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February 18, 1919

Sheet no 189

Scale M. Sirius 566 log 17 01 +15.0

8 00 B 51143.

	1st		2nd	2nd Diff	P. C 2nd
3	4.2 4.0	4.35 1	4.5	2.69	9.2 −2.16
4	4.9 4.7	5.05 1 2	5.2	2.77	9.8 −1.98
5	5.0 4.8	5.10 1	5.2	2.96	9.9 −1.84
6			5.3	3.17	
7			6.0	3.04	
8			6.5	3.03	
9			7.2	2.89	
12			7.8	2.77	
14			8.3	2.49	
15			8.5	2.63	
16			9.0	2.60	
17			9.2	2.63	
18			9.8	2.61	
20			10.0	2.76	
21					
22					
23					
24					
25					
27					
14a			9.0	.	
14b			9.8	.	
14c			8.8	.	
3a			4.4	2.95	9.8 −2.45
6a			5.8	2.84	
8a			6.2	3.48	

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	g 2nd		h 2nd	
3	8.2	8.20	8.2	−1.16
4	8.9	8.85	8.8	−1.03
5	9.0	9.00	9.0	−0.94
6	10.0	9.85	9.7	−1.38
7	10.0	10.00	10.0	−0.96
8	—			
6a	10.0	9.95	9.9	−1.31
3a	8.8	8.80	8.8	−1.45

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February 18, 1919

Series 566 D9 17 01 · −15.0 P.C. Cyclic Bkt 27.72

Scale M. B 51144

	1st	2nd	2nd	P	C	all corr +08	2nd	cu.	magn.
1	4.0	4.5					9.8	−2.29	7.21
2	4.5	4.7					9.5	−2.29	7.21
3		4.8					9.8	−2.22	7.58
4		5.0					9.9	−2.06	7.84
5		5.0					9.7	−2.17	7.53
6		5.8					—		
7		6.0					—		
8		5.5					10.0	−2.00	8.00
9		6.0							
10		6.5							
11		6.5							
12		7.0							
13		6.8							
14		7.0							
15		7.2							
16		7.1							
17		7.7							
18		8.0							
19		7.7							
20		8.0							
21		8.0							
22		8.4							
23		8.7							
24		8.8							
25		9.0							
26		9.2	9.3						
27		9.9	9.9						

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	g 2nd	h 2nd
1	8.0	8.0
2	8.5	8.3
3	8.5	8.2
4	8.2	8.3
5	8.5	8.5
6	8.8	8.9
7	9.5	9.5
8	9.2	9.5
9	9.9	9.8
10	–	10.0
11		

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February 18, 1919

Fe Cephei Ph 15:34

Series 566 South Pole 17 30 -90:0

Scale M B51147 P. C alt corr -9z

	1st	2nd	2nd	2nd	Cu	Magn
a	3.8	4.0		8.2	.	
b	4.0	4.5		9.1	.	
c		5.0		9.0		
d		5.5		9.8	-2.12	7.68
e		5.8		10.0	-2.00	8.00
f		6.0		10.0	-2.00	8.00
g		6.0				
h		6.5				
K		7.0				
l		7.0				
m		7.7				
n		7.8				
o		7.8				
p		8.3				
q		8.5				
r		8.6				
s		8.8				
t		9.1				
u		9.5				
w		9.6	9.6			

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	g 2nd	h 2nd
a	7.0	7.0
b	7.8	7.8
c	8.0	8.0
d	8.2	8.5
e	8.5	8.7
f	8.9	9.0
g	9.2	9.2
h	9.9	9.8
K	10.0	—

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February 18, 1919 Shot no. 189

Series 566 Cg 17 01 +15.1

Scale M B 51148

	1st		2nd	2nd Dif	P.C 2nd.	Dif
3	5.2 5.0	5.60 4	6.0	1.44	9.2	-2.16
4	5.7 5.5	5.85 2	6.0	1.97	9.8	-1.98
5	6.0 5.8	6.10 1	6.2	1.96	10.0	-1.94
6	6.2 6.0	6.10 1	6.0	2.37		
7			7.0	2.04		
8			7.0	2.53		
9			7.8	2.29		
12			8.0	2.57		
14			8.2	2.59		
15			8.8	2.33		
16			9.0	2.60		
17			9.2	2.63		
18			9.8	2.61		
20			9.9	2.86		
3a	5.7 5.5	5.85 2	6.0	1.50	9.7	-2.35
6a	6.4 6.2	6.60 2	6.8	2.04		
8a			7.2	2.48		
14a			9.0	.		
14b			9.8	.		
14c			9.0	.		

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	$\frac{g}{2^{nd}}$		$\frac{h}{2^{nd}}$	
3	8.0	8.00	8.0	−0.96
4	8.8	8.65	8.5	−0.83
5	8.9	8.90	8.9	−0.84
6	9.3	9.25	9.2	−0.78
7	9.8	9.90	10.0	−0.86
8				
3a	8.2	8.35	8.5	−1.00
6a	9.6	9.60	9.6	−0.96
8a	—			

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February 18, 1919

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Series 566 Carte 18 02 −64.5

Scale M B51149

P. C. alt com -12

	1st		2nd	2nd cu.		2nd	cu.	
1	3.8 3.6	3.90 1	4.0	.	.	8.8	.	.
2	4.7 4.5	4.85 2	5.0	.	.	9.8	−2.12	7.68
3			5.5	.	.	10.0	−2.00	8.00
4			5.8	.	.			
5			6.7	2.37	9.07			
6			7.0	2.40	9.40			
7			7.2	2.43	9.63			
8			7.2	2.43	9.63			
9			7.8	2.49	10.29			
10			7.8	2.49	10.29			
11			8.0	2.50	10.50			
12			8.2	2.52	10.72			
13			8.9	2.48	11.38			
14			9.6	2.62	12.22			
15			9.8	2.64	12.44			
16			9.9	2.65	12.55			
17			10.0	2.65	12.65			
18			–					

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	g_{2nd}		h_{2nd}	cm	
1	7.7	7.85	8.0	-0.94	6.91
2	8.5	8.50	8.5	-0.88	7.62
3	8.8	8.75	8.7	-0.86	7.89
4	9.6	9.65	9.7	-0.82	8.83
5	10.0	10.00	10.0	-0.82	9.18

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Series 566 · 44 Ks 18 33 - 12.8

Scale M B 5 1 1 5 1 P. C. alt cor +.07

	1st	2nd	2nd		2nd
1	4.4 4.2	4.45 0 1	4.5	.	9.2 .
2	53 5.1	5.55 3 2	5.8	.	-
44Ks: 3		6.7		2.37	9.07
4		7.0		2.40	9.40
5		7.6		2.47	10.07
6		8.6	8.55 0 1 8.5	2.56	11.11
7		8.4		2.53	10.93
8		9.4		2.61	12.01
9		9.9	9.90 0 9.9	2.64	12.54

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	$\frac{g}{2^{nd}}$		$\frac{h}{2^{nd}}$		
1	8.0	8.000	8.0	−0.93	7.07
2	9.5	9.500	9.5	−0.82	8.68
3	10.0	10.000	10.0	−0.82	9.18
4					

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Series 566 R + T Cor. Aust. 18 56 -37.1

Scale M. B51 152

P C alt Corr. +.05

	1st	2nd	2nd Cu		2nd
A	5.0 4.8	5.00	5.0	.	9.0 .
B			5.2	.	9.1 .
C			5.8	.	10.0 -2.00 8.00
~~a~~			7.0	2.40	9.40
b			6.0	2.18	8.18
c			6.8	2.38	9.18
d			7.2	2.43	9.63
d'			7.7	2.48	10.18
d^2			7.8	2.49	10.29
e			8.2	2.52	10.72
e'			8.8	2.58	11.38
f			9.0	2.59	11.59
f'			9.1	2.60	11.70
f^2			9.9	2.15	12.05

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	q 2nd		b 2nd	Cu	magn
A	8.0	7.95	7.9	-0.94	7.01
B	8.2	8.20	8.2	-0.91	7.29
C	9.0	8.95	8.9	-0.80	8.15
a	—				
b	9.6	9.60	9.6	-0.82	8.78
c	9.9	9.90	9.9	-0.82	9.08

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February 18, 1919.

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Series 566 Nova Sagittarii 18 58 −13.3

Scale M- B5 1153 P. C. alt con + 08

	1st	2nd	2nd cu.		2nd	cu	
a	off plate				—		
b	too near edge				—		
c	3.8 4.0	4.0 4.00	4.0		7.2		
d	off plate				—		
e	4.5 4.7	4.85	5.0		8.8		
f			5.5		9.6	−2.23	7.37
g			5.8		10.0	−2.00	8.00
h			6.0	2.18	8.18		
K			6.9	2.40	9.30		
l			7.2	2.43	9.63		
m			7.5	2.46	9.96		
n			8.0	2.50	10.50		
o			8.7	2.57	11.27		
q = p			9.5	2.62	12.12		
p = q			9.0	2.59	11.59		
r			10.0	10.0 2.65	12.65		

The stars p and q were marked wrong on the plate being interchanged. This accounts for the large error.

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	g 2nd	h 2nd	cu	
a	—			
b	—			
c	6.2	6.2 / 6.2	.	.
d	—			.
e	7.5	7.3 / 7.2	.	.
f	8.5	8.4 / 8.3	−0.89	7.53
g	8.5	8.5 / 8.5	−0.87	7.63

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February 18, 1919. Sheet no 189

Series 566 C10 19 01 +15.0

Scale M. B51154

	1st		2nd	2nd Diff.	P. C. 2nd	Diff.
1	4.7 4.5	4.85 2	5.0	1.99	9.0	-2.16
2	5.2 5.0	5.35 2 1	5.5	2.06	9.8	-2.39
3	5.7 5.5	5.85 2	6.0	1.49	9.8	-2.46
4	5.9 5.7	5.95 1 0	6.0	1.89	9.9	-2.06
6	6.1 5.9	6.05 1 0	6.0	2.45		
7	6.0 5.8	6.00 0 0	6.0	2.29		
8			6.5	2.60		
9			7.0	2.40		
10			7.0	2.69		
11			7.5	2.54		
12			8.0	2.49		
13			8.3	2.43		
15			8.6	2.57		
16			9.0	2.52		
17			9.5	2.40		
18			9.8	2.55		
19						
20						
21						
02						
24						
11b			8.6	.		
11a			8.0	.		

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	$\frac{g}{2^{nd}}$		$\frac{h}{2^{nd}}$	
1	7.8	7.8^{0}_{0}	7.8	−0.96
2	8.3	8.1^{5}_{1}	8.0	−0.84
3	8.2	8.2^{5}_{0}	8.3	−0.91
4	8.6	8.5^{5}_{0}	8.5	−0.71
~~5~~				
6	9.8	9.6^{0}_{2}	9.4	−1.10
7	9.0	9.1^{0}_{1}	9.2	−0.81
8	9.9	9.9^{5}_{1}	10.0	−0.85
9	10.0		—	−0.60

9.45

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February 19, 1919 Sheet No. 190

Series 660 65 9 01 +14.9

7 40 B52234 P.C.

	1st	2nd	2nd Dyf	2nd Dyf.
1	3.7 3.5		3.46	8.8 -1.64
2	4.2 4.0	H.10, 1	4.0 3.92	9.8 -1.78
4	4.2	4.35 2	4.5 3.85	10.0 -1.80
5			5.2 3.74	
6			5.8 3.36	
8			6.0 3.55	
9			6.0 3.72	
10			6.5 3.51	
12			6.9 3.31	
13			7.0 3.46	
15			8.1 3.06	
16			8.2 3.16	
18			8.8 3.02	
19			9.0 3.05	
20			9.0 3.22	
21			9.8 2.89	
22			10.0 +3.01	
23			10.0 3.19	
4a			5.0 3.37	
14a			7.5 3.45	

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	$\frac{g}{2^{nd}}$		$\frac{h}{2^{nd}}$	
1	7.2	7.1^{0}_{1}	7.0	+0.06
2	8.2	8.1^{0}_{1}	8.0	−0.08
4	8.5	8.5^{0}_{0}	8.5	−0.30
5	9.2	9.2^{5}_{0}	9.3	−0.31
6	9.5	9.5^{5}_{0}	9.6	−0.39
8				
9				
10				
4a	8.8	8.1^{0}_{1}	8.6	−0.33

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February 19, 1919

Series 660 28Ks 9 06 – 49.0

Scale M. B52235 P C alt con .00

	1st	2nd	2nd Cu	2nd Magn	2nd
1	3.2 3.0 3.2 3.4	3.30 1 1	·	·	8.2 ·
28Ks = 2	5.4 5.2	5.60 2 2	5.8	3.22	8.82 9.8 -1.77 8.03
3			6.2	3.22	9.42 –
4			7.0	3.19	10.19
5			7.3	3.17	10.47
6			7.8	3.15	10.95
7			8.0	3.14	11.14
8			8.3	3.12	11.42
9			8.6	3.10	11.70
10			8.8	3.09	11.89
11			9.0 9.0 9.0	3.07	12.07
12			9.3	3.06	12.36
13			9.8	3.03	12.83
14			10.0	3.00	13.00

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	g 2nd		h 2nd		
1	6.8	6.80	6.8	-0.03	6.77
2	8.7	8.65	8.6	-0.05	8.60
3	10.0	10.00	10.0	-0.46	9.54
4					
5					

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February 19, 1919

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Series 660 RW Carinae 9 18 −68.4

Scale IV1 B 52236

	1st	2nd	2nd cw		P 2nd	C 2nd	alw corr −18
A	4.7 4.5	4.85 v	5.0	3.22	8.07	9.7 −1.76	7.94
B	6.0 5.8	5.90 v	5.8	3.23	9.13	10.0 −1.77	8.23
a			6.1	3.22	9.32		
a'			7.0	3.19	10.19		
d			7.5	3.16	10.66		
d'			7.8	3.14	10.94		
e			8.0	3.13	11.13		
f			8.5	3.10	11.60		
g			8.8	3.09	11.89		
h			9.0	3.07	12.07		
l			9.7 9.7 9.7	3.03	12.73		

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	g 2 nd		h 2 nd		
A	8.2	8.35 (2, 1)	8.5	-0.30	8.05
B	9.0	9.05 (1, 0)	9.1	-0.41	8.64
a	9.7	9.85 (1, 2)	10.0	-0.46	9.39
a'	~~9.7~~				
d	~~9.7~~				

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February 19, 1919

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Series 660 R S Velorum 9 21 −48.5

Scale M. B52237 R. C. alt con. 00

	1st	2nd	2nd	Cu		2nd		
var.			7.6	7.55 0 1 / 7.5	3.16	10.71	—	
a	5.2 / 5.0	5.45 2 3		5.7	3.22	8.67	10.0 −1.78	8.22
b	5.7 / 5.5	5.85 1 2		6.0	3.22	9.07	—	
c				6.5	3.21	9.21		
d				6.6	3.20	9.80		
e				7.0	3.19	10.19		
f				7.8	3.15	10.95		
g				8.0	3.14	11.14		
h				8.2	3.13	11.33		
K				8.9	3.08	11.98		
l				9.0	3.07	12.07		
m				9.2	3.06	12.26		
n				9.6	3.03	12.63		
o				9.8	3.02	12.82		

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	g 2nd	h 2nd		
var –				
a	9.0	8.9 0 1 8.8	-0.38	8.52
b	9.5	9.53 0 1 9.6	-0.45	9.10
c	10.0	9.9 0 1 9.8	-0.46	9.44

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February 19, 1919

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Series 660 R R Hydrae 9 41 − 23.6

Scale M. B 52238

	1st	2nd	2nd	cu	magn	P. C 2nd		
a	5.0 4.8	5.0	5.0	3.22	8.22	9.7	-1.76	7.94
a'	5.6 4.8	5.2	5.4	3.22	8.42	10.0	-1.77	8.23
b			6.9	3.20	10.10			
b'			6.8	3.20	10.00			
d			7.6	3.16	10.76			
d'			7.6	3.16	10.76			
e			8.6	3.10	11.70			
e'			8.5	3.10	11.60			
f			9.0	3.07	12.07			
g			9.2	3.06	12.26			
h			9.0	3.07	12.07			
l			10.0	10.0	3.00	13.00		
var.			7.8	7.7	3.15	10.90		
K			9.5		3.04	12.54		

alt con +.07

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	$g_{2^{nd}}$		$h_{2^{nd}}$	
a	8.0	8.35 ~ 8.2	-0.30	8.05
a'	9.1	9.0 ~ 8.9	-0.40	8.60
b	10.0	—	-0.46	9.54
b'				
c				
c'				
e				
e'				

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Series 660 N G C 3201 10 14 −46.0

Scale M. B 52241 P. C. alt con +0.1

	1st		2nd	2nd Cu		2nd P. C.		
a	4.0 3.8	4.00 00	4.0	3.20	7.20	8.2	.	.
b	4.4 4.2	4.50 1	4.6	3.21	7.71	9.2	−1.76	7.44
c			5.5	3.22	8.72	9.8	−1.77	8.03
d			5.8	3.22	9.02			
e			6.0	3.22	9.22			
f			6.5	3.20	9.70			
g			6.8	3.20	10.00			
h			7.0	3.19	10.19			
k			8.0	3.14	11.14			
l			8.0	3.14	11.14			
m			8.2	3.13	11.33			
n			8.3	3.12	11.42			
o			9.2	3.06	12.26			
p			9.3	3.06 5	12.35			
q			9.8	9.80 00 9.8 3.02	12.82			

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	g 2nd		h 2nd		
a	7.0	6.95^{0}_{0}	6.9	−0.06	6.89
b	8.0	8.00^{0}_{0}	8.0	−0.24	7.76
c	8.6	8.60^{0}_{0}	8.6	−0.34	8.26
d	9.2	9.20^{0}_{0}	9.2	−0.42	8.78
e	9.2	9.40^{2}_{2}	9.6	−0.45	8.95
f	9.8	9.90^{0}_{1}	10.0	−0.46	9.44

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Series 660 R Z Carinae 10 33 −70.3

Scale M. B52242 P. C. alt con - 21

	1st	2nd	2nd Cu		2nd		
a	5.9 5.7	5.95	6.0	3.23	9.18	9.8 ~~9.0~~	−1.77 8.03
a'	6.0 5.8	6.00	6.0	3.22	9.22	10.0	−1.77 8.23
b			6.8	3.20	10.00		
c			6.9	3.20	10.10		
c'			7.2	3.18	10.38		
d			7.6	3.16	10.76		
e			8.0	3.14	11.14		
f			8.6	3.10	11.70		
g			8.8	3.09	11.89		
~~h~~ l			9.6	3.04	12.64		
m			9.7 9.75 9.8	3.03	12.78		
d'			9.0	3.07	12.07		

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	g 2nd		h 2nd		
a	8.6	8.60	8.6	-0.34	8.26.
a'	9.8	9.65	9.5	-0.45	9.20
b	9.8	9.80	9.8	-0.46	9.34
c	9.9	9.90	9.9	-0.46	9.44
c'	10.0	10.00	10.0	-0.47	9.53

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Series 660 R S Hydrae 10 47 −28.2

Scale M. B 52244 P. C alt corr +0.6

	1st	2nd	2nd Cu		
var.		8.3	3.12	11.42	none
a'	5.2 5.0	5.50 3 3	5.8	3.22	8.72
b	6.4 6.2	6.60 2 2	6.8	3.20	9.80
c	6.2 6.0	6.35 1 1	6.5	3.22	9.57
d		6.8		3.20	10.00
e		7.7		3.16	10.86
f		7.8		3.14	10.94
f'		8.2		3.13	11.33
g		8.7		3.10	11.80
g'		8.8		3.09	11.89
h		8.7		3.10	11.80
K		9.2	9.35 2 1 9.5	3.06	12.41

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	$\frac{g}{2\,\text{mds}}$	$\frac{h}{2\,\text{mds}}$			
var					
a'	9.8	9.8°°	9.8	-0.46	9.34
b	X—				
c					
d					
e					
f					

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Series 660 C6 11 01 + 14.9

Scale M. B52245

	1st	2nd	2nd Diff.	P C 2nd	Diff.
1	3.7 3.5	3.85 1 2	4.0	2.91	8.6 -1.84
2	3.7 3.5	3.90 2 2	4.1	2.98	8.5 -1.62
3			4.8	2.71	9.2 -1.69
4			4.7	2.86	9.3 -1.74
5			5.0	2.77	9.7 -1.93
6			5.6	2.61	10.0 -1.79
9			5.7	2.89	10.0 -1.41
10			5.8	3.10	-
12			6.5	2.84	
13			6.8	2.89	
14			7.0	3.06	
16			7.5	3.02	
17			7.6	3.18	
19			8.0	2.93	
21			8.2	3.06	
22			8.2	3.34	
23			8.8	3.03	
24			9.2	2.96	
25			9.4	2.93	
26			9.8	2.88	
27			9.8	3.32	
28			10.0	3.28	
10a		5.90 1 2	6.0	5.8 3.16	
14a			7.8		

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	$\frac{q}{2^{nd}}$	$\frac{h}{2^{nd}}$	
1	6.8	6.8^{0}_{0} 6.8	−0.04
2	7.0	7.0^{0}_{0} 7.0	−0.12
3	8.2	8.0^{0}_{2} 7.8	−0.49
4	8.0	8.0^{0}_{0} 8.0	−0.44
5	8.2	8.2^{0}_{0} 8.2	−0.43
6	8.5	8.5^{0}_{0} 8.5	−0.29
9	9.2	9.1^{5}_{0} 9.1	−0.56
10	9.2	9.2^{0}_{0} 9.2	−0.30
10a	9.5	9.5^{0}_{0} 9.5	−0.44
12	9.8	9.8^{0}_{0} 9.8	−0.46

9 25

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February 20, 1919

Sheet No. 190

7. 40 Series 672 Cb 11 01 +14.9

Scale M. B52378

	1st	2nd	2nd	Dyf	P. C. 2nd	
1	2.7 2.5			4.06	7.8	-1.04
2	3.2 3.0			4.68	8.0	-1.12
3	3.7 3.5	3.85 1	4.0	3.66	9.2	-1.69
4	3.7 3.0 3.5	3.50 3		4.06	9.0	-1.44
5	4.2 4.0	4.10 1	4.0	3.67	9.5	-1.73
6	4.0	4.25 3	4.5	3.96	9.9	-1.69
9			4.8	3.79	10.0	-1.41
10			5.3	3.60		
12			6.7	3.64		
13			6.5	3.19		
14			6.8	3.26		
16			7.0	3.52		
17			7.5	3.48		
19			7.7	3.23		
21			8.0	3.26		
22			8.5	3.04		
23			8.6	3.23		
24			8.9	3.26		
25			9.0	3.33		
26			9.7	2.98		
27			9.8	3.32		
28			10.0	3.28		
10a			5.7	3.36		
14a			7.5	.		

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	g 2nde		L 2nde	
1	6.5	6.5^{0}_{0}	6.5	+0.26
2	6.8	6.9^{0}_{1}	7.0	−0.02
3	7.5	7.4^{0}_{1}	7.3	+0.11
4	7.5	7.6^{5}_{2}	7.8	−0.09
5	7.8	7.6^{5}_{2}	7.5	+0.12
6	8.1	8.0^{5}_{1}	8.0	+0.16
9	8.8	8.7^{0}_{1}	8.6	−0.11
10	9.1	9.0^{5}_{1}	9.0	−0.15
12	9.8	9.8^{0}_{0}	9.8	−0.46
13	10.0	10.0^{0}_{0}	10.0	−0.31
10a	9.3	9.2^{5}_{1}	9.2	−0.19

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Series 672 S Carinae 10 07 −61.1

Scale M B52380 P.C alt com. −.09

	1st	2nd	2nd			2nd		
a	2.7 2.5			· Cu.	Magn	7.7	·	
b	3.0 2.8			·	·	7.7	·	
c	3.0 3.2 3.2 3.0 0			·	·	7.8	·	
d	3.5 3.7 3.7 3.0 0	3		3.19	4.23	7.93	8.1	·	
d'		4.8		3.22	3.83	8.63	9.0	−1.75 (.48)	7.52
e		5.5		3.22	3.70	9.20	10.0	−1.87 (.6)	8.33
f		5.5		3.22	3.70	9.20			
g		6.2		3.22	3.60	9.80			
h		6.8		3.20	3.52	10.32			
K		7.5		3.16	3.44	10.94			
l		7.5		3.16	3.44	10.94			
m		7.8		3.15	3.40	11.20			
n		8.0		3.14	3.38	11.38			
o		8.2		3.13	3.36	11.56			
p		8.9		3.08	3.30	12.20			
q		9.2		3.06	3.27	12.47			
r		9.5		3.04	3.26	12.76			
s		9.8		3.02	3.24	13.04			
var.		6.2		3.22	3.60	9.80			

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	g 2nd		h 2nd	cu	
a	6.0	6.00	6.0	~~.37~~	.
b	6.2	6.10	6.0	~~0.34~~	.
c	6.2	6.20	6.2	.	.
d	6.8	6.80	6.8	+0.10	6.90
d'	7.8	7.80	7.8	−0.04	7.76
e	8.8	8.80	8.8	−0.~~05~~ .24	8.56
f	8.5	8.50	8.5	−0.17	8.33
g	9.8	9.80	9.8	−0.44	9.36
h	–				
K					
var	9.9	9.95	10.0	−0.48	9.47

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Series 672 N G C 3201 10 14 −46.0

Scale M B 52381 P. C alt corr. +.01

	1st	2nd	2nd	Cu	magn.	2nd	Cu	magn
a	3.2 3.0			~~4.12~~	7.32	8.0	−1.20	6.80
b	4.0 3.8	H.00	4.0	3.97	7.97	9.2	−1.52	7.68
c			4.9	3.81	8.71	9.8	−1.64	8.16
d			5.0	3.80	8.80			
e			5.8	3.66	9.46			
f			6.0	3.63	9.63			
g			6.0	3.63	9.63			
h			6.5	3.55	10.05			
k			7.6	3.43	11.03			
l			7.8	3.40	11.20			
m			8.0	3.38	11.38			
n			8.0	3.38	11.38			
o			8.8	3.30	12.10			
p			9.1	3.27	12.37			
q			9.4	3.27	12.67			
r			10.0	3.24	13.24			

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	g ½ md		h 2 md		
a	6.5	6.6	6.7	+0.12	6.72
b	7.7	7.7	7.7	-0.04	7.66
c	8.2	8.2	8.2	-0.10	8.10
d	8.6	8.7	8.8	-0.22	8.48
e	9.0	9.2	9.4	-0.30	8.90
f	9.8	9.8	9.8	-0.44	9.36
g	10.0	10.0	10.0	-0.49	9.51

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Series 672 R Z Carinae 10 33 −70.3

Scale M B 52382 P. C alt con −21

	1st	2nd	2nd	Cu	magn.	2nd		Cu	
a	4.4 4.2	4.5	4.6	3.87	8.37	~~8.0~~	9.2	−1.52	7.68
a'	5.0 4.8	5.0	5.0	3.86	8.80	~~8.9~~	10.0	−1.67	8.33
b			5.5	3.70	9.20	~~9.1~~			
c			5.7	3.67	9.37	~~9.0~~			
c'			6.0	3.63	9.63				
d			6.8	3.51	10.31				
d'			8.0	3.38	11.38				
e			7.1	3.48	10.58				
f			7.8	3.40	11.20				
g			9.0	3.28	12.28				
m			9.2	3.27	12.47				
m'			9.8	3.24	13.04				

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	g_{2nd}		h_{2nd}	Cu	
a	8.0	7.90^{1}_{1}	7.8	-0.06	7.84
a'	8.9	8.80^{1}_{1}	8.7	-0.23	8.57
b	9.1	9.10^{0}_{0}	9.1	-0.29	8.81
c	9.0	9.10^{1}_{1}	9.2	-0.29	8.81
c'	10.0	9.95^{1}_{0}	9.9	-0.47	9.48

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Series 672 RS Hydrae 10 47 -28.2

B 52383 P.C. alt cor +.06

P. 2nd

Scale M	1st		2nd	2nd cm	2nd magn
a	5.0 4.8	5.0 0 0	5.0	3.80	8.80
a'			5.2	3.76	8.96
b			6.0	3.62	9.62
c			6.0	3.62	9.62
d			6.5	3.55	9.05
e			7.5	3.44	10.94
f'			8.0	3.39	11.39
g			8.7	3.32	12.02
g'			8.7	3.32	12.02
h			8.6	3.32	11.92
K			9.2	3.27	12.47
l			9.9	3.24	13.14
var.			8.0	3.24	11.24

none

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	g 2 mk	h 2 mk	cu		
a	8.9	8.90	8.9	-0.25	8.65
a'	9.2	9.20	9.2	-0.32	8.88
b	—		—		
c	10.0	10.00	10.0	-0.49	9.51
d					
e					
f'					

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February 20, 1919

Sheet no. 190

Series 672 G6 11 01 +14.9

Scale M B52384

	1st	2nd	2nd Diff	P. C 2nd	
1	2.7 2.5		4.06	8.0	-1.24
2	3.0 2.8		3.88	8.0	-1.12
3	3.2 3.0		4.31	9.0	-1.49
4	3.2 3.0		4.36	9.0	-1.44
5		4.0	3.77	9.6	-1.83
6		4.2	4.01	9.8	-1.59
9		5.0	3.59	10.0	-1.41
10		5 6.0	3.90		
12		5.0	4.34		
13		5.9	3.79		
14		6.1	3.96		
16		7.0	3.52		
17		7.0	3.78		
19		7.2	3.73		
21		7.7	3.56		
22		8.0	3.54		
23		8.5	3.33		
24		8.9	3.26		
25		9.0	3.33		
26		9.6	3.08		
27		9.8	3.32		
28		10.0	3.28		
10a		5 6.1	3.96		
14a		7.0			

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	g 2nd		h 2nd	
1	6.0	6.25 3	6.5	+0.58 1
2	7.0	6.90 1	6.8	-0.02
3	7.8	7.70 1	7.6	-0.19
4	7.6	7.70 1	7.8	-0.14
5	8.7	8.60 1	8.5	-0.83
6	8.2	8.35 2	8.5	-0.14
9	8.7	8.70 0	8.7	-0.11
10	9.2	9.70 0	9.2	-0.30
10a	9.8	9.75 0	9.7	-0.69
12	9.8	9.80 0	9.8	-0.46

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1919phae.proj.1083M

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Series 672 175 K 11 38 -45.2

Scale M B52385 P C alt. cor +.01

	1st	2nd	2nd cu	2nd magn.	2nd cu
175K = 1	~~4.0~~ ~~3.8~~ 4.0 ~~4.0~~ ~~3.8~~		3.97	7.97	9.0 - 1.48 7.52
2	~~5.2~~ 5.0	5.1 ±	5.0	3.77	8.87
3			6.5	3.55	10.05
4			7.~~5~~	3.50	10.50
5			7.0	3.50	10.50
6			~~8.0~~ 7.5	3.44	10.94
7			7.8	3.40	11.20
8			8.0	3.38	11.38
9			8.9	3.30	12.20
10			8.8	3.30	12.10
11			9.0	3.28	12.28
12			9.3	3.27	12.57
13			9.2	3.27	12.47

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1919phae.proj.1655m

Cfued

	g 2 mel		b 2 mel		
1	7.8	7.80	7.8	-0.04	7.76
2	8.9	8.95	9.0	-0.27	8.68
3					
4					
5					
6					

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1919phae.proj.1033M

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Scale M · Series 67 a 72 12 01 −75.1

B 52 386 P. C. ale corr. −31

	1st	2nd mea.	2nd mea. Cu	magn.	2nd mea.		
1	2.7 2.5		4.23	6.93	8.6	−1.37	7.23
2	3.2 3.0		4.12	7.32	9.2	−1.51	7.69
3	4.2 4.0		3.93	8.13	9.0	−1.49	7.51
4	4.0 3.8		3.97	7.97	9.2	−1.51	7.69
5		5.0	380	8.80	10.0	−1.67	8.33
6		4.5	3.87	8.37	10.0	−1.67	8.33
7		4.0	3.97	7.97	9.8	−1.64	8.16
8		4.8	3.83	8.63			
9		5.8	3.66	9.46			
10		5.5	3.70	9.20			
11		6.0	3.63	9.60			
12		6.0	3.63	9.63			
13		6.0	3.63	9.63			
14		6.8	3.52	10.32			
15		6.9	3.50	10.40			
16		6.8	3.51	10.31			
17		7.0	3.49	10.49			
18		7.2	3.47	10.67			
19		8.0	3.38	11.38			
20		8.2	3.36	11.56			
21		8.8	3.30	12.10			
22		8.8	3.30	12.10			
23		8.6	3.32	11.92			
24		8.8	3.30	12.10			
25		9.0	3.28	12.28			
26		9.0	3.28	12.28			
27		9.2	3.27	12.47			

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	g 2nd		h 2nd	Cu.	magn
1	7.0	7.10 1	7.2	+0.05	7.15
2	7.7	7.75 0	7.8	−0.04	7.71
3	8.0	7.90 1	7.8	−0.06	7.84
4	8.0	7.90 1	7.8	−0.05	7.85
5	8.6	8.45 2	8.3	−0.16	8.29
6	8.6	8.40 2	8.2	−0.15	8.25
7	8.0	8.00 0	8.0	−0.07	7.93
8	8.6	8.30 3	8.0	−0.13	8.17
9	8.8	8.60 2	8.4	−0.19	8.41
10	8.8	8.80 0	8.8	−0.23	8.57
11	9.2	9.40 2	9.6	−0.36	9.04
12	9.8	9.85 0	9.9	−0.45	9.40
13	9.8	9.85 0	9.9	−0.45	9.40
14	10.0	10.00 0	10.0	−0.49	9.51

	2nd	Cu	magn.
28	9.7	3.25	12.95
29	9.8	3.24	13.04
30	9.8	3.24	13.04
31	9.9	3.24	13.14

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Series 672 South Pole 12 01 -90.0

Scale M B52387

P C alt corr -92

	1st	2nd	Cu magn.		2nd	Cu magn
a	2.2 2.0		.	.	7.8	-1.14 6.66
b	3.2 3.0		4.12	7.32	8.0	-1.20 6.80
c	3.2 3.0		4.12	7.32	8.7	-1.40 7.30
d	3.7 3.5		4.03	7.73	9.2	-1.51 7.69
e	3.8 3.6		4.00	7.80	9.0	-1.48 7.52
f	4.0 3.8		3.97	7.97	9.8	-1.64 8.16
g		4.0	3.97	7.97		
h		4.8	3.83	8.63		
K		6.0	3.63	9.63		
l		6.0	3.63	9.63		
m		7.0	3.50	10.50		
n		7.0	3.50	10.50		
o		7.0	3.50	10.50		
p		7.5	3.44	10.94		
q		8.0	3.38	11.38		
r		7.9	3.40	11.30		
s		8.2	3.36	11.56		
t		8.6	3.32	11.92		
u		9.0	3.28	12.28		
w		9.2	3.27	12.47		
x		10.0	3.24	13.24		

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	g 2 mol	h 2 mol	Cu	
a	6.5	6.35 (1/2) 6.2	+0.16	6.51
b	6.8	6.80 (0) 6.8	+0.10	6.90
c	7.2	7.35 (1/2) 7.5	+0.02	7.37
d	7.8	7.80 (0) 7.8	−0.04	7.76
e	8.0	7.90 (1/2) 7.8	−0.06	7.84
f	8.5	8.60 (1/2) 8.7	−0.19	8.41
g	8.8	8.70 (1/2) 8.6	−0.21	8.49
h	9.2	9.25 (0) 9.3	−0.32	8.93
K	9.8	9.80 (0) 9.8	−0.44	9.36
l	10.0	—	−0.49	9.51

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February 20, 1919

Series 672 SW Centauri 12 13 -49.2

B 52388 P C alt con .00

Scale M

	1st	2nd	2nd		2nd
		6.80 0		cu	magn.
var.	6.8	6.8		3.52	10.32
a	6.0			3.63	9.63
b	6.5			3.56	10.06
c	6.9			3.50	10.40
d	7.0			3.50	10.50
e	7.0			3.50	10.50
f	7.7			3.41	11.11
g	7.8			3.40	11.20
h	8.0			3.39	11.39
K	8.5			3.33	11.83
l	9.0			3.28	12.28
m	9.8			3.24	13.04
n	—				
o	—				
p	10.0			3.24	13.24

. . none

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	$\frac{g}{2\text{ nd}}$		$\frac{h}{2\text{ nd}}$		
var	10.0	10.00_{0}^{0}	10.0	$-0.\overset{48}{\cancel{57}}$	9.52
a	9.5	9.50_{0}^{0}	9.5	−0.39	9.11
b	10.0	10.00_{0}^{0}	10.0	−0.48	9.52
c					
d					
e					
f					

10 10

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February 21, 1919

7 50 Series 365 Pleiades 3 - 43 +24.0

Scale M. B48930

	1st	2nd	2nd	P.	C	2nd	dt corr. -.06
1			Cu.			4.0 · Cu	
2						4.8 ·	
3						4.9 ·	
4	B		·			5.0 ·	
5	B		·			5.0 ·	
6	2.2 2.0		·			5.0 ·	
7	3.1 2.9		·			6.0 ·	
8	3.0 2.8		·			6.8 ·	
9	2 2.7 3.5		·			6.9 ·	
10	3.2 3.0		·			7.7 ·	
11	3.9 3.7		·			9.0 -1.77	7.23
12	3.8 3.6		·			9.2 -1.80	7.40
13	4.0 3.8		4.04	8.04		8.8 -1.72	7.08
14		4.0	4.04	8.04		9.0 -1.77	7.23
15	3.9 3.7		·	·		8.9 -1.75	7.15
16		4.0	4.04	8.04		9.2 -1.80	7.40
17		4.5	3.99	8.49		9.7 -1.90	7.80
18		5.0	3.92	8.92			
19		5.0	3.92	8.92			
20		5.0	3.92	8.92			
21	5.0 4.8	5.0	3.92	8.92			
22		5.8	3.77	9.57			
23		5.8	3.77	9.57			
24		6.0	3.74	9.74			
25		6.3	3.66	9.96			
26		5.7	3.79	9.49			

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Cfuid

				g 2 mk	h 2 mk		
			1	4.0	4.00 0 0	4.0	.
			2	4.0	4.00 0 0	4.0	.
			3	4.0	4.00 0 0	4.0	.
			4	4.2	4.10 1	4.0	.
			5	4.5	4.50 0	4.5	.
			6	4.2	4.20 0	4.2	.
			7	5.0	5.00 0	5.0	.
			8	5.2	5.20 0	5.2	.
			9	5.5	5.50 0	5.5	.
			10	6.0	6.00 0	6.0	.
			11	7.0	7.00 0	7.0	-0.35	3.65
			12	7.8	6.85 1	6.9	-0.34	6.51
			13	7.5	7.35 2	7.2	-0.40	6.95
			14	7.7	7.60 1	7.5	-0.44	7.16
	2 mk		15	7.6	7.65 0	7.7	-0.45	7.20
27	6.8	3.56 10.36	16	7.8	7.80 0	7.8	-0.47	7.33
28	7.7	3.30 11.00	17	8.2	8.20 0	8.2	-0.52	7.68
29	7.8	3.27 11.07	18	8.9	8.75 2	8.6	-0.63	~~8.6~~ 8.12
29a	8.0	3.22 11.22	19	9.0	9.00 0	9.0	-0.68	8.32
30	8.2	3.16 11.36	20	9.1	8.95 2	8.8	-0.68	8.27
31	8.9	2.97 11.87	21	9.0	8.90 1	8.8	-0.66	8.24
32	9.8	2.77 12.57	22	9.5	9.45 0	9.4	-0.80	8.65
32a	9.8	2.77 12.57	23	9.6	9.35 2	9.1	-0.78	8.57
			24	9.9	9.80 1	9.8	-0.92	8.88
			25	10.0	9.90 1	9.8	-0.95	8.95
			26	9.1	9.20 1	9.3	-0.74	8.46

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Scale VI Series 365 R Fornacis 2 25 -26.5

B 48926

	1st	2nd	2nd cu	magn.
a	3.6 3.8 3.9	4.0	.	
b		5.0	3.92	8.92
c		5.8	3.77	9.57
d		7.0	3.56	10.56
e		7.5	3.36	10.86
f		7.6	3.33	10.93
g		7.7	3.30	11.00
g'		8.0	3.22	11.22
h		8.8	3.00	11.80
K		8.7	3.02	11.72
K'		9.7	2.78	12.48
l		10.0	2.70	12.70

P. C. alt con. +.06

2nd	cu.	magn.
9.8	-1.91	7.89
-		

Seq. not in center of plate.

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	g 2nd		h 2nd		
a	8.3	8.15_{1}^{2}	8.0	−0.52	7.63
b	8.8	8.8_{0}^{0}	8.8	−0.64	8.16
c	10.0	10.0_{0}^{0}	10.0	−0.97	9.03

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February 21, 1919 Sheet no 191

Scale M. Series 365 C2 3.01 + 15.1

B48931

	1st	2nd	2nd		P 2nd	C
1	2.2 2.0			4.74	8.5	-1.56
2	3.7 3.5			3.84	9.0	-1.76
3	3.8 3.6	3.90 1	4.0	3.74	9.7	-2.06
4	4.2 4.0	4.10 1	4.5	4.10	10.0	-1.80
6			4.5	4.17		
7			5.0	4.06		
10			5.7	3.65		
11			5.8	3.94		
12			6.0	3.96		
14			7.2	3.59		
16			8.0	3.18		
17			8.1	3.33		
19			9.0	2.83		
21			9.5	2.84		
22			9.7	2.80		
23			10.0	2.79		
25			-			
12a			7.0	3.41		
9b			6.6	.		
9c			5.2	.		

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	g 2 mm		h 2 mm	
1	7.0	7.00	7.0	−0.06
2	7.7	7.60	7.5	−0.36
3	8.0	8.00	8.0	−0.36
4	8.8	8.80	8.8	−0.60
6	9.9	9.85	9.8	−1.18
7	9.8	9.85	9.9	−0.79
10	—			
11	—			
9b	—			
9c	9.5	9.50	9.5	

8 50

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1919phae.proj.1033M

Sheet no. 192

February 24, 1919

Sirius 720 69 17 01 +15.0

Scale M B52945

P. C.

8 20	1st	2nd	2nd Diff.	
3	3.7 0 2.5		4.34	8.2 −1.16
4	3.2 3.0		4.62	9.0 −1.18
5	3.H 3.2		4.66	9.2 −1.14
6		4.0	4.47	9.8 −1.33
7		5.0	4.04	—
8		5.2	4.33	~~9.8~~
9		6.0	4.09	
12		6.5	4.07	
14		6.9	3.89	
15		7.5	3.63	
16		8.0	3.60	
17		8.0	3.83	
18		8.8	3.61	
20		9.0	376	
21		9.3	376	
22		9.8	3.60	
23		—		
24				
25				
3a	3.2 3.0		4.15	8.8 −1.45
14a		7.8	.	
14b		8.8	.	
14c		7.8	.	

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	g 1st		h 2nd	
3	6.8	6.75_{0}^{1}	6.7	+0.29
4	7.5	7.65_{1}^{2}	7.8	+0.17
5	7.8	7.85_{0}^{1}	7.9	+0.21
6	8.2	8.10_{1}^{1}	8.0	+0.37
7	9.0	9.10_{1}^{1}	9.2	−0.06
8	9.7	9.75_{1}^{0}	9.8	−0.22
9				
12				
14				
15				
16				
32	6.8	6.90_{1}^{1}	7.0	+0.45

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February 24, 1919

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Series 7 20 157 K 17 26 -30.2

Scale VI B 52948 P. C. alt corr +.06

2nd 2nd

	1st			Cu		2nd
157 K = 1	4.0 3.8	4.0 4.00	4.0	4.27	8.27	8.8 -1.17 7.63
2			5.7	3.92	9.62	
3			5.8	3.90	9.70	
4			6.2	3.80	10.00	
5			7.0	3.63	10.63	
6			7.6	3.53	11.13	
7			8.0	3.51	11.51	
8			8.4	3.48	11.88	
9			8.8	3.49	12.29	
10			8.8	3.49	12.29	
11			9.1	3.50	12.60	
12			9.6	3.52	13.12	
13			—			

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	g 2nd		h 2nd	a	
1	7.7	7.65 (1) 0	7.6	+0.19	7.84
2	9.2	9.30 (1)	9.4	−0.07	9.23
3	9.8	9.80 (0) 0	9.8	−0.14	9.66
4	9.9	9.85 (1) 0	9.8	−0.15	9.70
5					

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Series 720 R W Arae 17 28 -57.1

Scale M B 52949 P. C alt corr -.05

	1st	2nd	2nd cu	Magn	2nd	cu.	Magn
var.		4.8	4.09	8.89	—		
a	3.2 3.0	3	4.43	7.63	7 8.2	.	.
b	3.4 3.2		4.38	7.78	7.6	-1.02	6.58
c	4.0 3.8		4.27	8.27	8.4	-1.13	7.27
d	4.0 3.8		4.27	8.27	9.0	-1.17	7.83
e	4.8 4.6		4.09	8.89	9.7	-1.33	8.37
f		5.8	3.90	9.70			
g		6.0	3.85	9.85			
h		6 6.2	3.80	10.00			
K		6.8	3.72	10.52			
l		7.0	3.63	10.63			
m		7.2	3.60	10.80			
n		7.6	3.53	11.13			
o		7.8	3.52	11.32			
p		8.2	3.50	11.70			
q		8.8	3.49	12.29			
r		9.2	3.51	12.71			
s		9.6	3.52	13.12			
t		9.8 ~~8.2~~	3.53	13.33			
u		—					

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	g 2nd	h 2nd		cu
var.	8.6	8.5^{0}_{1}	8.4	+0.05	8.55
a	6.0	6.0^{0}_{0}	6.0	~~0.0~~	6.00
b	6.6	6.4^{0}_{2}	6.2	+0.37 ε	6.77 e
c	6.8	6.8^{0}_{0}	6.8	+0.32	7.12
d	7.5	7.6^{5}_{1}	7.8	+0.18	7.83
e	8.0	8.0^{0}_{0}	8.0	+0.13	8.13
f	8.8	8.8^{0}_{0}	8.8	0.00	8.80
g	9.1	9.1^{5}_{1}	9.2	-0.05	9.10
h	9.8	9.6^{5}_{2}	9.5	-0.22	9.43

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February 24, 1919

Series 720 C 9 17 01 +15.0

Scale M B52950 P. C.

	1st	2nd	2nd. Diff	2nd	Diff
	3.0				
3	2.8		4.04	8.2	-1.16
	3.7				
3a	3.5		3.65	8.6	-1.25
	3.2				
4	3.0		4.62	9.0	-1.18
	4.0				
5	3.8		4.06	9.2	-1.14
6		5.0	3.47	dif.	
7		5.7	3.34		
8		5.8	3.73		
9		6.8	3.29		
12		7.0	3.57		
14		6 6.9 0 1 ~~7.8~~ 7.0	3.89		
14a		8.8 8.65 1 ~~9.3~~ 8.5	.		
14b		9.0	.		
14c		9.2	.		
15		8.0	3.13		
16		8.2	3.40		
17		8.6	3.23		
18		8.8	3.61		
20		9.3 9.3 0 0 9.3	3.46		
21		9.5	3.56		
22		9.8	3.60		
23					
16a		8.2	.		

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	$\frac{g}{2\text{ nd}}$	$\frac{l_2}{2\text{ nd}}$	
3	7.0	$6.9^{0}_{1} = 6.8$	+0.14
3a	8.0	$7.8^{0}_{2} = 7.6$	−0.45
4	7.8	$7.8^{0}_{0} = 7.8$	+0.02
5	~~8.0~~	$7.9^{0}_{1} = 7.8$	+0.16
6	~~9.2~~ 8.2	$8.1^{5}_{0} = 8.1$	+0.32
7	9.0	$9.1^{0}_{1} 9.2$	−0.06
8	9.6	$9.7^{0}_{1} 9.8$	−0.17
9	10.0	$10.0^{0}_{0} 10.0$	+~~0.66~~ .09

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Series 720 Pole 17 - 22 - 90.0

Scale IV B52952 P.C alt con -92

	1st	2nd	2nd		2nd		
a	2.9 2.7			4.48	7.38	7.5	
b	3.2 3.0			4.43	7.63	8.2 -1.10	7.10
c	3.2 3.0	320°	3.2	4.43	7.63	8.7 -1.16	7.54
d			4.0	4.27	8.27	9.2 -1.25	7.95
e			4.2	4.23	8.43	9.3 -1.27	8.03
f			4.8	4.10	8.90	9.5 -1.30	8.20
g			4.8	4.10	8.90	9.8 -1.34	8.46
h			5.0	4.05	9.05		
K			6.0	3.85	9.85		
l			6.0	3.85	9.85		
m			6.8	3.67	10.47		
n			8.2	3.50	11.70		
o			7.3	3.57	10.87		
p			7.5	3.54	11.04		
q			7.6	3.53	11.13		
r			8.8°	3.51	11.51		
s			8.0	3.51	11.51		
t			8.2	3.50	11.70		
v			—				
w			8.8	3.49	12.29		
x			9.6	3.52	13.12		

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	g 2 mel	h 2 mel		
a	6.0	5.9^{5}_{0} = 5.9	.	.
b	6.0	6.1^{5}_{2} 6.3	.	.
c	7.5	7.3^{5}_{1} = 7.2	+0.23	7.58
d	7.8	7.7^{5}_{0} = 7.7	+0.17	7.92
e	7.5	7.6^{5}_{1} = 7.8	+0.18	7.83
f	8.5	8.4^{5}_{1} 8.4	+0.06	8.51
g	8.7	8.6^{0}_{1} = 8.5	+0.03	8.63
h	8.8	8.8^{0}_{0} 8.8	0.00	8.80
K	9.8	9.7^{0}_{1} = 9.6	-0.13	9.57
l	10.0	10.0^{0}_{0} 10.0	-0.17	9.83

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Series 720 40 Ks 17 - 50 - 29.0

Scale M B52953 P. C alt corr +.6

	1st	2nd	2nd cal		2nd	Cu	Magn
40 Ks = 1	4.9 4.7	4.95	5.0	4.06	9.01	9.8	-3.34	8.46
2			5.5	3.96	9.46			
3			6.7	3.70	10.40			
4			6.8	3.67	10.47			
5			6.9	3.65	10.55			
6			8.0	3.51	11.51			
7			7.8	3.52	11.32			
8			8.2	3.50	11.70			
9			8.2	3.50	11.70			
10			8.8	3.49	12.29			
11			9.8	3.53	13.33			
12			–					

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1919phot.proj.1003m

Cepheid

	$\frac{g}{2^{nd}}$		$\frac{L}{2^{nd}}$	Cu.	Magn
1	9.0	$9.\frac{10}{1}$	9.2	-0.05	9.05
2	9.8	$9.\frac{75}{0}$	9.7	-0.13	9.62
3					
4					
5					
6					
7					
8					
9					

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February 24, 1919

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Series 720 Nova Sag. 2 17 54 -27.6

Scale VI B52954 P.C dt. corr + .07

nova	n - S.	1st	2nd	2nd Cu		2nd —	Cu	
~~a~~	3.8	4.0 4.00 00	4.0	4.27	8.27	8.8	-1.18	7.62
b			4.8	4.10	8.90	9.8	-1.33	8.47
c			5.0	4.05	9.05			
d ~~d'~~			5.8	3.90	9.70			
e			5.5	3.95	9.45			
f			6.8	3.67	10.47			
g			6.8	3.67	10.47			
h			6.9 5	3.65	10.55			
K			7.5	3.54	11.04			
l			7.8	3.52	11.32			
m			7.9	3.52	11.42			
n			8.0	3.51	11.51			
q ~~r~~			8.5	3.49	11.99			
p			8.7	3.49	12.19			
o ~~q~~			8.7	3.49	12.19			
r			9.0	3.49	12.49			
s			9.2	3.51	12.71			
t			~~8.9~~ 10.0	3.53	13.53			
a ~~d~~			4.8	4.01	8.81	9.2	-1.25	7.95

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		g 2nd	h 2nd	cr.	
~~nova~~					
	~~a~~	7.2	7.2^{0}_{0}	7.2	+0.26 7.46
sup.	b	8.0	7.9^{0}_{1}	7.8	+0.15 8.05
	c	8.5	8.1^{5}_{3}	7.8	+0.11 8.26
d	~~d~~ d'	9.5		~~9.2~~ sup.	−0.10 9.40
	e	9.2	9.2^{0}_{0}	9.2	−0.06 9.14
	f	10.0	10.0^{0}_{0}	10.0	−0.17 9.83
a	~~a~~ a''	7.5	7.6^{5}_{1}	7.8	+0.19 7.84

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February 24, 1919

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Scale M. Series 720 Carte 18 01 − 9.5

B52955

P.C. alt cor +07

	1st	2nd	2nd			2nd		
	3.9	3.95		cu	magn		cu	magn
1	3.7	1 0	4.0	4.28	8.23	9.2	−1.22	7.98
2			4.2	4.22	8.42	9.8	−1.33	8.47
3			4.5	4.16	8.66	10.0	−1.37	8.63
4			4.8	4.10	8.90			
5			5.8	3.90	9.70			
6			6.0	3.85	9.85			
7			5.8	3.90	9.70			
8			7.2	3.60	10.80			
9			7.7	3.53	11.23			
10			8.2	3.50	11.70			
11			8.2	3.50	11.70			
12			8.3	3.49	11.79			
13			8.6	3.49	12.09			
14			8.6	3.49	12.09			
15			9.2	3.51	12.71			
16			9.2	3.51	12.71			
17			9.7	3.52	13.22			
18			9.6	3.52	13.12			
19			10.0	3.53	13.53			

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	g 2nd		h 2nd	Cu	
1	7.8	7.7	7.6	+0.18	7.88
2	8.2	8.1	8.0	+0.12	8.22
3	8.6	8.6	8.6	+0.03	8.63
4	8.8	8.8	8.8	0.00	8.80
5	10.0	10.0	10.0	−0.16	9.84
6	–		–	.	.
7	9.9	9.9	10.0	−0.16	9.79

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1919phae.proj.1033M

Sheet no. 19

February 24, 1909

Series 720 b 10 19 01 +15.0

Scale IV. B 52956

	1st	2nd	2nd		P. C. 2nd
1	2.2 2.0			4.64	7 8 -0.96
2	2.7 2.5			4.71	8.8 -1.39
3	2.9 2.7			4.44	8.7 -1.36
4	3.0 2.8			4.84	8.8 -0.96
6	4.2 4.0	4.2 0 0	4.2	4.30	10.0 -1.50
7	3.8 3.6	395 = 1	4.1	4.34	9.8 -1.51
8			4.8	4.30	
9			5.4	4.00	
10			5.8	3.89	
11			6.8 7.0 m	7.2	3.04
12			7.2 7.0 m	6.8	3.49
13			7.0		3.73
15			7.7		3.40
16			7.9		3.62
17			8.7		3.20
18			sup.		9
19			9.5		3.24
20			9.9		2.97

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	g 2nds	h 2nds	
1	6.8	$6.6\frac{5}{2} = 6.5$	+0.19
2	7.2	$7.0\frac{5}{2} = 6.9$	+0.36
3	7.2	$7.0\frac{0}{2} = 6.8$	+0.34
4	7.2	$7.4\frac{0}{2} = 7.6$	+0.44
6	8.5	$8.5\frac{0}{0} 8.5$	0.00
7	8.2	$8.7\frac{0}{0} 8.2$	+0.09
8	9.0	$8.9\frac{0}{1} = 8.8$	+0.20
9	9.6	$9.7\frac{0}{1} 9.8$	−0.30
10	9.8	$9.8\frac{5}{0} 9.9$	−0.16
11	10.0	$10.0\frac{0}{0} 10.0$	+0.04

10 45

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February 25, 1919

Series 589 b7 13 01 +14.9

10 10 B 51410

Scale N	A[F]	B[d]	C
1	5.0	5 / 6.0	
2		6.8	
3		7.5 / 8.0	
4		7.8 / 8.0	
5		7.2	
6			9.0 / 8.0
7		a	9.2 / 8.6
8			10.0
9			–
10			–
11			9.7

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February 25, 1919

Series 589 E6 14 41 −45.1

Scale IV B51414

	A	B	C
1		5.7	
2		6.2	
3		5.8	
4		6.7	
5		5.0	
6		6.2	
7		8.0	
8		8.3	8.2
9		8.0	8.1
10		8.0	8.1
11			8.6
12			9.7
13			9.3
14			9.8
15			9.8
16			9.8
17			10.0
18			—
19			10.0:

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February 25, 1919

Series 589 South Pole 14 41 – 90

Scale N B 51415

	A	B	C
a	3.2	~~5.5~~ 4.0	
b	5.0	5.5	
c		6.0	
d		~~7.2~~ 6.8	6.2
e		7.2	7.0
f		8.2	
g		7.8	
h		6.8	6.2
k		~~9.8~~	9.8
l		~~10.0~~	10.0
m		~~10.0~~	10.0

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February ~~19~~ 25, 1919

Series 589 6 8 15 01 +14.9

Scale N Bt 51415

	A	B	C
1		5 2.8	6.0
3		8.8	8.8
4		6.0	6.0
8		8.6	8.2
9			9.4
11			—
12			10.0
14			9.2
15			—
16			—
18			—
6a		0	9.2

11-30

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1919phae.proj.1033M

Fellow

February 26, 1919

Series 686 C6 11 01 +14.9

Scale N B 52544

8 20	A	B	C	g C	h C
1	3.0			8.8	9.0
2	3.0			9.3	9.5
3		3.8		9.7	9.7
4		3.6		9.5	9.5
5		3.8		9.8	9.9
6		4.8		—	
9		3.2		9.8	10.0
10		3.8		9.8	9.8
12		4.8			
13		6.0			
14		7.2			
		Sc. C =			
16		9.0			
17		9.2			
19		8.8			
21		9.8			
10a		6.0			
14a		8.0			

No Prin. Comp.

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February 26, 1919

Series 686 R S Hydrae 10 47 -28.2

Scale N B52545

	A	B	C	no Bris. Comp.	no Diff.
a		4.8	4.5		
a'		6.0	5.8		
b		7.1	6.6		
c		7.5			
d			8.0		
e			8.8		
f		~~9.8~~	9.8		
f'			8.9		

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February 26, 1919

Series 686 Pole 11 00 − 91.0

Scale IV B52548

	A	B	C	q C	h C
a	1.6			7.0	6.9
b	2.0 2.9			8.8	8.8
c	3.5	3.2		9.0	9.0
d		4.6		–	–
e		3.8		10.0	10.0
f		5.2		–	–
g		5.0		–	–
h		3.2		9.0	9.0
K			6.8		
l			7.8		
m		8.0			
n		7.8			
o			8.0		
p			9.6		
q			9.6		
r			–		
s			–		
t		~~9.8~~	9.8		

Sc

No R. C.

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1919phae..proj.1033M

Series 686 E 5 12 01 – 45.1

Scale N B 52551

	A	B	C	g C	h C
1	3.0			9.8	9.8
2	2.8			8.2	8.7
3	4.8	5.2		–	–
4	2.0			8.5	8.8
5	5.0	5.2		–	–
6	4.0			10.0	9.9
7		5.2			
8		6.0 / 5.8			
9		6.2			
10		6.2			
11		7.5			
12			8.8		
13		5.9	5.8		
14			8.8		
15			9.8		
16		7.5	7.0 / ~~7.5~~		
17		7.8			

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1919phae.proj.1033M

February 26, 1919

Sirius 686 Coal Sack 12 51 -62.6

Scale N B52554 S

	A	B	C
1			7.0
2			9.5
3		~~9.5~~	9.5
4			8.8
5			8.7
6			10.0
7			–
8			–

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1919phae.proj.1033M

Series 686 C7 13 01 +14.9

Scale IV B52555

	A	B	C	g C	g C
1	~~2.5~~ 2.0			8.2	8.0
3	4.8	5.0		—	—
4	4.7	5.0			
8		7.8 ~~7.7~~	7.7		
9		8.5	8.2		
11		7.2	6.8		
12			8.7		
14			9.7		
15			10.0		
16			9.8		
17			—		
18			10.0		

10 00

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1919phae.proj.1033M

Fellow

February 28, 1919

Series 682 C4 7 01 +14.9

Scale N B 52496

8 - 55

	A	B	C	g C	h C
1		3.0		9.5	9.2
2		3.8		9.7	9.7
3		3.5		9.5	9.2
4		3.0		9.2	9.2
5		6.2			
7		—	—		
8		—	~~9.8~~		
9		—	—		
11			9.0		
13		8.0			
14			9.8		
16			9.9		
17			10.0		
9a			7.2		
4a		4.0		10.0	10.0

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February 28, 1919

Series 6.82 C 6 11 01 +14.9

Scale IV B2250 2/2

	A	B	C	g C	h C
1		3.0		9.0	9.5
2	2.0			10.0	9.6
3		4.0		9.8	9.8
4		3.0		9.8	9.6
5		5.5		10.0	10.0
6		5.8			
9		4.9			
10		4.0		9.8	9.8
12		5.9			
13		6.5			
14			8.0		
16			9.0		
17			10.0		
19			9.5		
21			10.0		
10a		6.2			
14a			8.5		

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February 28, 1919

Series 682 E 4 9 20 -45.1

Scale N B52503

	A	B	C	g C	h C
1	1.5			6.8	6.5
2		4.0		9.5	9.8
3		4.8		–	–
4	2.5			8.2	8.2
5	3.0			8.5	8.6
6		6.0		–	–
7		5.0		10.0	10.0
8		5.8			
9		7.0			
10			7.5		
11			7.8		
12			7.2		
13		4.7			
14		6 7.0			
15			8.2		
16			9.0		
17			8.0		
18			9.2		
19			7.0		
20			9 8		
21			9.2		

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1919phae.proj.1033M

February 28, 1919

Series 682 South Pole q 40 - 90.0

Scale N B52505

	A	B	C	q C	h C
a	1.0			7.5	8.0
b		3.0		9.8	9.5
c		3.0		10.0	10.0
d		6.0			
e		5.0			
f		6.0			
g		6.8		~~9.8~~	
h	4.5				
K		7	7.8		
l			8.8		
m			9.5		
n			8.5		
o			9.8		
p			9.8		

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February 28, 1919

Series 682 N.G.C. 3201 10 14 -46.0

Scale N B52506

10 55

	A	B	C	g/c	h/c
a	2.0 2.0	5		8.5	8.6
b		5.0	4.8	-	-
c		5 2.8	5.0		
d		6.0	~~6.0~~		
e		~~7.9~~	7.7		
f			7.8		
g		~~8.7~~	8.7		
h			8.7		
K			9.9		
l					
m					
n					
o					
p					
q					

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March 1, 1919

Sheet no. 192

Series 380 C_2 3 01 +15.1

Scale M 8 15

B 49086

	1st		2nd	2nd Diff.	P C. 2nd Diff.
1	4.2 4.0	4.35 (3) 1	4.5	2.59	8.2 -1.26
2	4.7 4.5	4.85 (1) 2	5.0	2.39	9.0 -1.76
3	4.8 4.6	4.90 (1) 1	5.0	2.74	9.5 -1.86
4			5.5	2.70	-
6			6.0	2.67	
7			6.5	2.56	
10			6.8	2.55	
~~11~~			6.8	2.94	
12			7.0	2.96	
14			7.8	2.99	
16			8.2	2.98	
17			8.5	2.93	
19			8.8	3.03	
21			9.5 8.8	2.84	
22			9.8	2.70	
23			10.0	2.79	
25			-		
12a			7.7	2.71	
9b			7.2	.	
9a			7.2	.	
9c			6.2	-	

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	2nd		2nd	ex Diff.
1	7.2	7.25	7.3	-0.31
2	7.8	7.80	7.8	-0.56
3	8.2	8.20	8.2	-0.56
4	8.6	8.70	8.8	-0.50
6	9.3	9.35	9.4	-0.68
7	9.6	9.60	9.6	-0.54
9c	9.2	9.25	9.3	-
10	10.0	10.00	10.0	-0.65

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March 1, 1919

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Series 380 D2 3.01 – 14.9

Scale M B 49087 P.C all cor +.06

	1st		2nd	2nd cu		2nd	cu	magn
1	4.2 4.0	4.20 0	4.2	2.33 2.50	6.53	9.4	-1.94	7.46
2	4.2 4.0	4.35 1 2	4.5	2.35	6.70	9.8	-2.05	7.75
3	4.7 4.5	4.75 0 1	4.8	2.40	7.15	9.6	-2.19	7.61
4	5.4 5.2	5.20 2	5.0	2.47	7.67	10.0	-2.10	7.90
5		4.90 1 2	4.8 5.0	2.40	7.30	10.0	-2.10	7.90
6			5.1	2.43	7.53	—		
7			6.0	2.60	8.60			
8			5.6	2.53	8.13			
9			5.9	2.58	8.48			
10			6.0	2.60	8.60			
11			6.7	2.75	9.45			
12			6.9	2.80	9.70			
13			7.0	2.82	9.82			
14			7.2	284	10.04			
15			7.5	2.90	10.40			
16			7.9	2.94	10.84			
17			8.1	2.95	11.05			
18			8.6	2.92	11.52			
19			8.7	2.90	11.60			
20			8.7	2.90	11.60			
21		9.20 0	9.2	9.2 2.76	11.96			
17a		8.20 0	8.2	8.2 2.95	11.15			
22			9.8	2.60	12.40			
23			9.9	2.57	12.47			
24			—					

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1919phae.proj.1033m

Cplud

	g 1 mk		h 2 mk	cu	magn
1	7.8	7.9^{0}_{1}	8.0	-0.50	7.40
2	8.5	8.5^{0}_{0}	8.5	-0.59	7.91
3	7.9	7.9^{5}_{1}	8.0	-0.51	7.44
4	8.8	8.7^{0}_{1}	8.6	-0.62	8.08
5	8.9	8.8^{5}_{1}	8.8	-0.64	8.21
6	9.3	9.2^{5}_{1}	9.2	-0.70	8.55
7	9.1	9.0^{5}_{1}	9.0	-0.67	8.38
8	9.2	9.1^{5}_{0}	9.1	-0.69	8.46
9	9.5	9.6^{0}_{1}	9.7	-0.75	8.85
10	10.0	10.0^{0}_{0}	10.0	-0.80	9.20
11	—		—		
12					

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March 1, 1919

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Scale M B 49088 P.C alt cm - 56

	1st	2nd	2nd	Magn	2nd		
1				.			
2				.		Cu.	Magn.
3				.	–		
4				.	–		
5		–		.	–		
6	–	–	Cu	.	6.7	.	.
7	–	–		.	7.0	.	.
8	–	–		.	7.5	.	.
9	3.8 3.6 4.4	3.9 0 1 4.4 5 0 1	4.0	.	8.5 0	.	.
10	4.2	sup.	4.5	2.36	6.81	8.4 .	.
11			4.8	2.40	7.20	8.6 -1.66	6.94
12			5.0	2.40	7.40	8.8 -1.77	7.03
13			5.0	2.40	7.40	9.0 -1.82	7.18
14			5.2	2.47	7.67	9.0 -1.82	7.18
15			5.3	2.49	7.79	9.0 -1.82	7.18
16			5.5	2.52	8.02	9.2 -1.87	7.33
17			5.5	2.52	8.02	10.0 -2.10	7.90
18			5.7	2.55	8.25	–	
19			5.8	2.56	8.36		
20			5.8	2.56	8.36		
21			5.8	2.56	8.36		
22			6.0	2.60	8.60		
23			6.2	2.65	8.85		
24			6.7	2.76	9.46		
25			7.0	2.81	9.81		
26			6.9	2.80	9.70		
27			7.4	2.87	10.27		
29a			8.5	2.94	11.44		

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	2nd g	2nd h	Cu.	magn.
6				
7				
8				
9	6.7	6.6^0_1 ~ 6.5	.	.
10	7.0	6.9^5_1 ○ 6.9	-0.40	6.55
diff. surface 11	7.5	7.5^0_0 ○ 7.5	-0.46	7.04
12	7.3	7.4^0_1 ~ 7.5	-0.44	6.96
13	7.8	7.7^0_1 ~ 7.6	-0.48	7.22
14	8.0	7.9^0_1 ~ 7.8	-0.50	7.40
15	8.0	7.9^0_1 ~ 7.8	-0.50	7.40
16	8.0	7.9^0_1 ~ 7.8	-0.50	7.40
17	8.6	8.6^0_0 ○ 8.6	-0.60	8.00
18	~~8.5~~ 9.2	9.1^0_1 ~ 9.0	-0.68	8.42
19	9.2	9.1^5_0 ~ 9.1	-0.69	8.46
20	9.1	9.1^5_1 ○ 9.2	-0.69	8.46
21	9.3	pulp.	-0.70	8.60
22	9.8	9.6^5_2 ~ 9.5	-0.76	8.89
23	9.6	9.7^0_1 ~ 9.8	-0.77	8.93
24	9.9	9.9^0_0 ○ 9.9	-0.80	9.10
25	—			.

	2nd g	2nd h	Cu	magn
28	7.8		2.94	10.74
29	8.0		2.95	10.95
30	8.5		2.93	11.43
31	9.0		2.81	11.81
32	9.6		2.66	12.66
33	10.0		2.53	12.53

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1919phae.proj.1033M

March 1, 1919 Sheet no. 192

Series 380 C3 3-01 +15.0

Scale M. B49092

	1st		2nd	2nd Diff.	R. C. 2nd
1	4.0 3.8	4.05 0 1	4.1	2.58	8.6 -1.97
2	4.7 4.5	4.6 0 1	4.5	2.34	8.9 -1.96
3	4.7 4.5	4.85 1 2	5.0	2.42	9.2 -1.98
4			5.1	2.35	9.5 -2.05
6			5.5	2.21	10.0 -2.29
7			5.8	2.25	
8			6.0	2.23	
10			6.5	2.19	
11			6.5	2.55	
13			6.7	2.73	
14			7.0	2.85	
15			7.2	2.94	
16			7.5	2.81	
19			7.9	2.78	
21			7.9	3.15	
22			8.3	2.90	
23			8.9	2.71	
24			9.7	2.12	
26			9.7	2.44	
26a			9.8	2.50	
9b			6.0	.	

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	g	h	Diff.
	June	Aug	
1	7.6	$7.\overset{2}{3}\overset{5}{2}$ = 7.0	-0.62
2	7.5	$7.\overset{3}{1}\overset{5}{2}$ = 7.2	-0.41
3	7.7	$7.\overset{6}{1}\overset{5}{0}$ 7.6	-0.43
4	8.2	$8.\overset{7}{0}\overset{0}{0}$ 8.2	-0.75
6	8.2	$8.\overset{3}{1}\overset{0}{1}$ 8.4	-0.59
7	8.6	$8.\overset{7}{1}\overset{0}{1}$ 8.8	-0.65
8	8.9	$9.\overset{0}{1}\overset{5}{2}$ 9.2	-0.82
10	9.8	$9.\overset{8}{0}\overset{0}{0}$ 9.8	-1.11
11	10.0	$10.\overset{0}{0}\overset{0}{0}$ 10.0	-0.95
13	-		
14	-		
9b	9.5	$9.\overset{5}{0}\overset{0}{0}$ 9.5	

9 30

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March 3, 1919

Sheet no. 193

Series 403 c2 3 0 1 + 5 1

Scale M. B49324

9 05	1st		2nd	2nd	Dif.	P.C. 2nd.	Dif.
1	4.1 3.9	4.005 1 0	4.0		2.89	9.2	- 2.26
2	4.4 4.2	4.45 0 1	4.5		2.79	9.5	- 2.26
Pic. img. 3	5.2 5.0	5.60 4	6.2	6.00 5.8	2.04	9.8	- 2.16
4			6.2		2.00	10.0	- 1.80
6			6.5		2.17		
7			7.0		2.06		
10			7.5		1.85		
11			7.8		1.94		
12			7.9		2.06		
14			8.5		2.29		
16			8.7		2.48		
17			8.9		2.53		
19			9.2		2.63		
21			9.9		2.44		
22			9.7		2.80		
23			9.9		2.89		
25			10.0		3.10		
12a			8.2		2.21		
9b			8.3		.		
9a			7.9		.		
9c			6.7		.		

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	g 2 mm		h 2 mm	Diff
1	8.3	8.30	8.3	-1.36
2	8.5	8.50	8.5	-1.26
3	8.8	8.80	8.8	-1.16
4	9.5	9.40	9.3	-1.20
6	~~+0.0~~ 9.7	9.65	9.6	-0.98
7	9.8	9.80	9.8	-0.74
10	—			
11				
9c	9.8	9.80	9.8	
9a	~~+0.0~~			
12	—			

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March 3, 1919

Sg I Cofwd B to 44.88 : : 9H
Sg II : :

Series 403 Large Mag. Cld. 5 06 -67.5

Scale M B49327

P. C. alt Cor -18

		1st		2nd	2nd Cu	magn.	2nd	Cu.	magn.
common to all sgs.	a	4.7 4.5	4.85 1 ~	5.0	2.36	7.21	8.6	.	
	f			6.2	2.13	8.33	—		
	e	6.2 6.0	6.10 1	6.0	2.13	8.23	9.8	-1.85	7.95
	g			6.5	2.15	8.65	—		
Sg. I	h'			6.8	2.18	8.98			
	K'			7.2	2.23	9.43			
	l			7.6	2.33	9.93			
	m			7.8	2.37	10.17			
	n			8.2	2.48	10.68			
	o			8.5	2.57	11.07			
	p			8.7	2.64	11.34			
	q			9.0	2.73	11.73			
	s			9.8	3.11	12.91			
Sg. II	h			7.0	2.20	9.20			
	K			7.2	2.23	9.43			
	l			7.7	2.34	10.04			
	m			8.0	2.42	10.42			
	n			8.2	2.48	10.68			
	o			8.5	2.56	11.06			
	p			8.7	2.63	11.33			
	q			9.0	2.74	11.74			
	s			9.3	2.87	12.17			
	t			9.6	3.00	12.60			

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		g		h		Magn.
common wedge	a	7.2	7.1	7.4	.	
	e	8.8	8.7	8.7	-0.88	7.87
	f	9.0	9.0	9.0	-0.82	8.18
	g	8.9	8.9	9.0	-0.83	8.12
Seq. I	h'	9.5	9.5	9.6	-0.68	8.87
	K'	10.0	9.9	9.9	-0.56	9.39
	l					.
Seq. II	h	10.0	10.0	10.0	-0.56	9.45

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21 K^S_8 Copied Bb 34:103 Enlarged see below Copied Bb 44:86, 87, 89

March 3, 1919

21 K^S_8

Series 403 Large Mag. Cld. 5 06 −69.0

Scale M. B49328 P. C. alt cor. −19

		1st	2nd	2nd cu	2nd magn.			
21 Ks =	1		7.6	2.33	9.93			
	2		7.8	2.36	10.16			
	3		8.3	2.50	10.80			
	4		8.5	2.57	11.07			
	5		8.7	2.63	11.33			
	6		8.8	2.67	11.47			
	7		9.0	2.73	11.73			
	8		9.5	2.96	12.46			
	9		9.8	3.11	11.91			
	10		9.8	3.11	12.91			
	11		10.0	3.26	13.26			

Copied Bb 34:112 " " 34:140

					cu		
plate common to all except	a		5.0	2.31	7.31	8.5	. .
	b		—			—	.
	c		5.2	2.23	7.43	9.5	−1.95 7.55
	d		5.7	2.14	7.84	9.7	−1.88 7.82
	e		6.2	2.13	8.33	9.8	−1.85 7.95
	f		6.5	2.15	8.65	9.9	−1.82 8.08
	g		6.7	2.18	8.88	10.0	−1.78 8.22

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	g 2 mol		h 2 mol	Cu	magn.
21Ks = 1	10.0	10.00	10.0	-0.53	9.45
2	—				
3					
4					

Copied B to 44: 112
" " 3H: 140

a	7.5	7.50	7.5	-1.16	6.3H
b	—		—		
c	8.6	8.55	8.5	-0.92	7.63
d	8.8	8.70	8.6	-0.89	7.81
e	8.8	8.75	8.7	-0.88	7.87
f	8.9	8.90	8.9	-0.85	8.05
g	9.3	9.25	9.2	-0.76	8.49

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March 3, 1919

Sgl Cephei B644: 88 : 86
88TV

Sirius 403 Large Mag. Cld. 5-06 -69.0

B 49 328 alt. com -19

Scale VI.		1st	2nd	2nd cm.	magn.	no p.c.
Seq. I	h'		6.8	2.18	8.98	
	K'		7.2	2.23	9.43	
	l		7.9	2.40	10.30	
	m		8.0	2.42	10.42	
	n		8.2	2.48	10.68	
	o		8.6	2.60	11.20	
	p		8.9	2.70	11.60	
	q		9.1	2.80	11.90	
	s		9.4	2.91	12.31	
Seq. IV	h4		6.8	2.18	8.98.	
	K4		7.0	2.20	9.20	
	l4		7.7	2.34	10.04	
	m		8.1	2.45	10.55	
	n		8.2	2.48	10.68	
	o		8.6	2.60	11.20	
	p		8.9	2.70	11.60	
	q		9.3	2.86	12.16	
	r		9.7	3.04	12.74	
	s		9.7	3.04	12.74	
	t		9.9	3.19	13.09	

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1919phae.proj.1033M

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		$\frac{g}{2^{nd}}$		$\frac{h}{2^{nd}}$	Cu.	magn
Seq. I	h'	9.6	9.65	9.7	-0.65	9.00
	K'	10.0	10.00	10.0	-0.56	9.45
	l	10.0	10.00	10.0	-0.55	9.45
Seq. IV	h^4	9.2	9.30	9.4	-0.75	8.55
	K^4	9.9	9.90	9.9	-0.57	9.33
	l^4	10.0	10.00	10.0	-0.55	9.45

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1919phae.proj.1033M

21 Ks copied Bk 34:103
Sq IV Reynolds " 44:86.
Bright stars copied 46:112

March 3, 1919

21 Ks

5 06 −70.5

Series 403

Large Mag. Cld. ~~49~~

Scale M. B49329

P.C.

alt corr −20

		1st	2nd	2nd	cu	magn.	2nd		
21 Ks =	1		7.5		2.30	9.80			
	2		8.0		2.42	10.42			
	3		8.2		2.48	10.68			
	4		8.2		2.48	10.68			
	5		8.6	dif.	2.60	11.20	q		
	6		8.7		2.64	11.34			
	7		8.8		2.67	11.47			
	8		9.0		2.74	11.74			
	9		8.8		2.67	11.47			
	10		9.8		3.12	12.92			
	11		10.0		3.25	13.25			
common to all seq.	a		5.0		2.31	7.31	8.5		
	c		5.7		2.14	7.84	9.5	−1.94	7.56
	d		6.0		2.12	8.12	9.8	−1.85	7.95
	e		6.7		2.18	8.88	9.8	−1.85	7.95
Seq. ~~IV~~	~~h~~		~~7.0~~		~~2.20~~	~~9.20~~			
	k		7.3		2.26	9.56			
	l		8.0		2.42	10.42			
	m		8.0		2.42	10.42			
	n		8.7		2.64	11.34			
	o		8.7		2.64	11.34			
	p		8.8		2.67	11.47			
	q		9.0		2.73	11.73			
	r		9.5		2.95	12.45			
	s		9.9		3.19	13.09			
	t		10.0		3.25	13.25			

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	$\frac{g}{2\,\text{meth}}$	$\frac{h\nu}{2\,\text{meth}}$	cu.	magn.
21 Ks = 1	10.0	9.95^{5}_{0} = 9.9	-0.56	9.39
a	7.5	$7.45^{5}_{1}{}^{0}$ 7.4	-1.16	6.29
b c	8.2	8.3^{0}_{1} 8.4	-0.99	7.31
d	8.5	8.6^{0}_{1} 8.7	-0.91	7.69
e	8.7	$8.65^{5}_{1}{}^{0}$ 8.6	-0.90	7.75
h 4	9.5	$9.55^{5}_{1}{}^{0}$ 9.6	-0.68	8.87
K 4	10.0	9.95^{5}_{0} = 9.9	-0.56	9.39

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March 3, 1919

Copied B 49.330 44.118

Series 403 T Columbae 5 16 -33.8

Scale M. B 49330 P. C alt corr. +.05

	1st	2nd	2nd cu.	2nd magn	2nd cu	2nd magn
a		5.0	2.32	7.32	9.4 -1.98	7.42
a'		5.0	2.32	7.32	9.2 -2.02	7.18
b		5.5	2.17	7.67	9.9 -1.82	8.08
c		6.0	2.13	8.13	-	.
d		6.6	2.17	8.77		
e		6.7	2.17	8.87		
f		7.2	2.23	9.43		
g		7.5	2.30	9.80		
h		8.0	2.37 .42	10.42		
K		8.6	2.60	11.20		
l		9.0	2.73	11.73		
m		9.4	2.91	12.31		
n		9.8	3.12	12.92		

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	$\frac{g}{2}$ mel		$\frac{h}{2}$ mel	cu.	magn
a	8.5	8.5^{5}_{0}	8.6	-0.92	7.63
a'	8.4	8.4^{5}_{0}	8.5	-0.96	7.49
b	8.8	8.7^{5}_{0}	8.7	-0.88	7.87
c	9.0	$9.^{10}_{1}$	9.2	-0.80	8.30
d	9.8	9.8^{0}_{0}	9.8	-0.60	9.20
e	10.0	10.0^{00}_{0}	10.0	-0.55	9.45
f	–		–		
g					

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March 3, 1919

Series 403 C3 5 01 +15.0

Scale M. B 49331

	1st	2nd	2nd Diff.	P.C. 2nd
1		4.0	2.63	8.5 -1.87
2		4.5	2.44	8.7 -1.76
3		5.1	2.12	9.2 -1.98
4		5.8	1.65	9.2 -1.75
6		5.8	1.91	9.5 -1.79
7		5.8	2.25	9.8 -1.75
8		5.8	2.43	10.0 -1.77
9b		5.9	.	9.8 .
10		6.5	2.19	-
11		6.8	2.25	
13		6.8	2.63	
14		7.2	2.65	
15		7.7	2.44	
16		7.8	2.51	
19		7.8	2.88	
21		8.1	2.95	
22		8.2	3.00	
23		8.6	3.01	
24		8.8	3.02	
26		9.1	3.04	
26a		9.2	3.10	
27		9.8	2.98	
28		9.8	3.41	
29		10.0	3.82	

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	g 2 mel		h 2 mel	Diff.
1	7.5	7.3^{5}_{1}	7.2	−0.72
2	7.8	7.7^{0}_{1}	7.6	−0.76
3	8.0	7.9^{0}_{1}	7.8	−0.68
4	8.5	8.4^{0}_{1}	8.3	−0.95
6	8.6	8.5^{0}_{1}	8.4	−0.79
7	8.5	8.5^{0}_{0}	8.5	−0.45
8	8.8	8.8^{0}_{0}	8.8	−0.57
9	9.2	9.1^{5}_{0}	9.1	~~−0.36~~
10	~~8.8~~ 9.0	9.0^{5}_{0}	9.1	−0.36
11	9.6	9.5^{5}_{0}	9.5	−0.50
13	9.8	9.7^{0}_{1}	9.6	−0.27
14	10.0	9.9^{5}_{0}	9.9	−0.10

10 45

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1919phae.proj.1033M

1st half only

March 5, 1919

Sheet no 193

Series 406 G3 5 01 +15.1

Scale M. B 49353

9.00	1st	2nd	2nd Diff.
1		5.0	1.63
2		5.0	1.94
3		5.5	1.72
4		6.2	1.25
6		6.3	1.41
7		6.5	1.55
8		6.8	1.43
10		7.2	1.49
11		7.3	1.75
13		7.5	1.93
14		7.7	2.15
15		7.8	2.34
16		8.2	2.11
19		8.3	2.38
21		8.5	2.55
22		8.6	2.60
23		9.0	2.61
24		9.2	2.62
26		9.5	2.64
9b	~~6.0~~	6.5	.
26c		10.0	.
26a		9.5	2.80
28		10.0	3.21

P.C.

	2nd	Diff.
*	7.7	-1.07
	8.0	-1.06
	8.5	-1.28
	9.6	-2.15
	9.8	-2.09
	10.0	-1.95

deflection

* Mar. 19, 1919 Remeasured P.C.

		Diff.
1	8.8	2.17
2	8.8	1.86
3	9.0	1.78

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1919phae.proj.1033M

	g 2nd		h 2nd	Diff.
1	8.0	8.00	8.0	−1.37
2	8.2	8.20	8.2	−1.26
3	8.5	8.55	8.6	−1.33
4	8.7	8.70	8.7	−1.25
6	8.8	8.80	8.8	−1.09
7	8.9	8.85	8.8	−0.80
8	9.0	9.00	9.0	−0.77
10 9	9.8	9.80	9.8	−1.11
9b	dif.		9.8	.
11	9.8	9.80	9.8	−0.75
13	10.0	10.00	10.0	−0.57
14	—		—	

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1919phae.proj.1033M

1st half only

March 5, 1919

3gI Cepheid B244: 99 88 94
5gII " " 44 94

Series 406 Large Mag. Cld. 5 0G −67.5

Scale M. B49354 P. C alt con −18

		1st	2nd	Cu.	magn.	2nd	Cu.	magn
	a		4.0	.		8.5	−2.17 e	6.33 e
	e		5.2	1.52 48	6.68	9.8	−2.13	7.67
	f		5.7	1.49 51	7.21	9.8	−2.13	7.67
	g		6.2	1.58 7	7.78 7		−	
Sq. I	h'		6.2	1.57	7.77			
	K'		7.0	1.77	8.77			
	l'		7.5	2.00	9.50			
	m'		7.9	2.22	10.12			
	n'		8.2	2.37	10.57			
	o'		8.5	2.49	10.99			
	p'		9.0	2.65	11.65			
	q'		9.5	2.80	12.30			
	r'		-		.			
	s'		9.8	2.88	12.68			
Sq. II	h²		6.8	1.70	8.50			
	K²		7.5	2.00	9.50			
	l²		7.8	2.15	9.95			
	m²		8.0	2.26	10.26			
	n²		8.0	2.26	10.26			
	o²		8.2	2.37	10.57			
	p²		8.5	2.50	11.00			
	q²		9.0	2.65	11.65			
	r²		9.2	2.72	11.92			
	s²		9.3	2.75	12.05			
	t²		9.8	2.88	12.68			

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1910phmc.proj.1003w

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	g 2nd		h 2nd	Cu.	mags
a	7.6	7.5 5- 0 1+	7.5	.	.
e	8.8	8.7 5- 0 1+	8.7	-1.14	7.61
f	8.8	8.9 0 1-	9.0	-1.08	7.82
g	9.0	9.0 0 0	9.0	-1.05	7.95
h'	9.7	9.7 5- 0	9.8	-0.73	9.03
K'	10.0	10.0 0 0	10.0	-0.64	9.36

Copied B644,98

Copied B644,95

h^2	9.8	9.8 0 0	9.8	-0.71	9.09
k^2	10.0	10.0 0 0	10.0	sup. -0.64	9.36

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1919phae.proj.1033M

21 Ks Cofued Bk 34:103
Sqm. Cld Cofued Bk 44:188

March 5, 1919

21 Ks

Series 406 Large Mag. Cld. 5h 06m −69.0

Scale M B49355 P.C. all Cor. −19

		1st	2nd	cu	magn	2nd	cu	magn
Sq I	a		5.0	1.46	6.46	8.5	−2.17 c	6.33 e
	e		6.2	1.57	7.77	9.7	−2.14	7.56
	f		6.5	1.63	8.13			
	g		6.7	1.69	8.39	9.8	−2.13	7.67
	h'		7.0	1.77	8.77			
	K		7.5	2.01	9.51			
	l		7.8	2.15	9.95			
	m		8.2	2.37	10.57			
	n		8.2	2.37	10.57			
	o		8.6	2.52	11.12			
	p		8.8	2.60	11.40			
	q		9.0	2.64	11.64			
	S		9.6	2.82	12.42			
21 Ks =	1		7.6	2.05	9.65			
	2		8.0	2.26	10.26			
	3		8.2	2.37	10.57			
	4		8.5	2.49	10.99			
	5		8.6	2.52	11.12			
	6		8.8	2.60	11.40			
	7		9.0	2.75	11.75			
	8		9.6	2.82	12.42			
	9		9.7	2.85	12.55			
	10		9.8	2.88	12.68			
	11		—					

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1919phae.proj.1033M

B.S. Class Cfined Bls 44;112
" " 34;140

	g 2nd		h 2nd	Cu.	magn	
a	7.5	7.50	7.5	.	.	
e	8.8	8.80	8.8	−1.13	7.67	
f	8.9	8.90	8.9	−1.08	7.82	
g	8.9	8.95	9.0	−1.06	7.89	
h'	9.5	9.55	9.6	−0.80	8.75	Cfined Bls. 44;99
K'	9.9	9.90	9.9	−0.67	9.23	
l'	-		-	.		
21 Ks = 1	10.0	10.00	10.0	−064	9.36	

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1919phae.proj.1033M

March 5, 1919

Comet Bb 44.96

Scale M. Series 406 Large Mag. Cld. 5 40 −67.5

B49357 P. C. alt corr −18

		1st	2nd	Cu.	magn.	2nd	Cu	
Seq. III	A^3		6.2	1.57	~~8.77~~ 7	9.7	−2.14	7.56
	B^3		6.8	1.66	8.46	10.0	−2.12	7.88
common to all	a		5.5	1.50	7.00	8.5	−2.17e	6.33e
	b		6.0	1.53	7.53	9.0	−2.15	6.85
	k^3		7.5	2.00	9.50			
	K^3		7.5	2.00	9.50			
	l^3		7.8	2.16	9.96			
	m^3		8.4	2.45	10.85			
	n^3		8.5	2.50	11.00			
	o^3		8.5	2.50	11.00			
	p^3		8.7	2.56	11.26			

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	g		h	cu	magn.
A^3	8.8	8.8	8.8	-1.13	7.67
B^3	9.3	9.2	9.1	-0.97	8.23
a	7.5	7.5	7.5	~~-1.39~~	
b	8.0	8.0	8.0	-1.39	6.61
h^3	9.8	9.8	9.8	-0.72	9.08
K^3	9.9	9.9	9.9	-0.67	9.23

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March 6, 1919.

Sq mg. Cld Copied B44:92
22 KS Copied B34:104

22 Ks.

Scale M. Series 406 Large Mag. Cld. 5 40 -68.9

B49358 + 1st 2nd

P.C. alt con. -19

		1st	2nd	cu	magn	2nd	cu	magn
Sq 5 common to all	a		5.0	1.46	6.46	8.5	-2.17e	6.33
	c		5.5	1.49	6.99	9.6	-2.14	7.46
	d		6.5	1.63	8.13	9.8	-2.13	7.67
see below	A		7.0					
22 Ks =	B		7.2	1.85	9.05			
	A	6.9	7.0	1.76	8.71			
	h		7.1	1.81	8.91			
	h'		7.7	2.10	9.30			
	K		7.2	1.84	9.04			
	l		7.5	2.00	9.50			
	m		8.2	2.37	10.57			
	n		8.5	2.49	10.99			
	o		8.6	2.52	11.12			
	p		9.2	2.72	11.92			
	q		9.7	2.85	12.55			
	q'		9.2	2.72	11.92			
	r		9.5	2.80	12.30			
	s		10.0	sup. 2.93	12.93 q			
	t		-					

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	g 2nd	h 2nd	Cu.	magn.
a	7.3	7.4 (0, 1)	7.5	·
sup. c	8.0	8.2 (5, 3)	8.5	-1.30	6.95 g
d	8.5	8.6 (5, 1)	8.8	-1.17	7.48
A	9.0	9.1 (0, 1)	9.2	-1.00	8.10
22 KS = B	9.8	9.8 (0, 0)	9.8	-0.72	9.08
h	9.7	9.7 (5, 0)	9.8	-0.73	9.02
h'	10.0	—		-0.64	9.36
K	10.0	10.0 (0, 0)	10.0	-0.64	9.36

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1919phae.proj.1033M

March 5, 1919

Scale M. Serie 406 C4 7 01 +15.0

B 49357

	1st	2nd		P.C. 2nd
1		5.5	1.21	9.1 -2.39
2		~~6.2~~ 5.7	1.51	9.6 -2.39
3		~~6.2~~ 5.8	1.52	9.7 -2.38
4		5.9	1.84	9.8 -2.06
5		6.6	1.81	—
7		6.9	1.84	
8		7.0	1.87	
9		7.4	1.94	
11		7.8	2.15	
13		8.2	1.99	
14		8.2	2.54	
16		8.6	2.50	
17		8.8	2.70	
18		9.0	293	
19		9.5	2.62	
20		9.9	2.60	
22		10.0	2.78	
23		10.0	3.00	
24		—		
26				
27				
9a		6.8	2.82	
21a		9.8	.	
4a		6.5	1.45	
21b		10.0	.	

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	$\frac{g}{2nd}$		$\frac{h}{2nd}$	
1	7.9	$7.90_{.0}$	7.9	-1.19
2	8.6	$8.60_{.0}$	8.6	-1.39
3	8.7	$8.60_{.1}$	8.5	-1.28
4	8.8	$8.70_{.1}$	8.6	-0.96
5	9.4	$9.45_{.0}$	9.5	-1.04
7	9.5	$9.55_{.0}$	9.6	-0.81
9a	10.0	$10.00_{.0}$	10.0	-0.38
4a	9.0	$8.90_{.1}$	8.8	-0.95
9	10.0	$10.00_{.0}$	10.0	-0.66
8	9.7	$9.65_{.0}$	9.6	-0.78

10 30

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March 11, 1919

Sheet no. 194

Series 619

Scale M. B 51767 61 1 01 +15.1

8 35

	1st	2nd		P.C 2nd	
1	2.7 2.5		4.48	9.2	-2.02
2	3.0 ~~2.8~~		4.39	9.3	-1.91
3	3.2 3.0		4.30	9.8	-2.30
4	3.7 3.5		4.26	10.0	-2.04
5		4.8	3.53		
9		5.5	3.78		
11		5.9	3.79		
12		6.5	3.52		
14		7.2	3.42		
15		7.8	3.24		
16		8 X 0	3.20		
17		8.4	3.10		
18		8.8	3.14		
7a		5.0	3.86		
6a		4.5	.		
18a		8.8	.		
19		9.0	3.21		
20		9.7	2.92		
21		10.0	2.92		

Plate badly streaked.

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1919phae.proj.1033M

	$\frac{g}{2\,mk}$		$\frac{h}{2\,mk}$	
1	7.5	7.60_{1}	7.7	−0.42
2	7.5	7.75_{3}	8.0	−0.36
3	7.8	7.90_{1}	8.0	−0.40
4	8.5	8.35_{1}	8.2	−0.39
5	8.9	8.80_{1}	8.7	−0.47
6a	9.8	9.85_{0}	9.9	
7a	9.8	9.80	9.8	−0.94
9	—			
11				
12				
14				
15				
16				

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Seq III Copied Bk 44: 32

March 11, 1919

Seq II - Copied Bk 44: 30,

Scale IV. Series 619 Sm. Mag. Cld. 1 05 −74.5

B51770

	1st	2nd	cu	magn.	P. C.	cu	magn.
	3.2						
a	3.0		4.04	7.24	7.6	.	
	3.3						
b	3.1		4.03	7.33	8.8	−1.77	7.03
	3.7						
c	3.5		3.97	7.67	9.7	−1.83	7.87
Seq. II g^2		6.4	3.50	9.90	Copied B		
k^2		7.7	3.25	10.95			
l^2		7.8	3.23	11.03			
m^2		8.3	3.13	11.43			
n^2		8.8	3.03	11.83			
o^2		9.0	3.01	12.01			
Seq. III g^3		6.2	3.53	9.73			
k^3		6.5	3.48	9.98			
l^3		7.0	3.38	10.38			
m^3		7.8	3.23	11.03			
n^3		8.0	3.23	11.23			
o^3		8.5	3.10	11.60			
p^3		8.6	3.08	11.68			
q^3		8.7	3.06	11.76			
r^3		9.2	2.97	12.17			
s^3		9.8	2.86	12.66			
h^2		7.1	3.36	10.46			
h^3		6.5	3.48	9.98			

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p.

	g		h	cu.	magn.
a	7.0	7.1	7.2	·	·
b	7.7	7.6	7.5	−0.47	7.13
c	8.5	8.4	8.4	−0.44	8.05
g^2	–		–		
h^2	–		–		
K^2	–				
l^2	–				
m^2					
g^3	–				
h^3	–				
K^3	–				
l^3					

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March 11, 1919

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Series 619 Var. 2 Tucanae / 05 -74.5

Scale M. B 51770 P. C. Ocular-Corr. -.30

	1st	2nd	cu.	magn.	2nd	cu	magn.
a		4.7	3.81	8.51	9.5	-1.82	7.68
b		5.0	3.76	8.76	10.0	-1.87	8.13
c		5 4.5	3.66	9.16			
d		5.6	3.65	9.25			
e		7.2	3.35	10.55			
f		7.6	3.27	10.87			
g		8.1	3.17	11.27			
h		8.3	3.13	11.43			
K		8.5	3.10	11.60			
l		9.0	3.01	12.01			
m		9.9	2.84	12.74			
var.		9.2	2.97	12.17			

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1919phae.proj.1033M

Cfwd.

	g 2 mk		h 2 mk	Cu.	Magn.
a	7.8	7.9^{0}_{1}	8.0	-0.40	7.50
b	8.5.	8.6^{0}_{1}	8.7	-0.44	8.16
c	9.7	9.8^{5}_{1}	10.0	-0.92	8.93
d	10.0		—	-0.98	9.02
e					
f					

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March 11, 1919

Cofnet Bla 34:57

Series 619 165 K 1 - 35 - 45.0

Scale M. B 51771 P. C. alt con. +01

	1st	2nd	Cu	
165K = 1		4.8	3.80	8.60
2		5.0	3.76	8.76
3		6.5	3.49	9.99
4		6.7	3.44	10.14
5		7.0	3.38	10.38
6		7.2	3.34	10.54
7		7.8	3.23	11.03
8		8.0	3.20	11.20
9		8.2	3.16	11.36
10		8.4	3.11	11.51
11		8.8	3.04	11.84
12		9.0	3.01	12.01
13		9.2	2.97	12.17
14		9.3	2.95	12.25
15		9.9	2.84	12.74

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	9 / 2 ind	4 / 2 ind	Cu.	Magn
1	8.6	8.55^{0}_{0}	8.5	-0.41 8.04
2	8.8	8.75^{0}_{0}	8.7	-0.50 8.25
3	9.8	9.80^{0}_{0}	9.8	-0.90 8.90
4				
5				
6				

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1919phae.proj.1033M

March 11, 1919 Shutno 194

Series 619 C2 3 - 01 +15.1

Scale M. B51772 P.C.

	1st	2nd		2nd	
1	3.1 2.9		3.84	8.5	-1.56
2	3.4 3.2		3.84	8.8	-1.56
3		4.0	3.64	9.2	-1.56
4		4.8	3.40		
6		5.0	3.67		
7		5.0	4.06		
10		5.9	3.45		
9b		7.0	.		
9c		7.9	.		
11		6.5	3.24		
12		7.2	2.76		
12a		6.9	3.51		
14		7.2	3.59		
16		7.8	3.38		
17		8.3	3.13		
19		8.8	3.03		
21		9.5	2.84		
22		9.8	2.70		
23		9.8	2.89		
25		–			

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1919phae..proj.1033M

	$\frac{q}{2}$ 1st		$\frac{h}{2}$ 2nd	
1	7.5	7.50	7.5	−0.56
2	7.7	$7.7\frac{5}{1}0$	7.8	−0.51
3	8.0	$7.9\frac{0}{1}$	7.8	−0.26
4	8.6	$8.6\frac{0}{0}0$	8.6	−0.40
6	9.5	$9.6\frac{5}{1}$	9.8	−0.98
7	9.8	$9.8\frac{0}{0}0$	9.8	−0.74
~~10~~	−			
9C	9.5	$9.5\frac{5}{1}0$	9.6	.

q 50

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1919phae.proj.1033M

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March 12, 1919

Sheet no 196

Series 617 C1 1.01 +15.1

Scale M. B 51742

P.C.

8 30.	1st	2nd	Dyf	2nd.
1	3.7 3.5		348	9.0 -1.82
2	3.7 3.5		369	9.0 -1.61
3		4.0	350	9.2 -1.70
4		4.5	346	9.9 -1.94
5		5.0	333	
9		5.9	338	
11		6.2	349	
12		6.7	332	
14		7.2	342	
15		7.9	314	
16		8.1	310	
17		8.2	330	
18		9.2	274	
19		9.6	271	
20		9.9	272	
21		—	.	
24		—	.	
6a		4.9	.	
7a		5.7	316	
18a		8.8	.	

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1919phae.proj.1033M

	$g_{2\,nd}$		$L_{2\,nd}$	
1	7.7	$7.7\frac{5}{1}0$	7.8	−0.57
2	7.8	$7.9\frac{0}{1}1$	8.0	−0.51
3	8.0	$7.9\frac{0}{1}1$	7.8	−0.40
4	9.0	$8.8\frac{0}{2}\approx$	8.6	−084
5	9.5	$9.7\frac{5}{3}\approx$	9.0	−0.92
6a	9.5	$9.6\frac{5}{1}\approx$	9.8	~~−0.94~~
7a	10.0	$9.8\frac{0}{2}\approx$	9.6	−0.94
9	dif		dif.	g
11				
12				

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1919phae.proj.1033M

March 12, 1919.

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Series 617 D1 1.01 −15.0

Scale M. B 51743 P.C all cm. +.07

	1st	2nd	cu	magn	2nd	cu.	magn.
1	3.2 3.0		3.70	6.90	9.8	−1.66	7.34
2	3.6 3.4		3.66	7.26	9.5	−1.69	7.81
3		4.2	3.60	7.80	9.7	−1.70	8.00
4		4.7	3.54	8.24	9.8	−1.72	8.08
5		4.8	3.53	8.33	10.0	−1.73	8.27
6		4.9	3.53	8.43	-		
7		4.7 5	3.56	8.06	9.8	−1.72	8.08
8		5.5	3.47	8.97			
9		5.7	3.46	9.16			
10		5.7	3.46	9.16			
11		6.2	3.42	9.62			
12		6.2	3.42	9.62			
13		6.7	3.36	10.06			
14		6.8	3.35	10.15			
15		6.7	3.36	10.06			
16		6.8	3.35	10.15			
17		7.5	3.26	10.76			
18		8.0	3.17	11.17			
19		8.0	3.17	11.17			
20		8.1	3.15	11.25			
21		8.3	3.12	11.42			
22		8.7	3.04	11.74			
23		8.8	3.03	11.83			
24		8.9	3.00	11.90			
25		9.3	2.93	12.23			
26		9.5	2.88	12.38			

See next page for cont. at bottom.

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1919phae..proj.1033M

Cofused

	g 2nd		h 2nd	Cu.	magn.
1	8.5	$8.\frac{35}{1}$	8.2	-0.63	7.72
2	8.5	$8.\frac{35}{1}$	8.2	-0.63	7.72
3	8.2	$8.\frac{25}{0}$	8.3	-0.65	7.60
4	8.8	$8.\frac{65}{2}$	8.5	-0.70	7.95
5	8.5	$8.\frac{50}{0}$	8.5	-0.66	7.84
6	9.2	$9.\frac{10}{1}$	9.0	-0.77	8.33
7	9.0	$9.\frac{10}{1}$	9.2	-0.77	8.33
8	9.2	$9.\frac{00}{2}$	8.8	-0.76	8.24
9	9.4	$9.\frac{30}{1}$	9.2	-0.80	8.50
10	9.7	$9.\frac{60}{1}$	9.5	-0.84	8.76
11	10.0	$9.\frac{95}{0}$	9.9	-0.86	9.09
12	def.				
13					
14					
15					
16					
16a					
17					
~~27~~					
18					
~~28~~					
19					

		Cu	magn
27	9.7	2.84	12.54
28	10.0	2.77	12.77
29	9.9	2.79	12.69
16a	7.2	3.30	10.50

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1919phae.proj.1033M

March 12, 1919

Series 617 Sm. Mag. Cld. 1 01 – 74.8

Scale M. B51744

		1st	2nd	Cu.	Magn		P.C. 2nd	Cu.	Magn	
	a	3.2 3.0		3.70	6.90	Cofued B644,'27	8.8	-1.64	7.16	alt cor. -.32 Cofued B644,'27
	b	3.7 3.5	3.85 1 v	4.0	3.64	7.34	8.8	-1.64	7.16	
	c			4.2	3.60	7.80	9.8	-1.72	8.08	
Sig. II	g^2			6.6	3.56 37	9.97				
	h^2			7.2	3.30	10.50				
	K^2			7.5	3.26	10.76				
	l^2			7.6	3.24	10.84				
	m^2			8.4	3.10	11.50				
	n^2			8.5	3.07	11.57				
	o^2			8.8	3.03	11.83				
	p^2			9.5	288	12.38				
	q^2			9.8	2.80	12.60				
	r^2			10.0	2.77	12.77				
Sig. III	g^3			6.2	3.42	9.62				
	h^3			6.5	3.38	9.88				
	K^3			7.0	3.33	10.33				
	l^3			7.2	3.30	10.50				
	m^3			7.7	3.23	10.93				
	n^3			8.0	3.17	11.17				
	o^3			8.6	3.06	11.66				
	p^3			8.7	3.04	11.74				
	q^3			9.0	3.00	12.00				
	r^3			9.2	2.94	12.14				
	s^3			9.5	2.88	12.38				
	t^3			9.9	2.78	12.68				

Cofued B644,'31

Cofued B644,'32

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1919phae.proj.1033M

	g 2nd	h 2nd	cc.	magn
a	7.5	7.3 5 1 2 = 7.2	-0.36	6.99
b	7.6	7.5 0 1 = 7.4	-0.40	7.10
c	8.2	surf.	-0.58	7.62 (Copied B to 44, 27)
g^2	10.0	10.0 0 0 = 10.0	-0.87	9.13
g^3	10.0	9.9 5 0 = 9.9	-0.86	9.09

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March 12, 1919

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Series 617 El Trucanae 1 01 -74.8.

Scale M. B 5 1744

P C alt cor. -3.2

	1st	2nd	m.		2nd	m	
a		4.2	3.60	7.80	9.3	-1.67	7.63
b		4.9	3.53	8.43	9.8	-1.72	8.08
c		5.0	3.52	8.52			
d		5.7	3.46	9.16			
e		7.0	3.33	10.33			
f		7.2	3.30	10.50			
g		8.6	3.06	11.66			
h		8.6	3.06	11.66			
K		8.4	3.10	11.50			
l		8.8	3.03	11.83			
m		9.5	2.88	12.38			
var.		8.7	3.04	11.74			
m		9.9	2.79	12.69			

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	$\frac{q}{2}$ mk		$\frac{h\nu}{2}$ mk		
a	7.8	7.9^{0}_{1}	8.0	-0.51	7.39
b	8.4	8.4^{5}_{0}	8.5	-0.65	7.80
c	9.0	9.1^{5}_{2}	9.3	-0.79	8.36
d	9.4	9.5^{5}_{3}	9.7	-0.84	8.71
e					
f					

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March 13, 1919

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Series 617 141 K 1 03 −29.7

Scale M B51745 P.C. alt cm. +05

		1st	2nd	cu.	magn.	2nd	cu	magn.
	1K		5.5	3.47	8.97	10.0	−1.73	8.27
	2K		5.8	3.45	9.25			
141K =	3K		6.0	3.43	9.43			
	4K		6.0	3.43	9.43			
	5K		7.2	3.30	10.50			
	6K		7.7	3.19	10.89			
	7K		8.0	3.17	11.17			
	8K		8.0	3.17	11.17			
	9K		8.5	3.07	11.57			
	10K		8.6	3.06	11.66			
	11K		8.8	3.03	11.83			
	12K		9.2	2.94	12.14			
	13K		9.5	2.88	12.38			
	14K		9.7	2.84	12.54			

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1919phae.proj.1033M

	g 2nd	h 2nd	Cr.	magn.
1	8.5	8.6^{5}_{1} = 8.8	-0.69	7.96
2	9.5	9.3^{5}_{1} = 9.2	-0.81	8.54
1+1K = 3	9.7	9.7^{0}_{0} = 9.7	-0.85	8.85
4	9.8	9.7^{5}_{0} = 9.7	-0.85	8.90

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1919phae.proj.1033M

Sheet No 196

March 12, 1919

Series 617 C2 3 01 +15.1

Scale M. B5 1753

P.C

	1st	2nd		2nd	
1	3.0 2.8		3.94	8.5	-1.56
2	3.2 3.0		4.04	8.8	-1.56
3		4.0	3.64	9.2	-1.56
4		4.5	3.70	9.8	-1.60
6		5.0	3.67	+	
7		5.2	3.86		
10		5.8	3.55		
11		6.5	3.24		
12		7.0	2.96		
14		7.5	3.29		
16		8.2	2.98		
17		8.4	3.03		
19		8.8	3.03		
21		9.2	3.14		
22		9.6	2.90		
23		10.0	2.79		
25		10.0?	3.10?		
9c		4 5.9	.	10.0	.
9b		6.9	.		
12a					

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1919phae.proj.1033M

	$\frac{g}{g_{2nd}}$		$\frac{h_c}{h_{2nd}}$	
1	7.5	7.5^{0}_{0}	7.5	−0.56
2	7.7	7.6^{5}_{1}	7.6	−0.41
3	8.0	7.8^{5}_{2}	7.7	−0.16
4	8.8	8.8^{0}_{0}	8.8	−0.60
6	9.5	9.5^{5}_{1}	9.6	−0.88
9c	9.6	9.5^{5}_{0}	9.5	·
7	9.7	9.7^{5}_{1}	9.8	−0.69
10	10.0	10.0^{0}_{0}	10.0	−0.65

10 15

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stabilizing only

March 14, 1919

Series 621 Sm. Mag. Cld. 1 - 01 - 74.8

Scale M. B5 1793

11.15		1st	2nd	cu	magn	P.C. 2nd	cu	magn.
	a		4.0	3.28	7.28	8.6	-1.80	6.80
	b		4.5	3.28	7.78	8.8	-1.80	7.00
	c		4.8	3.27	8.07	9.6	-1.77	7.83
Seq. II	g^2		6.7	3.17	9.87			
	l^2		7.2	3.13	10.33			
	K^2		7.7	3.10	10.80			
	l^2		7.9	3.06	10.96			
	m^2		8.2	3.03	11.23			
	n^2		8.6	2.98	11.58			
	o^2		9.0	2.92	11.92			
	p^2		9.8	2.79	12.59			
	q^2		9.9	2.76	12.66			
	r^2		10.0	2.74	12.74			
Seq. III	g^3		6.8	3.17	9.97			
	h^3		6.9	3.16	10.06			
	K^3		6.9	3.16	10.06			
	l^3		7.2	3.13	10.33			
	m^3		7.8	3.08	10.88			
	n^3		8.0	3.05	11.05			
	o^3		8.6	2.98	11.58			
	p^3		8.7	2.96	11.66			
	q^3		8.8	2.95	12.75			
	r^3		9.3	2.87	12.17			
	s		9.7	2.80	12.50			
	t		9.8	2.79	12.59			

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Copied B&H 44'31

Copied B&H 44'37 April 1921

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1919phae.proj.1033M

	g 2 red	b 2 red	cu	magn.
a	7.5	7.50	7.5	-0.57	6.93
b	7.7	7.85	8.0	-0.60	7.25
c	8.5	8.45	8.4	-0.67	7.78
g^2					
b^2					

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March 14, 1919

H Tucanae = Cpied Rb 44:48

~~H Tucanae~~ ~~S. Tuc. Var.~~ 1- 01 -74.8

Series 621

Scale N. B 5793

		1st	2nd	Cu	magn	2nd	Cu	magn.
~~Sq. I~~	var.		8.9	2.94	11.84	-		
	a		4.9	3.27	8.17	9.3	-1.78	7.52
	b		5.0	3.27	8.27	9.9	-1.75	8.15
	c		5.2	3.26	8.46	-		
	d		5.8	3.23	9.03			
	e		6.8	3.17	9.97			
	f		7.2	3.13	1033			
	g		8.1	3.03	11.13			
	h		8.2	3.02	11.22			
	K		8.2	3.02	11.22			
	l		9.6	2.82	12.42			
	m		9.8	2.79	12.59			
	n		10.0	2.75	12.75			

dif corr -.30 ~~+.06~~

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	g 2nd		g 2nd	Corr.	Magn
var.	-				
a	8.0	8.1	8.2	-0.63	7.47
b	8.6	8.65	8.7	-0.70	7.95
c	9.3	9.35	9.4	-0.88	8.47
d	9.8	9.80	9.8	-1.01	8.79
e	-				

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March 14, 1919

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Series 621 141 K 1.03 - 29.7

Scale M. B 51794 P. C. alt cor. +.06

		1st	2nd	Cu.	Magn	2nd
	1		5.5	3.25	8.75	-
	2		6.0	3.22	9.22	
141 K -	3		6.4	3.20	9.60	
	4		6.5	3.20	9.70	
	5		7.5	3.11	10.61	
	6		7.7	3.10	10.80	
	7		8.2	3.02	11.22	
	8		8.0	3.05	11.05	
	9		8.4	3.00	11.40	
	10		8.3	3.01	11.31	
	11		8.8	2.95	11.75	
	12		9.0	2.92	11.92	
	13		9.6	2.82	12.42	
	14		9.8	2.79	12.59	

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	g_2 mch		h_2 mch	cu	magn
1	8.7	8.70^{0}_{0}	8.7	-0.71	7.99
2	9.5	$9.5^{5}_{1}{}^{0}$	9.6	-0.94	8.61
3	9.8	$9.7^{5}_{0}{}_{1}$	9.7	-1.00	8.75
4	9.9	$9.8^{5}_{1}{}^{0}$	9.8	-1.04	8.81

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1919phae.proj.1033M

Sheet no. 194

March 14, 1919

Series 6 2 1 — G 1 — 1.0 1 — +15.1

Scale M. — B 51796

	1st	2nd		P.C 2nd
1		4.0	3.18	8.8 -1.62
2		4.2	3.19	9.0 -1.61
3		4.4	3.10	9.2 -1.70
4		4.5	3.46	9.8 -1.84
5		5.2	3.13	10.0 -1.67
9		6.0	3.28	
11		6.5	3.19	
12		7.0	3.02	
14		7.6	3.02	
15		8.0	3.04	
16		8.2	3.00	
17		8.4	3.10	
18		9.0	2.94	
19		9.3	2.91	
20		9.6	3.02	
21		10.0	2.92	
24		-		
7a		5.5	3.36	
18a		8.9	.	
6a		5.0	.	

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1919phae.proj.1033M

	g_2		g_2	
	2nd		2nd	
1	7.7	7.75	7.8	−0.57
2	8.0	8.10	8.2	−0.71
3	7.8	7.90	8.0	−0.40
4	9.0	9.00	9.0	−1.04
5	9.0	8.90	8.8	−0.57
6a	9.8	9.80	9.8	
7a	10.0	9.95	9.9	−1.09
9				
11				

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1919phae.proj.1033M

March 14, 1919

Series 621 C2 3-01 +15.1

Scale M. B 51802

	1st	2nd		P.C. 2nd	
1	2.7 2.5		4.24	8.9	−1.96
2	3.2 3.0	3.6 4	4.0	3.64	9.2 −1.96
3			4.5	3.14	9.3 −1.66
4			4.7	350	10.0 −1.80
6			5.5	3.17	
7			5.6	3.46	
10			6.0	335	
11			6.5	324	
12			7.3	2.66	
14			7.7	309	
16			8.0	3.18	
17			8.2	3.23	
19			9.1	273	
21			9.7	2.64	
22			9.9	2.60	
23			–	.	
25				.	
9b			7.0	.	
9c			5.2	.	
12a			7.3	3.11	

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1919phae.proj.1033M

	g 2 mm		h 2 mm	
1	7.5	7.5^{0}_{0}	7.5	−0.56
2	8.0	7.9^{0}_{1}	7.8	−0.66
3	8.3	8.2^{5}_{1}	8.2	−0.61
4	8.8	8.9^{0}_{1}	9.0	−0.70
6	9.8	9.8^{0}_{0}	9.8	−1.13
7	9.8	9.9^{0}_{1}	10.0	−0.84
9b				
9c	9.6	9.7^{5}_{2}	9.9	

12 05

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1919phae.proj.1033M

1st draft

March 17, 1919.

Sheet no. 195

Series 627 C1 1-01 +15.1

Scale IV. B51859

8 45	1st	2nd		P.C. 2nd	
1		4.0	3.18	8.7	-1.52
2		4.0	3.39	8.9	-1.51
3		4.0	3.50	9.1	-1.60
4		4.5	3.46	9.2	-1.24
5		4.9	3.43	9.8	-1.47
9		5.8	3.48	-	
11		6.0	3.69		
12		6.5	3.65		
14		6.9	3.72		
15		7.5 7.55	7.6 3.49		
16		7 8.6	3.60		
17		7.9	3.60		
18		-			
18a		8.2			
6a		5.2		-	
7a		5.5	3.36	10.0	-1.14
19		8.8	3.41		
20		9.2	3.42		
21		9.7	3.22		

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1919phae.proj.1033M

	g_{2nd}	h_{2nd}	
1	7.2	$7.35^{7.5}_{7.3}$	−0.17
2	7.7	7.6^{0}_{1} 7.5	−0.21
3	7.7	7.6^{0}_{1} 7.5	−0.10
4	8.2	8.2^{0}_{0} 8.2	−0.24
5	87	8.6^{0}_{1} 8.5	−0.27
6a	8.9	8.95^{0}_{1} 9.0	·
7a	9.5	9.4^{0}_{1} 9.3	−0.54
9	9.8	9.8^{0}_{0} 9.8	−0.52
11	10.0	9.95^{0}_{0} 9.9	−0.26

~~9.5~~

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1919phae.proj.1033M

March 17, 1919

Opied 44:20

Series 627 Small Mag. Cld.

Scale M. B 51860

P.C. alt cor 24

		1st	2nd	cu.	Magn	2nd	cu	
	a		4.2	3.36	7.56	8.6	-1.60	7.00
	b		4.0	3.34	7.34	8.8	-1.56	7.24
	c		4.9	3.44	8.34	9.5	-1.48	8.02
	d		4.9	3.44	8.34	-		
	e		5.0	3.45	8.45	-		
	f		5.0	3.45	8.45	~~9.8~~	~~-1.44~~	~~8.36~~ Not seen
Seq. I	h		6.8	3.58	10.38			
	k		7.0	3.57	10.57			
	l		7.7	3.54	11.24			
	m		7.9	3.52	11.42			
	n		8.2	3.48	11.68			
	o		8.3	3.47	11.77			
	p.		9.0	3.37	12.37			
	q.		-					
	r		9.8	3.22	13.02			
Seq. II	h^2		6.9	3.57	10.47			
	n^2		8.2	3.48	11.68			

Opied B644:30

Sequence is nearly 2 degrees from centre of plate

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1919phae.proj.1033M

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	g 2nd		h 2nd	cc.	
a	7.0	$6.9\frac{5}{0}\frac{1}{}$	6.9	-0.07 e	6.88 e
b	7.5	$7.5\frac{0}{0}\frac{0}{}$	7.5	-0.16	7.34
c	7.8	$8.0\frac{0}{3}\frac{2}{}$	8.2	-0.24	7.76
d	8.8	$8.8\frac{5}{0}\frac{1}{}$	8.9	-0.34	8.51
e	9.5	sup.		-0.42	9.08
f	~~10.0~~	—		-0.47	9.53

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1919phae.proj.1033M

March 17, 1919

Sm. mag. old: 13 hrs Copied Bk 34: 100
13 hrs 0 48 - 73.6
Small Comet br. Star
Copied 44: 20, 26

Series 627

Scale M. B 5186 1

P. C, alt corr -29

	1st	2nd	Cu.	Magn	2nd	Cu.	Magn.
1		5.0	3.45	8.45	9.5	-1.48	8.02
2		5.8	3.54	9.34			
3		5.9	3.55	9.45			
4		6.8	3.58	10.38			
5		6.9	3.57	10.47			
6		7.0	3.57	10.57			
7		7.5	3.55	11.05			
8		7.5	3.55	11.05			
9		7.6	3.54	11.14			
10		8.2	3.48	11.68			
11		8.8	3.41	12.21			
12		9.5	3.27	12.77			
13		9.5	3.27	12.77			
14		9.8	3.22	13.02			
15		10.0	3.16	13.16			
a	3.7		3.31	7.01	7.0		
b		4.6	3.40	8.00	9.2	-1.51	7.69
c		5.0	3.45	8.45	9.2	-1.51	7.69
d		5.5	3.52	9.02			
e		5.8	3.54	9.34			
f							

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1919phae.proj.1033M

Cepheid

	g 2nd		h 2nd	Cu.	Magn.
1	8.2	8.1	8.0	-0.24	7.86
2	8.8	8.80	8.8	-0.34	8.46
a	7.0	7.00	7.0	-0.08	6.92
b	7.9	7.90	7.9	-0.22	7.68
c	7.9		sup.	-0.22	7.68
d	8.5	8.50	8.5	-0.30	8.20
e	9.0	9.05	9.1	-0.37	8.68
f	9.5	9.50	9.5	-0.42	9.08
3	~~8.0~~ 9.2	9.25	9.3	-0.39	8.86
4	-				

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1919phae.proj.1033M

March 17, 1919

Corrected Bk 45, 212

Scale M. Series 627 South Pole 0 48 -90.0

B51862 P.C alt con -92

	1st	2nd	cu.	Magn	2nd	cu.		
a	3.1 2.9		.	.	7.7	.		
b	–		.	.	–			
c	3.9 3.7		3.33	7.23	8.5	-1.50	7.50	
d		4.5	3.40	7.90	9.0	-1.54	7.46	
e		4.9	3.44	8.34	9.2	-1.51	7.69	
f		5.7	3.54	9.24	9.2	-1.51	7.69	
g		5.9	3.55	9.45	9.9	-1.42	8.48	
h		6.0	3.56	9.56	–			
K		6.0	3.56	9.56				
l		6.5	3.57	10.07				
m		6.9	3.57	10.47				
n		6.9	3.57	10.47				
o		7.0	3.57	10.57				
p		7.7	3.54	11.24				
q		8.0	3.50	11.50				
r		8.0	3.50	11.50				
s		8.2	3.48	11.68				
t		8.5	3.45	11.95				
u		8.6	3.44	12.04				
w		9.0	3.37	12.37				

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1919phae.proj.1033M

C Cyed

	g 2 mds	h 2 mds	cor.	magn
a	~~8.8~~ 6.7	6.6 6.5	.	.
b	–	–		
c	7.0	7.1 7.2	−0.10	7.00
d	7.6	7.6 7.6	−0.17	7.43
e	7.6	7.6 7.6	−0.17	7.43
f	8.2	8.35 8.5	−0.27	8.08
g	8.7	8.65 8.6	−0.32	8.33
h	9.0	9.1 9.2	−0.37	8.73
K	9.7	9.75 9.8	−0.44	9.31
l	9.8	9.80 9.8	−0.45	9.35

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1919phae.proj.1033M

March 17, 1919

Sheet-no 195

Scale M. Series 627 61 1 - 01 +15.1

B51864

P. C

	1st	2nd	Dff.	2nd
1	3.7 3.5		3.48	8.8 -1.62
2	4.2 4.0	4.10½ 4.0	3.29	9.0 -1.61
3		4.0	3.50	9.5 -1.50
4		4.6	3.36	9.5 -1.54
5		5.0	3.33	9.8 -1.47
9		5.5	3.78	
11		6.0	3.69	
12		6.8	3.35	
14		7.0	3.62	
15		7.8	3.24	
16		7.9	3.30	
17		8.0	3.50	
18		8.7	3.24	
19		9.0	3.21	
7a		5.5	3.36	
20		9.3	3.32	
21		9.8	3.12	
18a		8.2	.	
6a		5.0	.	

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1919phae.proj.1033M

	g 2nd	h 2nd	Diff.
1	7.2	7.20 0 0	7.2	-0.02
2	7.5	7.60 1 1	7.7	-0.21
3	7.5	7.60 1 1	7.7	-0.10
4	8.5	8.30 2 2	8.1	-0.34
5	8.5	8.50 0 0	8.5	-0.17
7a	9.7	9.60 1 1	9.5	-0.74
6a	9.2	9.35 2 1	9.5	.
9	9.6	9.70 1 1	9.8	-0.42
11	10.0	10.00 0 0	10.0	-0.31

9 50

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1919phae.proj.1033M

2nd half.

March 18, 1919

Series 627 b 1 1 01 +15.1

Scale M. B 51864

P.C.

9 52

	1st	2nd	Dff	2nd	Dff
	3.7				.35
1	3.5		3.48	8.6	-1.42
	3.7				
2	3.5		3.69	8.7	-1.31
	3.9				
3	3.7		3.60	8.8	-1.30
4		4.5	3.46	9.5	-1.54
5		4.9	3.43	9.8	-1.47
9		5.5	3.78		
11		6.0	3.69		
12		6.5	3.52		
14		7.0	3.62		
15		7.5	3.54		
16		7.7	3.50		
17		8.0	3.50		
18		8.7	3.24		
19		8.8	3.41		
20		9.3	3.32		
21		9.5	3.42		
24		-	.		
6a		4.5	.		
7a		5.2	3.66		
18a		8.2	.		

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1919phae.proj.1033M

	g_{2nd}		h_{2nd}	
1	6.9	6.95_{1}^{0}	7.0	+0.23
2	7.2	7.40_{3}^{2}	7.6	−0.01
3	7.2	7.35_{3}^{1}	7.5	+0.15
4	8.6	8.40_{2}^{2}	8.2	−0.44
5	8.7	8.65_{1}^{0}	8.6	−0.32
6a	9.0	susp.		
7a	9.6	9.50_{1}^{1}	9.4	−0.64
9	9.4	9.50_{1}^{1}	9.6	−0.22
11	9.9	9.95_{1}^{0}	10.0	−0.26
12				

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1919phae.proj.1033M

March 18, 1919

Bruslaus Cfpied Bb 44:27 .. :31
Seg. II
Seg III Cofried Bb 44:33

Scale M. Series 627 Sm. Mag. Cld. 1-01 -74.8

B5 1865 P.C. alt Cow -29

		1st	2nd	cu.	magn.	2nd	cu.	magn.
	a	3.2 3.0		.	.	8.0	.	.
	b	4.0 3.8		3.54	7.54	8.5	-1.34	7.16
	c	4.7 4.5		3.57	8.27	9.0	-1.42	7.58
Seg. II	g^2		6.0	3.60	9.60			
	h^2		6.7	3.56	10.26			
	K^2		7.1	3.54	10.64			
	l		7.5	3.54	11.04			
	m		8.0	3.49	11.49			
	n		~~8.8~~ 8.2	w.e. 3.47	11.67			
	o		8.4	3.46	11.86			
	p		9.2	3.36	12.56			
	q		9.8	3.27	13.07			
	r		9.8	3.27	13.07			
Seg. III	g^3		5.8	3.60	9.40			
	h		5.8	3.60	9.40			
	K		6.4	3.58	9.98			
	l		6.4	3.58	9.98			
	m		7.5	3.53	11.03			
	n		7.5	3.53	11.03			
	o		8.0	3.49	11.49			
	p		8.2	3.48	11.68			
	q		8.8	3.41	12.21			
	r		8.9	3.40	12.30			
	s		9.4	3.33	12.73			

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	g 2nd		h 2nd	Cu.	magn.
a	6.7	6.75 (1, 0)	6.8	.	.
b	7.0	7.00 (0, 0)	7.0	+0.23	7.23
c	7.8	7.65 (2, 1)	7.5	−0.05	7.60
Seq. II	g^2	10.0	10.00 (0, 0)	10.0	−0.33	9.67
	h^2	—				
	K^2					
Seq. III	g^3	10.0	10.00 (0, 0)	10.0	−0.33	9.67

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March 18, 1919

Copied Bk 44: 48

Series 627 24 Tucanae 1 01 −74.8

Scale M. B 5 1865

P. C Alt Cow −29

	1st	2nd	cu.	magn.	2nd	cu.	magn.
var.		8.9	3.40	12.30	–		
a		4.2	3.55	7.75	8.8	−1.38	7.42
b		4.7	3.57	8.27	9.4	−1.46	7.94
c		5.0	3.59	8.59	10.0	.	.
d		5.6	3.60	9.20			
e		6.5	3.57	10.07			
f		6.9	3.56	10.46			
g		7.9	3.50	11.40			
h		7.8	3.51	11.31			
K		8.2	3.47	11.67			
l		8.6	3.43	12.03			
m		9.2	3.36	12.56			
n		9.8	3.27	13.07			

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	g 1st	h 1st	g 2nd	h 2nd		
var.	—		—		Cu.	magn.
a	7.7	7.80		7.9	-0.10	7.70
b	8.1	8.20		8.3	-0.26	7.94
c	8.7	8.60		8.5	-0.39	8.21
d	def.			9.7	-0.40	9.30
e						
f						

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March 18, 1919

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Series 627 188 K 1 23 -59.8

Scale M. B51867 P.C alb corr -.08

	1st	2nd			2nd	cu. magn.
1	-	-	· cu	magn.	8.8	-1.38 7.42
2		5.0	3.58	8.58	9.6	-1.49 8.11
188K = 3		5.8	3.60	9.40	-	-
4		6.2	3.60	9.80		
5		6.7	3.57	10.27		
6		7.0	3.55	10.55		
7		7.5	3.54	11.04		
8		7.5	3.54	11.04		
9		7.6	3.52	11.12		
10		8.2	3.48	11.68		
11		8.2	3.48	11.68		
12		8.5	3.43	11.93		
13		8.8	3.41	12.21		
14		9.6	3.30	12.90		
15		9.7	3.28	12.98		

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	g 2nd		h 2nd	Cu.	magn
1	6.9	7.05 / 1 / 2	7.2	+0.22	7.27
2	8.2	8.20 / 0 / 0	8.2	-0.24	7.96
3	9.1	9.25 / 1 / 2	9.4	-0.50	8.75
4	9.0	9.60 / 1 / 1	9.7	-0.43	9.17
5	9.8	9.85 / 0 / 1	9.9	-0.36	9.49
6					
7					

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March 18, 1919.

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Series 627 1651K 1 35 -45.0

Scale M. B51868

P.C. alt corr +0.2

		1st	2nd	cu	magn.	2nd	cu	magn
1651K =	1		5.0	3.58	8.58	9.8	-1.51	8.29
	2		6.0	3.60	9.60			
	3		6.0	3.60	9.60			
	4		6.5	3.57	10.07			
	5		6.8	3.56	10.36			
	6		7.0	3.56	10.56			
	7		7.9	3.50	11.40			
	8		8.2	3.47	11.67			
	9		8.2	3.47	11.67			
	10		8.0	3.50	11.50			
	11		8.7	3.41	12.11			
	12		9.0	3.38	12.38			
	13		9.4	3.33	12.73			
	14		9.6	3.30	12.90			
	15		9.9	"	"			

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1919phae.proj.1033M

Cepheid

	g 2nd		h 2nd	cu.	magn
1	8.5	8.50^{-}_{0}	8.5	−0.36	8.14
2	8.9	8.95^{-}_{1}	9.0	−0.48	8.47
3	10.0	9.95^{-}_{0}	9.9	−0.34	9.61

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March 18, 1919

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Series 627 142 K 2 - 04 - 29.7

Scale M B 51869 P.C. alt cm +0.6

		1st	2nd	cu	magn.
	1		5.0	3.58	8.58
	2		5.2	3.60	8.80
142K =	3		5.5	3.60	9.10
	4		6.2	3.60	9.80
	5		6.7	3.56	10.26
	6		7.0	3.55	10.55
	7		7.7	3.51	11.21
	8		7.8	3.51	11.31
	9		8.2	3.47	11.67
	10		8.2	3.47	11.67
	11		8.7	3.43	12.13
	12		9.2	3.36	12.56
	13		9.5	3.32	12.82
	14		9.8	3.27	13.07
	15		10.0	.	.

11

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	g 2nd		h 2nd	Cu.	magn.
1	8.6	8.65	8.7	-0.40	8.25
2	8.8	8.75	8.7	-0.44	8.31
3	9.5	9.55	9.6	-0.45	9.10
4	10.0	10.00	10.0	-0.33	9.67
5					
6					

11 10 1

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1919phae.proj.1033M

March 21, 1919. Sheet no 196

Series 608 C1 1 01 +15.1

Scale M. B 51871

P.C

7 50	1st	2nd	Diff.	2nd Diff.
1	4.2 4.0		2.98	8.8 -1.62
2	4.2 4.0		3.19	8.8 -1.41
3		4.0	3.50	8.8 -1.30
4		4.9	3.06	9.7 -1.74
5		5.5	2.83	
9		6.7	2.58	
11		6.9	2.79	
12		7.0	3.02	
14		7.7	2.92	
15		8.0	3.04	
16		8.0	3.20	
17		8.4	3.10	
18		8.8	3.14	
19		9.1	3.11	
20		9.7	2.92	
21		9.9	3.02	
24		—	.	
7a		5.6	3.26	
13a		7.1	3.34	
18a		8.8	.	
6a		5.0	.	

Plate badly streaked.

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1919phae.proj.1033M

	g 2nd		h 2nd	Diff.
1	7.7	$7.60_{1}^{\frac{1}{2}}$	7.5	−0.42
2	7.6	7.60_{0}^{0}	7.6	−0.21
3	7.7	7.70_{0}^{0}	7.7	−0.20
4	8.5	$8.55_{1}^{\frac{1}{2}}$	8.6	−0.59
5	8.7	$8.65_{1}^{\frac{1}{2}}$	8.6	−0.32
6a	9.0	9.05_{0}^{1}	9.1	.
7a	9.5	$9.40_{1}^{\frac{1}{2}}$	9.3	−0.54
9	9.6	9.65_{0}^{1}	9.7	−0.37
11	9.9	9.90_{0}^{0}	9.9	−0.21

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March 21, 1919

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Series 628 D1 1 01 - 15.0

Scale M B 5 1872

	2 mt	cu.	magn	P.C. 2 mt	cu	magn
1	4.0	3.04	7.04	9.2	-1.60	7.60
2	4.5	3.07	7.57	9.4	-1.62	7.78
3	5.0 wu.	3.09	8.09	9.9	-1.66	8.24
difficult. 4	5.8 5.2	3.11	8.61	9.8	-1.65	8.15
5	5.0	3.09	8.09	9.8	-1.65	8.15
6	5.0 W.u.	3.09	8.09	-		
7	5.0	3.09	8.09	9.9	-1.66	8.24
8	5.8	3.02	8.82	-		
9	6.0	3.13	9.13			
10	6.2	3.13	9.33			
11	6.7	3.05	9.75			
12	6.7	3.05	9.75			
13	7.0	3.06	10.06			
14	7.1	3.06	10.16			
15	7.5	3.07	10.57			
16	7.3	3.06	10.36			
17	7.8	3.18	10.98			
18	8.1	3.18	10.98			
19	8.5	3.17	11.67	Prim. 2 mt		
20	8.3	3.17	11.47	29 9.9	3.06	12.96
21	8.5	3.16	11.66	30 -		
22	8.7	3.16	11.86			
23	9.0	3.15	12.15			
24	8.9	3.15	12.05			
25	9.2	3.13	12.33			
26	9.3	3.13	12.43			
27	9.4	3.12	12.52			
28	9.9	3.06	12.96			

alt con +.07

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1919phae.proj.1033M

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	g 2 mk		l 2 mk	cu.	magn
1	8.0	8.00	8.0	−0.37	7.63
2	8.0	7.95	7.9	−0.37	7.58
3	8.4	8.40	8.4	−0.36	8.04
4	8.3	8.25	8.2	−0.36	7.89
5	8.2	8.35	8.5	−0.36	7.99
6	9.0	8.80	~8.6	−0.36	8.44
7	8.7	8.70	8.7	−0.35	8.35
8	8.8	8.80	8.8	−0.35	8.45
9	9.2	9.10	9.0	−0.36	8.74
10	9.4	9.50	9.6	−0.36	9.14
11	9.9	9.90	9.9	−0.39	9.51
12	10.0	9.95	9.9	−0.39	9.56

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1919phae.proj.1033M

March 21, 1919

Bb Stars Cfwd Bb 4/24
Seg II Cfwd " " ; 30,31
Seg III " " " ; 33

Series 628 Sm. Mag. Cld. 1 01 -74.8

Scale M. B51873

P.C alt cow -.31

		1st	2nd	cu	magn.	2nd	cu	magn.
	a		4.0	3.05	7.05	8.2		
	b		4.4	3.07	7.47	8.7	-1.56	7.14
	c		4.7	3.08	7.78	9.3	-1.60	7.70
Seg. II	g^2		6.5	3.05	9.55			
	h^2		7.2	3.16	10.36			
	k^2		7.5	3.17	10.67			
	l^2		7.8	3.18	10.98			
	m^2		8.4	3.17	11.57			
	n^2		8.9	3.16	12.06			
	o^2		9.2	3.14	12.34			
	p^2		9.6	3.10	12.70			
	q^2		10.0	3.06	13.06			
	r^2		-					
Seg. III	g^3		6.0	3.13	9.13			
	h^3		6.7	3.15	9.85			
	k^3		6.7	3.15	9.85			
	l^3		7.0	3.16	10.16			
	m^3		7.7	3.17	10.87			
	n^3		8.2	3.18	11.38			
	o^3		8.5	3.16	11.66			
	p^3		8.7	3.16	11.86			
	q^3		9.1	3.14	12.24			
	r^3		9.5	3.10	12.60			
	s^3		9.8	3.07	12.87			

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	g 2nd	h 2nd	Cw.	mags
a	7.6	7.55^{5}_{0} ~ 7.5	-0.38	7.17
b	8.0	7.95^{5}_{0} ~ 7.9	-0.36	7.59
c	8.5	def.	-0.35	8.15

Seq. II g^2 –

h^2 –

Seq. III g^3 –

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Series 628 Var. 4 Tucanae 1 01 - 74.8

Scale M. B5187 3 alt cor - .31

	1st	2nd	cu	magn.	P.C. 2nd	cu.	magn
var.		9.6	3.10	12.70			
a		4.5	3.07	7.57	9.0	-1.59	7.41
b		4.9	3.08	7.98	9.8	-1.65	8.15
c		5.4	3.10	8.50			
d		5.7	3.12	8.82			
e		7.0	3.16	10.16			
f		7.5	3.17	10.67			
g		8.2	3.18	11.38			
h		8.2	3.18	11.38			
K		8.6	3.16	11.76			
l		9.1	3.14	12.24			
m		9.8	3.08	12.88			
n		10.0	3.06	13.06			

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var	g 2 mk		h 2 mk	cu	magn
a	7.9	8.05^{-}_{+}	8.2	-0.36	7.69
b	8.8	8.75^{-}_{0}	8.7	-0.35	8.40
c	9.6	9.65^{-}_{0}	9.7	-0.37	9.28
d	10.0	10.00^{0}_{0}	10.0	-0.40	9.60

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March 21, 1919

Series 628 141 K 1-03 -29.7

Scale M. B51874 P.C. alt corr +.05

	1st	2nd	Cu	magn	2nd	Cu.	magn
	1	5.5	3.11	8.61	10.0	-1.67	8.33
	2	6.0	3.13	9.13			
141 K =	3	6.5	3.15	9.65			
	4	6.5	3.15	9.65			
	5	7.6	3.18	10.78			
	6	7.6	3.18	10.78			
	7	7.9	3.18	11.08			
	8	8.2	3.18	11.38			
	9	8.4	3.17	11.57			
	10	8.5	3.16	11.66			
	11	8.7	3.16	11.86			
	12	8.9	3.15	12.05			
	13	9.0	3.14	12.14			
	14	9.6	3.10	12.70			

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	♀ 2nd		♄ 2nd	Cu	magn
1	8.6	8.55	8.5	-0.35	8.20
2	9.0	9.00	9.0	-0.36	8.64
3	9.6	9.70	9.8	-0.37	9.33
4	9.6	9.70	9.8	-0.37	9.33
5	–		–		
6					
7					

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March 21, 1919

C[ird]B[k] 27: 101

Scale M. Series 628 E1 1 20 −45.0

B 51876 P.C. alt con + 01

	1st	2nd	cu.	magn.	2nd	cu.	magn
1		4.0	3.05	7.05	8.2		
2		4.5	3.07	7.57	8.6	-1.56	7.04
3		4.6	3.08	7.68	8.7	-1.57	7.13
4		4.7	3.08	7.78	9.0	-1.57	7.43
5		4.7	3.08	7.78	9.2	-1.60	7.60
6		4.9	3.08	7.98	9.6	-1.63	7.97
7		5.7	3.12	8.82	9.8	-1.65	8.15
8		5.8	3.13	8.93	9.9	-1.66	8.24
9		5.9	3.13	9.03			
10		6.0	3.~~13~~ 08	9.13 ~~8.08~~			
11		6.0	3.13	9.13			
12		5.8	3.13	8.93			
13		6.7	3.15	9.85			
14		6.9	3.16	10.06			
15		7.0	3.16	10.16			
16		7.0	3.16	10.16			
17		7.0	3.16	10.16			
18		8.0	3.18	11.18			
19		8.2	3.18	11.38			
20		8.3	3.17	11.47			
21		8.6	3.16	11.76			
22		8.9	3.15	12.05			
23		9.0	3.14	12.14			
24		9.0	3.14	12.14			
25		9.2	3.13	12.33			
26		9.6	3.10	12.70			
27		9.8	3.08	12.88			
28							

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29
30

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	g 1 mod		g 2 mod	Cu.	magn
1	7.0	7.1	7.2	-0.40	6.70
2	7.8	7.65	7.6	-0.38	7.27
3	7.5	7.50	7.5	-0.38	7.12
4	7.8	7.9	8.0	-0.36	7.54
5	8.0	8.1	8.2	-0.36	7.74
6	8.0	8.1	8.2	-0.36	7.74
7	8.7	8.75	8.8	-0.35	8.40
8	8.9	8.85	8.8	-0.35	8.50
9	8.7	8.85	9.0	-0.35	8.50
10	8.6	8.7	8.8	-0.35	8.35
11	9.8	9.80	9.8	-0.38	9.42
12	9.5	9.55	9.6	-0.36	9.19
13	10.0	10.00	10.0	-0.40	9.60

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March 21, 1919

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Scale M. Series 628 142K 2 04 −29.7

B51879 P.C alt cor +.05

	1st	2nd	Cu.	magn
1		5.0	3.09	8.09
2		5.5	3.11	8.61
142K = 3		5.8	3.13	8.93
4		6.3	3.14	9.44
5		7.0	3.16	10.16
6		7.5	3.17	10.67
7		8.0	3.18	11.18
8		7.8	3.17	10.97
9		8.2	3.18	11.38
10		8.2	3.18	11.38
11		8.8	3.16	11.96
12		9.3	3.13	12.43
13		9.6	3.10	12.70
14				
15				

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	ϕ 2 mk		ψ 2 mk	Cor.	Mag.
1	8.5	8.55 (0)	8.6	−0.35	8.20
2	8.8	8.90 (1)	9.0	−0.35	8.55
3	9.2	9.30 (1)	9.4	−0.36	8.94
4	10.0	10.00 (0)	10.0	−0.40	9.60

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March 21, 1919

Series 628 143 1Y 3 ov −29.6

Scale M. B 51881 P. C alt con. +.05 ~~-.21~~

		1st	2nd	Cu	Magn.
143 1Y =	1		6.2	3.13	9.33
	2		7.0	3.16	10.16
	3		7.1	3.16	10.26
	4		7.1	3.16	10.26
	5		7.6	3.17	10.77
	6		7.9	3.18	11.08
	7		—		
	8		8.0	3.18	11.18
	9		8.2	3.18	11.38
	10		8.7	3.16	11.86
	11		8.8	3.16	11.96
	12		9.3	3.13	12.43
	13		9.9	3.06	12.96
	14		9.9	3.06	12.96

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20.8

	g 2nd	h 2nd	cu.	magn.
1	10.0	def.	-0.40	-9.60
2				
3				
4				
5				

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Sheet no. 96

March 21, 1919

Scale M. Series 628 Co2 3 - 01 + 15.1

B 51882

	1st	2nd	Diff	P.C. 2nd
1		4.0	2.94	8.8 -1.86
2		4.0	3.24	9.0 -1.76
3		4.8	2.84	9.2 -1.56
4		5.0	3.20	9.8 -1.60
6		5.8	2.87	
7		5.7	3.36	
10		6.1	3.25	
11		6.5	3.24	
12		6.6	3.36	
14		7.8	2.99	
16		7.8	3.38	
17		8.1	3.33	
19		8.5	3.33	
21		9.0	3.34	
22		9.4	3.10	
23		9.5	3.29	
25		10.0	3.10	
9a		6.7	.	
9b		6.9	.	
9c		5.0	.	
12a		7.0	3.41	

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	g 2nd		h 2nd	
1	7.5	7.55	7.6	-0.61
2	7.6	7.70	7.8	-0.46
3	7.9	7.90	7.9	-0.26
4	8.5	8.55	8.6	-0.35
6	8.8	8.90	9.0	-0.23
7	9.1	9.25N	9.4	-0.19
10	10.0	10.00	10.0	-0.65
9a	—			
9b	—			
9c	8.8	8.90	9.0	
11				
12				
12a				

9 55

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