶	6.0 6.2 6.5	6.35	$\underline{2}$ 1	6.45	c⁴	10.0 im perhaps def	9.8
a⁵	4.1 4.3	4.3	a	4.1	a³	7.9	7.9
c⁴	5.3 5.5 5.6	5.55	$\underline{1}$ 0	5.30	c'	9.8	9.7
b'	4.3 4.5 4.7	4.60	$\underline{1}$ 1	4.40	c²	10.3	10.2
c'	5.6 5.8 5.7	5.75	0 $\underline{1}$	5.70	b'	8.9	9.0
c⁷	6.3 6.5 6.8	6.65	$\underline{1}$ 2	6.65	b²	9.6	9.5
c²	5.7 5.9 5.9	5.90	0 0	5.75	Focus very sharp and		
b²	5.0 5.2 5.5	5.35	$\underline{2}$ 1	5.00	difficult to measure		
d	6.7 6.9 6.9	6.90	0 0	6.70			
im v.p. c⁵	5.9 6.1 6.2	6.15	$\underline{1}$ 0	6.00			
f'	7.0 7.2 7.3	7.25	0 1	7.20			
e	6.9 7.1 7.0	7.05	1 0	6.90			
f²	7.7			7.6			
g	8.6			8.5			
k³	9.7			9.7			
hd	8.7			8.7			
f³	8.1			7.9			
k²	9.2			9.3			
k'	sup			sup			
k⁵	9.9			9.9			
i	8.9			8.9			
k⁴	9.8			9.7	Cloudy but not very dark		
l	10.0			10.0			

-11
+8
24)19(±.079
168
220
216

18)9
Av. dev. ±.05

50)29
av. dev. ±.06

M. E. H.

Friday, May 22, 1908

22.55

Copied

Praesepe

I 35275 Remeasured

Scale M	Preceding im at top				
a	1.7 1.9	1.9		Prismatic	
h'	2.5 2.7	2.7		d	8.3
h⁴	3.8 4.0	4.0		a	7.8
e	2.8 3.0	3.0		h'	9.1
k'	5.8 6.0 5.8	5.90	1 0 $\underline{1}$	~~h⁵~~	~~10.0~~
m'	6.6 6.8 6.6	6.70	1 $\underline{1}$	c	8.5
d	2.1 2.3	2.3		x	9.7
p	6.7 6.9 6.9	6.90	0 0	y	8.3
f	2.9 3.1	3.1		h⁴	9.9
h⁵	4.8 5.0 4.8	4.90	1 $\underline{1}$	b	8.5
l	6.3 6.5 6.6	6.55	$\underline{1}$ 0	e	9.0
h²	3.0 3.2	3.2		f	8.9
b	2.1 2.3	2.3		h²	9.3
x	3.1 3.3	3.3		g	9.2
c	2.1 2.3	2.3		h³	9.7
o	6.7 6.9 6.9	6.90	0 0		
k²	6.0 6.2 5.9	6.05	2 $\underline{1}$		
n²	6.9 7.1 6.9	7.00	1 $\underline{1}$		
h³	3.7 3.9	3.9			
y	1.9 2.1	2.1			
s	7.8	7.8			
r	7.0 7.2 7.3	7.25	0 1		
q	6.9 7.1 7.0	7.05	1 0		
m	6.6 6.8 6.8	6.80	0 0		
g	2.8 3.0	3.0			

N.S. Image mess. is a defect near position for p.c.

-6
+8
22)14(±.064
132
80
88

Images extremely poor + elongated

M. E. H.

Friday. May 22, 1908

Copied North Polar Sequence

I 35275 remeasured

Scale M ~~Preced~~

				p 102	Prismatic Companions			p 102	Mean	Res
a¹	2.0 2.2	2.2		2.4						
b¹	3.9 4.1	4.1		4.15	A 4.2 4.4 4.6	4.50	1 1	4.20	4.35	15 15
c³	6.8 7.0 6.9	6.95	0 1	7.10	a¹ 7.8		±10	7.9	7.85	0 1
im poor a⁵	3.1 3.3	3.3		3.4	a⁵ 9.1			9.3	9.20	1 1
c⁴	5.0 5.2 5.7	5.45	2 3	5.45	a³ 8.7			8.7	8.70	0 0
c²	6.4 6.6 6.5	6.55	0 1	6.50	c¹ 10.1			10.2	10.15	1 0
c¹	5.7 5.9 5.8	5.85	1 0	~~5.7~~ 5.80	b¹ 9.7			9.9	9.80	0 0
a³	2.9 3.1	3.1		3.1	b² 10.2			10.0	10.10	1 1
c⁶	6.8 7.0 7.0	7.00	0 0	7.20					14)11 ±08 Av. dev	
c⁷	7.0 7.2 7.2	7.20	0 0	7.20						
c⁵	6.6 6.8 6.7	6.75	0 1	6.75						
d	6.9 7.1 7.2	7.15	1 0	7.3						
b²	5.0 5.2 5.3	5.25	0 1	5.20						
f¹	7.9		−6 +5	7.9						
f³	8.8		18)11(±0.61 108 20	8.9						
h	9.6									
k¹	9.9			9.9						
f²	8.3			8.5						
i	9.8			9.8						
g	9.0			9.0						
e	7.6			7.7						

40)15
Av. dev. ±04

23.25

M. E. H.

Saturday, May 23, 1908

I' Plates for Praesepe

Remeasurement of Groups having Discordant Measures

Scale M copied

Praesepe

I 35275

star h³	3.5	3.7	
" k²	5.8 6.0 5.9	5.95	0 1
p.c. f	α 9.1	9.1	

I 35285

star b	2.8	3.0	
" m	6.0 6.2 6.2	6.20	0 0
p.c. h¹	8.6	8.6	
p.c. x	8.9	8.9	

An examination of the plate with knowledge of the three estimates shows that none can certainly be said to be wrong, though those on this page agree in each case with one of the other two, and seem to be the best.
Take mean of the three.

Thursday, May 28, 1908

copied Praesepe I' Plate

AC 9483

Scale N North Polar Sequence

					Mean 1,2,3,4	
	A	1.3 1.1			1.1	a · · ·
too faint, reject	D	~~7.4~~	5.6 5.2		5.00	· 2 · $\underline{2}$
	B	2.9 2.7			2.7	a · · ·
certainly wrong, reject	E	·	5.7 5.3	~~5.6~~	5.10	· 2 · $\underline{2}$
	b	4.0 3.8			3.8	a · · ·
	a^1		5.9 5.5	5.7	5.63	· $\underline{1}$ 1 1
	a^5		7.4 7.0	7.3	7.20	· $\underline{2}$ 1 1
Evidently wrong	c^4		~~8.4~~	8.5	8.60	· · $\underline{1}$ 1
	c^2		9.0 8.6	8.8	8.77	· $\underline{2}$ 0 1
	b^1		7.9 7.5	7.7	7.53	· 0 2 $\underline{1}$
	c^1		8.7 8.3	8.3	8.43	· $\underline{1}$ $\underline{1}$ 3
	a^3		6.9 6.5	6.6	6.43	· 1 2 $\underline{2}$
	F		6.0 5.6	5.7	5.$\overset{6}{7}$0	· 0 $\overset{1}{0}$ $\underline{1}$
unit wrong	b^3		8.5 8.1	$\overset{8}{9}$.3	8.33	· $\underline{2}$ 0 3
	a^4		6.9 6.5	6.5	6.53	· 0 0 1
	g		6.0 5.6	5.8	5.73	· $\underline{1}$ 1 1
	b^2		8.7 8.3		8.20	· 1 · $\underline{1}$
	a^2		6.7 6.3		6.15	· 1 · $\underline{2}$
	d			9.3	9.45	· · $\underline{1}$ · 2
	~~f^1~~			~~9.9~~	~~9.95~~	~~· · $\underline{1}$ 0~~
	c^3			9.3	9.35	· · $\underline{1}$ 0
	e			9.9	9.90	· · 0 0

+29
−24
46) 53 (±.115
46
70
46
240

Interrupted until the light failed

Measures of f^1 rejected – Object probably a defect in plate

114

Monday, June 1, 1908

23.12

copied North Polar Sequence (Praesepe) Scale AC 8858

AC 9483

Scale N 3rd scale remeasured

·	
D	4.8
E	4.9
b	·
a^1	$\overset{5}{4}$.7
a^5	7.3
c^4	8.7
c^2	8.9 ~~9.3~~
b^1	7.4
c^1	8.7
a^3	6.2
F	5.5
b^3	8.6
a^4	6.6
g	5.8
b^2	8.1
a^2	6.0
d	9.6
~~f^1~~	~~10.0~~
c^3	9.4
e	9.9

rejected: see note p. 110.

Praesepe

a	5.8 5.4	5.6	5.50	$\underline{1}$ 1
g	7.6 7.2	6.9	7.05	2 $\underline{1}$
c	6.7 6.3	6.0	6.15	~~1~~ $\underline{2}$
f	7.7 7.3	7.2	7.25	1 0
h^1	7.7 7.3	7.2	7.25	1 0
h^5	8.7 8.3	8.5	8.40	$\underline{1}$ 1
b	6.6 6.2	5.9	6.05	2 $\underline{1}$
d	6.9 6.5	$\overset{6}{5}$.9	6.70	$\underline{2}$ 2
p	·	9.7	9.7	· a
e^{4th}	7.5 7.1	6.8	6.95	1 $\underline{2}$
k^1	·	9.1	9.1	· a
h^4	8.6 8.2	7.8	8.00	2 $\underline{2}$
h^2	7.6 7.2	7.2	7.20	0 0
h^3	7.9 7.5	7.5	7.50	0 0
x	7.8 7.4	7.4	7.40	0 0
y	6.5 6.1	5.7	5.90	2 $\underline{2}$
n^2		9.6	·	
l		9.2		
m		9.6		
k^2		9.3		
s		10.3		
n^1		9.5		
o		9.7		
q		9.7		
r		9.8		

+16
−14
28) 30 (±.107
28
200
196

23.45

Monday, June 1, 1908

North Polar Sequence J' plate Scale AC 8858

Copied in B.A.H. XXIII. 62

AC 9473

Scale N

A	3.7 3.5	3.8 3.4		3.45	1 0 ·
C	·	6.8 6.4	6.4	6.40	·0 0
B		5.8 5.4	5.6	5.50	·⊥ 1
a¹	~~7.7~~	8.0 ~~7.7~~ 7.6	7.9	7.75	· 2̲ 1
E		7.4 7.0	6.9	6.95	· 0 ⊥
b¹		·	9.0	9.0	· · a
F		7.7 7.3	7.5	7.40	·⊥ 1
a⁴		8.7 8.3	8.4	8.35	·⊥ 0
a²		7.8 7.4	7.6	7.50	·⊥ 1
G		7.7 7.3	7.7	7.50	· 2̲ 2
D		7.5 7.1	7.2	7.15	·⊥ 0
a³		8.4 ~~7.8~~ 8.0	8.2	8.10	·⊥ 1
a⁵		9.0 8.6	8.7	8.65	· 0 1
b³			9.4		
c¹			9.7		
b²			9.5		
c²			9.9		
c³			10.1		
d			m.a		
c⁴			9.7		

+9
-11
24)20
±08

Monday, June 1, 1908

Copied Standard Sequence 6 3h +86°

ac 9473 T' Plate

Scale N scale 2

Pers. Comm't No. 240	a	8.5 8.~~8~~1	8.0	8.05	1 0
2013 ~~62~~	e	·	9.3	9.3	· a
62	b	8.7 8.~~5~~3	8.2	8.25	1 0
238	d	·	9.4	9.4	· a
2008	c	8.9 8.5	8.7	8.60	1̲ 1
	f		10.1	10.1	· a
	g	probably sup. star image here			

+3
-1
6)4
±.067

Copied BR XXVII, p. 66, 67

Standard Sequence $\frac{6}{5}$ $\frac{3}{4}$h +86

ac 9475 J' plate

Scale N

North Polar Sequence						Sequence 6 (2nd scale)				
A	2.9 2.7			2.7	a · ·	a	7.9 7.5	7.7	7.60	⊥ 1
a^1		7.7 7.3	7.3	7.30	·00	c	8.9 8.5	8.7	8.60	⊥ 1
B	4.9 4.7	5.2 4.8	4.8	4.77	⊥00	b	8.2 7.8	7.9	7.85	0 1
C	·	6.5 6.1	5.8	5.95	·1 2̲	f		9.7		
b^1		8.8 8.4	8.7	8.55	·2̲ 1	e		9.3		
a^5		8.8 8.4	8.4	8.40	·00	d		9.0		
F		7.6 7.2	6.8	7.00	·2 2̲	g		9.9		
E		7.2 6.8	6.7	6.75	·0 ⊥	h		10.2		
D		6.9 6.5	6.6	6.55	·⊥0					
a^2		7.8 7.4	7.2	7.30	·1 ⊥					
g		7.7 7.3	7.1	7.20	·1 ⊥					
b^3		·	8.9	8.9	· · a					
a^4		8.1 7.7	7.9	7.80	·⊥1					
a^3		7.9 7.5	7.8	7.65	·⊥2					
b^2			9.2							
c^1			9.3							
c^2			9.7							
c^4			9.5							
c^3			9.9							
c^5			10.0							

-2
+3
6)5
±.083

-13
+9
25)22(±.088
200
200

Copied XXVII 77

Sequence 15 9h +86

ac 9478 T' plate

Scale N

North Polar Sequence						Standard Sequence 15 (scale 2)				
A	1.9 1.7	·		1.7	a · ·	a	7.8 7.4	7.0	7.20	2 2̲
B	3.7 3.5	3.8 3.4	·	3.45	1 0 ·	d	8.7 8.3	8.6	8.45	⊥ 2
C	4.8 4.6	5.1 4.7	4.7	4.67	⊥ 0 0	b	7.9 7.5	7.0	7.25	3 2̲
D		5.7 5.3	5.4	5.35	·⊥ 0	c	8.5 8.1	8.3	8.20	⊥ 1
E	·	5.9 5.5	5.6	5.55	·⊥ 0	e	9.0 8.6	8.9	8.75	2̲ 1
F		6.8 6.4	5.9	6.15	·2 3̲	f		9.1		
g		7.0 6.6	~~7.4~~ 6.7	6.65	·0 1	g		9.5		
* a^1		6.8 6.4	~~6.9~~ 5.9	6.~~6~~15	·~~2~~ 3̲	h		9.8		
a^2		6.9 6.5	6.4	6.45	·1 0	k		9.9		
a^3		7.5 7.1	6.9	7.00	·1 ⊥					
a^4		7.7 7.3	7.2	7.25	·1 0					
a^5		8.0 7.6	7.7	7.65	·0 1					
b^1		8.7 8.3	8.5	8.40	·⊥ 1					
b^2		9.0 8.6	8.8	8.70	·⊥ 1					
b^3			8.7							
c^1			8.9							
c^2			9.5							
c^3			9.8							
c^4			8.8							
d			10.0							
c^5			9.7							
e			10.3							

+9
-8
10)17
±.17

-11
+13
27)24(±.089
216
240

*Re-examined May 4, 1909. Mistake of unit in reading on 3rd scale.

1.30

Wednesday, June 3, 1908

North copied Bk XXVII, p 68

Polar Sequence 15 9 h + 86

ac 9470 Exp + 86° Dist 4

Scale N

	Polar Sequence +90° Dist 4		
A	1.4 1.2	1.2	
B	3.2 3.0	3.0	
E	5.7 5.3 5.3	5.30	·00
C	4.3 4.1 4.8 4.4 4.3	4.27	2 1 0
D	5.0 4.8 5.6 5.2 5.3	5.10	3 1 2
a^2	7.0 6.6 6.7	6.65	·0 1
b^2	8.9 8.5 8.9	8.70	·2 2
a^4	7.5 7.1 6.9	7.00	·1 1
F	5.6 6.2 5.8	6.00	·2 2
b^3	9.0 8.6 8.7	8.65	·0 1
g	6.9 6.5 6.7	6.60	·1 1
a^3	7.2 6.8 6.6	6.70	·1 1
a^1	6.5 6.1 5.8	5.95	·1 2
a^5	7.9 7.5 7.6	7.55	·1 0
b^1	8.6 8.2 7.9	8.05	·2 1
c^3	9.8		
c^1	8.9		
c^2	9.3		
d	9.9		
c^5	9.5		
c^4	8.8		
e	10.2		

−16
+16
28)32(±.114
28
40
28
120
112

Copied XXVII, p 71

	Standard Sequence 15 (scale 2.)		
a	7.6 7.2 7.3	7.25	·01
b	7.7 7.3 7.4	7.35	·10
c	8.6 8.2 8.2	8.20	·00
d	8.5 8.1 8.1	8.10	·00
e	8.9		
f	9.0		
g	9.4		
h	9.7		
k	9.8		
l	10.2		

	Exp +90° Dist 28 (scale 2.)			Magn.
a	7.7 7.3 8.2 (7.7)	7.50	2 2	7.79
c	8.6 8.2 8.4	8.30	1 1	8.51
b	8.0 7.6 7.5	7.55	0 1	7.84
e	8.9 8.9			9.07
d	8.7 8.3 8.6	8.45	1 2	8.65
f	9.3			9.44
g	9.4			9.54
h	9.4			9.54
k	9.9			10.05
l	10.1			10.25

	Diff.	Polar Sequence +86 Dist 20		
A	1.09	1.8 1.4 (6)	1.6	
B	1.38	3.3 3.1	3.1	
E	0.44	5.9 5.5 5.6	5.55	1 0
C	0.68	4.8 4.6 4.9 4.5 4.7	4.60	0 2 1
D	0.61	5.8 5.4 5.0	5.20	2 2
a^2	0.40	6.7 6.3 6.5	6.40	1 1
b^2	0.13	8.9 8.5 8.9	8.70	2 2
a^4	0.51	7.3 6.9 6.7	6.80	1 1
F	0.68	6.2 5.8 5.8	5.80	0 0
b^3	0.10	9.0 8.6 8.7	8.65	0 1
g	0.50	6.5 6.1 6.2	6.15	1 0
a^3	0.21	7.4 7.0 6.8	6.90	1 1
a^1	0.24	6.7 6.3 6.2	6.25	1 0
a^5	0.27	7.9 7.5 7.7	7.60	1 1
b^1	0.33	8.1 7.7 8.1	7.90	2 2
c^3	0.06	9.8 9.8		
c^1	0.32	9.0 8.6 8.8	8.70	1 1
c^2	−0.05	9.6		
d	0.30	10.0		
c^5	0.31	9.6		
c^4	0.20	8.9		
e	0.40	10.3		

−14
+14
29)28(±.096
261
190
174
16

Wednesday, June 3, 1908

Copied Bk 53, 63

North copied

Sept 27 1919 Plots

Polar Sequence 24 15 h + 86°

ac 9480

Scale N'

Seq. 24+86 curve	magn.	No		Polar Sequence +90° Dist ~~29~~ 0			Diff.
a+0.06	6.81	1	A	2.1 1.9	1.9		
b−0.01	7.59	1	B	3.9 3.7 4.1 3.7	3.70		+0.78 ~~2.58~~
c−0.17	7.83	2	C	4.9 4.7 5.1 4.7 4.8	4.73	0 0 1	+0.55
d−0.23	8.17	3	D	5.9 5.5 5.7	5.60	·1 1	+0.21
e−0.30	8.70	4	E	6.4 6.0 5.8	5.90	·1 1	+0.09
f−0.16	9.44	2	F	7.0 6.6 6.4	6.50	·1 1	
g 0.00	9.90	3	g	7.3 6.9 6.8	6.85	·1 0	
h+0.15	10.35	5	a^1	6.8 6.4 6.0	6.20	·2 2	+0.29
k+0.04	10.04	1	a^2	7.4 7.0 6.7	6.85	·2 1	
		6	a^3	7.6 7.2 7.1	7.15	·0 1	−0.04
Seq. 24+90 curve	magn.	7	a^4	7.7 7.3 7.5	7.40	·1 1	−0.09
a−0.09	7.31	2	a^5	8.2 7.8 7.9	7.85	·0 1	
b−0.12	7.58	8	b^1	8.8 8.4 8.3 (8.5)	8.45	·0 1	−0.22
c−0.12	8.23	9	b^2	8.9			−0.07
d−0.12	8.38	3	b^3	9.0			
e−0.07	9.03	10	c^1	9.5			−0.48
f+0.02	9.62	11	c^2	9.8			−0.25
g+0.10	10.10	12	c^3	9.9			−0.04
h+0.12	10.22	4	c^4	9.1			
k+0.13	10.33	5	c^5	10.0			
		13	d	10.1			+0.20

Copied Bk 53, 63

+12
−8
23)20
±.087

with +90° dist 0

	Sequence 24 +86°		
a	7.2 6.8 6.7	6.75	0 1
b	7.9 7.5 7.7	7.60	1 1
c	8.5 8.1 7.9	8.00	1 1
d	8.7 8.3 8.5	8.40	1 1
e	9.0		
f	9.6		
g	9.9 (ext h)		
h	10.2 (ext poor)		
k	10.0		

with +86° Dist 29

	Sequence 24 +90°		
a	7.7 7.3 7.5	7.40	1 1
b	8.0 7.6 7.8	7.70	1 1
c	8.8 8.4 8.3	8.35	0 1
d	8.8 8.4 8.6	8.50	1 1
e	9.1		
f	9.6		
g	10.0		
h	10.1		
k	10.2		

Sept 27 1919

Dist 28

		Polar Sequence +86			Diff
A		1.9 1.7	1.7		
B	1	3.7 3.5 3.8 3.4	3.45	1 0	+1.03
C	2	5.0 4.8 5.6 5.2 4.9	4.97	2 2 1	+0.31
D	3	6.2 5.8 5.9	5.85	·1 0	+0.04
E	4	5.9 5.4 (5) 5.6	5.55	·1 0	+0.44
F		6.8 6.4 6.4	6.40	·0 0	
g		6.9 6.5 6.5	6.50	·0 0	
a^1	5	6.7 6.3 6.6	6.45	·1 2	+0.04
a^2		7.3 6.9 6.8	6.85	·1 0	
a^3	6	7.6 7.2 7.1	7.15	·0 1	−0.04
a^4	7	7.7 7.3 7.5	7.40	·1 1	−0.09
a^5		8.5 8.1 8.0	8.05	·1 0	
b^1	8	8.6 8.2 8.6	8.40	·2 2	+0.17
b^2	9	9.0 8.6 8.9	8.75	·2 1	+0.08
b^3		8.9 8.5 8.8	8.65	·1 2	
c^1	10	9.2			−0.18
c^2	11	9.6			−0.05
c^3	12	9.8			+0.06
c^4		9.1			
c^5		9.7			
d	13	10.0			+0.30
e		10.2			

+14
−12
29)26(±.09
261

2.50

Wednesday, June 10, 1908

2.30

N

Copied Praesepe Scale AC 8858

AC 9498 I' plate

North Color Sequence

A	2.1 1.9	1.9	a · ·
B	3.9 3.7 4.7 4.3	4.00	3 3 ·
C	5.8 5.4 5.4	5.40	· 0 0
a'	6.9 6.5 6.5	6.50	· 0 0
b^2	9.0 8.6 8.8	8.70	· 1 1
D	6.5 6.1 5.9	6.00	· 1 1
b'	8.6 8.2 8.6	8.40	· 2 2
E	6.8 6.4 5.9	6.15	· 2 3
y	7.0 6.6 6.8	6.70	· 1 1
a^4	7.7 7.3 7.6	7.45	· 1 2
F	6.9 6.5 6.6	6.55	· 1 0
a^2	7.5 7.1 6.8	6.95	· 1 2
a^5	8.0 7.6 7.9	7.75	· 2 1
a^3	7.7 7.3 7.3	7.30	· 0 0
b^3	8.8		
c^4	9.1		
c'	9.0		
c^3	9.8		
c^5	9.2		
c^2	9.5		

-17
+14
26)31(±.119
26
50
26
240
234

Praesepe

a	6.8 6.4 6.3	6.35	0 1
g	8.2 7.8 7.7	7.75	0 1
d	7.6 7.2 6.7	6.95	2 3
f	8.6 8.2 8.0	8.10	1 1
b	6.9 6.5 6.8	6.65	1 2
h'	8.0 7.6 7.8	7.70	1 1
e	7.9 7.5 7.7	7.60	1 1
c	7.6 7.2 6.8	7.00	2 3
p	9.7		
h^2	7.9		
k^2	9.0		
n^2	10.1		
h^3	8.2		
g	9.7		
k'	9.4		
m	9.8		
h^4	8.7		
l	9.5		
x	8.4 8.0 8.2	8.10	1 1
s			
r	10.2		
n'	9.7		
h^5	8.8		
y	7.0 6.6 6.6	6.60	0 0
o	9.9		

-12
+10
20)22(±.11

2.55 Plate badly scratched

Friday, June 12, 1908.

23.30

Copied Praesepe

I 35338 large prism

Scale M Preceding edge at top

a	3.3 3.5	3.5	a ·
g	4.8 5.0 4.8	4.90	1 1
c	3.8 4.0	4.0	a ·
f	4.9 5.1 4.9	5.00	1 1
b	3.7 3.9	3.9	a ·
e	4.5 4.7 4.7	4.70	0 0
h'	4.5 4.7 4.5	4.60	1 1
h^4	6.0 6.2 6.0	6.10	1 1
d	3.8 4.0	4.0	a ·
h^2	5.0 5.2 5.3	5.25	0 1
h^5	6.8 7.0 7.3	7.15	2 1
h^3	5.8 6.0 5.7	5.85	2 1
l	8.2		
o	8.7		
k'	7.8		
n'	8.6		
~~k^2~~	~~6.8~~	wrong star see next page	
n^2	8.8		
s	9.7		
m	8.6		
p	8.7		
g	8.9		
r	9.0		
~~x~~	5.3 5.5 5.5	5.50	0 0
y	3.7 3.9	3.9	a .

Images exceedingly faint.

-7
+8
18)15(±.083
144
60
54

Prismatic Companions

a	6.9 7.1 7.0	7.05	1 0
c	7.7		
h'	8.7		
b	7.7		
e	8.3		
h^3	9.0		
f	8.7		
h^4	9.8		
d	7.9		
g	8.7		
y	7.7		
x	9.1		
h^2	8.9		
h^5	10.3		

Friday June 12, 1908

Copied Praesepe remeasured

I 35338 large prism

Scale M Preceding edge at top Prismatic Companions

b	3.7 3.9	3.9	à ·	a	7.2
e	4.6 4.8 4.8	4.80	ȯ ȯ	e	8.4
g	4.8 5.0 4.9	4.95	ȯ i	b	7.7
d	3.9 4.1	4.1	à ·	h'	8.7
f	5.0 5.2 5.0	5.10	i i	h⁴	9.8
h²	5.0 5.2 5.0	5.10	i i	f	8.8
c	3.8 4.0	4.0	à ·	d	7.9
h⁴	5.9 6.1 6.0	6.05	i ȯ	g	8.8
h'	4.8 5.0 4.8	4.90	i i	h³	9.0
a	3.4 3.6	3.6	à ·	c	7.7
x	5.5 5.7 5.7	5.70	ȯ ȯ	h²	8.8
y	3.8 4.0	4.0	à ·	x	9.0
h³	5.7 5.9 5.8	5.85	i ȯ	y	7.6
h⁵	6.9 7.1 7.2	7.15	i ȯ	h⁵	10.4
l	8.6				
k'	7.4				
p	8.7				
* ~~k²~~	~~7.0~~				
n²	8.9				
m	8.6				
o	8.8				
r	9.2				
e	9.7				
n'	8.7				
q	8.9				

The wrong star was measured for k².
Measured June 23, 1908
7.9

-5
+5
18)10(±.055
90
100

0.0

Copied BB 53.47 Stand 33 +86° Oct. 2, 1919

23.35

Saturday, June 13, 1908

Plot 8 ↓ Plot 8 ↕

Copied Standard Sequence 3$^{3}_{1}$ $^{2}_{1}$^{h} 86.°

ac 9505 I' plate Scale AC 8858

Scale N Curve	magn			Polar Exp +90°	Dist 0	Diff NP1922		Diff		Standard 33 Exp +86 (scale 2)	Curve NP1922	Dist 8	Alt corr. 0.00 magn		Polar Exp +86	Dist 20	Diff NP1922
a -0.72	7.38	1a	A	2 7.7 2.5	2.5		à · ·		a	8.4 8.0 8.2	-0.59 8.10	i i	7.51	A 2	7.7 2.5	2.5	a · ·
b -0.55	7.95	1	B	4.7 4.5 4.9 4.5 4.8	4.60	-0.12	i i 2	-0.20	b	8.7 8.3 8.7	-0.48 8.50	2 2	8.02	B 1	4.8 4.6 4.9 4.5 4.5	-0.13 4.53	-0.05 1.00
c -0.49	8.16	2	C	5.8 5.4 5.8	5.60	-0.32	2 2	-0.36	c	8.9 8.5 8.8	-0.43 8.65	i 2	8.22	C 2	5.9 5.5 5.7	-0.36 5.60	-0.32 ·11
d -0.32	8.98	5	a'	7.7 7.3 7.2	7.25	-0.76	i 0	-0.79	d	9.3	-0.20 ·		9.10	D 3	6.9 6.5 6.6	-0.77 6.55	-0.74 ·10
e -0.26	9.44	8	b'	9.0 8.6 8.7 9.2	8.65	-0.42	0 i	-0.33	e	9.7	-0.07		9.63	E 4	6.9 6.5 6.5	-0.59 6.50	-0.51 ·00
f -0.22	9.88	3s	b	7.7 7.3 7.3	7.30		· 0 0		f	~~10.1~~ 10.1	+0.05		10.15	F	7.7 7.3 7.6	7.45	·12
g -0.22	9.88	7r	E	7.0 6.6 6.5	6.55		· 0 i		g	10.1	+0.05		10.15	G	7.7 7.3 7.5	7.40	·11
		1r	a²	7.8 7.4 7.6	7.50		· i i							a 5	7.7 7.3 7.4	-0.89 7.35	-0.86 ·10
		3	D	6.9 6.5 6.5	6.50	-0.69	0 0	-0.72						*	~~8.8 8.4 8.8~~	~~8.60~~	~~·22~~
Stand 33 +90		2s	F	7.7 7.3 7.0	7.15		· i 2		Standard 33 Exp +90°			Dist 26		a³ 6	8.4 8.0 8.1	-0.93 8.05	-0.94 ·01
a -0.87	7.03	7	a⁴	8.5 8.1 8.1	8.10	-0.79	· 0 0	-0.72	a	8.3 7.9 7.9	-0.79 7.90	0 0	7.11	a⁴ 7	8.5 8.1 8.2	-0.77 8.15	-0.84 ·04
b -0.82 (·74)	7.81	2r	a⁵	8.7 8.3 8.4	8.35		· i 0		b	8.8 8.4 8.7	-0.69 8.55	2 i	7.86	a⁵	8.7 8.3 8.7	8.50	·22
c -0.71	7.94	6	a³	8.3 7.9 7.8	7.85	-0.74	i 0	-0.73	c	8.9 8.5 8.8	-0.65 8.65	i 2	8.00	b 8	8.9 8.5 8.8	-0.33 8.65	-0.42 ·12
d -0.52	8.78	10	c'	9.4		-0.38	-0.29		d	9.3	-0.49		8.81	b² 9	9.4	-0.47	-0.57
e ·	9	11	c²	9.8		-0.25	-0.03		e	sup				b³	9.1		
f -0.38	9.72	3r	b³	9.2					f	10.1	-0.19		9.91	c' 10	9.7	-0.59	-0.68
g -0.34	9.96	9	b²	9.1		-0.27	-0.66 17		g	10.3	-0.12		10.18	c² 11	9.9	-0.13	-0.35
		12	c³	10.1		-0.24	-0.02							c³ 12	10.2	-0.12	-0.34
		5r	c⁵	10.1		~~-0.24~~								c⁴	9.6		
		4r	c⁴	9.5										c⁵	scratched		

Plot 1

-9
+9
25)18(±.072
175
50

* Image is covered by a defect. Reject

+10
-9
23)19(±.083
184
060
69

Reduce singles daggers together ↓
" double " " ↕

0.08

Copied Plot 53, 47

Oct 21 1919

Copied

Tuesday June 16, 1908

Plot 7

North Polar Sequence Standard Sequence 33 21h +86°

aC 9485 J'

Stand 33 diff −86

Scale N curve	magn	No.	Polar Sequence +90 Dist 5 (Diff N.P. 1922 ↓)		Mean	Weights	Diff	Polar +86° Dist. 28 (Diff N.P. 1922 ↕)		Mean	Weights	Diff	Standard 33 Exp +86 Dist 5 ↓ (scale 2)		Mean	Weights
a +0.06	7.36	no. 1,s	A	1.7 1.9 (5)	1.5	a ..		A	1.9 1.7	1.7	a ..		a	7 8.7 7.3 7.3	7.30	0 0
b +0.05	8.05	1	B	3.7 3.9 (5) 3.7 3.3	3.40 +1.00	1 1	+1.08	B	3.7 3.5 3.9 3.5 0.90	3.50	0 0	+0.98	b	8.4 8.0 8.0	8.00	0 0
c +0.03	8.43	2	C	4.8 ~~5.0~~ 4.6 5.1 4.7 5.1	4.80 +0.44	2 1 3	+0.48	C	4.9 4.7 5.2 4.8 4.8 0.46	4.78	1 0 0	+0.50	c	8.7 8.3 8.5	8.40	1 1
d +0.03	8.73	3	D	6.1 5.7 5.6	5.65 +0.13	1 0	+0.16	D	5.8 5.4 5.7 0.23	5.55	2 1	+0.26	d	8.9 8.5 8.9	8.70	2 2
e −0.01	9.39	4	E	6.4 6.0 5.7	5.85 0.06	2 1	+0.14	E	6.4 6.0 5.7 0.06	5.85	2 1	+0.14	e	9.4		
f −0.03	9.67	2s	F	7.0 6.6 6.3	6.45	2 1		F	7.3 6.9 6.3	6.60	3 3		f	9.7		
g −0.04	9.86	3s	G	6.9 6.5 6.7	6.60	1 1		G	7.5 7.1 6.8	6.95	1 2		g	9.9		
		5	a1	6.6 6.2 6.1	6.15 0.31	0 1	+0.34	a1	6.8 6.4 6.3 0.11	6.35	0 1	+0.14				
		1v	a2	7.5 7.1 6.8	6.95	1 2		a2	7.7 7.3 7.2	7.25	1 0					
		6	a3	7.6 7.2 6.9	7.05 0.07	2 1	+0.06	a3	7.6 7.2 7.4 −0.18	7.30	1 1	−0.19	Dist 22 ↕			
Stand 33 diff +90°		7	a4	7.8 7.4 7.3	7.35 0.03	0 1	−0.04	a4	7.8 7.4 7.3 0.03	7.35	0 1	−0.04	Standard 33 +90°			
a −0.05 (Curv.)	7.50 (magn)	2v	a5	8.1 7.7 7.8	7.75	1 0		a5	8.1 7.7 7.9	7.80	1 1		a	7.8 7.4 7.7	7.55	2 1
b −0.03	8.12	8	b1	8.5 8.1 8.3	8.20 0.12	1 1	+0.03	b1	8.5 8.1 8.4 0.07	8.25	1 2	−0.02	b	8.5 8.1 8.2	8.15	1 0
c −0.03	8.57	9	b2	9.0 8.6 8.6	8.60 0.33	0 0	+0.23	b2	8.9 8.5 8.8 0.28	8.65	1 2	+0.18	c	8.8 8.4 8.8	8.60	2 2
d −0.03	8.67	3v	b3	9.0 8.6 8.7	8.65	0 1		b3	9.0 8.6 8.8	8.70	1 1		d	9.0 8.6 8.8	8.70	1 1
e −0.02	9.38	10	c1	8.9	0.21		+0.12	c1	8.9 0.21			+0.12	e	9.4		
f −0.03	9.67	11	c2	9.6	0.17		−0.05	c2	9.7 0.07			−0.15	f	9.7		
g −0.03	9.75	12	c3	9.9	0.18		−0.04	c3	9.9 0.18			−0.04	g	9.8		
h −0.04	9.96	4v	c4	9.0				c4	9.0 8.6 8.9	8.75	2 1		h	10.0		
		5v	c5	ref				c5	t.p.							

Copied Plot 53, 47

Copied XXIII p. 12

+15
−14
29)29(±.1

−18
+16
31)34(±.11
31
30

Reduce single daggers (↓) together
double " (↕) "

Wednesday June 17, 1908

2.30

North Polar Sequence Standard Seq. 15 9h +86

Copied

aC 9502 J'

Scale N Curve NP 1922	Mag	Polar Sequence (scale 2)		Mean	Weights	Standard Sequence 15		Mean	Weights
0.10	7.40	a1	7.6 7.2 7.3	7.25	0 1	a	8.3 7.9 8.2	8.05	1 2
0.12	8.12	b1	8.8 8.4 8.9	8.65	2 3	b	8.6 8.2 8.4	8.30	1 1
0.13	8.53	a5	8.7 8.3 8.3	8.30	0 0	c	8.9 8.5 8.7	8.60	1 1
0.15	8.85	a3	8.0 7.6 7.8	7.70	1 1	d	9.2		
0.18	9.58	a4	8.5 8.1 7.9	8.00	1 1	e	9.4		
0.20	9.90	a2	7.7 7.3 7.6	7.45	1 2	f	9.7		
0.20	10.10	b2	9.6			g	9.8		
alt. corr. 0.00		b3	9.3			h	10.1		
		c1	9.4						
		c2	9.9						
		c3	10.0						
0.00	7.55	c4	9.5						
0.04	8.19	c5	9.9						
0.08	8.68								
0.09	8.79								
0.16	9.56								
0.18	9.88								
0.19	9.98								
0.21	10.21								

−5
+8
12)13(±.108

M. E. H.

Wednesday, June 17, 1908

Plot 6

N

Copied Bk XXVII, p. 86 Standard Sequence 24 Sept 27 1919 Scale AC 8858

AC 9503 J′ copied XXVII, 87

No		Polar Sequence		Diff.			Standard Sequence 24		
5	a¹	7.7 7.3 7.2	7.25	-0.76	1 0 -	a	7.9 7.5 7.8	7.65	1 2
1N	a²	7.8 7.4 7.6	7.50	·	1 1	b	8.6 8.2 8.4	8.30	1 1
6	a³	8.2 7.8 7.8	7.80	-0.69	0 0	c	8.8 8.4 8.7	8.55	2 1
7	a⁴	8.4 8.0 8.0	8.00	-0.69	0 0	d	9.0 8.6 8.9	8.75	2 1
2N	a⁵	8.7 8.3 8.5	8.40	·	1 1	e	~~9.6~~ 9.6		
8	b¹	8.9 8.5 8.9	8.70	-0.47	2 2	f	10.3		
9	b²	9.2		-0.47		g	ns		
3N	b³	9.2		·					
10	c¹	9.6		-0.58					
11	c²	9.8		-0.25					
12	c³	10.1		-0.24					
4N	c⁴	9.7		·					
5N	c⁵	10.0		·					

-6
+5
8)11
±.138

+5
-4
12)9 0.0
±.075

Use Readings Bk 27: 86, 87

M.E.H.

Wednesday, June 17, 1908

Plot 8

Copied Bk 58: 47

Copied Standard Sequence 33 21h +86

Oct 2 1919

Scale N No.		AC 9519 Polar Sequence		Diff. NP 1922		Diff	Sequence 33		Curve NP 1922		alt corr .00 magn.		curve	magn.
5	a¹	7.5 7.1 7.0	7.05	-0.59	1 0	-0.56	a	8.4 8.0 8.2	-0.40	8.10	7.70	1 1	-0.42	7.68
	a²	7.8 7.4 7.3	7.35		0 1		b	8.8 8.4 8.7	-0.30	8.55	8.25	2 1	-0.33	8.22
6	a³	8.0 7.6 7.7	7.65	-0.53	0 1	-0.54	c	9.0 8.6 8.8	-0.28	8.70	8.42	1 1	-0.31	8.39
7	a⁴	8.2 7.8 7.8	7.80	-0.42	0 0	-0.49	d	9.1	-0.20		8.90		-0.30	880
	a⁵	8.6 8.2 8.3	8.25		0 1		e	9.7	-0.12		9.58		-0.32	9.38
8	b¹	8.8 8.4 8.7	8.55	-0.23	2 1	-0.32	f	10.1	-0.10		10.00		-0.37	9.73
9	b²	9.1		-0.17		-0.27	g	10.3	-0.08		10.22		-0.40	9.90
	b³	9.2				-								
10	c¹	9.3		-0.19		-0.28								
11	c²	9.9		-0.13		-0.35								
12	c³	10.2		-0.12		-0.34								
·	c⁴	9.6		Plot 1										
·	c⁵	10.0												

-4
+3
6)7
±.117

+4
-3
12)7 (±.058

3.00

M.E.H.

Thursday, July 2, 1908

0.15

Corrected North Polar Sequence

I 35368 - Large prism

Scale M	Exp +90°			Prismatic Companions		
A	·			A 3.0 3.2	3.2	a ·
F	2.7 2.9 ·	2.9	a ·	a^1 5.9 6.1 6.2	6.15	1 0
ly	t.p			b^1 7.7	7.7	· a
a^1	t.p.			a^5 7.0 7.2 7.6	7.40	2 2
a^3	3.2 3.4 ·	3.4	a ·	F 5.9 6.1 6.2	6.15	1 0
a^4	3.7 3.9	3.9	a ·	ly 6.0 6.2 6.5	6.35	2 1
a^5	3.8 4.0 ·	4.0	a ·	a^4 sup ·		
b^1	t.p			a^3 6.6 6.8 6.8	6.80	0 0
b^2	t.p			c^4 8.6		+3 −6
c^1	5.6 5.8 5.8	5.80	0 0	c^5 9.5		10) 9 ±09
c^2	6.2 6.4 6.6	6.50	1 1	c^2 8.9		
c^3	6.7 6.9 6.9	6.90	0 0	c^6 9.3		
c^4	5.6 5.8 5.6	5.70	1 1	c^1 8.5		
c^5	6.6 6.8 6.8	6.80	0 0	b^2 8.3		
c^6	6.8 7.0 7.1	7.05	0 1	b^3 8.0		
c^7	6.8 7.0 7.5	7.25	2 3	c^3 9.4		
d	6.9 7.1 7.4 from	7.25	1 2	c^7 9.6		
b^3	5.6 5.8 5.7	5.75	0 1	e 10.0		
e	7.8		+8	d 9.7		
f^1	8.2		−6 18) 14 ±08	·		
f^2	8.5		a			
f^3	8.8					
g	9.3					
h	9.6					
k^1	9.9					
k^2	10.0					
k^3	10.2					
i	t.p					

M.H.

Thursday, July 2, 1908

Corrected North Polar Sequence

I 35368 - Large prism

Reject meas. Exp.+87°

Scale M	Exp +89			Prismatic Companions			Exp +87°		
F	t.p.		unit changed July 6. H.S.L.	A ~~7~~3.0 ~~7~~3.2	~~7~~3.2	a ·	a^1 2.7 2.9 ·	2.9	a ·
ly	t.p.			F 5.8 6.0 6.5	6.25	2 3	b^1 5.2 5.4 5.5	5.45	0 1
a^1	2.7 2.9	2.9	a ·	ly t.p			a^5 t.p 5.1	5.1	· a
a^3	3.6 3.8 ·	3.8	a ·	a^1 6.0 6.2 6.6	6.40	2 2	b^2 5.8 6.0 5.9	5.95	0 1
a^4	t.p			a^3 6.6 6.8 6.9	6.85	0 1	c^1 5.9 6.1 6.0	6.05	1 0
a^5	4.1 4.3 4.4	4.35	1 0	a^4 6.7 6.9 6.9	6.90	0 0	a^3 t.p ·		
b^1	4.8 5.0 4.9	4.95	0 1	a^5 6.9 7.1 7.5	7.30	2 2	c^4 6.2	6.2	· a
b^2	5.6 5.8 5.7	5.75	0 1	b^1 ~~7.0~~ 7.9		+8 −6			
b^3	t.p t.p			b^2 · 8.2		10) 14 ±14			
c^1	5.7 5.9 5.8	5.85	1 0	b^3 sup.			Prismatic Comp		
c^2	6.5 6.7 6.7	6.70	0 0	c^1 8.5			A 3.0 3.2	3.2	a ·
c^3	6.8 7.0 6.9	6.95	0 1	c^2 8.7			a^1 6.5 6.7 6.7	6.70	0 0
c^4	5.8 6.0 5.9	5.95	0 1	c^3 9.0			b^2 · 8.5		
c^5	6.3 6.5 6.9	6.70	2 2	c^4 8.6			a^5 7.3		
c^6	6.9 7.1 7.0	7.05	1 0	c^5 9.5			c^4 8.6		
c^7	7.0 7.2 7.3	7.25	0 1	c^6 9.5			b^1 7.9		
d	7.0		+5	c^7 9.6			c^1 8.6		
e	7.7		−7 20) 12 ±06	d 9.7			·		
f^1	8.3			e 9.9			Exp. +87° re-examined		
f^2	8.4			f^1 sup			a^5, July 6, Correct.		
* f^3	9.4								
g	9.4 ·								
h	9.5								
i	98								
k^1	9.9								
k^2	10.1								
k^3	10.2								

f^3 re-examined. Difficult. Do not change. H.S.L. July 6.

0.50

The prismatic companion of a^1 was re-examined on three exposures. No change made.

M.H.

Friday, July 3, 1908

Copied

Distances in millimeters from Centre

I 35368 - Large prism

	Exp +90	Exp +89	Exp +87.
A	31	11	35
F	33	54	
g	60	81	
a¹	38	18	27
a³	17	32	
a⁴	33	55	
a⁵	28	25	57
b¹	32	15	37
b²	34	18	39
b³	36	59	
c¹	10	12	
c²	6	28	
c³	11	27	
c⁴	35	30	55
c⁵	20	40	
c⁶	4	22	
c⁷	9	19	
d	10	23	
e	8	20	
f¹	13	21	
f²	13	19	
f³	12 average	18 average	
g			
h			
i			
k¹			

Friday, July 3, 1908

1.50

North Polar Sequence

I 35366 - Large prism

Scale M	Exp +90°			Prismatic Comparisons		
a¹A	v.h 2.5 2.7	2.7	a	A 3.2 3.2	3.2	a
p b¹	4.8 5.0 4.7	4.85	2 1	a¹ 6.2 6.4 6.7	6.50	1 1
c⁴	5.7 5.9 5.7 h	5.80	1 1	b² 8.2	8.2	a
a³	2.8 3.0	3.0	a	b¹ 7.0 7.2 7.7	7.45	2 3
c⁷	6.8 7.0 7.0	7.00	0 0	a⁵ 6.9 7.1 7.5	7.30	2 2
p b²	5.7 5.9 5.8	5.85	1 0	F 5 4.9 6.1 6.1	6.10	0 0
a⁵	3.8 4.0	4.0	a	b³ 7.8	7.8	a
c²	5.8 6.0 6.2	6.10	1 1	a⁴ 6.7 6.9 6.9	6.90	0 0
d	6.9 7.1 7.3	7.20	1 1	g 6.2 6.4 6.2	6.30	1 1
c¹	5.4 5.6 5.5 h	5.55	0 1	a³ 6.7 6.9 6.9	6.90	0 0
e	7.0 7.2 7.4	7.30	1 1	d 9.3		+7
c³	6.6 6.8 6.7	6.75	0 1	c⁴ 8.3		−5 14)12 ±09
a⁴	3.0 3.2	3.2	a	c⁷ 9.2		
F	2.5 2.7	2.7	a	c¹ 8.3		
c⁵	6.1 6.3 6.6	6.45	1 2	f¹ 9.9		
g	3.1 3.3	3.3	a	c² 8.6		
c⁶	6.8 7.0 6.9	6.95	0 1	c⁵ 9.0		
b³	5.2 5.4 5.2	5.30	1 1	c³ 8.7		
f³	8.7		+10	c⁶ 8.9		
f¹	7.9		−10 24)20 ±08	e 9.7		
g	9.1					
f²	8.6					
k³	10.1					
h	9.6					
i	9.7					
k¹	9.8					
2.10 k²	9.9					

Wednesday, July 8, 1908

1 50

North Polar Sequence

I 35366 Large Prism Cont.

Scale M

Prismatic Companions

Exp. +89

a'	2.3	2.5		2.5	ȧ:	a 3.1	3.3			3.3	a:
f'	3.9	4.1	41	4.10	ȯȯ	a' 6.6	6.8		6.8	6.80	ȯȯ
c⁴	5.6	5.8	5.8	5.80	ȯȯ	a³ 6.8	7.0		6.9	6.95	ȯi̱
c'	5.3	5.5	5.6	5.55	1̱ȯ	a⁵ 7.0	7.2		7.3	7.25	ȯi
c³	6.3	6.5	6.7	6.60	i̱ i				c' 8.1		
b²	5.0	5.2	5.3	5.25	ȯi				b' 7.7		+1 -1 6)2 ±03
c²	5.9	6.1	6.3	6.10	ȯȯ				c³ 8.7		
f	to poor			.					d 9.2		
g	to poor			.					f' 9.8		
a⁴	to poor								b² 8.0		
a²	2.8	3.0		3.0	ȧ:				c⁴ 8.2		
c⁵	6.0	6.2	6.7	6.45	2̱ 3				c⁵ 8.8		
d	6.9	7.1	7.1	7.10	ȯȯ				c² 8.7		
a⁵	3.9	4.1		4.1	ȧ.				e 9.8		
c⁶	6.6	6.8	6.8	6.80	ȯȯ				f² 10.2		
e	7.0	7.2	7.2	7.20	ȯȯ				c⁶ 9.0		
c⁷	6.8	7.0	7.0	7.00	ȯȯ				c⁷ 9.2		
f'			7.7		+5						
f³			8.6		-4 22)9 ±04						
h			9.2								
* f²	9.0		~~9.0~~ 8.4								
i	9.6		9.6								
g	9.0		9.0								
k'	9.8		9.8								
k²	9.9		9.9								
k³	10.1		10.1								

* wrong star perhaps measured for f² reading changed July 9. W.S.L.

E.O.C. 2.20

Wednesday July 8 1908

North Polar Sequence

I 35366 Large Prism Cont.

Scale M.

Prismatic Companions

Exp. +88

A	t.b.					A 2.9	3.1			3.1	ȧ:
a'	1.9	2.1	t.b	2.1	ȧ.	*** a' 5.9	6.1			6.10 ~~6.0~~	o ~~a~~ o
b'	4.0	4.2	t.b	4.2	ȧ.	‡ a⁵ 7.0	7.2		7.2	7.20	ȯȯ
c⁴	5.7	5.9	5.8	5.85	i o	† a³ 6.7	6.9			6.~~7~~ 85	a i ȯ
a³	t.p.		t.b	.		* C 5.6	5.8 ~~A t.b~~			5.75	i o
c'	5.6	5.8	5.8	5.80	ȯȯ	** D 6.0	6.2		*** a' 6.1		
c³	6.3	6.5	6.8	6.65	1̱ 2				b² 7.9		
d	6.9	7.1	7.0	7.05	i o				a⁵ 7.3		
c⁶	6.6	6.8	6.9	6.85	ȯ i				c⁴ 8.0		
c⁵	6.3	6.5	6.7	6.60	i̱ i				† a³ 6.8		
c²	6.3	6.5	6.5	6.50	ȯȯ	c²			8.3		
e	7.0	7.2	7.3	7.25	ȯi	d			9.0		
a⁵	4.3	4.5	4.4	4.45	i o	f'			9.8		
b²	5.0	5.2	5.3	5.25	ȯi	c³			9.0		
c⁷	6.8	7.0	7.0	7.00	ȯȯ	c⁵			8.9		
f'			7.7		+9	c⁶			8.8		
f²			8.0		-2 22)11 ±05	c⁷			9.2		
g			8.9			e			9.7		
f³			8.8			f²			10.1		
i			9.7			b'			7.6		
k²			10.0			c'			8.1		
h			9.3			** D	6.2		6.0	6.10	i i̱
k'			9.8			* C			5.7		+3 -1 ~~10~~ 10)4 ±04
k³			10.1								
D	1.9										

E.O.C. 2.40

Wednesday July 8, 1908

3.55 Distances in millimeters from centre

Underline distances with + sign in copying May 10, 1911

	I 35366 Exp +90	Large Exp +89	Prism Exp +88.
A	+30	+$\overset{12}{\cancel{72}}$	−17
C	+100	+82	+63
D	+75	+54	+$\overset{33}{\cancel{54}}$
f	−34	−56	.
g	−63	.	.
a^1	+36	+16	−11
a^5	−21	−$\overset{3}{\cancel{1}}$5	−55
a^4	−36	−57	−79
a^3	+24	−24	−38
b^1	+31	+16	−22
b^2	+33	+21	−26
b^3	−37	−57	.
c^1	+9	−14	−36
c^2	$\overset{-}{\cancel{+}}$9	−29	−51
c^3	−8	−28	−50
c^4	+31	−26	−38
c^5	−21	−41	−63
c^6	~~+~~9 (1pp. centre)	−25	−51
c^7	~~+~~11 " "	−23	−43
d	~~+~~7 " "	−24	−45
e	~~+~~5 " "	−21	−42
f^1	~~+~~9 " "	−21	−42
For fainter stars:	+7 average	−21 average	−41 average

Thursday July 9, 1908

North Polar Sequence

Scale M

diff.

	I 35365	Large	Prism Prismatic Companions			
a^1	2.8 3.0 t.b.	3.0 a.	A 2.9	3.1	t.b.	3.1 a.
b^1	4.7 4.9 4.9	4.90 0 0	a^1 6.2	6.4	6.2	6.30 1 $\underline{1}$
a^5	4.4 4.6 4.7	4.65 $\overset{0}{\cancel{05}}$ 1	b^2 ~~8.0~~		8.0	8.0
c^4	5.7 5.9 5.9	5.90 0 0	a^5 6.9	7.1	7.5	7.30 $\underline{2}$ 2
a^3	3.7 3.9 t.b.	3.9 a.	f 6.5	6.7	6.8	6.75 $\underline{1}$ 0
f	3.6 3.8 t.b	3.8 a.	a^4 6.8	7.00	$\overset{7.2}{\cancel{7.6}}$	7.10 $\underline{1}$ 1
a^4	4.1 4.3 4.6	4.45 $\underline{1}$ 2	a^3 6.7	6.9	7.1	7.00 $\underline{1}$ 1
c^1	5.7 5.9 5.8	5.85 1 0	b^1		7.6	+5 −6 10)11 ±11
d	6.6 6.8 7.2	7.00 $\underline{2}$ 2	c^1		8.3	
c^2	6.2 6.4 6.7	6.55 $\overset{2}{\cancel{1}}$ $\overset{1}{\cancel{2}}$	c^3		9.0	
b^2	5.5 5.7 5.7	5.70 0 0	c^4		8.4	
c^3	6.7 6.9 6.9	6.90 0 0	d		9.6	
e	too faint 7.7	7.7 a	c^2		8.8	
c^6	6.7 6.9 6.9	6.90 0 0	c^5		9.2	
c^7	6.9 7.1 7.2	7.15 $\overset{1}{\underline{0}}$ $\overset{0}{\underline{1}}$	c^7		9.6	
c^5	6.4 6.6 6.9	6.75 $\cancel{1}$ $\overset{2}{2}$	f^1		9.7	
f^1	7.7		e		9.7	
g	8.8	+8 −8 24)16 ±07	c^6		9.2	
k^3	10.1		f^2		10.1	
b^3	5.9					
f^3	8.8					
h	9.3					
k^1	9.7					
f^2	8.4					
i	9.5					
k^2	9.8					

The images of a′, b′ and b 2 are too poor to be safely used. Reject.
April 4, 1911.

Friday July 10, 1908

North Polar Sequence Exp 120^m

I 35399 Lalge Prism

Scale M

a'	t.b			
b'	1.9	2.1		~~a~~ 2.10 a.
c'	2.2	2.4		2.40 a.
c^3	3.4	3.6		3.60 a.
e	4.1	4.3	4.2	4.25 1 0
b^2	2.5	~~2.5~~ 2.7		~~2.5~~ 2.70 a.
c^4	2.8	~~2.8~~ 3.0		~~2.8~~ 3.00 a.
a^5	1.8	2.0		2.00 a.
c^2	2.9	~~2.9~~ 3.1		~~2.9~~ 3.10 a.
d	3.8	~~3.8~~ 4.0		~~3.8~~ 4.00 a.
f^2	5.7	5.9	5.8	5.85 0 1
poor g	6.9	7.1	7.3	7.20 1 1
c^5	3.6	3.8		3.80 a.
a^3	t.b			
a^4	0.8	1.0		1.00 a.
b^3	2.9	3.1		3.10 a.
f^1	4.9	5.1	4.9	5.00 1 1
f^3	6.4	6.6	6.7	6.65 1 0
h	7.0	7.2	7.4	7.30 1 1
c^6	3.7	3.9		3.90 a.
c^7	3.8	4.0		4.00 a.
k^3			8.7	
i			7.7	
l			9.0	
k^1			8.2	
k^4			8.8	
k^5			8.9	
m			9.3	

+4
-5
12)9
±08

σ	9.7
r	10.2
n	9.8
q	10.1
p	10.0
k^2	$\overset{8}{\cancel{9}}.2$

Image of K^2 examined Oct. 15, 1908 The reading 9.2 was obviously an error for 8.2

I 35399 Large Prism

Scale M Prismatic Comparisons

fogged A	1.9	2.1	t.b	2.1 a.
b'	5.8	6.0	5.8	5.90 1 1
a'	3.8	4.0	t.b	4.00 a.
c^3	6.8	7.0	7.4	7.20 2 2
a^5	5.0	5.2	5.6	5.40 2 2
c^4	6.3	6.5	~~6.8~~ 6.6	6.55 1 0
c^2	6.6	6.8	6.9	6.85 0 ~~2~~ 1
c^5	7.0	7.2	7.2	7.20 0 0
b^2	6.3	6.5	6.6	6.55 1 0
a^3	4.9	5.1	5.1	5.10 0 0
F ~~f~~	4.0	4.2	4.0	4.10 1 1
a^4	4.9	5.1	5.4	5.25 1 2
b^3	6.2	6.4	6.5	6.45 0 1
c'	6.2	6.4	6.7	6.55 2 1
d	too faint		7.8	
c^6	6.9	7.1	7.4	7.25 1 2
c^7	too faint		7.6	
f^1			8.3	
f^3			9.2	
e			8.0	
f^2			8.9	
g			9.1	
i			9.9	
h			9.7	
k^1			10.2	
K^2	not seen			

+13
-12
26)245
±10

Saturday July 11, 1908

23.50 North Polar Sequence

Prismatic Companions Small Prism

Scale M

	I35365			I35366 Exp. +89°	
a	4.8 5.0	5.00 a.	A	4.8 5.00 4.9	4.95 0 1
a^1	7.9		a^1	8.1	
b^1	9.0		b^1	9.7	
7	8.2		b^2	10.0	
a^4	8.8		a^5	9.1	
b^3	9.9		c^4	not seen	
a^3	8.7		7	7.9	
b^2	too poor		a^4	8.3	
a^5	8.9		b^3	not seen	
c^1	not seen		c^1	9.9	
c^4			a^3	8.4	

I

	I 35366 Exp +90°			I 35366 Exp. +88°	
a	4.7 4.9 4.9	4.90 0 0	a	4.6 4.8 4.9	4.85 1 0 ∓
a^1	8.1		a^1	7.9	
b^1	9.6		b^1	~~9.0~~ 9.4	
a^5	9.4		b^2	not seen	
c^4	10.2		a^3	8.3	
7	7.8		7	7.8	
a^4	8.3		a^4	8.6	
b^3	not seen		a^5	9.0	
b^2	10.0		b^3	not seen	
c^1	not seen				
a^3	8.5				

Saturday July 11, 1908.

2.35 North Polar Sequence

Prismatic Companions Small Prism

Scale M

	I 35368 Exp +90°			I 35368 Exp. +87°	
A	4.5 4.7 4.8	4.75 1 0	A	5.0 5.2 5.3	5.25 0 1
a^1	8.2	±05	a^1	8.2	
b^1	9.7		b^1	9.7	
b^2	not seen		b^2	not seen	
a^5	9.5		a^5	9.6	
c^4	not seen		c^4	not seen	
c^1	" "		7	too poor	
7	7.9		a^4	" "	
a^4	8.7		a^3	8.6	
a^3	8.6				

	I35368 Exp +89°	
A	4.9 5.1 5.1	5.10 0 0
a^1	8.3	±00
b^1	9.5	
b^2	10.0	
a^5	9.2	
c^4	not seen	
7	8.1	
a^4	8.7	
a^3	8.6	
b^3	not seen	

North Polar Sequence

Prismatic Companions Small Prism

Scale M

I 35399

A	2.7	2.9	t.b.	2.9 a.	
b¹	too faint		7.8		
a¹	5.7	5.9	5.9	5.90	0 0
a³	6.3	6.5	7.0	6.75	3̲ 2
7	5.9	6.1	6.5	6.3	2̲ 2
b³	too faint		8.1		
a⁴	6.8	7.0	7.2	7.10	1̲ 1
a⁵	7.0	7.2	7.5	7.35	1̲ 2
c⁴			8.6		
e¹			8.5		+7 -7 10)14 ±14
f²			8.3		
c⁵			8.3 ~~9.0~~		
c³			8.9		
c²			8.7		
d			9.6		
~~f¹~~			~~10~~ n.s.		
e			10.0		
c⁶			9.5		
c⁷			9.7		

North Polar Sequence

I 35398 Large Prism

Scale M

Star Images

	A	t.b				
	a¹	2.3	2.5	t.b	2.5 a.	
very poor	b¹	3.9	4.1	4.5	4.30	2̲ 2
	a³	2.5	2.7		2.7 a.	
	7	1.9	2.1	t.b	2.1 a.	
	a⁴	2.9	3.1		3.1 a.	
	c¹	4.7	4.9	4.9	4.90	0 0
	a⁵	3.1	3.3	t.b.	3.3 a.	
	c⁴	4.8	5.~~1~~ 0	5.1	5.~~10~~ 05	0 ~~0~~ 1
poor	c²	5.2	5.4	5.7	5.55	2̲ 1
	d	6.7	6.9	6.9	6.90	0 0
	c⁵	5.9	~~5.9~~ 6.1	5.9	~~5.90~~ 6.00	~~0 0~~ 1 1̲
	c³	5.9	6.1	6.1	6.10	0 0
	e	6.9	7.1	7.1	7.10	0 0
	b³	4.8	5.0	4.9	4.95	0 1̲
	c⁶	6.3	6.5	6.2	6.35	~~2 1̲~~ 1 2̲
very poor	b²	5.0	5.2	5.5	5.35	1̲ 2
	c⁷	6.6	6.8	6.9	6.85	~~1̲ 0~~ 0 1
	f¹			7.7		+9 -9
	f²			8.3		24)18 ±08
	g			8.9		
	k³			10.0		
	f³			8.6		
	i			9.7		
	k²			9.8		
	h¹			9.5		

Star Images con't.

k¹	9.7

Prismatic Companions Small Prism

A	4.3	4.5	4.5	4.50	0 0
					±00
a¹ x			7.7		
b¹			9.3		
7			7.7		
a~~5~~4			8.4		
c¹			10.2		
a⁵			9.0		
c⁴			t.p.		
b²			10.1		
b³			9.8		
a³			8.1		

Images

Images of Stars fainter than d are in poor focus.

Images of A, a¹, b¹, b² very poor.

Saturday July 11, 1908

North Polar Sequence

I 35398 [illegible] . .

Scale M

Prismatic Companions   Large Prism

very poor	A	2.5	2.7	t.b	2.7 a.
poor	a^1	5.8	6.0	6.0	6.00 00
	a^5	6.8	7.0	7.0	7.00 00
	c^4	too faint		7.8	
	a^3	6.1	6.3	6.8	6.55 $\underline{3}$ 2
	7	5.8	6.0	6.2	6.10 $\underline{1}$ 1
	a^4	6.7	6.9	6.8	6.85 0 $\underline{1}$
	b^1			7.2	$+3$ -5 $10\overline{)8}$ ± 08
	c^1			7.8	
	c^3			8.7	
	f^1			9.8	
	d			8.9	
	c^2			8.3	
	c^6			8.7	
	e			9.6	
	f^2			10.1	
	c^7			9.0	
	c^5			8.8	
	b^2			7.9	
	b^3			7.9	

Prismatic Companion of a^3 is difficult to measure because there is a star near it.

[illegible] 3.30

Monday July 13, 1908

North Polar Sequence

3.40   I 35399 remeasured - see page 134

Scale M

	A	t.b			
	a^1	"	"		
	b^1	1.7	1.9	.	1.9 a.
	c^2	2.8	$3.\overset{0}{1}$	.	$3.\overset{0}{1}$ a.
	d	3.7	3.9	.	3.9 a.
	f^1	4.9	5.1	4.9	5.0 1 $\underline{1}$
	c^3	3.5	3.7	t.b.	3.7 a.
	a^4	0.8	$\overset{1.0}{0.9}$		$\overset{1.0}{0.9}$ a.
poor	c^4	2.7	2.9		2.9 a.
	b^2	2.5	2.7		2.7 a.
	c^6	3.6	3.8		3.8 a.
	e	4.0	4.2	4.6	4.40 $\underline{2}$ 2
	f^2	$\overset{5}{4}.7$	5.9	5.8	5.85 $\overset{1}{0}\,\overset{0}{\underline{1}}$
	g	6.7	6.9	7.2	7.05 $\underline{1}$ 2
	c^7	3.7	3.9		3.9 a.
	c^1	2.4	2.6	.	2.6 a.
	c^5	3.7	3.9	.	3.9 a.
	f^3	6.3	6.5	6.7	$6.\overset{60}{55}$ $\underline{1}$ 1
	h	7.0	7.2	$7.\overset{5}{7}$	7.35 $\overset{2}{\underline{1}}\,\overset{1}{2}$
	b^3	2.8	3.0	.	3.0 a.
	k^3			8.7	$+8$ -7 $12\overline{)15}$ ± 12
	i			7.7	
	k^1			8.0	
	l			9.2	
	k^2			8.5	
	n			9.9	
	k^3			8.8	
	m			9.5	

o	9.1
q	10.2
p	9.9
r	10.3

Prismatic Companions   Small Prism

A 2.7	2.9	t b	2.9 a.
b^1 too faint		7.9	
a^1 5.9	6.1	5.9	6.0 1 $\underline{1}$
a^5 7.0	7.2	7.5	7.35 $\overset{2}{\underline{1}}\,\overset{1}{2}$
a^3 6.6	6.8	6.9	6.85 $\overset{0}{\underline{1}}\,\overset{1}{0}$
a^4 6.8	7.0	7.0	7.00 0 0
c^1		8.7	$+3$ -3 $8\overline{)6}$ ± 08
c^4		2.4	
b^3		8.0	
7		6.6	
c^3		9.0	
d		9.5	
f^1		10.2	
c^6		9.6	
c^2		8.8	
c^5		9.2	
e		10.0	
f^2		too faint	
b^2		8.5	

Monday July 13, 1908

North Polar Sequence

I 35399

Scale M Prismatic Companions Large Prism remeasured.

A	fogged				K² t.p.
a¹	3.9	4.1	t.b	4.1 Reject a.	Expunged April 29, 1911. Image too poor Reject
f²	6.2	6.4	6.5 ~~5.8~~	6.45 0 1	
a⁵	5.1	5.3	5.7	5.50 2 2	
c⁴	6.7	6.9	t.p.	6.9 a.	
c¹	6.6	6.8	6.9	6.85 $\overset{0}{1}$ $\overset{1}{0}$	
d	t.f.		7.7		
a⁴	4.9	5.1	5.3	5.20 1 1	
7	4.0	4.2	4.6	4.40 2 2	
c²	6.9	7.1	6.9	7.00 1 1	
b¹	5.8	6.0	5.8	5.90 1 1	
a³	4.8	5.0	5.4	5.20 2 2	
b³	6.2	6.4	6.3	6.35 $\overset{0}{1}$ $\overset{1}{0}$	
c⁶	7.1	7.3	7.3	7.30 0 0	
c³	7.0	7.2	7.1	7.15 $\overset{0}{1}$ $\overset{1}{0}$	
c⁵	7.0.	7.2	7.2	7.20 0 0	
e			7.8	+11 −11 24) 22 ±09	
f²			8.8		
f¹			8.5		
g			9.1		
c⁷			7.7		
f³			9.1		
h			9.7		
k¹			t.p.		
K³			10.0		
i			9.7		
K⁴			not seen		

4.10

Monday, September 28, 1908

North Polar Sequence

Approximate magnitudes of DM +89°17, 88°117, and 88°131
Directly estimated in comparison with Prov. Pty. Map

Des	Provisional current No.	AC9217	AC4737	Mean
+89°17	~~AC~~ 92568	9.5	9.4	9.45
+88°117	1016	8.9	8.8	8.85
+88°131	1156	8.6	8.6	8.60

Wednesday. September 30, 1908

23 45 Copied ~~XVIII~~, 99

Bright Stars near North Pole
Direct estimates of Stars down to Magnitude
8.5 on T′ Plate AC 9473 RA = 3h Dec. +86°
Provisional current numbers

A 2.6 B 4.6 C 5.2 D 5.7 E 5.8 F 6.4 G 6.5
a^1 6.4 a^2 6.6 a^3 7.0 a^4 7.2 a^5 7.7 b^1 8.1 b^2 8.6 c^1 8.8
b^3 8.7 c^1 8.8 c^2 9.0

Stars on Exp. at +90°

Dist from Center	Dist from Comp Stars						
6	- 6	13	8.7	14	6-	$\overset{9}{2005}$	8.9
11	- 5	83	8.7			2034	8.4
11	4	105	8.1			2035	8.0
10 -	5	132	.F			2036	8.0
11	5	238	8.6			2046	8.7
		496	8.2			2049	8.6
		601	7.6				
		684	8.2				
		722	8.5		8	a^1	
		765	7.8		7	b^1	
		778	8.0		7	b^2	
	-	949	9.1				
		977	8.0				
	- - -	1011	8.9				
		1100	8.8				
		1109	7.2				
		1016	8.5				
		1156	8.7				
		1171	7.3				
12	- 9	2001	8.8				
12	6-	2004	9.0				

Stars on Exp at 3h, +86°

	Comp. Circ.		Dist. ~~from the~~ Comp. Stars Centre		Diff. from Mean					
	25	13	17	8.4	.16	20 6	2004	12	8.7	3 .05
		56		5.3	.		2005		8.0	.
b		62		~~6.4~~ 7.0	.		2006		.81	.
	20	83	12	8.5	.14 (2)		2007		7.8	.
		90		7.9	.	c	2008		7.7	.
	20	105	11	7.9	.11 (2)	15 6	2009	7	8.7	.16
		118		7.6	.		2010		8.~~7~~ 6	.
	20	132	12	8.5	.04		2011		8.0	.
		183		~~5.9~~ 6.1	.		2012		8.4	.
		205		6.0	.	e	2013		8.5	.
d	19	~~*238~~	~~11~~	~~8.8~~	.35		2014		8.0	.
a		240		~~7.0~~ 6.8			a		-	
		264		7.8		19	a^1	14	6.2	.21 .43
		274		7.8		20	b^1	14	7.9	17 .21
		279		6.5		20	b^2	13	8.5	12 .09
		294		6.2			2052		8.7	
		310		7.4			f see p. 175			
		313		8.0						
	25	2001	15	9.0	.15	~~.15~~ 2				
		2002		8.4	.					
		2003		8.0	.					

+118
-35
8 | +83
~~+104~~
+~~0.10~~

7 | 118
+0.17

1.39
~~+0.66~~
-0.50
11 | 0.89
+0.08

+116
-15
10 | 101
+0.10

7 | +95
+.14

1 15 Measures of faint stars on this plate, difficult

Reject meas. of 238. It not only is out of accord with all other plates, but is obviously wrong on examining plate

Thursday, October 1, 1908

Copied XXVII, 98

Bright Stars near North Pole
Direct Estimates of Bright Stars on T′ Plates
AC 9475 Seq. as on Preceding Page

2 45

Stars Exp. +90°

13	8.7	.14	2035	8.0
83	8.6	.04	2036	8.1
105	8.0	.01	2046	8.5
132	8.5	.04	2049	8.6
238	8.5	.05		
496	8.0	.09		
601	7.6	.02		
684	8.4	.02		
722	8.5	.04		
765	8.1			
778	8.2			
949	8.7			
977	8.4			
1011	9.0			
1016	8.5			
1100	8.5			
1109	7.4			
1156	8.5			
1171	7.3			
2001	8.8			
2004	8.6			
2009	8.8			
2034	8.6			

Exp. 3h +86°

	13	8.5	.06		2006	8.0
	56	5.6	.		2007	7.5
b	62	7.0	.	c	2008	7.8
	83	8.6	04		2009	8.8
	90	8.2	.		2010	~~8.9~~ 9.0
	105	7.9	.11		2011	8.6
	118	7.6	.		2012	8.4
	132	8.6	.06	e	2013	8.5
	183	6.3	.		2014	8.4
	205	6.2	.		2052	8.5
d	238	8.4	.05		a	8 . .
a	240	6.~~6~~ 8	.		a^1	6.4
	264	7.5			b^2	8.5
	274	7.7			b^1	8.1
	279	6.4			X	
	294	6.3			f in p. 175	
	310	7.5				
	313	8.4				
	2001	8.6	.25			
	2002	8.5	.			
	2003	8.0	.			
	2004	8.5	.25			
	2005	8.1	.			

+37
-06
8 | +31
+0.04

+93
-06
11 | 87
+0.08

4 10 This plate is much better than AC 9473, especially

Friday October 2
~~Wednesday, September 30~~, 1908

Copied ~~XXVII~~, 100

Bright Stars Near North Pole
Direct Estimates AC 9478 T Plate

Dist Centre	Dist Comp Stars	Exp. at +90°	
	~~Do~~	105	8.1
		132	8.7
		238	8.4
15	19	496	8.2
14	7.5	601	7.7
		684	8.4
		722	8.3
		765	8.0
		778	8.2
		977	8.2
		1100	8.4
		1109	7.5
		1016	8.6
		1156	8.6
		1171	7.4
		2034	8.8
		2035	8.2
		2036	8.1
		2046	8.5
		2049	8.6
		13	8.6
		83	8.6
16	.	a^2	
6	.	a^3	
11	.	a^4	

An excellent plate

Dist Comp Stars	Exp. at 9h, +86°	Dist Centre		
	338		7.4	
	420		7.5	
	425		7.8	
	426		6.2	
	451		7.8	
	457		7.7	
	464		7.0	
	479		6.3	
10	4966		8.1	01
~~10~~ 2.15	498x		7.3	
	513		8.4	
	515		8.3	
	523		7.5	
	536		5.4	
	541		7.8	
a	570		7.2	
	583		7.9	
b	587		7.5	
9.20	601	15	7.6	02
	606		6.6	
	2015		7.9	
	2016		8.0	
	2053		8.0	
	2057		8.4	
c	2018		8.0	

	2019		8.3	
	2020		8.3	
	2021		8.1	
	2022		8.0	
21	a^2	11	6.7	~~5~~ 14
21	a^3	15	7.0	~~2~~ 00
22	a^4	13	7.2	~~3~~ 00

October 3

Sequence at 9h +86°

d	8.4
e	8.6
f	8.7
g	9.2

5 ⌊0.23
-0.05

Friday, October 2, 1908

Bright Stars near Pole

4 00 Direct Estimates on T Plate AC 9470

	Exp. at +90°
13	8.5
83	8.5
105	8.2
132	8.6
238	8.5
496	8.1
601	Clouds came up - light too poor to continue
684	
722	
765	
778	
977	
1016	
1100	
1109	
1156	
1171	
2034	
2035	
2036	
2046	
2049	

Saturday, October 3, 1908

22 40

Copied XXVII, 100

Bright Stars near North Pole
Direct Estimates O'Plate AC 9470

	Exp. +90°		Exp. 9^h		+86°	8	
13	8.6		338	7.9	c 2018	8.3	
83	8.5		420	7.5	2019	8.4	
105	8.0		425	8.1	2020	8.5	
132	8.6		426	6.4	2021	8.3	
237 8	8.4		451	7.6	2022	8.2	
496	8.1		457	7.8	a^2	6.8	25 24
601	7.6		464	7.4	a^3	7.2	22 20
684	8.6		479	6.4	a^4	7.2	23 00
722	8.5		496	8.3 21			
765	8.2		498	7.5			
778	8.4		513	8.4		Seq. at 9^h, +86°	
977	8.3		515	8.4	d	8.4	
1016	8.5		523	7.9	e	8.6	
1100	8.4		536	5.7	f	8.9	
1109	7.5		541	8.0	g	9.3	
1156	8.7	a	570	7.3			
1171	7.4		583	8.1			
2034	8.6	b	587	7.7			
2035	8.2		601	7.9 32		5)−1.03 −0.21	
2036	8.3		606	6.6			
2046	8.5		2015	8.2			
2049	8.6		2016	8.3			
			2053	8.3 2			
			2054	8.5			

23 00 23 30

Saturday, October 3, 1908

2.35

Copied

North Polar Sequence, Plates taken with whole & half apertures.
Plate I 34065 Scale I M 32811

Remark In marking plate, c^6 and c^7 are interchanged, as inspection shows, original marks still remaining May 20, 1909

Brightest images A

3 1 • A
1 2 2 • B
3 • C
Order of taking

Exp. 1 aperture "A"
" 8² " "B"

Pur a^1	2.7 2.9	2.9 a.	o	6.8 7.0 6.9 6.95 01	f^3	8.8	f^3	8.8
b^1	4.4 4.6	4.6 a.	p	6.9 7.1 7.2 7.15 ⊥0	p	7.8	~~f^1~~ g	9.~~8~~0
c^1	4.8 5.0 5.1	5.05 01	q	7.7	~~The~~ r	9.0	h	9.6
c^7 see Remark* c^6	~~5.9~~ 6.3 6.5 6.7	6.60 ⊥1	r	8.3 +11 −9 28)20 ±07	o	7.5	i	9.~~4~~6
a^3	3.0 3.2	3.2 a.			k^1	10.0	~~k^1 10.0~~ covered by defect	

Brightest images A		Second images B aperture "B"	Third images C aperture "A"	Prismatic Companions
c^4	4.9 5.1 5.4 5.25 ⊥2			
a^5	3.6 3.8 3.8	a^1 3.3 3.5 3.5		A 3.9 4.1
c^6 see Remark* c^7	6.0 6.2 6.5 6.35 21	b^1 5.0 5.2 5.0 5.10 1⊥	b^1 4.9 5.1 5.5 5.30 22	a^1 6.9 7.1 7.1 7.10 00
c^2	5.8 6.0 5.8 5.90 1⊥	b^2 5.9 6.1 5.7 5.90 22	b^2 5.8 6.0 6.0 6.00 00	b^1 9.2 ±00
F	2.4 2.6 2.6	c^6 6.8 7.0 7.2 7.10 ⊥1	c^6 6.9 7.1 7.1 7.10 00	b^2 9.7
b^3	4.7 4.9 4.8 4.85 10	a^3 3.9 4.1 4.1 a.	a^3 + p	a^3 8.3
floor b^2	4.9 5.1 5.0 5.05 10	c^2 6.3 6.5 6.7 6.60 ⊥1	c^2 6.7 6.9 6.7 6.80 11	F 7.6
c^3	~~6.3~~ 5.9 6.1 5.9 6.00 1⊥	c^5 ~~5.9~~ 6.7 6.9 6.9 6.90 00	d 7.0 7.2 7.2 7.20 00	a^4 8.4
f^1	7.0 7.2 7.2 7.20 00	b^3 5.4 5.6 5.8 5.70 ⊥1	c^5 6.8 7.0 6.9 6.95 01	b^3 9.7
c^5	5.8 6.0 5.9 5.95 01	F 3.0 3.2 3.2 a.	b^3 5.6 5.8 5.7 5.75 01	a^5 9.0
d	6.4 6.6 6.7 6.65 01	a^4 3.9 4.1 4.1 a.	a^4 + p 4.5	c^4 10.0
e	6.7 6.9 6.8 6.85 10	c^3 6.7 6.9 7.0 6.95 ⊥0	c^3 6.8 7.0 6.9 6.95 0⊥	c^1 9.7 2nd
a^4	3.1 3.3 3.3	a^5 im good 4.0 4.2 4.2 a.	c^1 6.1 6.3 5.9 6.10 22	A 3.9 4.1
g	8.5	d 6.9 7.1 7.2 7.15 ⊥0	c^7 6.9 7.1 7.0 7.05 10	a^1 7.9
f^3	8.0	c^1 5.7 5.9 5.8 5.85 10	a^5 4.8 5.0 4.8 4.90 1⊥	b^1 9.5
f^2	7.8	c^4 5.8 6.0 5.9 5.95 0⊥	c^4 5.9 6.1 5.9 6.00 11	a^3 8.4
k^3	9.7	c^7 6.8 7.0 6.9 6.95 01	σ 7.4	a^4 8.4 a^5 8.9 3rd
i	8.9	g 8.5	f^1 7.9 +8 −10 24)18 ±08	
k^4	9.9	f^1 8.1 +7 −10 22)17 ±08	g 8.7	A + p
h	8.7	g 9.2	e 7.7	~~a^1 7.8~~
k^1	8.9	e 7.7	f^{32} 8.5	no prismatic
k^2	9.6	f^2 8.5	p 7.9	
k^5	10.1			
M.E.H. l uncertain	10.0	l 9.7	r 8.9	

3.25

Checked by H.S.L. Oct. 3, 1908

Saturday, October 3, 1908

North Polar Sequence

1½-in eye-piece   Scale from AC 8796

AC 7694 Remeasured (see page 67)
Capital letters only

Exposure 1

A	4.3	. .			
B	5.9	6.1	5.8	5.9	
C		7.1	6.8		
D		7.2	6.9		Interrupted at this point
E		7.9	7.6		
F		8.6	8.3		
G		8.6	8.3		

Monday, October 5, 1908

North Polar Sequence

Scale 0   AC 7694 - Remeasurements cont. from preceding page

	Exposure 1 scale 1	scale 2	scale 3				p. 67			Exposure 2 scale 1	scale 2		scale 3	
A	4.3			.	4.3		4.2 4.25			6.2	6.4	6.1	5.9	6.07 .11
B	5.9		~~6~~ 5.8	5.9	5.87	0.10	5.97	5.92	~~01~~ 05 05		8.0	7.7	7.8	7.75 .10
C			6.8	7.0	6.90	.11	6.73	6.82	~~11~~ 08 09		8.9	8.6	8.9	8.75 .21
D			6.9	7.3	7.10	.22	7.15	7.12	~~01~~ 02 03		~~9.7~~ 9.5	9.2	9.1	9.15 .01
E			7.6	7.8	7.70	.11	7.60	7.65	~~10~~ 05 05		9.8	9.5	9.8	9.65 .12
F			8.3	8.5	8.40	.11	8.35	8.38	~~00~~ 02 03		10.2	9.9	10.2	10.05 .12
G			8.3	8.6	8.45	.12	8.55	8.50	~~11~~ 05 05		n.s.			.
a¹		8.7	8.4	8.5	8.45	.01	8.30	8.38	~~01~~ 07 08		10.1 ~~9.8~~	9.8	10.2	10.00 .32
a²		8.6	8.3	8.7	8.50	.22	8.30	8.40	~~11~~ 10 10		n.s.			
a³		9.2	8.9	9.0	8.95	.10	8.90	8.92	~~10~~ 03 02					
a⁴		9.7	9.4	9.4	9.40	.00	9.35	9.38	~~00~~ 02 03					
a⁵		9.8	9.6	9.9	9.75	.21	9.85	9.80	~~00~~ 05 05					
b	.	10.1	9.8	10.0	9.90	.11	.	9.90	a.					

+12
−13
25)25
±10

+8
−4
24)11
±05

+8
−9
15)17
±11

Exp. 2 2nd		p. 67		
A	6.07	5.90	5.98	~~11~~ 09 08
B	7.75	7.60	7.68	~~11~~ 07 08
C	8.75	8.60	8.68	~~11~~ 07 08
D	9.15	9.40	9.28	~~11~~ 13 12
E	9.65	9.55	9.60	~~00~~ 05 05
F	10.05	.	10.05	a.
a¹	10.00	.	10.00	a.

+4
−4
10)8
±08

Monday, October 5, 1908

Copied XXVII, 106, 107

Bright Stars near North Pole

Estimates of Brightness on T' Plate AC 9480

Exp. at +90°

13	8.5
8$\overset{3}{8}$	8.6
105	8.0
132	8.6
238	8.5
496	8.3
601	7.8
684	8.5
722	8.6
765	7.9
778	8.2
977	8.4
1016	8.6
1100	8.5
1109	7.3
2001	8.6
200$\overset{4}{5}$	8.9
2009	9.0
2034	8.5
2035	8.0
2036	8.1
2046	8.4
2049	8.8

Exp. at ~~1~~ 15h, +86°

	~~338~~		
	~~420~~		
	642	7.$\overset{1}{3}$	
	669	7.5	
	679	7.3	
	684	~~7.6~~ 8.4	02
	688	7.6	
	707	8.5	
b	713	7.2	
	722	8.5	04
c	748	7.6	
	752	5.8	
	758	7.6	
d*	76$\overset{5}{4}$	8.0	
	778	8.2	08
	790	~~8.0~~ 7.5	
a	805	6.6	
	807	7.9	
	840	8.1	
	880	7.6	
	893	Im. def.	
	2023	8.4	
	2024	8.7	
	2025	8.8	

e	2026	8.6
	2027	7.7
	2028	7.6
	2029	Light fading
	2030	
	2031	
	2032	
	2033	
	2034	
	2035	
	7	
	b	
	b^3	

~~765 8.0 06~~ See next page

Seq. at 15h +86°

f

g

h

* d is No. 764. Why was no. changed to 765? Retain original reading.

Tuesday, October 6, 1908

Bright Stars near North Pole

T' Plate AC 9480 cont.

Exp. 15h +86°

2029	8.6	
2030	8.7	
2031	8.1	
2032	8.5	
2033	8.8	
2034	8.6	01
2035	8.0	04
7	6.3	~~05~~ 04
b	6.4	~~09~~ 07
f^3	8.5	~~12~~ 09
765	7.9	04
a^4	7.2	03

seq. at 15h +86°

f	9.0
g	–
h	–

+27
−15
10 ⌊12
± 0.01

Tuesday, October 6, 1908

23 40

Copied XXVII, 110, 111

Bright Stars near the North Pole

Estimates of Brightness on I' Plate AC9503

Exp. at +90°					Exposure at 15m, 86°		
13	8.5		642	7.2		2028	7.6
$8\overset{3}{\cancel{8}}$	8.8		669	7.9		2029	8.7
105	8.8		679	7.4		2030	9.1
132	8.7		684	8.3	12	2031	8.5
238	8.5		688	7.8		2032	8.3
496	7.9		707	8.4		2033	8.7
601	7.5	b	713	7.6		2034	8.8 19
684	8.5		722	8.4	06	2035	8.1 06
722	8.3	c	748	7.8		f	6.3 ~~05~~ 04
765	7.6		752	5.9		g	6.4 ~~09~~ 07
778	7.8		758	7.8		f^3	8.6 : 01
977	8.0	* d	$76\overset{5}{\cancel{4}}$	8.0		765	7.9 04
1016	8.6		778	8.4	28		
1100	8.4		790	7.6			
1109	7.5	a	805	6.8		Seq. at 15m, +86°	
2001	8.8		807	7.9		f	.9 4
2004	8.8		840	8.3		g	–
2009	8.8		880	7.8		h	–
2034	8.5		893	8.4? star m. close			
2035	7.9		2023	8.5			
2036	8.0		2024	9.0			
2046	8.3		2025	9.0			
2049	8.5	l	2026	8.7			
1171	7.6		2027	7.8			
1156	8.7						

$$\begin{array}{r} +36 \\ -53 \\ 8\,\overline{)\,-17} \\ -0.02 \end{array}$$

d is 764. Why is number changed to 765? Retain first reading.

Images very small Faint stars difficult

Tuesday, October 6, 1908

2.35

North Polar Sequence

I 34622 Exp 93

Scale M Copied

Prismatic Companions

	b^1 1.9 2.1	2.1		n 9.7 n 9.7	A 2.6 2.8	2.8		
	b^2 2.6 2.8	2.8		q 10.1	a^1 5.9 6.1 6.0	6.05	10	
	b^3 t p			o $9.\overset{6}{8}$	b^1 7.0 7.2 7.7	7.45	23	
	a^5 1.7 1.9	1.9		p 9.9	a^4 6.2 6.4 6.7	6.55	31	
	c^1 3.0 3.2	3.2	Images difficult to measure. Poor		a^3 6.2 6.4 6.9	6.65	23	
	a^4				too nearly sub a^5 ~~6.4~~		$\begin{array}{r} +8 \\ -6 \\ 8\overline{)14} \\ \pm 18 \end{array}$	
	a^3 0.7? 0.9	0.9?			b^3 8.1			
	c^5 t p				c^7 9.7			
	c^3 3.1 3.3	3.3			b^2 8.2			
	f^1 4.8 5.0 5.0	5.00	00		c^2 9.0			
v.p	f^3 6.2 6.4 6.2	6.30	11		c^3 8.9			
	h 6.9 7.1 7.1	7.10	00		c^1 8.4			
	c^6 3.5 3.7	3.7			e 10.1			
	c^2 3.0 3.2	3.2			d 9.6			
	d 3.9 4.1	4.1			f^1 n.e			
	f^2 5.8 6.0 5.8	5.90	11		c^5 9.5			
	g 6.8 7.0 6.8	6.90	11		c^4 8.3			
	l 3.9 4.1	4.1			c^6 9.2			
p.m.	c^4 2.8 3.0	3.0	$\begin{array}{r} +8 \\ -8 \\ 10\overline{)6} \\ \pm 06 \end{array}$					
	c^7 3.7 3.9	3.9						
	k^3 $\overset{8}{9}.4$							
	k^1 $\overset{7}{8}.9$							
	i 7.6							
	l 8.7							
	m 9.0							
	k^2 7.9							
	k^4 8.7							
M. H.	k^5 8.8							

Tuesday, October 6, 1908

North Polar Sequence

I 34926 Exp 120

Scale M Copied

a⁵	2.8 3.0		
b¹	2.7 2.9		
a⁴	1.2 1.4		
b²	3.0 3.2		
b³	2.9 3.1		
c¹	3.1 3.3		
c²	3.7 3.9		
c³	4.0 4.2		
c⁴	3.7 3.9		
from c⁵	4.2 4.4		
c⁶	4.1 4.3		
c⁷	4.8 5.0		
d	4.5 4.7 4.8	4.75	10
e	4.9 5.1 5.0	5.05	10
a³	1.0 1.2	1.2	a.
f¹	5.7 5.9 5.7	5.80	11
f²	6.0 6.2 5.9	6.05	21
f³	6.2 6.4 6.5	6.45	01
g	6.9 7.1 6.8	6.95	12
h	7.3		+6 −5 12)11 ±09
i	7.6		
k¹	7.9		
k²	7.9		
k³	8.6		
k⁴	8.7		
k⁵	8.7		
l	8.7		
m	9.0		
n	9.6		

3.05

M. K.

r	10.1
p	9.8
o	9.2
q	9.9
s	10.3?

Prismatic Companions

A	2.8 3.0		
a¹	5.7 5.9		
a³	6.2 6.4		
a⁴	6.6 6.8		
a⁵	7.0 7.2 7.6	7.40	22
b¹	7.9		
b²	8.4 ~~9.4~~	±20	
b³	8.3		
c¹	8.5		
c²	9.0 ~~7.8~~		
c³	9.2		
c⁴	8.7		
c⁵	9.3 :		
c⁶	9.6		
c⁷	9.7		
d	9.8		
e	10.1		
f¹	n.s.		

Images poor
Difficult to measure

22.00

Wednesday, October 7, 1908

Copied

North Polar Sequence

I 34069 Whole and half aperture - Badly scratched

Scale M

marked end
•— 1a
•— 2B
•— 3c
Order 1, 2, 3

Exp. 1 Aperture "A"
" 3 " "B"

	Exp A aperture "B"										
est from a¹	2.9 3.1	3.1		a¹	Ǝ 2.1 2.3 2.3 2.5			k⁴ scratched			
b¹	4.0 5.2 5.7	5.45	23	b¹	3.9 4.1 4.6	4.35	32	k⁵	10.0		
a³	3.7 3.9	3.9			2.8 3.0			l	10.0		
a⁴	3.9 4.1	4.1			3.1 3.3			Exp C aperture "A"			
a⁵	4.8 5.0 4.9	4.95	01		3.7 3.9			a¹	3.0 3.2		
b²	5.8 6.0 6.1	6.05	01		4.9 5.1 5.1	5.10	00	b¹	4.9 5.1 5.1	5.10	00
b³	5.8 6.0 5.9	5.95	01		4.7 4.9 4.8	4.85	10	b²	5.7 5.9 5.9	5.90	00
* c¹	6.0 6.2 6.2 ~~6.5 6.7 6.5~~	6.20 ~~6.60~~	00 ~~11~~		4.9 5.1 5.0	5.05	10	a³	3.6 3.8	3.8	
c²	6.7 6.9 6.9	6.90	00		5.8 6.0 6.0	6.00	00	c²	6.7 6.9 6.7	6.80	11
c³	6.8 7.0 7.2	7.10	11		6.1 6.3 6.3	6.30	00	c⁵	6.8 7.0 6.9	6.95	01
from c⁴	6.2 6.4 6.2	6.30	11		4.9 5.1 5.6	5.35	32	b³	5.7 5.9 5.7	5.80	11
c⁵	6.9 7.1 7.0	7.05	10		5.9 6.1 6.0	6.05	10	a⁴	3.9 4.1	4.1	
c⁶	7.0 7.2 7.3	7.25	01		6.3 6.5 6.6	6.55	10	a⁵	4.7 4.9 4.8	4.85	10
c⁷	6.9 7.1 7.4	7.25	12		6.6 6.8 6.7	6.75	01	c³	6.9 7.1 7.0	7.05	10
d	7.7				6.5 6.7 6.8	6.75	10	c¹	5.9 6.1 5.8	5.95	13
e	7.9		+110 −87 22)197 ±098		6.8 7.0 7.1	7.05	01	c⁶	7.0 7.2 7.1	7.15	01
f¹	8.3				7.0 7.2 7.4	7.30	11	c⁴	5.9 6.1 6.2	6.15	10
f²	8.8				8.1			c⁷	7.3		+5 −7 20)12 ±06
f³	9.1				8.4			d	7.6		
"q"	scratched				8.1			e	7.7		
"p"	8.2				7.6			f¹	scratched 8.2		
"r"	nearly sup. 9.4				8.5			f²	‡9.3		
g	9.6				8.6			f³	8.9		
i	9.8				8.9			g	scratched		
h	9.7				8.9			h	9.7		
k¹	10.0			k²	def			i	9.7		
"o"	7.9			o	6.9 7.1 6.9	7.00	11	k²	10.0		
				k¹	9.2			"q"	8.7		
				k³	9.6	+10 −11 28)21 ±08		"o"	7.8		
								"p"	8.2		
								"r"	9.2		

22.47

Stars "o," "p," "q," "r" measured by Miss Leland.

M. K.

Prismatic Companions

Exp B

A	3.7 3.9
a¹	7.7
a³	sup
a⁴	def
a⁵	sup
b¹	9.1
b²	9.7
b³	10.0
c¹	9.7
Ǝ	7.9
c²	def

‡ "Examination of plate shows that f² in C could not possibly be 9.3 — a faint star-image is near and was probably measured. - Reject." Note on reduction sheet.

* Remeasured Wednesday Mar. 3, '09

a exp.

	1st scale	2nd scale
c¹	6.0	6.2

Wrong star may have been measured before.

Wednesday, October 7, 1908

2.17

Copied

North Polar Sequence

I 34084 Whole + Half Aperture

Marked and
↑ 3 · a
2 · B
1 · C
Order
1 aperture "A"
3 aperture "B"

Scale M

	Exp. A Aperture B			Exp. B							
a^1	v.p. 3.2 3.4	3.4		2.5 2.7			k^5 10.0			t	7.7
a^3	v.p. 3.8 4.0	4.0		3.1 3.3			m 10.½			k^3	10.1
a^4	v.p. 3.8 4.0	4.0		3.3 3.5			n 10.2			k^1	9.9
a^5	4.7 4.9 4.8	4.85	10	3.9 4.1			Exp C Aperture "A"			k^2	def
b^1	v.p. 5.3 5.5 5.6	5.55	10	3.8 4.0			a^1 v.p. 3.3 3.5			Prismatic Companion	
b^2	v.p. 5.8 6.0 5.7	5.85	21	4.2 4.4 4.9	4.65	33	a^3 v.p. 3.8 4.0			Exp B	
b^3	5.6 5.8 5.8	5.80	00	4.4 4.6 4.8	4.70	11	b^1 v.p. 4.9 5.1 5.5	5.30	22	A	3.6 3.8
c^1	5.8 6.0 fm 6.3	6.15	21	5.0 5.2 5.0	5.10	11	b^2 v.p. 5.5 5.7 6.0	5.85	12	b^1	8.9
c^2	6.5 6.7 6.7	6.70	00	5.7 5.9 5.7	5.80	11	c^7 6.8 7.0 7.2	7.10	11	a^1	7.5
c^3	6.7 6.9 6.9	6.90	00	5.8 6.0 5.9	5.95	01	c^2 6.5 6.7 6.8	6.75	10	b^2	9.7
c^4	5.8 6.0 6.5	6.25	33	5.0 5.2 5.2	5.20	00	c^5 6.9 7.1 6.8	6.95	12	a^3	8.1
c^5	6.1 6.3 6.9	6.60	33	5.8 6.0 5.8	5.90	11	b^3 v.p. 5.5 5.7 5.7	5.70	00	a^4	8.9
F	v.p. 2.9 3.1	3.1	a.	2.8 3.0	3.0	a.	F 3.1 3.3	3.3		a^5	8.6
c^6	6.7 6.9 6.9	6.90	00	6.0 6.2 6.2	6.20	00	a^4 3.8 4.0	4.0		~~b~~	
c^7	6.9 7.1 7.1	7.10	00	6.1 6.3 6.5	6.40	11	a^5 4.8 5.0 4.9	4.95	01	b^3	t.p.
d	7.0 7.2 7.2	7.20	00	6.4 6.6 6.6	6.60	00	c^3 6.9 7.1 6.9	7.00	11	c^1	9.7
e	7.6	7.6		6.7 6.9 6.8	6.85	10	c^1 5.9 6.1 6.0	6.05	10	F	7.7
f^1	7.8	+10 −9 24)19 ±08		6.9 7.1 7.0	7.05	10	c^4 5.8 6.0 5.9	5.95	01	c^2	scratched
f^2	8.4			7.7			g 8.4	+8 −10 20)18 ±09		c^3	n.a.
f^3	8.7			8.0			c^6 6.9			c^4	9.7
o	7.7			6.5 6.7 6.8	6.75	10	d 7.3				
p	7.9			6.9 7.1 7.3	7.20	11	f^1 im def				
q	8.3			7.7			f^2 8.3				
h	8.9			8.2							
g	8.8			in h 8.3 8.8	8.3	a	f^3 8.9				
h	9.0			8.8	+11 −10 28)21 ±08		g 9.0				
i	9.2			8.9			h 9.5				
k^1	9.7			9.3			i 9.6				
k^2	10.0			9.5							
k^3	10.0			9.6			p 7.9				
l				10.0							
k^4				9.7			q 9.0				

3.00

M. H

e in Exp C was omitted. M. E. H.

Thursday, October 8, 1908

23.37

Copied

North Polar Sequence

P

C 1656.8 Whole + ½ Aperture Scale C 15350

marked and
3 · a
2 · B
1 · C
Order
1 aperture "B"
3 " "A"

↑ 3	Exp A Aperture "A"			Exp B			Exp C Aperture "B"			
a^1	not on plate			c^3 5.4 5.1 4.9	5.00	11	6.0 5.7 6.1	5.90	22	
a^3				q 7.0 6.7 7.0	6.85	12	7.9			
a^4				~~t 6.3~~						
a^5				c^1 4.6 4.3 4.4	4.35	10	5.6 5.3 5.6	5.45	12	
				b 6.3 6.0 6.0	6.00	00	6.8 6.5 6.9	6.70	22	
				c^6 5.0 4.7 4.9	4.80	11	6.3 6.0 6.1	6.05	01	
				p 6.8 6.5 6.7	6.60	11	7.0 6.7 7.1	6.90	22	
b				c^2 4.7 4.4 ·	4.4		5.7 5.4 5.3	5.35	01	
c^1	5.7 5.4 5.6	5.50	11	c^7 5.5 5.2 5.1	5.15	01	6.6 6.3 6.6	6.45	12	
c^2	6.0 5.7 5.9	5.80	11	d 5.9 5.6 5.8	5.70	11	6.6 6.3 6.6	6.45	12	
c^3	6.3 6.0 6.2	6.10	11	e 6.4 6.1 6.1	6.10	00	6.9 6.6 6.9	6.75	21	
k^1	n.e			f^1 6.8 6.5 6.8	6.65	12	7.0			+14 −12
i	9.9	9.9		i * 9.3	+8 −8 20)16 ±08		9.8			18)26 ±14
c^6	6.6 6.3 6.5	6.40	11	g 7.8			8.7			
c^7	6.9 6.6 6.7	6.65	01	k^3 def						
d	6.7 6.4 6.7	6.55	21	h 8.0			9.3			
e	6.9			k^1 9.0						
f^1	7.4			f^2 7.0			7.7			
f^2	7.8			f^3 7.4			8.0			
f^3	8.0			r 7.8			8.3			
o	6.8 6.5 6.7	6.60	11	k^2 9.3						
p	7.4	+7 −7								
q	7.9	14)14 ±10								
r	9.1									
h	9.4									
g	8.9									

* Examined by M.E.H. Dec. 9, 1908 – evidently ~~should be~~ intended for 8.3

Images not comparable with scale
Difficult

M. H

Thursday, October 8, 1908

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North Polar Sequence

Scale $\overset{P}{C}$ 15350 C 16567 Whole and half aperture

	Exp a					Exp B				
c³	5.2	4.9	$\overset{2}{5.5}$	5.05	1 2	6.5	6.2	6.2	6.20	0 0
q	6.9	6.6	7.1	6.85	2 3			7.9	7.9	
d	5.8	5.5	5.9	5.70	2 2	6.8	6.5	6.7	6.60	1 1
* o	6.5	6.2	6.3	6.25	0 1	7.0	6.7	6.9	6.80	1 1
c¹	4.9	4.6	4.8	4.70	1 1	5.8	5.5	5.8	5.65	1 2
c⁶	6.0	5.7	5.9	5.80	1 1	6.6	6.3	6.6	6.45	1 2
f¹	6.8	6.5	6.8	6.65	1 2			7.0		
c²	5.6	5.3	4.9	5.10	2 2	6.2	5.9	5.9	5.90	0 0
c⁷	6.1	5.8	5.9	5.85	0 1	6.7	6.4	6.6	6.50	1 1
e	6.5	6.2	6.1	6.15	0 1			7.0		+7 −5
* o	6.6	6.3	6.5	6.40	1 1			~~6.9~~	meas. above	14)12 ±09
f²			7.1		+16 −12			7.7		
g			7.7		22)28 ±13			8.8		
f³			7.5					8.0		
k³			9.8							
k²			9.0							
k¹			8.8							
i			8.3					10.0		
p			6.7					7.7 ~~6.6~~		
r			7.8					8.6 ~~7.8~~		
h			8.0					9.1		
k⁴			10.0							

*meas twice
mean 6.32

Measurements very difficult

M. H

Thursday, October 8, 1908

North Polar Sequence

C 16556 Whole and half aperture Scale $\overset{P}{C}$ 15350

	Exp a					Exp B				
c³	6.0	5.7	5.9	5.80	1 1	$\overset{6}{7.5}$	6.2	6.6	6.40	2 2
p	6.7	$\overset{4}{6.3}$	7.0	6.70	3 3			7.2	7.2	
c⁶	6.1	5.8	6.0	5.90	1 1	6.7	6.4	6.7	6.55	2 1
c¹	5.2	4.9	4.9	4.90	0 0	$\overset{5}{4.9}$	5.6	5.8	5.70	1 1
o	6.6	6.3	6.7	6.50	2 2			6.9	6.9	
c²	5.8	5.5	5.7	5.60	1 1	6.3	6.0	6.2	6.10	1 1
c⁷	6.7	6.4	6.5	6.45	0 1	6.8	6.5	6.8	6.65	1 2
q			7.0	7.0				7.9	7.9	
d	6.4	6.1	6.2	6.15	1 0	6.7	6.4	6.8	6.60	2 2
e	6.7	6.4	6.7	6.55	2 1			7.0		+9 −9
r			7.9		+10 −11			8.3		12)18 ±15
f¹			6.9		18)21 ±12			7.2		
f²			7.2					7.9		
f³			7.8					8.0	7.9 Remeas. 11-5-11	
g			7.8					8.6		
k¹			9.2					9.9		
k³			9.7							
h			8.3					8.0	9.0 Remeas. 11-5-11	
k²			9.1							
i			8.9					9.4		

Measures very difficult

Owing to a Discordance in plotting for Rel. Magn. stars f³ and h were remeasured May 11, 1911. Original ~~measure~~ scale reading of h probably intended to be 9.0.

0.30

M. H

Thursday, October 8, 1908

3.18

Copied North Polar Sequence

I 35142 Exp 60m

Scale M					
c¹	3.0	3.2		3.2	
i	6.8	7.0	7.0	7.00	00
c³	3.8	4.0		4.0	
f¹	5.2	5.4	5.4	5.40	00
c⁶	4.1	4.3	4.2	4.25	10
g	6.3	6.5	6.8	6.65	12
c²	3.7	3.9		3.9	
e	4.7	4.9	4.8	4.85	10
f³	5.9	6.1	6.1	6.10	00
c⁷	4.5	4.7	4.6	4.65	10
f²	5.6	5.8	5.7	5.75	01
h	6.7	6.9	7.1	7.00	11
d	4.3	4.5	4.6	4.55	10
k³		7.9			+6 −4 20)10 ±05
l		8.6			
k⁴		8.3			
k¹		7.5			
k²		7.6			
k⁵		8.5			
m		8.8			
o		9.1			
q		9.9			
n		9.3			
p		9.8			

Prismatic Companions

A	2.3	2.5		2.5	a.
a¹	5.8	6.0	5.9	5.95	01
a³	6.2	6.4	$\overset{6}{7.7}$	6.55	21
3	5.8	6.0	5.9	5.95	01
a⁴	6.7	6.9	6.9	6.90	00
a⁵	7.0	7.2	7.2	7.20	00
b¹			7.6		+1 −4 10)5 ±05
b²			8.0		
f³			7.9		
c⁴			8.2		
c¹			8.0		
c³			8.9		
e			10.0		
c²			8.7		
c⁶			9.0		
c⁷			def		
d			9.3		
c⁵			9.0		

M. H.

Thursday, October 8, 1908

Copied

North Polar Measures repeated with Scale I 32811

C 16568 Whole & Half Aperture

Scale M	Exp a					Exp B					Exp C				
c³	4.9	5.1	5.1	5.10	00	3.5	3.7				4.9	5.1	4.9	5.00	11
c¹	3.8	4.0		4.0		2.7	2.9				4.0	4.2		4.2	a.
o	6.7	6.9	6.9	6.90	00	5.2	5.4	5.6	5.50	11	6.7	6.9	6.8	6.85	10
diff c⁷	5.8	6.0	5.7	5.85	21	3.7 v.b	3.9				5.7	5.9	5.8	5.85	10
" c⁶	5.3	5.5	5.3	5.40	11	3.2 v.b	3.4				5.0	5.2	5.1	5.15	01
c²	4.8	5.0	4.9	4.95	01	2.8	3.0				4.0	4.2		4.2	
d	5.9	6.1	5.9	6.00	11	4.2	4.4	4.6	4.50	11	5.9	6.1	5.9	6.00	11
f¹			7.7	7.7		5.9	6.1	6.5	6.30	22	7.0	7.2	7.6	7.40	22
e	6.7	6.9	6.9	6.90	00	5.3	5.5	5.4	5.45	10	6.7	6.9	6.8	6.85	10
p	7.0	7.2	7.4	7.30	11	5.9	6.1	5.8 ~~7.7~~	5.95	12	7.1	7.3	7.4	7.35	10
g			8.4		+5 −5 16)10 ±06			7.3					8.3		+7 −6 16)13 ±08
f²			8.4			6.8	7.0	7.2	7.10	11			8.1		
f³			8.6					7.8		+7 −7 12)14 ±12			8.7		
r			9.2					8.0 ~~9.3~~					9.1		
g			9.2					8.2					8.9		
h			9.8					8.7					9.7		
i			10.0					9.1					9.9		
k¹								9.5					im def		
k²								9.7							
k³								10.1							

Comparisons much easier than Scale C 15358 but stars brighter ~~fainter~~ than d are still difficult

350

M. H.

Friday, October 9, 1908

2 30

Copied XXVIII, 112, 113

Bright Stars near North Pole

Direct Estimates I' Plate AC 9485

Exp. at +90°					Exp. at 21^h, +86°		
13	8.4	907	7.6		2037	8.4	
83	8.6	948	8.0		2038	8.6	
105	8.0	* 949	9.0	Est. 8.7, May 3, 1909. Too far from center for safe est. Repeat?	2039	8.7	
132	8.3	975	8.3		2040	8.4	
238	8.3	977	8.2	04	2041	8.9	
496	8.0	1011	8.6 ~~7.6~~ scratched		2042	8.4	
601	7.5	1016	8.5	06	2043	7.8	
684	8.6	1030	7.0		2044	8.4	
722	8.7	1043	7.4 scratched		c 2045	8.3	
765	7.9	1044	7.5		2046	8.3	18
778	8.0	1100	scratched		2047	8.5	
977	8.3	a 1109	7.4	02	2048	8.2	
1016	8.6	1110	7.6 scratched		2049	87	08
1100	8.5	1081	7.6		2050	7.8	
1109	7.5	1156	8.7	01	B	4.6	01 03
1156	8.9	1157	scratched		E	5.6	24 27
1171	7.4	1166	7.8		a^5	7.7	02 00
2001	9.0	1171	7.5 ~~8.1~~	10	c^4	8.7	22
2004	8.7	1176	8.1		C	5.1	~~13~~ 15
2009	scratched	b 1189	7.9		D	5.5	~~17~~ 18
2034	8.7	1208	7.4		2051	8.3	
2035	8.0	1242	7.0		2036	8.2	10
2036	scratched	1244	8.4		Seq. at 21^h, +86°		
2046	8.5	1246	7.5		d	8.5	+80
2049	8.7	1251	7.2		e	9.1	−29 11⌊51 ±0.05
		1279	6.9		f		

3 20

Monday, October 12, 1908

23, 25 Copied p. 166

North Polar Sequence

I 28790 Taken with wire screen

Scale M

	Exp A without screen	Reading 1	Reading 2	Mean 1+2		Exp. B with wire screen		
						3 4.8 5.0 5.6	5.30	3 3
a^1	2.6 2.8	2.8	2.9	2.85	01	4.7 4.9 5.3	5.10	2 2
b^1	3.7 3.9	3.9	4.0	3.95	10	6.0 6.2 6.7	6.45	2 3
b^2	4.0 4.2 4.2	4.20	00 4.30	4.25	01	6.7 6.9 7.0	6.95	1 0
c^5	5.0 5.2 5.6	5.40	27 5.40	5.40 see next page	00	* 8 ~~9~~.0	8 ~~9~~.0	
~~f^1~~	2 ~~4.6~~							
a^4	0 3.4 3.2	3.2				5.7 5.9 5.8	5.85	1 0
b^3	3.9 4.1	4.1				6.7 6.9 7.0	6.95	1 0
c^2	4.8 5.0 5.4	5.20	2 2			7.8		
d	5.7 5.9	5.9				8.8		
f^1	6.7 6.9 6.8	6.85	11			9.8		
c^1	4.3 4.5 4.9	4.70	2 2			6.9 7.1 7.0	7.05	1 0
a^5	3.2 3.4	3.4				5.8 6.0 5.8	5.90	1 1
c^4	4.0 4.2	4.2				7.3		
c^3	5.5 5.7 5.7	5.70	00			8.1		
e	6.2 6.4 6.7	6.55	2 1			9.0		
a^3	2.8 3.0	3.0	~~3.2~~	~~3.10~~	~~11~~	5.3 5.5 5.6	5.55	1 0
c^6	5.4 5.6 5.8	5.70	11			* 8 diff ~~7~~.6		
c^7	5.8 6.0 5.8	5.90	11			8.6		+11 −11 18)22 ±02
f^2		7.6	+10 −10 18)20 ±11					
g		8.1						
k^3		9.7						
f^3		7.9						
h		8.6						
k^1		9.2						
k^2		9.3						
i		8.8						
k^4		9.8						

Images ~~Exps.~~ of bright stars very diff to measure as they are surrounded by other images.

*mistake of a unit

M. H. Comparison difficult

Monday, October 12, 1908

Copied

Repeated measures

Scale M

I 28790

	Exp a	Readings (1)	Readings (2)	Mean		Exp B	Readings (1)		Readings (2)	Mean	
a^1	2.7 2.9	2.9	2.8	2.85	10	4.7 4.9 5.0	4.95	10	5.10	5.02	01
b^1	3.8 4.0	4.0	3.9	3.95	01	6.5 6.7 6.7	6.70	00	6.45	6.58	12
b^2	4.0 4.2 4.4	4.30^{11}	4.20	4.25	10	6.9 7.1 7.0	7.05	10	6.95	7.00	00
c^5	5.1 5.3 5.5	5.40^{11}	5.30^{4}	5.40	00	8.2	8.2		8.0	8.10	11
a^3	3.0 3.2	3.2	3.0	3.10	11	5.5 5.7 5.6	5.65	10	5.55	5.60	00
c^2	5.2 5.4 4.2^{5}	5.30^{11}	5.20	5.25	10	7.8	7.8		7.8	7.80	00
d	5.8 6.0 5.8	5.90^{11}	5.9	5.90	00	8.8	8.8		8.8	8.80	00
f	6.8 7.0 6.8	6.90^{11}	6.85	6.88	01	9.8	9.8		9.8	9.80	00
c^6	5.6 5.8 5.6	5.70^{11}	5.70	5.70	00	8.6	8.6		8.6	8.60	00
a^4	3.2 3.4	3.4	3.2	3.30	11	5.5 5.7 5.8	5.75	10	5.85	5.80	00
Ƶ	2.6 2.8	2.8	·	2.8	a.	4.8 5.0 5.5	5.25	23	5.30	5.28	10
b^3	4.0 4.2 4.7	4.45^{33}	4.1	4.28	12	6.9 7.1 7.0	7.05	10	6.95	7.00	00
c^3	5.5 5.7 5.7	5.70^{00}	5.70	5.70	00	8.3	8.3		8.1	8.20	11
a^5	3.4 3.6	3.6	3.4	3.50	11	5.7 5.9 5.7	5.80	11	5.90	5.85	01
e	6.0 6.2 5.9	6.05^{21}	6.55	6.30	23	9.1	9.1		9.0	9.05	10
c^1	4.1 4.3 4.9	4.60^{33}	4.70	4.65	01	7.0 7.2 7.2	7.20	00	7.05	7.12	11
c^4	4.0 4.2	4.2	4.2	4.20	00	7.3	7.3		7.3	7.30	00
c^7	5.8 6.0 5.9	5.95^{01}	5.90	5.92	10	8.7	8.7		8.6	8.65	10
f^3	7.9		7.9	7.90	00						
k^3	9.6		9.7	9.65	01						
i	8.8		8.8	8.80	00						
k^4	9.8		9.8	9.80	00						
h	8.5		8.6	8.55	10						
f^2	7.3		7.6	7.45	12						
g	8.5		8.1	8.30	22						
k^2	9.4		9.3	9.35	01						
k^5	10.0		·	10.0	a.						
l	10.1		·	10.1	a.						
k^1	9.1		9.2	9.15	10						

+14
−13
22)27
±12

+7
−5
18)12
±07

+8
−6
18)14
±08

+17
−16
54)33
±06

0.0

m H

Monday, Oct. 12, 1908

0.0

Copied p 168

North Polar Sequence

I 28807 Wire Screen used

Isochromatic, with color screen.

Scale M

	Exp a without screen			Exp B with screen		
a^1	3.0 3.2 ·	3.2		6.1 6.3 6.6	6.45	12
b^1	4.9 5.1 5.2	5.15	10	t.f. 8.1	8.1	
b^2	5.7 5.9 5.9	5.90	00	9.1	9.1	
d	t.f. 7.8	7.8				
c^2	6.6 6.8 7.0	6.90	11	10.0	10.0	
c^1	6.1 6.3 6.2	6.25	10	9.2	9.2	
a^5	3.1 3.3 ·	3.3		6.1 6.3 6.2	6.25	10
c^4	4.9 5.1 5.4	5.25	12	sub		
c^5	5.6 5.8 5.8	5.80	00	8.8	8.8	
a^3	3.7 3.9	3.9		6.7 6.9 6.9	6.90	00
c^6	7.0 7.2 7.2	7.20	00			
c^3	6.8 7.0 7.2	7.10	11	n.a.		
a^4	4.0 4.2 4.4	4.30	11	7.0 7.2 7.3	7.25	01
Ƶ	2.9 3.1	3.1		6.0 6.2 6.1	6.15	01
c^7	6.0 6.2 6.7	6.45	23	9.6	9.6	
b^3	3.9 4.1 4.3	4.20	11	6.9 7.1 7.2	7.15	10
e	6.9 7.1 7.1	7.10	00			
f^1	7.8					
f^3	9.6					
f^2	9.0 scratched					
g	9.9					
h	n a					

+10
−8
24)18
±08

+4
−3
12)7
±06

m H

Monday, October 12, 1908

Copied

Repeated measures

I 28807 Wire screen used

Scale M

	Exp a			Readings 1	Readings 2	Mean		Exp B						
b^1	4.9	5.1	5.2	5.15^{10}	5.15	5.15	00			8.2	8.2	8.1	8.15	01
c^1	6.0	6.2	6.1	6.15^{01}	6.25	6.20	00			9.4	9.4	9.2	9.30	11
c^5	5.7	5.9	5.7	5.80^{12}	5.80	5.80	00			8.7	8.7	8.8	8.75	10
a^1	3.0	3.2		3.2	3.2	3.20	00	6.2	6.4	6.1	6.25^{21}	6.45	6.35	20
b^2	5.8	6.0	5.9	5.95^{01}	5.90	5.92	10			9.1	9.1	9.1	9.10	00
F	2.9	3.1		3.1	3.1	3.10	00	5.9	6.1	5.9	6.00^{11}	6.15	6.08	11
a^4	3.9	4.1	4.7	4.40^{33}	4.30	4.35	01	6.9	7.1	7.4	7.25^{12}	7.25	7.25	00
b^3	4.0	4.2	4.5	4.35^{31}	4.20	4.28	11	7.0	7.2	7.2	7.20^{00}	7.15	7.18	00
d	t.f		7.8	7.8	7.8	7.80	00							
e	6.9	7.1	7.0	7.05^{10}	7.10	7.08	10							
c^2	6.7	6.9	6.9	6.90^{00}	6.90	6.90	00			10.0	10.0	10.0	10.00	00
c^6	6.9	7.1	7.2	7.15^{10}	7.20	7.18	00							
c^7	6.1	6.3	6.5	6.40^{11}	6.45	6.42	00			9.7	9.7	9.6	9.65	10
a^3	3.8	4.0		4.0	3.9	3.95	01	6.7	6.9	7.0	6.95^{10}	6.90	6.92	10
a^5	3.0	3.2		3.2	3.3	3.25	01	6.0	6.2	6.2	6.20^{00}	6.25	6.22	00
c^4	4.9	5.1	$\overset{5}{6.4}$	5.25^{12}	5.25	5.25	00			sup.				
c^3	6.9	7.1	7.0	7.05^{10}	7.10	7.08	$\overset{1}{0}0$							
f^1			7.8		7.8	7.80	00							
f^3			9.7		9.6	9.65	10							
f^2			9.1 scratched		9.0	9.05	10							
g			10.0		9.9	9.95	01							

+10
−12
24)22
±09

+5
−4
12)9
±08 sup

+6
−4
24)10
±04

+6
−5
42)11
±03

0.30

M. H.

3.27 Monday, October 12, 1908

Copied p. 170

Polar Sequence

I 28$\overset{7}{8}$71 Wire screen

Scale M

	Exp a					m 10.1 Exp B				
F	2.5	2.7		2.7						
a^1	2.3	2.5		2.5		4.9	5.1	5.5	5.30	22
a^3	3.0	3.2		3.2		5.6	5.8	5.9	5.85	01
a^4	3.3	3.5		3.5		5.7	5.9	5.9	5.90	00
a^5	3.5	3.7		3.7		5.9	6.1	6.0	6.05	10
b^1	3.9	4.1		4.1		6.0	6.2	6.5	6.35	21
b^2	4.6	4.8	4.9	4.85	01	6.7	6.9	6.8	6.85	10
b^3	def					6.9	7.1	7.0	7.05	10
c^1	4.9	5.1	5.0	5.05	10	7.0	7.2	7.3	7.25	01
c^2	5.7	5.9	5.7	5.80	11			7.8	7.8	
c^3	5.7	5.9	5.8	5.85	10			7.9	7.9	
c^4	4.4	4.6	4.8	4.70	11	7.0	7.2	7.1	$7.\overset{1}{0}5$	$\overset{0}{2}1$
c^5	5.7	5.9	5.8	5.85	10			8.0		
c^6	5.8	6.0	6.4	6.20	22			8.0		
c^7	6.0	6.2	6.6	6.40	22			8.5		
d	6.3	6.5	6.4	6.45	10			8.4		
e	6.1	6.3	6.7	6.50	22			8.9		
f^1	6.9	7.1	6.9	7.00	11			9.3		
f^2	7.1	7.3	7.6	7.45	12	4.8	5.0	5.5 9.7	5.25	23
f^3			7.9					10.1		
g			8.1							
h			8.5							
i			8.6							
k^1			9.2							
k^2			9.0							
k^3			9.6							
k^4			9.8							
k^5			9.9							
l			10.0							

+16
−10
24)26
±10

+11
−7
20)18
±09

M H

Monday, October 12, 1908

Copied

Remeasured

I 28771 — Wire screen used

Scale M

	Exp a				p169	mean		Exp B				p169		
F	2.6	2.8		2.8	2.7	2.75	01	4.9	5.1	5.1	5.10^{00}	5.25	5.18	10
a¹	2.4	2.6		2.6	2.5	2.55	01	5.0	5.2	5.2	5.20^{00}	5.30	5.25	01
a³	3.0	3.2		3.2	3.2	3.20	00	5.7	5.9	5.8	5.85^{10}	5.85	5.85	00
a⁴	3.2	3.4		3.4	3.5	3.45	01	5.6	5.8	5.8	5.80^{00}	5.90	5.85	01
a⁵	3.3	3.5		3.5	3.7	3.60	11	5.9	6.1	5.8	5.95^{12}	6.05	6.00	00
b¹	4.0	4.2		4.2	4.1	4.15	01	6.5	6.7	6.7	6.70^{00}	6.35	6.52	21
b²	4.7	4.9	5.0	4.95^{10}	4.85	4.90	11	6.8	7.0	6.8	6.90^{11}	6.85	6.88	01
b³	def			def	def			6.8	7.0	6.8	6.90^{11}	7.05	6.98	10
c¹	4.8	5.0	5.0	5.00^{00}	5.05	5.02	00	7.0	7.2	7.2	7.20^{00}	7.25	7.22	00
c²	5.5	5.7	5.7	5.70^{00}	5.80	5.75	10			7.7	7.7	7.8	7.75	10
c³	5.7	5.9	5.8	5.85^{10}	5.85	5.85	00			8.0	8.0	7.9	7.95	01
c⁴	4.2	4.4	4.8	4.60^{22}	4.70	4.65	01	7.0	7.2	7.1	7.15^{01}	7.05 1	7.10 5	~~22~~
c⁵	5.8	6.0	5.8	5.90^{11}	5.85	5.88	01			7.9	+4 −5 20)9 ±04	8.0	7.95	10
c⁶	5.9	6.1	5.9	6.00^{11}	6.20	6.10	11			8.3		8.0	8.15	12
c⁷	6.1	6.3	6.2	6.25^{10}	6.40	6.32	11			8.6		8.5	8.55	01
d	6.0	6.2	6.6	6.40^{32}	6.45	6.42	00			8.4		8.4	8.40	00
e	6.4	6.6	6.8	6.70^{11}	6.50	6.60	11			8.8		8.9	8.85	01
f¹	6.8	7.0	6.9	6.95^{01}	7.00	6.98	00			9.1		9.3	9.20	11
f²			7.6	~~7.4~~	7.45	7.52	11			9.7		9.7	9.70	00
f³			7.9	7.9	7.9	7.90	00			9.9		10.1	10.00	11
g			8.0	+9 −9	8.1	8.05	01							+89 −13 40)22 ±06
h			8.6	22)18 ±08	8.5	8.55	01							
i			8.7		8.6	8.65	10							
k¹			9.2		9.2	9.20	00							
k²			9.0		9.0	9.00	00							
k³			9.7		9.6	9.65	10							
k⁴			9.9		9.8	9.85	10	+12 −13 58)25 ±04						
k⁵			9.9		9.9	9.90	00							
l			10.0		10.0	10.00	00							
m			10.2		10.1	10.15	01							

M. H.

Monday, October 12, 1908

3.05

Copied

North Polar Sequence

Scale M

	Ma 349					Tuesday, October 13, 1908					Mean 1+2	
c¹	2.0	2.2		2.2	a.	2.0	2.2		2.2		2.20	00
d	2.9	3.1		3.1	a.	3.0	3.2		3.2		3.15	10
c²	2.4	2.6		2.6	a.	2.2	2.4		2.4		2.50	11
f¹	5.0	4.2	4.0	4.10	11	3.9	4.1		4.1		4.10	00
k³			8.3	8.3	.a			8.3	8.3		8.30	00
g	6.1	6.3	5.9	6.10	22	6.0	6.2	6.0	6.10	11	6.10	00
e	3.7	3.9		3.9	a.	3.8	4.0		4.0		3.95	10
c³	2.8	3.0		3.0	a.	2.7	2.9		2.9		2.95	01
~~c⁷~~	~~4.0~~	wrong star				3.1 ~~4.2~~	3.3	~~4.3~~	3.3		3.3	.a
f²	4.7	4.9	4.9	4.90	00	4.8	5.0	4.9	4.95	01	4.92	01
i	6.8	7.0	6.9	6.95	01	6.9	7.1	6.9	7.00	11	6.98	00
f³	5.0	5.2	5.2	5.20	00	5.4	5.6	5.3	5.45	21	5.32	11
h	6.4	6.6	6.3	6.45	21	6.7	6.9	6.7	6.80	11	6.62	22
~~c⁶~~	~~3.9~~	4.1 wrong star			+5 −5 12)10 ±08	2.9	3.1		3.1	+5 −5 10)10 ±10	3.1	.a
b¹			7.6					7.4			7.50	11
l			8.7					8.9			8.80	11
n			9.6 in [illegible]					9.7			9.65	01
q			10.1					10.1			10.10	00
o			9.4					9.7			9.55	31
r			10.2? do not see					probably not on plate			10.2?	a.
k⁴			8.7					8.7			8.70	00
m			8.9					9.0			8.95	10
k²			7.4					7.8			7.60	22
k⁵			8.7					8.7			8.70	00
p			9.8					9.8			9.80	00

+11 −14 44)25 ±06

Images poor on plate. Diff to meas near edge.

M. H.

Thursday, October 15, 1908

Copied

North Polar Sequence

Ma 275

Scale M

f² prob. meas. by mistake at first

c^1	1.6	1.8				u	9.7
c^6	2.7	2.9				v	9.8
c^2	2.0	2.2					
i	5.9	6.1	5.8	5.95	1 2		
d	2.7	2.9					
f^2	3.9	4.1					
k^1	6.3	6.5	6.3	6.40	1 1		
c^3	2.5	2.7					
f^1	3.~~8~~3	3.5					
k^2	6.7	6.9	6.7	6.80	1 1		
e	2.9	3.1					
f^3	4.2	4.4	4.9	4.65	2 3		
g	5.2	5.4	5.3	5.35	0 1		
h	5.8	6.0	5.8	5.90	1 1		
c^7	2.7	2.9			+7 −8 12)15 ±1.2		
m		7.8					
k^5		7.3					
k^4		7.6					
k^3		6.9					
l		7.8					
n		8.3					
r		9.2					
o		8.2					
p		8.7					
q		8.9					
s		9.3					
t		9.6					
w		10.2					

m H

Thursday, Oct 15, 1908

North Polar Sequence

Ma 275	Argelander's Ma 349	Ma $\frac{349}{245}$
~~d d~~	c^2 2 c^3	c^2 3 c^3
c^2 2 c^3	c^3 5 d	c^3 5 d
c^3 4 d	d 5 e	d 5 e
d 4 e	e 4 f^1	e 4 f^1
e 3 f^1	f^1 5 f^2	f^1 6 f^2
f^1 5 f^2	f^2 3 f^3	f^2 3 f^3
f^2 3 f^3	f^3 3 g	f^3 2 g
f^3 2 g	g 2 h	g 3 h
g 2 h	h 2 i	h 2 i
h 1 i	i 3 k^1	i 3 k^1
i 3 k^1	k^1 2 k^2	k^1 2 k^2
k^1 1 k^2	k^2 4 k^3	k^2 3 k^3
k^2 2 k^3	k^3 2 k^4	k^3 3 k^4
k^3 3 k^4	k^4 1 k^5	k^4 1 k^5
k^4 2 k^5	k^5 0 l	k^5 0 l
k^5 1 l	l 2 m	l 2 m
l 1 m	m 3 n	m 3 n
m 3 n	n 0 o	n 0 o
n 1 o	o 4 p	o 3 p
o 6 p	p 2 q	p 5 q
p 2 q	q r not seen	q r not seen
q 1 r		r s
r 1 s		
s 0 t		
t 1 u		
u 1 v		
v 3 w		

m. H

Copied ~~XVIII~~, 114,115

Friday, October 16, 1908

Bright Stars near North Pole

Direct Estimates 7' Plate AC 9505

Exp. at +90°		Exp. at 21^h, +86°					
13	8.5	907	7.4		1279	6.6	
83	8.7	948	7.9		2037	8.1	
105	7.9	* ~~949~~	~~8.1~~	see next page	2038	8.5	
132	8.4	975	8.0		2039	8.7	
238	8.4	977	8.0	24	2040	8.4	
496	8.0	1011	8.8		2041	8.9	
601	7.3	1016	8.5	06	2042	8.3	
684	8.2	1030	6.~~8~~ 7		2043	7.9	
722	8.3	1043	7.0		2044	8.0	
765	8.0	1044	7.5		c 2045	8.1	
778	8.2	1100	8.3 ~~7.8~~	19	2046	8.3	18
977	8.3	a 1109	7.5	08	2047	8.0	
1016	8.6	1110	7.9		2048	7.9	
1100	8.4	1081	7.5		* 2049	8.4	22
1109	7.5	1156	8.7	01	2050	7.8	
1156	8.7	1157	8.2		2036	8.0	10
1171	7.4	1166	7.6		2051	8.1	
2001	9.1	1171	7.4	00	B	4.6	~~01~~ 03
2004	8.5	1176	7.8		E	5.7	~~14~~ 17
2009	8.8	b 1189	7.7		a^5	7.5	~~22~~ 20
2034	8.8	1208	7.4		c^4	8.7	22
2035	8.0	1242	6.8		C	5.0	~~23~~ 25
2036	8.1	1244	8.2		D.	5.6	~~07~~ 08
2046	8.~~8~~ 4	1246	7.5		Seq at	21^h, +86°	
2049	~~9.0~~ 8.6	1251	7.3		d	8.6	
					e	9.1	

+168
- 09
13) 159
+0.12

* Orig reading out by a unit.

Friday, October 16, 1908

Bright Stars near North Pole

Estimates of Standard Sequence at 3^h, +86°

7' Plate AC 9473
f too ft on this plate

7' Plate AC 9475
f 9.1
g too ft

The other stars have been measured in the regular list of bright stars.

Monday, May 3, 1909 Plate AC 9505 (see p. 174)
No. 949 Exp. at +86°. Estimated 8.7
Reject previous est. 8.1. A star-like defect of about the eighth magnitude was probably measured instead of the star.

Saturday, October 17, 1908

Copied North Polar Sequence

MA 275 Fourth Measurement

Scale M

c¹	1.5	1.7		1.7	
i	5.9	6.1	~~6~~5.9	6.00	i i
d c³	2.4	2.6		2.6	
e	2.9	3.1		3.1	
f¹	3.5	3.7		3.7	
f³	4.7	4.9	4.8	4.85	i o
c²	2.0	2.2		2.2	
g	5.4	5.6	5.6	5.60	o o
k¹	6.~~k~~3	6.5	6.4	6.45	i o
c⁶	2.8	3.0		3.0	
k³	7.0	7.2	7.0	7.10	i i
f²	3.8	4.0		4.0	
k²	6.6	6.8	6.7	6.75	o i
c⁷	2.7	2.9		2.9	
c⁵	2.3	2.5		2.5	
h	5.7	5.9	5.8	5.85	i o
k⁵			7.5		+5 −3 14)8 ±06
l			7.8		
k⁴			7.6		
n			8.3		
q			8.9		
s			9.2		
w			10.2		
m			7.9		
r			9.1		
u			9.7		

v	9.9
o	8.1
p	8.7
t	9.6

M. H. Diff to measure bright stars

Saturday, October 17, 1908

Copied North Pole Sequence

I 35546 Large prism

Scale M

F	2.8	3.0		3.0	a.
a³	3.3	3.5		3.5	a.
c¹	5.7	5.9	5.7	5.80	1 1
b³	5.2	5.4	5.3	5.35	0 1
c³	6.4	6.6	6.7	6.65	0 1
e	7.0	7.2	7.3	7.25	0 1
a⁵	3.9	4.1		4.1	a.
c⁴	5.4	5.6	5.7	5.65	0 1
c²	6.0	6.2	6.0	6.10	1 1
c⁶	6.5	6.7	6.9	6.80	1 1
c⁵	6.4	6.6	6.7	6.65	0 1
c⁷	6.7	6.9	6.8	6.85	1 0
a⁴	3.1	3.3		3.3	a.
d	6.8	7.0	6.9	6.95	0 1
f²		8.2			+8 −5 20)13 ±06
f¹		7.7			
f³		8.7			
g		8.8			
h		9.4			
i		9.2			
k¹		9.8			
k²		10.0			
k³		10.1			

Prismatic Comp Large prism

a³	6.7	6.9	~~7.2~~ 6.7	6.80	1 1
a⁵	7.0	7.2	7.2	7.20	0 0
F	5.8	6.0	5.9	5.95	0 1
a⁴	6.7	6.9	6.9	6.90	0 0
b³		8.1			+1 −2 8)3 ±04
c⁵		9.6			
c¹		8.4			
c⁶		9.8			
c²		9.0			
c⁴		8.6			
d		10.2			
c³		9.7			
c⁷		10.0			
e		10.2			

Prismatic Comp Small prism

a³	8.7
c¹	n.s.
F	7.9
a⁴	8.8
b³	n.s
a⁵	9.5
c⁴	n.s.

Images of a³, a⁴, a⁵ b³ are all good on this plate

M. H

Copied North Pole Sequence

I 35558 Large prism

Scale M b^3 + a^4 t.p

	b^1	4.0 4.2 4.5	4.35	21	a^1 5.9 6.1 6.0	6.05	10
	a^1	1.8 2.0	2.0	a.	A 2.7 2.9	2.9	a.
	a^3	2.8 3.0	3.0	a.	b^1 7.0 7.2 7.7	7.45	23
	c^1	5.2 5.4 5.3	5.35	01	a^3 6.5 6.7 6.9	6.80	11
p	a^5	3.8 4.0	4.0	a.	a^5 6.9 7.1 7.0	7.05	10
″	c^4	$\overset{5}{4}$.2 5.4 5.7	5.55	21	a^4 6.7 6.9 6.9	6.90	00
	c^2	5.9 6.1 5.9	6.00	11	c^1 8.0		+6 −3 10)9 ±09
	d	6.7 6.9 6.9	6.90	00	c^6 9.6		
p	c^5	6.4 6.6 6.7	6.65	01	c^2 8.8		
.	e	6.9 7.1 7.2	7.15	10	c^4 8.3		
	c^3	6.3 6.5 6.3	6.40	11	c^3 8.9		
	c^6	6.4 6.6 6.7	6.65	01	f^1 10.0		
	c^7	7.0 7.2 6.8	7.00	22	d 9.4		
	b^2	5.3 5.5 5.6	5.55	10	c^5 9.1		
	f^2	7.8		+8 −11 22)19 ±09	e 9.9		
	g	8.9			c^7 ~~10.1~~ 9.5		
	k^3	10.1			b^2 8.0		
	h	9.2			Prism Comp. Small prism		
	i	9.5			A 4.5 4.7 4.8	4.75	10
	f^3	8.5			a^1 7.7		±05
	f^1	7.8			b^1 9.6		
	k^1	9.7			a^3 8.4		
	k^2	9.8			a^5 9.4		
					a^4 9.0		

Prism Comp. Large prism

Copied North Polar Sequence

Scale P

	H 153		Scale C 15350 H 308	
f^3	6.1 5.8 5.9 5.85	01		
g	6.5 6.2 6.2 6.20	00	5.9 5.6 5.7	5.65 01
h	6.7 6.4 6.8 6.60	22	6.4 6.1 6.2	6.15 10
i	6.9 6.6 6.8 6.70	11	6.4 6.1 6.3	6.20 11
k^1	7.3	+4 −3 8)7 ±09	6.8 6.5 6.8	6.65 12
k^2	7.3		7.0 6.7 6.9	6.80 11
k^3	7.7		7.4	−4 +5 10)9 ±09
k^4	7.9		7.7	
k^5	7.9		7.8	
l	7.9		7.9	
m	8.3		8.0	
n	8.9		8.6	
o	8.9		8.6	
p	9.2		9.0	
q	9.6		9.4	
r	10.1?		10.0?	
s	n.s.		10.0	
	Images very poor		Images poor	

The above two plates not included in discussion

Include in final discussion (June 7, 1909)

Saturday, October 1~~8~~7, 1908

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Pole Scale I 32811

C 16556 Whole and Half Aperture

Scale M

	1st Exp					2nd Exp				
c^1	3.6	3.8		3.8		4.8	5.0	4.9	4.95	0 1
o	5.8	6.0	6.0	6.00	0 0	6.8 ~~5.9~~	7.0	7.0	7.00	0 0
d	5.6	5.8	5.6	5.70	1 1	6.6	6.8	6.7	6.75	0 1
q	7.1	7.3	7.4	7.35	1 0			8.3	8.3	
c^3	4.9	5.1	4.9	5.00	1 1	6 ~~5~~.0	6.2	5.9	6.05	2 1
p	6.7	6.9	6.8	6.85	1 0	~~7.0~~		7.7 ~~6.6~~	7.7	
c^2	4.0	4.2		4.2		5.1	5.3	5.7	5.50	2 2
e	6.2	6.4	6.3	6.35	0 1	6.9	7.1	7.1	7.10	0 0
f^2			7.6	7.6				8.1		+4 -5 12)9 ±08
f^1	6.8	7.0	7.0	7.00	0 0			7.5		
f^3			7.9		+3 -4 14)7 ±05			8.6		
~~e~~			~~6.3~~							
r			8.3					8.9		
i			9.2					9.8		
g			8.5					9.0		
k^3			10.1							
k^1			9.7					10.2		
h			8.7					9.5		
k^2			9.7							

Saturday, October 17, 1908

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Pole

C 16567 Whole and Half Ap. scale $\overset{M}{I}$ 32811

	1st Exp					2nd Exp				
c^1	3.1	3.3		3.3	a.	4.3	4.5		4.5	a.
o	5.7	5.9	5.7	5.80	1 1	6.8	7.0	6.8	6.90	1 1
d	4.8	5.0	5.0	5.00	0 0	6.3	6.5	6.2	6.35	1 2
c^2	3.8	4.0		4.0	a.	4.9	5.1	4.9	5.00	1 1
c^6	4.7	4.9	4.7	4.80	1 1	5.8	6.0	5.8	5.90	1 1
f^1	6.2	6.4	6.6	6.50	1 1			7.7	7.7	.a
q	6.9	7.1	7.2	7.15	1 0			8.4	8.4	.a
c^3	3.9	4.1		4.1	a.	5.7	5.9	5.7	5.80	1 1
c^7	4.9	5.1	5.0	5.05	1 0	6.0	6.2	5.9	6.05	2 1
e	5.6	5.8	5.8	5.80	0 0	6.8	7.0	6.9	6.95	0 1
p	6.3	6.5	6.2	6.35	1 2			7.6 ~~6.0~~		+7 -8 14)15 ±10
f^2	6.9	7.1	7.3	7.20	1 1			8.3		
f^3			7.8		+6 -7 18)13 ±07			8.8		
g			8.3					9.2		
k^3			10.0							
i			8.9					10.0		
r			8.3					9.1 ~~8.0~~		
h			8.7					9.7		
k^1			9.4							
k^4			10.2							
k^2			9.7							

Tuesday October 20, 1908

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Iceland Spar Plates - Additional stars

a-f Polaris. p, q, r, s, t = a' u, v, w = b' x, y, z = b^2

Scale M I 15253

Images 1
a 2.1 2.3
a' 4.8 5.0 4.9 4.95 05 05
s 7.9
t 8.6
u 8.0
v 8.2
w 9.1
x 8.7
y 9.0
z 9.8

Images 2
a 4.9 5.1 4.9 5.00 10 10
a' 6.9 7.1 7.3 7.20 10 10
s
t
u
v
w
x
y

Images 3
a 2.0 2.2
a' 4.7 4.9 4.8 4.85 05 05
s 7.7
t 8.5
u 8.0
v 8.6
w 9.0
x 8.7
y 8.9
z 9.9

Images 4
a 5.0 5.2 5.6 5.40 20 20
a' 7.7

+50
-50
10)100
±0.10

M. H.

Tuesday, October 20, 1908

Copied

Iceland Spar Plates - Additional stars

Scale M I 15254

Images 1
a 1.9 2.1
a' 4.6 4.8 4.6 4.70 10 10
s 7.7
t 8.2
u 8.0
v
w 8.9
x 8.3
y 9.0
v 8.2
z 10.0

Images 2
a 4.4 4.6 4.8 4.70 10 10
a' 6.9 7.1 7.0 7.05 05 05

Images 3
a 2.0 2.2 2.2
a' $\overset{5}{4}$.0 5.2 5.0 5.10 10 10
s 7.9
t 8.4
u ~~7.0~~ * $\overset{8}{8}$.0
v 8.6
w 8.9
x 8.4
y 9.0
z 9.9

mistake of a unit

Images 4
a 5.1 5.3 5.3 5.30 00 00
a' 7.0 7.2 7.2 7.20 00 00

12(70
0.06

I 15252

Images 1
a 2.3 2.5
a' 5.0 5.2
s n.2
t "
u 7.9
v n.2
w "
x 8.7
y n.2
z "
q 8.6

Images 2
a 4.9 5.1 5.0 5.05 05 05
a' 7.0 7.2 7.2 7.20 00 00

Images 3
a 2.7 2.9
a' 4.9 5.1 5.2 5.15 05 05
u 7.9
x 8.7
q 8.7

Images 4
a 5.3 5.5 5.6 5.55 05 05
a' 7.4

M. H.

Tuesday, October 20, 1908

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~~Pol~~ I' plate for standard sequence

I 35327 9h +86.5 Sig.15

Scale M	Polar Sequence				
from b'	3.1	3.3		3.3	
f'	6.8	7.0	7.2	7.10	1 1
c²	4.9	5.1	5.1	5.10	0 0
d	5.9	6.1	6.0	6.05	1 0
c'	4.0	4.2		4.2	a.
e	6.3	6.5	6.4	6.45	1 0
b²	4.0	4.2		4.2	a.
c³	5.2	5.4	5.6	5.50	1 1
g			8.4		
k³			9.8		
h			8.9		
f³			7.9		
k'			9.2		
f²			7.6		
l			10.2		
k²			9.4		
k⁴			9.8		
i			8.7		
k⁵			9.9		

+4
−2
10)6
±0.060

Standard sequence					
c	3.5	3.7		3.7	
l	6.5	6.7	6.7	6.70	0 0
f	4.4	4.6	4.9	4.75	2 1
h	5.7	5.9	5.7	5.80	1 1
m	6.8	7.0	6.8	6.90	1 1
e	4.1	4.3	4.6	4.45	1 2
k	5.7	5.9	5.7	5.80	1 1
d	3.8	4.0		4.0	a.
g	5.0	5.2	5.0	5.10	1 1
r			8.9		
o			7.9		
n			7.6 ~~6.8~~		
q			9.0		
s			9.7		
p			8.5		

+7
−7
14)14
±0.100

M. H.

Tuesday, October 20, 1908

Copied

Remeasured

I 35327 9h +86° Sig.15

Sept 26-1919

Copied Pb 53;28

Scale M mean			Polar Sequence				p184
3.40	1 1 ~~10 10~~	b'	3.3	3.5		3.5	3.3
7.05	05 05	f'	6.8	7.0	7.0	7.00 00	7.10
5.15	2 3 05 05	c²	4.9	5.1	5.2	5.15 10	5.10
6.05	00 00	d	5.9	6.1	6.0	6.05 10	6.05
4.20	0 0 ~~00 02~~	c'	4.0	4.2		4.2	4.2
6.48	03 02	e	6.2	6.4	6.6	6.50 11	6.45
4.15	1 0 ~~05 05~~	b²	3.9	4.1		4.1	4.2
5.52	02 03	c³	5.4	5.6	5.5	5.55 01	5.50
8.45	1 0 ~~05 05~~	g			8.5		8.4
9.75	1 0 ~~05 05~~	k³			9.7		9.8
8.80	1 1 ~~10 10~~	h			8.7		8.9
7.90	0,0 ~~00~~	f³			7.9		7.9
9.20	0,0 ~~00~~	k'			9.2		9.2
7.65	1 0. ~~05 05~~	f²			7.7		7.6
10.10	1 1 ~~10 10~~	l			10.0		10.2
9.30	1 1 ~~10 10~~	k²			9.2		9.4
9.80	0,0 ~~00~~	k⁴			9.8		9.8
8.80	1 1 ~~10 10~~	i			8.9		8.7
9.90	0 0 ~~00 00~~	k⁵			9.9		9.9

+2
−3
10)5
±0.050

+83
−82
38)165 ±.04

Standard Sequence					p184	curve	mean	magn	
c	3.5	3.7		3.7	3.7	4.78	3.70	8.48	0 0 ~~00 00~~
d	3.9	4.1		4.1	4.0 ~~6.7~~	4.71	4.05	8.76	1 0 ~~05 05~~
e	4.0	4.2	4.7	4.45 23	4.45	4.62	4.45	9.07	00 00
f	4.6	4.8	4.7	4.75 01	4.75	4.54	4.75	9.29	00 00
g	4.9	5.1		5.1 a.	5.10	4.46	5.10	9.56	00 00
h	5.4	5.6	5.6	5.60 00	5.80	4.32	5.70	10.02	10 10
k	5.7	5.9	5.8	5.85 10	5.80	4.28	5.82	10.10	02 03
l	6.2	6.4	6.7	6.55 21	6.70	4.12	6.62	10.74	08 07
m	6.7	6.9	7.0	6.95 10	6.90	4.07	6.92	10.92	02 03
n			7.6		7.6	3.99	7.60	11.59	0,0 ~~00~~
o			7.9		7.9	3.97	7.90	11.87	0,0 ~~00~~
p			8.5		8.5	3.98	8.50	12.48	0,0 ~~00~~
q			8.9		9.0	4.05	8.95	13.00	1 0 ~~05 05~~
r			9.0		8.9	4.05	8.95	13.00	0 1 ~~05 05~~
s			9.8		9.7	4.22	9.75	13.97	0 1 ~~05 05~~

+5
−6
12)11
±0.092

+44
−41
30)85
±0.028

Light was poor

M. H.

Tuesday, Oct. 20, 1908

Copied

Standard Sequence 9h +86 Seq. 15

I 35274

Scale M

	Polar Sequence				Standard Sequence 15	
c¹	3.4 3.6	3.6		a	too far from centre	
c²	4.0 4.2	4.2		b	" " "	
c³	4.3 4.5 4.7	4.60		c	3.0 3.2	3.2
b¹	2.8 3.0	3.0		d	3.6 3.8	3.8
b²	3.6 3.8	3.8		e	3.9 4.1	4.1
b³	3.8 4.0	4.0		f	3.9 4.1	4.1
d	5.2 5.4 5.5	5.45	01	g	4.5 4.7 4.7	4.70
e	5.7 5.9 5.7	5.80	11	h	4.8 5.0 5.0	5.00
f¹	5.9 6.1 5.9	6.00	11	k	5.4 5.6 5.7	5.65
f²	6.7 6.9 7.0	6.95	10	l	5.8 6.0 5.9	5.95
f³	7.3	8) 6 ±.08		m	6.0 6.2 6.8	6.50
g	7.8			n	6.8 7.0 7.0	7.00
h	8.0			o	7.6	
i	8.2			p	7.9	
k¹	8.6			q	8.5	
k²	8.8			r	8.8	
k³	9.0			s	9.8	
k⁴	9.1			t	10.2	
k⁵	9.6					
l	10.0					

m. H

Tuesday Oct 20, 1908

Copied Sept 26 - 1919 Copied B653, 28

Remeasured

I 35274

Scale M

See Standard sequences 15 mean) curve	mag	Polar Sequence			p 186	mean		Standard Sequence 15			p 186	mean	
c 5.20	8.45	b¹	3.0 3.2	3.2	3.0	3.10	11	c	3.1 3.3	3.3	3.2	3.25	10
d 5.19	8.94	b²	3.7 3.9	3.9	3.8	3.85	10	d	3.5 3.7	3.7	3.8	3.75	10
e 5.17	9.22	b³	3.7 3.9	3.9	4.0	3.95	10	e	3.8 4.0	4.0	4.1	4.05	01
f 5.16	9.36	c¹	3.7 3.9	3.9	3.6	3.75	12	f	4.0 4.2 4.4	4.30	4.1	4.20	~~11~~ 10 10
g 5.10	9.78	c²	4.0 4.2	4.2	4.2	4.20	00	g	4.3 4.5 4.8	4.65	4.70	4.68	~~10~~ 03 02
h 5.02 4	10.02	c³	4.6 4.8 4.7	4.75	4.60	4.68	~~11~~ 07 08	h	4.8 5.0 *4 ~~4~~.9	4.95	5.00	4.98	~~00~~ 03 02
k 4.92	10.54	d	5.0 5.2 5.5	5.35 .21	5.45	5.40	00 00	k	5.4 5.6 5.6	5.60	5.65	5.62	00 02 03
l 4.85	10.80	e	5.8 6.0 5.8	5.90 .12	5.80	5.85	~~10~~ 05 05	l	5.9 6.1 5.8	5.95	5.95	5.95	00 00
m 4.71	11.31	f¹	6.2 6.4 6.0	6.20 .22	6.00	6.10	~~11~~ 10 10	m	6.5 6.7 6.7	6.70	6.50	6.60	~~11~~ 10 10
n 4.63	11.73	f²	6.9 7.1 7.0	7.05 .10	6.95	7.00	~~00~~ 05 05	n	6.9 7.1 7.3	7.20	7.00	7.10	~~11~~ 10 10
o 4.63	12.28	f³	7.6	8) 10 ±0.12	7.3	7.45	21	o	7.7		7.6	7.65	10
p 4.64	12.54	g	7.8		7.8	7.80	00	p	7.9		7.9	7.90	00
q 4.47	13.17	h	8.0		8.0	8.00	00	q	8.5		8.5	8.50	00
r 4.70	13.50	i	8.2		8.2	8.20	00	r	8.8		8.8	8.80	00
s 4.78	14.58	k¹	8.6		8.6	8.60	00	s	9.8		9.8	9.80	00
t 4.82	14.97	k²	8.9		8.8	8.85	10	t	10.1		10.2	10.15	10
		k³	9.1		9.0	9.05	10						+6 −6 32) 12 ±04
		k⁴	9.6		9.1	9.35	23	Mistake of a unit in second scale					
		k⁵	9.7		9.6	9.65	10						
		l	9.9		10.0	9.95	10						
							+13 −11 40) 24 ±06						

Thursday, October 22, 1908

3.55

Copied Standard Sequence 24 15h +86°

I 35514

	Scale M	Polar Sequence	p189	mean		Sequence 24.			
	a′					b 1.9 2.1 (from)			
	a³	1.3 1.5	1.4	1.45	10	l 3.0 3.2			
	a⁵	2.0 2.2	2.1	2.15	01	h 4.8 5.0	5.0	5.00	
v.p.	b′	2.8 3.0	2.8	2.90	11	d 2.2 2.4			
v.p.	b²	3.5 3.7	3.2	3.45	32	f 3.7 3.9			
	c′	3.1 3.3	3.2	3.25	10	k 5.5 5.7	5.7	5.70	
	c²	3.7 3.9	3.9	3.90	00	a 1.1 1.3			
	c³	4.4 4.6 4.7 4.65 01	4.10	4.38	23	c 2.1 2.3			
	d	5.0 5.2 5.4 5.30 11	5.15	5.22	10	g 4.6 4.8	4.7	4.75	
	e	5.8 6.0 5.7 5.85 21	5.85	5.85	00	l 5.8 6.0	5.8	5.90	
	f′	6.4 6.6 6.8 6.70 11	6.80	6.75	10	n 6.7 6.9	6.9	6.90	
	f²	7.5 almost sup	7.7	7.60	11	m 6.4 6.6	6.7	6.65	
	f³	7.8 8)8 ±.10	7.8	7.80	00	u 9.7			
	g	8.0	7.9	7.95	01	p 7.9			
	h	8.3	8.0	8.15	12	r 8.8			
	i	8.3	8.5	8.40	11	w 10.2			
	k′	8.7	8.8	8.75	10	t ~~9.6~~			Wrong star evidently meas.
	k²	9.0	8.9	8.95	01	o 7.0			
	k³	9.3	9.3	9.30	00	q 8.1			
	k⁴	9.5	9.7	9.60	11	s 9.0			
	k⁵	9.6	9.6	9.60	00	v Images poor			
	l	9.9	10.0	9.95	10	especially for brighter stars			
	m	10.0	10.0	10.00	00				
	n	10.2	10.2	10.20	00				

46)30
±.07

4.07

M. H.

Friday, October 23, 1908

22.50

Copied Remeasured Standard Sequence 24 15h +86°

I 35514

Scale M	Polar Sequence			Sequence 24			p188	Mean	
a′	·			a 1.1 1.3			1.3	1.30	00
a³	1.2 1.4			b 1.9 2.1			2.1 from	2.10	00
a⁵	1.9 2.1			c 2.2 2.4			2.3	2.35	01
b′	2.6 2.8			d 2.2 2.4			2.4	2.40	00
b²	3.0 3.2			e 2.9 3.1			3.2	3.15	10
c′	3.0 3.2			f 3.8 4.0			3.9	3.95	01
c²	3.7 3.9			g 4.3 4.5			4.75	4.62	12
c³	4.0 4.2 4.0 4.10 12			h 4.8 5.0	5.0	5.00	5.00	5.00	00
d	4.9 5.1 5.2 5.15 20			k 5.0 5.2	5.7	5.45	5.70	5.58	21
e	5.7 5.9 5.8 5.85 10			l 5.6 5.8	5.9	5.85	5.90	5.88	10
f′	6.6 6.8 6.8 6.80 00			m 6.4 6.6	6.7	6.65	6.65	6.65	00
f²	7.7 almost sup			n 6.7 6.9	6.9	6.90	6.90	6.90	00
f³	7.8	8)4 ±.05		o 7.0 7.2	7.2	7.20	7.0	7.10	11
g	7.9			p 7.8			7.9	7.85	01
h	8.0			q 8.2			8.1	8.15	01
i	8.5			r 8.6			8.8	8.70	11
k′	8.8			s 9.0			9.0	9.00	00
k²	8.9			t 9.1			·	9.1	a.
k³	9.3			u 9.8			9.7	9.75	01
k⁴	9.7								
k⁵	9.6			w 10.3			10.2	10.25	10
l	10.0								
m	10.0								
n	10.2								

M. H.

Friday, October 23, 1908

Copied Bk 53; 46

Copied Standard Sequence 33 21h +86°

I 35498

Scale M

		Polar Sequence				h191	mean	
m good	b'	2.9	3.1			3.1	3.10	00
	c²	4.6	4.8	4.5	4.65 2̲1	4.55	4.60	00
	d	5.3	5.5	5.7	5.60 1̲1	5.75	5.68	1̲2
	a⁵	2.5	2.7			2.8	2.75	1̲0
m. good	b²	3.7	3.9			4.1	4.00	1̲1
	c³	4.9	5.1	5.4	5.25 1̲2	4.95	5.10	11̲
	f'	6.8	7.0	6.9	6.95 01̲	6.90	6.92	10
	c'	3.7	3.9			4.0	3.95	1̲0
	a³	1.8	2.0			2.2	2.10	1̲1
	e	5.9	6.1	5.9	6.00 1̲2	6.05	6.02	00
	g			8.0	10) 11 / ±.11	7.9	7.95	01̲
	k³			9.5		9.5	9.50	00
	f²			7.3		7.35	7.32	01
	f³			7.8		7.8	7.80	00
	h			8.3		8.4	8.35	1̲0
	l			9.9		9.9	9.90	00
	k²			9.0		8.8	8.90	11̲
	i			8.4		8.6	8.50	1̲1
	k⁴			9.6		9.7	9.65	01
	m			10.0		10.0	10.00	00
	k'			9.0		8.9	8.95	01̲
	k⁵			9.8		9.9	9.85	01
	n			10.1		10.2	10.15	1̲0

46) 22 / ±.05

	Sequence 33				h191	Mean	curve		magn
a	2.0	2.2			2.3	2.25	5.07	01	7.32
b	too far from centre								
c	3.6	3.8			3.7	3.75	4.59	01̲	8.34
d	3.9	4.1			4.1	4.10	4.94	00	9.04
e	4.7	4.9			4.90	4.90	4.78	00	9.68
f	5.0	5.2	5.4	5.30	5.50	5.40	4.69	1̲1	10.09
g	5.2	5.4	5.6	5.50	5.60	5.55	4.64	1̲0	10.19
h	6.3	6.5	6.3	6.40	6.35	6.38	4.48	00	10.86
k	6.8	7.0	7.3	7.15	6.95	7.05	4.36	20	11.41
l	7.0	7.2	7.7	7.45	7.6	7.52	4.32	1̲1	11.84
m			8.0		8.0	8.00	4.30	00	12.30
n			8.4		8.3	8.35	4.30	01̲	12.65
o			8.6		8.6	8.60	4.32	00	12.92
p			8.9		8.8	8.85	4.36	10	13.21
q			8.9		9.0	8.95	4.37	1̲0	13.32
r			9.6		9.7	9.65	4.50	01	14.15
s			10.0		10.0	10.00	4.57	00	14.57
t			10.2		10.3	10.25		01	

M. H.

Friday, October 23, 1908

Copied Remeasured

I 35498

Scale M

	Polar Seq				
a³	2.0	2.2			
c'	3.8	4.0			
f'	6.7	6.9	6.9	6.90	00
b'	2.9	3.1			
c²	4.2	4.4	4.7	4.55	2̲1
a⁵	2.6	2.8			
c³	4.8	5.0	4.9	4.95	01̲
b²	3.9	4.1			
d	5.6	5.8	5.7	5.75	01̲
e	6.0	6.2	5.9	6.05	2̲1̲
f²	7.1	7.3	7.4	7.35	1̲0
f³			7.8	12) 9 / ±.08	
g			7.9		
h			8.4		
i			8.6		
k'			8.9		
k²			8.8		
k³			9.5		
k⁴			9.7		
k⁵			9.9		
l			9.9		
m			10.0		
n			10.2		

	Sequence 33			
a	2.1	2.3		
b				
c	3.5	3.7		
d	3.9	4.1		
e	4.7	4.9	4.9	4.90
f	5.0	5.2	5.8	5.50
g	5.4	5.6	5.6	5.60
h	6.0	6.2	6.5	6.35
k	6.8	7.0	6.9	6.95
l			7.6	
m			8.0	
n			8.3	
o			8.6	
p			8.8	
q			9.0	
r			9.7	
s			10.0	
t			10.3	

23.30

M. H.

Friday, October 23, 1908

23.30

Sequences standard

	AC 9495		Scale N AC 8858			Remeasured p. 203
	Sequence 6 3h +86 scale 2		p. 203	mean		
a	6.3 5.9 5.8	5.85	5.95	5.90	11	
b	6.8 6.4 6.2	6.30	6.50	6.40	11	
c	7.6 7.2 6.9	7.05	7.05	7.05	00	
d	8.0 7.6 7.7	7.65	7.90	7.78	21	
e	8.3 7.9 8.0	7.95	8.05	8.00	00	
f	8.8 8.4 8.8	8.60°	8.60	8.60	00	
g	8.9 8.5 8.7	8.60	8.70	8.65	01	
h	9.2		9.2	9.20	00	
k	9.7		9.5	9.60	11	
l	9.8		9.8	9.80	00	
m			10.2	10.2	.a	
Superposed on Seq. 6	Sequence 12					
a	6.8 6.4 6.2	6.30	6.35	6.32	01	
b	7.3 6.9 6.7	6.80	6.90	6.85	01	
c	7.7 7.3 7.3	7.30	7.35	7.32	01	
d	7.7 7.3 7.5	7.40	7.50	7.45	01	
e	8.1 7.7 7.9	7.80	7.75	7.78	00	
f	8.6 8.2 8.3	8.25	8.30	8.28	10	
g	8.8 8.4 8.7	8.55	8.55	8.55	00	
h	9.2		9.2	9.20	00	
k	9.7		9.6	9.65	10	
l	9.8		9.7	9.75	01	
m	10.0		9.8	9.90	11	
n	10.2			10.2	a.	

M. H.

Saturday, October 24, 1908

22.27

copied North Polar Sequence

Scale M I 32811	C 17485					Two exposures with diff apertures ~~Sea~~				
	1st Exp		p199	Mean		2nd Exp		p199	mean	
c^1	3.3 3.5	3.5	3.8	3.65	12	c^1 6.8 7.0 7.0	7.00 00	7.00	7.00	00
"r"	5.7 5.9 5.9	5.90 00	6.15	6.02	12	c^2 7.6	±00	7.5	7.55	01
d	5.8 6.0 5.6	5.80 22	5.80	5.80	00	c^3 8.2		7.8	8.00	22
c^2	4.7 4.9 4.7	4.80 12	4.75	4.78	00	d 8.3		8.4	8.35	10
f^1	6.8 7.0 6.8	6.90 12	6.85	6.88	01	e 8.7		8.6	8.65	10
"q"	7.1 7.3 7.3	7.30 00	7.15	7.22	10	f^1 9.2		9.2	9.20	00
e	5.9 6.1 5.9	6.00 12	6.05	6.02	00	f^2 9.7		9.6	9.65	10
c^3	4.8 5.0 5.0	5.00 00	5.25	5.12	11	"r" 8.6		8.7	8.65	01
"p"	6.5 6.7 6.6	6.65 10	6.75	6.70	11	"p" 9.0		9.2	9.10	11
f^3	7.7	+6	7.8	7.75	10	f^3 9.9		def ~~9.8~~	9.85 9	aa
i	8.6	-5 16)11 ±07	8.6	8.60	00	g 10.3		10.2	10.25	10
k^4	9.7		9.7	9.70	00	"q" 9.7		9.8	9.75	10
g	7.9		7.9	7.90	00	"r"		10.2	10.2	.a
k^3	9.6		9.6	9.60	00					+7 -6
h	8.4		8.4	8.40	00					22)13 ±06
k^1	8.9		8.9	8.90	00					
m	10.1		10.1	10.10	00					
"r"	7.9		8.0	7.95	10					
f^2	7.4		7.15	7.28	11					
k^2	8.9		9.1	9.00	11					
k^5	9.8		9.8	9.80	00					
l	10.1		10.1	10.10	00					
n	10.3		10.3	10.30	00					
					+9 -9 46)18 ±04					

M. H.

Copied

North Polar Sequence

Different aperture

Scale M

C 17489 - Each Exp 10m

	1st Exp		10.		p198	Mean	
"o"	5.4	5.6	5.7	5.65^{01}	5.90	5.78	2i
"p"	6.3	6.5	6.6	6.55^{10}	6.30	6.42	2i
"q"	7.0	7.2	7.2	7.20^{00}	7.20	7.20	00
c¹	3.4	3.6			3.3	3.45	2i
c²	3.7	3.9			3.9	3.90	00
c³	3.9	4.1			4.2	4.15	i0
d	4.9	5.1	5.0	5.05^{10}	5.05	5.05	00
e	5.6	5.8	5.7	5.75^{01}	5.80	5.78	00
f¹	6.1	6.3	6.4	6.35^{10}	6.40	6.38	00
f²	7.2	7.4	7.5	7.45^{01}	7.20	7.32	ii
f³			7.9	+3 −3 14)6 ±04	7.9	7.90	00
g			8.3		8.3	8.30	00
h			8.7		8.9	8.80	ii
i			9.1		9.0	9.05	i0
k¹			9.6		9.7	9.65	0i
k²			9.7		9.9	9.80	ii
k³			10.2		10.1	10.15	0i
"r"			8.2		8.1	8.15	0i

Comparisons diff
2.

+10
−10
36)20
±06

2nd Exp 10m p198

c¹	5.9	6.1	6.0	6.05^{10}	6.05	6.05	00
c²	6.6	6.8	6.9	6.85^{01}	6.90	6.88	i0
c³	6.9	7.1	7.5	7.30^{22}	7.30	7.30	00
d			8.0	+4 −2 6)6 ±10	7.9	7.95	0i
e			8.6		8.7	8.65	0i
"o"			8.5		8.6	8.55	i0
f¹			9.6		9.3	9.45	2i
"q"			9.8		9.7	9.75	0i
f²			9.7		9.8	9.75	i0
"p"			9.2		8.9	9.05	2i
f³			10.3		10.2	10.25	i0

+6
−7
22)13
±06

C 17489 Each Exp 15

2nd Exp p198 mean

c¹	5.9	6.1	6.2	6.15^{10}	6.05^{10}	6.12	i0
c²	6.7	6.9	6.9	6.90^{00}	7.00	6.95	i0
c³	7.0	7.2	7.1	7.15^{01}	7.25	7.20	00
d			7.8	0 −2 6)2 ±03	7.8	7.80	00
e			8.1		8.0	8.05	i0
f¹			8.5		8.6	8.55	i0
"o"			7.9		7.9	7.90	00
"p"			8.3		8.6	8.45	i2
"q"			9.2		9.1	9.15	0i
f²			9.2		9.3	9.25	0i
f³			8.6		9.4	9.50	ii
g			9.9		9.9	9.90	00
"r"			9.8		9.3	9.55	23

−9
+5
26)14
±05

C 17488

1st Exp

c¹	3.4	3.6			
"o"	5.6	5.8	5.7	5.75	01
"p"	6.0	6.2	6.6	6.40	22
"q"	6.8	7.0	7.0	7.00	00
c²	4.0	4.2			
c³	4.7	4.9	4.9	4.90	00
d	5.0	5.2	5.3	5.25	01
e	5.8	6.0	5.9	5.95	01
f¹	6.1	6.3	6.7	6.50	22
f²	6.9	7.1	6.9	7.00	11
f³			7.5		+6 −7 16)13 ±08
g			7.8		
h			8.2		
i			8.1		
k¹			8.8		
k²			9.0		
k³			9.5		
k⁴			9.8		
k⁵			10.0		
"r"			7.8		

M. H

Copied North Polar Sequence

M

Scale I 32811

C 17490 Diff aperture Each exp 60m

1st Exp ~~p 200~~

	c¹	1.0	1.2			~~1.2~~
	"o"	2.9	3.1			
	i	6.3	6.5	6.6	6.55	10
	g	5.6	5.8	5.7	5.75	01
	f¹	3.6	3.8			
	d	2.7	2.9			
	c²	1.8	2.0			
	"p"	3.6	3.8			
	"r"	5.7 ~~6.1~~	5.9	5.7	5.80	11
	c³	2.0	2.2			
	e	2.9	3.1			
	f²	4.0	4.2			
	f³	4.8	5.0	5.0	5.00	00
	h	5.9	6.1	6.2	6.15	10
	k¹	7.0	7.2	7.0	7.10	11
	"q"	3.9	4.1			
measured above mean 6.72 *	i	6.7	6.9	6.9	6.90	00
	k³			7.7		+2 −5 14)7 ±05
	k²			7.3		
	k⁵			8.4		
	m			9.1		
	k⁴			8.6		
	p			9.8		
	r			10.3		
	n			9.2		
	q			10.1		
	l			8.8		
	s			10.4		
	o			9.3		

2nd Exp

c¹	3.1	3.3		3.3	
e	6.2	6.4	6.0	6.20	22
c³	4.6	4.8	4.8	4.80	00
"p"	6.8	7.0	6.9	6.95	01
c²	4.1	4.3		4.3	
d	5.5	5.7	5.7	5.70	00
f¹	7.0	7.2	7.0	7.10	11
"o"	5.9	6.1	5.9	6.00	11
"q"			7.8		+4 −5 12)9 ±08
f³			8.6		
f²			7.9		
g			8.7		
k³			10.1		
i			9.6		
"r"			8.7		
h			9.6		
k²			9.9		
k¹			9.8		

Images on 2nd Exp are circular but ~~poor~~ focus & diff to meas.

Images in 1st Exposure elongated and very difficult to measure

Saturday, October 24, 1908

P

Copied North Polar Seq remeasured with diff. scale

Scale C15350

C 17490

c^1	2.9	2.6		2.6	
"o"	4.7	4.4	4.3	4.35	01
c^3	3.6	3.3		3.3	
f^1	5.3	5.0	4.9	4.95	01
f^3	6.1	5.8	6.0	5.90	11
c^2	3.6	3.3		3.3	
"p"	5.3	5.0	4.9	4.95	01
"r"	6.7	6.4	6.3	6.35	01
d	4.0	3.7	·	3.7	
f^2	5.9	5.6	5.7	5.65	01
"q"	5.8	5.5	5.7	5.60	11
g	6.7	6.4	6.5	6.45	01
e	4.6	4.3	4.5	4.40	11
h	6.8	6.5	6.8	6.65	12
k^1	7.1	6.8	7.2	7.00	22
i	6.9	6.6	6.9	6.75	21
n		9.0			+10 −12 24)22 ±09
k^3		7.8			
k^4		8.1			
m		9.0			
k^2		7.4			
o		9.1			
q		9.9			
k^5		8.3			
p		9.6			
l		8.4			
r		10.1			
s		10.1			

Reject. Not certainly a star image

2nd Exp

"o"	6.6	6.3	6.7	6.50	22
c^1	4.9	4.6	4.8	4.70	11
c^3	5.8	5.5	5.8	5.65	12
e	6.9	6.6	6.8	6.70	11
c^2	5.8	5.5	5.9	5.70	22
d	6.4	6.1	6.5	6.30	22
f^1	7.0	6.7	$\overset{2}{7.4}$	6.95	32
"p"	7.1	6.8	6.9	6.85	01
f^2			7.7		+13 −12 16)25 ±16
g			8.2		
"q"			7.8		
"r"			8.4		
f^3			8.0		
k^3			9.9		
h			8.9		
i			9.2		
k^1			9.6		
k^2			9.7		

Measurement diff but easier than Scale I 32811

12.45

M. H.

Saturday, October 24, 1908

2.55

M Copied North Polar Seq

Scale I 32811 C 17484

1st Exp

c^1	3.9	4.1	·	4.1	
d	5.9	6.1	5.9	6.00	11
f^1	6.8	7.0	7.0	7.00	00
c^2	4.9	5.1	5.5	5.30	22
"p"	6.8	7.0	6.9	6.95	01
e	6.4	6.6	6.6	6.60	00
"o"	6.5	6.7	6.5	6.60	11
c^3	5.7	5.9	5.6	5.75	12
f^2		7.6			+5 −7 14)12 ±09
g		8.4			
k^3		9.7			
f^3		7.9			
h		8.6			
l		9.9			
"r"		8.1			
"q"		7.5			
k^1		8.9			
i		8.5			
k^5		9.8			
k^2		9.2			
m		10.2			
k^4		9.8			

2nd Exp

c^1	$\overset{6}{5.8}$	7.0	6.8	6.90	11
c^2	t.p		·		±10
c^3		7.7			
d		8.0			
e		8.5			
f^1		8.9			
f^2		9.4			
f^3		9.8			
"o"		8.6			
"p"		8.8			
"q"		9.6			
"r"		10.0			
q		10.0			

C 17486-Re-measured

Copied p.194

c^1	6.0	6.2	6.0	6.10	11
c^3	$\overset{v.p}{7.0}$	7.2	7.3	7.25	01
c^2	$\overset{v.p}{6.8}$	7.0	7.0	7.00	00
"o"		7.9			+2 −1 6)3 ±05
e		8.0			
f^2		9.3			
f^1		8.6			
d		7.8			
"p"		8.6			
"r"		9.3			
f^3		9.4			
g		9.9			
"q"		9.1			

Light was poor

C 17486 Re-measured

	1st Exp				p.194	mean	
c^1	3.3	3.5			3.6	3.55	10
c^2	4.0	4.2			4.2	4.20	00
c^3	4.8	5.0	4.9	$\overset{01}{4.95}$	4.90	4.92	10
"o"	5.7	5.9	5.7	$\overset{11}{5.80}$	5.75	5.78	00
"p"	6.2	6.4	6.7	$\overset{21}{6.55}$	6.40	6.48	11
d	5.0	5.2	$\overset{5}{4.6}$	$\overset{22}{5.40}$	5.25	5.32	11
e	5.7	5.9	5.8	$\overset{10}{5.85}$	5.95	5.90	21
f^1	6.4	6.6	6.6	$\overset{00}{6.60}$	6.50	6.55	01
f^2	6.9	7.1	6.8	$\overset{12}{6.95}$	7.00	6.98	00
f^3				7.4	7.5	7.45	01
"q"	6.8	7.0	7.9	$\overset{01}{6.95}$	7.00	6.98	00
q				7.9	7.8	7.85	10
h				8.0	8.2	8.10	11
i				8.1	8.1	8.10	00
k^1				8.7	8.8	8.75	10
k^2				8.9	9.0	8.95	10
k^3				9.4	9.5	9.45	01
k^4				9.8	9.8	9.80	00
k^5				9.9	10.0	9.95	10
l				10.0	10.0	a.	
m				10.2	10.2	a.	
"r"				7.8	7.8	7.80	00

+6 −9 16)15 ±09

+8
−9
44)17
±04

3.20

M. H.

Monday, October 26, 1908

2.25

copied

North Polar Sequence

M

C 17484 re-measured

Scale I 32811

*	3	4		4	p197	mean	
c¹	4.8	5.0	.	5.0	4.1	4.05	01
c²	5.0	5.2	5.2	5.20 ⁰⁰	5.30	5.25	01
c³	5.7	5.9	5.8	5.85 ¹⁰	5.75	5.80	00
d	5.7	5.9	5.9	5.90 ⁰⁰	6.00	5.95	10
e	6.2	6.4	6.7	6.55 ²¹	6.60	6.58	00
f¹	6.8	7.0	6.9	6.95 ⁰¹	7.00	6.98	00
"o"	6.3	6.5	6.6	6.55 ¹⁰	6.60	6.58	00
"p"	6.6	6.8	7.0	6.90 ¹¹	6.95	6.92	01
f²			7.6	+3 −5 14)8 ±06	7.6	7.60	00
f³			8.0		7.9	7.95	01
g			8.3		8.4	8.35	10
h			8.5		8.6	8.55	10
i			8.7		8.5	8.60	11
k¹			9.0		8.9	8.95	01
k²			9.2		9.2	9.20	00
k³			9.7		9.7	9.70	00
k⁴			9.8		9.8	9.80	00
k⁵			10.0		9.8	9.90	11
l			10.0		9.9	9.95	01
m			10.1		10.2	10.15	10
"q"			7.7		7.5	7.60	11
"r"			8.2		8.1	8.15	01

+6 −11 4+)17 ±04

Light poor

* mistake of a unit

2nd Exp

					p197	mean	
c¹	6.5	6.7	6.8	6.75 ¹⁰	6.90	6.82	00
c²			t.p.	±05	t.p.		
c³			7.6		7.7	7.65	01
d			8.0		8.0	8.00	00
e			8.5		8.5	8.50	00
f¹			8.8		8.9	8.85	01
f²			9.3		9.4	9.35	11
f³			9.8		9.8	9.80	00
g			10.0		10.0	10.00	00
"o"			8.6		8.6	8.60	00
"p"			8.8		8.8	8.80	00
"q"			9.6		9.6	9.60	00
"r"			9.9		10.0	9.95	10

+3 −2 24)5 ±02

C 17489 - 2nd Exp

c¹	5.9	6.1	6.0	6.05	10
c²	6.7	6.9	6.9	6.90	00
c³	7.0	7.2	7.4	7.30	11
d			7.9	+2 −1 6)3 ±05	
e			8.7		
f¹			9.3		
f²			9.8		
f³			10.2		
"o"			8.6		
"p"			8.9		
"q"			9.7		

Light poor

re-measured

C 17489 - 1st Exp

"o"	5.8	6.0	5.8	5.90	11
"p"	6.3	6.5	6.1	6.30	22
"q"	7.0	7.2	7.2	7.20	00
f²	6.9	7.1	7.3	7.20	21
c²	3.7	3.9			
e	5.7	5.9	5.7	5.80	11
c¹	3.1	3.3			
d	4.9	5.1	5.0	5.05	10
f¹	6.5	6.7	6.1	6.40	33
c³	4.0	4.2		+9 −8 14)17 ±12	
f³			7.9		
g			8.3		
h			8.9		
i			9.0		
k¹			9.7		
k²			9.9		
k³			10.1		
"r"			8.1		

Measures difficult

M. H.

Monday, October 26, 1908

copied

North Polar Sequence

M

C 17485 re-measured

Scale I 32811

1st Exp

c¹	3.6	3.8		3.8	
c²	4.6	4.8	4.7	4.75	01
c³	4.9	5.1	5.4	5.25	12
d	5.7	5.9	5.7	5.80	11
e	6.0	6.2	5.9	6.05	21
f¹	6.7	6.9	6.8	6.85	10
"o"	5.9	6.1	6.2	6.15	10
"p"	6.5	6.7	6.8	6.75	10
"q"	7.0	7.2	7.1	7.15	01
"r"		8.0			
f²	6.9	7.1	7.2	7.15	10
f³		7.8			+6 −7 18)13 ±07
g		7.9			
h		8.4			
i		8.6			
k¹		8.9			
k²		9.1			
k³		9.6			
k⁴		9.7			
k⁵		9.8			
l		10.1			
m		10.1			
n		10.3			

2nd Exp

c¹	6.8	7.0	7.0	7.00	
c²			7.5	±00	
c³			7.8		
d			8.4		
"o"			8.7		
"p"			9.2		
"q"			9.8		
f¹			9.2		
f²			9.6		
f³			dif.		
"r"			10.2		
e			8.6		
g			10.2		

4.00

M. H.

Light poor

Monday, October 2~~4~~6, 1908

4.00

Copied M

North Polar Sequence

C 17490 remeasured

Scale I 32811

	1st Exp	p ~~200~~ 195	Mean			2nd Exp	p ~~200~~ 195	Mean	
c¹	1.0 1.2	1.2	1.20	00	c¹	3.6 3.8	3.3	3.55	23
c²	1.9 2.1	2.0	2.05	10	c²	4.0 4.2	4.3	4.25	01
c³	2.2 2.4	2.2	2.30	11	c³	4.8 5.0 4.8 4.90^{11}	4.80	4.85	10
d	2.3 2.5	2.9	2.70	22	d	5.6 5.8 5.6 5.70^{11}	5.70	5.70	00
e	3.0 3.2	3.1	3.15	01	e	6.0 6.2 6.5 6.35^{21}	6.20	6.28	11
f¹	3.7 3.9	3.8	3.85	10	f¹	6.8 7.0 7.0 7.00^{00}	7.10	7.05	01
f²	4.0 4.2	4.2	4.20	00	"o"	6.0 6.2 6.1 6.15^{01}	6.00	6.08	11 ~~20~~
f³	4.9 5.1 4.9 5.00^{11}	5.00	5.00	00	"p"	6.8 7.0 6.9 6.95^{01}	6.95	6.95	00
g	5.7 5.9 5.6 5.75^{12}	5.75	5.75	00	"q"	7.7	7.8	7.75	10
"p"	3.6 3.8	3.8	3.80	00	"r"	8.7	8.7	8.70	00
"o"	3.0 3.2	3.1	3.15	01	f²	7.9	7.9	7.90	00
"r"	5.8 6.0 5.8 5.90^{11}	5.80	5.85	10	f³	8.4	8.6	8.50	11
h	6.0 6.2 6.~~5~~0 6.10^{11}	6.15	6.12	01	g	8.8	8.7	8.75	01
i	6.2 6.4 6.7 6.55^{21}	6.~~55~~72	6.64	01	h	9.2	9.6	9.40	22
k¹	6.9 7.1 7.0 7.05^{10}	7.10	7.08	10	i	9.5	9.6	9.55	10
"q"	3.9 4.1	4.1	4.10	00	k¹	9.7	9.8	9.75	10
k²	7.1	7.3	7.20	11	k²	9.9	9.9	9.90	00
k³	7.8	7.7	7.75	01	k³	10.0	10.1	10.05	01
k⁴	8.5	8.6	8.55	10					
k⁵	8.4	8.4	8.40	00					
l	8.7	8.8	8.75	10					
m	9.0	9.1	9.05	01					
n	~~8~~8.8	9.2	9.00	22					
o	9.2	9.3	9.25	01					
p	9.9	9.8	9.85	10					
q	10.0	10.1	10.05	01					
r	10.3	10.3	10.30	00					
s		10.4	10.4	a					

+6
-7
12)13
±11

+3
-6
12)9
±08

+11
-12
36)23
±06

-12
+15
54)27(±05

4.25

m. 14

Tuesday, October 2~~5~~7, 1908

23.10

Copied P

North Polar Sequence

C 17490 remeasured

Scale C 15350

	1st Exp	p196	Mean			2nd Exp	p196	Mean	
c¹	3.0 2.7	2.6	2.65	10	c¹	5.2 4.9 4.8 4.85 10	4.70	4.78	01
c²	3.6 3.3	3.3	3.30	00	c²	5.8 5.5 5.6 5.55 10	5.70	5.62	01
c³	3.8 3.5	3.3	3.40	11	c³	6.0 5.7 5.9 5.80 11	5.65	5.72	11
d	4.1 3.8	3.7	3.75	01	d	6.5 6.2 6.4 6.30 11	6.30	6.30	00
e	4.9 4.6 4.6 4.60^{00}	4.40	4.50	11	e	6.8 6.5 6.8 6.65 12	6.70	6.68	10
f¹	5.1 4.8 5.0 4.90^{11}	4.95	4.92	01	f¹	7.2 7.2	6.95	7.08	11
f²	5.9 5.6 5.9 5.75^{21}	5.65	5.70	11	"o"	6.7 6.4 6.7 6.55 21	6.50	6.52	10
f³	6.5 6.2 6.0 6.10^{11}	5.90	6.00	11	"p"	7.0	6.85	6.92	11
g	6.7 6.4 6.5 6.45^{01}	6.45	6.45	00	"q"	7.7	7.8	7.75	10
h	6.9 6.6 6.8 6.70^{11}	6.65	6.68	01	"r"	8.5	8.4	8.45	10
i	6.9 6.6 6.9 6.75^{21}	6.75	6.75	00	f²	7.8	7.7	7.75	01
"o"	4.8 4.5 4.2 4.35^{12}	4.35	4.35	00	f³	8.0	8.0	8.00	00
"p"	5.3 5.0 4.9 4.95^{01}	4.95	4.95	00	g	8.5	8.2	8.35	12
"q"	5.8 5.5 5.7 5.60^{11}	5.60	5.60	00	h	8.9	8.9	8.90	00
"r"	6.6 6.3 6.7 6.50^{22}	6.35	6.42	10	i	9.1	9.2	9.15	10
k¹	7.4	7.00	7.20	22	k¹	9.6	9.6	9.60	00
k²	7.5	7.4	7.45	10	k²	image def	9.7	9.7	a
k³	7.9	7.8	7.85	10	k³	9.9	9.9	9.90	00
k⁴	8.2	8.1	8.15	01					
k⁵	8.3	8.3	8.30	00					
l	8.4	8.4	8.40	00					
m	8.9	9.0	8.95	10					
n	9.1	9.0	9.05	10					
o	9.1	9.1	9.10	00					
p	9.6	9.6	9.60	00					
q	9.9	9.9	9.90	00					
r	10.1	10.1	10.10	00					
s	not actually seen								

+10
-13
22)23
±10

+6
-6
12)12
±10

+7
-10
34)17
±05

+12
-10
54)22(±04

23.30

M. E. 14.

Tuesday, October 27, 1908

2 3. 32

Copied

North Polar Sequence

I 35597 - Large prism

Scale M

im. good	a³	2.4 2.6				
	a⁵	3.6 3.8				
.. ..	b³	4.9 5.1	5.0	5.05	10	
	c¹	4.8 5.0	5.0	5.00	00	
	c²	5.6 5.8	5.8	5.80	00	
	c³	5.9 6.1	5.9	6.00	$1\underline{1}$	
	c⁴	4.9 5.1	5.3	5.20	$\underline{1}1$	
	c⁵	6.0 6.2	6.5	6.35	$\underline{2}1$	
	c⁶	6.5 6.7	6.7	6.70	00	
	c⁷	6.7 6.9	6.8	6.85	10	
	d	6.7 6.9	6.8	6.85	10	
	e	6.8 7.0	7.2	7.10	$\underline{1}1$	
im good	F	2.0 2.2				+6 −5 20)12 ±06
	a⁴	2.9 3.1				
	f¹	7.8				
	f²	7.9				
	f³	8.7				
	g	8.9				
	h	9.0				
	i	9.3				
	k¹	9.7				
	k²	9.8				
	k³	10.2 v.p.				

Prismatic Companions - Large prism

F	5.7 5.9	6.0	5.95	$\underline{1}0$	
a⁴	6.3 6.5	6.8	6.65	$\underline{1}2$	
b³		7.9			
a³	6.4 6.6	6.7	6.65	01	
a⁵	7.0 7.2	7.1	7.15	$0\underline{1}$	
c¹		8.2			+3 −3 8)6 ±08
d		9.3			
c²		8.6			
c⁷		$\overset{9}{8}$.7			Unit changed Nov. 15, 1908 H.S.L.
c⁵		9.0			
e		10.0			
c³		9.0			
c²		9.1			
f¹		10.2			
c⁴		8.2			

No prism comp of small prism near enough centre of plate

23.45

M. E. H.

Tuesday, October 27, 1908

0.15

Standard Sequences

AC 9495 Measured also pages 192 and 204.

N

Scale AC 8858

Sequence 24, 15h+86 (scale 2)

a	6.4	6.0	5.6	5.80	$2\underline{2}$	
b	7.1	6.7	6.5	6.60	$1\underline{1}$	
c	7.6	7.2	7.1	7.15	$0\underline{1}$	
d	7.8	7.4	7.7	7.55	$\underline{2}1$	
e	8.4	8.0	8.3	8.15	$\underline{2}1$	
f	8.7	8.3	8.7	8.50	$\underline{3}2$	
g		8.5				
h		9.2				+7 −10 12)17 ±0.142
k		9.4				
l		9.5				
m		9.7				
n		10.0 ~~9.8~~				
o		10.4				

Sequence 33 21h+86

a	7.1	6.7	6.0	6.35	$3\underline{4}$	
b	7.5	7.1	6.9	7.00	$1\underline{1}$	
c	7.8	7.4	7.4	7.40	00	
d	8.4	8.0	8.0	8.00	00	
e	8.7	8.3	8.6	8.45	$\underline{1}2$	
f	9.1	8.7	9.0	8.85	$\underline{1}2$	
g		8.9				
h		9.6				+8 −7 12)15 ±0.125
k		scratched 9.9				

Seq 6 re-measured see p. 192

a	6.6	6.2	5.7	5.95	$2\underline{3}$	
b	6.9	6.5	6.5	6.50	00	
c	7.6	7.2	6.9	7.05	$2\underline{1}$	
d	8.3	7.9	7.9	7.90	00	
e	8.2	7.8	8.3	8.05	$\underline{2}3$	
f	8.8	8.4	8.8	8.60	$\underline{2}2$	
g	8.9	8.5	8.9	8.70	$\underline{2}2$	
h		9.2				
k		9.5				+11 −10 14)21 ±0.150
l		9.8				
m		10.2				

comp on Seq 24 Sequence 16

a	6.7	6.3	5.9	6.10	$2\underline{2}$	
b	7.2	6.8	6.7	6.75	$0\underline{1}$	
c	7.4	7.0	6.7	6.85	$2\underline{1}$	
d	7.7	7.3	7.3	7.30	00	
e	7.8	7.4	scratched 7.7	7.55	$\underline{2}1$	
f	8.5	8.1	8.0	8.05	10	
g	8.8	8.4	8.5	8.45	01	
h	9.1	8.7	8.9	8.80	$\underline{1}1$	
k		9.5				
l		9.6				+8 −7 16)15 ±0.094
m		10.0				
n		10.2				
o		10.3				

Sequence 14 comp on Seq 33

a	5.9	5.5	5.7	5.60	$\underline{1}1$	
b	7.0	6.6	6.5	6.55	$0\underline{1}$	
c	almost comp 7.4	7.0	6.9	6.95	$0\underline{1}$	
d	7.9	7.5	7.7	7.60	$\underline{1}1$	
e	8.3 ~~7.9~~	7.9	8.3	8.10	$\underline{2}2$	
f	8.9	8.5	8.7	8.60	$\underline{1}1$	
g		8.9				
h		9.4				+5 −6 12)11 ±0.092
k		9.8				
l		n.d.				
m						

Sequence 12 re-measured see p. 192

a	6.8	6.4	6.3	6.35	$0\underline{1}$	
b	7.4	7.0	6.8	6.90	$1\underline{1}$	
c	7.7	7.3	7.4	7.35	$\underline{1}0$	
d	7.7	7.3	7.7	7.50	$\underline{3}2$	
e	8.0	7.6	7.9	7.75	$\underline{3}1$	
f	8.6	8.2	8.4	8.30	$\underline{1}1$	
g	8.7	8.3	8.8	8.55	$\underline{3}2$	
h		9.2				
k		9.6				+7 −11 14)18 ±0.129
l		9.7				
m		9.8				

M. E. H.

Tuesday, October 27, 1908

Standard Sequence

N

AC 9495 Remeasured; see pages 203 and 192

Scale AC 8858

Sequence 24 remeasured

						p203	Mean	
a	6.2	5.8	5.8	5.80	00	5.80	5.80	00 00
d	8.0	7.6	7.6	7.60	00	7.55	7.58	03 02
b	7.2	6.8	6.5	6.65	21	6.60	6.62	02 03
c	7.7	7.3	7.0	7.15	12	7.15	7.15	00 00
e	8.3	7.9	8.1	8.00	11	8.15	8.08	07 08
f	8.9	8.5	8.7	8.60	11	8.50	8.55	05 05
g		8.9				8.5	8.70	20 20
h		9.2				9.2	9.20	00 00
k		9.2				9.4	9.30	10 10
l		~~10.4~~ 9.3				9.5	9.40	10 10
m		9.6				9.7	9.65	05 05
n		9.8				10.0	9.90	10 10
o		10.4				10.4	10.40	00 00

Seq 16

a	6.6	6.2	5.8	6.00	22	6.10	6.05	05 05
b	7.3	6.9	6.8	6.85	10	6.75	6.80	05 05
c	7.5	7.1	6.7	6.90	22	6.85	688	03 02
d	7 6.7	7.3	7.5	7.40	11	7.30	7.35	05 05
e	8.2	7.8	7.6	7.70	11	7.55	7.62	07 08
f	8.6	8.2	8.3	8.25	01	8.05	8.15	10 10
g	8.8	8.4	8.3	8.35	01	8.45	8.40	05 05
h	9.1	8.7	8.8	8.75	10	8.80	8.78	02 03
k		9.6				9.5	9.55	05 05
l		9.5				9.6	9.55	05 05
m		10.0				10.0	10.00	00 00
n		10.3				10.2	10.25	05 05
r						10.3	10.3	a.

1.00

Sequence 33.

						p203	Mean	
a	6.8	6.4	6.4	6.40	00	6.35	6.38	03 02
b	7.5	7.1	6.7	6.90	22	7.00	6.95	05 05
c	7.8	7.4	7.4	7.40	00	7.40	7.40	00 00
d	8.3	7.9	7.9	7.90	00	8.00	7.95	05 05
e	8.6	8.2	8.4	8.30	11	8.45	8.38	07 08
f	9.0	8.6	8.9	8.75	21	8.85	8.80	05 05
g		8.9				8.9	8.90	00 00
h		9.5				9.6	9.55	05 05
k		9.8				9.9	9.85	05 05

Sequence 14

a	5.8	5.4	5.4	5.40	00	5.60	5.50	10 10
b	6.8	6.4	6.4	6.40	00	6.55	6.48	07 08
c	7.3	6.9	6.6	6.75	12	6.95	6.85	10 10
d	7.9	7.5	7.7	7.60	11	7.60	7.60	00 00
e	8.2	7.8	7.6	7.70	11	8.10	7.90	20 20
f	9.0	8.6	8.6	8.60	00	8.60	8.60	00 00
g		9.1				8.9	9.00	10 10
h		9.5				9.4	9.45	05 05
k		9.7				9.8	9.75	05 05
l		m.e						

Light poor

M.E.H

Tuesday, November 10, 1908

copied

North Polar Sequence

I 35635 - Large prism

Scale M

a¹	1.4	1.6			
a³	2.5	2.7			
a⁵	3.7	3.9			
b¹	3.8	4.0			
b²	4.6	4.8			
c¹	4.8	5.0	5.0	5.00	00
c²	5.0	5.2	5.7	5.45	23
d	5.9	6.1	6.6	6.35	32
f²	7.0	7.2	7.6	7.40	22
c⁵	t.p				
c⁴	4.7	4.9	4.9	4.90	00
e	6.4	6.6	6.8	6.70	11
c³	5.7	5.9	5.8	5.85	10
c⁶	5.9	6.1	6.2	6.15	10
c⁷	6.1	6.3	6.4	6.35	10
f¹	6.8	7.0	7.1	7.05	01
i		8.8			+10 −10
k³		9.7			20) 20 ±10
g		8.0			
f³		7.8			
h		8.6			
k¹		9.0			
l		m def			
k⁵		10.0			
k²		9.1			
k⁴		9.9			

Prismatic Companions - Large prism

a¹	5.0	5.2	5.7 diff	5.45	23
b¹	6.9	7.1	7.0	7.05	10
A	2.3 diff	2.5		2.5	a.
a⁵	6.5	6.7	6.8	6.75	10
a³	6.0	6.2	6.4	6.30	11
c¹			7.7		
c⁶			8.8		8) 9 ±11
c²			8.0		
d			9.0		
f¹			10.0		
c⁷			9.2		
c³			8.5		
e			9.6		
b²			7.6		
c⁴			7.9		

Prismatic Companion - Small prism

A	3.9	4.1		
a¹	6.9	7.1	7.5	7.30
a³			8.0	
a⁵			8.7	
b¹			9.1	
b²			9.8	
c¹			9.9	
c⁴			10.0	

M.E.H

23.45

Copied Pleiades

I 35649 - Large prism

Preceding edge at top

Scale M

d	1.1 1.3	1.3	a.
e'	2.5 2.7	2.7	a.
j	4.7 4.9 4.8	4.85	i o
g	2.8 3.0	3.0	
h	6.9 7.1 6.9	7.00	i i
e	2.3 2.5	2.5	
j^3	5.5 5.7 5.7	5.70	o o
j'	6.5 6.7 6.8	6.75	i o
h'	4.1 4.3 4.8	4.55	3 2
i^*	4.1 4.3 4.9	4.60	3 3
j^5	6.7 6.9 7.0	6.95	i o
f	2.9 3.1	3.1	
h	3.7 3.9	3.9	
j^2	4.9 5.1 5.4	5.25	i 2
z	3.0 3.2	3.2	
d'	1.9 2.1	2.1	
ε	4.7 4.9 4.8	4.85	i o
γ	2.8 3.0	3.0	a.
Δ	4.2 4.4 4.7	4.55	2 1
i'	4.1 4.3 4.9	4.60	3 3
j^4	5.8 6.0 5.7	5.85	2 1
k'	7.8		+16
l'	9.1		-16 24)32 ±.13
l	8.5		
m	9.6		
n	10.1		
m'	9.9		

Images elongated

M.E.H.

Prismatic Companions - Large prism

b^2	2.7 2.9		
c	3.9 4.1 4.5	4.30	3 2
a	2.9 3.1		
γ	6.2 6.4 6.7	6.55	2 i
ε	8.1		
β	3.1 3.3		
b	2.8 3.0		
d	4.7 4.9 4.9	4.90	o o
e'	5.9 6.1 6.3	6.20	i i
a	1.9 2.1		
d'	5.0 5.2 5.7	5.45	3 3
a'	2.7 2.9		
b'	3.8 4.0		
f	6.6 6.8 6.8	6.80	o o
h	7.0 7.2 7.2	7.20	o o
e	5.7 5.9 5.8	5.85	i o
g	6.6 6.8 6.7	6.75	o i
z	6.5 6.7 6.7	6.70	o o
Δ	7.8		
j'	9.7		
j^3	8.8		
h'	7.8		
j^5	10.2		
i'	8.3		
k'	11.2		
k	10.1		
j	8.4		
j^4	9.1		

j^2	8.7		
i	7.9		

Small Prism

Prismatic Companions

b^2	4.9 5.1 5.3	5.20	i i
c	6.8 7.0 6.8	6.90	i i
β	5.8 6.0 5.9	5.95	o i
α	5.5 5.7 5.6	5.65	i o
a	4.1 4.3	4.3	
b	5.8 6.0 5.8	5.90	i i
a'	4.9 5.1 5.4	5.25	i 2
b'	6.7 6.9 6.8	6.85	i o
d	6.9 7.1 7.3	7.20	i i
γ	8.7		+8 -6 16)14 ±09
ε	10.1?		
δ	9.9		
z	8.9		
d'	8.0		
e'	8.6		
f	9.0		
h	9.7		
e	8.4		
h'	10.0 scratched		
g	8.9		
j	10.2?		

Copied North Polar Sequence

I 35643 - Large prism

Scale M

a'	2.7 2.9		
b'	4.0 4.2		
a^3	2.9 3.1		
c'	4.9 5.1 5.4	5.25	i 2
c^3	5.8 6.0 6.2	6.10	i i
f'	7.0 7.2 7.3	7.25	o i
c^6	5.8 6.0 6.2	6.10	i i
a^5	3.7 3.9	3.9	
b^2	4.7 4.9 4.8	4.85	i o
c^7	6.1 6.3 6.4	6.35	i o
c^2	5.7 5.9 5.7	5.80	i i
d	6.3 6.5 6.7	6.60	i i
e	6.7 6.9 6.8	6.85	i o
i	9.8		+9
k^4	10.2		-6 18)15 08
g	8.7		
k^3	10.0		
f^3	8.3		
h	8.9		
k'	9.7		
k^2	9.9		
f^2	7.8		

0.15

M.E.H.

Prismatic Companions - Large prism

A	2.1 2.3	2.3	
a'	5.7 5.9 5.9	5.90	o o
a^3	6.0 6.2 6.7	6.45	2 3
a^5	6.8 7.0 7.0	7.00	o o
b'	7.4		+3 5 5 ±08
b^2	8.1		
c'	8.3		
c^2	8.8		
c^3	9.1		
c^6	9.6		
~~c^7~~	~~10.0~~		Certainly wrong. H.S.L. Nov. 17, 1908 Wrong star probably measured
d	9.6		
e	10.0		
f'	10.3?		

Prismatic Comp. Small prism

A	4.5 4.7 4.6	4.65	i o
a'	7.8		±05
a^3	8.0		
a^5	9.2		
b'	9.4		mistake of unit
b^2	10.0		
c'	10.0		

Friday, November 13, 1908

copied

North Polar Sequence

Reexamination of Plates for discordant Measures

AC 2519 scale $\overset{N}{\text{AC }8858}$

f'	9.5
f³	10.2
c⁵	8.4
e	9.0
f²	9.8

AC 4737

d	8.2 7.8	7.9	7.85	01
a²₁	4.0 3.6	–	3.6	a.
f	9.0 8.6	8.8	8.70	1̲1
f³	–	9.6	9.6	.a
a⁵	5.2 4.8	4.8	4.80	00

+2
−1
6)3
±05

AC 5544

a'	4.4 4.0 ½	4.0	a.
a³	4.9 4.5 4.3	4.40	11̲
g	4.~~4~~ 4.0 ½	4.0	a.
f²	7.5 7.1 6.9	7.00	11̲

+2
−2
4)4
±10

Diff. scale from preceding AC 8756 2d exp scale AC 8796

D	6.5	6.7 6.4	5.8	$6.\overset{23}{12}$	$\overset{3}{5},2\underline{4}$
f²	f	9.8 9.5	9.5	9.50	.00
E	6.4	6.6 6.3	5.9	6.20	2 1 3̲
a'	7.0	7.2 6.9	6.8	6.90	±01̲
f³	f ~~6.4~~	9.2 8.9	$9.\overset{0}{2}$	8.95	.1̲0

I 35285

f²	4.9 5.1	5.3	5.20	1̲1
~~f~~				
c'	5.6 5.8	5.8	5.80	00
c²	5.8 6.0	5.9	5.95	01̲
d	6.7 6.9	6.9	6.90	00

AC 8759 2d exp scale AC 8756 Diff scale from first meas.

a³	8.8 8.5	8.6	8.55	1̲0
a'	8.4 8.1	7.8	7.95	12̲
a⁵	9.3 9.0	8.9	8.95	01̲
7	8.1 7.8	7.7	7.75	01̲
a⁴	~~8.6~~ 9.0 8.7	8.7	8.70	00

I 34324

f²	4.7 4.9 4.9	4.90	00
c²	5.5 5.7 5.8	5.75	1̲0
~~d~~e	6.5 6.7 6.8	6.75	1̲0
c'	4.7 4.9 4.8	4.85	10

B2304

f²	2.0
c⁷	2.8
f'	1.2
c'	1.7
a⁵	1.0

c' appears brighter than f² sharper image

B937

c⁵	5.8 6.0 5.9	5.95	01̲
c'	4.2 4.4 4.6	4.50	1̲1
c³	5.0 5.2 5.6	5.40	2̲2

I 28206 4th Exp

e	~~8~~ 8.3
c²	7.5
d	7.9

C 10052 scale C 15950

d	3.0	
f'	3.8	
c³	2.8	
f²	4.5 $\overset{4.2}{4}$ 3	4.25 01
e	3.4	

Thursday, March 4, 1909

12.30

North Polar Sequence

I 35797 – Large prism Remeasured p. 212

Scale M

I 35797.

c'	2.9 3.1		3.1	a.
h	6.8 7.0 7.0		7.00	00
e	$\overset{4}{5}$.8 5.0 5.1		5.05	01
c⁶	4.1 4.3 $4.\overset{5}{8}$		4.40	1̲1
i	7.0 7.2 7.3		7.25	01
f'	5.6 5.8 5.7		5.75	01̲
g	6.5 6.7 6.9		6.80	1̲1
c²	3.8 4.0		4.0	a.
d	4.5 4.7 4.6		4.65	10
f²	5.8 6.0 5.8		5.90	11̲
c⁷	4.6 4.8 4.8		4.80	00
f³	6.4 6.6 6.7		6.65	01
c³	4.0 4.2 4.4		4.30	1̲1
k⁴		8.4		
k³		8.0		
n		9.2		
l		8.7		
r		10.0		
k⁵		8.5		
k'		7.8		
m		8.8		
u		10.2		
k²		7.8		
s		9.1		
p		9.7		
q		9.9		
r		10.0		

+8
−5
22)13
06

t. 10.1

Prismatic Companions Large prism

$\overset{a^3}{c'}$	6.2 6.4 6.6		6.50	1̲1
c⁶	6.9 7.1 7.5		7.30	2̲2
c²	6.6 6.8 6.9		6.85	01
c³	6.8 7.0 7.0		7.00	00
c⁷		7.6		
g		9.4		
d		7.7		
e		8.0		
f²		8.8		
h		9.7		
k'		10.1		
f'		8.4		
f³		9.0		
i		9.9		

+4
−3
8)7
±09

Prismatic Companions – Small prism

a³	6.5 6.7 6.9.		6.80	1̲1
c'	~~8.6~~	8.6	±10	
c²		8.8		
c³		9.2		
c⁶		9.0		
c⁷		9.6		
d		9.6		
e		9.8		
f'		9.8		
f²		m.a.		

M.H.

Thursday, Mar. 4, 1909

~~1.20~~

Copied Nutt.

Polar Sequence

I 35767 – Different apertures

Scale M

	1st Exp – full aperture		
a¹	1.5 1.7	1.7	a .
b¹	3.3 3.5	3.5	a .
c¹	3.9 4.1	4.1	a .
c³	4.7 4.9 5.0	4.95	1 0
f¹	5.8 6.0 6.0	6.00	0 0
f³	6.7 6.9 6.9	6.90	0 0
c⁶	4.8 5.0 5.0	5.00	0 0
e	5.5 5.7 5.5	5.60	1 1
f²	$6.\overset{0}{5}$ 6.2 6.2	6.20	0 0
d	5.0 5.2 5.4	5.30	1 1
c²	4.1 4.3 4.7	4.50	2 2
c⁷	4.9 5.1 5.3	5.20	1 1
b²	3.8 4.0	4.0	a .
a³	2.0 2.2	2.2	a .
g	6.8 7.0 7.1	7.05	0 1
i	7.6		+6
n	9.3		−6 20)12 ±.06
h	⁷8.2		
k³	8.6		
k¹	7.9		
l	8.9		
p	10.0		
o	9.2		
k⁵	8.7		
k²	8.0		
m	8.9		
k⁴	8.7		
q	10.1		

1.20

M.H.

	Prismatic Companions		
a¹	~~3.8~~ 6.7 6.9 6.9	6.90	0 0
b¹	7.9		±00
c¹	8.5		
c⁶	9.2		
a³	7.0		
c³	9.2		
e	9.9		
c²	8.9		
d	9.6		
f¹	10.0		
b²	8.2		
c⁷	9.5		

	2nd Exp – Small ap		
a¹	t.p.		
b¹	fogged ~~5.8~~ ~~6.5~~ 6.8	reject – too fogged	
c¹	6.7 6.9 6.7	6.80	1 1
c⁶	7.0 7.2 7.2	7.20	0 0
c²	6.7 6.9 7.1	7.00	1 1
b²	$6.\overset{5}{9}$ 6.7 6.7	6.70	0 0
a³	4.8 5.0 5.5	5.25	3 3
c³	6.9 7.1 7.3	7.20	1 1
f³	9.0		+6
e	7.9		−5 12)11 ±10
d	7.7		
c⁷	7.6		
f¹	8.3		
f²	8.5		
g	9.3		
i	9.8		
h	9.6		
k¹	10.0		

Images of all stars brighter than d are very poor. Focus on this exp much sharper than previous exp

---

1.00

Friday, Mar 5, 1909

Copied Nutt.

Polar Sequence

AC 9786

Unit changed after examination of plate, March 8/09

	1st Exp		
a	$\overset{4}{5}$.2	$\overset{4}{5}$.2	a . .
C	~~6.4~~ 7.3 7.0 7.1	7.05	. 0 1
B	6.1 6.6 6.3 5.9	$6.\overset{1}{2}0$	0 $\overset{2}{3}$ 2
D	8.2 7.9 7.7	7.80	. 1 1
a¹	8.9 8.6 8.8	8.70	. 1 1
b¹			
E	8.3 8.0 7.7	7.85	. 2 1
a³	9.3 9.0 9.5	9.25	. 2 3
F	9.0 8.7 8.5	8.60	. 1 1
a⁴	9.8 9.5 9.7 p	9.60	. 1 1
g	8.9 8.6 8.9	8.75	. 2 1
a²	9.5 9.2 9.0	9.10	. 1 1
a⁵	10.1 9.8 10.2	10.00	. 2 2
	2nd Exp		
A	6.0 6.7 6.4 5.9	6.10	1 3 2
B	8.3 8.0 7.8	7.90	. 1 1
E	10.2 9.9 10.3	10.10	. 2 2
D	9.9 9.6 9.6	9.60	. 0 0
C	9.1 8.8 9.1	8.95	. 2 1
			+23 −22 34)45 13

Scale AC 8796

	1st Exp Plate AC 9787		
A	4.8	4.8	a . .
B	6.5 6.8 6.5 6.4	$6.\overset{47}{50}$	0 0 1
E	8.2 7.9 7.8	7.85	. 1 0
C	7.8 7.5 7.3	7.40	. 1 1
D	8.3 8.0 7.9	7.95	. 0 1
a¹	8.9 8.6 8.6	8.60	. 0 0
b¹	10.2 9.9 10.4?	10.15	. 3 2
a²	9.0 8.7 8.8	8.75	. 1 0
F	8.9 8.6 8.7	8.65	. 0 1
a⁴	9.8 9.5 9.5	9.50	. 0 0
g	8.9 8.6 8.7 –	8.65	. 0 1
a⁵	10.1 9.8 10.3	10.05	. 2 3
a³	9.6 9.3 9.0	9.15	. 1 2
	2nd Exp		
A	6.4 6.7 6.4 6.0	6.27	1 1 3
B	8.2 7.9 7.8	7.85	. 1 0
C	9.1 8.8 8.6	8.70	. 1 1
D	9.8 9.5 9.8	9.65	. 1 2
E	10.0 9.7 10.1	9.90	. 2 2
F	n.a		+18 −18 36)36 10

An attempt was made to estimate combined light

Images are double on ~~this~~ first exp

M.E.H.

Thursday, March 11, 1909.

North Polar Sequence.

I 35797 Remeasured

3.30

Scale M

							First meas. p 209
b^1	2.2	2.4 image poor					.
f^1	5.6	5.8	5.7	5.75	0 1		5.75
g	6.7	6.9	6.8	6.85	1 0		6.80
c^1	~~4~~3.0	3.2					3.1
d	4.7	4.9	4.8	4.85	10		4.65
c^2	3.8	4.0					4.0
i	7.0	7.2	7.6	7.40	2 2		7.25
c^6	4.2	4.4	4.3	4.35	0 1		4.40
e	4.9	5.1	5.1	5.10	00		5.05
f^2	5.8	6.0	5.9	5.95	0 1		5.90
h	6.9	7.1	7.1	7.10	00		7.00
c^7	4.2	4.4	4.8	4.60	2 2		4.80
f^3	6.3	6.5	~~7~~6.7	6.60	1 1		6.65
b^2	2.9	3.1	.				.
b^3	.				+7 −8 20) 15 ±.08	~~0.7~~5	
c^3	4.0	4.2	.				4.30
k^4		8.6					8.4
n		9.1					9.2
~~h~~		~~7.3~~					
l		8.7					8.7
k^1		7.8					7.8
k^2		7.8					7.8
m		9.1					8.8
p		9.7					9.7
k^3		. 8.2					8.0
k^5		8.6					8.5

o	9.4	9.1	s	10.0
q	9.9	9.9	t	10.1
r	10.1	10.0	u	10.2

Prismatic Companions P.C.

Large prism							First meas. p 209	Small prism						First meas. p 209
c^1	6.~~8~~4	6.6	6.7	6.65	0 1		6.50	A	too fogged					
b^1	5.6	5.8	5.8	5.80	00			a	too poor 2nd scale					
c^3	6.8	7.0	7.2	7.10	1 1		7.00	b^1	~~7.8~~	7.8				.
c^6	.	7.5					7.30	c^1		8.5				8.6
c^7	.	7.7					7.6	c^3		9.1				9.2
b^2	~~6.3~~ 6.0	6.5	6.7	6.60	1 1		.	c^6		9.1				9.0
c^2	6.7	6.9	6.9	6.90	00		6.85	a^3	6.6	6.8	6.8	6.80	00	6.80
a^3	4.1	4.3	.		+3	.		b^2		8.5				.
f^1		8.5			−2 10) 5 0.50		8.4	d		9.6			0 0 2) 0 0	9.6
g		9.4					9.4	f^1		10.0				9.8
e		7.9					8.0	c^7		9.4				9.6
f^2		8.8					8.8	e		9.5				9.8
h		9.8					9.7	f^2		n.s.				:
f^3		9.0					9.0	c^2		8.8				8.8
d		7.7					7.7							
i		9.9					9.9							
k^1		10.1					10.1							

3.59

a.S.W.

North Polar Sequence.

I 35797

Do not use readings for b^1 & b^2. They are too poor.

Begin star readings with c^1

	Star reading						
b^1	2.4 ~~5.75~~	a ~~00~~	. ~~00~~	v	10.05	05	05
b^2	3.1	a	.	s	10.0	.	a
b^3				t	10.1	.	a
c^1	3.15	05	05				
c^2	4.00	00	00				
c^3	4.25	05	~~10~~ 05				
c^4							
c^6	4.38	03,	02				
c^7	4.70	10,	10				
d	4.75	10	10				
e	5.0~~5~~8	~~05~~ 02	0~~5~~3				
f^1	5.75	00,	00				
f^2	5.92	03	02				
f^3	6.62	02,	03				
g	6.82	03	02				
h	7.05	05	05				
i	7.32	08	07				
k^1	7.80	00,	00				
k^2	7.80	00,	00				
k^3	8.10	10	10				
k^4	8.50	10	10				
k^5	8.55	~~10~~ 05	~~00~~ 05				
l	8.70	00,	00				
m	8.95	~~20~~ 15	~~10~~ 15				
n	9.15	05	05				
o	9.25	~~2~~ 15	15				
p	9.70	00,	00				
q	9.90	00,	00				

w	10.2	. a
v		

50) 240 ±05

Prismatic Companions P.C.

Begin with c^1

Large prism				Small prism			
a^3	4.3	a	.	a^3	6.80	00	00
b^1	5.80	a	.	b^1	7.8	a	.
b^2	6.60	a	.	b^2	8.5	a	.
c^1	6.58	07	08	c^1	8.55	05	05
c^2	~~8.75~~ 6.88	02	03	c^2	8.80	00,	00
c^3	7.05	05	05	c^3	9.15	05,	05
c^6	7.40	10,	10	c^6	9.05	05,	05
c^7	7.65	05	05	c^7	9.50	10,	10
d	7.70	00,	00	d	9.60	00	00
e	7.95	05	05	e	9.65	15	15
f^1	8.45	05,	05	f^1	9.90	10	10
f^2	8.80	00,	00	f^2	n.s.		
f^3	9.00	00,	00				
g	9.40	00,	00				
h	9.75	05.	05				
i	9.90	00,	00.				
k^1	10.10	00,	00				

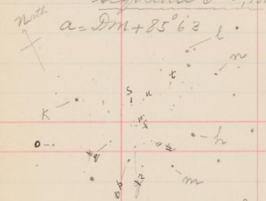
18) 100 ±06

28) 90 ±03

Charts of Faint Stars in Standard Polar Sequences.

Sequence 6 3^h, $+86^\circ$

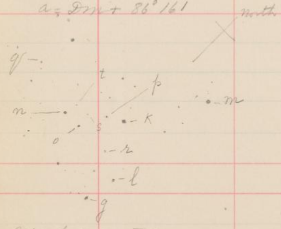
a = DM $+85^\circ$ 63



Marked on I 34920 Original r is double.

Sequence 15, 9^h, $+86^\circ$

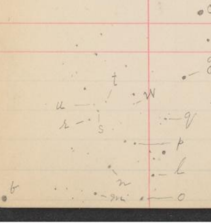
a = DM $+86^\circ$ 161



Marked on I 34920

Sequence 24 15^h, $+86^\circ$

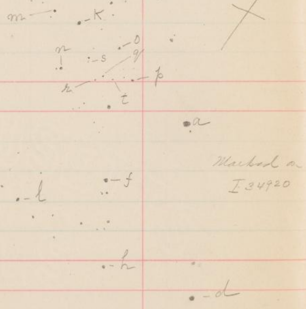
a = DM $+85^\circ$ 269



Marked on I 34920

Sequence 33 21^h, $+86^\circ$

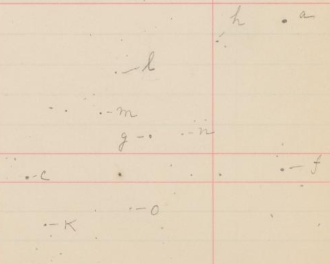
a = DM $+86^\circ$ 319



Marked on I 34920

Sequence 12 8^h, $+77^\circ$

a = DM $+75^\circ$ 334

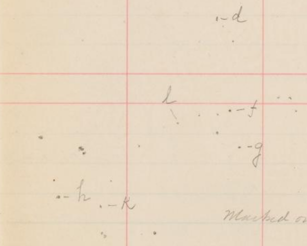


Marked on I 28597

Charts of Faint Stars in Polar Sequences

Sequence 14 9^h, $+79^\circ$

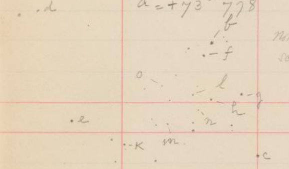
a = $+77^\circ$ 359



Marked on I 22415

Sequence 16 9^h $+79^\circ$

a = $+73^\circ$ 778

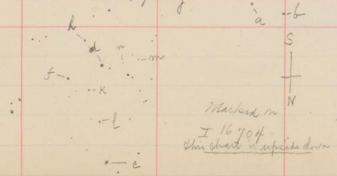


Not magnified scale of I plates

Marked on I 16708

Sequence 17, 11^h, $+82^\circ$

a = $+81^\circ$ 349



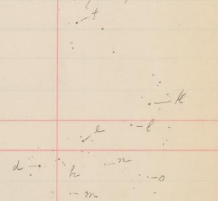
Marked on I 16704 This chart is upside down

~~Sequence 15 10^h, $+77^\circ$~~

a = $+73^\circ$ 778

Sequence 18 11^h, $+77^\circ$

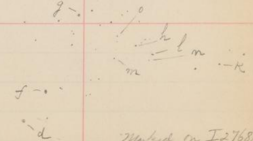
a = $+76^\circ$ 402



Marked on I 25318

Sequence 19 13^h $+77^\circ$

a = $+76^\circ$ 473

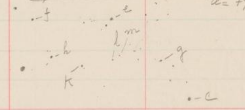


Marked on I 27688

Charts of Faint Stars in Polar Sequences

Sequence 1 1^h +77°.5

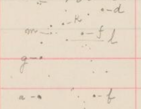
a= +76°40



Marked on I 28259

Sequence 2 1^h +81°

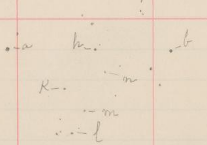
a = +80° 50



Marked on I 29799

Sequence 3 2^h +76°

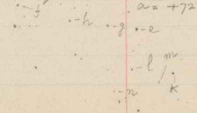
a = +74° 117



Marked on I 11464

Sequence 4 3^h +72°

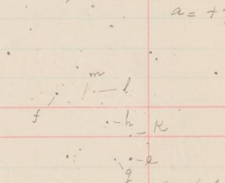
a= +72° 178



Marked on I 7980

Sequence 5, $2^h.9$, +79°

a= +78° 103

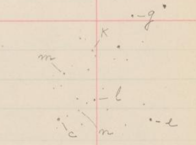


Marked on I 2872

Sequence 6 see page 216

Sequence 7 4^h. +76°

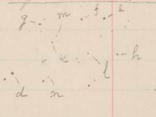
a = +76° 174



Marked on I 8097

Sequence 8 $4^h.5$ +82°

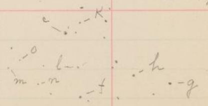
a= +82° 113



Marked on I 9819

Sequence 9 $5^h.5$ +77°.5

a= +78° 187



Marked on I 16560

Charts of Faint Stars in Polar Sequences