KG
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011

KG 11366.011

KG 11366.011

HARVARD
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Polar Sequence.

Dev

Blue Aug 30. 1919

1 v5 Mc 15982 Ex 30s? PC

	Sc 1	Sc 2	Diff. ~~Approx Ptv~~ Ptg	Cu.	(1) Magn	Sc 2	Diff	Cu	Magn
1	Off pl					Off pl			
3	3.0	3.1	~~2.52~~ 71 ~~Pte~~	2.85	5.95	8.1	-2.29	-2.32	5.78
4	Off pl.		.	.	,	off	-~~2~~.	.	.
5	3.5	3.6	2.8~~3~~9	2.79	6.39	9.0	-2.51	-2.51	6.49
6	Sc 2 4.5		2.~~48~~61	2.60	7.10	9.7	-2.59	-2.60	7.10
7	4.7		2.~~76~~61	2.53	7.23				
w.u 8	~~7~~6.5		1.~~53~~73	1.84	8.34				
w.u 9	~~8~~7.0		1.~~74~~83	1.78	8.78				
10	7.3		1.~~58~~72	1.74	9.04				
11	7.7		1.~~66~~88	1.70	9.40				
12	8.3		1.~~28~~56	1.62	9.92				
13	8.7		1.~~38~~60	1.57	10.27				
14	9.0		1.~~24~~65	1.52	10.52				
15	9.8?		~~0.84~~ 1.28 ?	1.40	11.20?				
16	ns		.	,	,				
17	ns →		.	,	,				
2n		5.3	2.57	2.28	7.58				
3n		6.5	2.25	1.84	8.34				
4n		7.1	2.00	1.76	8.86				
5n		8.1	1.81	1.65	9.75				
6n		8.5	1.80	1.60	10.10				
7n		8.9	1.80	1.54	10.44				
8n		9.3	1.90	1.47	10.77				
9n		9.7	2.00	1.42	11.12				
4s		8.5	1.~~7~~62	1.60	10.10				
5s		9.5?	1.31	1.45	10.95				

Polar Seq

Sc V

Aug 30, 1919

MC 15892 (cont)

		Sc1	Sc2	Curve	Magn		g	h Diff			Gr. p. Prism Cu	Magn
87°	12		7.2	1.76	8.96	1	Off				.	.
	15		6.3	1.90	8.20	3	+p	+p		(2)	.	.
88°	2		7.1	1.77	8.87	5	8.1 R 8.20	8.3	R −2.0$\overset{2}{0}$. ~~1.71~~ e	−1.72	R 6.48	1.64	R 9.84
	80		7.3	1.74	9.04	6	9.5 R 9.60	9.7	R −2.$\overset{19}{\cancel{44}}$	−2.48	R 7.12	1.53	R 11.13
	86		6.7	1.80	8.50	7	n.s	n.s	,	.	.	.
	90		7.7	1.70	9.40							
	105		7.1	1.77	8.87							
	115		7.5	1.73	9.23							

Remark. Stars +88° 2 and +88° 80 are too faint for diffraction images and prism. comp. to be seen on this plate. Reject measures

1:30

Polar Sequence

Sept 3, 1919

Ser

1:20

Mc 15983

	Se 1		Se 2	(Ex 1m)	Cu.	(1) Magn	PC		Cu	(5) Magn	Prim fr gr. Cu	(~~4~~ 3) magn
1	Off						—					
3	2.1 2.0		2.1	3.71	3.75	5.85	7.2	−1.39	−1.29	5.91		
4	Off		.		.	.	~~7~~	+		.		
5	27 2.6		2.7	3.79	3.75	6.45	7.7	−1.21	−1.40	6.30		
6	34 3.3		3.4	3.71	3.72	7.12	8.9	−1.79	−1.71	7.19		
7	36 3.5		3.6	3.71	3.70	7.30	9.0	−1.69	−1.75	7.25		
8	4.6 4.5	4.65	4.7	3.58	3.53	8.23	9.9	? −1.07?	.	.		
9			5.5	3.33	3.32	8.82						
10			5.8	3.22	3.22	9.02					0.03	5.83
11			6.5	3.05	3.08	9.58					−0.10	6.40
12			6.9	2.96	3.00	9.90					−0.21	6.69
13			7.3	3.00	2.92	10.22					−0.31	6.99
14			7.7	2.95	2.83	10.53					−0.44	7.26
15			8.3	2.78	2.72	11.02					−0.63	7.67
16			8.7	2.70	2.63	11.33					−0.78	7.92
17			9.0	2.63	2.56	11.56					−0.90	8.80
18			9.7	2.36	2.44	12.14					.	.
2r			3.9	3.97	3.66	7.56					.	.
3r			5.3	3.45 ~~2.57~~	3.38	8.68					.	.
4r			5.7	3.40	3.27	8.97					.	.
5r			6.7	3.21	3.03	9.73					−0.16	6.54
6r			7.1	3.20	2.96	10.06					−0.26	6.84
7r			7.7	3.00	2.83	10.53					−0.44	7.26
8r			8.2	3.00	2.73	10.93					−0.60	7.60
9r			9.0	2.70	2.56	11.56					−0.90	8.10
10r			7									

Polar Sequence

Sept 3, 1919

Sc V

MC 15983 cont.

	Sc 1	Sc 2		Cu	Magn	Prim to Gr. Cu	magn
4 s		7.4	272	2.90	10.30	– 0.35	7.05
5 s		8.1	2.71	2.75	10.85	– 0.57	7.53
6 s		8.5	2.61	2.67	11.17	– 0.71	7.79
7 s		9.8?	2.65	2.42	12.22?	.	.
87° 12		5.5		3.32	8.82	.	.
15		4.7		3.53	8.23	.	.
88 2		5.5		3.32	8.82	.	.
~~[illegible]~~ 80		5.7		3.27	8.97	.	.
86		5.5		3.32	8.82	.	.
90		6.7		3.03	9.73	– 0.16	6.54
105		5.3		3.38	8.68	.	.
115		5.5		3.32	8.82	.	.

3
(~~4~~)

Diff.

	gf		h	
3	5.0	4.95	4.9	086 ~~406~~
5	6.7	6.70	6.7	-0.21 ~~2.79~~
6	7.5	7.50	7.5	0.39
7	7.7	7.70	7.7	-0.39
8	9.1	9.20	9.3	-0.97
9	F			

(2)

	Cu	Magn
3	~~2.20~~	.
5	-016	6.54
6	- 0.39	7.11
7	- 0.44	7.26
8	- 0.97	8.23

4
(~~3~~)

Gr. from Prim.

Cu.	Magn
3.48	8.43
3.03	9.73
2.88	10.38
2.84	10.54
2.52	11.72

1 : 55

Polar Sequence

Sept 3, 1919

Sc V

3; vo

MC 15984 Sex 3m

Diff

Prim. for Gr. Cu	(~~4~~ 3) Gr. magn	+	Sc 1	Sc 2	Diff.	Cu	(1) Magn	PC	Diff.	Cu	(5) Magn	g			Diff.
		3	~~1.25 ±01~~ 1.2 1.3		4.~~56~~ 51	~~[illegible]~~	~~8.98~~	6.3	0.49	-0.34	6.96	tp	tp		
		4	Off pl.		.	.	.	—	.	.	.	—	—		
		5	~~1.58 ±10~~ 1.5 1.6		~~4.94~~ 4.89	4.92	6.49	6.8	-0.31	-0.38	6.42	5.5	5.60±1	5.7	0.89
		6	~~2.15 ±10~~ 2.1 2.2		~~5.01~~ 4.96	4.84	~~6.99~~ 7.04	7.7	-0.59	-0.62	7.08	6.5	6.50±00	6.5	0.61
		7	~~2.38 ±10~~ 2.3 2.4		~~5.06~~ 4.91	4.82	7.~~17~~ 22	7.7	-0.39	-0.62	7.08	6.5	6.60±1	6.7	0.71
		8	~~3.55 ±10~~ 3.5 3.6		4.~~78~~ 63	4.63	8.~~18~~ 23	9.3	? -1.07 ?	-1.08	8.22	7.7	7.75±0	7.8	0.48
		9	4.1 4.2 4.25 01	4.3	4.58	4.50	8.75	ns	.	.	.	8.7	8.80±1	8.9	0.03
		10		4.5	4.52	4.43	8.93					9.0	9.00±00	9.0	0.02
+0.87	6.17	11		5.3	4.25	4.24	9.54					~~7~~ Cu	(2) Magn		
+0.80	6.60	12		5.8	4.06	4.12	9.92					+0.8~~8~~ 3	6.43		
+0.78 1	7.01	13		6.3	4.00	3.99	10.29					+0.68	7.18		
+0.67 3	7.33	14		6.7	3.95	3.95	10.65					+0.65	7.25		
+0.57	7.64	15		7.1	3.98	3.86	10.96					0.38	8.13		
+0.44	7.94	16		7.5	3.90	3.77	11.27					0.07	8.87		
+0.38	8.23	17		7.9	3.73	3.68	11.58					0.00	9.00		
0.10	8.80	18		8.7	3.36	3.53	12.23								
0.03	8.93	19		8.9	3.52	3.50	12.40								
-0.06	9.24	20		9.3	3.43	3.45	12.75								
.	.	23		9.9	3.44	3.40	13.30								
.	.	2r	~~2.58~~ 2.5 2.6		5.27	4.80	7.~~35~~ 40	8.5	-0.63	-0.84	7.66	7.5	7.60±1	7.7	0.27
.	.	3r	3.8 3.9	3.9 3.95±10 4.0	4.80	4.56	8.51	7		.	.	8.5	8.50±00	8.5	0.25
.	.	4r		4.5	4.60	4.43	8.93					Cu -0.41	magn 8.01		
0.84	6.34	5r		5.5	4.41	4.19	9.69					0.16	8.66		
0.76	6.76	6r		6.0	4.30	4.08	10.08								
0.60	7.40	7r		6.8	3.90	3.93	10.73								
0.44	7.94	8r		7.5	3.70	3.77	11.27								
0.30	8.30	9r		8.0	3.70	3.65	11.65								

Polar Sequence
Sept 3, 1919

ScV

MC15984

Gr.-fr. Prim Cu.	4 (3) Magn		Sc 1	Sc 2	Diff	Cu.	(1) Magn	Pc		Diff g		L		
		10 r		8.8	3.55	351	12.31	007						
		11 r		9.5	3.47	342	12.92							
4.17	9.77	12 r		7	.	.	.							
3.99	10.49	4 s		5.9	4.22	4.10	10.00							
3.97	10.57	5 s		6.6	4.21	3.96	10.56							
3.71	11.46	6 s		7.3	3.81	3.81	11.11							
3.52	12.32	7 s		8.7	3.75	3.52	12.22							
3.49	12.49 87	12		4.3		4.49	8.79			8.7	8.70 00	8.7	0.11	8.81
.		15		3.5		4.64	814	9.1 — 1.00	(5) 8.10	7.7	7.70 00	7.7	0.39	8.09
	88°	2		4.1		4.52	8.62			8.5	8.60 ±1	8.7	0.13	8.73
		80		4.5		4.43	8.93			7			.	.
		86		4.0		$4\overset{5}{2}4$	$8\overset{5}{2}4$			8.9	8.95 ±0	9.0	0.02	8.97
		90		5.2		4.26	9.46			7			.	.
		105		4.0		$4\overset{5}{2}4$	$8\overset{5}{2}4$			8.9	8.90 00	8.9	0.04	8.94
		115		4.3		4.49	8.79			8.7	8.80 ±1	8.9	0.07	8.87

Cu.	4 (3) Magn	Prim fr Gr. Cu	3 (4) Magn	Gr.-fr. Prim Cu.	4 (3) Magn
		007	8.87		
		.	.	3.52	12.22
		.	.	3.72	11.42
3.74	11.34	0.79	6.69	3.54	12.14
3.54	12.04	0.65	7.25	.	
		0.50	7.80	3.49	12.44
		0.11	8.81	.	
		.	.	3	50
		.	.	3.50	12.40
		0.40	5.60	3.52	12.32
		.	.		
		.	.		

Ser

Polar Sequence

Sept 4, 1919

1; 50 Mc 15985 Ep 10m

Gr fr. Prime Cu	Magn		Sc 1	Sc 2	Diff.	Cu	(1) Magn	Pc Sc 2	Diff.	Cu	(5) Magn	Diffr. g		Diff.
On edge	~~(3)~~ 4	3	B		.	.	.	5.8	0.71	.				
5.80	10.10	5	B		.	.	.	5.5	0.99	0.98	6.48	4.3 4.30°°	4.3	2.19
5.72	10.77	6	1.2 1.1		5.91 ~~6.04~~	5.87	7.07	6.1	1.01	0.91	7.01	5.0 5.05 01	5.1	2.06
5.72	10.82	7	1.4 1.3		5.91 ~~6.01~~	5.87	7.27	6.4	0.91	0.87	7.27	5.1 5.10°°	5.1	2.21
5.34	11.84	8	2.4 2.3		8 5.93	5.84	8.24	7.5	0.73	0.72	8.22	6.5 6.50°°	6.5	1.73
5.13	12.33	9	3.0 2.9		8 5.93	5.83	8.83	8.3	0.53	0.61	8.91	7.1 7.20±1	7.3	1.63
5.08	12.68	10	3.2 3.1		8 5.92	5.82	9.02	8.5	0.52	0.59	9.09	7.5 7.60±1	7.7	1.42
5.01	13.10	11	3.6 3.5 3.65°1	3.7	5.90	5.83	9.48	8.9	0.65	0.54	9.44	8.1 8.10°°	8.1	1.45
4.97	13.54	12		4.1	5.76	5.81	9.91	9.3	0.56	0.49	9.79	8.5 8.60±1	8.7	1.26
								Cu 2.22	magn 6.32 ← Prime for Gr-~~(4)~~3					
4.85	13.95	13		4.5	5.80	5.79	10.29	2.17	6.67			9.1 9.10°°	9.1	1.20
4.72	14.57	14		4.9	5.75	5.74	10.64	2.10	7.00			9.5 9.50°°	9.5	1.15
		15		5.3	5.78	5.69	10.99	2.02	7.32			9.8 9.85°1	9.9	1.23
		16		5.7	5.70	5.62	11.32	1.94	7.64					
		17		6.1	5.53	5.48	11.58	1.85	7.95					
		18		6.9	5.16	5.22	12.12	1.65	8.56					
		19		7.3	5.12	5.11	12.41	1.55	8.88					
		20		7.7	5.03	5.07	12.77	1.45	9.15					
		23		8.3	5.04	4.99	13.29	1.31	9.61					
		25		8.9	4.97	4.89	13.79	1.21	10.11					
		26		9.5	4.83	4.80	14.30	1.14	10.64					
		27		n.s				.	.					
5.63	11.23	2r	1.4 1.3		6.47	5.87	7.27 ~~12.34~~	6.8	1.07	0.83	7.63	5.5 5.60±1	5.7	2.27
5.20	12.15	3r	2.6 2.5		6.15	5.84	8.44 ~~11.~~	8.0	0.75	0.64	8.64	6.9 6.95±0	7.0	1.80
5.11	12.41	4r	2.9 2.8		6.20	5.84	8.74	8.4	0.70	0.59	8.99	7.3 7.30°°	7.3	1.80
4.94	13.44	5r	4.0 3.9 4.00°°	4.0	5.91	5.80	9.80	7	.	.	.	8.5 8.50°°	8.5	1.41
4.88	13.83	6r		4.5	5.80	5.79	10.29					9.0 8.95 0!	8.9	1.35
		7r		4.9	5.80	5.74	10.64					9.7?	9	1.00?

Polar Sequence

Sc V

Sept 4, 1919

MC 15985 (cont)

(2) Cu	(2) Magn		Sc1 Prism to Gr 3 (~~4~~) Cu	Magn	Sc2	Diff	Cu	(1) Magn	PC				Diff g II		Li	4 (~~3~~) Gr to Prism Cu	Magn
		8r	1.98	7.48	5.5	5.70	5.64	11.34									
2.10	6.40	9r	1.85	7.95	6.1	5.60	5.48	11.58									
2.07	7.12	10r	1.65	8.55	6.9	5.45	5.21	12.11									
2.06	7.16	11r	1.45	9.15	7.7	5.27	5.07	12.77									
1.75	8.25	12r	1.28	9.78	8.5	4.98	4.95	13.45								4.88	13.83
1.57	8.77	4s	2.16	6.66	4.5	5.62	5.79	10.29	9.8	0.32	0.44	(5) 10.24	8.9	8.95±0	9.0	1.17	
1.49	9.09	5s	2.02	7.32	5.3	5.51	5.65	10.95					w.s Cu	(2)			
1.35	9.45	6s	1.94	7.64	5.7	5.41	5.61	11.31					1.20	10.15			
1.25	9.85	7s	1.55	8.85	7.3	5.15	5.11	12.41									
1.19	10.29	8s	1.14	10.64?	9.5?	4.70?	4.79	14.29?									
1.15	10.65 87°	12	3.1 3.0				5.82	8.92	8.3		0.60	8.90	7.1	7.20±1	7.3	5.12	12.32
1.13	10.98	15	2.4 2.3		~~2.3~~		5.84	8.24	7.5		0.72	8.22	6.3	6.20±1	6.1	5.45	11.65
	88°	2	2.7 2.6		~~2.6~~		5.83	8.53 w.s	3 8.0		0.60	8.90	7.3	7.25 10	7.2	5.12	12.37
		80	3.0 2.9				5.83	8.83	8.5 sup?		0.59	9.09	7.5	7.50 0 0	7.5	5.09	12.59
		86	2.6 2.5				5.84	8.44	8.00 7.9 8.1		0.64	8.64	7.1	7.10 0 0	7.1	5.14	12.24
		90	3.7 3.6				5.80	9.50	9.7?		0.45	10.15?	8.5	8.50 0 0	8.5	4.95	13.45
		105	2.6 2.5				5.84	8.44	8.4		0.59	8.99	7.3	7.30 0 0	7.3	5.11	12.41
		115	3.0 2.9				5.83	8.83	8.6		0.54	9.34	7.7	7.7 0 0 0	7.7	5.06	12.76

Cu.	(2) Magn
1.58	8.78
1.82	8.02
1.87	8.82
1.50	9.00
1.57	8.67
1.27	9.77
1.55	8.85
1.46	9.16

3 20

1.96	7.56
1.64	8.59
1.55	8.85
1.28	9.78
1.21	10.16
1.14	10.84?

Polar Sequence

Sept 5, 1919

Sa 4

11 ; 00

MC 15986

Exp 30^m

	Sc 1	Sc 2	Diff.	(1) Cu	Magn	Pc Sc 2	Diff.	Cu	(5) Magn	g	h	Diff.
3	B		.			4.1	1.71	.		B	B	.
5	B		.			4.3	2.19	.		B	B	.
6	B		.			4.9	2.21	2.18	7.08	B	B	.
7	B		.			5.1	2.21	2.15	7.25	B	B	.
8	$1.2^{1.3}$		~~7.03~~ 6.93	6.84	8.14	6.2	2.03	1.92	8.12	$5.1^{5.10\ 00}$	5.1	3.13
9	$2.1^{2.2}$		$\overset{6}{6.73}$	6.92	9.12	7.2	1.63	1.68	8.88	$6.1^{6.05\ 10}$	6.0	2.78
10	$2.1^{2.2}$		$\overset{8}{6.92}$	6.92	9.12	7.5	1.52	1.62	9.12	$6.3^{6.40:1}$	6.5	2.62
11	$2.5^{2.6}$		~~7.05~~ 6.95	6.91	9.51	8.0	1.55	1.54	9.54	$7.0^{7.00\ 00}$	7.0	2.55
12	$2.7^{2.8}$		$\overset{0}{7.16}$	6.90	9.70	8.3	1.56	1.50	9.80	$7.3^{7.30\ 00}$	7.3	2.56
13	$3.2^{3.3}$		$\overset{0}{7.10}$	6.85	10.15	8.7	1.60	1.44	10.14	$7.8^{7.85\ 01}$	7.9	2.45
14	$\overset{3.8}{3.7}$ $3.85\ 01$	3.9	6.80	6.79	10.64	9.3	1.35	1.38	10.68	$8.1^{8.15:0}$	8.2	2.50
15		4.3	6.78	6.72	11.02	9.7	1.38	1.34	11.04	$8.5^{8.50\ 00}$	8.5	2.58
16		4.7	6.70	6.64	11.34	7	.			$8.9^{9.00:1}$	9.1	2.40
17		5.0	6.63	6.59	11.59					$9.1^{9.20:1}$	9.3	2.43
18		5.6	6.46	6.49	12.09					$9.7^{9.70\ 00}$	9.7	2.36
19		$5.9^{6.00:1}$ 6.1	6.42	6.41	12.41							
20		6.4	6.33	6.34	12.74							
23		7.0	6.34	6.24	13.24							
25		7.7	6.17	6.12	13.82							
26		8.3	6.03	6.00	14.30							
27		8.8	5.89	5.93	14.73							
28		9.3	5.81	5.87	15.17							
29		9.8	5.86	5.82	15.62							

~~(4)~~ 3

Prim for Gr

Cu	Magn
3.05	8.05
2.91	8.51
2.78	8.78
2.63	9.03
2.62	9.62
2.53	10.23
2.47	10.77
2.42	11.22
2.39	11.69
2.34	12.14

~~(3)~~ 4

Gr for Prim

Cu.	Magn
6.57	11.67
6.41	12.46
6.34	12.74
6.25	13.25
6.19	13.49
6.09	13.94
5.90	14.90
5.89	15.09
5.83	15.53

	Cu	(2) Magn
8	3.04	8.14
9	2.82	8.87
10	2.74	9.14
11	2.63	9.63
12	2.59	9.89
13	2.52	10.37
14	2.49	10.64
15	2.45	10.95
16	2.41	11.41
17	2.39	11.59
18	2.35	12.05

Polar Sequence

D=V

Sept 5, 1919

MC 15986 cont

3 (~~4~~) Prim to Gr Cu	Magn	~~1 r~~	Sc 1	Sc 2 ~~5.7~~	Diff	Cu	(1) Magn	Pc ~~5.7~~	Diff.	Cu.	(5) Magn	Diff g			Diff.	4 (~~3~~) Gr to Prim Cu	Magn
		2 r	1.3 1.2		5 6.67	6.84	8.14	5.9	1.97	2.02	7.92	4.5	4.50 00	4.5	3.37	6.69	11.19
		3 r	2.2 2.1		5 6.65	6.91	9.11	6.8	1.95	1.76	8.56	5.8	5.75 0!	5.7	3.09	6.46	12.21
		4 r	2.4 2.3		7 6.80	6.90	9.30	7.0	2.10	1.72	8.72	6.1	6.15 !0	6.2	2.95	6.39	12.54
		5 r	3.2 3.1		7 6.81	6.86	10.06	8.3	1.61	1.50	9.80	7.3	7.20 !!	7.1	2.71	6.21	13.41
		6 r	3.6 3.5		7 6.80	6.82	10.42	8.9	1.40	1.42	10.32	7.8	7.85 01	7.9	2.45	6.09	13.94
		7 r	3.8 3.7 3.85 01	3.9	6.85	6.79	10.64	9.5	1.20	1.35	10.85	8.3	8.30 00	8.3	2.40	6.00	14.30
		8 r		4.4	6.80	6.70	11.10	7				8.9	8.90 00	8.9	2.30	5.92	14.82
3.05	8.05	9 r		5.0	6.70	6.59	11.59					9.5	9.50 00	9.5	2.20	5.88	15.35
2.80	8.90	10 r		6.1	6.25	6.40	12.50										
2.69	9.39	11 r		6.7	6.27	6.30	13.00										
2.59	9.89	12 r		7.3	6.18	6.20	13.50									Cu	(2) Magn
.	.	4 s	3.3 3.2		6.82	6.85	10.15	8.7	1.42	1.44	10.14	7.5	7.50 00	7.5	2.62	2.55	10.05
.	.	5 s	4.1 4.0 4.10 00	4.1	6.71	6.74	10.84	9.7	2.11	1.34	11.04	near br.		8.3	2.51	2.48	10.78
~~2.84~~	.	6 s		4.5	6.61	6.68	11.18	7				8.7	8.70 00	8.7	2.41	2.44	11.14
2.84	8.74	7 s		5.9	6.55	6.44	12.34					Too close					
2.47	10.77	8 s		8.3	5.90	6.00	14.30									Cu	magn
		87° 12	2.3 2.2			6.91	9.21	7.1 7.3 7.20 !!		1.68	8.98	5.9	6.00 !!	6.1		2.83	8.83
		15	1.4 1.3			6.85	8.25	6.3		1.91	8.21	5.0	4.95 0!	4.9		3.08	8.03
		88° 2	1.6 1.5			6.88	8.48	7.1		1.70	8.80	6.1	6.00 !!	5.9		2.83	8.83
		80	2.2 2.1			6.91	9.11	7.5		1.62	9.12	5.7	5.70 00	5.7		2.90	8.60
		86	2.6 2.5			6.90	9.50	7.8		7 1.6~~4~~	~~9.47~~ ~~8.94~~	5.5	5.50 00	5.5		2.95	8.45
		90	1 ~~1~~.8 ~~2~~.7	2.8		6.89	9 ~~8~~69	8.~~8~~		1.52	9.62	6.7	6.70 00	6.7		2.61	9.31
		105	1.8 1.9			6.90	8.80	7.1		1.70	8.80	6.1	6.10 00	6.1		2.80	8.90
		115	2.0 2.1			6.91	9.01	7.3		1.64	8.94	6.3	6.40 !!	6.5		2.74	9.14
		9 s		8.5	5.97	5.96	7 14.46										
		10 s		9.1	5.92	5.89	14.99										

assume first measure 2.7 correct

Cu	(2) Magn
2.88	8.63
2.79	8.94
2.60	9.80
2.52	10.37
2.47	10.77
2.42	11.32
2.37	11.87

Gr to Prim (~~3~~) 4 Cu	magn	Cu	(~~3~~) 4 Magn
6.15	13.65	6.47	12.17
6.00	14.30	6.50	12.00
5.94	14.64	6.30	13.00
6.41	12.41	6.40	12.50
6.60	11.55	6.35	12.75
6.41	12.41		

1110

Polar Sequence

Sept 6, 1919

Sc V

12; vn MC 15987

Gr fr Prim 4 (3) Cu	Magn		Sc 1	Sc 2	Diff	Cu	(1) Magn	Pc	Diff	Cu	(5) Magn	g	h	Diff
On edge		3	B		.			3.0	2.81	3.08	6.08	B	B	
		4	B		.			3.1	2.89	3.07	6.17	B	—	
		5	B		.			3.3	3.19	3.05	6.35	B	B	
7.69	11.84	6	B		.			4.2	2.91	2.99	7.19	B	B	
7.50	12.45	7	B		.			4.3	3.01	2.98	7.28	B	B	~~(2)~~
7.48	12.58	8	B		.			5.3	2.93	2.88	8.18	4.1 4.15!0	4.2	4.08
7.24	13.14	9	1.4 1.3		7.43	7.63	9.03	5.9	2.93	2.82	8.72	5.0 4.95 0!	4.9	3.88
7.04 6.89	13.54 13.84	10	1.4 1.3		7.62	7.63	9.03	6.2	2.82	2.77	8.97	5.1 5.10 0 0	5.1	3 ~~4~~92
6.78	14.08	11	1.9 1.8		7.65	7.70	9.60	6.9	2.65	2.64	9.54	5.9 5.90 0 0	5.9 f	3.65
6.69	14.39	12	2.1 2.0		7.76	7.74	9.84	7.3 75 7.40 !!	2.46	2.54	9.94	6.5 6.50 0 0	6.5	3.36
6.60	14.65	13	2.6 2.5		7.70	7.77	10.37	7.8	2.50	2.48	10.28	7.0 6.95 0!	6.9	3.35
6.53	14.93	14	2.9 2.8		7.75	7.79	10.69	8.3	2.35	2.40	10.70	7.3 7.30 0 0	7.3	3.35
6.40	15.40	15	3.4 3.3		7.68	7.80	11.20	8.7	2.38	2.36	11.06	7.7 7.70 0 0	7.7	3.38
6.32	15.72	16	3.6 3.5		7.80	7.76	11.36	9.0	2.40	2.32	11.32	8.0 8.05 0!	8.1	3.35
Prim to Gr 3 ~~(4)~~ Cu	Magn	17	3.8 3.7 3.80 0 0	3.8	7.83	7.74	11.54	Sup		.	.	8.3 8.40 !!	8.5	3.23
4.00	8.40	18		4.4	7.66	7.64	12.04	7		.	.	9.0 9.00 0 0	9.0	3.06
3.90	8.80	19		4.9	7.52	7.52	12.42					9.3 9.40 !!	9.5	3.02
3.80	9.10	20		5.3	7.43	7.42	12.72					9.7	7	3.03
3.59	9.69	23		6.1	7.24	7.17	13.27							
3.41	10.41	25		7.0	6.87	6.87	13.87							
3.30	11.00	26		7.7	6.63	6.69	14.39							
3.22	11.42	27		8.2	6.49	6.56	14.76							
3.14	11.84	28		8.7	6.41	6.48	15.18							
3.04	12.24	29		9.2	6.46	6.36	15.56							
2.97	12.77	30		9.8	6.24	6.24	16.04							

	Diff Cu	(2) Magn
8	4.02	8.17
9	3.90	8.85
10	3.85	8.95
11	3.64	9.54
12	3.50	10.00
13	3.42	10.37
14	3.37	10.67
15	3.31	11.01
16	3.24	11.29
17	3.18	11.58
18	3.09	12.09
19	3.03	12.43

Primary + Diff. images - elongated

Polar Sequence

Sept 6, 1919

Sc 4 (3)

MC 15987 (cont)

Diff.	Grafs Prism Cu	Magn		Sc 1	Sc 2	Diff.	Cu	(1) Magn	Pc	Diff.	Cu	(5) Magn	g		h	(2) Cu	Magn	Diff.
	7.69 7.49	11.79 12.54	2r	B					4.5	3.37	2.96	7.46	B		B			
	7.17 6.99	13.27 13.69	3r	1.5 1.4		7.25	7.63	9.13	6.00 ½ 5.9 6.1	2.75	2.80	8.80	4.1	4.10 00	4.1	4.03	8.13	4.65
	6.78 6.64	14.08 14.49	4r	1.6 1.5		7.50	7.65	9.25	6.3	2.80	2.75	9.05	5.1	5.05 1 0	5.0	3.88	8.93	4.05
	6.47 7.00	15.17 13.60	5r	2.3 2.2		7.61	7.74	10.04	7.40 ½ 7.5 7.3	2.51	2.53	9.93	6.1	6.10 00	6.1	3.59	9.69	3.81
	6.72	14.22	6r	2.6 2.5		7.70	7.77	10.37	7.8	2.50	2.48	10.28	6.7	6.70 00	6.7	3.46	10.16	h 3.60
08	6.66 7 6.50	14.41 14.45	7r	3.0 2.9		7.70	7.80	10.80	8.3	2.40	2.40	10.70	7.3	7.30 00	7.3	3.37	10.67	3.40
88	7.71 7.50 7.49	11.71 12.50 12.54	8r	3.3 3.2		7.90	7.79	11.09	Sup	.	,	,	7.8	7.85 0 1	7.9	3.29	11.14	3.35
92	7.52 7.17 7.49 7.42	12.42 13.27 12.54 12.72	9r	3.9 3.8	3.90 00 3.9	7.80	7.73	11.63	9.5 ?	2.20?	2.28	11.78 near def -			8.7	3.14	11.84	3.00
	Prism for Grafs (4) 3 Cu.	Magn																
.65	3.94	8.64	10r		4.7	7.65	7.56	12.26										
36	3.70	9.40	11r		5.7	7.27	7.32	13.02										
5	3.50	10.00	12r		6.5	6.98	7.04	13.54										
5	.	.	4s	2.3 2.2		7.82	7.74	10.04	7.5	2.62	2.52	10.02	6.5	6.60 ± 1	6.7	3.48	10.08	3.52
8	.	.	5s	3.0 2.9		7.81	7.80	10.80	8.3	2.51	2.40	10.70	7.5	7.50 00	7.5	3.34	10.84	3.31
5	.	.	6s	3.4 3.3		7.71	7.79	11.19	8.7	2.41	2.36	11.06	7.8	7.75 0 ±	7.7	3.30	11.05	3.36
3	3.93	9.13	7s		5.2	7.25	7.44	12.64	5				Sup,		—			,
	3.34	10.84	8s		7.5	6.70	6.72	14.22										
2	3.29	11.09	9s		7.8	6.67	6.65	14.45										
3	3.20	11.50	10s		8.3	6.72	6.54	14.84										
	3.20	11.50	11s		8.3	6.75	6.54	14.84										
	3.17	11.67	12s		8.5	6.61	6.51	15.01										
			13s		?													
		87°	12	1.6 1.5		X	7.65	9.25	6.1		2.79	8.89	4.9	4.95 ± 0	5.0	Cu 3.90	Magn 8.85	
			15	13			.	.	5.0		2.92	7.92	4.0	4.00 00	4.0	4.04	8.04	
		88°	2	1.5 1.4			7.63	9.13	6.1		2.79	8.89	5.0	5.00 00	5.0	3.88	8.88	
			80	1.5 1.6			7.65	9.25	6.3		2.75	9.05	5.1	5.05 1 0	5.0	3.88	8.93	
			86	1.3 1.4			7.63	9.03	6.1		2.79	8.89	4.9	4.90 00	4.9	3.91	8.81	
			90	2.0 2.1			7.74	9.84	7.3		2.57	9.87	6.1	6.10 00	6.1	3.59	9.69	
			105	1.4 1.5			7.63	9.13	6.1		2.79	8.89	5.0	5.05 0 1	5.1	3.88	8.93	
			115	1.4 1.5			7.63	9.13	6.3		2.75	9.05	5.3	5.30 00	5.3	3.81	9.11	
														2.00				

Polar Sequence

Sc V Sept 12, 1919

11 – 50 MC16051 Yellow Exp 20^s

	Sc 1	Sc 2
1	Off pl.	
3		5.5
4	Off pl.	
5		6.9
6		7.8
7		8.1
8		9.3
9		7
2r		6.5
3r		8.3
4r		8.7?
5r		n.s

ScV

Polar Sequence
Sept 12, 1919

MC 16052 Yellow Exp 1^m

	Sc1	Sc2
1	Off pl.	
3	3.5	
4	Off pl.	
5		5.0
6		5.7
7		6.1
8		7.5
9		8.7
10		8.9
11		Sup?
12		2.5
2r		4.3
3r		6.5 6.7
4r		7.7
5r		8.3
6r		9.0?
7r		9.5?
87° 12		7.7
15		8.3
88° 2		8.0
80		?
86		9.0
90		9.1
105		8.3
115		8.7

Polar Sequence

ScV

Sept 12, 1919

MC 16053 Yellow Exp 3m

	Sc 1	Sc 2	g	h	Pc
3	2.3		8.1	8.0	9.1
5	3.1		9.0	9.0	
6	4.0	4.0			
7		4.7			
8		5.8			
9		7.1			
10		7.5			
11		8.3			
12		8.7			
13		9.2			
14		9.7			
15		n.5			
2n	3.0		8.9	9.0	
3n		4.7			
4n		5.7			
5n		6.5			
6n		7.9 7.7			
7n		8.7			
8n		7			
~~9n~~ 4s		8.9			
87° 12		5.5			
15		6.1			
88° 2		5.9			
80		7.7 7.5			
86		7.5			
90		7.5			
105		6.2			
115		6.5			

12.30

Polar Sequence

Scv

Sept 13, 1919

1;10 Mc 16054 Ex 10m Yellow PC

	Sc1	Sc2		g	h	PC	
3	On edge of film			-	-	-	
5	2.0			7.5	7.3	8.8 87	
6	2.6		w.s	$\overset{1}{8.7}$	$\overset{3}{8.7}$	9.7	
7	3.0			8.7	8.7	9.8	
8	3.7	3.9		9.8	9.8	-	
9		4.8					
10		5.1					
11		6.2					
12		6.5					
13		7.3 7.5					
14		7.7					
15		8.5					
16		8.9					
17		9.2					
18		9.9					
2r	2.0			7.1	7.1	8.5	
3r	3.0			8.5	8.3	9.7	
4r	3.5			9.8	9.8	7	
5r		4.7					
				Sc1	Sc2 ; PC	Diff g	h
6r		5.4 5.5	87° 12	33		9.1	9.3
7r		6.8	15		4.0	9.9	9.9
8r		7.7	88 2	3.6	3.7	9.7	9.7
9r		8.3 8.5	80		5.7 5.5		
10r		ns	86		4.7		
4s		6.5	90		5.0		
5s		7.1	105		3.9		
6s		8.0	115		5.5		
7s		7					

1:35

Polar Sequence

DcY

Sept 15, 1919

11 MC 16085 Ex 30^m Yellow (Broken)

	Sc 1	Sc 2		847	48	pc 41
3	B		W.S	~~5.6~~	~~5.5~~	~~7.3~~ 6.5
5	1.3			5.7	5.7	~~7.8~~
6	1.9			6.8 6.5	6.8 6.7	8.0
7	2.1			7.1	7.0	8.3
8	2.9			near cr.	8.1	9.7
9	3.4			9.1	9.3	7
10	3.5			9.8	9.5	
11	4.1	4.3				
12		4.7				
13		5.5				
Near crack 14		5.8				
15		6.5				
16		7.1				
Near crack 17		7.5				
18		8.3				
19		8.7				
21		9.7?				
2 r	1.1			5.5	5.7	7.3 7.1
2 r	2.3			7.1	7.3	8.5
4 r	2.5			8.0	8.0	n.s
5 r	3.1			8.9	8.9	
6 r	3.5	38		9.3	9.3	
7 r		4.5				
8 r		5.5				
9 r		6.7				
10 r		near cr.				
11 r		8.5				
12 r		9.0				

Images poor - and region poor in center of plate.

Polar Sequence

DeV Sept 15, 1919

Mc 16055 cont

	Sc 1	Sc 2	g	h	pe
4s		4.8 4.5			8.9
5s		5.1			
6s		6.2			
7s		8.1			
87° 12	2.4		7.5	7.5	8.9
15	2.8		8.1	8.1	9.5
88° 2	2.5		8.0	7.9	9.0
80	3.5	~~3.5~~			
86	3.5	~~3.5~~			
90	3.5	~~3.5~~			
105	2.5		8.1	8.1	
115	3.5				

11:45

Polar Sequence

DcY

Sept 15, 1919

Mc 16056 Yellow Exp 60m

	Sc1	Sc2		g	h		pc
1	B			B	B		3.9
3	Off pl.			—	—		~~4.5~~
4	B			B	B	ws	5.3 ~~4.5~~
5	B			4.0	4.1		6.0
6	1.0			5.1	5.1		6.9
7	1.3			5.7	5.7 p		7.3
8	2.0			6.8	6.9		8.3
9	2.6			7.9	7.9		9.0
10	2.9			8.1	8.1		9.3
11	3.2			9.0	9.0		9.9 ?
12	3.5			9.3	9.5		
13	4.0	4.1		9.7	9.8		
14		4.4					
15		5.1					
16		5.9					
17		6.2					
18		7.0					
19		7.6					
20		8.0					
23		9.0					
25		9.7					
2r	B			4.0	4.0		5.9
3r	1.3			5.8	5.9		7.3
4r	2.1			6.9	7.0		~~8.9~~ 8.5 8.7
5r	2.5			7.5	7.5		Sup?
6r	3.0			8.3	8.5		
7r	3.5						

Polar Sequence

Del

Sept 15, 1919

MC 16056 (cont.)

	Sc1	Sc2		n	pe
8 n		4.3			
9 n		5.3			
10 n		7.7			
11 n		7.5			
12 n		8.0			
4 s	3.5				
5 s		3.9			
6 s		4.9			
7 s		7.3			
8 s		9.5			
87° 12	1.9 1.7		6.9	6.9	80
15	2.0 ~~1.5~~		7.3	7.3	8.7
88° 2	1.9		6.8	6.9	8.5
80	3.0		8.7	8.9	9.7
86	2.9		8.7	8.7	
90	2.5		8.1	8.1	9.3
105	1.8		Sup	7.3	8.5
115	2.5		8.5	8.7	

1! 10

12',00

ScV

Measures of Standard Seq 33

Sept 17, 1919

Mc 2040 8' 2 exposures

		Sc1	Sc2		Pg
Ep 1	a	13			4.7
Seq.33	b	1.2 1.30		1.30	5.6
	c	1.7 1.8		1.80	6.0
	d	2.1 2.2		2.20	6.4
	e	2.5 2.60 2.7		2.60	7.1
	f	3.3 3.4		3.$\overset{4}{3}$0	7.7
	g	3.7 3.8 3.850	3.9	3.85	8.1
	h		4.2'		8.5
	k		5.0		9.2
	k'		5.5		9.8
	l		5.5		7
	l'		5.9		
	m		6.4		
	n		6.8		
	o		7.1		
	p		7.5		
	q		7.9		
	r		8.7		

Polar Seq

Plt 8

Sept 17, 1919

Sc V

MC 2040 (cont.)

		Sc1	Sc2	Diff	PC	Diff
Polar Seq	5	13			4.0	2.49
	6	B			4.6	2.51
	8	13			6.1	2.13
	9	~~2.3~~ ~~13~~			6.9	1.93
	10	2.9 3.0		6.02	7.2	1.82
	11	3.4 3.5		6.05	7.8	1.75
	12		3.8	6.06	+/p	.
	13		4.2	6.10	8.7	1.60
	14		4.7	5.95	9.1	1.55
	15		5.1	5.98	9.5 9.60 9.7	1.48
	16		5.5	5.90	9.8	1.60
	17		5.8	5.83		
	18		6.3	5.76		
	19		6.7	5.72		
	20		7.0	5.73		
	23		7.7	5.64		
	25		8.3	5.57		
	26		8.8	5.53		
	27		9.5	5.19		
	28		7	.		

Standard Seq 33

Sept 17, 1919

Copied Bk 53; 46, 47

Sc V

MC 2040 (cont)

		Sc 1 B	Sc 2	B	Copied Pg 26 B	mean B	PC	Copied Pg 26	mean	Pc curve	Pc magn	Primary curve	Primary magn
Ex 2	a			B	B	B . .	4.9	4.70	4.80$^{1\ 1}$	2.38	7.18	·	·
Seq. 33	b	1.3$^{1.4}$		1.40	1.30	1.35$^{05\ 05}$	5.9	5.60	5.75$^{1\ 2}$	2.20	7.95	·	·
	c	1.9$^{2.0}$		2.00	1.80	1.90$^{1\ 1}$	6.1	6.00	6.05$^{1\ 0}$	2.12	8.17	·	·
	d	2.3$^{2.4}$		2.40	2.20	2.30$^{1\ 1}$	6.7	6.40	6.55$^{1\ 2}$	1.99	8.54	·	·
	e	2.9$^{3.0}$		3.00	2.60	2.80$^{2\ 2}$	7.3	7.10	7.20$^{1\ 1}$	1.83	9.03	6.04	8.84
	f	3.5$^{3.6}$		3.60	3.40	3.50$^{1\ 1}$	8.1	7.70	7.90$^{2\ 2}$	1.73	9.63	6.05	9.55
	g	3.7$^{3.6}$ 3.5$^{1\ 1}$		3.60	3.85	3.72$^{12\ 13}$	8.3	8.10	8.20$^{1\ 1}$	1.67	9.87	6.04	9.76
	h	4.0$^{4.1}$ 4.1^{5}	4.2	4.15	4.20	4.18$^{03\ 02}$	8.7	8.50	8.60$^{1\ 1}$	1.61	10.21	6.01	10.19
	k		5.3		5.00	5.15$^{1\ 3}$	9.5	9.20	9.35$^{1\ 2}$	1.53	10.88	5.92	11.07
	k'		5.7		5.50	5.60$^{1\ 1}$	9.8 ?	9.80	9.80$^{2\ 0}$	1.51	11.31	5.86	11.46
	l		5.7		5.50	5.60$^{1\ 1}$		7	7		7	5.86	11.46
	l'		6.0		5.90	5.95$^{05\ 05}$						5.82	11.77
	m		6.5		6.40	6.45$^{05\ 05}$						5.76	12.21
	n		6.9		6.80	6.85$^{05\ 05}$						5.71	12.56
	o		7.3		7.10	7.20$^{1\ 1}$						5.66	12.86
	p		7.7		7.50	7.60$^{1\ 1}$						5.62	13.22
	q		8.0		7.90	7.95$^{05\ 05}$						5.58	13.53
	r		8.9		8.70	8.80$^{1\ 1}$						5.48	14.28

1' 10

20 Sequences Near North Pole

Sc V

Sept 22, 1919

11:30 I 34974 P +90° (B +89°, A +88°)

		Sc 1	Sc 2	Diff		PC 4.80 IL 4.7	Diff	
P +90	1	B		.		4.9	− 0.32	
	2	B		.		5.4	− 0.12	
	3	14 1.3		4.41		5.9	− 0.09	
	4	16 1.5 p		4.39		6.2	− 0.21	
	5	20 1.9		4.49		6.7	− 0.21	
	6	26 2.5		4.51		7.3	− 0.19	
	7	28 2.7		4.51		7.5	− 0.19	
	8	38 3.7	385 01 3.9 3	4.38		8.5	− 0.27	
	9		w.s 4.6	4.53		9.1	− 0.27	
	10		4.5	4.52		9.1	− 0.08	
	11		5.0	4.55		9.7?	− 0.15	
	12		5.4	4.46		n.s		
	13		5.7	4.60				
	14		6.1	4.55				
	15		6.5	4.58				
	16		6.7	4.70				
	17		6.9	4.73				
	18		7.8 w.s ~~6.9~~	4.62				
	18		7.5	4.56				
	20		8.1	4.63				
	23		8601L 4.74 8.7 8.5					
	25		9.3	4.57				
	26		n.s					
87°	15		Sc 1 3.5	4.48	7.98	8.1	− 0.19	7.91
	12		Sc 2 4.3	4.49	8.79	9.0	− 0.17	8.83
88°	2		4.2 4.15 4.144		8.64			
	80		+p.			8.9	− 0.18	8.74
	86		+p.					
	90		4.8	4.51	9.31	9.5	− 0.16	9.34
	105		4.3	4.49	8.79	Sup		.
	115		4.6	4.50	9.10	9.7?	− 0.16.	9.54

Over

Sequences Near N. Pole

Sept 2, 1919

Copied Bk 53;132

Sc V

I 34974 cont

Cor. for Dist.

Seq N Dist + 90° Mean Dist. 22 mm		Sc 1 Read for dist	Sc 2	P+89 Cu.	Magn	PC	P+90 Curv	Magn
28mm	a	~~5.4~~ ~~5.2~~ 5.54	5.5	4.60	10.10		~~4.52~~ 4.56	+0.06 ~~9.99~~ 10.10
15	b		6.2	4.60	10.80		4.57	10.77
18	c		6.5	4.61	11.11		4.59	11.09
21	d		7.1	4.63	11.73		4.62	11.72
	e		7.5	4.66	12.16		4.63	12.13
	f		7.7	4.67	12.37		4.66	12.36
	g		8.1	4.69	12.79		4.66	12.76
	h		8.7	4.74	13.44		4.66	13.36
	k		9.0	4.77	13.77		4.67	13.67
	l		n.s.	.	.			
	539	✓	4.0	4.60	8.60		4.48	8.48
	568		4.9	4.60	9.50		4.51	9.41
	654		4.3	4.60	8.90		4.49	8.79
	657		4.3	4.60	8.90		4.49	8.79
568 =	71		4.7	4.63	9.33		4.50	9.20
654 =	73		4.2	4.60	8.80		4.49	8.69
Seq M +90 44mm								
	a	5.19	5.1	4.62	9.71		4.52	9.71
	b	5.57	5.5	4.64	10.14		~~4.53~~ 4.57	10.10
	c	5.77	5.7	4.64	10.34		~~4.54~~ 4.57	10.31
	d		+p	.	.			
	e		+p	.	.			
	f	6.72	6.7?	4.65	11.35?		~~4.60~~ 4.63	11.32
	g	7.0	7.0?	4.64	11.64?		4.61	11.61?
	h		+p	.	.			
	k		+p	.	.			
	657	4.57	4.5	4.59	9.09		~~4.50~~ 4.50	9.07
	639	4.05	4.0	4.55	8.55		4.49	8.54

Copied Bk 53;128

All images Too faint

Sequences near N. Pole

DcV

Sept 22, 1919

I 34974 cont

P + 89°

	Sc1	Sc2	Diff		PC		
			.				
1	B		.		5.0	– 0.52	
2	1.1 1.0		4.1 ~~3.38~~		5.5	– 0.22	
3	16 1.5		4.21		6.0	– 0.19	
4	16 1.5 p		4.39		6.2	– 0.21	
5	20 1.9		4.49		6.9	– 0.41	
6	2.4 2.3		4.71		7.3	– 0.19	
7	+p		.		7.5	– 0.19	
8	38 37 3.80 00	3.8	4.43		8.5	– 0.27	
9	Sup		.		9.0	– 0.17	
10		4.3	4.72		9.1	– 0.08	
11		4.9	4.65		9.5	0.05	
12		5.3	4.56				
13		5.7	4.60				
14		6.1	4.55				
15		6.5	4.58				
16		6.7	4.70				
17		7.0	4.63				
18		7.5	4.56				
19		7.7	4.72				
20		8.0	4.73				
23		5 8.8	4.84				
25		9.3	4.57				
87° 12		4.2	4.60	8.80	9.0	– 0.15	8.85
15		3.4	4.57	7.97	8.3	– 0.24	8.06
88 2		4.3	4.60	8.90	9.0	– 0.15	8.85
80		+p	.	.			
86		+p	.	.			
105		4.3	4.60	8.90			
115		4.5	4.60	9.10			
90		4.7	4.60	9.30			

Over

Sequences Near N. Pole

S c V

Sept 22 1919

Copied Bk 53, 84

S 34974

Seq ~~B~~ + 89°
Mean Dist 0

	Sc 2	P × 90° Cu.	Magn	P 34	Mean	Cu	Magn	Corr 0 P+89 Corr Dist	Magn.
a	5.8	4.55	10.35	5.7	$\overset{01}{5.75}$	4.55	10.30	4.57	10.37
b	5.9	4.56	10.46	6.0	$\overset{10}{595}$	4.55	10.50	4.57	10.47
c	6.60 11 6.5	4.58 67	11.18	6.5	$\overset{01}{655}$	4.58	11.13	4.58	11.18
d	6.7	4.59	11.29	6.7	$\overset{00}{670}$	4.59	11.29	4.59	11.29
e	7.1	4.62	11.72	7.1	$\overset{00}{710}$	4.62	11.72	4.60	11.70
f	7.3	4.63	11.93	7.3	$\overset{00}{730}$	4.63	11.93	4.61	11.91
g	7.7	4.64	12.34	7.6	$\overset{10}{765}$	4.63	12.28	4.63	12.33
h	8.3	4.65	12.95	.	$\overset{0.0}{830}$	4.64	12.94	4.81	13.11
k	8.5	4.65	13.15	8.7	$\overset{11}{860}$	4.65	13.20	4.88	13.38
l	8.9	4.66	13.56	9.0	$\overset{10}{895}$	4.66	13.61	5.00	13.90
m	9.3	4.66	13.96	9.5	$\overset{11}{940}$	4.65	14.05	5.18	14.48
n	7	.	.	.	.				
63	4.9	4.50	9.40	5.0	$\overset{10}{495}$	4.51	9.46	4.56	9.46
82	5.4	4.52	9.92	5.3	$\overset{01}{535}$	4.53	9.88	4.57	9.97
7 = 144	5.5	4.53	9.93	5.5	$\overset{00}{550}$	4.53	10.03	4.57	10.07
~~7~~									
Mean +88° 2 ~~1156~~	~~6.0~~								
~~1178~~	~~5.2~~								
~~1211~~	~~7.1~~								
1277	5.5	4.53	10.03	5.5	$\overset{00}{550}$	4.53	10.03	4.57	10.04
882	4.2	4.49	8.69	4.3	$\overset{01}{425}$	4.49	8.74	4 5.51	8.71
8 = 100	5.9	4.56	10.46	5.7	$\overset{11}{580}$	4.55	10.35	4.57 5.9	10.47
11 = 1229	5.0	4.51	9.51	4.9	$\overset{01}{495}$	4.51	9.46	4.55	9.55
~~78~~									
~~7~~									
Between Seq B + V 1156	3.9	4.49	8.39	4.1	$\overset{11}{400}$	4.49	8.49		
1178	4.9	4.50	9.40	5.0	$\overset{10}{495}$	4.51	9.46		
1211	5.3	4.52	9.82	5.5	$\overset{11}{540}$	4.53	9.93		

Sequences Near N. Pole

ScV

Sept 22, 1919

I 34974

		Sc 1	Sc 2	Diff		PC	
P + 88°							
	1	B		.		4.8	- 032
	2	B		.		5.3	- 0.02
	3	$^{1.4}$1.3		4.41		5.9	- 0.09
	4	tp		.		6.2	- 0.21
	5	$^{2.0}$1.9		4.49		$^{6.90\ 11\ 68}$7.0	. - 0.41
	6	$^{2.6}$2.5		4.51		7.2	- 0.09
	7	$^{2.8}$2.7		4.51		7.5	- 0.19
	8	3.8 3.80 00	3.8	4.43		8.5	- 0.27
	9		4.3	4.53		9.1	- 0.27
	10		4.3	472		9.3	- 0.28
	11		4.8	4.75			
	12		5.3	4.56			
	13		5.7	4.60			
	14		6.0	4.65			
	15		6.4	4.68			
	16		6.7	4.70			
	17		7.0	4.63			
	18		7.6	4.46			
	19		7.8	4.62			
	20		8.1	4.63			
	23		8.7	4.64			
	25		9.3	4.57			
87°	12		4.2	4.57	8.77		
	15		3.5	4.54	8.04		
88°	2		4.2	4.57	8.77		
	80		tp	.	.		
	86		tp	.			
	105		4.3	4.56	8.86		
	115		4.3	4.56	8.86		
	90		tp	.	.		

Over

Sequences [illegible] W. Cole
Sept 2[illegible] 1919

Copied Bk 53, 84

ScV

I 34974
Sc1

Seq B +88°

	Sc2	Cu.	Px 89 Magn	Px 90° from page 32	Mean		Reading +89°0 p.32	88° -89°
a	5.7	4.60	10.30	10.35	10.32	02 03	58	-1
b	6.0	4.60	10.60	10.46	10.53	07 07	5.9	+1
c	6.5	4.60	11.10	11.18	11.14	04 04	6.60	-1
d	6.7	4.61	11.31	11.29	11.30	01 01	6.7	0
e	7.1	4.63	11.73	11.72	11.72	01 00	7.1	0
f	7.3	4.64	11.94	11.93	11.94	00 01	73	0
g	7.6	4.66	12.26	12.34	12.30	04 04	7.7	-1
h Too close to	.	.	.	12.95	12.95	. a	8.3	.
k	8.7	4.76	13.46	13.15	13.30	16 15	8.5	+2
l	9.0	4.76	13.76	13.56	13.66	10 10	8.9	+1
m	9.5	4.80	14.30	13.96	14.13	17 17	93	+2
63	5.0	4.60	9.60	9.40	9.50	10 10	~~5~~ 4.9	+1
82	5.3	4.60	9.90	9.92	9.91	01 01	~~4.9~~ 5.4	-1
7 = 144	5.5	4.60	10.10	9.93	10.02	08 09	5.5	0
7								7-4
								13
Mean +88° 2 ~~1156~~	~~5.9~~							+02
~~1178~~	~~5.3~~						6.5 & 8.5	2-2 6
~~1211~~	~~7.1~~							00
1277	5.5	4.60	10.10	10.03	10.06	04 03		
88° 2	4.3	4.60	8.90	8.69	8.80	10 11		
8 = 100	5.7	4.60	10.30	10.46	10.38	08 08		
11 = 1229	4.9	4.60	9.50	9.51	9.50	00 01		
~~8~~								
~~11~~								
Between Seq B + V 1156	4.1	4.60	8.70	8.39	8.54	16 15		
1178	5.0	4.60	9.60	9.40	9.50	10 10		
1211	5.5	4.60	10.10	9.82	9.96	14 14		

Sequences near N Pole

Sept ~~23~~ 22, 1919

Copied Bk 53; 80

ScV

I 34974

Seq A +88	Sc 1	Sc 2		Px90 Cu	Magn
a		5.9		4.55	10.45
b		6.3		4.56	10.86
c		6.5		4.58	11.08
d		6.75 6.8	6.7	4.59	11.$\overset{3}{\cancel{4}}$4
e		6.8		4.60	11.40
f		7.2		4.62	11.82
g		7.60 7.5	7.7	4.63	12.23
h		7.9		4.64	12.54
k		8.3		4.65	12.95
l		8.7		4.65	13.35
m		9.40 9.3	9.5	4.65	14.05
n		ns	.	.	.
1266		4.8		4.50	9.30

Seq A +87°

a
b
c
d
e
f
g
h
k
l
m
1266

Omitted by mistake

3; 00

Sequences Near N Pole

Sept 25 1919

Sc V
9-30
P +90°

P 35028

	Sc 1	Sc 2	Diff		Sc	
1	B		.		5.5	– 102
2	tp		.		6.1	– 0.82
3	2.0 1.9		3.81		6.5	– 0.69
4	2.2 2.1		3.79		6.9 near dif.	0.91
5	2.6 2.5		3.89		7.3	– 0.81
6	3.1 3.0		4.01		7.9	– 0.79
7	3.2 3.1		4.11		8.1	– 0.79
8	4.0 3.9	4.05 01 4.1	4.18		9.3	– 1.07
9		4.9	3.93		7	.
10		5.1	3.92			
11		5.5	4.05			
12		5.7	4.16			
13		6.0	4.30			
14		6.4	4.25			
15		6.8	4.28			
16		7.0	4.40			
17		7.3	4.33			
18		7.9	4.16			
19		8.3	4.12			
20		8.7	4.03			
23		9.3	4.04			
25		9.75 9.8	01 4.12 9.7			
87° 12		4.9	4.07	8.97		
15		4.0	4.04	8.04		
88° 2		5.0	4.09	9.09		
80		tp	.	.		
86		tp	.	.		
90		4.7	4.06	8.76		
1.05		4.5	4.05	8.55		
1.15		4.8	4.07	8.87		

Sequences Near N Pole

Sept 25, 1919

Sel

S 35028

Seq N +90°

Images very poor shape & hazy

	Sc1	Sc2	Pt 89° Cu.	Magn
a		5.7	4.46	10.16
b		6.3	4.55	10.85
c		6.7	4.56	11.26
d		7.2	4.55	11.75
e		7.7	4.51	12.21
f		8.1	4.49	12.59
g		8.5	4.45	12.95
h		8.9	4.42	13.32
k		9.3	4.39	13.69
539		4.3	4.23	8.53
568		5.2	4.38	9.58
654		4.5	4.26	8.76
657		4.3	4.23	8.53

Seq M +90°

Images too poor elongated & hazy

	Sc2	Pt 88° Cu	Magn
a	5.1		
b	5.6		
c			
d			
e			
f			
g			
h			
539	4.1	p 4.29	8.39
657	4.3	p 4.35	8.65

Over

Sequences Near N Pole

Sept 25, 1919

Se V

I 35028 (cont)

		Sc 1	Sc 2	Diff		Pc	
δ +89°	1	+p		.		5.5	−1.02
	2	+p		.		6.1	−0.82
	3	2.0 1.9		3.81		6.7	−0.89
	4	2.2 2.1		3.79		7.0	−1.01
	5	2.6 2.5		3.89		7.5	−1.01
	6	3.0 2.9		4.11		Sup onto object	
	7	+p		.		8.0	−0.69
	8		4.0	4.23		8.9	−0.67
	9		4.7	4.13		9.7?	−0.87
	10		4.80 '' 4.9	4.22 4.7			
	11		5.1	4.45			
	12		5.5	4.36			
	13		5.8	4.50			
	14		6.1	4.55			
	15		6.5	4.58			
	16		6.7	4.70			
	17		7.0	4.63			
	18		7.7	4.36			
	19		8.0	4.42			
	20		8.3	4.43			
	23		8.9	4.44			
	25		9.5	4.37			
	26		9.9	4.43			
87°	12		4.9	4.33	9.23		
	15		4.1	4.20	8.30		
88°	2		4.9	4.33	9.23		
	80		+p	.	.		
	86		+p	.	.		
	91		+p	.	.		
	105		4.3	4.24	8.54		
	115		4.7	4.30	9.00		

Faint - Polar images
poorly defined - hazy -

Sequences Near N. Pole

Sept 28, 1919

Copied Bk 53, '84

SeV

I 35028 (cont.)

Seq B +89°

	Sc 1	Sc 2	P+90° Cu	Magn	See Page 41	Mean		
a		5.9	4.20	10.10	10.40	10.25.	15	15
b		6.3	4.24	10.54	10.74	10.64	10	10.
c		6.8	4.28	11.08	11.27	11.18	10	09
d		6.9	4.29	11.19	11.17	11.18	01	01
e		7.3	4.28	11.58	11.84	11.71	13	13
f		7.5	4.25	11.75	12.03	11.89	14	14
g		8.0	4.18	12.18	12.40	12.29	11	11
h		8.9	4.08	12.98	13.14	13.06	08	08
k		9.0	4.07	13.07	13.41	13.24	17	17
l		9.5	4.02	13.52	13.86	13.69	17	17
m		9.8	3.98	13.78	14.11	13.94	16	17
63		5.1	4.09	9.19	9.35	9.27	08	08
82		5.4	4.12	9.52	9.92	9.72	20	20
144		5.5	4.14	9.64	9.70	9.67	03	03
1156		4.5	4.05	8.55	8.53	8.54	01	01
1178		5.5	4.14	9.64	9.70	9.67	03	03
1211		5.5	4.14	9.64	9.93	9.78	14	15
1277		5.5	4.14	9.64	9.93	9.78	14	15
88° 2		4.7	4.06	8.76	8.53	8.64	12	11
8		5.8	4.18	9.98	10.16	10.07	09	09
11		5.1	4.09	9.19	9.34	9.26	07	08

Over

SeV

Sequences Near N Pole
Sept 25, 1919

	35028 (cont.)	Sc 1	Sc 2			Pc
℘ + 88°	1	t/p		.		5.3 – 0.82
	2	t/p		.		6.0 – 0.72
	3	1.9 1.8		3.91		6.7 – 0.89
	4	t/p		.		6.8 – 0.81
	5	2.6 2.5		3.89		7.3 – 0.81
	6	t/p		.		7.7 – 0.59
	7	t/p		.		7.9 – 0.59
	8	3.9 3.90 00 3.8	3.9	4.33		8.9 – 0.67
	9		4.5	4.33		9.8 – 0.97
	10		4.5	4.52		
Images too poor elongated + hazy	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
87°	12		4.8	.		
	15		4.0	4.26	8.26	
88°	2		4.5	4.42	8.92	
	80		t/p	.	.	
	86		t/p	.	.	
	90		t/p	.	.	
	105		t/p	.	.	
	115		4.4	4.39	8.79	

Se V

Sequences Near N Pole

Sept 25, 1919

I 35028 (cont.)

Images poor

Seq. B + 88°	Sc 1	Sc 2	P+89°		B+89° p.39	88°-89°
a		5.9	4.50	10.40	5.9	0
b		6.2	4.54	10.74	6.8	-1
c		6.7	4.57	11.27	6.8	-1
d		6.6	4.57	11.17	6.9	-3
e		7.3	4.54	11.84	7.3	0
f		7.5	4.53	12.03	7.5	0
g		7.9	4.50	12.40	8.0	-1
h		8.7	4.44	13.14	8.9	-2
k		9.0	4.41	13.41	9.0	0
l		9.5	4.36	13.86	9.5	0
m		9.8	4.31	14.11	9.8	0
63		5.00 5.1	4.35 4.9	9.35	5.1	0
82		5.5	4.43	9.93	5.4	+1
144		5.3	4.40	9.70	5.5	-2
1156		4.3	4.23	8.53	4.5	-2
1178		5.3	4.40	9.70	5.5	-2
1211		5.5	4.43	9.93	5.5	0
1277		5.5	4.43	9.93	5.5	0
88° 2		4.3	4.23	8.53	4.7	-4
8		5.7	4.46	10.16	5.8	-1
11		5.0	4.34	9.34	5.1	-1
						1-20 21
						-10
					6.5 to 85 (c to g)	-7 5
						-14

B's fainter on Exp. 88° than on Exp. 89° by .14

Over

Sequences Near N Pole
Sept 26 1919

Copied Bk 53, 80

Sc V

I 35028 cont

Seq A +88°

	Sc 1	Sc 2	Pt 90° Cu		[illegible]	Mean		
a		6,0	4.21	10.21	10.40	10.30	09	10
b		6,3	4.24	10.54	10.64	10.59	05	05
c		6,5	4.26	10.76	.	1076	a	.
d		67	4.28	10.98	11.07	11.02	04	05
e		7,0	4.29	11.29	11.37	11.33	04	04
71-st. sup. f		7.1	4.29	11.39	11.56	11.48	09	08
g		7,7	4.23	11.93	12.12	12.02	09	10
h		8,1	4.17	12.27	.	12.27	a	.
k		8,5	4.12	12.62	12.78	12.70	08	08
l		8,7	4.10	12.80	12.86	12.83	03	03
m		9.5	4.00	13.50	13.55	13.52	02	03
1266		5.0	4.08	9.08	9.00	9.04	04	04

Copied Bk 53, 80

Seq A +87°

	Sc 2	Pt 89° Cu	Magn
a	5.9	4.50	10.40
b	6,1	4.54	10.64
c	.	.	.
d	6.5	4.57	11.07
e	6,8	4.57	11.37
f	7,0	4.56	11.56
g	7.60 !! 4.52 7.7 7.5		12.12
h	t/v	.	.
k	8,3	4.48	12.78
l	8.40 !! 4.46 8.3 8.5		12.86
m	9.3	4.25	13.55
1266	4.7	4.30	9.00

12' 50

Images +87° very poor
elongated & hazy

9-25

DeV

Sequences Near N Pole

Sept 26; 1919

I 35043

		Sc1	Sc2	Diff		PC 580	
P + 9ü	1	+p		.		5.9 5.7	- 1.32
	2	+p		.		+p	- .
	3	+p		.		6.7	- 0.89
	4	$\overset{2.5}{2.4}$		3.49		7.0	- 1.01
	5	$\overset{2.6}{2.5}$		3.89		7.5	- 1.01
	6	$\overset{3.2}{3.1}$		3.91		8.0	- 0.89
	7	$\overset{3.1}{3.0}$ $\overset{3.20}{}$ $\overset{11}{\overset{33}{3.2}}$		$4.\overset{1}{2}1$		$8.\overset{2}{0}$	- 0.89
	8	$\overset{3.9}{3.8}$ 3.90 00	3.9	4.33		9.1	- 0.87
	9		4.5	4.33		9.8	- 0.97
	10		4.8	4.22			
	11		5.3	4.25			
	12		5.7	4.16			
	13		6.0	4.30			
	14		6.4	4.25			
	15		6.7	4.38			
	16		7.1	4.30			
	17		7.5	4.13			
	18		8.0	4.06			
	19		8.3	4.12			
	20		8.5	4.23			
	23		9.1	4.24			
	25		9.8	4.07			
87°	12		4.3	4.30	8.60		
	15	$\overset{36}{3.5}$ - 3.65 01	3.7	4.22	7.92		
88°	2		4.5	4.30	8.60		
	80		4.3	4.30	8.60		
	86		4.1	4.30	8.40		
	90		5.3	4.28	9.58		
	105		4.8	4.30	9.10		
	115		5.1	4.29	9.39		

DeV

Sequences Near N. Pole
Sept 26, 1919

Copied Bl 53; 104

I 35043 (cont)

Seq G + 90°

Images poor. elongated.

	Sc 1	Sc 2	P+89° Cu	Magn	From page 46	Mean		
a		5.3	4.29	9.59	9.86	9.72	13	14
b		6.0	4.34	10.34	10.45	10.40	06	05
c		6.6011 6.7	4.35 6.5	10.95	10.94	10.94	01	00
d		6.7	4.35	11.05	11.03	11.04	01	01
e		6.9	4.34	11.24	11.22	11.23	01	01
f		7.3	4.34	11.64	11.73	11.68	04	05
g		7.7	4.32	12.02				
h		8.3	4.29	12.59				
k		8.8	4.24	13.04				
l		9.3	4.17	13.47				
m		2.5	.	.				
260 = 13		5.7	4.32	10.02	10.26	10.14	12	12
323		5.2	4.29	9.49	9.67	9.58	09	09
326		6.1	4.35	10.45	10.74	10.60	15	14

Copied Bl 53; 100

Seq F + 90°

Images very poor-badly elongated-rejected-?

		P+88° Cu	Magn
a	?		
b	5.7	4.75	10.45
c	6.0	4.74	10.74
d	6.3	4.73	11.03
e	6.7	4.70	11.40
f	6.9	4.66	11.56
g	7.5		
h	7.7		
k Too close to another St			
l			
m	8.7		
n	8.9		
o	9.3?		
326	6.1	4.74	1$\overset{0}{\cancel{1}}$.84
346	4.8	4.78	9.58
398	4.0	4.84	8.84

Sequences Near N Pole
Sept 26, 1919

I 35043 (cont.)

		Sc 1	Sc 2	~~Diff~~		Pc	
P + 89°	1	$^{2.0}$ 1.9		2.48		5.9	− 1.42
	2	+ p		.		6.3	− 1.02
	3	+ p		.		6.9	− 1.09
	4	$^{2.6}$ 2.5		3.39		7.1	− 1.11
	5	$^{2.6}$ 2.5		3.89		7.5	− 1.01
	6	$^{3.1}$ 3.0		4.01		7.9	− 0.79
	7	+ p		.		8.1	− 0.79
	8	+ p		.		9.0	− 0.77
	9	+ p		.		9.8	− 0.97
	10		4.7	4.32			
	11		5.3	4.25			
	12		5.5	4.36			
	13		6.0	4.30			
	14		6.3	4.35			
	15		6.7	4.38			
	16		7.1	4.30			
	17		7.4	4.23			
	18		8.0	4.06			
	19		8.2	4.22			
	20		8.5	4.25			
	23		9.0	4.34			
	25		9.8	4.07			
87°	12		4.1	4.17	8.27		
	15		3.4	4.06	7.46		
88°	2		4.3	4.20	8.50		
	80		4.5	4.22	8.72		
	86		4.1	4.17	8.27		
	90		5.3	4.30	9.60		
	105		4.9	4.25	9.15		
	115		5.1	4.28	9.38		

ScV

Sequence Near N Pole
Sept 26, 1919

Copied Bk 53; 104

I 35043 (cont.)

Seq G +89°

Images poor; very elongated; not comp with scale

	Sc1	Sc2	P+88° Cu	Sup 44 Magn
a		5.1	4.76	9.86
b		5.7	4.75	10.45
c		6.2	4.74	10.94
d		6.3	4.73	11.03
e		6.5	4.72	11.22
f		7.1	4.63	11.73
g		7.5		
h		8.0		
k		defective		
l		f/p		
260		5.5	4.76	10.26
323		4.9	4.77	9.67
326		6.0	4.74	10.74

Copied Bk 53; 152

Seq J +89°

				P+90° Cu	~~Sup~~
		a	5.5	4.27	9.77
~~no star marked~~		b	5.9	4.26	10.16
		c	6.45 6.6	4.25 ~~6.3~~	10.70
~~no st. "~~		d	w.s. ~~6.7~~	4.24 ~~6.5~~	10.74
		e	6.7	4.24	10.94
		f	7.0	4.23	11.23
		g	7.3	4.22	11.52
894	5.4	h	7.5	4.21	11.71
949	5.1	K	7.8	4.20	12.00
88° 105	5.0	l	8.3	4.18	12.48
Cu	Magn	m	– 8.7	4.16	12.86
4.27	9.67	n	9.1	4.14	13.24
4.29	9.39	o	9.5	4.12	13.62
4.29	9.29				

Sequences Near N Pole
Sept 26, 1919

Sc V

I 35043 (cont)

		Sc 1	Sc 2	Diff		PC	
P + 88°	1	1.5 1.4				5.9	−1.42
	2	+ p				6.3	−1.02
	3	+ p				+ p	.
	4	2.5 2.4		3.49		7.20 7.1 7.3	−1.21
	5	+ p				7.5	−1.01
	6	+ p				8.0	−0.89
	7	+ p				8.1	−0.79
	8	+ p				8.9	−0.67
	9	+ p				9.5	−0.67
	10		4.1	4.92			
	11		4.8	4.75			
	12		5.2	4.66			
	13		5.5	4.80			
	14		5.9	4.75			
	15		6.3	4.78			
	16		6.7	4.70			
	17		7.0	4.63			
	18		Sup				
	19		Sup?				
	20		+ p				
	23		+ p				
	25		+ p				
87°	12		+ p.				
	15		+ p.				
88°	2		+ p.				
	80		4.3	4.81	9.11		
	86		4.5	4.79	9.29		
	90		5.0	4.76	9.76		
	105		4.5	4.79	9.29		
	115		4.7	4.78	9.48		

Images two poor to meas. reject.

Sequences Near N Pole

Sept 26, 1919 Bk 53:152

ScV

S 35043 cont

Copy

Seq T +88°	Sc1	Sc2	P+89° Cu	Magn	See p.46	Mean		
		5.80	4.34					
a		5.7	5.9	10.14	9.77	9.96	18	19
P b		5.9	4.35	10.25	10.16	10.20	05	04
c		6.0	4.34	10.34	10.70	10.52	18	18
d		6.2	4.35	10.55	10.74	10.64	09	10
e		6.5	4.35	10.85	10.94	10.90	05	04
f		6.9	4.35	11.25	11.23	11.24	01	01
g		7.3	4.34	11.64	11.52	11.58	06	06
h		7.5	4.33	11.83	11.71	11.77	06	06
k		7.9	4.31	12.21	12.00	12.10	11	10
l		8.3	4.29	12.59	12.48	12.54	05	06
m		8.8	4.24	13.04	12.86	12.95	09	09
n		9.1	4.20	13.30	13.24	13.27	03	03
o		9.3	4.16	13.46	13.62	13.54	08	08
894		5.3	4.29	9.59	9.67	9.63	04	04
949		4.9	4.25	9.15	9.39	9.27	12	12
88° 105		5.0	4.27	9.27	9.29	9.28	01	01

Copied Bk 53:148

Seq S +88°			P+90° Cu	Magn
a		5.9	4.26	10.16
b		5.9	4.26	10.16
c		6.4	4.24	10.64
d		6.7	4.24	10.94
e		7.0	4.22	11.22
f		7.2	4.22	11.42
g		7.5	4.21	11.71
h		7.8	4.20	12.00
k		8.0	4.19	12.19
l	nearly sup		:	:
m		8.7	4.15	12.85
n		9.0	4.14	13.14

878	5.0
958	6.3
966	5.3
2035	4.2
Cu	
4.29	929
4.25	10.55
4.28	9.58
4.30	8.50

Sequences Near N Pole
Sept. 26, 1919

Copied Bk 53: 148

Sc V

δ 35043 cont-

Seq δ +87°

	Sc1	Sc2	P+89° Cu	Magn	Sep 48	Mean		
a		5.5	4.31	9.81	10.16	9.98	17	18
b		5.7	4.32	10.02	10.16	10.09	07	07
c		6.5	4.36	10.86	10.64	10.75	11	11
d		6.7	4.35	11.05	10.94	11.00	05	06
e		7.1	4.34	11.44	11.22	11.33	11	11
f		7.3	4.34	11.64	11.42	11.53	11	11
g		Sup.	.	.	11.71	11.71	.	a
h		8.0	4.30	12.30	12.00	12.15	15	15
k		8.1	4.29	12.39	12.19	12.29	10	10
l		8.3	4.29	12.59	.	12.59	a	.
m		8.5	4.27	12.77	12.85	12.81	04	04
n		8.98 10 8.9 ~~9.0~~	4.22	13.17	13.14	13.16	01	02
~~o~~		~~9~~						
878		4.9	4.26	9.16	9.29	9.22	06	07
958		6.3	4.35	10.65	10.55	10.60	05	05
966		5.1	4.28	9.38	9.58	9.48	10	10
2035		4.0	4.15	8.15	8.50	8.32	17	18

1:00

11:30

ScY

Sequences Near N. Pole

Sept 27, 1919

P + 90°	I 35044					Pc
		Sc 1	Sc 2	Diff		
	1	+ p		.		5.5 − 1.02
	2	Too near edge		.		6.3 − 1.02
	3	T. P		.		7.0 − 1.19
	4	2.2 2.1 2.4 2.3 2.30 11		3.69		7.2 − 1.21
	5	3.0 2.9 3.50 11		3.49		.
	6	3.6 3.5 3.3 3.50 3.34		3.61		7.9 − 0.79
	7	3.6 3.5		3.71		8.1 − 0.79
	8	4.4 4.3 4.45 01	4.5	3.78		9.1 − 0.87
	9		4.9	3.93		9.7 − 0.87
	10		5.1	3.92		
	11		5.5	4.05		
	12		5.8	4.06		
	13		6.2	4.10		
	14		6.5	4.15		
	15		7.1	3.98		
	16		7.5	3.90		
	17		7.60 11 7.7	4.03 7.5		
	18		8.1	3.96		
	19		8.3	4.12		
	20		8.5	4.23		
	23		9.1	4.24		
	25		9.8	4.07		
87°	+12		4.5	3.82	8.32	
	15		3.9	3.71	7.61	
88°	2		5.0	3.92	8.92	
	80		4.5	3.82	8.32	
	86		4.3	3.79	8.09	
	90		5.3	3.99	9.29	
	105		5.1	3.94	9.04	
	115		5.3	3.99	9.29	

Sequences Near N Pole

Sept 27 1919

Copied Bk 53, 104

Sc V

I 35044

Seq G + 9°

	Sc1	Sc2	P+89° / Cu	Magn
a		5.8	4.04	9.84
b		6.2	4.00	10.20
c		6.9	3.95	10.85
d		7.0	3.94	10.94
e		7.3	3.93	11.23
f		7.5	3.90	11.40
g		8.0	3.89	11.89
h		8.3	3.88	12.18
k		8.7	3.84	12.54
l		9.2	3.83	13.03
m		9.7	3.81	13.51
260		6.0	4.02	10.02
323		defective		
326		6.3	4.00	10.30

Copied Bk 53, 100

Seq F + 90

		P+88° / Cu	Magn
a	-		
b	6.1	4.33	10.43
c	6.5	4.34	10.84
d	6.7	4.34	11.04
e	+p		
f			
g			
h			
k			
l			
326	6.3	4.34	10.64
346	5.0	4.20	9.20
398	4.3	4.06	8.36

Too poor (f–l) badly elong & hazy

Sequences Near N Pole

Sept 27, 1919

SeV	D 35044					
δ + 89°		Se1	Se2		Pc	
	1	$\overset{1.4}{1.3}$		3.18	5.7	− 1.22
	2	+p		.	6.2	− 0.92
	3	+p		.	6.7	− 0.89
	4	$\overset{2.6}{2.5}$		3.39	6.9	− 0.91
	5	$\overset{3.1}{3.0}$		$\overset{33}{2.99}$	7.5	− 1.01
	6	$\overset{3.5}{3.4}$		3.61	8.0	− 0.89
	7	+p		.	8.3	− 0.99
	8	$\overset{4.0}{3.9}$ 4.00 00	4.0	4.23	8.9	− 0.67
	9		4.6	4.23	7	.
	10		4.9	4.12		
	11		5.5	4.05		
	12		5.9	3.96		
	13		6.3	4.00		
	14		6.7	3.95		
	15		7.0	4.08		
	16		7.4	4.00		
	17		7.7	3.93		
	18		8.3	3.76		
	19		8.6	3.82		
	20		8.9	3.83		
	23		9.5	$\overset{3}{\cancel{4}.84}$		
87°	12		+p	. .		
	15		+p	. .		
88°	2		4.9	4.15 9.05		
	80		4.7	4.18 8.88		
	86		4.5	4.20 8.70		
	90		5.7	4.05 9.75		
	105		5.3	4.10 9.40		
	115		5.5	4.07 9.57		

Sequences Near N Pole

Sept 21, 1919

ScV

I 35044

Copied Bla 53:104

		Sc1	Sc2	P+88° Cu	Magn
Seq Y + 89°					
	a		5.7	4.30	10.00
	b		6.3	4.33	10.63
	c		6.7	4.34	11.04
	d		6.9	4.34	11.24
	e		7.3	,	,
	f		7.5	.	,
Too poor elongated hazy	g				
	h				
	k				
	l				
	m				
	260		6.1	4.33	10.43
	323		5.3	4.24	9.54
	326		+p	,	,
Seq J + 89°			σ	Cu. P+90°	magn
	a		5.8° 5.9	4.07 5.7	9.87
P	b		60	4.09	10.09
	c		Sup.		.
P	d		62	4.10	10.30
	e		6.7	4.08	10.78
	f		7.1	4.04	11.14
894 5.5	g		7.5	4.03	11.53
949 5.3	h		7.7	4.02	11.72
88° 105 5.2 Cu magn 4.02 9.52	k		8.0	4.06	12.06
3.99 9.29 3.97 9.17	l		8.3	4.11	12.41
very close ←	m		8.9	4.18	13.08
to bv S1	n		9.1	4.19	13.29
	o		9.5	4.20	13.70

Copied Bla 53:152

ScN

Sequences Near N Pole

Sept 27, 1919

S + 88° S 35044

	Sc1	Sc2			Pc	
1a	$\overset{14}{1.3}$		3.18		$\overset{5.80}{5.9}$ 5.7	– $\overset{3}{1.\cancel{4}2}$
2b	+p				6.3	– 1.02
3	+p				6.9	– 1.09
4	$\overset{26}{2.5}$		3.39		7.1	– 1.11
5	+p				7.7	– 1.21
6	+p				8.1	– 0.99
7	+p				8.3	– 0.99
8	+p				ns	
9	+p					
10	+p					
11		5.1	4.45			
12		5.6	4.26			
13		$\overset{6.10}{6.0}$	$\overset{4.20}{6.2}$			
14		$\overset{6.60}{6.7}$	$\overset{4.48}{6.5}$			
15						
16						
17						
18						
19						
20						
23						
87° 12		+p	.	.		
15		+p	.	.		
88° 2		4.3	4.07	8.37		
80		4.7	4.15	8.85		
86		4.9	4.18	9.08		
90		5.7	4.30	10.00		
105		5.5	4.28	9.78		
115		5.5	4.28	9.78		

Too near
elongated.
hazy - not
comp with Sc

Sequences Near N Pole

Sept 27, 1919

Sc V

I 35044

Copied Bk 53, 152

Seq I +88°	Sc 1	Sc 2	P+89° Cu	Magn
a		ws ~~5.8~~ 5.7	4.05	9.75
b		6.0	4.02	10.02
c		6.5	3.99	10.49
d		6.5	3.99	10.49
e		6.8	3.96	10.76
f		7.2	3.94	11.14
g		7.7	3.90	11.60
h		7.9	3.89	11.79
k		8.1	3.89	11.99
l		8.5	3.86	12.36
m		Sup	'	'
n		920 U 9.1	3.83 9.3	13.03
o		7	.	.
894		5.6	4.06	9.66
949		5.5	4.07	9.57
88° 105		5.3	4.10	9.40

Copied Bk 53, 148

		Seq S +88°		P+90° Cu	Magn
		a	6.1	4.10	10.20
		b	6.3	4.10	10.40
		c	7.1	4.04	11.14
		d	7.3	4.04	11.34
878	5.5	e	7.6	4.03	11.63
958	6.7	f	7.8	4.04	11.84
966	5.9	g	7.9	4.05	11.95
2035	50	h	8.3	4.11	12.41
4.02	9.52				
4.08	10.78	K	8.3	4.11	12.41
4.09	9.99	l	8.7	4.16	12.86
4.12	9.12	m	8.9	4.18	13.08
		n	th	'	'

Over

Sequences Near N Pole

Sept 27, 1918

ScV

Copy Bb 53; 148

35044

Seq S +87°	Sc1	Sc2		
a		6.1	4.01	10.11
b		6.3	4.00	10.30
c		7.1	3.94	11.04
d		7.5	3.90	11.40
e		7.5	3.90	11.40
f		7.9	3.90	11.80
g		8.0	3.89	11.89
h		8.3	3.87	12.17
k		8.5	3.86	12.36
l		8.7	3.85	12.55
m		9.0	3.84	12.84
n		9.60 L 9.5	3.82 9.7	13.42
878		5.5	4.08	9.58
958		6.7	3.96	10.66
966		5.7	4.04	9.74
2035		4.9	4.15	9.05

2:30

10 – 5

Sc1

Sequences Near N Pole

Sept 29, 1919

I 35230

P +90°		Sc1	Sc2	Diff		Pc
	1	tp				5.5 – 1.02
	2	tp				6.3 – 1.02
	3	tp				7.0 – 1.19
	4	tp				7.1 – 1.11
	5	2.2 2.1		4.29		7.5 – 1.01
	6	2.7 2.6		4.41		7.9 – 0.79
	7	3.0 2.9		4.31		8.1 – 0.79
	8	4.0 3.9 400 00	4.0	4.23		8.9 – 0.67
	9		4.7	4.13		9.5 – 0.67
	10		4.9	4.12		9.8 – 0.78
	11		5.4	4.15		
	12		5.9	3.96		
	13		6.3	4.00		
	14		6.7	3.95		
	15		7.2	3.88		
	16		7.5	3.90		
	17		7.7	3.93		
	18		8.2	3.86		
	19		8.5	3.92		
	20		8.8	3.93		
	23		9.5	3.84		
+87°	12		5.0	4.12	9.12	
	15		4.1	4.20	8.30	8.7
88°	2		4.5	4.16	8.66	
	80		tp	'	'	
	86		tp	'	'	
	90		tp	'	'	
	105		4.9 p	4.12	9.02	
	115		5.1 p	4.10	9.10	

over

Sequences Near N Pole

Sept 30/1 1919

Copied Bk 53; 132

Sc V

I $\overset{3}{\cancel{2}}5230$

P+89°

Seq N+90°

	Sc 1	Sc 2		Cu	Magn
a		6.8		4.00	10.80
b		7.40 ll 7.5	7.3	3.94	11.34
c		7.60 ll 7.7	7.5	3.93	11.53
d		7.90 ll 8.0	7.8	3.93	11.83
e		8.20 ll 8.3	8.1	3.92	12.12
f		8.60 ll 8.5	8.7	3.90	12.50
g		8.9		3.90	12.80
h		9.3		3.91	13.21
k		F		.	.
539		5.0		4.18	9.18
568		5.7		4.10	9.80
654		5.2		4.15	9.35
657		5.3		4.14	9.44

Copied Bk 53; 140

Seq Q+90°

Images very poor not-shape comp.

			Sc 1	Sc 2		Cu	Magn
		a		6.0		4.08	10.08
		b		6.3		4.04	10.34
		c		6.7		4.00	10.70
		d		7.0		3.97	10.97
		e		7.3		3.95	11.25
		f		7.7		3.93	11.63
685	6.3	g		7.7		3.93	11.63
718	6.1	h		8.0		3.92	11.92
811	6.5	k		8.5		3.90	12.40
88°90	5.5	l		8.80 ll 8.9	8.7	3.90	12.70
404 407	10.34 10.17	m		9.40 ll 9.5	9.3	3.91	13.31
401 412	10.51 9.62	n		F	.	.	.

Sequences Near N Pole

DeV

Sept 29, 1919

I 35230

		Sc1	Sc2	Diff		Oc	
δ + 89°							
	1	+p				5.5	–102
	2	+p				6.2	–0.92
	3	+p				6.9	–1.09
	4	+p				7.1	–1.11
	5	2.3 2.2		4.19		7.5	–1.01
	6	2.8 2.7		4.31		8.0	–0.89
	7	+p				8.1	–0.79
	8	4.0 3.9	4.00 00 4.0	4.23		9.0	–0.77
	9		4.6	4.23		?	
	10		4.9	4.12			
	11		5.3	4.25			
	12		5.7	4.16			
	13		Sup.				
	14		6.8	3.85			
	15		7.1	3.98			
	16		7.5	3.90			
	17		7.7	3.93			
	18		8.1	3.96			
	19		8.3	4.12			
	20		8.7	403			
	23		9.5	3.84			
87°	12		4.9	4.19	9.09		
	15		4.1	4.22	8.32		
86°	2		4.7	4.20	8.90		
	80		+p	.	.		
	86		+p	.	.		
	90		4.9	419	909		
	105		5.0	p 4.18	9.18		
	115		+p	.	.		

Over

Sequence Near N Pole
Sept 29, 1919

Copied Bb53; 92

ScV

I ~~2~~3 5230
Sc 1

	Sc 2	P+90° Cu.	Magn	See below	Mean		
Seq D +89 a	5.8	4.04	9.84	9.56	9.70	14	14
b	6.40'' 6.3	3.99 6.5	10.39	10.30	10.34	05	04
c	7.2	3.93	11.13	10.94	11.04	09	10
d	7.3	3.92	11.22	11.22	11.22	00	00
e	7.7	3.90	11.60	11.42	11.51	09	09
f	7.9	3.90	11.80	11.70	11.75	05	05
g	8.3	3.90	12.20	12.20	12.20	00	00
h	8.9	3.91	12.81	12.60	12.70	11	10
k	9.3	3.93	13.23	13.02	13.12	11	10
l	9.8	3.95	13.75	13.65	13.70	05	05
112	5.1	4.10	9.20	9.12	9.16	04	04
132	4.8	4.13	8.93	8.66	8.80	13	14
146	6.7	3.97	10.67	10.67	10.67	00	00
185	5.9	4.03	9.93	9.56	9.74	19	18
161	5.2	4.10	9.30	9.02	9.16	14	14

Seq D +88°

Copied Bb53; 92

	v		
a	5.5	4.06	9.56
b	6.3	4.00	10.30
c	7.0	3.94	10.94
d	7.3	3.92	11.22
e	7.5	3.92	11.42
f	7.8	3.90	11.70
g	8.3	3.90	12.20
h	8.7	3.90	12.60
k	9.1	3.92	13.02
l	9.7	3.95	13.65

DcV

Sequences Near N Pole
Sept 29, 1919

Copied Bk 53; 92

I 35230

Seq D +88°	Sc1	Sc2	ρ+90° Cu	Magn
112		4.9	4.22	9.12
132		4.5	4.16	8.66
146		6.7	3.97	10.67
185		5.5	4.06	9.56
161		4.9	4.12	9.02

Copied Bk 53; 88

Seq C +88°	Sc2	ρ+90°		Fu62	Mean		
a	5.9	4.03	9.93	9.80	9.86	07	06
b	6.3	4.00	10.30	10.34	10.32	02	02
c	6.5	3.98	10.48	10.52	10.50	02	02
d	6.8	3.96	10.76	10.70	10.73	03	03
e	7.3	3.92	11.22	11.25	11.24	02	01
f	7.5	3.92	11.42	11.44	11.43	01	01
g	7.8	3.90	11.70	11.64	11.67	03	03
h	8.0	3.90	11.90	11.83	11.86	04	03
k	8.7	3.90	12.60	12.40	12.50	10	10
l	9.0	3.92	12.92	12.90	12.91	01	01
m	9.3	3.93	13.23	13.11	13.17	06	06
n	9.7	3.95	13.65	,	13.65	~	,
87° 12	4.7	4.13	8.83	9.09	8.96	13	13
15	3.8	4.23	8.03	8.13	8.08	05	05
112	4.7	4.13	8.83	9.09	8.96	13	13

Om

Sequences Near N Pole
Sept 29, 1919

Sev

I 35230

Copied Bk 53,96

Seq E +88°	Sc 1	Sc 2	Pt 90° Cu	Magn
a		5.7	4.04	9.74
b		6.1	4.01	10.11
c		5.9	4.03	9.93
d		6.9	3.95	10.85
e		Scr	.	.
f		7.5	3.91	11.41
g		7.9	3.90	11.80
h		8.1	3.90	12.00
k		8.5	3.91	12.41
l		880 8.7	3.91 8.9	12.71
m		960 9.5	3.94 9.7	13.54
238		4.3	4.18	8.48

Sep 6, Copied Bk 53,88

Seq C +87°		Sc 2	Pt 89 Cu	Magn
a		5.7	4.20	9.80
b		6.3	4.04	10.34
c		6.5	4.02	10.52
d		6.7	4.00	10.70
e		7.3	3.95	11.25
f		7.5	3.94	11.44
g		7.7	3.94	11.64
h		7.9	3.93	11.83
k		8.5	3.90	12.40
l		9.0	3.90	12.90
m		9.2	3.91	13.11
n		ns	.	.
Term cir { 87°	12	4.9	4.19	909
	15	3.9	4.23	813
	112	4.9	4.19	909

Sequences Near N Pole
Sept 29, 1919

ScV

S 35230

Copied Bk 53,96

	Seq E+87°	Sc1	Sc2		Pt 89° Cu	Magn	page 62	Mean		
	a		5.6		4.11	9.71 ~~10.31~~	9.74	9.72 ~~10.02~~	01 ~~29~~	02 ~~28~~
poor im	b		6.2 011 6.3	6,1	4.05	25 10.3X	10.11	10.18	07	07.
	c		5.5		4.12	9.62	9.93	9.78	16	15
	d		6.8		3.99	10.79	10.85	10.82	03	03
	e		7.3		3.95	11.25	.	11.25	a	.
	f		7.5		3.94	11.44	11.41	11.42	02	01
	g		Scr		.	.	11.80	11.80	.	a
	h		8.1		3.92	12.02	12.00	12.01	01	01
	k		8.3		3.91	12.21	12.41	12.31	10	10
	l		8.7		3.90	12.60	12.71	12.66	06	05
	m		9.60 11 9.7	9.5	3.92	13.52	13.54	13.53	01	01
	238		4.3		4.21	8.51	8.48	8.50	01	02
	n		F		.	.	.	.	.	.

1:15

10 –
DeV

Sequences Near N. Pole

Sept 30, 1919

I 35231

		Sa1	Sa2	Diff		PC	
δ +90°	1	+p				5.7 elong	– 1.22
	2	+p				6.7 elong	– 0.92
	3	+p				6.7	– 0.89
	4	+p				6.9 elong	– 0.91
	5	$^{2.4}$ 2.3		4.09		7.5	– 1.01
	6	$^{2.9}$ 2.8		4.21		7.9	– 0.79
	7	$^{3.0}$ 2.9		4.31		8.1	– 0.79
	8	$^{3.9}$ 3.8 3.90 00	3.9	4.33		9.0	– 0.77
	9		4.5	4.33		7	.
	10		4.8	4.22			
	11		5.4	4.15			
	12		5.8	4.06			
	13		6.1	4.20			
	14		6.5	4.15			
	15		7.0	4.08			
	16		7.3	4.10			
	17		7.5	4.13			
	18		8.1	3.96			
	19		8.3	$4.\overset{1}{\cancel{1}}2$			
	20		8.7	4.03			
near br. st.	23		9.3	4.04			
	25		9.8	4.07			
87°	12		4.9	4.25	9.15		
	15		4.1	4.30	8.40		
88°	2		4.7	4.28	8.98		
Images Twor	80		4.9 p	4.25	9.15		
	86		4.7 p	4.28	8.98		
	90		5.7	4.17	9.87		
	105		4.9	4.25	9.15		
	115		5.1	4.22	9.32		

Sequences Near N Pole

Sept 30, 1919

Dct

I 35231

Copied Bk 53; 160

Seq V +90°	Sc1	Sc2	R+89° Cu	Magn
a		5.5	4.09	9.59
b		5.9	4.08	9.98
c		6.5	4.10	10.60
d		6.7	4.10	10.80
e		7.0	4.10	11.10
f		7.3	4.10	11.40
g		7.7	4.10	11.80
h		8.0	4.08	12.08
k		8.4	4.05	12.45
l		8.9	4.03	12.93
m		9.40 9.3	4.04 95	13.44
n		F	,	,
1005		6.3	4.10	10.40
1016		4.9	4.10	9.08
1156		4.8	4.12	8.92
1178		5.60 5.5	4.09 5.7	9.69
88° 115		5.1	4.10	9.20

Over

Sequences Near N. Pole

Sept 30, 1919

Sc V

I 35231

		Sc 1	Sc 2	Diff	PC	
P + 89°	1	+ p			5.5	- 1.02
On edge	2	+ p			+ p	.
	3	+ p			6.7	- 0.89
	4	t p			6.9 elong	- 0.91
	5	+ p			7.3	- 0.81
	6	2.8 2.7		4.31	7.9	- 0.79
	7	3.1 3.0		4.21	8.0	- 0.69
	8	4.0 3.9	400 00 40	4.23	9.0	- 0.77
	9		4.7	4.13	Sup	.
	10		5.0	4.02		
	11		5.5	4.05		
	12		5.8	4.03		
	13		6.2	4.10		
	14		6.5	4.15		
	15		7.0	4.08		
	16		7.3	4.10		
	17		7.5	4.13		
	18		8.0	4.06		
	19	Too close to another st.				
	20		8.7	4.03		
	23		9.3	4.04		
	25		9.8	4.07		
87°	12		+ p			
Images poor	15		+ p			
88°	2		4.9			
	80		4.9			
	86		4.5			
	90		5.7			
	105		4.7			
	115		4.7			

Sequences Near N Pole
Sept 30 1919

Del

I 35231

Copied Bk 53;120

Seq K +89°	Sc1	Sc2		P+90° Cu	Magn	See below	Mean		
a		5.7		4.17	9.87	9.78	9.82	05	04
b		6.0		4.14	10.14	10.10	10.12	02	02
c		6.4		4.12	10.52	10.40	10.46	06	06
d		6.80 11 6.9	6.7	4.10	10.90	10.80	10.85	05	05
e		6.9		4.09	10.99	11.00	11.00	01	00
f		7.1		4.08	11.18	11.30	11.24	06	06
g		7.5		4.06	11.56	11.60	11.58	02	02
h		7.9		4.04	11.94	11.89	11.92	02	03
k		8.1		4.04	12.14	11.94	12.04	10	10
l		8.40 LI 8.3	8.5	4.04	12.44	12.35	12.40	04	05
m		8.7		4.04	12.74	12.54	12.64	10	10
n		9.0		4.04	13.04	13.04	13.04	00	00
o		9.5		4.05	13.55	13.55	13.55	00	00
p		7		,	,	,	,	,	,
445		5.8		4.16	9.96	9.88	9.92	04	04

Copied Bk 53;120

Seq K +88°	Sc2		P+89° Cu	Magn
a	5.7		4.08	9.78
b	6.0		4.10	10.10
c	6.3		4.10	10.40
d	6.7		4.10	10.80
e	6.9		4.10	11.00
f	7.2		4.10	11.30
g	7.5		4.10	11.60
h	7.8		4.09	11.89
k	7.85 01 7.8	7.9	4.09	11.94
l	8.3		4.05	12.35
m	8.5		4.04	12.54
n	9.0		4.04	13.04
o	9.5		4.05	13.55
445	5.7		4.08	9.88

Over

Sequences Near N Pole

Sept 30, 1919

Sc V

I 35231

Copied Bk 53;108

Seq H + 88°

	Sc 1	Sc 2	Pt+90° / Cu	Magn	h.69			
a		5.8	4.16	9.96	9.78	9.87	09	09
b		6.3	4.12	10.42	10.30	10.36	06	06
? c		6.7	4.10	10.80	10.80	10.80	00	00
d	w.s	7.1 700 1L ~~6.7~~ 6.9	4.09	11.09	11.10	11.10	01	00
e		7.3	4.07	11.37	11.60	11.48	11	12
f		7.5	4.06	11.56	11.60	11.58	02	02
g		7.7	4.05	11.75	11.80	11.78	03	02
h		7.9	4.05	11.95	12.08	12.02	07	06
k		8.3	4.04	12.34	12.35	12.34	00	01
l		8.5	4.04	12.54	12.73	12.64	10	09
m		900 L1 8.9 9.1	4.04	13.04	13.03	13.04	00	01
n		7?	.	.		.	.	.

Copied Bk 53;124

398		5.1	4.22	9.32	9.20	9.26	06	06

Seq L + 88°

a		5.5	4.19	9.69	9.78	9.74	05	04
b		5.7	4.16	9.86	10.00	9.93	07	07
c		6.0	4.14	10.14	10.40	10.27	13	13
d		6.3	4.12	10.42	10.60	10.51	09	09
e		6.5	4.11	10.61	10.80	10.70	09	10
f		6.8	4.10	10.90	11.00	10.95	05	05
g		7.2	4.08	11.28	11.20	11.24	04	04
h		7.5	4.06	11.56	11.80	11.68	12	12
k		7.9	4.05	11.95	12.17	12.06	11	11
l		8.3	4.04	12.34	12.35	12.34	00	01
m		8.7	4.04	12.74	12.74	12.74	00	00
n		9.0	4.04	13.04	13.13	13.08	04	05
o		960 L1 9.5 9.7	4.06	13.66	13.54	13.60	06	06
539		4.9	4.24	9.14	9.10	9.12	02	02

Sequences Near N Pole
Sept 30, 1919

Seq V
I 35231

Copied Bk 53, 108

Seq H +87°

	Sc1	Sc2	P+89° Cw	Magn
			4.08	
a		5.7		9.78
b		6.2	4.10	1030
? c		6.7	4.10	10.80
d		6.9 7.1 7.00 U	4.10	11.10
Close to br. st. e		7.5?	4.10	11.60 ?
f		7.5	4.10	11.60
g		7.7	4.10	11.80
h		8.0	4.08	12.08
k		8.3	4.05	12.35
l		8.7	4.03	12.73
m		9.0	4.03	13.03
n		7		
398		5.1	4.10	9.20

Copied Bk 53, 124

Seq S +87°

	Sc1	Sc2	Cw	Magn
a		5.7	4.08	9.78
b		5.9	4.10	10.00
c		6.3	4.10	10.40
d		6.5	4.10	10.60
e		6.7	4.10	10.80
f		6.9	4.10	11.00
g		7.1	4.10	11.20
h		7.7	4.10	11.80
k		8.1	4.07	12.17
l		8.3	4.05	12.35
m		8.7	4.04	12.74
n		9.1	4.03	13.13
o		9.5	4.04	13.54
539		5.0	4.10	9.10

12:55

Sequence Near N Pole
Oct 1, 1919

Sc V

10 – 5

I 35232

		Sc 1	Sc 2	Diff		PC
P + 90°	1	+p				5.5 – 102
	2	+p				6.3 – 1.02
	3	+p				6.9 – 1.09
	4	+p				6.95 6.9 7.0 – 0.96
	5	2.5 2.4		3.99		7.5 – 1.01
	6	3.0 2.9		4.11		8.1 – 0.99
	7	3.1 3.0		4.21		8.3 – 0.99
	8	4.1 4.0 4.10 00	4.1	4.13		Sup? .
	9		4.9	3.93		
	10		5.0	4.02		
	11		5.5	4.05		
	12		5.7	4.16		
	13		6.2	4.10		
	14		6.5	4.15		
	15		7.1	3.98		
	16		7.3	4.10		
	17		7.5	4.13		
	18		8.0	4.06		
	19		8.3	4.12		
	20		8.5	4.23		
	23		9.1	4.24		
	25		9.7	4.17		
87°	12		4.8	4.05	8.85	
	15		4.1	4.06	8.16	
88	2		5.0	4.05	9.05	
	80		+p	.	.	
	86		+p	.	.	
	90		5.3	4.06	9.36	
	105		4.9 p	4.05	8.95	
	115		4.9 p	4.05	8.95	

Sequences Near N Pole

Oct 1 1919

Copied Bk 53;140

Sc V

I 35232

Seq Q +89°

	Sc 1	Sc 2	~~Cu~~	Cu	Pt 90° Mag	Pt 75	Mean		
a		5.9		4.06	9.96	9.92	9.94	02	02
b		6.1		4.07	10.17	10.20	10.18	01	02
c		6.5		4.08	10.58	10.50	10.54	04	04
d		6.80 1.1 6.7	6.9	4.10	10.90	10.70	10.80	10	10
e		6.95 1.0 6.9	7.0	4.09	11.04	11.10	11.07	03	03
f		7.3		4.10	11.40	11.31	11.36	04	05
g		7.5		4.10	11.60	11.52	11.56	04	04
h		7.8		4.10	11.90	11.84	11.87	03	03
k		8.0		4.10	12.10	12.18	12.14	04	04
Mean def. l		8.3		4.12	12.42	12.62	12.52	10	10
m		8.60 1.1 8.5	8.7	4.14	12.74	13.09	12.92	18	17
n		9.0		4.18	13.18	13.34	13.26	08	08
685		6.1		4.07	10.17	10.01	10.09	08	08
718		5.70 2.2 5.5	5.9	4.06	9.76	9.92	9.84	08	08
811		6.3	~~6.1~~	4.08	10.38	10.30	10.34	04	04
88° 90		5.5		4.06	9.56	9.53	9.54	02	01
o		9.3		4.20	13.50	13.86	13.68	18	18
p		7							

Over

Sequences Neg. N Pole

Oct 1, 1919

Copied Bk 53, 136

Dc V

I 35232

Seq O +88°	Sc1	Sc2	P+90° Cu	Magn	I 76	Mean		
	~~Sct~~							
a		5.8	4.06	9.86	10.01	9.94	06	07
b		6.2	4.08	10.28	10.30	10.29	01	01
c		66011 6.7 6.5	4.09	10.69	10.50	10.60	09	10
d		6.5	4.09	10.59	10.50	10.54	05	04
e		6.7	4.09	10.79	10.90	10.84	05	06
f		6.9	4.09	10.99	11.10	11.04	05	06
g		7.2	4.10	11.30	11.10	11.20	10	10
h		7.5	4.10	11.60	11.52	11.56	04	04
k		76011 7.5 7.7	4.10	11.70	11.52	11.61	09	09
l		7.9	4.11	12.01	11.84	11.92	09	08
m		7.8	4.10	11.90	.	11.90	a	.
n		8.2	4.12	12.32	12.18	12.25	07	07
o		8.5	4.14	12.64	12.62	12.63	01	01
p		8.9	4.17	13.07	13.20	13.14	07	06
684		4.8	4.05	8.85	8.89	8.87	02	02
718		6.1	4.07	10.17	9.92	10.04	13	12
88° 80		4.9	4.05	8.95	8.98	8.96	01	02
86		4.5	4.04	8.54	8.64	8.59	05	05
q		7	.	.	13.86	13.86	.	a

11-20

Sequences Near N Pole

Oct 2, 19

Copied Bk 53,92

Sc1

11 — S35232

Seq D +90°

	Sc1	Sc2		P+89° Cu	Magn	h77	Mean			P488° Cu	Magn
		6.00	11								
a		6.1	5.9	4.01	10.01	9.59	9.80	21,	21	4.10	10.16
b		6.5		4.00	10.50	10.42	10.46	04	04	4.12	10.62
c		7.3		4.01	11.31	.	11.31	a	.	4.13	11.43
d		7.5		4.02	11.52	11.03	11.28	24	25	4.13	11.63
e		7.7		4.04	11.74	11.74	11.74	00	00	4.15	11.85
f		7.9		4.05	11.95	11.84	11.90	05	06	4.16	12.06
g		8.0		4.07	12.07	12.08	12.06	01	01	4.17	12.17
h		8.3		4.09	12.39	12.49	12.44	05	05	4.~~4~~19	12.49
k		8.5		4.12	12.62	12.92	12.77	15	15	4.20	12.70
l		8.9		4.18	13.08	13.25	13.16	08	09	4.24	13.14
m		9.3		4.30	13.60	13.82	13.71	11	11	4.30	13.60
n		9.7		4.44	14.14	.	14.14	a	.	4.~~32~~40	14.~~02~~10
112		5.2		4.04	9.24	.	9.24	a	.	4.07	9.27
132		5.0		4.06	9.06	.	9.06	a	.	4.03	9.03
146		6.9		4.00	10.90	10.62	10.76	14	14	4.12	11.02
185		5.9		4.02	9.92	9.59	9.76	16	17	4.10	10.00
161		5.3		4.05	9.35	9.04	9.20	15	16	4.08	9.38

Over

Sequences Near N Pole

Sc V

Oct 2, 1919

	J 35232	Sc 1	Sc 2			PC	
B + 89°	1	+p				5.4	– 0.92
	2	+p				6.2	– 0.92
	3	+p				6.7	– 0.89
	4	+p				6.9	– 0.91
	5	2.6 2.5		3.89		7.5	– 1.01
	6	3.1 3.0		4.01		7.8	– 0.69
	7	3.2 3.1		4.11		7.9	– 0.59
	8	4.0 3.9 4.00 00	4.0	4.23		8.9	– 0.67
	9		4.7	4.13		9.5	– 0.67
	10		5.0	4.02		9.7	– 0.68
	11		5.5	4.05			
	12		5.7	3.96			
	13		6.3	4.00			
	14		6.6	4.05			
	15		7.1	3.98			
	16		7.3	4.10			
	17		7.7	3.93			
	18		8.3	3.76			
	19	Nearly sup.					
	20		8.5	4.23			
	23		9.1	4.24			
	25		9.5	4.37			
	26		9.8	4.53			
87°	12		4.5	4.14	8.64		
	15		3.8	4.15	7.95		
88°	2		5.0	4.06	9.06		
	80		4.7	4.11	8.81		
	86		4.5	4.14	8.64		
	90		5.5	4.04	9.54		
	105		4.9	4.08	8.98		
	115		5.3	4.04	9.34		

Sequences Near N Pole

Sc V

Oct 2 1919

Copied Bk 53; 1140

I 35232

Seq Q +88°	Sc 1	Sc 2	P+89° Cu	Sept 7, Magn
a		5.9	4.02	9.92
b		6.2	4.00	10.20
c		6.5	4.00	10.50
d		6.7	4.00	10.70
e		7.1	4.00	11.10
f		7.3	4.01	11.31
g		7.5	4.02	11.52
h		7.8	4.04	11.84
k		8.1	4.08	12.18
l		8.5	4.12	12.62
m		8.9	4.19	13.09
n		9.1	4.24	13.34
o		9.5	4.36	13.86
68 5		6.0	4.01	10.01
71 8		5.9	4.02	9.92
8 11		6.3	4.00	10.30
88 90		5.5	4.03	9.53

Over

Sequences Near N Pole

ScV

Oct 2, 1919

I 35232

Copied Bk 53;136

Seq. O + 87°	Sc1	Sc2	P+89° Cu	Sept 72 Magn
a		6.0	4.01	10.01
b		6.3	4.00	10.30
c		6.5	4.00	10.50
d		6.5	4.00	10.50
e		6.9	4.00	10.90
f		7.1	4.00	11.10
g		7.1	4.00	11.10
h		7.5	4.02	11.52
k		7.5	4.02	11.52
l		7.8	4.04	11.84
m		Sup.	.	.
n		8.1	408	12.18
o		8.5	412	12.62
p		9.0	4.20	13.20
684		4.8	409	8.89
718		5.9	4.02	9.92
88° 80		4.9	4.08	8.98
86		4.5	4.14	8.64
q		9.5	~~9.7~~ 4.36	13.86

12-15

12 — 30
Sc V

Sequences Near N Pole
Oct 2, 1919

S35232

	Sc 1	Sc 2	P + 88° Cu	Magn	
Seq E + 9°					Copied Bk 53; 96
a		5.7	4.10	9.80	
b		6.1	4.11	10.21	
c		5.9	4.10	10.00	
d		6.9	4.13	11.03	
e		7.3	4.14	11.44	
f		7.5	4.14	11.64	
g		7.9	4.15	12.05	
Close to br. st h		8.1	4.17	12.27?	
k		8.3	4.19	12.49	
l		8.9	4.24	13.14	
m		9.3	4.30	13.60	
n		9.7	4.34	14.04	
238		4.5	.	.	
Seq D + 89°					Copied Bk 53; 92
a		5.5	4.09	9.59	
b		6.3	4.12	10.42	
c	Nearly Sup —		.	.	
Images poor d		6.9	4.13	11.03	
e		760 7.7	4.14 7.5	11.74	
f		7.7	4.14	11.84	
g		7.9	4.15	12.05	
h		8.3	4.19	12.49	
k		8.7	4.22	12.92	
l		9.0	4.25	13.25	
m		9.5	4.32	13.82	
172		4.7	.	.	
132		4.5	.	.	
146		6.5	4.12	10.62	
185		5.5	4.09	9.59	
161		5.0	4.04	9.04	

Sequences Near N. Pole

Sc V

Oct. 2, 1919

		δ35232 Sc 1	Sc 2		Pc	
8 + 88°	1	B		.	5.5 − 1.02	
	2	+ fr		.	6.1 − 0.82	
	3	+ fr		.	6.8 − 0.99	
	4	2.4 2.3 fr		3.59	7.0 − 1.01	
	5	+ fr		.	7.4 − 0.91	
	6	3.1 3.0		4.01	7.9 − 0.79	
	7	3.2 3.1		4.11	7.9 − 0.59	
	8	+ fr		.	8.8 − 0.57	
	9	+ fr		.	9.5 − 0.67	
	10		4.9	4.12		
	11		5.5	4.05		
	12		5.8	4.06		
	13		6.2	4.10		
	14		6.5	4.15		
	15		6.9	4.18		
	16		7.2	4.20		
	17		7.5	4.13		
	18		8.0	4.06		
	19		8.3	4.12		
	20		8.5	4.23		
	23		9.0	4.34		
	25		9.60 ✓ 9.5	4.27 9.7		
87°	12		fr	.		
	15		+ fr	.		
88°	2		+ fr	.		
	80		4.9	4.04 8.94		
	86		4.4	. .		
	90		5.5	4.09 9.59		1-35
	105		5.0	4.05 9.05		
	115		5.2	4.06 9.26		

Sequences Near N Pole

Oct 3, 1919

Sc V
11,00

I 35319

		Sc 1	Sc 2	Diff		PC
P + 90°	1	tp				tp. along
	2	tp		.		6.2 – 0.92
	3	tp		.		6.5 – 0.69
	4	tp		.		6.8 – 0.81
	5	2.0 1.9		4.49		7.4 – 0.91
	6	2.6 2.5		4.51		7.9 – 0.79
	7	2.8 2.7		4.51		8.1 – 0.79
	8	3.6 3.5 ~~3.7~~ 3.68 01	3.7	4.58		9.0 – 0.77
	9	4.2 4.1 4.20 00	4.2	4.63		9.9? – 1.07
	10		4.4	4.62		
	11		5.10 ±.1 5.0 5.2	4.45		
	12		5.50 ±.1 5.4 5.6	4.36		
	13		6.00 ±.1 5.9 6.1	4.30		
	14		6.3	4.35		
	15		6.90 ±.1 6.8 7.0	4.18		
	16		7.3	4.10		
	17		7.5	4.13		
	18		8.1	3.96		
	19		8.3	4.12		
	20		8.60 ±.1 8.5 8.7	4.13		
	23		9.3	4.04		
	25		9.8	4.07		
87°	12		tp	.		
	15		tp	.		
				Cu.	Magn	
86°	2		4.0	4.60	8.60	
	80		tp	.	.	
	86		tp	.	.	
	90		5.5	4.44	9.94	
	105	–	4.1	4.60	8.70	
	115		4.3	4.60 –	8.90	

Sequences Near N Pole

Oct 3 1919

Copied Bk 53, 160

ScV

I 35319

Pt 90°

Seq V +88°	Sc1	Sc2	Cu	Magn	k87	Mean		
a		5.3	4.47	9.77	9.80	9.78	01	02
b		6.0	4.34	10.34	10.36	10.35	01	01
c		6.3	4.30	10.60	10.85	10.72	12	13
d		7.0	4.16	11.16	11.38	11.27	11	11
e		7.1	4.15	11.25	11.55	11.40	15	15
f		8.0	4.08	12.08	11.95	12.02	06	07
g		8.3	4.06	12.36	12.20	12.28	08	08
h		8.5	4.06	12.56	12.38	12.47	09	09
k		8.7	4.05	12.75	38 ~~12.84~~	12.56	19	18
l		9.0	4.05	13.05	12.84 ~~13.14~~	12.94	11	10
m		9.2	4.05	13.25	14 ~~13.74~~	13.20	05	06
n		9.60 !! 9.7 9.5	4.06	13.66	13.74	13.70	04	04
o		9.7	4.06	13.76	,	13.76	a	,
1005		6.2	4.30	10.50	10.46	10.48	02	02
1016		4.40 !! 4.3 4.5	4.59	8.99	8.58	8.78	21	20
1156		4.3	4.59	8.89	8.66	8.78	11	12
1178		5.55 ?! 5.4 5.7	4.43	9.98	9.80	9.89	09	09
88° 115		4.4	4.59	8.99	8.75	8.87	12	12

Sequences Near N Pole

Copied B 53, 164

Oct 3, 1919

Sc V

I 35319 Sc 1 Sc 2

Seq W +87°

	56	011	P+90° Cu	Magn	P+89° Cu	Magn	88	Mean			
a	5,7	5,5	4.42	10.02	4.30	9.90	9.80	9.91	~~05~~ 11	~~05~~ 01	11
b	5.9		4.37	10.27	4.25	10.15	10.36	10.26	01	11	10
c	6,0		4.34	10.34	4.23	10.23	10.46	10.34	00	11	12
d	7,0		4.16	11.16	4.06	11.06	11.30	11.1~~8~~7	01	1~~2~~1	1~~2~~3
e	7,3 elong.		4.12	11.42	4.04	11.34	11.55	11.44	02	10	11
f	7,8		4.09	11.89	4.02	11.82	11.85	11.8~~4~~5	04	03	00
g	8,1		4.06	12.16	4.00	12.00	12,11	12.09	07	09	0~~5~~2
h	8,3		4.06	12.36	4.00	12.30	12.29	12.32	04	02	03
k	8.7		4.05	12.75	4.00	12.70	12.55	12.6~~2~~7	~~12~~ 08	~~08~~ 03	~~08~~ 12
l	9.0		4.05	13.05	3.99	12.99	12.94	12.99	06	00	05
m	9.3		4.05	13.35	3.98	13.28	13.14	13.26	09	0~~7~~2	~~07~~ 12
n	9.5		4.08	13.55	3.97	13.47	13.54	13.52	03	05	0~~4~~2
o	9.7		4.06	13.76	3.96	13.66	.	13.71	05	05	.
1147	5,0		4.51	9.51	4.42	9.42	9.57	9.50	01	08	07
2056	5.1		4.50	9.60	4.40	9.50	9.80	9.63	03	13	15

12 – 5

Images slightly elongated.

Sequences Near N Pole

Oct 3, 1918

Copied Blk 53;120

DcY
12;30

I35319

Seq K +90°

			Pt+89° Cu	Magn	Pt+88° Cu	Magn	h 85	Mean			
a		5.7	4.28	9.98	4.35	9.63	10.05	989	09	26	16
b		6.1	4.21	10.31	4.36	10.46	10.46	10.41	10	05	05
c		6.3	4.17	10.47	4.36	10.66	10.66	10.60	13	06	06
d	Nearly Sup		.	.	.	.	10.85	10.85	.	.	a
e		6.7	4.10	10.80	4.34	10.44	11.13	10.79	01	35	34
f		7.1	4.06	11.16	4.29	11.39	11.38	11.31	15	08	07
g		7.5	4.02	11.52	4.22	11.72	11.54	11.59	07	13	05
h		8.0	4.01	12.01	4.11	12.11	11.88	1200	01	11	12
k		8.1	4.00	12.10	4.10	12.20	1204	12.11	01	09	07
l		8.5	4.00	12.50	4.05	12.55	12.38	12.48	02	07	10
m		8.9	3.99 p	12.89	404	12.94	12.56	12.80	09	14	24
n		9.3	3.98 p	13.28	4.04	13.34	13.04	13.22	06	12	18
445		6.0	4.23	10.23	4.36	10.36	10.36	10.32	09	04	04

Sequences Near N Pole
Oct. 3, 1919

SeV

		Δ35319 Se 1	Se 2			PC
δ + 89°						
	1	tp				tp along
	2	tp				6.3 – 1.02
	3	tp				6.7 – 0.89
	4	tp				7.0 – 1.01
	5	2.0 1.9		4.49		7.5 – 1.01
	6	2.6 2.5 q		4.51		7.9 – 0.79
	7	2.9 2.8 q		4.41		8.0 – 0.69
	8	3.6 3.5 q		4.63		8.9 – 0.67
	9	4.1 4.10 00 4.0 q	4.1	4.73		9.5 – 0.67
	10		4.40 4.3	L1 4.62 4.5		9.7 – 0.68
	11		5.3	4.25		
	12		5.7	3.98		
	13		6.1	4.20		
	14		6.5	4.15		
	15		7.0	4.08		
	16		7.5	3.90		
	17		7.7	3.93		
	18		8.1	3.96		
	19		8.3	4.12		
	20		8.7	4.03		
	23		9.40 9.3	L1 3.94 9.5		
	25		Sup			
87°	12		4.7 p	4.50	9.20	
	15		3.9 p	4.62	8.52	
88	2		4.0	4.62	8.62	
	80		tp	.	.	
	86		tp	.	.	
	90		5.3	4.36	9.66	
	105		4.0	4.62	8.62	
	115		4.3	4.48	8.78	

Sequences Near N Pole
Oct 3, 1919

ScV

Seq I + 88 I 35319

Copied BK 53; 152

Sc 1	Sc 2	P+89° Cu.	Magn
a	5.5	4.32	9.82
b	5.9	4.25	10.15
c	6.2	4.20	10.40
d	6.3	4.17	10.47
e	6.7	4.10	10.80
f	7.3	4.04	11.34
g	7.7	4.02	11.72
h	7.7	4.02	11.72
k	8.0	4.00	12.00
l	8.3	4.00	12.30
m	8.8	4.00	12.80
n	9.3	3.98	13.28
8 94	4.9	4.44	9.34
9 49	4.7	4.50	9.20
88 105	4.5	4.54	9.04

1-25

10',3○

S. N.

Sequences Near N Pole

Oct 6 1919

Copied Bk 53; 124

Sa	S 35319 Sc1	Sc2	P+88° Cu	Magn
Seq L+90°				
a		5.5	4.31	9.81
b		6.00!! 5.9 6.1	4.36	10.36
c		6.20!! 6.3 6.1	4.36	10.56
d		6.5	4.35	10.85
e		6.5	4.35	10.85
f		6.9	4.32	11.22
g		7.3	4.24	11.54
h		7.7	4.18	11.88
k		8.1	4.10	12.20
l		8.3	4.08	12.38
m		8.7	4.04	12.74
n		9.40!! 9.3 9.5 ?	4.04 fr	13.44?
539		5.15!! 5.2 5.1	4.23	9.38

Copied Bk 53; 120

Seq K+89° a		5.7	4.35	10.05
b		6.1	4.36	10.46
c		6.3	4.36	10.66
d		6.5	4.35	10.85
e		6.8	4.33	11.13
defective? f		7.1	4.28	11.38
g		7.3	4.24	11.54
h		7.7	4.18	11.88
k		7.9	4.14	12.04
l		8.3	4.08	12.38
m		8.5	4.06	12.56
n		9.0	4.04	13.04
o		7	'	'
445		6.0	4.36	10.36

Over

Sequences Near N Pole
Oct 6, 1919

Sel

		δ35319 Se1	Se2			Pc long
δ + 88°	1	B				
	2	tp				6.1 − 0.82
	3	^{14}1.3		4.41		6.7 − 0.89
	4	^{16}1.5		4.39		7.0 − 1.01
	5	$^{2.0}$1.9		4.49		7.5 − 1.01
	6	tp				7.9 − 0.79
	7	tp				8.0 − 0.69
	8		4.0	p4.23		9.0 − 0.77
	9		4.7	p4.13		9.7 − 0.87
	10		4.9	4.12		9.8 − 0.78
	11		5.3	4.25		
	12		5.5	4.36		
	13		5.9	4.40		
	14		6.3	4.35		
	15		6.7	4.38		
	16		7.1	4.30		
	17		7.4	4.23		
	18		8.0	4.06		
	19		8.3	4.12		
	20		8.7	4.03		
	23		9.3	4.04		
	25		9.8	4.07		
87°	12		tp	,		
	15		tp	,		
88°	2		4.3	4.20	8.50	
	80		tp	,	,	
	86		tp	,	,	
	90		5.8	p4.30	9.80	
	105		4.4	4.17	8.57	
	115		4.7	4.14	8.84	

Sequences Near N Pole

Sc V

Oct 6, 1919

I 35319

Copied Blk 53, 160

Seq V +87°	Sc 1	Sc 2	P+88° Cu	~~Sup 80~~ Magn	P+89°	Magn
a		5.5	4.30	9.80	4.32	9.82
b		6.0	4.36	10.36	4.23	10.23
c		6.5	4.35	10.85	4.13	10.63
d		7.1	4.28	11.38	4.05	11.15
e		7.3	4.25	11.55	4.03	11.33
f		7.8	4.15	11.95	4.01	11.81
g		8.1	4.10	12.20	4.00	12.01
h		8.3	4.08	12.38	4.00	12.30
k		8.3	4.08	12.38	4.00	12.30
l		8.8	4.04	12.84	4.00	12.80
m		9.1	4.04	13.14	3.99	13.09
n		9.7	4.04	13.74	3.97	13.67
o		7	.	.		
1005		6.1	4.36	10.46	4.22	10.32
1016		4.4	4.18	8.58	4.60	9.00
1156		4.5	4.16	8.66	4.53	9.03
1178		5.5	4.30	9.80	4.32	9.82
88° 115		460 45 ~~47~~	L 4.15	8.75	4.52	9.12

1919phae.proj.1012I

Sequences Near N Pole
Oct 6, 1919

SeV

I 35319

Copied Bk 53, 164

Seq W +86°	Sc1	Sc2	P+88° Cu.	Sub 8 Magn
a		5.5	4.30	9.80
b		6.0	4.36	10.36
c		6.1	4.36	10.46
d		7.0	4.30	11.30
e		7.3	4.25	11.55
f		7.7	4.18	11.88
g		8.0	4.11	12.11
h		8.2	4.09	12.29
k		8.5	4.05	12.55
l		8.9	4.04	12.94
m		9.1	4.04	13.14
n		9.5	4.04	13.54
o		7	,	,
1147		5.3	4.27	9.57
2056		5.5	4.30	9.80

12

Sequences Near N Pole

Oct 7, 1919

Dec 11–20

I 35366

P + 90°

		Sc 1	Sc 2	Diff		PC	−102
	1	+p				5.5 p	clong
	2	+p				6.2	−.092
	3	+p				6.7	−.089
	4	+p				7.0	−.101
	5	2.1 2.0		4.39		7.5	−.101
	6	2.5 2.4		4.61		7.9	−.079
	7	2.6 2.5		4.71		8.1	−.079
	8		3.95 4.0	.01 4.28 39		8.9	−.067
	9		4.5	4.33		9.5	−.067
	10		4.7	4.32		9.8	−.078
	11		5.1	4.45			
	12		5.5	4.36			
	13		6.0	4.30			
	14		6.4	4.25			
	15		6.9	4.18			
	16		7.3	4.10			
	17		7.7	3.93			
	18		8.3	3.76			
	19		8.5	3.92			
	20		8.8	3.93			
	23		9.5	3.84			
	25		F	,			
87°	12		5.0	p 4.36	9.36		
	15		4.18 4.2	4.1 4.28 p	8.43		
88°	2		4.5	4.31	8.81		
	80		4.9	4.35	9.25		
	86		4.5	4.31	8.81		
	90		5.5	4.34	9.84		
	105		4.9	4.35	9.25		
	115		5.1	4.35	9.45		

Sequences Near N Pole

SeV

Oct 7, 1919

I35366

Seq B +89°

P+90

Copied Bk 53, 84

		Cu	Magn	Pg 93	Mean		
a	6.0	428	10.28	10.48	10.38	10	10
b	6.9	4.14	11.04	10.98	11.01	03	03
c	7.3	406	11.36	11.23	11.30	06	07
d	7.5	402	11.52	11.47	11.50	02	03
e	8.0	393	11.93	11.94	11.94	01	00
f	8.2	391	12.11	12.02	1206	05	04
g	8.5	390	12.40	12.25	12.32	08	07
h	93	384	13.14	12.66	12.90	24	24
k	95	383	13.33	12.83	13.08	25	25
l	7	.	.	13.38	13.88	a	.
63	5.1	4.25	9.35	9.32	9.34	01	02
82	5.9	4.30	10.20	9.96	10.08	12	12
144	6.0	4.28	10.28	10.22	10.25	03	03
1156	4.2	4.28	8.48	8.98	8.73	25	25
1178	3.4	4.35	9.75	9.87	9.81	06	06
1211	6.0	4.28	10.28	10.22	10.25	03	03
1277	6.0	4.28	10.28	9.96	10.12	16	16
88° 2	4.1	4.27	8.37	8.70	8.54	17	16
8	6.3	4.25	10.55	10.64	10.60	05	04
11	5.5	4.34	9.84	9.80	9.82	02	02

Sequences Near N Pole

Sett

Oct 7, 1919

I 35366

ρ+90°

Copied Bk 53, 80

Seq A +88°

		Cu	Magn
a	6.7	4.18	10.88
b	7.1	4.10	11.20
c	7.3	4.05	11.35
d	7.5	4.02	11.52
e	7.8	3.95	11.75
f	8.0	3.93	11.93
g	8.5	3.89	12.39
h	8.9	3.88	12.78
k	9.3	3.84	13.14
l	9.5	3.83	13.33
m	9.8	3.82	13.62
1266	5.0	4.38	9.38

12

Sequences Near N Pole

Oct 8, 1919

10 – 20

ScV

δ +89°

I 35366

		Sc1	Sc2			PC	
	1	+p				5.7 elong.	-1.22
	2	+p				6.3	-1.02
	3	+p				6.9	-1.09
	4	+p				7.0	-1.01
	5	2.0 1.9		4.49		7.5	-1.01
	6	2.5 2.4		4.61		7.9	-0.79
	7	2.6 2.5 p		4.71		8.1	-0.79
	8	3.6 3.5		4.63		9.0	-0.77
	9	4.1 4.0	4.10 00 4.1	4.73		7	,
	10		4.3	4.72			
	11		4.9	4.65			
	12		5.5	4.36			
	13		6.0	4.30			
	14		6.3	4.35			
	15		6.7	4.38			
	16		7.1	4.30			
	17		7.5	4.13			
	18		8.1	3.96			
	19		8.5	3.92			
	20		8.9	3.83			
	23		9.5	3.84			
	25		7	,			
87°	12		4.1	4.70	8.80		
	15		3.3	4.69	7.99		
88°	2		4.0	4.70	8.70		
	80		+p	,	,		
	86		+p	,	,		
	90		5.5	4.46	9.96		
	105		4.7	4.61	9.31		
	115		4.9	4.58	9.48		

Sequences Near N Pole

Oct 8 1919

Copied Bk 53, 132

Sc V

I 35366

Seq N +90°	Sc 1	Sc 2	Pt 89° Cu	Sec χ90 Magn	χ95	Mean		
a		6.2	4.35	10.55	10.45	10.50	05	05
b		6.9	4.25	11.15	11.26	11.20	05	06
c		7.3	4.17	11.47	11.52	11.50	03	02
near br st. d		7.8	4.05	11.85	11.90	11.88	03	02
e		8.1	4.00	12.10	12.19	12.14	04	05
f		8.5	3.91	12.41	12.65	12.53	12	12
g		8.8	3.86	12.66	13.02	12.84	18	18
h		9.3	3.78	13.08	13.59	13.34	26	25
k		9.40 9.3	L 3.78 9.5	13.18	13.77	13.48	30	29
l		7?	,	,	,			
539		4.3	4.69	8.99	9.20	9.10	11	10
568		5.3	4.50	9.80	9.78	9.79	01	01
654		4.5	4.66	9.16	9.31	9.24	08	07
657		5.1	4.54	9.64	9.62	9.63	01	01

Copied Bk 53, 84

Seq B +88°			Sec χ90
a	6.1	4.38	10.48
b	6.7	4.28	10.98
c	7.0	4.23	11.23
d	7.3	4.17	11.47
e	7.9	4.04	11.94
f	8.0	4.02	12.02
g	8.3	3.95	12.25
h	8.80 8.7	L 3.86 8.9	12.66
k	9.0	3.83	12.83
l	9.60 9.5	L 3.78 9.7	13.38
63	4.7	4.62	9.32
82	5.5	4.46	9.96
144	5.8	4.42	10.22

Over

Sequences Neg. N Pole

ScV A35366 Oct. 8 1919

Copied BK53, 84

Seq B +88° (cont)

	Sc 1	Sc 2	P+88° Cu	Magn
1156		4.3	4.68	8.98
1178		5.4	4.47	9.87
1211		5.8	4.42	10.22
1277		5.5	4.46	9.96
88° 2		4.0	4.70	8.70
8		6.3	4.34	10.64
11		5.3	4.50	9.80

Seq M +90°

Copied BK53, 86

	Sc 2	P+88° Cu	Magn
a	5.5	4.44	9.94
b	6.1	4.35	10.45
c	6.5	4.30	10.80
d	6.9	4.26	11.16
e	Sup.	.	.
f	7.5	4.21	11.71
g	7.9	4.19	12.09
h	8.1	4.18	12.28
k	8.3	4.16	12.46
l	8.5	4.15	12.65
m	9.0	4.12	13.12
n	9.5	4.09	13.59
o	F	,	,
539	4.5	4.70	9.20
657	5.0	4.55	9.55

Images elongated

Sequences Near N Pole
Oct 8, 1919

DeV

I 35366

Copied Bk 53:132

Images elongated

Seq N+89°	Sc1	Sc2	Pt 88° Cu	Lr 93 Magn
a		6.1	p 4.35	10.45
b		7.0	4.26	11.26
c		7.3	4.22	11.52
d		7.7	4.20	11.90
e		8.0	4.19	12.19
f		8.5	4.15	12.65
g		8.9	4.12	13.02
h		9.5	4.09	$\overset{3}{12}$.59
k		9.7	4.07	13.77
l		9.8	.	.
539		4.5	p 4.70	9.20
568		5.3	4.48	9.78
654		4.7	4.61	9.31
657		5.1	4.52	9.62

Over

ScV

Sequences Near N Pole
Oct 8, 1919

δ35366

		Sc1	Sc2		PC	
δ +88°					5.7 elong	−122
	1	B				
	2	+p			6.3 near bi st	102
	3	+p			6.7	−089
	4	+p			6.9	−091
	5	19 1.8		4.59	7.4	−091
	6	+p		.	7.9	−079
	7	+p		.	8.0	−069
	8	34 3.3		4.83	8.9	−067
	9	40 3.9	400 00 4.0	4.83	9.5	−047
	10		4.3	4.72	9.8	−078
	11		5.1	445 p		
	12		5.5	4.36		
	13		6.0	4.30		
	14		6.5	4.15		
	15		6.7	4.38		
	16		7.1	4.30		
	17		7.5	4.13		
	18		8.0	4.06		
	19		8.2	4.22		
	20		8.5	4.23		
	23		9.3	4.04		
87°	12		4.0			
	15		3.3			
88°	2		4.3			
	80		+p			
	86		+p			
	90		+p			
	106		4.9			
	115		5.0			

12-50

Nova - (J. b. m) $20^h 3^m$ +17° 24′ (1900) Sagittae
Estimates of brightness
Sept - 9, 1919

12

✓ 23643 ns? ~~Im.~~ 13.9
✓ 25732 ns? ~~Im.~~ <13.2
✓ 25719 ns <14.1
✓ 25879 ns <14.1
✓ 21300. Does not cover reg
✓ 23584 ns <13.7
✓ 20837 ns <13.2
✓ 17910 ns? <14.1
✓ 15675 Does not " "
✓ 16258 ns <14.1
✓ 16133 ns <14.1
✓ 18655 ns = 13.2
✓ 7054 ns <13.7
✓ 7184 ns <13.2

✓ AI 11938
7.1

✓ AC 14609
8.9

AI 11933
✓ <10.2

✓ AC 14582
7.2

✓ AI 11953
8.3

AC 14595
✓ 8.2

✓ AI 11994
9.7?

✓ AC 14618
9.0

✓ ~~AI~~ 12034
<10.2?

✓ AI 12053
< ~~10.9~~ ?
9.7

✓ AI 12040
9.9

✓ MC 5709
13.6

✓ AI 11809

✓ AI 11899

Nova - JDM

Sept 10, 1919

✓	Ac 13438	< 11.2
✓	Ac 14210	< 11.8
✓	Ac 14281	< 11.2
✓	Ac 14240	< 11.2
✓	Ac 14267	< 11.2
✓	Ac 13442	< 10.9
✓	Ac 14322	< 9.7
✓	Ac 14394	< 11.2
✓	Ac 14422	< 11.2
✓	Ac 14471	< 10.2
✓	Ac 14492	< 12.5
✓	Ac 14528	< 11.8
✓	Ac 14056	fp
✓	Ac 14216	< 11.8
✓	Ac 14222	< 11.2
✓	Ac 14012	< 10.9
✓	Ac 14018	< 11.8
✓	Mc 16227	≮ 14.4
✓	Mc 16227	≮ 14.8
✓	Mc 5810	13.7
✓	Mc 6338	13.7
✓	Mc 6411	14.1
✓	Mc 11340	< 14.8 ~~14.2~~
✓	Mc 1333	< 14.4 ?
✓	Mc 11339	< 13.7

Uncertain

Light - very poor !

YELLOW

10 – 00

Sequences Near N. Pole

Oct 14, 1919

Dev	MC 16062	Pole			(Superposed on D 17771)		
		Sc 1	Sc 2		g	h	pc
Take Mean with MC16069, p.130	1	Off pl			.	.	
	2	" .			.	.	
	3	1.0			6.9	6.7	7.7
	4	Off pl.			~~7.7~~	.	~~8~~
	5	2.0			7.5	7.7	8.3
	6	2.5 2.7			8.5	8.7	
	7	3.0			9.1	Scr.	
	8	4.1	4.2				
	9		5.20 L1 5.1	5.3			
	10		5.7				
	11		6.80 1L 6.9	6.7			
	12		7.1				
	13		7.8				
	14		8.1				
	15		8.8				
	16		9.3				
	17		9.7				
	18		F				
	2 n		2.0		7.5	7.5	8.1
	3 n		3.1		9.0	9.0	n.s
	4 n		4.3				
	5 n		5.1				
	6 n		6.0				
	7 n		6.8				
	8 n		7.9				
	9 n		8.8				
	10 n		n.s				

1919phae.prqj.1012L

YELLOW

SeV

Sequences Near N Pole
Oct 14, 1919

MC 16062 cont

	Sc 1	Sc 2	
4s		7.3	7.1
5s		7.5	?
6s		8.0	
7s		?	
87° 12	3.5		
15		4.1	
88° 2		4.3	
80		6.0	
86		5.5	
90		6.0	5.8
105		4.3	
115		5.7	
Seq S a		5.5	
b		6.5	
c		8.0	
d		7.8	
e		~~Sup~~ 8.8	
f		7.7	
g		8.1	
h		~~9.1~~ n.s	
k		~~9.3~~ n.s	
878		5.9	
2035		4.3	
323		6.1	
326		6.7	
346		6.5	
894		6.5	6.3
949		5.7	
958		6.7	
966		6.3	

11 ; 10

YELLOW

ScV

Sequences Near N Pole

Oct 17, 1919

10-05 Mc 16062

		Sc1	Sc2
Seq A	a		8.3
	b		8.9
	c		9.3 9.5
	d		9.8
	e		9.8
	f		n.s
	1266		6.6
	2056		6.5
Seq S			
In corner of pl.	a		5.1
	b		6.1
	c		9.0
	d		9.3?
	e		9.3?
Seq M			
	a		7.5
	b		8.0
	c		9.1
	d		9.3
	e		~~9.4?~~
	f		n.s
Seq Y			
On extreme edge of pl.	a		4.3
	b	Off pl.	
	c	?	
	~~d~~	?	
	e	Rej Obj	
	f	" "	
	g		9.0

YELLOW

Sequences Near N Pole

Sc V

Oct 17, 1919

MC 16062 (cont)

Seq R	Sc 1	Sc 2
a		7,5
b		7,7
c		8,0
d		8,2
e		8,3
f		8,7
g		8,9
h		n.s
k		9.8?
l		n.s
811		5,6
878		5,9

Seq near edge

11' 00

YELLOW

Sev

Sequences Near N. Pole Plot for Distance

Oct 17, 1919

~~Take mean with MC16069 p.130~~

~~For reducing S on 16063 p.107~~

12	MC16063 Sc1	Sc2	Pole	g	h	pc
3	B			Sup	69	7.5
5	1.9	2.0		7.5	7.7	8.3
6	2.7	2.8		8.7	8.7	
7	2.9	3.0		9.3?	n.s	
8	4.0 4.1	41 410				
9		5.1				
10		5.5				
11		6.7				
12		7.1				
13		7.7				
14		8.0				
15		8.7				
16		9.1				
17		9.5				
2n	←	2.0 2.1		7.3	7.5	8.1
4n		4.1		9.7	+p	
87° 12	3.5	3.6				
15		4.2				
88° 2		4.2				
80		5.9				
86		5.5				
90		5.5				
105		4.3				
115		5.5				

YELLOW

Sc 1

Sequences Near N Pole Plot for Dist.

Oct 17, 1919

MC 16063 (cont)

Seq S

~~Reduce with Pos MC 16062 p.106~~

	Sc 1	Sc 2	
a		5.5	
b		6.3	
c		8.0	
d		7.5	
e		8.5	
f		7.5	
g		7.9	
h		n.s	
k		9.5?	
l		9.0	8.9
878		5.5	
2035		4.1	
323		6.2	
326		6.5	
346		6.5	
894		5.9	6.1
949		5.5	
958		6.7	
966		6.1	

12.50

YELLOW

Sc V

Sequences Near N Pole Obs for Dist.

Oct 18, 1919

11:45	MC 16063	Sc 1	Sc 2
Seq A			
	a		8.1
	b		8.7
	c		9.1
	d		9.7
	e		9.9
	f		n.s
Seq S			
	a		5.3
	b		6.1
	c		9.0
	d		9.5
	e		9.7
	f		ns
	1266		6.5
	2056		6.3
Seq M			
	a		7.7
	b		8.1
	c		9.3 Sc 2
	d		9.7?
	e		n.s

YELLOW

Plot for Dist

Sequences Near N Pole

Oct 18, 1919

ScV

MC 16063

Seq J

Seq. on edge of plate.

	Sc 1	Sc 2
a		4.2
b		7.5 ~~n.s~~
b′		7.1
c	W.S	6.9 ~~8.5?~~
d	no star –	?
e		scr ~~7.5~~
f		7
g		8.5 8.7
h		9.1

Seq R

a	7.5
b	7.8
c	8.0
d	8.1
e	8.3
f	8.5
g	8.7
h	n.s
811	5.5
878	5.5

12:40

YELLOW

Plot for Dist.

Sequences Near N Pole

Oct 18, 1919

Se V

1.5 0

MC 16464 Pole

	Se 1	Se 2		g	h	PC
1	B			B	B	5.4
3	B			6.0	6.1	7.0
4	1.3			6.1	6.1	7.3 7.1
5	1.9			7.3	7.5	8.1
6	2.4			8.5	8.3	8.9
7	3.0			9.0	9.0	~~9.1~~
8	4.1	4.2				
9		5.3				
10		5.5				
11		6.1	6.3			
12		6.9	6.7			
13		8.0	7.5			
14		8.3	8.0			
15		8.9				
16		9.3	9.1			
17		9.5				
18		F				
2n	2.0			7.1	7.1	8.0
4n		4.0				
87° 12	3.4					
15	+p					
88° 2		4.1				
80		5.9				
86		5.4				
90		5.5				
105		4.1				
115		5.5				

YELLOW

Sequences Near N Pole

Plts for Dist.

Sc V

Oct 18, 1919

MC 16064 (cont)

Seq S

	Sc 1	Sc 2
a		5.3
b		6.2
c		7.8
d		7.5
e		8.3
f		7.2
g		78
h		8.9?
k		9.3?
l		9.1
878		5.4
2035		3.9
323		6.0
326		6.5
346		6.7
894		5.8
949		5.5
958		5.7
966		6.0

Light poor

2:50

YELLOW

Plot for Dist,

Sequences Near N Pole

Oct 20, 1919

Sc Y

10 — MC 16064 (cont)

	Sc 1	Sc 2	
Seq A			
a		7.5	7.7
b		8.0	
c		8.3	
d		8.7	
e		9.0	
f		9.8?	
Seq S			
a		4.9	
b		5.8	
c		8.7	
d		9.0	
e		9.5	
f		9.7?	
1266		6.3	
2056		6.5	
Seq M			
a		7.5	
b		7.9	
c		9.0	
d		9.3	
e		9.5	
f		9.8	
g		9.8?	

YELLOW

Plts for Dist.

Sequences Near N Pole
Oct 20, 1919

MC 16064 (cont.)

		Sc 1	Sc 2
Seq γ	a		4.1
	b	On edge	
	c		6.3
M Star —	d		?
	e		n.s ~~7.2~~
	f		9.5
	g		7.8
	b' ~~f?~~		6.9
	h		8.9
	k		n.s
Seq R			
	a		7.1
	b		7.5
	c		7.7
	d		7.9
	e		8.8 8.9
	f		8.1
	g		8.1
	h		9.0
	k		8.9
	l		n.s
	8 ''		8.3
	878		5.5

10–50

YELLOW

Sc V

Sequences Near N Pole

Plot for Dist.

Oct 20, 1919

11:30 MC16065 Pole

	Sc 1	Sc 2		g	h	pc
1	B			4.1	4.3	5.7
3	B			+p	+p	7.3
4	1.2			6.1	6.3	7.5
5	2.0			7.3	+p	8.0
6	2.5			8.5	+p	8.9?
7	2.8			~~7~~ 9.3?	+p	9.0?
8	3.9	4.1				
9		5.3				
10		5.5				
11		6.5				
12		6.9				
13		7.9 7.7				
14		8.1				
15		8.9				
16		9.1				
17		9.3				
18		98?				
2 r	2.0			7.1	7.0	8.1
4 r		4.1				
87° 12		+p				
15		+p				
88° 2		4.1				
80		5.8				
86		5.5				
90		5.5				
105		4.2				
115		5.7				

YELLOW

Plts for Dist.

Sc V

Sequences Near N. Pole

Oct 20, 1919

MC 16065 cont

	Sc1	Sc2
Seq S		
a		5.1
b		6.0
c		7.8
d		7.3
e		8.3
f		7.3
g		7.7
h		7
k		7
l		9.0
878		5.3
2035		3.8
323		6.3
326	Off pl	
346	" "	
894		5.9
949		5.5
958		6.3
966		5.9
Seq A		
a		8.0
b		8.5
c		8.7
d		9.1 93
e		9.5
f		7

Over

YELLOW

Olcott for Dist.

Sequences Near N Pole

Oct 20, 1919

Dev

~~1.30~~		MC 16065		
Seq S				
	a		4.9	
	b		5.7	
	c		8.5	
	d		8.9	
	e		9.2	
	f		9.8?	
1266			6.1	
2056			6.5	
1.30				
Seq M				
	a		7.5	
	b		8.0	
	c		9.0	
	d		9.3	
	e		9.7	
	f		9.8	
	g		9.9?	
Seq J				
	a		4.1	
	b	~~off pl.~~	7.1	
	b'		6.7	6.5
	c	" "	6.5	
no star	d	" "		
	e		8.5 ~~6.5~~	
	f	" "	9.0	
	g		8.0	
	h		9.0	

12.35

Phot. for Dist.

YELLOW

Sequences Near N Pole

Oct 20, 1919

Sec V

MC 16065

Seq R	Sc 1	Sc 2	
a		7.1	
b		7.5	
c		7.8	
d		7.9	
e		8.9	9.0
f		8.3	
g		8.5	
h		9.5	9.5?
k		8.9	
l		7.8	
811		5.4	
878		5.5	

2.00

YELLOW

ScV

Sequences Near N Pole

Oct 21, 1919

Plot for Dist

10-30 MC 16066 Pole

	Sa 1	Sa 2		g	h	pc
1	B			B	B	5.5
3	On edge –			—	—	—
4	1.4			6.1	6.3	7.3
5	1.9			7.7	7.9	8.2
6	On edge of film			—	—	—
7	+p			—	—	—
8	Off pl					
9	" "					
10		5.9				
11		6.7				
12		7.1				
13		7.7				
14		8.1				
15		9.0				
16		9.5				
17		98				
2 n	2.1			7.1	7.1	8.3
4 n		4.3				
87° 12	Off pl					
15	" "					
88° 2		3.9				
80		6.0				
86		5.7				
90		5.5				
105		4.5				
115		5.9				

YELLOW

Sc V

Sequences Near N Pole
Oct 21, 1919

Obs for Dist.

MC 16066 (cont)

	Sc 1	Sc 2
Seq S		
a		5,5
b		6,5
c		7,8
d		Sup
e		8,5
f		7,5
g		7,7
h		n,s
k		n,s
l		9.0
878		5,5
2035		4.0
323	off. pl	
326	" "	
346	" "	
894		6,1
949		5,5
958		6,3
966		6,0
Seq A		
a		8,3
b		8,7
c		9,0
d		9,5
e		9,7
f		n,s

Bree

YELLOW

Sc V

Sequences Near N Pole

Pltd for Dist.

Oct 21, 1919

MC 16066 cont

	Sc 1	Sc 2	
Seq S			
a		5.0	
b		5.7	
c		8.9	8.7
d		9.1	
e		9.5	9.7
f		7	
1266		6.5	
2056		6.3	
Seq M			
a		7.8	
b		8.3	
c		9.5:	ft
d		9.7	
e		Scr	
f		9.8	
Seq J			
a		4.2	
b	~~off pl.~~	6.5	
c	— " — "	6.3	
d	— " —		
e		8.8 ~~6.7~~	
f	—	m.s	
g		8.1	
h		9.0	
b'		6.5	

YELLOW

Sc V

Sequences Near N Pole

Plots for Dist.

Oct 21, 1919

MC 16066

Seq R	Sc 1	Sc 2
		–
a		7.0
b		7.5
c		7.7
d		7.9
e		8.6
f		8.2
g		8.3
h		7
k		8.9
l		~~7.9~~ ? 7
811		5.5
878		5.5

12 ; 00

YELLOW

Del

Alt. for Dist.

Sequences, Near N Pole

Oct ~~28~~ 21, 1919

12-15	MC 16067 Sc1	Sc2	Pole	g	h	Pc
1	B			B	B	5.5
3	Edge of film			—	—	—
4	15					7.5
5	Off pl					
6	" "					
7	+p					9.0
8	Off pl					
9	" "					
10	Ser.					
11		6.9				
12		7.1				
13		7.8				
14		8.1				
near ser. 15		9.0				
16		9.3				
17		9.5				
2n	20			7.1	7.1	8.1
4n		4.1				
87° 12	Off pl					
15	" "					
88° 2	+p ~~Off pl~~					
80		6.0				
86		5.8				
90		5.5				
105		4.3				
115		5.7				

YELLOW

Sc V

Sequences Near N Pole

Oct 21, 1919

Plt for Dist.

MC 16067 (cont)

Seq S	Sc 1	Sc 2	
a		5.4	
b		6.5	
c		7.7	
d		7.5	7.3
e		8.7	
f		7.5	
g		7.7	
h		8 98?	
k		7	
l		9.0	
878		5.5	
2035		4.1	
323	Off pl		
326	" "		
346	" "		
894		6.1	
949		5.5	
958		6.3	
966		6.1	

1-05

YELLOW

DcV

Plot for Dist -

Sequences Near N Pole

Oct 22, 1919

11 - 45

MC 16067 cont

Seq A

Seq on edge of pl. Region poor

	Sc 1	Sc 2
a		8.5
b		9.0
c		9.3
d		9.7?
e		n.s

Seq S

	Sc 1	Sc 2
a		4.7
b		5.8
c		8.7
d		9.1
e		9.5 9.7
f		n.s?.
~~g~~		
~~h~~		
~~k~~		
l		
1266		6.7
2056		6.5

Seq M

Seq near edge - reg poor

	Sc 1	Sc 2
a		8.0
b		Scr.
c		n.s
d		n.s
~~e~~		
~~f~~		
~~h~~		

YELLOW

Sc V

Sequences Near N Pole
Oct 22, 1919

Plot for Dist.

MC 16067

~~Not marked~~

	Sc 1	Sc 2	
Seq γ			
a		4.0	
b		7.0 ~~ns~~	
b'		6.5	6.7
c	—	6.5	
d	—		
e		6.7	
f	—	7	
g		8.1	
h		9.2	
k		scr	
Seq R			
a		7.1	
b		7.7	
c		7.8	
d		8.0	
e		9.0	
f		8.5	
g		8.5	
h		ns	
k		8.8	
l		9.8	
811		5.5	
878		5.5	

12! 40

YELLOW

Sequences Near N. Pole

Plot for Dist.

Sc V

Oct 23, 1919

9-30 MC 16068 Pole

		Sc 1	Sc 2		g	h	PC
	1	B			B	B	5.7
	3	Off pl			–	–	–
	4	B			6.5	6.5	7.5
	5	Off pl			–	–	–
	6	Off pl			–	–	–
	7	3.0 p					
	8	off pl					
	9	" "					
	10	" "					
	11		6.9				
	12		7.2				
	13		7.7				
	14	Off pl					
	15	" "					
	16	On edge of film					
	17		9.5	9.7			
	2n	1.5			7.1	elong	7.9
	4n		4.0				
87°	12	Off pl					
	15	" "					
88°	2	" "					
	80		5.9				
	86		5.5				
	90		5.7				
	105		4.2				
	115		5.9				

YELLOW

Plot for Dist.

Sequences Near N Pole

ScV

Oct 23, 1919

MC 16068 (cont)

		Sc 1	Sc 2
Seq S			
	a		5.5
	b		6.3
	c		7.9
	d		7.3
	e		8.9
	f		7.5
	g		7.8
	h		7
	k		7
	l		9.0
	878		5.7
	2035		4.1
	323	Off pl	
	326	" "	
	346	" "	
	894		6.2
	949		5.9
	958		+p
	966		6.3
Seq A			
	a		
	b		
	c		
	d		
	e		

Seq H plate

YELLOW

Sev

Sequences Near N Pole

Oct 23, 1919

Plot for Dist

MC 16068 (cont)

		Sc 1	Sc 2
Seq S			
	a	Off pl	
	b	" "	
On edge of film	c		
	d		
	e		
	1266	Off pl	
	2056	On edge of film	
Seq M			
	a		7.7
	b		8.1
	c		9.3
	d		9.3 9.5
	e		9.7
	f		9.8
	~~g~~		
Seq γ			
	a		4.2
	b	?	6.7 6.5
	c	?	6.5 6.3
~~No star marked!~~ →	d	?	?
~~Ident uncertain~~ –	e		8.7? ~~6.7~~
	f		9.0
	g		8.1 8.3
	h		9.0 9.1
	~~b'~~	w.s	6.5 ~~6.9~~

YELLOW

Sc V

Sequences Near N. Pole.

Plot for Dist.

Oct 23, 1919

MC 16068 (cont.)

Reduce with Polar Curve from MC {16062, 16069} See page 102.

Compare with pp 136, and 142

Seq R	Sc 1	Sc 2	
a		7.0	
b		7.5	
c		7.9	7.7
d		7.9	
e		9.0	
f		8.2	
g		8.5	
h		7	
k		9.0	
l		9.7	
811		5.5	
878		5.7	

10:40

Y…OW

SeV

Sequences Near N Pole Plts for Dist

Oct 24 1919

Take mean with 16062 p.102

10'.45		MC 16069	Pole		g	h	pc
	1	Off pl.			—	—	—
	3	B			Sup	6.7	75
	4	Off pl.			—	—	—
	5	2.0			7.7	7.7	8 5
	6	2.7			8.5	8.5	7
	7	3 1			9.0	9.1	
	8		4.1 w.s ~~4.7~~				
	9		5.3				
	10		5.5				
	11		6.55 3/2 6.3	6.8			
	12		7.0				
	13		7.7				
	14		8.0				
	15		8.5				
	16		8.9				
	17		9.3				
	18		9.8				
	2n	2.1			7.1	7.3	8.3
	4n		4.3				
87°	12	3.5	-				
	15		4.2				
88°	2		4.3				
	80		6.0				
	86		5.7				
	90		5.5				
	105		4.5	4.7			
	115		5.9				

YELLOW
Sev

Sequences Near N Pole
Oct 24, 1919

Plots for Dist.

MC 16069

	Sc 1	Sc 2	
Seq S			
a		5.4	
b		6.5	
c		7.9	
on edge d		7.5	
e		8.5	
f		7.5	
g		7.8	
h		8.8	
k		7	
l		9.0	
878		5.9	
2035		4.2	
323		6.1	
326		6.5	
346		6.3	
894		6.0	
949		5.7	
958		6.5	
966		6.2	
Seq A			
a		8.3	8.1
b		8.5	
c		9.0	
d		9.5	
e		9.7	

YELLOW

Sel

Sequences Near N Pole Obt for Dist.

Oct 24, 1919

		MC16069 Sc 1	Sc 2	
Seq δ				
Seq on edge - mostly off plate.	a		4.5	
	b	Off pl		
	c	"	"	
	d	"	"	
	e	On edge of film		
	f			
	g			
	1266		6.1	
	2056		6.5	
Seq M				
	a		7.5	
	b		7.8	
	c		9.0	
	d		9.3	
	e		9.7	
	f		n.s.	
	g			
Seq γ				
	a		4.0	
Seq on edge of plate	b		7.5	7.7
	b′		7.5	7.4
	c		7.3	7.1
	~~d~~		9.0	
	~~f~~		9.5?	
	g		8.1	
	h		7	

YELLOW

ScV

Sequences Near N Pole
Oct 24, 1919

Plot for Dist.

MC 16069

Seq R	Sc1	Sc2
a		7.1
b		7.5
c		7.9
d		8.0
e		9.1
f		8.1
g		8.5
h		9.8?
k		9.0
l		ns
811		5.5
878		5.7

Remark For measurement of Plates MC 16062-16069, see cover of Plate MC 16062

The different sequences were intended~~ed~~ to be measured in order at one sitting for any given sequence on different plates, as indicated on cover of MC 16062. This was not done, and observations on different days will have to be compared, thus making systematic errors caused by changes of light, etc. probable. It is hoped, however, that these will be small.

11:50

YELLOW

ScV

Sequences Near N Pole
Oct 24, 1919

12 - 10 Mc 16062 Pole

		Sc 1	Sc 2	Diff	g	h	pc
On edge	3	B			6.9 690	6.9	75
	5	2.1 2.0		4.24	7.5 760	7.7	8.5
	6	28 2.7		4.12	8.7 8.70	8.7	
	7	3.1 3.0		4.30			
	8		4.1	3.89			
	9		5.3	3.38			
	10		5.5	3.35			
	11		6.7	2.66			
	12		69	2.63			
	13		7.5	2.58			
	14		80	2.24			
	15		8.9	1.76			
	16		9.3	1.67			
	17		9.5	1.60			
	2 r	2.1 20			7.3	7.3	8.3
	4 r	4.1 40					
87°	12	3.6 35					
	15		4.1				
88°	2		4.3				
	80		5.9				
	86		5.7				
	90		6.0				
	105		45				
	115		5.7				

Plot for Reduction of
Y on 16064
r on 16068
~~R~~ S " ~~16068~~ 16069

YELLOW

Sc V

Sequences Near N Pole

Oct 24, 1919

Copied 53:206

MC 16064

Seq Y

Reduce with MC 16062

		Sc 1	Sc 2	Cu	Magn
	a		6.2	2.97	9.17
66 =	b		4.5	3.72	822
51 =	c		7.3	2.50	9.80
47 =	d		7.7	2.32	10.02
	e		7.1	2.60	9.70
	f		7.80 7.7	2.27 7.9	10.07
	g		8.9	1.82	10.72
48 =	h		8.5	1.98	10.48
	k		F	.	.
	l		F	.	.
	m		9.0	1.77	10.77

Reduce with MC 16062

MC 16068

Seq y

a	4.1
b	6.5
b'	6.5
c	6.3
~~d~~	
e	8.5
f	8.9
g	8.3
h	8.9

Over

YELLOW

DeV

Sequences Near N Pole
Oct 24, 1919

~~Reduce with MC 16062~~ MC 16068 (cont)

Seq R

Compare with pp129, 142

Not sure.

	Sc 1	Sc 2
a		7.1
b		7.3
c		7.7
d		7.9
e		9.2
f		8.3
g		8.5
h		?
k		9.0
l		9.8?

MC 16066 [6]

Seq S

Reduce with MC 16062

Copied 53: 204

		Cu	Magn
a	5.5	3.30	8.80
b	6.5	2.84	9.34
c	7.9	2.23	10.13
d	Sup	.	.
e	8.5	1.98	10.48
f	7.5	2.41	9.91
g	7.5	2.41	9.91
h	n.s	.	.
k	n.s	.	.
l	8.9	1.82	10.72

1 - 30

YELLOW

Dev

Sequences Near N Pole

Oct 27, 1919

10 — Mc 16064 Pole

Plot for Reduction of P^G on 16062
~~O on 16068~~

	Sc1	Sc2		g	h	PC
1	B			B	B	5.5
3	B			6.3	6.3	7.1
4	$\overset{1.4}{1.3}$			6.3	6.3	7.5
5	$\overset{2.0}{1.9}$			7.1	7.3	8.0
6	$\overset{2.6}{2.5}$					9.0
7	$\overset{3.1}{3.0}$					
8		4.0				
9		5.1				
10		5.5				
11		6.3				
12		6.7				
13		7.7				
14		7.9				
15		8.5 8.7				
16		8.9				
17		9.3 9.5				
2 r	$\overset{2.0}{1.9}$			7.0	7.1	8.1
4 r		4.0				
87° 12	$\overset{3.7}{3.6}$					
15		4.1				
88° 2		4.0				
80		5.7				
86		5.3				
90		5.3				
105		4.1				
115		5.5				

YELLOW

Sey

Sequences Near N Pole
Oct 27, 1919

MC 16062

		Sc1	Sc2
Seq Y Reduce with MC 16064	a		7.3
53 =	b		80
59 =	c		8.3
	d		7.5
	e		7.2
	f		8.5
	g		9.7
	h		9.8?
	k		n.s

$

MC 16068

Seq O P Reduce with ~~[illegible]~~ MC 16064 ~~[illegible]~~	a	7.3
	b	6.7
	c	6.9
	d	7.8
	e	9.0
	f	8.5
	g	8.8
	h	9.0
	k	n.s

10:40

YELLOW

Sequences Near N Pole

Oct 27, 1919

Sev

11 — 20 MC 16066 Pole

For Reducing
G on 16064
F on 16062
N on 16068

Reject

	Sc1	Sc2	g	h	pc
1	B		B	B	5.5
3	On edge		—	—	—
4	1.4 1.3		6.1	6.3	7.2
5	1.9 1.8		7.8	7.9	8.1
6	On edge				
7	+/n				
8	Off pl.				
9	" "				
10		5.8			
11		6.8			
12		7.1			
13		7.5			
14		7.9			
15		8.9			
16		9.3			
17		9.7			
2 n	2.1 20		7.1	7.2	8.1
4 n		3.9 4.1			
87° 12	Off pl.				
x 15	" "				
88° 2		3.9			
80		6.0			
86		5.7			
90		5.5			
105		4.3			
115		5.7			

YELLOW

Dev

Sequences Near N Pole
Oct 27, 1919

MC 16064

Seq g
~~Reduce with 16066~~

		Sc 1	Sc 2
	a		7.2
53 =	b		7.8
59 =	c		8.3
	d		7.5
	e		6.5
	f		8.2
	g		9.5
	h		9.7?

Seq F MC 16062
~~Reduce with 16066~~

a		7.3
b		7.8
c		8.5
d		7.9
e	near def	?
f		8.1
g		6.7
h		8.5
k		9.7?

MC 16068

Seq N
~~Reduce with 16066~~

Near edge
Reg. poor

	a	7.5	f	9.7
80 =	b	8.0	g	9.5
74 =	c	8.5	h	?
	d	9.7	k	9.7
	e	9.0?		

12, 30

YELLOW

SeV

Sequences Near N Pole
Oct 27, 1919

12–15 MC16063 Pole

For Reducing
~~G on 16062~~
~~R on 16068~~

	Sc 1	Sc 2	q	h	pe
On edge 3	B		tp	tp	7.5
" " 4	—		—	—	—
5	2.1 2.0		7.3	7.5	8.3
6	2.6 2.5		8.7	tp	
7	3.1 3.0		9.5?	11.5	
8		4.0			
9		5.1			
10		5.5			
11		6.5			
12		7.1			
13		7.5			
14		7.9			
15		8.5			
16		9.1			
17		9.5 9.7			
2 n	2.0 1.9		7.2	7.3	8.0
4 n		4.2			
87° 12	3.8 3.7				
15		4.3			
88° 2		4.3			
80		6.0			
86		5.7			
90		5.5			
105		4.3			
115		5.7			

YELLOW

Sc V

Sequences Near N Pole
Oct 28, 1919

MC 16062

Seq G

~~Reduce with 16063~~

	Sc 1	Sc 2	
a		7.5	
53 = b		8.0	
59 = c		8.5	
d		7.5	7.7
e		6.9	
f		8.5	
g		9.7	
h		7	
k		ns	

MC 16068

Seq R

~~Reduce with 16063~~
Compare with pp 129, 136

a	7.2	
b	7.5	
c	7.7	
d	8.0	
e	9.3	
f	8.5	
g	8.5	8.3
h	ns	
k	9.0	
l	9.5	9.7 ?

Grew suddenly very dark

1.00

YELLOW

ScV

Sequences Near N Pole

Oct 29, 1919

10-00 MC 16065 Pole

~~For Reducing 2 on 16068~~

	Sc1	Sc2		g	h	PC
1	B			B	B	5.8
3	B			tp	tp	7.1
4	1.4 1.3			6.1	6.3	7.3
5	2.0 1.9			7.3	7.5 ?	8.0
6	2.6 2.5			8.7		8.5 ~~8.8~~
7	3.0 2.9			9.5		
8		4.0				
9		5.2				
10		5.5				
11		6.3				
12		6.7				
13		7.5				
14		8.0				
15		8.9				
16		9.2				
17		9.5				
18		7				
2n	2.0 1.9			6.9	7.0	7.9
4n		4.1				
87° 12	3.4 3.3p					
15		41p				
88° 2		4.1				
80		5.9				
86		5.5				
90		5.3				
105		4.3				
115		5.5				

YELLOW

Se Y

Sequences Near N Pole
Oct 29, 1919

Seq Q

Reduce with MC 16065

	MC 16068 Se 1	Se 2
a		6.7
b		7.5
c		7.9
d		8.2
e		8.9
f		9.1
g		9.5
h		9.8

10-30

YELLOW

Sequences Near N Pole
Nov 7, 1919

Plot for Dist.

Dist.
ScV

9 – 30 MC 16070 Pole +90°

		Sc1	Sc2	g	h	Pc
Take ~~mean~~ with MC16077, p. 156	3	13		6.3	6.5	7.5
+50mm	5	2.1 2.0	2.1	7.3	7.5	8.5
54l	6	2.7 2.6	2.7	8.0	8.0	7
-80l	7	3.4 3.0	3.1	8.7	8.9	
+48l	8	-	3.9	9.7	9.8	
+54l	9		5.3			
20l	10		5.5			
-32l	11		6.2			
-25l	12		6.7			
-19l	13		7.5			
13l	14		7.9			
20l	15		8.7			
5l	16		9.0			
-10	17		9.3			
-8	18		9.8?			
22r	2r	2.1 2.0	2.1	7.1	7.3	8.1
33r	4r		4.0			
87°	12	3.6 3.5	3.6			
	15		3.9			
88°	2		3.7			
	80		5.9			
	86		5.5			
	90		5.5			
-37r	105		4.3			
37r	115		5.7			

YELLOW

Se V

Sequences Near N. Pole

Nov 7, 1919

Plate for Dist.

Seq. on edge of plate.

	MC 16670 Se 1	Se 2	
Seq U			
70r a		7.0	
73r b		7.9	
53r c		7.1	
59r d		8.3	
74r e		8.9	
68r f		9.2	
61r g		9.8?	
63r h		9.5	
72r K		9.8?	
Seq V			
a		6.7	
b		7.8	
c		6.5	
d		8.9	
e		7.1	
f		9.8	
g		9.7	
h		7	
K		7	
l		7	
323		5.9	
894		6.0	
949		5.5	10:25
55r 958		6.3	
53r 966		6.0	
-68 2035		4.1	
55r 2056		6.2	
62r 2057		6.1	

YELLOW

DeV

Sequences Near N Pole Plots for Dist.

Nov 7, 1919

10:30 MC 16071 Pole (Plate broken) 89°.5

		Sc 1		Sc 2		g	h	pc
	4	1.4 1.3	1.4			6.3	6.5	7.5
+57l	5	2.2 2.1	2.2			7.6	7.5	8.3
78l	6	2.6 2.5	2.6			7.9	8.0	8.9?
-100l	7	2.8 2.7	2.8					
+62l	8			4.0				
+69l	9			5.3				
44l	10			5.5				
53l	11			6.2				
-46l	12			6.7				
-38l	13			7.3				
38l	14			7.9				
48l	15			8.5				
29l	16			8.9				
30l	17			9.5	9.3			
30l	18			7				
-9	2r	20	2.1			73	7.3	8.3
-11r	4r			4.0				
-	87° 12	3.5	3.6					
	15			4.0				
	88° 2			3.9				
	80			5.8				
	86			5.3				
	90			5.7				
-37	105			4.3				
13r	115			5.7				

YELLOW

Plot for Dist

Sequences Near N Pole
Nov 7, 1919

DeV

MC 16671 cont

Seq U

45r a	6.9
-50r b	7.5
30r c	Sup
36r d	8.1
50r e	9.0
43r f	9.3
39r g	7
41r h	9.3
47r K	7

Seq V V, not gamma.

Reduce from mean pole curve MC 16670, 16077

a	6.5
b	7.9
c	6.3
d	8.7
e	7.1
f	9.8
g	9.7
K	ns
323	6.0
894	6.1
949	5.5
-33r 958	6.5
-31r 966	6.1
-45 2038	4.1
40r 2056	6.3
38r 2057	6.1

Plts for Dist.

YELLOW

Sequences Near N Pole
Nov 7, 1919

Sc V

		MC 16072 Sc 1		Pole 89°.0 Sc 2	g	h	Pc
-81r	1	B			B	B	5.7
-69r	4	1.3	1.4		6.3	6.3	7.7
+67l	5	1.9	2.0		7.3	7.5	8.3
88l	6	2.5	2.6		8.1	8.1	9.1
-105l	7	2.9	3.0				
+73l	8			3.9			
+82l	9			5.2			
55l	10			5.4			
61l	11			6.1			
52l	12			6.7			
46l	13			7.3			
48l	14			7.8			
58l	15			8.5			
40l	16			9.0			
38l	17			9.3			
39l	18			9.8			
12l	2 r	1.9	2.0		7.2	7.3	8.3
+2	4 r			3.9			
87°	12	3.7	3.8	3.8			
	15			4.0			
88°	2			4.0			
	80			6.0			
	86			5.3			
	90			5.5			
-2a	105			4.2			
+5r	115			5.5			

YELLOW

Plot for Dist.

Sequences Near N. Pole
Nov 7, 1919

Sc V

MC. 1607~~7~~ 2 (Cont)

		Sc 1	Sc 2
Seq V	30a a		6.9
	38n b		7.7
	20n c		6.9
	25n d		8.2
	39n e		8.7
	33n f		9.1
	6n g		n.s
	29n h		9.3
	37n k		9.8?
Seq V			
	a		6.5
	b		7.7
	c		6.3
	d		8.8
	e		6.9
	f		Sup (almost)
	g		9.1
	h		9.7?
	323		5.9
	894		5.9
	949		5.3
	-22n 958		6.3
	-19n 966		6.0
	-40 2035		4.0
	25n 2056		6.2
	29n 2057		6.1

~~Reduce from~~
~~mean curve (PM)~~
MC 16070, 16077

YELLOW

Sequences Near N Pole

Nov 7, 1919

Plot for Dist.

Dev		MC 16073 Pole +88°.5			g	h	pe
		Sc 1	Sc 2				
-74l	1	B			B	B	5.7 :
-61l	4	1.4			6.3	6.3	7.5
+72l	5	2.1			7.1	7.3	8.1
103l	6	2.5			8.3	8.3	9.1
-121l near edge	7	+p					
+83l	8		4.1				
+91l	9		5.1				
70l	10		5.3				
78l	11		6.3				
69l	12		6.7				
62l	13		7.5				
63l	14		7.9				
73	15		8.5				
55l	16		9.1				
55l	17		9.3				
56l	18		9.7	9.8			
29l	2 n	2.0					
18l	4 n		3.9				
87°	12		3.9				
	15		4.1				
86°	2		4.0				
	80		6.0				
	86		5.7				
	90		5.3				
-36l	105		4.1				
13l	115		5.5				

YELLOW

Se V

Plot for Dist.

Sequences Near N Pole

Nov 7, 1919

MC 16073

		Sc 1	Sc 2
Seq U			
20n	a		6.8
-29n	b		7.7
5n	c		6.9
-11n	d		8.3
-25n	e		8.7
18n	f		Sup
-19n	g		9.8?
-18n	h		9.1
21n	k		7
Seq V			
	a		6.3
	b		7.7
	c		6.3
	d		8.9
	e		7.0
	f		9.8?
	g		9.0
	h		9.2
323	Off pl.		
894			6.0
949			5.5
958			6.3
966			6.1
2035			3.9
2056			6.1
2057			6.1

* Reduce from mean curve (Pole) MC16072, 16077

YELLOW

DeV

Sequences Near N Pole Plot for Dist.

Nov 7, 1919

	Mc 16074 Pole 88°.0						
		Sc 1	Sc 2		g	h	PC
-65	1	B			B	B	5.5
-53	4	1.3			6.1	6.1	7.3
+88l	5	1.9			elong	elong	8.0
·	6	Off pl					
·	7	" "					
+100l	8		4.0	3.9			
+107l	9		4.9				
89l	10		5.2				
97l	11		6.3				
87l	12		6.5				
81l	13		7.5				
82l	14		7.9				
92l	15		8.3				
73l	16		9.0	8.8			
73l	17		9.5				
48l	2 n	2.0					
36l	4 n		3.9				
87°	112	+p					
	15	+p					
88°	2		3.9				
	80		5.9				
	86		5.7				
	90		5.3				
51l	105		4.0				
31l	115		5.5				

YELLOW

SeV

Plot for Dist.

Sequences Near N. Pole

Nov 7, 1919

MC 16074 88

* Reduced from mean curve (PKD) MC16070, 16077

Decl U	Sc 1	Sc 2
0 a		6.5
22 b		7.5
15l c		6.2
11l d		7.9
-15 e		8.2
-4 f		8.9
-20l g		7
-16l h		9.1?
-8 k		ns
323	Off pl.	
894		5.8
949		5.3
-25l 958		6.1
-23l 966		5.9
2035		3.8
2056		5.9
6l 2057		6.0

YELLOW

S.V

Obs for Dist.

Sequences Near N Pole
Nov 7, 1919

Mc 16076 Pole 87°.0

		Sc 1	Sc 2		g	h	Pc
28 ~~+54~~	1	B			B	B	54
+33 ~~-47~~	4	1.3			6.0	6.0	7.3
~~+108~~	5	Off pl					
	6	" "					
	7	" "					
	8	" "					
	9	" "					
	10	" "					
	11	" "					
120 ~~107~~l	12		6.7				
121 ~~102~~l	13		7.5				
	14	Off pl					
	15	" "					
	16	" "					
120l	17		9.3				
100l	2n	1.9					
98l	4n		3.8				
	87° 12	Off pl					
	15	" "					
	88° 2	Off pl					
	80	" "	5.8	5.7			
	86		5.0				
	90		5.3				
[illegible]3l	105		3.9				
+95l	115		5.3				

YELLOW

Sev

Plot for Dist.

Sequences Near N Pole
Nov 7, 1919

MC 16076 84°

Seq N

+84l a	6.3
+64l b	7.3
+86l c	6.3
+82l d	8.0
+71l e	8.7
+82l f	9.0
+72l g	9.3?
+74l h	9.1
+78l k	7
323 off pl.	
894	5.7
949	5.3
+74l 958	5.9
+78l 966	5.7
2035	3.9
2056	5.7
+85l 2057	5.9

YELLOW

DeV

Plot for Dist.

Sequences Near N Pole
Nov 7, 1919

MC 16077				g	h	P.C.
	Sc1	Sc2				
1	off pl					
4	11B			6.3	6.3	7.3
5	2,0			7.1	7.1	8.1
6	2.4			8.0	8.1	
7	2.7					
8		3.9				
9		5,1				
10		6.3				
11		6.1				
12		6.5				
13		7.3				
14		7.9				
15		8.3				
16		8,7				
17		9.2				
18		9.7				
2n	2,0			7.0	6.9	8.1
4n		3,9				
87° 12		3.8				
15		4.0				
88° 2		3,8				
80		5.5				
86		5,3				
90		5.1				
105		3.9				
115		5.3				

YELLOW

Se V

Plot for Dist.

Sequences Near N Pole
Nov 7, 1919

Plot for Dist.

Seq U	MC 16677 Se1	Se2
a		6.7
b		7.7
c		6.5
d		7.9
e		8.7
f		8.9
g		9.7?
h		9.0
k		7
323		5.5
894		5.9
949		5.3
958		6.1
966		5.7
2035		3.8
2056		5.9
2057		6.0

Sight - very poor -

$2^{h}00$

YELLOW

Sequences Near N Pole

Nov 10, 1919

12 — MC16070

Seq M	Sc1	Sc2
a		7.1
b		7.5
c		8.5
d		8.7
e		9.0
f		9.3
g		9.5?
h		9.7?
k		n.s

Seq R	Sc1	Sc2
a		7.0
b		7.5
c		7.8
d		8.0
e		8.9
f		8.3
g		8.5
h		9.7?
k		9.0
l		9.5 9.7
	8.11	5.7
	8.78	5.7

MC16070

Seq γ	Sc2
a	4.1
b	on edge of film
c	6.9 6.7
d	,
e	8.9?
f	9.0
g	8.3
h	9.0
b′	6.7 6.9

YELLOW

Sc V

Sequences Near N Pole
Nov 10, 1919

Seq M	MC16672 Sc1	Sc2
a		7.0
b		7.5
c	w.s	~~9.0~~ 8.7 8.8
d		9.5
e		9.7
f		
g		
h		

Seq R		
a		7.0
b		7.5
c		7.9
d		8.1
e		9.0
f		8.3
g		8.7
h		7
k		9.1
l		9.7?
811		5.9
878		57

Seq γ	MC 16072 Sc2
a	4.0
b	?
c	6.7
~~d~~	
e	?
f	9.1
g	8.5
h	9.1
b′	6.5

Light too poor to continue

1.00

YELLOW

Ser

Sequences Near N Pole

Nov ^{2}10, 1919

		Sc1	Sc2	
11:10	Mc 16070			
Seq M				
	a		7.0	
	b		7.5	
	c		8.5	
	d		8.9	
uncertain	e			
	f		x.5	
	g		x.5	
	h		9.8?	
		8 11	5.7	
		8.78	5.5	
Seq γ				
	a		4.0	
	b	On edge of pl.		
	b′		6.9	7.1
	c		6.9	
	e		~~8.9?~~ scr.	
	f		9.0?	9.2
	g		8.1	
	h		9.0	
Seq R				
	a		7.0	
	b		7.5	
	c		7.8	
	d		8.0	
	e		9.0	
	f		8.5	
	g		8.7	
	h		9.5	
	k		9.1	
	l		9.5	

YELLOW

Sc V

Sequences Near N Pole
Nov 12, 1919
MC16071 (Plate badly broken)

	Sc 1	Sc 2
Seq M		
a		7.3
b		7.7
c		8.7
e ~~d~~		defective
d		9.5
f		n.s
g		n.s
Seq γ		
a		4.0
b	On edge	
b′		6.7
c		6.5
e	Too near edge	
f	" "	"
g		8.5
h		9.5
Seq R		
a		7.1
b		7.7
c		7.9
d		8.1
e		9.0
f		8.5
g		8.7
h		9.8? ~~9.5~~
K		8.9
l		n.s
8 11		5.7
8 16		5.5

YELLOW

Sequences Near N Pole

Nov 12, 1919

MC 16072

		Sc 1	Sc 2
Seq M			
	a		7.1
	b		7.7
	c		8.7
	d		~~7~~ 9.5:
	e		9.7
Seq γ			
	a		4.0
Seq near edge of pl. Reg. poor	b	On edge of pl.	
	b'		6.7
	c		6.7
	e ~~d~~		8.1
	f		8.9
	g		8.5
	h		8.9
Seq R			
	a		7.0
	b		7.5
	c		7.9
	d		8.0
	e		9.0
	f		8.3
	g		8.5
	h		n.s
	k		9.0
	l		7
	811		5.5
	878		5.5

YELLOW

ScV

Sequences Near N Pole
Nov 12, 1919

MC 16073

		Sc 1	Sc 2
Seq M			
Seq on edge-reg pos.	a		7.1
	f		7.8
	c		9.0
	d		n.s
	e		9.7?
Seq	γ a		4.0
	b	On edge of pl	
	b′		6.7
	c		6.5
Too near edge of pl.	e ~~d~~		~~8.9?~~
	f		9.1?
	g		8.3
	h		9.0?
Seq R	x		
	a		6.9
	b		7.5
	c		7.8
	d		7.9
	e		9.0
	f		8.2
	g		8.5
	h		n.s
	k		8.9
Sup?	l		9.7?
	811		5.5
	878		5.5

YELLOW

Sc V

Sequences Near N Pole

Nov 12, 1919

MC 16074

		Sc 1	Sc 2
Seq M			
Seq on edge of pl.	a	On edge of film	
	b	" " " "	
	c	Off pl	
	d	n.s	
	e	Off pl.	
Seq γ			
	a		3.8
	b′		6.5
	b*	On edge of film	
	c		6.3
insufficiently	e	Too near edge	
	f		
	g		8.1
	h		9.1?
Seq R			
	a		6.8
	b		7.3
	c		7.7
	d		7.9
	e		8.9
	f		8.1
	g		8.3
	h		n.s
	K		9.0
	l		n.s
	811		5.4
	878		5.5

YELLOW

ScV

Sequences Near N Pole
Nov 12, 1919

MC 16076

		Sc1	Sc2
Seq M			
On extreme edge of plate	a		
	b		
	c		
	d		
	e		
Seq Y			
	a		3.8
	b		6.1
	c		6.1
	d'		6.3
	e		8.0
	f		8.8
	g		7.9
	h		8.8
Seq R			
	a		6.8 ~~3.8~~
	b		7.3
	c		7.7
	d		7.8
	e		8.9
	f		7.9
	g		8.3
	h		w.s
	k		8.8
	l		9.5?
	811		5.3
	878		5.3

YELLOW

Sc V

Sequences Near N Pole

Nov 12, 1919

MC 16077

		Sc 1	Sc 2
Seq M			
	a		7.0
	b		7.5
	c		8.5
	d		8.9
	e		9.1
	f		9.3
	g		9.5
	h		9.7
Seq Y			
	a		3.9
	b	~~On~~ Off edge	
	b'		6.7
	c		6.7
	e	On edge	
	f	" "	
	g		8.1
	h		9.1
Seq R			
	a		7.0
	b		7.5
	c		7.7
	d		8.0
	e		9.0
	f		8.1
	g		8.5
	h		7.5
	k		8.9
	l		9.5
	811		5.5
	878		5.5

Seq near edge-neg turn

2:00

YELLOW

Scv

Sequences Near N Pole
Nov 13, 1919

9:40 MC16670

Seq E

	Sc1	Sc2	
a		5.7	5.5
b		8,1	
c		6,8	
d		7,5	
e		9,7	
f		9,5?	
g		8,2	
h		9,0	
k		n,s	

Seq W

a	6,5
b	5,9
c	6,7
d	8,0
e	7,9
f	9,7?
g	n,s
h	n,s
1266	6,1
2056	6,5

YELLOW

Sequences Near N Pole

Ser

Nov 13, 1919

MC 16071

Seq C	Sc1	Sc2	
a		5.9	
b		8.3	
c		6.7	
d		7.7	
e		9.7	
f		n.s	
g		8.8	
h		9.0	
k		n.s	

Seq W	Sc1	Sc2	
a	w.s	6.7 ~~6.2~~	
b	w.s	6.1 ~~5.8~~	
c		6.9	
d	w.s	8.3 ~~8.7~~	8.5
e		7.9	
f		9.7	
g		n.s	
1266		6.3	6.5
2056		6.3	

YELLOW

Sequences Near N Pole

Set

Nov 13, 1919

	MC 16072 Sc1	Sc2
Seq C		
a		5.7
b		8,3
c		6,9
d		7,5
e		9,5
f		9.7
g		8,1
h		8,9
k		ns
Seq W		
a		6,7
b		6,1
c		6,7
d		8,2
e		7,9
f		9,7?
g		ns
h		ns
1266		6,0
2056		6.3

YELLOW

Sequences Near N Pole
Nov 13, 1919

MC16073

	Sc1	Sc2
Seq E		
a		5,9
b	Off film	–
c		7,0
d		7,5
e		9,7
f		7
g		8,2
h		9,1
k		n,s
Seq W		
a		6,7
b		6,0
c		6,7
d		8,1
e		7,8
f		9,7
g		n,s
1266		6,2
2056		6,3

172

YELLOW

ScV

Sequences Near N Pole

Nov 13, 1919

MC 16074

Seq C

Seq on edge of pl. Rep soon

	Sc1	Sc2
a	Off pl	
b	" "	
c	" "	
d		7.7
e		9.7
f		n.s
g		8.2
h		9.0
k		n.s

Seq W

	Sc1	Sc2
a		6.5
b		5.8
c		6.7
d		8.0
e		7.7
f		9.7
g		n.s
h		n.s
1266		6.0
2056		6.2

Growing very dark –

YELLOW

Sequences Near N Pole
Nov 13, 1919

Sc Y

Mc 16076

Seq C

Not covered by 16076

	Sc 1	Sc 2	
a			
b			
c			
d		~~7.7~~	
e			
f			
g			
h			

Seq W

a		6.5	6.7
b		5.7	
c		6.5	
d		8.3	
e		7.8	
f		9.7	
g		ns	
h		ns	

1266	Off pl.		
2056		6.0	

YELLOW

Sc V

Sequences Near N Pole
Nov 13, 1919

	MC 16077 Sc1	Sc2
Seq C		
a		5.5
b		8.0
c		6.7
d		7.3
e		9.0
f		9.7
g		
h		
Seq W		
a		6.5
b		5.7
c		6.7
d		7.9
e		Sup?
f		9.3
g	On edge	
1266		5.7
2056		5.7

12:20

Sight very poor - during the last 3 plates

YELLOW

Sev

Sequences Near N Pole

Nov 14, 1919

10-68— MC 16070 Pole

For reducing ~~7 on 16071~~, p.176
~~S on 16074~~
R on 16076

	Sc1	Sc2		g	w	pc
5	2.1			7.5	7.5	8.5
6	2.6			8.0	8.1	
7	2.9			8.7	8.7	
8		3.8		9.8	—	
9		4.9				
10		5.1	5.3			
11		6.1				
12		6.5				
13		7.3				
14		7.7				
15		8.5				
16		9.0				
17		9.5				
18		F				
2 r	2.0			7.3	7.3	8.3
4 r		3.9				
87° 12		3.7				
15		4.0				
88° 2		3.9				~~8.3~~
80		5.7				
86		5.5				
90		5.5				
105		4.1				
115		5.5				

Over

YELLOW

DeV

Sequences Near N Pole

Nov 14, 1919

Mc 16070

		Sc 1	Sc 2
Seq Y – Reduce with 16072, p.179 Rig.	a		7.1
53 =	b		7.7
59 =	c		8.1
	d		7.0
	e		6.5
	f		8.0
	g		9.3
	h		n.s

Mc 16071

Seq J Reduce with Pon 16070 p.175	a	6.3
66 =	b	4.7
51 =	c	7.3
47 =	d	7.9
	e	7.1
	f	8.0
	g	9.0?
	h	8.7
	k	7
	l	9.8
	m	9.3?

YELLOW

SeY

Sequences Near N Pole

Nov 14, 1919

	MC 16071 Sc1	Sc2	Pole	g	h	pc
4	1.3			6,5	6,5	7,5
5	20			7.3	7.5	8.3
6	2.7			8,0	8,1	9,0
7	3.0					
8		3.9				
9		5.1				
10		5.5				
11		6.3				
12		6.7				
13		7.3				
14		8.0				
15		8.7				
16		9.0				
17		9.5				
2r	2.1			7.3	7.5	8.5
4r		4.1				
87° 12		3.7				
15		4.1				
88° 2		3.9				
80		6.0	5.9			
86		5.5				
90		5.5				
105		4.3				
116		5.5				

YELLOW

Se V

Sequences Near N Pole
Nov 14, 1919

MC 16074

Seq S

Reduce with Ry
Pon 16070, p. 175

	Se 1	Se 2
a		5.1
b		6.1
c		7.5
d		6.9
e		8.0
f		6.9
g		7.1
h		n.s
k		n.s
l		8.5
m		n.s

MC 16076

Seq R

Reduce with Ry
Pon 16070, p. 175

a	6.5
b	6.7
c	7.1
d	7.5
e	9.0
f	7.7
g	8.0
h	n.s
k	8.5
l	9.5?

11:55

YELLOW

Sc V

Sequences Near N Pole
Nov 14, 1919

For reducing
~~G on 16070 p.176~~
G on 16071, p.180
K on 16070, p.180

11.30	MC 16072 Sc 1	Sc 2	Pole	g	h	pe
1	-1.3			B	B	5.7
4	1.2		ws	6.1 ~~7.9~~	6.3 ~~8.6~~	7.8
5	1.9		ws	7.1 ~~8.1~~	7.3 ~~8.3~~	8.1
6	2.7			8.1	8.3	9.2
7	2.9					
8		3.8				
9		5.1				
10		5.3				
11		6.1				
12		6.7				
13		7.3				
14		7.6				
15		8.3				
16		8.9				
17 18		9.5 9.7				
2 n	2.0			7.0	7.1	8.1
4 n		4.0				
87° 12	3.5					
15		4.0				
88° 2		3.9				
80		5.9				
86		5.5				
90		5.5				
105		4.1				
115		5.5				

YELLOW

Sey

Sequences Near N Pole

Nov 14, 1919

MC 16071

Seq G

	Sc 1	Sc 2
		73
a	\xrightarrow{}	—
53 = b		7,8
59 = c		8,1
d		7,1
e		6,7
f		8,1
g		9,5?
h		n,s

RY Reduce with Pon 1607~~2~~3, p. ~~179~~181

MC 16070

Seq K

a	6,4
b	6,7
c	7,3
d	7,7
e	8,0
f	7,0
g	8,2
h	8,9
k	n,s

RY Reduce with Pon 16072, p. 179

2:10

YELLOW

Sev

Sequences Near N Pole

Nov 15, 1919

1; vo MC 16073 Pole

For reducing
~~G on 16072, p.182~~
K on 16071, p.182
F on 16070, p.183
2 on 16076, p.183

	Sc1	Sc2	g	h	pe
4	1.3 1.2		6.1	6.3	7.5
5	2.2 2.1		7.0	7.1	8.1
6	2.8 2.7		8.3	8.5	9.0
7	3.1 3.0				
8		4.1			
9		5.0			
10		5.3			
11		6.3			
12		6.8			
13		7.3			
14		7.9			
15		8.7			
16		9.0			
17		9.3			
18	2.3	9.9			
2n	2.2		7.0	7.1	8.1
4n		3.9			
87 12		3.9			
15		4.2			
88° 2		4.1			
80		6.0			
86		5.7			
90		5.5			
105		4.1			
115		5.5			

182

YELLOW

Seq V

Sequences Near N Pole
Nov 15, 1919

MC 16072

Seq. J Reg.

Reduce with P on 16074, p.184

		Sc 1	Sc 2
	a		7.1
58 =	b		7.7
59 =	c		8.1
	d		7.1
	e		6.9
	f		8.0
	g		9.3
	h		n.s

MC 16071

Seq K

Near Reg.
on edge of broken plate—reg. poor

Reduce with P on 16073, p.181

a	6.9
b	7.2
c	7.5
d	7.9
e	8.3
f	7.5
g	8.9
h	def.
k	n.s

YELLOW

Sc V

Sequences Near N Pole
Nov 15, 1919

Seq F

MC 16070

pij
Reduce with Pon 16073 p.181

Images near edge. poor

	Sc 1	Sc 2
a		7.1
b		7.5
c		7.9
d		7.5
e		8.7 q
f		7.7
g		7
h		8.7
k		n.s

Seq Q MC 16076

pij
Reduce with Pon 16073, p.181

a	6.3
b	7.1
c	7.5
d	8.0
e	8.5
f	9.1
g	n.s
h	n.s
k	n.s

2:10

184

YELLOW
SeV

Sequences Near N Pole
Nov 17, 1919

10-15

For reducing
K on 16072, p.185
J on 16071, p.185
G on 16072, p.182
Reject near edge

MC 16074 Pole	Se 1	Se 2		g	h	pe
1	B			B	B	5.3
~~4~~	^{15}1.4			6.0	6.1	7.2
5	$^{2.0}$1.9			7.0	7.1	8.0
6	Off pl					
7	" "					
8		3.9				
9		+/n				
10		5.1				
11		6.2				
12		6.5				
13		7.3				
14		7.7				
15		8.2				
16		9.0				
17		9.5				
2n	$^{2.1}$2.0			7.0	7.1	8.1
4n		3.9				
87° 12	+/n					
15	+/n					
88° 2		3.9				
80		5.9				
86		5.5				
90		5.3				
105		4.0				
115		5.3				

YELLOW

DeV

Sequences Near N Pole
Nov 17, 1919

MC 16072

Seq K

Reduce with P on 16074, p 184

On edge of plate -

Reject

	Sc 1	Sc 2
a		6.7
b		7.1
c		7.5
d		7.9
e	On edge film	
f	" " "	
g	" " "	
h	defective -	
k	n.s	

Reject MC 16070

Seq H

Sequence on edge of plate, ident. uncertain

	Sc 1	Sc 2
a		6.5
b		
c		7.7
d		w.s ~~9.0~~?
e	On edge film -	
f		n.S
g		9.7?
h		n.S

Seq J MC 16071 Rej.

Reduce with P on 16074 p 184

Near edge of plate. Rej'd poor

a	7.1
b	7.7
c	7.8
d	7.7
e	tp
f	7.8 g
g	n.s
h	8.9

11 -

Blue
~~YELLOW~~
Seq V

Plot 16

Sequences Near N Pole
Nov 17, 1919

12;05

P + 90

	I 35230 Sc 1	Sc 2	Diff	Pc	Diff
1	tp			5.5	– 1.02
2	tp			6.1	– 0.82
3	tp			7.0	– 1.19
4	tp			7.2	– 1.21
5	2.1 2.0		4.39	7.5	– 1.01
6	2.8 2.7		4.31	7.9	– 0.79
7	3.1 3.0		4.21	8.0	– 0.69
8	4.0 4.00 00	4.0	4.23	9.0	– 0.77
9		4.7	4.13	9.7	– 0.87
10		4.9	4.12	9.8	– 0.78
11		5.5	4.05		
12		5.9	3.96		
13		6.5	3.80		
14		6.7	3.95		
15		7.3	3.78		
16		7.5	3.90		
17		7.8	3.83		
18		8.3	3.76		
19		8.5	3.92		
20		8.7	4.03		
23		9.3	4.04		
25		9.8	4.07		

Blue
[redacted]
ScV

Sequences Near N Pole
Nov 17, 1919

Copied 53' 168

Dec α +87		δ 35230 Sc1		Sc2	Cw	Magn	Pc Sc2		
Reduced with P+90°	a	38 3.7	3.85 v1	3.9	4.22	8.07	8.7	– 0.76	7.94
	b			4.8	4.11	8.91	9.7	– 0.87	8.83
	c			5.0	4.08	9.08			
	d			5.2	4.04	9.24			
	e		w.s.?	7.5 ~~5.3~~	3.80	11.30			
	f		w.s	5.7 ~~5.3~~	~~6.9~~ 3.98	9.68			
	g			5.5	4.00	9.50			
	h			6.7	3.84	10.54			
	k			7.0	3.81	10.81			
	l			7.3	3.80	11.10			
	m			8.1	3.84	11.94			
	n			8.20 ½ 8.3	3.85 8.1	12.05			
	o			8.3	3.86	12.16			
	p			8.7	3.92	12.62			
	q			8.9	3.95	12.85			
	r			9.0	3.96	12.96			
	s			9.3	4.02	13.32			
	u ~~t~~			9.5	4.05	13.55			
	w			n.s.	,	,			

Images poor – not circular

over

~~Blue~~ YELLOW
Sc V

Plot 16

Sequences Near N Pole
Nov 17, 1919

Seq δ +86°

c =

Reduced with P+89°

Region poor. Images elong.

Copied 53ʹ.168

	δ 35230 Sc 1	Sc 2	Cu	Magn
a		4.0	4.19	8.19
		4.80	" 4.19	
b		4.7	4.9	8.99
c		?		
d		5.1	4.15	9.25
e		7.3	3.94	11.24
f		5.9	4.07	9.97
g		5.5	4.12	9.62
h		6.5	4.00	10.50
k		7.1	3.95	11.05
l		7.3	3.94	11.24
m		7.8	3.93	11.73
n		8.1	3.94	12.04
o		8.1	3.94	12.04
p		8.5	3.95	12.45
q		8.9	3.98	12.88
r	nearly sup		,	,
s		9.3	4.02	13.32
u		n S	,	,
w		n S	,	,

Blue

Sc V

Sequences Near N Pole

Nov 17, 1919

P + 89°

	D 35230 Sc 1	Sc 2	Diff	P.C. Sc 2	
				5.3	− 0.82
1	+ p			6.3	− 1.02
2	+ p				
3	+ p			$\overset{0}{7.2}$	− 1.19
4	+ p			6.9	− 0.91
5	$\overset{2.2}{2.1}$		4.29	7.7	− 1.21
6	$\overset{2.9}{2.8}$		4.21	8.1	− 0.99
7	+ p		,	8.1	− 0.79
8	$\overset{4.0}{3.9}$ 4.05	4.1	4.18	9.0	− 0.77
9		4.5	4.33		
10		4.9	4.12		
11		5.3	4.25		
12		5.7	4.16		
13	Nearly sup.		,		
14		6.7	3.95		
15		7.1	3.98		
16		7.3	4.10		
17		7.7	3.93		
18		8.2	3.86		
19		8.5	3.92		
20		8.7	4.03		
23		9.3	4.04		
25		9.8	4.07		

1:30

11 – 0 0

Blue
YELLOW
Sc V

Plot 16

Sequences Near N Pole

Nov 18, 1919

B + 90°

	35231 Sc 1	Sc 2	Diff	PC
1	+ p			5.5 – 1.02
2	+ p			6.1 – 0.82
3	+ p			6.7 – 0.89
4	+ p			6.9 – 0.91
5	2.2 2.1		4.29	7.5 – 0.81
6	3.0 2.9		4.11	8.0 – 0.89
7	3.2 3.1		4.11	8.1 – 0.79
8	4.0 3.9 ~~4.00~~ 4.00 °°	4.0	4.23	9.0 – 0.77
9		4.5	4.33	9.7? – 0.87
10		4.9	4.12	
11		5.5	4.05	
12		5.9	3.96	
13	w.s	3 6.5	4.00	
14		6.9	3.95	
15		7.0	4.08	
16		1.40 7.3	1.400 .75	
17		7.7	3.93	
18		8.3	3.76	
19		8.5	3.92	
20		8.7	4.03	
near br st – 23		9.3	4.04	
25		7	,	

Blue

~~YELLOW~~

ScV

Sequences Near N Pole.

Nov 18, 1919

Copied Bh 53, ~~85~~ 172

I 35231

Seq β+87°

Beta, Not B

Region poor

	Sc1	Sc2		Curve	Magn
a		4.3	4.20' – 4.1	4.17	8.37
b		4.5	'	4.14	8.64
c		5.1	5.20 – ' 5.3	4.07	9.27
d		5.8		4.04	9.84
e		6.4		4.01	10.41
f		6.7		3.99	10.69
g		6.9		3.98	10.88
h	Nearly Superp.			.	.
k		7.8?		3.95	11.75?
k'		8.0		3.95	11.95
l		8.7		3.98	12.68
m		8.9		3.99	12.89
n		F		.	.

Copied Bh 53, ~~85~~ 172

Seq β + 86°

	Sc2	Curve	Magn
a	4.0	4.13	8.13
b	4.5	4.12	8.62
c	5.1	4.11	9.21
d	5.7	4.11	9.81
e	6.2	4.12	10.32
f	6.5	4.13	10.63
g	6.5	413	10.63
h	6.9	4.14	11.04
k	7.7	4.14	11.84
k'	7.5	414	11.64
l	8.5	4.11	12.61
m	8.7	4.09	12.79
n	9.0	4.07	13.07

Blue
YELLOW
SaV

Plot 16

Sequences Near N Pole

Nov 18, 1919

ρ +89° − I 35231

	Sa 1	Sa 2	Diff	PC	
1	+p			elong-	.
2	Off film			—	.
3	+p			6.5	−0.69
4	+p			elong.	.
5	+p			7.3	−0.81
6	$\overset{2.9}{2.8}$		4.21	8.0	−0.89
7	$\overset{3.1}{3.0}$		4.21	8.0	−0.69
8		4.1	4.13	8.9	−0.67
9		4.5	4.33		
10		5.0	4.02		
11		5.5	4.05		
12		5.7	4.16		
13		6.2	4.10		
14		6.5	4.15		
15		6.9	4.18		
16		7.2	4.20		
17		7.5	4.13		
18		7.9	4.16		
19	Nearly sup. –		.		
20		8.7	4.03		
23		9.3	4.04		
25		9.8?	4.07		

12:30

Plat 17

Sequences Near N Pole
Nov 19, 1919

Sc V
9:40
B + 90

D 35232 Pole

	Sc1	Sc2	Diff	PC
1	+ p			5.4 – 0.92
3	+ p			6.7 – 0.89
4	+ p			7.0 – 1.01
5	2.6 2.5		3.89	7.5 – 1.01
6	3.0 2.9		4.11	8.0 – 0.89
7	3.2 3.1		4.11	8.2 – 0.99
8	4.1 4.10 00 4.0	4.1	4.13	9.5 – 0.97
9		4.9	3.93	
10		5.1	3.92	
11		5.5	4.05	
12		5.8	4.~~5~~06	
13		6.3	4.00	
14		6.7	3.95	
15		7.0	4.08	
16		7.3	4.10	
17		7.5	4.13	
18		8.0	4.06	
19		8.2	4.22	
20		8.5	4.23	
23		9.2	414	
25		9.8	407	

Sequences Near N Pole
Nov 19, 1919

DeV

I 35232

Copied 53:144

Seq R +88°	Sc 1	Sc 2	Cu	magn
a		5.5	4.00	9.50
b		5.9	4.01	9.91
c		6.3	4.02	10.32
d		6.7	4.05	10.75
e		7.1	4.08	11.18
f		7.3	4.10	11.40
g		7.5	4.12	11.62
h		7.9	4.15	12.05
k		8.2	4.15	12.35
l		8.7	4.15	12.85
m		8.9	4.15	13.05
n		9.3	4.13	13.43
811		6.5	4.03	10.53

Copied 53:144

Images poor

Seq R +87°				
a		5.7	4.04	9.74
b		5.9	4.04	9.94
c		6.4	4.02	10.42
d		6.7	4.02	10.72
e		7.1	4.04	11.14
f		7.3	4.05	11.35
g		7.7	4.08	11.78
h		7.9	4.10	12.00
k		8.1	4.12	12.22
l		8.5	4.20	12.70
nearly Sup. m		8.8	4.26	13.06
n		9.1	4.31	13.41
811		6.5	4.02	10.52

Sequences Near N Pole

Nov 19, 1919

DcV

I 35232

Copied 53:176

Seq γ +87°	Sc 1	Sc 2	Cu	Magn
a		4.1	4.04	8.14
b		5.4	4.01	9.41
c		6.1	4.01	10.11
e		6.5	4.04	10.54
f		700'' 7.1	4.07 69	11.07
g		7.1	4.08	11.18
h		7.3	4.10	11.40
k		7.5	4.12	11.62
l	W.S	7.7 ~~8.1~~	4.14	11.84
m		7.9	4.15	12.05
n		8.0	4.16	12.16
o		8.2	4.16	12.36
p		8.7	4.15	12.85
q		9.0	4.15	13.15
b'		5.9	4.01	9.91

Images slightly long.

Del

Sequences Near N Pole

Nov 19, 1919

I 35232

Copied 53:176

Seq γ +86°	Sc 1	Sc 2	Cu.	Magn
a		4.3	4.12	8.42
b		5.7	4.04	9.74
f'		6.1	4.03	10.13
c		6.4	4.02	10.42
e		6.8	4.02	10.82
f		7.2	4.04	11.24
g		7.5	4.06	11.56
h		7.5	4.06	11.56
k		7.7	4.08	11.78
l		8.1	4.12	12.22
m		7.9	4.09	11.99
n		8.1	4.12	12.22
o		~~Sup~~ 8.1	4.12	12.22
p		8.9	4.28	13.18
q		9.1	4.32	13.42
r				

Sequences Near N Pole
Nov 19, 1919

ScV

S35232

P +89°	Sc1	Sc2	Diff	Pc	
1	+p			5.3	-0.82
2	+p			6.1	-0.82
3	+p			6.8	-0.99
4	+p			6.9	-0.91
5	+p			7.5	-1.01
6	3.1 3.0		4.01	7.9	-0.79
7	3.1 3.0		4.21	8.0	-0.69
8	4.0 3.9 4.05 .01	4.1	4.18	9.0	-0.77
9		4.6	4.23	9.7	-0.87
10		5.0	4.02		
11		5.5	4.05		
12		5.8	4.06		
13		6.3	4.00		
14		6.7	3.95		
15		6.95 6.9	10 4.13 7.0		
16		7.3	4.10		
17		7.5	4.13		
18		8.1	3.96		
19	Nearly sup				
20		8.5	4.23		
23		9.0	4.34		
25		9.5	4.37		
26		9.8?	4.53		

11:45

9 – 50

Dev

Sequences Near N Pole

Oct 17

Nov 21, 1919

P + 90°

I 35319 Pole

No.	Se 1	Se 2	Cu	Magn	Pc	
1	tp				5.3	−0.82 along
2	tp				6.3	−1.02
3	tp				6.7	8 −0.99
4	tp				7.0	−1.01
5	2.1 2.0		4.39		7.5	−1.01
6	2.6 2.5		4.41		8.0	−0.89
7	2.8 2.7		4.51		8.2	−0.89
8		3.5	4.73		9.0	−0.77
9		4.1	4.73		9.8	−0.97
10		4.5	4.52			
11		5.3	4.25			
12		5.7	4.16			
13		6.1	4.20			
14		6.5	4.15			
15		6.9	4.18			
16		7.5	3.90			
17		7.7	3.93			
18		8.3	3.76			
19		8.5	3.92			
20		8.8	3.93			
23		9.5	3.84			
25		9.9?	3.97			

Sequences Near N Pole
Nov 21, 1919

DeV

δ 35319

Seq N+88°	Sc1	Sc2	P90° Cu.	Copied 53:156
a		5.8	4.23	10.03
b		6.5	4.12	10.62
c		6.3	4.15	10.45
d		6.7	4.08	10.78
e		7.2	4.00	11.20
f		7.5	3.94	11.44
g		7.9	3.89	11.79
h		8.4	3.8~~7~~ 4	12.~~47~~ 24
k		8.5	3.84	12.34
l		890 9.0	3.85 8.8	12.75
m		9.2	3.87	13.07
n		9.7	3.90	13.60
958		6.3	4.15	10.45
966		5.1	4.38	9.48
977		3.8	4.70	8.50
10[illegible]6		4.3	4.61	8.91
2057		5.1	4.38	9.48

Sequences Near N Pole
Nov 21, 1919

Se V

I 35319

Copied 53:156

Seq u +87°	Sc 1	Sc 2		P+90° Cu	
a		5.7		4.24	9.94
b		6.60 6.7	6.5	4.10	10.70
c		6.60 6.5	6.7	4.10	10.70
d		6.7 ~~[illegible]~~		4.08	10.78
e		7.3		3.98	11.28
f		7.60 7.7	7.5	3.93	11.53
g		8.0		3.87	11.87
h		8.50 8.3	8.7	3.85	12.35
k		8.5		3.84	12.34
l		8.9		3.85	12.75
m		9.3		3.87	13.17
n		9.7		3.90	13.60

Copied 53:180

Seq δ +87°				Cu	
a	3.3 q		* 3.9	4.19	8.09
b		5.5 q	5.1 ~~3.7~~	4.38	9.48
c		6.5 q	7.1	4.01	11.11
d		7.3 q	7.3	3.98	11.28
e		7.1	7.5	3.94	11.44
f		7.7	7.7	3.92	11.62
g		8.5	7.9	3.88	11.78
h		8.7	8.4	3.86	11.96
k		9.0	8.40 8.5	3.84 8.8	12.24
		9.2			
l		9.5	8.80 8.7	3.86 8.9	12.66
m		7	9.1	3.86	12.96
n			9.5?	3.89	13.39?

Reject measures. Supposed on wrong region.

* Wrong star meas for "a"

Sequences Near N Pole
Nov 21, 1918

DcV

I 35319

Seq N +86°	Sc 1	Sc 2	P 89° Cu	Copied 53:186
a		5.9 q	4.21	10.11
b		6.5 q	4.10	10.60
c		6.5	4.10	10.60
d		6.7	4.08	10.78
e		7.3	4.04	11.34
f		7.5	4.03	11.53
g		8.0	4.02	12.02
h	8.40 8.5	8.3	4.01	12.41
k	8.50 8.3	8.7	4.01	12.51
l	9.1 ~~Suf?~~		4.02	13.12
m	9.40 ~~9.5~~	9.3	4.03	13.43
n	9.8		4.04	13.84 e

Copied 53:180

Seq S +86°		Sc 2		
a	Ap	4.0	4.56	8.56
b	Ap	5.2	4.33	9.53
c	Ap	7.1	4.05	11.15
d	Ap	7.3	4.04	11.34
e	Ap	7.5	4.04	11.54
f	7.9	7.8	4.03	11.83
g		8.0	4.03	12.03
h		8.2	4.02	12.22
k		8.5	4.02	12.52
l		9.0	4.02	13.02
m		9.3	4.03	13.33
n		9.7	"	"

Sequences Near N. Pole

Nov 21, 1919

Dev

		δ 353 19 Sc1	Sc2		Pc	
δ +89°					5.3	— 0.82
	1	+p			6.1	— 0.82
	2	+p				
	3	+p			6.7	−0.89
	4	+p 2.0			6.9	−0.91
		1.9				
	5	+p		4.49	7.5	−1.01
		2.8 2.7				
	6	+p		4.31	7.9	− 0.79
		3.0 2.9				
	7	+p		4.31	8.1	− 0.79
		3.5 3.4				
	8	+p 3.65 12	38	4.58	9.0	− 0.77
	9	+p	4.2	4.63	9.7	− 087
	10		4.5	4.52		
	11		5.3	4.25		
	12		5.7	416		
	13		6.2	410		
	14		6.5	4.15		
	15		6.9	4.18		
	16		7.4	4.06		
	17	~~no~~	7.5	4.13		
	18		8.1	3.96		
	19		8.3	4.12		
	20		8.7	4.03		
	23		9.3	4.04		
	25		-			

12

YELLOW

10 : 10

Sequences Near N Pole

ScV

Dec 5, 1919

MC 16078 Pole

	Sc 1	Sc 2	
5	2.4 2.3		
6	3.0 2.9		
7	3.3 3.2		
8	4.1 4.0 4.10	4.1	
9		5.2	
10		5.5	
11		6.20 6.3	6.1
12		7.1	
13		7.7	
14		8.0	
15		8.5	
16		9.0	
17		9.3	
18		9.9	

YELLOW

Sequences Near N Pole

Sc V

Dec 5, 1919

MC 16081

Seq V	Sc 1	Sc 2	
a		5.8 590	6.0
b		7.5	
c		6.0	
d		8.7	
e		7.0	
f		n.s	
g		9.1	
h		n.s	

MC 16082 Plate broken

Seq U		
a	6.0	
b	7.0	
c	6.0	
d	7.7	
e	8.5	
f	8.9	
g	9.7 960	95
h	9.1	
k	n.s	

YELLOW

Sequences Near N Pole

ScV

Dec 5, 1919

MC 16082 cont

Seq V

	Sc 1	Sc 2	
a		5.5	
b		7.0	
c		56° 5.7	5.5
Close to another st. d		8.0	
e		6.1	
f		9.0	
g		Sup	
h		9.8	

Seq W

	Sc 1	Sc 2
a		5.5
b		5.1
c		5.9
d	Too near cr.	
e		7.0
f		9.0
g		9.8?
h		9.7
k		n.s

YELLOW

Sequences Near N Pole

Dec 5, 1919

ScV

MC 16083

Seq U	Sc1	Sc2
a		6.1
b		7.1
c		6.2
d		7.9
e		8.3
f		8.7
g		9.7
h		8.9
k		n.s

Seq W	Sc1	Sc2
a		6.0
b		5.3
c		6.0
d		7.9
e		7.1
f		n.s
g		9.7
h		9.8
k		n.s

YELLOW

Sequences Near N Pole

ScV

Dec 5, 1919

MC 16083 cont

Seq S

	Sc 1	Sc 2
		3.9
a		4.8
b		
c		8.3
d		8.8
e		9.8?
f		9.1
g		9.1
h		9.3

4+ uncertain

MC 16084 Plate broken

Seq U

a	6.35 6.2 6.5
b	7.5
c	6.5
d	8.0
e	8.5
f	8.9
g	9.8
h	9.0
k	ns

YELLOW

Sequences Near N Pole

Scv

Dec 5, 1919

	Mc 16085 Sc1	Sc2	Pole
5	2.2 2.1		
6	2.8 2.7		
7	3.1 3.0		
8		3.9	
9		5.1	
10		5.4	
11		6.1	
12		6.9	
13		7.5	
14		7.8	
15		8.3	
16		8.9	
17		9.3	
18		9.8	

1:10

YELLOW

Sequences Near N Pole

Dec 17, 1919

Dcv

10 — MC 16078

Seq K

		Sc 1	Sc 2
	a		6.3
	b		6.8
	c		7.3
	d		7.9
	e		8.1
	f		7.0
	g		8.5
	h		8.9
	k		ns

Seq H

on edge of plate	a		6.5
	b		7.7
on edge of film	c		8.7?
"	d		+p
	e		9.0
defective	f		
Ident uncertain	g		

Seq L

On edge of plate	a		6.3
	b		6.9
	c		6.5?
	d		7.5
	e		8.7
	f		9.0
	g		9.7
	h		ns

YELLOW

Scv

Sequences Near N Pole
Dec 17, 1919

MC 16081 Pole

	Sc 1	Sc 2
5	~~1.9~~ 2.1 2.0 20 1.9	
6	2.6 2.5	
7	Off pl.	
8	3.6 3.5	
9	4.3 4.2 4.30	4.3
10		4.7
11		5.7
12		6.2
13		6.9
14		7.40 7.5 7.3
15		8.0
16		8.7
17		9.1
18		9.7 ? scr.

Seq K

a
b
c
d

Plate does not cover region of Seq K

YELLOW

Sequences Near N Pole -

Sc V

Dec 17, 1919

MC 16082 Pole

	Sc 1	Sc 2
5	1.9 1.8	
6	Off pl	
7	" "	
8	3.5 3.4	
9	4.2 4.1 4.25	4.3
10		4.5
11		5.7
12		6.3
13		7.0
14		7.5
15		8.0
16		8.5
17		8.9
18		9.5

YELLOW

Sc V

Sequences Near N Pole
Dec 17, 1919

		MC 16085 Sc 1	Sc 2			
Seq K						
	a		6.1			
	b		6.5			
	c		7.3			
	d		7.7			
	e		7.9			
	f		6.9			
	g		8.3			
	h		8.7			
Seq H						
	a		6.3			
	b		7.3			
	c		8.1			
	d		9.0			
	e		8.7			
	f		9.3			
	g		9.7			
Seq L						
	a		6.1			
	b		6.9			
On edge of plate	c	On edge of film				
	d		7.5			
	e	On edge -				
	f		8.5			
	g		90			
	h		ns			11.30
	k					
	l					

YELLOW

Sequences Near N. Pole

Dec 18, 1919

Sc V

10 — MC 16078

		Sc 1	Sc 2
Seq H			~~6.7~~
	a		6.7
	b		7.8
	c	On edge	8.9?
	d	On edge	-
	e		9.0
Uncertain ident	f		
	g		
Seq L			
	a		6.3
	b		7.0
	c		6.7 p
	d		7.5
	e		8.7
	f		9.0
	g		9.5
	h		n.s

Sequences Near N Pole

Dec 18, 1919

Seq

MC 16083 Pole

	Se1	Se2
5	2.3 2.2	
6	Off pl	
7	" "	
8	3.6 3.65 3.5	3.7
9		4.5
10		5.0
11	Off pl	
12		6.7
13		7.3
14		Sup
15		+p
16		8.7
17		9.5?
18		n.S

Images on edge of pl. very poor.

Seq β

a	4.3
b	
c	
d	7.7

Seq off edge of pl.

11 —

2:40
ScV

Sequences Near N Pole

May 5, 1920 Ser. 982. Contd fr B63:217

MC 16626

	Sc1	Sc2	Cu	Magn
Seq B				
f		5.5	6.46	11.96
g		6.1	6.34	12.44
h		6.9	6.17	13.07
k		7.5	6.04	13.54
l		7.9	5.96	13.86
m		8.3	5.88	14.18
m′		8.5	5.84	14.34
n		9.1	5.72	14.82
1178	3.2 3.1		6.66	9.76
1229	3.0 2.9		6.65	9.55
Seq N				
e		6.1	6.34	12.44
f		6.5	6.24	12.74
g		6.8	6.20	13.00
h		7.5	6.04	13.54
k		7.9	5.96	13.86
l		8.18 8.2	5.90 8.1	14.05
l′		8.5	5.84	14.34
m		8.8	5.78	14.58
n		9.0	5.73	14.73
o		9.8	5.65	15.45
562	2.9 2.8		6.65	9.55

Copied 53:193

Copied 53:203

Plot 38

Sc V

Sequences Near N Pole
May 5, 1920

MC 16626 Pole

	Sc1	Sc2	Diff
10	2.4 2.3		6.62
11	2.9 2.8		6.65
12	3.2 3.1		6.66
13	3.6 3.5		6.70
14		4.0	6.65
15		4.40 4.3	6.68 4.5
16		4.9	6.50
17		5.0	6.63
18		5.6	6.46
19		6.10 6.2	6.32 6.0
20		6.5	6.23
21		6.8	6.16
22		7.0	6.19
23		7.3	6.04
24		7.5	6.14
25		8.0	5.87
26		8.5	5.83
27		8.9	5.79
28		9.5	5.61
29		9.9	5.76

Set

Sequences Near N Pole
May 5, 1920

MC 16632

Seq B	Sc1	Sc2	Cu	Magn
f		5.5	6.31	11.81
g		6.0	6.22	12.22
h		6.9	6.05	12.95
k		7.4	5.94	13.34
l		7.9	5.87	13.77
m		8.3	5.81	14.11
m'		8.7	5.76	14.46
n		9.3	5.74	15.04
1178	3.1 3.0		6.50	9.60
1229	3.0 2.9		6.54	9.54

Copied 53:193

Seq N	Sc1	Sc2	Cu	Magn
e		6.2	6.18	12.38
f		6.5	6.13	12.63
g		7.0	6.03	13.03
h		7.5	5.93	13.43
k		7.9	5.87	13.77
l		8.1	5.84	13.94
l'		8.3	5.81	14.11
m		8.7	5.76	14.46
n		9.0	5.74	14.74
o		9.5	5.74	15.24
568	3.0 2.9		6.54	9.54

Copied 53:203

Plot 38

Sequences Near N Pole
May 5, 1920

Se V

MC 16632 Pole

	Sc 1	Sc 2	Diff
10	$\overset{2.6}{2.5}$		6.42
11	$\overset{3.0}{2.9}$		6.55
12	$\overset{3.3}{3.2}$		6.56
13	$\overset{3.5}{3.4}$		6.80
14		3.9	6.75
15		4.3	6.78
16		5.0	6.40
17		5.3	6.33
18		5.8	6.26
19		6.2	6.22
20		6.6	6.13
21		6.9	6.06
22		7.1	6.09
23		7.5	5.84
24		7.7	5.94
25		8.0	5.87
26		8.5	5.83
27		9.0	5.69
28		9.3	5.81
29		9.8	5.86

$3.\overset{3}{\cancel{4}}0$

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